Pro C5300S/C5310S, IM C6500/C8000
Machine Code: D0CP/D0CQ, D0CM/D0CN
Field Service Manual

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Important Safety Notices

Warnings, Cautions, Notes

In this manual, the following important symbols and notations are used.

⚠WARNING

- A Warning indicates a potentially hazardous situation. Failure to obey a Warning could result in death or serious injury.

⚠CAUTION

- A Caution indicates a potentially hazardous situation. Failure to obey a Caution could result in minor or moderate injury or damage to the machine or other property.

Important

- Obey these guidelines to avoid problems such as misfeeds, damage to originals, loss of valuable data and to prevent damage to the machine.

Note

- This information provides tips and advice about how to best service the machine.

General Safety Instructions

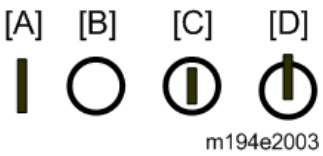
For your safety, please read this manual carefully before you use this product. Keep this manual handy for future reference.

Safety Information

Always obey the following safety precautions when using this product.

Safety During Operation

In this manual, the following important symbols and notations are used.



[A]: ON

[B]: OFF

[C]: Push ON/Push OFF

[D]: Standby

Switches and Symbols

Where symbols are used on or near switches on machines for Europe and other areas, the meaning of each symbol conforms with IEC60417.

For Norway

This product is also designed for an IT power distribution system with phase-to-phase voltage 230V.

Safety Labels of the Machine

For machines with the following label:

⚠CAUTION

DOUBLE POLE/NEUTRAL FUSING

Disconnect main power before changing fuse.

Safety

POWER CORD

As a company policy, Ricoh prohibits any kind of modifications, cutting, puncturing, damage or misuse of the power cords. A modified power cord always carries a high risk of electric shock and fire hazard. When replacing the power cord or adding a conversion adapter, please follow the country's safety laws and regulations as well as the manufacturer's requirements.

Prevention of Physical Injury

1. Before disassembling or assembling parts of the machine and peripherals, make sure that the machine and peripheral power cords are unplugged.
2. The plug should be near the machine and easily accessible.
3. Note that some components of the machine and the paper tray unit are supplied with electrical voltage even if the main power switch is turned off.
4. Always unplug the power cord from the power source before you move the product. Before you move the machine, arrange the power cord so it will not fall under the machine.
5. Disconnect all peripheral units (finisher, LCT, etc.) from the mainframe before you move the machine.
6. If any adjustment or operation check has to be made with exterior covers off or open while the main switch is turned on, keep hands away from electrified or mechanically driven components.
7. The machine drives some of its components when it completes the warm-up period. Be careful to keep hands away from the mechanical and electrical components as the machine starts operation.
8. The inside and the metal parts of the fusing unit become extremely hot while the machine is operating. Be careful to avoid touching those components with your bare hands.
9. To prevent a fire or explosion, keep the machine away from flammable liquids, gases, and aerosols.
10. Do not use flammable sprays or solvent in the vicinity of the machine. Also, avoid placing these

items in the vicinity of the machine. Doing so could result in fire or electric shock.

11. To avoid fire or explosion, never use an organic cleaner near any part that generates heat.
12. Clean the floor completely after accidental spillage of silicone oil or other materials to prevent slippery surfaces that could cause accidents leading to hand or leg injuries.
13. Never remove any safety device unless it requires replacement. Always replace safety devices immediately.
14. Never do any procedure that defeats the function of any safety device.
15. Modification or removal of a safety device (fuse, switch, etc.) could lead to a fire and personal injury. Always test the operation of the machine to ensure that it is operating normally and safely after removal and replacement of any safety device.
16. For replacements use only the correct fuses or circuit breakers rated for use with the machine. Using replacement devices not designed for use with the machine could lead to a fire and personal injuries.
17. For machines with two or more plugs/sockets:
    Disconnect all plug/socket combinations before maintenance.
18. For machines with circuit breaker:
    Do not use circuit breakers to isolate input power supply.
19. For machines installed with the document feeder (ADF, ARDF etc.):
    When a thick book or three-dimensional original is placed on the exposure glass and the document feeder cover is lowered, the back side of the document feeder rises up to accommodate the original. Therefore, when closing the document feeder, please be sure to keep your hands away from the hinges at the back of the document feeder.
20. When using a vacuum cleaner around the machine, keep others away from the cleaner, especially small children.
21. For machines installed with the anti-tip components:
    The anti-tip components are necessary to prevent the products, which are heavy in weight, from toppling as a result of people running into or leaning onto the products, which can lead to serious accidents such as persons becoming trapped under the product. Therefore, removal of such components must always be with the consent of the customer. Do not remove them at your own judgment.
22. Never touch the AC circuits on the PSU board to prevent electric shock caused by residual charge. Residual charge of about 100V-400V remains in the AC circuits on the PSU board even when the board has been removed from the machine after turning off the machine power and unplugging the power cord.

Health Safety Conditions

1. For machines with ozone filters:
    - Never operate the machine without the ozone filters installed.
    - Always replace the ozone filters with the specified types at the proper intervals.

2. The machine, which use high voltage power source, can generate ozone gas. High ozone density is harmful to human health. Therefore, locate the machine in a large well ventilated room that has an air turnover rate of more than 50m^3/hr/person.
3. Toner and developer are non-toxic, but if you get either of them in your eyes by accident, it may cause temporary eye discomfort. Try to remove with eye drops or flush with water as first aid. If unsuccessful, get medical attention.

Observance of Electrical Safety Standards

1. The machine and its peripherals must be installed and maintained by a customer service representative who has completed the training course on those models with exceptions on some machines where the installation can be handled by the user.

Safety and Ecological Notes for Disposal

- Do not incinerate toner bottles or used toner. Toner dust may ignite suddenly when exposed to an open flame.
- Dispose of used toner, developer, organic photoconductors, and AIO unit in accordance with local regulations. (These are non-toxic supplies.)
- Dispose of replaced parts in accordance with local regulations.
- For machines using replaceable lithium batteries:
  When keeping used lithium batteries in order to dispose of them later, do not put more than 100 batteries per sealed box. Storing larger numbers or not sealing them apart may lead to chemical reactions and heat build-up.
  ⚠CAUTION
  The danger of explosion exists if a battery of this type is incorrectly replaced. Replace only with the same or an equivalent type recommended by the manufacturer. Discard used batteries in accordance with the manufacturer’s instructions.

Handling Toner

- Work carefully when removing paper jams or replacing toner bottles or cartridges to avoid spilling toner on clothing or the hands.
- If toner is inhaled, immediately gargle with large amounts of cold water and move to a well-ventilated location. If there are signs of irritation or other problems, seek medical attention.
- If toner gets on the skin, wash immediately with soap and cold running water.
- If toner gets into the eyes, flush the eyes with cold running water or eye wash. If there are signs of irritation or other problems, seek medical attention.
- If toner is swallowed, drink a large amount of cold water to dilute the ingested toner. If there are signs of any problem, seek medical attention.
- If toner spills on clothing, wash the affected area immediately with soap and cold water. Never use hot water! Hot water can cause toner to set and permanently stain fabric.

- Always store toner and developer supplies such as toner and developer packages, cartridges, bottles (including used toner and empty bottles and cartridges), and AIO unit out of the reach of children.
- Always store fresh toner supplies or empty bottles or cartridges in a cool, dry location that is not exposed to direct sunlight.
- Do not use a vacuum cleaner to remove spilled toner (including used toner). Vacuumed toner may cause a fire or explosion due to sparks or electrical contact inside the cleaner. However, it is possible to use a cleaner designed to be dust explosion-proof. If toner is spilled over the floor, sweep up spilled toner slowly and clean up any remaining toner with a wet cloth.

Lithium Batteries for Taiwan

警告

本機器內的鋰電池如果更換不正確型號會有爆炸的危險。
只能使用相同或製造商推薦同等類型的電池進行更換。
請依製造商說明書處理用過之廢棄電池。

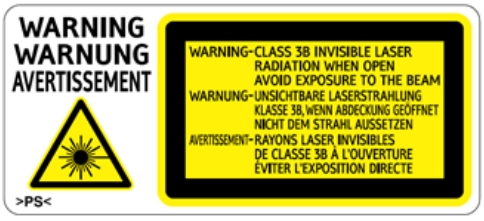
Laser Safety

The Center for Devices and Radiological Health (CDRH) prohibits the repair of laser-based optical units in the field. The optical housing unit can only be repaired in a factory or at a location with the requisite equipment. The laser subsystem is replaceable in the field by a qualified Customer Engineer. The laser chassis is not repairable in the field. Customer engineers are therefore directed to return all chassis and laser subsystems to the factory or service depot when replacement of the optical subsystem is required.

⚠WARNING

- Use of controls, or adjustment, or performance of procedures other than those specified in this manual may result in hazardous radiation exposure.

WARNING FOR LASER UNIT
WARNING: Turn off the main switch before attempting any of the procedures in the Laser Unit section. Laser beams can seriously damage your eyes.



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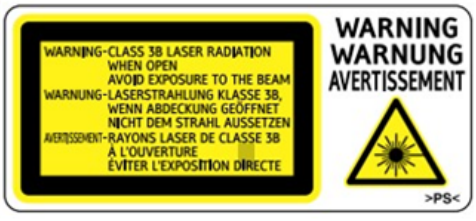

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Safety Instructions for the Color Controller

Fuse

The color controller uses a double pole fuse. If this fuse blows, be sure to replace it with an identical fuse.

Batteries

⚠CAUTION

Always replace a battery with the same type of battery prescribed for use with the color controller unit. Replacing a battery with any type other than the one prescribed for use could cause an explosion.

- Never discard used batteries by mixing them with other batteries or other refuse.
- Always remove used batteries from the work site and dispose of them in accordance with local laws and regulations regarding the disposal of such items.

Symbols, Abbreviations

This manual uses several symbols and abbreviations.

Symbols:

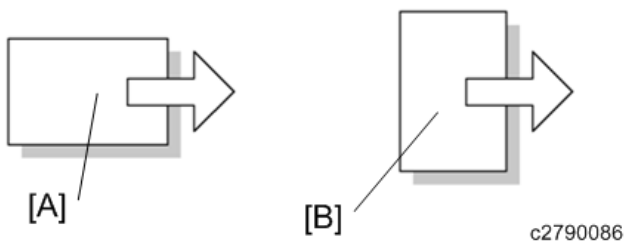
Symbol	What it means
	Clip ring
	Screw
	Connector
	Clamp
	E-ring
	Flat Flexible Cable
	Timing Belt
	Location of the screw(s) to be unscrewed or loosen
	Location of the connector(s), clamp(s) or spring(s) to be removed
	Direction (Rotating or moving)

Abbreviations:

Note

Abbreviations such as (M1), (S1), or (TH1) attached after the name of some electrical components show the symbols in Point-to-Point diagram.

Abbreviation	Meaning
SEF	Short Edge Feed [A]
LEF	Long Edge Feed [B]
K	Black
C	Cyan
M	Magenta
Y	Yellow



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  Microsoft® Windows Server® 2012 R2 Standard
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  Microsoft® Windows Server® 2016 R2 Essentials
  Microsoft® Windows Server® 2016 R2 Standard
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  Microsoft® Windows Server® 2019 Datacenter
  Microsoft® Windows Server® 2019 Standard
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1. Product Information

Guidance for Those Who are Familiar with Predecessor Products

This section shows the changes from the predecessor models (Pro C5200S/C5210S, MP C6503/C8003).

Items	Pro C5200S/C5210S MP C6503/C8003	Pro C5300S/C5310S IM C6500/C8000
SPDF Doublefeed Detection	Not supported	Pro: Option Office: -
SPDF Small Size Paper	Not supported	Pro: - Office: Option
Auto Image Adjustment Auto Color Calibration (ACC)	Correction 1 to 5	Correction 1 to 5 Added the quick correction mode Changed the test pattern layout
Operation Panel Generation	G2	G2.5
Operation Panel Tilt Function (Office)	-	Available
PCDU Potential Sensor	Available	Pro: Available Office: -
PCDU Drum unit (Pro) Preventive Maintenance Interval	1400K	1400K *1 1900K *2
PCDU Drum unit (Office) Preventive Maintenance Interval	1000K	1000K
Development Unit (Pro) Preventive Maintenance Interval	600K	800K *2
Image Transfer Belt (ITB) Unit Image Transfer Belt Preventive Maintenance Interval	1000K	1800K
Image Transfer Belt (ITB) Unit Image Transfer Roller Preventive	1000K	1800K

Items	Pro C5200S/C5210S MP C6503/C8003	Pro C5300S/C5310S IM C6500/C8000
Maintenance Interval		
Image Transfer Belt (ITB) Unit ITB Bias Roller (Pro) Preventive Maintenance Interval	1000K	1500K
Image Transfer Belt (ITB) Unit ITB Bias Roller (Office) Preventive Maintenance Interval	1000K	1500K
Drawer Unit Transfer Timing Sensor	-	Pro: Available Office: -
Specification of paper thickness of main unit paper feed (duplex) (Pro)	Up to 300.0g/m^2	Up to 360.0g/m^2 (If the weight of paper is heavier than 300 g/m2, it can be only used in grain short direction.)
Fusing Unit Heating roller rotation sensor	Transmission Type	Encoder (The sensor has not been changed, the same as the predecessor products.)
Fusing Unit Fusing Unit (Office) Preventive Maintenance Interval	600K	700K
Fusing Unit Fusing Cleaning Web Unit (Pro) Preventive Maintenance Interval	300K	600K
Paper Exit and Duplexing Paper cooling	Fusing heat pipe roller system	Cooling duct system
Electrical Components Java VM	Standard onboard function	Supplied as an optional SD card
Process Control Color Stability	Either solid area or halftone is corrected.	Both solid area and halftone are corrected.
Process Control Glossiness adjustment mode	-	Glossiness of coated sheet is adjusted.
Proximity Sensor SC869-01 Occurrence	Occurs if continuously switched on for 24 hours	Occurs if continuously switched on for 480 hours

1.Product Information

Items	Pro C5200S/C5210S MP C6503/C8003	Pro C5300S/C5310S IM C6500/C8000
Condition		
Proximity Sensor SC869-02 Occurrence Condition	Occurs on detecting user operation 20 times when switched off	Occurs on detecting user operation 300 times when switched off
Waste Toner Bottle	Replaced by Service Technician	Replaced by user
Waste Toner Bottle Automatic Delivery Service	N/A	Started the service

*1: Pro C5300S

*2: Pro C5310S

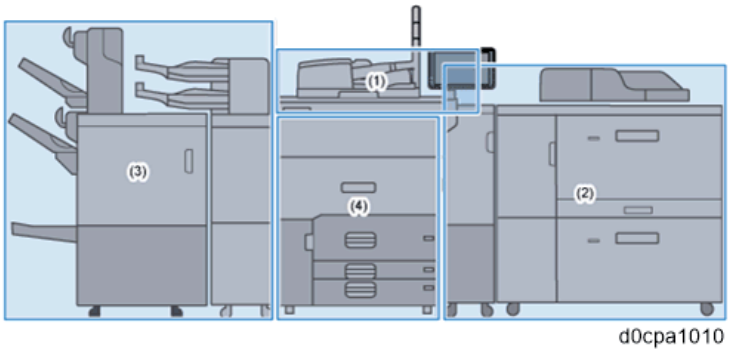
Machine Codes and Peripherals Configuration

Pro C5310S/C5300S

Main Machine

No.	Item	Machine Code
1	Pro C5300S	D0CP-17(NA) D0CP-21(CHN) D0CP-27(EU) D0CP-29(AP)
2	Pro C5310S	D0CQ-17(NA) D0CQ-21(CHN) D0CQ-27(EU) D0CQ-29(AP) D0CQ-90(EU)

External Options



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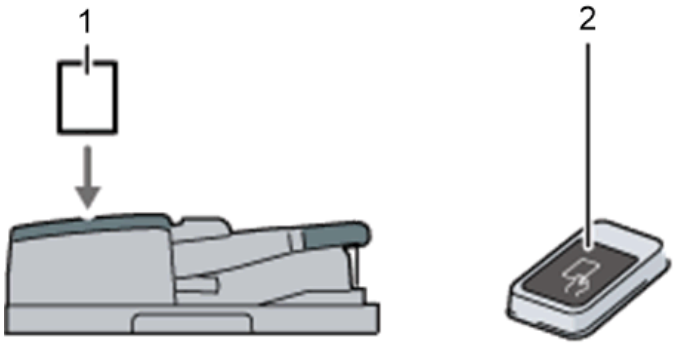
(1) Options Mounted to the Machine's Top Section



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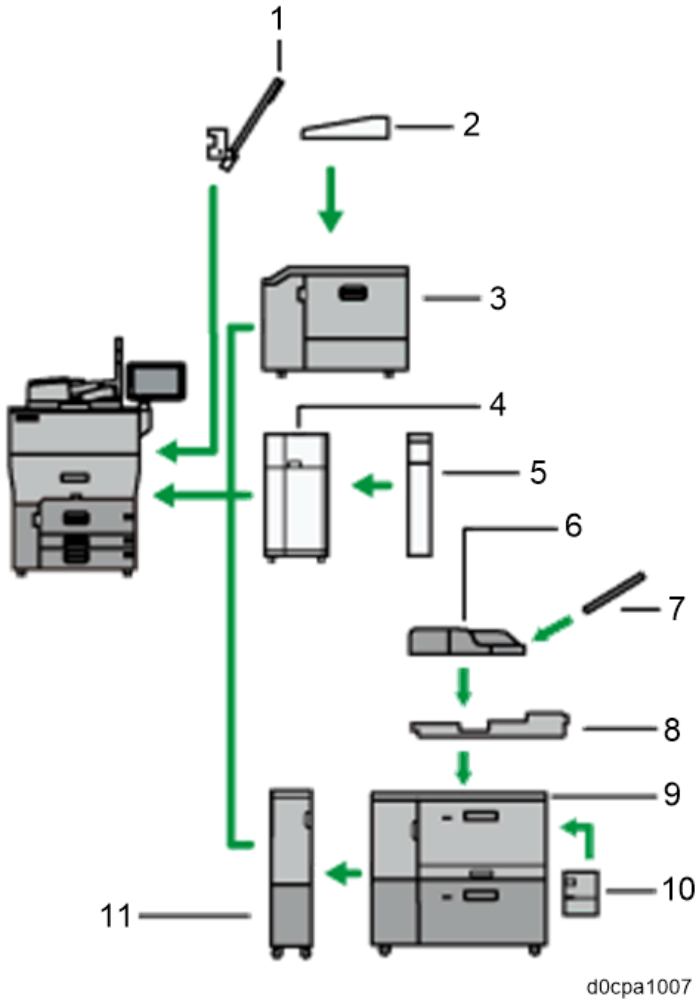
No.	Item	Machine Code	New Option?
1	Page Keeper Type M37	D3FF-19 (NA/EU/AP) D3FF-23 (CHN)	No

No.	Item	Machine Code	New Option?
2	NFC Card Reader Type S6	D3DH-06 (NA/EU)	No

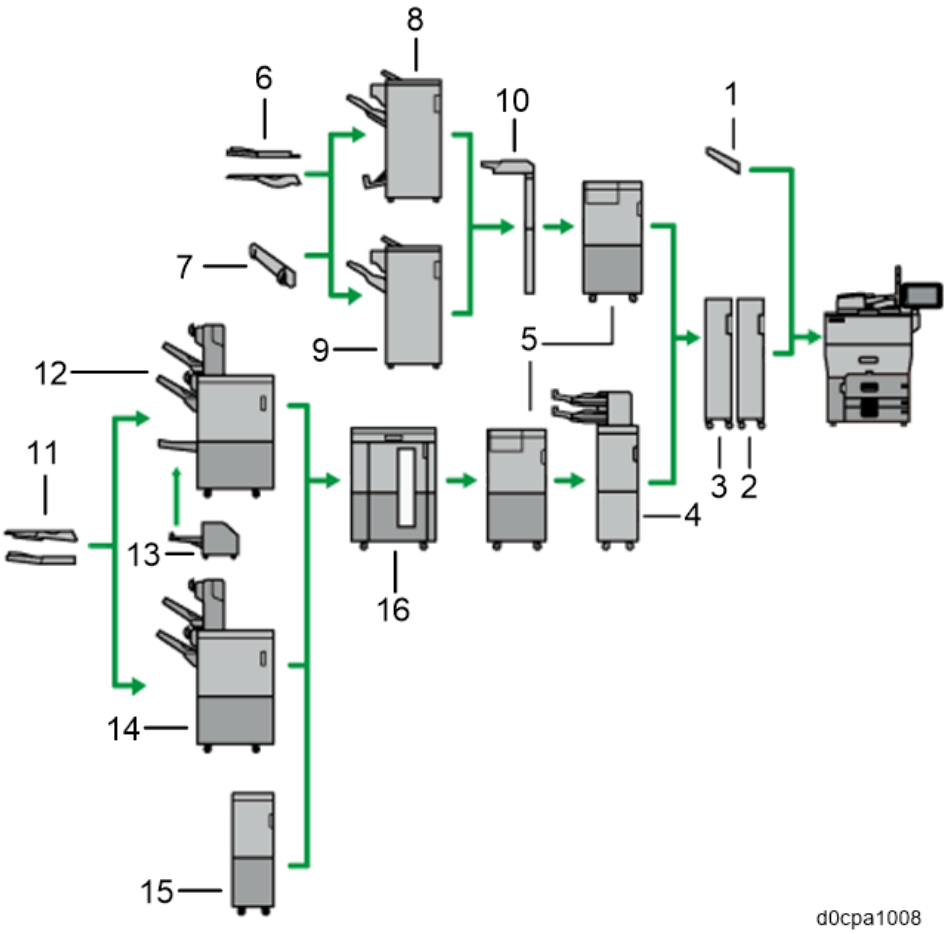
(2) Options Mounted to the Machine's Right Side Section



No.	Item	Machine Code	New Option?
1	Multi Bypass Banner Sheet Tray Type S6	D3D1-17	No
2	Banner Sheet Guide Tray for A3/11"x17" LCIT Type S6	D710-02	No
3	LCIT RT5140	D3HL-17	Yes
4	LCIT RT4060	D3HK-17 (NA/TWN) D3HK-27 (EU/AP/CHN)	Yes
5	8 1/2" x 14" PAPER SIZE TRAY TYPE M2	D745-17	No
6	Multi Bypass Tray BY5020	D3EV-17	No
7	Multi Bypass Banner Sheet Tray Type S9	D3EV-02	No
8	Multi Bypass Attachment Kit for Vacuum Feed LCIT Type S9	D3EW-04	No

No.	Item	Machine Code	New Option?
9	Vacuum Feed LCIT RT5120	D3EW-17 (NA/TWN) D3EW-27 (EU/AP/CHN)	No
10	Vacuum Feed Banner Sheet Tray Type S9	D3EW-02	No
11	Bridge Unit BU5030	D3HQ-17	Yes

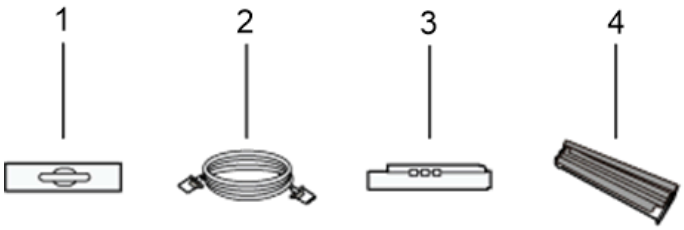
(3) Options Mounted to the Machine's Left Side Section



No.	Item	Machine Code	New Option?
1	Copy Tray Type M42	D3J0-01	Yes
2	Decurl Unit DU5080	D3HZ-17	Yes
3	Buffer Pass Unit Type S9	D3FC-17 (NA/TWN) D3FC-27 (EU/AP/CHN)	No
4	Cover Interposer Tray CI5040	D3GA-17	No
5	Multi-Folding Unit FD5020	D740-17 (NA/TWN) D740-27 (EU/AP/CHN)	No
6	SR4000 series Output Tray for Banner Sheet Type6	D3CF-01	No
7	Output Jogger Unit Type M25	D3CJ-01	No

No.	Item	Machine Code	New Option?
8	Booklet Finisher SR5100	D3GC-17 (NA/EU/AP) D3GC-21 (CHN)	No
9	Finisher SR5090	D3GD-17 (NA/EU/AP) D3GD-21 (CHN)	No
10	Cover Interposer Tray CI5050	D3HW-17	Yes
11	SR5000 series Output Tray for Banner Sheet Type S6	D3CC-01	No
12	Booklet Finisher SR5120	D3G8-17 (NA/TWN) D3G8-27 (EU/AP/CHN)	No
13	Trimmer Unit TR5050	D3GG-17 (NA/TWN) D3GG-27 (EU/AP)	No
14	Finisher SR5110	D3G9-17 (NA/TWN) D3G9-27 (EU/AP/CHN)	No
15	Bridge Unit BU5020	D3GN-17	No
16	High Capacity Stacker SK5040	D3DK-17 (NA/TWN) D3DK-27 (EU/AP/CHN)	No

(4) Other Options



No.	Item	Machine Code	New Option?
1	A3/11"x17" Tray Unit Type M26	D3D2-02	No
2	Copy Connector Type M25	D3D3-01	No
3	Optional Feed Roller Unit Type S13	D3HX-17	Yes
4	Carbonless Paper Unit Type S13	D3HY-17	Yes
-	Small Paper Feeding Unit Type M37	D3FF-18	No
-	Cooling Fan Unit Type M26	D3CK-01	No
-	Punch Unit PU3090 NA	D3FP-00(NA/AP)	No
-	Punch Unit PU3090 EU	D3FP-01(NA/EU/AP) D3FP-03(CHN)	No
-	Punch Unit PU3090 SC	D3FP-02(NA/EU/AP)	No
-	Punch Unit PU5030 NA	D3GJ-17	No
-	Punch Unit PU5030 EU	D3GJ-27	No
-	Punch Unit PU5030 SC	D3GJ-28	No

No.	Item	Machine Code	New Option?
-	Roll-Away Cart Type 5010	D456-17	No
-	Tab Sheet Holder Type M2	D750-01	No
-	Cover Interposer Tray Double-Feed Detection Kit Type S11	D3GA-18 (NA/EU/AP) D3GA-19 (CHN)	No
-	TCRU/ORU Type S13 (Set A)	D916-01	Yes
-	TCRU/ORU Type S13 (Set B)	D916-02	Yes
-	TCRU/ORU Type S13 (Set C)	D3DP-02	Yes
-	Numeric Keypad Type S13	D3J1-17	Yes
-	RPIP Interface Box Type S3	M462-17	No
-	Optional Counter Interface Unit Type M12	B870-21	No
-	Media Identification Unit Type S3	D3AK-02 (NA/EU/AP) D3AK-04 (CHN)	No

Internal Options

No.	Item	Machine Code	New Option?
1	Extended USB Board Type M19	D3BS-01	No
2	IEEE 802.11a/g/n Interface Unit Type M19	D3BR-01(NA/EU/AP)	No
3	IEEE 1284 Interface Board Type M19	D3C0-17	No
4	PostScript3 Unit Type M42	D3HM-03(NA) D3HM-04(EU) D3HM-05(AP/CHN)	Yes
5	XPS Direct Print Option Type M42	D3HM-07(NA) D3HM-08(EU) D3HM-09(AP/CHN)	Yes
6	OCR Unit Type M13	D3AC-23(NA) D3AC-24(EU) D3AC-25(AP/CHN)	No
7	Fax Option Type M42	D3HN-01(NA) D3HN-02(EU) D3HN-03(AP/CHN)	Yes
8	G3 Interface Unit Type M42	D3HN-10(NA) D3HN-11(EU/AP)	Yes

No.	Item	Machine Code	New Option?
9	Fax Connection Unit Type M42	D3HN-01(NA) D3HN-02(EU) D3HN-03(AP/CHN)	No
10	File Format Converter Type M19	D3BR-04	No
11	VM Card Type P18	D3EN-03(NA) D3EN-04(EU) D3EN-05(AP/CHN)	No
12	Smart Card Reader Built-in Unit Type S6	D3DH-07(NA/EU)	No
13	IPDS Unit Type M42	D3HM-11(NA) D3HM-12(EU) D3HM-13(AP/CHN)	Yes
14	Data Overwrite Security Unit Type M19	D3BS-03	No
15	FAX Memory Unit Type M26 64MB	D3D9-12	No
16	RICOH Brand Plaque Type S13	D0D2-00(EU/AP/KOR)	Yes
17	SAVIN Brand Plaque Type S13	D0D2-01(NA)	Yes
18	LANIER Brand Plaque Type S13	D0D2-02(NA)	Yes
19	Taiwan Language Kit Type S13	D0CP-31(TWN)	Yes
20	Korean Language Kit Type S13	D0CP-32(KOR)	Yes

EFI Options

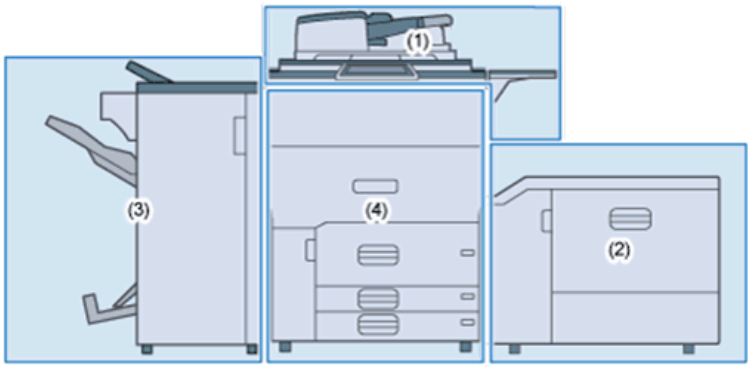
No.	Item	Machine Code	New Option?
1	Color Controller E-27B	D3HR-01	Yes
2	Color Controller E-47B	D3HS-01	Yes

IM C6500/C8000

Main Machine

No.	Item	Machine Code
1	IM C6500	D0CM-17(NA) D0CM-21(CHN) D0CM-27(EU) D0CM-29(AP)
	BASE MODULE FOR IM C6500	D0CM-91(CHN)
2	IM C8000	D0CN-17(NA) D0CN-21(CHN) D0CN-27(EU) D0CN-29(AP)
	BASE MODULE FOR IM C8000	D0CN-91(CHN)

External Options



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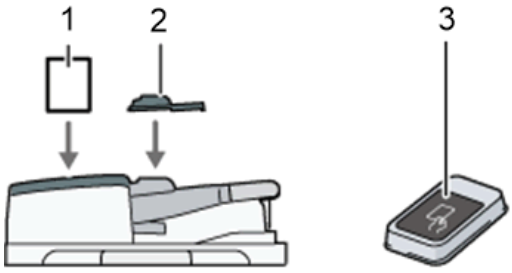
(1) Options Mounted to the Machine's Top Section



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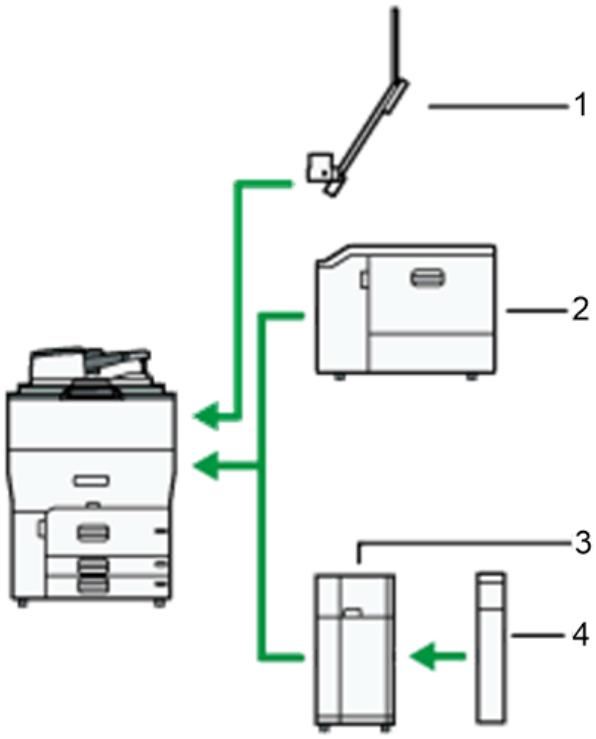
No.	Item	Machine Code	New Option?
1	Page Keeper Type M37	D3FF-19 (NA/EU/AP) D3FF-23 (CHN)	No
2	Small Paper Feeding Unit Type M37	D3FF-18	No
3	NFC Card Reader Type M42	D3HP-03	Yes

(2) Options Mounted to the Machine's Right Side Section



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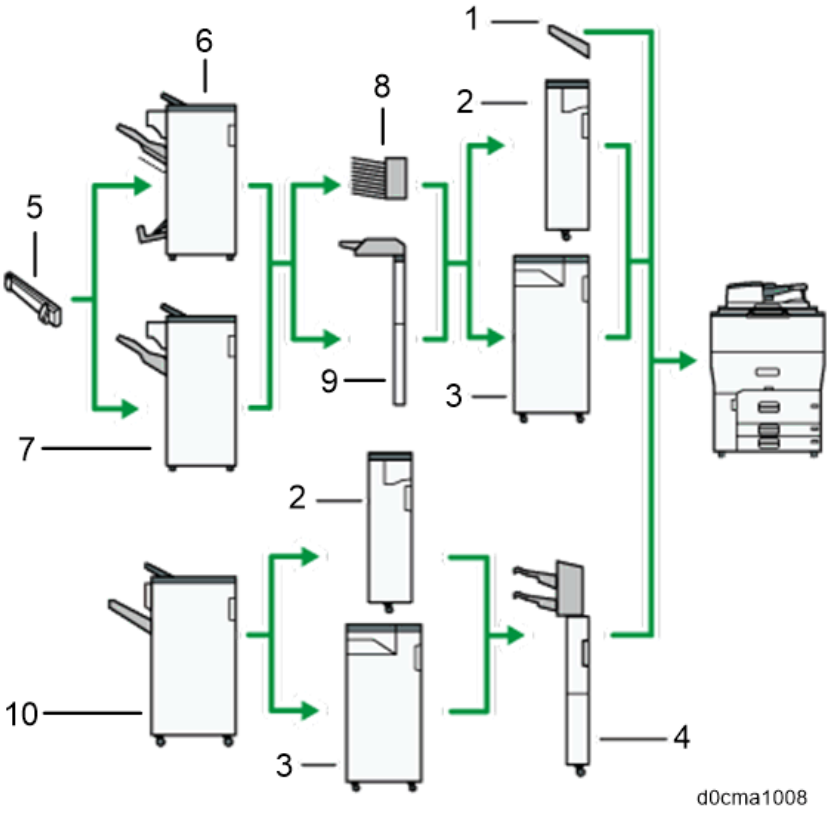
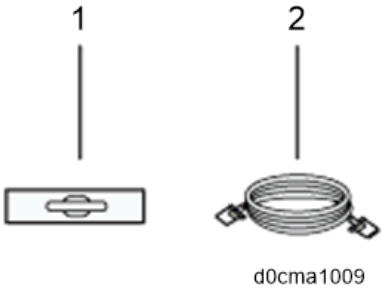
No.	Item	Machine Code	New Option?
1	Banner Paper Guide Tray Type M26	D3D2-01	No
2	LCIT RT4070	D3HL-57	Yes
3	LCIT RT4060	D3HK-17 (NA) D3HK-27 (EU/AP/CHN)	Yes
4	8 1/2" x 14" PAPER SIZE TRAY TYPE M2	D745-17	No

(3) Options Mounted to the Machine's Left Side Section



No.	Item	Machine Code	New Option?
1	Copy Tray Type M42	D3J0-01	Yes
2	Multi-Folding Unit FD4010	D3HJ-17(NA) D3HJ-27(EU/AP/CHN)	Yes
3	Multi-Folding Unit FD4020	D3HH-17(NA) D3HH-27(EU/AP/CHN)	Yes
4	Cover Interposer Tray CI4050	D3HF-17	Yes
5	Output Jogger Unit Type M25	D3CJ-01	No
6	Booklet Finisher SR4160	D3HC-17(NA/EU/AP) D3HC-21(CHN)	Yes
7	Finisher SR4150	D3HB-17(NA/EU/AP) D3HB-21(CHN)	Yes
8	Mail Box CS4010	D708-17	No
9	Cover Interposer Tray CI4040	D3CN-17	No
10	Finisher SR4140	D3HD-17	Yes

(4) Other Options



No.	Item	Machine Code	New Option?
1	A3/11"x17" Tray Unit Type M26	D3D2-02	No
2	Copy Connector Type M25	D3D3-03	No
-	Punch Unit PU3090 NA	D3FP-00(NA/AP)	No
-	Punch Unit PU3090 EU	D3FP-01(EU/AP) D3FP-03(CHN)	No
-	Punch Unit PU3090 SC	D3FP-02(EU/AP)	No
-	Tab Sheet Holder Type M2	D750-01	No
-	Optional Counter Interface Unit Type M12	B870-21	No
-	Smart Card Reader Built-in Unit Type M19	D3BS-22	No
-	Banner Paper Guide Tray Type M26	D3D2-01	No
-	Cooling Fan Unit Type M26	D3CK-01	No
-	Cooling Fan Unit Type M31	D770-04	No
-	Punch Unit PU5050 NA	D3HE-01(NA/AP)	Yes
-	Punch Unit PU5050 EU	D3HE-02(EU/AP/CHN)	Yes
-	Punch Unit PU5050 SC	D3HE-03(EU/AP)	Yes

Internal Options

No.	Item	Machine Code	New Option?
1	IEEE 802.11a/g/n Interface Unit Type M19	D3BR-01(NA/EU/AP)	No
2	IEEE 1284 Interface Board Type M19	D3C0-17	No
3	PostScript3 Unit Type M42	D3HM-03(NA) D3HM-04(EU) D3HM-05(AP/CHN)	Yes
4	XPS Direct Print Option Type M42	D3HM-07(NA) D3HM-09(AP/CHN)	Yes
5	OCR Unit Type M13	D3AC-23(NA) D3AC-24(EU) D3AC-25(AP/CHN)	No
6	Fax Option Type M42	D3HN-05(NA)	Yes

No.	Item	Machine Code	New Option?
		D3HN-06(EU) D3HN-07(AP) D3HN-08(CHN)	
7	G3 Interface Unit Type M42	D3HN-10(NA) D3HN-11(EU/AP)	Yes
8	Fax Connection Unit Type M42	D3HN-01(NA) D3HN-02(EU) D3HN-03(AP/CHN)	No
9	File Format Converter Type M19	D3BR-04	No
10	VM CARD Type M37	D3GF-32	No
11	IPDS Unit Type M42	D3HM-11(NA) D3HM-12(EU) D3HM-13(AP/CHN)	Yes
12	Data Overwrite Security Unit Type M19	D3BS-03	No
13	FAX Memory Unit Type M26 64MB	D3D9-12	No
14	Device Server Option Type M37	D3GF-10(NA) D3GF-11(EU/AP)	No
15	Enhanced Security HDD Option Type M12	D3A6-02	Yes
16	Unicode Font Package for SAP(R) 1 License	B869-01	Yes
17	Unicode Font Package for SAP(R) 10 License	B869-02	Yes

Specifications

See "Appendices" for the following information:

- General Specifications
- Supported Paper Sizes
- Software Accessories
- Optional Equipment

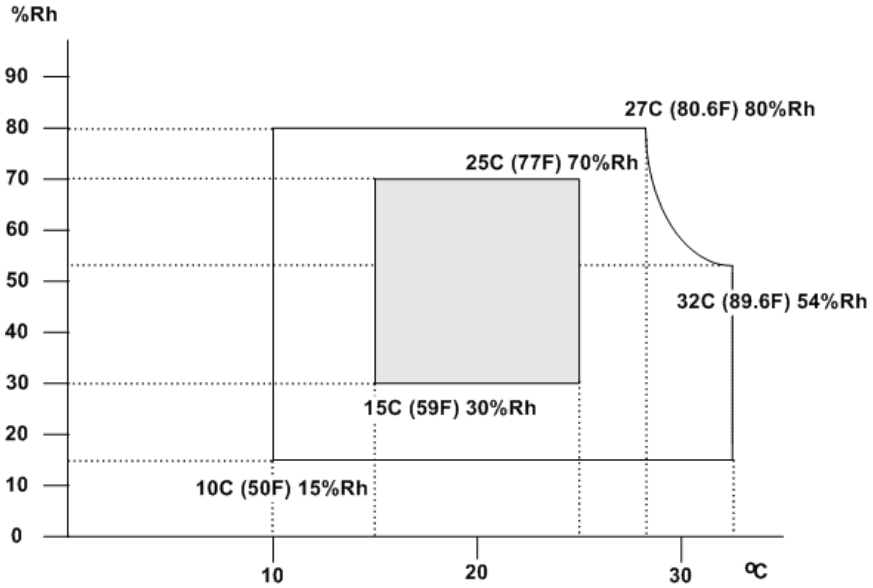
2. Installation

Installation Requirements

Important

- Install the machine in a safe place, to maintain security.
- Make sure that the operating instructions are kept at a convenient place for the customer.

Environment



Temperature Range:	10°C to 32°C (50°F to 90°F)
Humidity Range:	15% to 80% RH
Ambient Illumination:	Less than 1,500 lux (do not expose to direct sunlight.)
Ventilation:	Room air should turn over at least three times/hr/person
Ambient Dust:	Less than 0.10 mg/m^3 (2.7 x 10/6 oz/yd^3)

1. Avoid areas exposed to sudden temperature changes:
   1) Areas directly exposed to cool air from an air conditioner.
   2) Areas directly exposed to heat from a heater.
2. Do not place the machine where it will be exposed to corrosive gases.
3. Do not install the machine at any location over 2,000 m (6,500 ft.) above sea level. (NA models can be installed at up to 2,500m (8,200 ft.))
4. Place the main machine on a sturdy and level base. Inclination on any side should be no more than 5 mm (0.2").
5. Do not place the machine where it may be subjected to strong vibrations.

Minimum Space Requirements

The following space is required for the user to use the machine.

If the required space is not provided, machine usability will not be ensured.

The required space is also necessary to avoid causing any damage.

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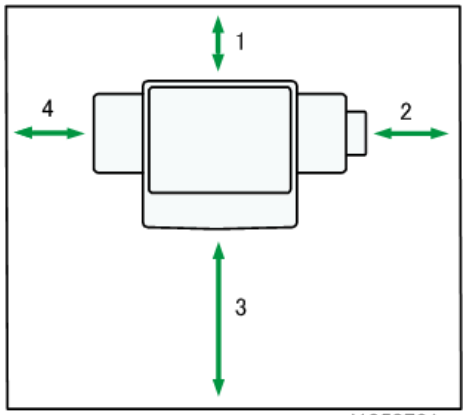

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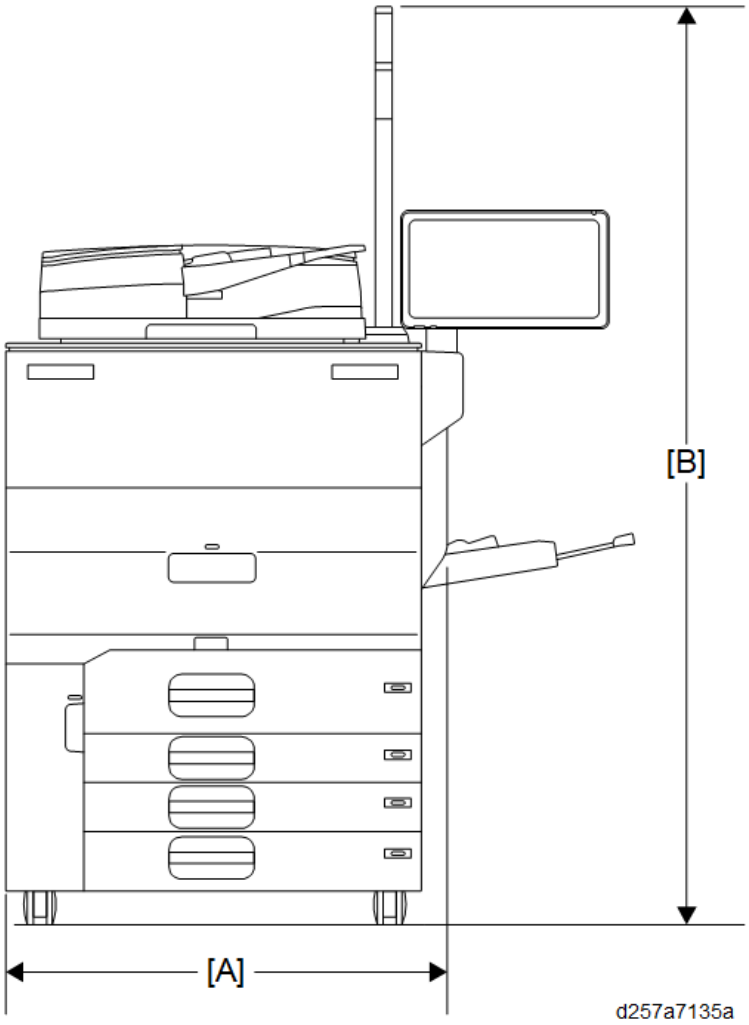
1 Rear	100 mm (4")
2 Right	150 mm (5.9")
3 Front	800 mm (31.5")
4 Left	150 mm (5.9")

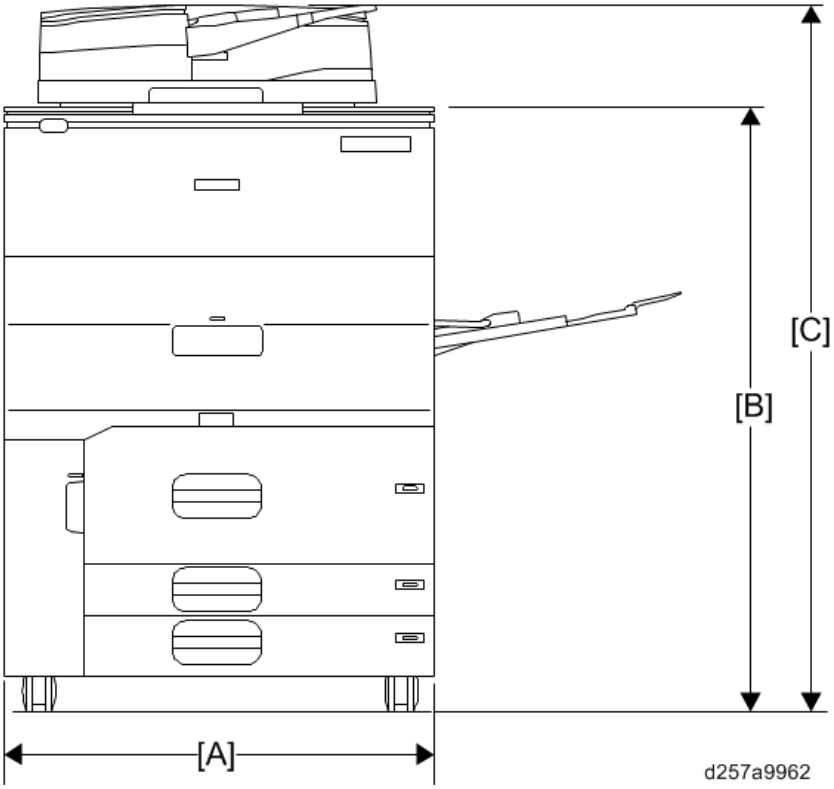
Dimensions

Pro C5300S/C5310S



[A]: 799 mm

[B]: 1648 mm



[A]: 750 mm

[B]: 1050 mm

[C]: 1225 mm

Power Requirements

⚠CAUTION

- The main machine should be installed near a wall socket/outlet and the plug is inserted firmly in the socket/outlet.
- Avoid using extension cords and multi-wiring.
- The machine must be grounded.
- Never set anything on the power cord.
- Rating voltage of output connectors [A] and [B] for peripherals: Max.DC 24V

Input voltage level (Pro C5300S/C5310S)

Destination	Model	Power supply voltage	Rated current consumption
NA	Pro C5300S	208 to 240V	12A
	Pro C5310S	208 to 240V	12A
EU	Pro C5300S	220 to 240V	12 to 10A
	Pro C5310S	220 to 240V	12 to 10A
AP	Pro C5300S	220 to 240V	12 to 10A
	Pro C5310S	220 to 240V	12 to 10A
TWN	Pro C5300S	220 to 240V	12 to 10A
	Pro C5310S	220 to 240V	12 to 10A
CHN	Pro C5300S	220 to 240V	12 to 10A
	Pro C5310S	220 to 240V	12 to 10A

Input voltage level (IM C6500/C8000)

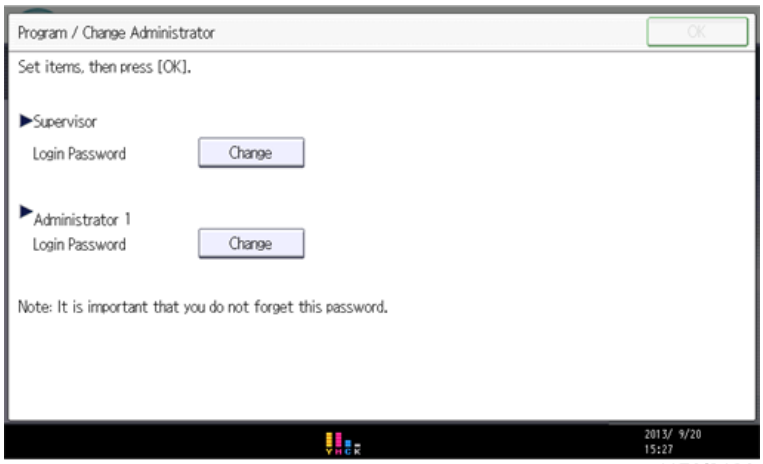
Destination	Model	Power supply voltage	Rated current consumption
NA	IM C6500	120 to 127V	16A
	IM C8000	208 to 240V	12A
EU	IM C6500	220 to 240V	12 to 10A
	IM C8000	220 to 240V	12 to 10A
AP	IM C6500	220 to 240V	12 to 10A
	IM C8000	220 to 240V	12 to 10A
CHN	IM C6500	220 to 240V	12 to 10A
	IM C8000	220 to 240V	12 to 10A

Important Notice on Security Issues

To increase the security of the MFP and ensure the customer sets the administrator password, a prompt to set or change the administrator password is displayed when powering up for the first time.

Overview

- The following Program/Change Administrator screen is displayed at the first power-up.



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- After the customer sets the administrator/supervisor login password, the home screen will be displayed. However, customers can remove the administrator password setting screen with the following procedure if they do not need.

1. On the Program/Change Administrator screen, press [Change] next to Supervisor and then touch [OK] without inputting any password.
2. Touch [OK] again when the Confirm password display shows up.
3. For Administrator 1, do the same procedure as steps 1 and 2.
4. Press the [OK] button, and then turn the power OFF/ON.

SP5-755-002 (Display Setting: Hide Administrator Password Change Scrn) allows you to skip this screen temporarily and continue the installation procedure without setting an administrator password. However, the Program/Change Administrator screen appears every time you turn the power OFF/ON, if the password is not set.

Password Setting Procedure

Note

For further details about security issues of MFPs, refer to the "Notes on Using Multi-Function Printers Safely" supplied with the MFP.

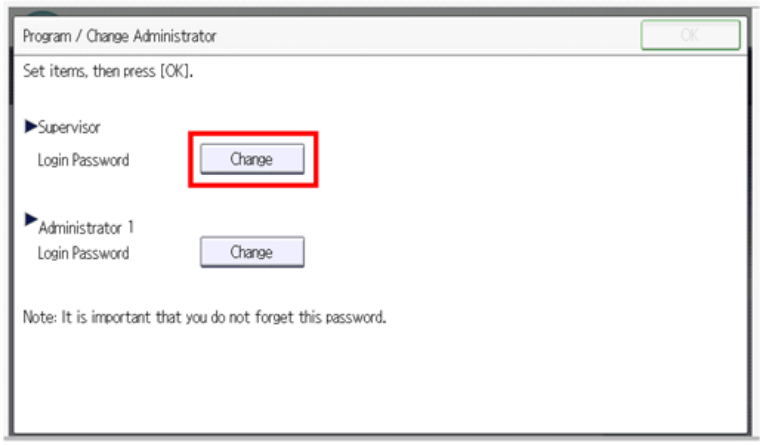
⚠CAUTION

When Supervisor/Administrator 1-4 passwords are configured via network, the "Change Supervisor login password" window won't display.

The passwords for Supervisor or Administrator 1 to 4 can be set via "System Settings". However, the

Program/Change Administrator screen appears every time the power is turned on if the passwords are input this way. Therefore, we recommend customers set the passwords via the network or the Program/Change Administrator screen.

1. Install the machine.
2. Turn ON the main power.
   The password change display appears.
3. Press [Change] and change the supervisor login password.



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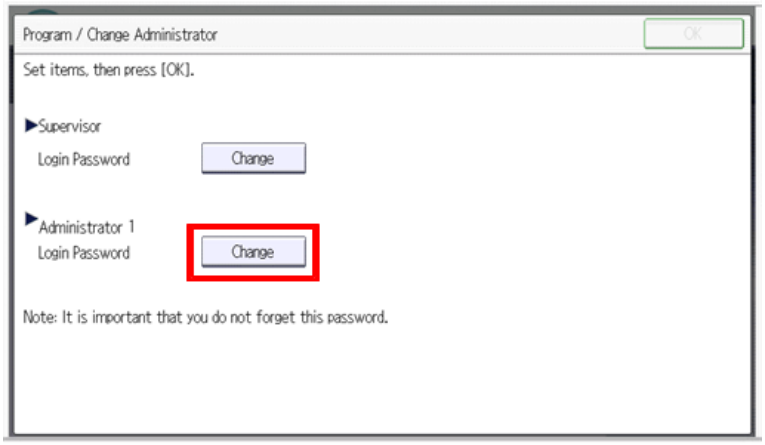
4. Input the password, and then press [OK].
5. Confirm the password, and then press [OK].
6. Change the administrator 1 login password.



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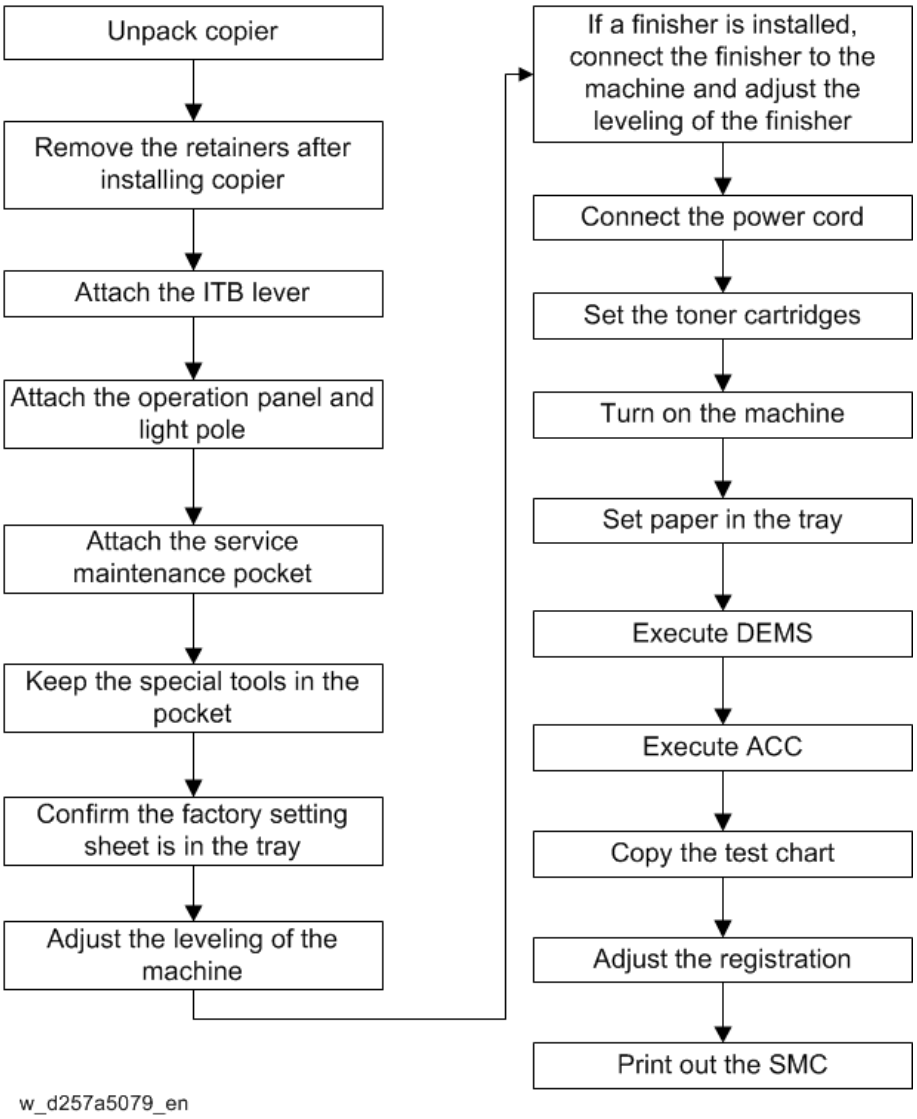
7. Input the password, and then press [OK].
8. Confirm the password, and then press [OK].
9. Turn the main power OFF and back ON again.

Main Machine Installation (Pro C5300S/C5310S)

Installation Flow Chart



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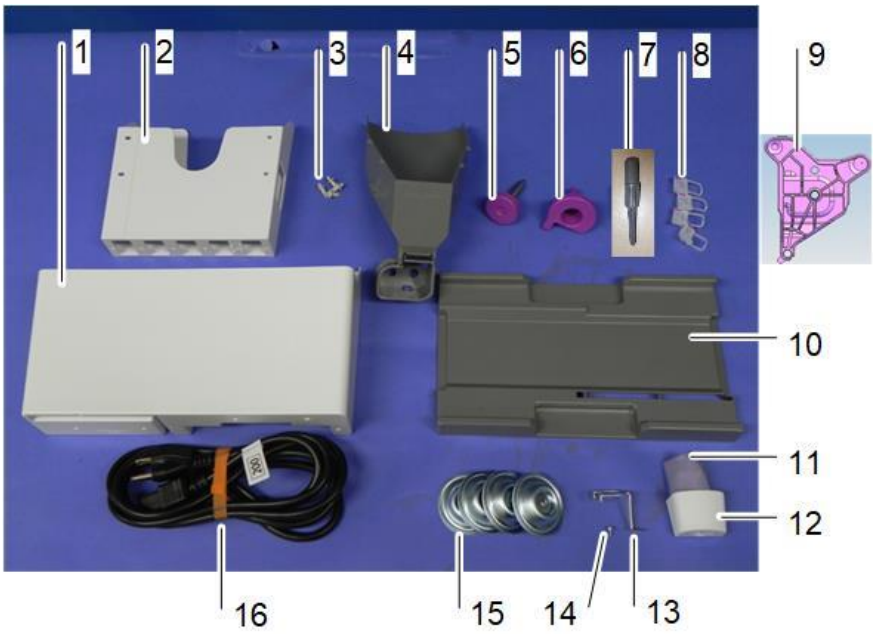
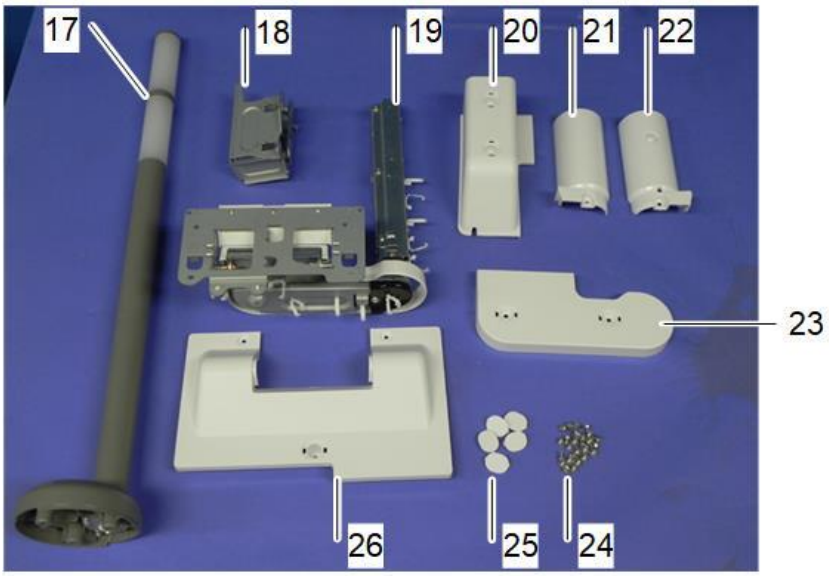
Accessory Check

No	Description	Q'ty	
		Pro C5300S	Pro C5310S
1	Service Pocket	1	1
2	Pocket	1	1
3	Rivet - Dia5	2	2
4	Developer Funnel	1	1
5	Drum Holder (front)	1	1
6	Drum Holder (rear)	1	1
7	Jig for Development Unit	1	1

No	Description	Q'ty	
		Pro C5300S	Pro C5310S
8	Development Cap	4	4
9	Jig for Paper Transfer Belt Unit	1	1
10	PCDU Holder	1	1
11	Cloth - DF Exposure Glass	1	1
12	Cloth Holder	1	1
13	Power Cord Protection Plate	1	1
14	Screw - M3 x 6	1	1
15	Leveling Shoes	4	4
16	Power Cord	1	1
17	Tube Type Lamp	1	1
18	Operation Panel Arm Guide Plate	1	1
19	Operation Panel Arm	1	1
20	Operation Panel Post Lower Cover	1	1
21	Operation Panel Post Front Cover	1	1
22	Operation Panel Post Rear Cover	1	1
23	Operation Panel Arm Upper Cover	1	1
24	Tapping Screw - 3 x 6	25	25
25	Screw Cover	2	2
26	Operation Panel Rear Cover	1	1
27	Guide Sheet	1	1
-	Plate: Logo Type (NA only)	1	1
-	Decal: Paper Set Direction	1	1
-	Manual: Read This First	1	1
-	Manual: Notes for Using This Machine Safely	1	1
-	Note for Bluetooth	1	1
-	Note to Users in EU Countries	1	1
-	Note to Users in the USA	1	1
-	Note to Users in Canada	1	1
-	EULA Sheet	1	1
-	Notes for Users (AirPrint)	1	1
-	CD-ROM	1	1
-	Software License Agreement	1	1
-	DVD-ROM	1	1
-	Decal: Pullout Set	1	1
-	Sheet: TEL (China only)	1	1





Installation Procedure

Unpacking the Machine

1. Unpack the machine and remove all the wrapping.
2. Place the machine at the installation site.

3. Remove all filament tape from the machine.

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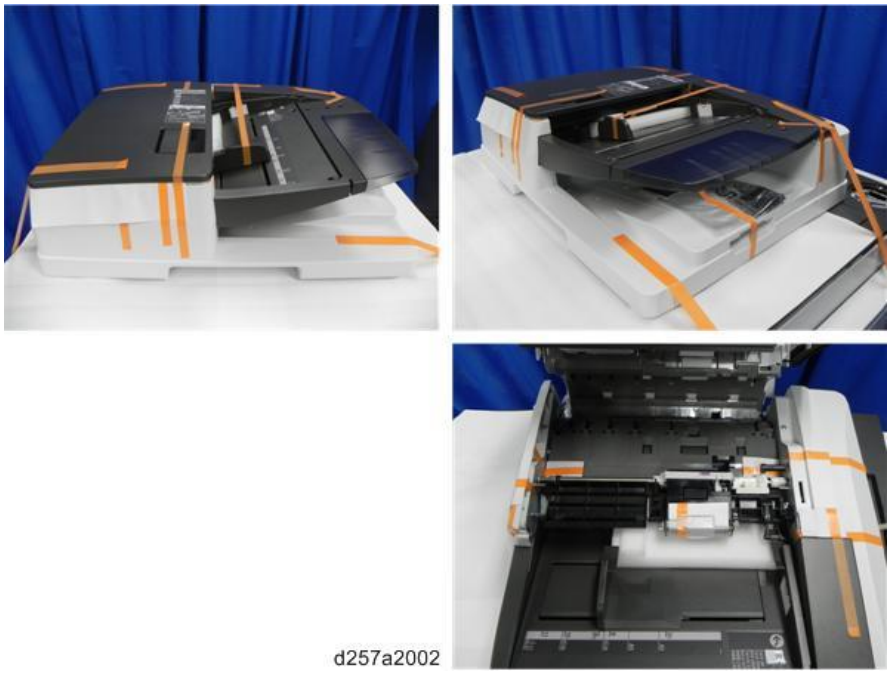
4. Remove the filament tape and the cushion at the ADF.



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5. Open the ADF [A] and release the lever to open the white board. Then remove the protection

sheet.

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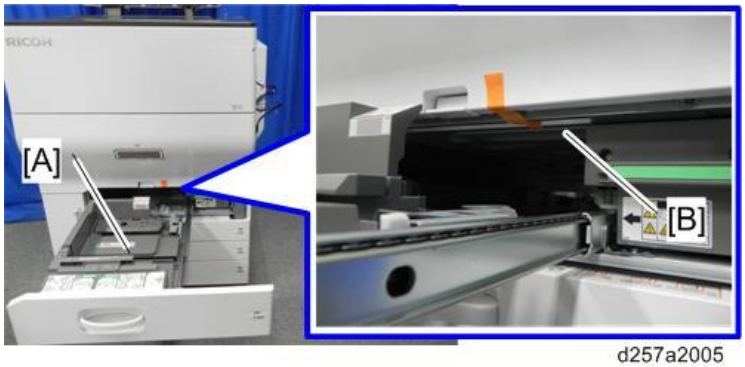
6. Open the tandem tray [A] and remove the filament tape at the duplex unit [B].



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7. Remove the power cable from paper tray 2.

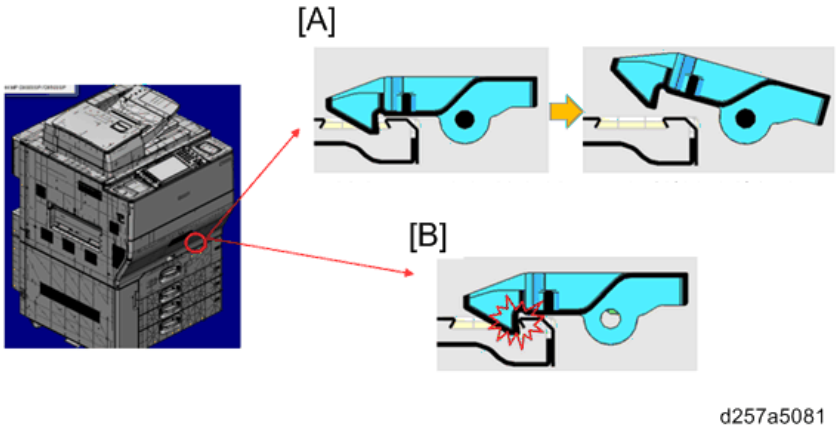
8. Remove the operation panel from paper tray 3.

Attaching the ITB Separation Lever

When unpacking the machine, the ITB separation lever is not yet attached to the correct location. Be sure to attach the lever when installing the machine.

Note

After transporting the machine, the load on the front part of the machine may cause the drawer unit to become stuck, making it impossible to draw it out.



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[A] (Normal): When the drawer unit is pulled, the lock mechanism is lifted and the drawer unit is unlocked.

[B] (Abnormal): The drawer unit is stuck.

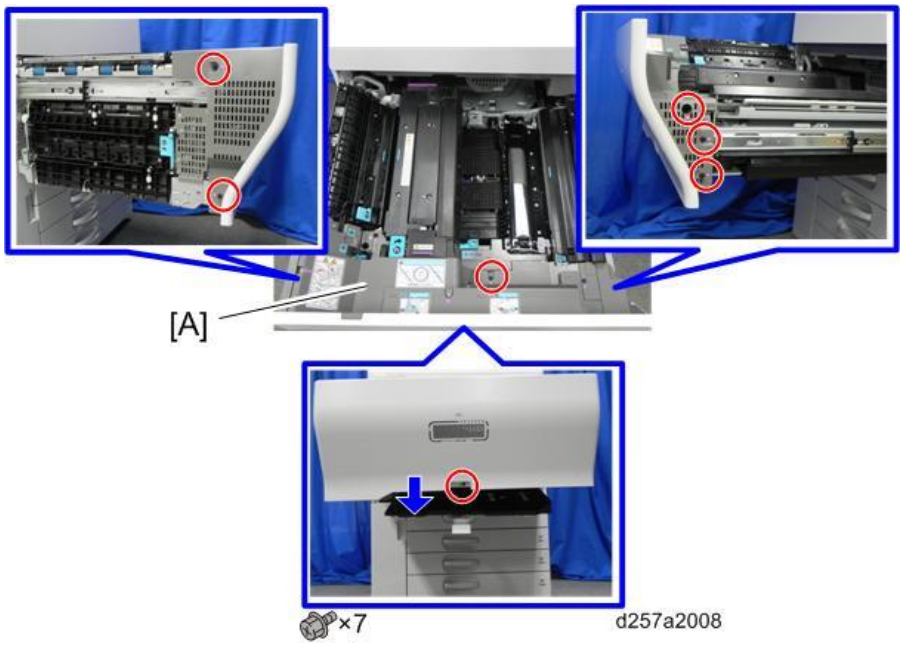
If this happens, push the drawer unit in and try pulling it out again.

Also, please note that when the power is turned ON, the drawer unit will be pulled in automatically, and this will solve the problem.

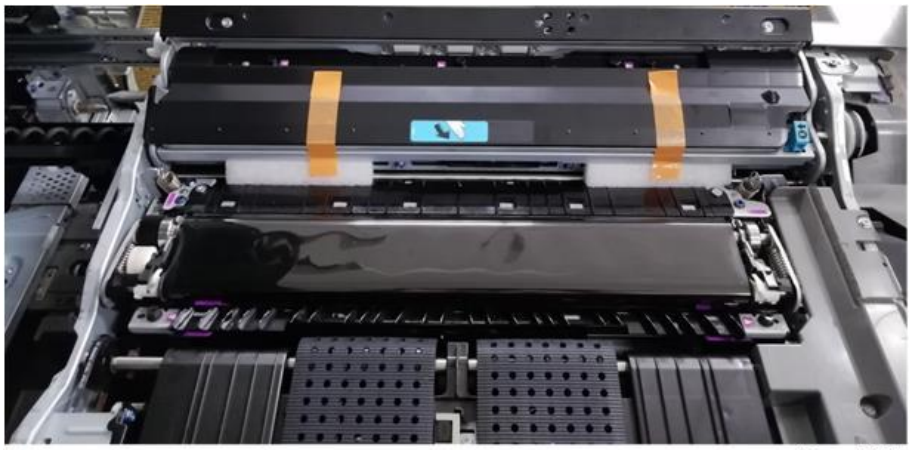
1. Open the toner supply unit front cover [A], and remove the ITB separation lever [B].

2. Open the drawer unit [A].

3. Remove the drawer unit cover [A].



4. Remove the tape and retainer.

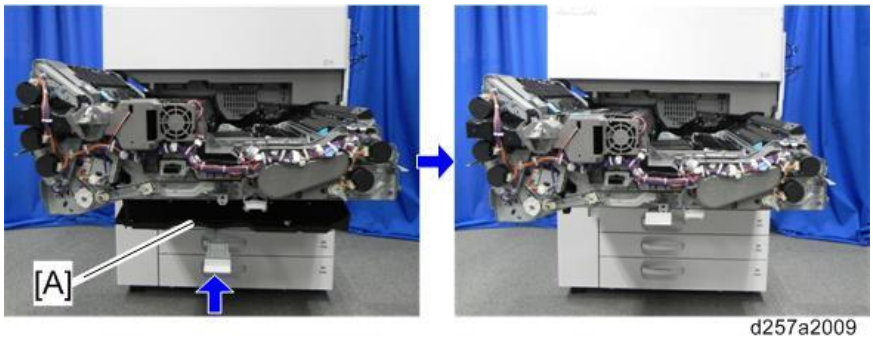


d0cpz1272

5. Close the drawer unit.

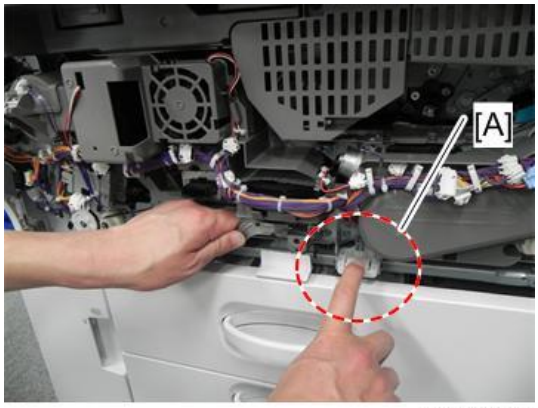
Note

- Pushing the drawer unit back into the machine allows you to close the guide plate [A] of the paper exit and duplex unit after removing the drawer unit cover.



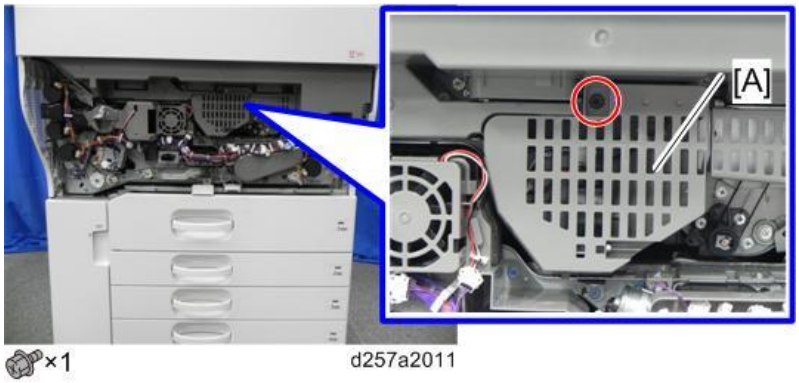
d257a2009

- Make sure to hold down the lock lever [A] when pulling out the drawer unit. The drawer unit is locked in place by this lever.



d257a2010

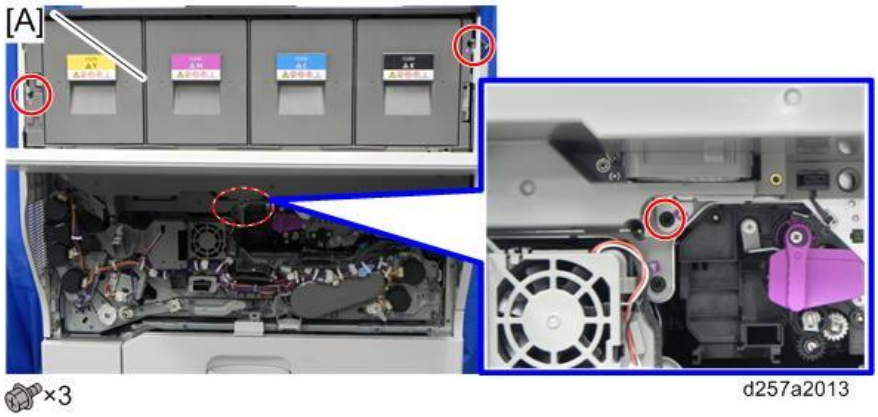
6. Remove the ITB cleaning intake fan [A] along with the duct.



Note: TCRU screws

7. Open the toner supply unit front cover [A].

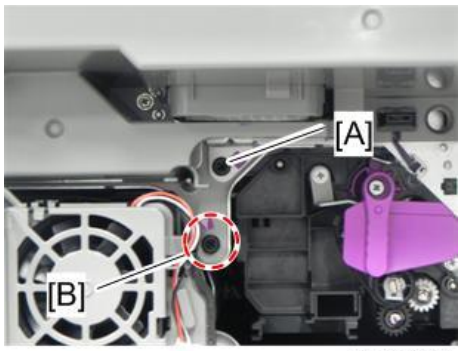
Remove the fixing screws of the toner supply unit [A].



Note: TCRU screws

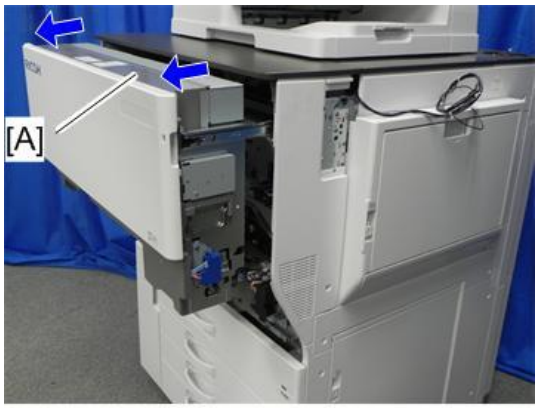
Note

Do not remove the screw [B] below the toner supply unit fixing screw [A] because it is used to fix the faceplate.



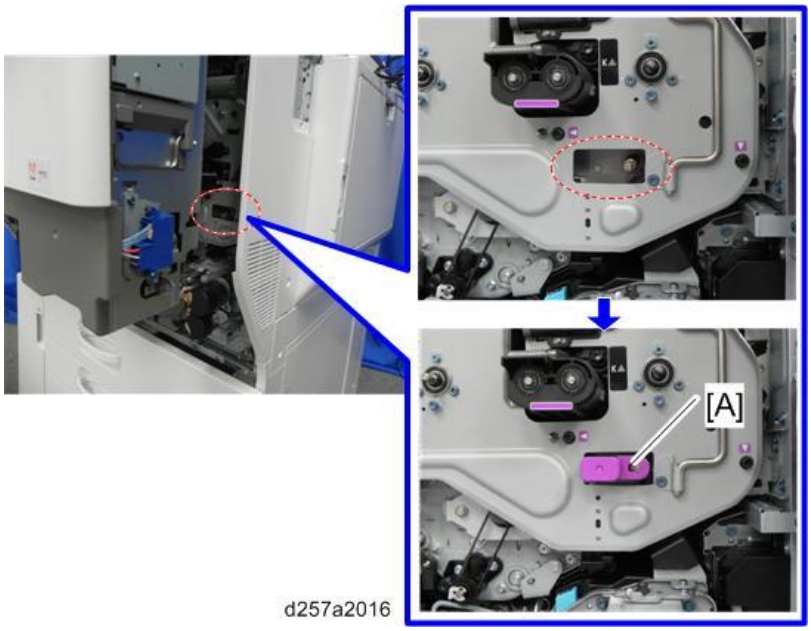
d257a2014

8. Slide the toner supply unit [A] to the front.



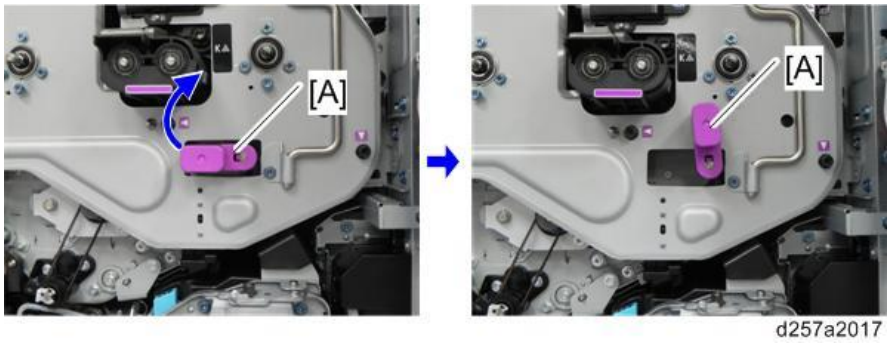
d257a2015

9. Attach the ITB separation lever [A] horizontally from the right side of the machine.



d257a2016

10. Turn the ITB separation lever [A] clockwise until it stops.



11. Return the toner supply unit to the machine and secure it with the screws.

12. Attach the ITB cleaning intake fan and drawer unit cover.

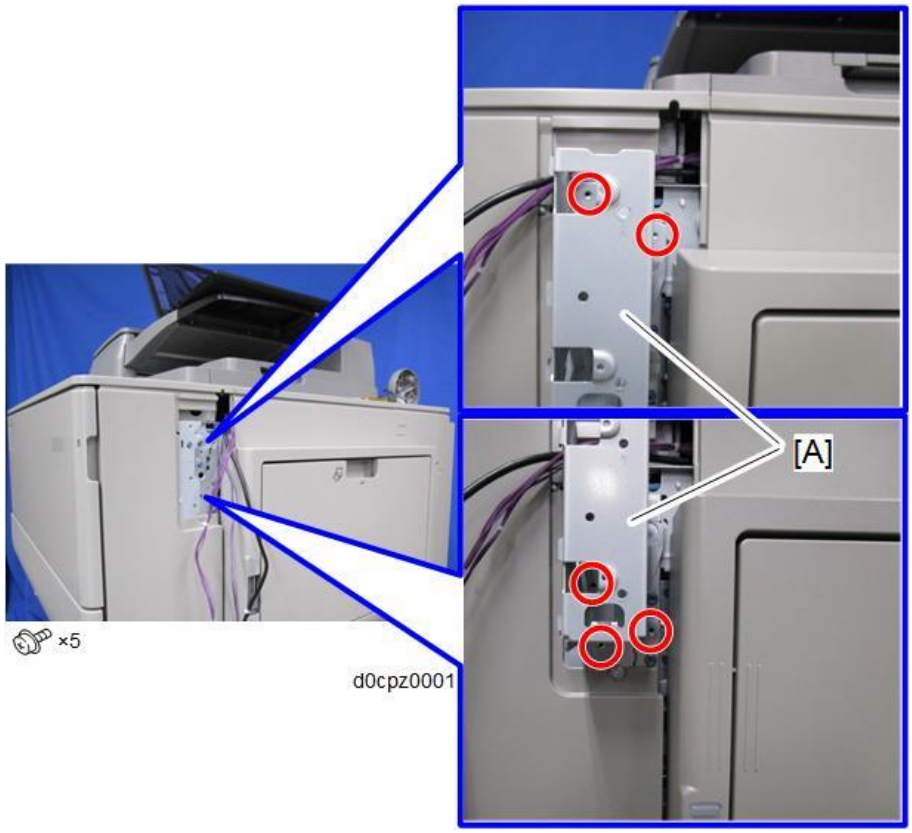
Operation Panel Attachment

Note

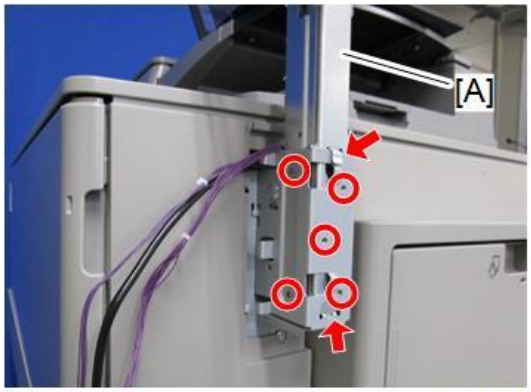
Silver and black screws are used for the operation panel unit.

Use the correct screws. Using incorrect screws may damage the exterior cover.

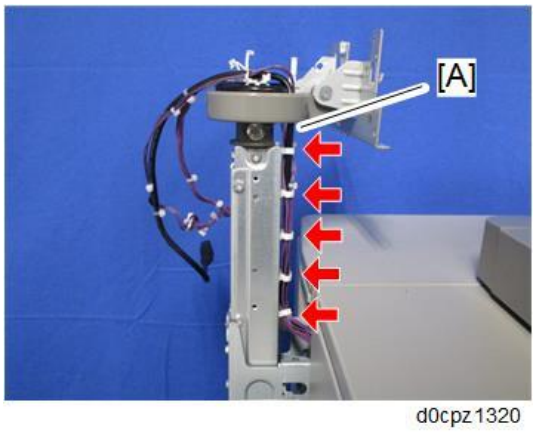
1. Attach the stay [A] for mounting the operation panel arm.



2. Attach the operation panel arm [A].

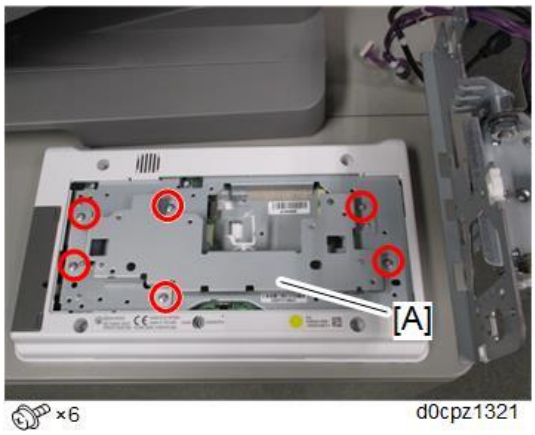


3. Clamp the harness [A].

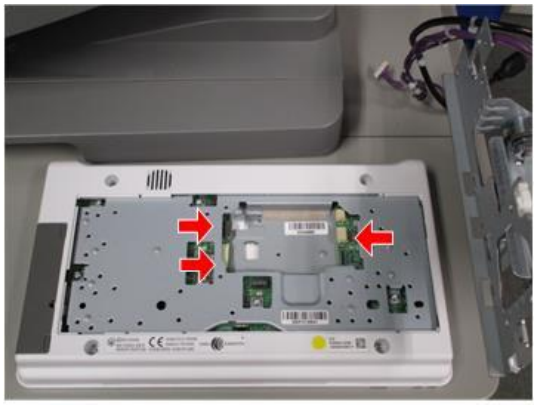


4. Place the operation panel on the main machine.

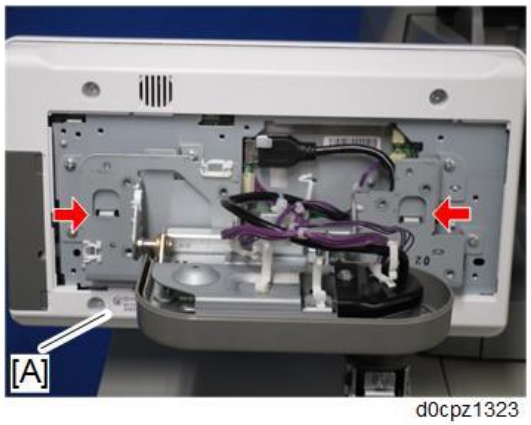
5. Remove the bracket [A].



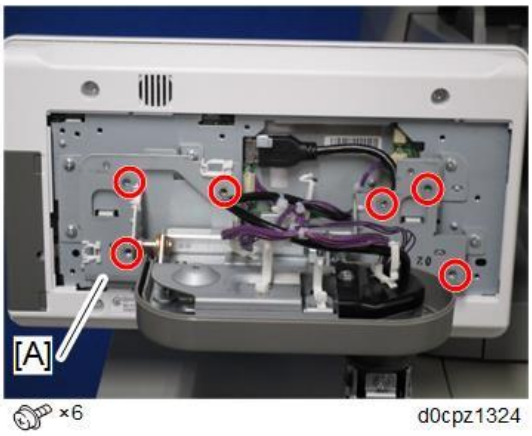
6. Connect the connectors.



7. Attach the operation panel [A] to the hook of the arm.



8. Tighten the operation panel to the arm [A].



9. Clamp the harness [A].

×1 d0cpz1325

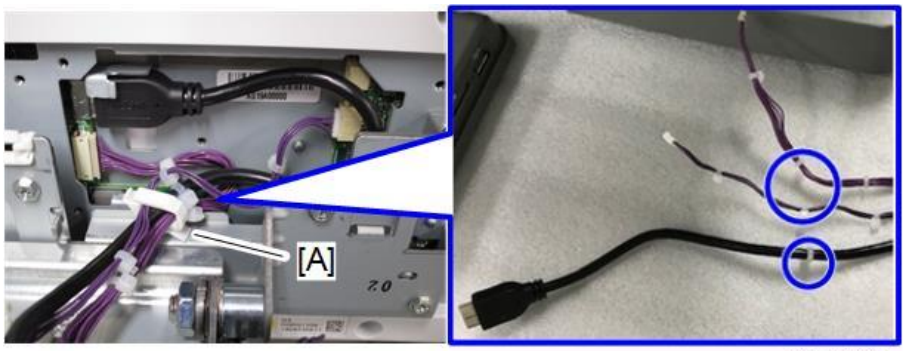
Note

Route the harness as shown below.

The cable ties * shown in the blue circle must be placed near the control panel beyond the clamp [A].

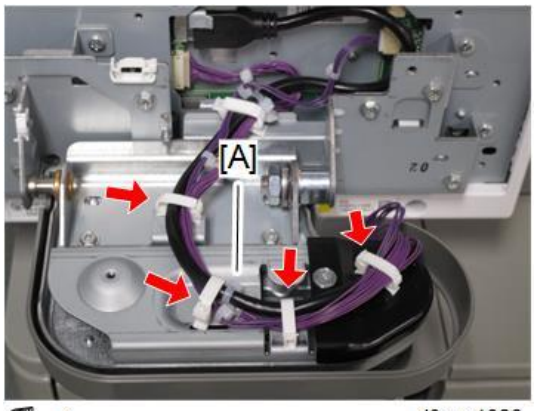
*The 2nd tie from the connector for the purple harnesses.

*The 1st tie from the connector for the black harness.



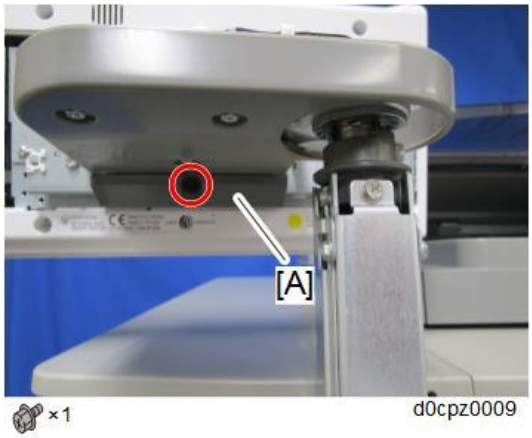
d0cpz0628

10. Clamp the harness. Make sure that the locking support [A] is placed as the photo below.

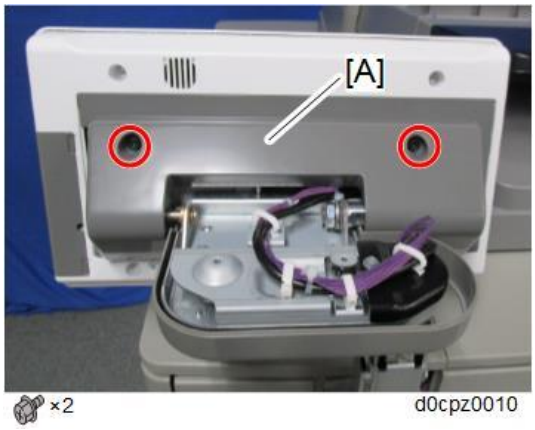


×4 d0cpz1326

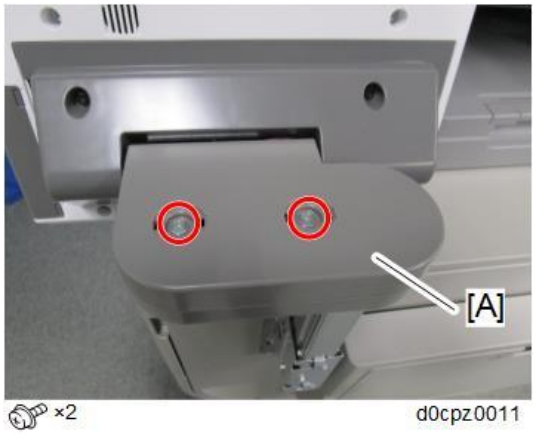
11. Attach the panel rear bottom cover [A] with a **BLACK** screw.



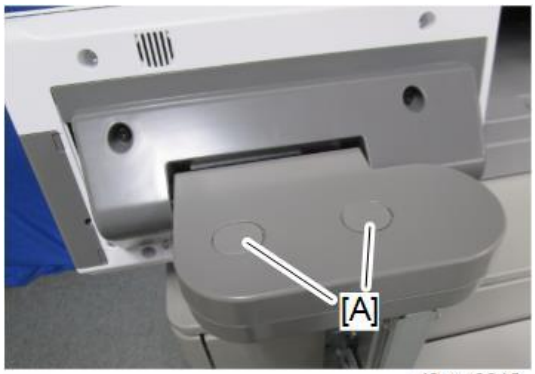
12. Attach the panel rear cover [A] with **BLACK** screws.



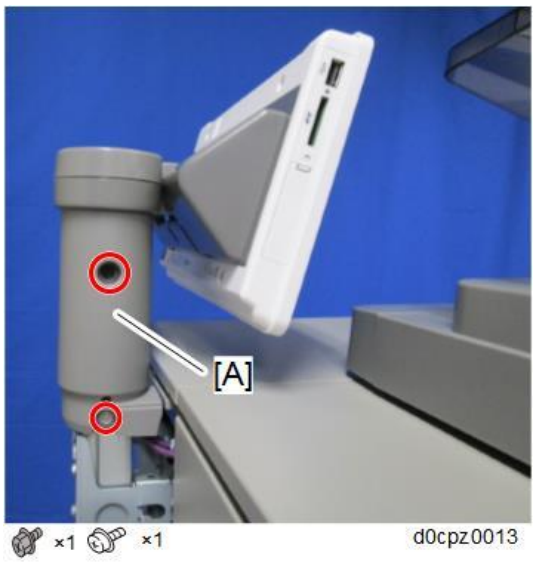
13. Attach the arm upper cover [A].



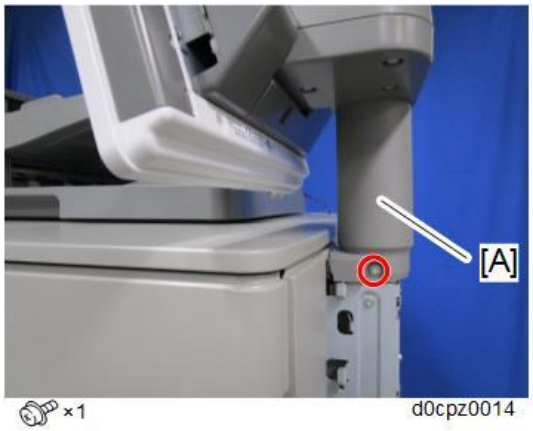
14. Attach the screw covers [A].



15. Attach the operation panel post rear cover [A]. Use a **BLACK** screw for the upper screw hole.



16. Attach the operation panel post front cover [A].



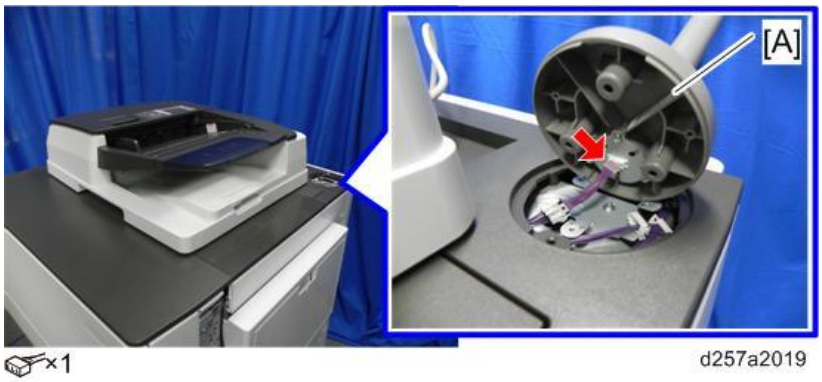
17. Attach the panel arm cover [A].

18. Attach the cover [A].

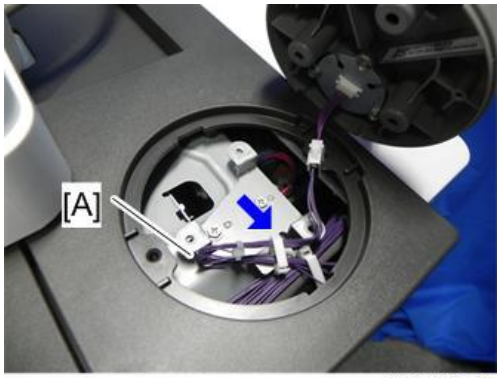
19. Remove the protecting sheet from operation panel.

Operator Call Light Attachment

1. Connect the operator call light [A] to the machine.

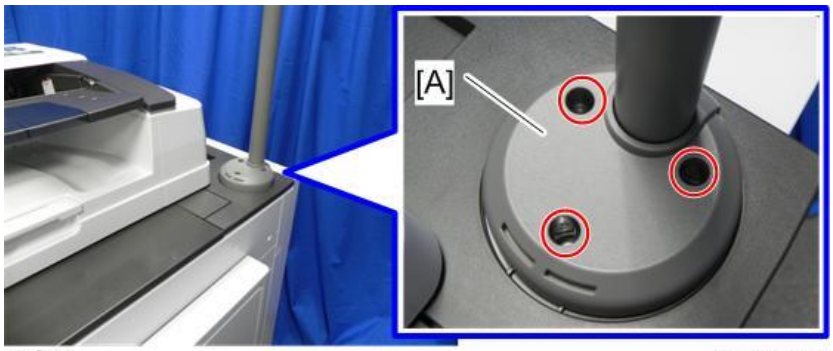


2. Fold back the harness [A] and clamp it.



d257a2020

3. Secure the operator call light [A].



d257a2021

Note

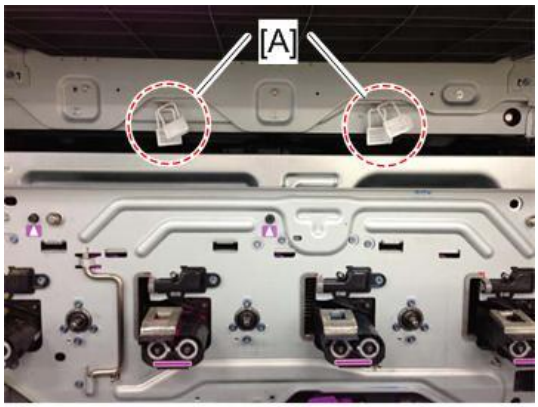
When attaching the operator call light, be careful not to pinch the harness. Fix the light after checking visually from the front and back.

d257a2022

Storing the Supply Port Caps for the Developer

TCRU/ORU Contracts

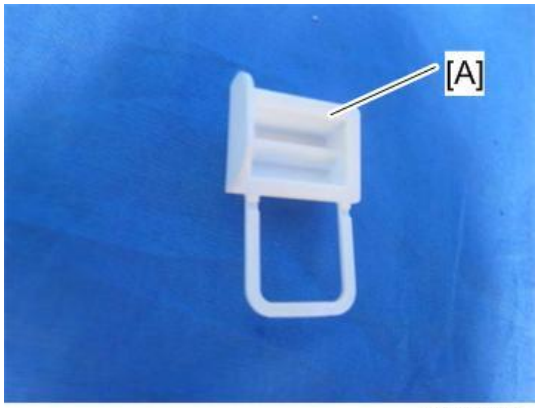
When a TCRU/ORU user removes the PCDU from the machine, they must use the caps (x 4) to prevent developer from spilling. When installing the machine, attach the caps [A] to the clamping positions shown below.



d1353058

Not TCRU/ORU Contracts

Store the caps [A] (x 4) in the service pocket for the operating instructions. Use them during maintenance if needed.



d1350056

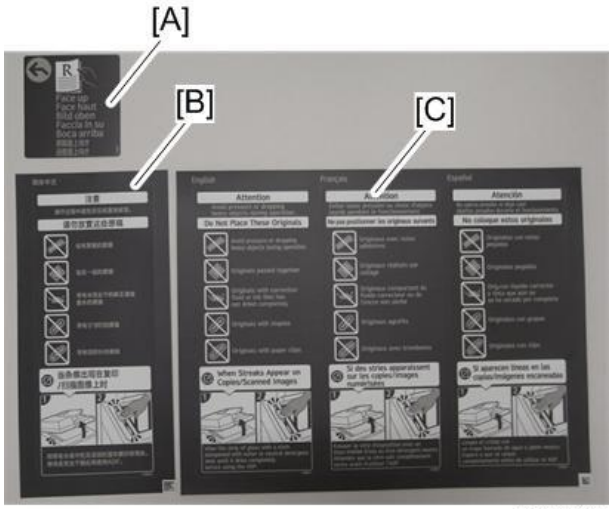
Storing the Factory SP Sheet

On a newly delivered machine, the factory SP sheet is located on the exposure glass.
Open the tandem tray [A], and remove the paper set sheet [B]. Confirm that the factory SP sheet [C] is stored inside.

d1350033

Attaching the decals

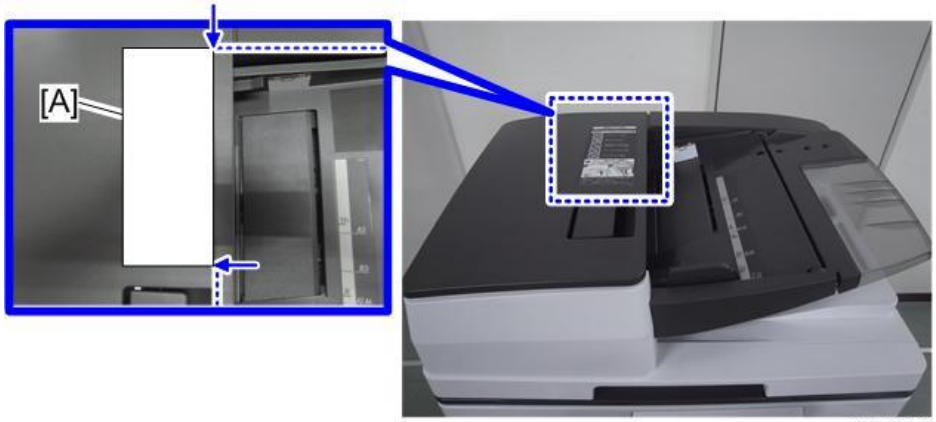
1. Prepare the ADF paper set decal [A] and ADF caution decal ([B] or [C]).



d1351935

- [B]: ADF caution decal for China
- [C]: ADF caution decal for other countries

2. Attach the ADF caution decal to the position [A] on the ADF.



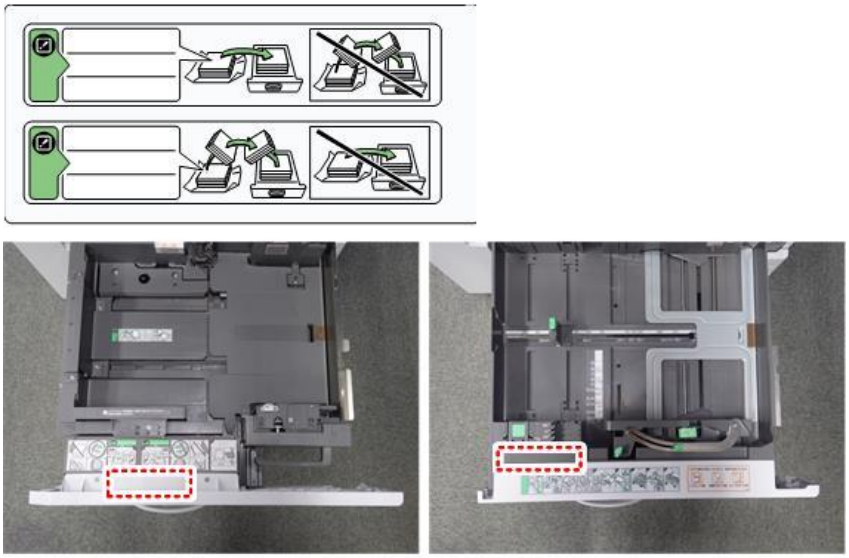
d1351933

3. Attach the ADF paper set decal [A] in the indentation in the ADF.

d1351934

4. According to the paper that will be used by the customer, select and attach the following decals to

the 1st tray, 2nd tray and 3rd tray.



d257a7237

Note

- Paper type, brand, etc can be written on the blank space.

Machine Level Adjustment

Make sure the machine is level during installation.

Important

- If the machine is not level, the tilt will reduce the accuracy of side-to-side registration.
- The front and rear inclination of the machine must be less than 5 mm (0.2").

1. Place the four shoes [A] below the bolts [B] under each corner of the machine.
2. Turn the nuts [B] to lower the bolt until the bolts reach the leveling shoes [A].

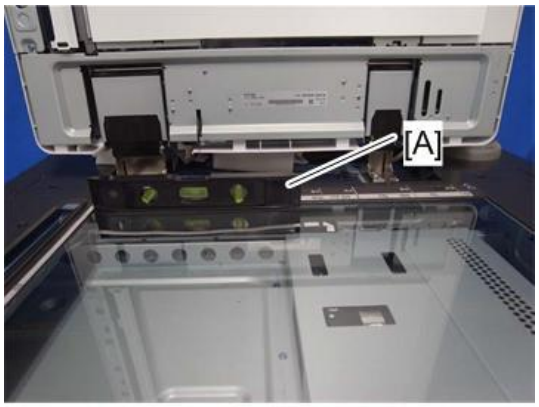
   Example below: Front side

d1350034

Note

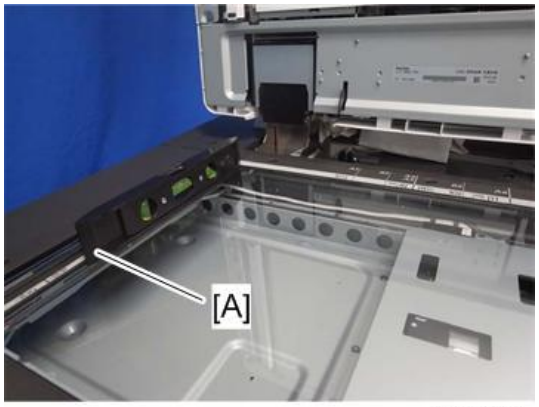
- Use a wrench to raise or lower the nuts.

3. Open the ADF, and then place a level [A] on the exposure glass.



d1350035

4. Adjust the machine level until the machine is less than 5mm from level (measure from left-to-right).
   - When the right side of the machine is lower: Lower the nuts of the right side of the machine (front and rear) to lift the right side of the machine.
   - When the left side of the machine is lower: Lower the nuts of the left side of the machine (front and rear) to lift the left side of the machine.
5. Open the ADF, and then place the level [A] along the side.



d1350036

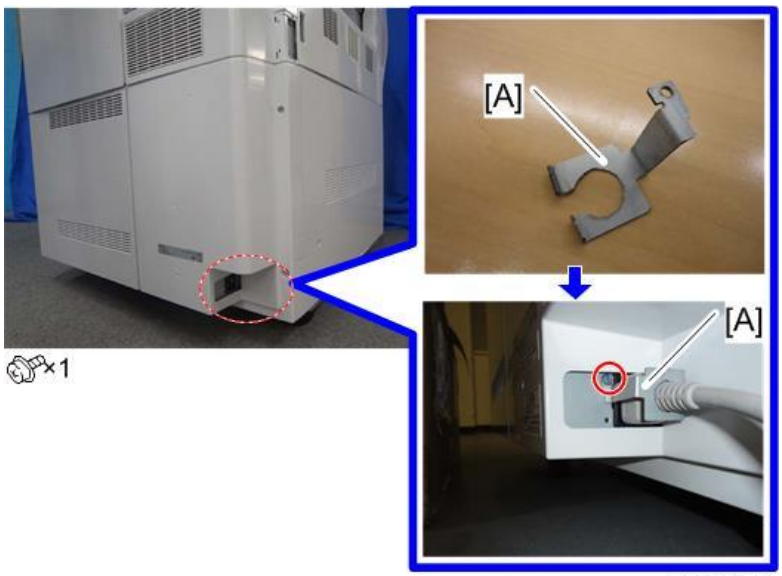
6. Adjust the machine level until the machine is less than 5mm from level (measure from front-to-rear).
   - When the front side of the machine is lower: Lower the nuts of the front side of the machine (left and right) to lift the front of the machine.
   - When the rear side of the machine is lower: Lower the nuts of the rear side of the machine (left and right) to lift the rear of the machine.

Installing the Securing Bracket to Prevent the Power Cord from Falling Off

1. Install the securing bracket [A] to prevent the power cord from falling off.

Note

Pro C5300S has 2 power cords. Install the securing bracket for each of the power cords.



d1350048a

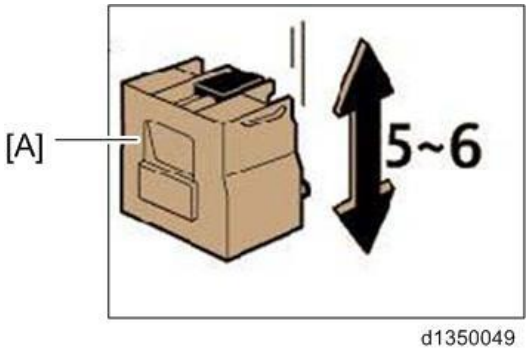
How to Set the Toner Cartridge

Important

- Each toner cartridge has a different shape and forcing a cartridge in the wrong place will damage it. The places for each cartridge from left to right are as follows: Y, M, C, K.

d1350052

1. Open the toner supply unit front cover.
2. Unpack the new toner cartridge.
3. Turn the toner cartridge upside down and shake 5-6 times while holding both ends.



d1350049

4. Set each color toner cartridge. Push the toner cartridge until it locks into place.

Executing DEMS

Execute DEMS (SP3-040-001) to correct uneven image density.

ACC (Automatic Color Calibration) Adjustment

1. Make sure all clamps etc. have been removed and plug in the power cord.
2. Turn the main power switch ON.

Auto Color Calibration (ACC) (Adjustment 001: ACC (Automatic Color Calibration))

- Press the [Settings] icon on the [Home] screen.
- Press [Maintenance] - [Auto Color Calibration].
- Press [Start Auto Calibration].

Adjusting the Color Registration

- Press the [Settings] icon on the [Home] screen.
- Press [Maintenance] - [Color Registration].
- Press [OK].

Checking the Copy Image with the Color Chart

Install any options before doing the procedure below.

1. Switch the machine to copier mode.
2. Make sure that there is A3 or DLT paper in one of the trays.
3. Put a "Color Chart C-5" on the exposure glass.
4. Select full color mode and print one copy of the chart.
5. Check the results of the copy with the customer.

Important

A banding with 250 mm interval may occur immediately after main machine installation.

If this symptom occurs, do SP1-133-110 to refresh. Refer to the link page for detail. (Troubleshooting for banding after Installation at 250 mm intervals)

Paper Tray Settings

Adjust the side-to-side registration for each paper tray as necessary.

- SP1-003-001 (Side-to-Side Reg: Tray1)
- SP1-003-002 (Side-to-Side Reg: Tray2)
- SP1-003-003 (Side-to-Side Reg: Tray3)
- SP1-003-004 (Side-to-Side Reg: Tray4)
- SP1-003-005 (Side-to-Side Reg: Bypass Tray)
- SP1-003-006 (Side-to-Side Reg: Duplex)

Paper Library Data Installation

Important

From this model, the file format "mqp" is changed to "fwu", which is generally used for firmware for RICOH products.

This change allows you to do paper library data installation with the same procedure for other firmware update. Refer to Update Procedure for details.

Important

- Note the following 2 types of MQP data:
  - MediaLib XX ProC5300 A(AB) : For **ProC5300S** only
  - MediaLib XX ProC5310 A(AB) : For **ProC5310S** only

Backing up and restoring paper library data

This table describes the methods for backing up and restoring Paper Library data.

		Adjustment Setting for Skilled Operators	SP mode	SD slot
MQP data	Install	No	Yes: SP5-711-001	Lower slot
Custom paper library	Back up	Yes	No	Slot on operation panel
	Restore	Yes	No	Slot on operation panel
Saved paper library	Back up	Yes	No	Upper slot
	Restore	No	Yes: SP5-711-002	Lower slot

How to back up and restore Custom Paper Library/Saved Paper Library in Adjustment Settings for Skilled Operators

1. Insert the SD card into the SD card slot on the operation panel.
2. Tap [Adjustment Settings for Skilled Operators].
3. Tap [05: Machine Maintenance].
4. Tap [0512: Backup / Restore Custom Paper Data].
5. Tap [Back Up Library Archive], [Back Up Custom Paper Settings], or [Restore Custom Paper Settings].

Auto Remote Firmware Update (ARFU) Settings

Specify ARFU settings as required.

Important

Operating Conditions:

- ARFU requires an internet connection. Be sure to get permission from the customer before setting up ARFU.
- ARFU is available only for machines that contain a HDD. If the machine does not have a HDD, an option HDD must be installed.

Note

- The connection is one-way, so the user's data cannot be accessed from the firmware server.

Procedure:

1. ARFU enable setting
2. Server connection check
3. Prohibited date and time setting

(1) Enable ARFU

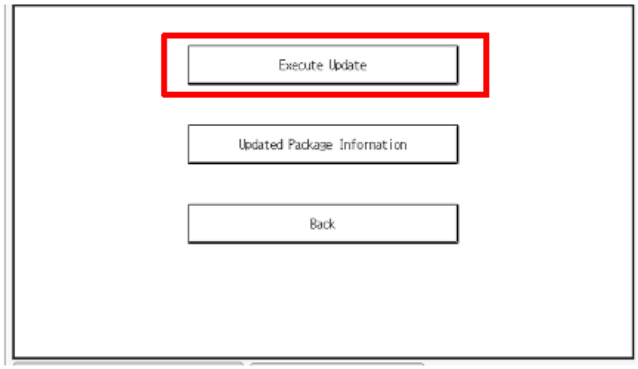
1. Set SP5-886-111 (Auto Update Setting) to "1 (ON)".
1: ON / 0: OFF (Default)

Note

To download the firmware only using SFU (Smart Firmware Update), and not by ARFU, specify the settings as follows:
- SP5-886-111(Auto Update Setting) to "0 (OFF)"
- SP5-886-115 (SFU Auto Download Setting) to "1 (ON)"

(2) Server connection check

1. Enter the SP mode.
2. Press [Firmware update] > [Update] > [Execute update].



3. Check if one of the following messages appears: "Will you download the latest package Ver *** and update?" or "The installed package is the latest version.".
If the message appears, it is possible to execute ARFU. Press "No" and close SP mode to complete the configuration.

Important

The update will run immediately if you press "Yes" at the message "Will you download the latest package Ver *** and update?" The update cannot be canceled if it is run by SFU. (The update can

be canceled if ARFU is used.)

Note

SP5-886-116 (Auto Update Prohibit Term Setting) displays the scheduled date and time of the next ARFU.

If error code 71: [Network connection error] appears when you click “Execute update”, see troubleshooting below.

(3) Prohibited date and time setting

Ask the customer for the prohibited times and days of the week for ARFU execution and set the following as needed. The default prohibited time is from 9 a.m. to 5 p.m. and there is no prohibited day.

- SP5-886-112 (Auto Update Prohibit Term Setting) Default: 1 (ON)
- SP5-886-113 (Auto Update Prohibit Start hour) Default: 9
- SP5-886-114 (Auto Update Prohibit End hour) Default: 17
- SP5-886-120 (Auto Update Prohibit Day Of Week Setting) Default: 00000000 [00H]
  Set the bits for the days of the week to prohibit updating.
  Prohibited (Monday - Sunday): bit 7, Monday: bit 6, Tuesday: bit 5
  Wednesday: bit 4, Thursday: bit 3, Friday: bit 2, Saturday: bit 1, Sunday: bit 0
  e.g.) Prohibited on Mon., Fri., Sat., and Sun.: 01000111 [47H]

Note

They can be specified also via Web Image Monitor if logged in as the machine administrator from the device if SP5-886-111(Auto Update Setting) is set to "1 (ON)". For details, see Specifying the Time and Day of the Week to Prohibit Updating via Web Image Monitor.

Troubleshooting: If error code 71: [Network connection error] appears

If error code 71: [Network connection error] appears when you click [Firmware update] > [Update] > [Execute update] in SP mode, check the following.

- No.1. IPv4 address, Subnet mask of the machine and Gateway IPv4 address
- No.2. IPv4 address of the DNS server
- No.3. Proxy server settings
- No.4. Encryption level setting SP

No.1 IPv4 address, Subnet mask of the machine and Gateway IPv4 address

Check the machine’s IPv4 address, subnet mask, and gateway IPv4 address.

(In "Settings" icon > System Settings > Network/Interface)

No.2 DNS Server IP Address

Check the DNS IPv4 address and check the connection.

(In "Settings" icon > System Settings > Network/Interface > DNS Configuration)

Note

How to find the IP address:

2.Installation

Ask the customer to tell you the IP address of the DNS server. If the customer does not know it, ask the customer to check the IP address by one of the following ways:
1. Run "ipconfig / all" at the command prompt on the computer, then check the IP address of the DNS server.
2. Open the IPv4 properties dialog box on the computer, then check whether the IP address setting of the DNS server is manual or automatic.

- If the setting of the DNS IP address is automatic, select [Auto-Obtain (DHCP)] at the MFP machine's DNS settings.
- If the setting of the DNS IP address is manual, select [Specify] and specify the DNS server 1 to 3.
- Press [Connection Test] to check the connection with the input address. Make sure that it is connected successfully.

No.3 Proxy server settings

Check the user's network environment and, as required, specify the proxy server settings in the following SPs:

- SP5-816-062 (Use Proxy)
  1: Used / 0: Not used
- SP5-816-063 (Proxy Host)
- SP5-816-064 (Proxy PortNumber)
- SP5-816-065 (Proxy User Name)
- SP5-816-066 (Proxy Password)

Important

If access to the external server is restricted, request the network administrator (customer) to permit the following FQDN name for communication.- FQDN: p-rfu-ds2.support.ricoh.com

Note

They can be specified also via Web Image Monitor if logged in as the machine administrator from the device if SP5-886-111(Auto Update Setting) is set to "1(ON)". For details, see Specifying the Time and Day of the Week to Prohibit Updating via Web Image Monitor.

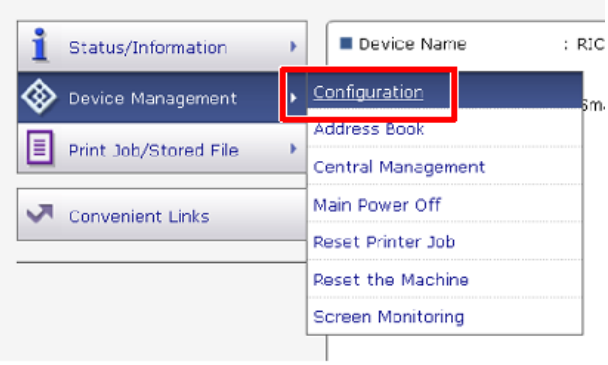
No.4 Connection to the SERES server

Check the connection with the SERES server using the following SPs:

- SP5-886-121: Executes to check the connection.
- SP5-886-122: Returns the result of the SP5-886-121. (0: successfully connected, 255: now checking. If other codes are indicated, refer to "Numbers set for the result history for SP7-520-051 to 060, and SP5-886-122" in Related SP)

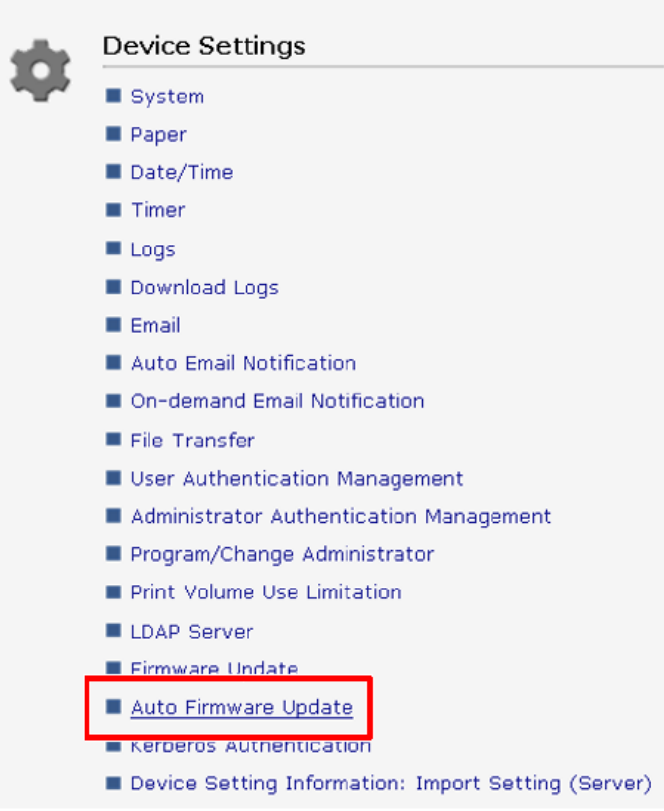
Specifying the Time and Day of the Week to Prohibit Updating via Web Image Monitor

1. Start Web Image Monitor.
2. Log in as the machine administrator.
3. Point to [Device Management], and then click [Configuration].



d238m0983e

4. Click "Auto Firmware Update".



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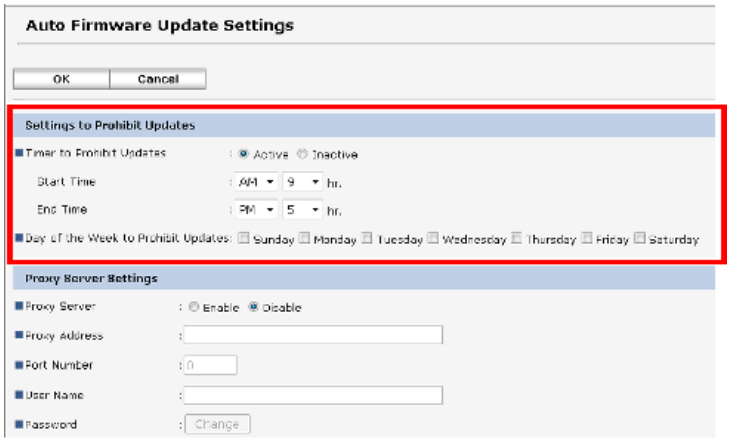
Note

Turn the main power OFF and back ON again after setting SP5-886-111 (AutoUpdateSetting) to "1 (ON)". "Auto Firmware Update" will appear in the menu list of Web Image Monitor.

5. Specify the times and days of the week to prohibit updating.

Select the check boxes of the applicable days of the week to prohibit updating on that day

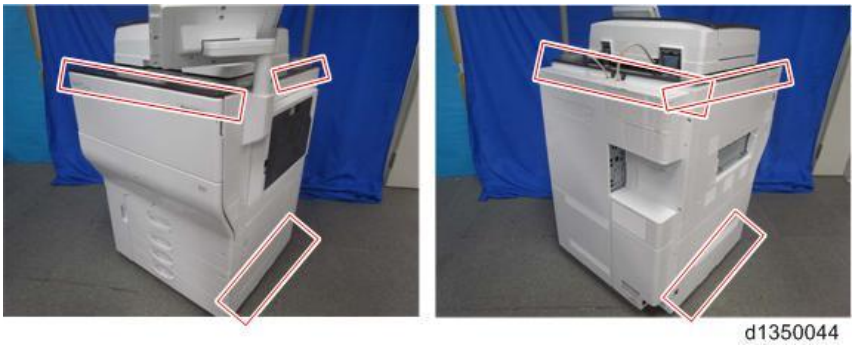


d238m0985e

Moving the Machine

1. Turn OFF the main power switch, and then unplug the power cord from the main machine.
2. Close all the doors and trays that can be opened and closed, and then secure them in place with shipping tape.
3. Make sure to follow all the precautions listed below when moving the machine. This is to prevent the machine from being damaged and the drawer unit from coming out.
   - If there is a possibility of hitting operation panel, remove the operation panel before moving.
   - Do not put a load on the ADF
   - When moving the machine, push the machine instead of pulling the machine. Pulling the machine may cause damage to the covers.
   - When pushing the machine, push the upper side of the machine in the areas marked with red rectangles below. If you move the machine over an uneven surface, insert your hands under the machine at the places marked with red rectangles below, and then lift the machine slightly to get over the uneven surface.
   - When you move the machine, face the **left or right side** of the machine toward the direction of movement. Then, push the machine forward at a slow walking speed. Move the machine slowly on uneven surfaces.
   - However, if you cannot face the left or right side forward, move the machine with the **front side** facing forward (in the direction you are moving).
   - Do not face the rear side of the machine toward the direction of movement. This is because if

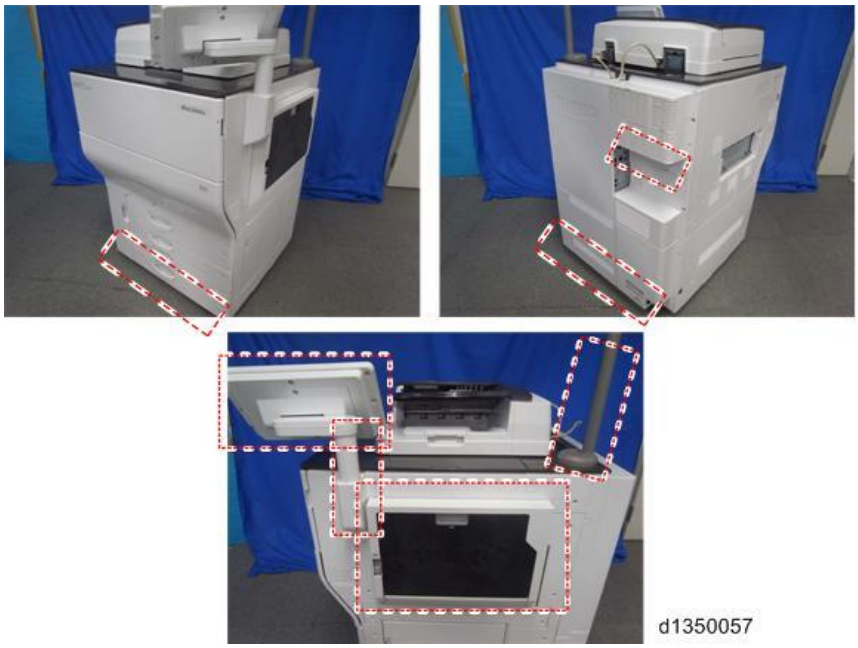
the floor is inclined upward, the trays and drawer unit may come out.



d1350044

Note

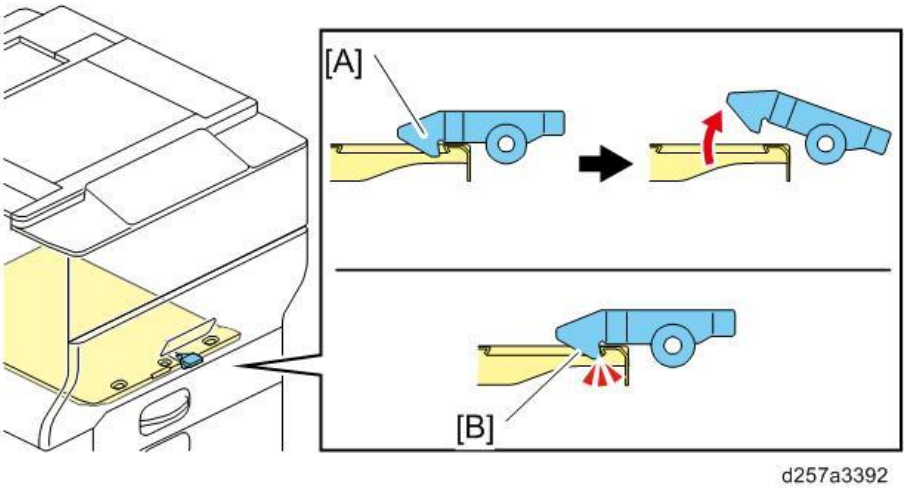
- Do not push or lift the locations marked with red rectangles below. You may damage the machine.



d1350057

- After transporting the machine, the load on the front part of the machine may cause the drawer unit to become stuck, making it impossible to pull it out.
  - [A] (Normal): When the drawer unit is pulled, the lock mechanism is lifted and the drawer unit is unlocked.

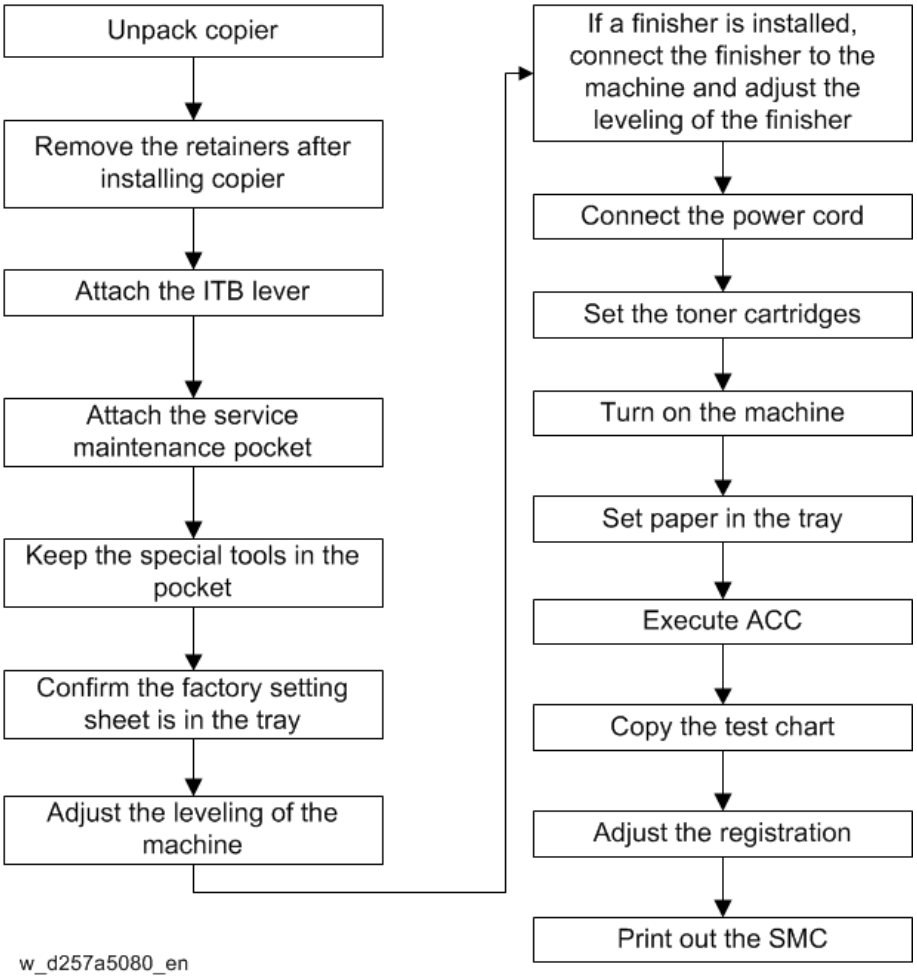
- [B] (Abnormal): The drawer unit is stuck.



- If this happens, push the drawer unit in and try pulling it out again.
- Also, please note that when the power is turned ON, the drawer unit will be pulled in automatically, and this will solve the problem.

Main Machine Installation (IM C6500/C8000)

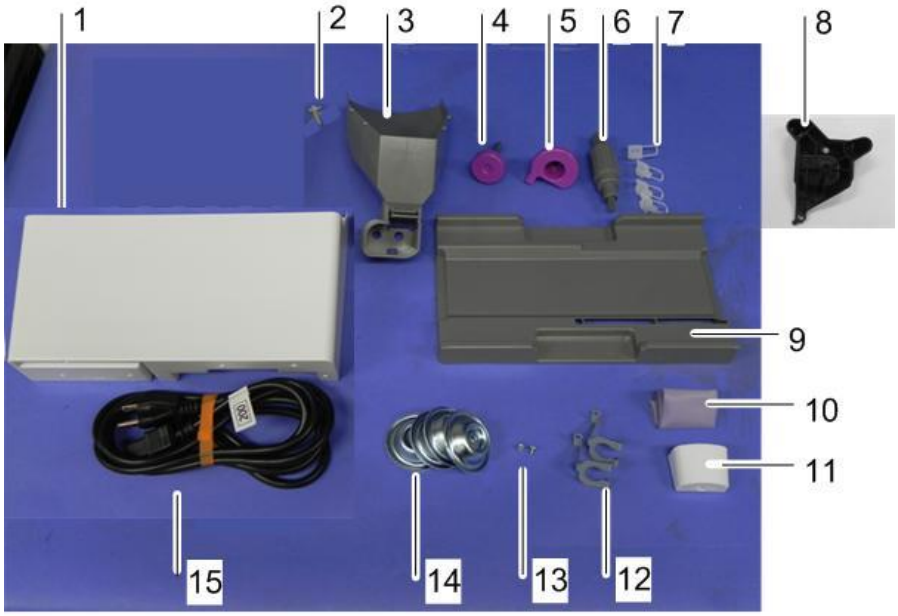
Installation Flow Chart



Accessory Check

No	Description	Q'ty	
		IM C6500	IM C8000
1	Service Pocket	1	1
2	Rivet - Dia5	2	2
3	Developer Funnel	1	1
4	Drum Holder (front)	1	1
5	Drum Holder (rear)	1	1
6	Jig for Development Unit	1	1
7	Development Cap	4	4
8	Jig for Paper Transfer Belt Unit	1	1
9	PCDU Holder	1	1
10	Cloth - DF Exposure Glass	1	1

No	Description	Q'ty	
		IM C6500	IM C8000
11	Cloth Holder	1	1
12	Power Cord Protection Plate	1	1
13	Screw - M3 x 6	1	1
14	Leveling Shoes	4	4
15	Power Cord	1	1
16	Guide Sheet	1	1
17	DECAL:SIZE INDICATION:PAPER TRAY:OFFICE	1	1
18	DECAL:CAUTION CHART:PAPER SET DIRECTION	3	3
19	DECAL:BLUETOOTH (Operation Panel)	1	1
21	PLATE:LOGOTYPE:RIC (NA/EU only)	1	1
22	SHEET:LOGO	1	1
23	Jig for Development Unit	1	1
24	Pocket	1	1
-	Manual: Read This First	1	1
-	Decal: Pullout Set	1	1
-	Sheet: TEL (China only)	1	1
-	Manual: Notes for using This Machine Safely	1	1
-	Note to Users in EU Countries	1	1
-	Note to Users in the USA	1	1
-	Note to Users in Canada	1	1
-	EULA Sheet	1	1
-	Notes for Users (AirPrint)	1	1
-	CD-ROM	1	1
-	DVD-ROM	1	1



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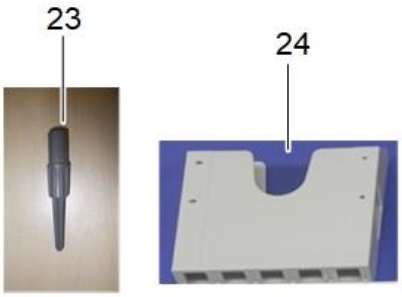
d0cpz4215



d0cpz4111

Installation Procedure

Unpacking the Machine

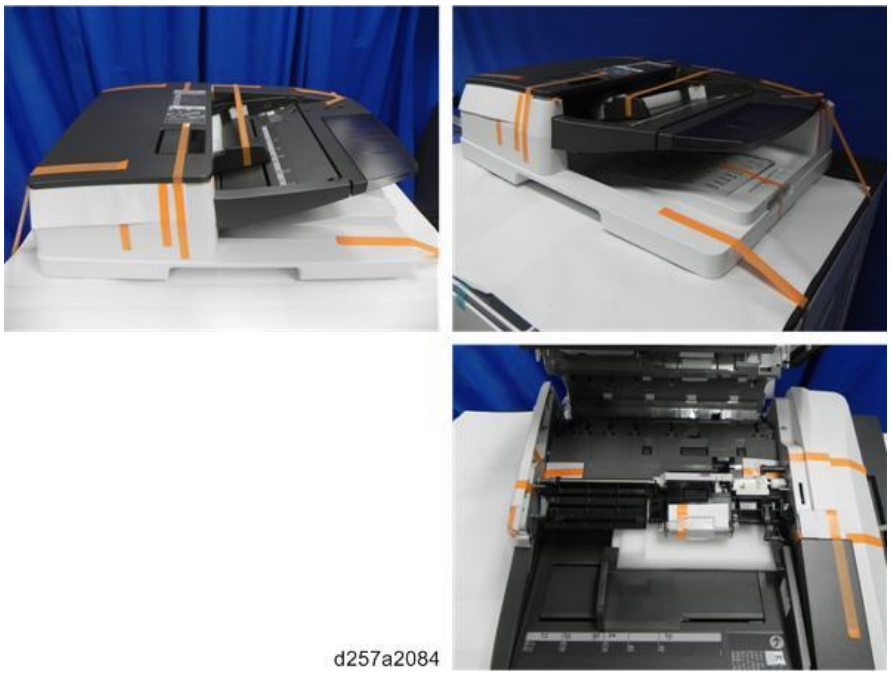
1. Unpack the machine and remove all the wrapping.

2. Place the machine at the installation site.

3. Remove all filament tape from the machine.

d257a2083

4. Remove the filament tape and the cushion at the ADF.



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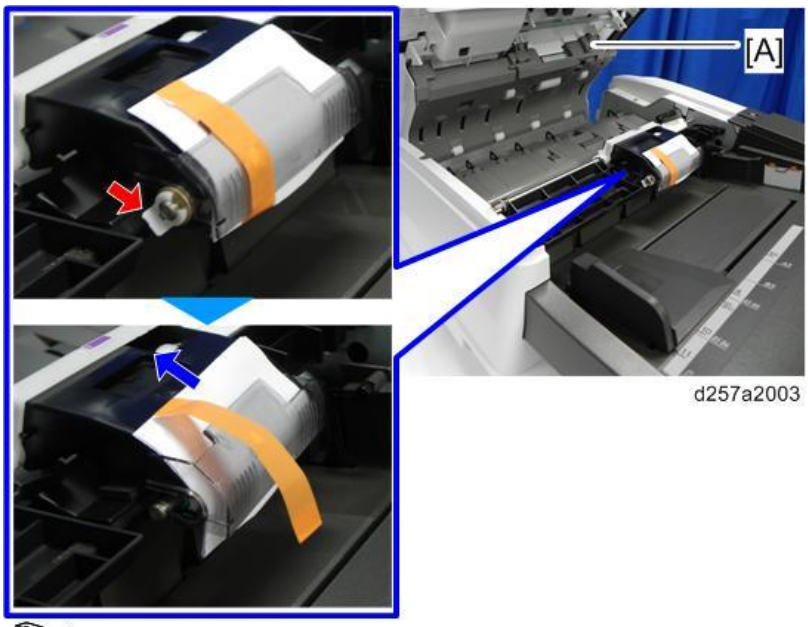
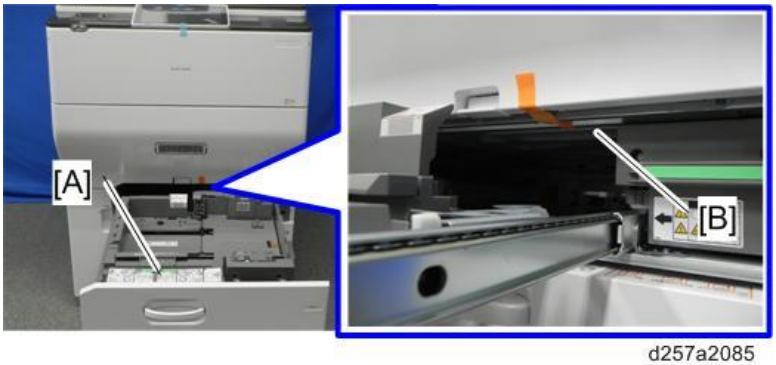
5. Open the feed cover [A] and remove the protection sheet.



×1

6. Open the ADF [A] and release the lever to open the white board. Then remove the protection sheet.

7. Open the tandem tray [A] and remove the filament tape at the duplex unit [B].



8. Remove the power cable from paper tray 2.
9. Remove the protection sheet from operation panel.

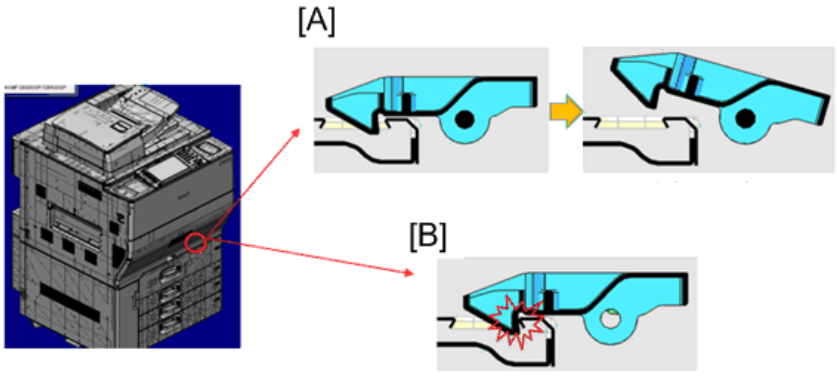
Attaching the ITB Separation Lever

When unpacking the machine, the ITB separation lever is not yet attached to the correct location. Be

sure to attach the lever when installing the machine.

Note

After transporting the machine, the load on the front part of the machine may cause the drawer unit to become stuck, making it impossible to draw it out.



d257a5081

[A] (Normal): When the drawer unit is pulled, the lock mechanism is lifted and the drawer unit is unlocked.

[B] (Abnormal): The drawer unit is stuck.

If this happens, push the drawer unit in and try pulling it out again.

Also, please note that when the power is turned ON, the drawer unit will be pulled in automatically, and this will solve the problem.

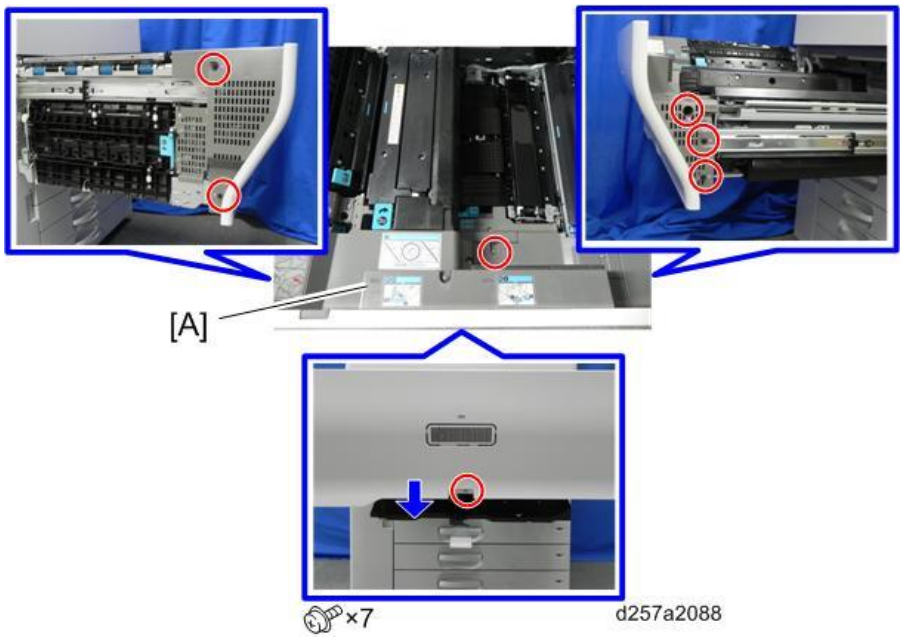
1. Open the toner supply unit front cover [A], and remove the ITB separation lever [B].

d257a2087

2. Open the drawer unit [A].

d257a2102

3. Remove the drawer unit cover [A].

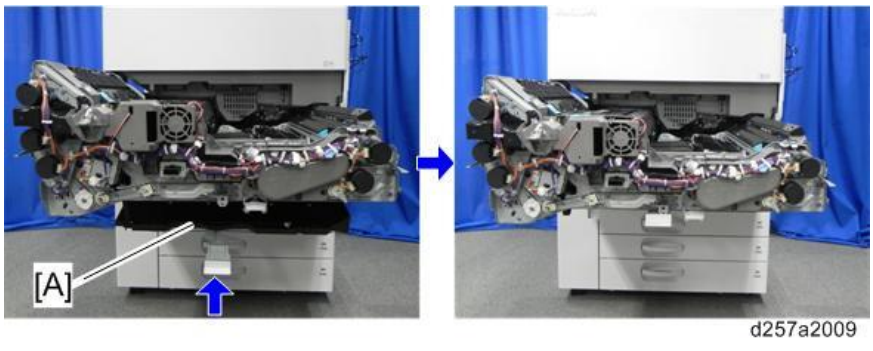


4. Remove the tape and retainer.

5. Close the drawer unit.

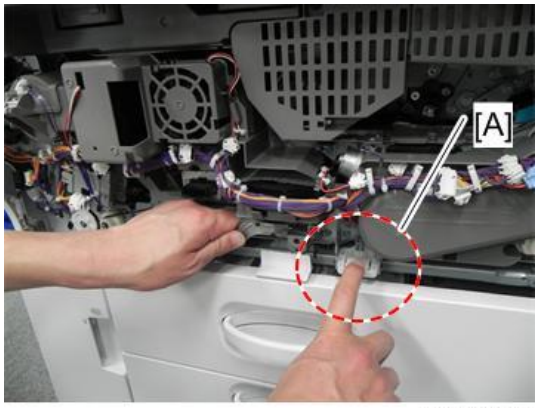
Note

- Pushing the drawer unit back into the machine allows you to close the guide plate [A] of the paper exit and duplex unit after removing the drawer unit cover.



- Make sure to hold down the lock lever [A] when pulling out the drawer unit. The

drawer unit is locked in place by this lever.



d257a2010

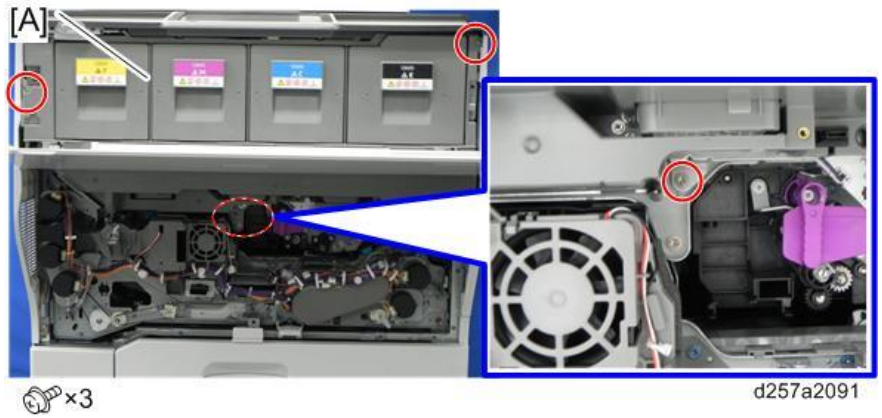
6. Remove the ITB cleaning intake fan [A] along with the duct.

×1 d257a2089

7. Open the toner supply unit front cover [A].

d257a2090

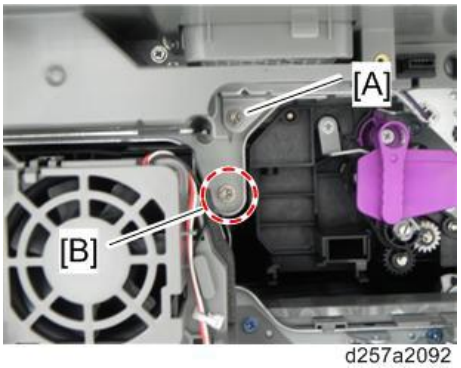
8. Remove the fixing screws of the toner supply unit [A].



×3 d257a2091

Note

- Do not remove the screw [B] below the toner supply unit fixing screw [A] because it is used to fix the faceplate.

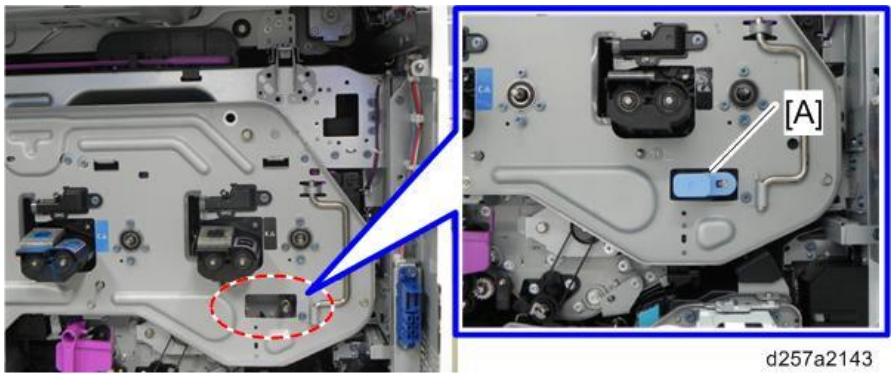


d257a2092

9. Slide the toner supply unit [A] to the front.

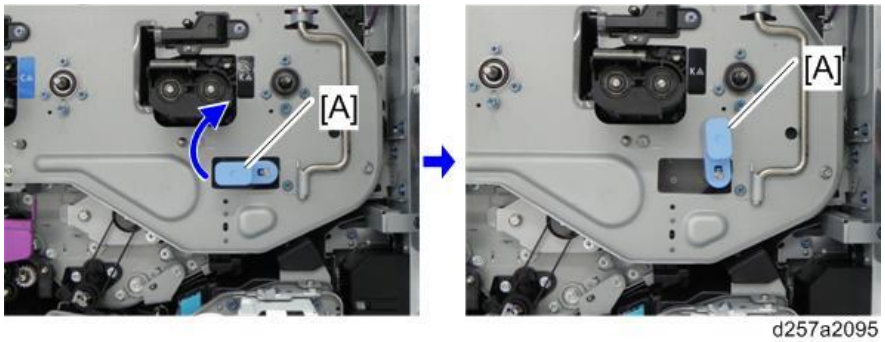
d257a2093

10. Attach the ITB separation lever [A] horizontally from the right side of the machine.



d257a2143

11. Turn the ITB separation lever [A] clockwise until it stops.

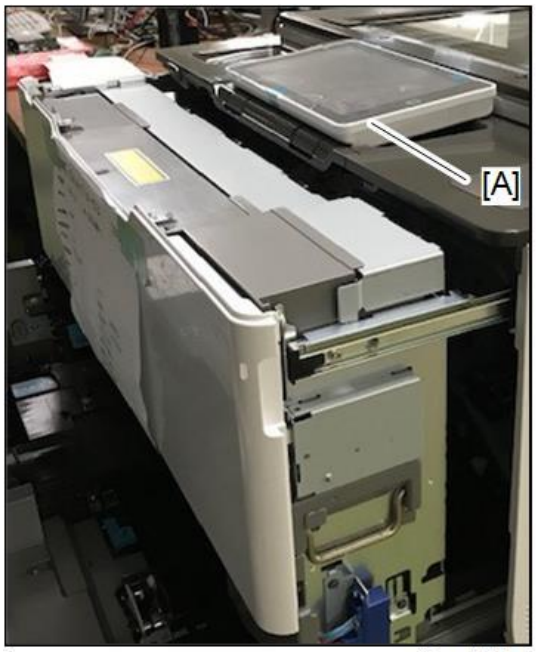


d257a2095

12. Return the toner supply unit to the machine and secure it with the screws.

Note

When returning the toner supply unit, be sure to tilt down the operation panel [A]. Otherwise, the toner supply unit may interfere with the panel bracket.



d0cpz1273

13. Attach the ITB cleaning intake fan and drawer unit cover.

Storing the Factory SP Sheet

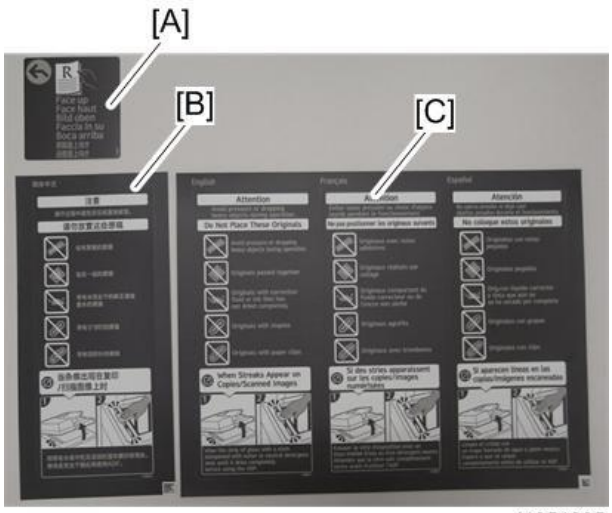
On a newly delivered machine, the factory SP sheet is located on the exposure glass.

Open the tandem tray [A], and remove the paper set sheet [B]. Confirm that the factory SP sheet [C] is stored inside.

d257a2139

Attaching the decals

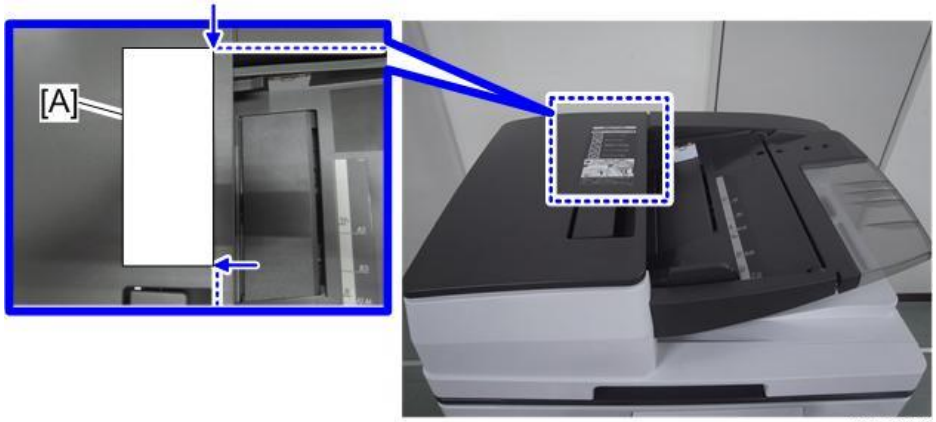
1. Prepare the ADF paper set decal [A] and ADF caution decal ([B] or [C]).



d1351935

- [B]: ADF caution decal for China
- [C]: ADF caution decal for other countries

2. Attach the ADF caution decal to the position [A] on the ADF.



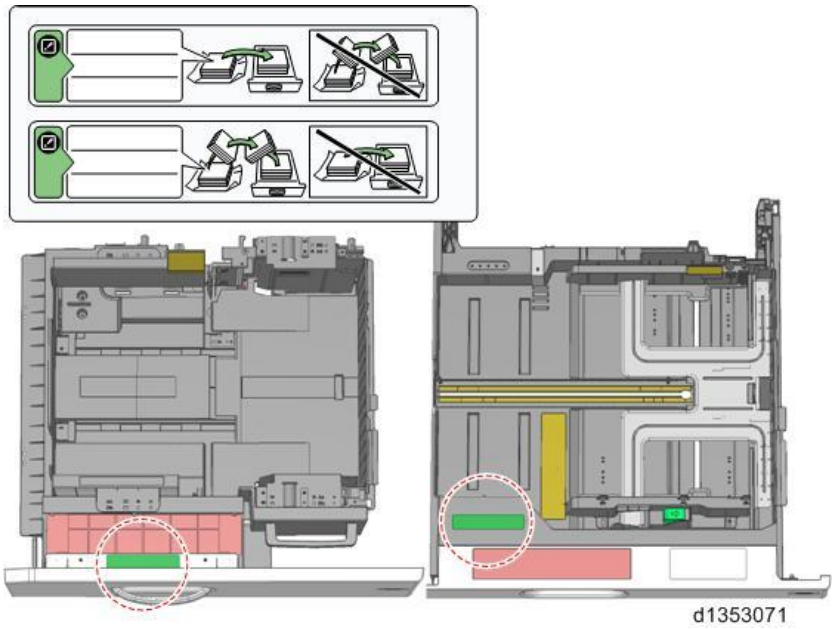
d1351933

3. Attach the ADF paper set decal [A] in the indentation in the ADF.

d1351934

4. According to the paper that will be used by the customer, select and attach the following decals to

the 1st tray, 2nd tray and 3rd tray.



Note

- Paper type, brand, etc can be written on the blank space.

Machine Level Adjustment

Make sure the machine is level during installation.

Important

- If the machine is not level, the tilt reduces the accuracy of side-to-side registration.
- The front and rear side of the machine must be less than 5 mm (0.2") away from level.

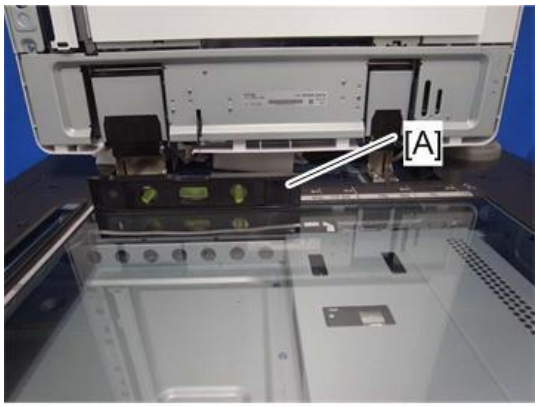
1. Place the four leveling shoes [A] below the bolts [B] under each corner of the machine.
2. Turn the nuts [B] to lower the bolt until the bolts reach the leveling shoes [A].

   Example below: Front side

Note

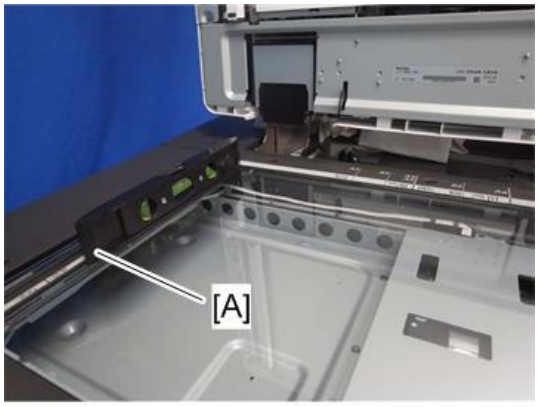
- Use a wrench to raise or lower the nuts.

3. Open the ADF, and then place a level [A] on the exposure glass.



d1350035

4. Adjust the machine level until the machine is less than 5mm from level (measure from left-to-right).
   - When the right side of the machine is lower: Lower the nuts of the right side of the machine (front and rear) to lift the right side of the machine.
   - When the left side of the machine is lower: Lower the nuts of the left side of the machine (front and rear) to lift the left side of the machine.
5. Open the ADF, and then place the level [A] along the side.



d1350036

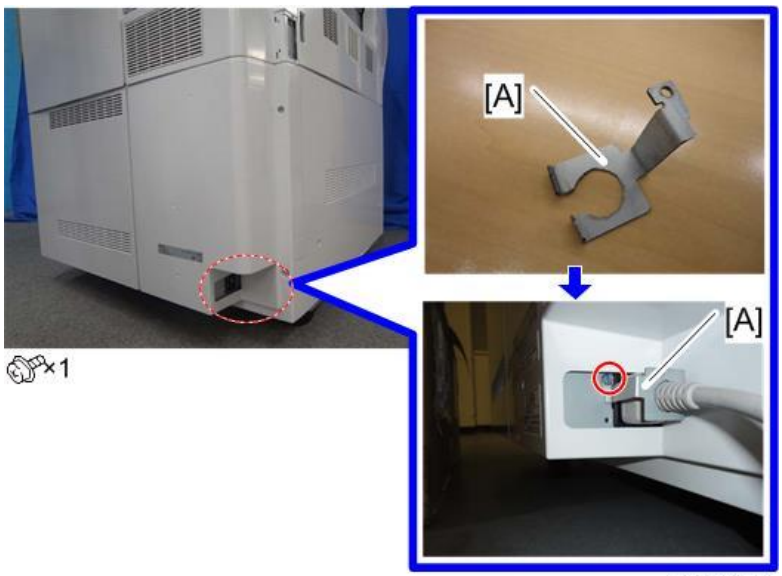
6. Adjust the machine level until the machine is less than 5mm from level (measure from front-to-rear).
   - When the front side of the machine is lower: Lower the nuts of the front side of the machine (left and right) to lift the front of the machine.
   - When the rear side of the machine is lower: Lower the nuts of the rear side of the machine (left and right) to lift the rear of the machine.

Installing the Securing Bracket to Prevent the Power Cord from Falling Off

1. Install the securing bracket [A] to prevent the power cord from falling off.

Note

IM C8000 has 2 power cords. Be sure to install the bracket for each power cord.



d1350048a

How to Set the Toner Cartridge

Important

- Each toner cartridge has a different shape and forcing a cartridge in the wrong place will damage it. The places for each cartridge from left to right are as follows: Y, M, C, K.

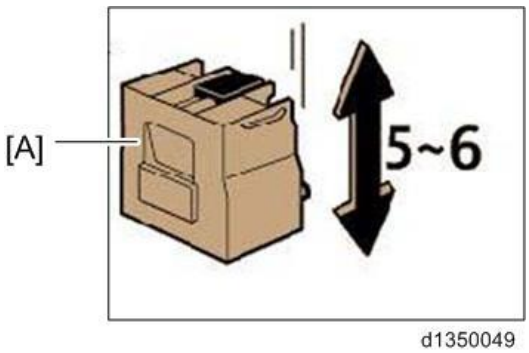
d1350050

1. Open the toner supply unit front cover [A].

d257a2096

2. Unpack the new toner cartridge.

3. Turn the toner cartridge upside down and shake 5-6 times while holding both ends.

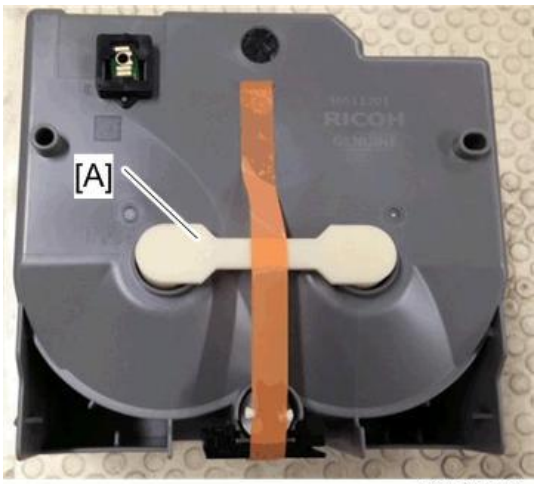


d1350049

4. Set each color toner cartridge. Push the toner cartridge until it locks into place.

Note

- Make sure to remove the retainer [A] before installing the K toner cartridge.



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ACC (Automatic Color Calibration) Adjustment

1. Make sure that all clamps etc. have been removed and plug in the power cord.
2. Turn the main power switch ON.

Auto Color Calibration (ACC) (Adjustment 001: ACC (Automatic Color Calibration))

- Press the [Settings] icon on the [Home] screen.
- Press [Maintenance] - [Auto Color Calibration].
- Press [Start Auto Calibration].

Adjusting the Color Registration

- Press the [Settings] icon on the [Home] screen.
- Press [Maintenance] - [Color Registration].
- Press [OK].

Checking the Copy Image with the Color Chart

Install any options before doing the procedure below.

2.Installation

1. Switch the machine to copier mode.
2. Make sure that there is A3 or DLT paper in one of the trays.
3. Put a "Color Chart C-5" on the exposure glass.
4. Select full color mode and print one copy of the chart.
5. Check the results of the copy with the customer.

Important

A banding with 250 mm interval may occur immediately after main machine installation.

If this symptom occurs, do SP1-133-110 to refresh. Refer to the link page for detail. (Troubleshooting for banding after Installation at 250 mm intervals)

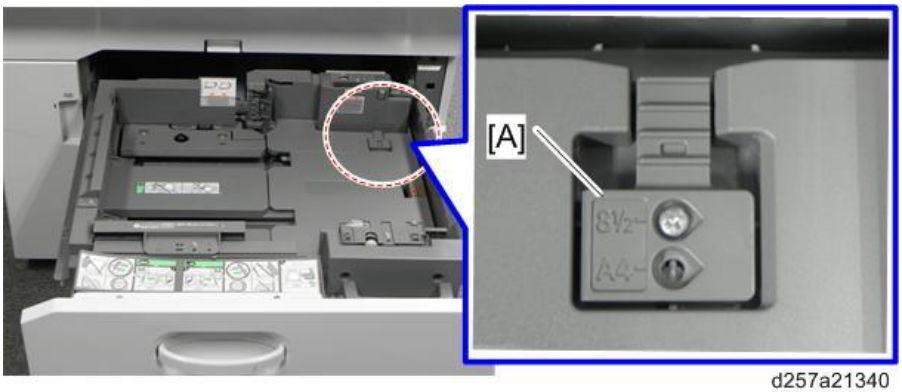
Paper Tray Settings

Adjust the side-to-side registration for each paper tray as necessary.

- SP1-003-001 (Side-to-Side Reg: Tray1)
- SP1-003-002 (Side-to-Side Reg: Tray2)
- SP1-003-003 (Side-to-Side Reg: Tray3)
- SP1-003-004 (Side-to-Side Reg: Tray4)
- SP1-003-005 (Side-to-Side Reg: Bypass Tray)
- SP1-003-006 (Side-to-Side Reg: Duplex)

Important

- The pressure release bracket [A] of the tray bottom plate is set to $8^1/_2$ size in the factory. For IM C6500/C8000, do not change the position of the bracket even if using A4 size paper. (The bracket is fixed to $8^1/_2$ size).



Auto Remote Firmware Update (ARFU) Settings

Specify ARFU settings as required.

Important

Operating Conditions:

- ARFU requires an internet connection. Be sure to get permission from the customer before setting up ARFU.

- ARFU is available only for machines that contain a HDD. If the machine does not have a HDD, an option HDD must be installed.

Note

- The connection is one-way, so the user's data cannot be accessed from the firmware server.

Procedure:

1. Enable ARFU
2. Server connection check
3. Prohibited date and time setting

(1) Enable ARFU

1. Set SP5-886-111 (Auto Update Setting) to "1 (ON)".
1: ON / 0: OFF (Default)

Note

To download the firmware only using SFU (Smart Firmware Update), and not by ARFU, specify the settings as follows:
- SP5-886-111(Auto Update Setting) to "0 (OFF)"
- SP5-886-115 (SFU Auto Download Setting) to "1 (ON)"

(2) Server connection check

1. Enter the SP mode.
2. Press [Firmware update] > [Update] > [Execute update].

3. Check if one of the following messages appears: "Will you download the latest package Ver *** and update?" or "The installed package is the latest version.".
If the message appears, it is possible to execute ARFU. Press "No" and close SP mode to complete the configuration.

Important

The update will run immediately if you press "Yes" at the message "Will you download the latest package Ver *** and update?" The update cannot be canceled if it is run by SFU. (The update can be canceled if ARFU is used.)

Note

SP5-886-116 (Auto Update Prohibit Term Setting) displays the scheduled date and time of the next ARFU.

If error code 71: [Network connection error] appears when you click “Execute update”, see troubleshooting below.

(3) Prohibited date and time setting

Ask the customer for the prohibited times and days of the week for ARFU execution and set the following as needed. The default prohibited time is from 9 a.m. to 5 p.m. and there is no prohibited day.

- SP5-886-112 (Auto Update Prohibit Term Setting) Default: 1 (ON)
- SP5-886-113 (Auto Update Prohibit Start hour) Default: 9
- SP5-886-114 (Auto Update Prohibit End hour) Default: 17
- SP5-886-120 (Auto Update Prohibit Day Of Week Setting) Default: 00000000 [00H]
  Set the bits for the days of the week to prohibit updating.
  Prohibited (Monday - Sunday): bit 7, Monday: bit 6, Tuesday: bit 5
  Wednesday: bit 4, Thursday: bit 3, Friday: bit 2, Saturday: bit 1, Sunday: bit 0
  e.g.) Prohibited on Mon., Fri., Sat., and Sun.: 01000111 [47H]

Note

They can be specified also via Web Image Monitor if logged in as the machine administrator from the device if SP5-886-111(Auto Update Setting) is set to "1 (ON)". For details, see Specifying the Time and Day of the Week to Prohibit Updating via Web Image Monitor.

Troubleshooting: If error code 71: [Network connection error] appears

If error code 71: [Network connection error] appears when you click [Firmware update] > [Update] > [Execute update] in SP mode, check the following.

- No.1. IPv4 address, Subnet mask of the machine and Gateway IPv4 address
- No.2. IPv4 address of the DNS server
- No.3. Proxy server settings
- No.4. Connection to the SERES server

No.1 IPv4 address, Subnet mask of the machine and Gateway IPv4 address

Check the machine’s IPv4 address, subnet mask, and gateway IPv4 address.
(In "Settings" icon > System Settings > Network/Interface)

No.2 DNS Server IP Address

Check the DNS IPv4 address and check the connection.
(In "Settings" icon > System Settings > Network/Interface > DNS Configuration)

Note

How to find the IP address:

Ask the customer to tell you the IP address of the DNS server. If the customer does not know it, ask the customer to check the IP address by one of the following ways:

1. Run "ipconfig / all" at the command prompt on the computer, then check the IP address of the DNS server.
2. Open the IPv4 properties dialog box on the computer, then check whether the IP address setting of the DNS server is manual or automatic.

- If the setting of the DNS IP address is automatic, select [Auto-Obtain (DHCP)] at the MFP machine's DNS settings.
- If the setting of the DNS IP address is manual, select [Specify] and specify the DNS server 1 to 3.
- Press [Connection Test] to check the connection with the input address. Make sure that it is connected successfully.

No.3 Proxy server settings

Check the user's network environment and, as required, specify the proxy server settings in the following SPs:

- SP5-816-062 (Use Proxy)
  1: Used / 0: Not used
- SP5-816-063 (Proxy Host)
- SP5-816-064 (Proxy PortNumber)
- SP5-816-065 (Proxy User Name)
- SP5-816-066 (Proxy Password)

Important

If access to the external server is restricted, request the network administrator (customer) to permit the following FQDN name for communication.- FQDN: p-rfu-ds2.support.ricoh.com

Note

They can be specified also via Web Image Monitor if logged in as the machine administrator from the device if SP5-886-111(Auto Update Setting) is set to "1(ON)". For details, see Specifying the Time and Day of the Week to Prohibit Updating via Web Image Monitor.

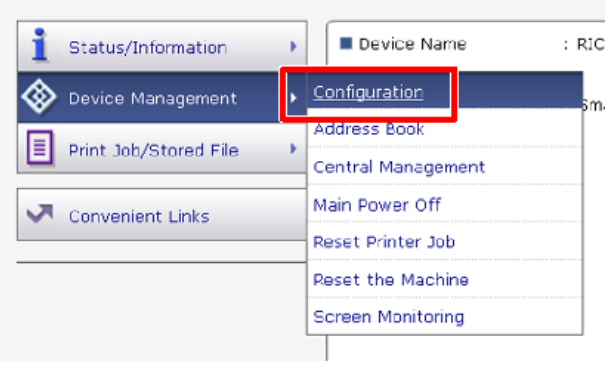
No.4 Connection to the SERES server

Check the connection with the SERES server using the following SPs:

- SP5-886-121: Executes to check the connection.
- SP5-886-122: Returns the result of the SP5-886-121. (0: successfully connected, 255: now checking. If other codes are indicated, refer to "Numbers set for the result history for SP7-520-051 to 060, and SP5-886-122" in Related SP)

Specifying the Time and Day of the Week to Prohibit Updating via Web Image Monitor

1. Start Web Image Monitor.
2. Log in as the machine administrator.
3. Point to [Device Management], and then click [Configuration].



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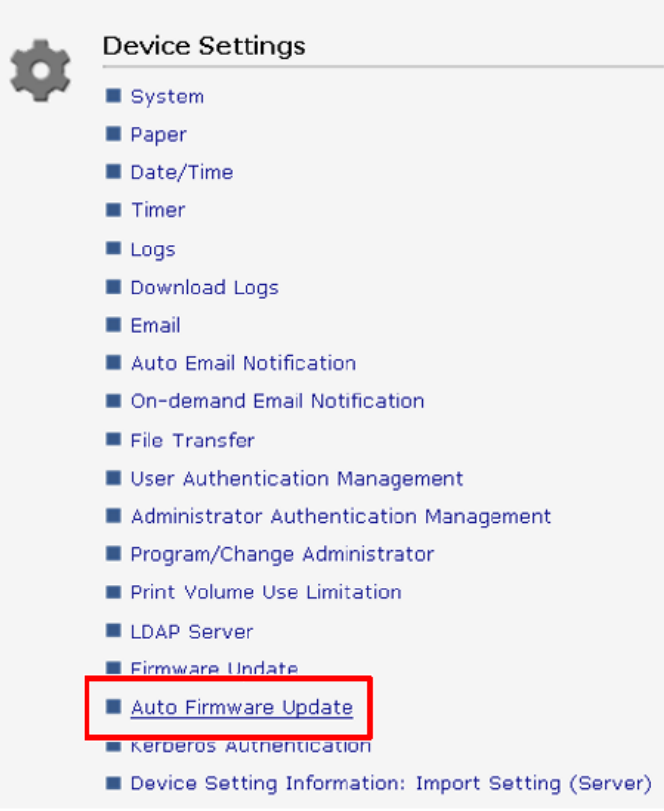
4. Click "Auto Firmware Update".



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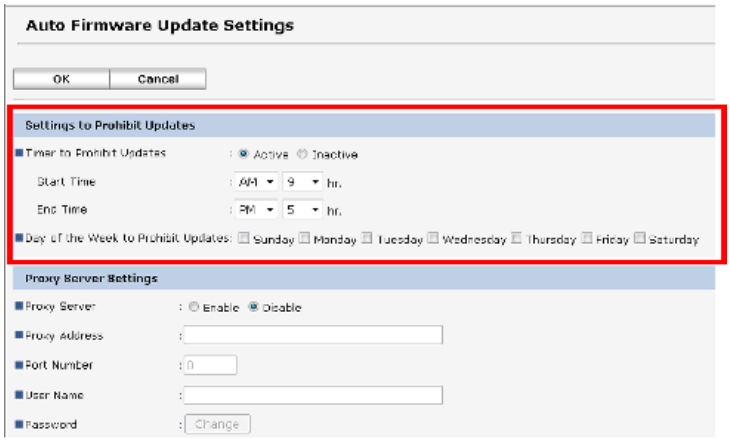
Note

Turn the main power OFF and back ON again after setting SP5-886-111 (AutoUpdateSetting) to "1 (ON)". "Auto Firmware Update" will appear in the menu list of Web Image Monitor.

5. Specify the times and days of the week to prohibit updating.

Select the check boxes of the applicable days of the week to prohibit updating on that day



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Moving the Machine

1. Turn OFF the main power switch, and then unplug the power cable from the main machine.
2. Close all the doors and trays that can be opened and closed, and then secure them in place with shipping tape.
3. Make sure to follow all the precautions listed below when moving the machine. This is to prevent the machine from being damaged and the drawer unit from coming out.
   - Do not put a load on the ADF
   - When moving the machine, push the machine instead of pulling it. Pulling the machine may cause damage of the covers.
   - When pushing the machine, push the upper side of the machine in the areas marked with red rectangles below. If you move the machine over an uneven surface, insert your hands under the machine at the places marked with red rectangles below, and then lift the machine slightly to get over the uneven surface.
   - When you move the machine, face the **left or right side** of the machine toward the direction of movement. Then, push the machine forward at a slow walking speed. Go slower if there are any uneven areas on the floor.
   - However, if you cannot face the left or right side forward, move the machine with the **front side** facing forward (in the direction you are moving).
   - Do not face the rear side of the machine toward the direction of movement. This is because if the floor is inclined upward, the trays and drawer unit may come out.

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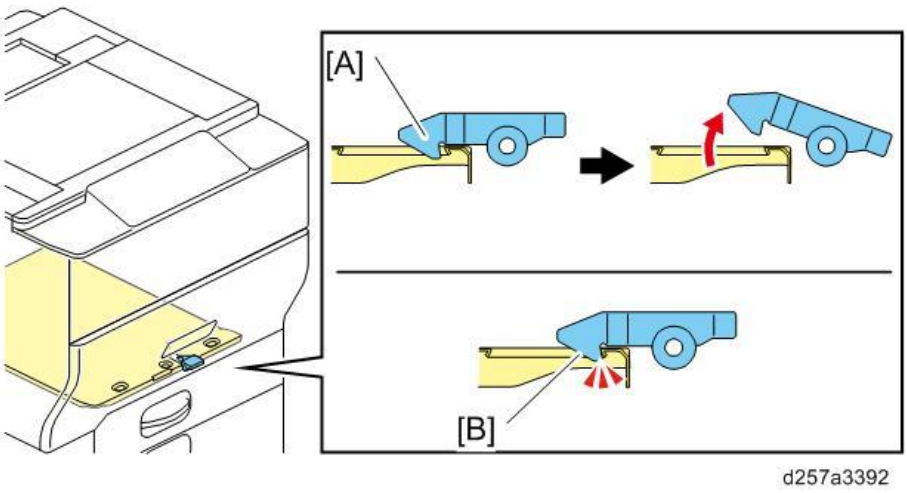
Note

- Do not push or lift the location marked with red rectangles below. You may damage the machine.

- After transporting the machine, the load on the front part of the machine may cause the drawer unit to become stuck, making it impossible to draw it out.
  - [A] (Normal): When the drawer unit is pulled, the lock mechanism is lifted and the drawer unit is unlocked.
  - [B] (Abnormal): The drawer unit is stuck.

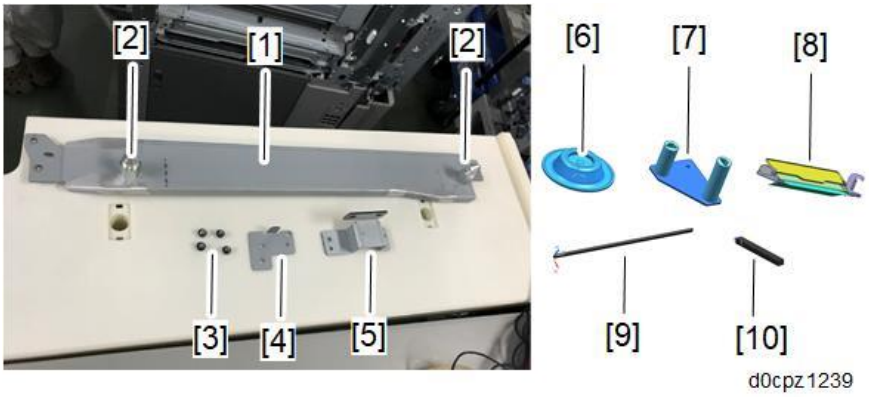


  - If the drawer unit is stuck, push the drawer unit in and try pulling it out again.
  - Also, please note that when the power is turned ON, the drawer unit will be pulled in automatically, and this will solve the problem.

External Options (Pro C5300S/C5310S)

Bridge Unit BU5030 (D3HQ)

Accessory Check



No.	Description	Q'ty
1	Joint bracket	1
2	Positioning pin	2
3	Tapping Screw: ４×８	4
4	Positioning bracket (Interlock SW)	1
5	Bracket	1
6	Holder	4
7	Jig for Rotary gate motor	1
8	Bracket	1
9	Sponge Strip	1
10	Sponge Strip	1
-	EMC Address	1

Installation Procedure

⚠CAUTION

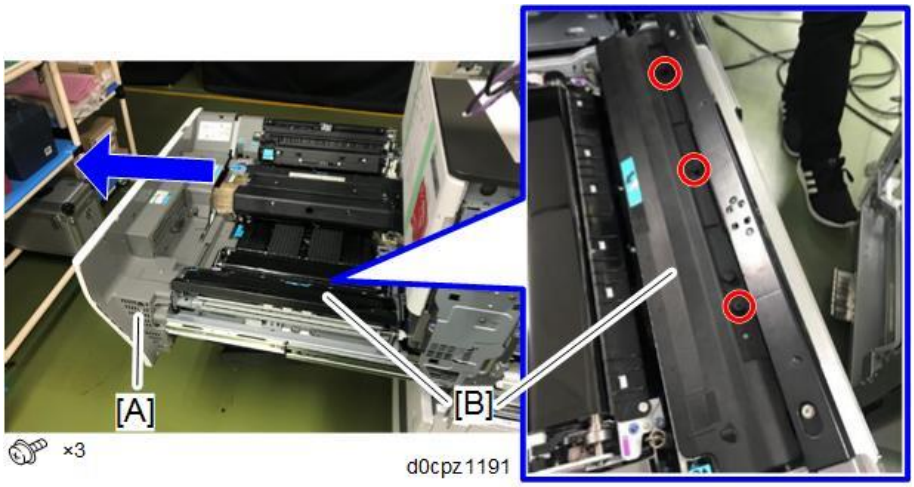
- Always switch the machine off and unplug the cable before beginning the following procedure.

1. Pull the drawer unit [A] and remove the registration unit cover [B].

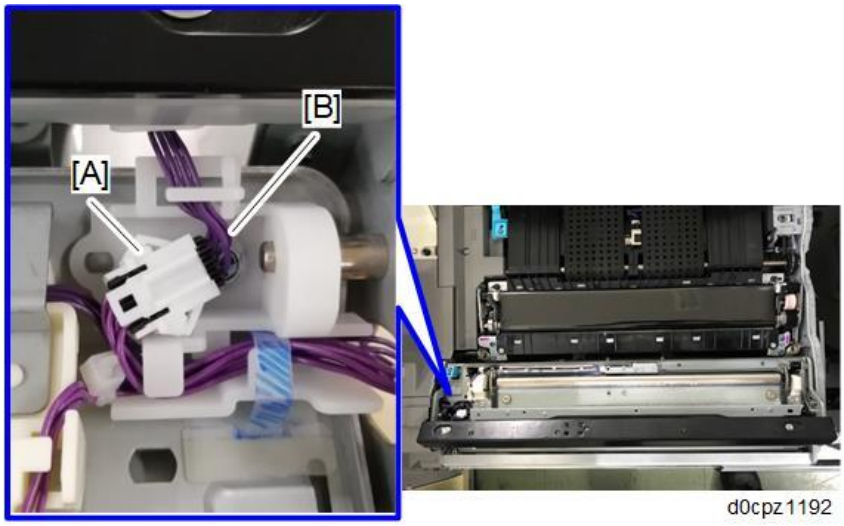
Note

The removed screw will be used in a later step.

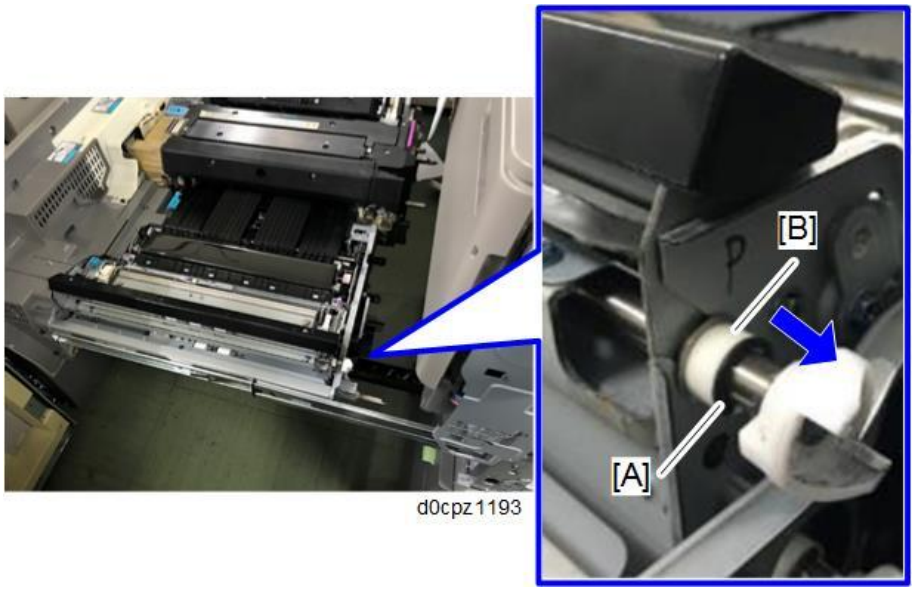
There is no need to remove the registration unit from the drawer unit.



2. Remove the relay connector [A] and then remove the harness [B] of the paper type sensor.



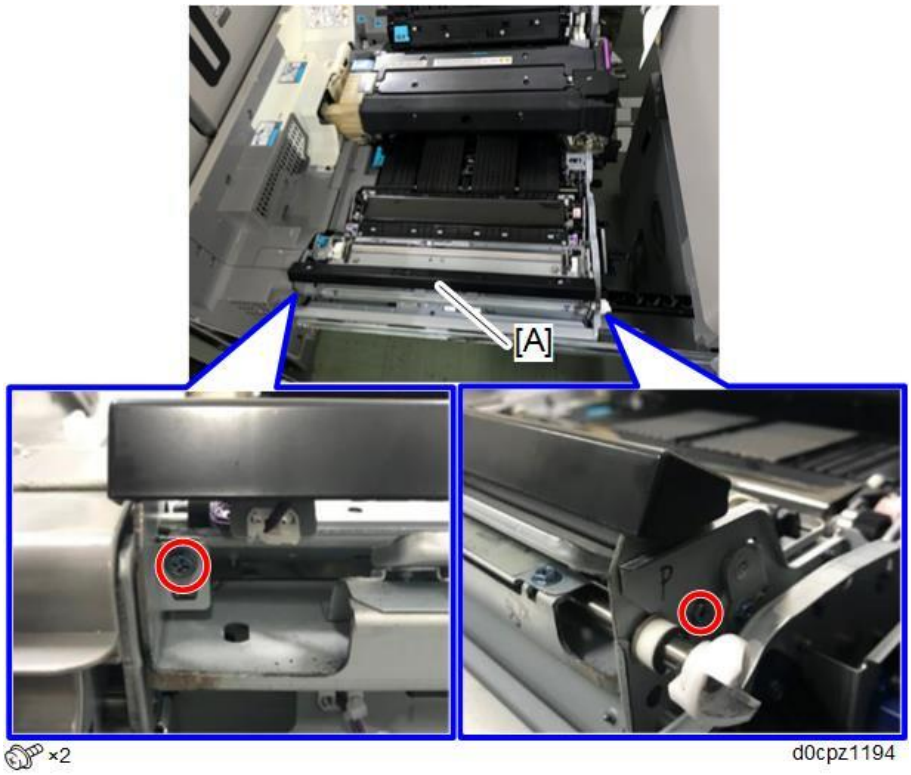
3. Remove the E-ring [A] and slide the bearing [B] in the direction of arrow.



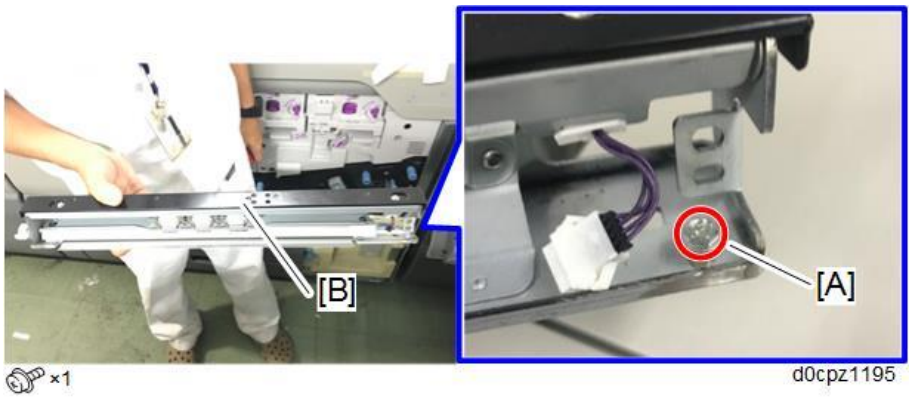
4. Remove the bypass relay unit[A].

Note

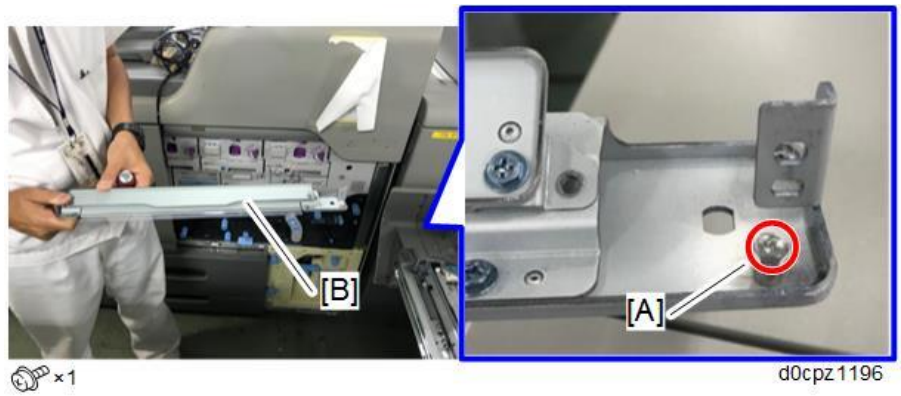
The removed screw will be used in a later step.



5. Remove the screw [A] securing the bypass relay unit [B].



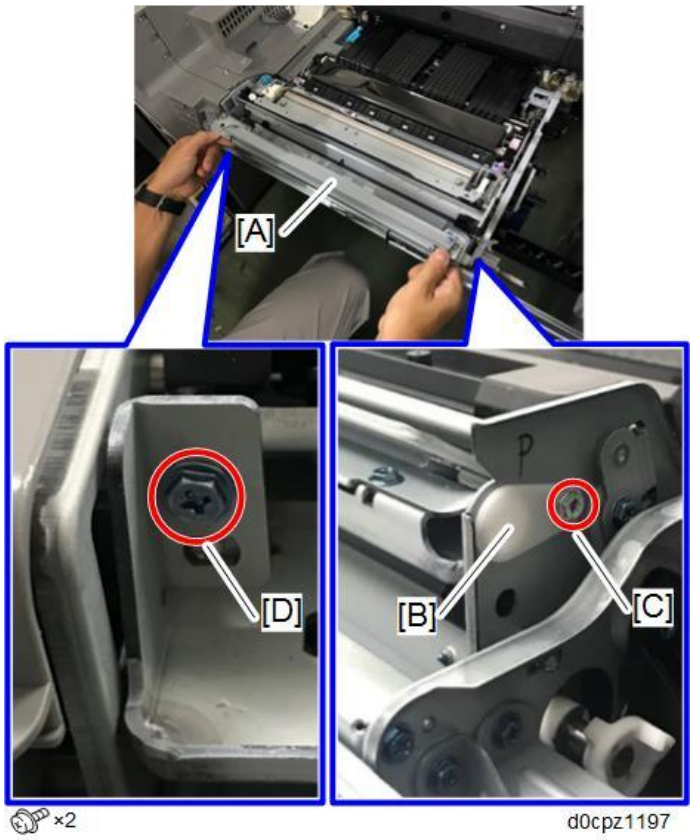
6. Attach the screw, removed in step 5, to the position [A] on the relay unit [B] of this option.



7. Attach the relay unit [A] to the main machine.

Note

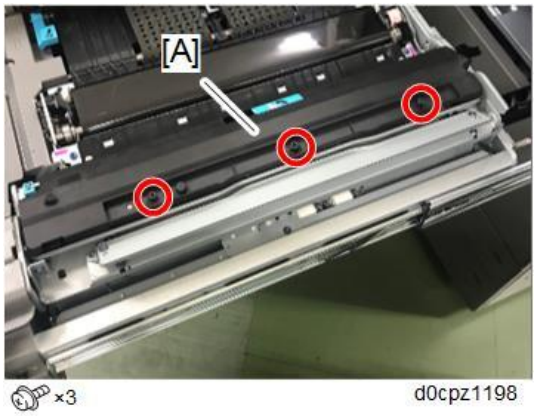
・Insert the positioning plate [A] first, and secure with the screw[C], and finally attach the screw [D].



8. Reattach the registration cover [A].

Note

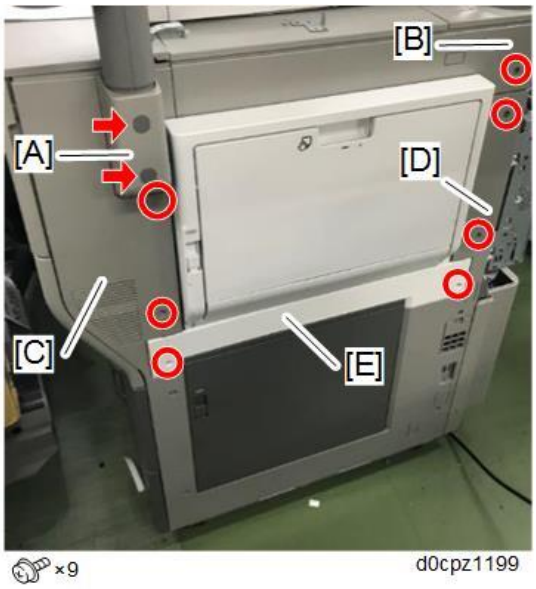
Use the screw removed in step 1.



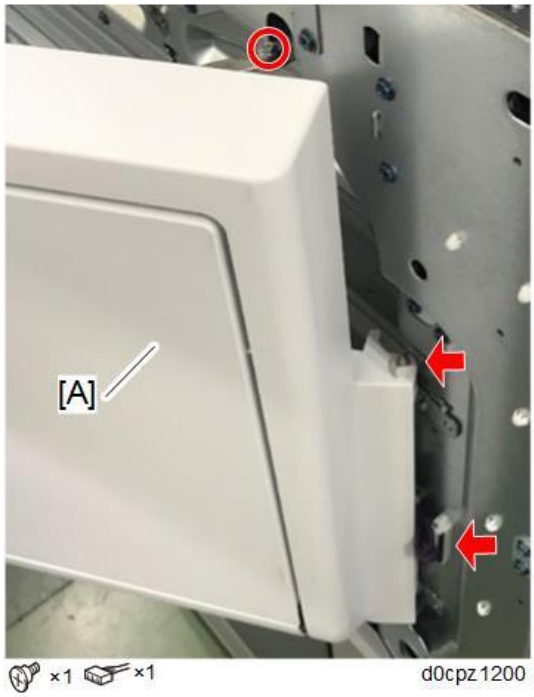
9. Remove the exterior covers in the order of [A] to [E].

Note

To remove the cover [A], remove the small plates first.



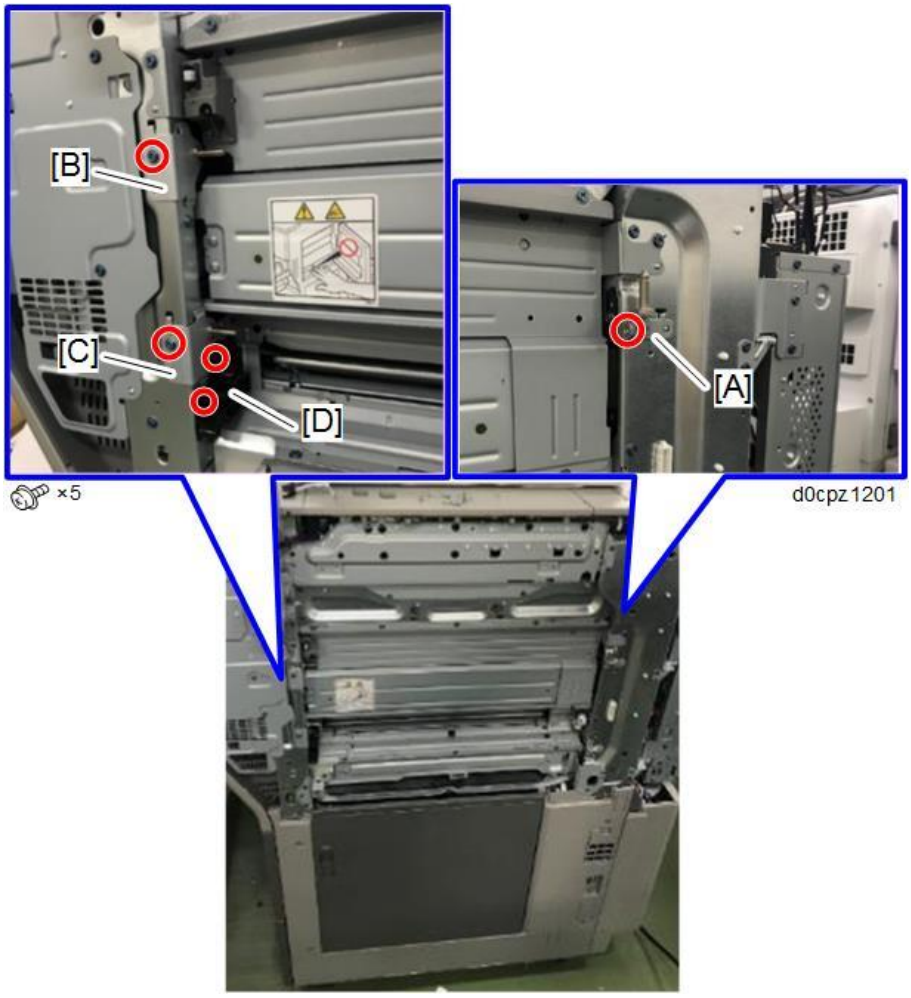
10. Remove the bypass tray [A].



11. Remove the brackets [A][B][C] and the interlock switch cover [D].

Note

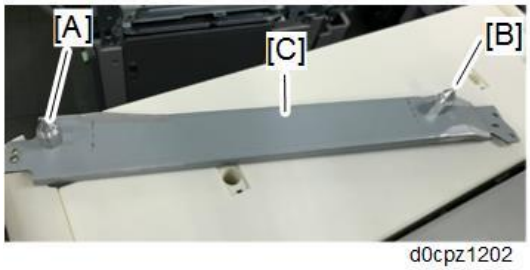
The removed screw will be used in a later step.



12. Attach the positioning pins [A][B] to the joint bracket [C].

Note

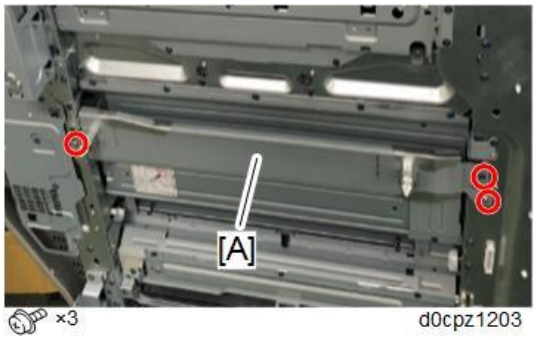
These pins and joint bracket are provided with this option.



13. Attach the joint bracket [A] to the main machine.

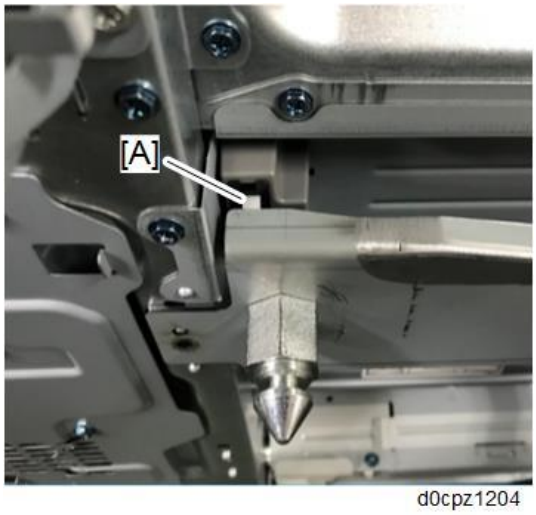
Note

Use the screws removed in step 11.



Note

The joint bracket must be outside the interlock switch [A].

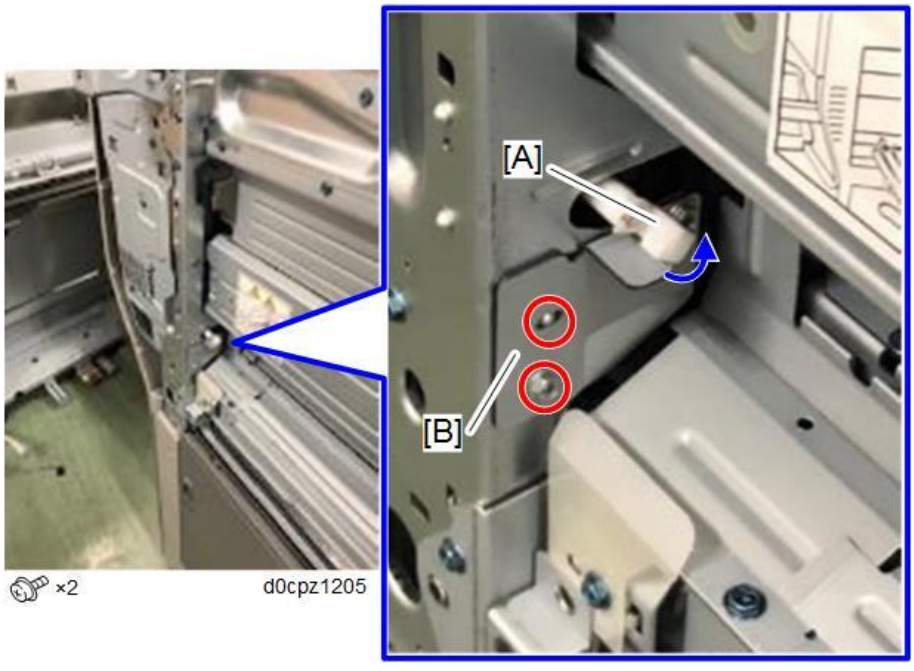


14. Rotate the interlock switch lever [A] in counterclockwise, and attach the positioning bracket [B].

Note

Use the screws removed in step 11.

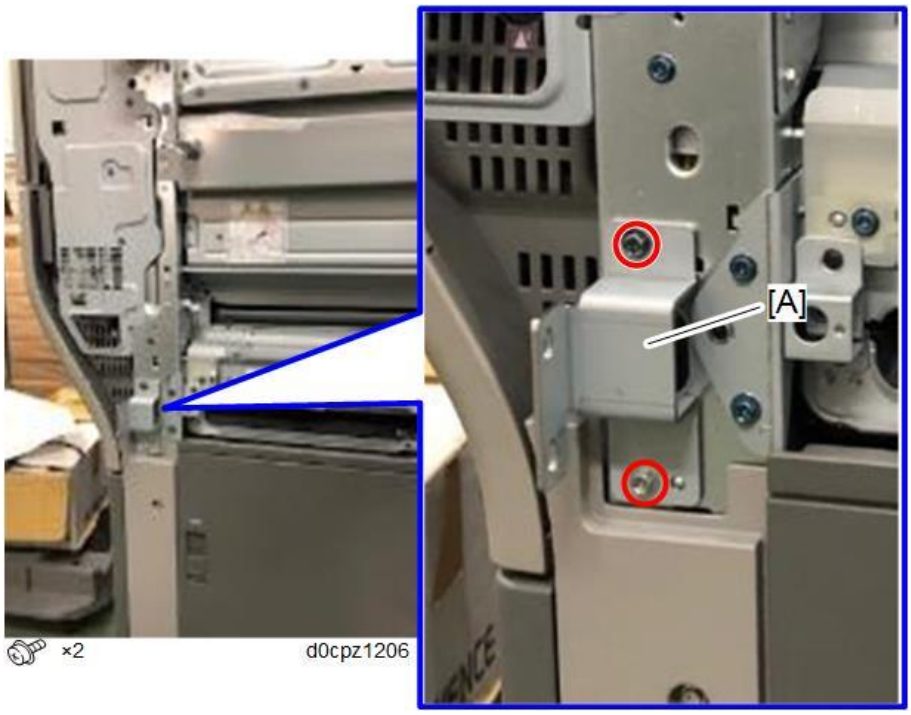
The positioning bracket [B] is provided with this option.



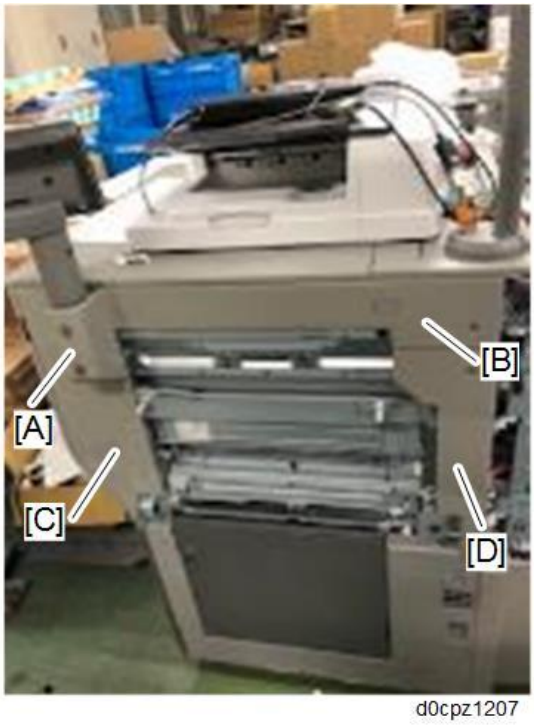
15. Attach the securing bracket [A].

Note

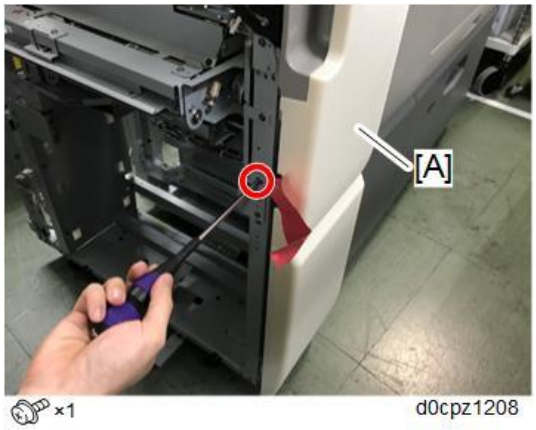
Use the screws provided with this option.



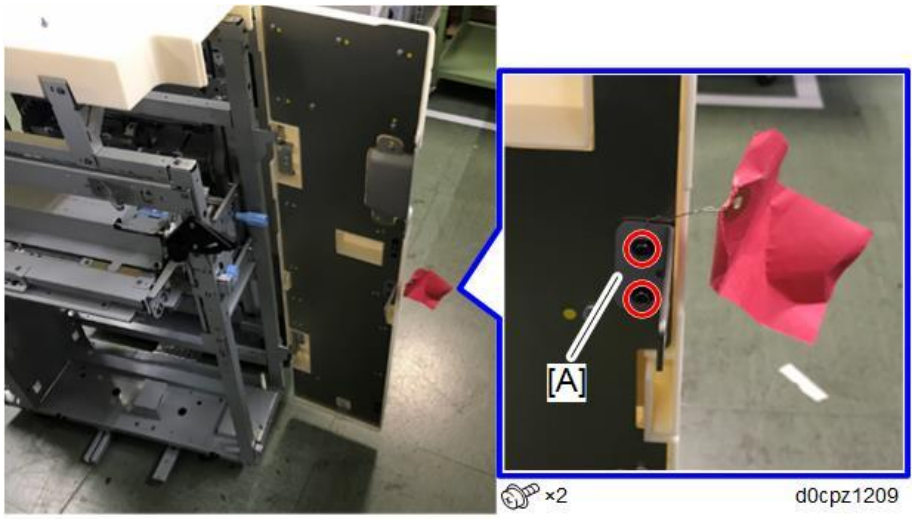
16. Attach the covers removed in step 9, in the order of [D], [C], [B], [A].



17. Remove the screw of the bracket and open the front cover [A].



18. Remove the bracket with a red tag [A].



19. Remove the tape.

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20. Remove the grounding bracket.

21. Attach the grounding bracket (removed in step 20) upside down.

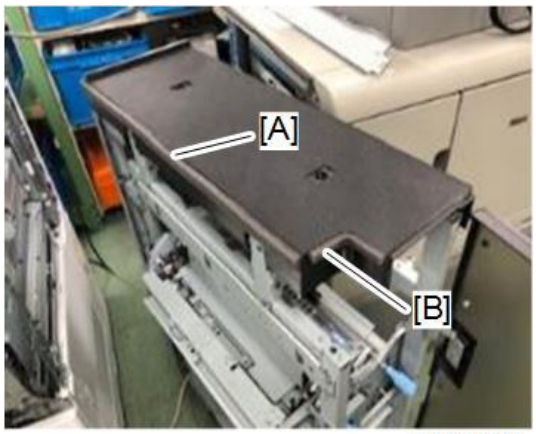
22. Remove the joint stay.

Note

The removed screw will be used in a later step.

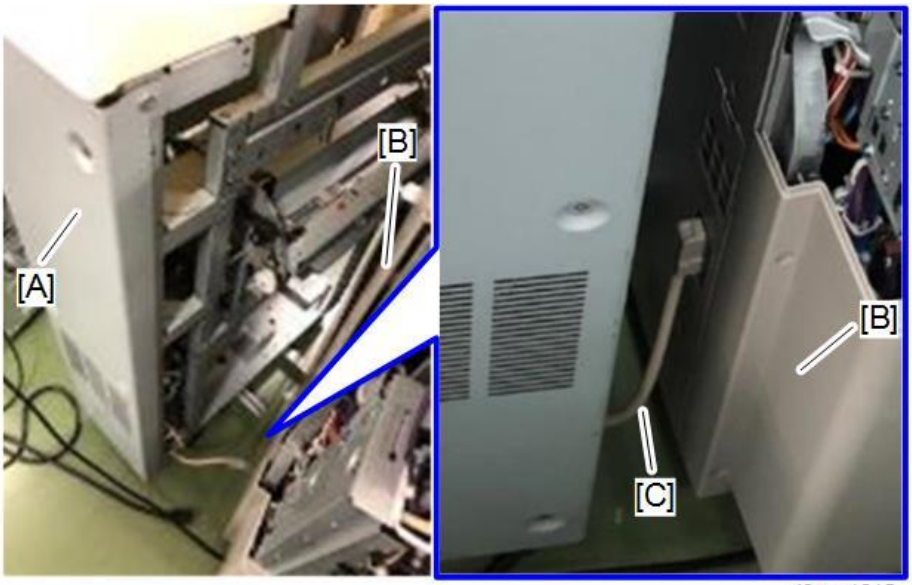
×1 d0cpz1213

23. Attach the sponge strips [A][B] as shown below.



d0cpz1214

24. Move this option [A] closer to the main machine [B] and connect the interface cable [C].

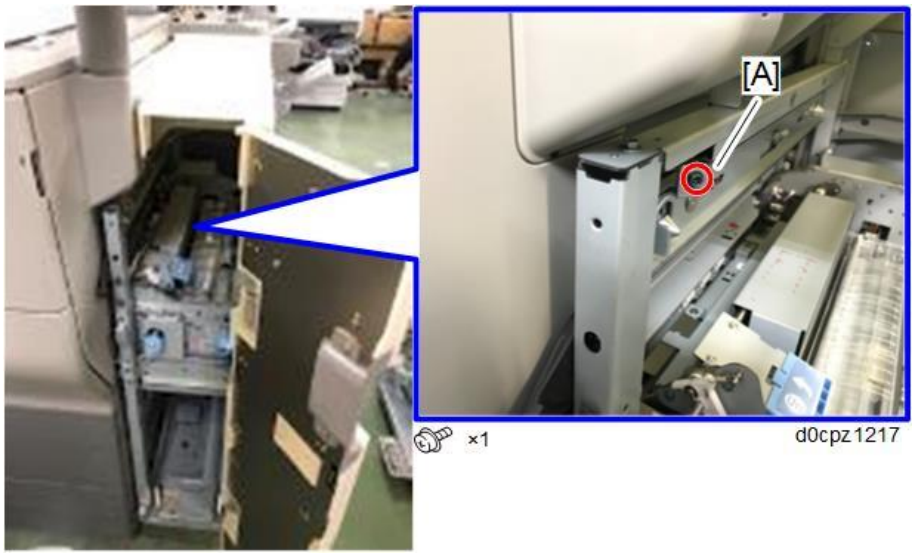


d0cpz1215

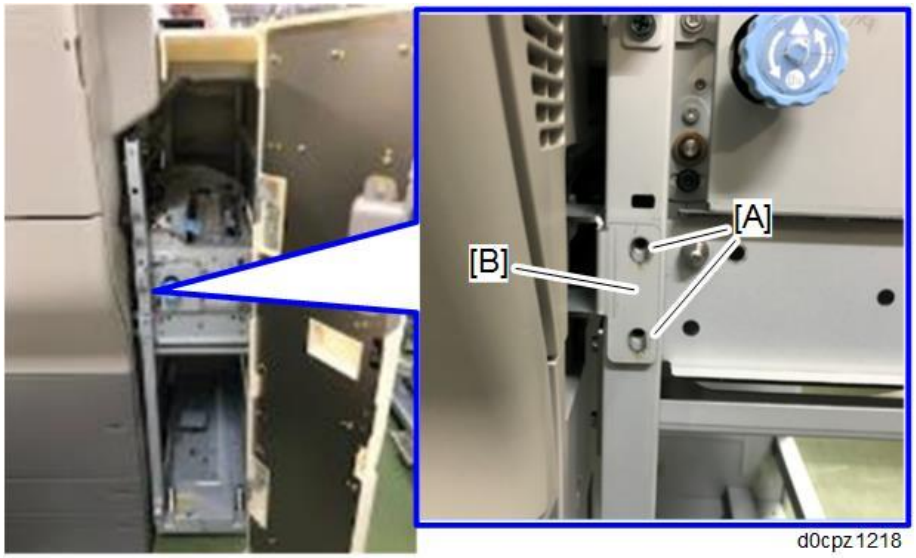
25. Connect this option [A] with the main machine [B].

d0cpz1216

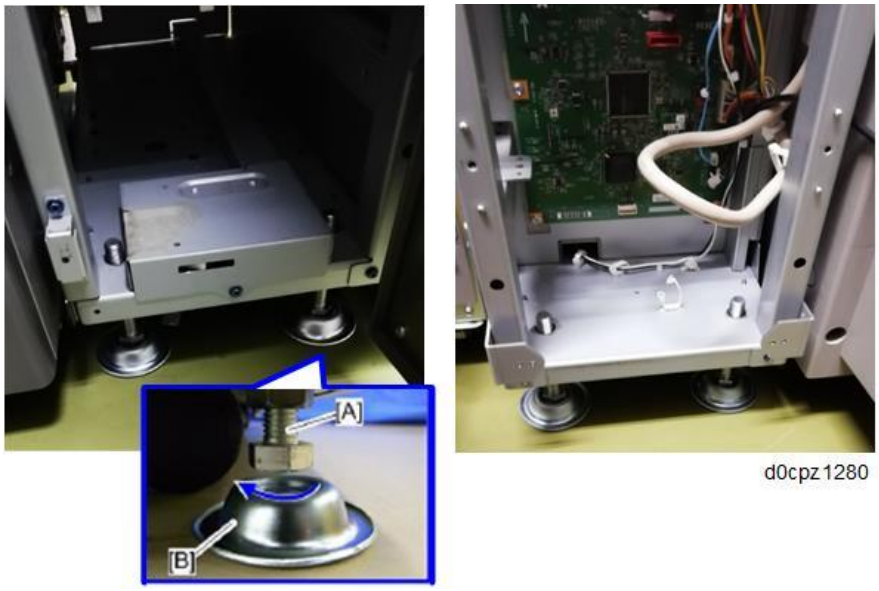
26. Lock the joint stay [A].



27. Align the screw hole of this option [A] with the hole on the bracket of the main machine [B].



28. Turn the nuts to lower the bolt [A] until the bolts reach the holders [B].



d0cpz1280

29. Place a level [A] on the top of the unit and then adjust the machine level and height with leveling bolts.

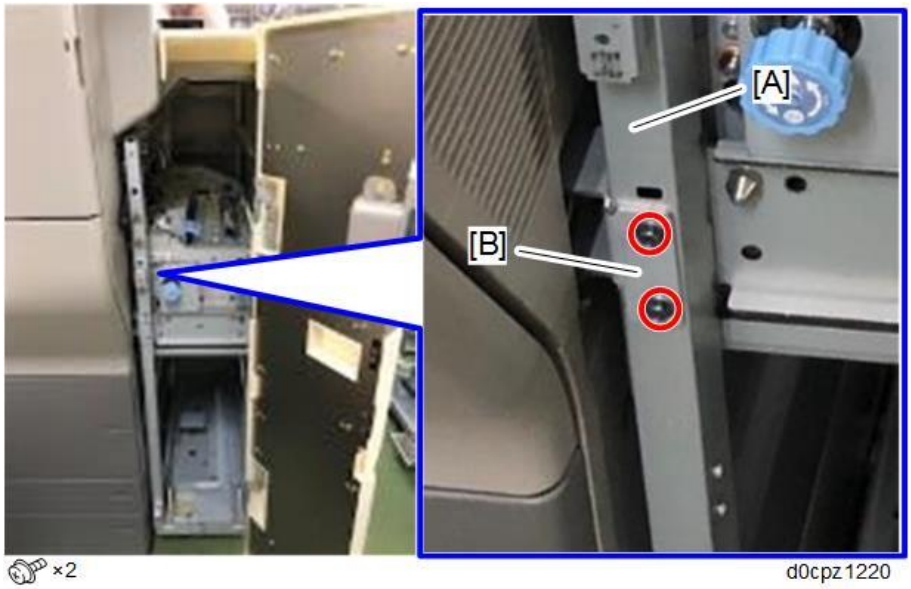
d0cpz1281

Note

Acceptable level: within 5mm (left and right, front and rear)

Make sure that the four leveling bolts are firmly mounted on the holders.

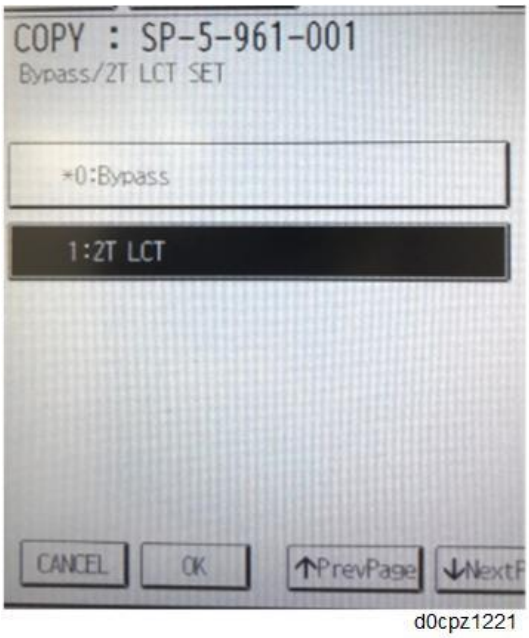
30. Attach the bracket [B] to the frame [A].



31. Connect this option to an LCIT.

32. Plug in and turn ON the main power.

33. Enter SP mode, set the value of SP5-961-001 to "1" and press [OK].



34. Turn OFF then ON the main power.

Image Position Adjustment

Preparation

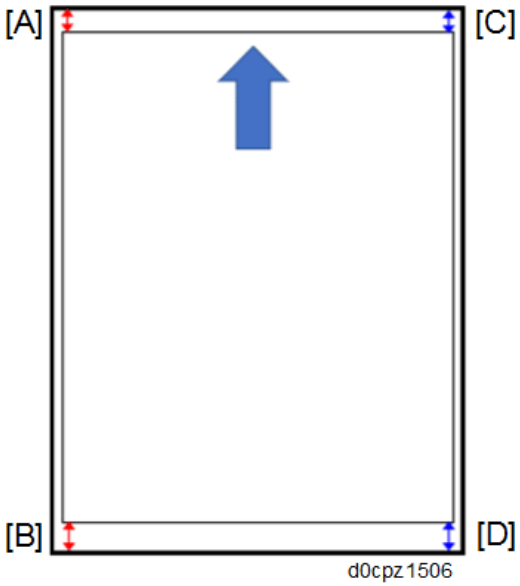
- Paper:
  - **Paper [X]**: Mohawk Color Copy 98(298g/㎡) DLT or Mondi Color Copy(300g/㎡) A3
  - **Paper [Y]**: Hammermill Tidal MP (20lb) DLT, or Data Copy Everyday Printing(80g/㎡) A3
- Test chart: Trim pattern (SP2-109-003 Pattern No.14)

Parallelism

1. Print 3 sheets of trim image using the **Paper [X]** from the upper tray of the Vacuum Feed LCIT (Hereinafter abbreviated as LCIT) and measure the main skew and parallelism of the third sheet.
The result value for parallelism should be less than 1.0 mm.
The result value for the main skew should be 1.5mm/200mm or less.

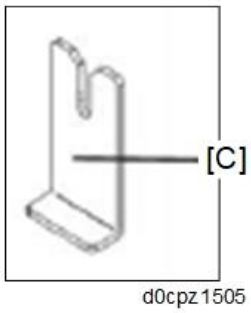
Note

Measure the top and bottom margins of the chart sheet, and calculate the parallelism with the following formula.
Parallelism [mm] = ([C]+[D]) - ([A]+[B])



If the result meets the criteria, proceed to the step 6.

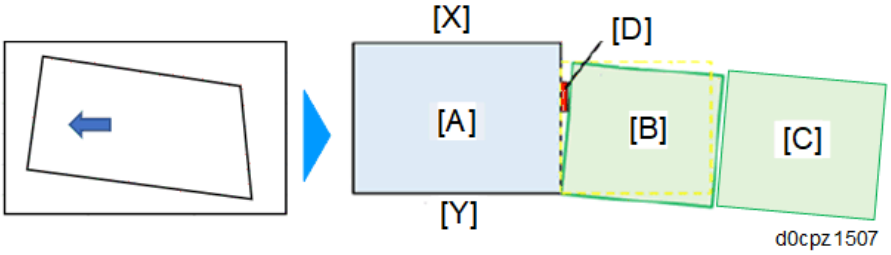
2. If the result of the step 1 does not meet the criteria, jack down this option and LCIT and insert the skew correcting plate [C] into the jointing pin, which is attached on the main machine, to adjust the parallelism. (Adjustable: 0.4mm/plate: "+" by inserting front side [A], "-" by inserting rear side [B])



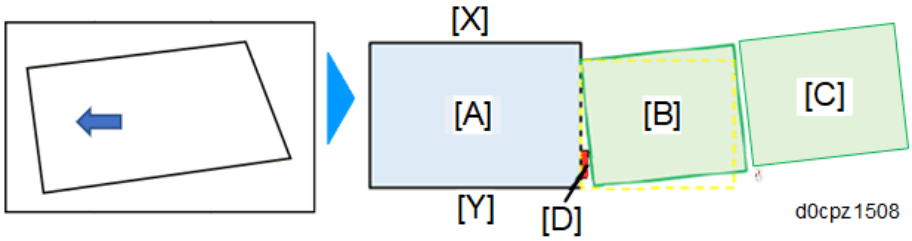
3. According to the result of the step 1, do the following. (Blue arrow in the figure indicates the transport direction)

- If the trim chart is as below, then insert the skew correcting plate [D] into the machine rear side

[X].



- If the trim chart is as below, then insert the skew correcting plate [D] into the machine front side [Y].



[A]: Main machine

[B]: This option

[C]: LCIT

4. Jack up this option and LCIT and adjust the level.

5. Do the step 1 again and make sure the parallelism using the **Paper [X].**

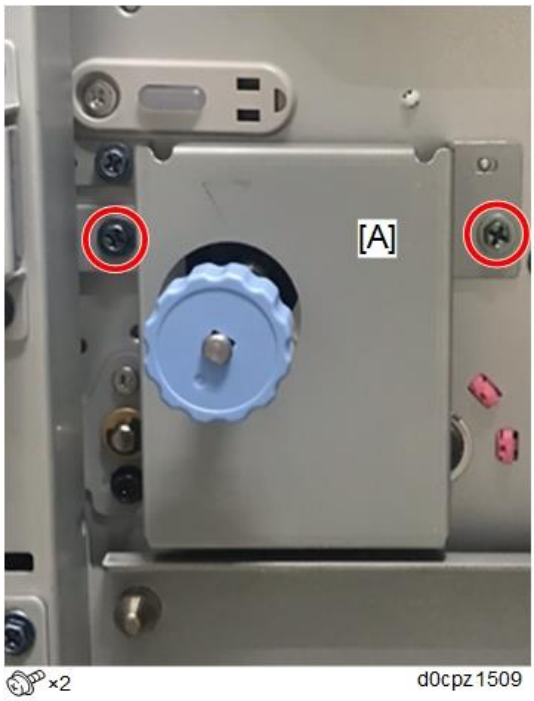
6. Using the **paper [Y]**, print 10 sheets of trim image, and measure the parallelism. Check the worst sample of the 10 sheets.

Criteria value: Less than 1.0mm

7. If the skew does not meet the criteria value, adjust the skew correction with the rotary gate roller adjusting device provided with this option.

(Adjustable: approx.0.06mm/100mm per 1 scale of the device)

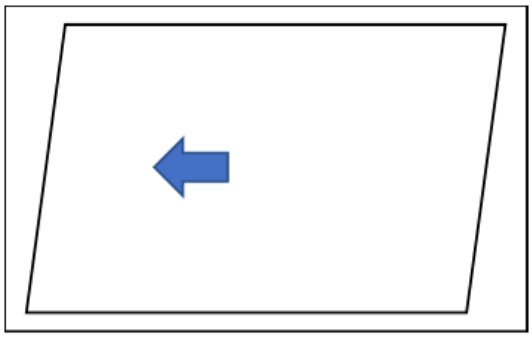
8. Remove the cover [A] of the transporting unit.



9. Loosen the screw (black) of the rotary gate roller adjusting device.

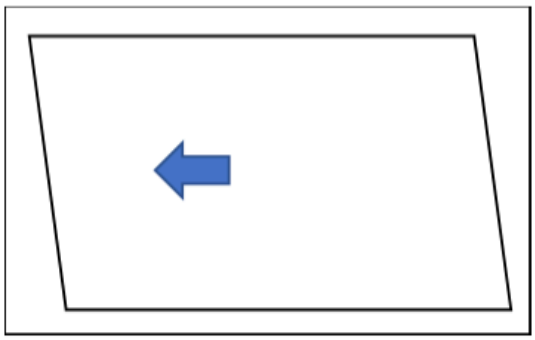
10. If the trim chart is as below, then tilt the adjusting device to the left. (Blue arrow in the figure

indicates the transport direction)



d0cpz1511

11. If the trim chart is as below, then tilt the adjusting device to the right. (Blue arrow in the figure indicates the transport direction)



d0cpz1512

12. Fasten the screw (black) of the rotary gate roller adjusting device.

13. (Following step 14 to 15 can be skipped if the result in the step 6 meets the criteria)

14. Using the **Paper [Y]**, measure the parallelism from LCIT.

If the value meets the criteria, reattach the cover removed in step 3.

If the value does not meet the criteria, go back to the step 8 again.

15. Proceed to registration adjustment.

Registration Adjustment

1. Do the following 2 steps for adjusting registration of side 1.

1. Side-to-Side scan registration (side 1): Apply the adjusted value of lower tray to the upper tray and BY5020.

SP	Item	Adjustable Range
1-003-031	Side-to-Side Reg 2T LCT Bypass	-3 to +3
1-003-032	Side-to-Side Reg 2T LCT Tray1	-3 to +3
1-003-033	Side-to-Side Reg 2T LCT Tray2	-3 to +3

2. Sub scan registration (side 1): Apply the adjusted value of the tray of the main machine to LCIT and BY5020.

SP	Item
1-001-031	Lead Edge Reg 2T LCT Bypass
1-001-032	Lead Edge Reg 2T LCT Tray1

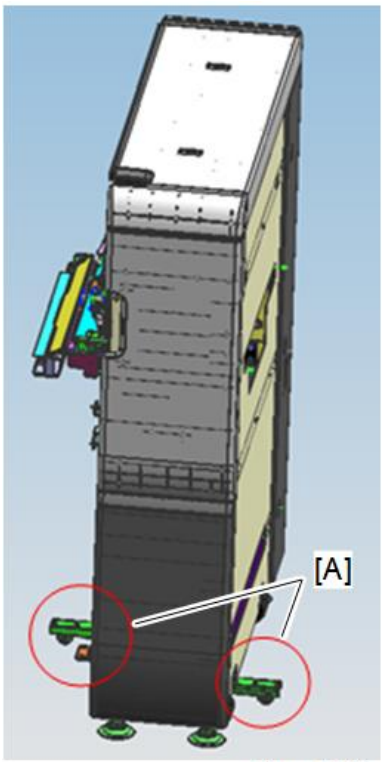
SP	Item
1-001-033	Lead Edge Reg 2T LCT Tray2

2. Adjust the Side-to-Side registration offset (side 2) (Centering the paper edge shift)

1. Change the value of SP1-206-001 (Paper Shift Setting Shift Mode Selection) to "2" (Shift: Off)
2. Print 5 duplex sheets of from LCIT.
3. Check the values of SP1-605-001 to 005 and take the maximum value.
   Ex: If the values are -0.4, -0.3, -0.1, -0.2, -0.3, respectively, then the max value is -0.1.
4. Multiply the maximum value obtained in the previous step by -1 and add the value to SP1-609-001 and SP1-003-037.
   if the max value is -0.1, then you have to add "0.1" to these SPs. (-0.1 x -1)
5. Change the value of SP1-206-001 to "1".
6. Print the chart again, and make sure there is no problem on side-to-side registration (side 2).

Notes When Moving the Option

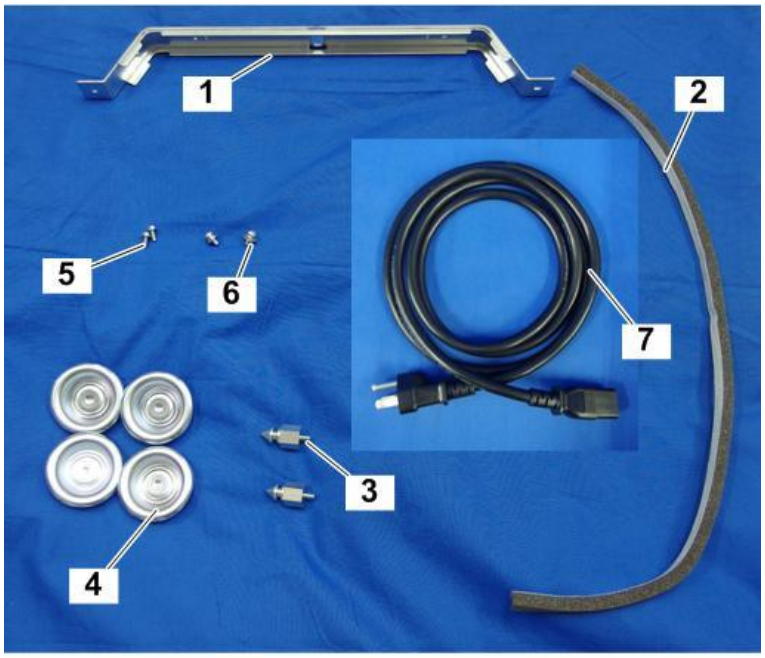
When moving this option alone, use the support caster [A].
When moving the option that connected with both the main machine and the Vacuum Feed LCIT, disconnect the main machine and move this option with the Vacuum Feed LCIT connected.



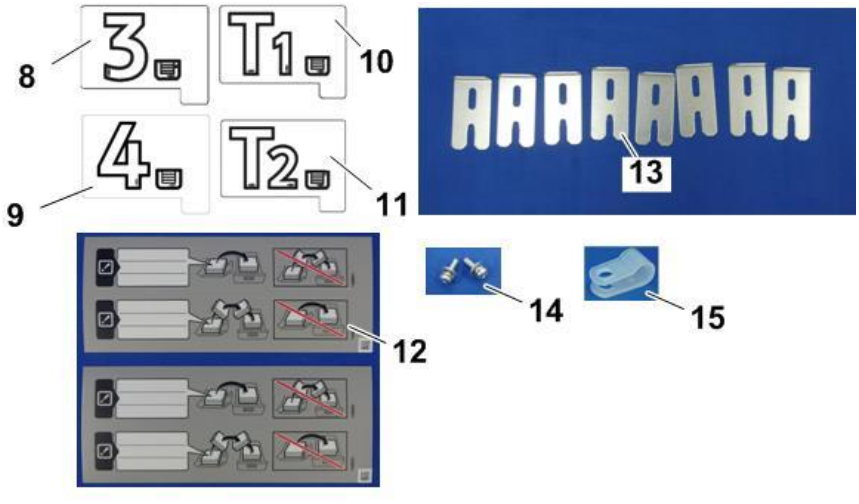
d0cpz4102

Vacuum Feed LCIT RT5120 (D3EW17)

Accessories



d194d9164a



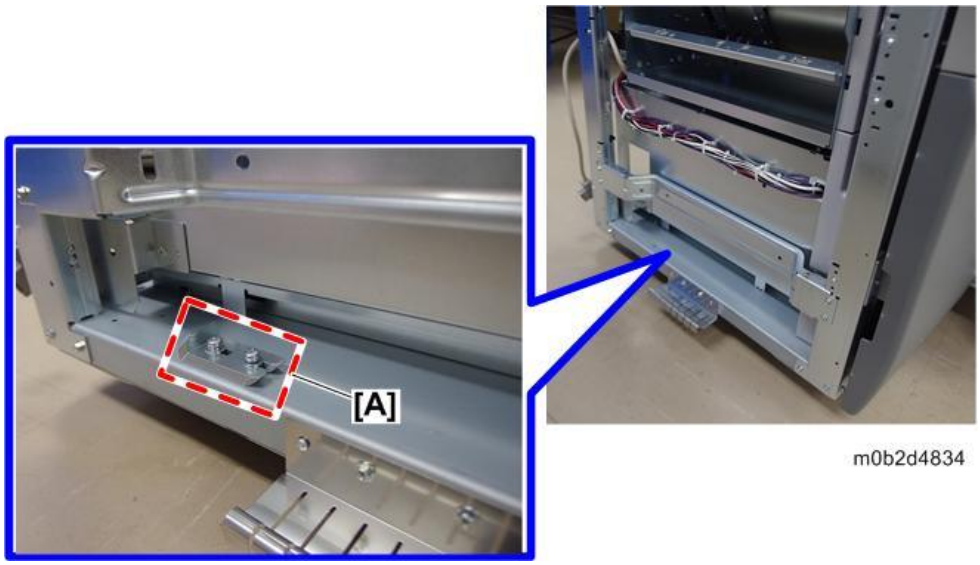
d194d9165a

No.	Description	Q'ty
1	Joint Bracket	1
2	Cushion	1
3	Joint Pins	2
4	Leveling Shoes	4
5	Tapping Screw : 4x10	2
6	Screw: Polished Round/Spring: M5x10	2
7	Power Cord	1

2.Installation

No.	Description	Q'ty
8	Decal - Paper Tray [3]	1
9	Decal - Paper Tray [4]	1
10	Decal - Paper Tray [T1] Not used with this machine	1
11	Decal - Paper Tray [T2] Not used with this machine	1
12	Decal: Paper Set Direction	2
13	Support Plate*	8
14	Screws (M5x14)	2
15	Clamp	1
-	Cushion (EU only)	4

*1: The support plates (No.13) [A] are included as a countermeasure against skew at the LCT output. To store them, stack and secure them with the screws (M5x14) as shown below.

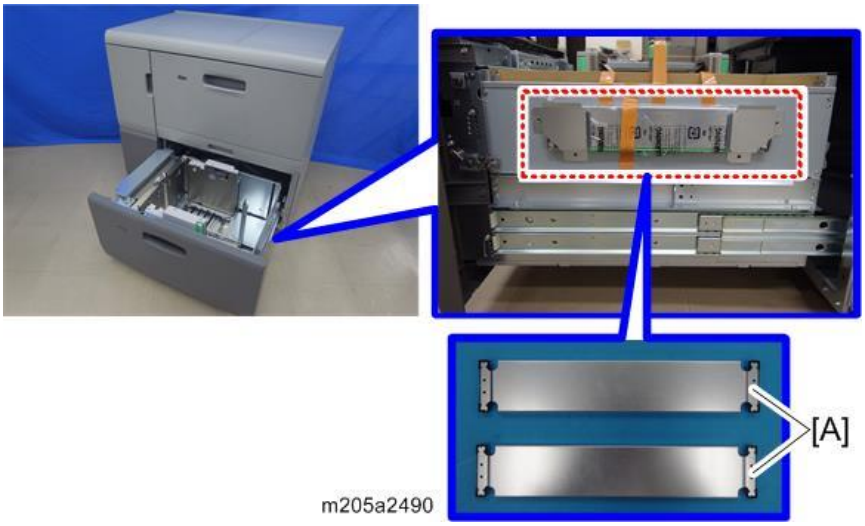


For details about how to use these plates, refer to "Correcting Skew".

Note

- Attach the auxiliary bottom plates [A] to the bottom of the tray when using paper wider than

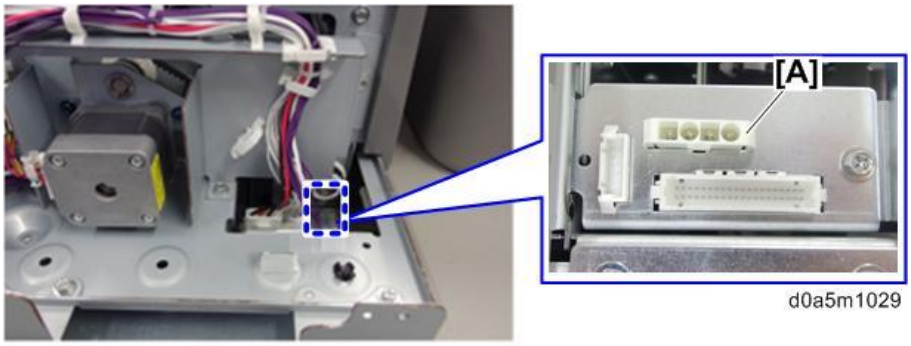
204 mm.



Installation

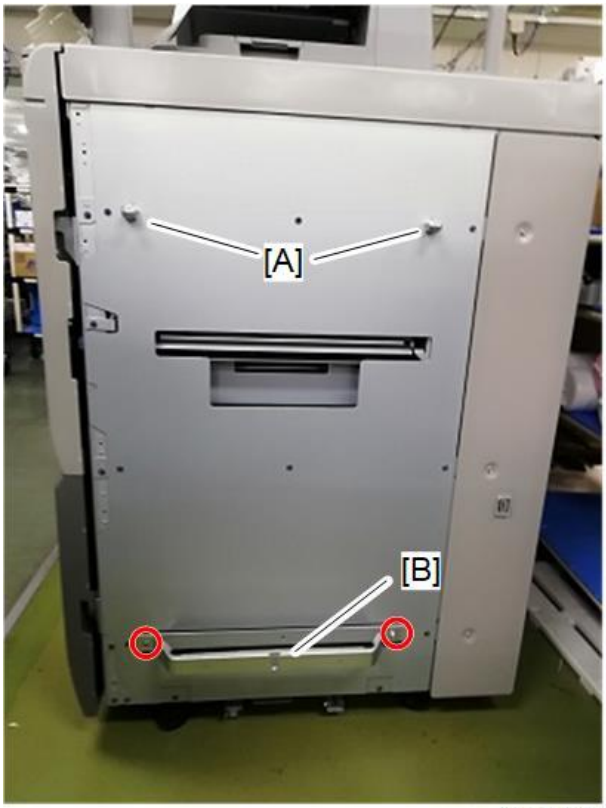
⚠CAUTION

- Before performing the following procedure, make sure that the main power switch and AC power switch of the main machine are turned OFF and that the power cord is disconnected. Performing the procedure with the power on could result in an electric shock or could cause a malfunction.
- Rated voltage of output connectors for accessory:
  [A]: Max.DC24V.
  [B]: Max.DC24V.



1. Remove all visible external tape on the LCIT.

2. Attach the joint pins [A] and joint bracket [B] to the main machine (x2: M5x10).

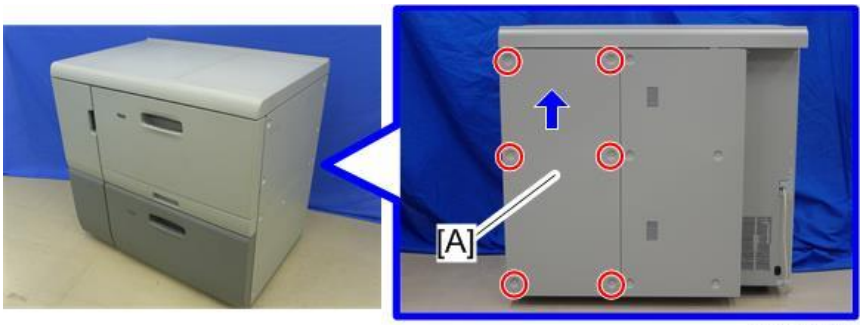


d0cpz1277

Note

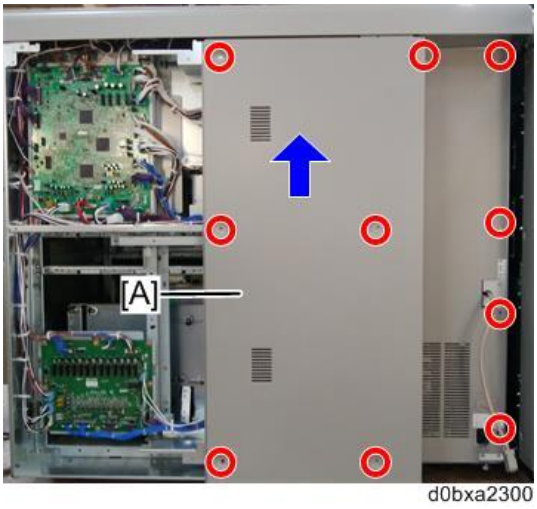
- Tighten the joint pins [A] with a wrench.
- Fix the joint bracket [B] with the M5x10 screws provided with this option.

3. Lift the rear right cover [A] of the LCIT slightly and remove it (x6).



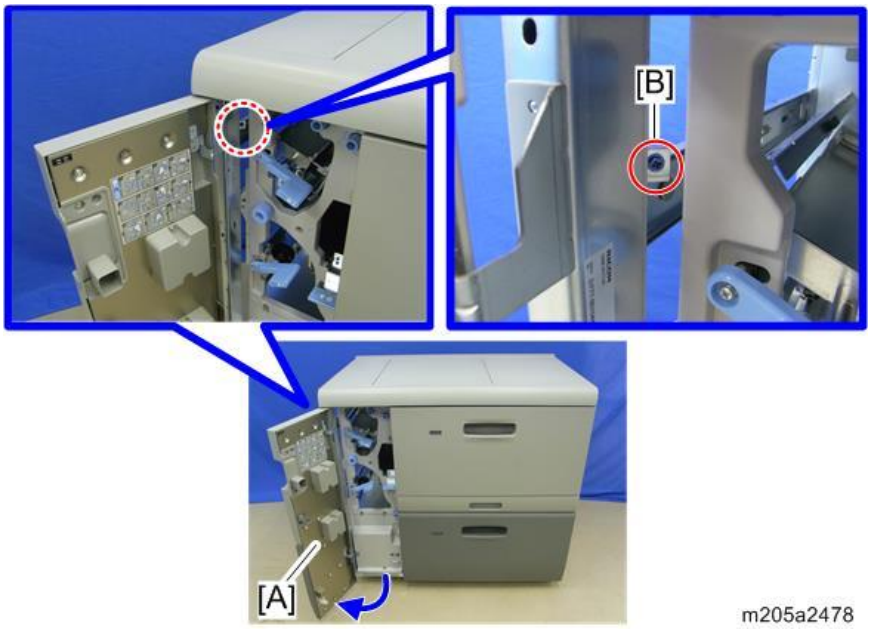
m205a2477

4. Lift the rear left cover [A] of the LCIT slightly and remove it (x10).



5. Open the front door [A] and release the lock lever [B] (x1).

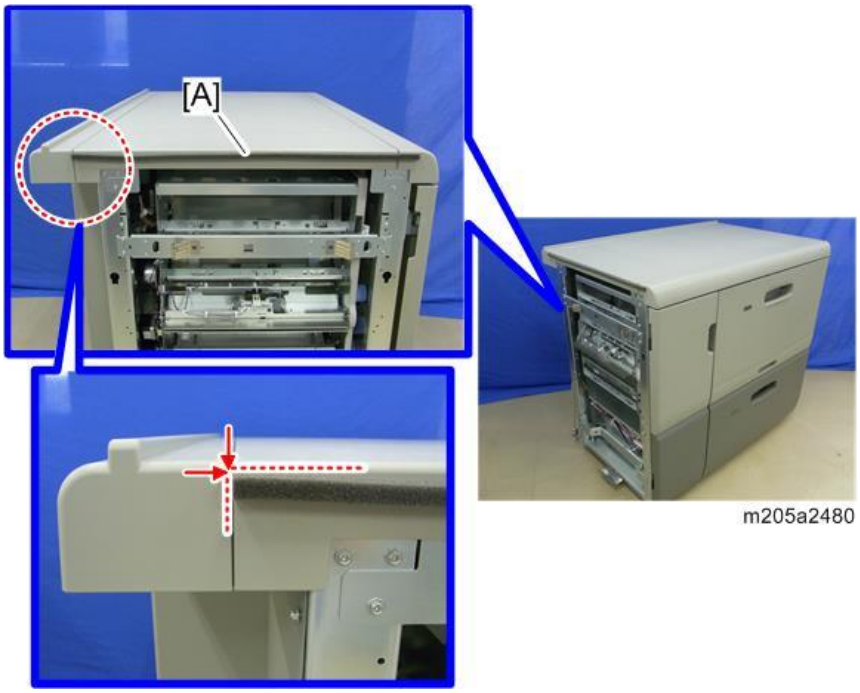
The removed screw is used in step 11.



6. Remove the ground plate [A], and then reinstall it as shown below (x2).

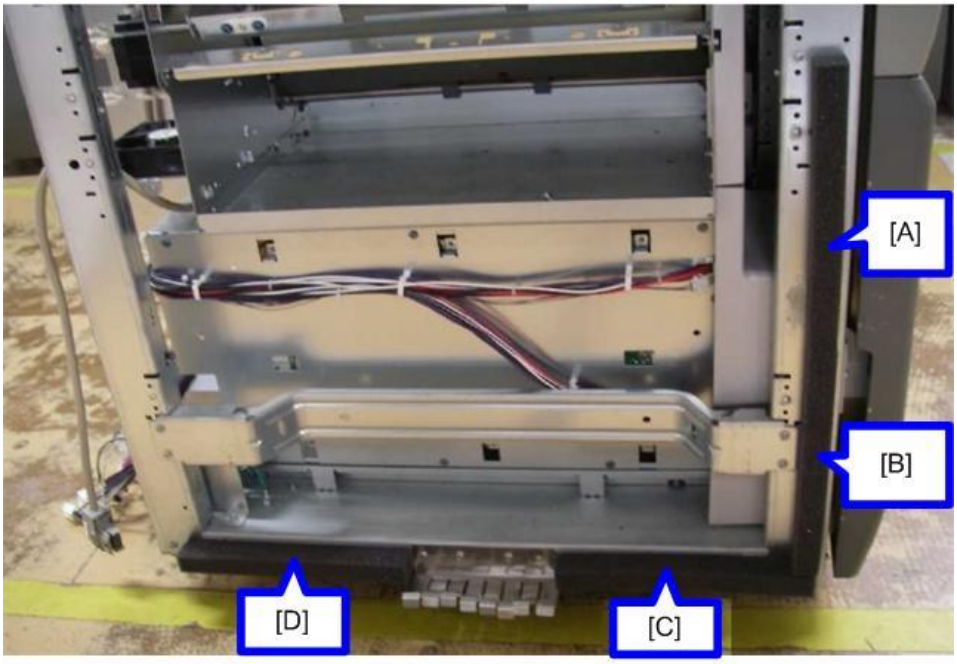
m205a2479

7. Attach the cushion [A] to the docking side of the LCIT as shown below.



m205a2480

8. For EU only: Attach the sponge strips [A] [B] [C] [D] as shown below.



m0b2d8080

9. Install the LCIT on the main machine.

Match the frames of the LCIT with the joint pins and joint bracket of the main machine.

d0cpz1279

10. Open the front door and fix the lock lever (x1).

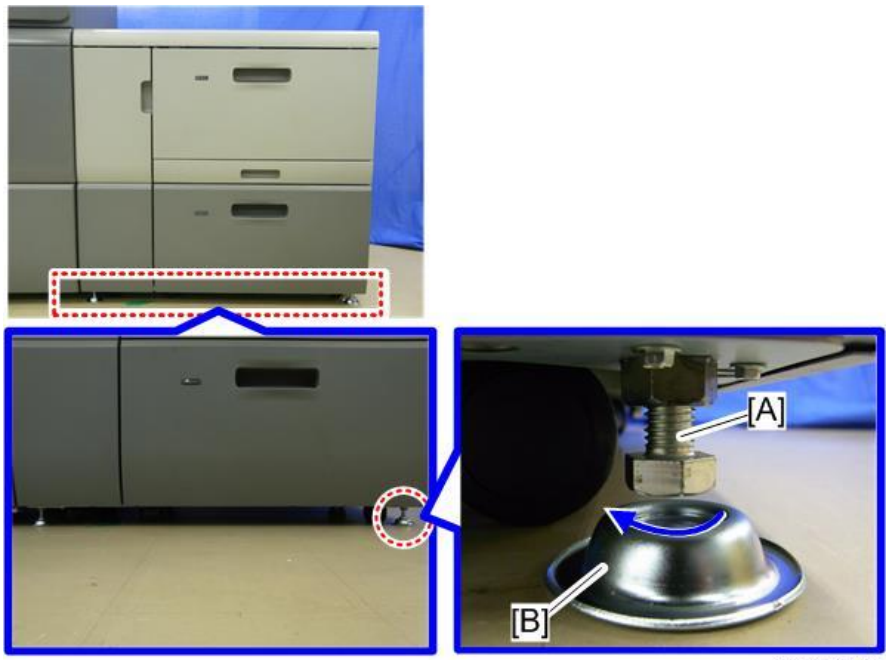
Use the screw removed in step 6.

m263d9103

11. Place the four holders [B] below the leveling bolts [A] under each corner of the LCIT.

12. Turn the nuts to lower the bolt until the bolts reach the holders.

Example below: Front side



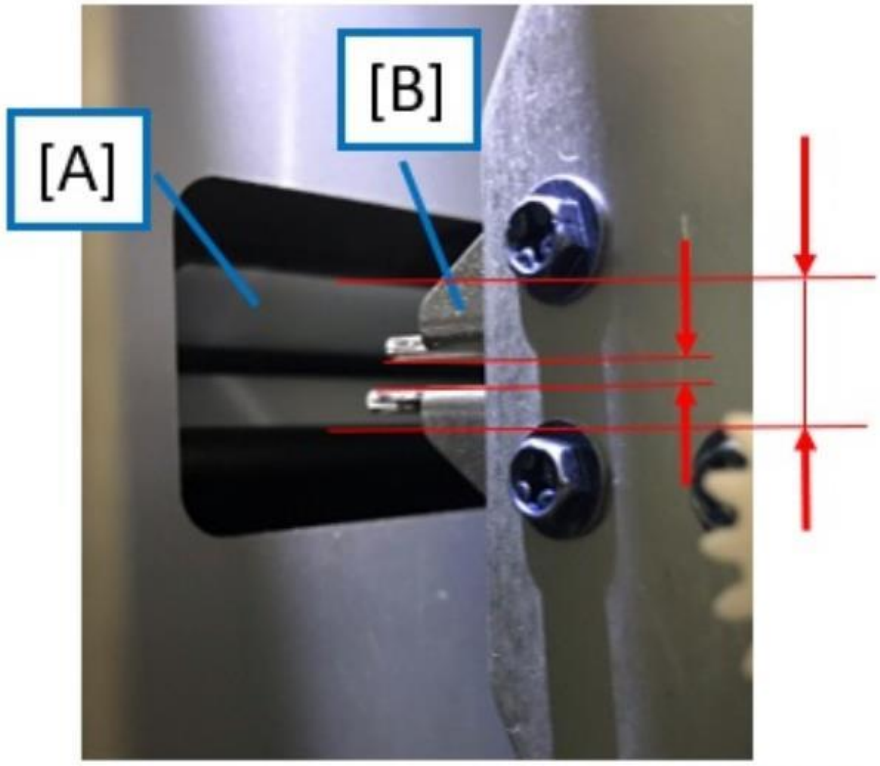
m205a2484

13. Place a level on the top of the LCIT and then adjust the machine level and height with leveling bolts.

d194d9168

Note

- Machine level: Less than 5mm (0.2”) from level (measure from left-to-right and front-to-rear)
- Machine height: The paper feed port [A] of the LCIT must be positioned within the range of the paper feed port [B] of the main machine.
- Make sure that the four leveling bolts are firmly mounted on the holders.

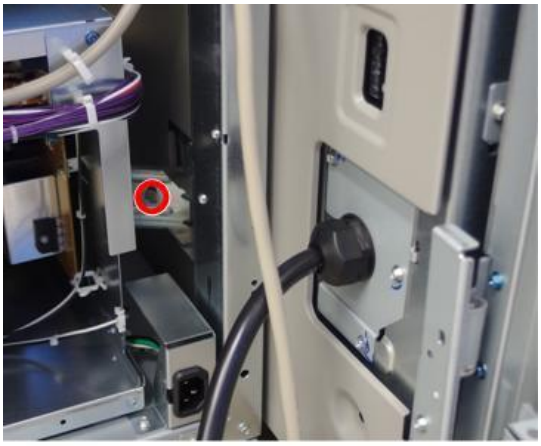


d0cpz1276

14. Open the front door. Secure the LCIT to the front side of the main machine (x1: M4x10).

m263d9104a

15. Secure the LCIT to the rear side of the main machine (x1:M4x10).



d194d9113

16. Reattach both rear covers of the LCIT.

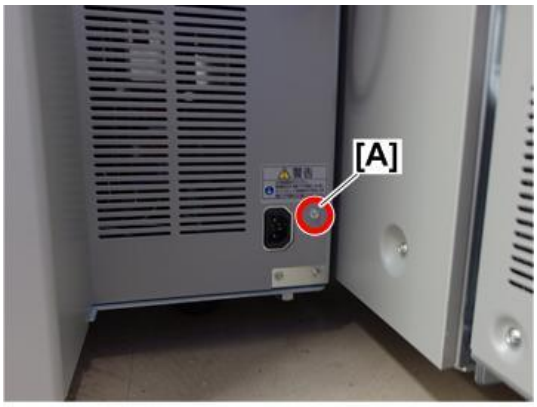
17. Connect the LCIT I/F cable [A] to the main machine.

d0cpz1278

18. Connect the power cord provided with the LCIT to the power inlet on the LCIT.

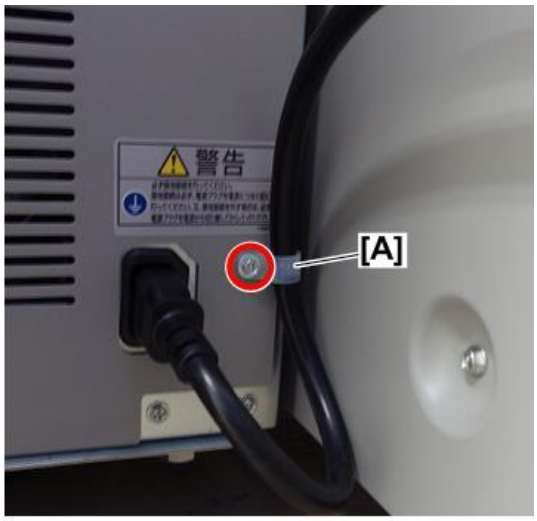
d194d9167

19. Remove the screw [A] beside the rear inlet (×1)



m0b2d8001

20. Secure the power cord with the accessory clamp [A] and one removed screw (x1, ×1).



m0b2d8002

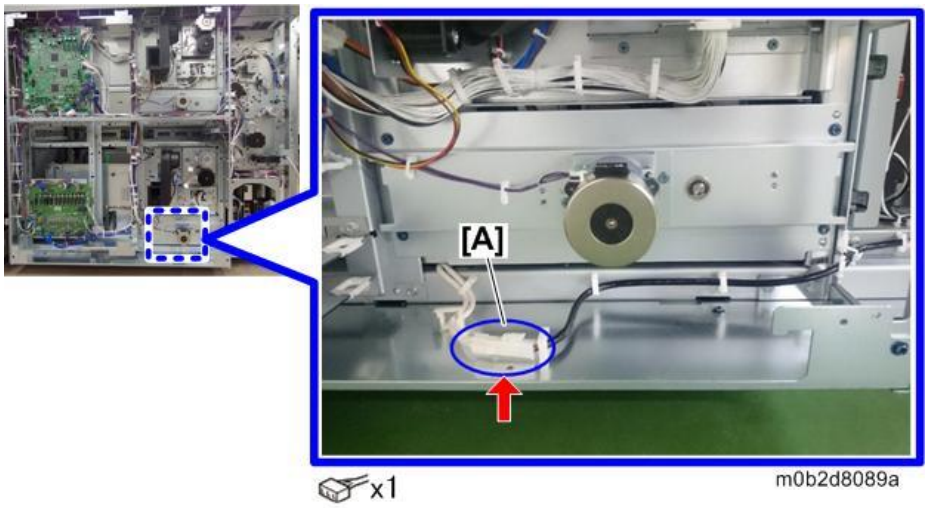
21. Attach the decal along with the LEDs. (T1 for Upper tray, T2 for lower tray)

d194d9166

Tray Heater (Service Option)

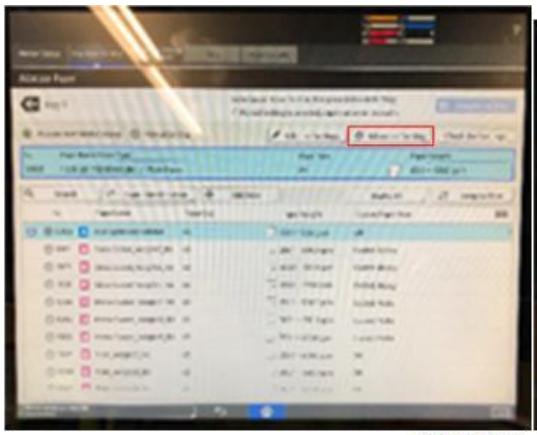
An optional tray heater can be installed under paper feed tray 2.

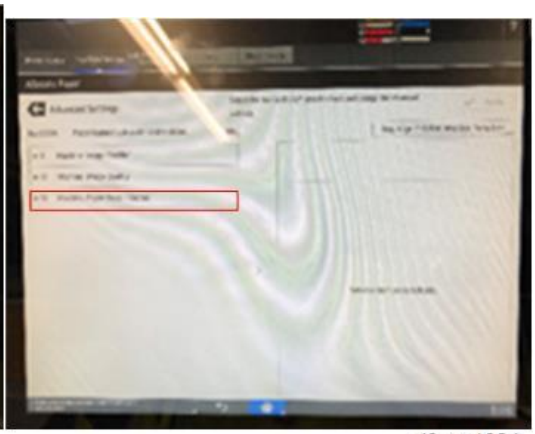
The heater itself does not have an ON/OFF switch. It remains ON as long as the power cord of the vacuum feed LCIT is connected. To turn the heater OFF, the relay connector [A] must be disconnected.

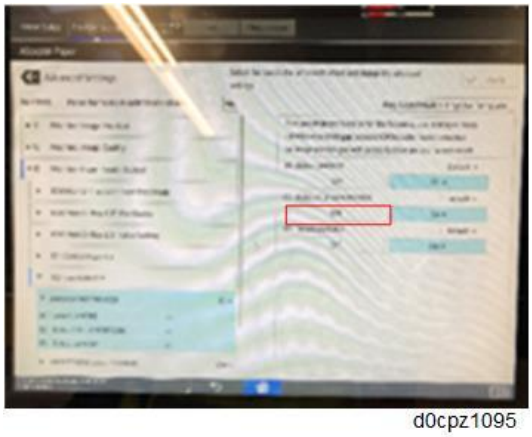


Vacuum Feed LCIT Tray: T1/T2

1. Change 1502-116 on IMSS.

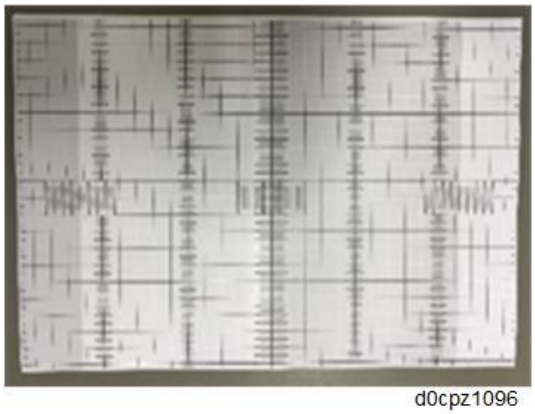

d0cpz1093


d0cpz1094


d0cpz1095

2. Set more than 100 sheets of paper on the T1/T2 tray, and print 20 sheets of the chart below

(Single-sided) using the setting above.



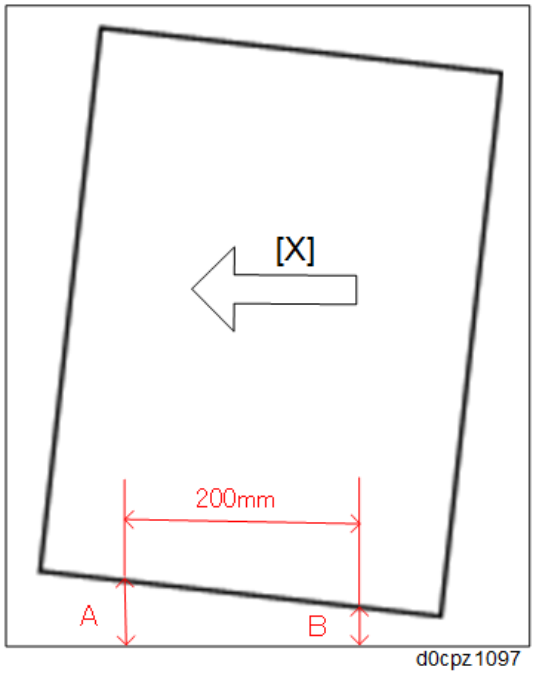
d0cpz1096

3. Using fifth to tenth sheets, measure the distance between the outline of the image and sheet edge (See the A and B below).

Note

The paper skew on the first to fourth sheets is not stable.

Skew = (A – B)/200mm



d0cpz1097

[X]: Transporting direction

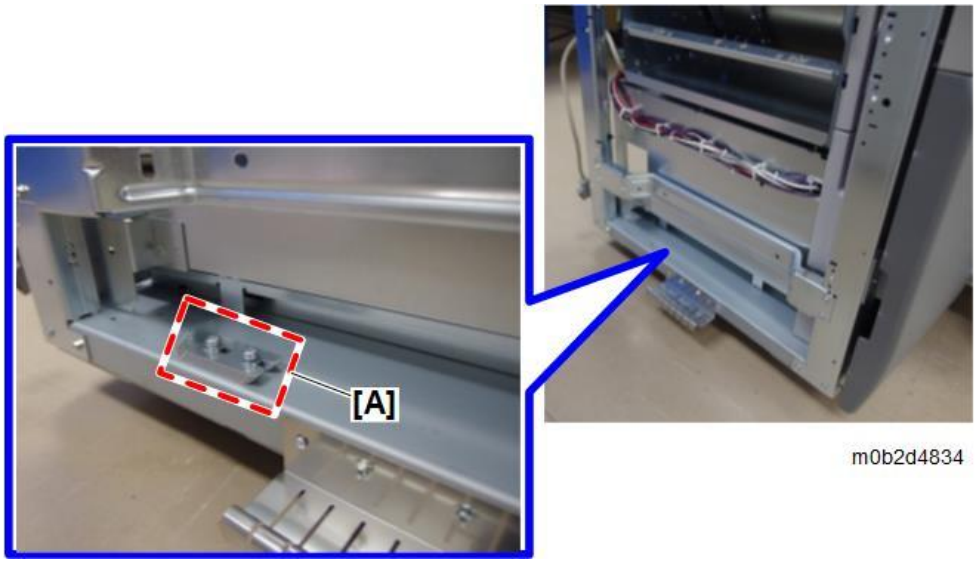
4. Depending on the skew amount (when skew=>1), insert the support plate in between the main machine and LCIT.

Note

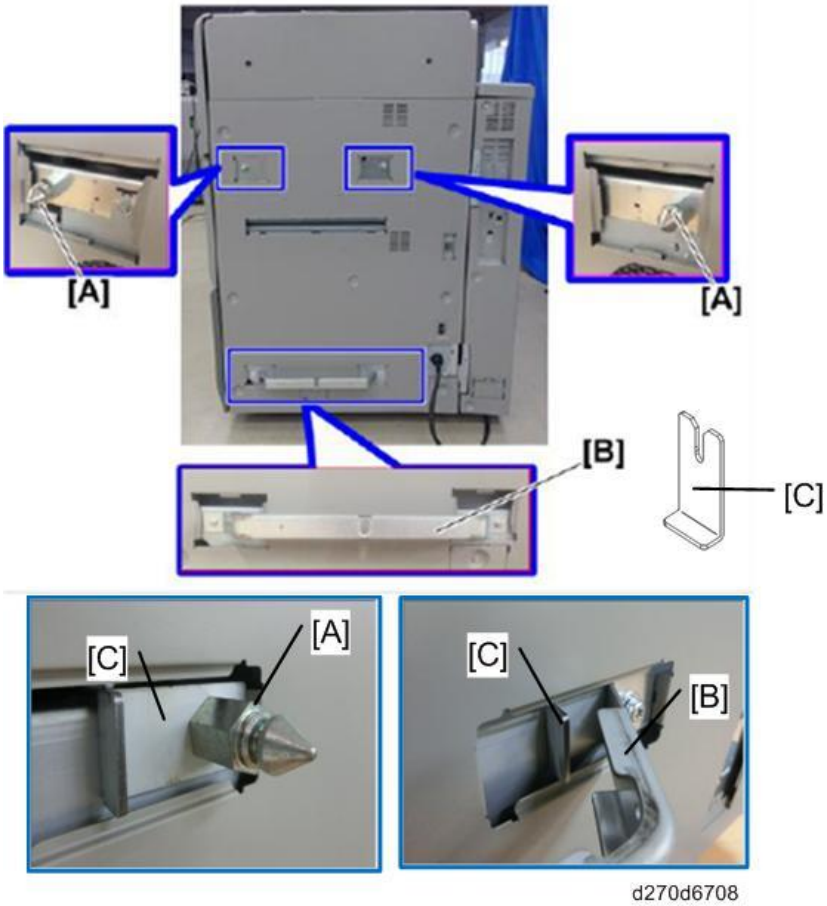
The support plate is 1mm thick and is able to correct a 2 mm/200 mm skew by a single plate.

(MAX: 4 mm/200 mm by 4 plates)

8 support plates are provided with the LCIT. Fasten the support plate at the area [A] to store them.



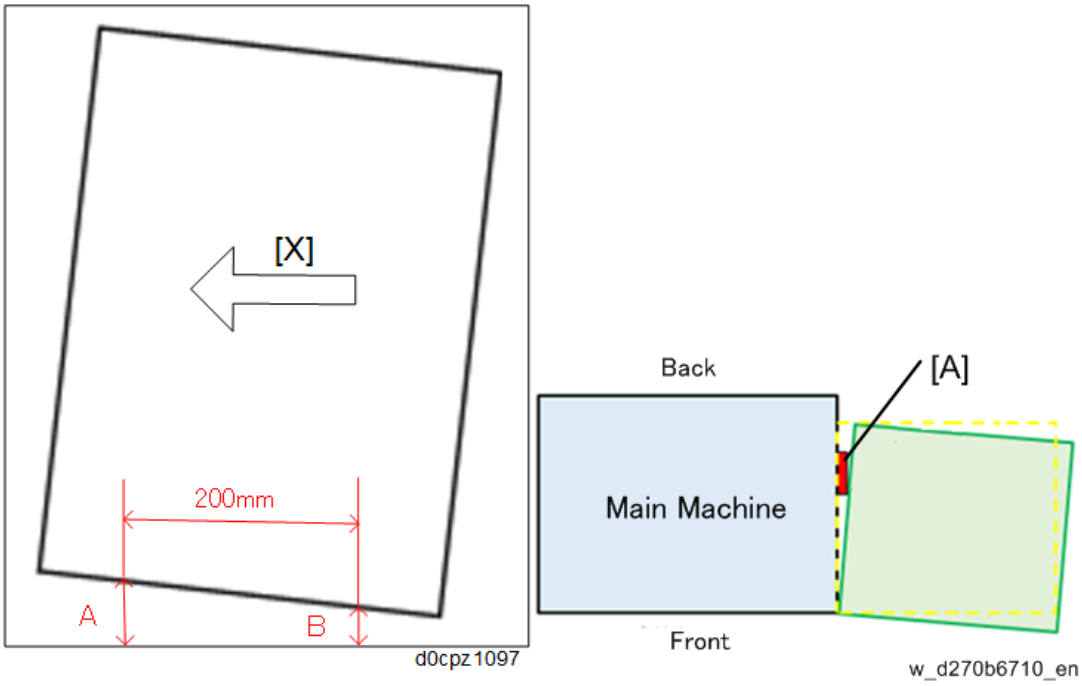
Insert the support plate [C] in the joint pin [A] and joint bracket [B].



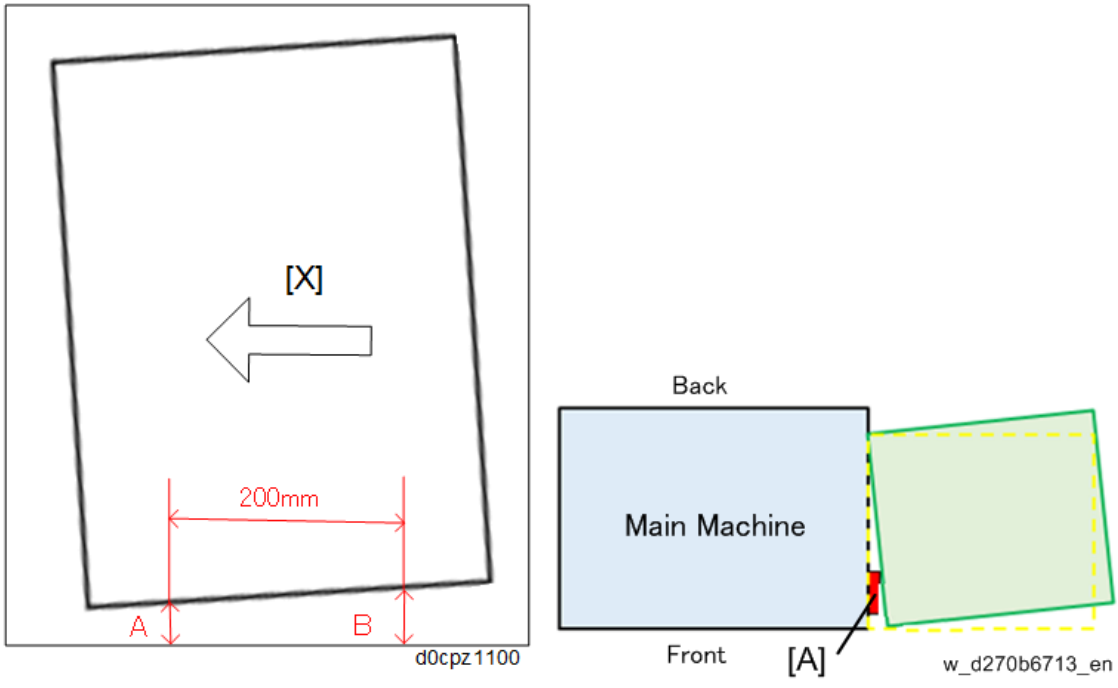
5. Depending on the value measured, do the following: ([X] = Transporting direction)

- **Image skewed to the front**: Insert the number of support plate [A] corresponding to the skew

amount to the back side of which the main machine and LCIT are connected.



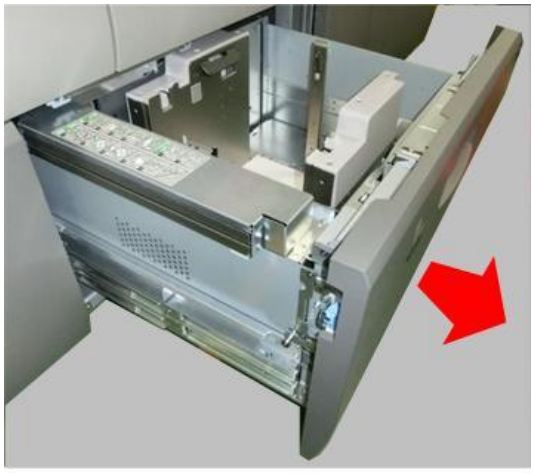
- **Image skewed to the rear**: Insert the number of support plate [A] corresponding to the skew amount to the front side of which the main machine and LCIT are connected



6. Measure the skew amount again, and make sure that the skew is 0 mm/200 mm.
If skew exists, do this procedure again.

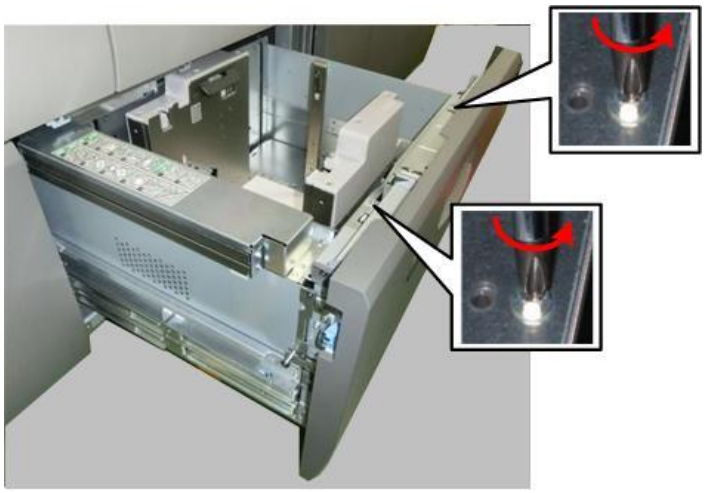
7. Measure the skew amount for T4 as same as the step 1 to step 3.

8. Pull the tray.



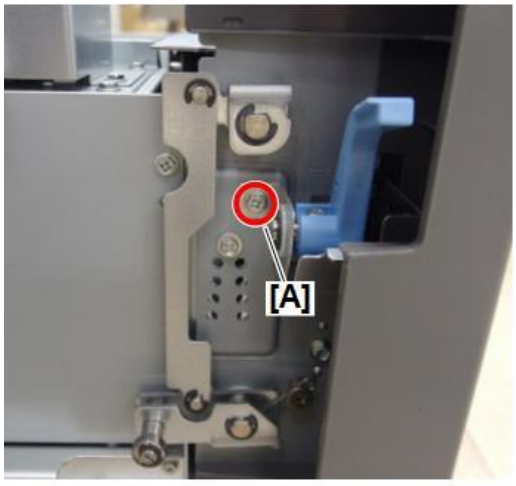
m263b1050

9. Loosen the 2 screw.



m263b1053

10. Loosen the screw [A] on the left side of the tray.



x1 m0b2d6706

11. Remove the screws [A][B] securing the upper/lower grid on the left/right side of the tray.

12. Depending on the value measured in step 3, tighten the screw in the following positions. ([A]: Left, [B]: Right)

13. Print the image in step 2, and make sure that the skew is 0 mm/200mm.
If skew exists, do this procedure again.

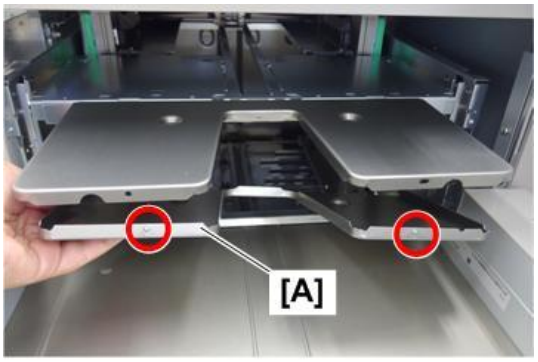
Side-to-Side Registration

Preparation (only Applicable If Vacuum Feed Banner Sheet Tray is Installed)

If the vacuum feed banner sheet tray is installed on the vacuum feed LCIT, unlock the feed tray before adjusting the side-to-side registration.

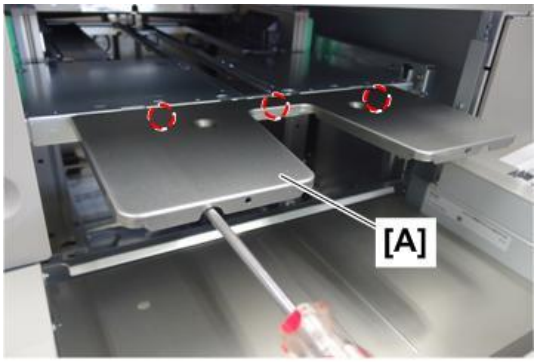
1. Open the cover of the banner sheet tray.

2. Remove the screw of the extension tray and remove the lower bottom plate [A] from the emboss. (x 2)



d194d9535

3. Remove the upper bottom plate [A]. (x 3)

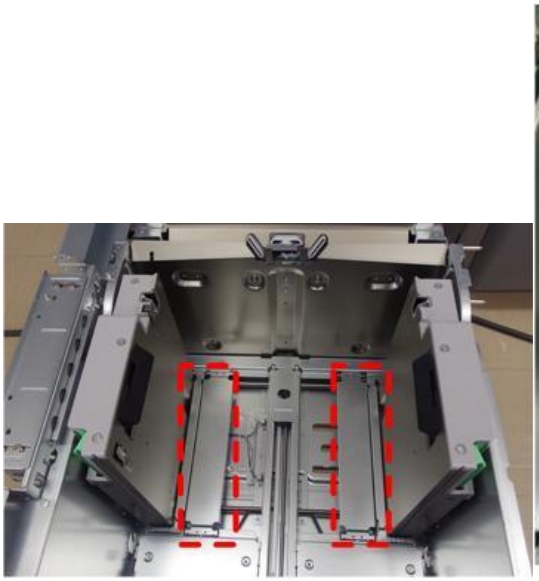


d194d9534

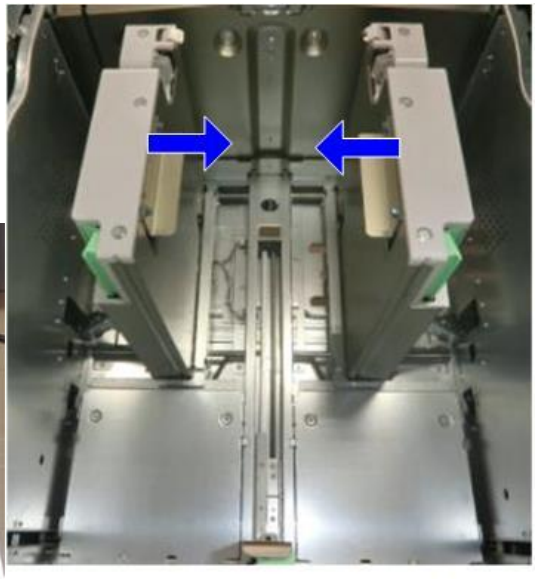
4. Remove the screw on the upper feed tray.

d777z0001

5. Remove the support bottom plate and minimize the side fence.



d194d9515



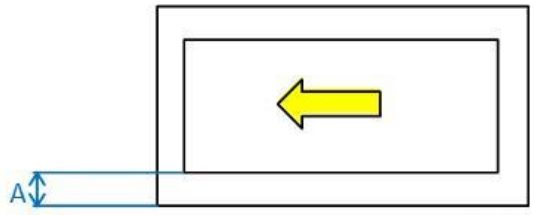
m0b2d3106a

Side-to-Side Adjustment Procedure

1. Enter SP mode and change the value of the following SPs:
   SP1-206-001: Change from 1 to 2 (disables the edge shift feature)
   SP1-623-007 to 009: Change from 1 to 0
2. Set the value of SP1-003-031 to -033 for the tray to adjust the side-to-side registration to [0.0mm].
3. Select the value of [14: Trim area] in SP2-109-003.
4. Press the copy button on the operation panel, select the tray to adjust the side-to-side registration, and print 3 to 5 sheets of trim image.

   Note

   Make a note of the arrow in the transporting direction on the printed sheets.
5. Measure the distance A.



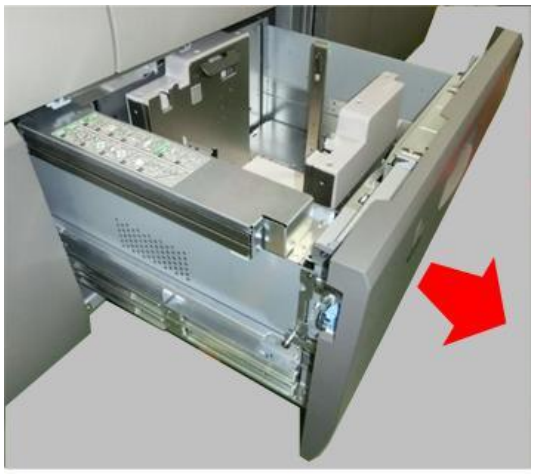
m0b2d6708

   Depending on the result, do the followings:
   - 1.5mm < A < 2.5mm: No need to adjust
   - 2.5mm <= A: Adjust the tray toward rear side for the distance A (mm) - 2 mm
   - A <= 1.5mm: Adjust the tray toward front side for 2 mm - the distance A (mm)
6. Perform the side-to-side registration for the tray that the adjustment is required.
   <Main/LCIT>

Note

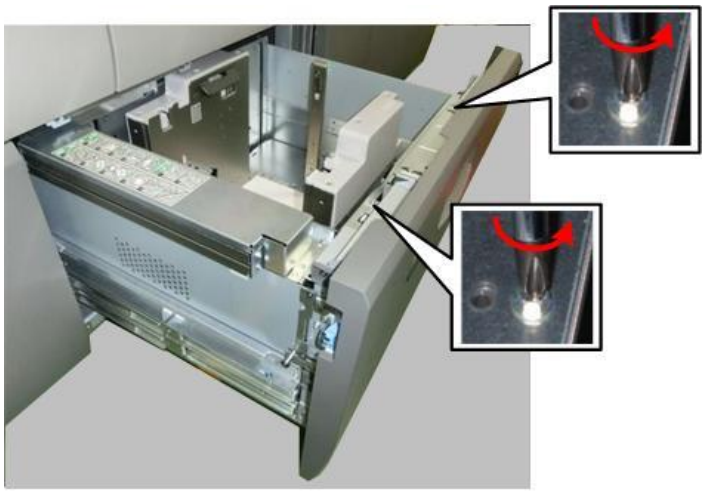
Removal of the tray front cover is not required.

1. Pull out the feed tray.



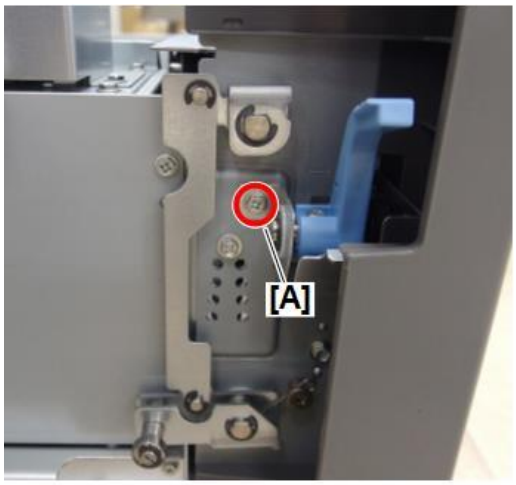
m263b1050

2. Loosen the two screws.



m263b1053

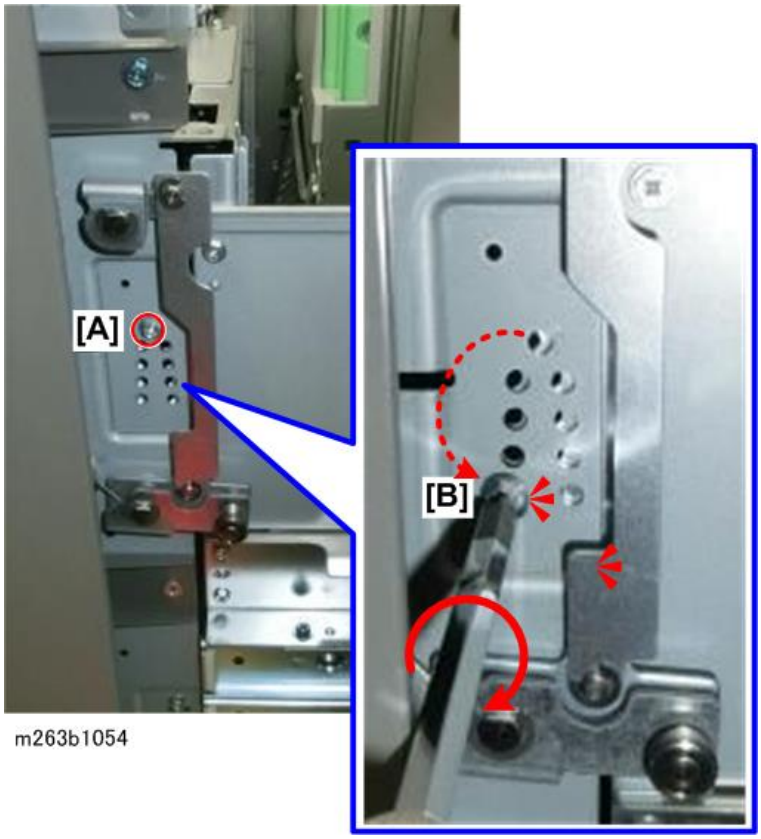
3. Loosen the left side screw [A].



x1

m0b2d6706

4. Remove the screw [A] securing the grid.
5. Set the grid on the adjusting point and fasten the screw [B] removed in the previous step.



Note

Adjustment range: 0.5 mm/hole, MAX±2.0mm

Right holes (+): The tray shifts toward rear side.

Left holes (-): The tray shifts toward front side.

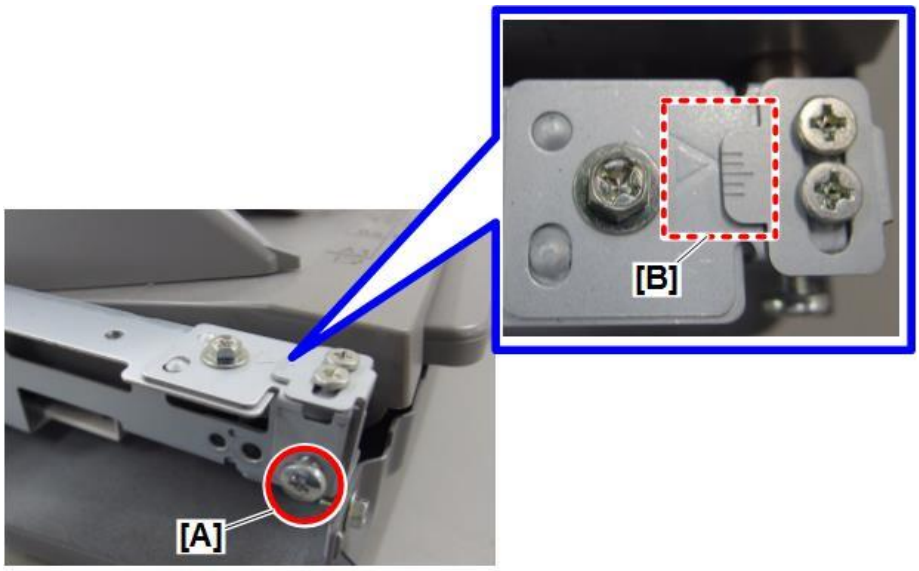
6. Fasten the screws on the left side and upper side, and then secure the frame.
7. Put back the feed tray.

<Bypass Tray>

Note

Removal of the tray front cover is not required.

1. Remove the right front cover.
2. Rotate the adjustment screw [A] to adjust the tray toward front or rear. Refer to the adjustment scale [B] when adjusting.



m0b2d6707

7. Print the trim image and measure the distance A (See step 5).
   Repeat the adjustment procedure until the distance A is within 1.5mm to 2.5mm.
8. Restore the value of the following SPs:
   SP1-206-001
   SP1-623-007 to 009

Important

If the distance A cannot be within 1.5 mm to 2.5mm, do the skew correction for LCIT.

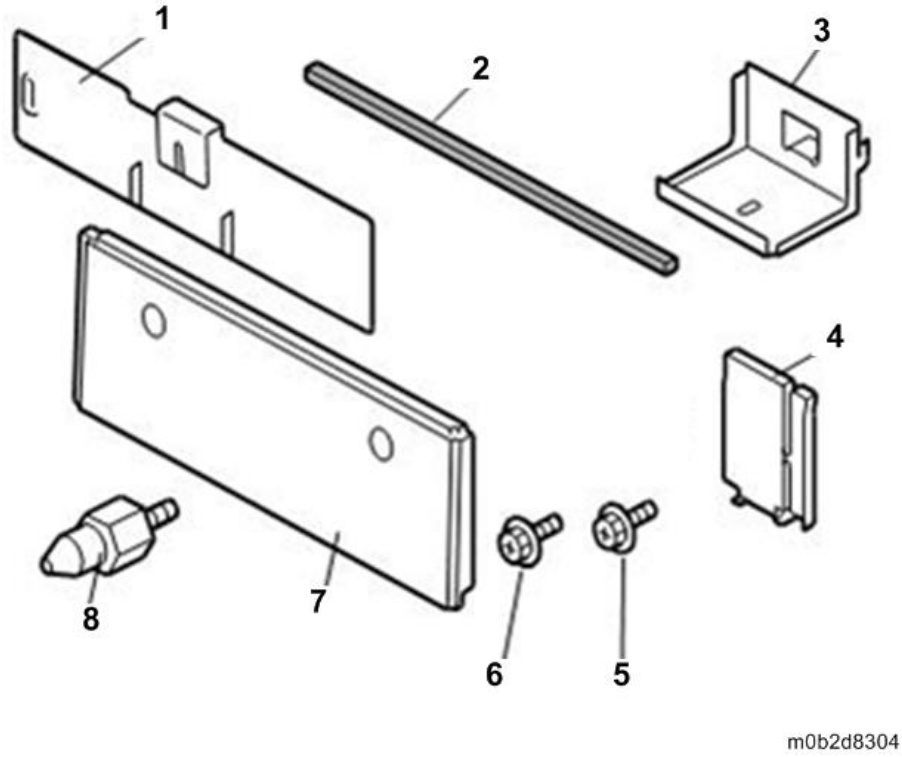
Multi Bypass Tray BY5020 (D3EV17), Multi Bypass Attachment Kit for Vacuum Feed LCIT Type S9 (D3EW)

Accessories

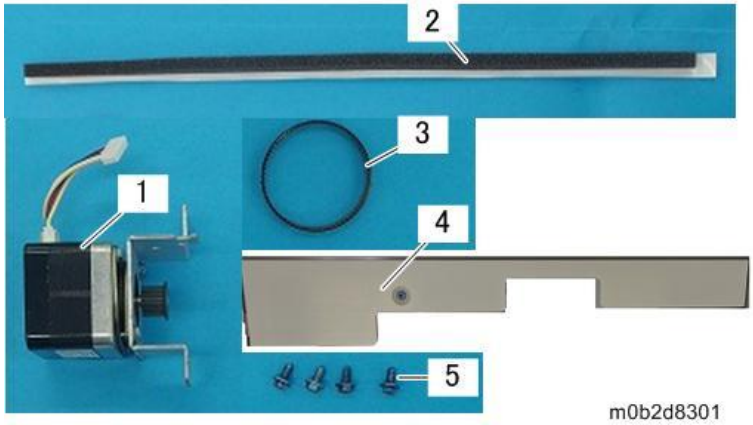
Multi Bypass Tray BY5020 (D3EV)

No.	Description	Q'ty
1	Tab Sheet Fence	1
2	Sponge Strip (Not used)	1
3	Bracket	1
4	End Fence	1
5	Screws (M4x6)	2
6	Screws (M4x8)	4
7	Left Cover	1
8	Joint Pins	2

No.	Description	Q'ty
-	Decal (ROHS) *China Only	1



Multi Bypass Attachment Kit for Vacuum Feed LCIT Type S9 (D3EW)



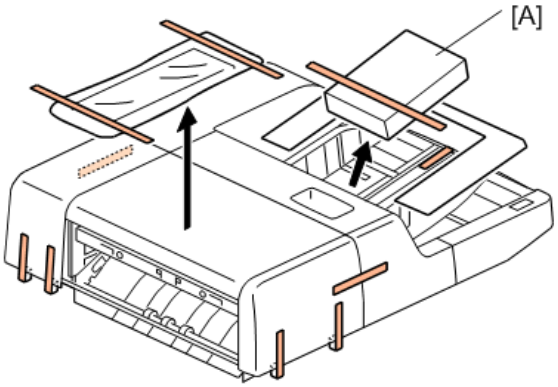
No.	Description	Q'ty
1	Stepping motor assembly	1
2	Sponge cushion	1
3	Timing belt	1
4	Cover plate	1
5	Tapping screws (4X8)	4

⚠CAUTION

- Before installation, make sure that the main power switch and AC power switch of the main machine are turned OFF and that the power cord is disconnected. Installing the unit when the machine's power is ON could result in an electric shock or cause a malfunction.

Preparing for the Multi Bypass Tray

1. Take the multi bypass tray out from the box and place it on a work space.
2. Remove the accessory packet [A] and open it.
3. Remove all tape and shipping materials.



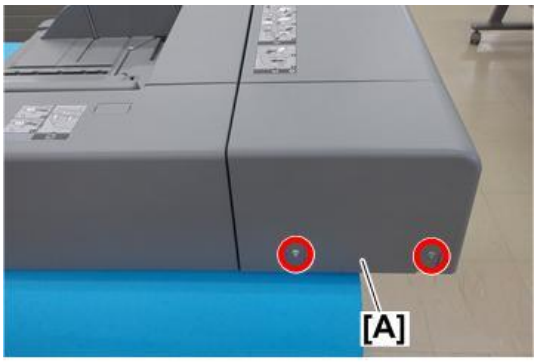
d517i101

Note

- The guide plate of the unit bottom sticks out, so place the unit on a table as shown below.

d194d8205

4. Remove the rear cover [A] (×2: M4×8)



d194d8206

5. Open the bypass tray.

d194d8207

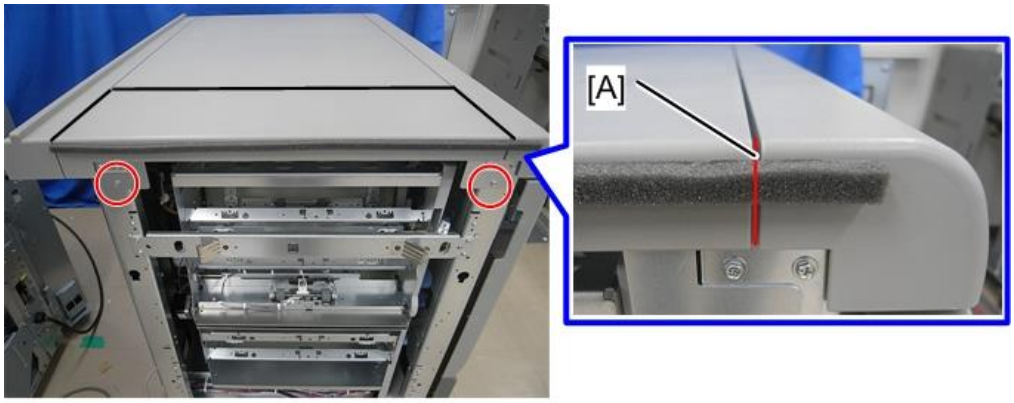
6. Remove the front cover [A] (×1: M4×8)

d194d8208

Mounting the Multi Bypass Tray

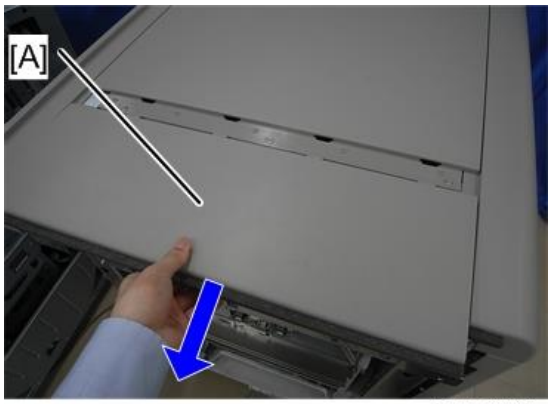
1. Cut the cushion at the position [A] along the groove of the left top cover of the vacuum feed LCIT.

2. Remove the screws on the left top cover. (×2)



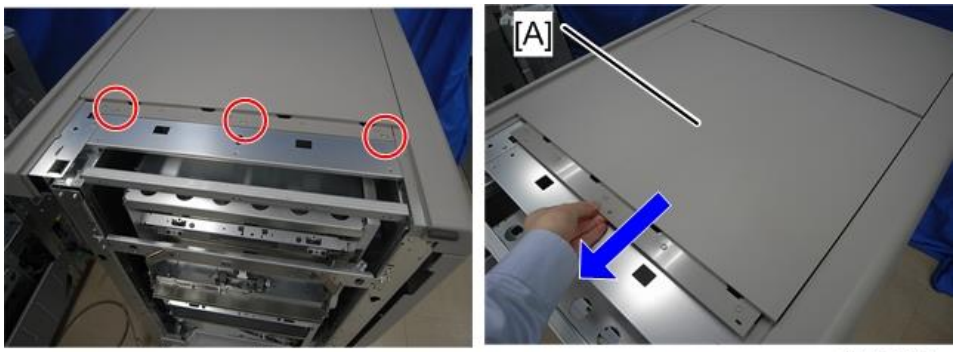
d777z0047

3. Slide the left top cover [A] in the direction of the blue arrow and remove it.



d777z0048

4. Slide the center top cover [A] in the direction of the blue arrow and remove it. (×3)

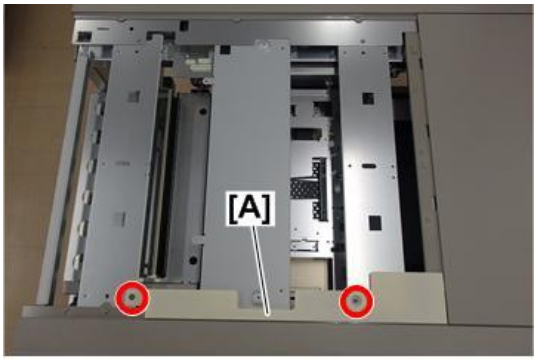


d777z0049

5. Attach the cover plate [A] (provided with the Multi Bypass Attachment Kit) to the front edge. (×2: M4×8)

Note

- Fixing screws are also provided with the Multi Bypass Attachment Kit.

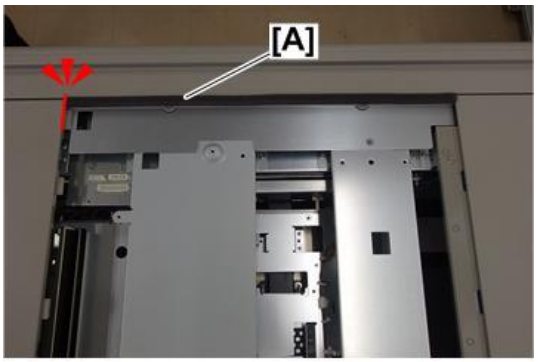


d194d8203

6. Attach the cushion [A] to the rear edge.

Note

- Paste it from the left end so that there is no gap at the left and right ends of the cushion.



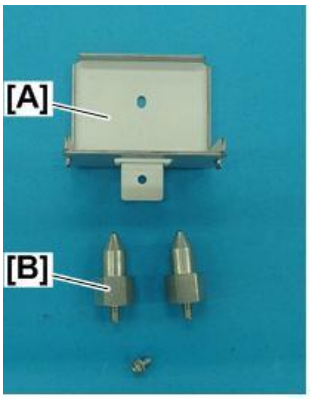
d194d8204

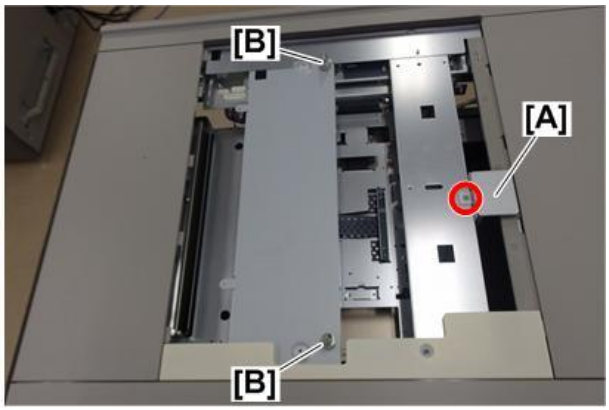
7. Attach the bracket [A] and joint pins [B]. (×1: M4×6)

These are provided with the multi bypass tray.

Note

- The fixing screw is also provided with the multi bypass tray.





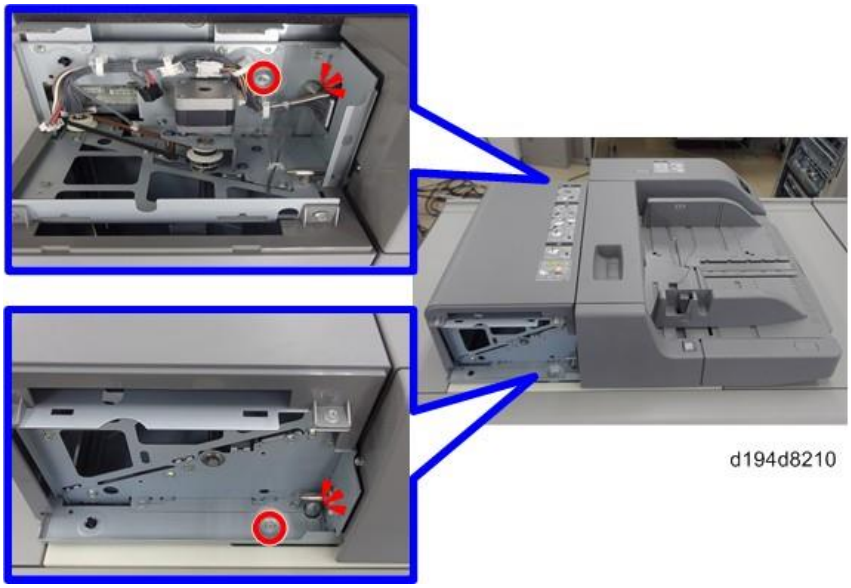
d194d8209

8. Mount the multi bypass tray on the vacuum feed LCIT. (×2: M4×6)

Align the holes at the front and rear of the multi bypass tray with the joint pins on the vacuum feed LCIT.

Note

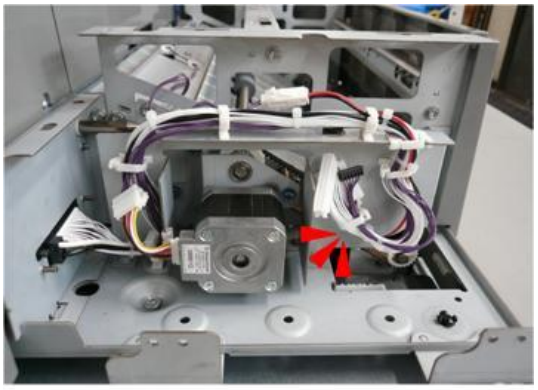
- The bypass unit weighs 20 kg (44 lb.). You may need assistance to set the bypass unit on top of the vacuum feed LCIT.
- Fixing screws are provided with the multi bypass tray.



d194d8210

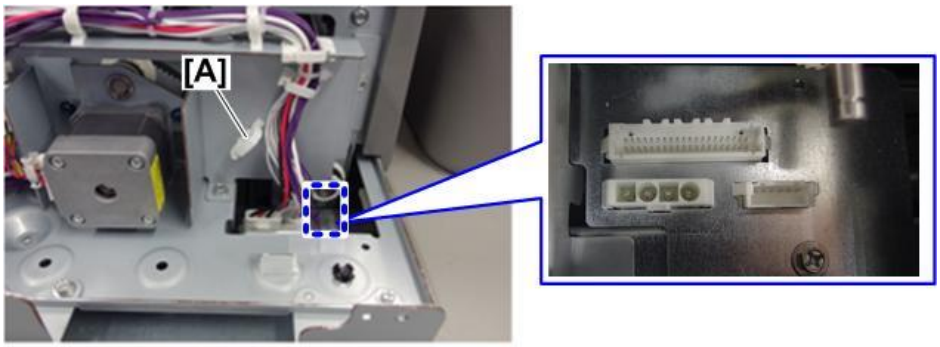
Connecting the Multi Bypass Tray

1. At the rear, open the clamp to disconnect the harness. (×1)



m0b2d8302

2. Securely connect the harnesses inside the LCIT. (×3)
   Clamp [A] is not used for this installation.

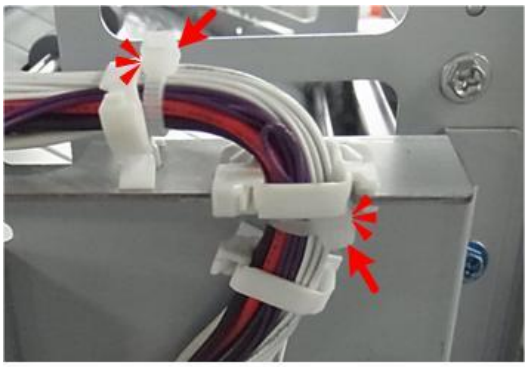


m0b2d8303

Important

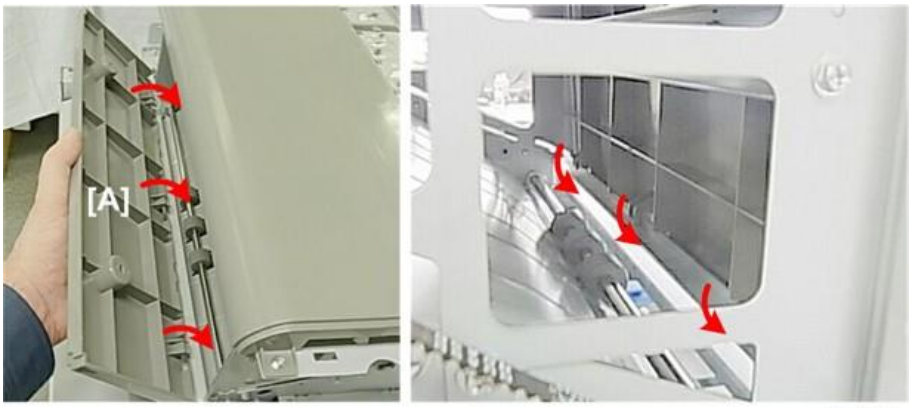
To securely connect the harnesses, push down the harness connectors firmly.

3. When you close the harnesses, make sure that the two lock bands and clamps are positioned as shown below.



d5170040

4. Set the left cover [A] provided with the multi bypass tray. Make sure that the claws are set correctly in their holes.

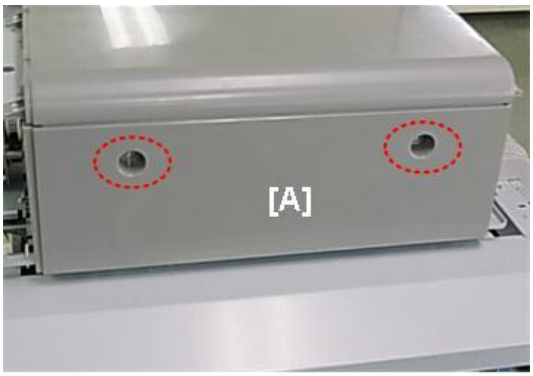


d517i015

5. Fasten the left cover [A]. (×2, M4×8)

Note

- Fixing screws are provided with the multi bypass tray.



d517i016

6. Re-attach:

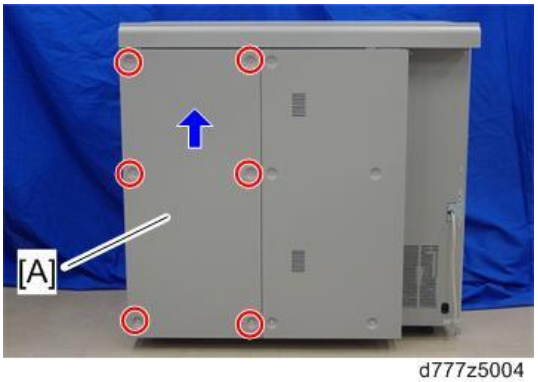
Front cover [A] (×1: M4×8)

Rear cover [B] (×2: M4×8)

d517i017

Installing the Motor on the Vacuum Feed LCIT

1. Lift the rear left cover [A] of the vacuum feed LCIT slightly and remove it. (×6)



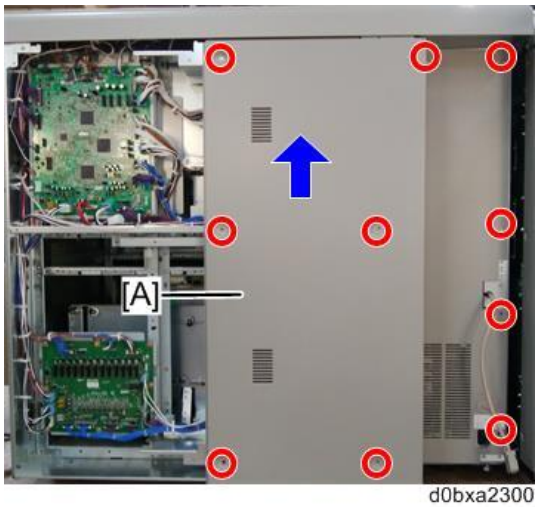
d777z5004

Note

- When attaching the rear left cover, hang it on the hook.

d777z0061

2. Lift the rear right cover [A] slightly and remove it. (×10)



d0bxa2300

Note

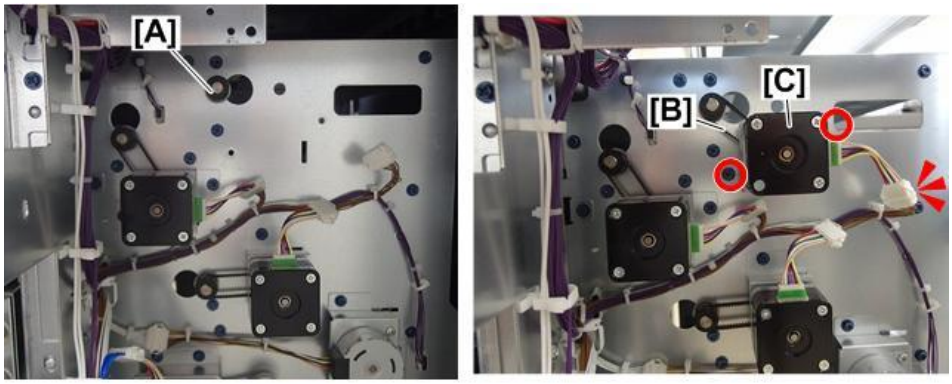
- When attaching the rear right cover, hang it on the hook.

d777z0062

3. Attach the stepping motor assembly [C] while attaching the timing belt: M140 [B] to the pulley [A] and stepping motor. (×2: M4×8, x1)

Note

- The stepping motor assembly, timing belt: M140 and fixing screws are provided with the Multi Bypass Attachment Kit.



d194d8202

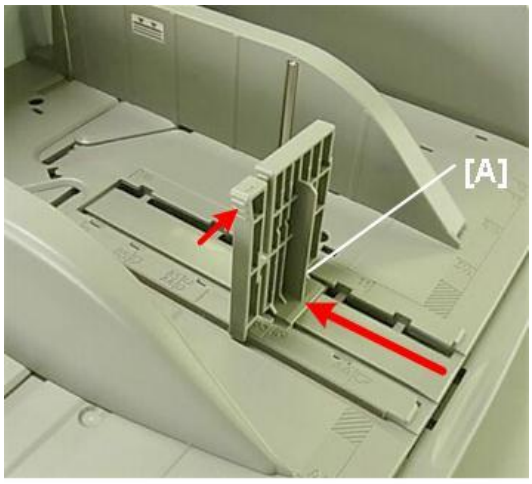
4. Reattach the covers.

End Fence and Tab Sheet Fence

Note

- The items in this section are bypass unit accessories.

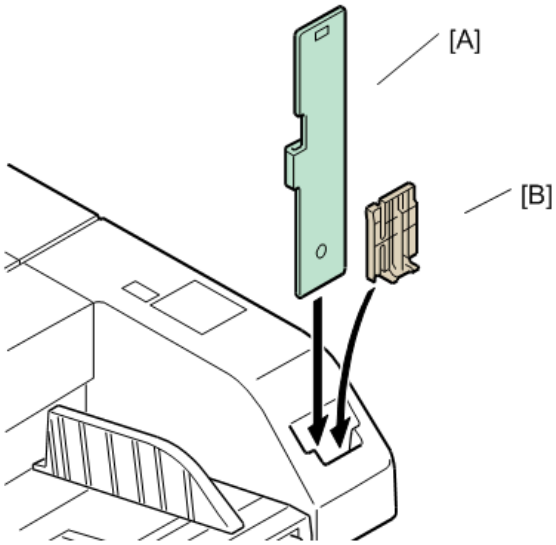
1. Set the end fence [A].



d517i031

2. Store the tab sheet fence [A] as shown. Also store the end fence [B] here if the customer does not

need to use it at this time.



d517i033

Docking, Height Adjustment

Follow the procedures in the vacuum feed LCIT installation section to complete this installation.

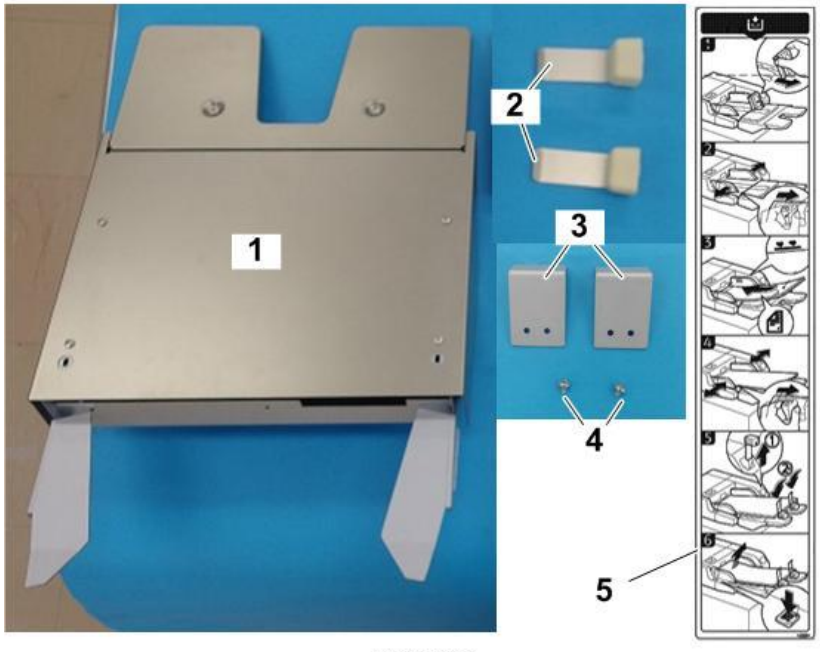
- Docking (Installation)
- Height adjustment (Height and Level Adjustment)

Multi Bypass Banner Sheet Tray Type S9 (D3EV02)

Note

This option is for Multi Bypass Tray BY5020 that is installed on Vacuum Feed LCIT RT5120.

Accessories



d194d8228a

2.Installation

No.	Description	Q'ty
1	Banner Sheet Tray	1
2	End Fence	2
3	Joint Plate	2
4	Tapping Bind Screw: M4×6	2
5	Decal	1

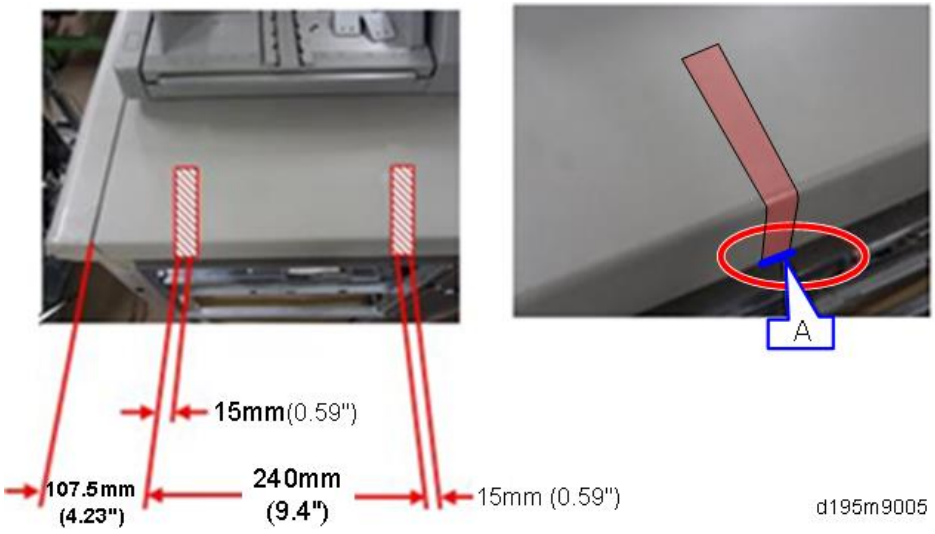
Installation

⚠CAUTION

- Make sure that the main power switch and AC power switch of the main machine are turned OFF and that its power cord is disconnected before doing the following procedure. Doing the following procedure in an energized state constitutes an electric shock hazard and could cause a malfunction.

Attaching the Protection Tapes

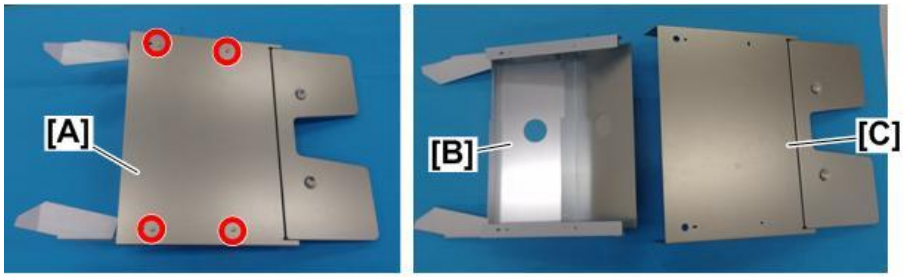
Attach the protective sheets to protect the LCIT's top cover.
Align the ends of the sheets with the edge [A] on the right side, and attach the sheets according to the following dimensions. (Be sure not to let any bubbles form under the sheets.)



Attaching the Multi Bypass Banner Sheet Tray to the Bypass Tray

1. Remove the screws from the banner sheet tray [A] and then separate the base tray [B] and cover

[C]. (×4)

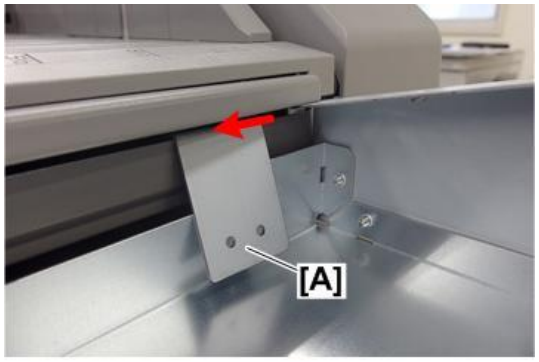


d194d8229

2. Insert the base tray [A] under the bypass tray.

d194d8230

3. Hang the two joint plates [A] (provided with this option) in the gap under the extension tray.



d194d8231

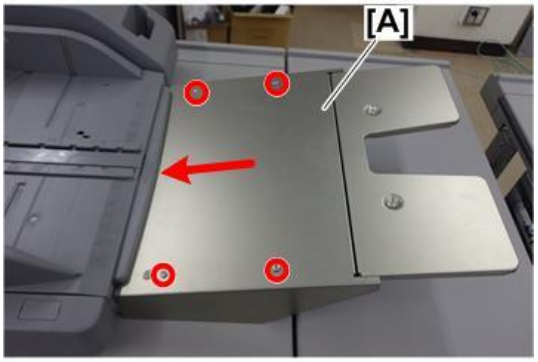
4. Move each joint plate [A] under the base tray edges and then fix them to the base tray. (×1 each: M4×6)

Fixing screws are provided with this option.

d194d8232

5. Insert the cover [A] separated in step 1 between the extension tray and base tray.

To fix it, use the screws that were removed in step 1. (×4: M4×6)



d194d8233

6. Pull the extension tray [A] and then hang it on screws as shown below.

d194d8234

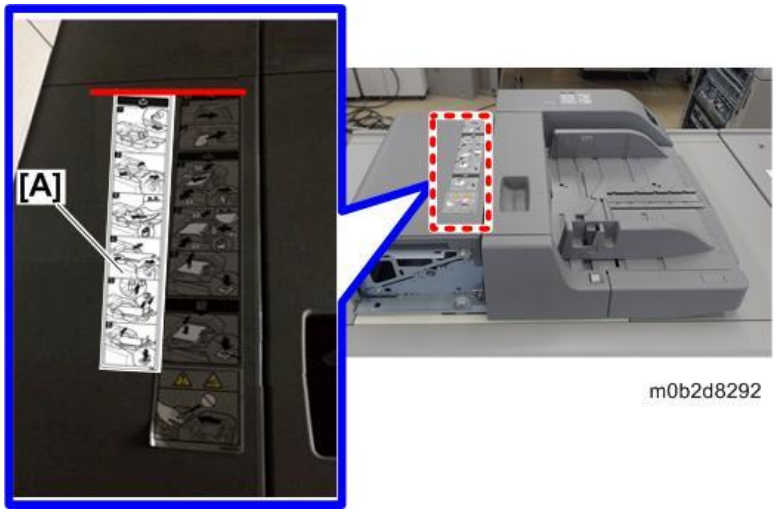
7. Stand the end fences [A] (provided with this option) as shown below.
The end fences are held to the banner sheet tray by magnets.

d194d8235

8. Attach the decal [A] next to the existing one.

Note

When attaching the decal, align its upper edge with the upper edge of the existing decal.



SP Settings

After starting up the main machine, it is necessary to make sure the Multi Bypass Banner Sheet Tray is recognized by using the following SP.

1. Enter the SP mode.
2. Change SP5-150-003 from [0] to [1].
3. Exit the SP mode.
4. Restart the main machine.

Vacuum Feed Banner Sheet Tray Type S9 (D3EW02)

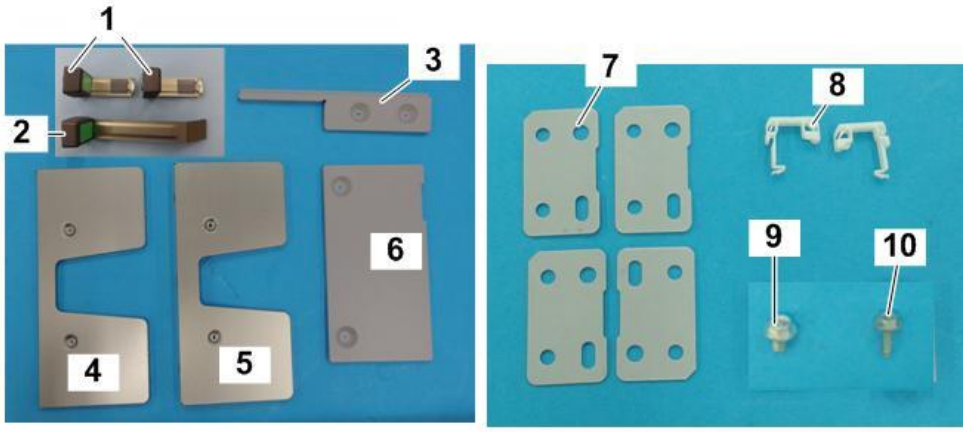
Note

- The vacuum feed banner sheet tray type S9 is connected to the vacuum feed LCIT.
- When installing this option and Multi Bypass Tray BY5020 at the same time, install this option first.
- To facilitate banner paper supply, the top cover of the vacuum feed LCIT can open.
  When one vacuum feed LCIT is docked and the two options (the vacuum feed banner sheet tray type S9 and the multi bypass tray BY5020) are installed, you cannot open the top cover because the cover contacts the multi bypass banner sheet tray.
- The vacuum feed banner sheet tray type S9 cannot be installed to the system that has vacuum feed LCIT RT5120 and multi bypass tray BY5020 installed.

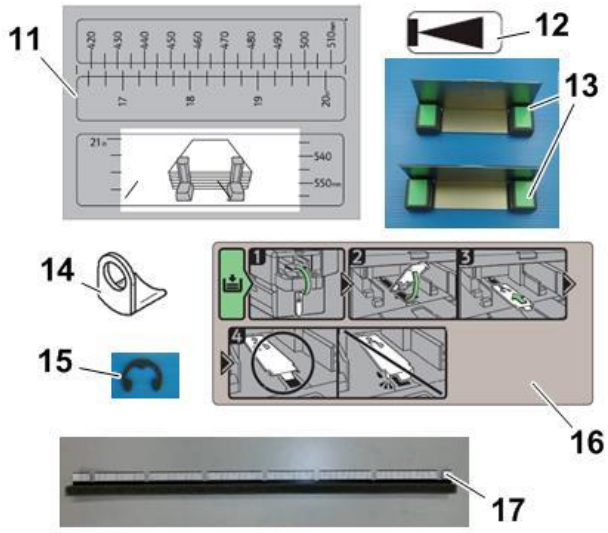
Accessories

No.	Description	Q'ty
1	End Fence (Short)	2
2	End Fence (Long)	1
3	Front Cover	1

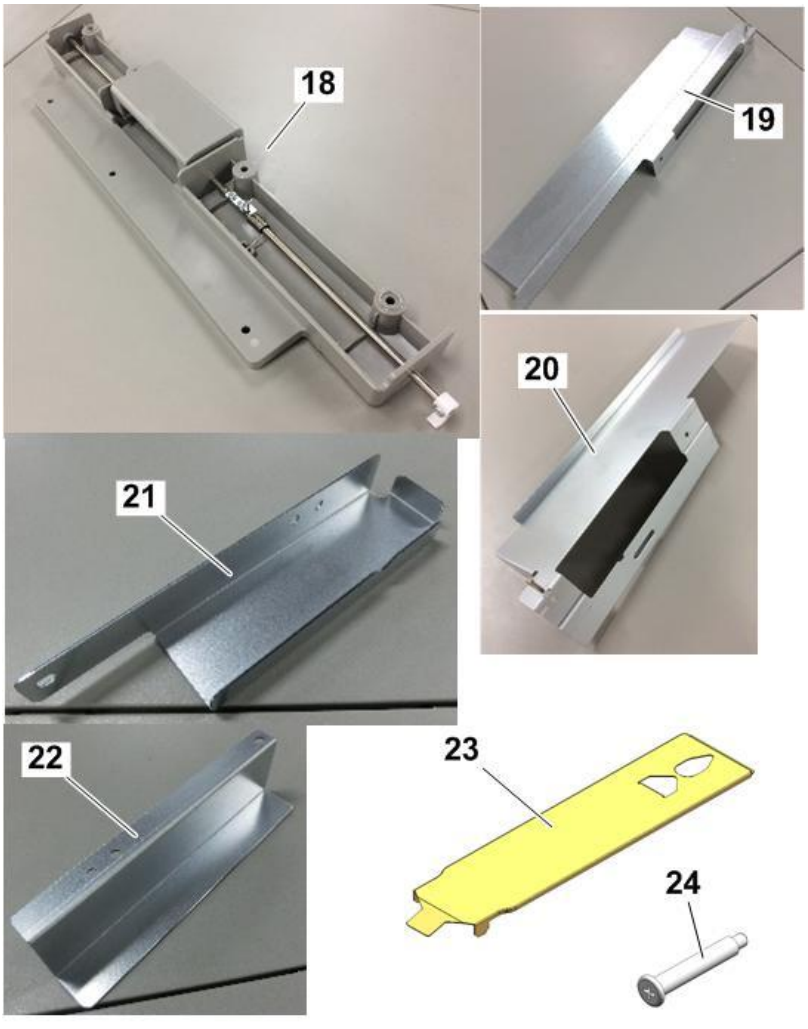
No.	Description	Q'ty
4	Upper Bottom Plate	1
5	Lower Bottom Plate	1
6	Rear Cover	1
7	Stopper Plate	4
8	Edge Saddle	2
9	Tapping Screw – M4×8	6
10	Tapping Screw – M3×6	2
11	Decal Sheet: Scale	1
12	Decal: Position Indicator	2
13	Side Fence	2
14	Wire Cover	4
15	E-ring	4
16	Decal Sheet: Raised Bottom Plate Set	1
17	Sponge Strip	1
18	Upper Cover	1
19	Securing Cover (Front)	1
20	Securing Cover (Rear)	1
21	Tray Cover (Front)	1
22	Tray Cover (Rear)	1
23	Raised Bottom Plate **(Not used with this machine)**	1
24	Shouldered Screw **(Not used with this machine)**	1
-	Decal Top Cover Caution	1
-	Tapping Screw – M4×12	7
-	Tapping Screw – M4×8	2



m0b2d8215



m0b2d8216b



m0b2d8214b

Installation

Vacuum Feed Banner Sheet Tray

⚠CAUTION

- Make sure that the main power switch and AC power switch of the main machine are turned

OFF and that its power cord is disconnected before doing the following procedure. Installing the unit when the machine's power is ON could result in an electric shock or cause a malfunction.

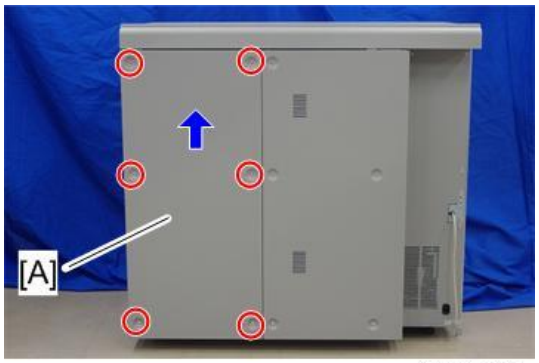
1. Remove all visible external tape on the vacuum feed banner sheet tray type S9.
2. Lift the right top cover [A] of the vacuum feed LCIT and remove it. (×4)

Note

- Removed screws are used when attaching the front cover and rear cover provided with this option.

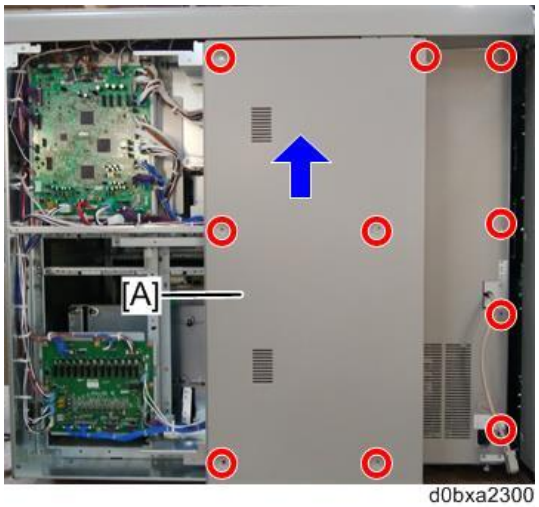
d777z0040

3. Lift the rear right cover [A] of the vacuum feed LCIT and remove it. (×6)



d777z5004

4. Lift the rear left cover [A] of the vacuum feed LCIT and remove it. (×10)



d0bxa2300

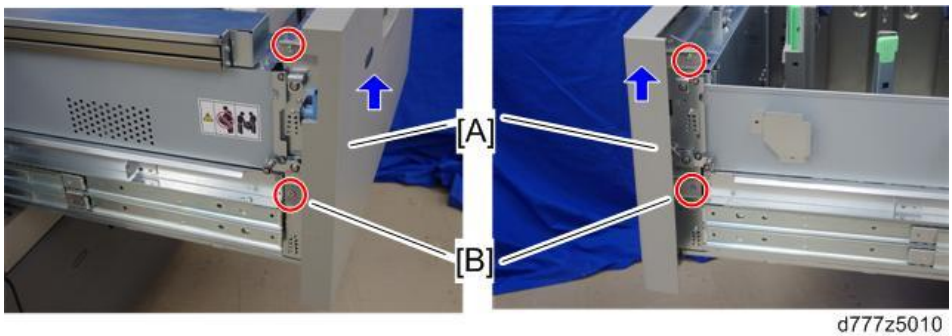
5. Pull paper tray 1 from the vacuum feed LCIT.

6. Lift the tray 1 front cover [A] and remove it. (×4)

- Screws [B]: shoulder screws

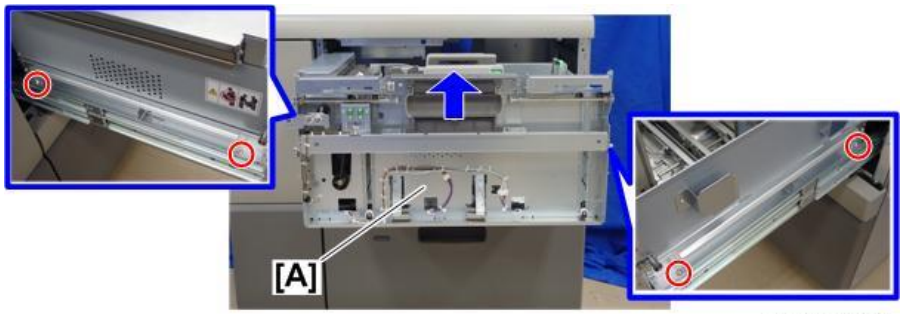
Note

- Remove the tray 1 front cover beforehand so that it does not hit the floor when putting paper tray 1 on the floor.



d777z5010

7. Remove paper tray 1 [A] (×4)



d194d9530a

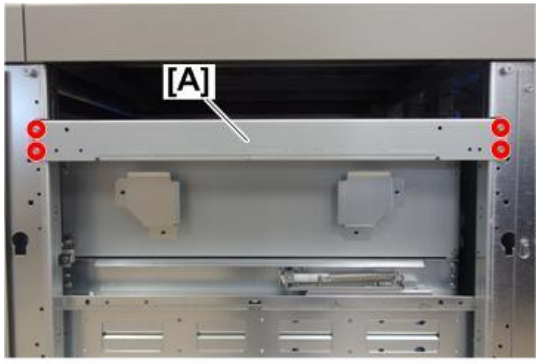
Important

- Two or more customer engineers are required to lift paper tray 1 off the rails because it is extremely heavy. Work carefully when lifting and moving it.

8. Remove the stay [A] on the right side of the vacuum feed LCIT. (×4)

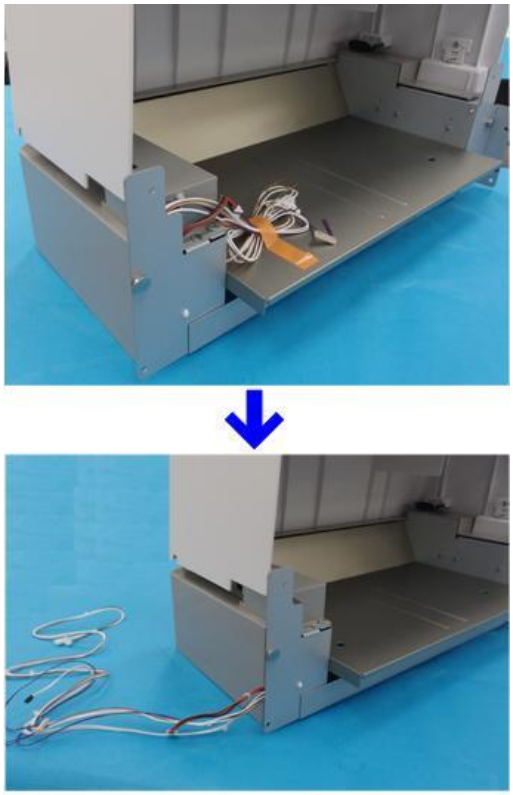
Note

- After removing the stay, keep it in storage in case the vacuum feed banner sheet tray is removed at some point in the future.



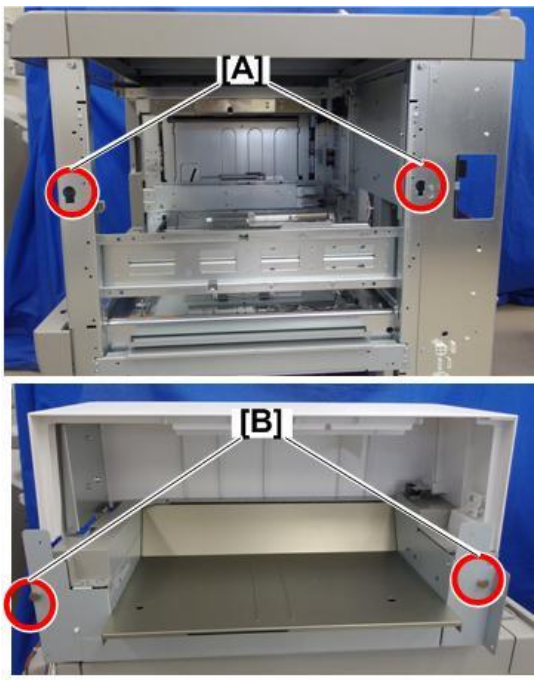
d194d9503

9. Pull the harness of the vacuum feed banner sheet tray to the outside of the tray.



d194d9505

10. Mount the shoulder screws [B] on the front and rear of the vacuum feed banner sheet tray into the holes [A] that receive the shoulder screws on the vacuum feed LCIT.

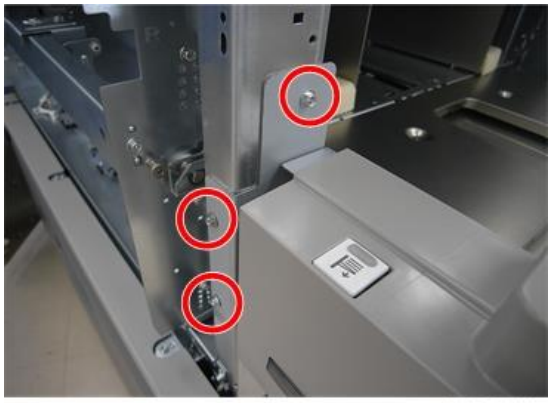


d194d9506

d194d9507

11. Fix the vacuum feed banner sheet tray with the screws provided with this option.

Near side: (×3: M4×8)

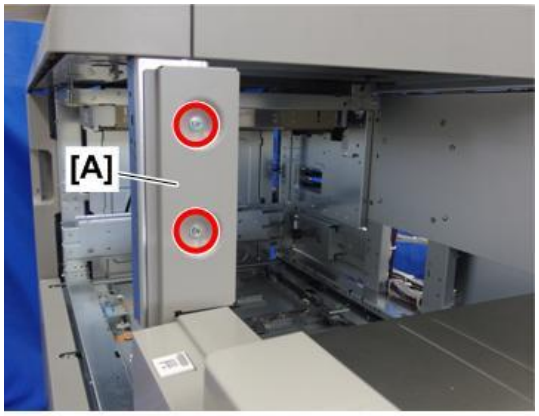


d777z0006

Far side: (×2: M4×8)

d777z0007

12. Attach the front cover [A] provided with this option. (×2)



d194d9508

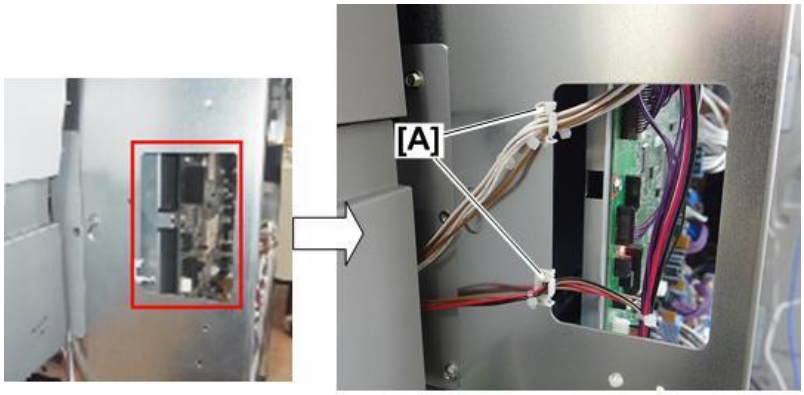
Note

- Use the screws removed from the right top cover.

13. Attach the edge saddles [A] provided with this option, and pass the harnesses of the vacuum feed banner sheet tray through the rear side.

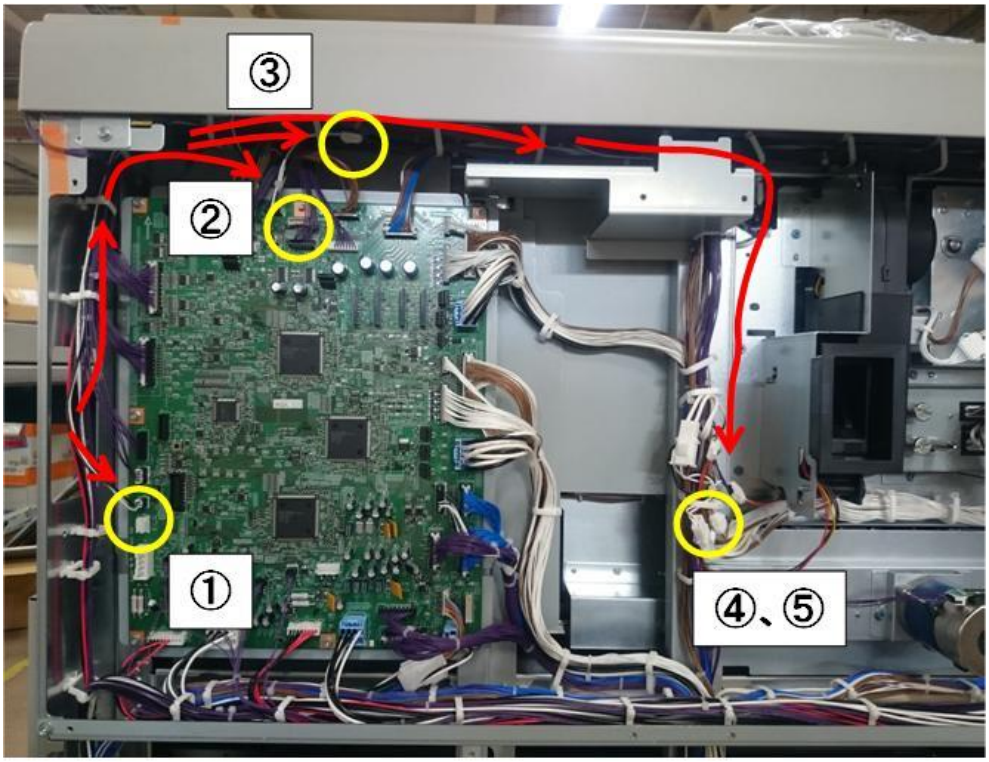
Note

Pass the red/brown harnesses through the lower saddle, and the other harnesses through the upper saddle.



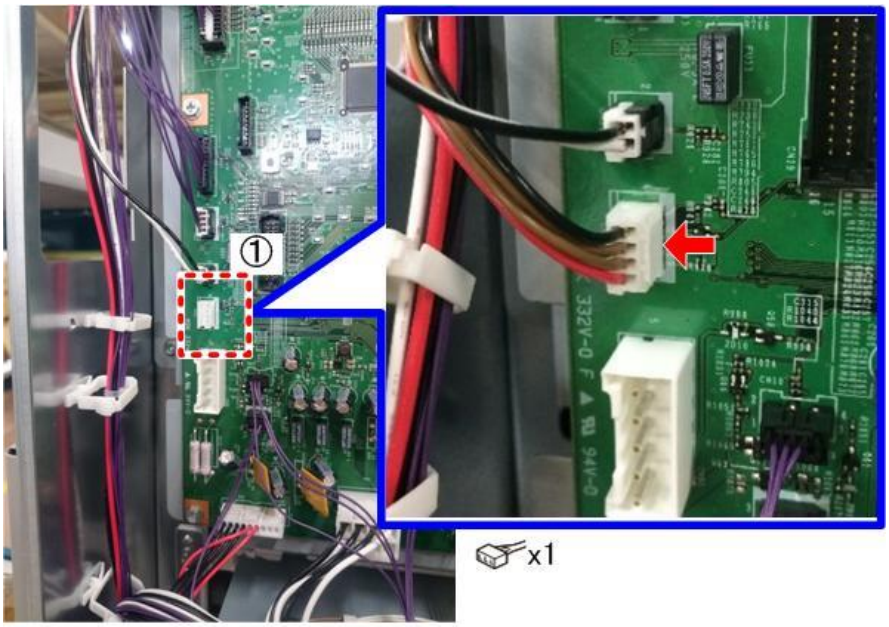
d194d9545a

14. Route the harnesses as shown below and connect them to the board of the vacuum feed LCIT as shown in the following steps.



m0b2d8285

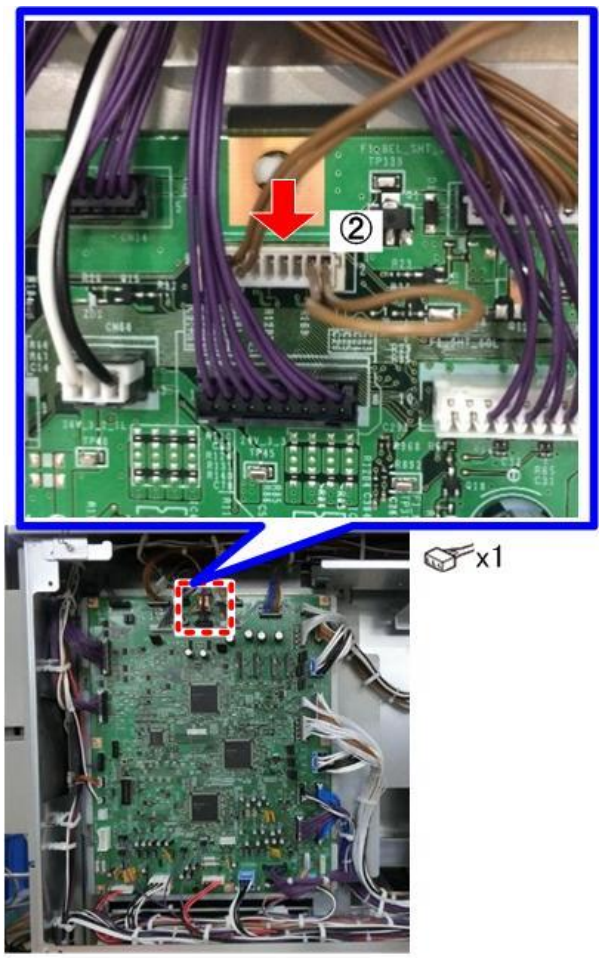
1. Connect the shortest harness to CN36 on the board.



m0b2d8286

2. Connect the harness that has a long slim connector to CN40 on the board.

2.Installation

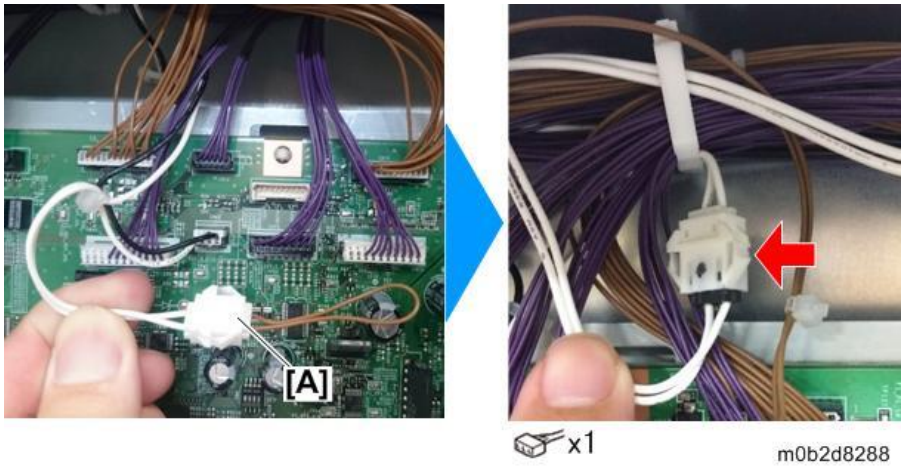


m0b2d8287

3. Remove the routed connector [A] and connect it to the harness connector from the banner sheet tray.

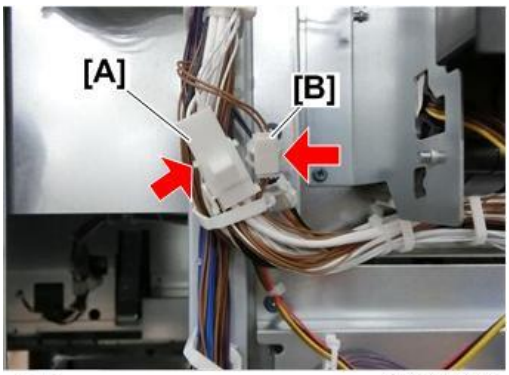
Note

The routed connector removed here is not used again in this procedure.



m0b2d8288

4. Disconnect the connectors [A] [B].

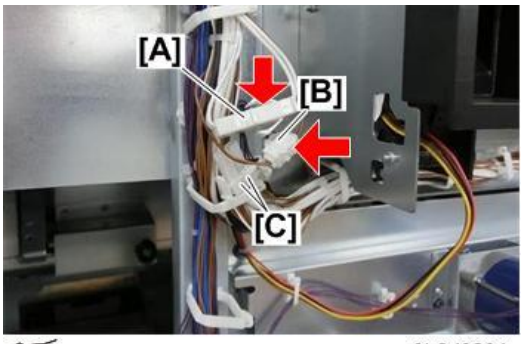


x2 m0b2d8283

5. Connect the relay connectors, which were routed from above, to the connectors [A] [B] disconnected in the previous step.

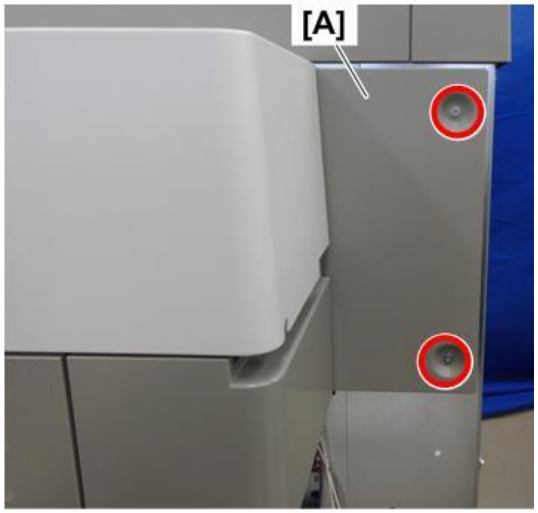
Note

- With the clamps nearby, bundle up and secure the harnesses [C] disconnected in the previous step.



x2 m0b2d8284

15. Attach the rear cover [A] provided with this option. (×2)

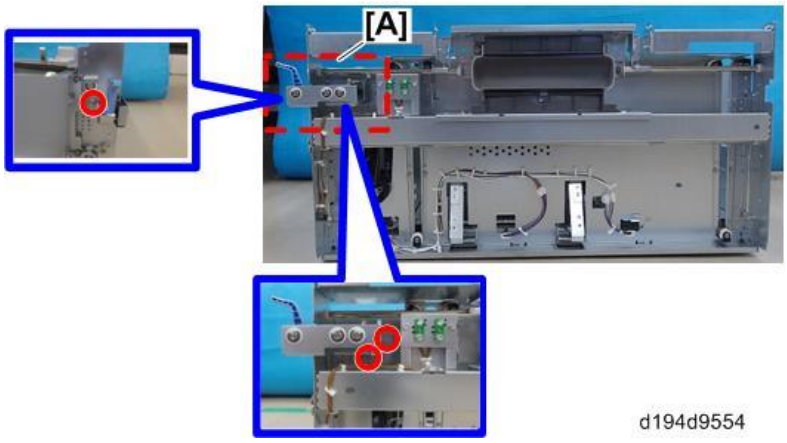


d194d9509

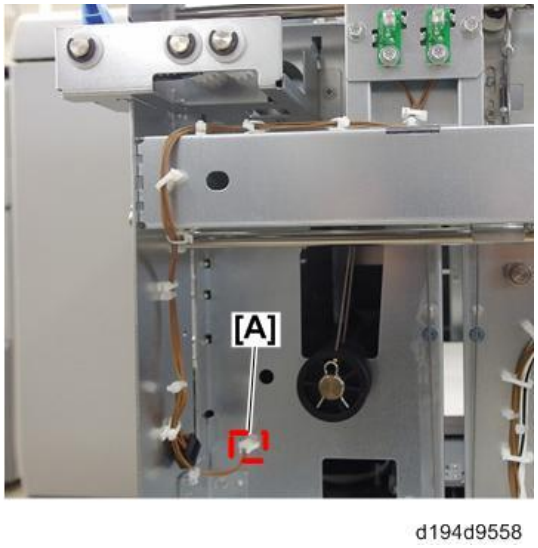
Note

- Use the screws removed from the right top cover.

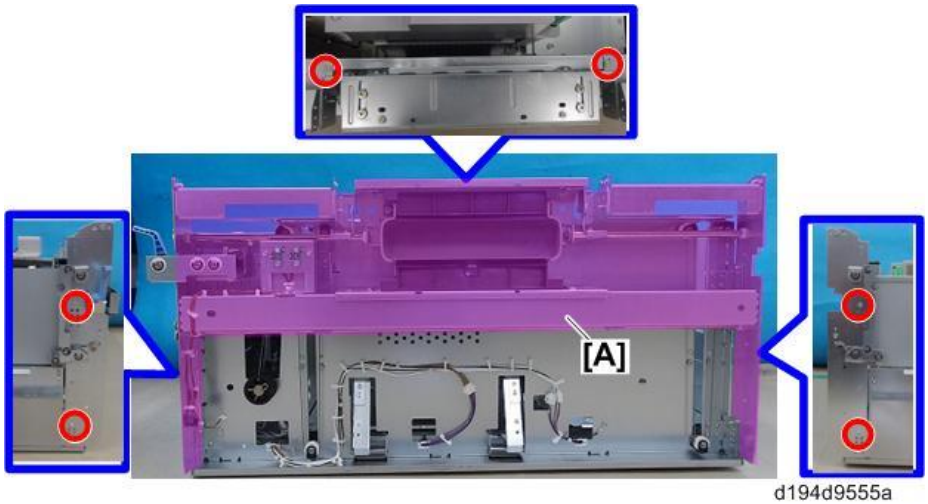
16. Remove the jam removal lever [A] on the front side of the tray. (x3)



17. Disconnect the connector [A]. (x1)

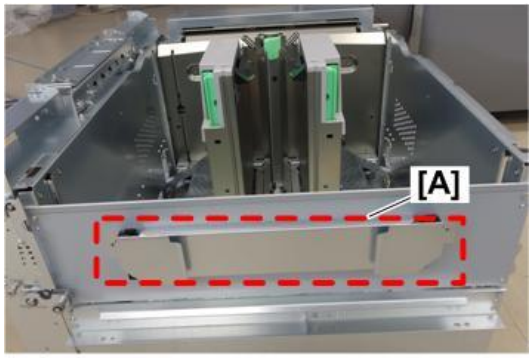


18. Remove the stay [A]. (x6)



d194d9568

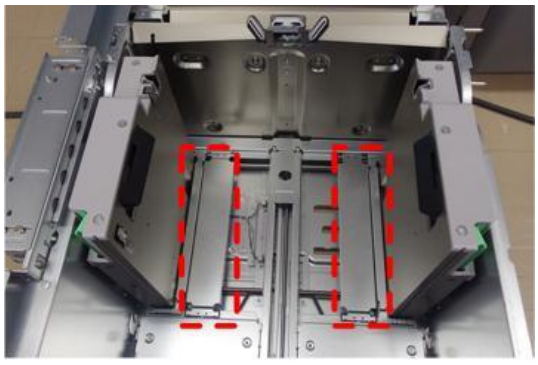
19. Remove the support plates [A] on the side of the paper tray removed from the vacuum feed LCIT.



d194d9513

d194d9514

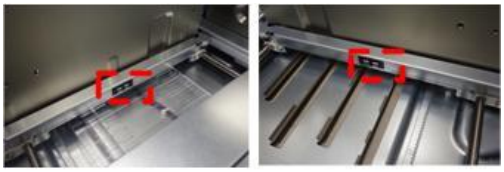
20. Widen the side fences of the paper tray and attach the support plates on the inside of the side fences.



d194d9515

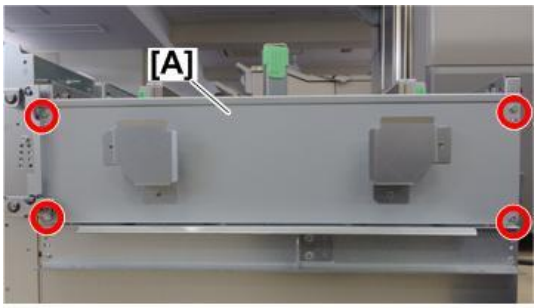
Note

- The support plates are held in place by magnets on both sides of the paper tray.



d194d9516

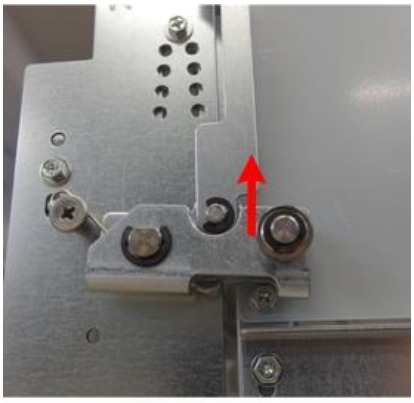
21. Remove the side plate [A] from the paper tray. (×4)
Keep the plate in storage in case the vacuum feed banner sheet tray is removed at some point in the future.



d194d9517

Note

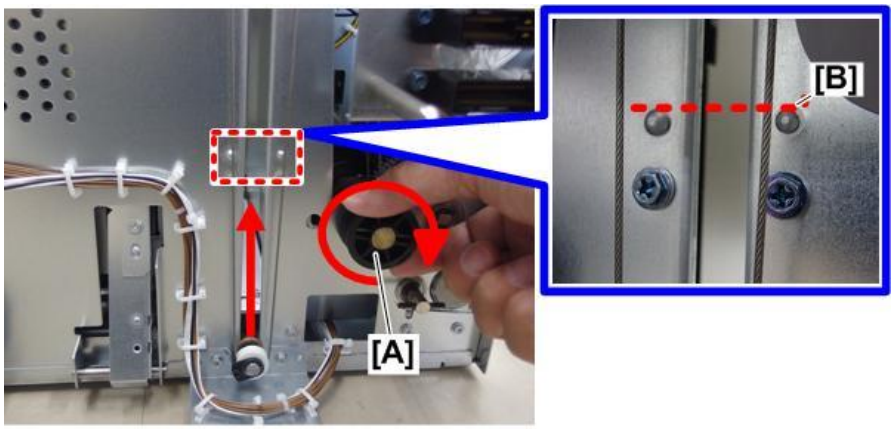
- Lift up the operating lever to remove the screws on the front.



d194d9518

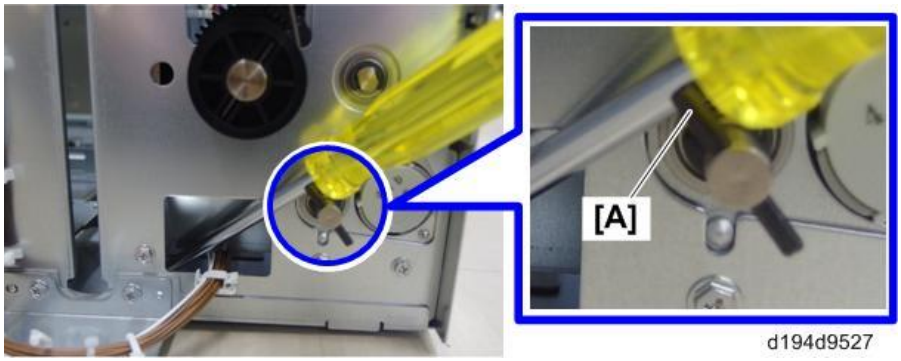
The screw removed here is used in the openable top cover installation.

22. Turn the roller [A] clockwise, and lift up the bottom plate above the embossed part [B].



d194d9526a

23. When the bottom plate has been lifted above the embossed part, insert an object such as a screwdriver into the hole in the sheet metal to hold the pin [A].



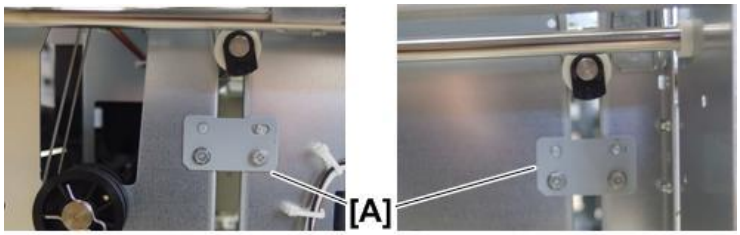
d194d9527

24. Attach the four stopper plates [A] provided with this option. (×2 each)

Note

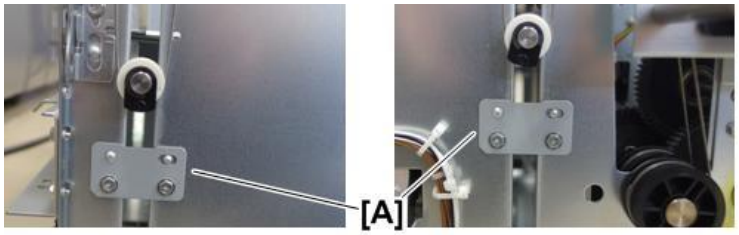
- Screws with washers are mounted in advance at the stopper mounting position.
- Remove the washers from the screws when attaching the four stopper plates.

Front left and front right



d194d9528

Rear left and rear right



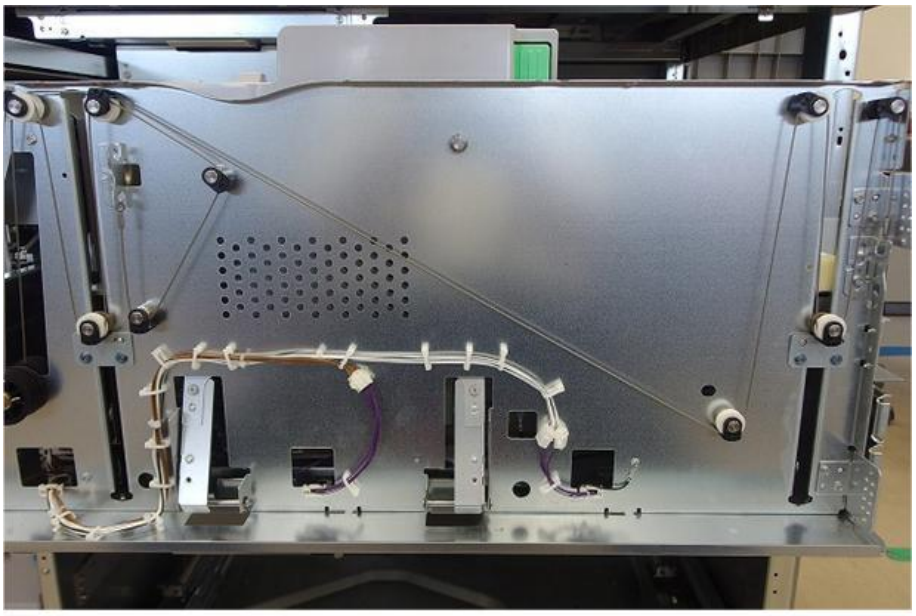
d194d9529

25. Remove the screwdriver or other object inserted in the previous step.
Then, do the following steps to rehang the wire as shown below.

Before

m0b2d8294

After

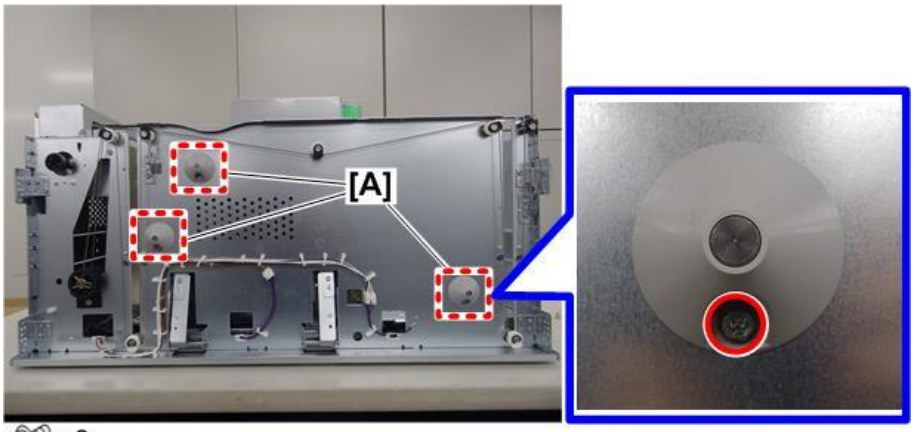


d194d9566

26. Remove the three covers [A], which cover the pins.

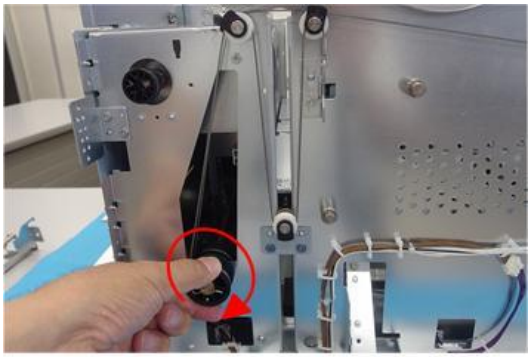
Note

Discard the removed covers.



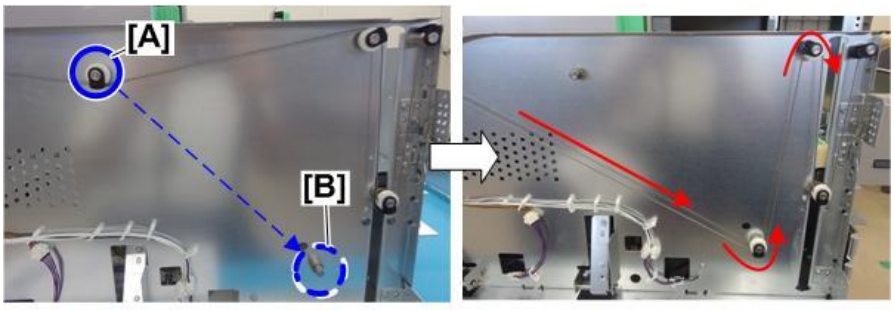
m0b2d8295

27. Turn the wire take-up roller clockwise and loosen the wire.



d194d9547

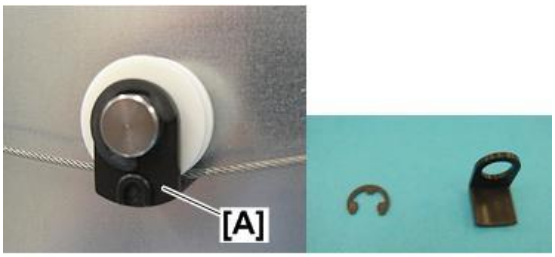
28. Remove the pulley [A] in the middle and then install it at [B]. (×1)
Then, rehang the long wire as shown below.



d194d9548

Note

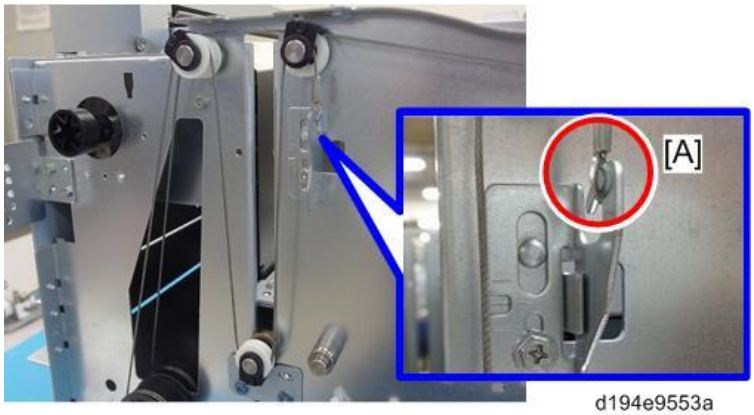
- Remove the pulley cover [A] and then remove the pulley.



d194d9549

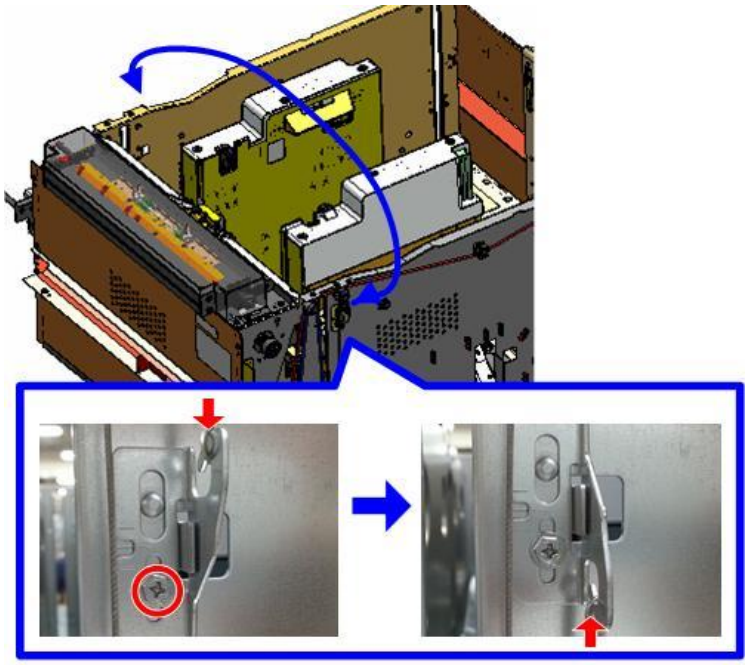
29. Reattach the removed pulley cover. (×1)

30. Unhook the wire [A] from the wire hook.



d194e9553a

31. Replace the wire hook with the one on the rear side (first check the position of the graduations; see the note below this step), and then attach it so that the hook faces down. (×1 each)

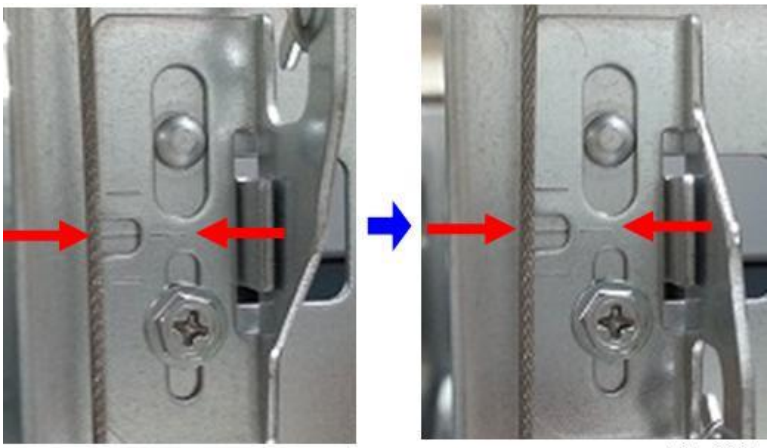


m194e2290

Note

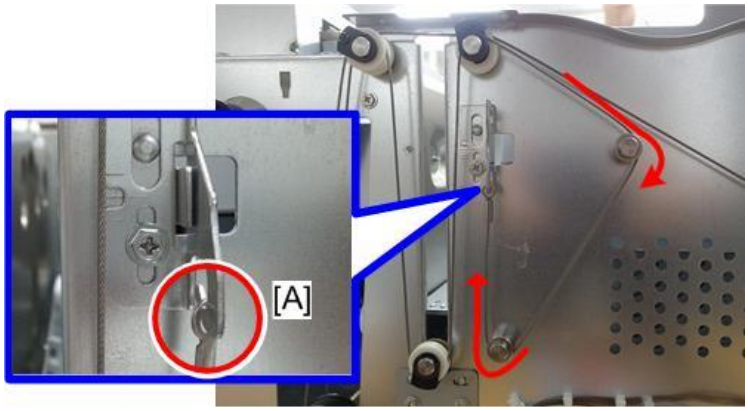
- Before replacing the wire hook, check the position of the reference line and the graduation on both front and rear hooks. Make sure the hook retains the original position when

reattached.



m194e2291

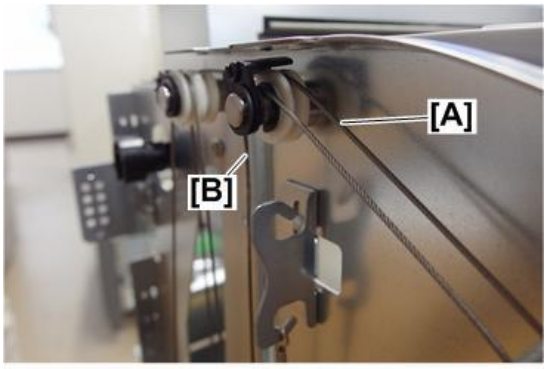
32. Rehang the wire as shown below, and then hook the wire [A] on the wire hook.



d194e9553b

Note

- At the upper pulley, pass the long wire [A] through the pulley and pass the short wire [B] between two E-rings.

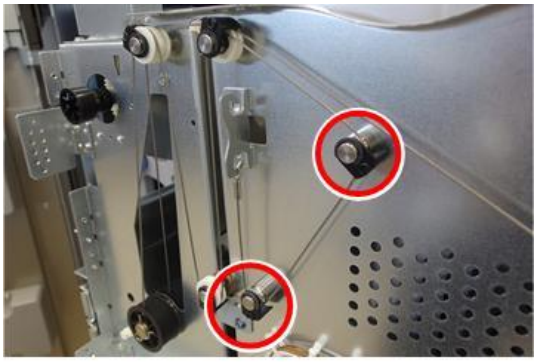


d194d9569

- Hang the wire into the groove of the pin on the frame.

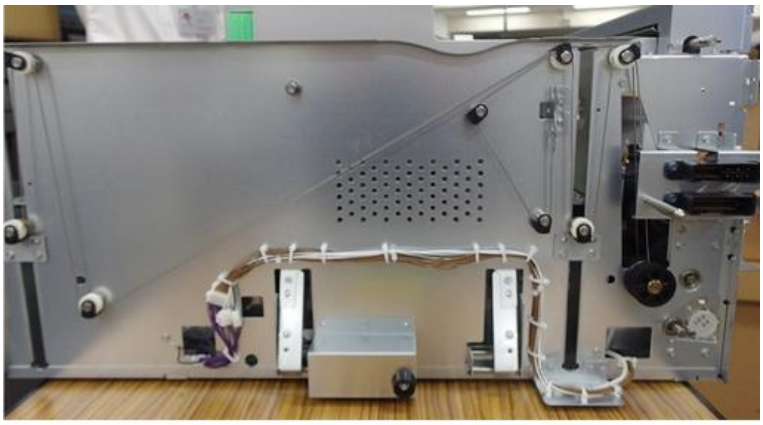
d194d9551a

33. Attach the pulley covers (provided with this option) to the 2 pulleys. (×2)
Two E-rings are also provided with this option.



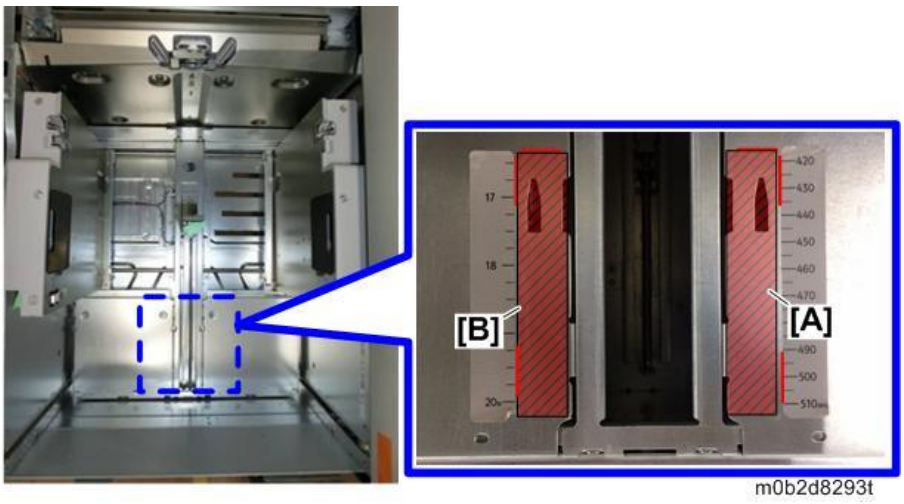
d194d9570

34. Similarly to the front side, move and add pulleys on the rear side and rehang the wires.



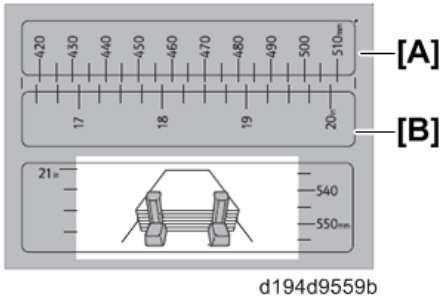
d194d9571

35. Attach the decals [A] and [B] (provided with this option) to the bottom plate of the paper tray.
Align the decals so that the bottom edge aligns with the bottom edge of the bottom plate (indicated with the red lines).
In the photo below, the decals are attached on the outer side of the red squares, but in this machine, attach decals in the red squares.



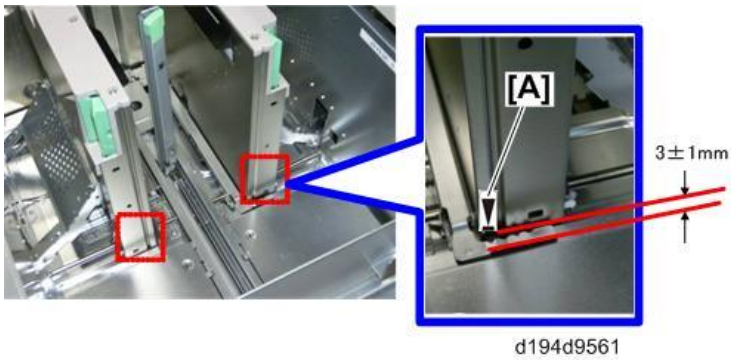
Note

- Before attaching the decals, clean the area



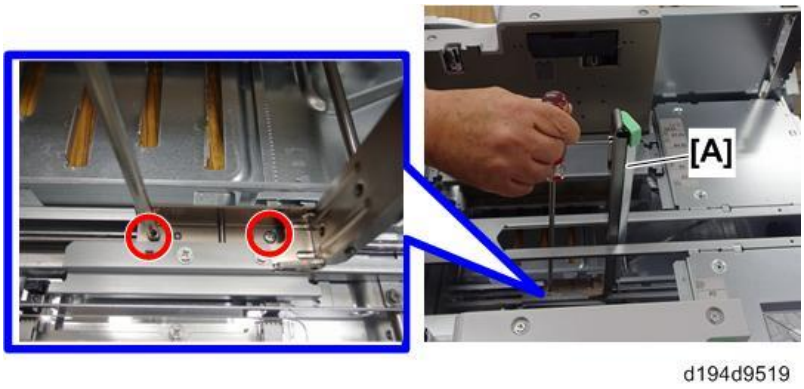
- The rest of the decal will be attached in the later step.

36. Attach the decals (position indicator) [A] (provided with this option) to both side fences.

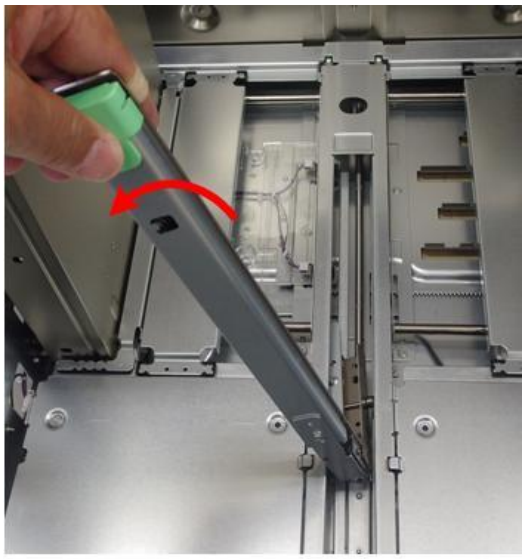


37. Remove the screws from the end fence [A], and then remove the end fence from the paper tray as

it falls down diagonally. (×2)

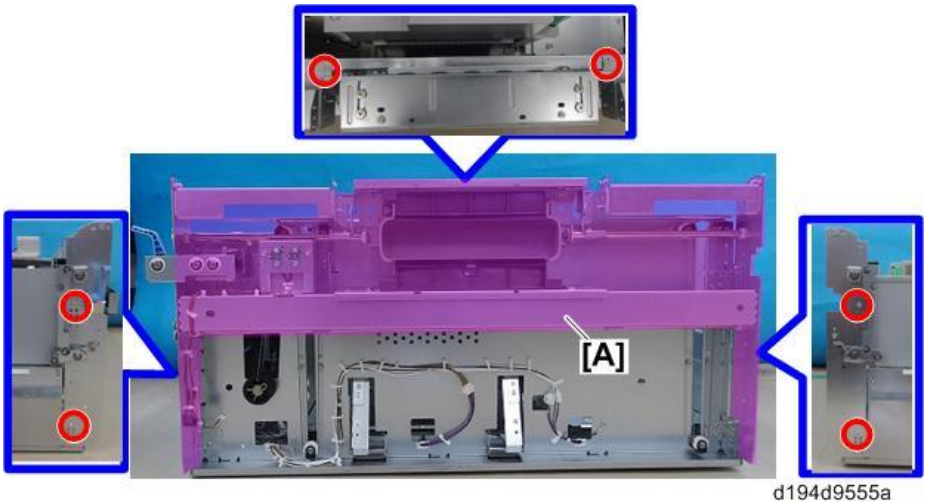


d194d9519



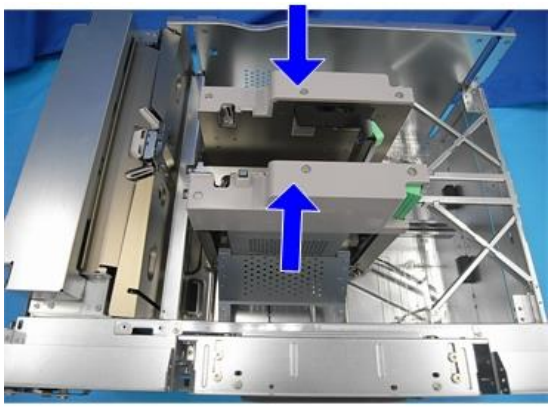
d194d9520

38. Attach the removed stay [A] and removed jam removal lever. (x6)



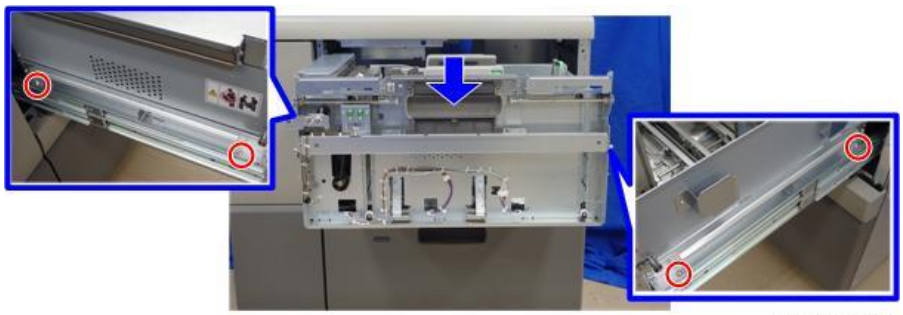
d194d9555a

39. Move the side fences inwards until they stop.



d777z0070

40. Pull out the vacuum feed LCIT slide rails and mount the paper tray on them, and fasten it in place. (×4)



d194d9530

Important

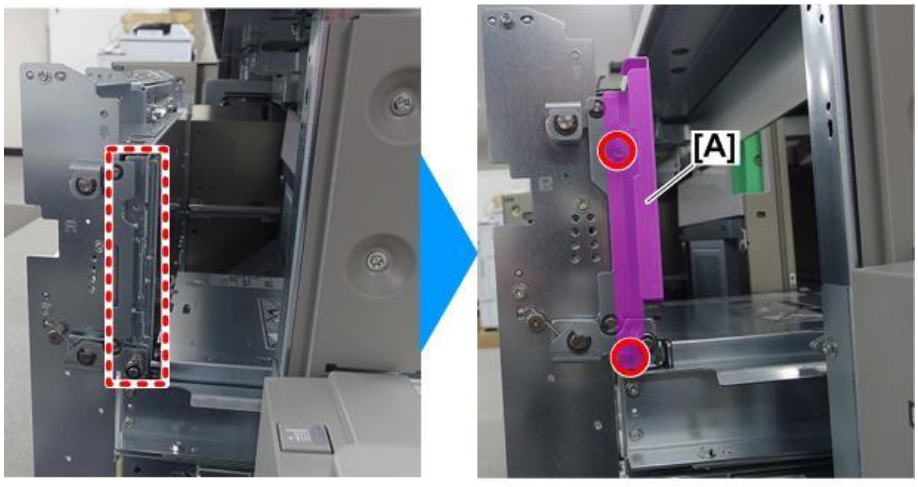
- Do not install the tray front cover in this step.
- Two or more customer engineers are required to mount paper tray 1 on the rails because paper tray 1 is extremely heavy. Work carefully when mounting it.

41. Pull the paper tray out about 5cm.

42. Attach the tray cover (front) [A], which is provided with this option, as shown below.

Note

- Use the removed screws from the tray side cover.



x2

m0b2d8298

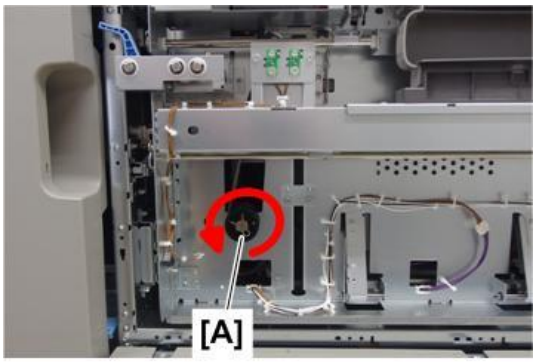
43. Attach the tray cover (rear) [A], which is provided with this option, as shown below.

Note

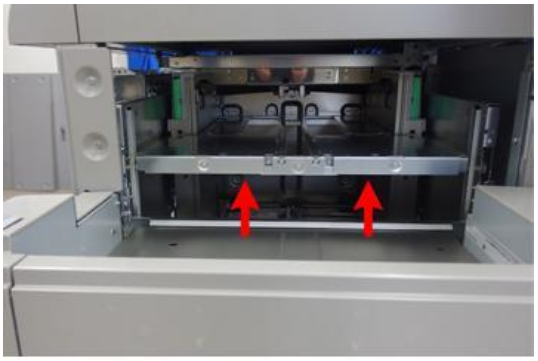
Use the removed screws from the tray side cover.

44. Push the paper tray and close it.

45. Turn the wire take-up roller [A] at the front of the paper tray counterclockwise to raise the bottom plate until you can see it completely from the vacuum feed banner sheet tray.



d194d9531

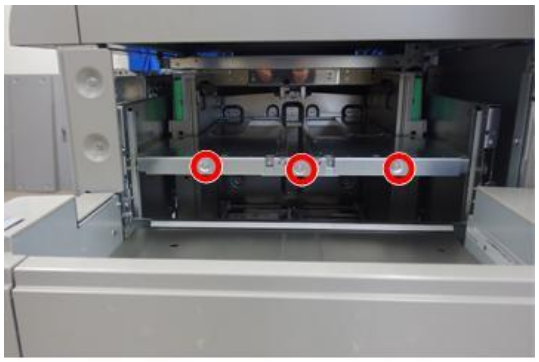


d194d9532

Note

- The raised bottom plate will not lower even if the wire take-up roller is released. However, if the bottom plate is raised too high, pulling out the paper tray will cause it to lower.

46. Remove the screws on the bottom plate. (×3)

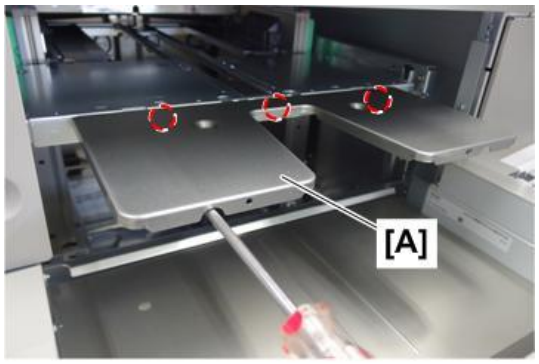


d194d9533

47. Attach the upper bottom plate [A] provided with this option. (×3)

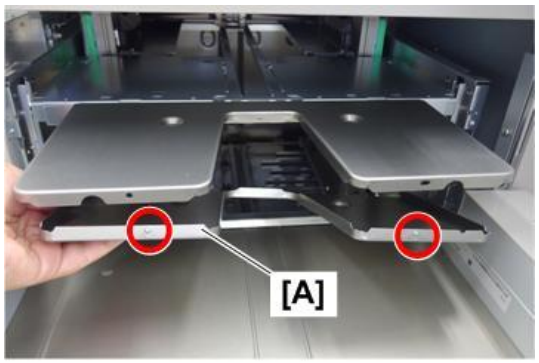
Note

- Use the screws removed in the previous step.



d194d9534

48. Insert the lower bottom plate [A] (provided with this option) to attach it. (×2: accessory M3×6)



d194d9535

d194d9536

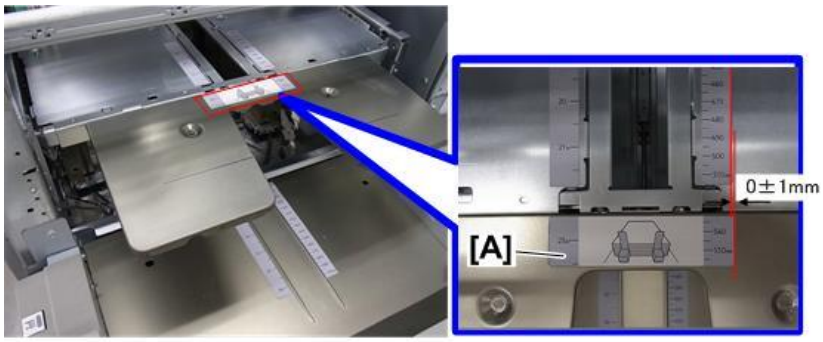
Note

When you use a screw driver, open the top cover to facilitate the securing.

⚠CAUTION

- If the bottom plate is lifted too far and a screwdriver cannot get in, pull the paper tray out slightly so it can be lowered. Please note that if you pull the tray out too far, it may come in contact with and deform the extension tray, so be very careful when doing this.

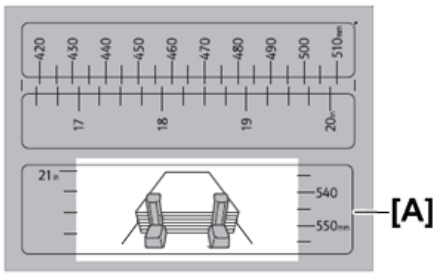
49. Attach the decal [A] (provided with this option) to the upper bottom plate.



d194d9562

Note

- Before attaching the decal, clean the area on which you will attach it.



d194d9559c

50. Pull out the paper tray carefully so as not to let the installed parts be interfered. Then, reattach the front tray cover.

51. Open the front door of the vacuum feed LCIT and lock paper tray 1. (×1)

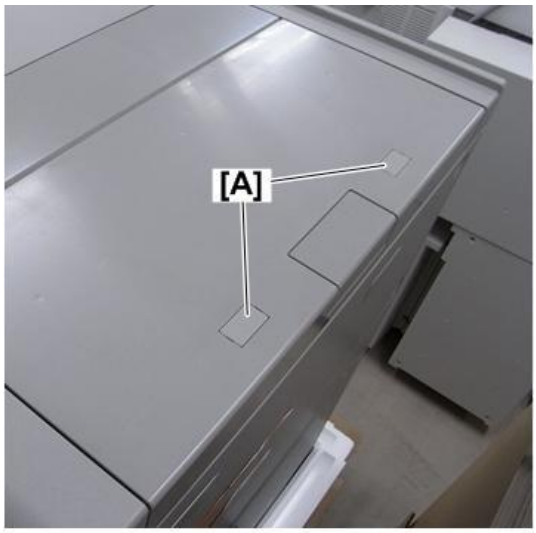
After paper tray 1 is locked, it cannot be pulled out.

d777z0001

52. Remove the caps.

Note

When one RT5120 is docked and the multi bypass tray (BY5020) is installed, the top cover cannot open. So you do not need to do the procedure for the openable top cover.



m0b2d8201

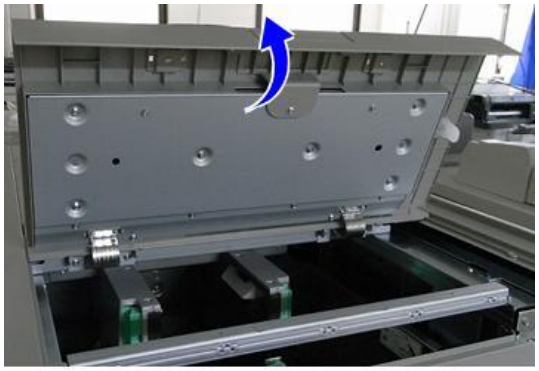
53. Remove the screws fastening the top cover. (x2)

Note

The removed screws will be used in the later step.

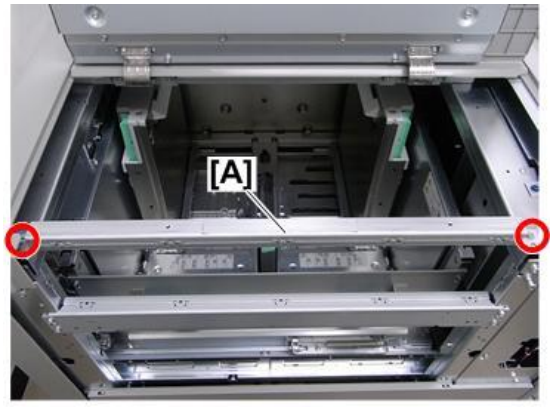
m0b2d8202

54. Open the top cover.



m0b2d8203

55. Remove the stay [A]. (x2)

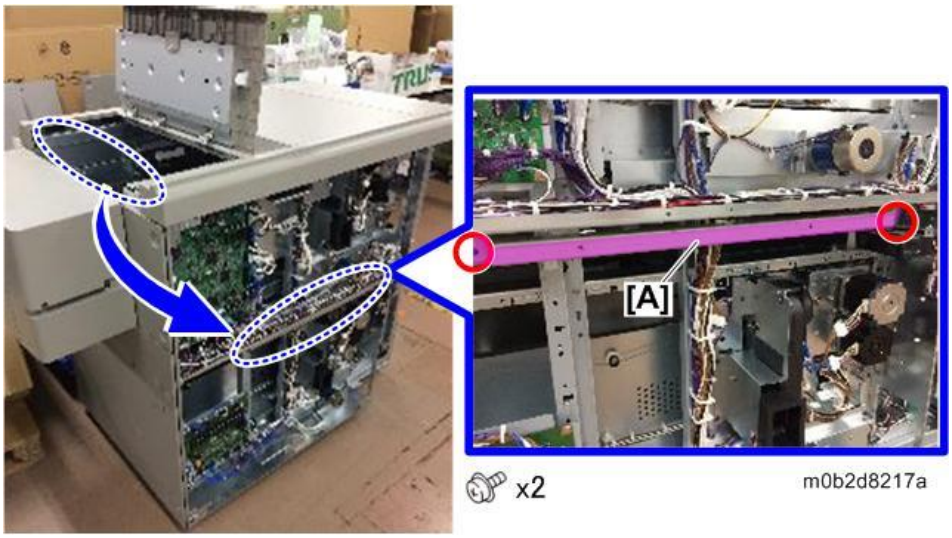


m0b2d8204

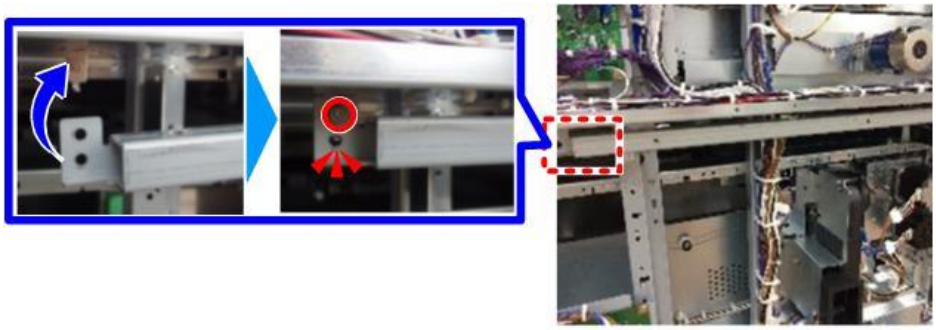
Note

Secure the removed stay [A] with the removed screws, in the rear of the LCIT.

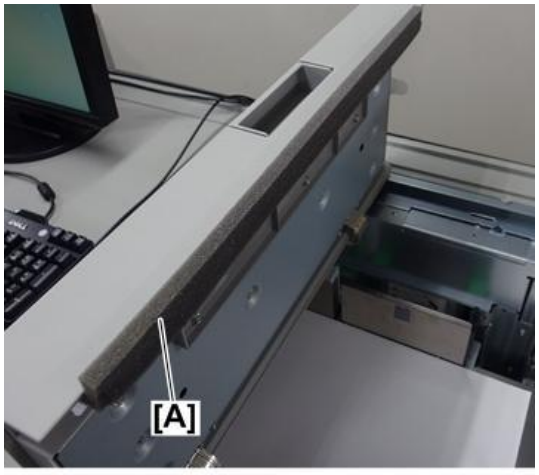
The stay is used when the LCIT needs moving a long distance.



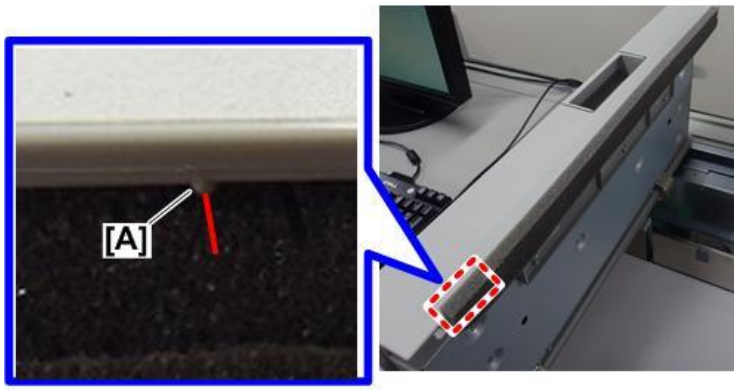
Make sure to hook the stay on the boss before securing it.



56. Attach the sponge strip [A] provided with this option inside the top cover.

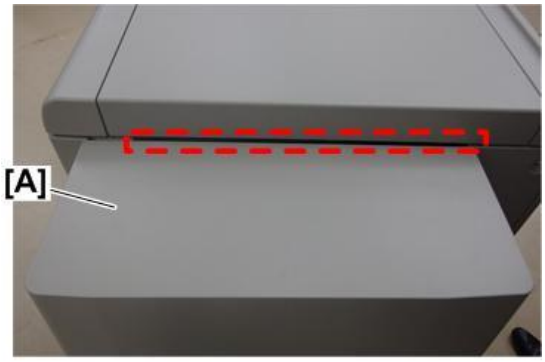


Attach the sponge strip as aligning the convex part [A] of the top cover with the slit of the sponge strip.



m0b2d8120

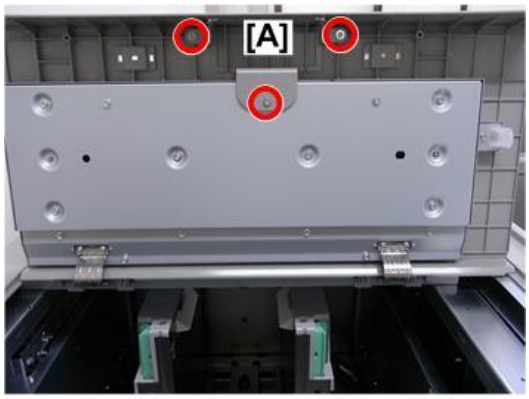
57. Close the cover [A] of the banner sheet tray. Then, make sure that there is no gap.



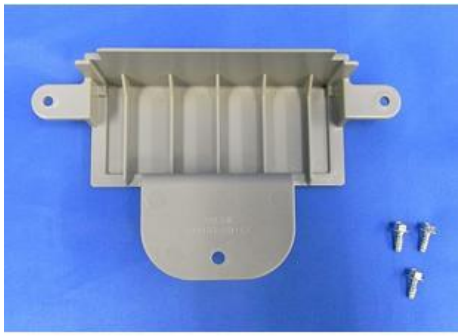
d194d9564

58. Open the top cover.

59. Remove the handle cover [A]. (x3)

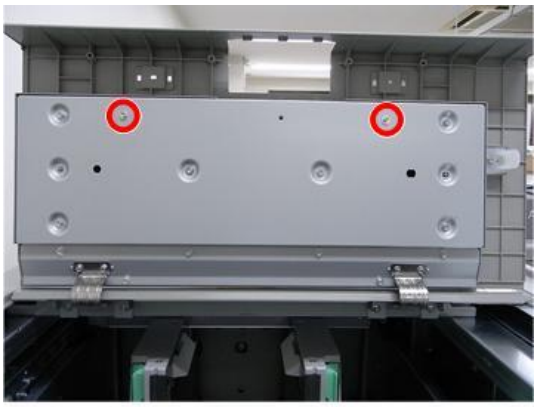


m0b2d8205



m0b2d8213

60. Remove the screws in the diagram below. (x2)



m0b2d8206

61. Install the upper cover [A], which is an accessory of the kit. (x7: accessory M4x12)

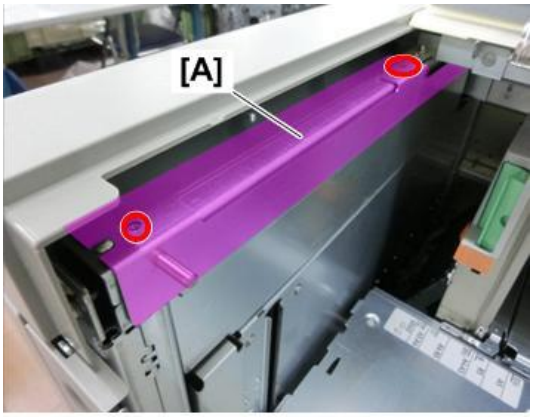
m0b2d8207a

62. Push the paper tray and close it.

63. Install the securing cover (front) [A] in the LCIT. (x2)

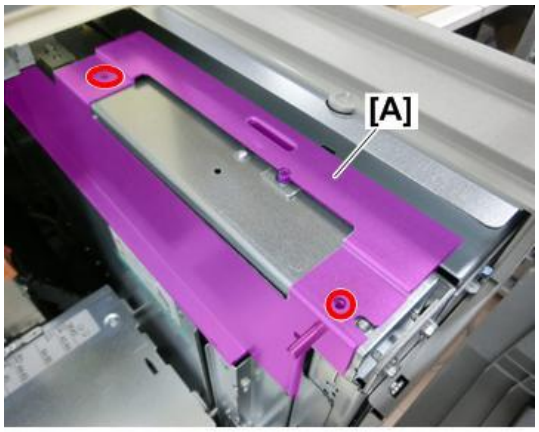
Note

To secure the cover, use the screws which were removed from the top cover.



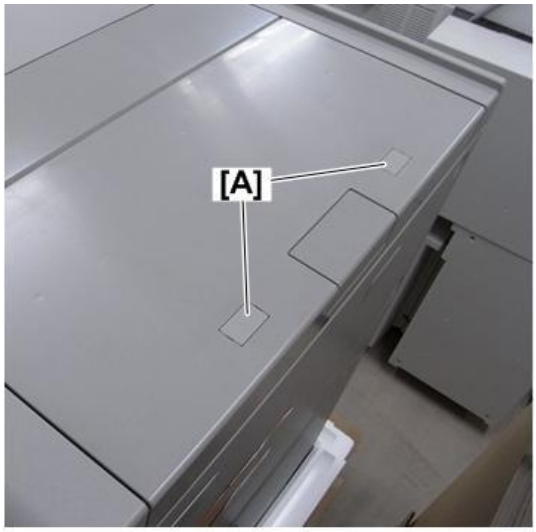
m0b2d8210

64. Install the securing cover (rear) [A] in the LCIT. (x2: accessory M4x8)



m0b2d8211

65. Close the top cover and reattach the caps [A].



m0b2d8201

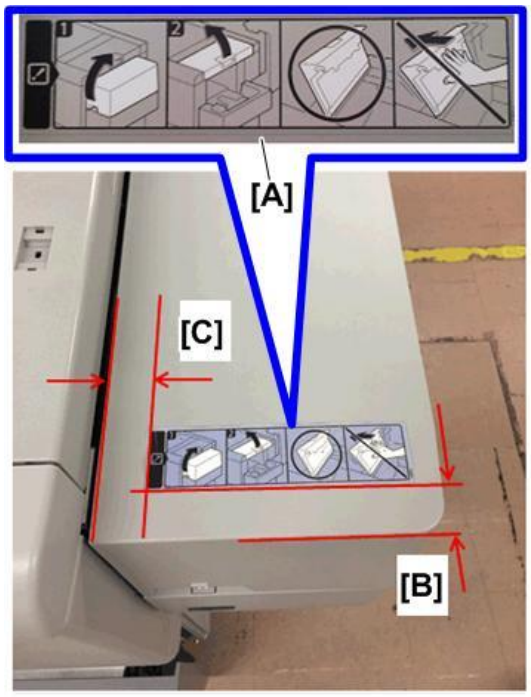
Note

If Multi Bypass Tray BY5020 is installed, top cover cannot be open/close. Fasten the top cover with screws so that the top cover cannot open.

m0b2d8202

66. Reattach the rear cover.

67. Attach the decal [A].

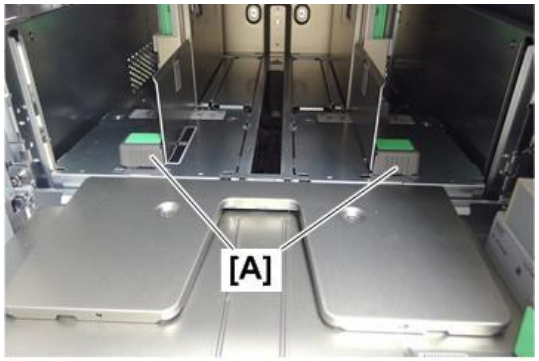


m0b2d8121

[B] [C]: 30 ± 5 mm, Slant: Within 1 mm

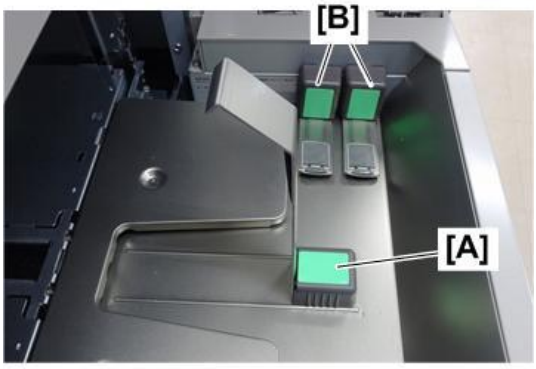
Attaching the Side Fences and End Fences

1. Attach the side fences [A] provided with this option as shown below.
The side fences are held to the vacuum feed banner sheet tray by magnets.



d194d9572

2. Stand the end fence (long) [A] provided with this option as shown below. Put the end fences (short) [B] (provided with this option) on the side of the tray.
The end fences are held to the vacuum feed banner sheet tray by magnets.



d194d9537

SP Setting

After starting up the main machine, it is necessary to make sure the vacuum feed banner sheet tray is recognized by using the following SP.

1. Enter the SP mode.
2. Change SP5-150-002 from [0] to [1].
3. Exit the SP mode.
4. Restart the main machine.

Attaching the Extension Tray to the Finisher

To extend the output tray of the finisher for banner sheets, the optional extension tray "SR5000 series Output Tray for Banner Sheet Type S6 (D3CC)" is required.

LCIT RT5140 (D3HL17)

Note

- LCIT RT5140 is for Pro C5310S/C5300S.
- **This description is applicable for the LCIT RT4070 for IM8000/C6500.**
- You cannot install this option with LCIT RT4060 simultaneously.

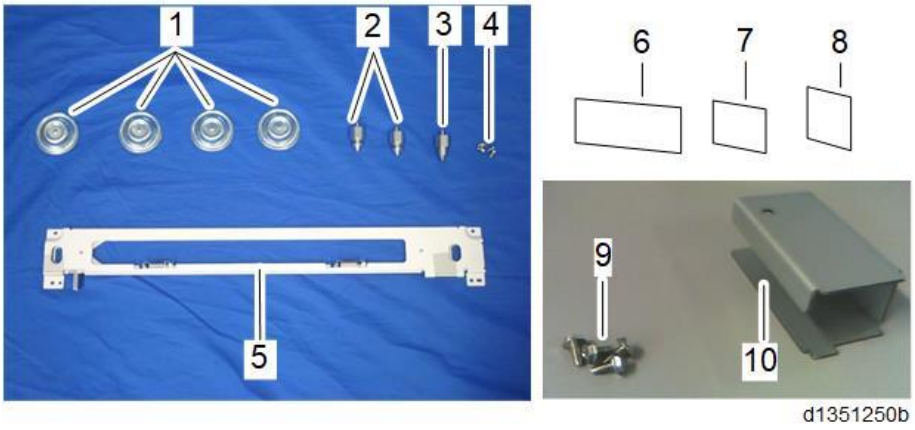
Accessory Check

Check the quantity and condition of the accessories in the box against the following list.

No	Description	Q'ty	Note
1	Shoes	4	
2	Upper Positioning Pins	2	
3	Lower Positioning Pin	1	
4	Tapping screws – M4 x 8	4	
5	Stay	1	
6	Decal: caution chart: paper set direction	1	

2.Installation

No	Description	Q'ty	Note
7	Decal: transport: cover	1	
8	Decal: misfeed removal: manual feed: 250	1	Pro C5310S/C5300S only
9	Tapping Screw – 3 x 8	4	For heater bracket
10	Heater bracket	1	
-	EMC sheet	1	



d1351250b

Installation Procedure

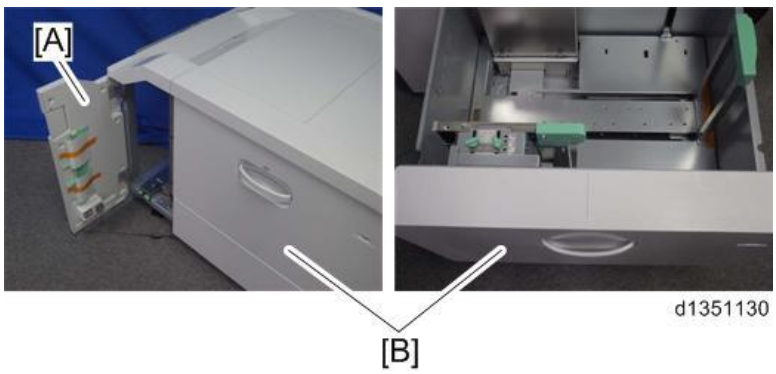
⚠CAUTION

Turn OFF the machine and disconnect the machine power cord before doing this procedure.

1. Remove all tape and retainers from the LCIT.

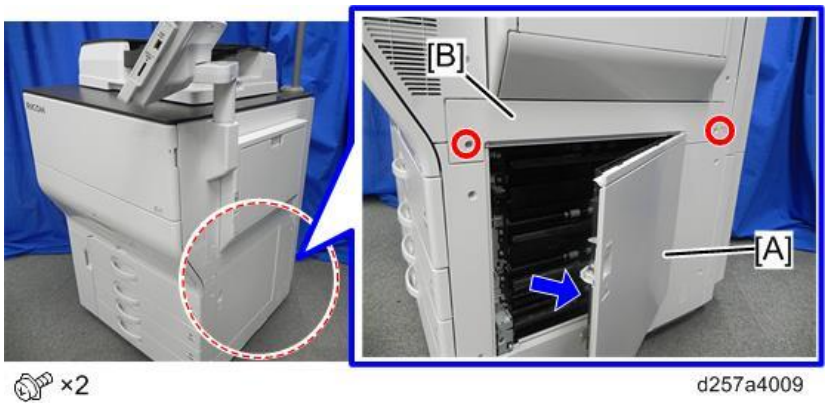
d1351129

2. Open the front door [A] and paper tray unit [B], and remove all tape and retainers from the LCIT.

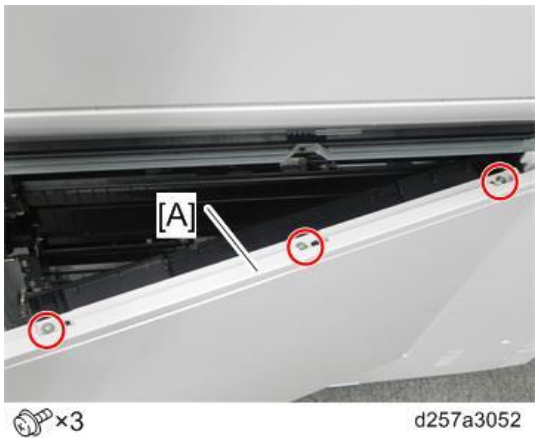


d1351130

3. Open the vertical transport door [A] and remove the LCIT cover [B].



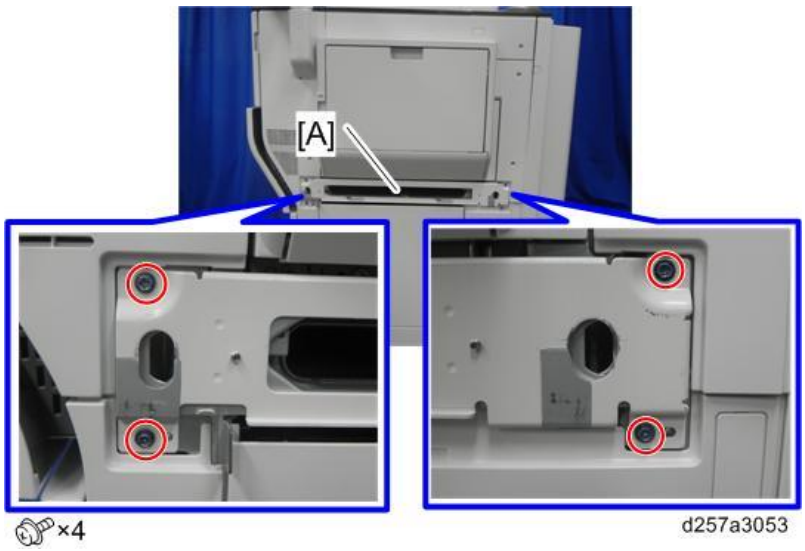
4. Remove the cover [A].



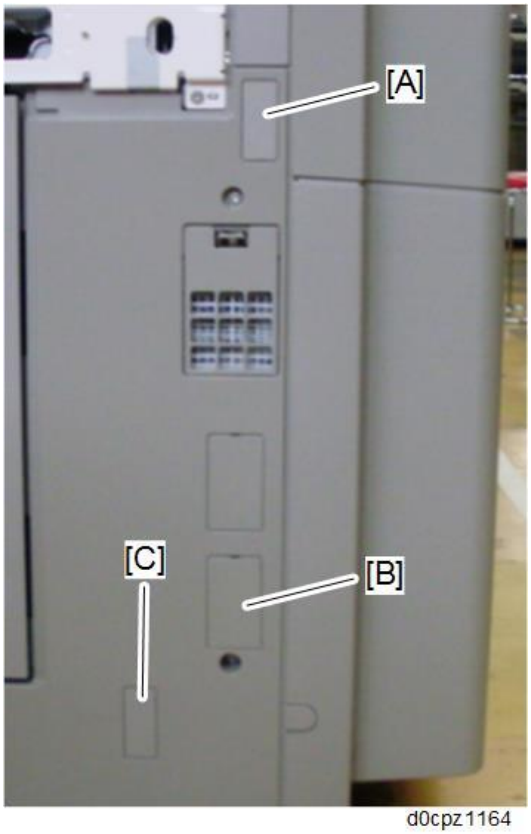
5. Install the stay [A] on the main machine. (M4 x 8)

Note

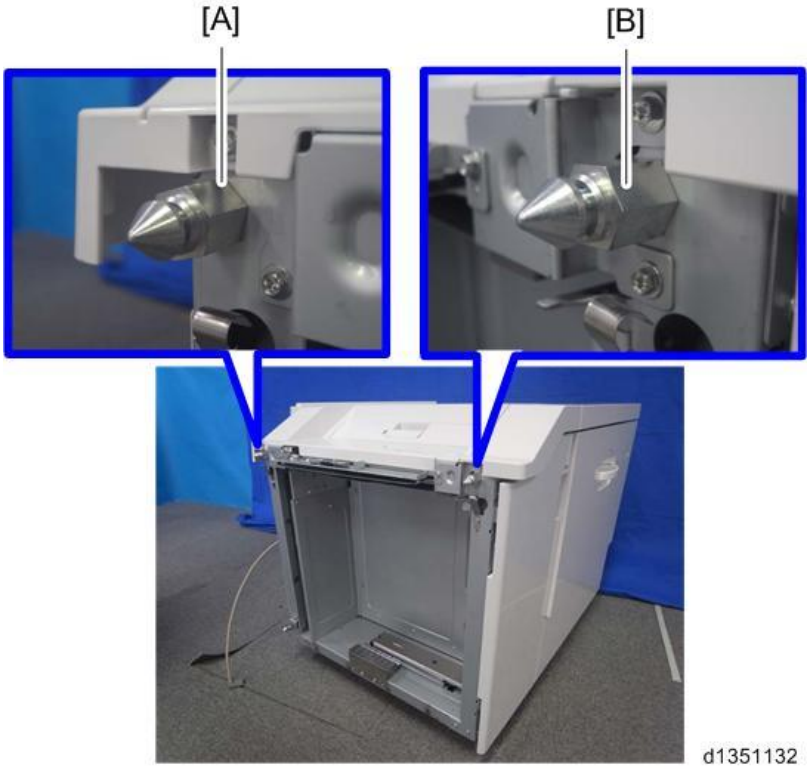
- Set the embossed side of the stay against the main machine.



6. Remove the connector cover [A], [B], [C] on the right side of the main machine.



7. Install the upper positioning pins [A] and [B].



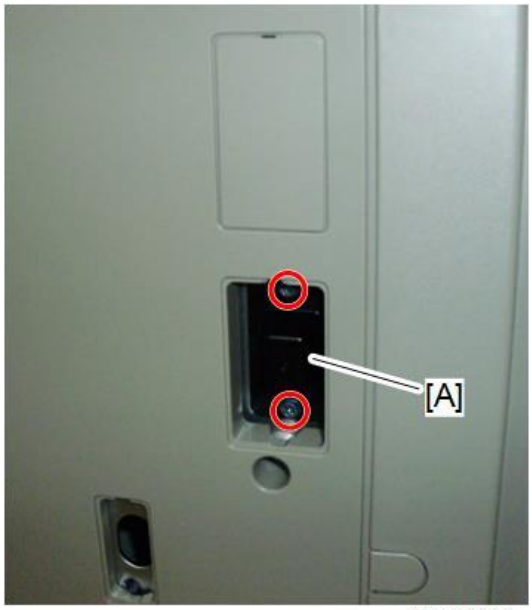
8. Install the lower positioning pin [A].

9. Remove the grounding plate [A].

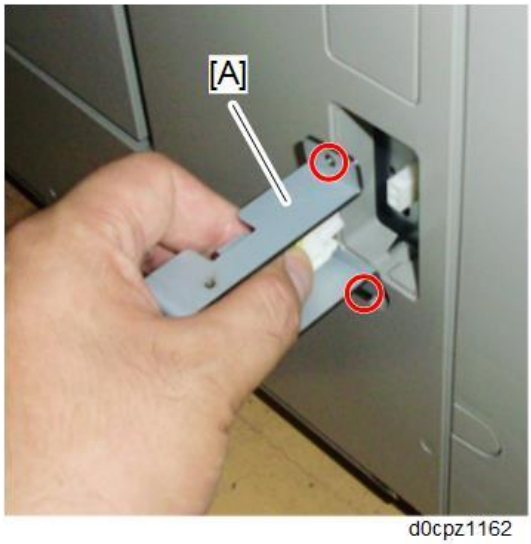
10. Change the orientation of the grounding plate, and then install it as shown below.

11. Open the front cover [A] and remove the screw [B] and release the lock plate [C]. (M4 x 8)

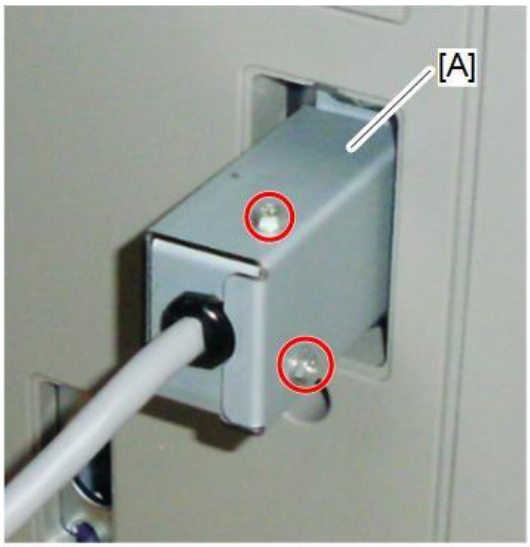
12. Remove the cap.



13. Attach the heater bracket [A] with the connector inserted. (Tapping screws - M3 x 8)



14. Attach the heater cover [A]. (Tapping screws - M3 x 8)



d0cpz1163

15. Install the LCIT [B] on the main machine [A].

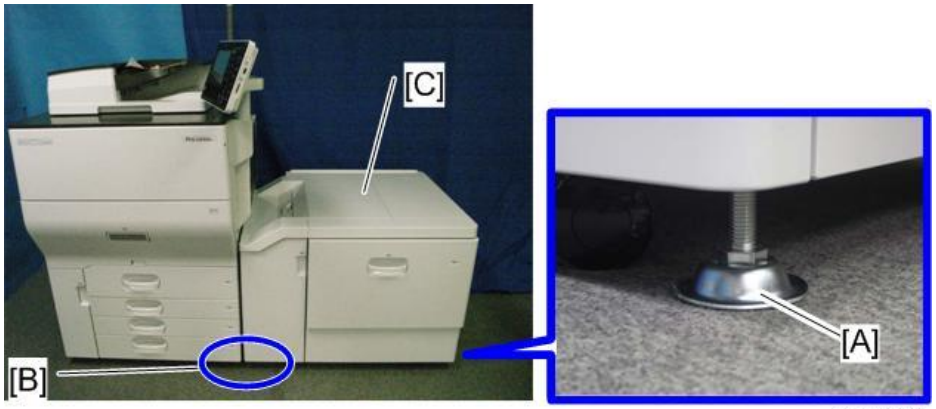
d1351138

16. Reattach the left corner plate [A]. (M4 x 8)

×1

d1351139a

17. Set the leveling shoes [A] (front left, front right, rear left, rear right side of the LCIT).



d1351140

Note

- Align the bottom of the machine paper tray and the bottom of the LCIT front cover [B].
- Adjust the level of the LCIT top surface [C] until it is within ±2.5/1000mm.

18. Connect the LCIT interface cable [A] to the LCIT connector of the main machine.

d1351141

19. Open the bypass tray unit [A].

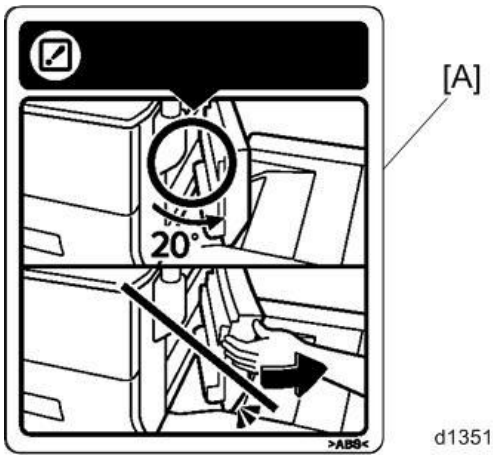
d1351751

Note

- Push down the lever [A] when opening the bypass unit.

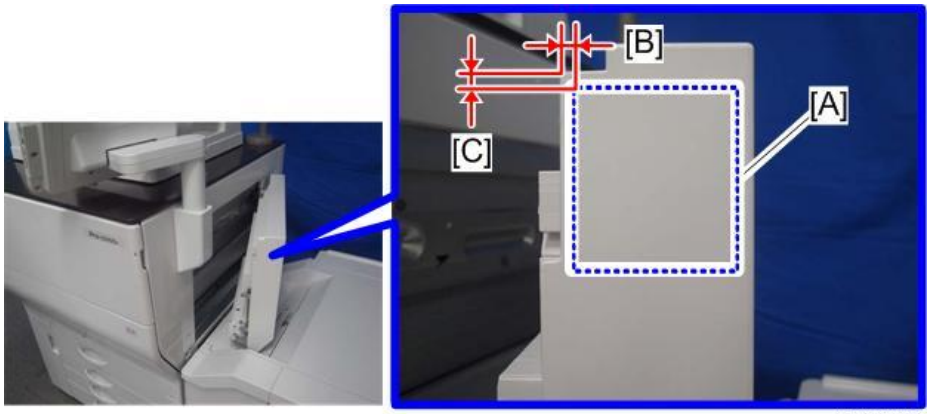
d1351755

20. Prepare the caution decal [A] provided with the LCIT. (Accessories No.9, Decal: misfeed removal: manual feed: 250)



d1351756

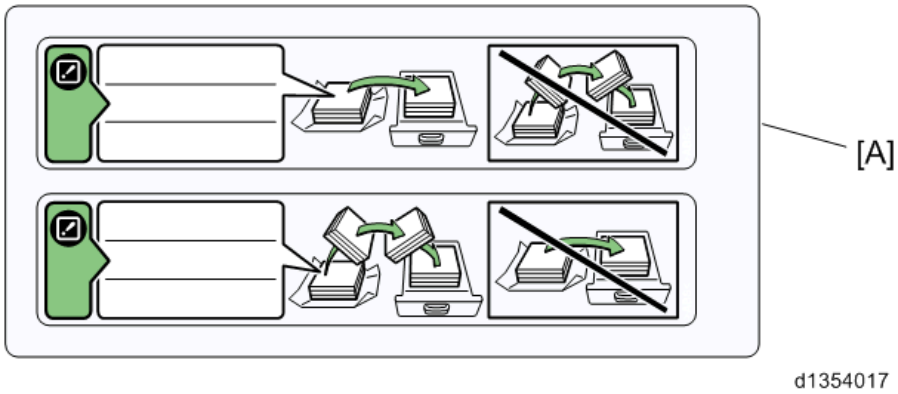
21. Attach the caution decal to [A] on the bypass tray unit.



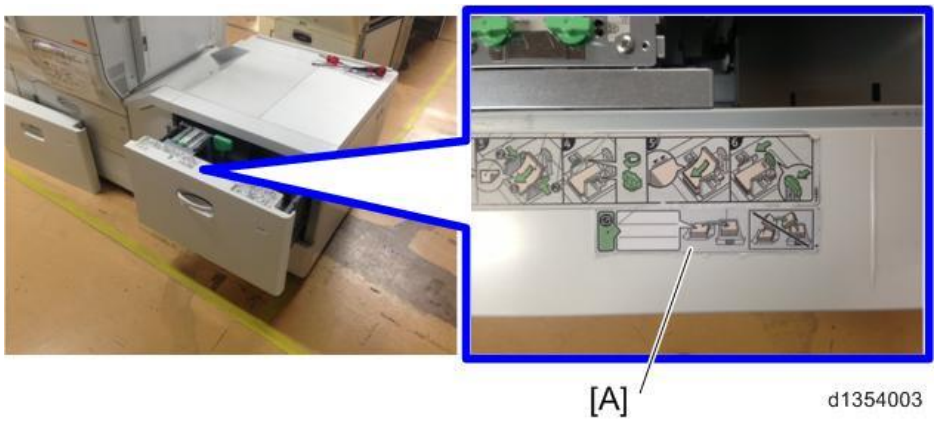
d1351752

- [B]: 2mm
- [C]: 2mm

22. Prepare the Decal: caution chart: paper set direction [A].



23. Draw out the paper tray and attach the decal [A] on the top of the front door.
Select one of the decals according to the paper that will be used by the customer.



Note

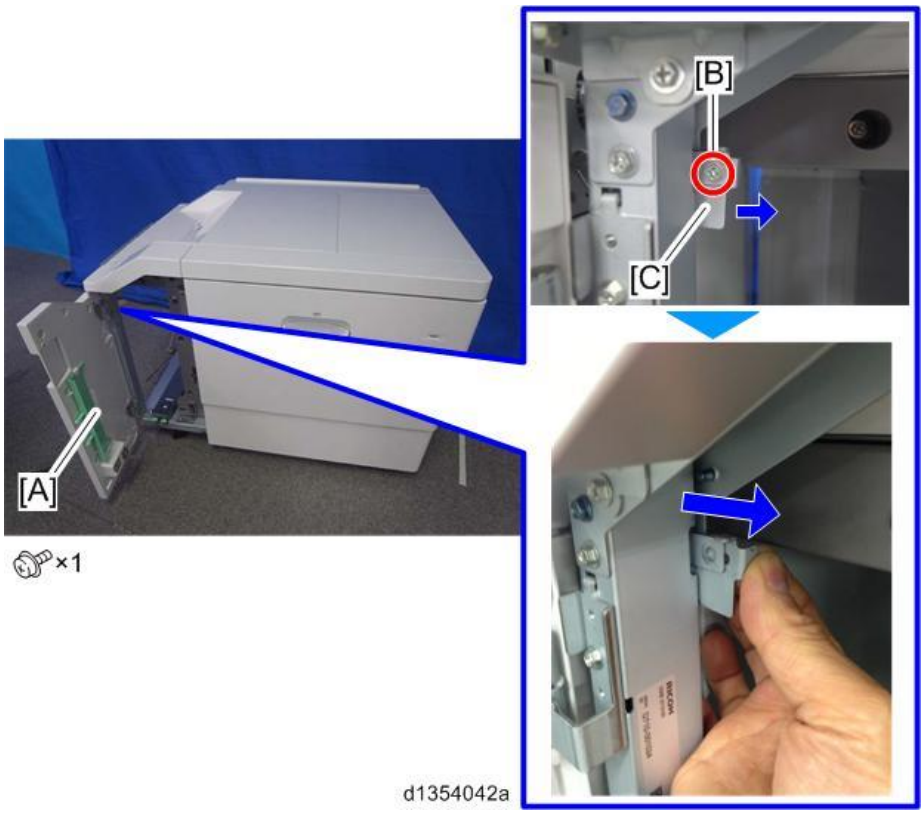
- Paper type, brand, etc. can be written on the blank space.

24. Plug in the machine and turn it ON.

How to disconnect the LCIT from the main machine

1. Open the front cover [A]. Remove the screw [B] and pull the lock plate [C] in the direction indicated

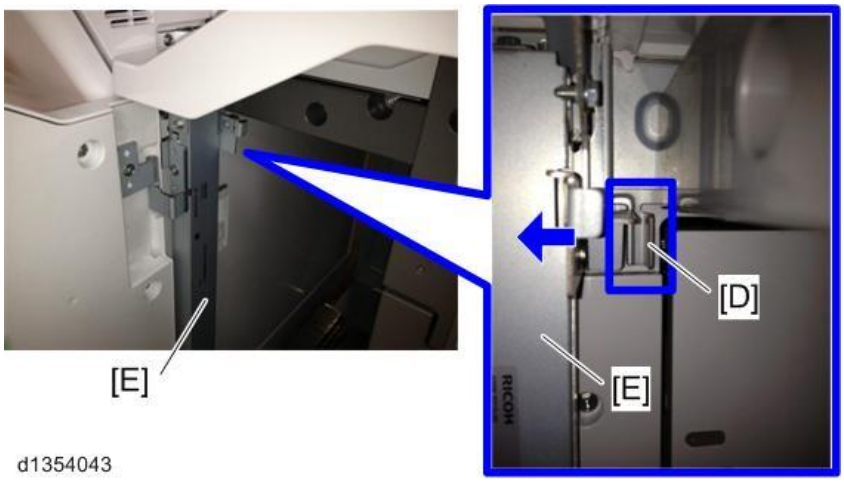
with the arrow.



2. Disconnect the LCIT from the main machine while pressing the lock plate [D] in the direction indicated with the arrow.

Note

- Lock plate [D] is located at the rear side of the LCIT frame [E].

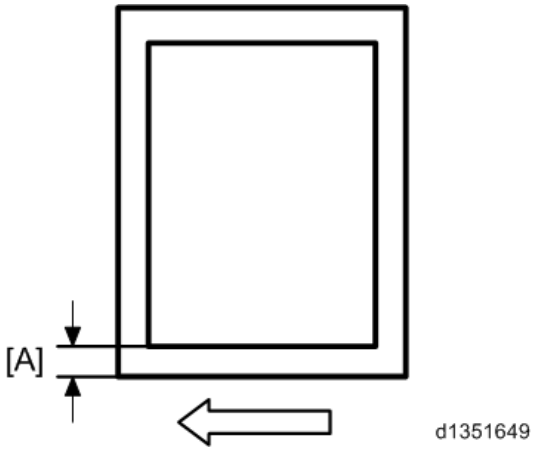


2.Installation

d1354044

Image Adjustments: Side-to-side registration

1. Use the Trimming Area Pattern (SP2-109-003, No. 14) to print the test pattern.
2. Go to SP1-003-007 (Side-to-Side Reg: LCIT).
3. Load paper (A4 LEF) in the LCIT tray, and then copy a couple of sheets.
4. Enter the value in SP1-003-007 to adjust the blank margin [A] to 2 mm.
   The default value of the SP is 0 mm. Press [+] to increase the margin, and press [-] to reduce it.
   You can adjust the value in 0.1 mm intervals.



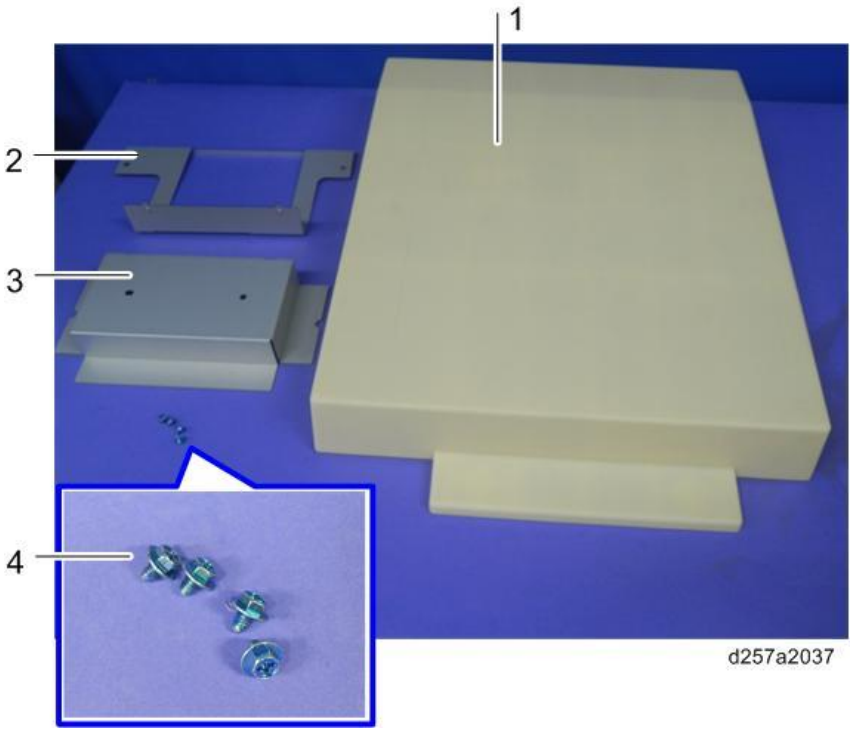
d1351649

Banner Sheet Guide Tray for A3/11"x17" LCIT Type S6 (D710)

Accessory Check

Check the quantity and condition of the accessories against the following list.

No	Description	Qty
1	Base Plate	1
2	Inner Bracket	1
3	Outer Bracket	1
4	Tapping Screw M4 X 6	4

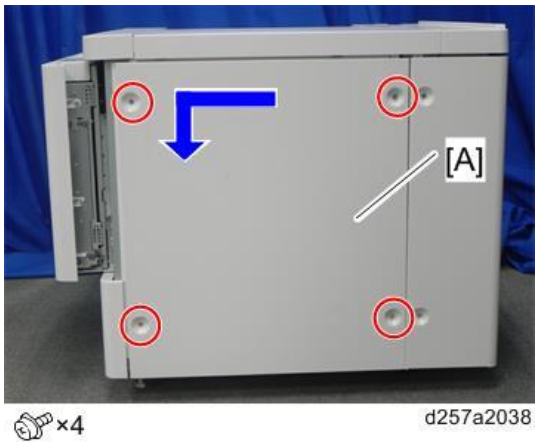


Installation Procedure

⚠CAUTION

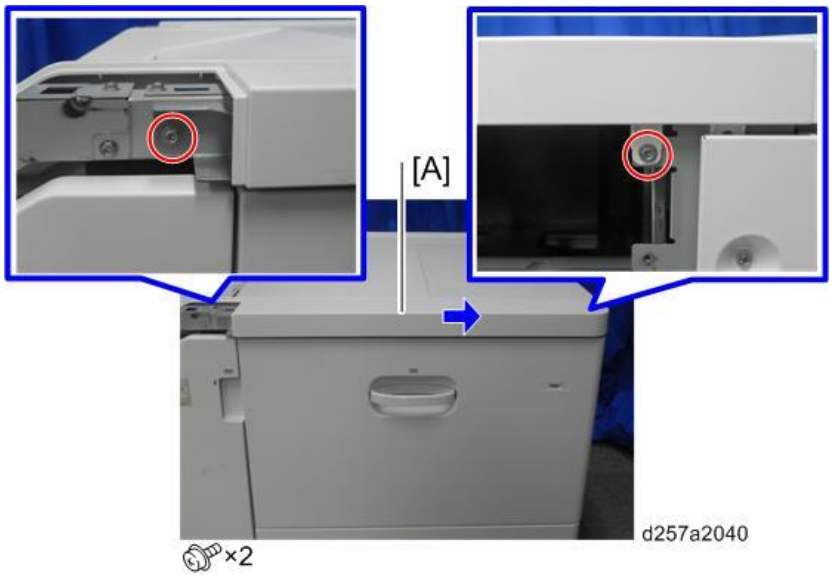
Always switch the machine off and unplug the cable before beginning the following procedure.

1. Open the front door of LCIT RT4050.
2. Slide the right cover [A] to the left, and then slide it down to remove it.

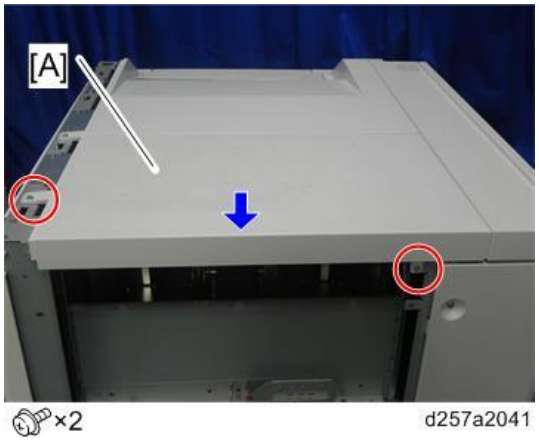


3. Remove the front left cover [A].

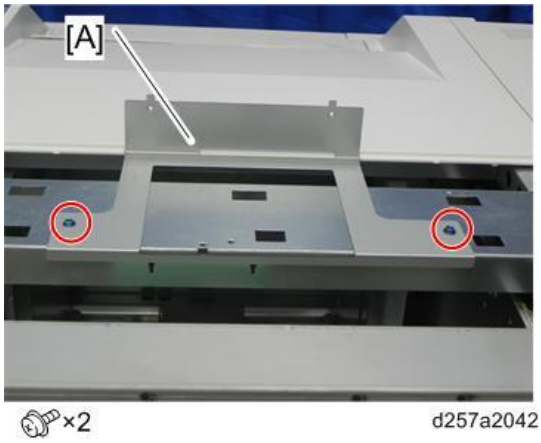
4. Remove the top front cover [A].



5. Remove the top right cover [A].

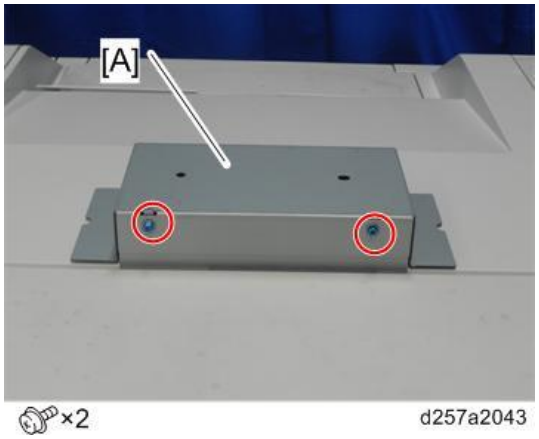


6. Attach the inner bracket [A].

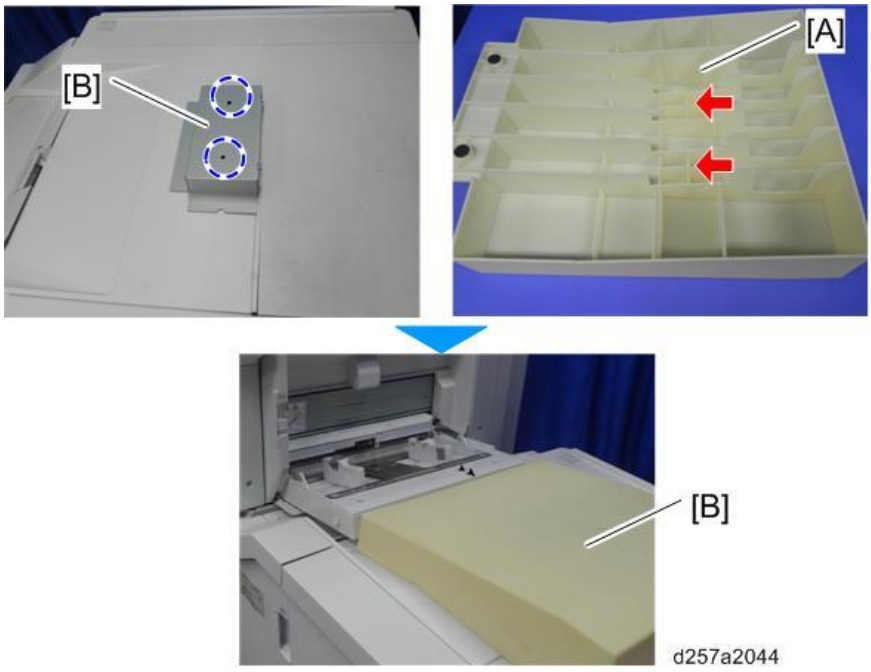


7. Attach the covers in the following order: Top right cover, top front cover, front left cover, right cover.

8. Attach the outer bracket [A].



9. Insert the bosses of the base plate [A] into the holes in the outer bracket [B].



LCIT RT4060 (D3HK)

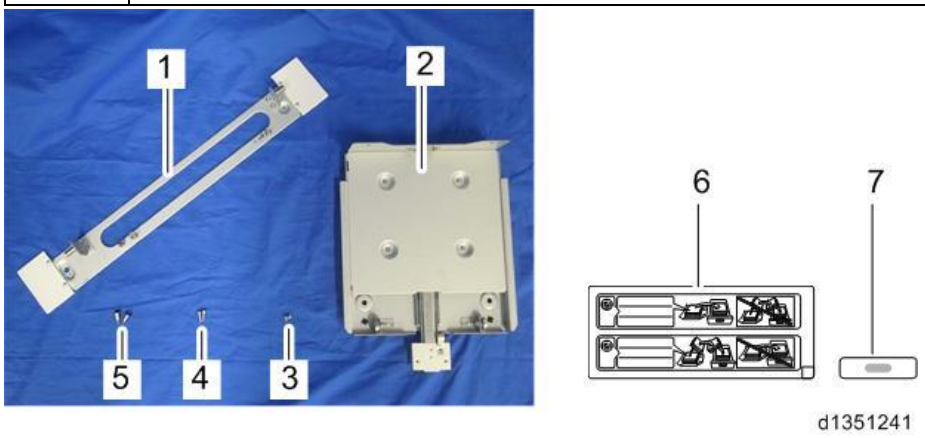
Note

- You cannot install LCIT RT4060 and LCIT RT4070 simultaneously.

Accessories

Check the quantity and condition of the accessories in the box against the following list.

No	Description	Q'ty
1	Stay	1
2	Rail	1
3	Tapping screws – M3 x 6	2
4	Tapping screws – M4 x 14	2
5	Shoulder screws	2
6	Decal: caution chart: paper set direction	1
7	Decal: LED	1
-	EMC Address	1



d1351241

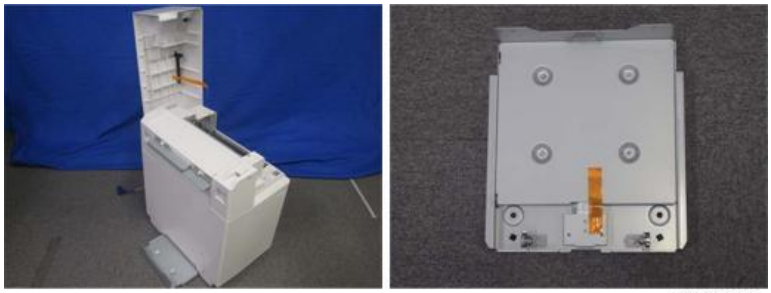
Installation Procedure

⚠CAUTION

- Always switch the machine off and unplug the cable before beginning the following procedure.

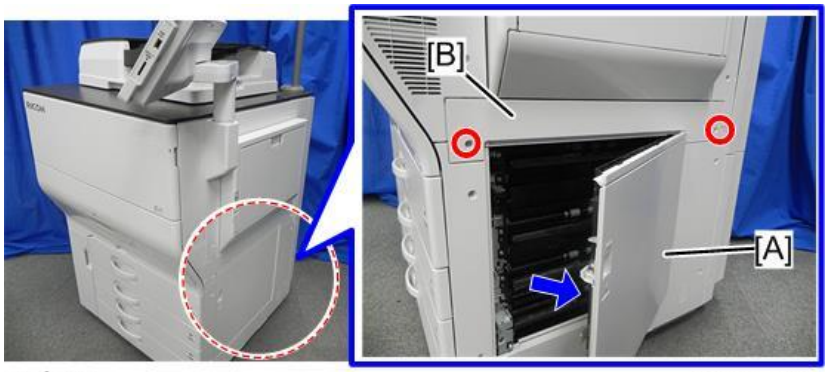
1. Remove all tape and retainers from the LCIT.

d1351110



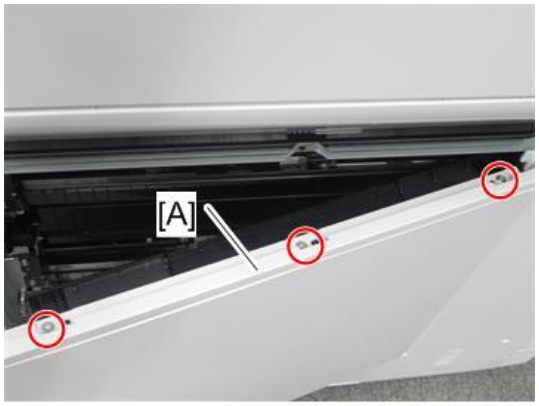
d1351111

2. Open the vertical transport door [A] and remove the LCIT cover [B].



×2 d257a4009

3. Remove the cover [A].



×3 d257a3052

4. Install the stay [A] on the main machine. (M3 x 6)

5. Remove the connector cover [A] from the main machine.

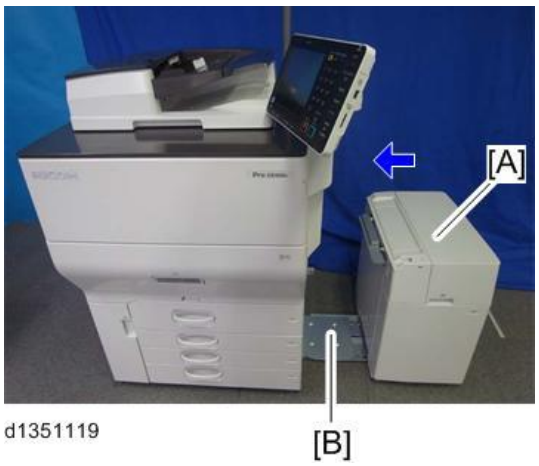
6. Install the rail [A] on the right side of the main machine. (M4 x 14)

Note

- The rail must be standing on the floor. If the screw holes on the LCIT are too high or too low, and do not overlap the vertical screw slots in the rail, the rubber feet of the rail must

be adjusted. (Adjustment for the Rubber Foot Positions on the Rail)

7. Set the LCIT [A] on the rail [B], and then slide it towards the main machine.



d1351119

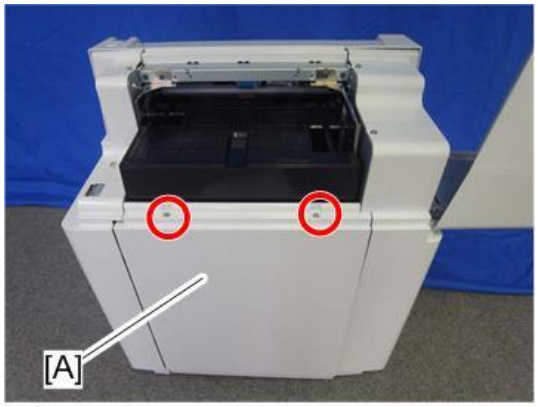
8. Install the LCIT on the main machine.

d1351120

9. Open the top right cover [A].

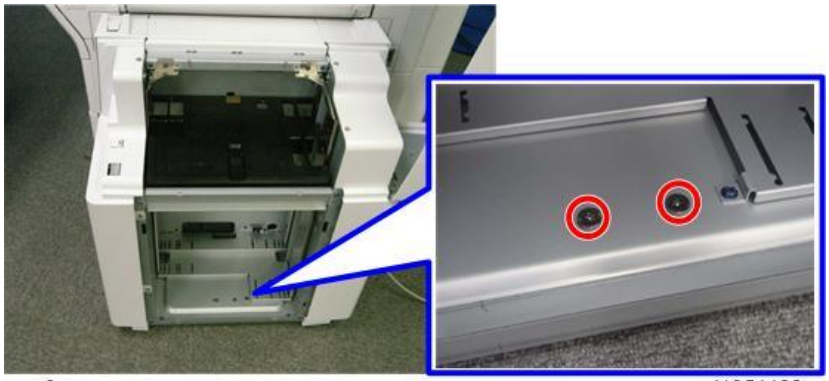
d1351068

10. Remove the right cover [A].



×2 d1351074a

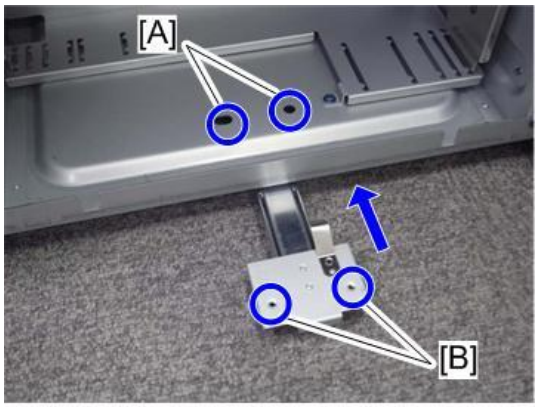
11. Fasten the rail to the LCIT. (shoulder screws)



×2 d1351122a

Note

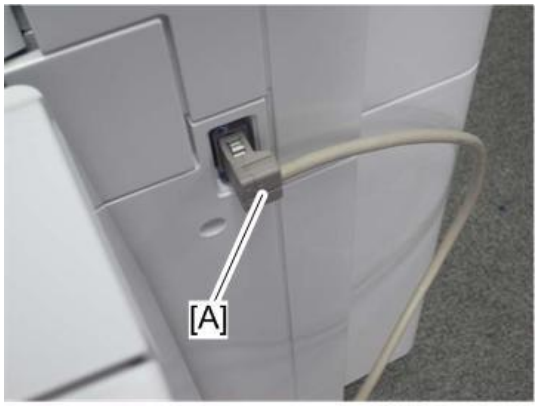
- When you fasten the rail to the LCIT, the screw holes [B] of the rail need to be in the same position as the screw holes [A] of the LCIT.



d1351121

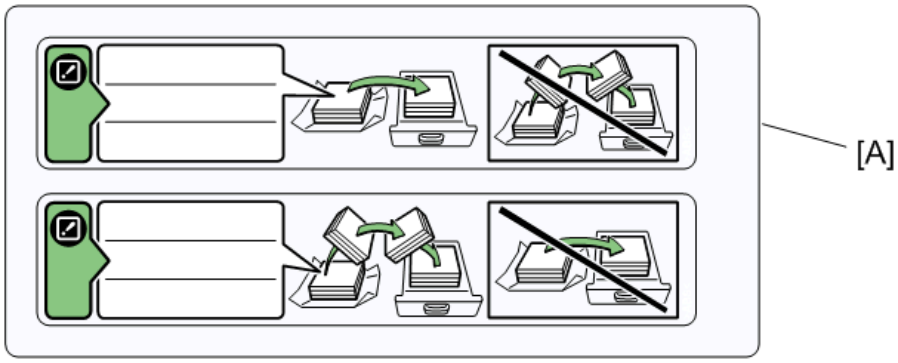
12. Reattach the right cover, and then connect the plug [A] of the LCIT power connector to the side of

the machine.



d1351124

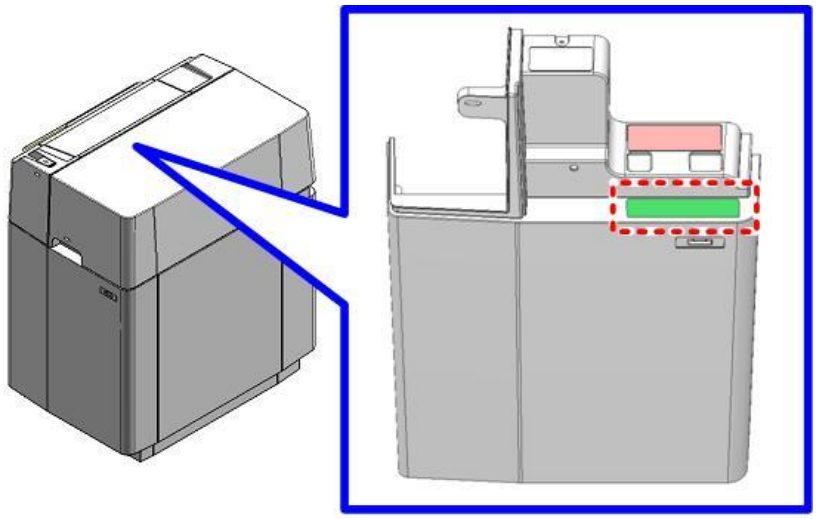
13. Prepare the Decal: caution chart: paper set direction [A].



d1354017

14. Open the top right cover and attach the decal as shown below.

Select one of the decals according to the paper that will be used by the customer.

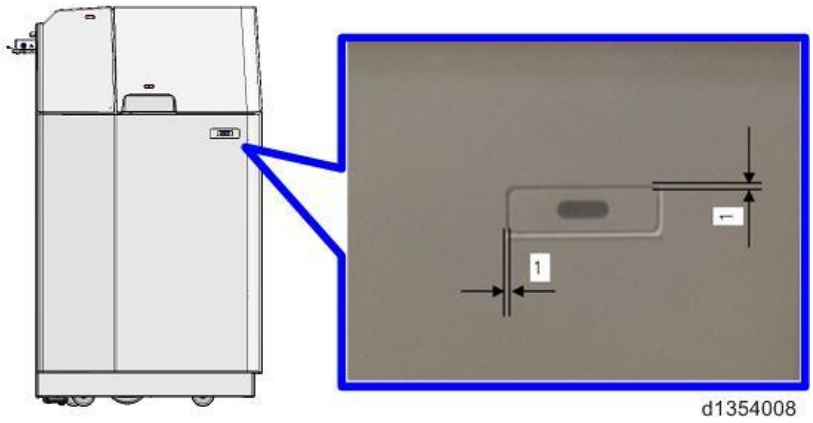


d1354007

Note

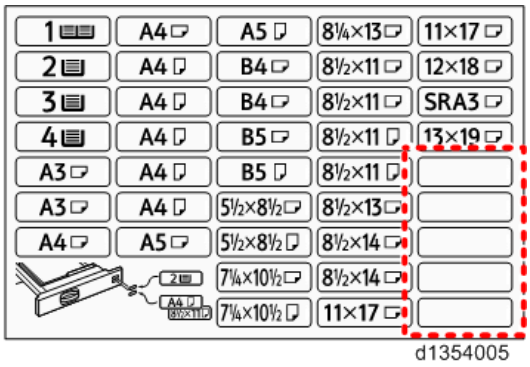
- Paper type, brand, etc can be written on the blank space.

15. Attach a decal to the front.



Pro C5310S/C5300S: Attach the Decal: LED supplied with the LCIT.

IM C8000/C6500: Attach a blank sheet on the paper size decal supplied with the main machine.



16. Plug in the machine and turn it on.

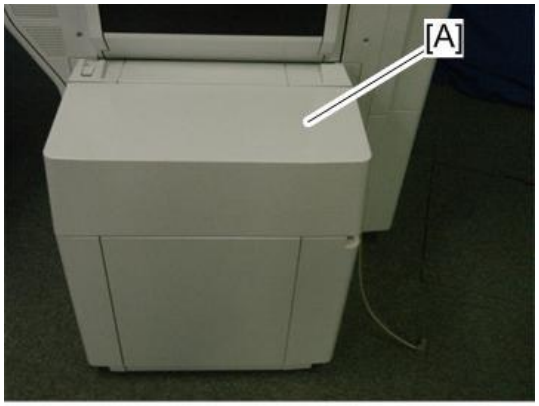
Note

- To move down the paper tray, cover the photo sensor with your left hand and press the bottom plate operation button [A].

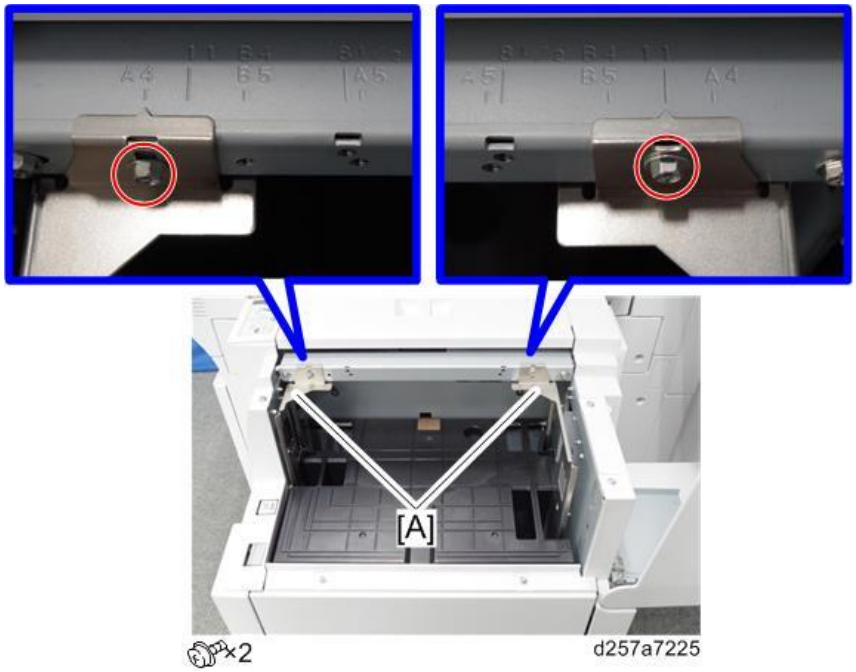
Changing the Paper Size

By changing the location of the side fence and the rear edge supporting rod, you can switch the paper size among A4 LEF, B5 LEF, 81/2x11 LEF.

1. Open the top right cover [A].

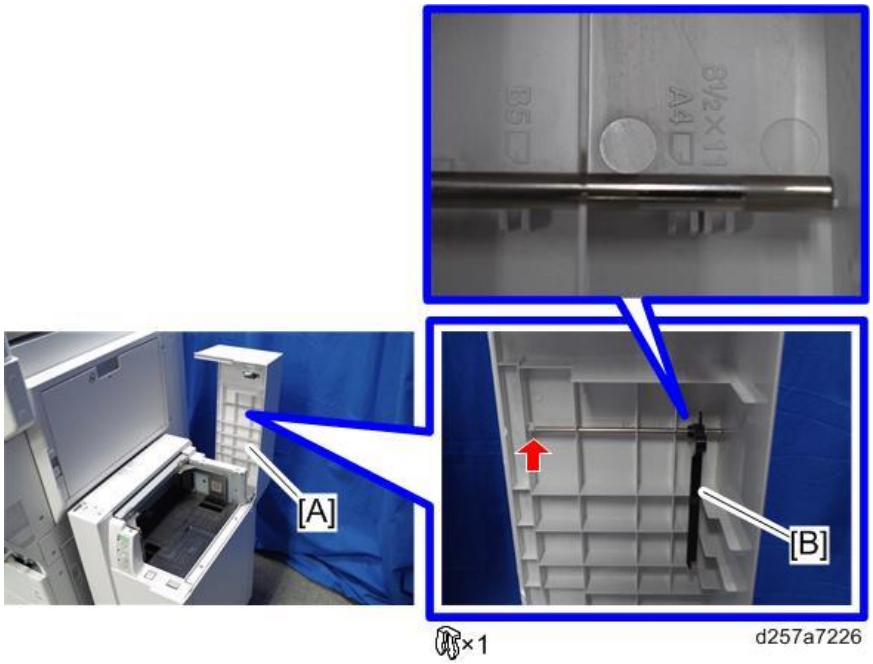


2. Change the location of the side fence [A] corresponding to the paper size.



3. Change the location of the rear edge supporting rib [B], on the back of the top right cover [A],

corresponding to the paper size.

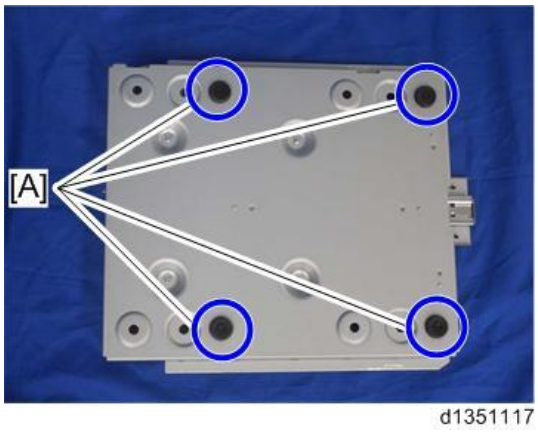


4. Enter the SP mode, and then specify the paper size in SP5-959-003 (A4 LCT: Paper size).

Adjustment for the Rubber Foot Positions on the Rail

The rail must be standing on the floor. If the screw holes on the LCIT are too high or too low, and do not overlap the vertical screw slots in the rail, the rubber feet of the rail must be adjusted. Adjust the rubber foot positions on the rail before the installation.

1. The rubber feet are placed at [A] as shown below.

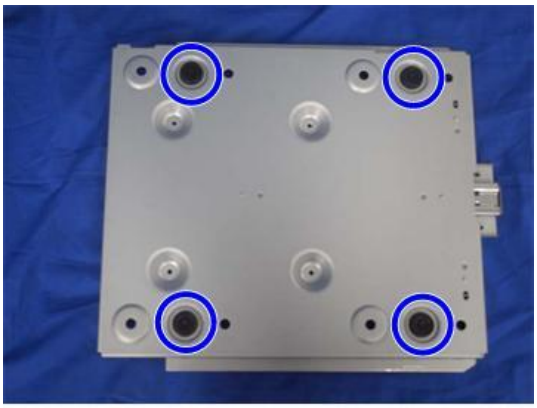


2. The slotted screw holes in the rail for attaching the rail to the LCIT have a tolerance for the height (-/+ 2 mm). If you can move the rail up or down within this -/+ 2 mm tolerance so that it is installed correctly, with the feet on the floor, you do not need to do the following steps.
3. If you cannot install the rail within the -/+ 2 mm height tolerance, change the rubber foot position to adjust the height of the rail.
    - If the screw holes of the machine are above the slotted holes of the rail, change the rubber

foot position as shown below.

d1351115

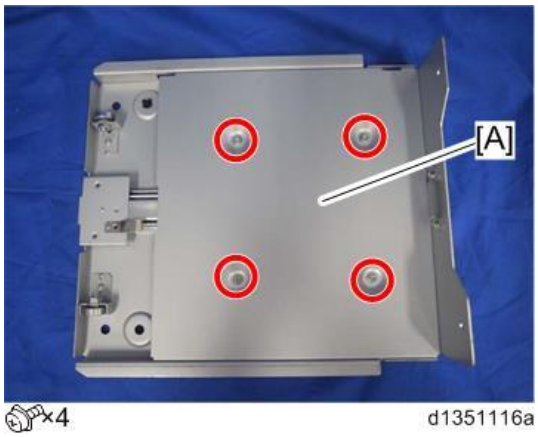
- If the screw holes of the machine are below the slotted holes of the rail, change the rubber foot position as shown below.



d1351118

Note

When changing the rubber foot position, remove the rail bracket [A]. After changing the rubber foot position, reinstall the rail bracket.



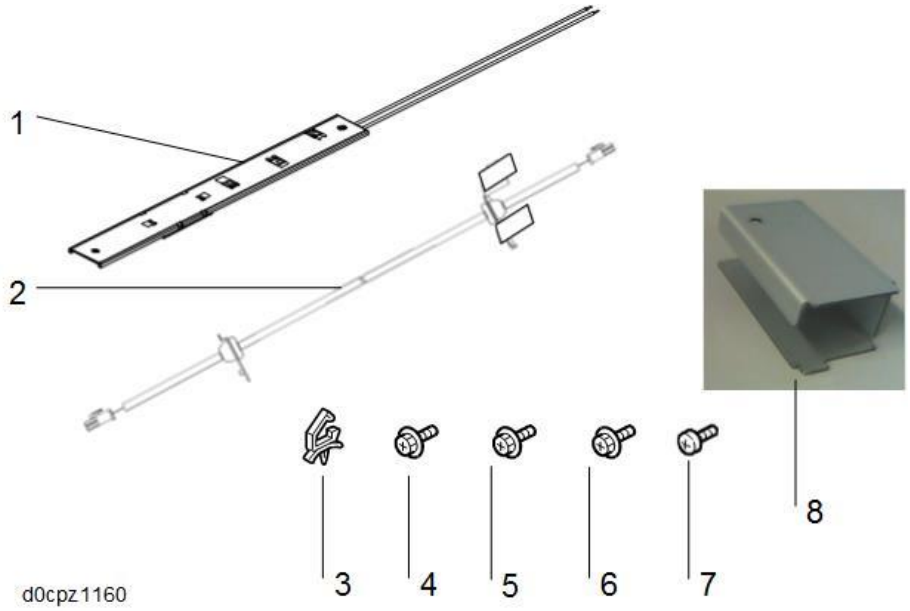
d1351116a

Installing the Tray Heater

⚠CAUTION

- Turn OFF the main power and unplug the power cord from the wall socket. If installing without turning OFF the main power, an electric shock or a malfunction may occur.

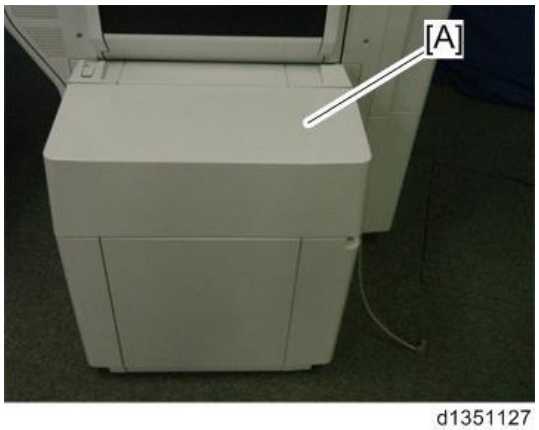
Accessory Check



No.	Item	Q'ty	Remarks
1	PTC Heater	1	
2	Harness	1	
3	Clamp	2	
4	Tapping Screw 4×6	2	For the heater
5	Tapping Screw 4×8	2	For the harness bracket (LCIT)
6	Tapping Screw 3×8	4	For the heater bracket
7	Screw M4×8	1	Ground for LCIT
8	Bracket	1	Ground for Main Machine

Installation Procedure

1. Open the upper right cover [A] of the LCIT.

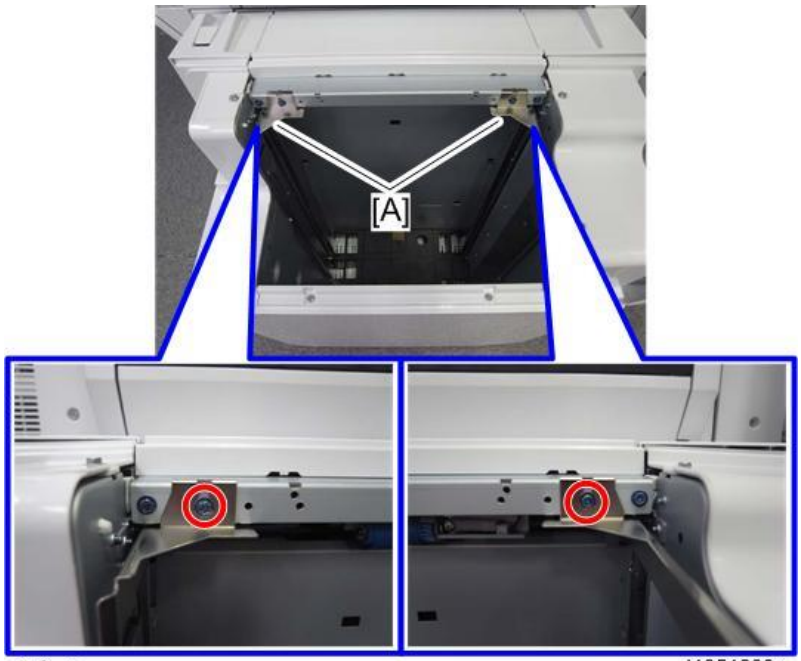


2. Move down the paper tray. Cover the photo sensor with your left hand and press the bottom plate

operation button [A].

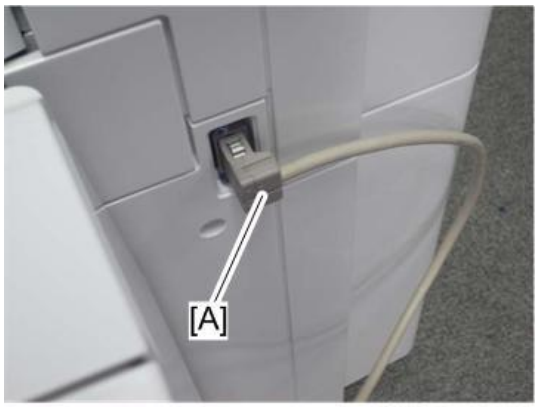
d1351125

3. Remove the side fence [A].



d1351209a

4. Close the upper right cover and raise the tray. (it stops after approx. 30 seconds)
5. Turn OFF the main power of the main machine.
6. Remove the plug [A] of the LCIT power connector

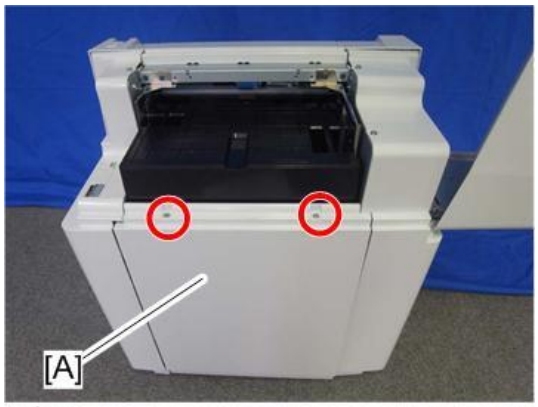


d1351124

7. Open the top right cover [A].

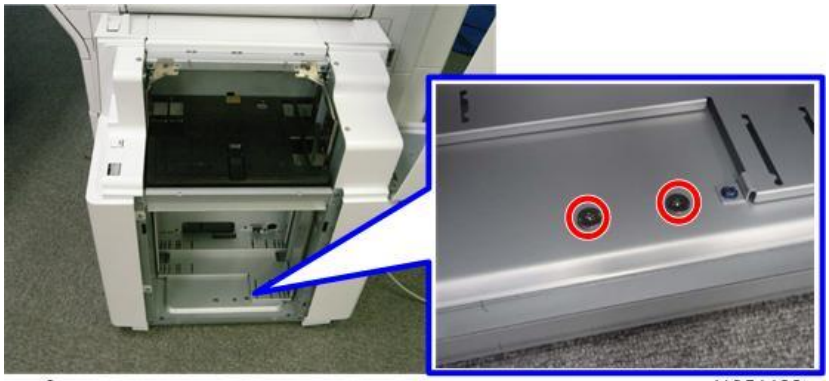
d1351068

8. Remove the right cover [A].



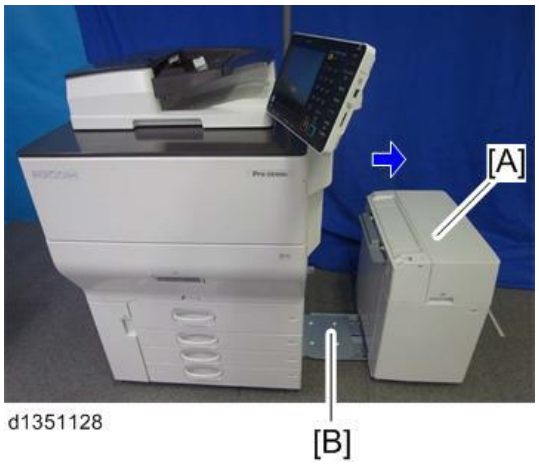
×2 d1351074a

9. Disconnect from the main machine.



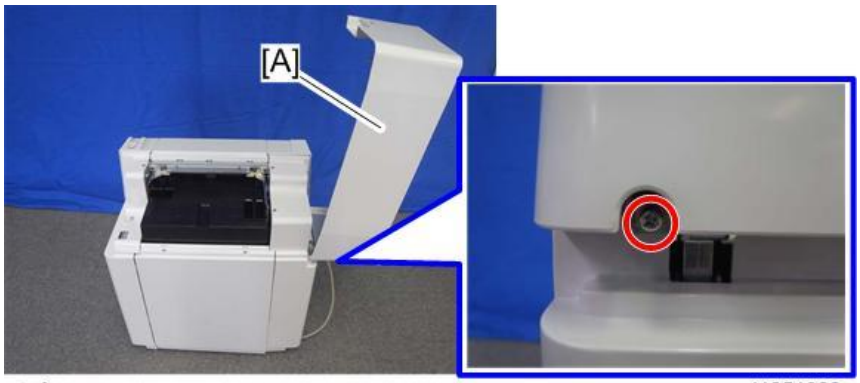
×2 d1351122a

10. Take down the LCIT [A] from the rail [B].



d1351128

11. Remove the top right cover [A].



×1

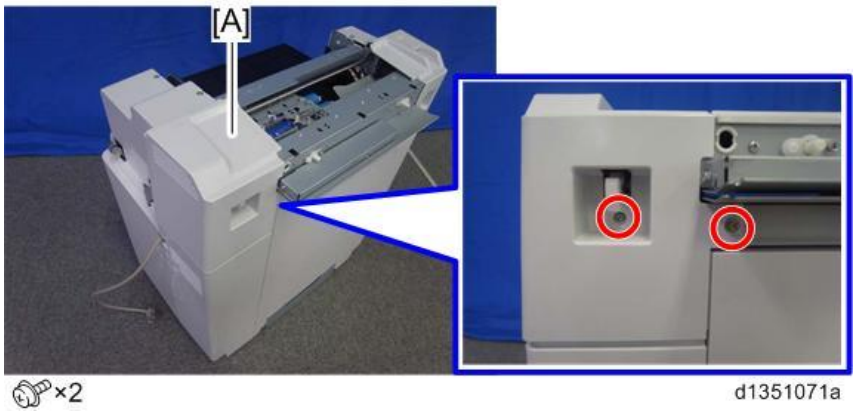
d1351069a

12. Remove the top left cover [A].

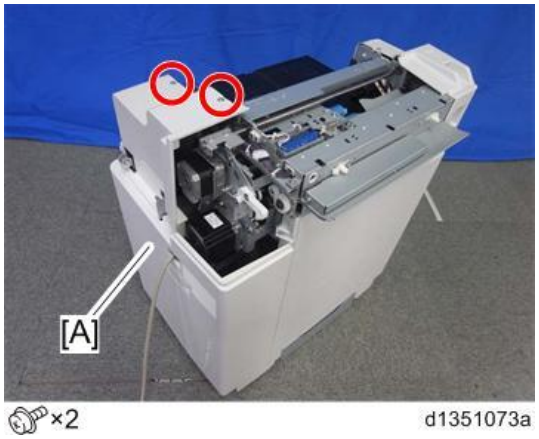
d1351070a

×2

13. Remove the rear left cover [A].

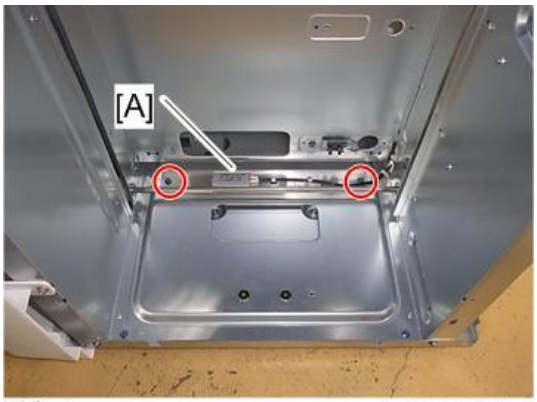


14. Remove the rear cover [A].



15. Remove the bottom plate of the LCIT.

16. Attach the heater [A] to the LCIT. (M4×6)

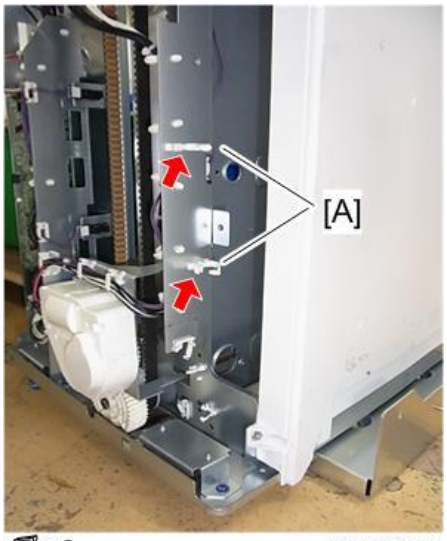


×2 d257a2076

17. Route the heater harness [A] and put it out from the hole.

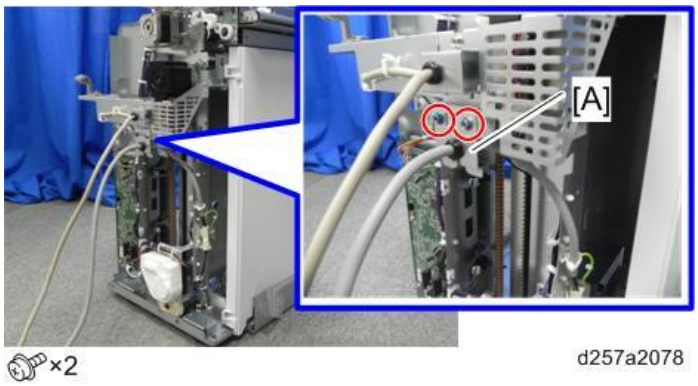
×2 d257a2075

18. Attach the clamps [A] on the left side of the LCIT.

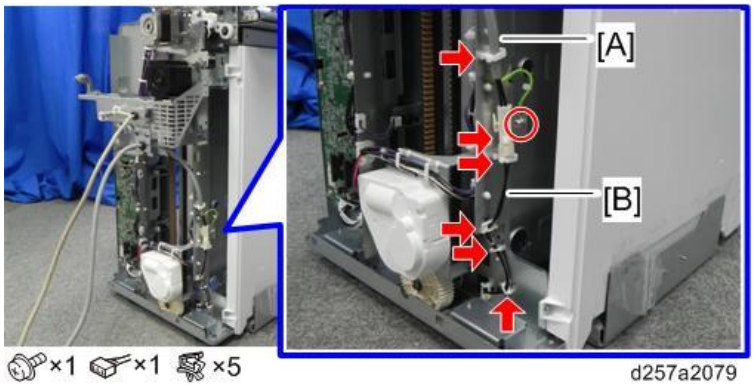


×2 d257a2077

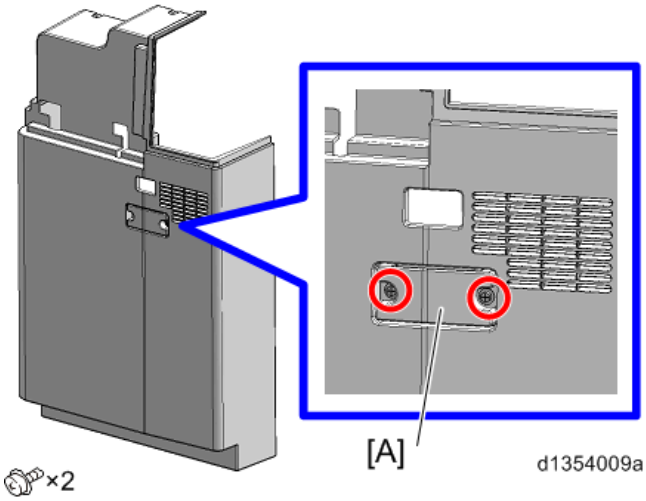
19. Attach the heater bracket [A] to the LCIT. (M4×8)



20. Connect the cable [A] of the heater bracket and heater harness [B] and ground (sems screw).



21. Remove the cover [A] from the rear cover.

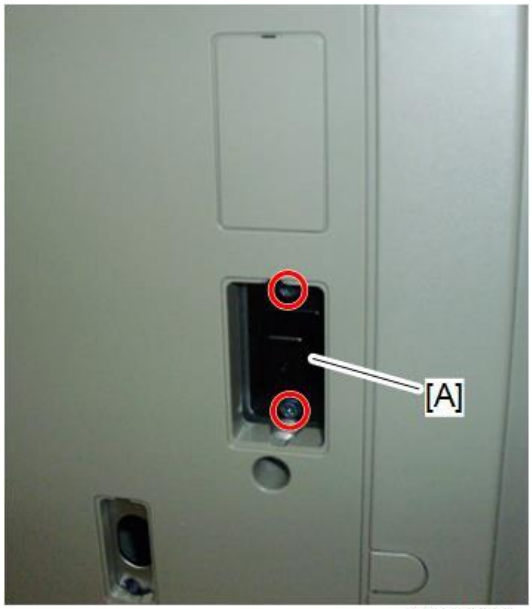


22. Reassemble the following covers of LCIT.

- Rear cover
- Rear left cover
- Top left cover
- Top right cover

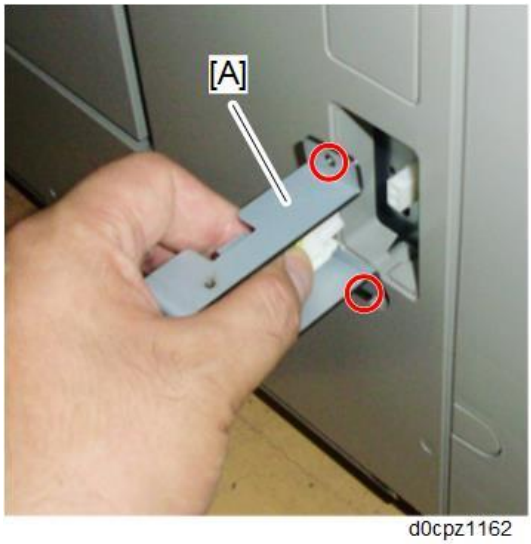
When reassembling the rear cover, put the harness out of the hole where the cover removed in step 21.

23. Remove the cap.



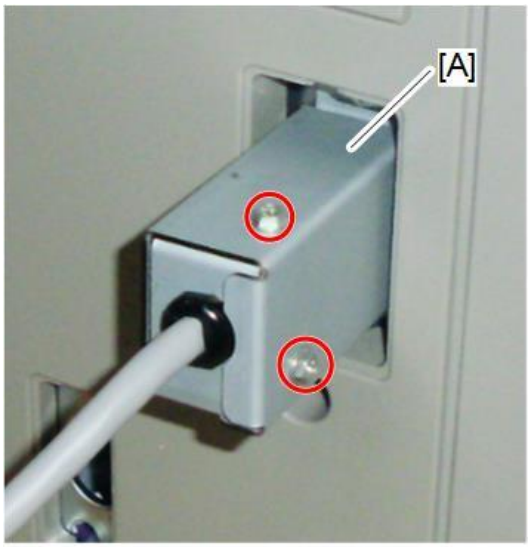
d0cpz1161

24. Attach the heater bracket [A] with the connector inserted. (Tapping screw 3×8)

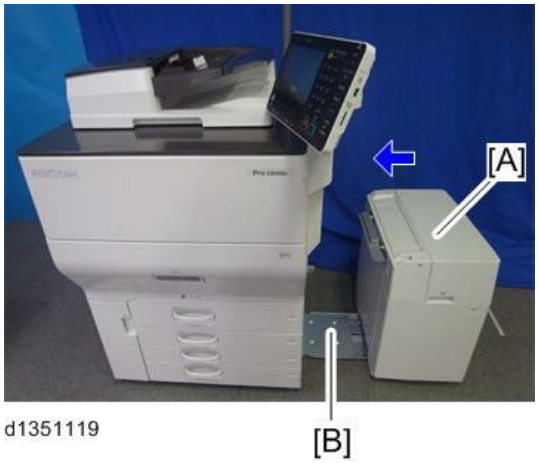


d0cpz1162

25. Attach the heater cover [A]. (Tapping screw 3×8)



26. Put the LCIT [A] on the rail [B] and slide it to the main machine.

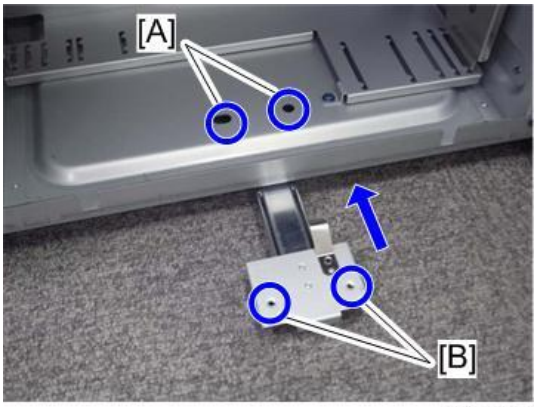


27. Open the upper right cover and secure the rail and LCIT.

Note

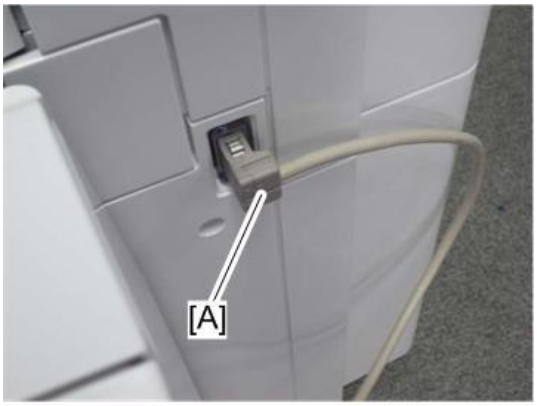
- When you fasten the rail to the LCIT, the screw holes [B] of the rail need to be in the same

position as the screw holes [A] of the LCIT.



d1351121

28. Reattach the right cover.
29. Plug the plug [A] of the LCIT power connector to the side of the machine.



d1351124

30. Turn ON the main power.
31. Move down the paper tray. Cover the photo sensor with your left hand and press the bottom plate operation button [A].

d1351125

32. Reattach the side fence.
33. Close the upper right cover.

Image Adjustments: Side-to-side registration

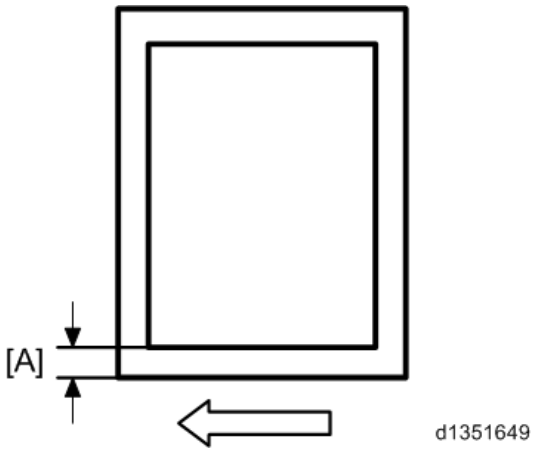
1. Use the Trimming Area Pattern (SP2-109-003, No. 14) to print the test pattern.
2. Go to SP1-003-007 (Side-to-Side Reg: LCIT).

3. Load paper (A4 LEF) in the LCIT tray, and then copy a couple of sheets.

4. Enter the value in SP1-003-007 to adjust the blank margin [A] to 2 mm.

The default value of the SP is 0 mm. Press [+] to increase the margin, and press [-] to reduce it.

You can adjust the value in 0.1 mm intervals.

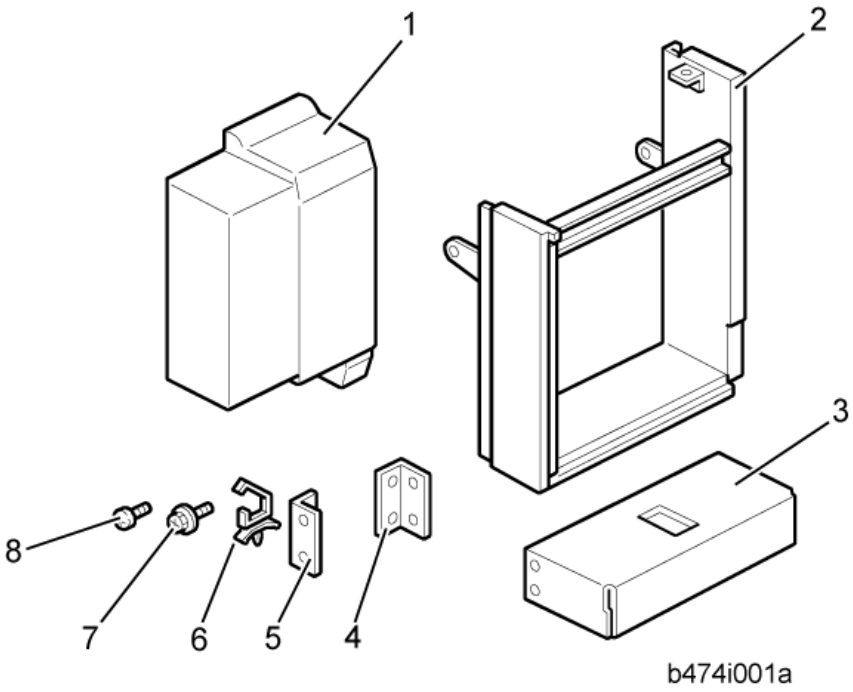


8 1/2" x 14" Paper Size Tray Type M2 (D745)

Component List

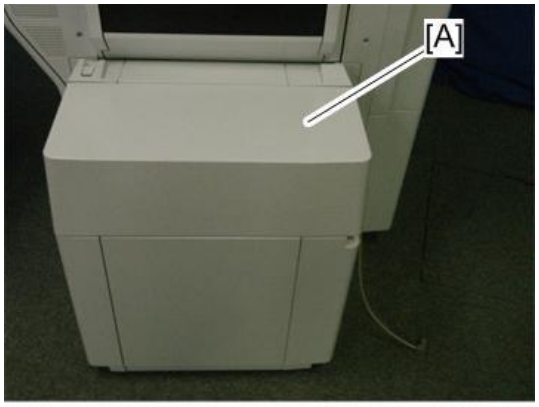
Check the quantity and condition of the accessories in the box against the following list.

No.	Description	Q'ty
1	Cover	1
2	B4/LG frame	1
3	Bottom plate extension	1
4	Rear bracket	1
5	Front bracket	1
6	Harness clamp	1
7	Tapping screws - M4x8	6
8	Tapping bind screws - M4x8	4



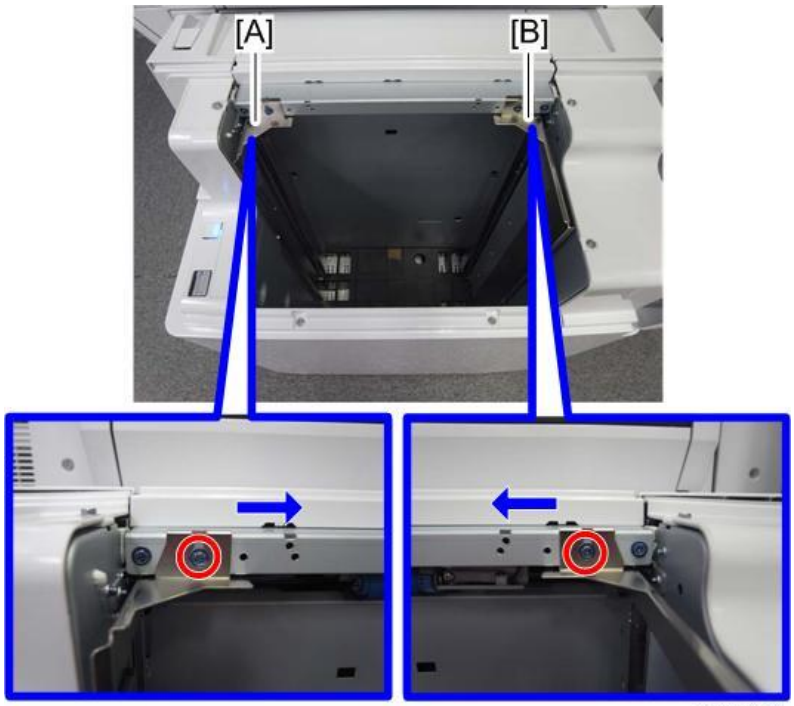
Installation Procedure

1. Open the upper right cover [A].



2. Move down the paper tray. To do this, cover the photo sensor with your left hand and press the bottom plate operation button [A].

3. Move the front side fence [A] and rear side fence [B] to the B4 or LG position.



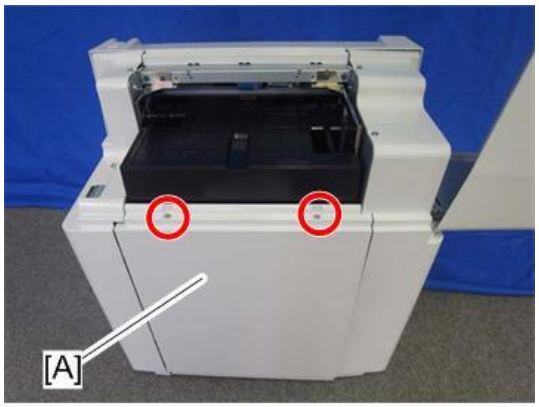
d1351230

4. Close the upper right cover to move the paper tray up. (The paper tray stops in about 30 seconds.)

5. Switch the machine off and unplug the machine.

6. Disconnect the LCIT power connector from the machine.

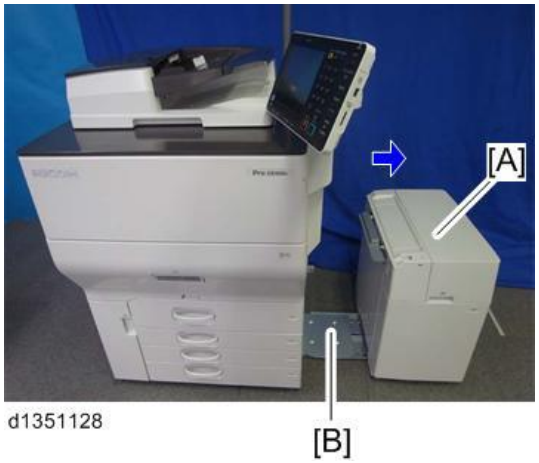
7. Remove the right cover of the LCIT. (x2)



d1351074

8. Release the LCIT from the main machine.

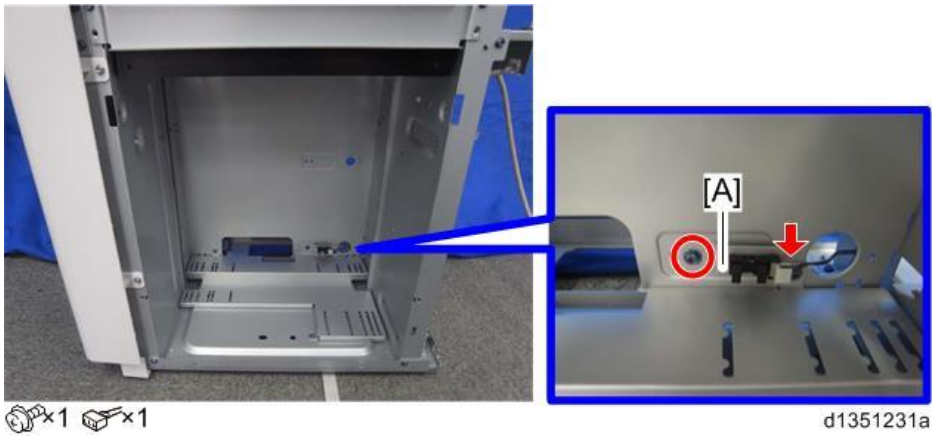
9. Slide the LCIT [A] against the main machine, and then remove it from the rail [B].



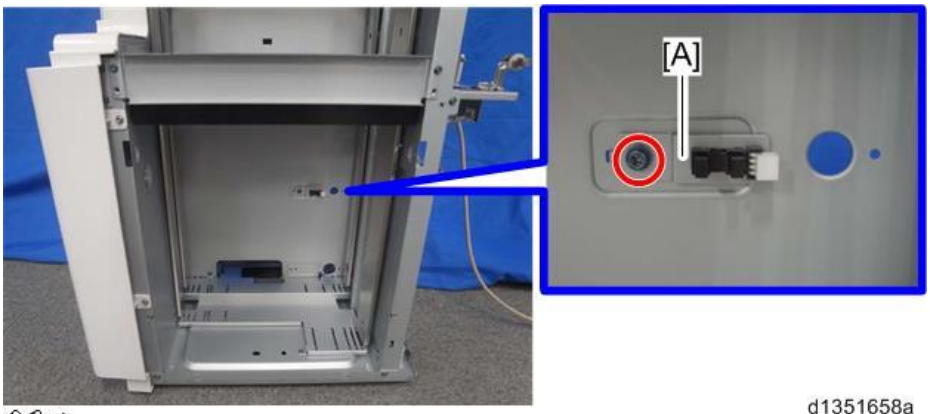
10. Remove the following covers. (LCIT RT4060 (D3HK))

- Upper right cover
- Upper left cover
- Rear left cover
- Rear cover
- Left cover

11. Remove the lower limit sensor bracket [A].

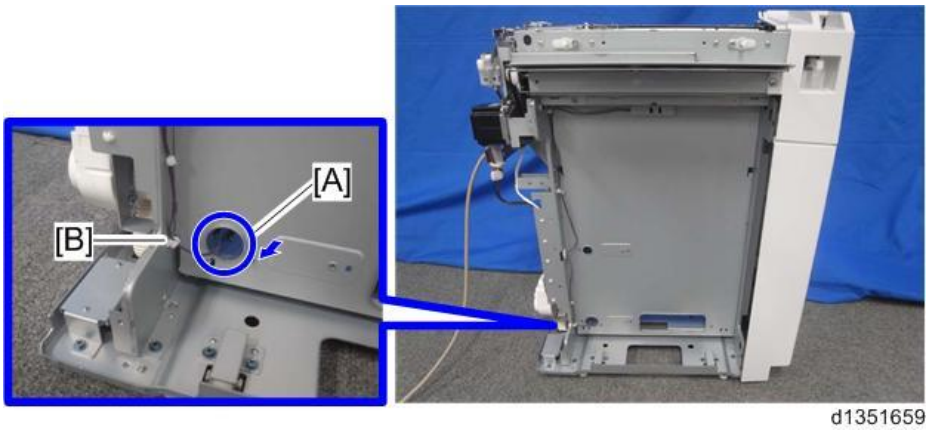


12. Install the lower limit sensor bracket [A] at the higher position.

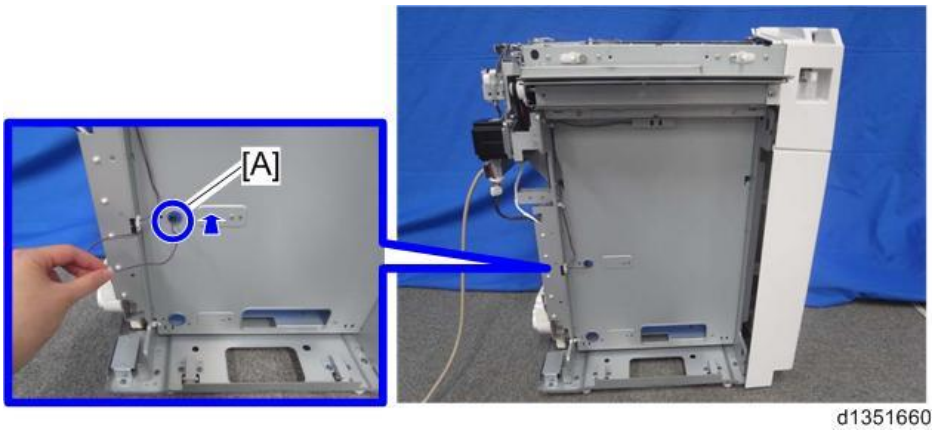


13. Pull the sensor connector wire removed in step 11 through the hole [A] from the left side of the LCIT.

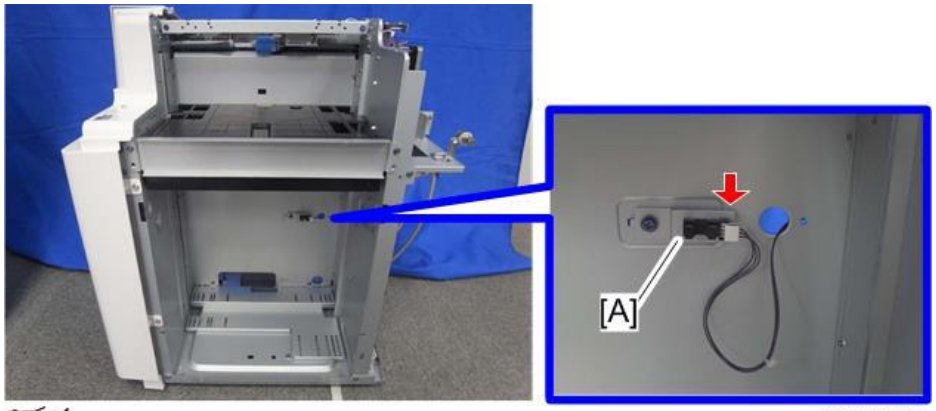
14. Release the sensor connector wire from the clamp [B].



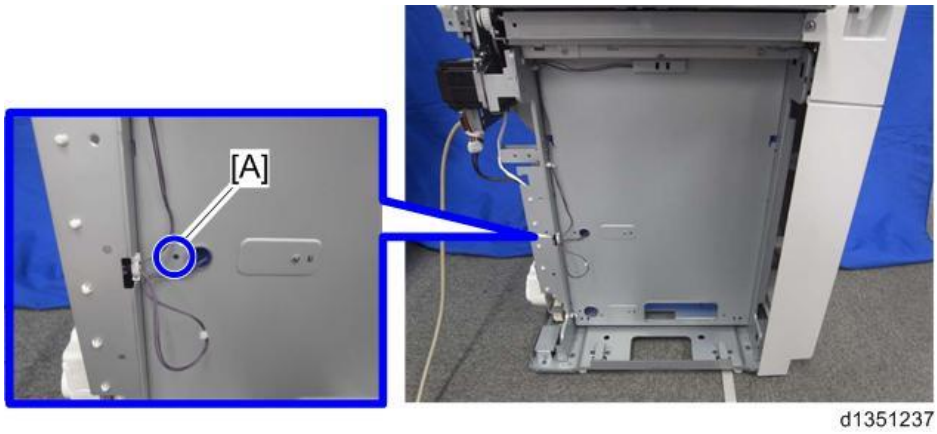
15. Put the sensor connector wire to the right side of the LCIT through the hole [A].



16. Connect the sensor connector wire to the lower limit sensor [A].



17. Attach the harness clamp to the rear of the plate [A]. Use this clamp to hold the sensor connector wire.

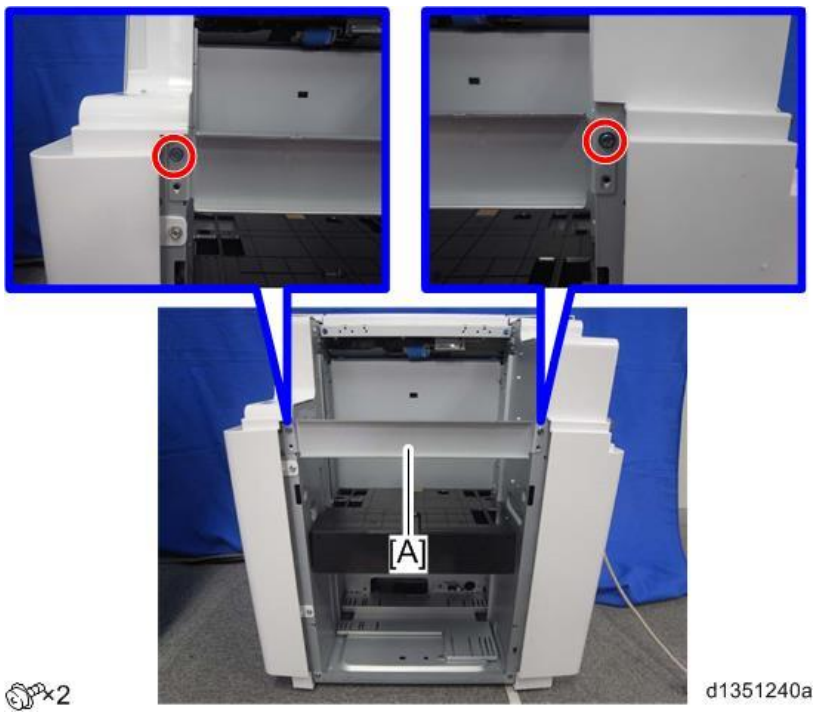


18. Reattach the following covers.

- Left cover
- Rear cover
- Rear left cover
- Upper left cover

19. Remove the right stay [A].

Bring back or discard the stay after removing it.



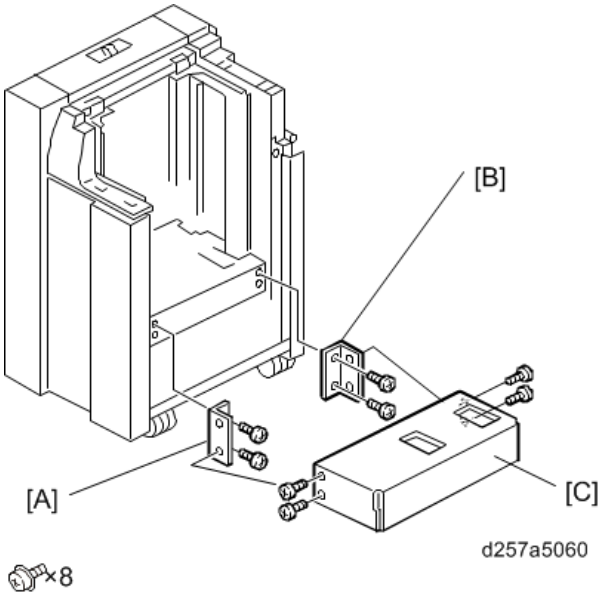
20. Attach the front bracket [A] with the beveled corner down.

Note

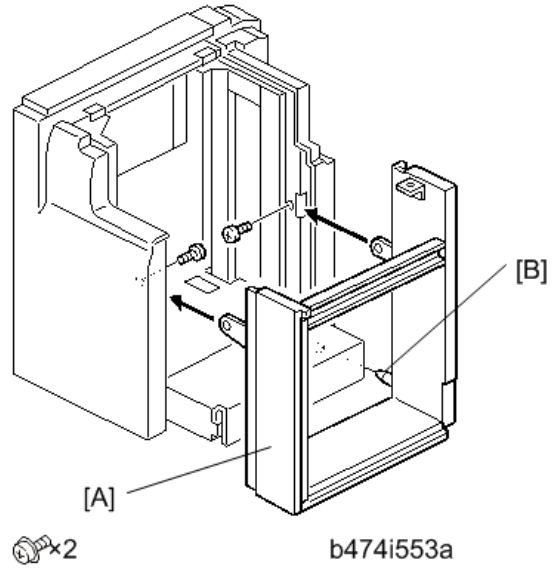
- If the brackets are not easy to install, lift the bottom plate with your hand.

21. Attach the rear bracket [B] with the beveled corner down.

22. Attach the bottom plate extension [C] with the hex screws.



23. Attach the B4/LG frame [A] with the hex screws.

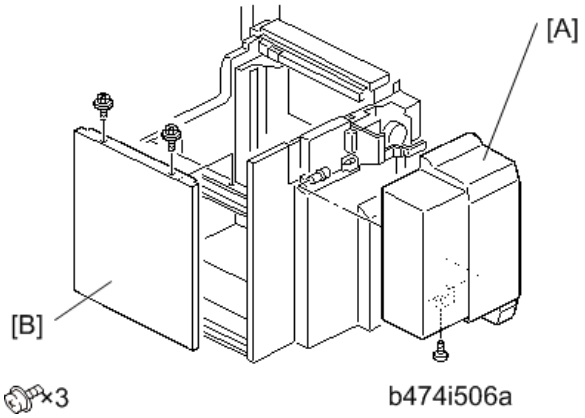


Note

Insert the positioning pin [B] of the B4/LG frame [A] into the hole of the LCIT.

24. Attach the right cover [B].

25. Attach the upper right cover [A] provided with the 8 1/2" x 14" Paper Size Tray Type M2.



26. Install the LCIT on the main machine. (LCIT RT4060 (D3HK))

27. Plug in and turn ON the machine.

28. Go into the SP mode and do 5-959-003.

29. Input "5" for B4 SEF or "6" for 8.5" x 14" SEF.

Copy Tray Type M42 (D3J0)

Accessory Check

No.	Description	Q'ty
1	COPY TRAY:EXIT:ASS'Y	1
2	BRACKET:COOLING UNIT:ASS'Y	1
3	COOLING UNIT:ASS'Y	1
4	CLAMP:LWC-3A	1

2.Installation

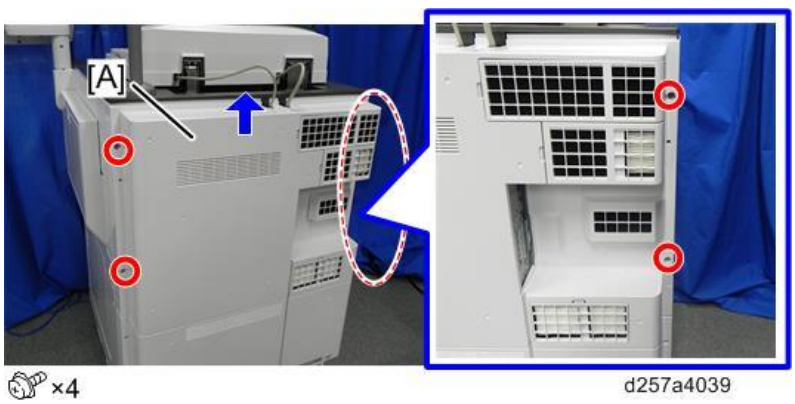
No.	Description	Q'ty
5	TAPPING SCREW:4X12	2
6	TAPPING SCREW:ROUND POINT:3X6	2
7	SCREW:M4X20	5
8	Paper height sensor	1
9	Caution decal	1
10	Tapping screw: 3x8	2
11	Harness	1
12	Polyester film	1
13	Guide	1
14	Bracket	1
-	EMC sheet	1
-	Operating instructions	1

Installation Procedure

⚠CAUTION

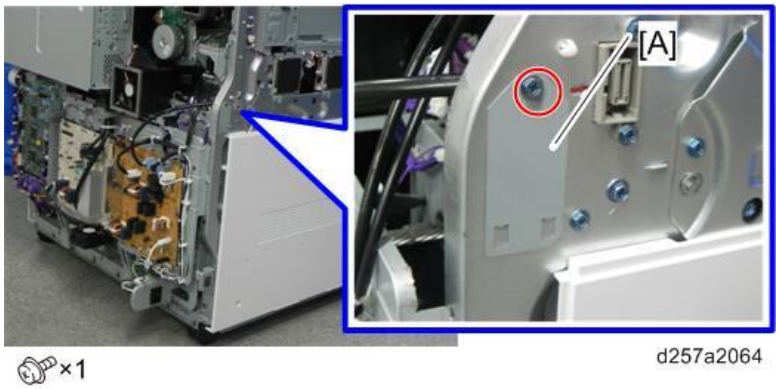
- Turn the machine off and disconnect the machine power cord before doing this procedure.

1. (IM C6500/C8000 only) Remove the rear middle cover.

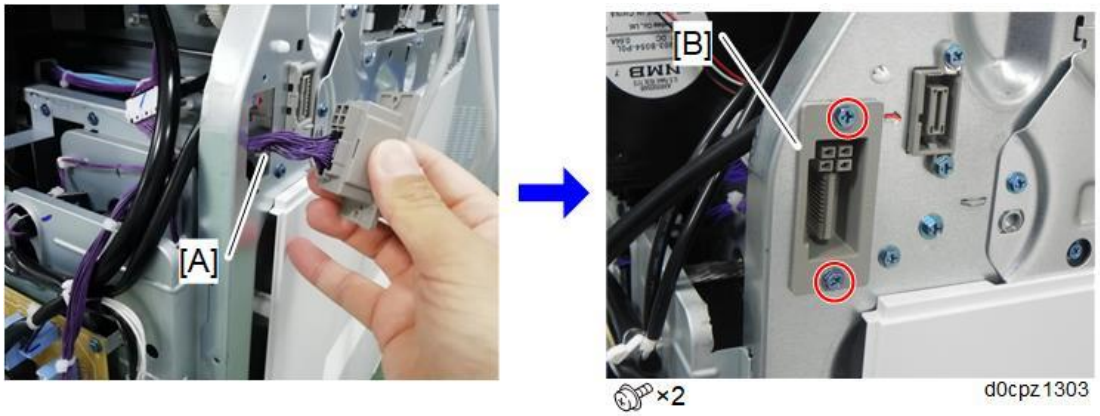


2. (IM C6500/C8000 only) Remove the rear lower cover.

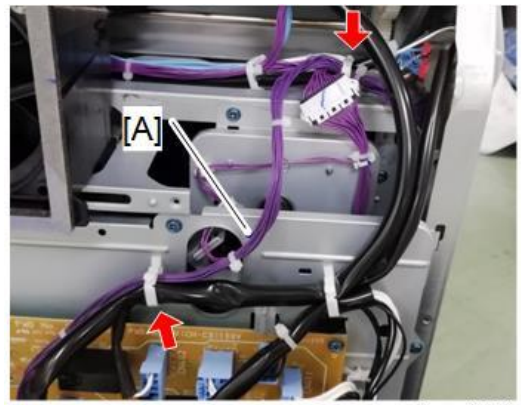
3. (IM C6500/C8000 only) Remove the left upper cover.
4. (IM C6500/C8000 only) Remove the relay connector cover [A].



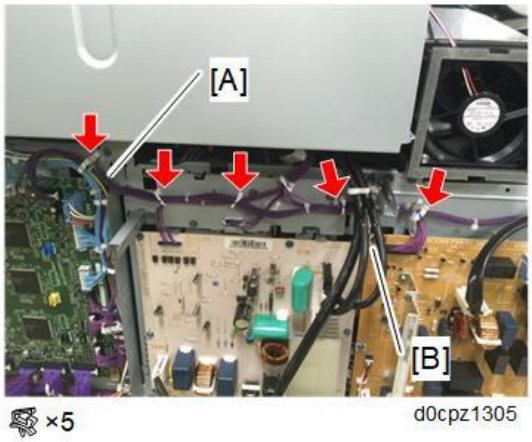
5. (IM C6500/C8000 only) Pass the harness [A] through the hole and connect the drawer connector [B].



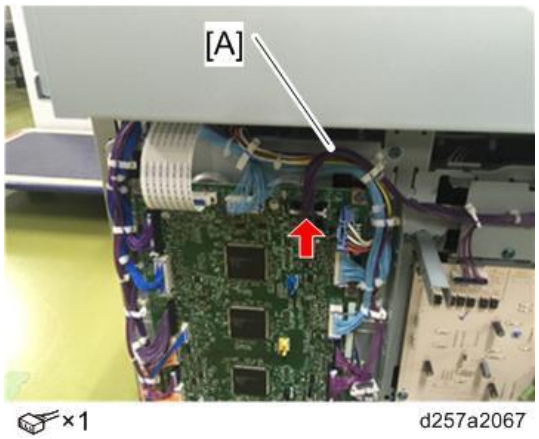
6. (IM C6500/C8000 only) Clamp the harness [A].



7. (IM C6500/C8000 only) Clamp the harness [A]. Pass the harness under the black tubes.

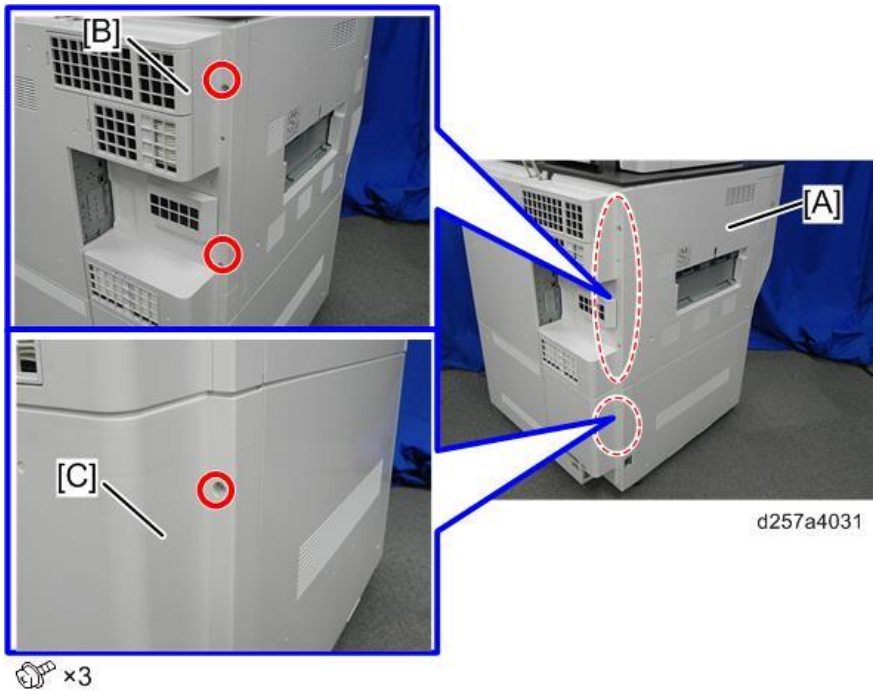


8. (IM C6500/C8000 only) Connect the harness [A] to CN272 of the PFB.

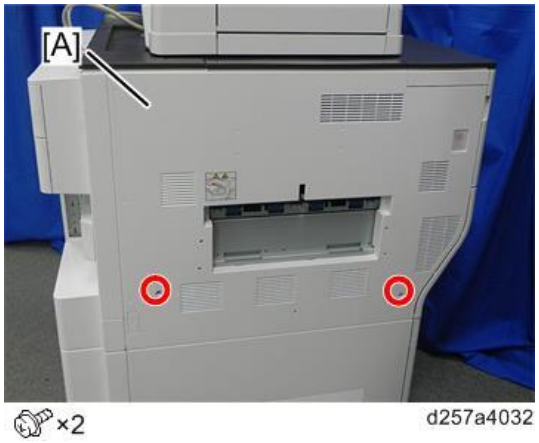


9. To make it easier to remove the left middle cover [A], remove the screws from the rear middle

cover [B] and the rear lower cover [C].

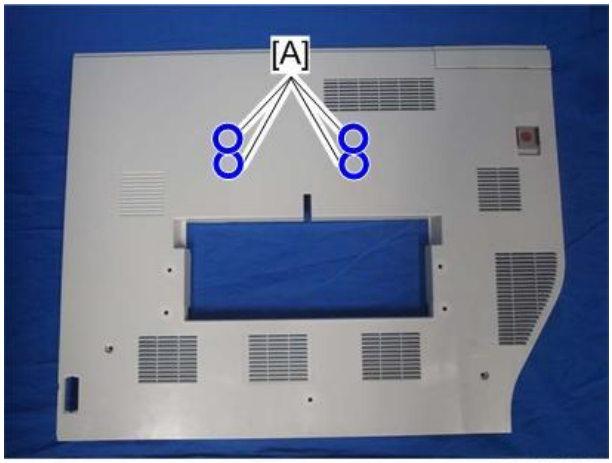


10. Remove the screws of the left middle cover [A].



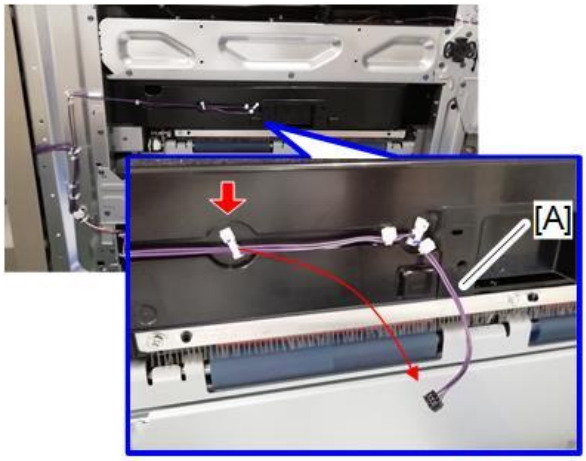
11. Hold the positions shown below and pull the left middle cover [A] toward you to remove it.

12. Make four holes [A] in the left middle cover with a screwdriver.



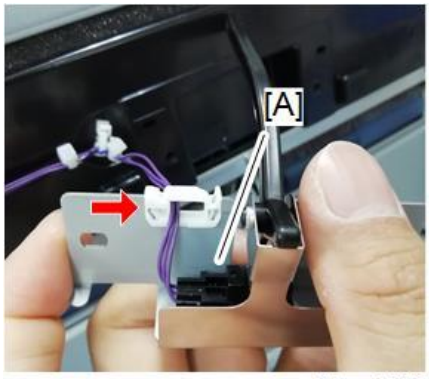
d1351766

13. Unclamp the edge of the harness [A].



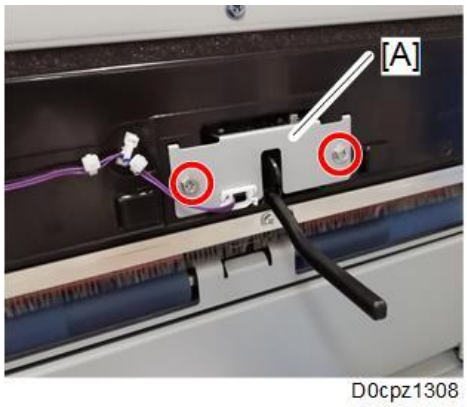
D0cpz1306

14. Connect the paper height sensor [A] and clamp it.



D0cpz1307

15. Attach the sensor bracket [A] to the main machine. (M4x12)



D0cpz1308

16. (IM C6500/C8000 only) Reattach the left upper cover, the rear lower cover and the rear middle cover.

17. Reattach the left middle cover.

18. Remove the connector cover [A].

d257a5063

19. Open the drawer unit [A].

d257a3003

20. Attach the sheet [A] to the left side of the main machine.

⚠CAUTION

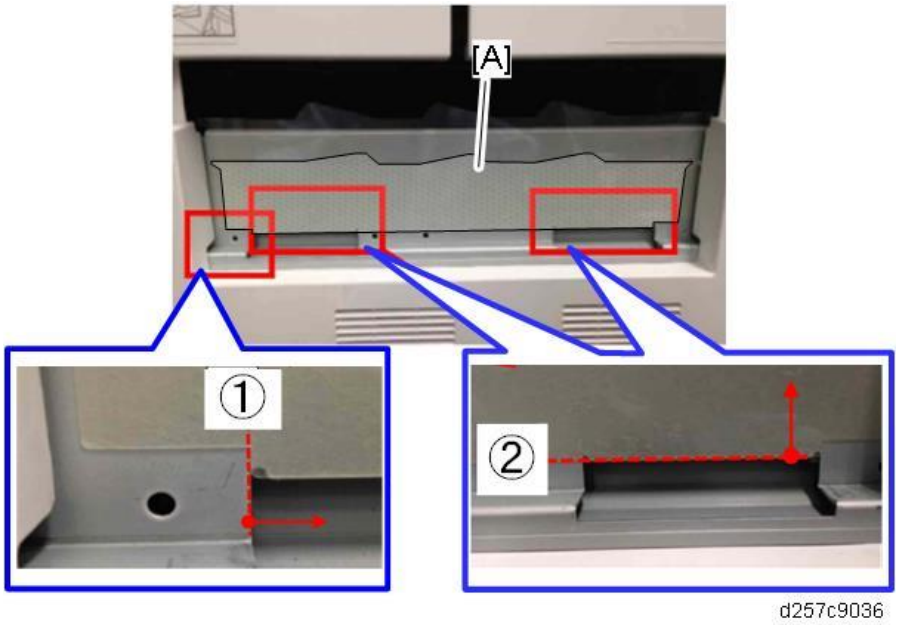
If the sheet is not attached, paper may fall down from the copy tray into the fusing drawer while opening the drawer unit, which can cause an error (fusing unit not set).

Note

Before attaching, wipe the attaching place with alcohol to remove dirt or oil and make sure that the

attaching place is dry when attaching the sheet.

After attaching the sheet, press the sheet attached several times to stick it firmly.



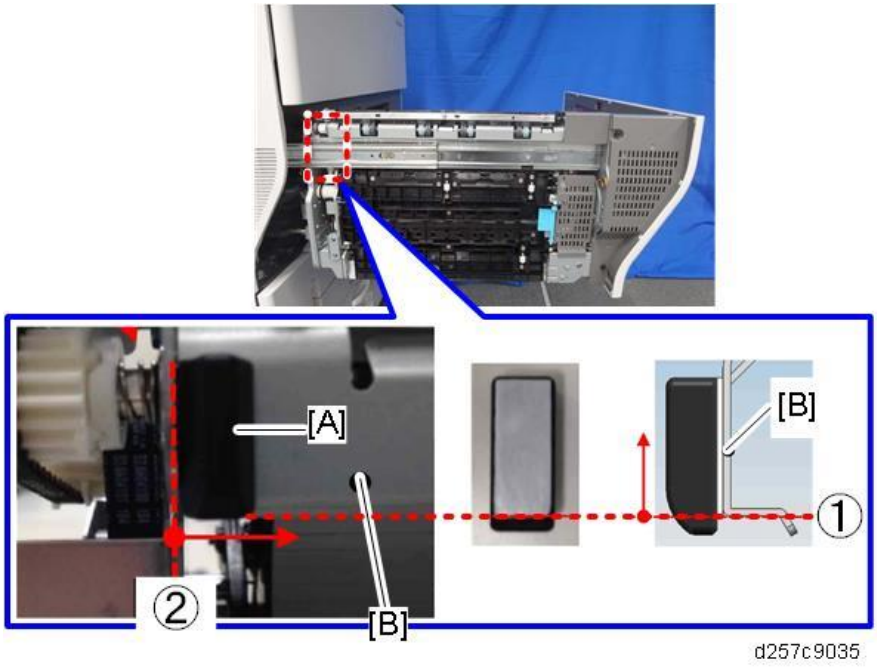
Note

Attach the sheet in the direction of the red arrow, within 0.5 mm.

Left-right direction: Align the sheet edge with the plate edge ①.

Up-down direction: Align the sheet lower edge with the plate edge ②. Be sure that double-sided tape of the sheet does not exceed the lower edge of the exit guide plate.

21. Attach the guide [A] to the paper exit plate [B] of the drawer unit.



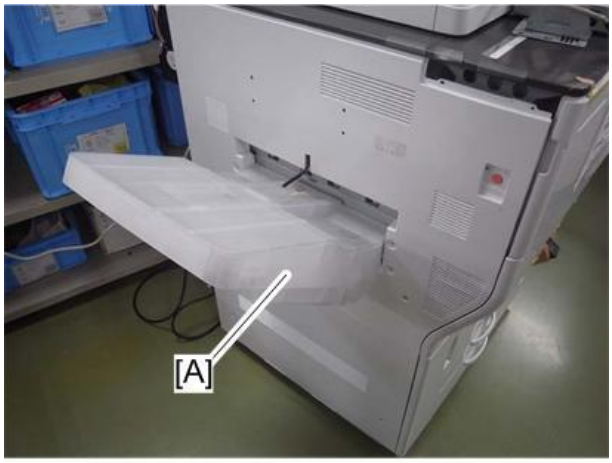
Note

Attach the sheet in the direction of the red arrow, within 0.5 mm.

Left-right direction: Align the lower edge of the double-sided tape with the exit guide edge ①.

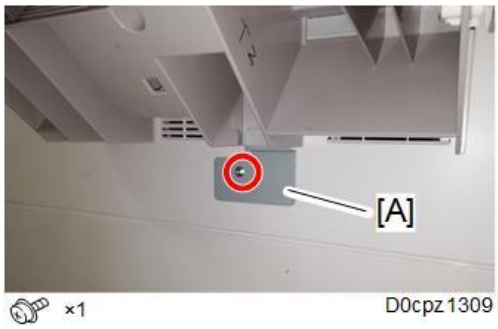
Up-down direction: Hit the wall part ② of the exit guide plate.

22. Attach the copy tray [A].



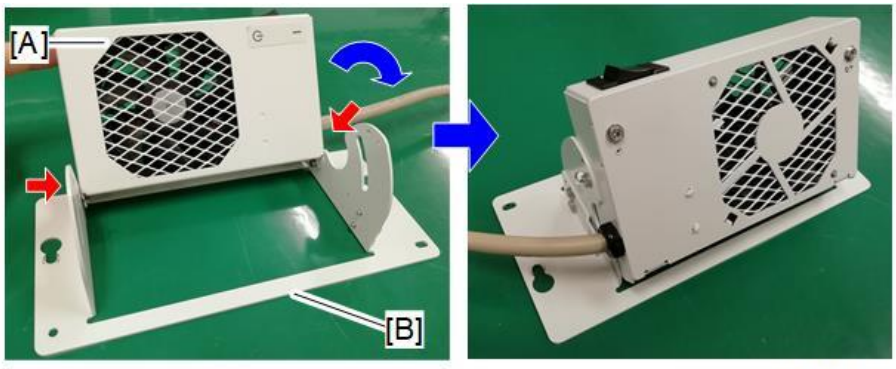
d1351767

23. Attach the bracket [A] under the copy tray.



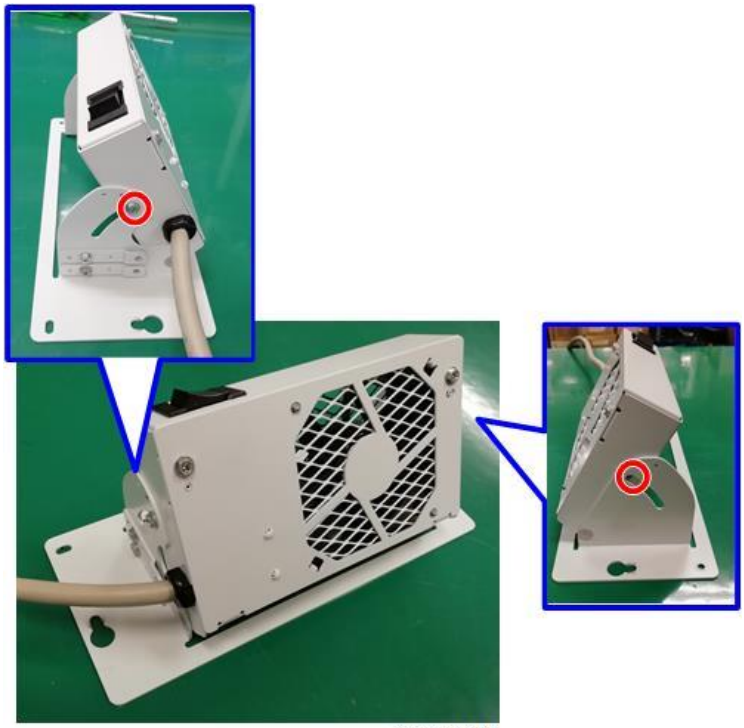
×1 D0cpz1309

24. Install the cooling unit [A] on the cooling unit bracket [B]. (hook x2)



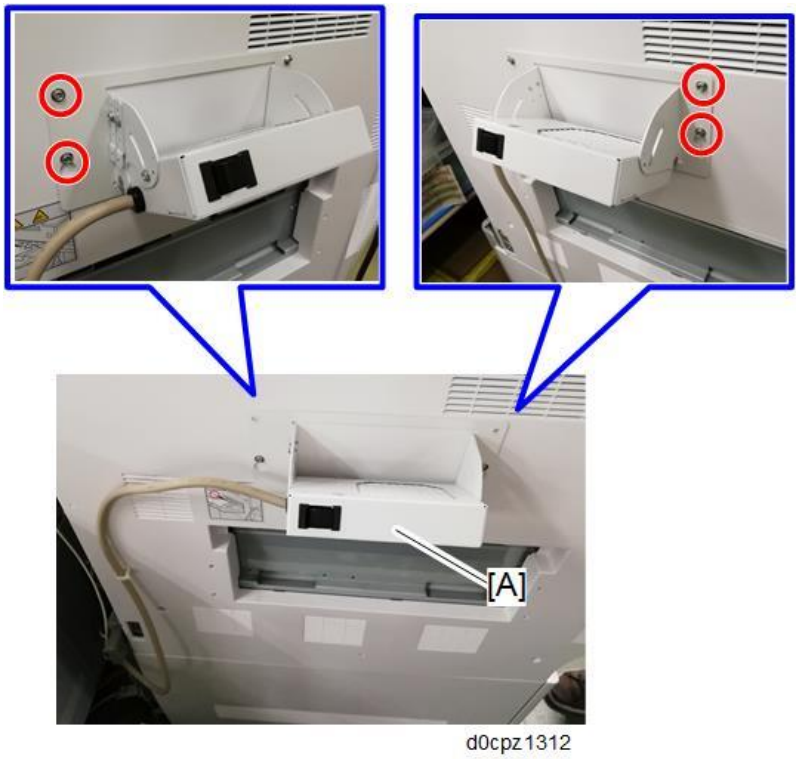
d0cpz1310

25. Fasten the cooling unit to the cooling unit bracket. (M3 x 6)



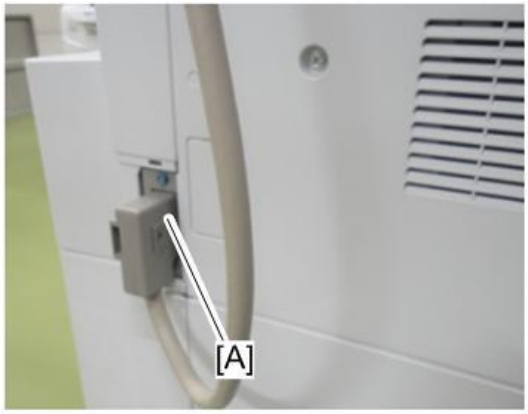
d0cpz1311

26. Install the cooling unit bracket [A] on the main machine. (M4 x 20)



d0cpz1312

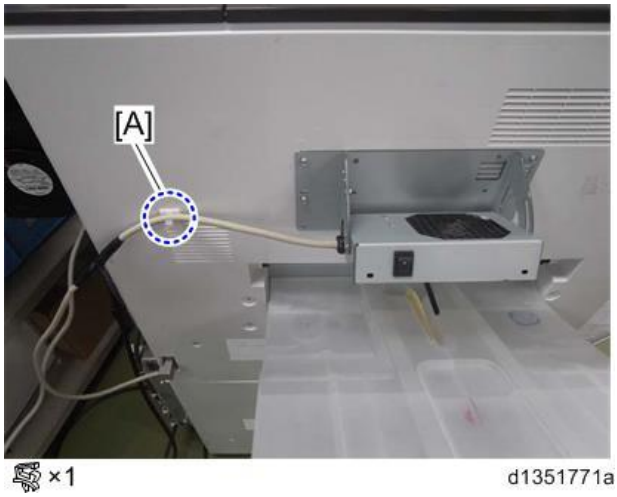
27. Connect the interface cable [A].



Important

- If you leave this connector unconnected, **SC530-10** occurs.

28. Attach the cable clamp [A] provided with the copy tray to the main machine. Then route the harness as shown below.



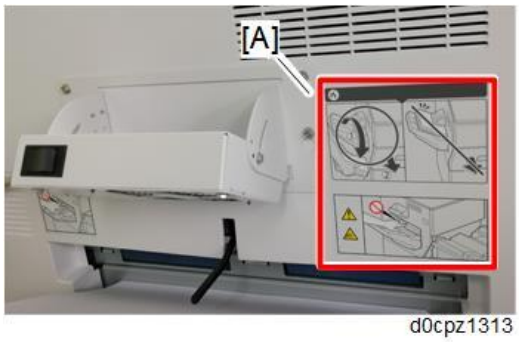
29. Turn the machine main power switch ON.

30. Set **SP1-907-001** (Exit Tray Full Detection) to "**1: ON**".

Note

- The default setting of this SP is "0: OFF". It must be set to "1: ON" for tray full detection to work.

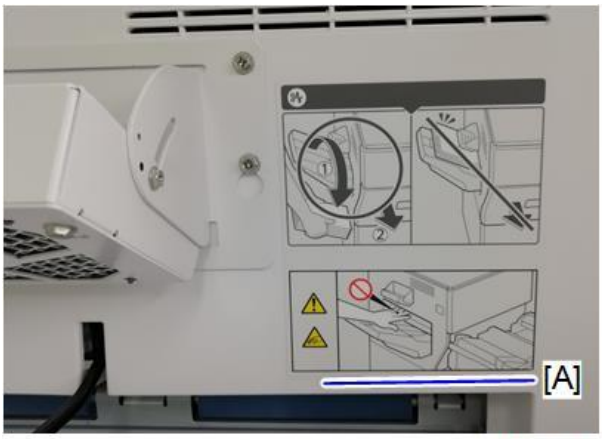
31. Attach the decal [A] to the left side of the main machine.



d0cpz1313

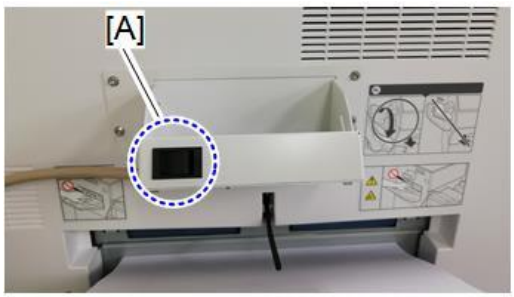
Note

- Align the lower side of the decal with the marker [A] on the main machine.



d0cpz1314

32. Turn the power switch [A] of the cooling fan ON.



d0cpz1315

Important

- Always keep the power switch of the cooling fan ON. This is because the fan is installed to prevent paper from sticking together and jamming during duplex printing due to undried toner. (The fan stops when the print/copy job is complete.)
- If the sound of the fan is unacceptable to the customer, or the air from the fan pushes thin paper off the exit tray, advise the customer to power off the fan as necessary.
- If jams still occur while the fan is ON, tilt the fan 90 degrees as described in Troubleshooting for Blocking on the Paper Output Tray.

Decurl Unit DU5080 (D3HZ)

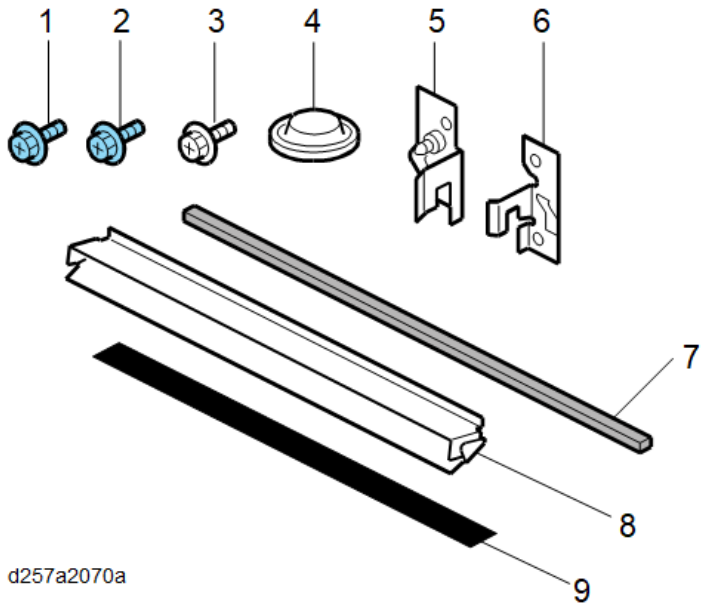
⚠CAUTION

- The decurl unit is top heavy and has an extremely narrow base. It can fall over easily. Work carefully to avoid knocking it over.
- Do not set this unit upright until you are ready to install it and connect it to the side of the main machine.
- Never leave this unit standing upright and unattended in the work area during installation.

Accessories

Check the quantity and condition of the accessories in the box against the following illustration and list.

No.	Description	Q'ty
1	Screws M3x6	2
2	Screws M4x16	4
3	Screws M4x8	4
4	Leveling Shoes	3
5	Joint Bracket – L	1
6	Joint Bracket – R	1
7	Sponge Strip	1
8	Entrance Guide Plate	1
9	Sheet – Black	1
-	EMC Address	1



Installation Procedure

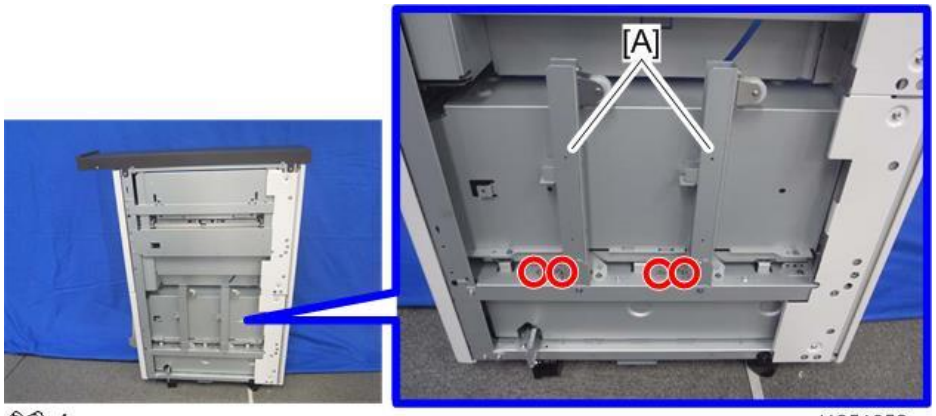
⚠CAUTION

- Make sure that the main machine is switched off and that its power cord is disconnected before doing the following procedure.
- When moving this unit, move it together with the main machine linked to it. If you try to move only the unit, it may fall down, causing injury.

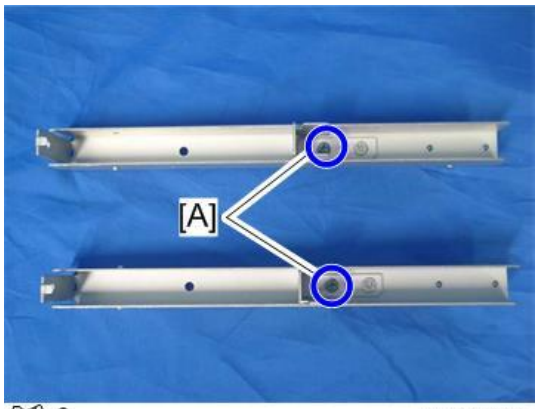
1. Remove the retainers [A].

Note

- Keep the screws. They will be needed to reinstall the retainers after connecting the decurl unit with the main unit.



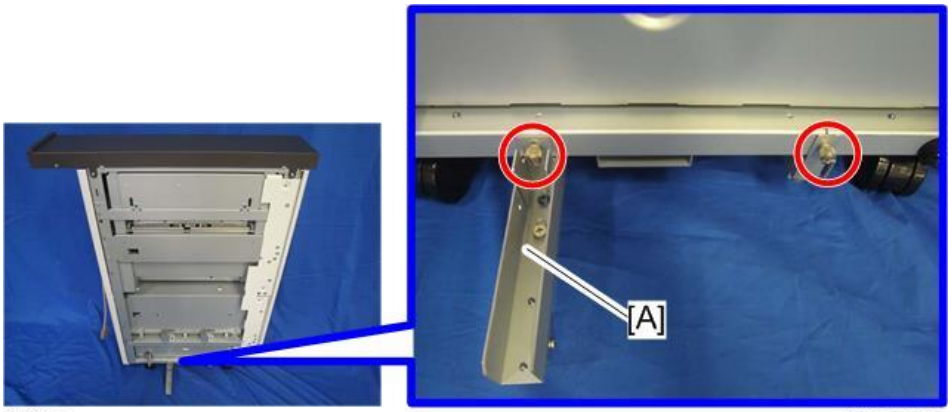
2. Loosen the screws [A] of the retainers.



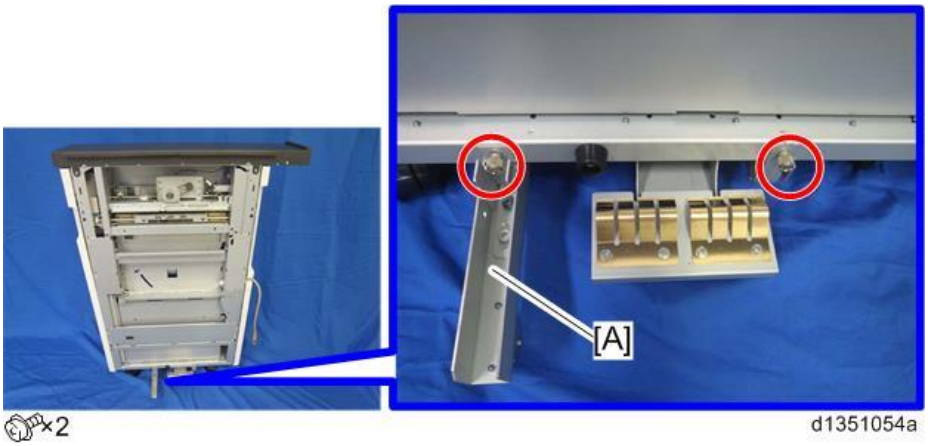
3. Install the retainers on the decurl unit.

Install the retainers [A] alternately on both sides of the decurl unit as shown below.

- Left side of the decurl unit

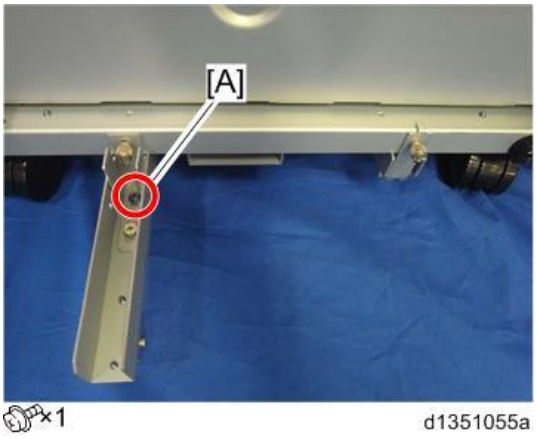


- Right side of the decurl unit

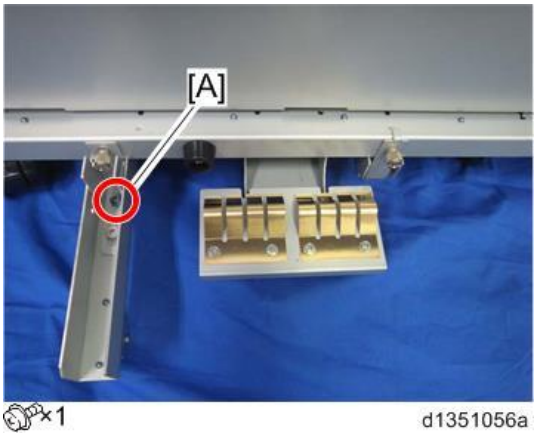


4. Fasten the screws [A] loosened in step 2.

- Left side of the decurl unit

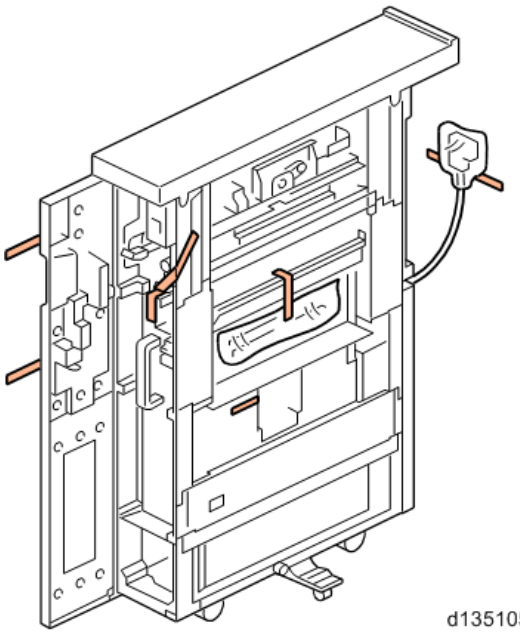


- Right side of the decurl unit



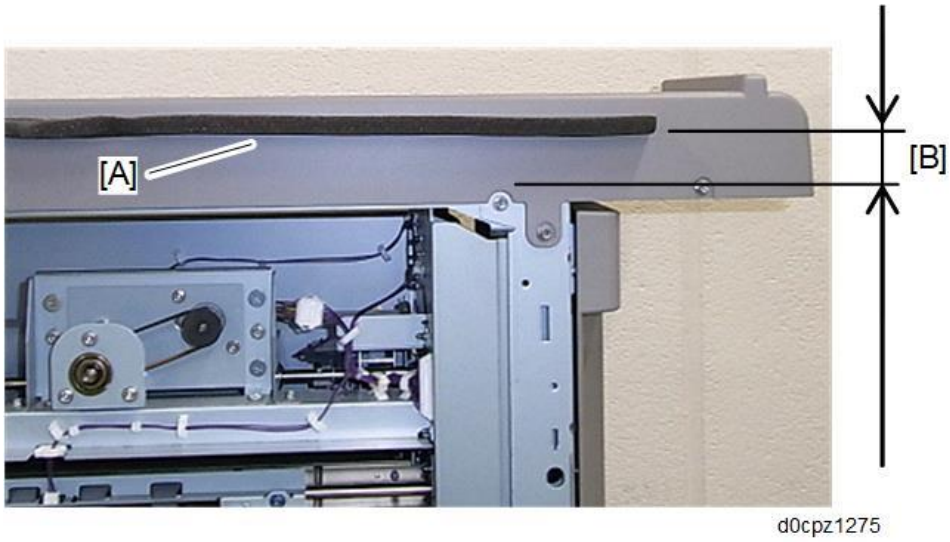
5. Open the front door.

6. Remove tape and retainers.

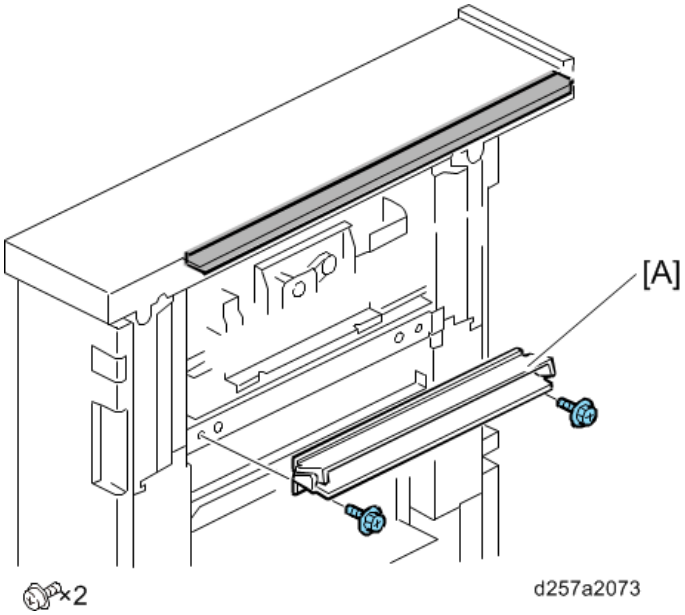


7. Peel the tape from the sponge strip [A] and attach it to the top right edge of the unit. ([B]: 25 -

30mm)

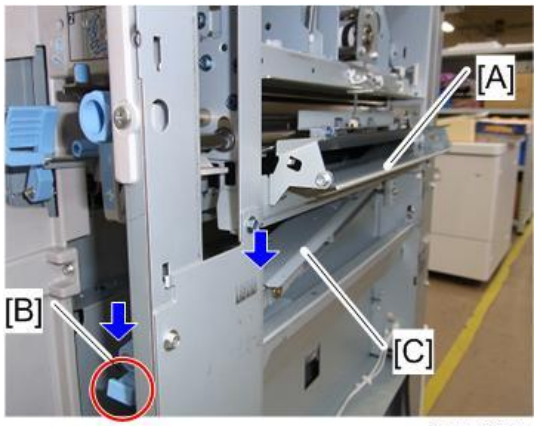


8. Attach the entrance guide plate [A]. (M3x6)



Note

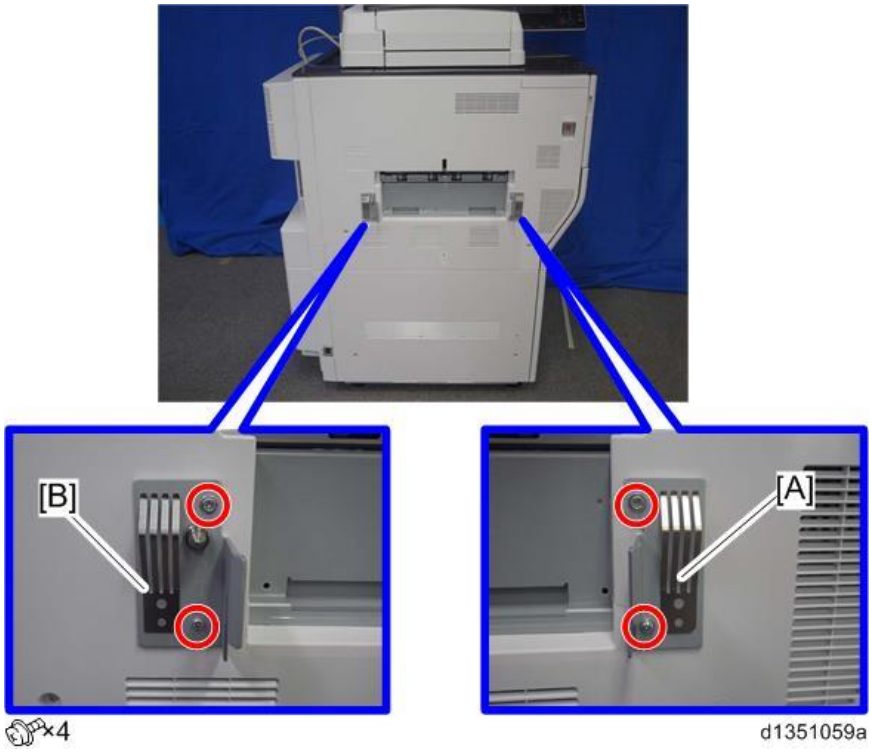
Attach the entrance guide plate [A] while pressing the K4 button [B] which opens the lower transport guide [C].



d257a2071

9. Attach the following to the main machine:

- [A] Right connecting bracket, marked "R" (M4x16)
- [B] Left connecting bracket, marked "L" (M4x16)



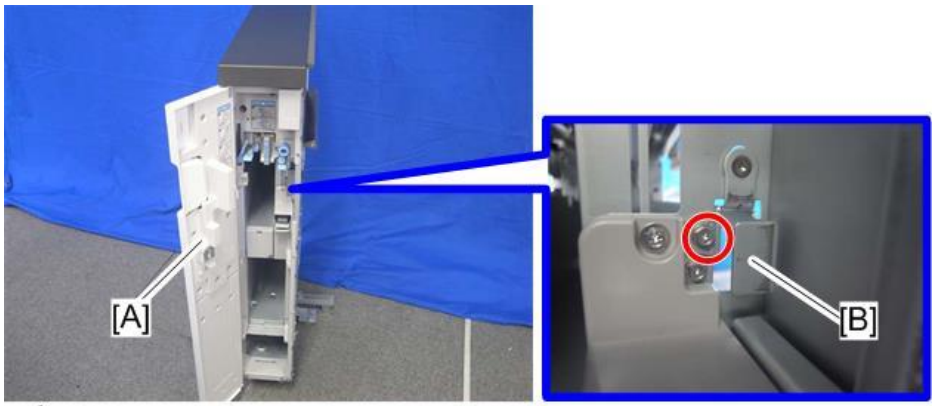
d1351059a

10. Remove the interface connector cover [A] from the main machine.

d1351060

11. Open the front door [A].

12. Remove the screw of the lock bar [B]. Keep this screw.



×1 d1351061a

13. Remove the retainers installed in step 3.

14. Push the decurl unit [A] against the main machine so that the lock bar is below the connecting brackets.

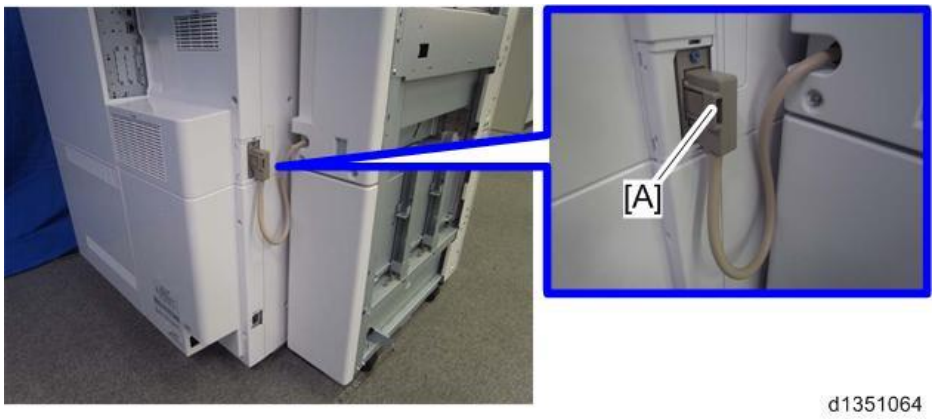
d1351062

15. Push in the lock bar [A] and fasten it with the screw removed in step 12.

×1 d1351063a

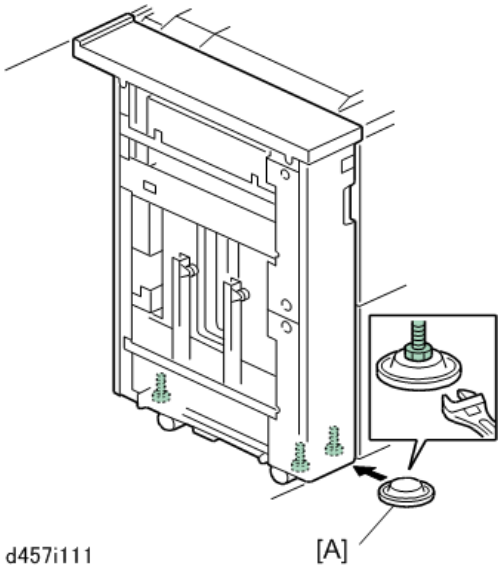
16. Reinstall the retainers [A] removed in step 13 as shown below.

17. Connect the I/F cable [A] of the decurl unit to the main machine.



18. Set the leveling shoes [A].

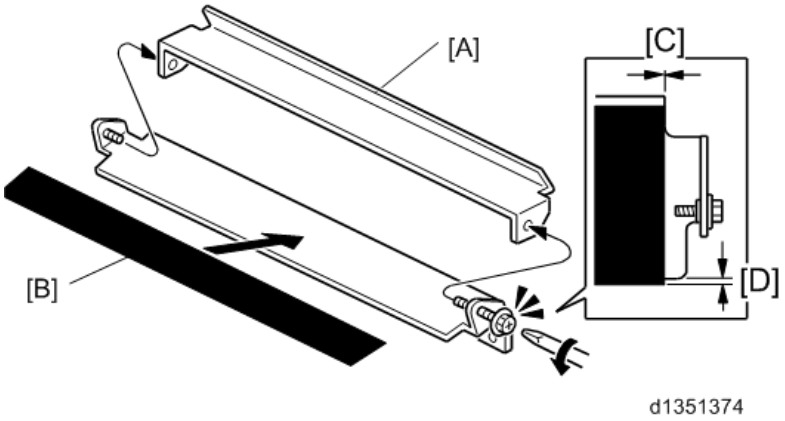
19. Adjust the height of the unit and make sure that it is level.



20. Remove the entrance guide plate of the downstream device.

21. Disassemble the entrance guide plate [A].

22. Attach the black sheet [B].



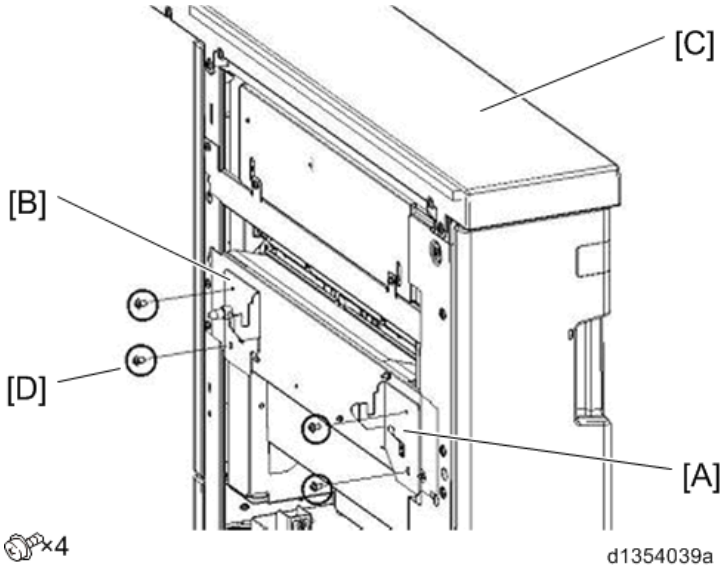
- [C]: 0 to 1 mm
- [D]: 0 to 1 mm

Important

- If the downstream device is Buffer Pass Unit Type S6 (D3D0), don't attach the black sheet. The sheet for the buffer pass unit is provided with the buffer pass unit.

Docking with Downstream Devices

If finisher SR5090, SR5100, or Multi-Folding unit FD5020 is to be docked with this option:
When fastening the joint bracket [A] [B] provided with the finishers to the decurl unit [C], use the screw [D] (M4x8) provided with the decurl unit [C].
Do not use the screw (M4x20) provided with the finisher.



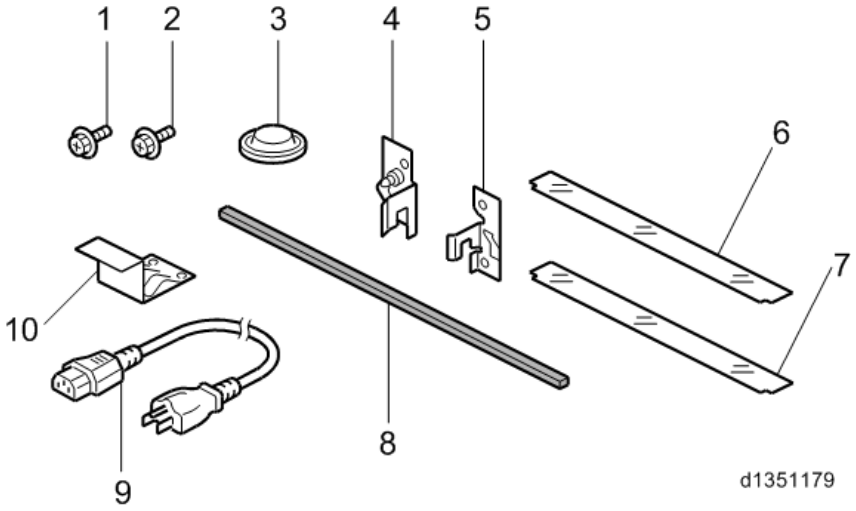
Paper Curl Adjustment When Decurl Unit DU5020 Connects with Finisher SR5090/5100 or Booklet Finisher SR5120

1. Print out 10 sheets of A4/LT in stapling mode, LEF.
2. Check the paper curl.
3. Adjust the paper curl in [System setting] - [Paper curl Correction level].

Buffer Pass Unit Type S9 (D3FC)

Accessory Check

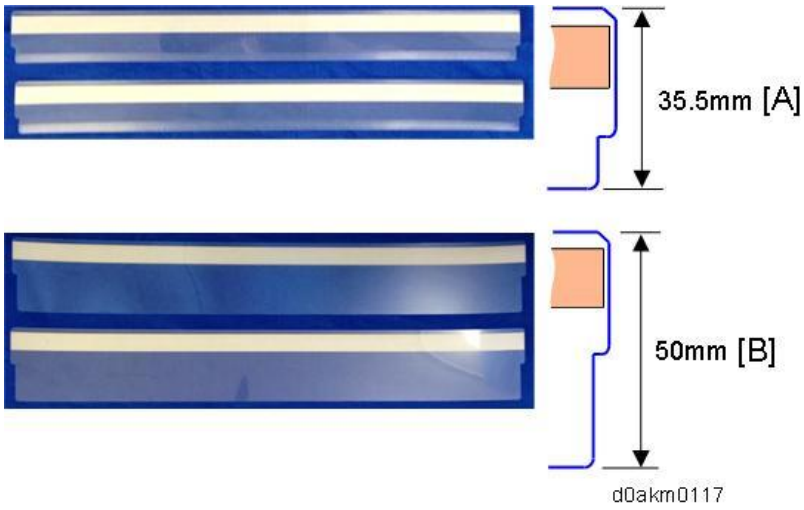
Check the quantity and condition of the accessories in the box against the following list:



No.	Description	Q'ty
1	Tapping Screws - M4 x 8	6
2	Tapping Screws - M4 x16	4
3	Leveling Shoes	4
4	Joint Bracket (L)	1
5	Joint Bracket (R)	1
6	Narrow Guide Sheets (35.5mm)*1	2
7	Wide Guide Sheets (50mm)*1	2
8	Sponge Strip	1
9	Power Cord	1
10	Ground Plate	1

*1 Guide sheets of two different widths are provided: 35.5 mm [A] and 50 mm [B].

Guide Sheet	When to Use The Sheets
Wide Guide Sheets (50mm)	The wider guide sheets should be attached to the entrance guide of the buffer pass unit. However, if the decurl unit is installed, these sheets are not necessary.
Narrow Guide Sheets (35.5mm)	The narrower guide sheets should be attached to the entrance guide of the downstream peripheral.



Installation

⚠CAUTION

- The unit must be connected to a power source that is close to the unit and easily accessible.
- Make sure that the main power switch and AC power switch of the main machine are turned OFF and that its power cord is disconnected before doing the following procedures.
- The buffer pass unit is unstable and can fall over easily. To avoid personal injury or damage to the unit, use caution when you pull out the buffer pass unit drawer until the unit has been docked to the main machine.
- The power cord that comes with the buffer pass unit is for use with this equipment only. Do not use it with other options. Doing so could result in fire or electric shock.
- Rated voltage of output connector for accessory [A]: Max. DC 24 V.

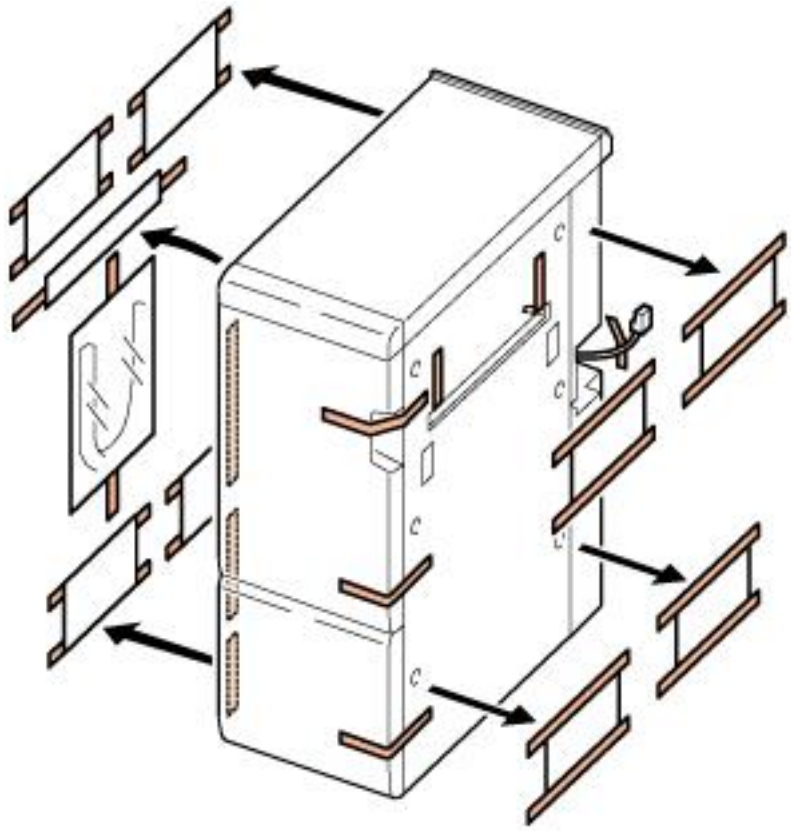
Fuse Rating (DC5V, DC24V Fuse)

PCB: CTB

	ID	Rating	Manufacturer	Type No.
[A]	FU1	DC32V/5A	IDEC CORP	NRPS10-G5A
[B]	FU2	DC6V/1.5A	TYCO ELECTRONICS CORP	miniSMDC150F

Removing the Entrance Guide Plate

1. Remove all visible external tape.

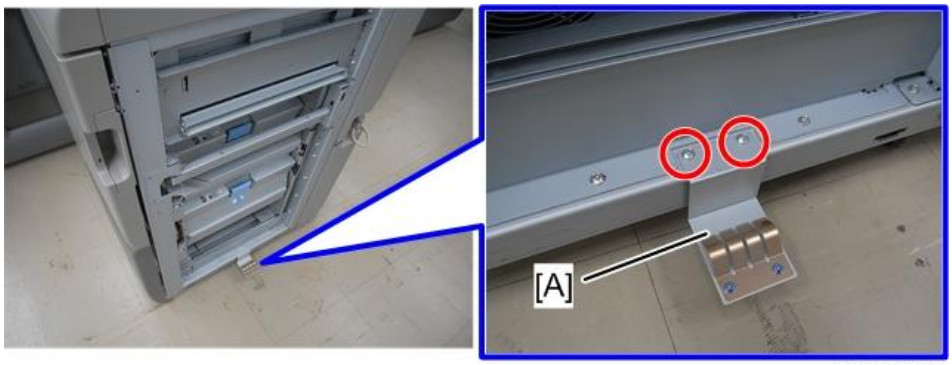


2. Open the front door and remove all visible tape.

3. Remove the right cover [A] of the buffer pass unit. (x6)

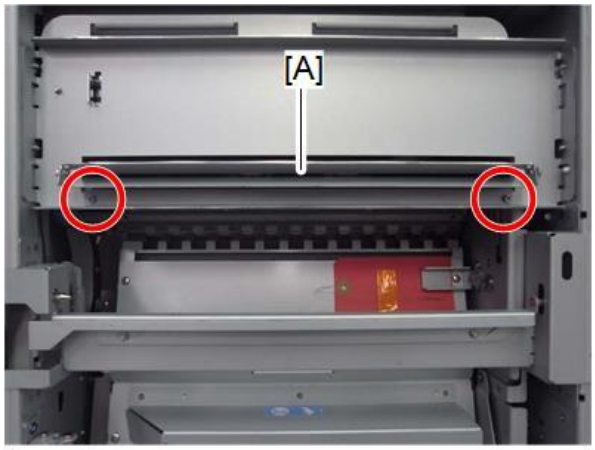
d194z0049

4. Attach the ground plate [A].(x 2)



d194z0050

5. Remove the entrance guide plate [A].

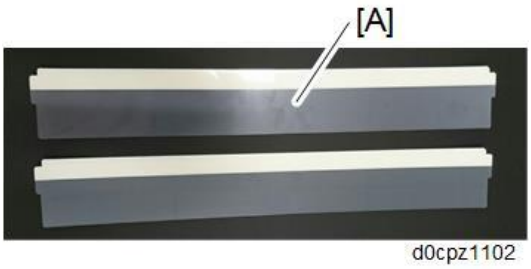


×2 d1351022a

For Installing the Buffer Pass Unit to the Upstream Peripherals

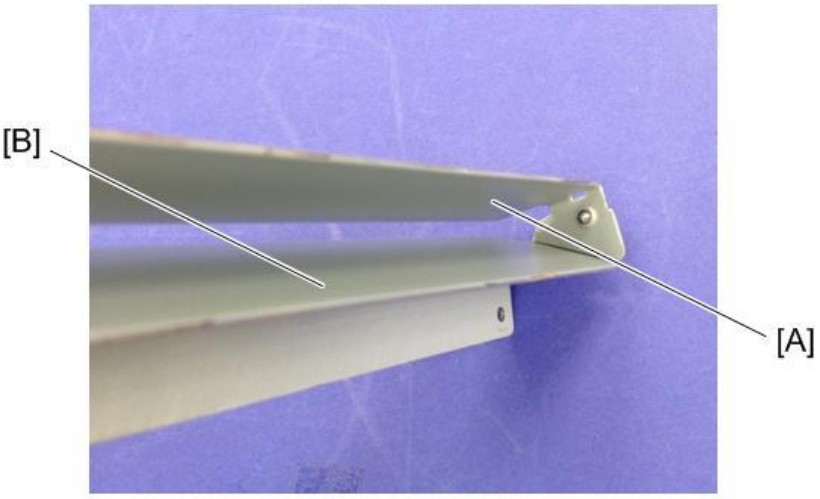
To Connect with the Main Machine

Attach the polyester film [A] (Width 50.0mm) to the entrance guide plate.



d0cpz1102

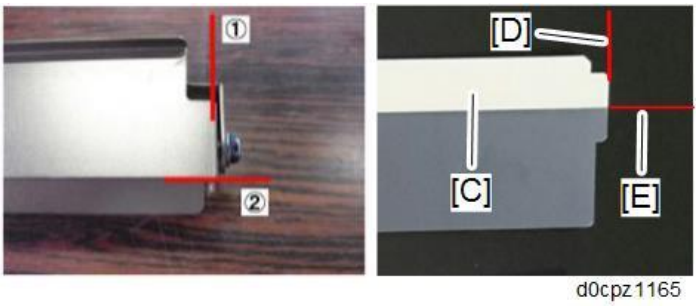
Attach the polyester film on the position [A] and [B].



d1359955

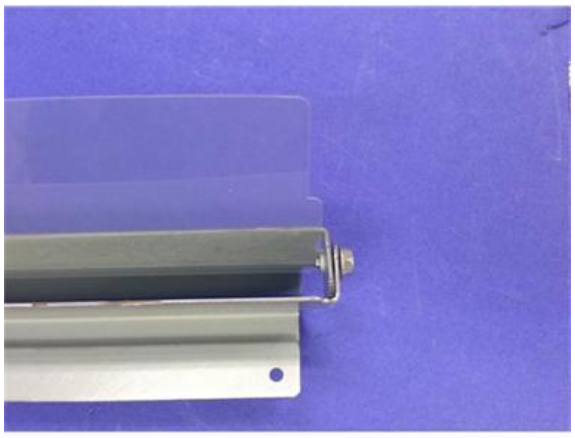
To Attach the Film on Position [A]

1. Peel off the double-sided tape of the film [C].
2. Align the edge of the film [D] with ① (guide plate), and the edge of the double-sided tape [E] with ② (guide plate).



d0cpz1165

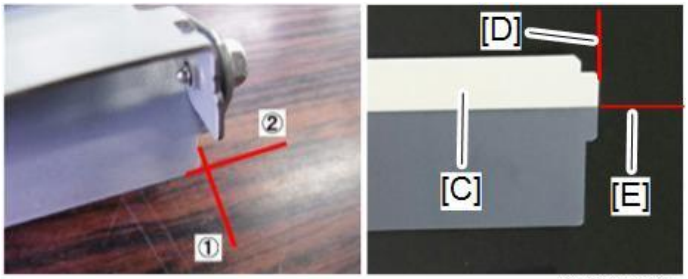
Attached:



d1359962a

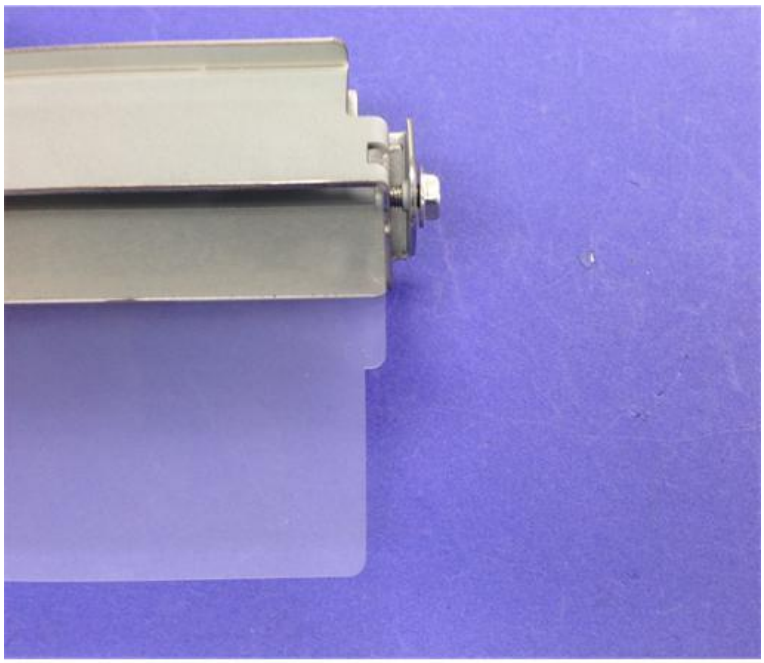
To Attach the Film on Position [B]

1. Peel off the double-sided tape of the film [C].
2. Align the edge of the film [D] with ① (guide plate), and the edge of the double-sided tape [E] with ② (guide plate).



d0cpz1166

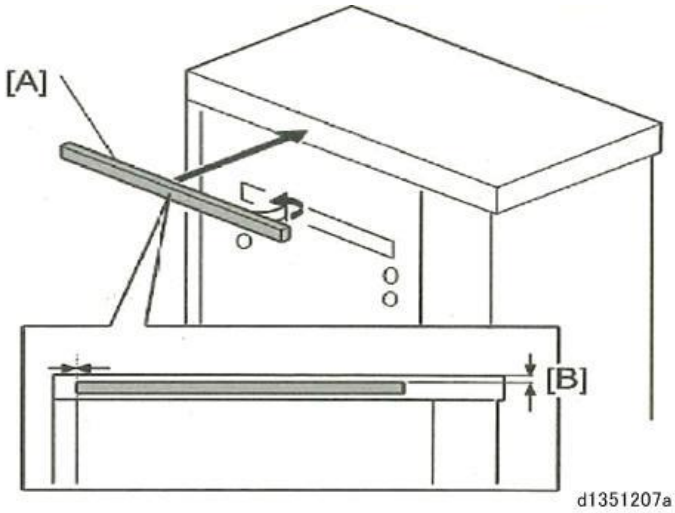
Attached:



d1359965

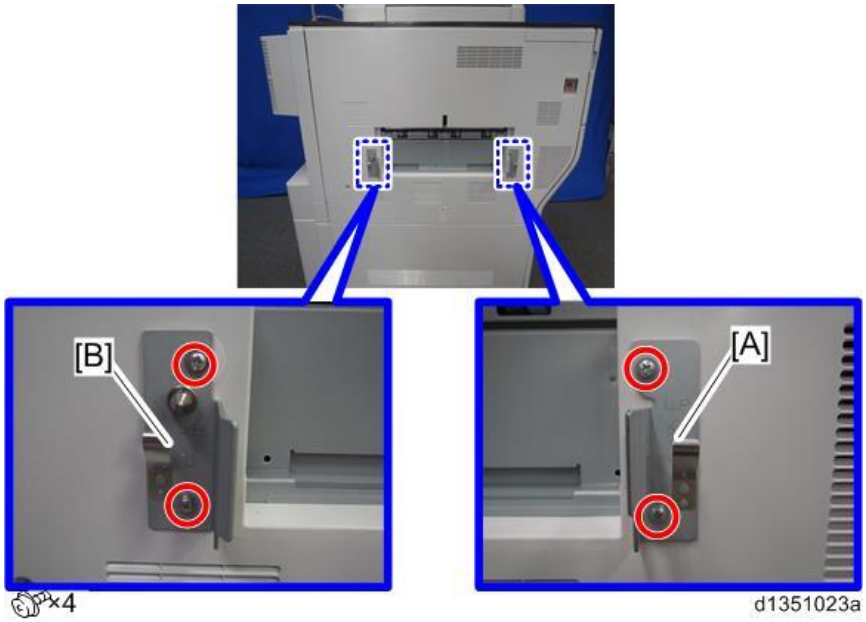
3. Put back the entrance guide plate.
4. Attach the right cover. (x 6)

5. Attach the sponge strip [A] (provided with this option) to the Buffer Pass Unit as shown in the illustration below.

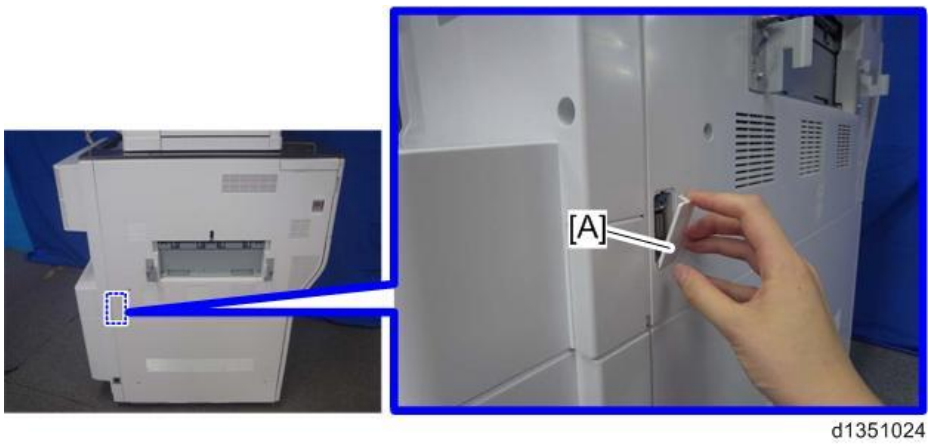


[B]: 5mm

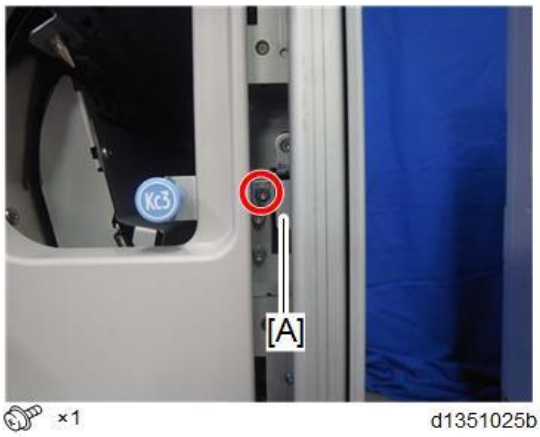
6. Attach the joint brackets to the main machine. (x4: M4x16)



7. Remove the connector cover [A].



8. Pull out the docking lever [A]. (x1)



9. Set the shoes and push the buffer pass unit against the main machine.

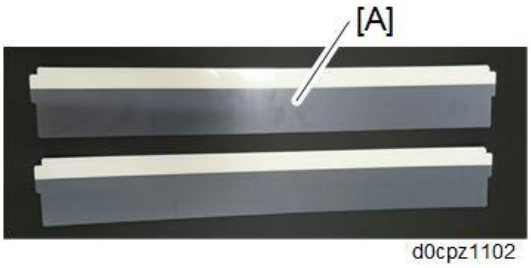
10. Put back the docking lever.

11. Connect the interface cable of the buffer pass unit to the inlet of the main machine.

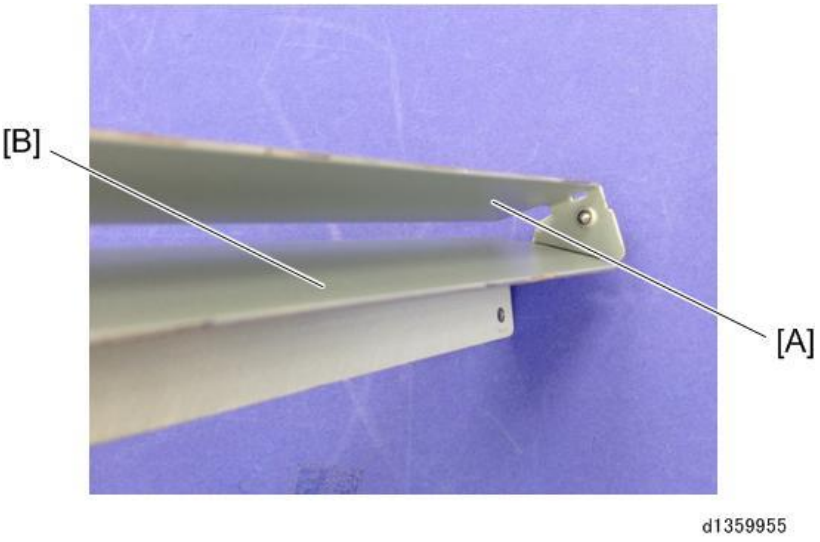
12. Proceed to "Common Procedure" for later steps.

To Connect with the Decurl Unit

Attach the polyester film [A] (Width 50.0mm) to the entrance guide plate.

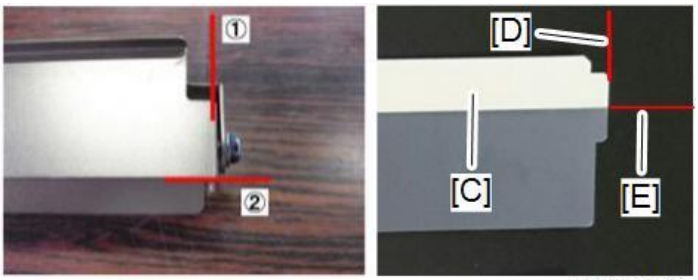


Attach the polyester film on the position [A] and [B].



To Attach the Film on Position [A]

1. Peel off the double-sided tape of the film [C].
2. Align the edge of the film [D] with ① (guide plate), and the edge of the double-sided tape [E] with ② (guide plate).



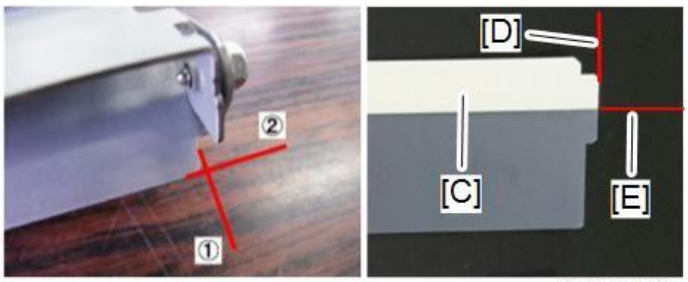
d0cpz1165

Attached:

d1359967

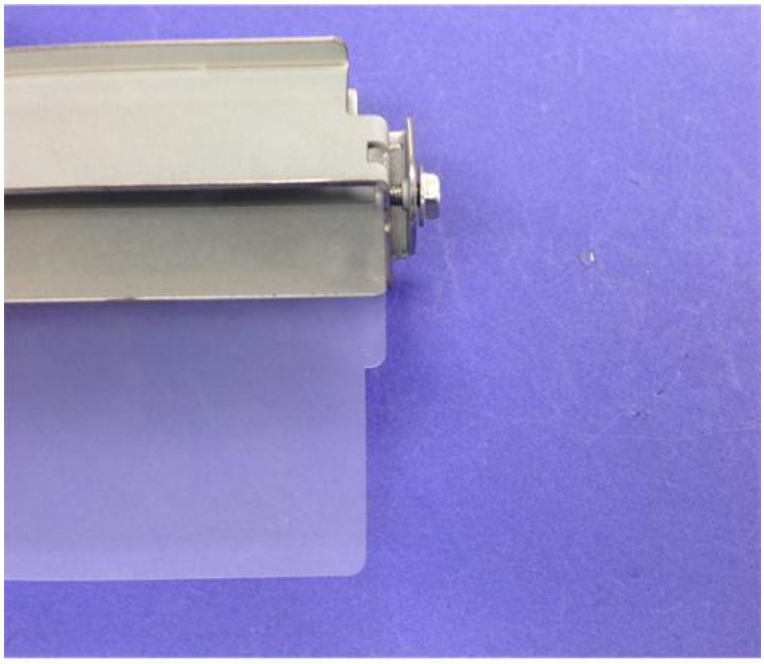
To Attach the Film on Position [B]

1. Peel off the double-sided tape of the film [C].
2. Align the edge of the film [D] with ① (guide plate), and the edge of the double-sided tape [E] with ② (guide plate).



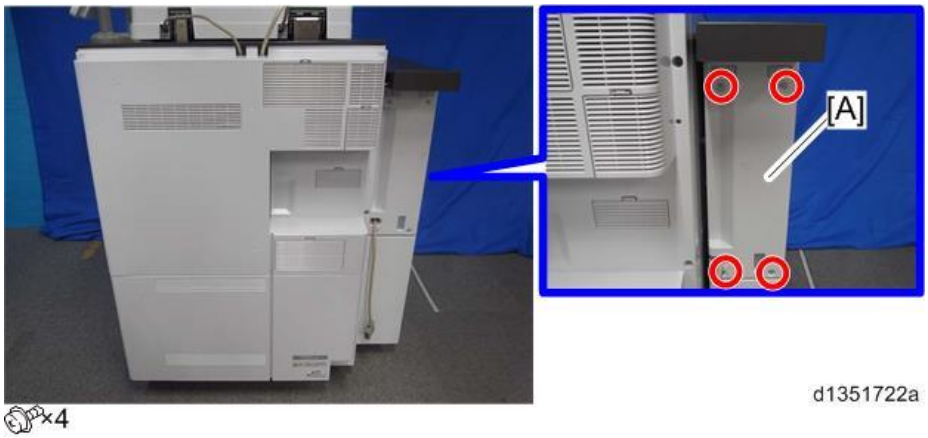
d0cpz1166

Attached:



d1359965

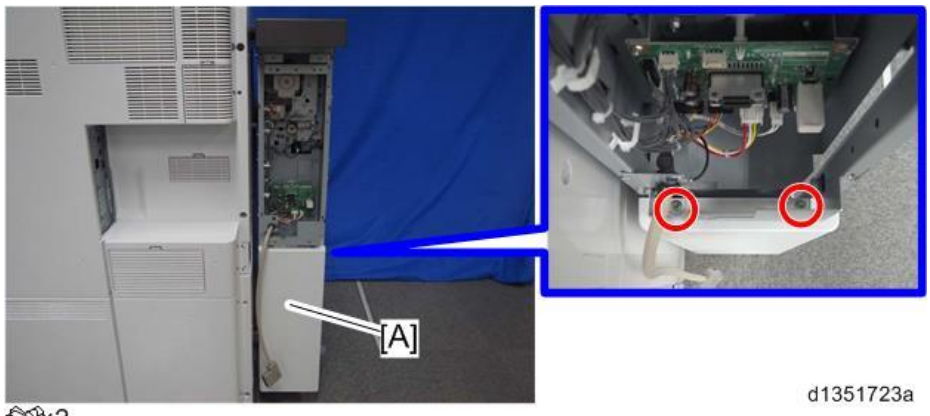
3. Put back the entrance guide plate.
4. Attach the right cover. (x 6)
5. Remove the rear upper cover [A] of the decurl unit.



d1351722a

×4

6. Remove the rear lower cover [A] of the decurl unit.

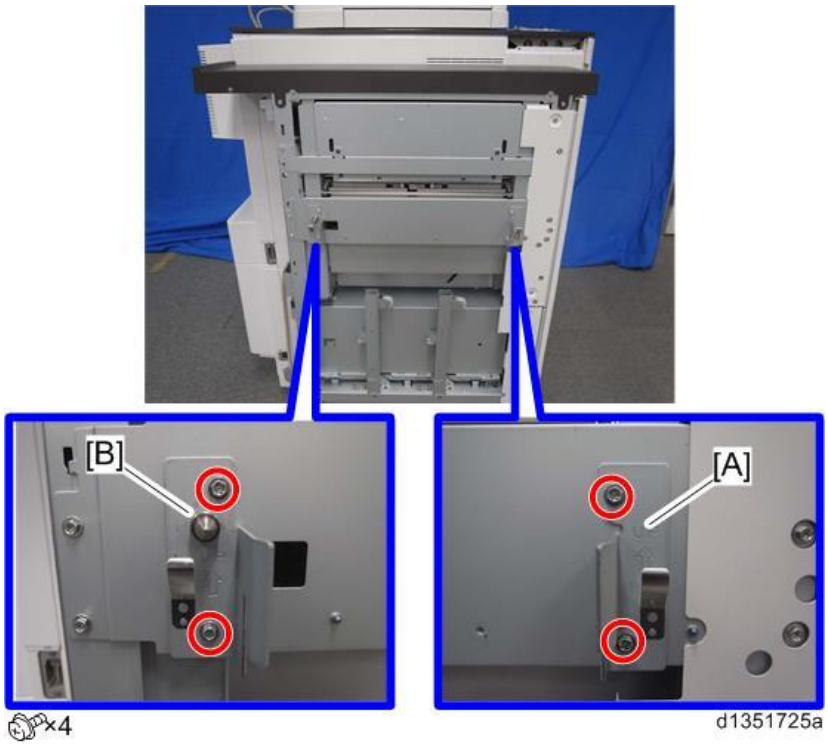


d1351723a

×2

7. Remove the bracket [A] from the decurl unit.

8. Attach the joint bracket (front) [A] and (rear) [B] to the paper exit section of the decurl unit. (M4 x 16)

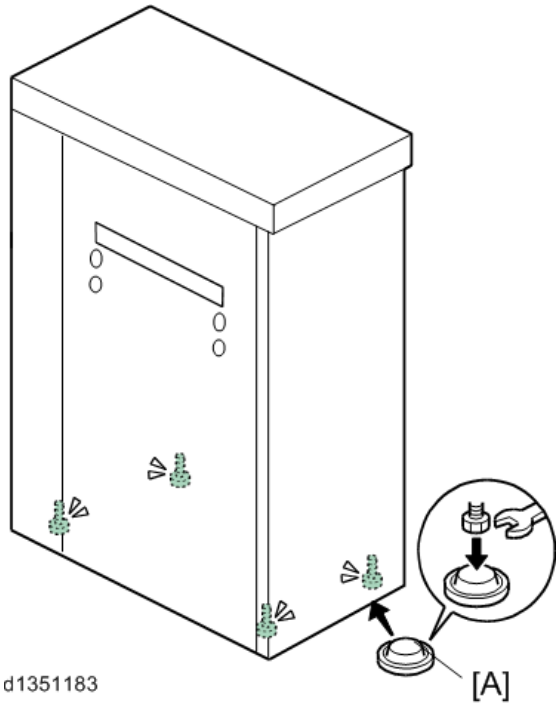


9. Connect the interface cable of the buffer pass unit to the inlet [A] of the main machine.

d1359957

For Installing the Buffer Pass Unit to the Downstream Peripherals

1. Set the leveling shoes [A] and adjust the height of the unit.



d1351183

2. Remove the 2 screws [A] on the front side of clamping bracket [D].

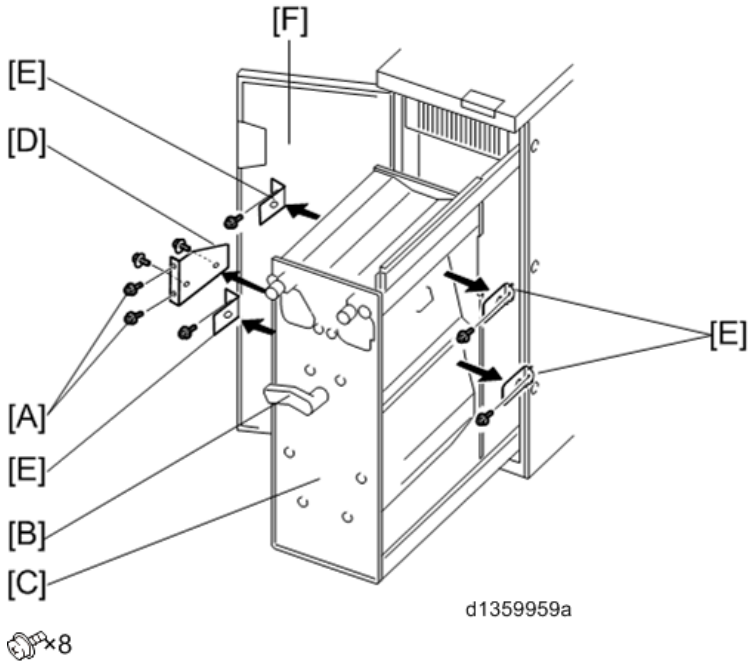
3. Turn the Kc5 lever [B] counter clockwise and pull out the buffer pass unit drawer [C].

4. Remove the clamping bracket [D].

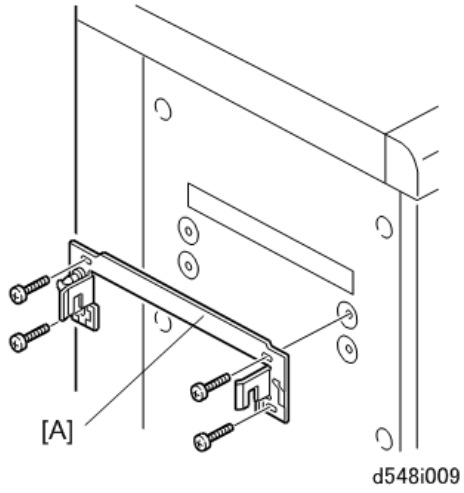
5. Remove the 4 shipping brackets [E].

6. Slide in the buffer pass unit drawer [C].

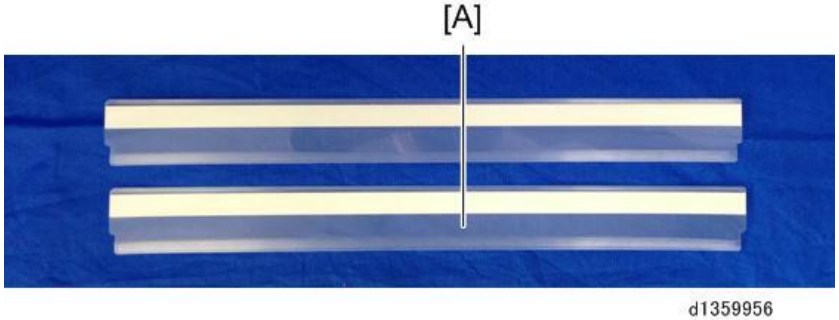
7. Close the front door [F].



8. Attach the connecting bracket [A] of the downstream device to the left side of the buffer pass unit.



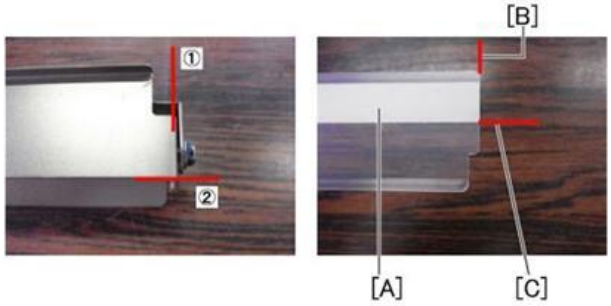
9. Attach the Narrow Guide Sheet [A] (35.5mm, accessories item #7) to the entrance guide of the downstream device by referring to the procedure in the following section.



Attaching the Narrow Guide Sheet to the Upper Entrance Guide

1. Peel off the release paper from the double-sided tape [A] on the Narrow Guide Sheet.

2. Attach the Narrow Guide Sheet to the upper entrance guide by aligning the edge [B] of the double-sided tape with the edge (1) of the guide plate, and the edge [C] of the double-sided tape with the edge (2) of the guide plate.



d1359968

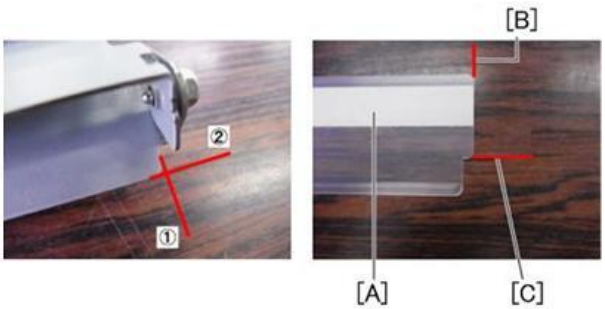
3. Confirm that the Narrow Guide Sheet is attached correctly to the upper entrance guide as shown in the photo below.

d1359968-1

Attaching the Narrow Guide Sheet to the Lower Entrance Guide

1. Peel off the release paper from the double-sided tape [A] on the Narrow Guide Sheet.

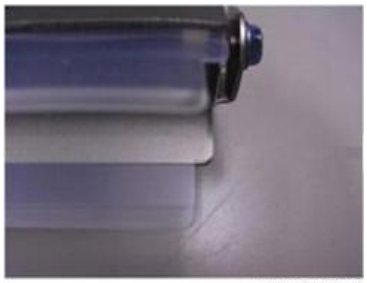
2. Attach the Narrow Guide Sheet to the lower entrance guide by aligning the edge [B] of the Guide Sheet with the edge (1) of the guide plate, and edge [C] of the double-sided tape with the edge (2) of the guide plate.



d1359969

3. Confirm that the Narrow Guide Sheet is attached correctly to the lower entrance guide as shown in

the photo below.



d1359969-2

Completing the Installation

1. Dock the downstream peripherals to the buffer pass unit.
2. Connect the power cord [A] provided with the buffer pass unit to the power inlet on the buffer pass unit.

d1351657

3. Connect the buffer pass unit power cord to the wall socket, and then connect the mainframe power cord to the wall socket.

Note

- Make sure the power cords are plugged into the wall sockets in the above order. Otherwise, the buffer pass unit will not be recognized by the mainframe when turning on the power in the following step, and this will cause a paper jam in the buffer pass unit.

4. Turn ON the main power switch on the mainframe.
5. Confirm proper function of the buffer pass unit to complete the procedure.

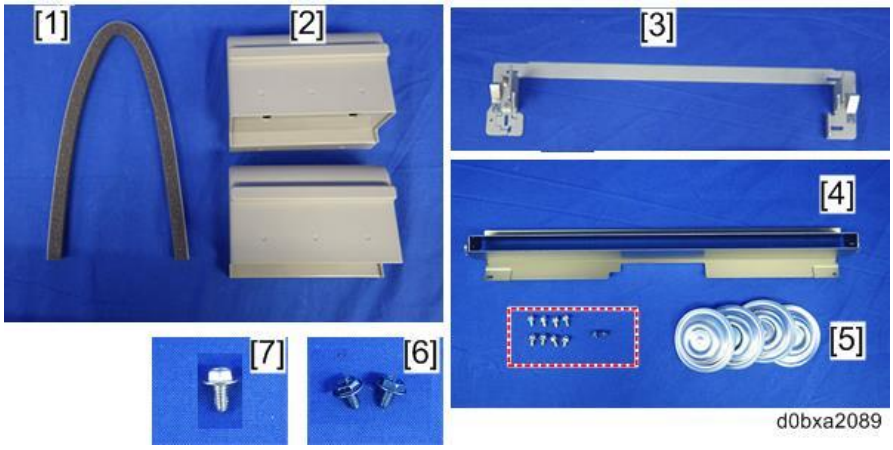
Moving the Buffer Pass Unit

⚠CAUTION

- When moving the buffer pass unit, move it together with the main machine or upstream devices linked to it. If you try to move only the buffer pass unit, it may fall down, causing injury.

Cover Interposer Tray CI5040 (D3GA17)

Accessories



No.	Description	Q'ty	Remarks
1	Sponge Strip	1	
2	Upper Rear Cover	2	
3	Joint Bracket	1	
4	Entrance Guide Plate	1	
5	Leveling Shoes	4	
6	Tapping Screws M3x6	2	For attaching the entrance guide plate
7	Tapping Screws M4x8 (Round Point)	8	For attaching the auxiliary cover
-	Tapping Screws M4x14	4	For attaching the joint bracket

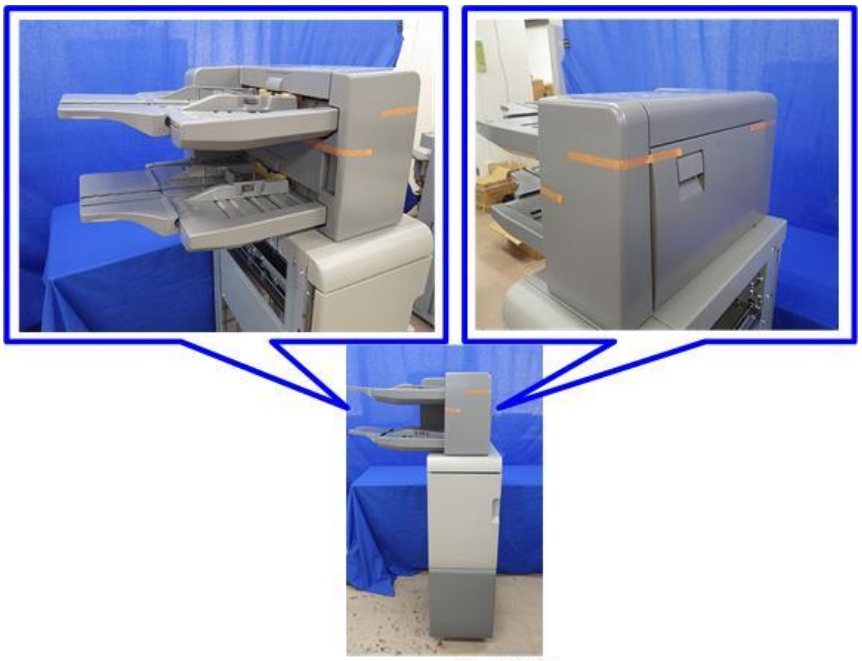
Installation

⚠CAUTION

- The unit must be connected to a power source that is close to the unit and easily accessible. Make sure that the main machine is switched off and that its power cord and AC power source are disconnected before doing the following procedure.
- When moving the cover interposer tray to another installation site, move the cover interposer tray and the downstream unit together without disconnecting the cover interposer tray from the downstream unit. If they are disconnected, the cover interposer tray might overturn and cause an injury.

Unpacking

1. Remove the exterior tape.

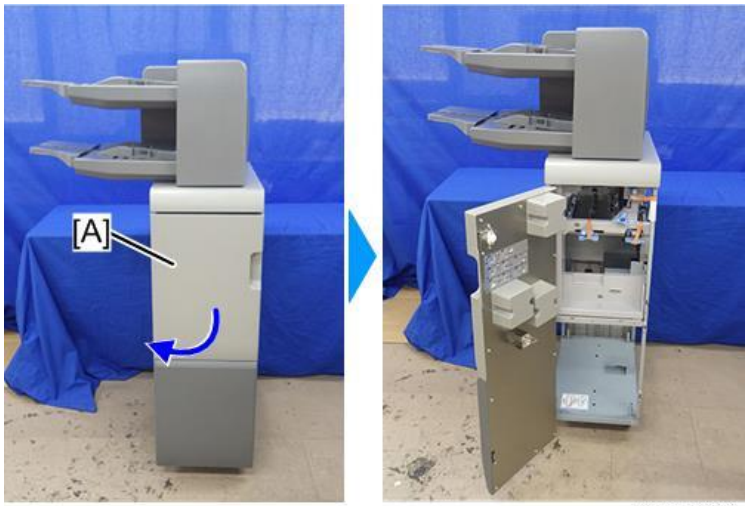


d0bxa2090

2. Remove the paper and tape inside the paper feed cover.

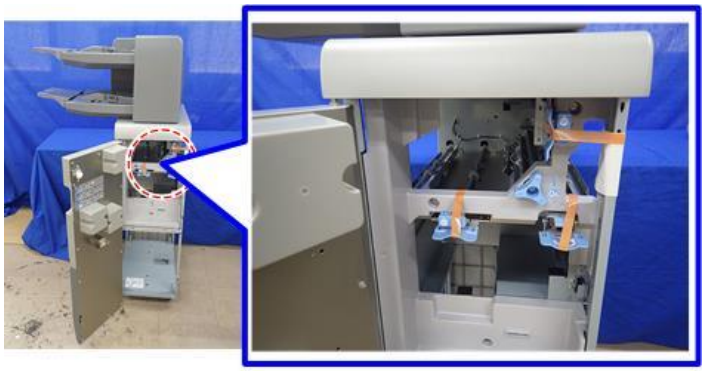
d0bxa2212

3. Open the front cover [A].



d0bxa2091

4. Remove the tape inside the cover interposer tray.



d0bxa2092

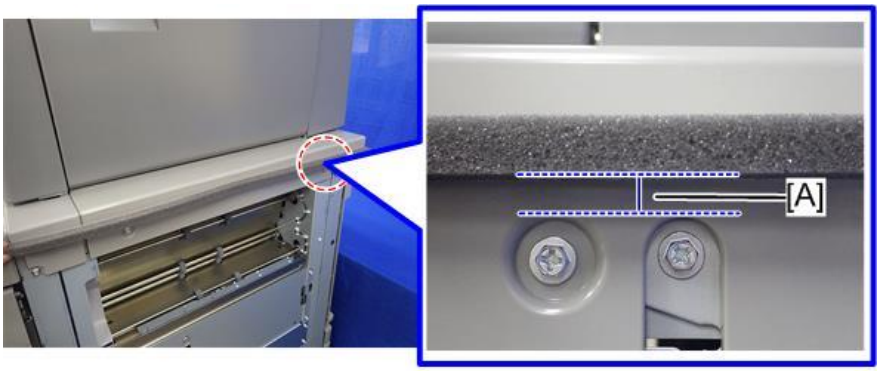
Attaching the Parts

1. Attach the sponge strip [A].

d0bxa2093

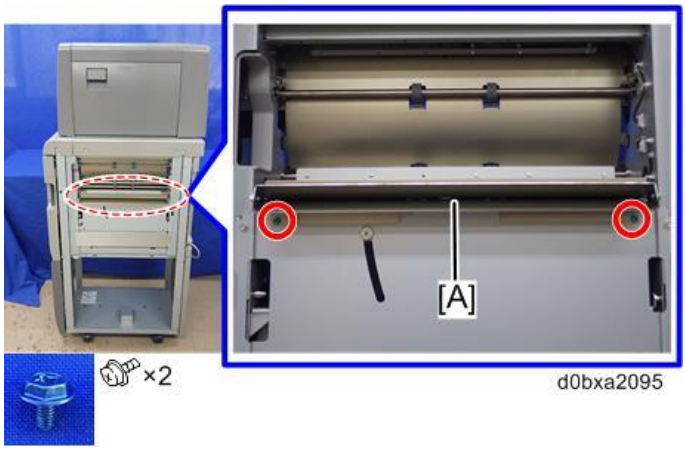
Note

- Attach the sponge strip to the position as shown below.
  [A]: from 0 to 5 mm



d0bxa2094

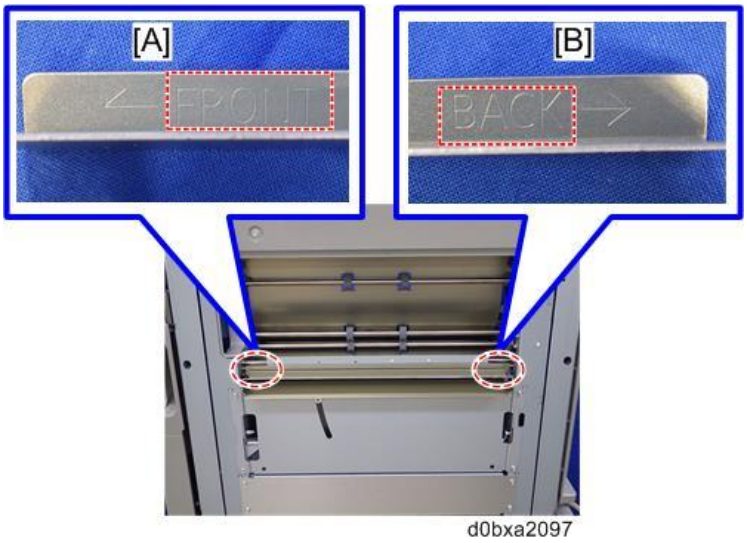
2. Attach the entrance guide plate [A]. (M3×6)



d0bxa2095

Note

- When attaching the entrance guide plate, refer to the mark "FRONT" [A] and "BACK" [B] for indicating direction.



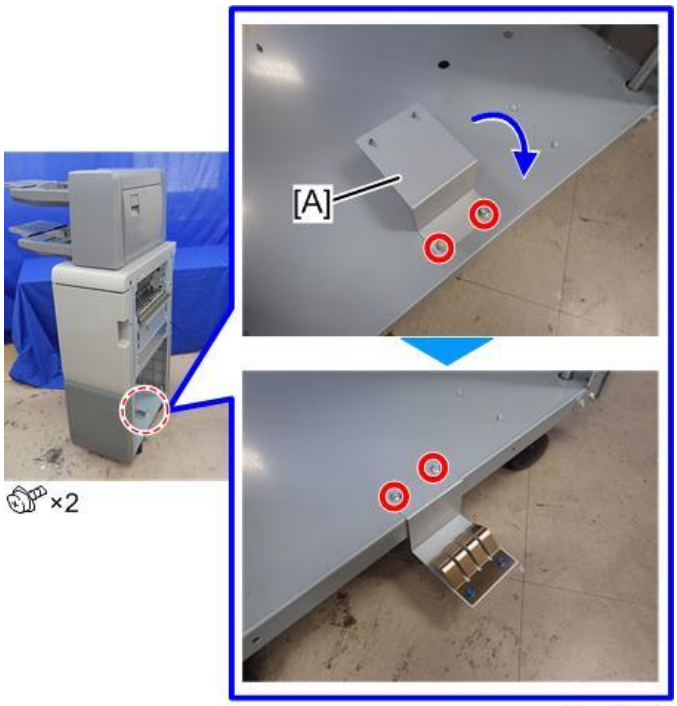
d0bxa2097

Important

- The types of the entrance guide plate and installation procedure depend on the upstream unit.
- If the upstream unit is the buffer pass unit, refer to "When Connecting to the Buffer Pass

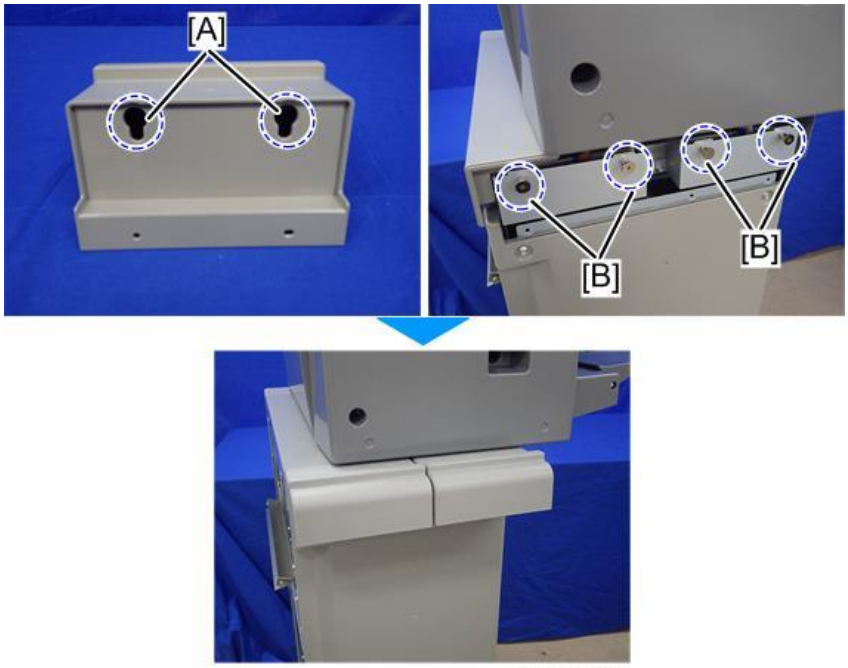
Unit".

3. Remove the ground plate [A] fixed to the bottom part. Make the ground plate upside down and reattach it.



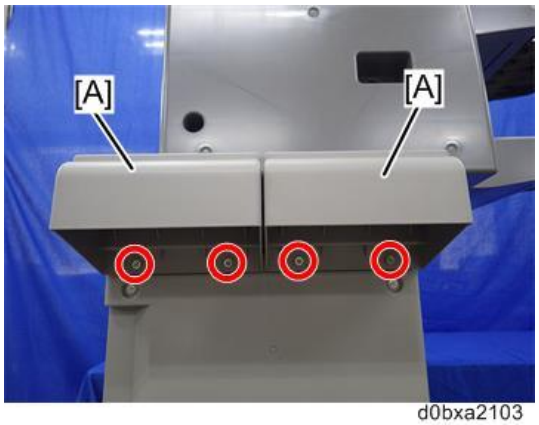
d0bxa2096

4. Hook the holes [A] of the auxiliary covers to the stepped screws [B].



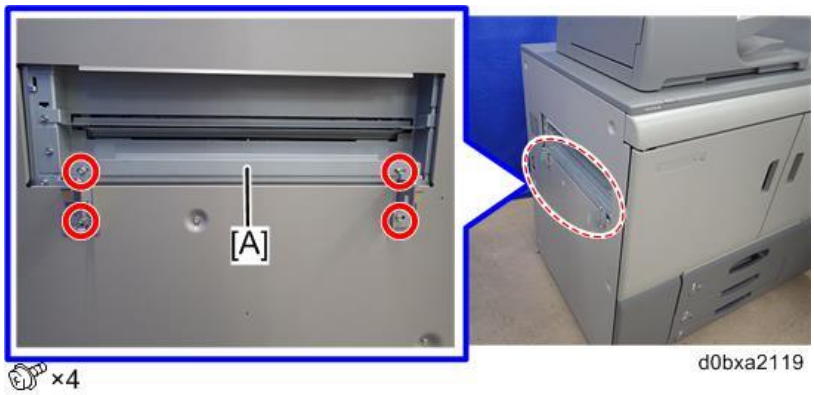
d0bxa2102

5. Fix the auxiliary covers [A]. (M4×8 Round point)



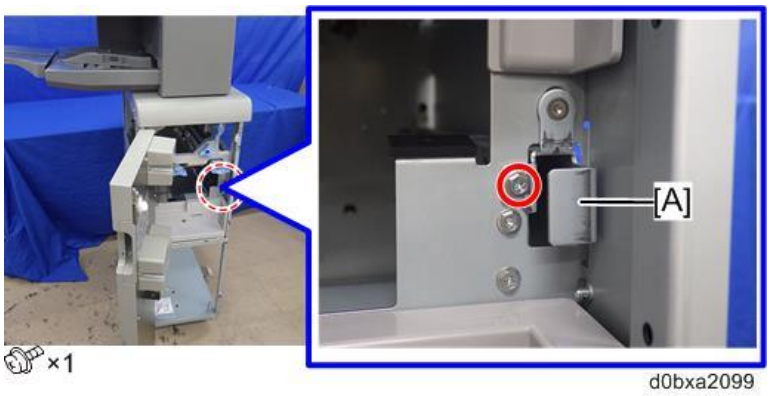
Connecting the Unit to the Main Machine

1. Attach the joint bracket [A] to the main machine. (M4×8 Round point)

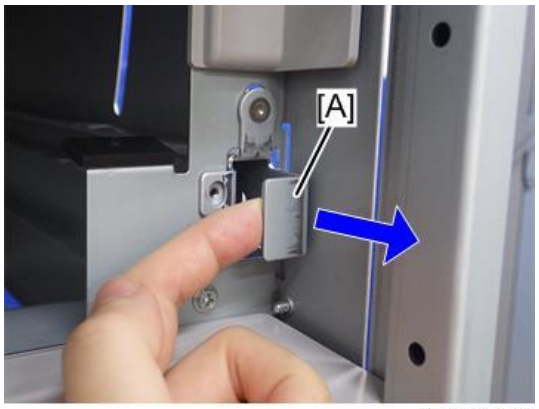


2. Open the front cover [A] of the cover interposer tray.

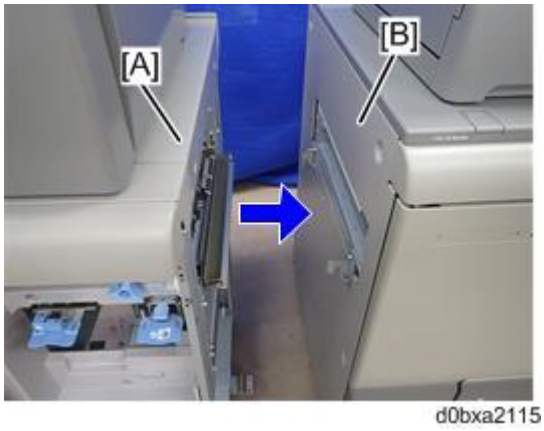
3. Remove the screw [A] of the lock lever.



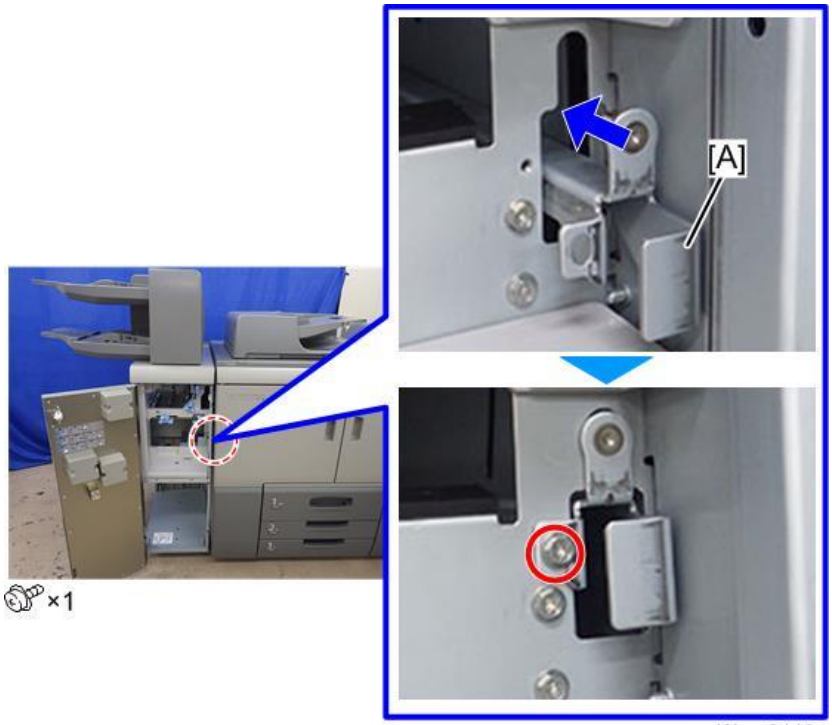
4. Pull out the lock lever [A].



5. Connect the connector of the cover interposer tray [A] to the main machine [B].

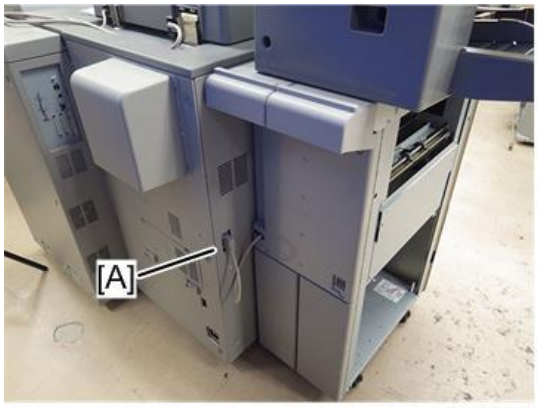


6. Push in the lock lever [A], and then fix it with the screw removed in step 3.



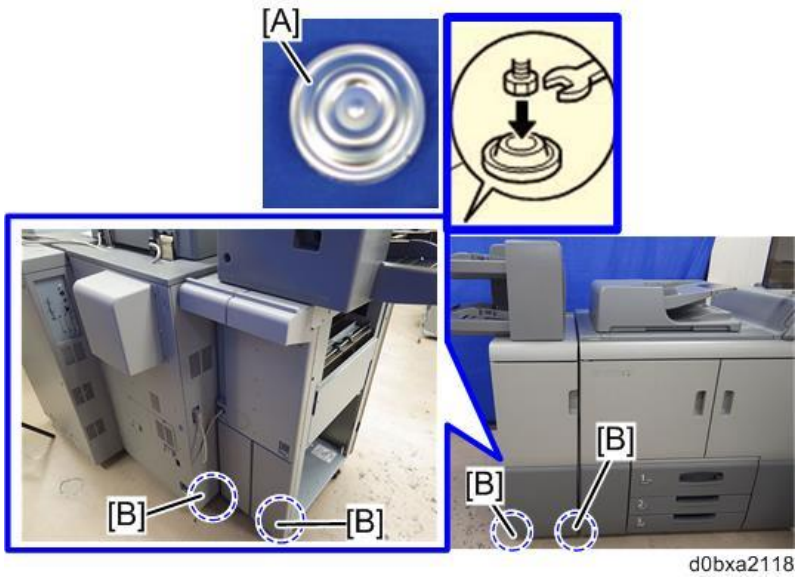
d0bxa2116

7. Connect the connector [A] of the cover interposer tray.



d0bxa2117

8. Set the holders (x4) [A] under the leveling bolts [B], and then adjust the level.



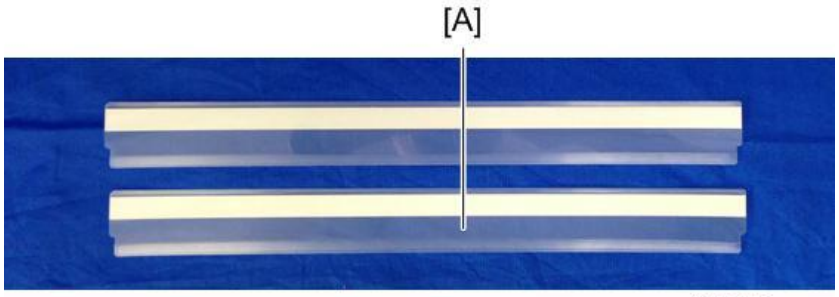
d0bxa2118

Note

- Measure the slant of the stands by the level, and then adjust the leveling bolts like you adjust the leveling bolts of the main machine. (Height and Level Adjustment)

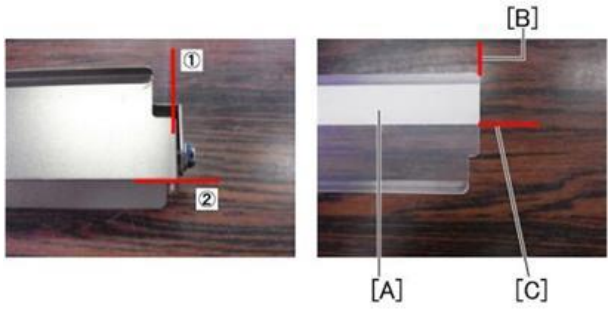
When Connecting to the Buffer Pass Unit

1. Attach the finisher guide sheet [A] provided with the buffer pass unit to the entrance guide plate of the cover interposer tray.



d1359956

2. Peel off the release paper from the double-sided tape [A] on the finisher guide sheet, attach the finisher guide sheet the entrance guide plate.
When attaching the entrance guide plate, align the edge [B] of the sheet with the position 1 and align the edge [C] of the double-sided tape with the position 2.



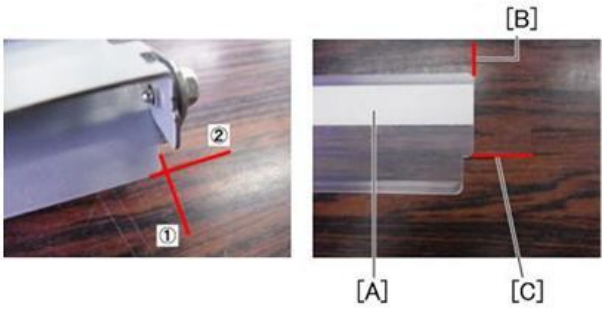
d1359968

Note

- Confirm that the finisher guide sheet is attached correctly to the entrance guide plate as shown in the photo below.

d1359968-1

3. Peel off the release paper from the double-sided tape [A] on the finisher guide sheet, attach the finisher guide sheet the entrance guide plate.
When attaching the entrance guide plate, align the edge [B] of the sheet with the position 1 and align the edge [C] of the double-sided tape with the position 2.

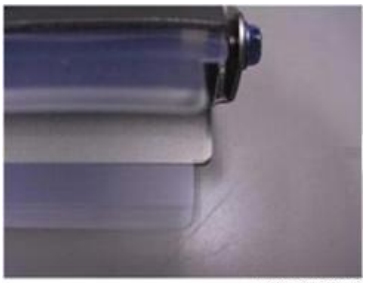


d1359969

Note

- Confirm that the finisher guide sheet is attached correctly to the entrance guide plate as

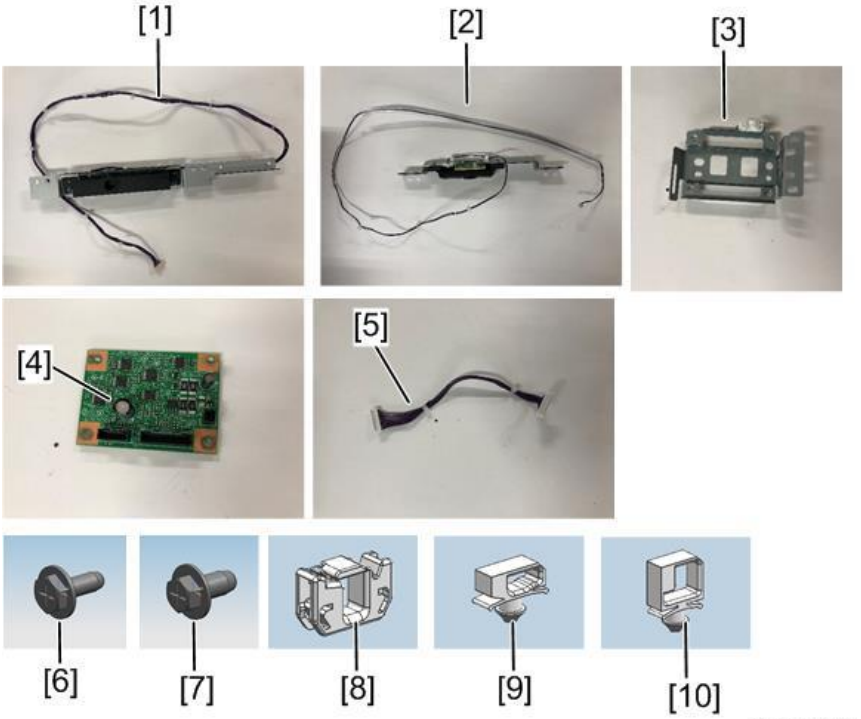
shown in the photo below



d1359969-2

Cover Interposer Tray Double-Feed Detection Kit Type S11 (D3GA18, D3GA19)

Accessories

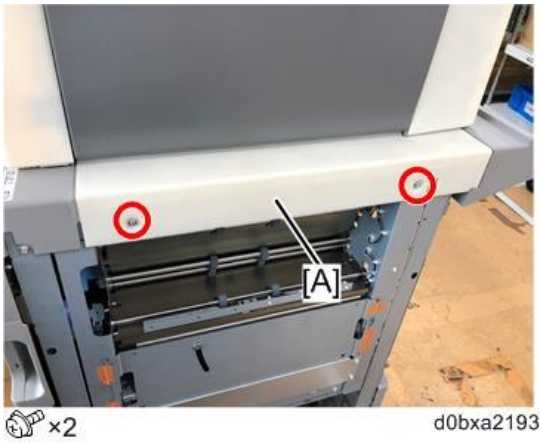


d0bxa2192

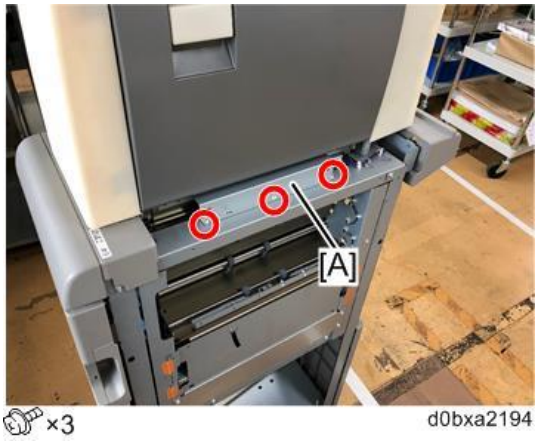
No.	Description	Q'ty
1	Double-feed Sensor (Right)	1
2	Double-feed Sensor (Left)	1
3	Bracket	1
4	PCB	1
5	Harness	1
6	Screws M3x8 (Rounded end)	4
7	Screws M4x8 (Rounded end)	5
8	Locking Edge Saddle	2
9	Wire Saddle	4
10	Wire Saddle	6

Removing the Exterior Parts

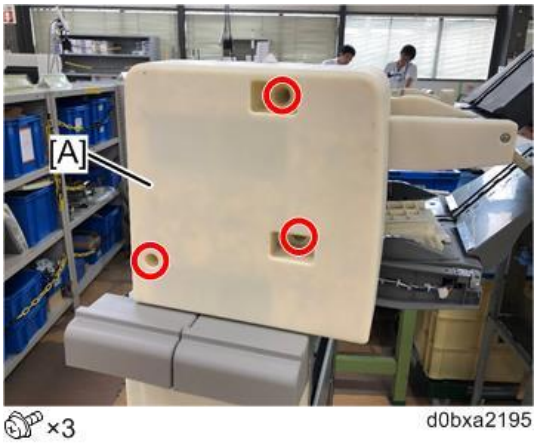
1. Remove the cover [A]. (M4x8)



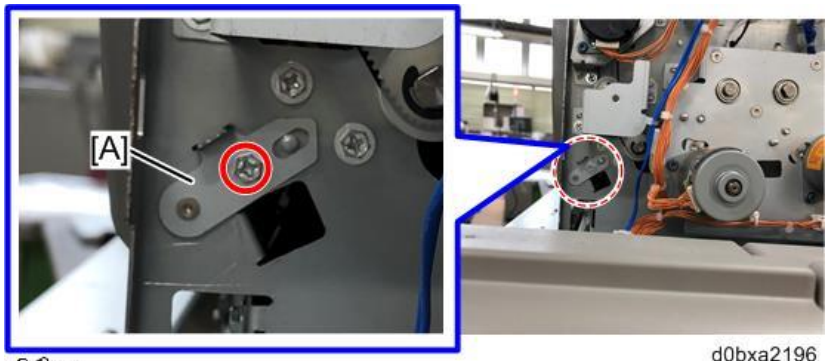
2. Remove the shield plate [A]. (M4x8)



3. Remove the cover [A]. (M4x8)



4. Remove the bracket [A]. (M4x8)

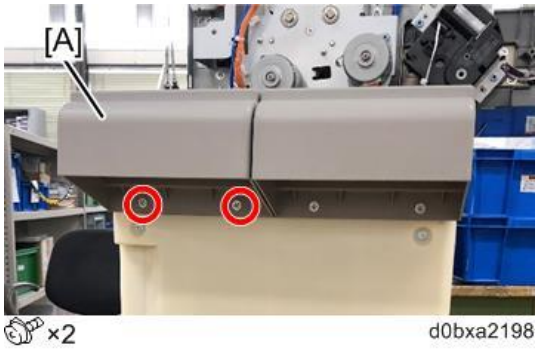


5. Remove the cover [A] by sliding it to the rear side.

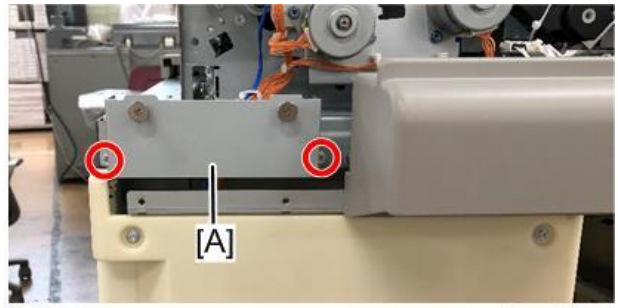
Note

- Because the rear side of the cover is removed in the previous step, the cover is held only by the bracket of the front side.

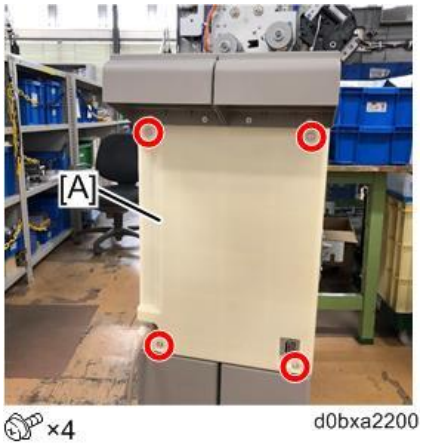
6. Remove the cover [A]. (M4x8)



7. Remove the bracket [A]. (M4x8)

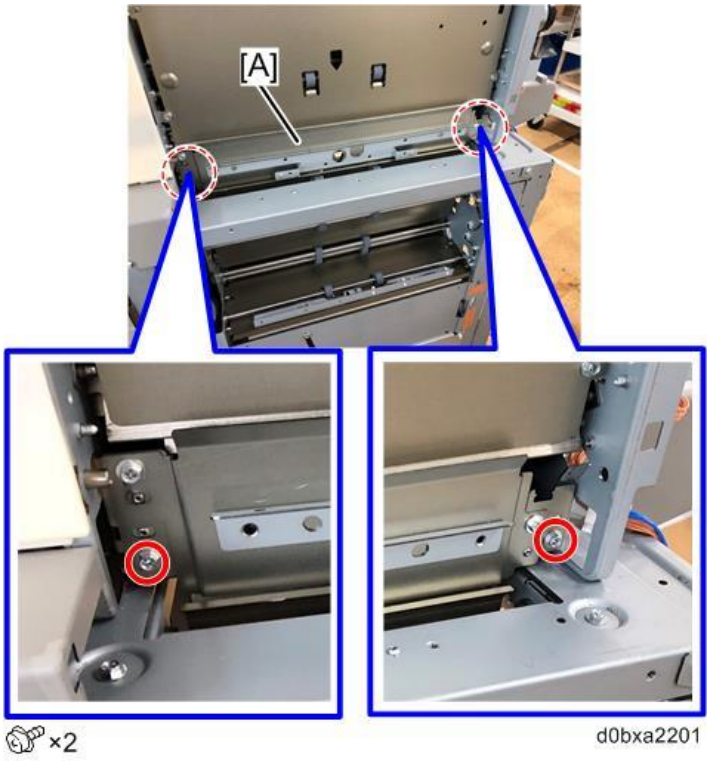


8. Remove the cover [A]. (M4x8)

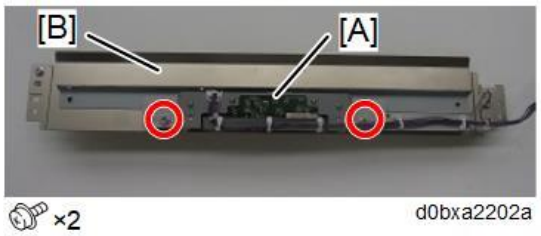


Installing the Double-Feed Detection Kit

1. Remove the guide plate [A] of the right side of the machine. (M4x8)



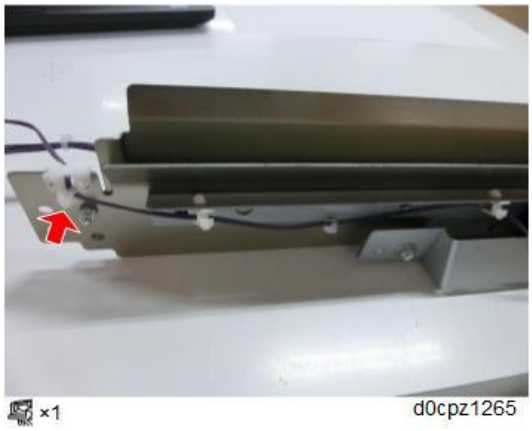
2. As the picture below, attach the double-feed sensor (right) [A] to the guide plate [B] for the double-feed sensor (right). (M4x8)



Note

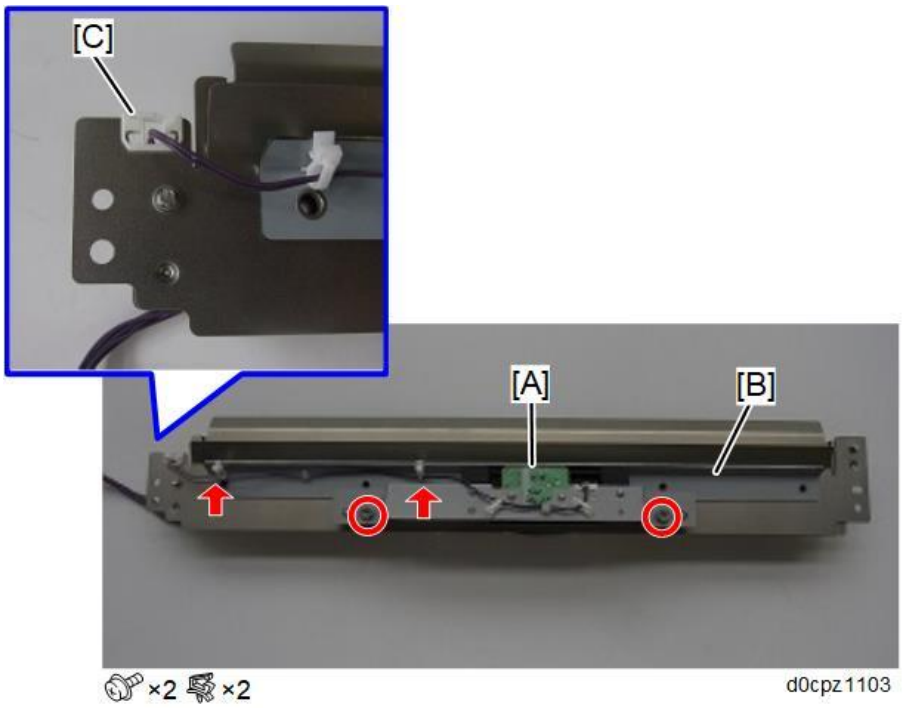
- When tightening the screw, make sure that the harness is not caught between the screw and the bracket.

3. Clamp the double-feed sensor (left) [A]. (Use No.9 in Accessory)

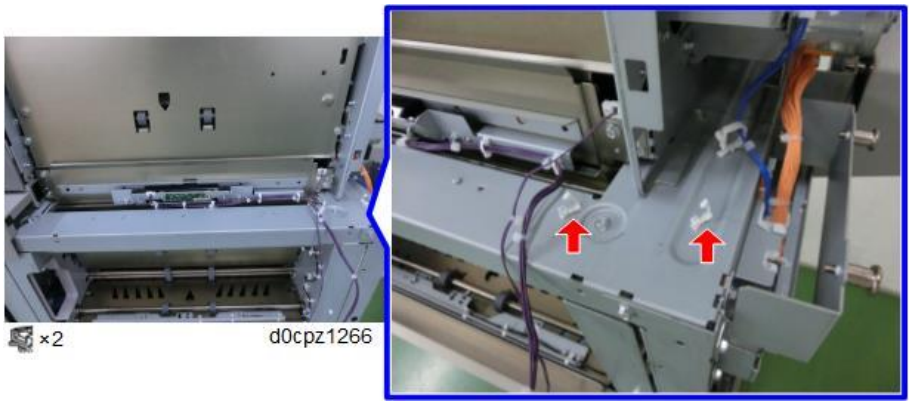


4. Attach the double-feed sensor (left) [A] to the guide plate for the double-feed sensor (left) [B]. (M4x8)

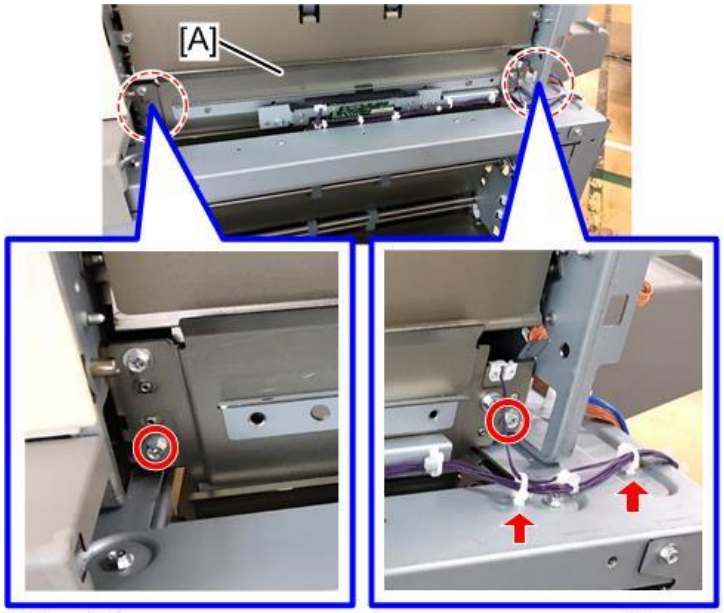
5. Attach the edge saddle to the position [C].



6. Attach the clamp (No.9 in Accessory) on the top surface of the frame.



7. Attach the guide plate [A]. (M4x8)

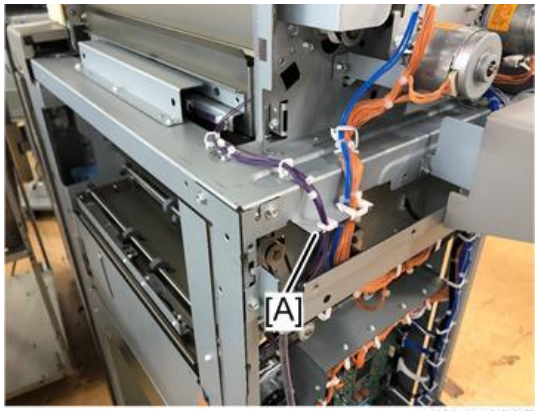


×2 ×2 d0bxa2204

Note

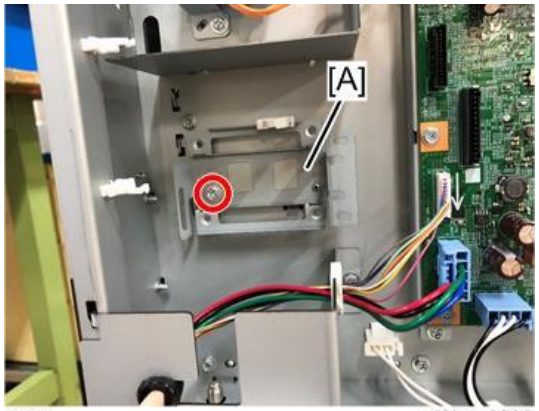
- When tightening the screw, make sure that the harness is not caught between the screw and the bracket.

8. Attach the edge saddle to the position [A].



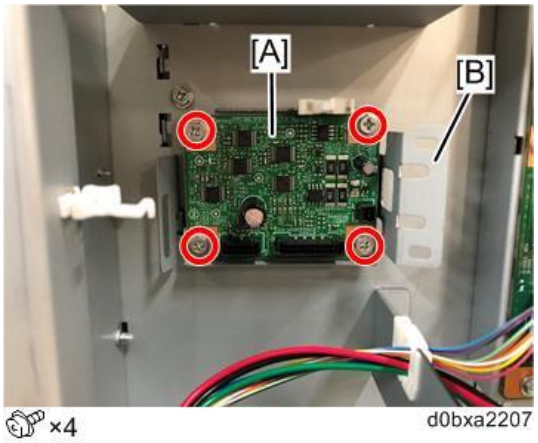
d0bxa2205

9. Attach the bracket [A] (No.3 in Accessory) to the rear side of the machine. (M4x8)

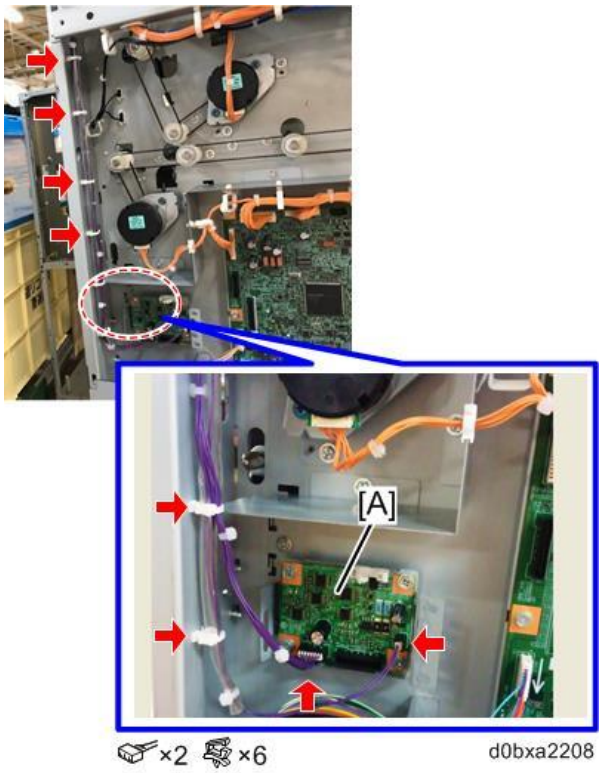


×1 d0bxa2206

10. Install the PCB [A] to the bracket [B]. (M3x8)

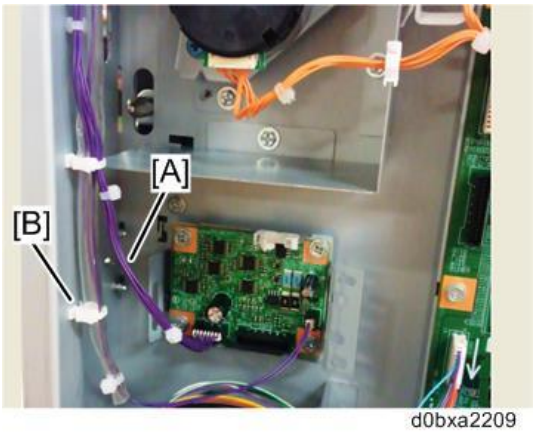


11. Connect the connectors of the double-feed sensor (right) and the double-feed sensor (left) to the PCB [A], and then fix the harnesses to the stay with the clamps (No.10).



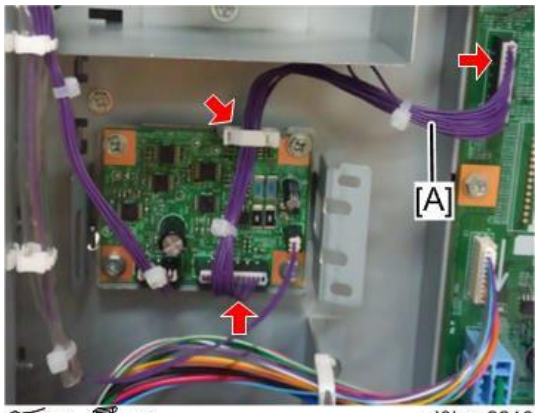
Note

- The clamp [B] does not fix the harness [A].



d0bxa2209

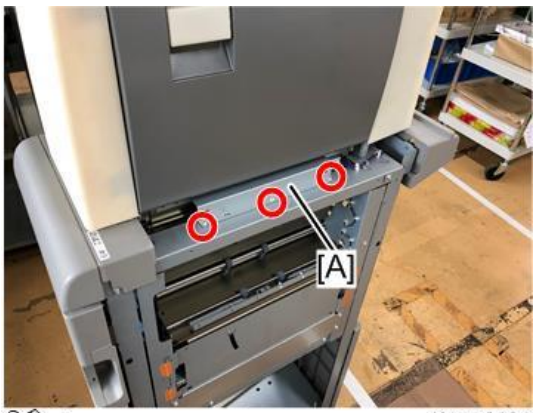
12. Attach the harness [A].



×2 ×1 d0bxa2210

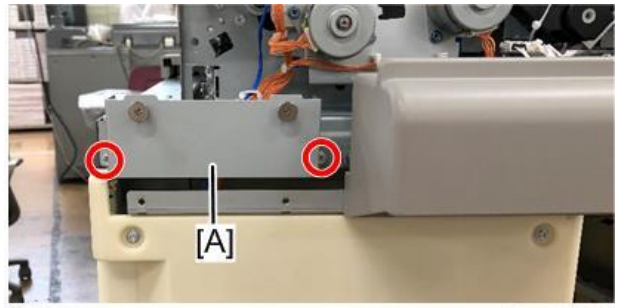
Attaching the Exterior Parts

1. Attach the shield plate [A]. (M4x8)



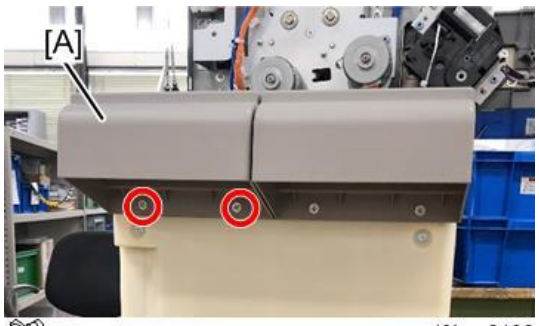
×3 d0bxa2194

2. Attach the bracket [A]. (M4x8)



×2 d0bxa2199

3. Attach the cover [A]. (M4x8)



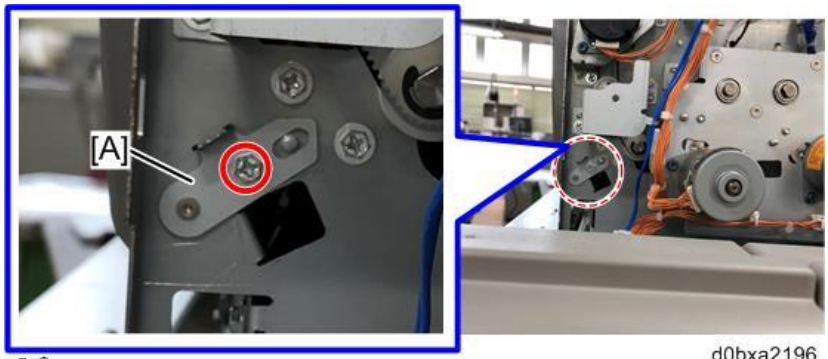
×2 d0bxa2198

4. Attach the cover [A].

d0bxa2197

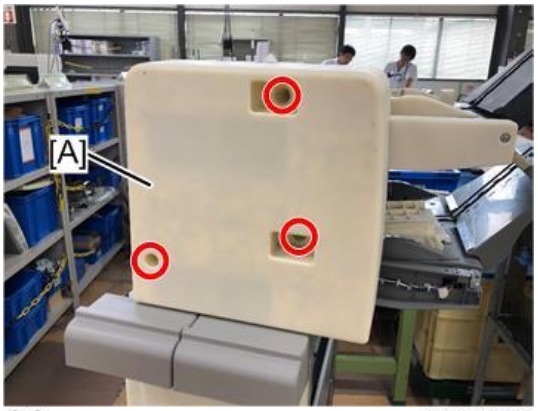
5. Attach the bracket [A]. (M4x8)

When attaching the bracket, align the hole of the bracket to the hole of the machine.



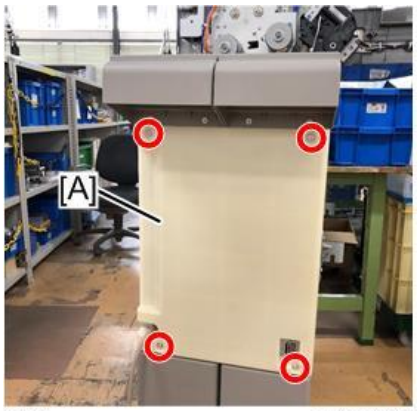
×1 d0bxa2196

6. Attach the cover [A]. (M4x8)



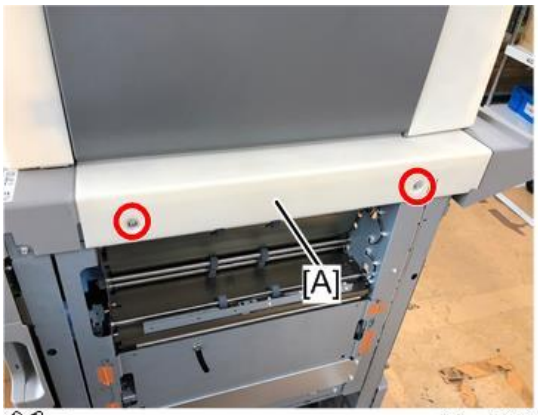
×3 d0bxa2195

7. Attach the cover [A]. (M4x8)



×4 d0bxa2200

8. Attach the cover [A]. (M4x8)



×2 d0bxa2193

Adjustment after Installation

Note

If the double feed detection is not used, the following operation is not required.

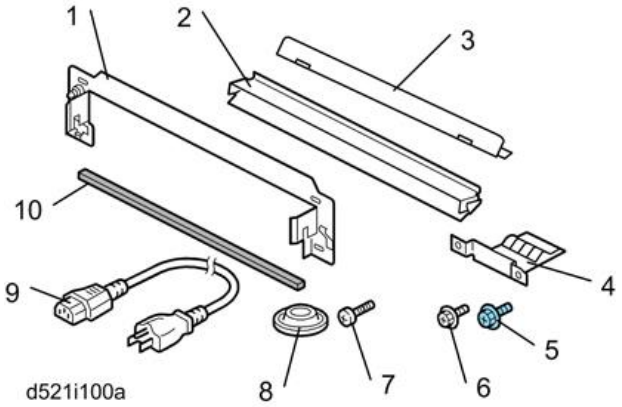
1. Turn ON the main power.

2. Enter SP mode.
3. Set the value of SP6-416-001 to "1".
4. Set the value of SP6-416-002 to "1".
5. Execute SP6-410-032 and check that the double feed detection works.
6. Open the vertical transport cover and insert paper on the center of the transporting path. Check the following:
   - If 1 sheet of paper inserted: Make sure that "0" is indicated.
   - If 2 sheets of paper inserted: Make sure that "1" is indicated.

Multi-Folding Unit FD5020 (D740)

Accessories

Check the quantity and condition of the accessories in the box against the following illustration and list.



No.	Description	Q'ty
1.	Joint Bracket	1
2.	Entrance Guide Plate	1
3.	Guide for the downstream unit	1
4.	Ground Plate	1
5.	Screws M3x6	2
6.	Screws M3x6	2

No.	Description	Q'ty
7.	Screws M4x14	4
8.	Leveling Shoes	5
9.	Power Cord*1	1
10.	Sponge Strip	1
11.	Plate (Power Supply Cord Inlet)	1

*1: In China, do not use the power cord provided with this unit. Contact your supervisor and use the power cord specified for use in China.

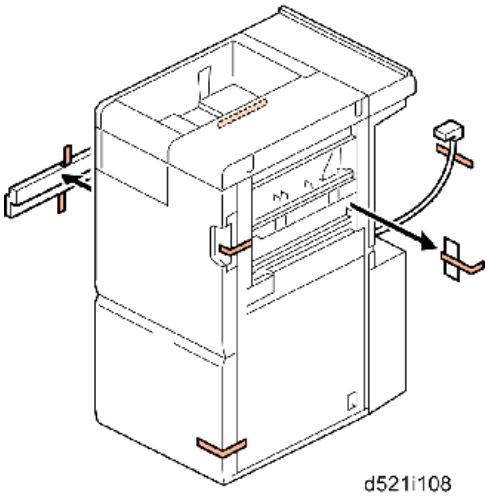
Installation

⚠CAUTION

- The unit must be connected to a power source that is close to the unit and easily accessible.
- Make sure that the main machine is switched off and that its power cord is disconnected before doing the following procedures.

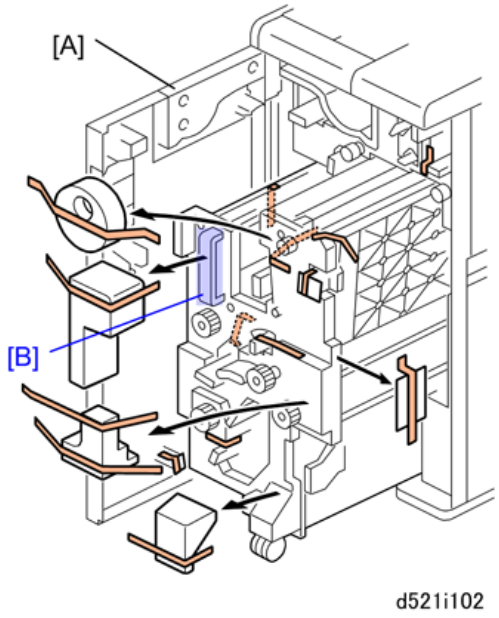
Tapes

1. Remove all tape and packing material from the front, left, rear, and right sides.



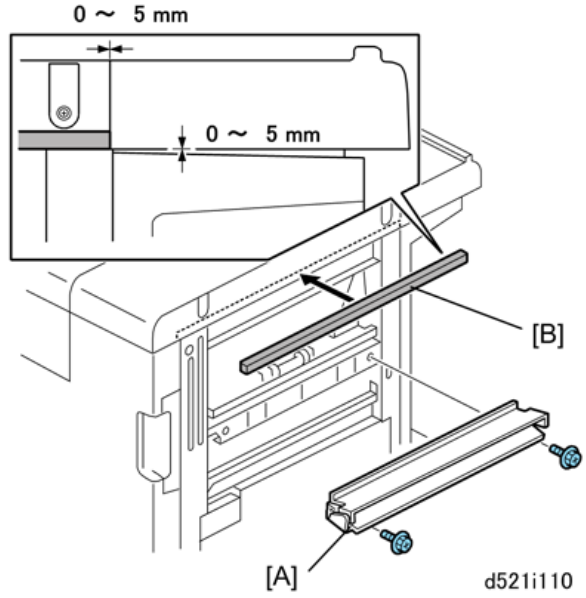
2. Open the front door [A].
3. Grip the handle [B] and slowly pull the folding unit out of the machine.

4. Remove all tape and packing material from inside.



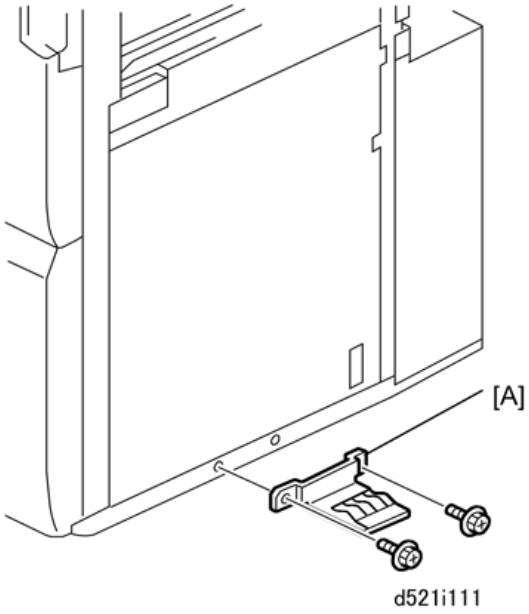
Entrance Guide Plate, Sponge Strips

1. Attach the entrance guide plate [A] (x2 M3x6).
2. Peel the tape from the sponge strip [B] and attach the strip to the top right edge of the unit.



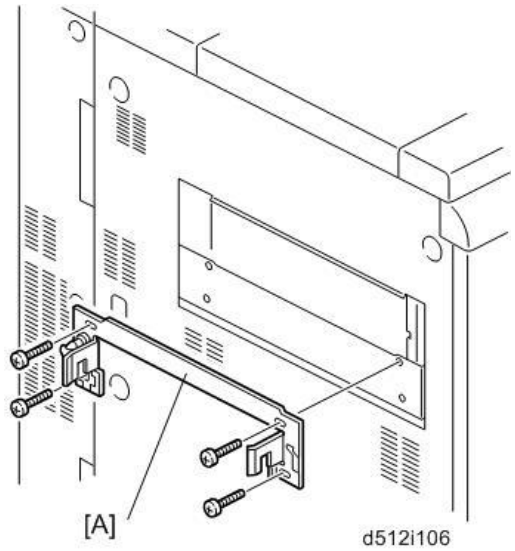
Ground Plate

1. Attach the ground plate [A] to the lower right edge of the unit (x2 M3x6).



Docking

1. Fasten the joint bracket [A] to the left side of the upstream unit (x4 M4x14).

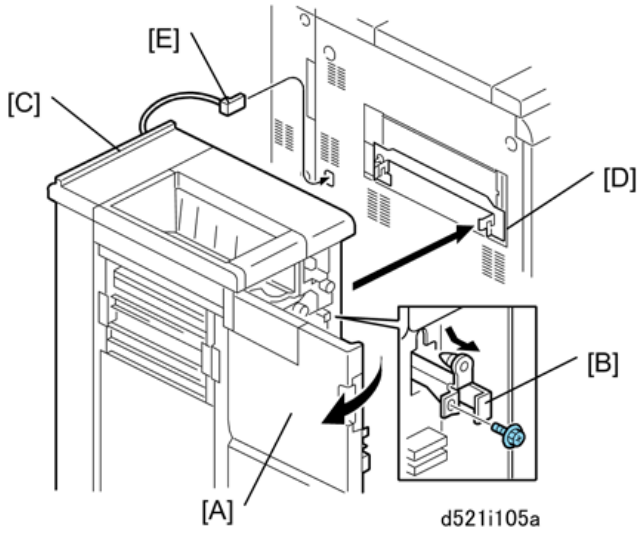


2. Open the front door [A].
3. At the front right corner, remove the screw of the lock bar [B] (x1 M3x6). **Keep this screw.**
4. Pull out the lock bar.
5. Slowly push the unit [C] against the left side of the upstream unit (or main machine) so that the lock bar is directly and squarely under the arms of the joint bracket.
6. Push in the lock bar so that it slides up into the notches in the arms on both ends of the joint bracket [D].
7. Fasten the lock bar by re-attaching the screw removed in **Step 3** (x1).

8. Connect the I/F cable [E] to the upstream unit (or main machine).

Note

- If you are docking to the main machine, you must first remove the plastic cap at the I/F cable connection point.



9. Attach the joint bracket provided with this option to the downstream device.

Note

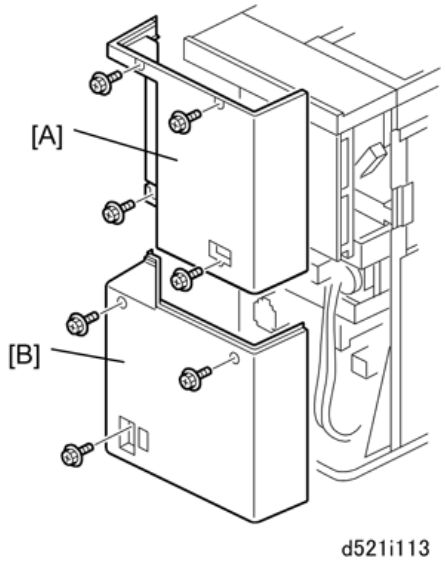
Use the screw provided with the downstream devices.

If any M4x14 screw is not provided with the downstream devices, use the provided screw for FD5020 instead.

10. Remove:

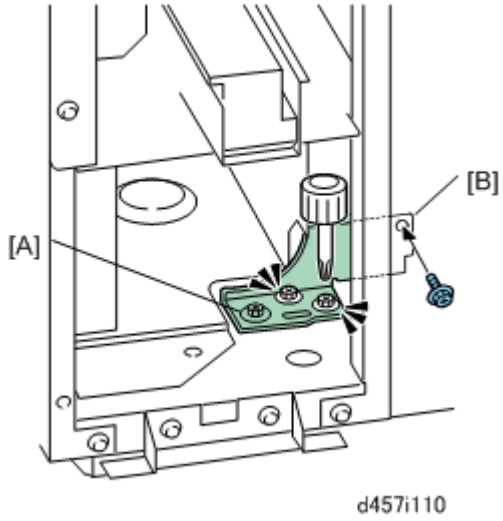
[A] Rear upper cover (x4)

[B] Rear lower cover (x3)



11. Use a short screwdriver to loosen the bracket [A] (x2).

12. Fasten the bracket to the upstream unit at [B] (x1).



13. Tighten the screws (x3).
14. Re-attach the rear covers.

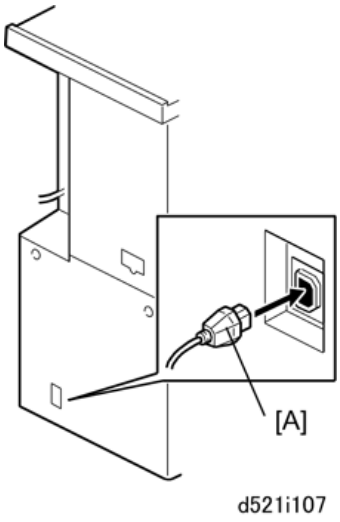
Power Cord

1. Insert the power cord socket [A] into the power connection point.

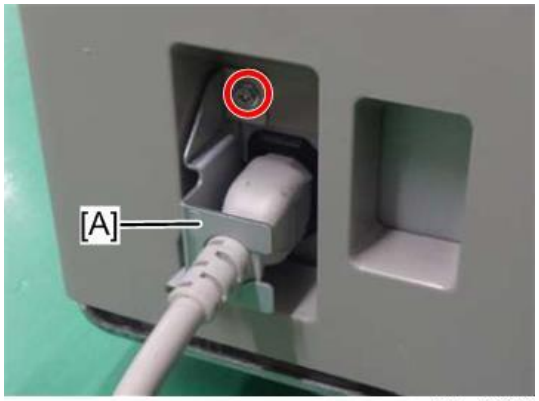
Important

- In China, do not use the power cord provided with this unit. Contact your supervisor and use the power cord specified for use in China.

2. Connect the power supply cord plug to a power outlet.

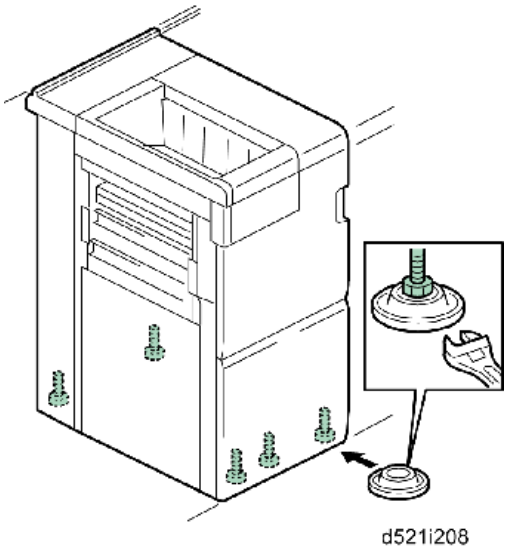


3. Attach the bracket [A] (x1).



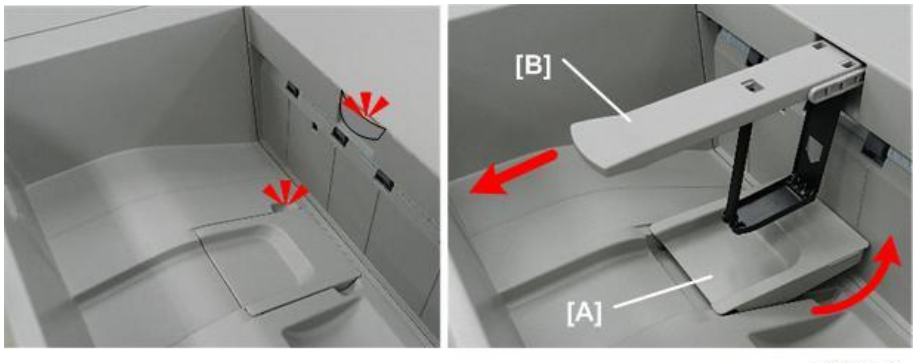
Finishing the Installation

1. Set the holders to the leveling bolts and adjust the height of the unit.



Auxiliary Tray, Fold Depressor

1. Raise the auxiliary tray [A] or pull out the flexible page depressor [B] when required.
   - The auxiliary tray [A] keeps Z-folded paper (FM1) flat in the tray so that the trailing edges do not trigger an early tray full alert in the top tray.
   - The flexible page depressor [B] prevents folded paper (especially FM3 Letter Fold-out sheets) from opening out and triggering an early tray full alert in the top tray.



Removing Parts for the Cover Interposer Tray

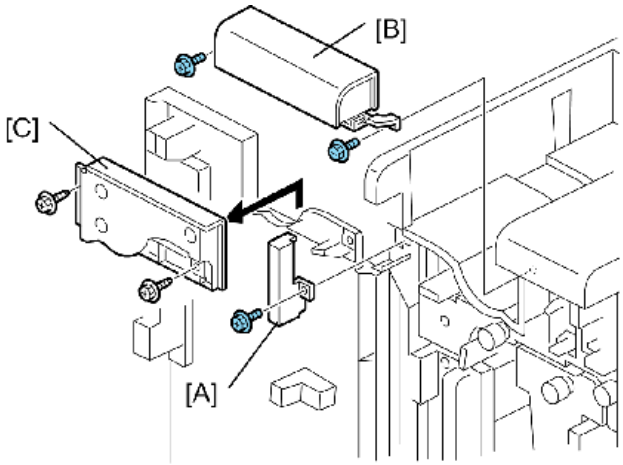
Three parts must be removed before the tray unit of the cover interposer tray can be mounted on top of the Multi Folding Unit.

1. Open the front door.

Important

- The following parts require removal only if the upstream unit is the Cover Interposer Tray.
- These parts must be removed so that the tray unit of the Cover Interposer Tray will fit on top of the Multi Folding Unit.

2. Remove:
   [A] Bracket (x1)
   [B] Cross-piece (x2)
   [C] Metal plate from the door (x2)
3. After removing [B] and [C], reattach [A].



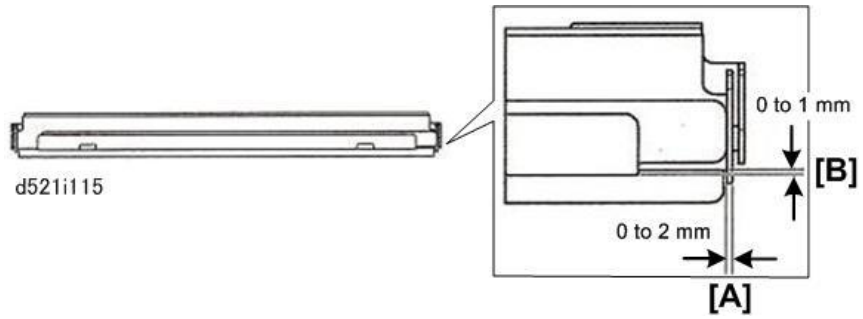
d521i109

Attaching the Guide Plate

1. Peel the tape from the accessory Polyester film.

d521i114

2. Attach the mylar aligned along the edge of the entrance guide plate of the downstream unit.
   - The gap between the mylar and the edge should be within 2 mm at [A].
   - The gap between the mylar and the edge should be within 1 mm at [B].



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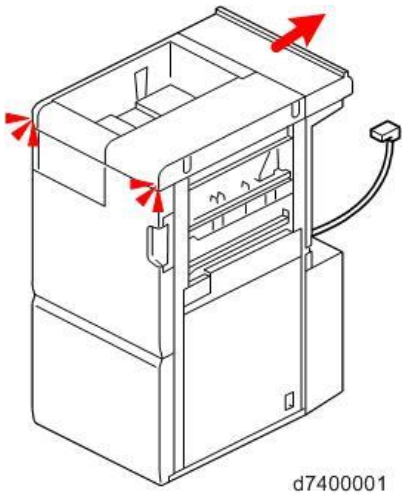
Moving the Multi-Folding Unit

Always observe the following points when moving the Multi-Folding unit.

Important

- To prevent damage to the connection brackets, never attempt to move or change the position of the system with the LCT, the Multi-Folding Unit, (or any other downstream peripheral) connected.

1. Turn the system off.
   - Press the main power switch on the left corner of the main machine to turn the machine off.
   - The power-down alert message appears on the operation panel. Wait for the operation panel to go off.
   - Switch off the AC power switch.
2. Unplug the main machine from the power source.
   - Grip the head of the plug firmly, and then pull it out.
   - Never pull on the cord.
3. Disconnect the unit I/F cord from the upstream unit (or main machine) and downstream unit.
4. Make sure that the front door of the unit is closed.
5. Disconnect the unit power plug.
   - Grip the head of the plug firmly, and then pull it out.
   - Never pull on the cord.
6. When you move the unit:
   - Place your hands on the front left and right corners of the unit.
   - Push the unit in the direction of the arrow.
   - Pushing the unit front-to-rear prevents twisting the delicate frame of the unit.

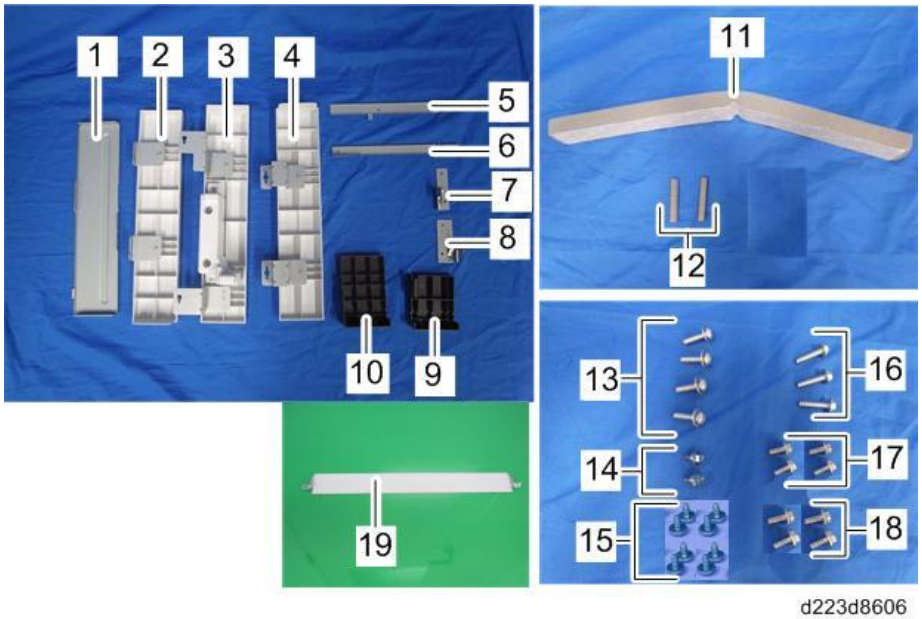


Cover Interposer Tray CI5050 (D3HW)

Accessories

Check the accessories and their quantities against this list.

No.	Description	Q'ty
1	Plate Extension (bottom)	1
2	Rear cover extension (bottom)	1
3	Front door extension (top)	1
4	Front door extension (bottom)	1
5	Connecting Bracket (rear)	1
6	Connecting Bracket (front)	1
7	Front Joint Bracket	1
8	Rear Joint Bracket	1
9	Right front corner plate	1
10	Right Rear Cover Plate	1
11	Cushion (with double-sided tape)	1
12	Gasket	2
13	Screws– M4 x 14	4
14	Shoulder screw	2
15	Tapping screws – M3 x 6	8
16	Tapping screws – M4 x 16	3
17	Tapping screws – 3 x 6	4
18	Tapping screws – M4 x 8	4
19	Entrance Guide Plate	1
-	EMC Address	1

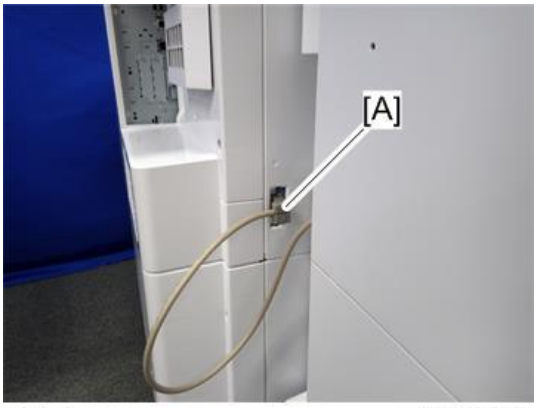


Installation Procedure

1. Remove the finisher from the main machine.

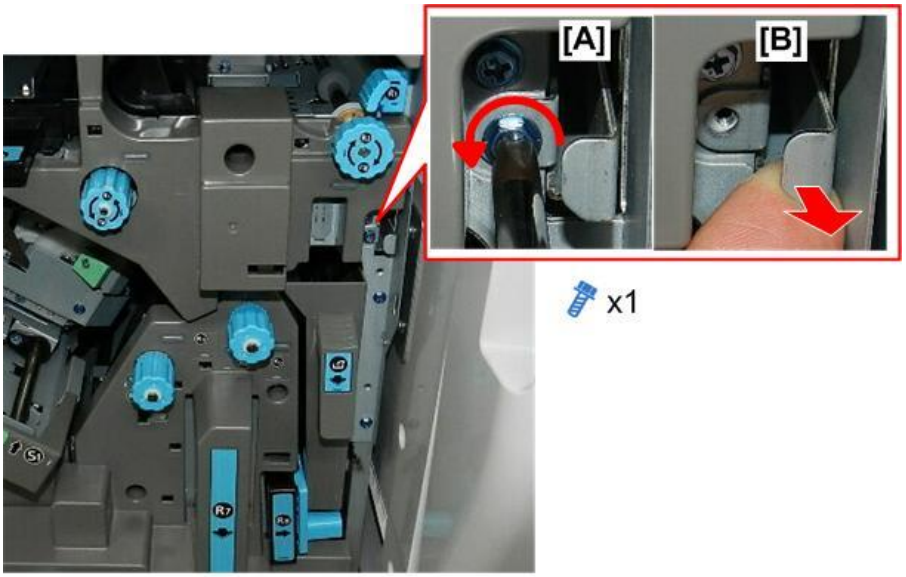
2.Installation

1. Remove the connecter [A] of the finisher.



×1 d257a5051

2. Open the finisher front cover, remove the screw [A], and release the lock bar [B].

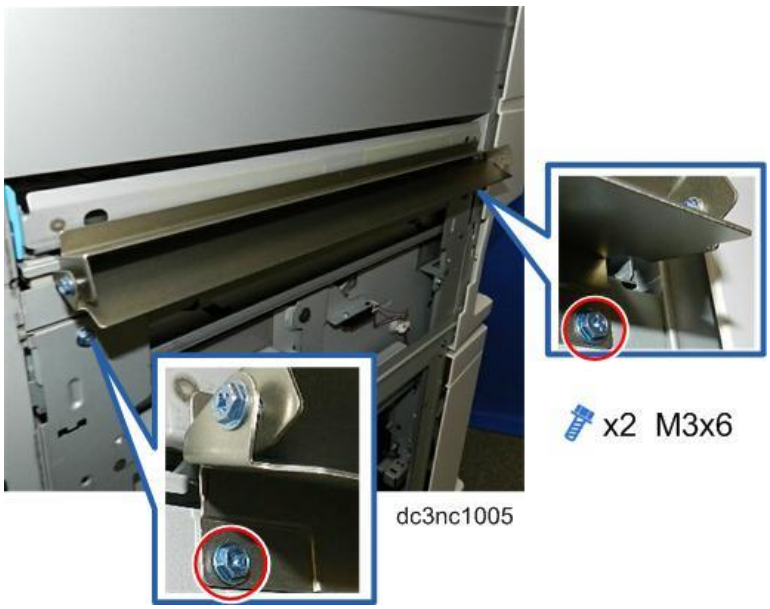


x1

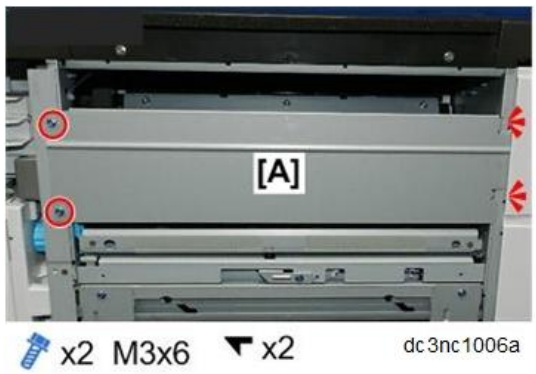
dc3nc1003

3. Remove the finisher from the main machine.

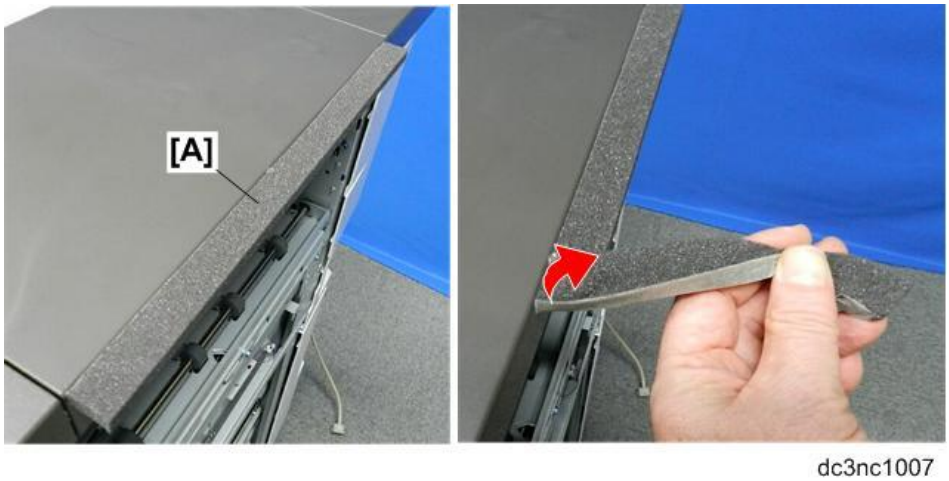
2. Remove the paper guide on the right side of the finisher.



3. (For SR4160 only) Remove the right upper cover [A].

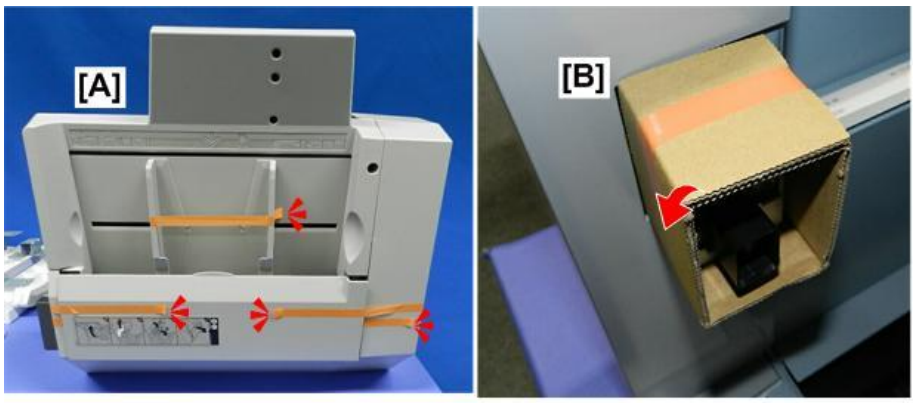


4. Remove the sponge strip [A] from the upper right edge of the finisher.



5. Remove the joint bracket [A] from the left side of the main machine.

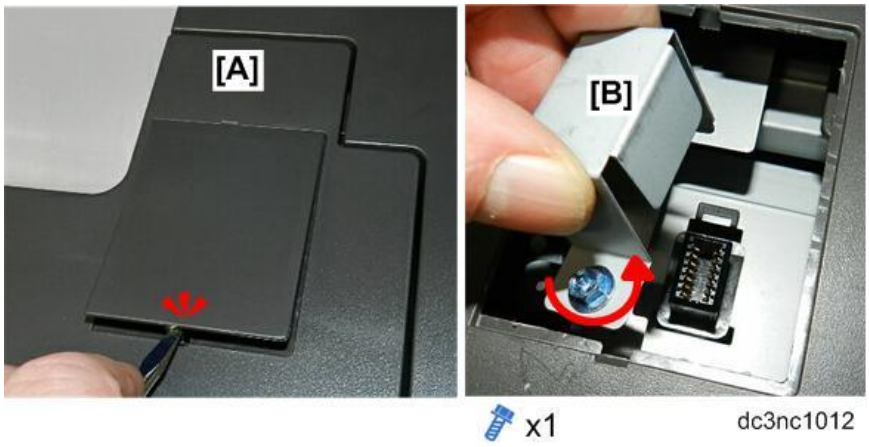
6. Remove the tape strips and the cardboard on the connector [B] under the tray.



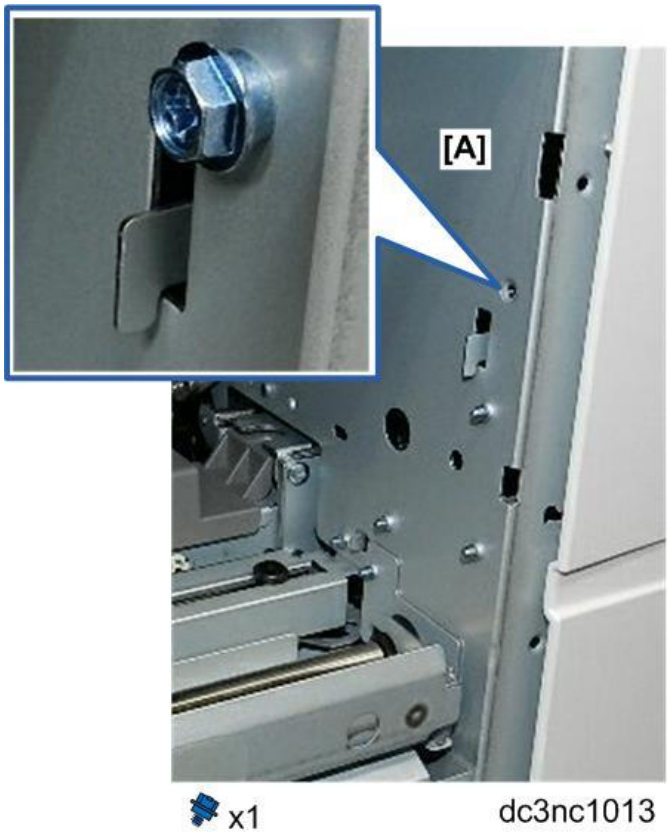
7. Open the tray, and remove all the tape strips and cardboard pieces.

8. On top of the finisher, remove the connector cover [A].

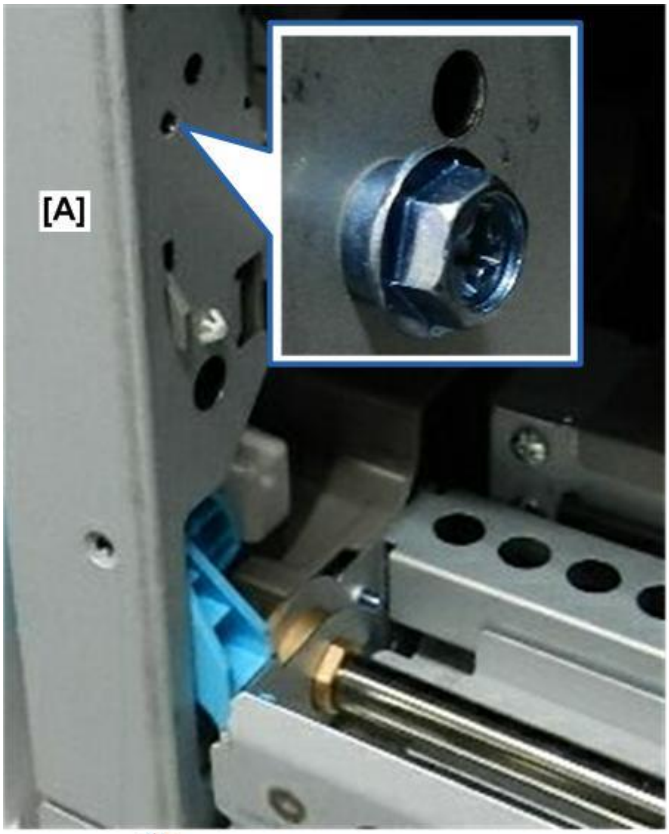
9. Remove the metal cover [B].



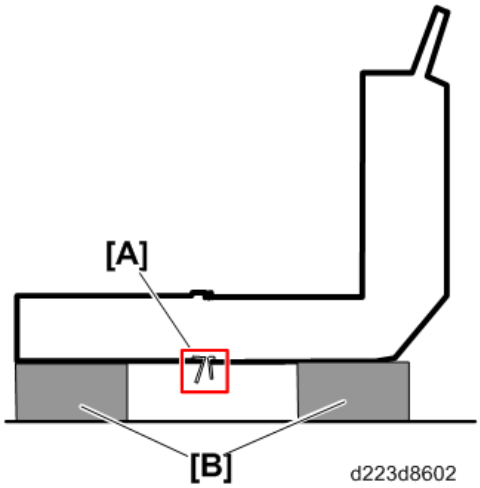
10. On the right rear inside panel of the finisher [A], fasten one shoulder screw.



11. On the right front post of the finisher [A], fasten the other shoulder screw.

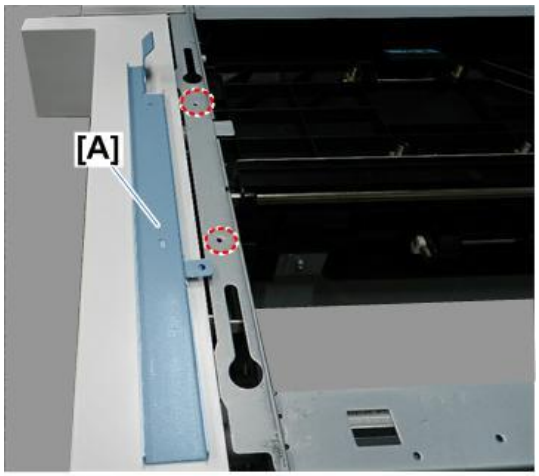


12. To avoid damaging the guides on the right side of the unit, elevate the unit with some blocks, boxes, etc. so it is not flat on the floor.

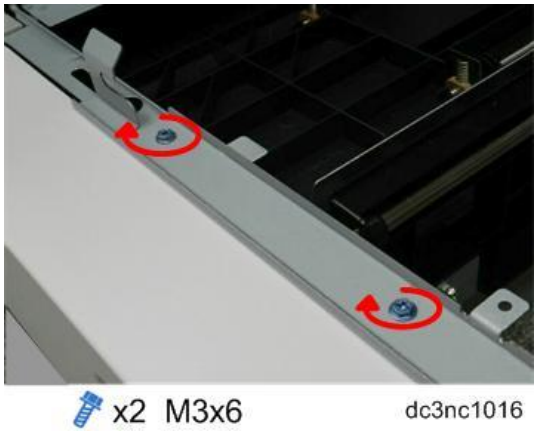


13. Select the rear tray mounting bracket [A], and then locate its screw holes between the keyholes on

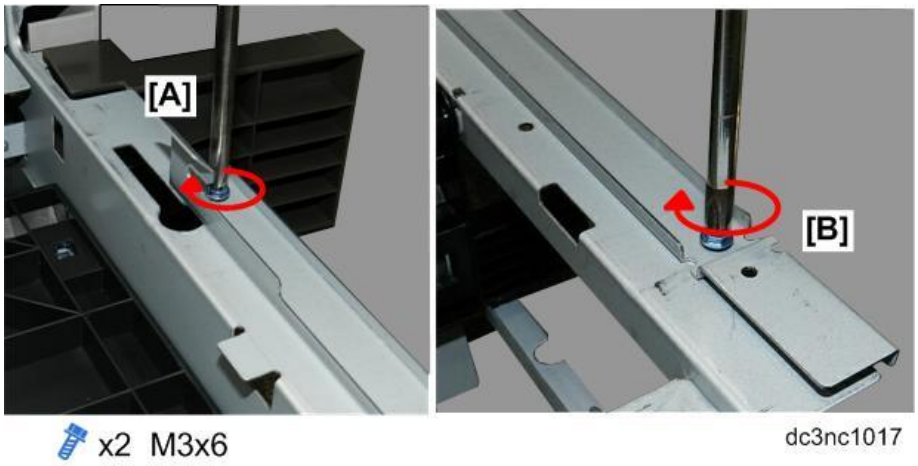
the rear frame.



14. Align the holes, and then fasten the tray mounting bracket to the frame.



15. Fasten the other mounting bracket to the front frame at [A] and [B].



16. If the upstream device is the main machine or the multi folding unit, proceed to step 15. The other options must change the guide plate with the following steps.

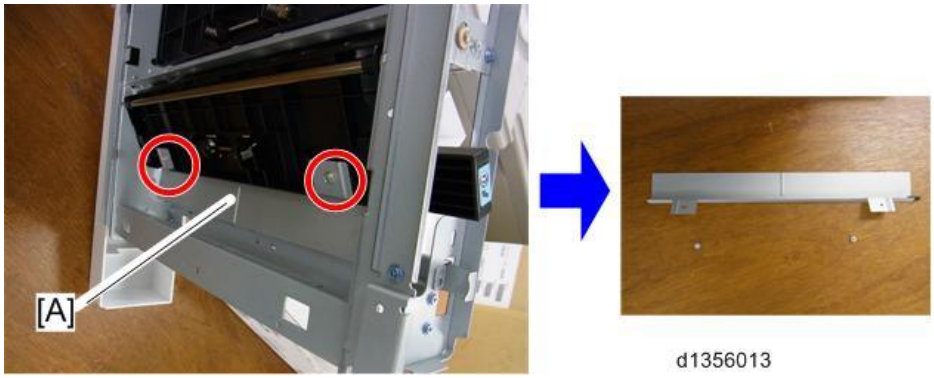
⚠CAUTION

- If the guide plate is not replaced, open/close guide plate cannot be opened because of interference when you handle jams on the cover interposer.

1）Lower the lever [A].

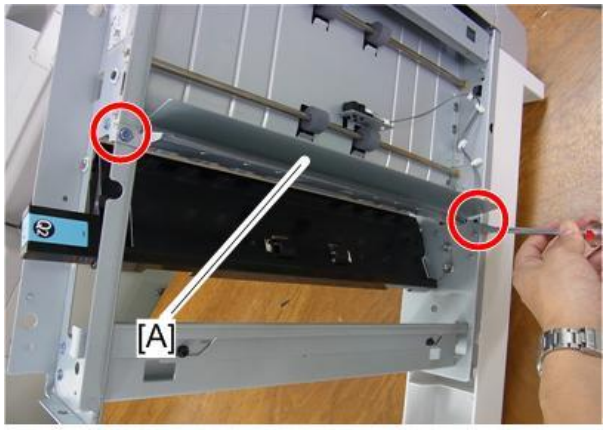
d1356012

2）Remove the guide plate [A].



d1356013

3）Attach the guide plate [A] provided with this option to the bracket of the cover interposer.

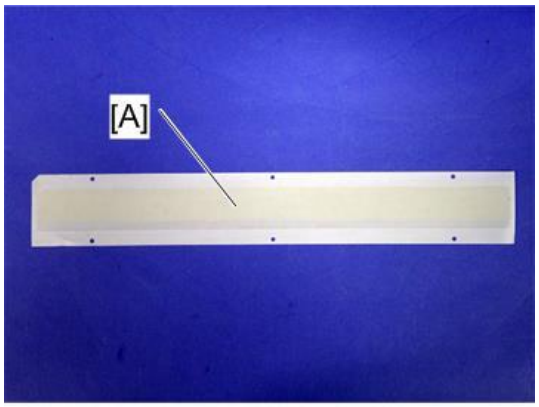


d1356014

4）Put back the lever.

17. If the upstream device is the main machine, attach the guide with the following steps. If the upstream device is not the main machine, proceed to step 16.

1）Prepare the guide [A] provided with the main machine.



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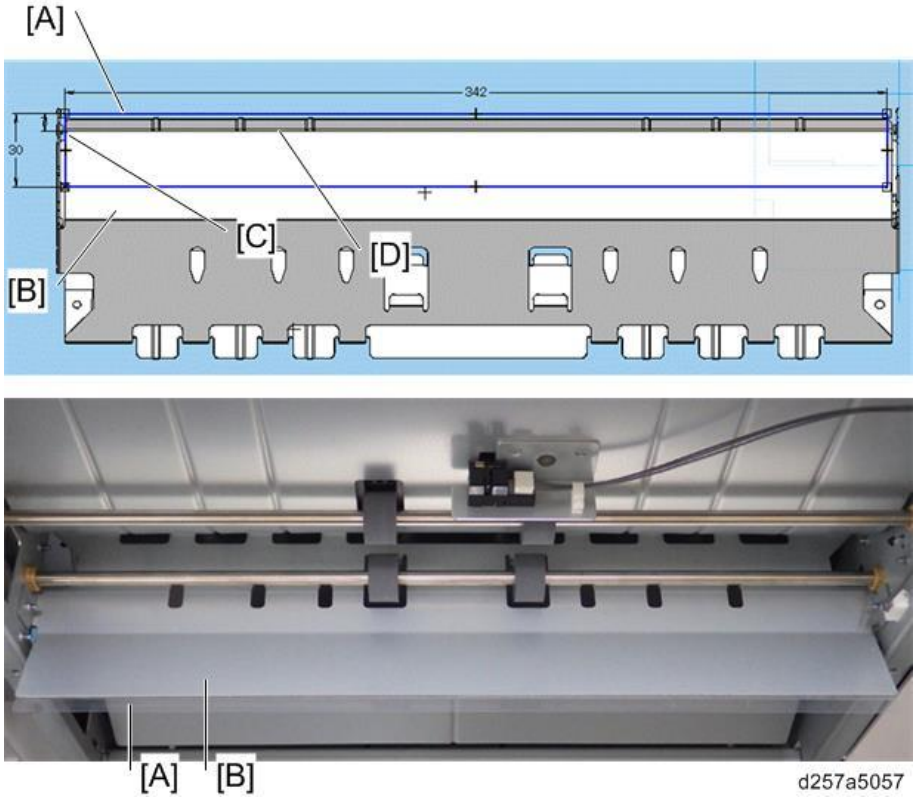
2）Peel off the release paper of the guide [A], and then attach it to lower side of the upper guide plate [B].



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[C]: Align the guide plate edge with the upper edge of the guide

[D]: Align the guide plate edge with the edge of the double-sided tape

18. Slowly, lower the tray unit hooks onto the shoulder screws inside the finisher.

dc3nc1018

Note

- Set the stepped screw at the near side [A] and far side [B] inside the finisher.

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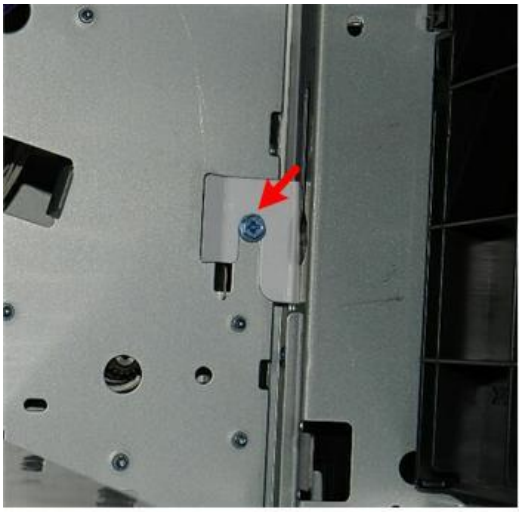
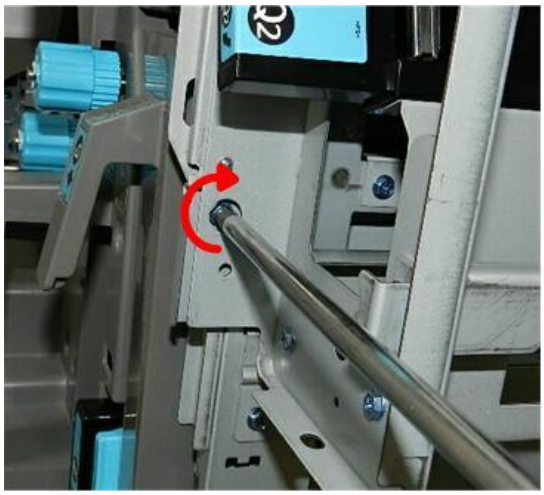
- Look inside the finisher to confirm that the hook of the rear bracket is seated correctly on

the shoulder screw.



dc3nc1019

19. Fasten one screw below the Q2 lever to fasten the tray to the frame.



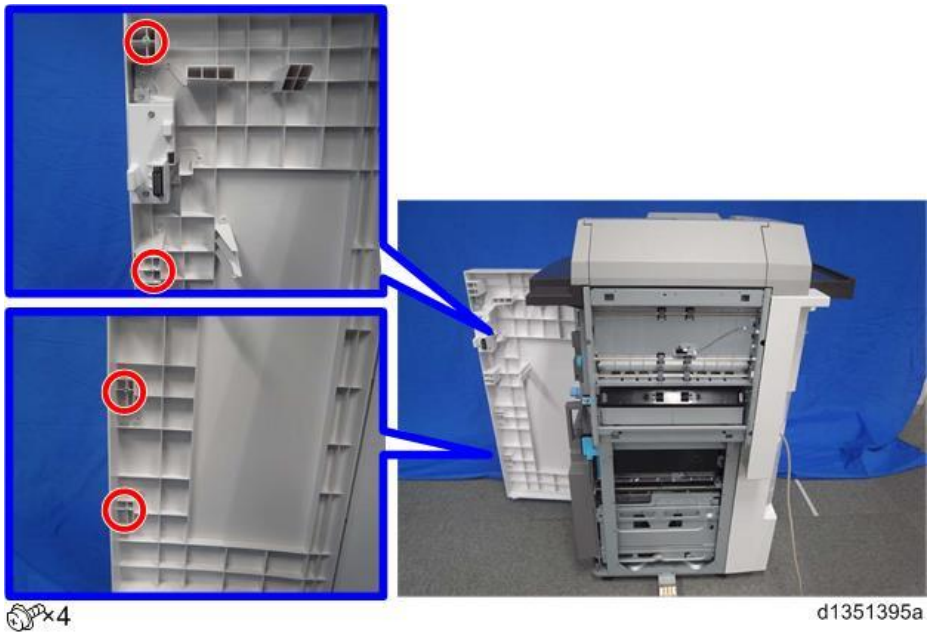
x1 M3x6 dc3nc1020

20. Fasten one screw to fasten the tray to the frame at the rear.

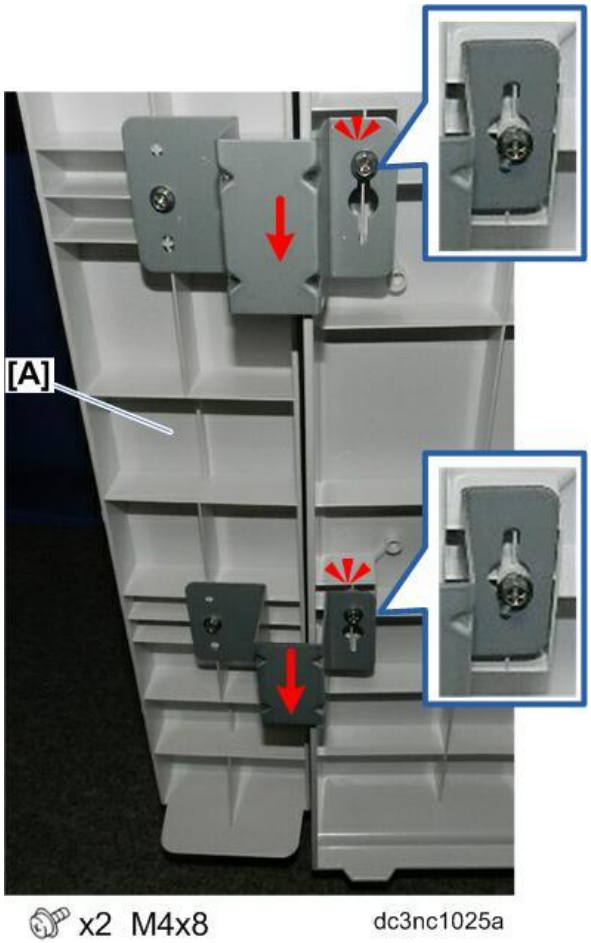
x1 M3x6 dc3nc1022

21. Attach the screw (M4x8) provided with this option to the screw holes on finisher front door. (Do not

tighten yet)

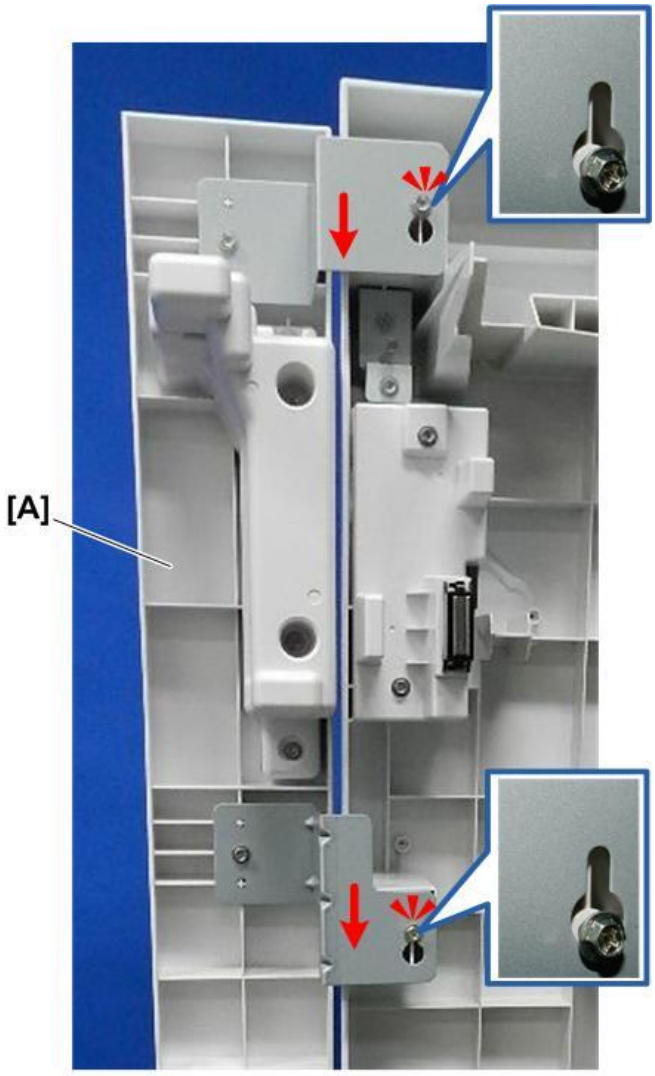


22. Hang the metal part of the cover [A] provided with this option on the screw (M4x8), slide it to the bottom side. Then tighten the screw.



23. Hang the metal part of the door [A] provided with this option on the screw (M4x8), slide it to the

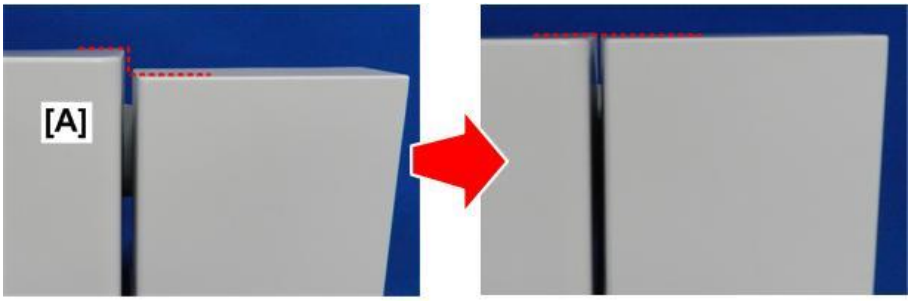
bottom side. Then tighten the screw.



dc3nc1026a

Note

- Check the top of the door and extension. If the top of the door and the extension are not equal [A], slide the extension up slightly [B] and tighten the screws.



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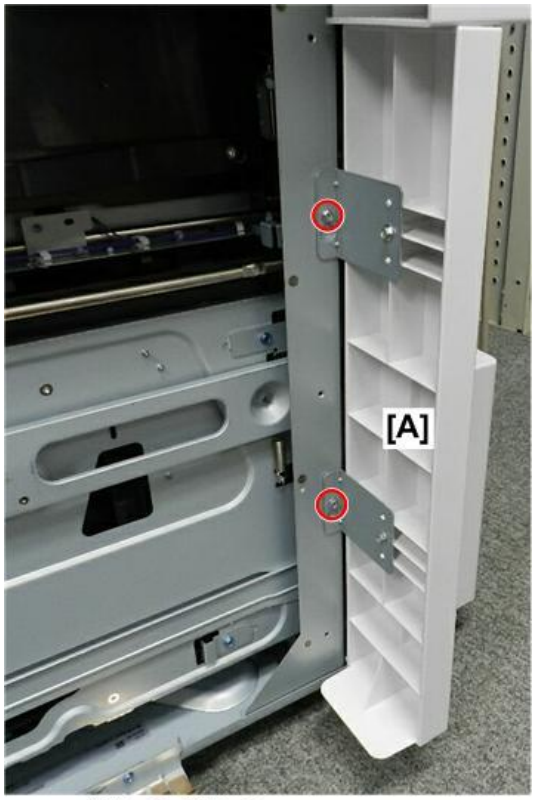
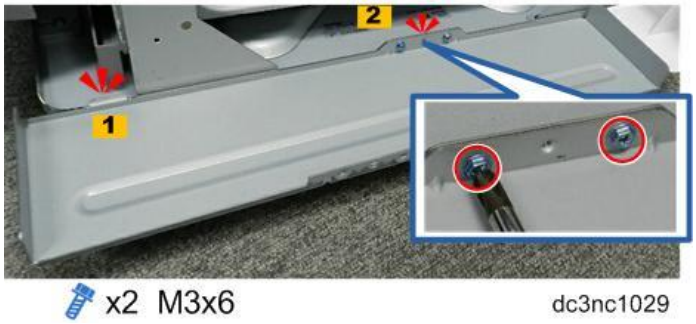
24. Attach the rear cover extension [A].



25. Remove ground plate [A] from the bottom right edge of the finisher.

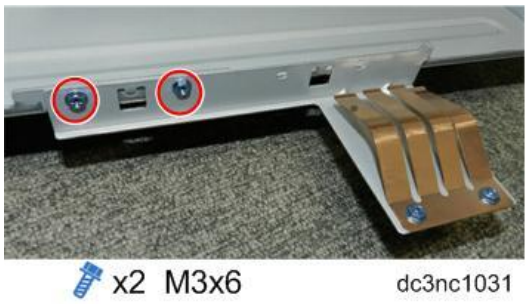
26. Set the tab [1] and boss [2] of the ground plate extension on the bottom edge, and then fasten it

with the screws.



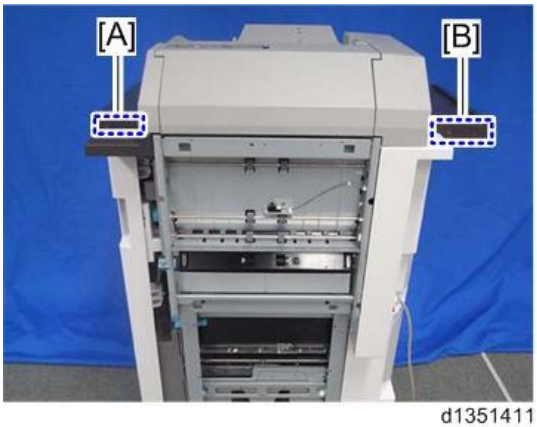
27. Hook the ground plate to the right edge of the extension.

28. Fasten the ground plate to the extension.

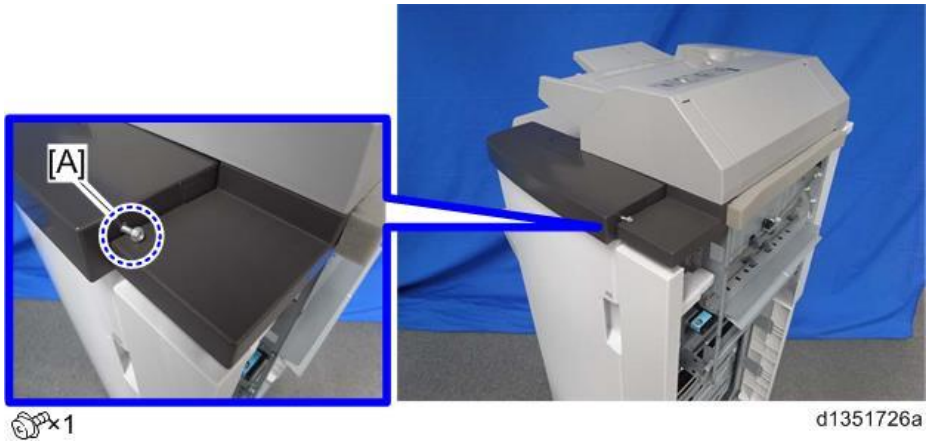


29. At the right front corner of the finisher [A], peel off the tape.

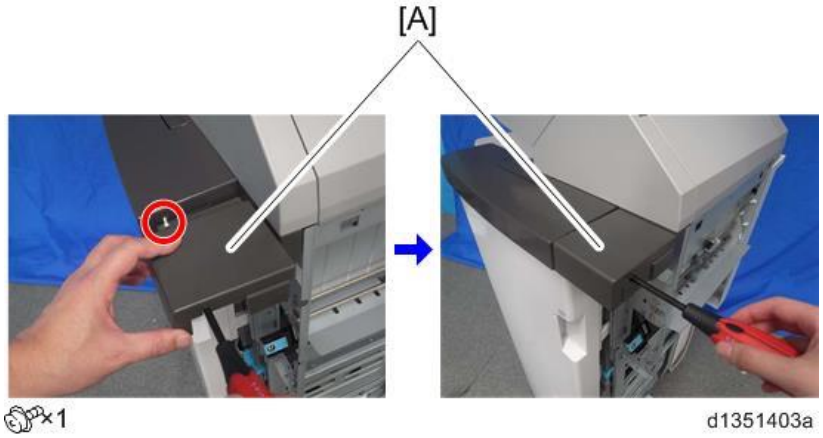
- Front [A]
- Rear [B]



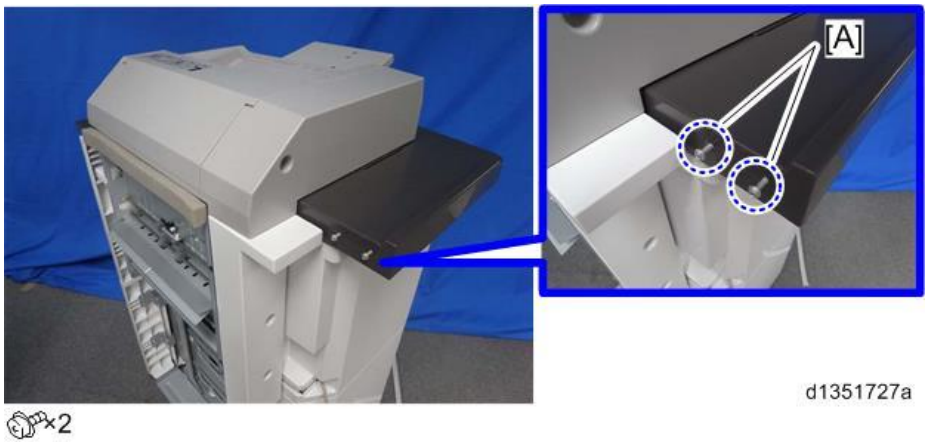
30. Attach the screw [A] to the front side of the finisher. (M4×16)



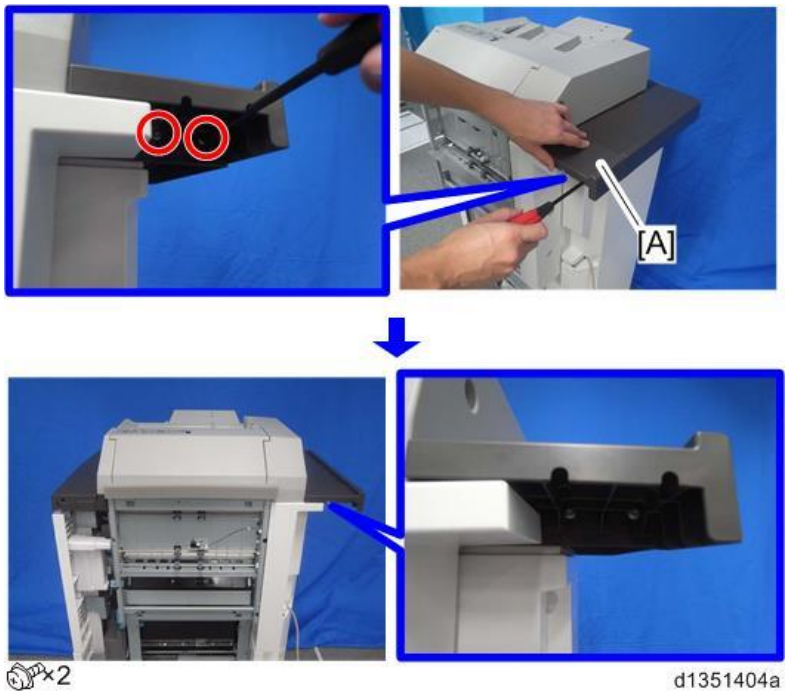
31. Attach the cover [A] provided with this option to the finisher and tighten the screw.



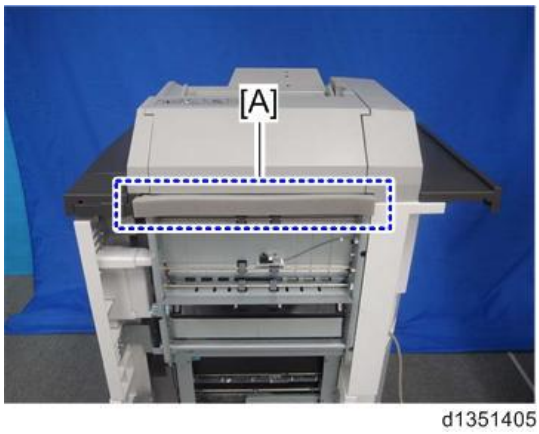
32. Put the screw [A] on the rear side of the finisher. (M4×16)



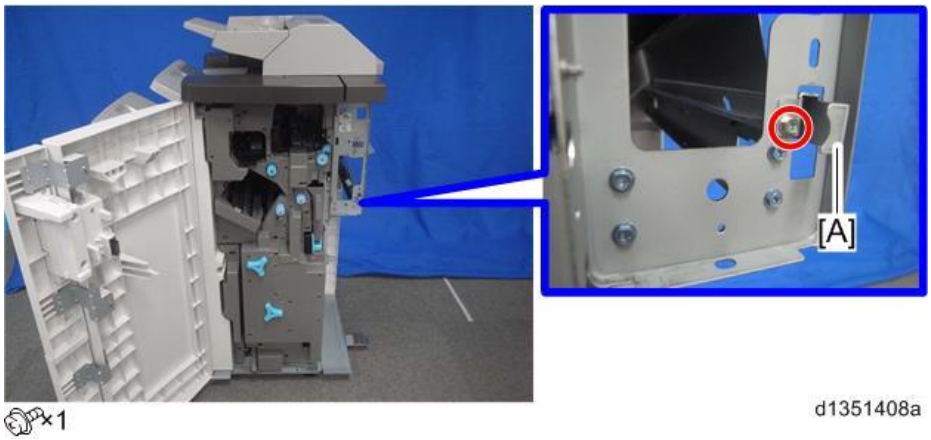
33. Attach the rear spacer cover [A] to the finisher and tighten the screw.



34. Attach the provided sponge strip [A] to the cover interposer.



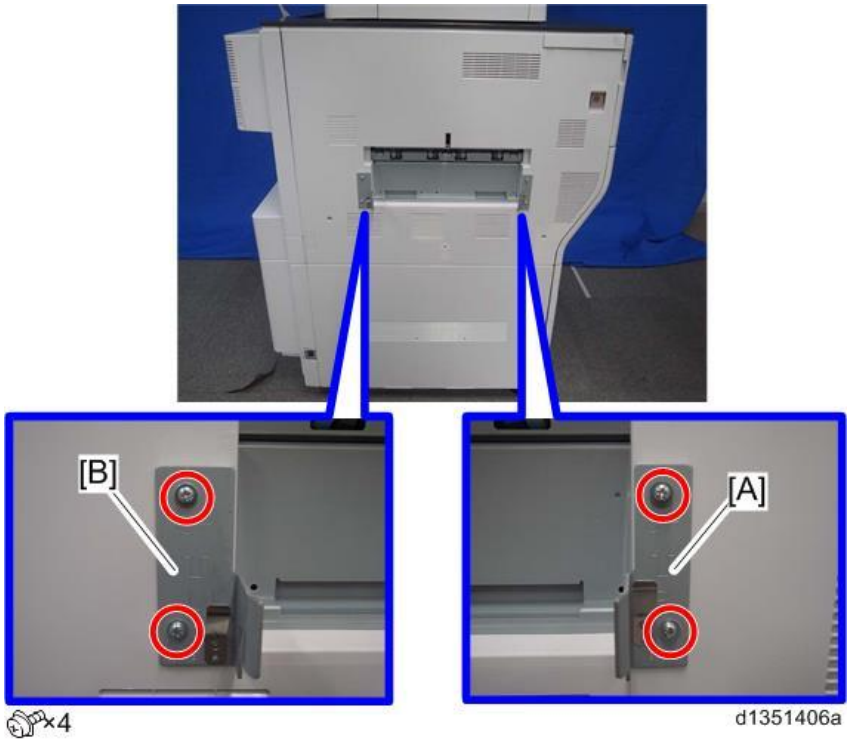
35. Open the finisher front cover and release the lock bar [A].



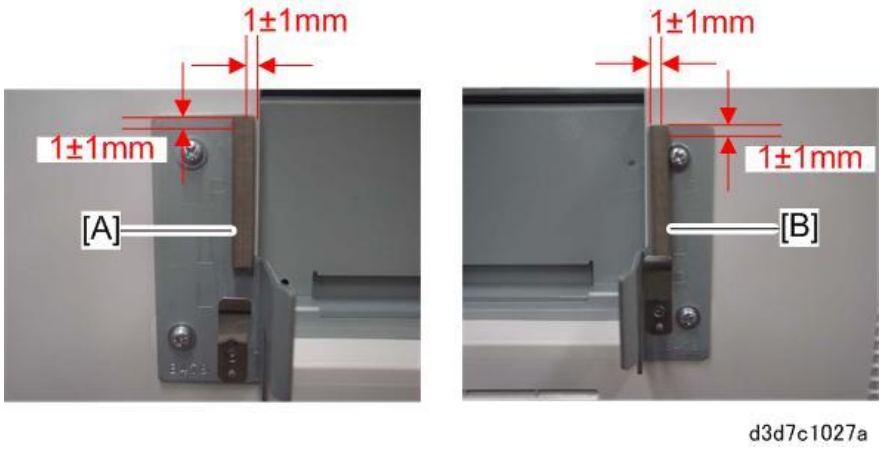
Note

- Keep the screw removed.

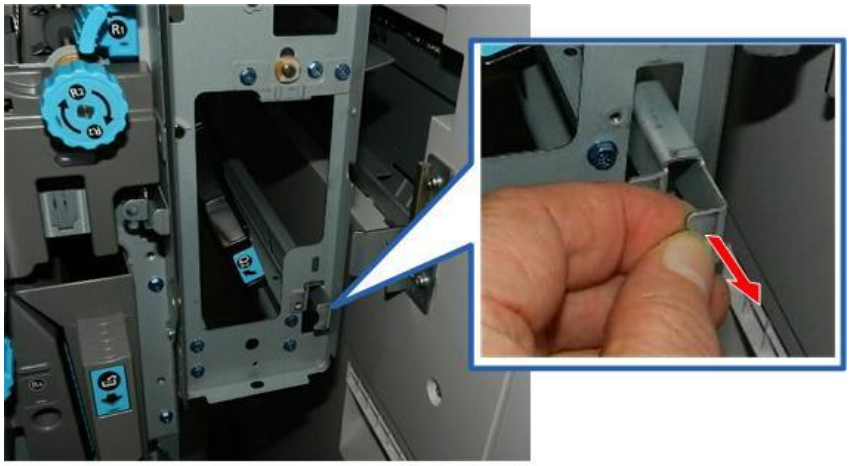
36. Attach the bracket [A] [B] provided with this option. (M4×14)



37. Attach the gasket [A] [B] to the joint bracket.

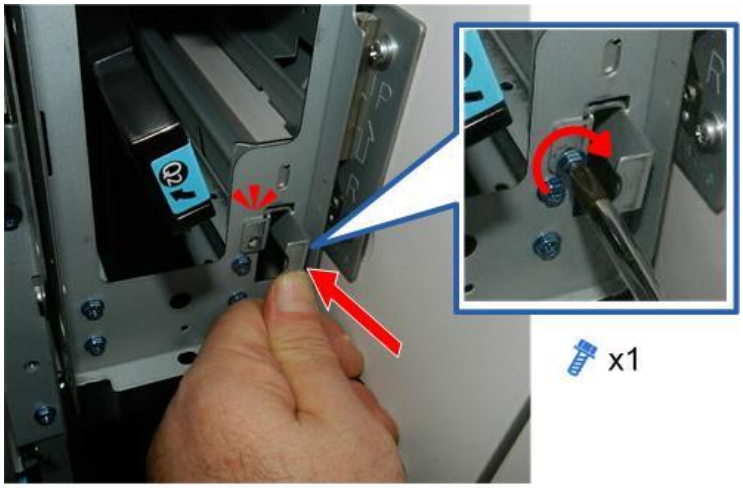


38. Confirm that the lock bar is pulled out completely.



dc3nc1041

39. Push in the lock bar, and then fasten it with its screw.



dc3nc1042

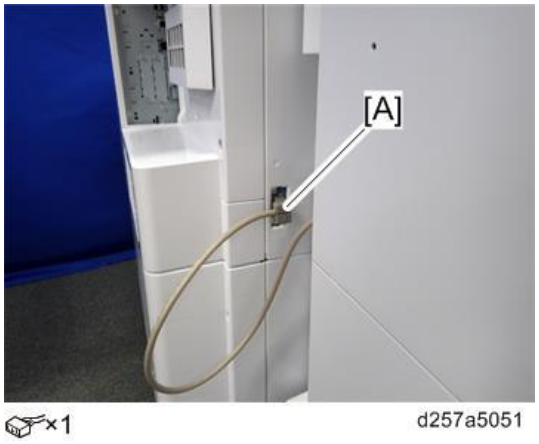
Note

• After docking the finisher, lower and raise guide Q2 to confirm that it opens and closes smoothly.

• If it does not operate smoothly, make sure that the right side of the finisher is straight against the left side of the machine (or upstream unit).

• Also, check the guide Q2 and the paper guide above to see if either is bent or loose.

40. Connect the finisher cable at the right rear corner of the machine [A].



41. Plugin and Turn ON the main power.

42. Enter [System Settings].

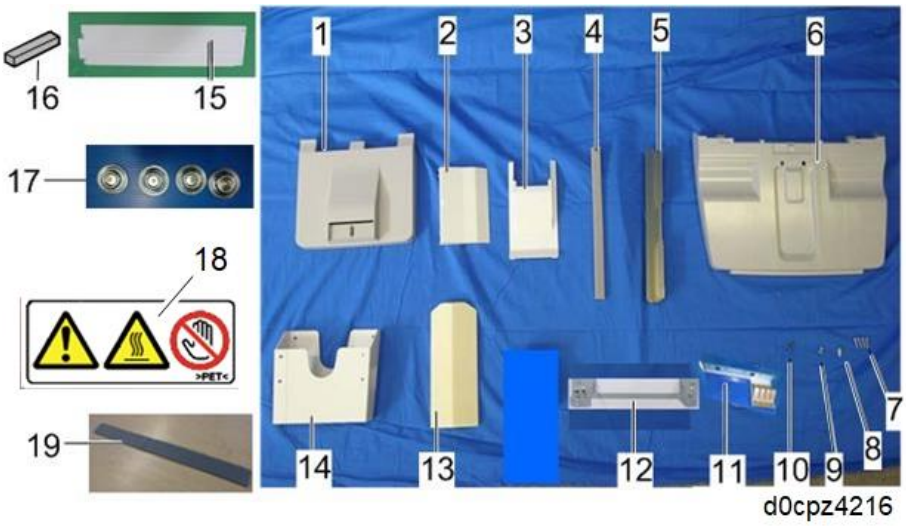
43. Select Cover Sheet Tray > Front Cover Sheet Tray > Back Cover Sheet Tray > Tray Paper Settings > Designation Sheet 2 Tray.

Finisher SR5090 (D3GD), Booklet Finisher SR5100 (D3GC)

Note

- Finisher SR5090 and Booklet Finisher SR5100 are for Pro C5310S/C5300S.
- **This description is applicable for Finisher SR4150 and Booklet Finisher SR4160 for IM C6500/C8000.**

Accessories



No.	Description	Q'ty	Remarks
1	Tray	1	For SR4160 only
2	Shift Tray Support Tray	1	Use when Multi-folding unit installed

No.	Description	Q'ty	Remarks
3	Proof Tray Support Tray	1	
4	Sponge Strip	1	
5	Relay Guide Plate	1	
6	Shift Tray	1	
7	Screw: M4x20	4	
8	Round Rivet	2	
9	Tapping Screw 3×8	1	
10	Tapping Screw 3×6	6	
11	Bracket	1	
12	Joint Bracket	1	
13	Proof Tray Support Tray	1	
14	Pocket	1	Support Tray
15	Rear Upper Cover	1	
16	Finisher Coupling Seal	1	
17	Leveling Shoes	4	
18	Decal (Warning: High Temperature)	1	For Output Jogger Unit
19	Cushion	1	
-	Cover Hopper	1	For SR4160 only
-	EMC Address	1	

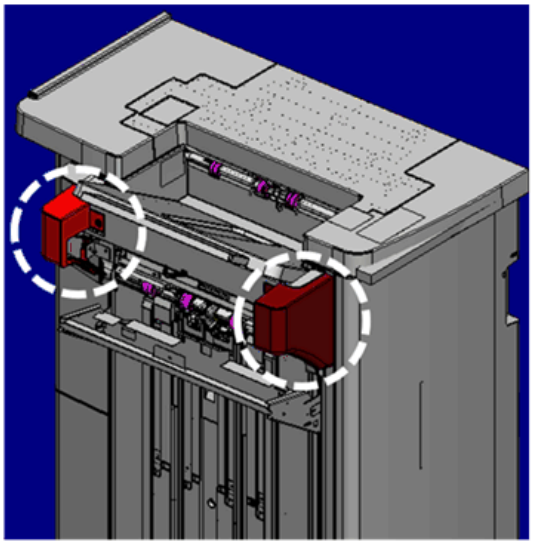
Installation Procedure

⚠CAUTION

- When installing this option, turn OFF the main power and unplug the power cord from the wall socket. If installing without turning OFF the main power, an electric shock or a malfunction may occur.

⚠CAUTION

Do not hold on the guide cover in the area highlighted in red during installing. Otherwise, the cover may break and SC720 occur.



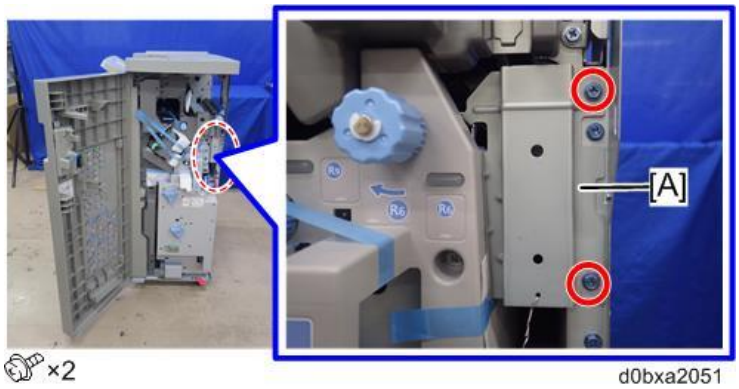
d0cpz4108

1. Remove the tape and retainers and then pull out the accessories.

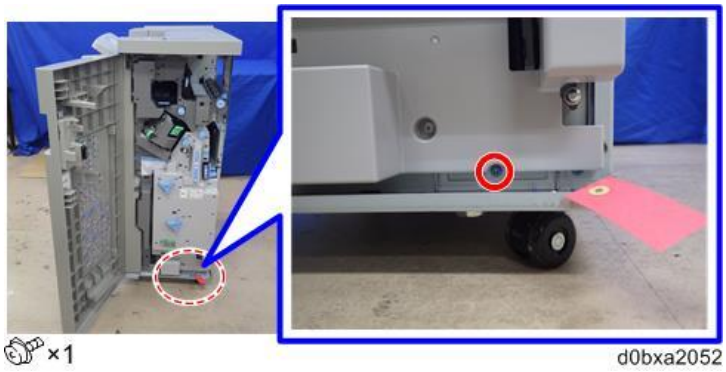
d0bxa2050

2. Open the front door and remove the tape and retainers inside the finisher.

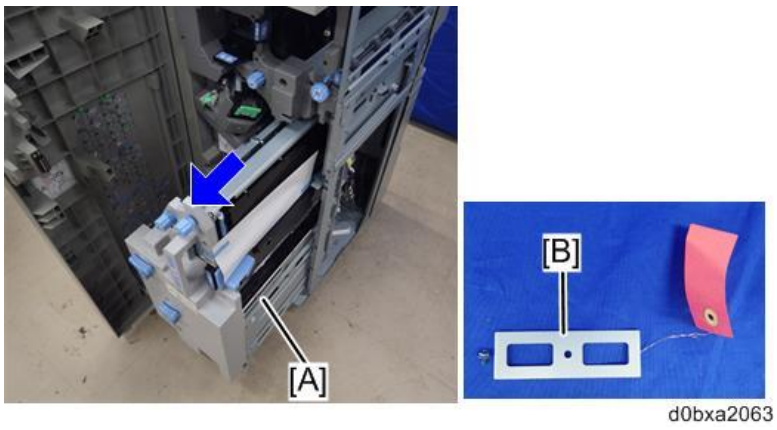
3. Remove the upper bracket [A] attached a red tag.



4. Remove the lower bracket [A] attached a red tag.



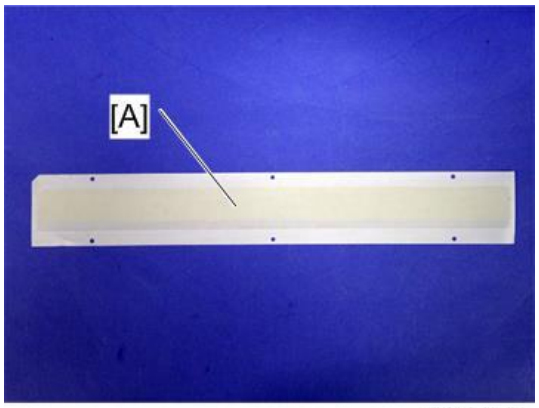
5. Pull the booklet unit [A] and remove the retainer [B].



6. Remove the tape and retainers on the booklet unit [A].

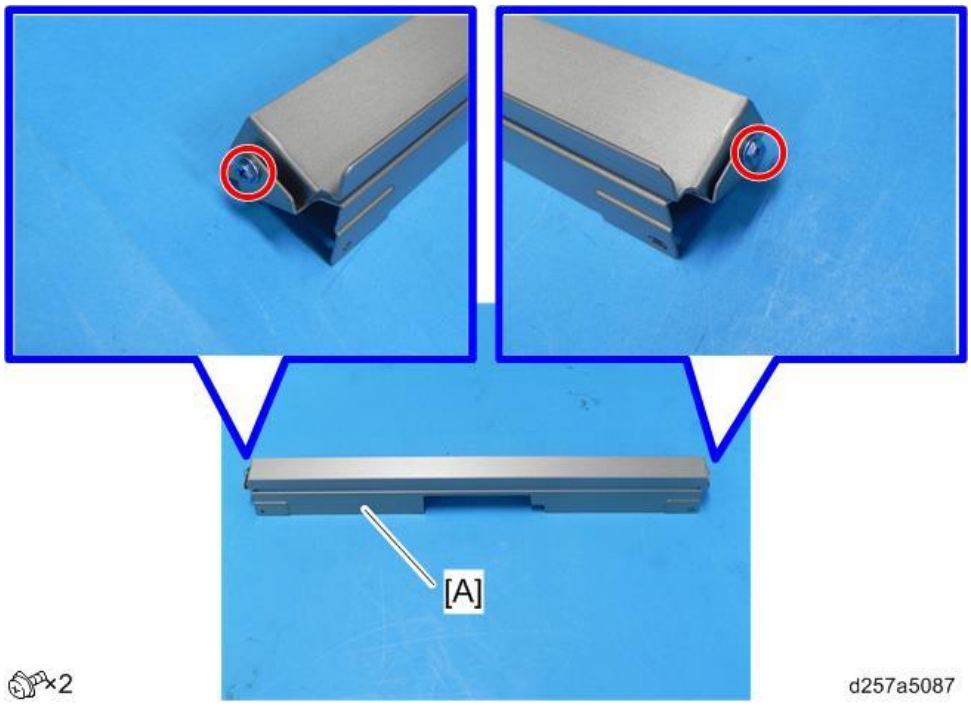
7. Put back the booklet unit.

8. For docking with the main machine, prepare the guide [A] provided with the main machine.
For docking with other peripherals, proceed to step 12.



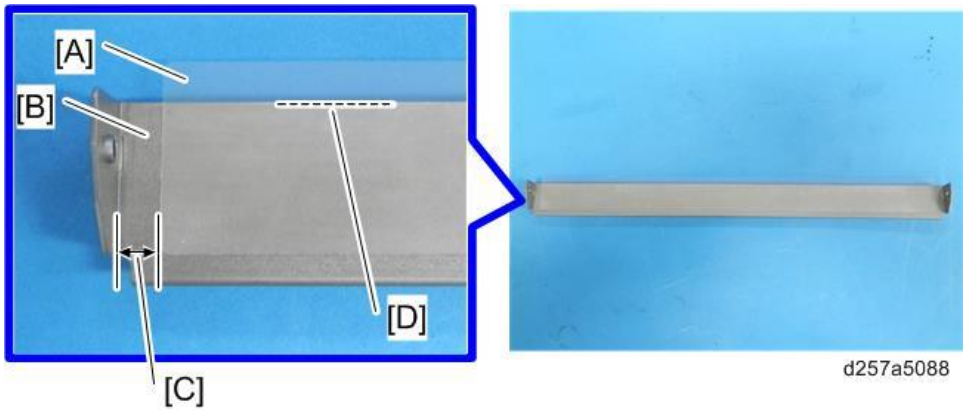
d257a5054

9. Separate the guide plate [A] into upper and lower pieces.



d257a5087

10. Peel off the release paper of the guide [A], and attach it on the upper side of the guide plate [B], which becomes the inner side when assembled.

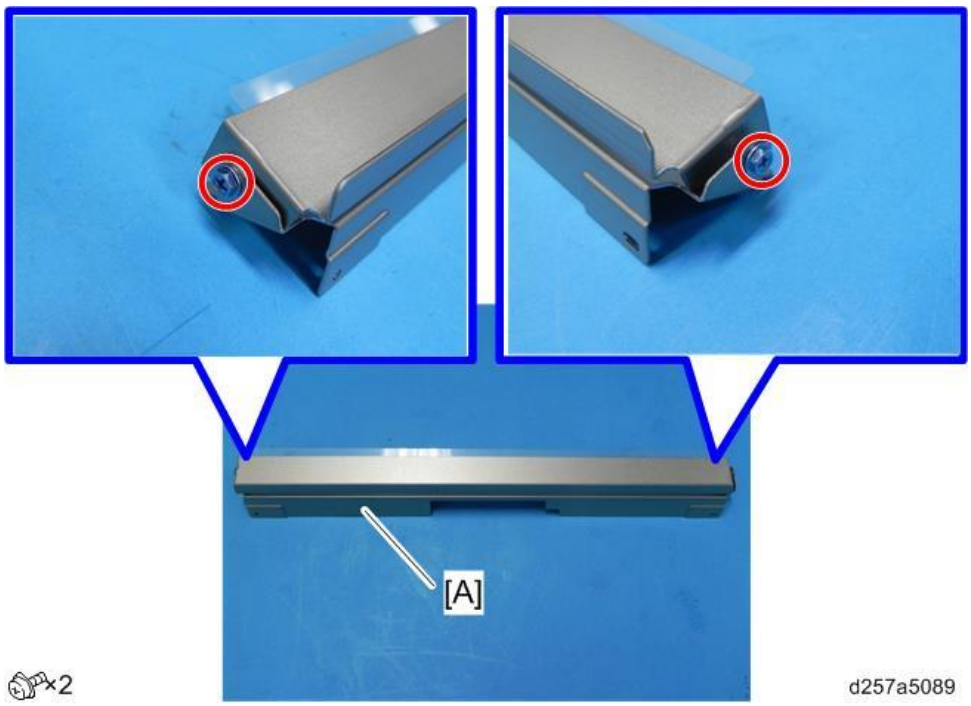


d257a5088

[C]: 5 mm from guide plate edge

[D]: Align the guide plate edge with the edge of the double-sided tape.

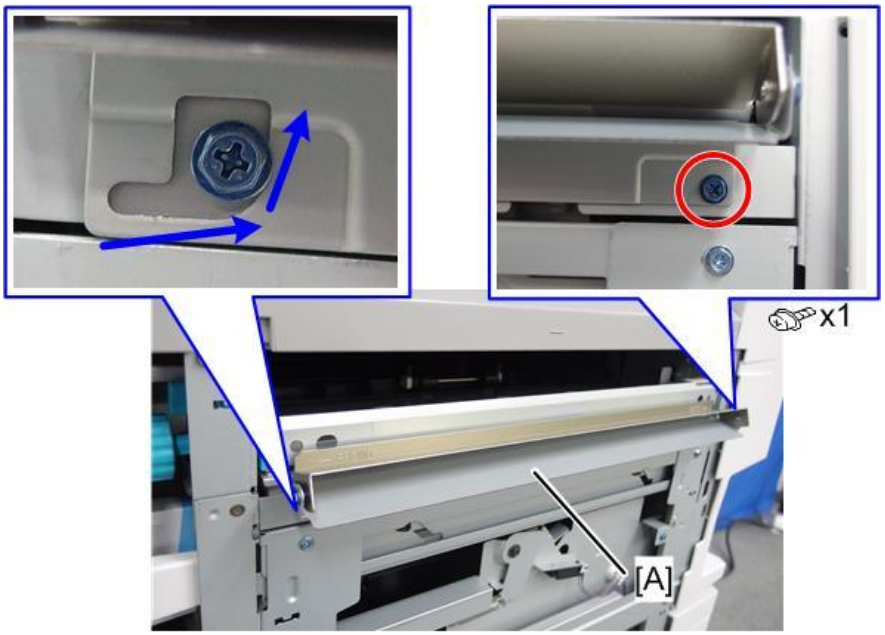
11. Assemble the guide plate [A].



12. Attach the relay guide plate.

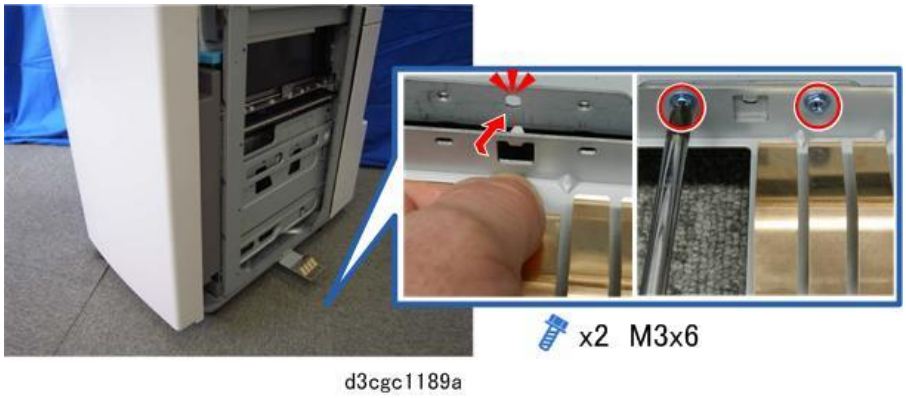
1. Attach the screw front side so that the relay guide plate can be hang on it.

2. With the relay guide plate [A] hanging on, fasten the screw of the rear side.



3. Tighten the screw front side.

13. Attach the ground plate to the finisher.

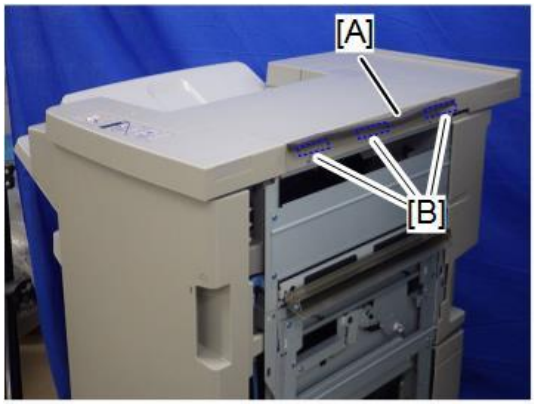


14. Attach the cover [A] to the finisher.

Note

If the finisher is used with CI4040, this cover is not used.

15. Attach the sponge strip [A] by aligning the line [B]. Wipe the area with alcohol before attaching it.



d0cpz1158

Note

- Be sure to attach the sponge strip. Otherwise, paper between the main machine and the finisher may fall down.
- Attach it within 1 mm from the upper edge.

d0bxa2160

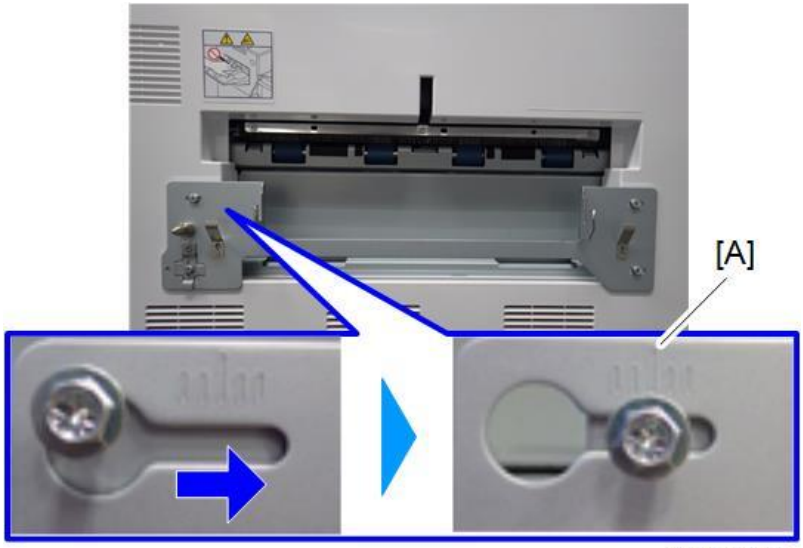
16. Attach 2 screws on the upper side and hang the joint bracket [A] on the screws (M4 x 20).

Note

If the decurl unit is installed, use M4x8 screws provided with the decurl unit.

×2
d257a5047a

17. Set the screw head on the center of the scale [A].



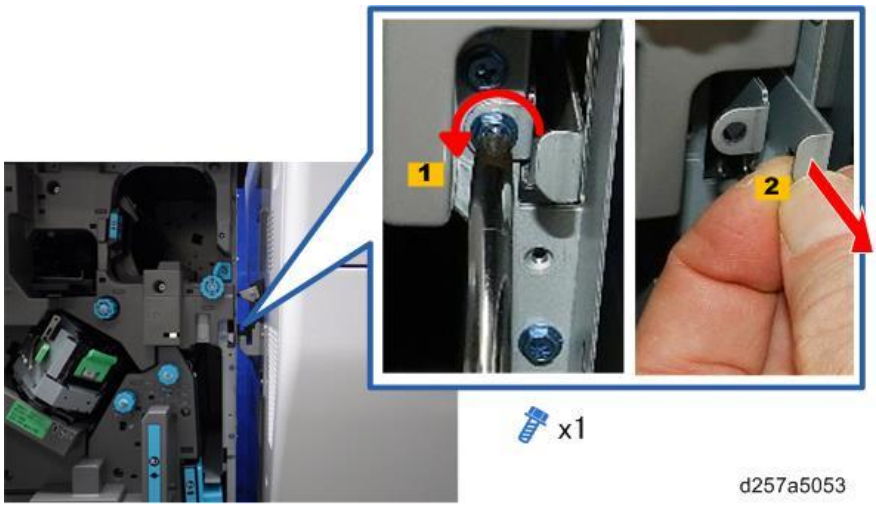
18. Fasten the joint bracket [A]. (M4 x 20)

19. Attach the finisher coupling seal [A].

20. Remove the connector cover [A].

21. Open the front cover of the finisher.

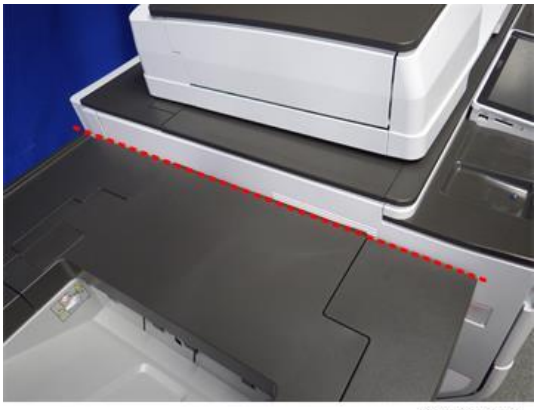
22. Remove screw [1] and pull the docking lever [2] to release.



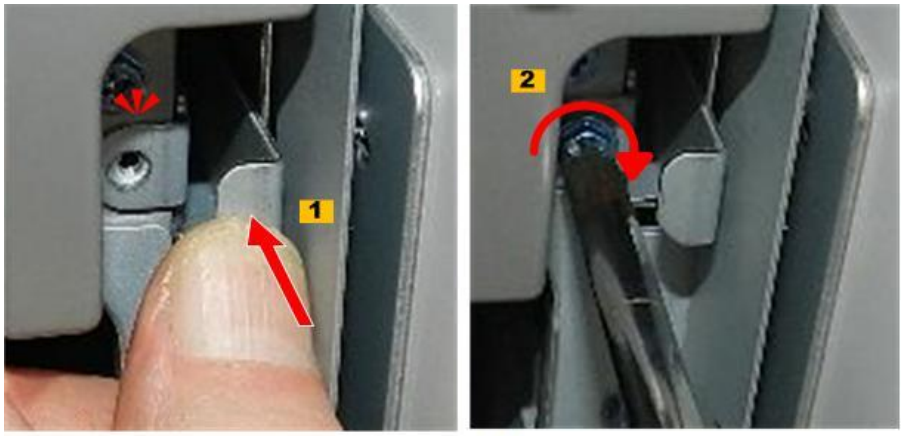
23. Push the finisher again to joint with the main machine firmly.

Note

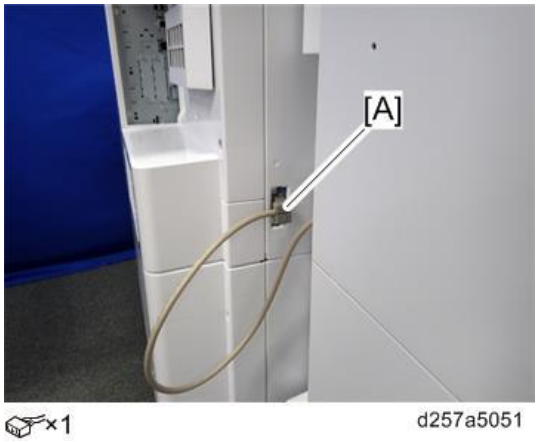
- Make sure that the finisher and the main machine are parallel.



24. Set the docking lever just released, and fasten the screw.

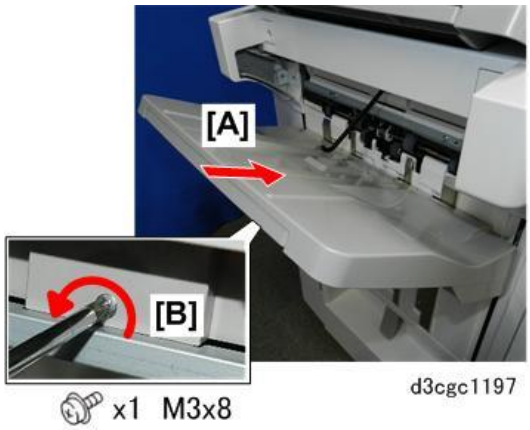


25. Plug in the interface cable to the main machine.



26. Close the front cover of the finisher.

27. Set the shift tray [A] and tighten the lower side [B].



28. (SR4160 only) Attach the multi-folding tray [A].

d3cgc1198a

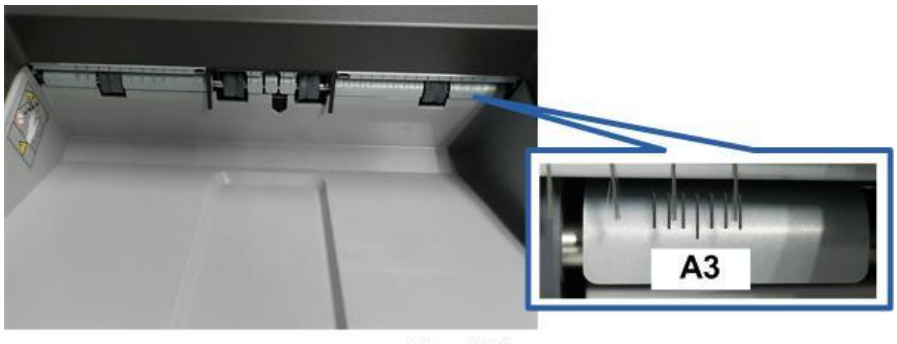
29. If necessary, attach the holders to the finisher, and level the finisher.

d3cgc1007

30. Turn ON the power of the main machine.

31. Make sure that the finisher can be selected on the operation panel. Also check that it can be operated.

32. Print 5 sheets of A3 paper to proof tray. Check the side-to-side registration with A3 adjustment scale.



d3cgc3121a

Note

If the paper passes at the center of the scale, then it means that the paper passes the center and no adjustment is required.

One division of the scale is 2 mm. If the paper edge passes at the 1 division from the center, then the paper is offset 2 mm front.

The outermost division of the scale represents 6 mm. If the paper edge passes at the leftmost

division, then the paper is offset 6 mm rear.

33. Make sure that folding operation works correctly.

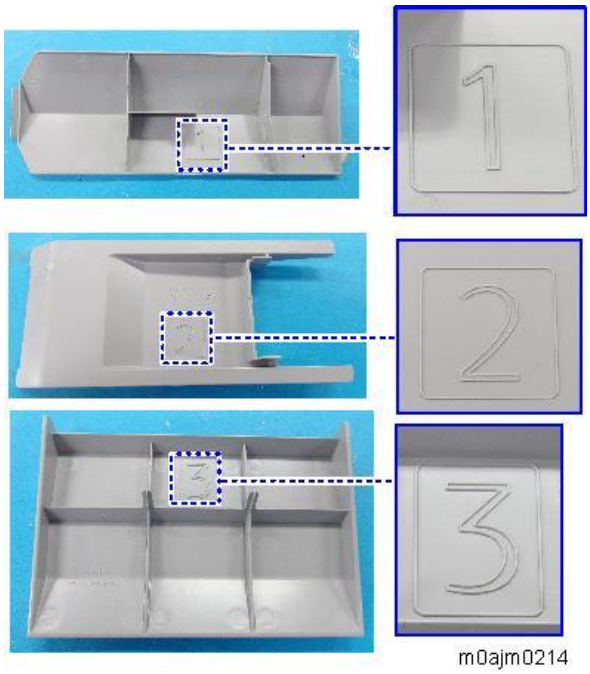
Note

If there are folding errors, see the troubleshooting for peripherals.

Using the Support Trays for the Proof Tray

When delivering z-folded sheets, or the paper is curled, the sensor may prematurely detect the exit tray. The job will be suspended until the paper is removed from the exit tray.

By using a support tray, you can prevent premature detection of a tray full.



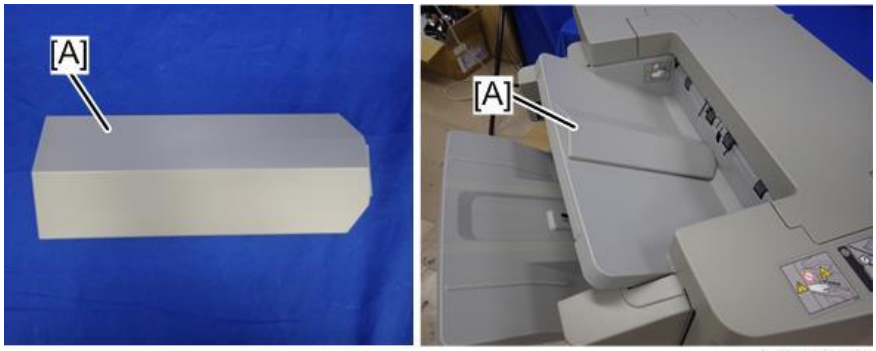
m0ajm0214

Support Tray "1"

When using B4, LG or larger paper, or when using limp paper, the sheet may bend, resulting in premature full detection.

d1826009

In such a case, attach the support tray [A] to the proof tray.

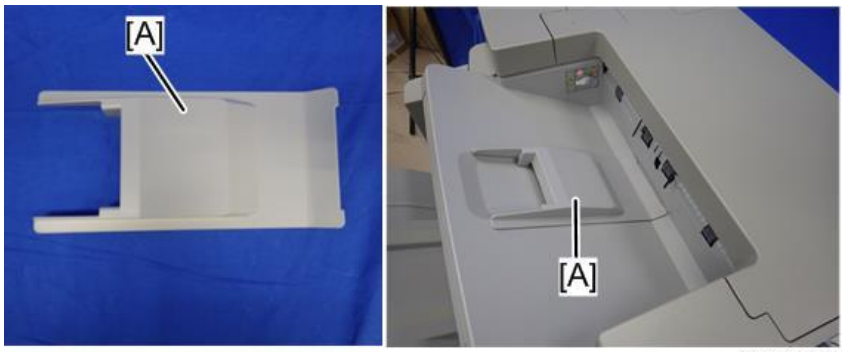


d0bxa2059

However, when this support tray is used, when printing with A4, LT or smaller paper, the machine can stack only 200 sheets (less than the specified stack capacity of 250 sheets).
When printing with B4, LG or larger paper, the machine stacks 50 sheets (specified stack capacity).

Support Tray "2"

When delivering z-folded sheets, using the support tray can prevent premature full detection.

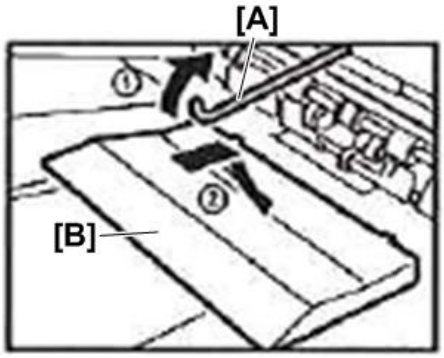


d0bxa2060

Support Tray "3"

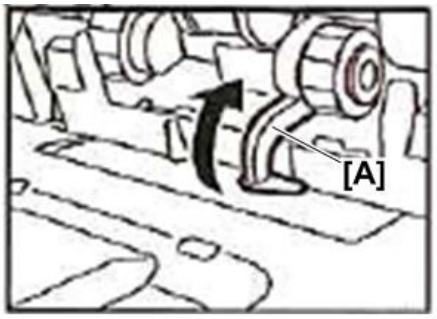
Use this tray if the multi-folding unit is installed on. This support tray allows much more paper to stack.
<Installation Procedure>

1. Raise the feeler [A] and place the support tray [B] on the shift tray.



d223d8207

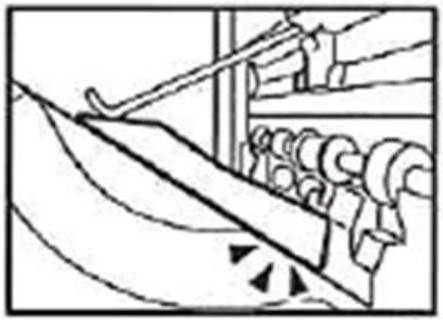
2. Set the support tray while pushing up the feeler [A].



d223d8208

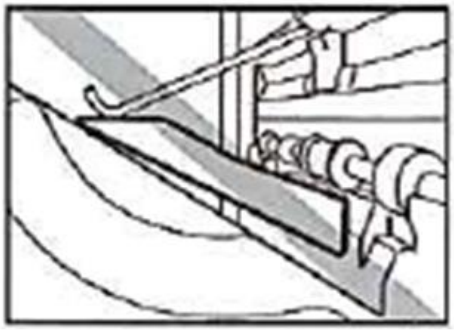
Note

- Check that there is no gap between the shift tray and support tray. Installing it incorrectly may cause dropping off of the paper height sensor.
  Correct:



d223d8209

Incorrect:

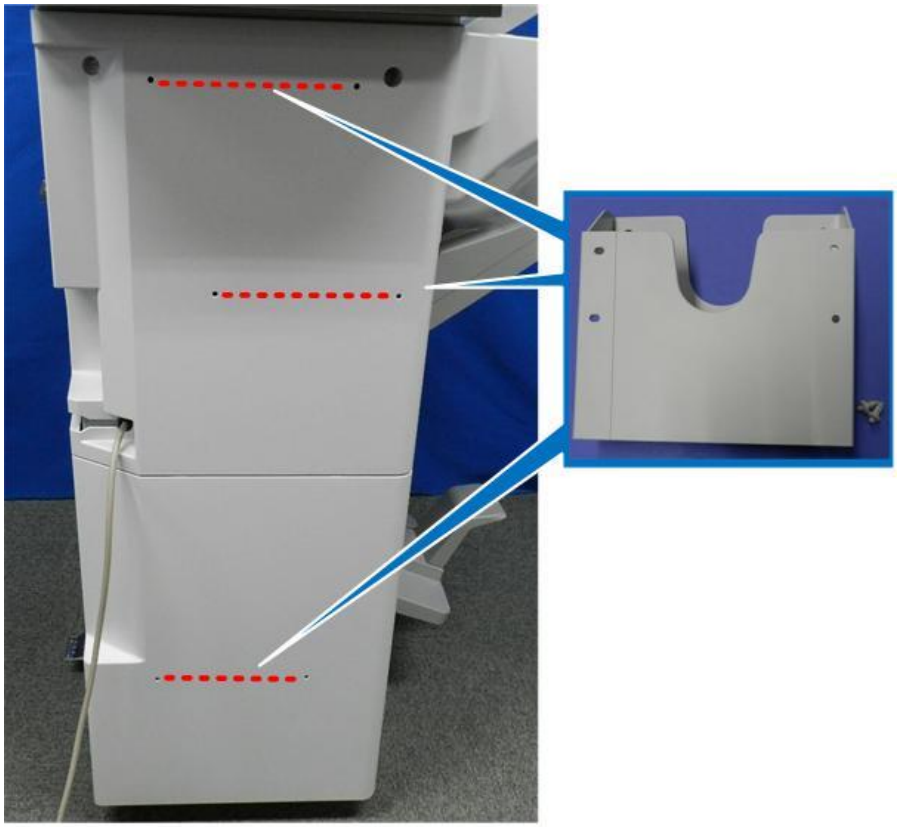


d223d8210

Installing the Support Tray Pocket

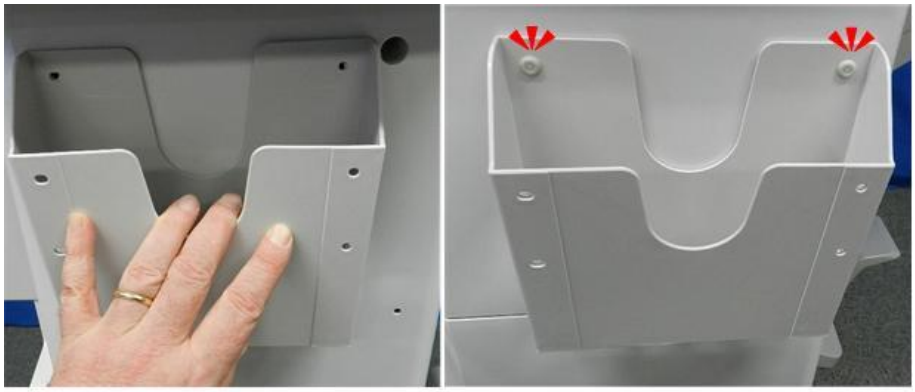
Note

The pocket can be installed at one of the following three locations.



d3cgc1002

1. Attach the pocket with rivets.



d3cgc1003

2. If the support tray is not used, then store it in the pocket.

d3cgc1004

Moving the Finisher

⚠CAUTION

- When moving the finisher, move it together with the main machine linked to it. If you try to move only the finisher, it may fall down, causing injury.

Cooling Fan Unit Type M26 (D3CK)

Important

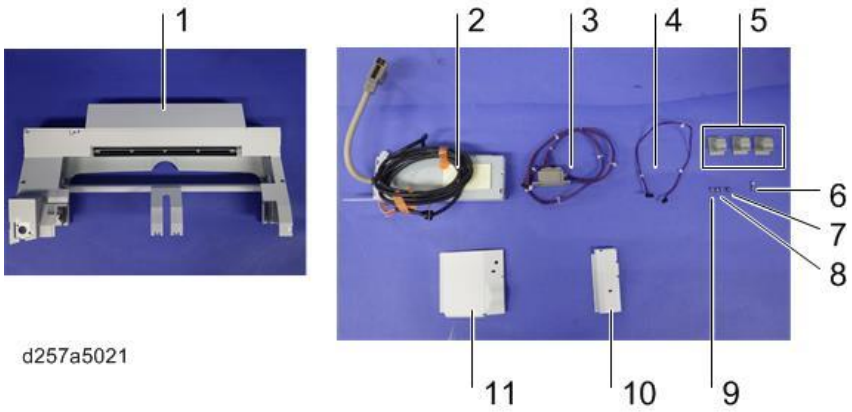
This option can be installed on the Finisher SR4150 or Booklet Finisher SR4160 after installing the Output Jogger Unit.

This option cools down the sheets delivered to the finisher shift tray.

Accessory Check

Check the quantity and condition of the accessories against the following list.

No	Description	Qty
1	Cooling Fan Assembly	1
2	Interface Unit	1
3	Harness: Decurler: Off (for use with IM C6500/C8000 only)	1
4	Harness: Shift Tray: Switch	1
5	Locking Wire Saddle CKN-13	3
6	Tapping Screw 3 X 16	1
7	Tapping Screw 3 X 6	6
8	Tapping Screw 3 X 8	1
9	Tapping Screw: Round Point: 3 X 6	1
10	Front Cover	1
11	Rear Cover	1



Installation Procedure

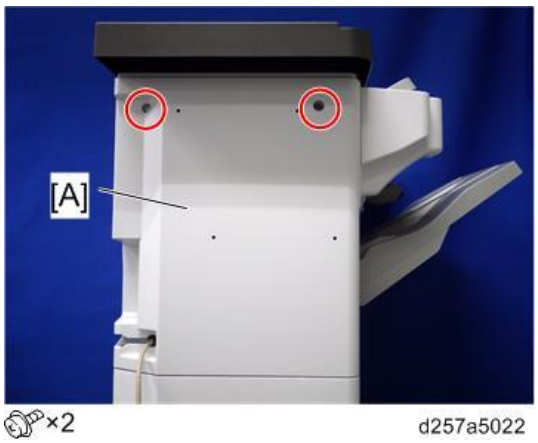
⚠CAUTION

Always switch the machine OFF and unplug the machine before installation.

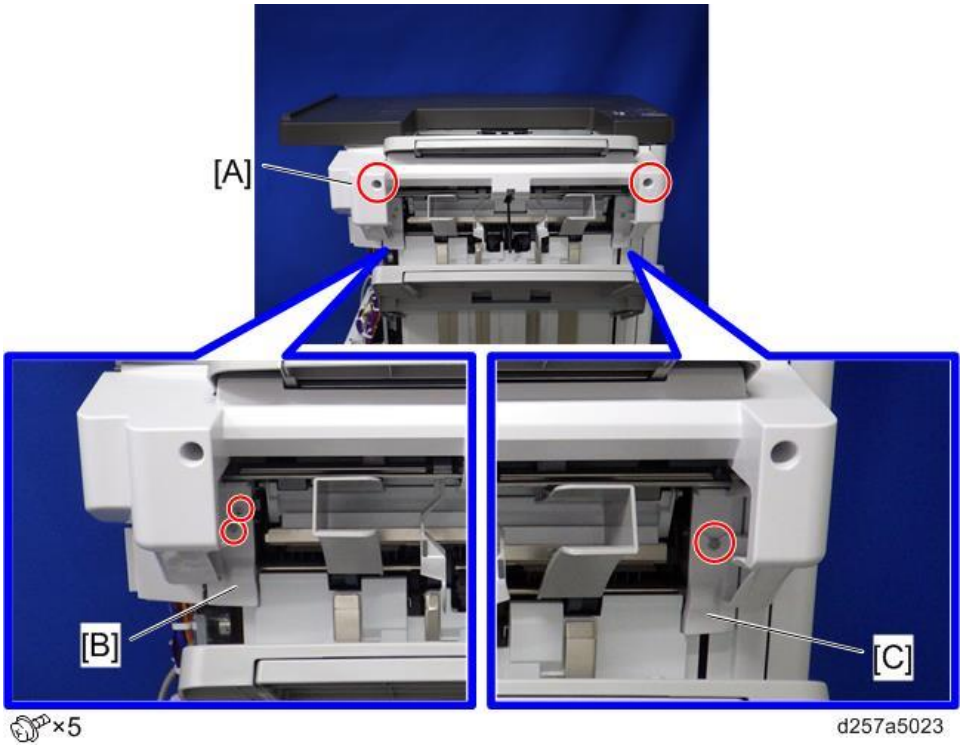
Preparation

If the finisher is connected to the machine, disconnect it.

1. Remove the rear upper cover [A] from the finisher.



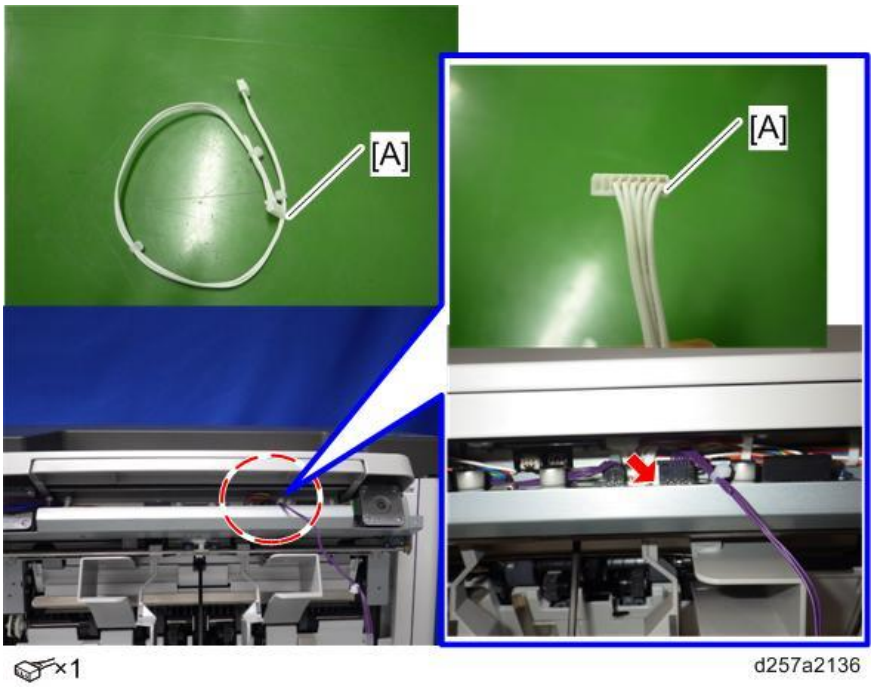
2. Remove the covers [A], [B], and [C].



3. Take out the harness [A].

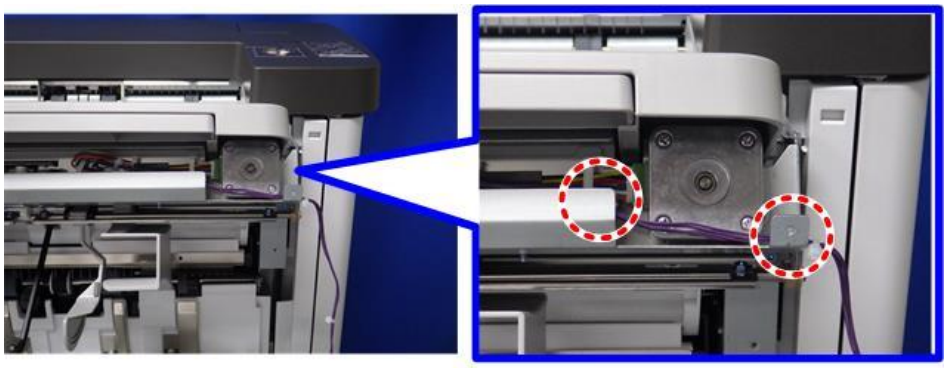
4. Connect the large connector of the harness [A] to the jogger unit board in the direction as shown below.

It will be easier to insert the harness by bending it.



5. Place the harness [A] temporarily as shown below.

Keep the parts below, marked with red circles, inside the plate to protect the harness from getting pinched.



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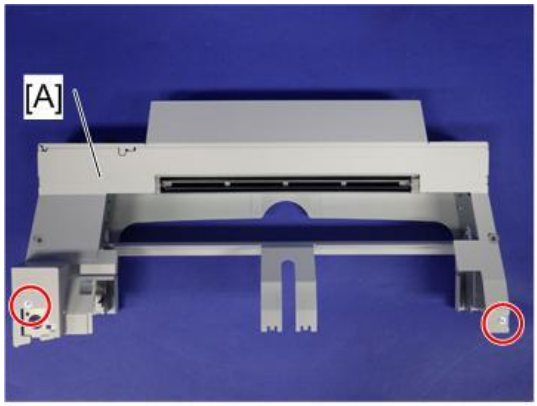
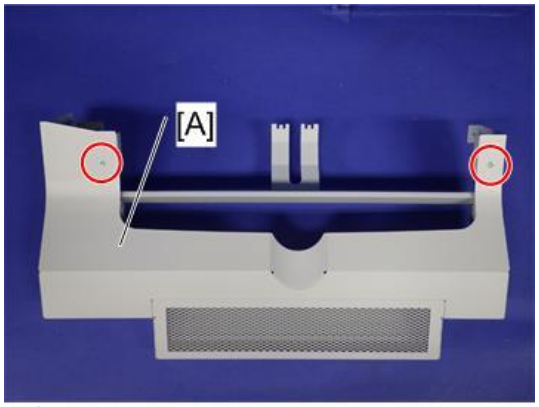
6. Unpack the cooling fan unit.
7. Position the cooling fan unit upside down, and remove the lower cover [A] from the cooling fan assembly.



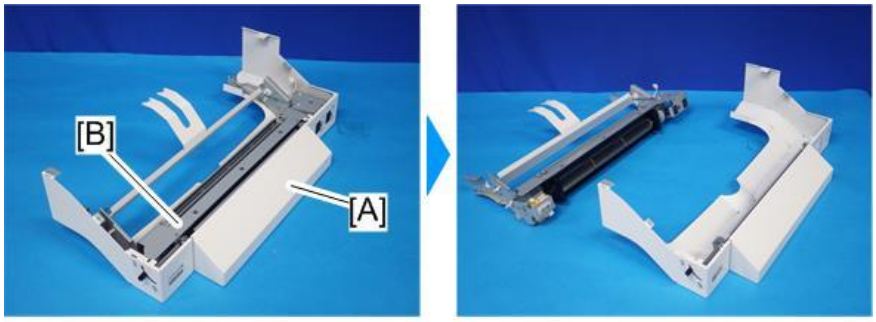
×2 d257a5026a

8. Turn over the cooling fan assembly, and remove the screws from the upper cover [A].



×2 d257a5027

9. Turn over the cooling fan assembly, and then remove the base unit [B] from the upper cover [A].



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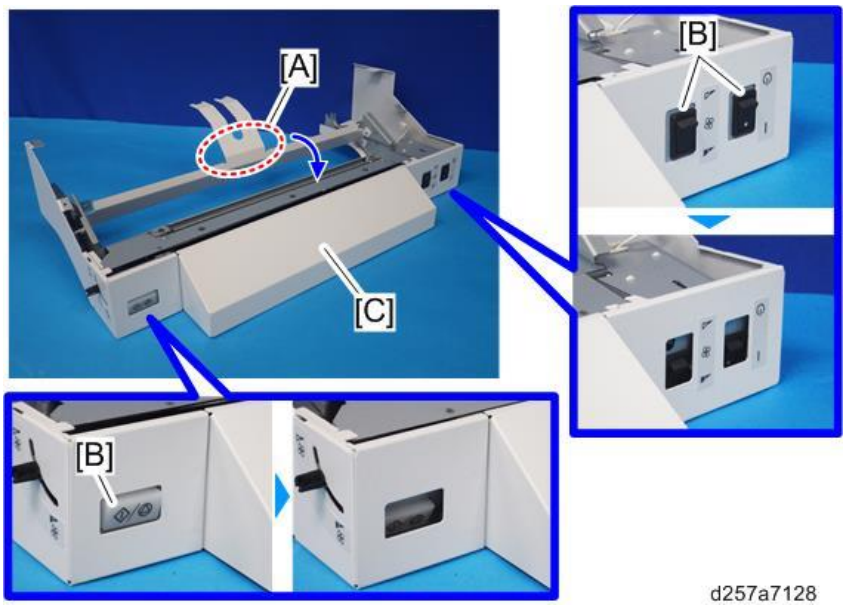
Note

Remove the base unit as shown below.

1. Hold the stay [A] of the base unit, and then rotate the base unit to move three switches [B] out of the upper cover [C].



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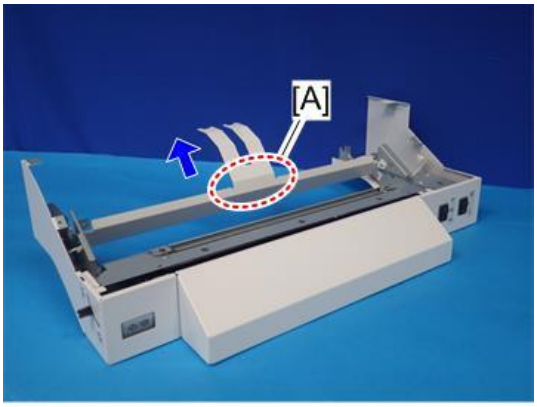
2. Hold the stay [A], and then pull out the base unit towards the direction of the arrow



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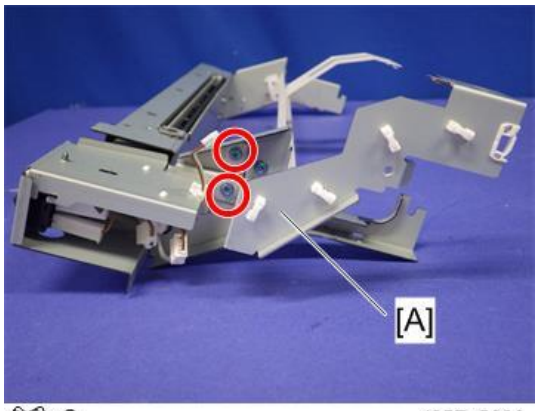
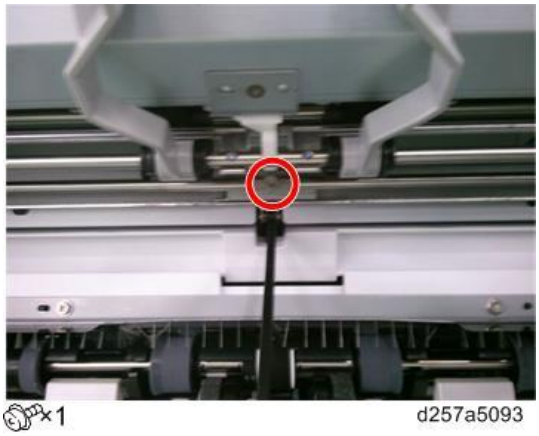
10. Remove the bracket [A].

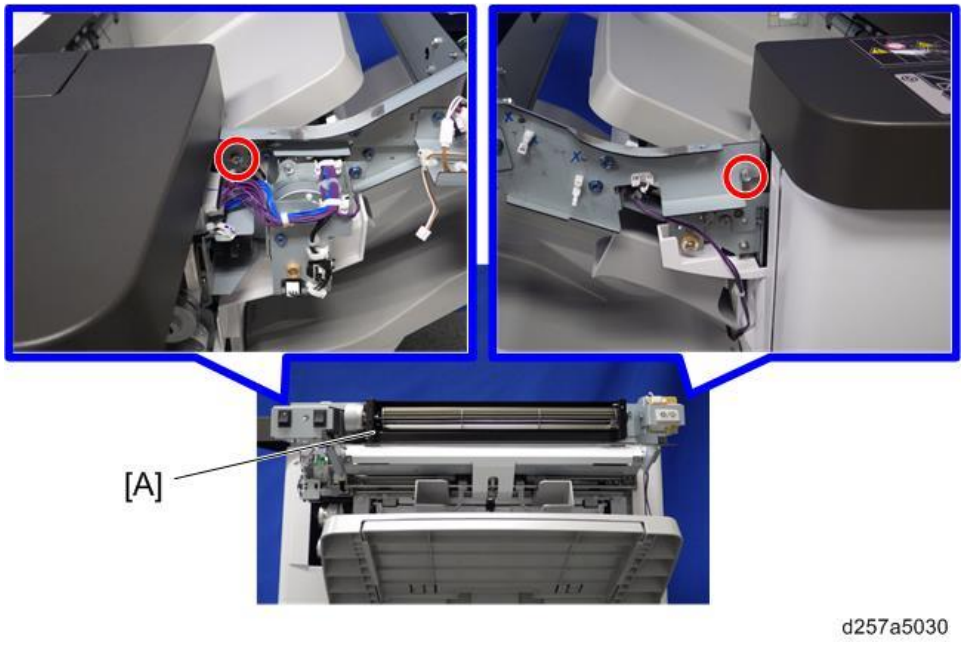


11. Remove the screw at the center of the paper guide unit which fastens the shaft.



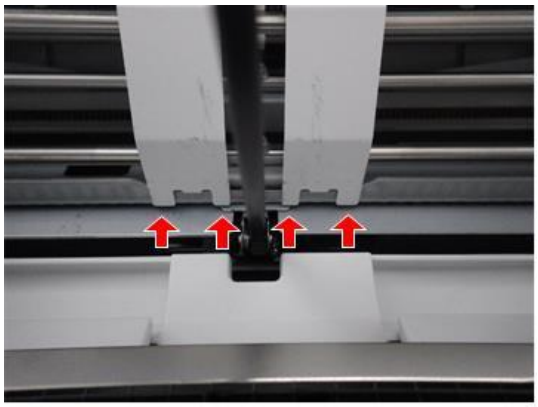
12. Set the cooling fan unit [A] on the finisher.

Hook the U-shaped grooves of the cooling fan unit over the stepped screws of the jogger unit.



Note

Make sure that the hooks at the center on the lower side are hooked onto the plate of the jogger unit.



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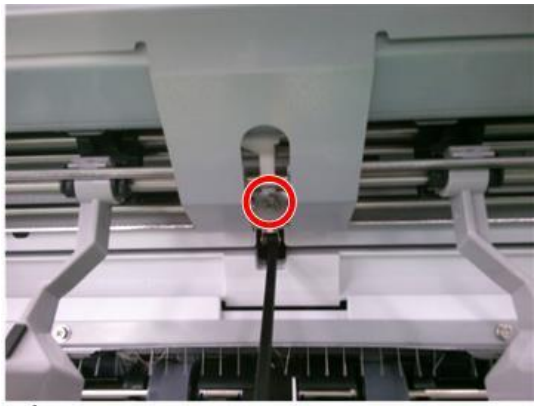
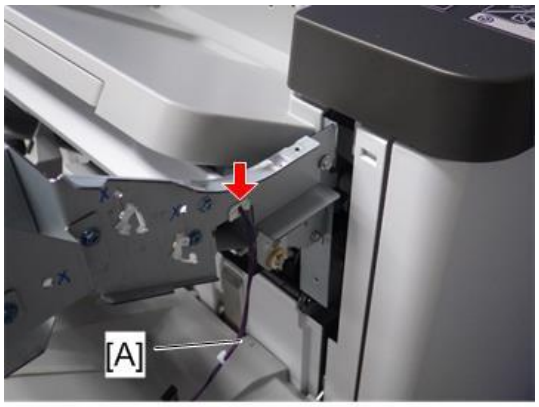
13. Using the screw removed in step 11, fasten the center of the cover and the shaft of the paper guide unit.



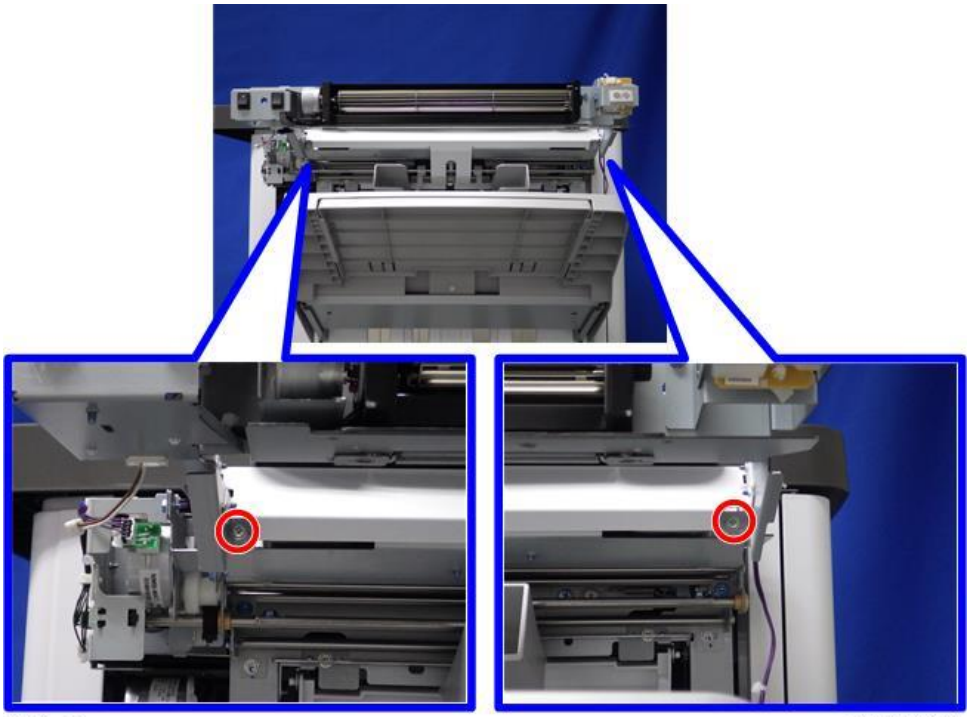
×1 d257a5094

14. Pass the harness [A] put temporarily in step 5 through the edge saddle and close it. Pull the harness [A] toward you.



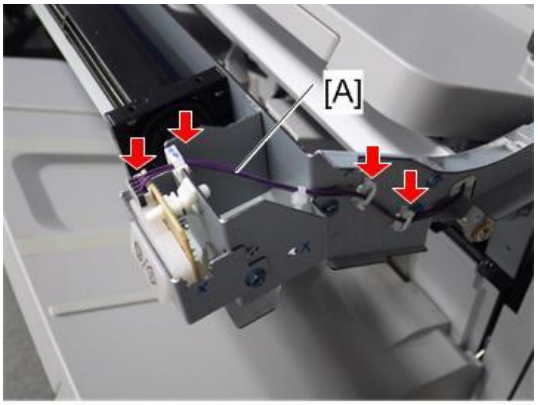
×1 d257a5032

15. Fasten the cooling fan unit with the screws removed in step 2.



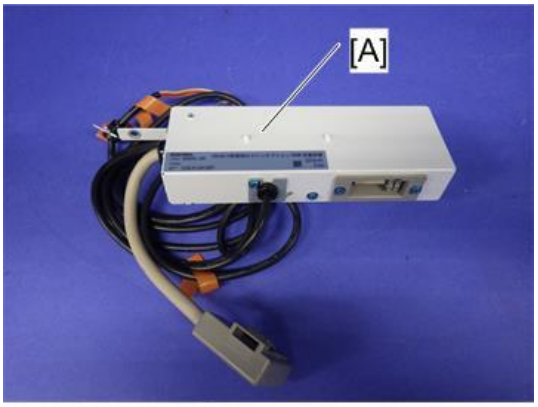
×2 d257a5033

16. Connect the harness [A] to the switch board and clamp it.



×1 ×3 d257a5034

17. Take out the interface unit [A].



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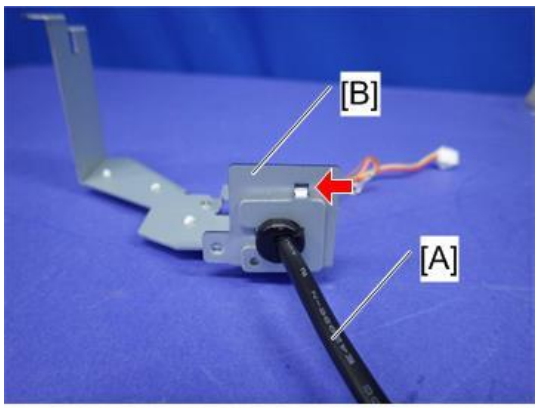
18. Pass the harness [A] of the interface unit through the hole in the bracket [B] removed in step 10. Insert the hook of the harness bracket into the square hole in the bracket [B].



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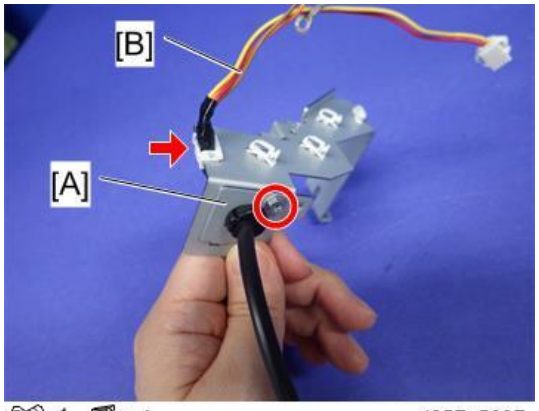
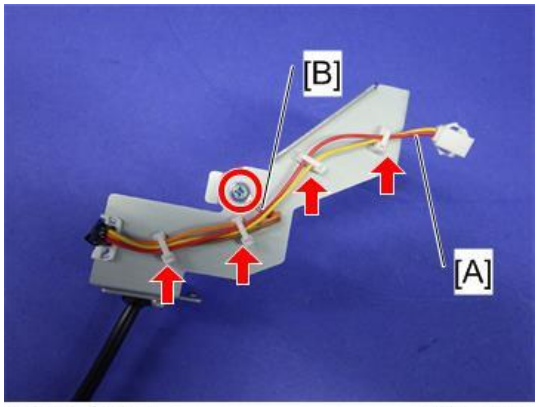
19. Attach the harness bracket [A] with the silver screw, and pass the harness [B] through the edge saddle.



×1 ×1 d257a5037

20. Route the harness [A] and attach the grounding wire [B] with the blue screw.

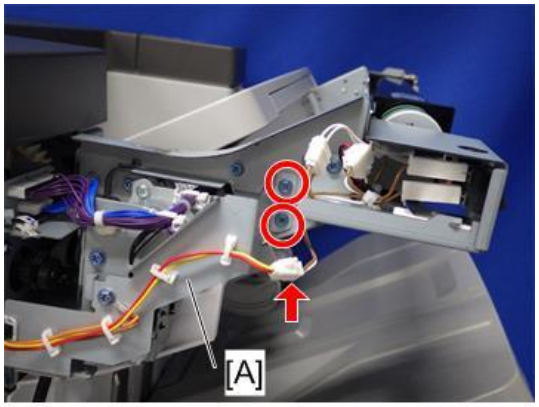
21. Clamp the harnesses.



×1 ×4 d257a5038

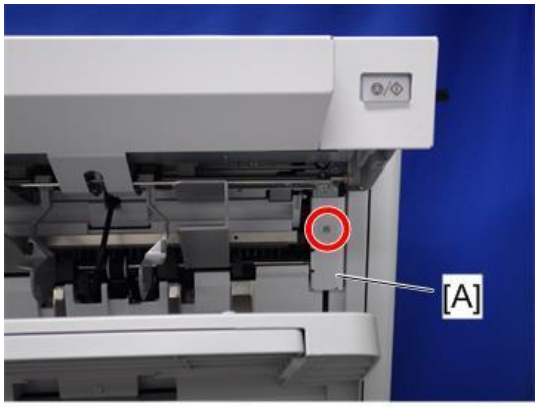
22. Attach the bracket [A] with two screws, and connect the cooling fan unit harness to the interface

unit harness.



×2 ×1 d257a5039

23. Attach the front cover [A] provided with the cooling fan unit.

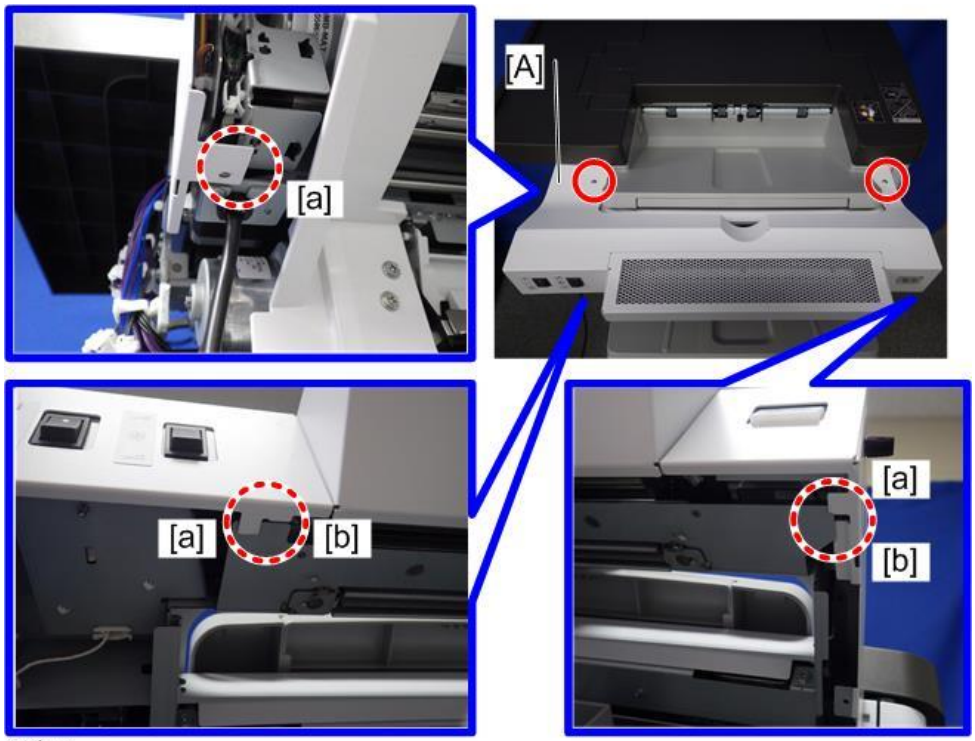


×1 d257a5043

24. Attach the rear cover [A] provided with the cooling fan unit.

×2 d257a5044

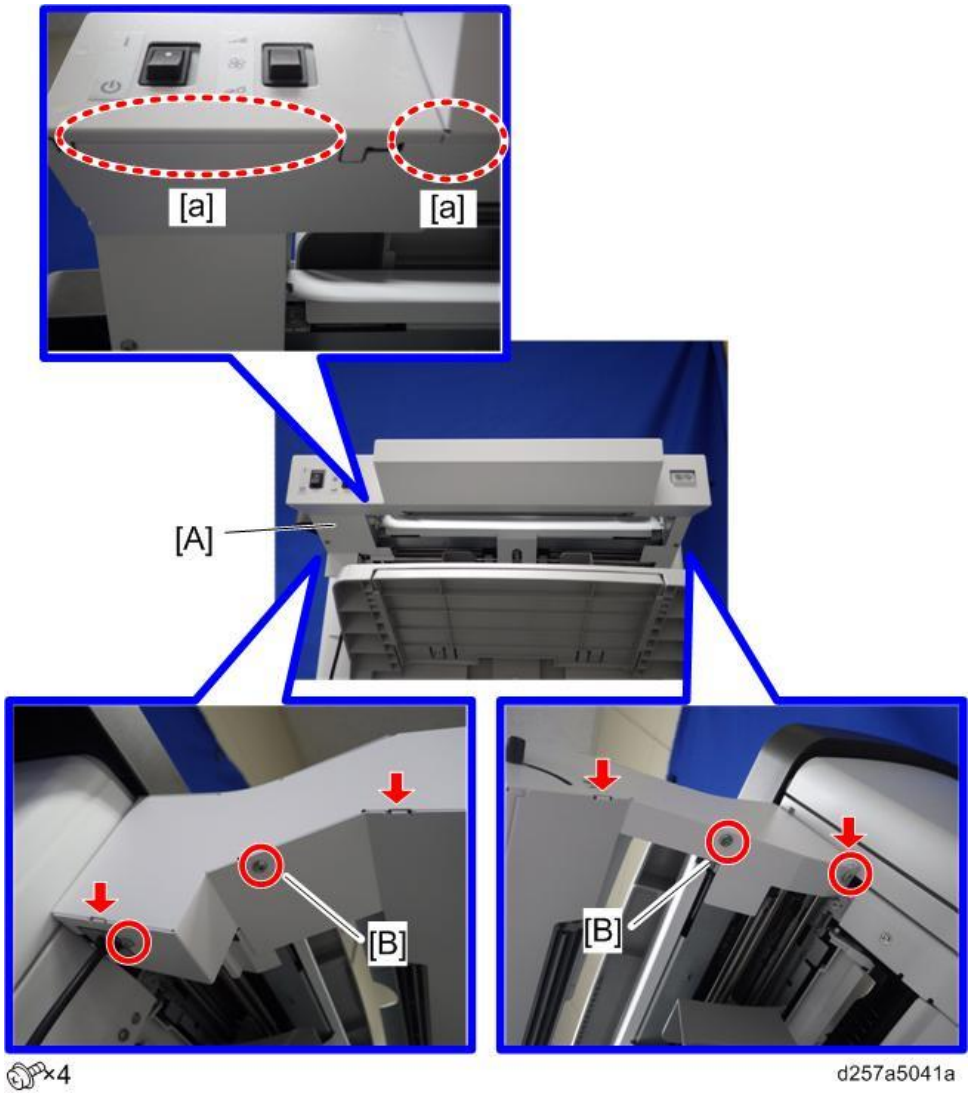
25. Attach the upper cover [A] removed from the base unit of the cooling fan assembly in step 9.
Use the screws removed in step 8.



[a]: The frame must be inside the cover.

[b]: The cover must be inside the frame.

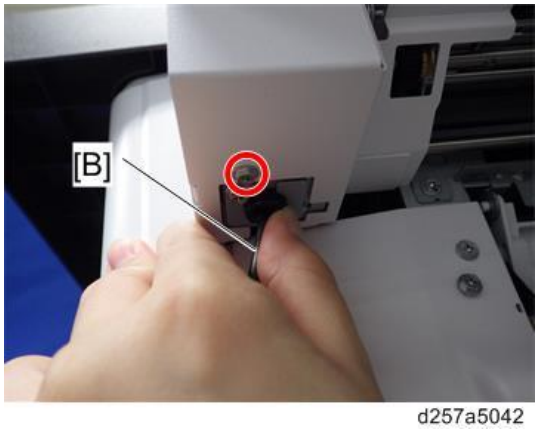
26. Attach the lower cover [A] removed from the cooling fan assembly in step 7. Use 3x6 screws (accessory #7) for [B]. Insert four hooks into the holes in the upper cover.



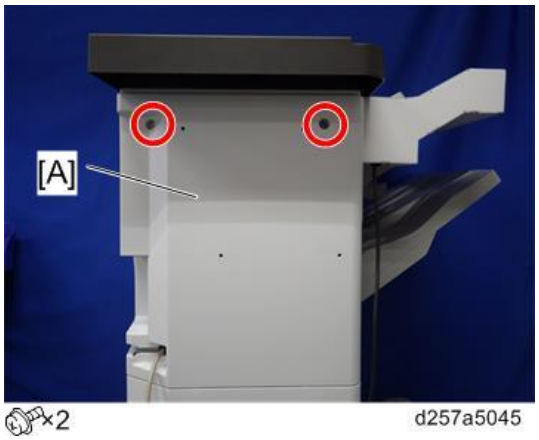
[a]: The lower cover must be inside the upper cover.

Note

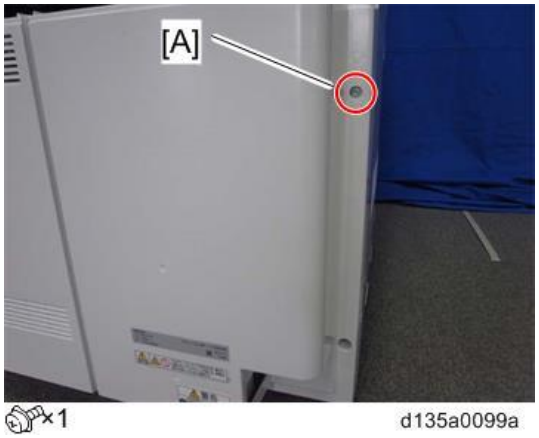
If the screw hole shown in the red circle is too high or too low, press the cord [B] with your finger and adjust the position of the hole.



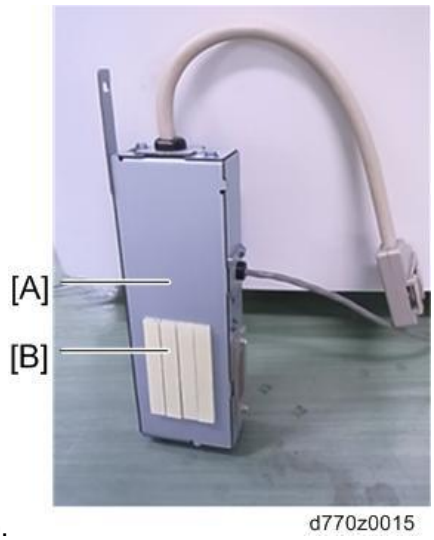
27. Attach the finisher rear upper cover [A] removed in step 1



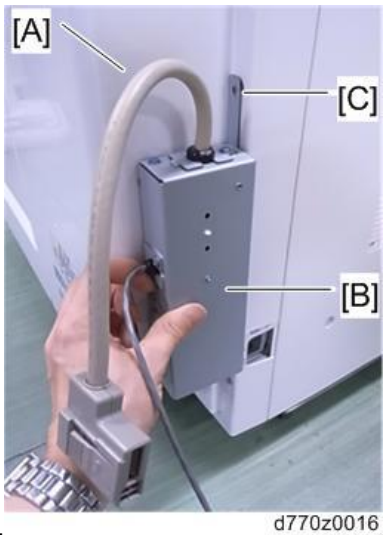
28. Remove the upper screw [A] from the rear lower cover.



29. Peel off the tape from the hook and loop fasteners [B] attached to the interface unit [A] (accessory #2).



30. Align the screw hole [C] with the hole the cover [A], and attach the interface unit [B] with its hook



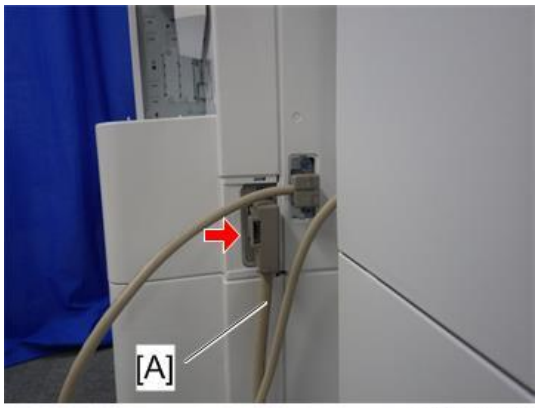
d770z0016

and loop fasteners against the surface of the cover.

31. Attach the interface unit [A] to the lower left cover with an M3x16 screw (accessory #6).

d770z0017a

32. Connect the interface unit cable [A] to the copier.



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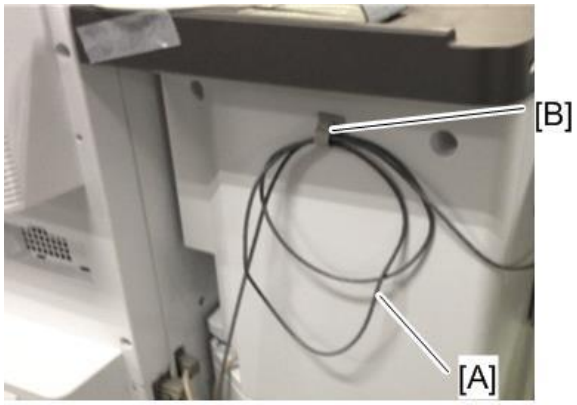
33. Bind the harness of the interface unit [A] and clamp it with Locking Wire Saddle CKN-13 [B]

(accessory #5).



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Note

- Depending on the number of options installed between the copier and Finisher, 3 pcs of Locking Wire Saddle CKN-13 might be needed to clamp the harness.

Information for Cooling Fan Unit Type M26

Cooling Fan Unit Type M26 activates under the following condition.

Main Power Switch [A] of Cooling Fan Unit Type M26	Mainframe	
	Printing/Copying	Ready status
ON	Active	Inactive
OFF	Inactive	Inactive

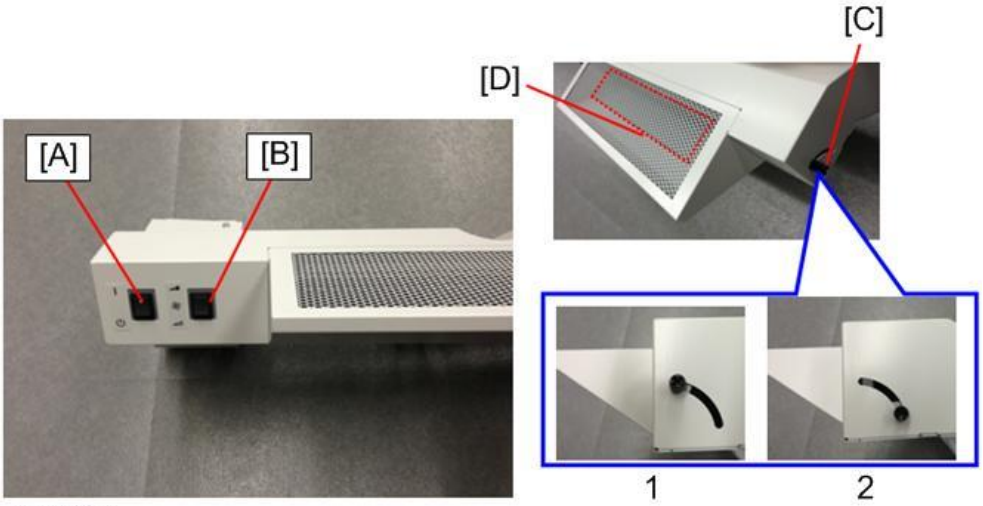
Important

- Always keep the main power switch of the Cooling Fan Unit Type M26 **ON**, because the power is supplied from mainframe.
- If the printer is in ready status, the cooling fan unit does **not** activate even with the mainframe power switched ON. The cooling fan is activated **only** while printing or copying.

Instruction for Customers

How to adjust the fan power

Cooling Fan Unit Type M26 has a fan power adjustment switch [B]. Fan power can be set to either maximum or minimum. If stacking is poor as a result of excess air volume, set this switch to minimum. If the air volume needs to be finely adjusted, rotate the knob screw [C], which will let you change the position of the air shield [D] inside the unit. The air shield can be fixed at the desired position by tightening the knob screw. (The air shield [D] is inside the meshed cover.)



d135a3151

1: Maximum air volume

2: Minimum air volume

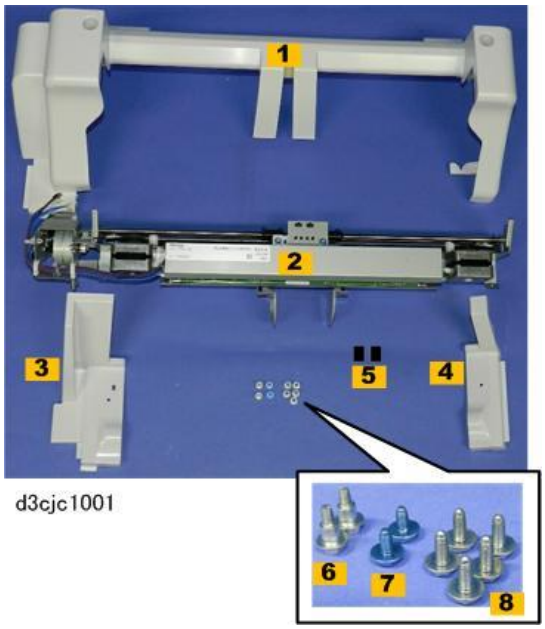
Output Jogger Unit Type M25 (D3CJ)

Component Check

Check the quantity and condition of the accessories against the following list.

No	Description	Qty
1	Jogger Unit Cover	1
2	Jogger Unit	1
3	Rear End Cover	1
4	Front End Cover	1
5	Cushions	2
6	Shoulder Screws	2
7	Screws (Blue) M3x6	2
8	Tapping Screw: Round Point: 3x8	5

2.Installation



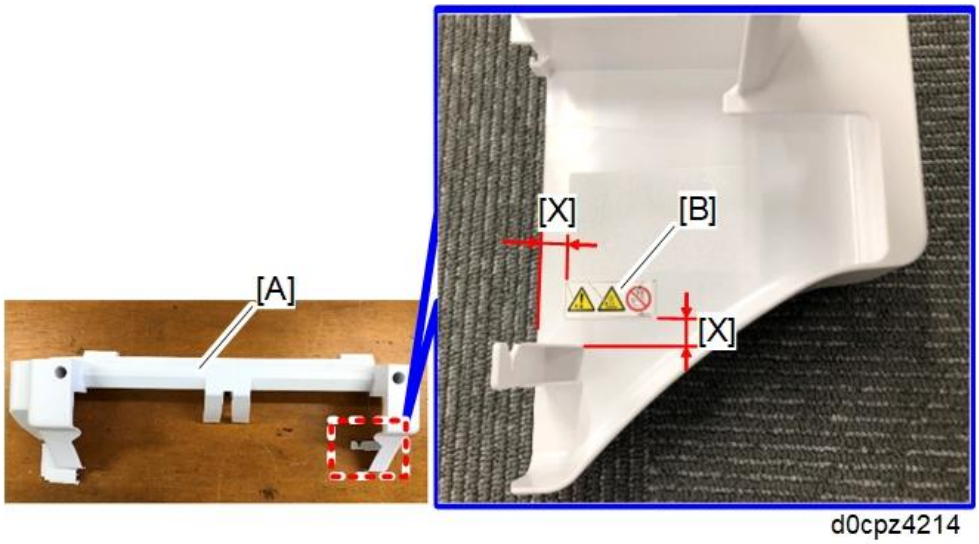
Installation

⚠CAUTION

- Always switch the machine off and unplug the cable before beginning the following procedure.

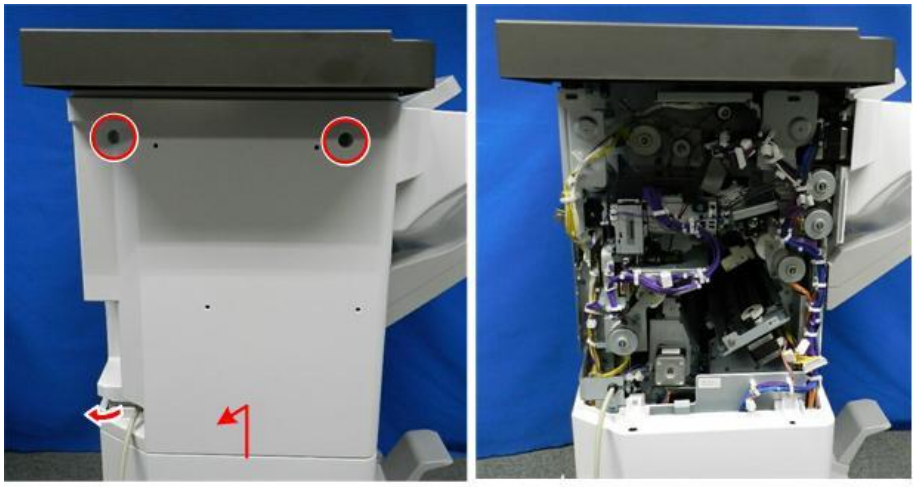
1. Attach the decal [B] provided with the finisher to the jogger unit cover [A].

[X]: 10 mm



2. Disconnect the finisher from the main machine.

3. Remove the rear cover.



x2

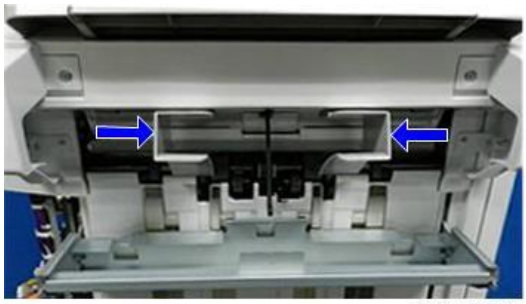
d3cjc1002

4. Remove the shift tray.

x1

d3cjc1003

5. Push the paper guides to the center.



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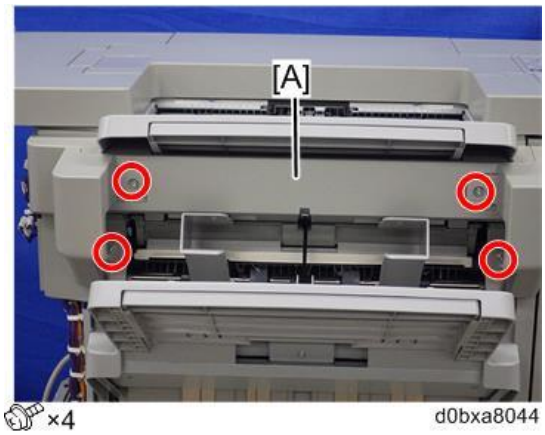
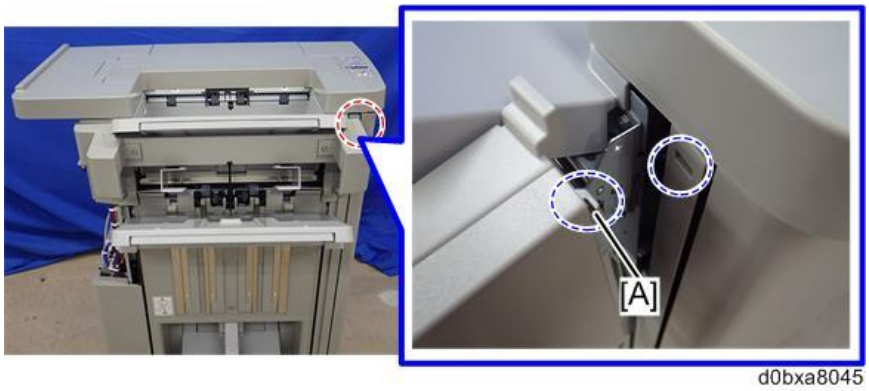
6. Remove the rear paper guide cover.



Note

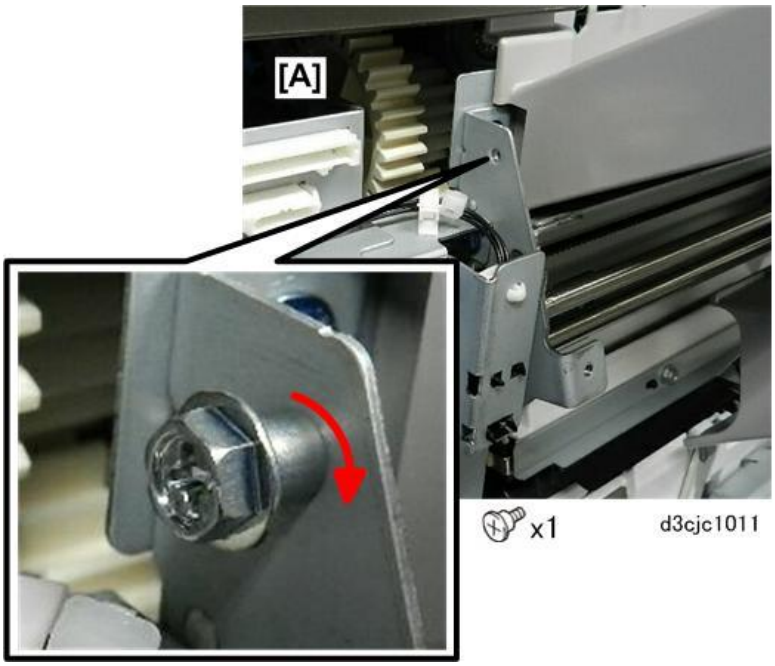
Remove the hook [A] on the right side.



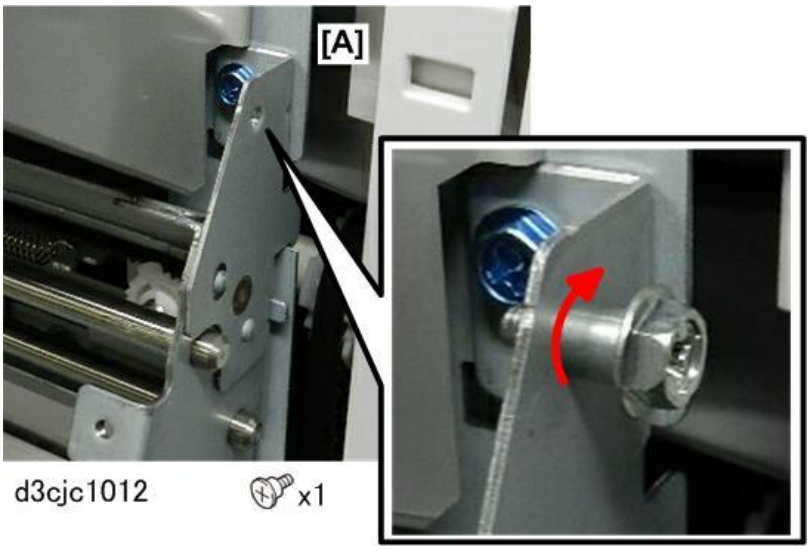
7. Disconnect the cover installation bracket.

8. Slowly, disconnect the bracket from the rail above, and then remove it.

9. At the rear, set one shoulder screw [A].

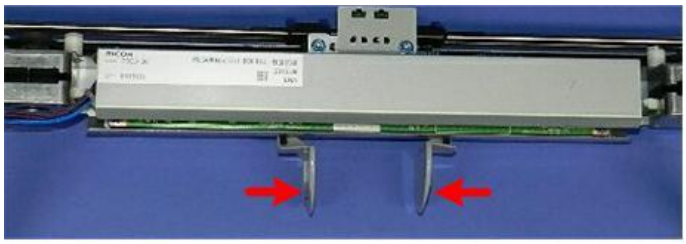


10. At the front, set the other shoulder screw [A].



11. Spread the paper guides to the maximum width.

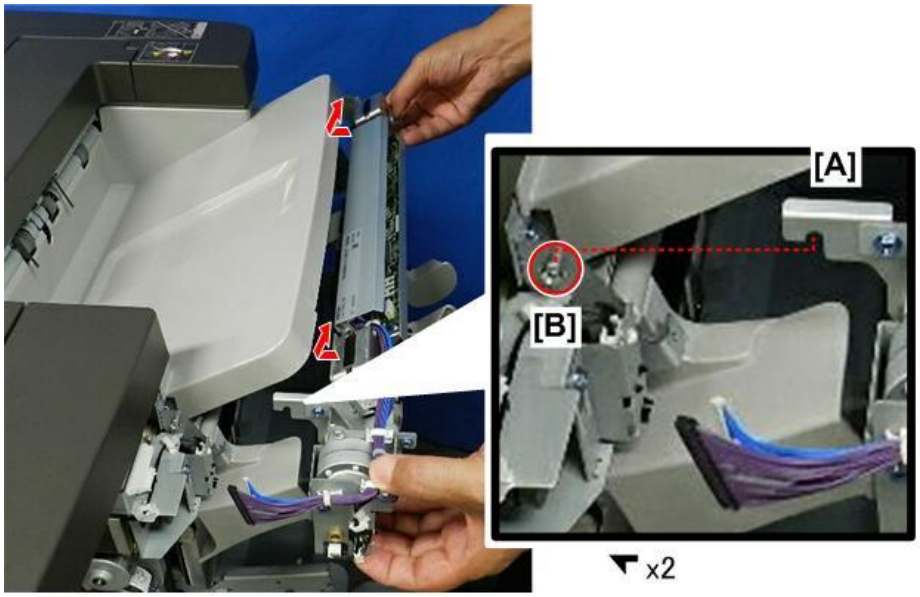
12. Move the jogger arms on the jogger unit to the center.



d3cjc1014

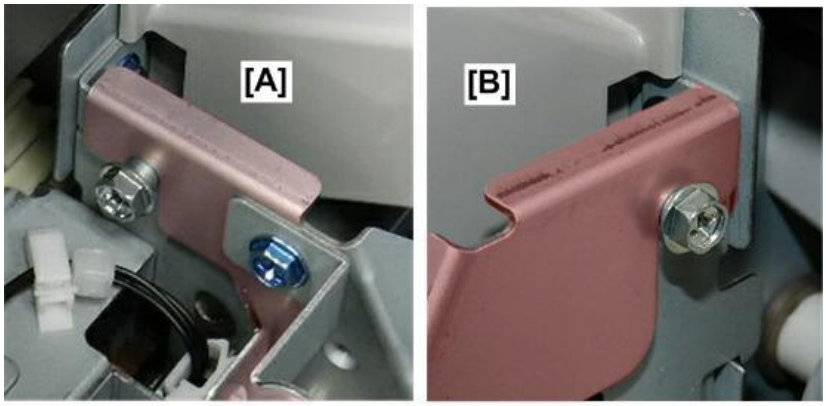
13. Hold the jogger unit so that the hooks [A] on both ends of the unit are in line with the installed shoulder screws [B].

14. Rotate the jogger unit slightly up under the output tray so that the motors on both ends of the unit go under the tray, and then hang the hooks on the shoulder screws at the front and rear.



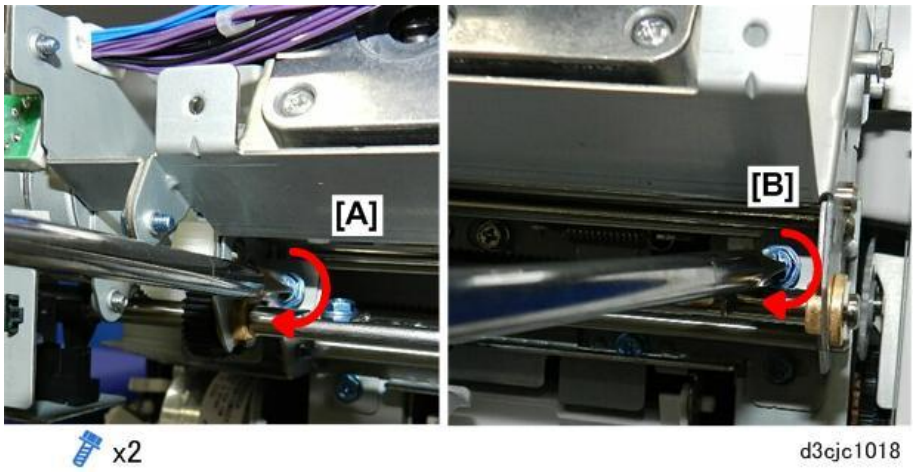
d3cjc1015

15. Make sure that the shoulder screws are firmly hang on the hook on the rear side [A] and front side [B].

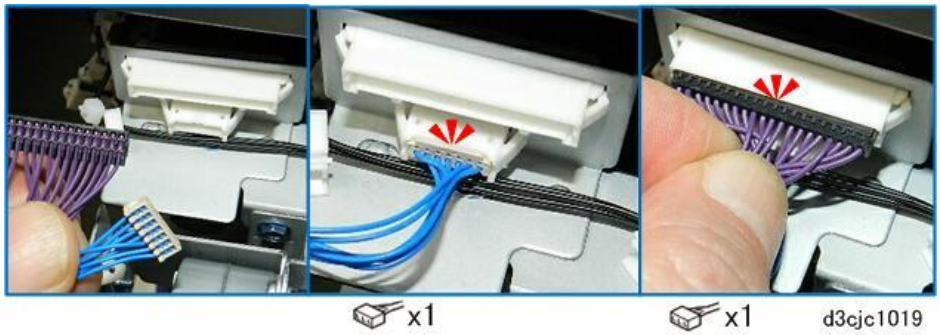


d223d8212

16. Fasten the jogger unit at the rear [A] and front [B].

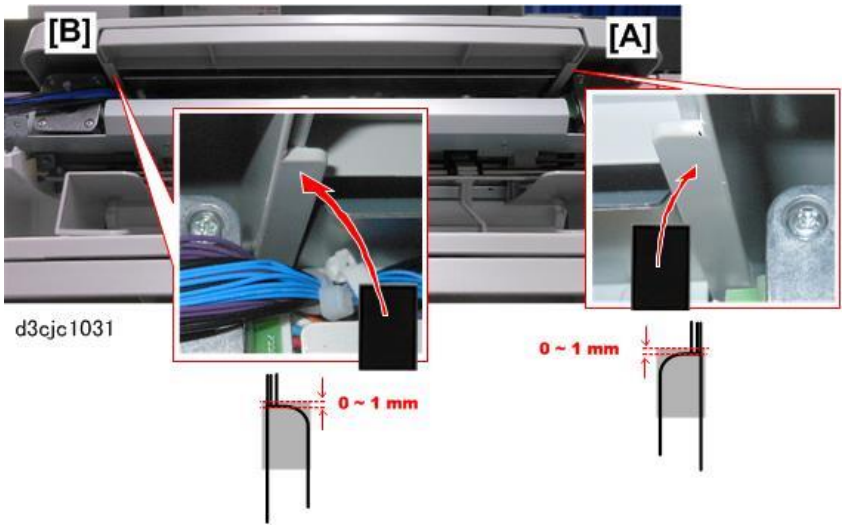


17. Connect the jogger unit at the rear.

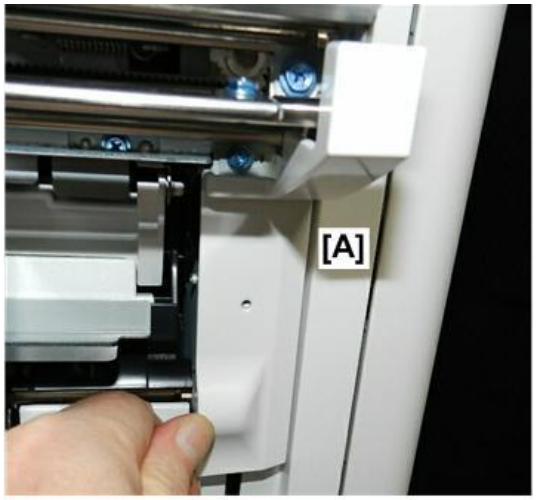


18. Peel the back off the two accessory cushions.

19. Attach the cushions to the front [A] and rear [B] of the lower arms of the output tray.

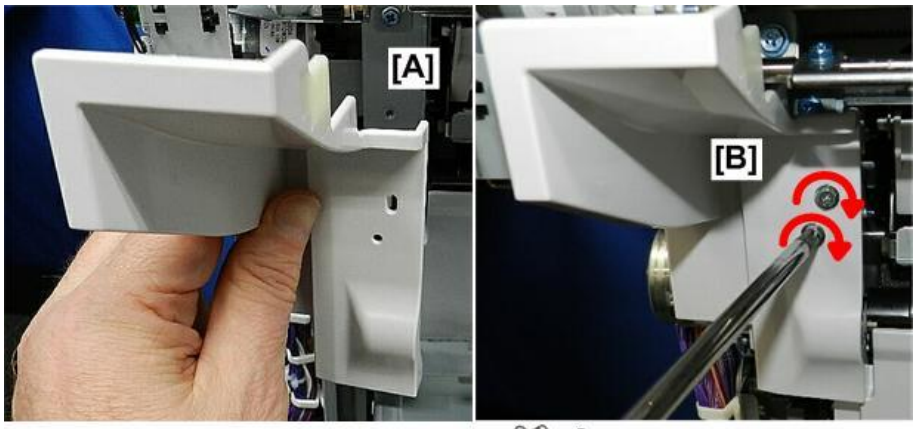


20. Set the front end cover [A]. Do not attach the screw yet.



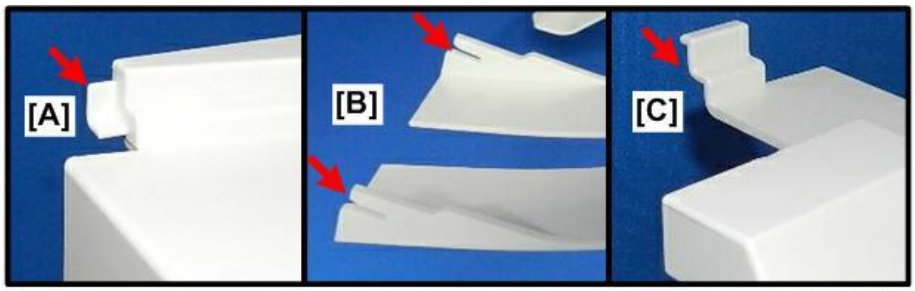
d3cjc1020

21. Set the rear end cover [A], and then fasten it [B].



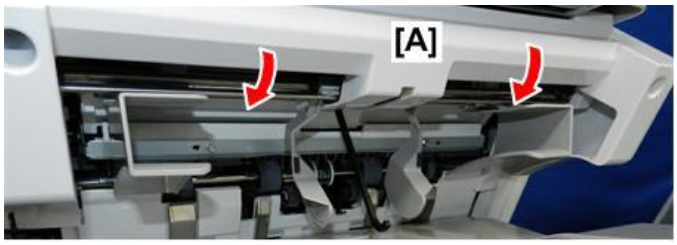
d3cjc1021

22. Look at the jogger cover. Note the tabs and slots on the rear end [A], center arm covers [B], and front end [C].



d3cjc1022

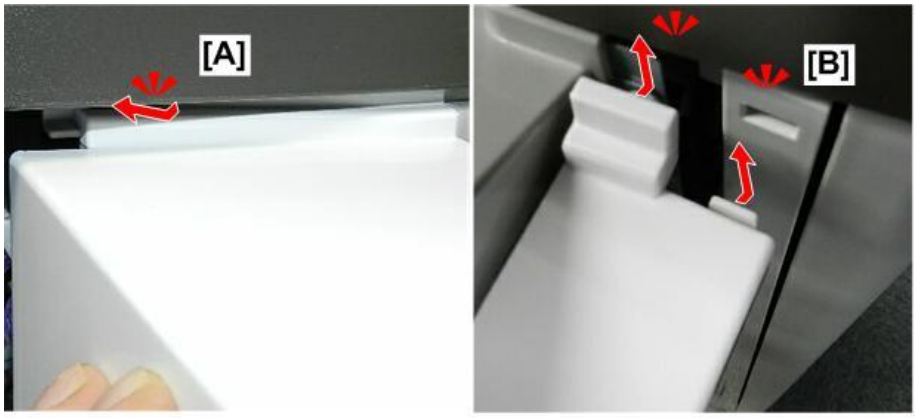
23. Slowly, set the jogger cover [A] on the jogger unit.



d3cjc1023

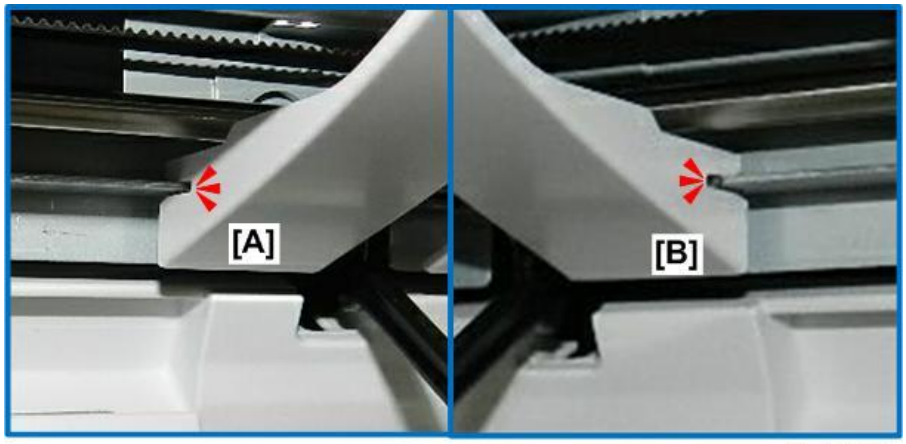
24. At the rear [A], confirm that the tab inserts correctly.

25. At the front [B], confirm that both tabs set correctly.



d3cjc1024

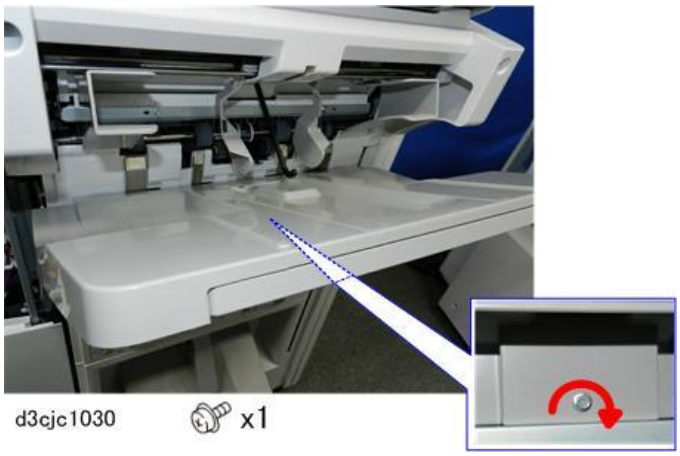
26. In the center under the jogger unit, make sure the rear arm cover [A] and front arm cover [B] fit over the edge of the plate as shown.



d3cjc1025

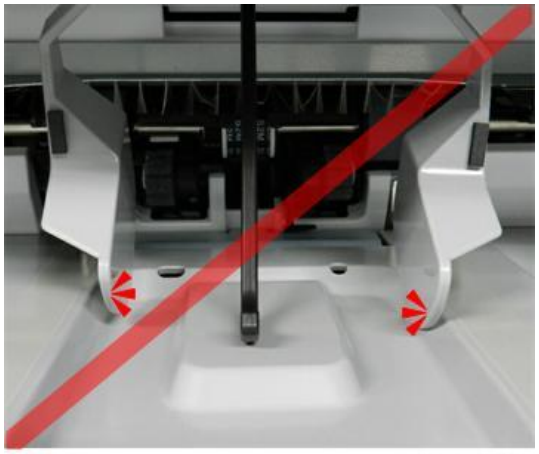
27. After making sure that all tabs are set correctly, fasten the cover to the jogger unit.

28. Reinstall the shift tray.



29. Check the center of the shift tray.

If the jogger arms are touching the surface of the shift tray as shown, this will cause a jam when the machine is turned on because the arms will move and hit the tray.



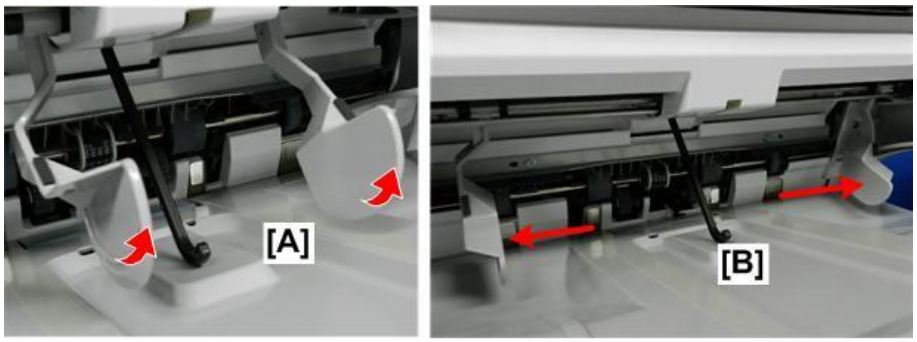
30. To avoid a jam, take the following action before turning the machine on:

Raise the jogger arms [A] slightly so that they are not touching the shift tray below.

-or-

You can spread the jogger arms [B] away from the center so that they are not touching the surface

of the tray.



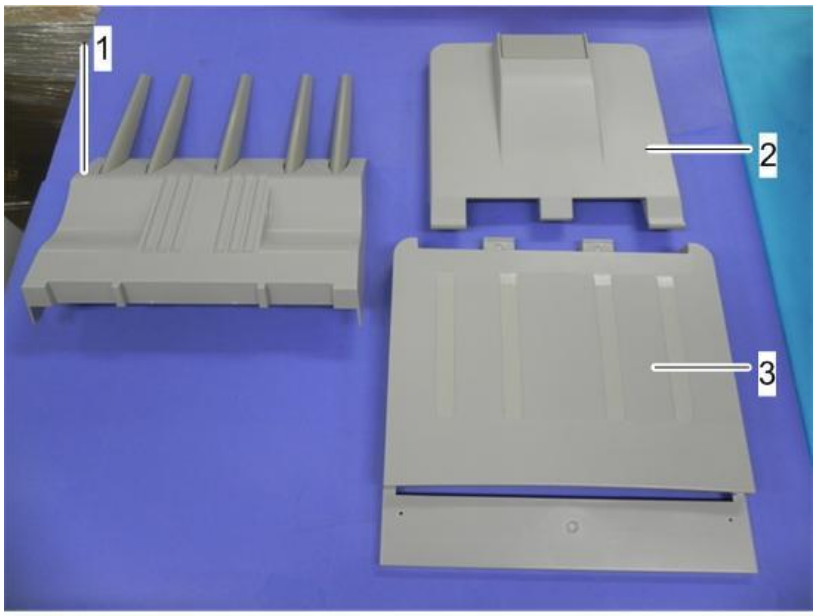
d3cjc1028

SR4000 series Output Tray for Banner Sheet Type S6 (D3CF)

Accessory Check

Check the quantity and condition of the accessories against the following list.

No	Description	Qty
1	Support Plate	1
2	Extension Tray	1
3	Relay Tray	1



d257a2057

Installation Procedure

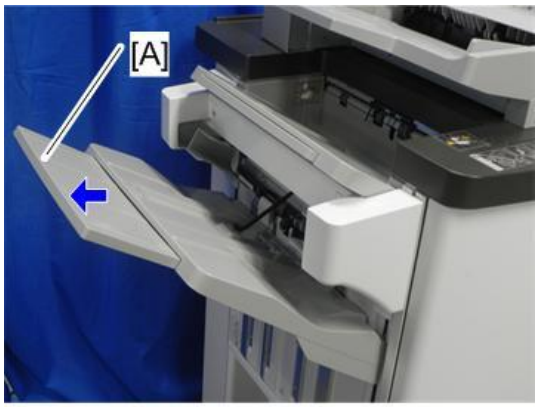
If the finisher has been used, the shift tray may be raised. If it is raised, lower it by opening and closing the finisher front door while the power is turned ON.

⚠CAUTION

Always switch the machine off and unplug the cable before beginning the following procedure.

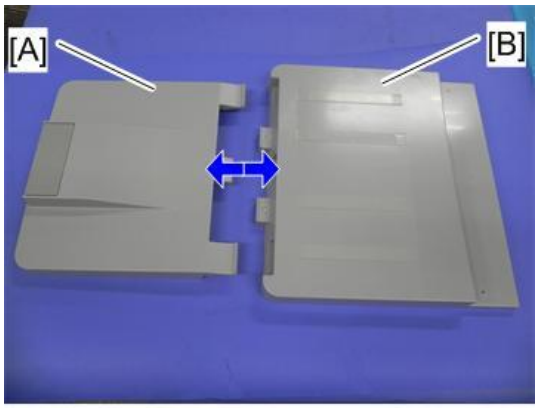
Attaching the Banner Sheet Tray to the Finisher

1. Pull out the extension [A] of the finisher's shift tray.



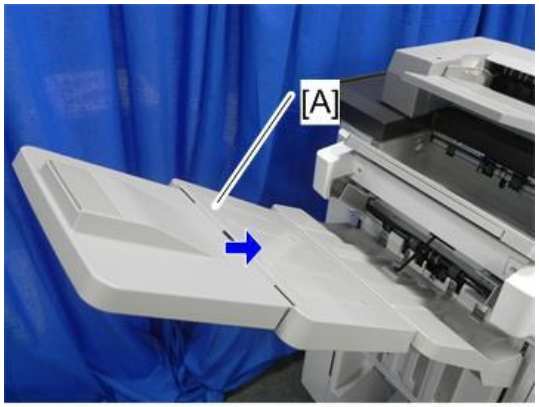
d257a2059

2. Attach the extension tray [A] to the relay tray [B].



d257a2058

3. Attach the assembled tray [A] to the finisher.



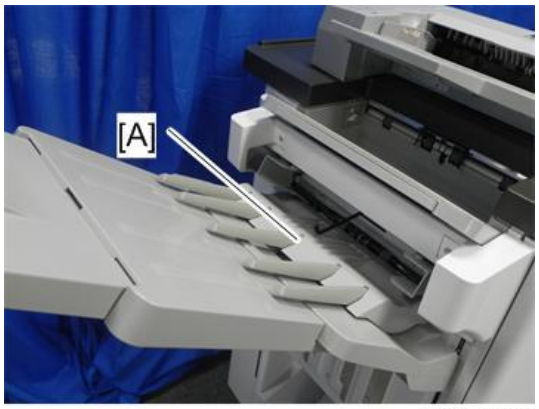
d257a2060

Note

When attaching the tray, make sure that the extension of the finisher shift tray reaches the position shown in the picture below.

d257a2061

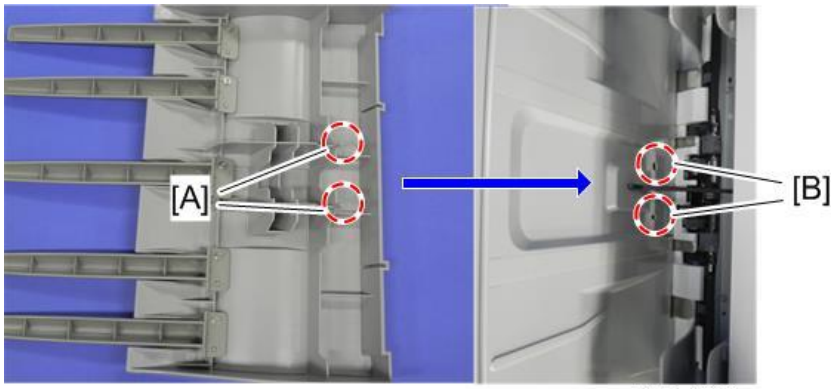
4. Attach the support plate [A] provided with this option.



d257a2062

Note

Insert the pins [A] of the support plate into the holes [B] in the shift tray.



d257a2063

SP Setting

After starting up the main machine, change the SP setting to let the banner sheet tray be recognized.

1. Enter the SP mode.
2. Change SP5-150-002 from [0] to [1].
3. Exit the SP mode.
4. Restart the main machine.

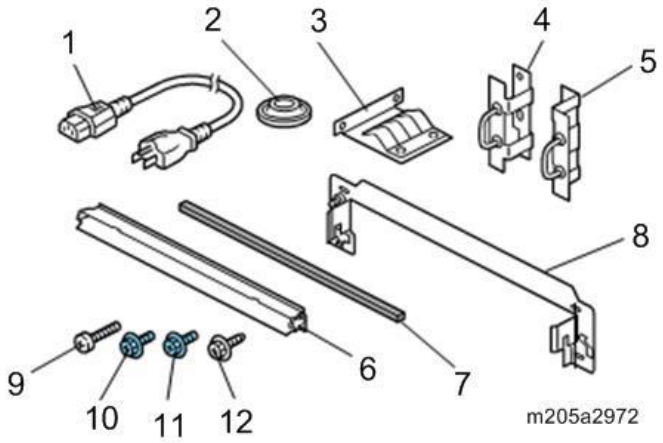
High Capacity Stacker SK5040 (D3DK), Roll-Away Cart Type 5010 (D456)

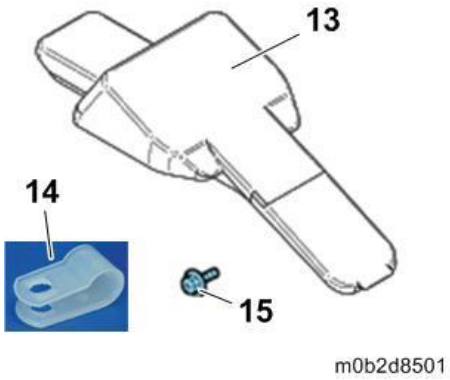
Note

- Up to two of the stackers can be docked.

Accessories

High Capacity Stacker SK5040 (D3DK)



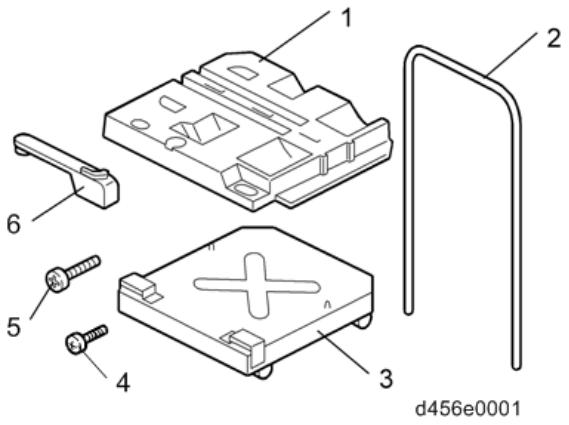


No.	Description	Q'ty
1	Power Cord*1	1
2	Leveling Shoes	4
3	Ground Plate	1
4	Lock Hasp – Left	1
5	Lock Hasp – Right	1
6	Entrance Guide	1
7	Sponge Strip	1
8	Joint Bracket	1
9	Screw M4x14	2
10	Screw M3x6	4
11	Screw M4x6	2
12	Screw M4x8	4

No.	Description	Q'ty
13	Support Tray	1
14	Clamp	1
15	Screw 3x8	1

*1 In China, do not use this power cord provided with this option. Contact your supervisor and use the power cord specified for use in China.

Roll-Away Cart Type 5010 (D456-17)



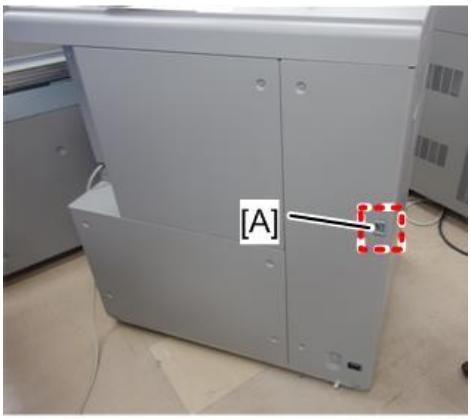
No.	Description	Q'ty
1	Paper Tray	1
2	Tray Cart Handle	1
3	Tray Cart Base	1
4	Screw M4x14	2
5	Screws M10x25	2
6	Paper Press Lever	1

Installation

⚠CAUTION

- The unit must be connected to a power source that is close to the unit and easily accessible.
- Before performing the following procedure, make sure that the main power switch and AC power switch of the main machine are turned OFF and that the power cord is disconnected. Performing the procedure with the power on could result in an electric shock or could cause a malfunction.

- Rated voltage of output connector for accessory [A]: Max. DC24V.

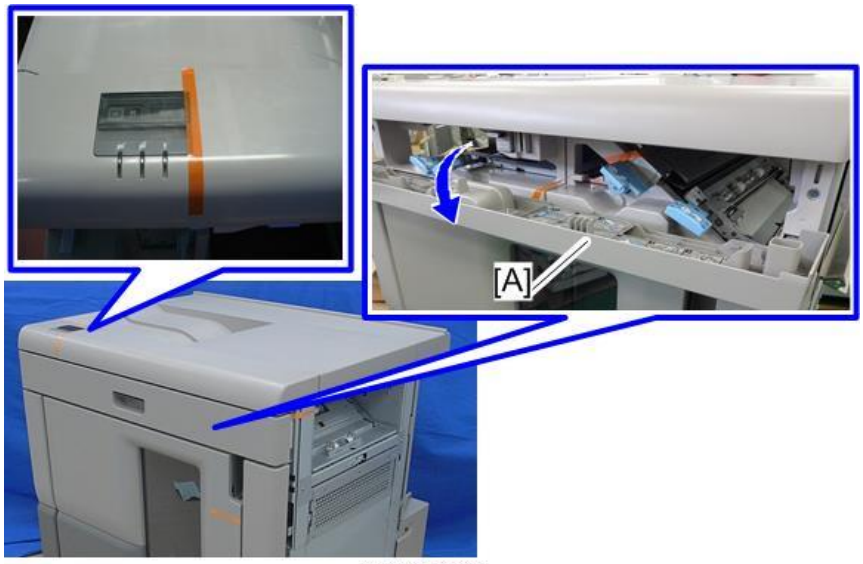


d0a5m1025

Important

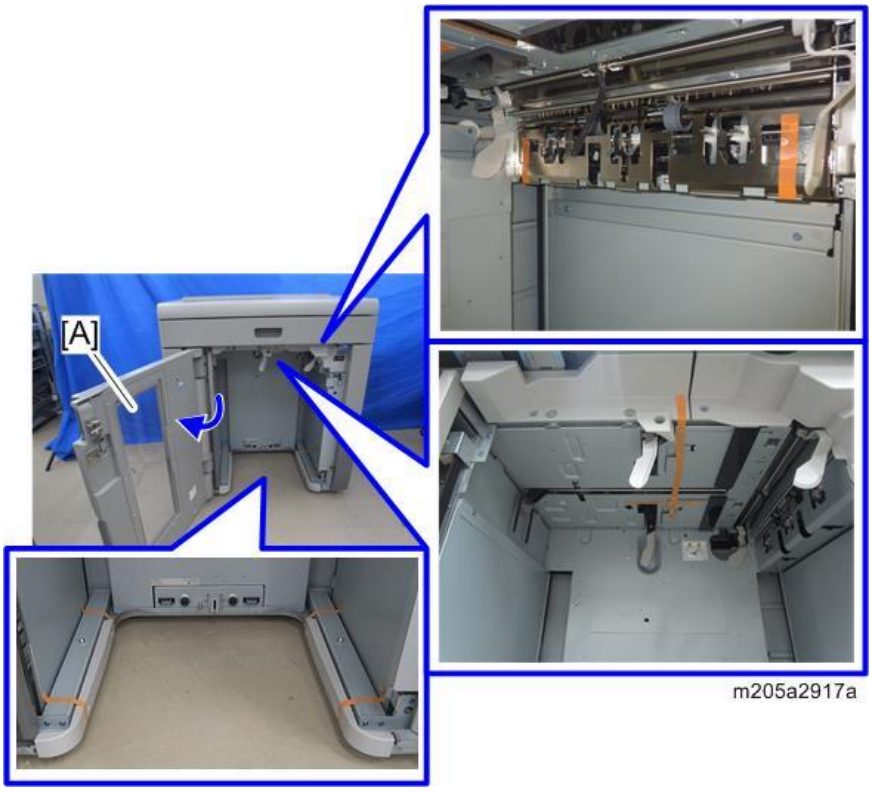
- Make sure that no cables are sticking out on the floor inside the high capacity stacker.
- Install the high capacity stacker on a flat and level surface. This is to prevent problems during lifting and lowering operation of the paper tray.
- Do not move the high capacity stacker while the tray cart is installed inside the high capacity stacker.

1. Remove all visible tape from the external covers.
2. Open the front upper cover [A], and then remove all visible tape.

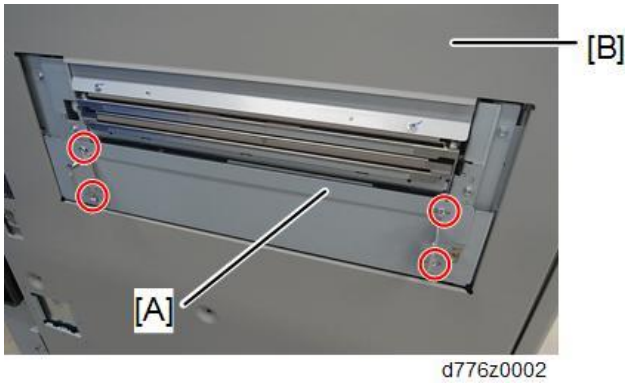


m205a2916b

3. Open the front door [A] and remove all visible tape.



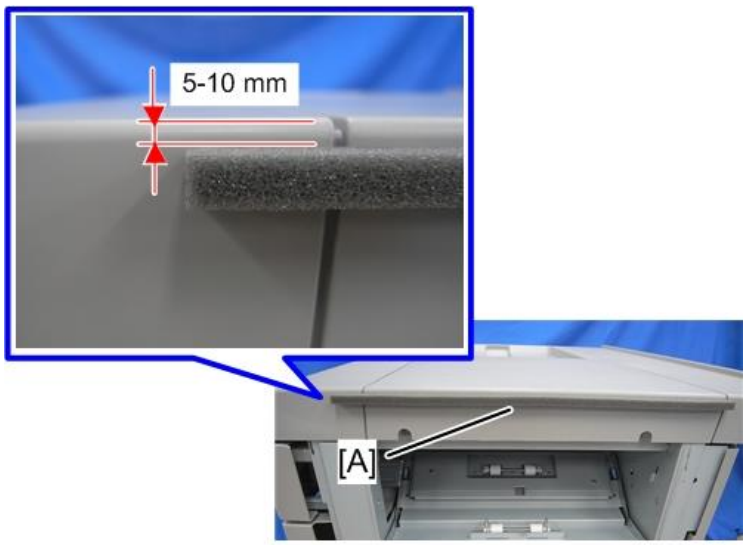
4. Install the joint bracket [A] on the main machine or the upstream unit. (M4×14)



5. Remove the tape from the sponge strip [A], and attach the strip to the top right edge of the high capacity stacker.

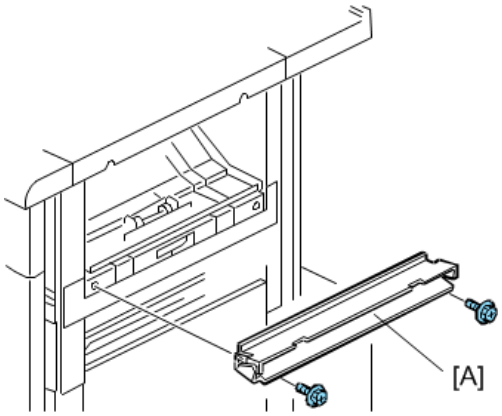
Note

- The sponge strip closes the gap between the high capacity stacker and the upstream unit, to prevent paper or other objects from falling between the units.



w_d194z0171

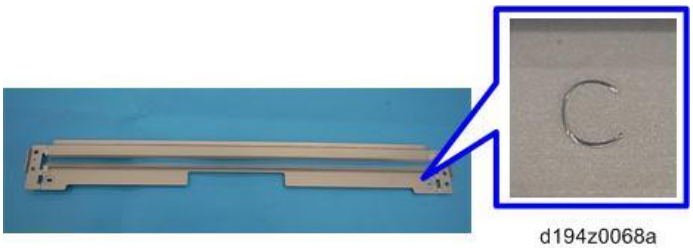
6. Install the entrance guide [A] on the right side of the high capacity stacker (x2: M3x6).



m205a2919

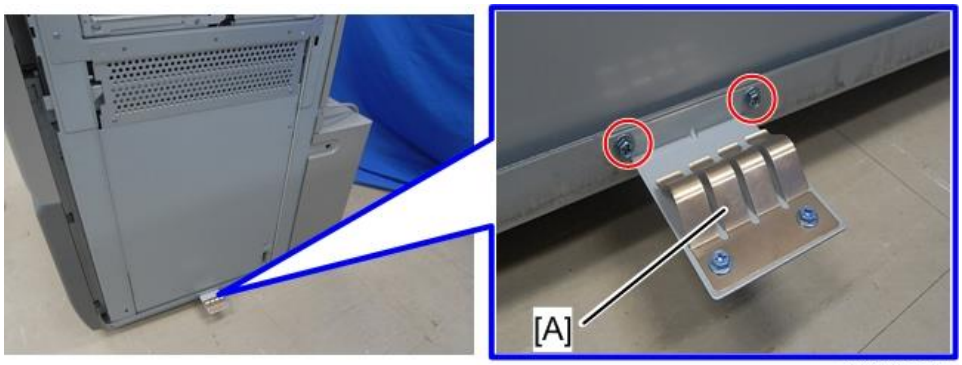
Important

- **When docking the high capacity stacker to the main machine:**
  - If the decurl unit is not installed in the main machine, attach the entrance guide provided with the high capacity stacker.
  - If the decurl unit is installed in the main machine, attach the guide plate marked “C” that is provided with the decurl unit. Do not attach the entrance guide provided with the high capacity stacker.



d194z0068a

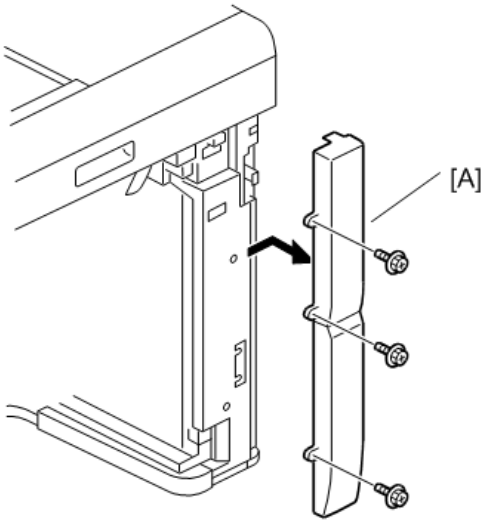
7. Attach the ground plate [A] to the bottom right edge of the high capacity stacker (x2: M4x6).



d776z0003

8. Open the front door of the high capacity stacker.

9. Remove the front right cover [A] (x3).



d515i107

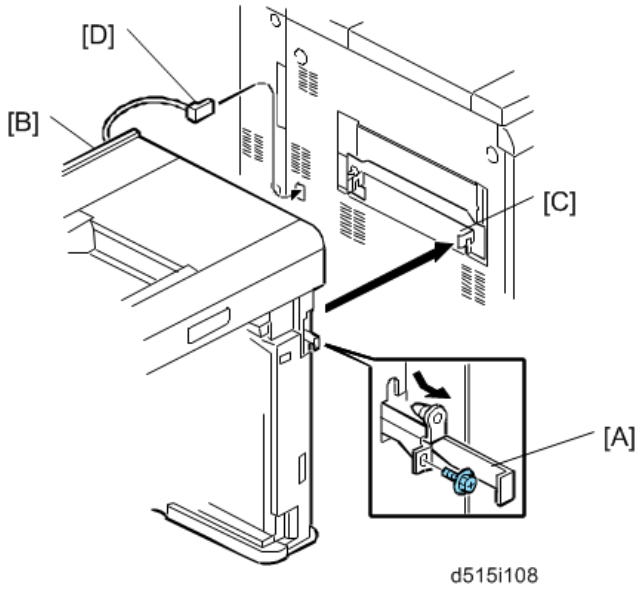
10. At the front right corner, remove the screw of the lock bar [A] (x1), and pull the lock bar toward you until it stops.

Use this screw in Step 12.

11. Slowly push the high capacity stacker [B] against the left side of the upstream unit (or main machine) so that the lock bar is directly and squarely under the arms of the joint bracket [C].

12. Push the lock bar in completely so that it slides up into the notches in the arms on both ends of the joint bracket, and fasten the lock bar by re-attaching the screw removed in Step 10 (x1).

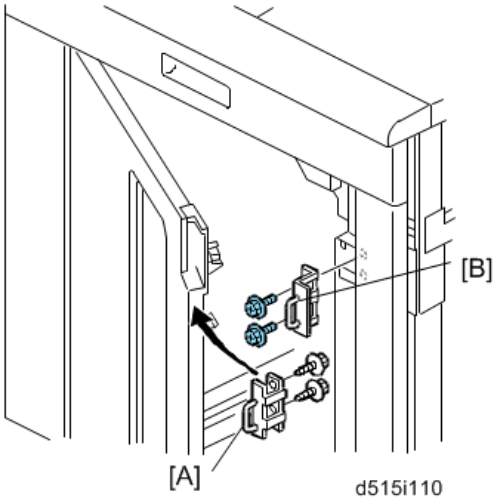
13. Attach the I/F cable [D] to the upstream unit (or main machine).



14. Re-attach the front right cover.

15. Fasten left lock hasp [A] (x2: M4x8) to the door.

16. Fasten right lock hasp [B] to the door frame (x2: M3x6).



17. Connect the power cord [A] to the right rear lower side of the unit.

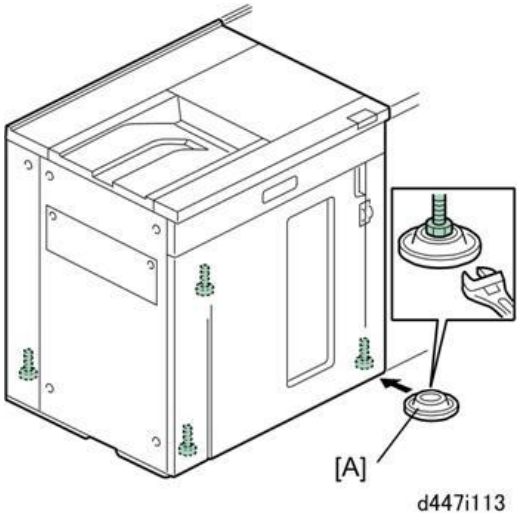
Important

- In China, do not use the power cord provided with this option. Contact your supervisor and use the power cord specified for use in China.

18. Secure the power cord with the clamp [A]. (x1, x1)

m0b2d8502

19. Set the four holders [A] to the leveling bolts.



d447i113

Note

- Place a level on the top of the unit and then adjust the height with leveling bolts so that the unit is level left-to-right and front-to-back.

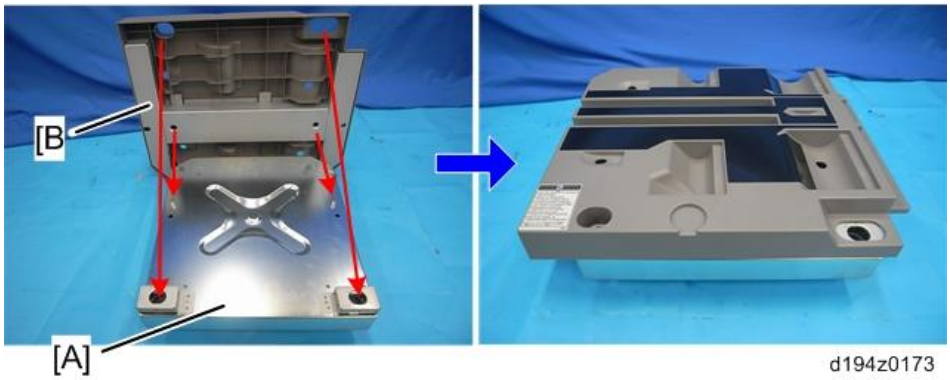
20. If large media is used, install the accessory support tray [A] on the proof tray.
The support tray is used for thick paper or large envelopes (B4 / K2 (envelopes) or larger) to prevent the trailing edge of paper lifting from the proof tray, and the proof tray being detected as full

m0b2d8503

too early.

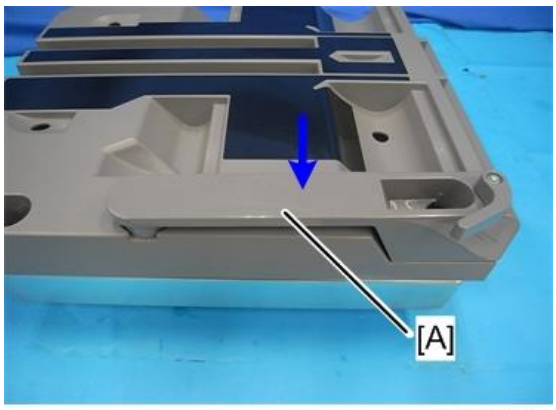
Installing the Roll-Away Cart (D456-17)

1. Align the studs on the tray cart base [A] with the holes in the brackets of the paper tray [B].
2. Set the holes over the studs.



d194z0173

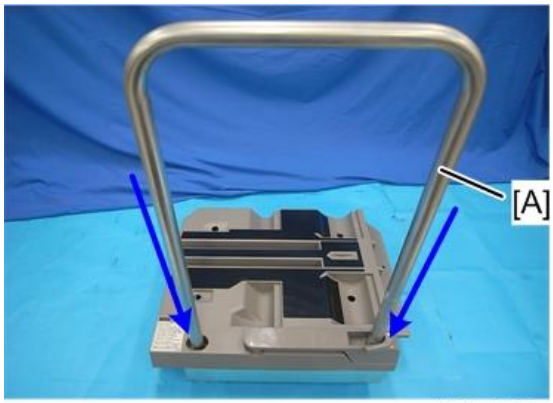
3. Set the paper press lever [A] into the recessed cut-out of the paper tray.



d194z0174

4. Insert the ends of the tray cart handle [A] into the handle holes. One end of the handle passes

through the paper press lever on the paper tray.



d194z0175

5. Lay the assembly down with the handles on the floor.

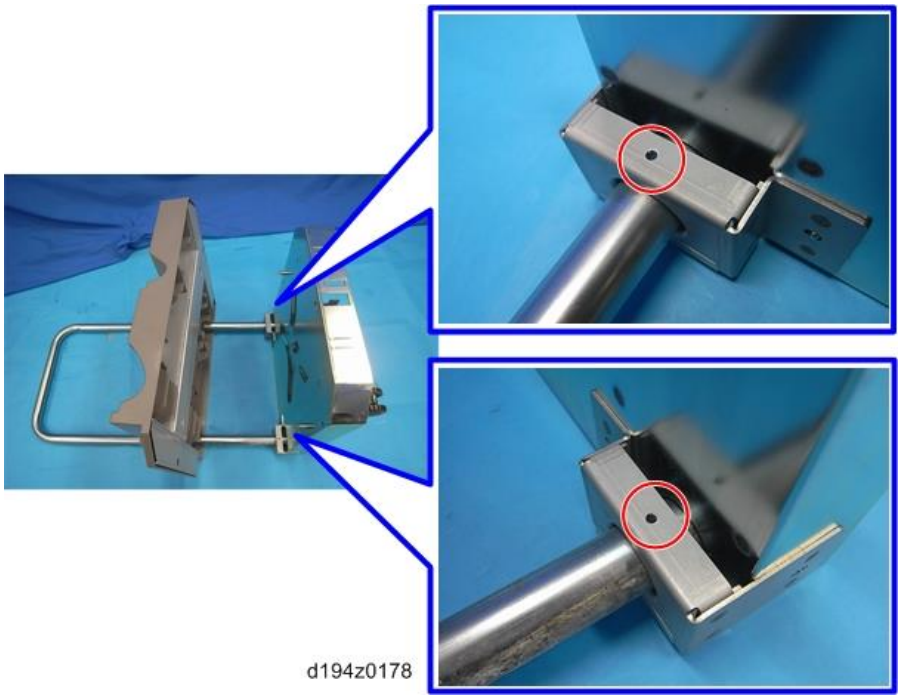
d0cpz1263

6. Fasten the end of each handle (x 1 each, M10x25).

×2

d0cpz1264

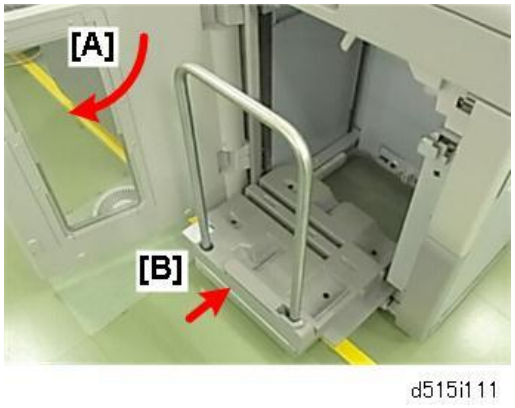
7. Raise the paper tray and then tighten the screws on the handle bases (x 1 each, M4x14).



8. Set the cart upright on its casters.

9. Open the front door [A].

10. Push the tray cart [B] into the unit and close the door.

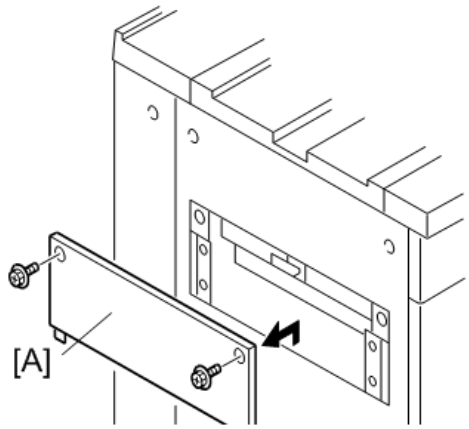


Docking the Downstream Unit

Important

- Do this procedure only if another peripheral device will be installed downstream.

1. Remove the left exit cover [A] from the left side of the unit (x2).



d515i112

2. Install the joint bracket of the downstream unit on the left side of the high capacity stacker, and then install the downstream unit.
   Use the screw holes circled below.

m205a2921

3. Connect the interface cable of the downstream unit [A] to the high capacity stacker [B].

d0a5m1401

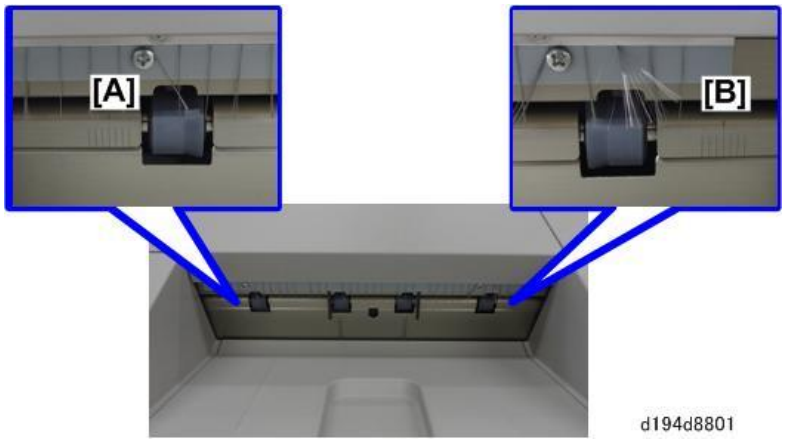
Registration Adjustment, Skew Correction

Important

Remove the cart from the stacker when disconnecting with upstream devices.

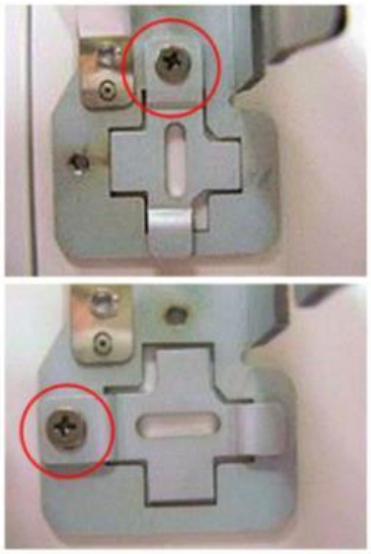
Otherwise, the set switch for the cart may be broken.

1. Copy a sheet of plain paper with single-sided A3 or 11"x17". The sheet should transport from the main tray to the proof exit tray on the stacker.
2. Check that the registration/skew on the printed sheet is within 2 mm (1 scale). If it is not within 2 mm, refer to the following steps.
   [A]: Scale for 11"×17", [B]: Scale for A3



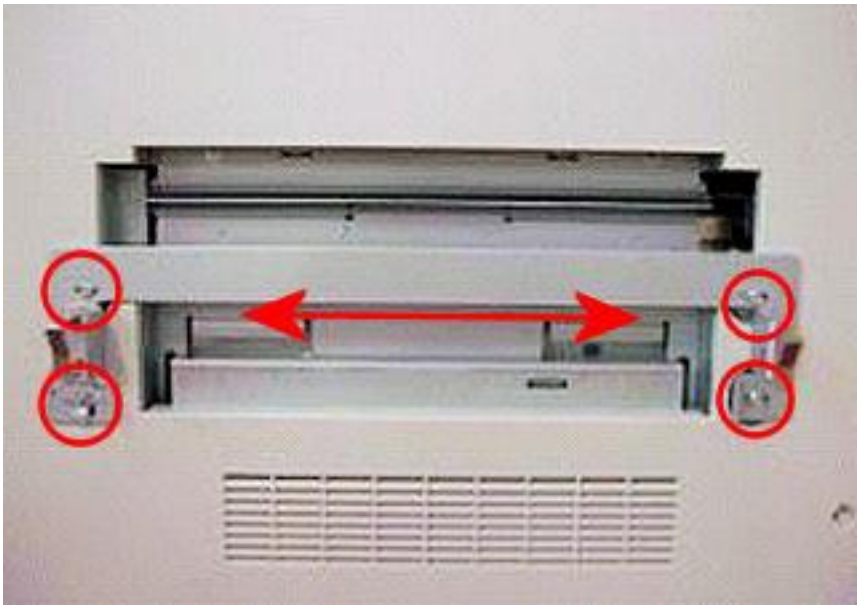
Registration Adjustment Procedure

1. Disconnect the stacker with the upstream device and release the stand.
2. Remove the cross bracket on the joint bracket and change the direction. (×1)



d0cpz1336

3. Loosen the screws on the joint bracket, adjust the bracket position, and then secure it again.



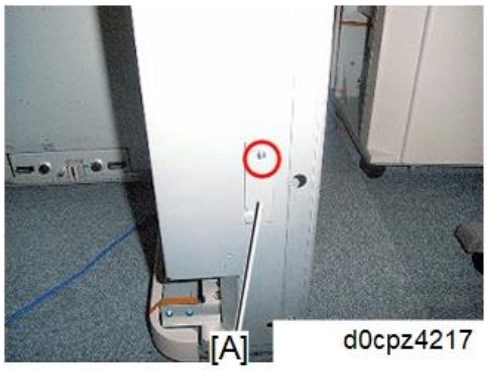
4. Connect the stacker again and check the registration/skew. If they are not within 2 mm, repeat the adjustment procedure.
5. Connect the stacker with the upstream device, and then set the stand.

Skew Correction Procedure

1. Disconnect the stacker with the upstream device and release the stand.

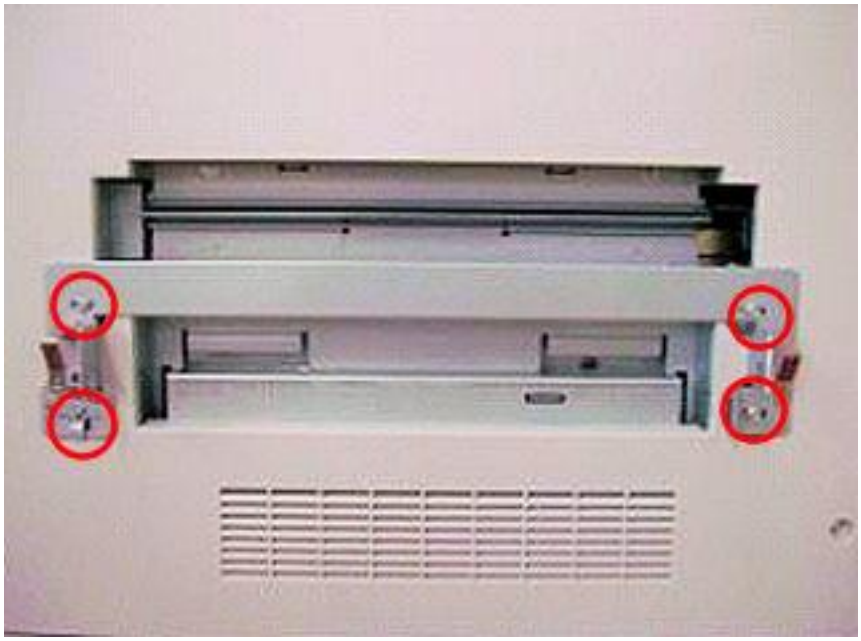
2. Remove the front right cover [A]. (×3)

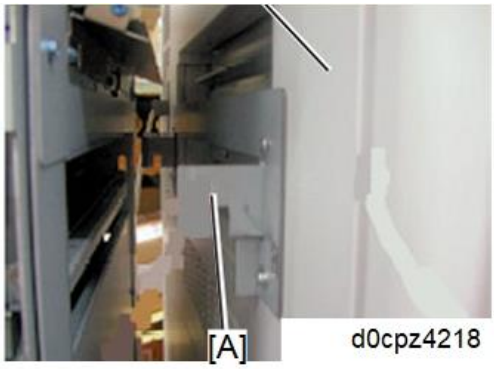
3. Remove the skew correction plate [A]. (×1)



4. Loosen the screws on the joint bracket [A]. Insert the skew correction plate behind the joint bracket

(either left or right side) and tighten the screws again.





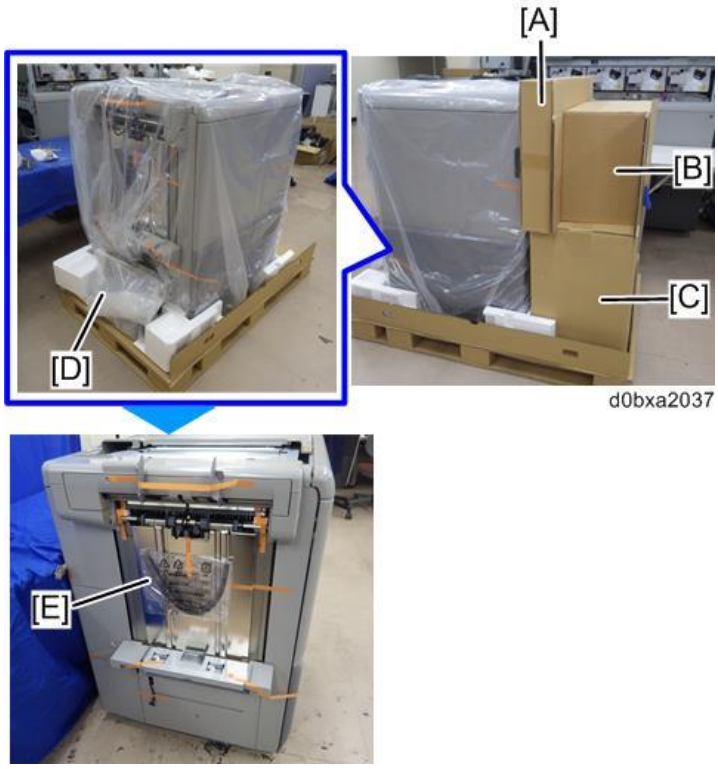
Note

The skew correction plate is 2 mm thick.

5. Connect the stacker again and check the registration/skew. If they are not within 2 mm, repeat the adjustment procedure again.
6. Attach the front right cover again, connect the stacker with upstream devices and set the stand.

Finisher SR5110 (D3G9), Booklet Finisher SR5120 (D3G8)

Accessories

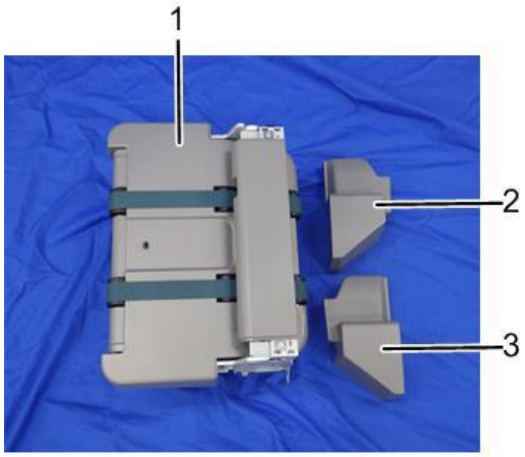


Shift Tray/Other Parts [A]

No.	Description	Q'ty
1	Shift Tray	2
2	Entrance Guide Plate	1
3	Ground Plate	1
4	Screws M3x8	9
5	Screws M3x6 (Rounded End)	2
6	Screws M3x6	2
7	Screws M4x14	4
8	Cover for Overturning Prevention Stand	1
9	Bracket	1
10	Leveling Shoes	5
11	Power Cord	1
-	Tapping screw 3x8	1
-	Tapping screw 4x8 (Rounded End) *1	6

*1: These screws are in a different bag than the ones containing the screws in No. 4 to No. 7.

Booklet Tray [B] (Booklet Finisher SR5120 Only)



d0bxa2039

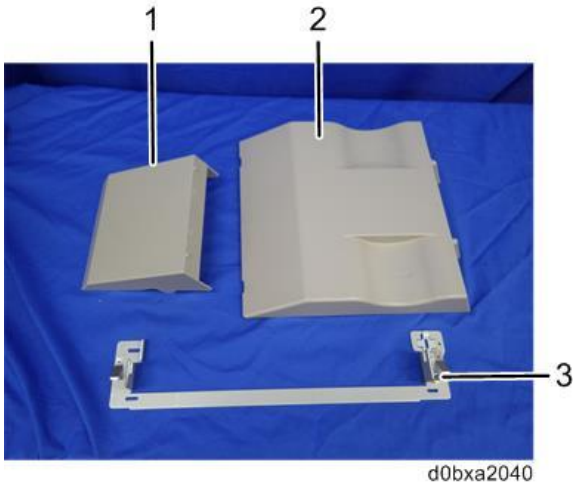
No.	Description	Q'ty
1	Booklet Tray (SR5120)	1
2	Rear Cover	1
3	Front Cover	1
-	Screws M4x14	2
-	Screws M3x8	4

Upper Shift Unit [C]

d0bxa2041a

No.	Description	Q'ty
1	Upper Shift Unit	1
2	Tapping Screw 3x8	1
3	Tapping Screw 4x8	6

Auxiliary Tray/Joint Bracket [D]



No.	Description	Q'ty
1	Auxiliary Tray - Z-Fold	1
2	Shift Tray	1
3	Joint Bracket	1

Sponge Strip [E]

No.	Description	Q'ty
1	Sponge Strip	1

Installation

⚠CAUTION

- Make sure that the main machine is switched off and that its power cord is disconnected before doing the following procedure.
- Packing materials, fixing brackets, and other protectors prevent the machine from moving

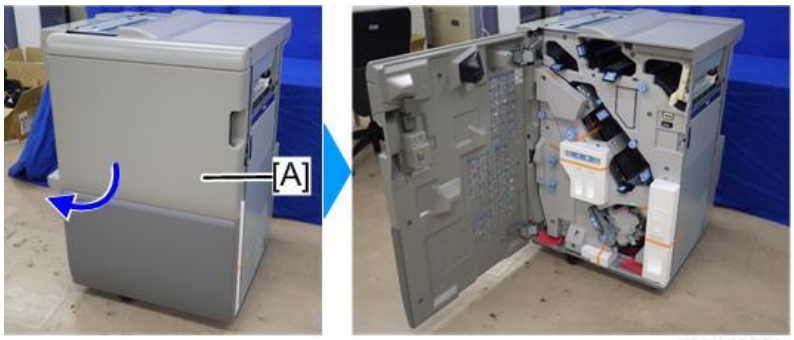
during transportation. If the machine will be transported to another location, these materials should be reattached.

Unpacking

1. Remove the tape from the exterior section.

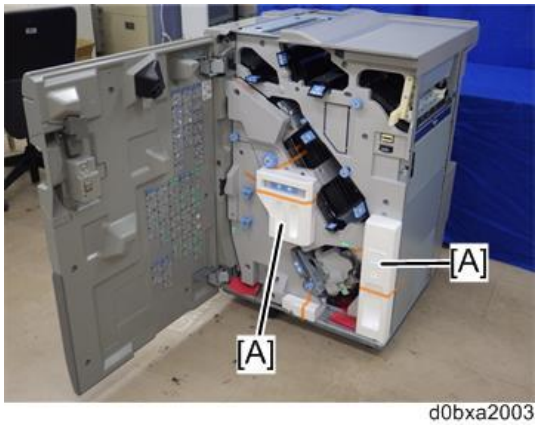
d0bxa2001

2. Open the front door [A].



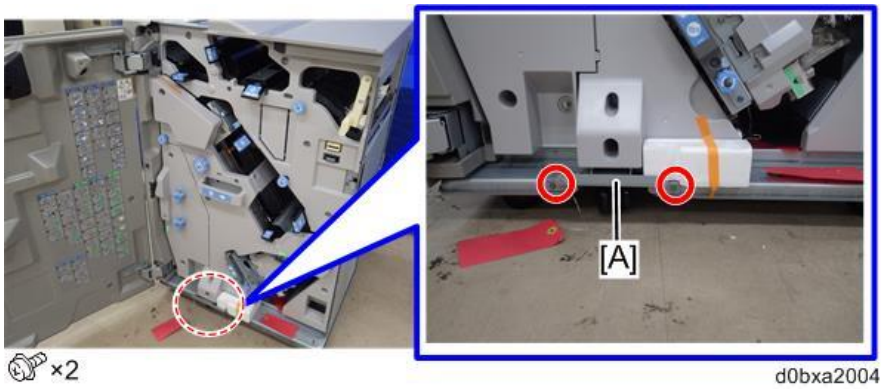
d0bxa2002

3. Remove the tape and the cushions [A] inside the machine.

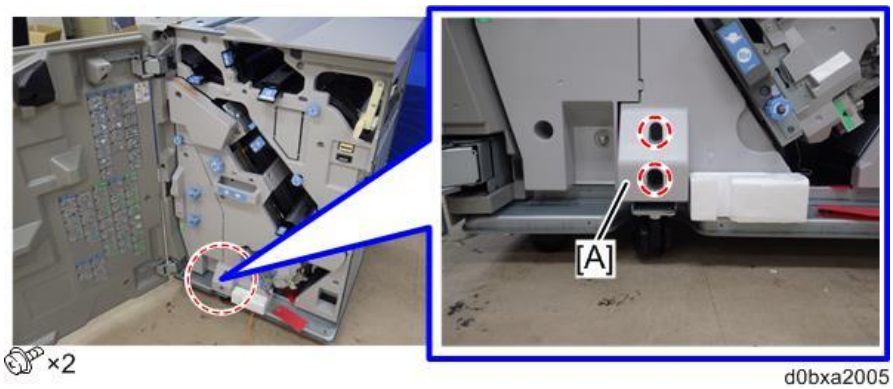


d0bxa2003

4. Remove the fixing bracket [A] with a tag.



5. Loosen the screws of the caster cover [A].



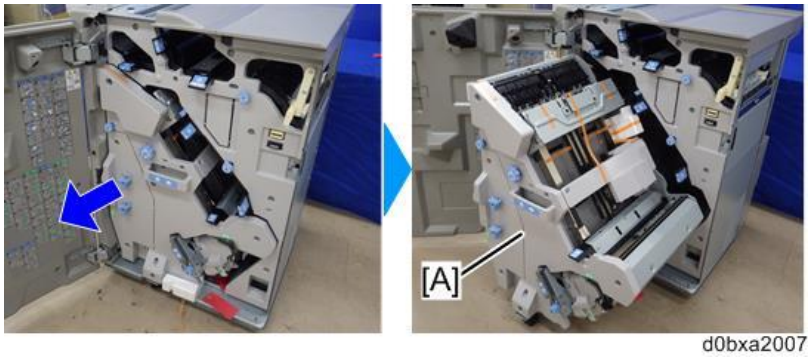
6. Push the caster [A] down until it touches the floor.

7. With the caster touching the floor, tighten the caster cover screws.

Note

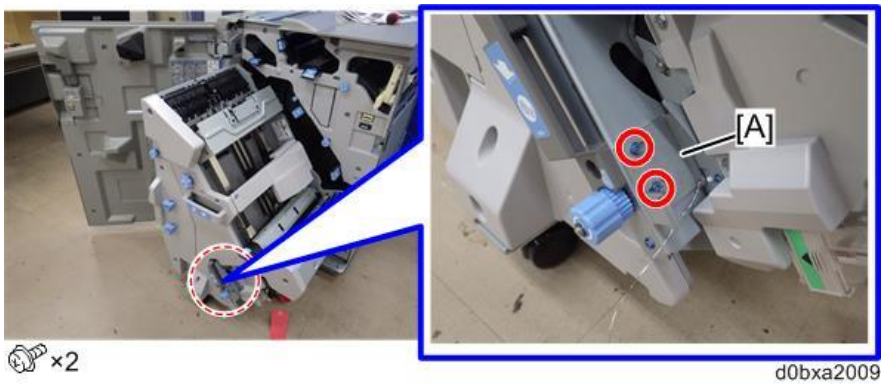
- Lifting the machine up on the castor will relieve the stress on the rails of the stacker/stapler unit.
- Adjust the caster position accordingly if the finisher height raised until the wheels not touching the ground. Otherwise, the slide rails may be distorted when the stapler unit is pulled out.

8. Pull the stacker/stapler unit [A] out until it stops.

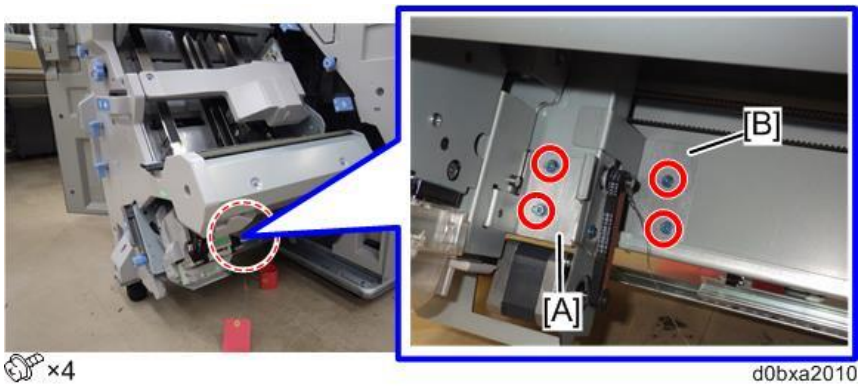


9. Remove the tape and cushions.

10. Remove the fixing bracket [A] with a tag.

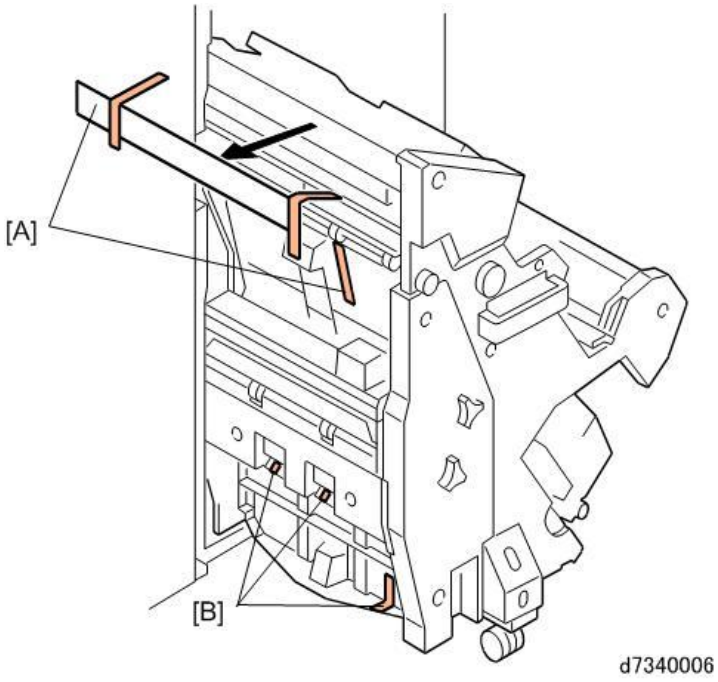


11. Remove the fixing brackets [A] and [B] with tags.



12. Remove the tape and the retainer [A] on the left upper side of the stacker/stapler unit and the tape

[B] on the lower side of the unit.



d7340006

13. Remove the tape and cushions on the left side.

d0bxa2011

14. Remove the tape from the power cord on the rear side.

d0bxa2012

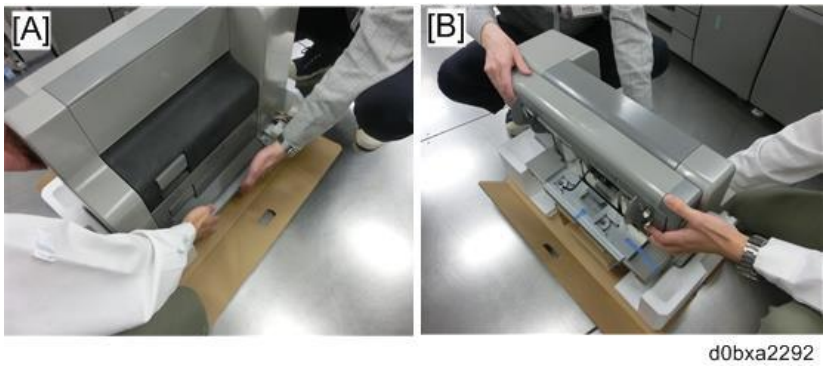
Installing the Upper Shift Unit

1. Remove the top middle cover [A].

×1

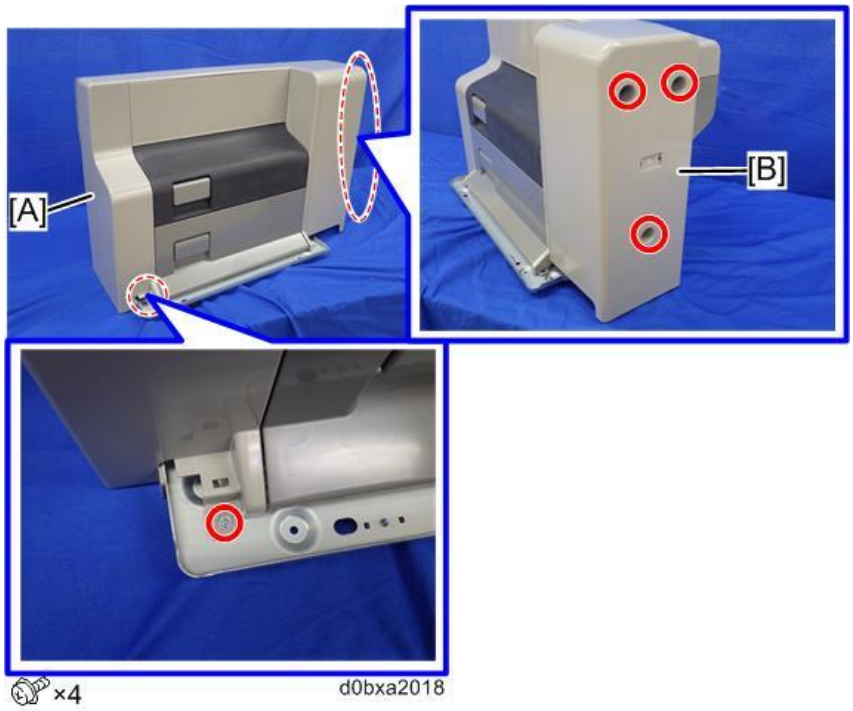
2. Open the cover of the box, remove the protective foam. Refer to the photo below.

3. Taking the upper shift unit out of the box requires two people. Lift the base section [A] with one hand while supporting the exterior part with the other hand [B].



4. Lay the upper shift unit on the flat surface, and then remove the front cover [A] and the rear cover

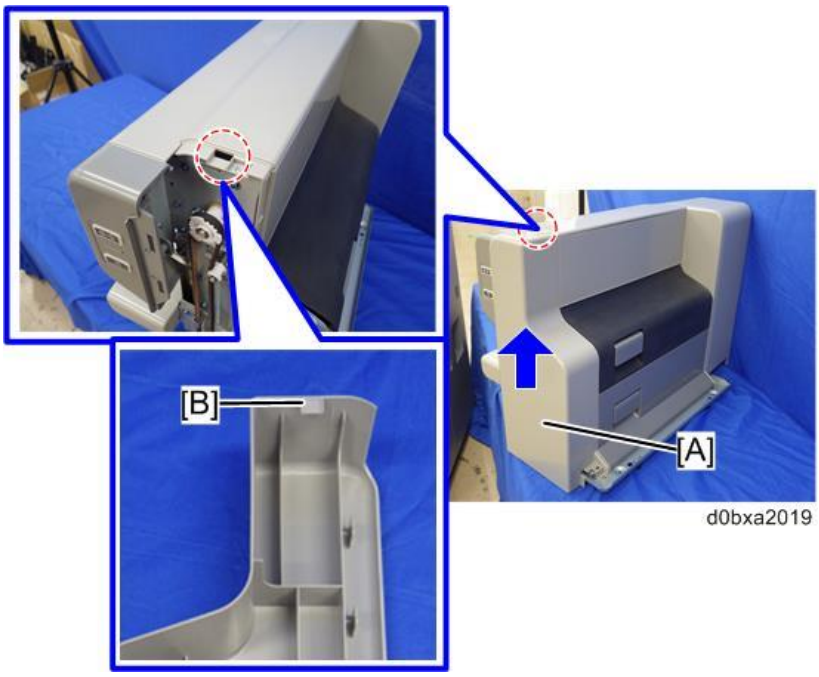
[B] from the upper shift unit.



Note

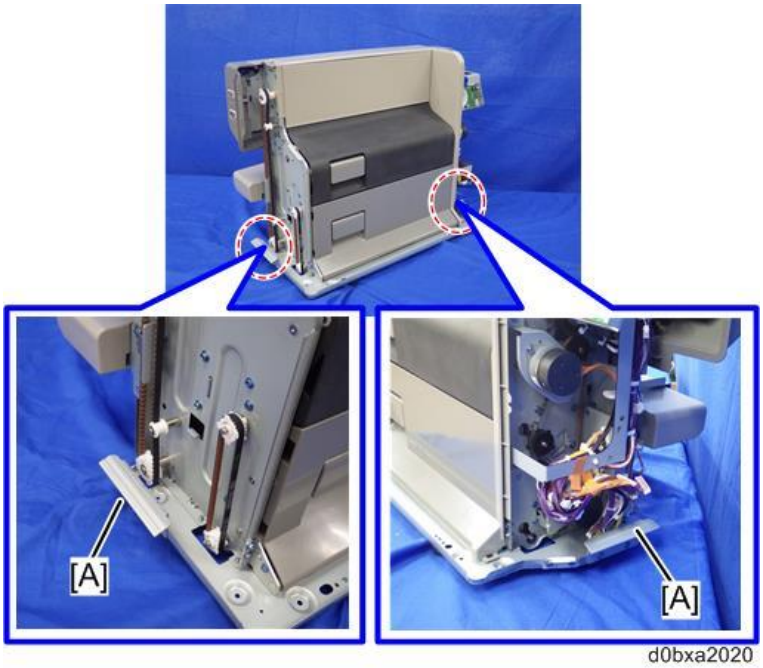
- When removing the cover of the upper shift unit, be careful not to overturn the unit.
  To prevent the unit from overturning, card boards are attached to the unit.

- Remove the front cover [A] by displacing it up to remove the hook [B].



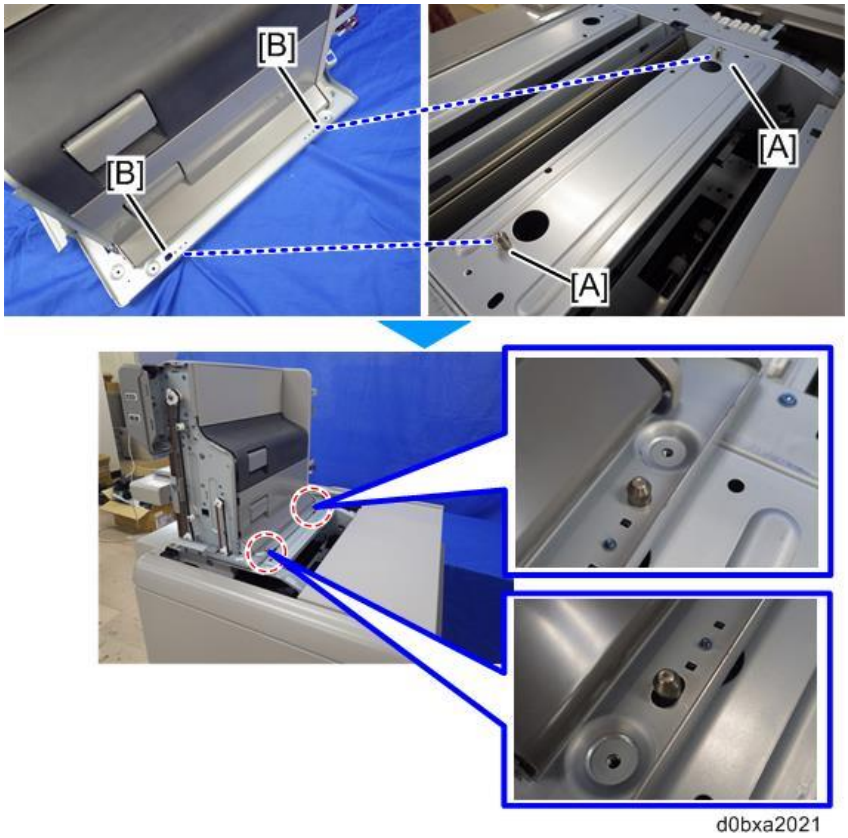
5. Remove the cardboards from the upper shift unit.

6. Grip the handles [A], and then lift the upper shift unit.



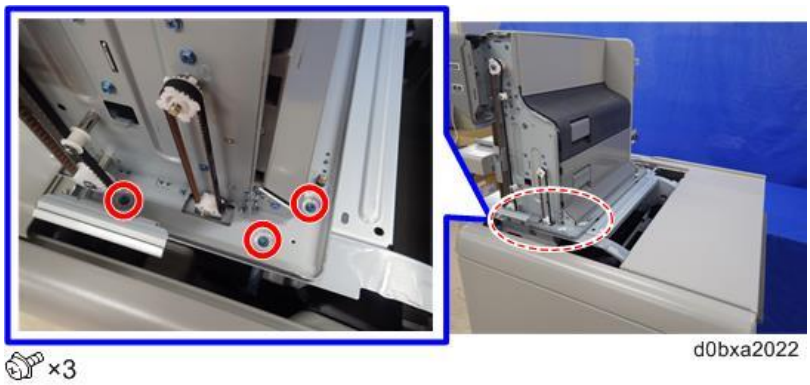
7. Align the cutouts [B] of the upper shift unit with the positioning pins [A] of the finisher to install the

upper shift unit.

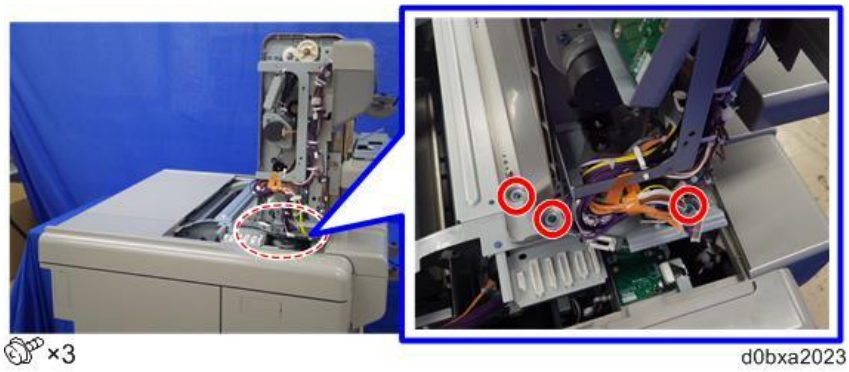


8. Fix the upper shift unit with screws. (M4×8)

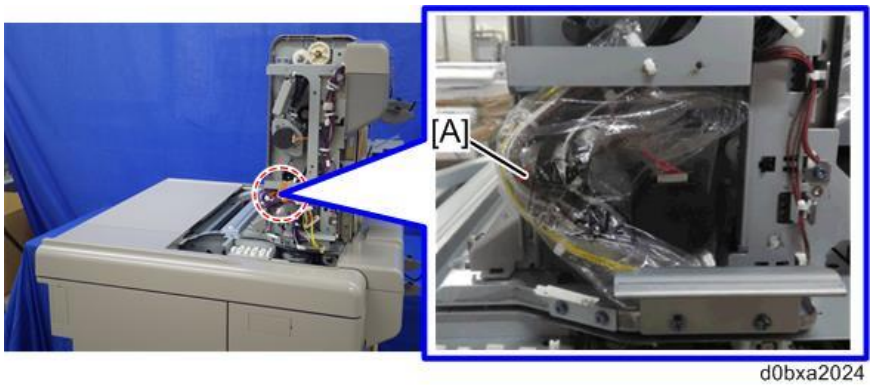
Front Side



Rear Side



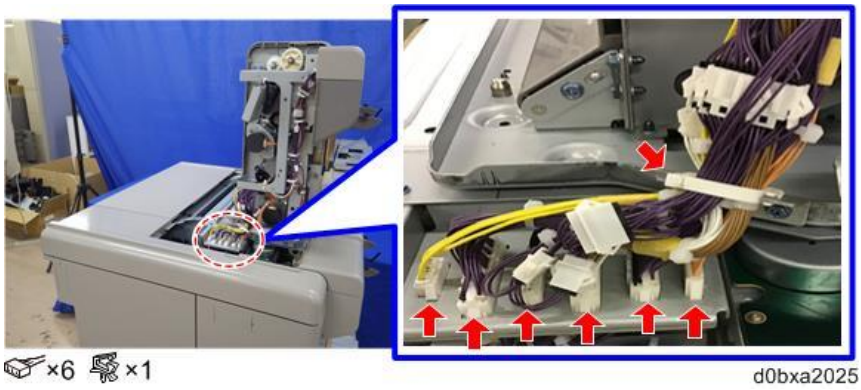
9. Remove the plastic bag [A] for the harness.



d0bxa2024

10. Connect the connectors and clamp them.

Push the connectors to make them fit tightly.



×6 ×1

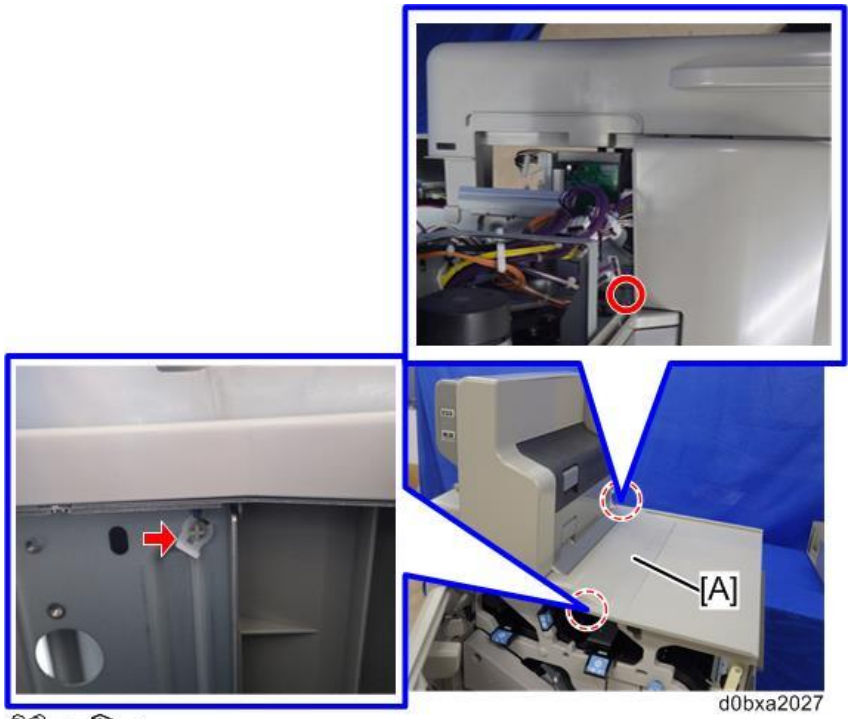
d0bxa2025

11. Attach the front cover [A].

×1

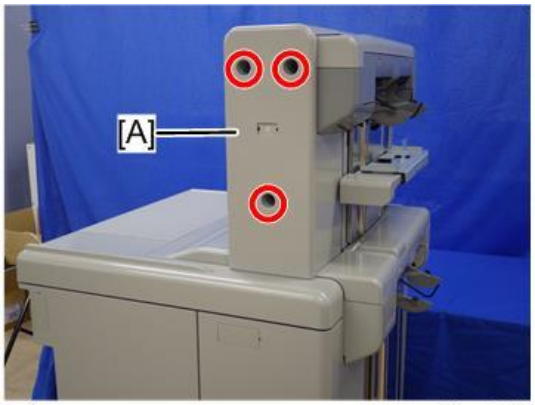
d0bxa2026

12. Attach the top middle cover [A]. (M3×8 Rounded End)



×1 ×1

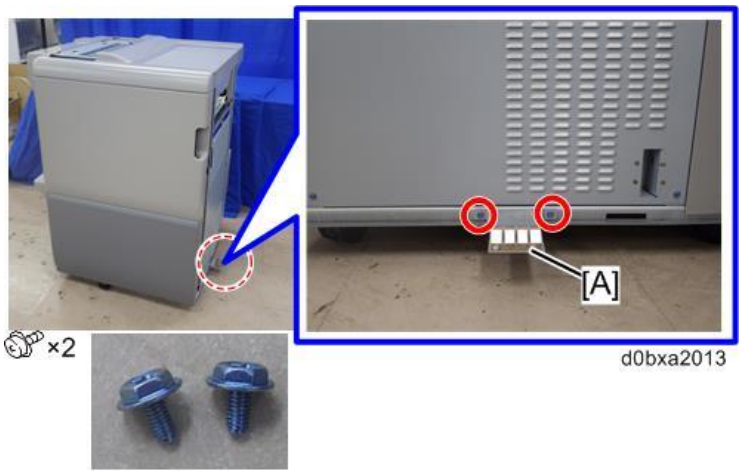
13. Attach the rear cover [A].



×3

Attaching the Parts

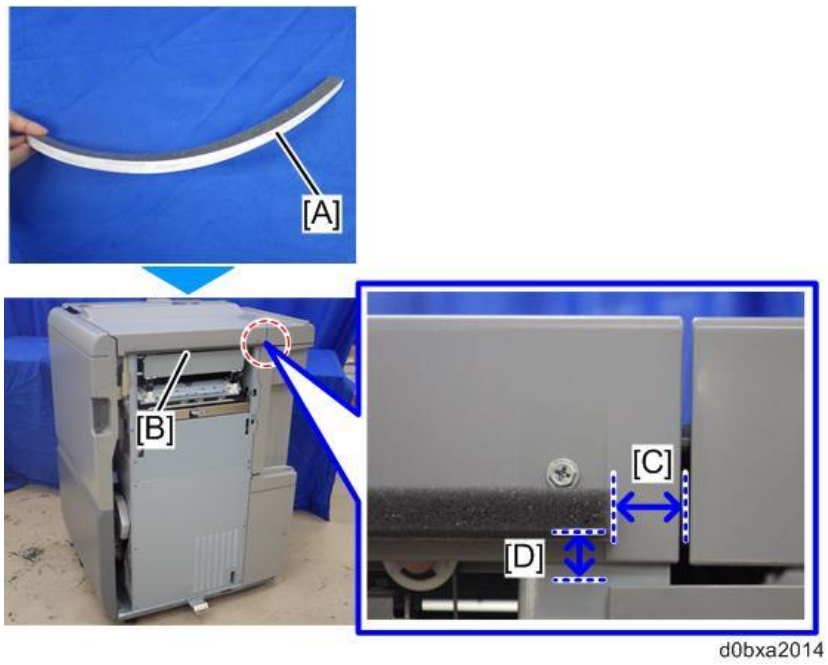
1. Attach the ground plate [A]. (M3×6)



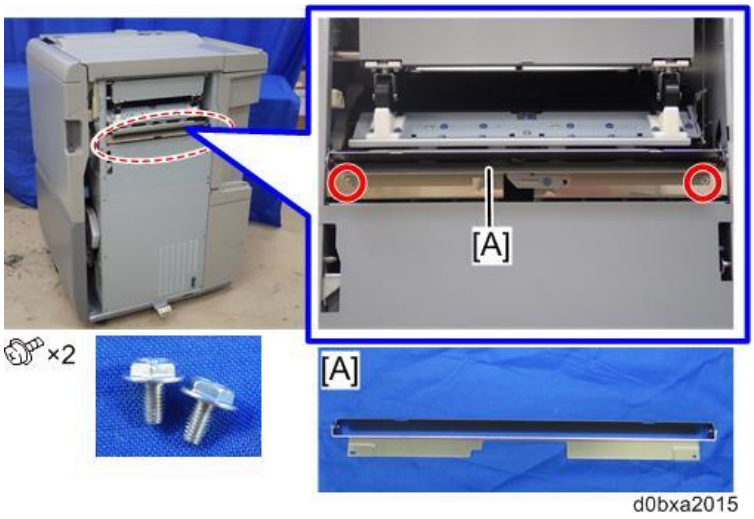
2. Peel off the tape [A], and then attach the sponge strip [B] to the top right edge of the finisher.

[C]: from 10 to 15 mm

[D]: from 0 to 5 mm

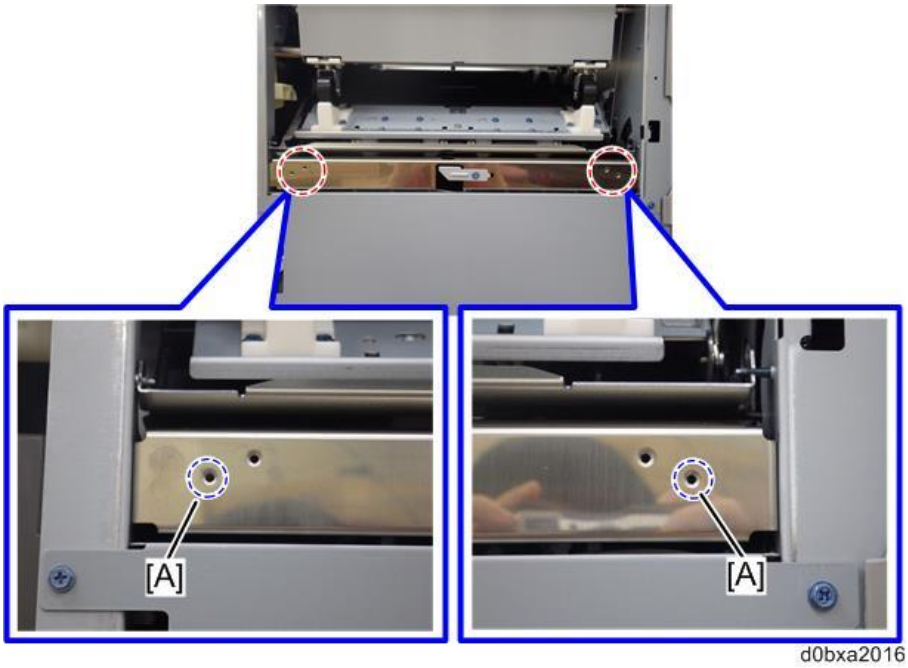


3. Attach the entrance guide plate [A]. (M3×6 Rounded End)

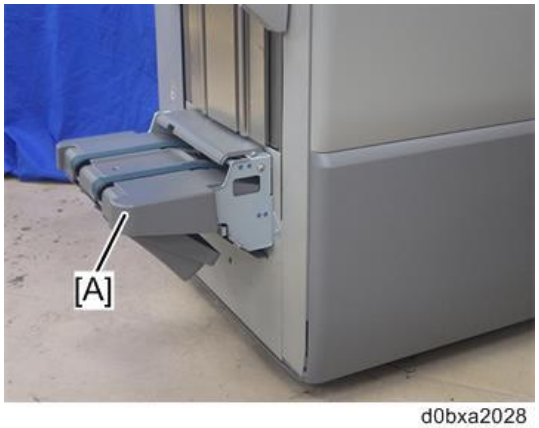


Note

- Use the holes [A] to fix the entrance guide plate.

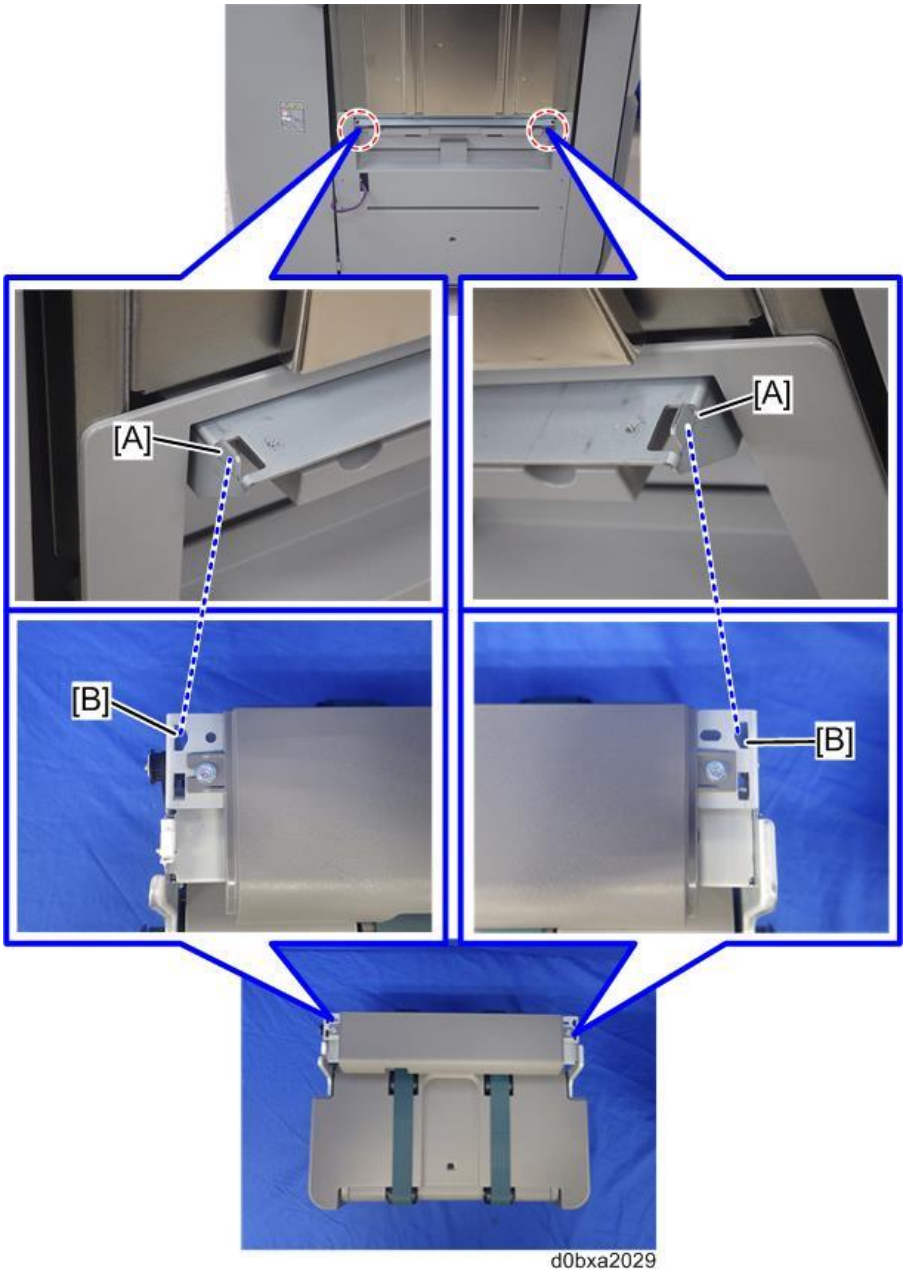


4. Set the booklet tray [A] to the finisher.

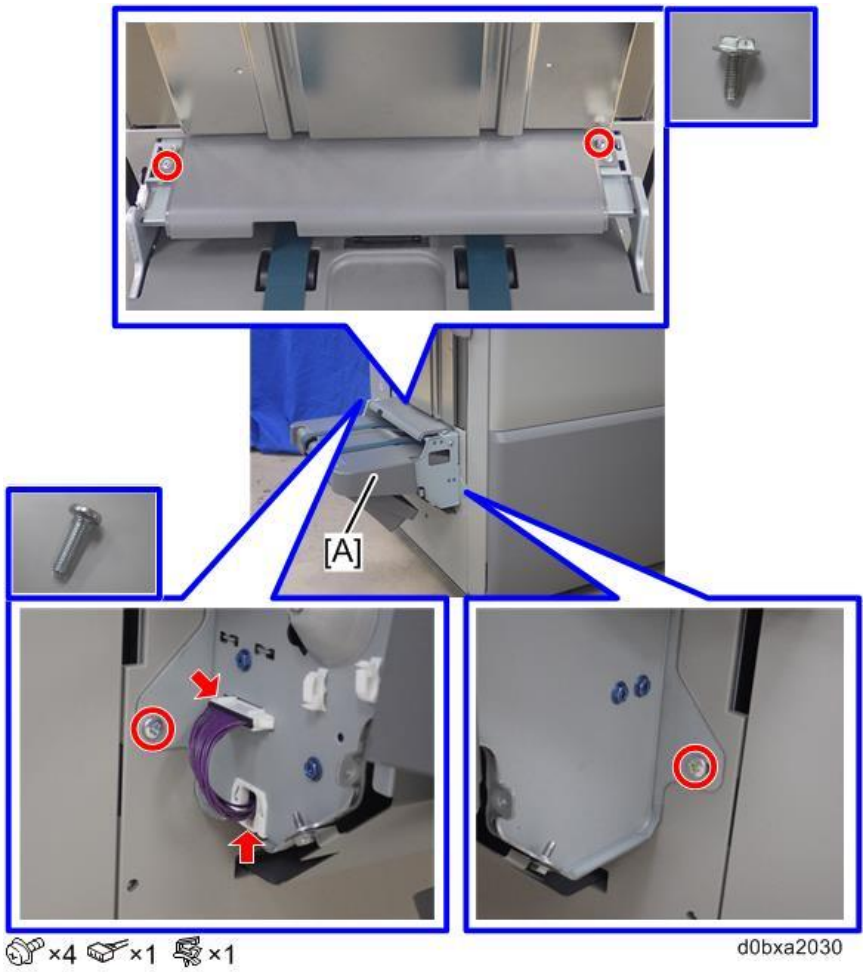


Note

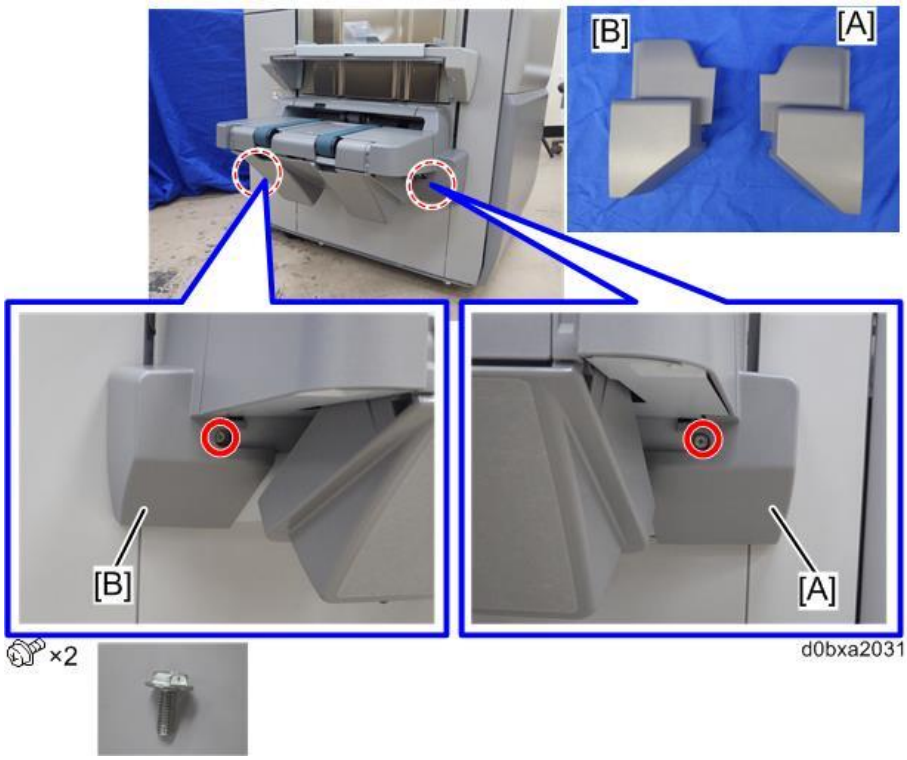
- Hook the hooks [A] of the finisher to the cutouts [B] of the booklet tray.



5. Fix the booklet tray [A]. (M3×8, M4×14)

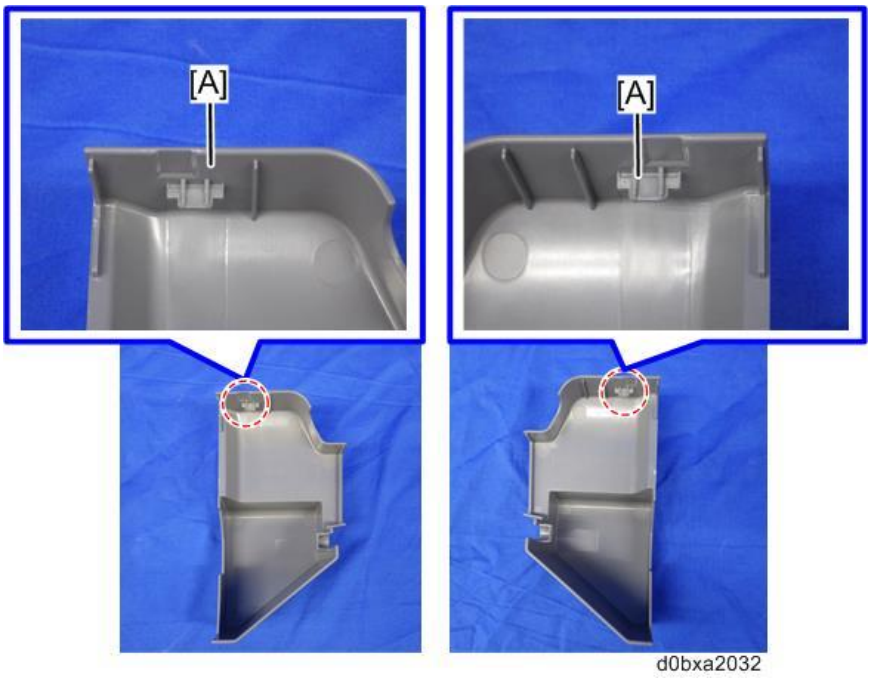


6. Attach the front cover [A] and the rear cover [B]. (M3×8)

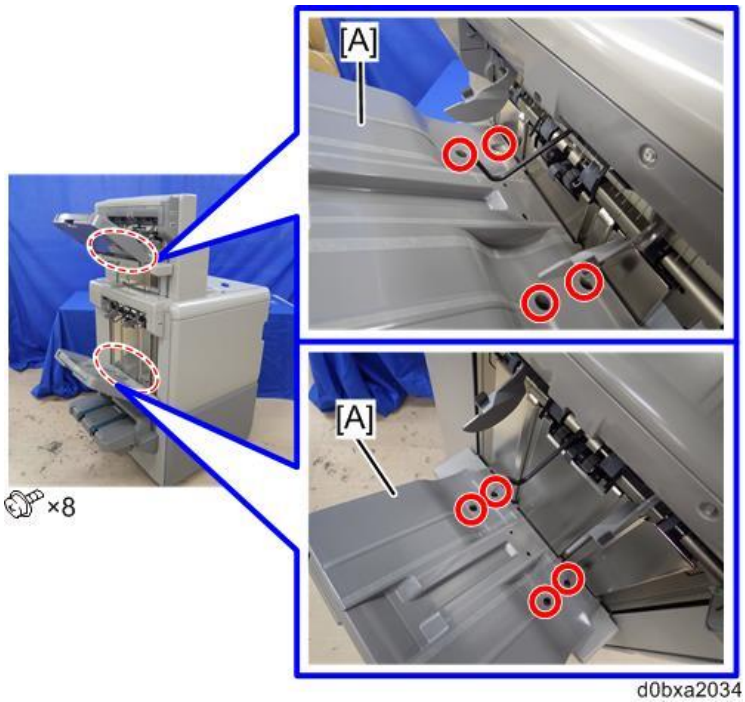


Note

- The covers have hooks [A]. Attach them carefully.



7. Attach the shift trays [A]. (M3×8)

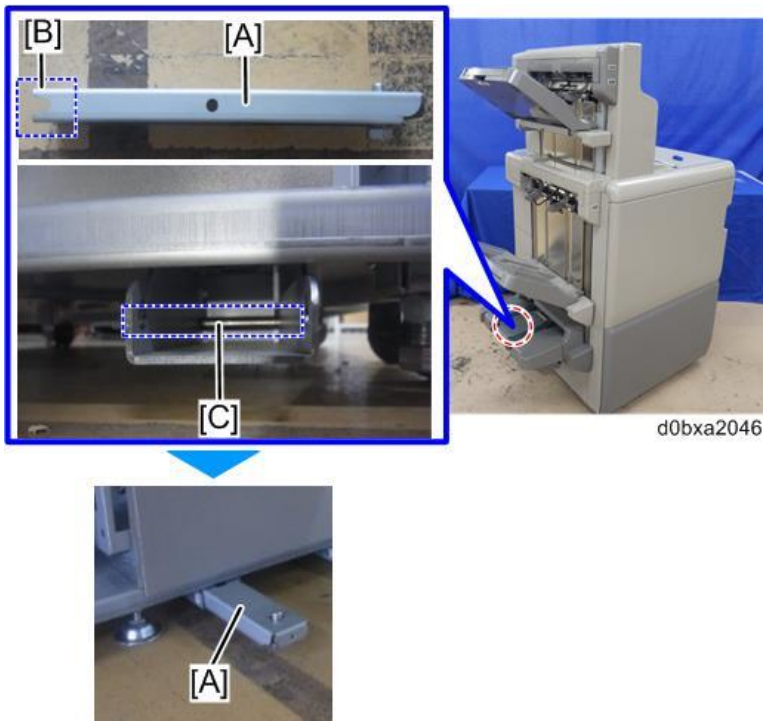


Note

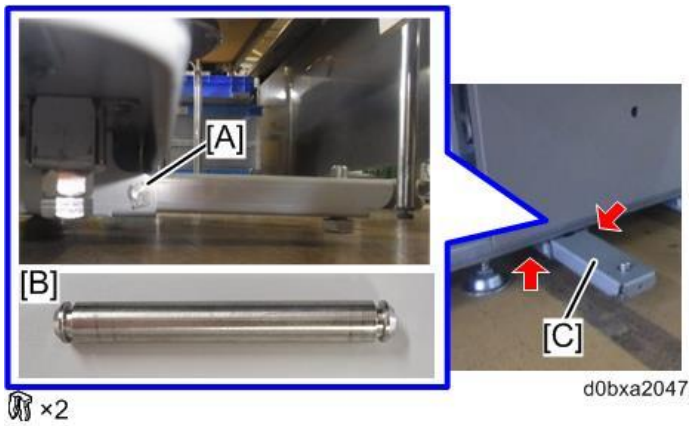
- The tray base of the upper tray is higher than that of the lower tray.
- If tightening the screws is difficult, lower the tray base to the lowest position, and then attach the shift tray.

8. Attach the overturning prevention stand [A] so that the finisher pin [C] fits into the cutout [B] of the

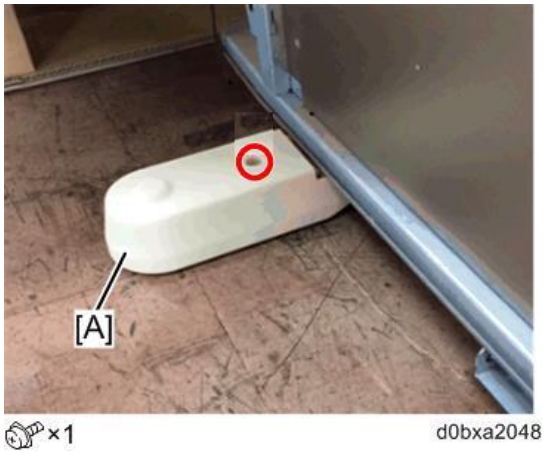
overturning prevention stand.



9. Insert the pin [B] into the hole [A] that formed when the hole of the overturning prevention stand aligns with the hole of the finisher, and then fix the overturning prevention stand [C] with the clamps.

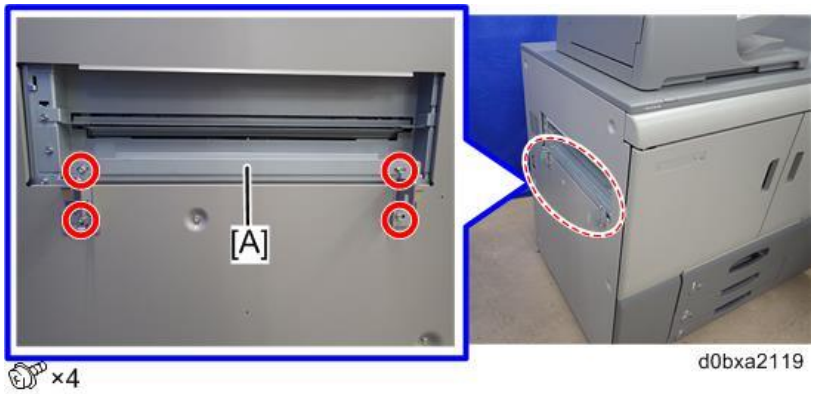


10. Attach the stand cover [A] to the overturning prevention stand. (M3×8)



Connection Procedure

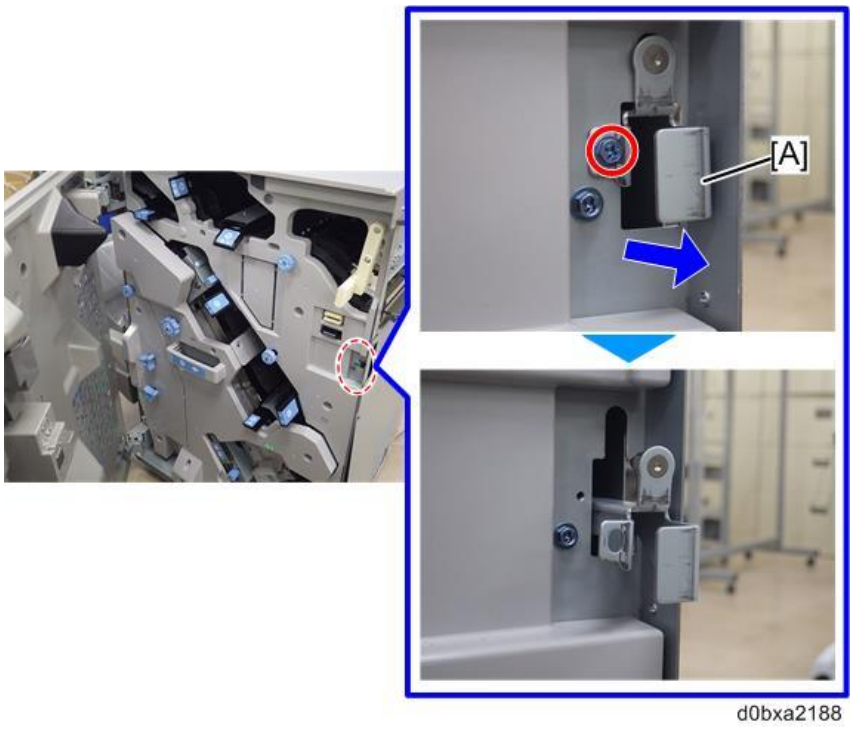
1. Fix the joint bracket [A] to the upstream unit. (M4×14)



Note

- To prevent interference with the Decurl Unit (if it is installed), remove and use the Decurl Unit screws to attach the upper left and right corners of the bracket. (x2)

2. Open the front door of the unit.
3. At the front right corner, Pull the lock bar [A] toward you until it stops. (M3×6)
   Keep this screw.



4. Slowly push the unit towards the left side of the upstream unit (or main machine) so that the lock

bar [A] is directly and squarely under the arms of the joint bracket [B].

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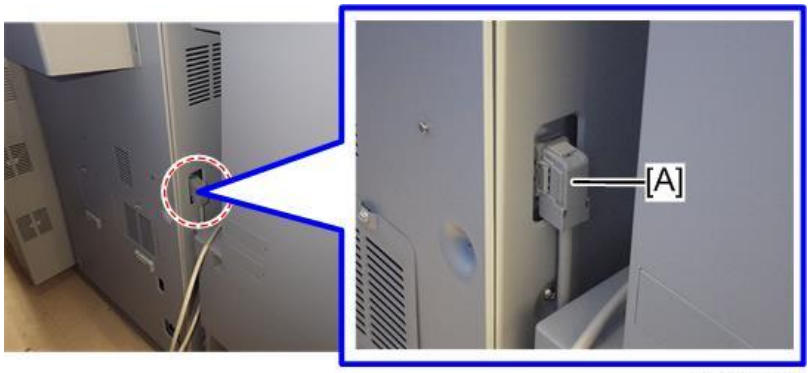
5. Attach the I/F cable [A] to the upstream unit.



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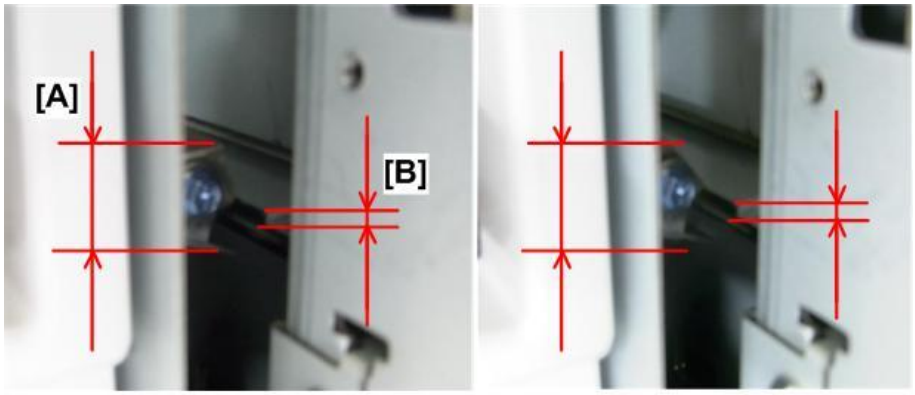
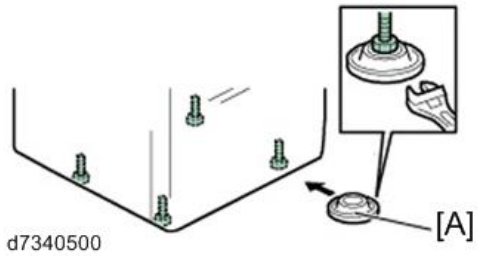
6. Push the finisher close to the side of the upstream unit.
7. Make sure that the height of the finisher entrance [A] is at the same height as the upstream unit's paper exit [B].



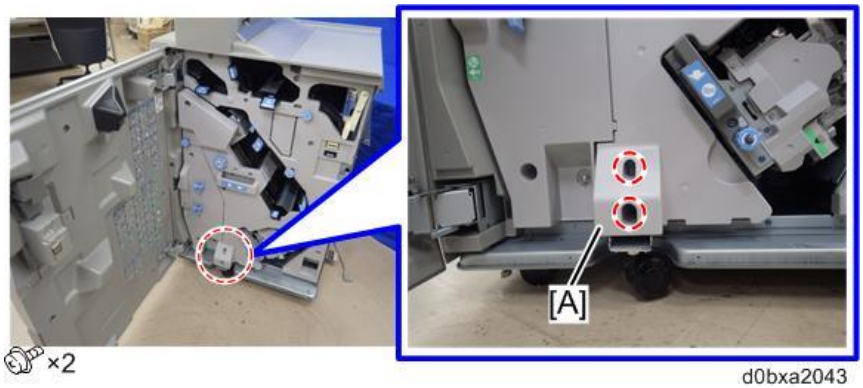
d7340013

8. Push the finisher closer to the side of the upstream unit, and then once again confirm that the height of the finisher entrance still matches the height of the upstream unit exit.
9. If the exit and entrance are not at the same height, adjust the height of the finisher by adjusting the leveling bolts. First adjust the four legs of the finisher, attach the holder [A] to the overturning

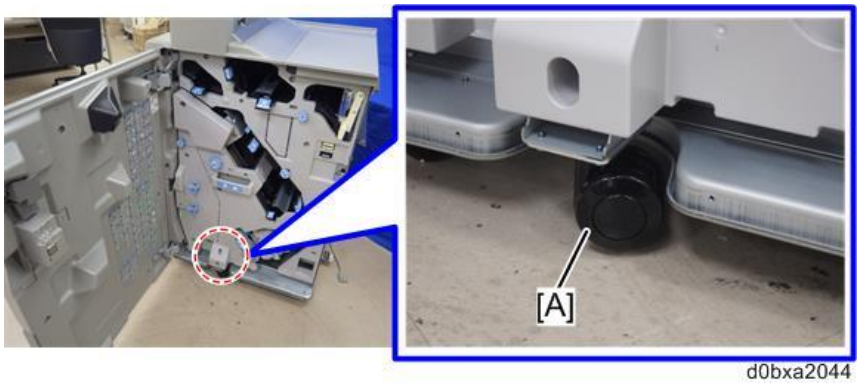
prevention stand, and then adjust the overturning prevention stand.



10. Loosen the screws of the caster cover [A].



11. Push the caster [A] down until it touches the floor.



Note

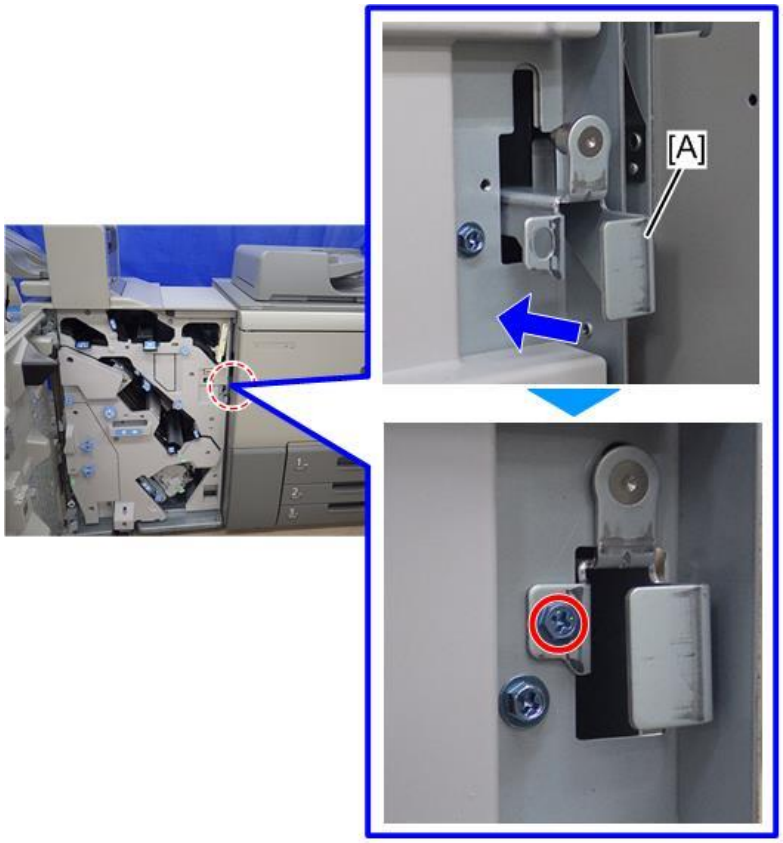
- This relieves stress on the rails of the stacker/stapler unit when it is pulled out of the machine.
- If the finisher is raised until the caster leaves the floor after you adjust the height of the finisher, adjust the caster position at the same time. Otherwise, the slide rails may be distorted when the stapler unit is pulled out.

12. With the caster touching the floor, tighten the caster cover screws [A].

13. Push the finisher against the side of the upstream unit.

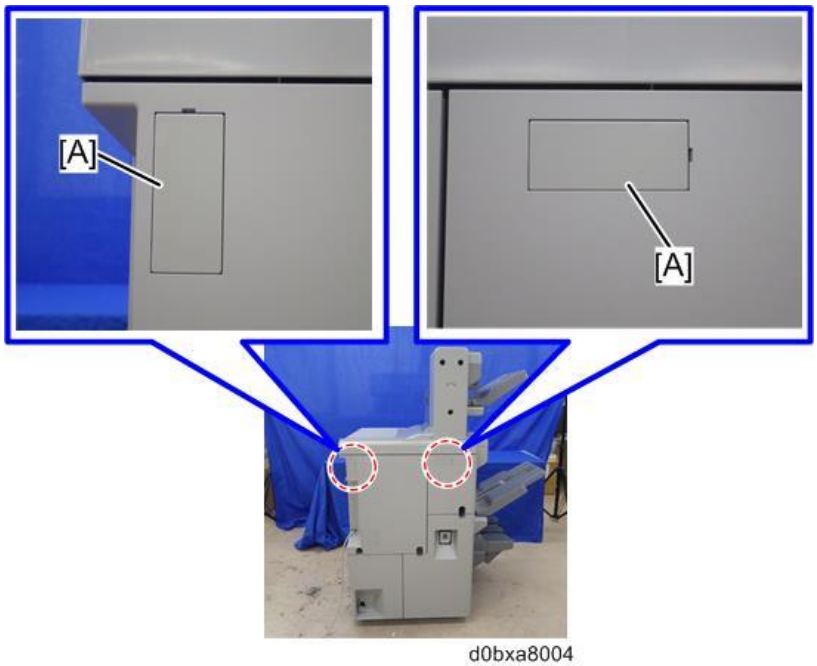
14. Push the lock bar [A] in completely so that it slides up into the notches in the arms on both ends of

the joint bracket, and then fix it.(x1)



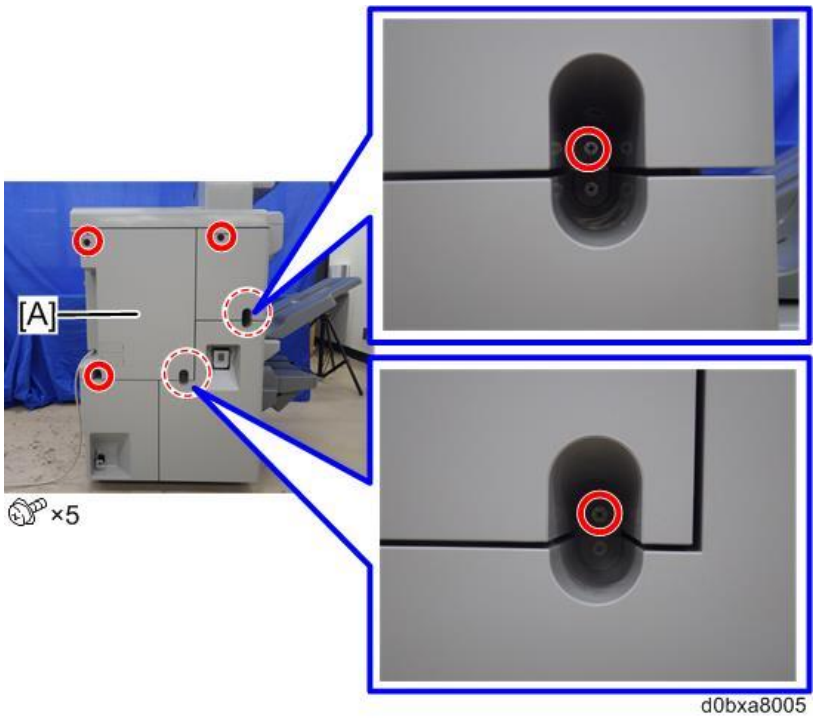
d0bxa2190

15. Remove the caps [A] of the rear upper cover of the finisher. (x2)

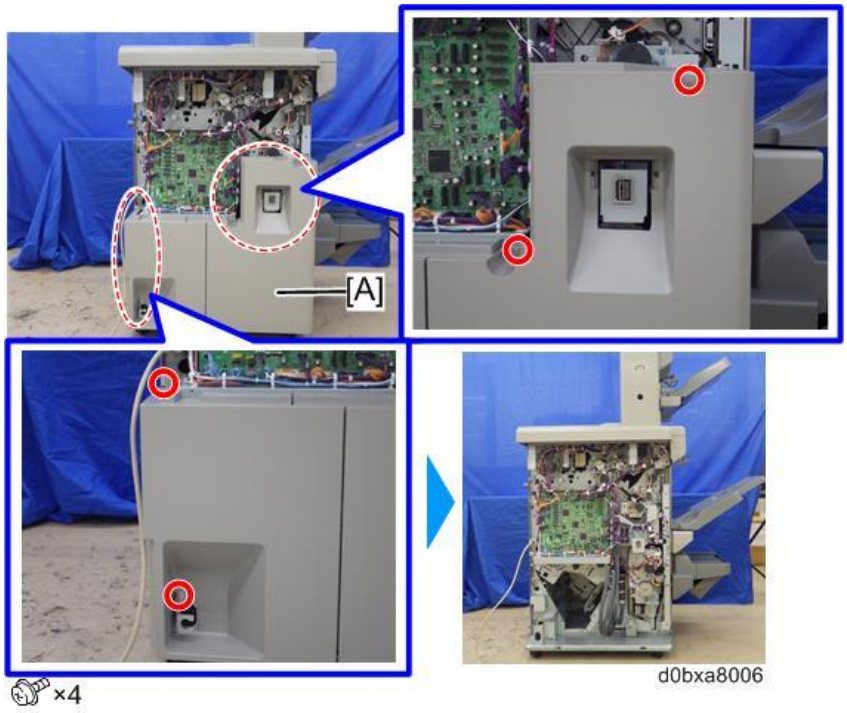


d0bxa8004

16. Remove the rear upper cover [A].



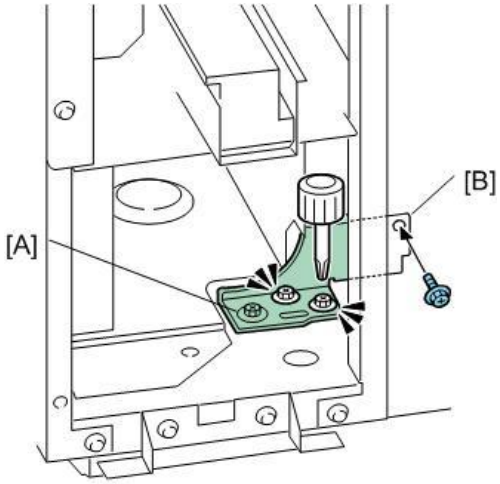
17. Remove the rear lower cover [A].



18. Loosen the screws of the bracket [A].

19. Fasten the bracket to the upstream unit at [B]. (x1)

20. Tighten the screws. (x3)



d7340015

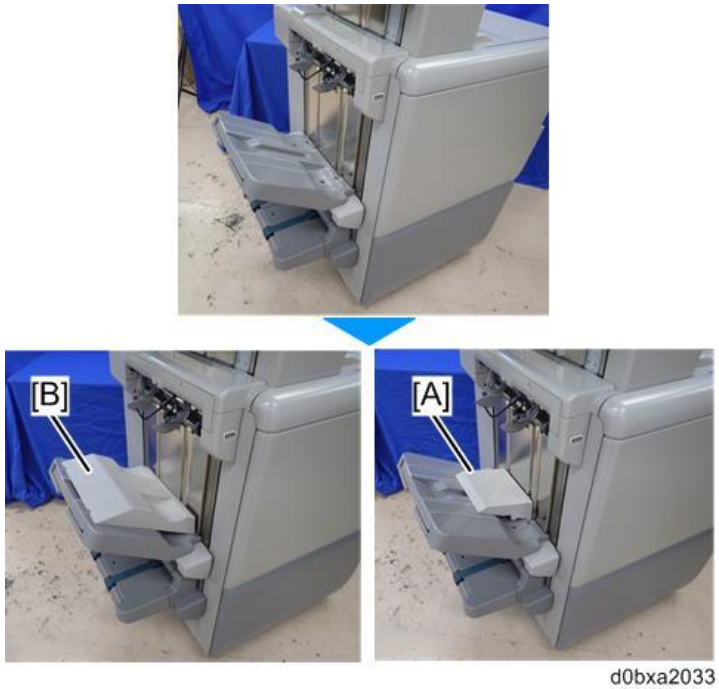
21. Reattach the rear upper cover and the rear lower cover.

Auxiliary Tray

1. Attach an auxiliary tray [A] or [B] to the shift tray.

There are two types of auxiliary trays. Attach them in accordance with the usage.

- Z-fold auxiliary tray [A]: If a Z-folded paper is supplied from the multi-folding unit.
- Auxiliary tray for thin coated paper [B]: Paper size is 420.1 mm or more. Paper type is thin paper whose weight is 64g/m^2 or less or thin coated paper whose weight is 80g/m^2 or less.



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Inspection You Perform After Installing the Finisher

1. Remove the holding plate [A] attached to the inlet of the rear side. (x1)

2. Connect the power cord [B], and then attach the holding plate [A]. (x1)

3. Set A3/DLT papers to the second tray of the main machine, and then copy several times.
4. If there is skew in a paper, perform the adjustment when it is necessary. (Skew and Side-to-Side Registration)

Vertical Skew Adjustment

Do this adjustment only if the edges of folded booklets are not even.

Switch the main machine and do a test run for booklet folding with either A3 or DLT paper.

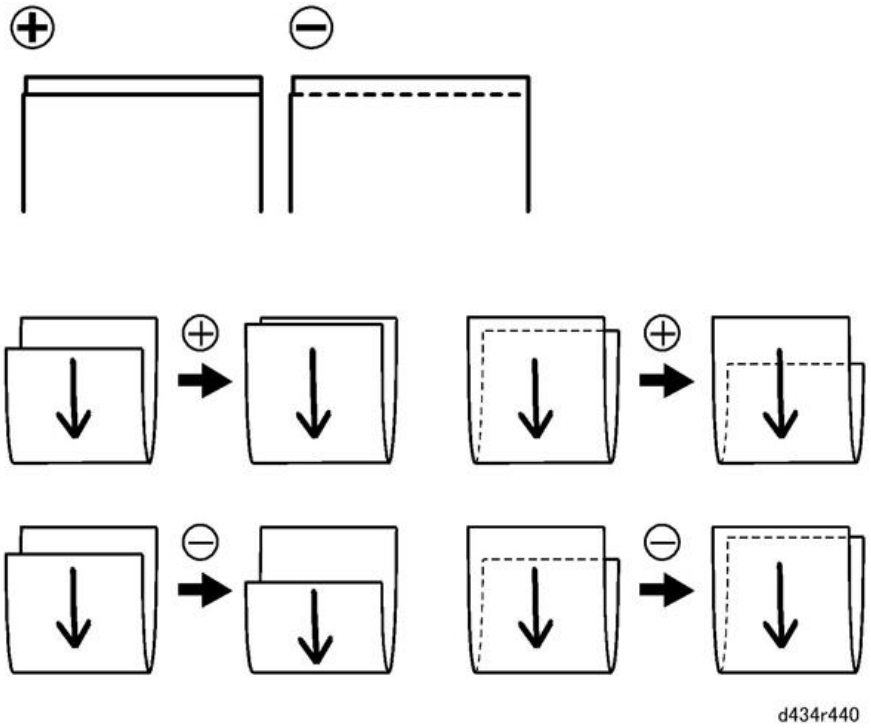
Note

- This procedure shows you how to test and adjust the fold position for A3/DLT paper.
- This same adjustment can be done for other paper sizes as well with **SP6201**.

Look at the paper and determine what kind of skew (if any is present).

1. Look at the paper and refer to the diagram below to determine in which direction the fold position is

shifted.



2. Measure the amount of position shift.
3. Enter the SP mode
   - Europe, Asia: Use **SP6201-8** (this is for A3 paper).
   - North America: Use **SP 6201-15** (this is for DLT paper).

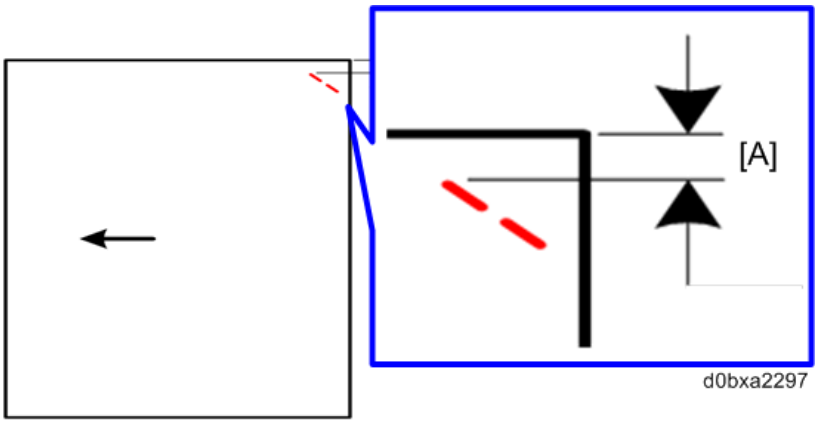
   Note
     - The illustration above shows the effects of +/- adjustment with **SP6201**.
     - The vertical arrows show the direction of paper feed
4. Enter one-half the measured amount of position shift.
   - Example: If the measure amount of position shift is -1.2 mm, enter -0.6 mm
   - The range for measurement is –2.0 mm to +2.0 mm in 0.2 mm steps for every notch adjustment.
5. Exit the SP mode, do another test print and repeat the adjustment procedure if necessary.
6. When you have finished adjusting the fold position, next enter the adjustment value for the bind position using SP6202. Enter the same value as the fold position adjustment value for each paper size.

The Adjustment of Rear Slant Binding Position

With A4Y standard paper, perform the adjustment as shown below in the job of rear slant binding 2 copies where the position [A] is not 6 mm.

1. Output some rear slant binding booklets. (one copy or more)
2. As the below image shows, measure the staple position [A] from the paper edge in the direction

that is at right angles to the transport direction. (main scan binding depth)



The target value is set to 6 mm.

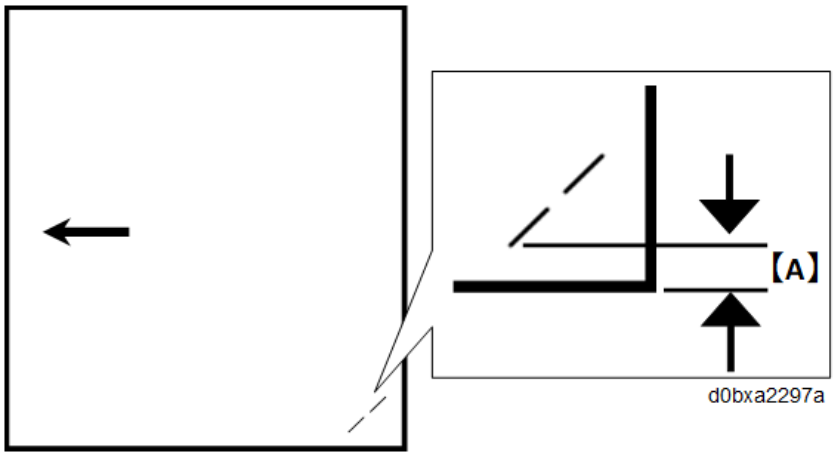
If the measured result is 6 mm then there is no need to proceed further.

3. In SP6-281-001, adjust the binding depth so that it becomes 6 mm.
   If you want to make the binding depth deeper, increase the value.
   If you want to make the binding depth shallower, decrease the value.
   If the customer asks for a custom binding depth, adjust according to the request.
4. Output some rear slant binding booklets, and confirm that the staple position is at the target position.
5. If the staple position is at the target position, the adjustment has been completed.
   If it isn't, perform the procedure from step 3 again.

The Adjustment of Front Slant Binding Position

With A4Y standard paper, perform the adjustment as shown below in the job of front slant binding 2 copies where the position [A] is not 6 mm.

1. Output some front slant binding booklets. (one copy or more)
2. As the below image shows, measure the staple position [A] from the paper edge in the direction that is at right angles to the transport direction. (main scan binding depth)



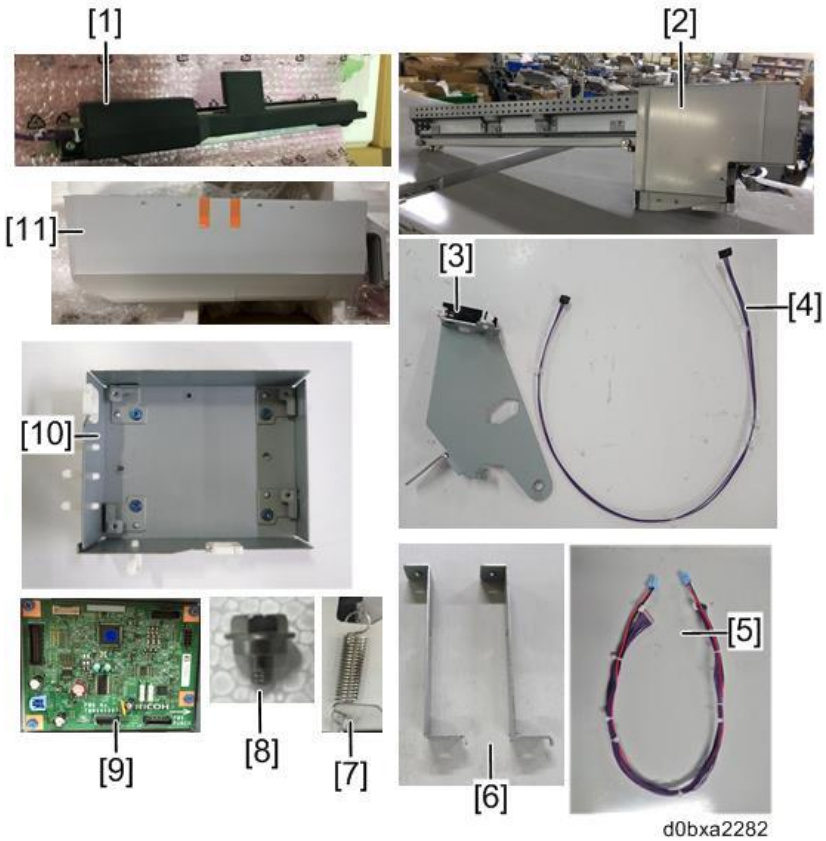
The target value set to 6 mm. If the measured result is 6 mm then there is no need to proceed

further.

3. Use SP6-282-001 to adjust the binding depth to 6 mm.
   For deeper binding depth, increase the value.
   For shallower binding depth, decrease the value. If the customer has a request for the binding depth, adjust the value to reflect the customer's request.
4. Output some front slant binding booklets, and confirm that the staple position is at the target position.
5. If the staple position is at the target position, the adjustment has been completed.
   If it isn't, perform the procedure from step 3 again.

Installing Punch Unit PU5030 (D3GJ)

Accessories



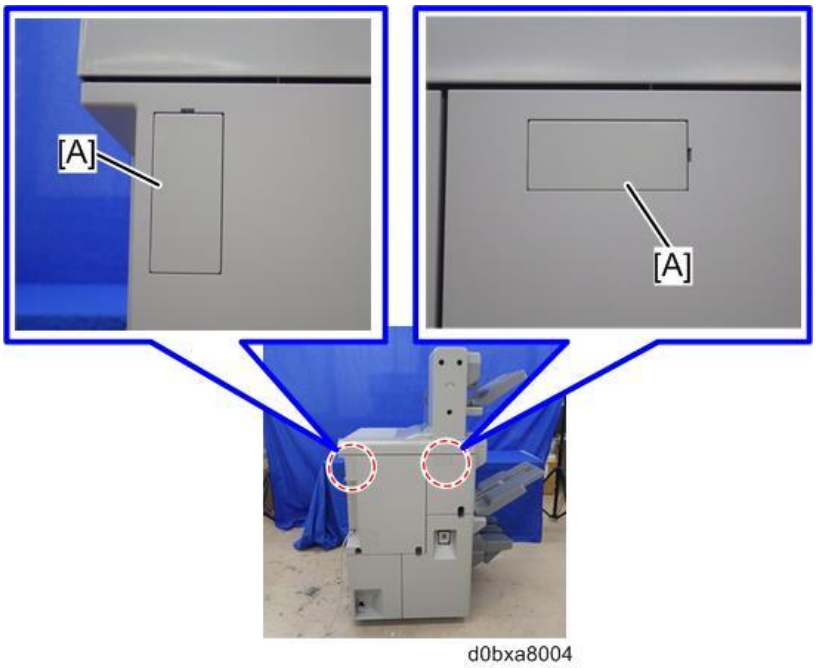
No.	Description	Q'ty
1	CIS	1
2	Punch Unit	1
3	Sensor Bracket	1
4	HARNESS:PUNCH:OVERFLOW:SENSOR:ASS'Y	1
5	HARNESS:MAIN:PUNCH:BASE:ASS'Y	1

2.Installation

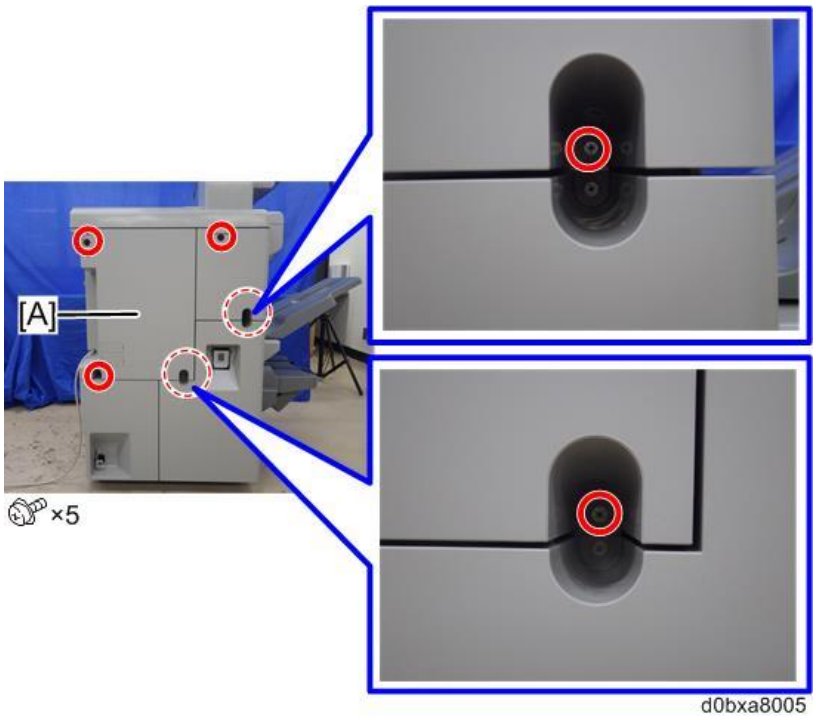
No.	Description	Q'ty
6	BRACKET:FIX:PCB:PUNCH UNIT	2
7	LOCK SPRING	1
8	SCREW:CONTACT POINT	1
9	PCB:PUNCH	1
10	Controller Board Bracket	1
11	Punch Hopper	1
-	TAPPING SCREW - M3X6	16

Installation

1. Remove the caps [A]. (▾x2)



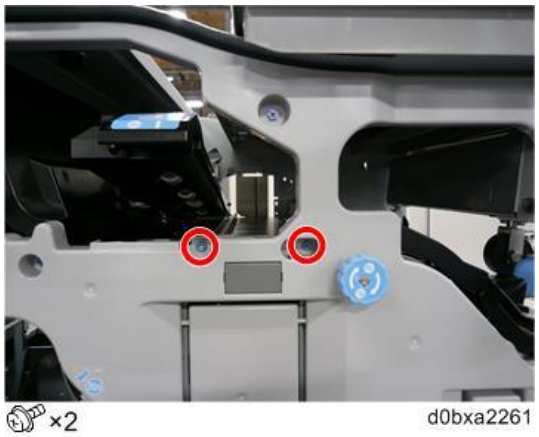
2. Remove the rear cover [A].



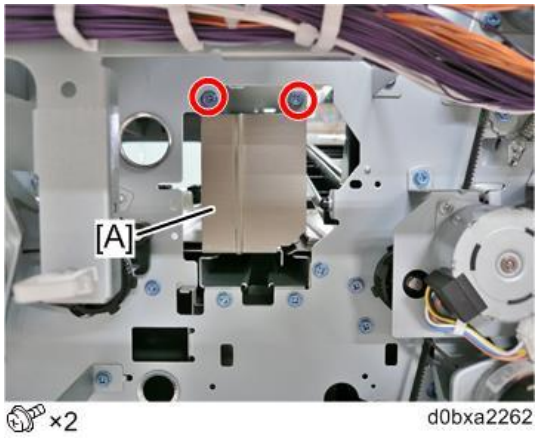
3. Open the front door.

4. Remove the guide plate [A].

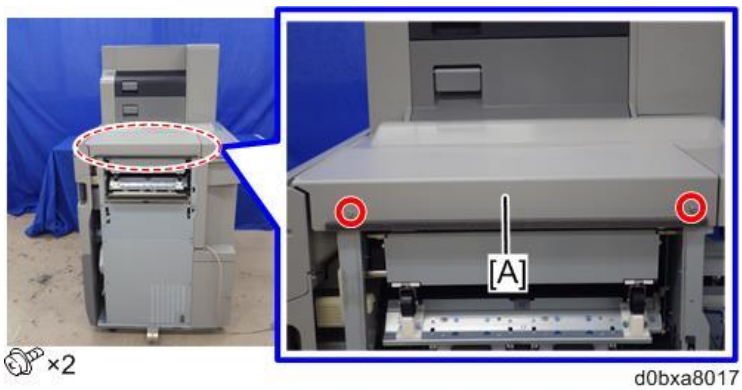
Front side



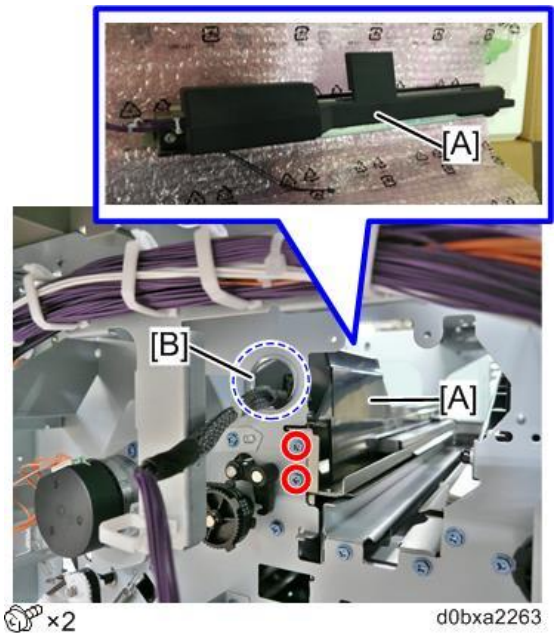
Rear side



5. Remove the top right cover [A].

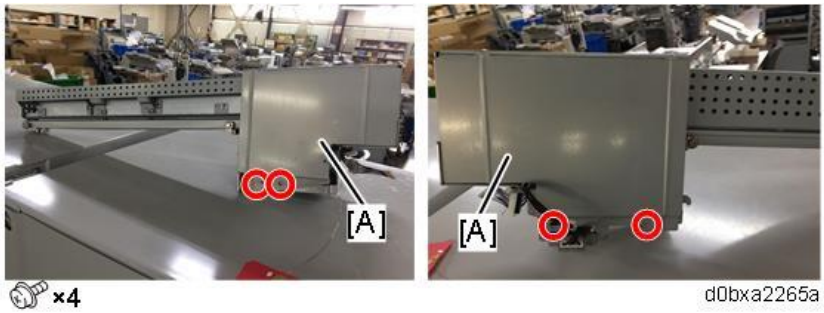


6. Install the CIS [A], and then pass the harness through the hole [B] at the rear.

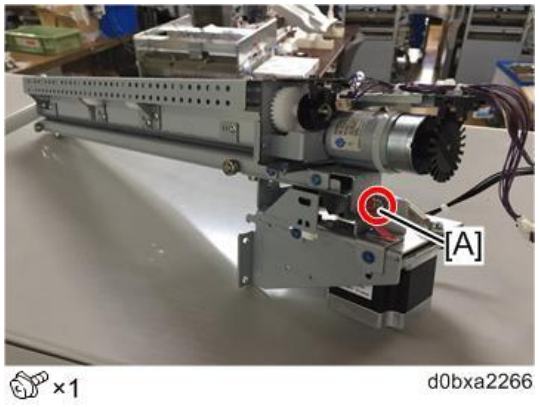


7. Fix the CIS at the front side.

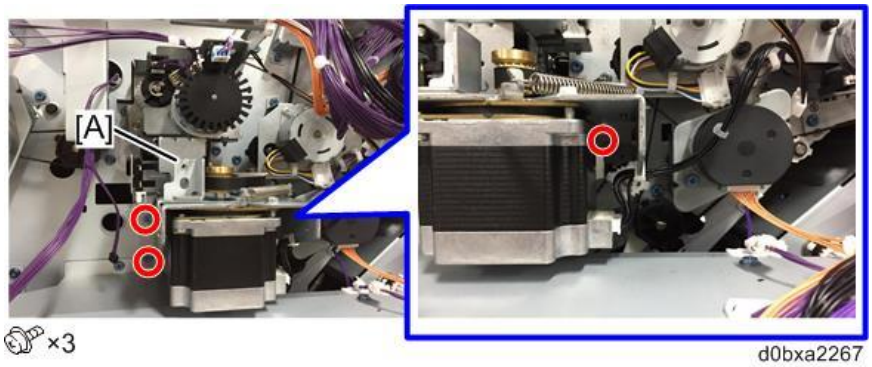
8. Remove the punch unit cover [A].



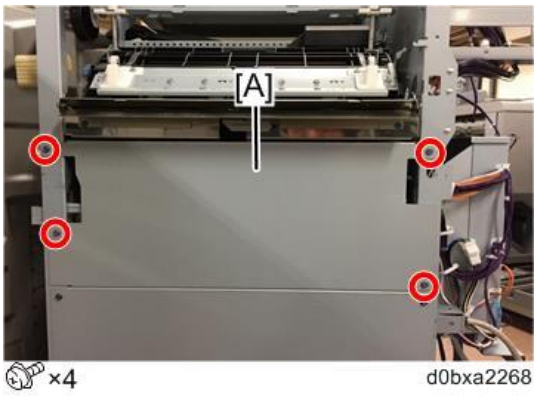
9. Remove the fixing screw [A].



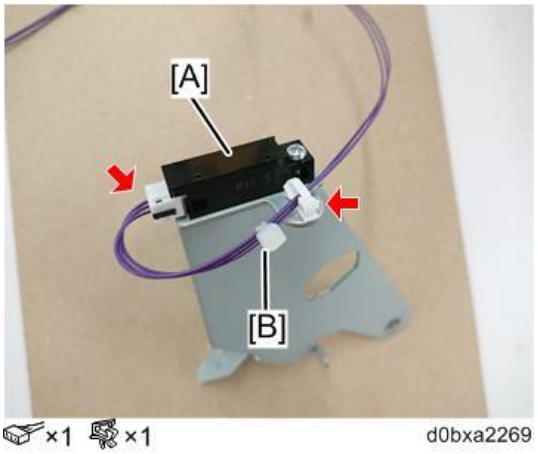
10. Install the punch unit [A] into the finisher by sliding it from the rear side.



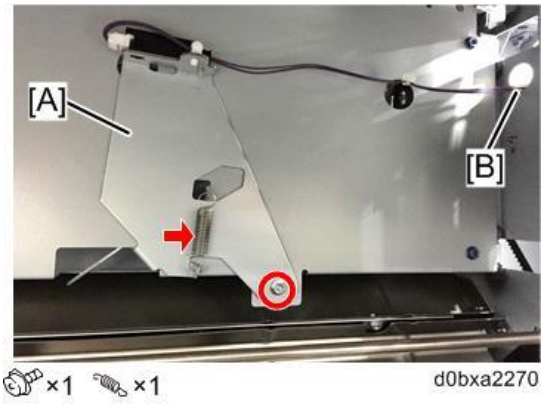
11. Remove the right cover [A].



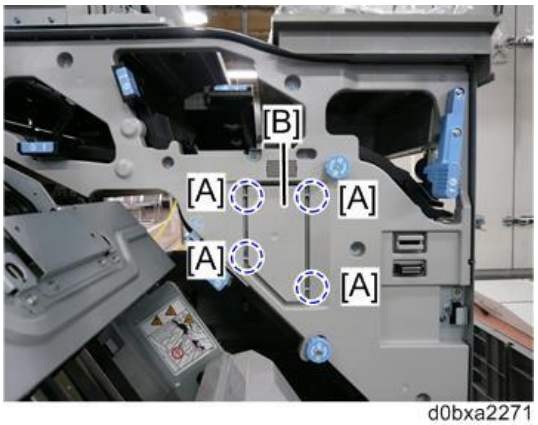
12. Connect the 3-pin connector of the harness to the punch chad full sensor [A] provided with the unit. The bind [B] should be located at the following position.



13. Attach the sensor bracket [A] using the spring and stepped screw provided with the unit, and then pass the harness through the hole [B].



14. Cut the four points [A] with a nipper, and then remove the cover [B].



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15. Insert the punch hopper [A] into the space [B].

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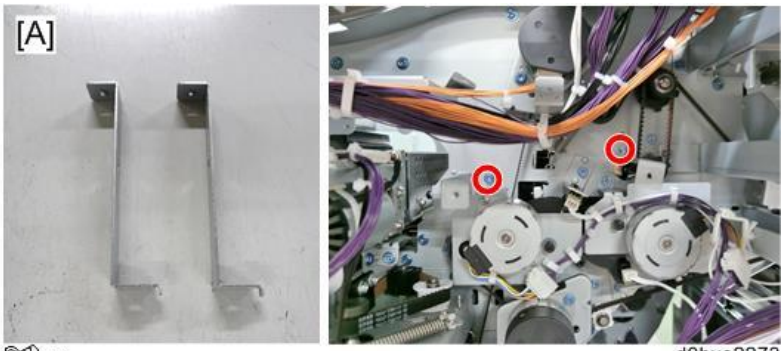
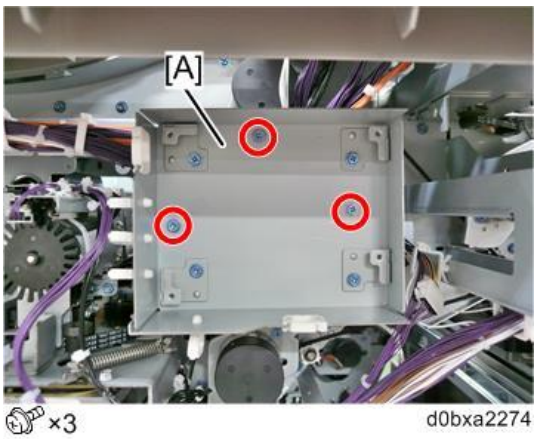
16. Attach the stays [A].



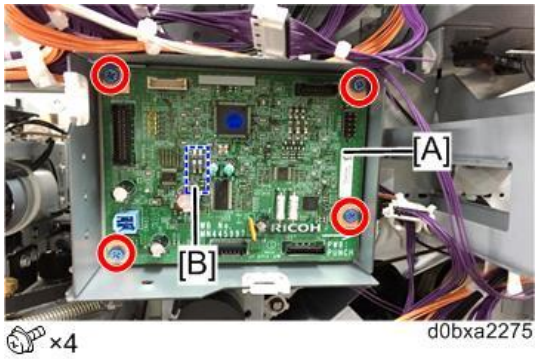
d0bxa2273

17. Attach the controller board bracket [A] to the stay for attaching the base.



d0bxa2274

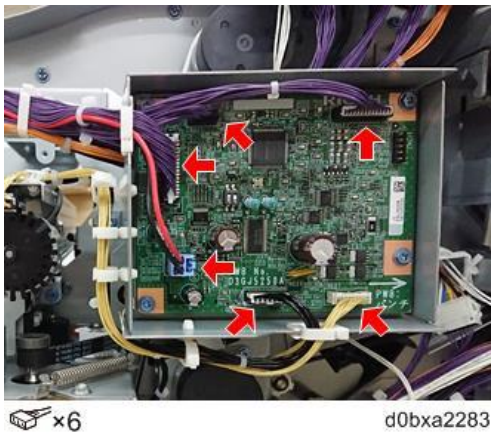
18. Attach the controller board [A] to the controller board bracket.



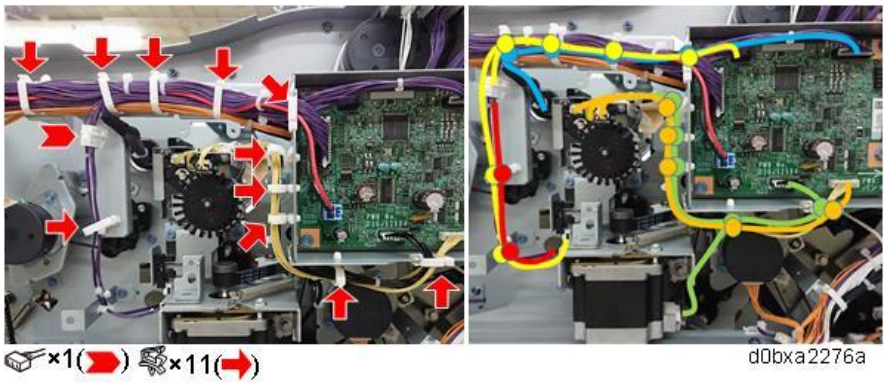
How to set the switch [B] is shown in the following table.

Destination	SW1	SW2
North America (-17)	**OFF**	**ON**
Europe (-27)	**ON**	**OFF**
North Europe (-28)	**ON**	**ON**

19. Connect the connectors to the controller board.

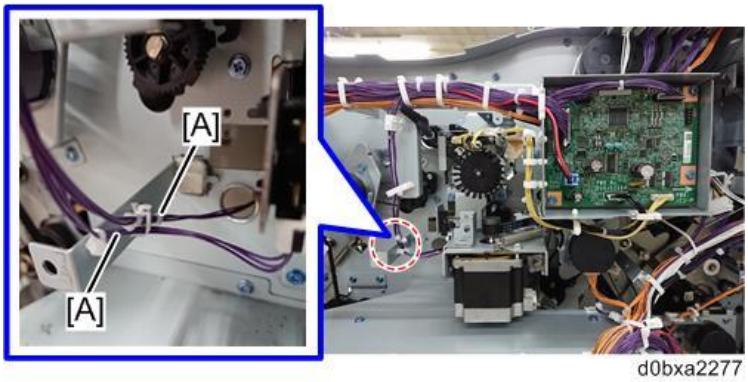


20. Route the harnesses between the punch unit and punch unit PCB as shown below.



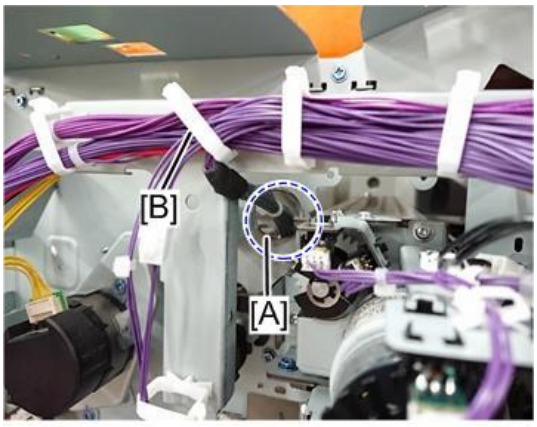
Note

- Fix the clamp between the two binds [A].



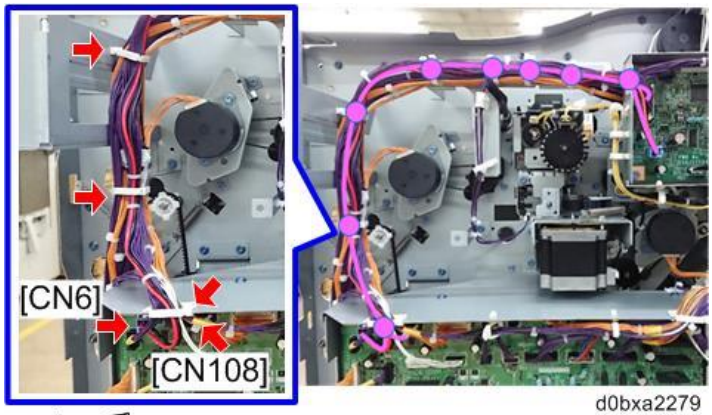
d0bxa2277

- Pass the CIS harness through the hole [A] of the side plate, and then fix the harness with the clamp [B].



d0bxa2278

21. Route the harnesses between the punch unit PCB and main PCB as shown below.

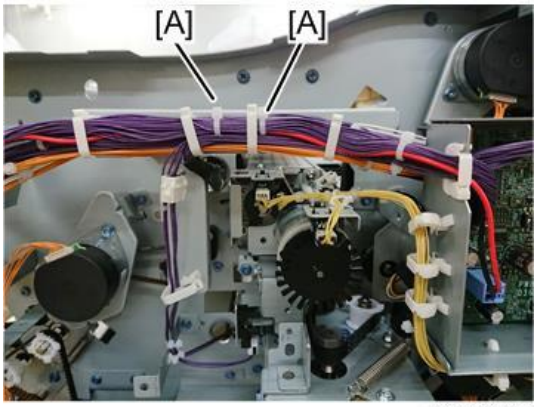


d0bxa2279

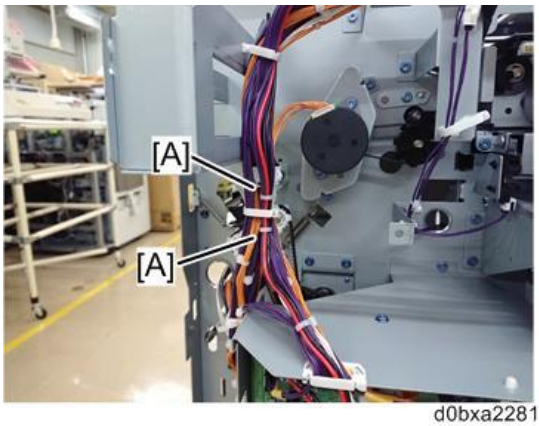
×2 ×3

Note

- Fix each clamp between each two binds [A].



d0bxa2280



d0bxa2281

22. Reattach the rear cover, the top right cover, the right cover, and the inner cover.

23. If adjusting the punch hole position is necessary, perform the adjustment of the position of the main scan and sub scan in SP mode.

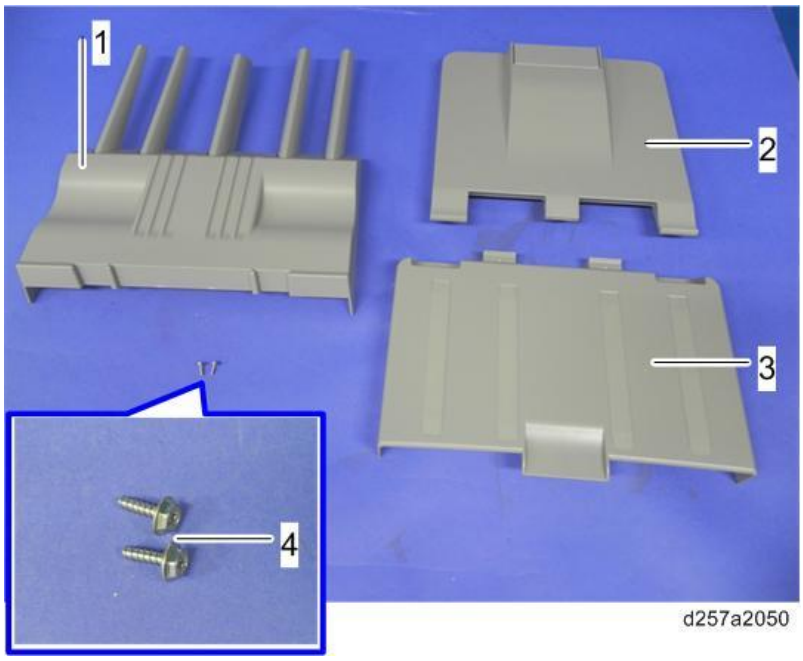
SP number depends on the SP specification of the connected main machine.

SR5000 series Output Tray for Banner Sheet Type S6 (D3CC)

Accessory Check

Check the quantity and condition of the accessories against the following list.

No	Description	Qty
1	Support Plate	1
2	Extension Tray	1
3	Relay Tray	1
4	Tapping Screw: 3 x 10	2



Installation Procedure

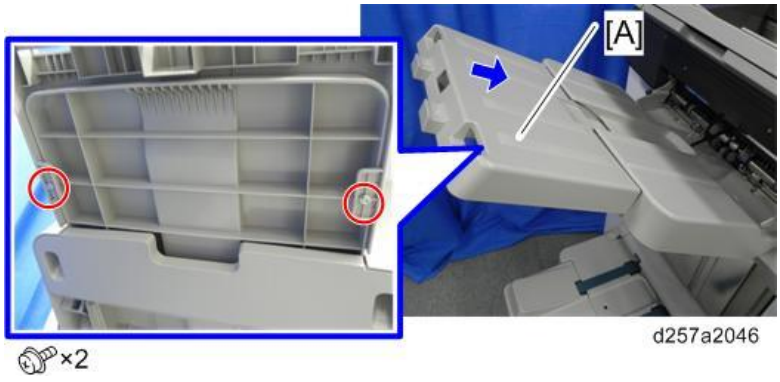
⚠CAUTION

Always switch the machine off and unplug the cable before beginning the following procedure.

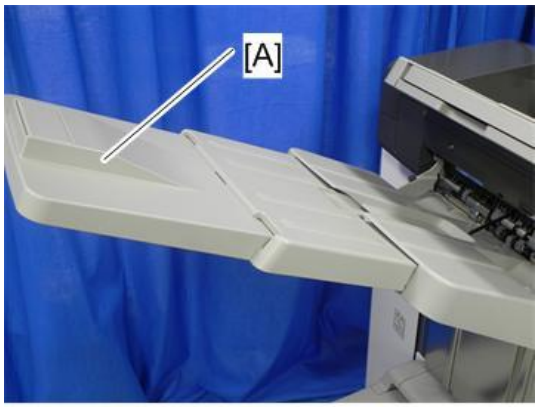
Attaching the Banner Sheet Tray to the Finisher

1. Pull out the extension of the finisher's shift tray.

2. Attach the relay tray [A].

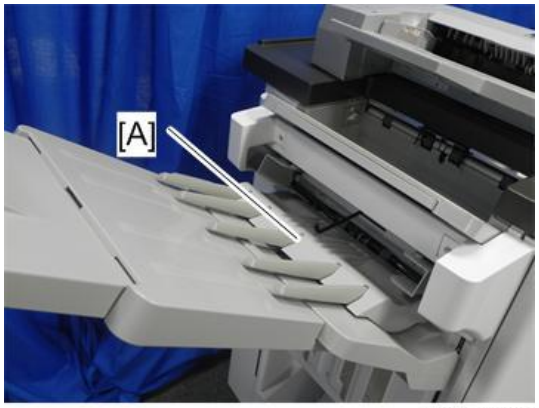


3. Attach the extension tray [A].



d257a2049

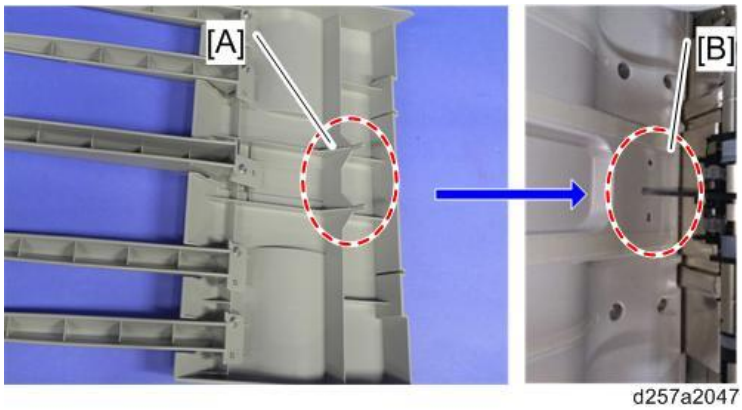
4. Use the shift tray emergency stop switch of the finisher to lower the shift tray, and then attach the support plate [A] provided with this option.
Raise the shift tray by using the shift tray emergency stop switch after attaching this support plate.



d257a2062

Note

Insert the support plate pins [A] into the shift tray holes [B].



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SP Setting

After starting up the main machine, change the SP setting to recognize the banner sheet tray.

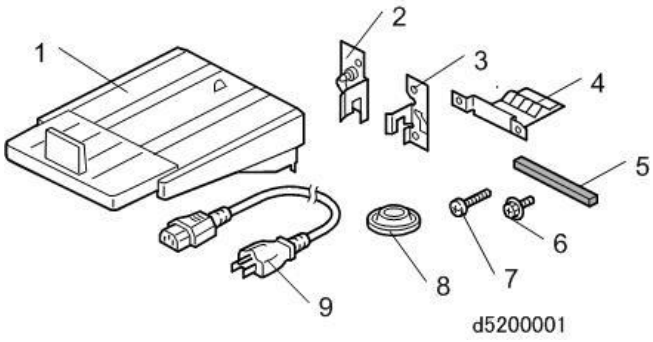
1. Enter the SP mode.
2. Change SP5-150-002 from [0] to [1].

3. Exit the SP mode.
4. Restart the main machine.

Trimmer Unit TR5050 (D3GG)

Accessories

Check the quantity and condition of the accessories in the box against the following illustration and list.



No.	Description	Q'ty
1.	Output Tray*1	1
2.	Joint Bracket – Left (Marked "L")	1
3.	Joint Bracket – Right (Marked "R")	1
4.	Ground Plate	1
5.	Sponges	2
6.	Screws (M3x6 for Ground Plate)	2
7.	Screws (M4x10 for Joint Bracket)	4
8.	Leveling Shoes	4
9.	Power Cord	1

*1: Screws (x2) for the output tray are attached to the left side of the unit.

Installation

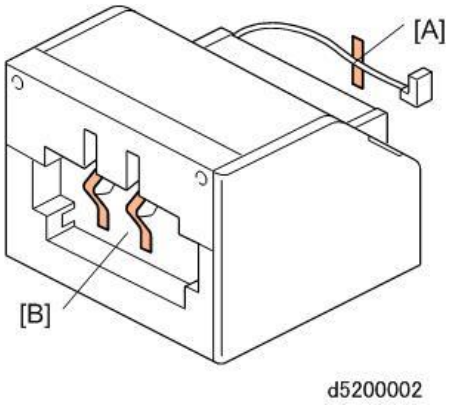
⚠CAUTION

- Make sure that the main machine is switched off and that its power cord is disconnected before doing the following procedure.
- Connect the power cord provided to a power source that is properly grounded.

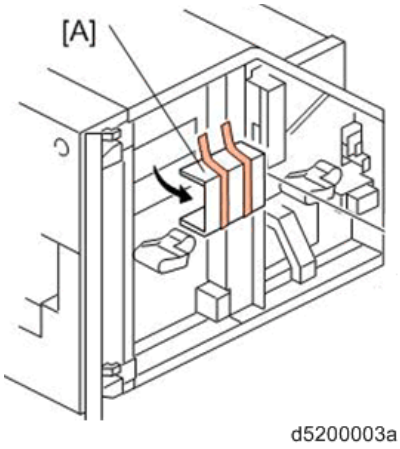
Tapes, Stopper Plate

1. Remove the tape on the right side to free the I/F cable [A].

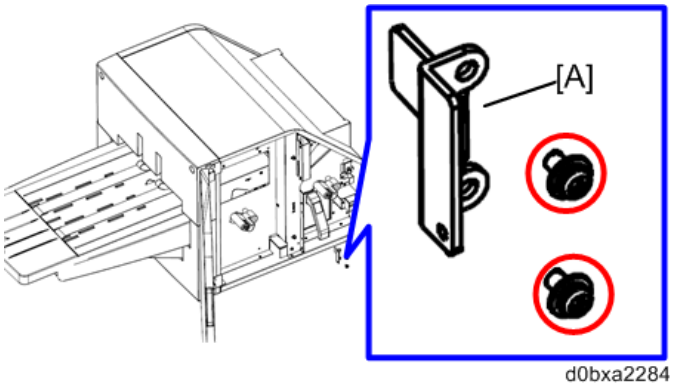
2. Remove the tape from the left side [B].



3. Open the front door and remove the retainer [A].



4. Remove the stopper plate [A] (x2).

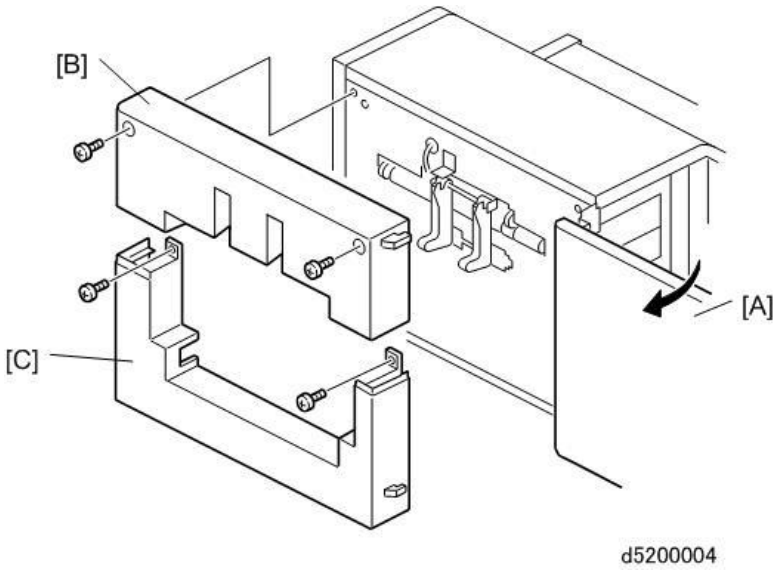


Note

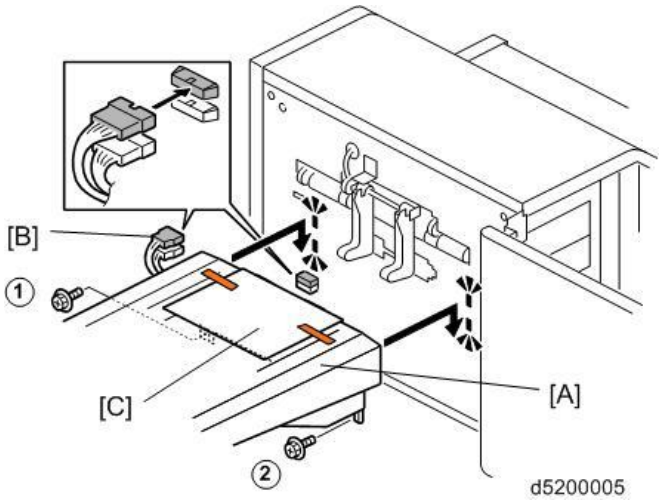
- Keep the stopper plate. It should be reinstalled before transporting the unit to a new location.

Output Tray

1. Make sure that the front door [A] is open.
2. Remove:
   [B] Left upper cover (x2)
   [C] Left lower cover (x2)



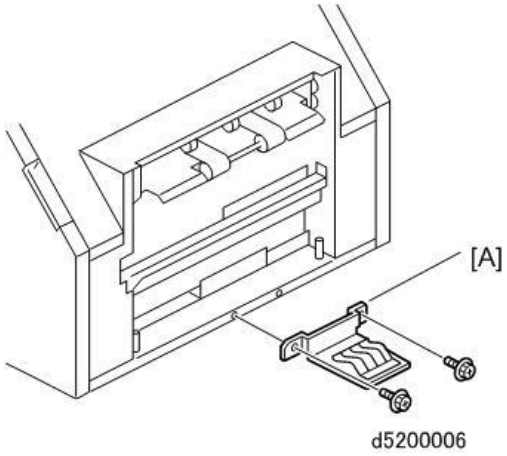
3. Remove the screws ① and ② from the left side.
4. Use the removed screws to attach the output tray [A].
5. Connect the output tray at [B].
6. Remove the sheet [C] of paper. **Do not remove this sheet [C] of paper before connecting the output tray to the trimmer unit**.



7. Reattach the left lower cover and left upper cover.

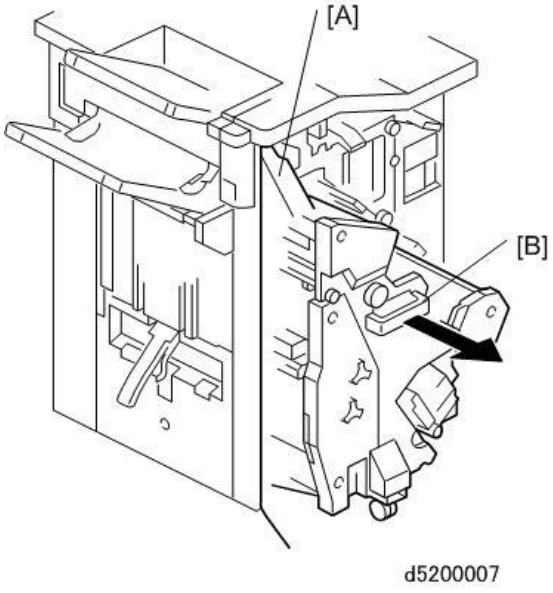
Ground Plate

1. Attach the ground plate [A] to the right bottom edge (x2 M3x6).

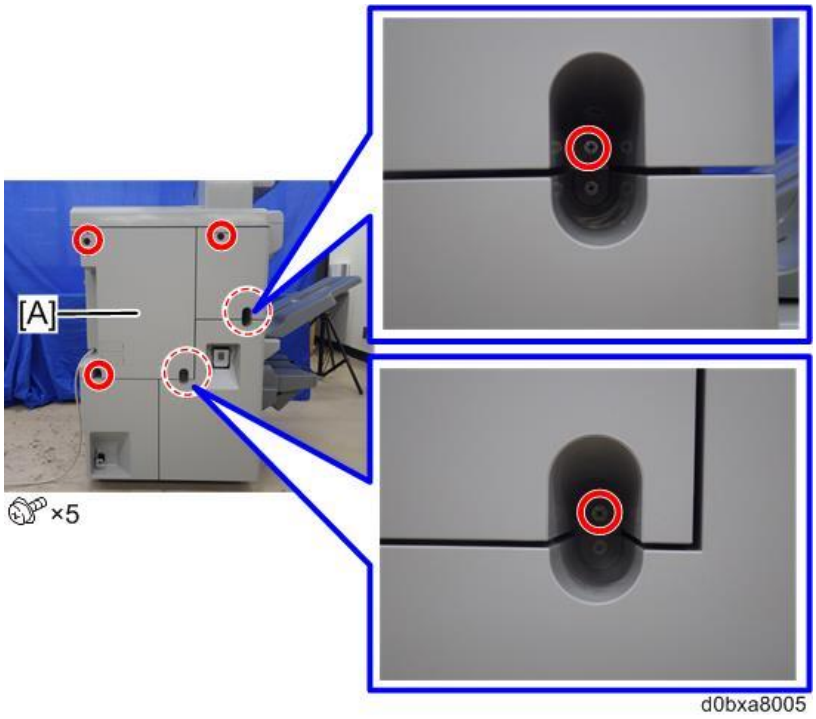


Connecting to the Finisher

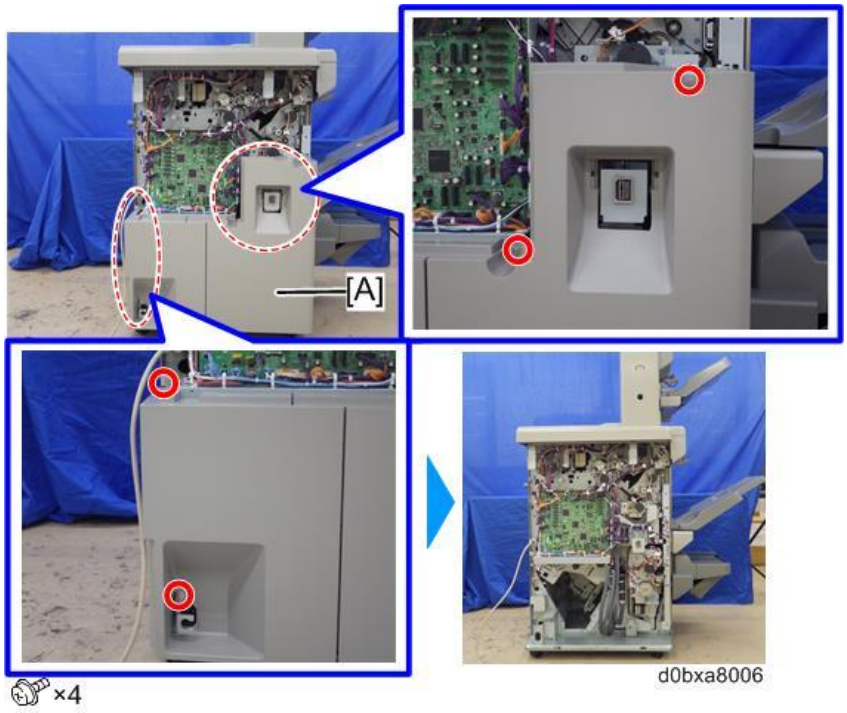
1. Open the front door [A] of the finisher.
2. Pull out the staple unit [B].



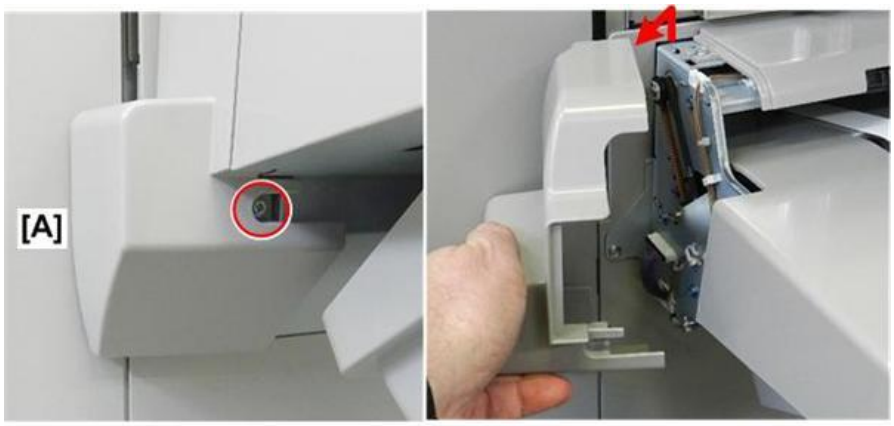
3. At the rear of the finisher, remove the rear upper cover [A] (x5)



4. At the rear of the finisher, remove the rear lower cover [A]. (x4)



5. At the rear [A], remove the book tray rear cover. (x1)



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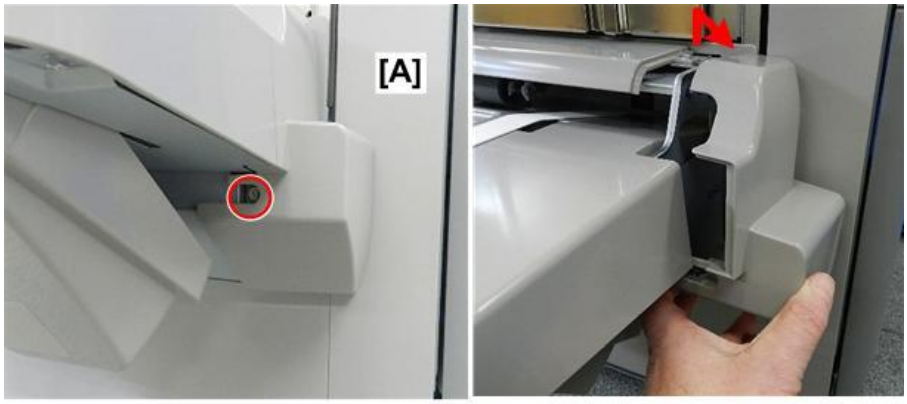
6. At the front [A], remove the book tray front cover. (x1)



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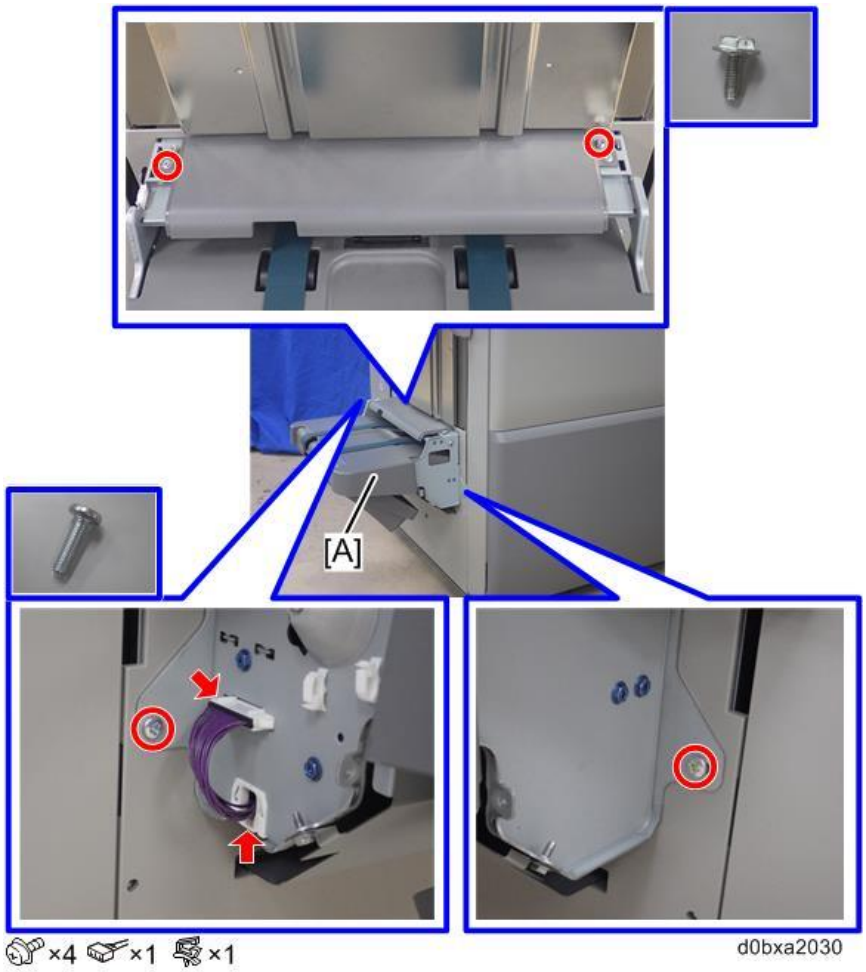
7. Remove the retainers from the booklet tray [A].

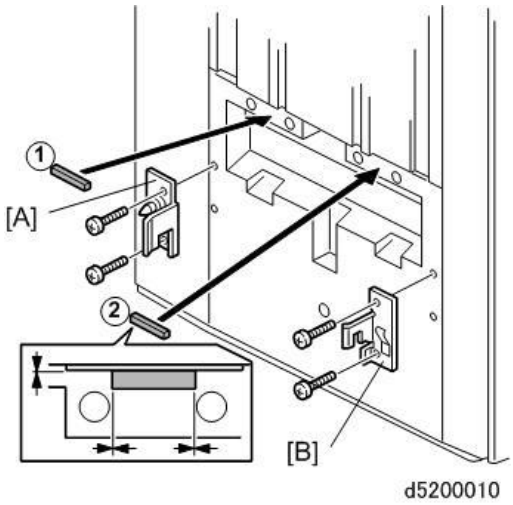


8. Raise the booklet tray, and then remove it.

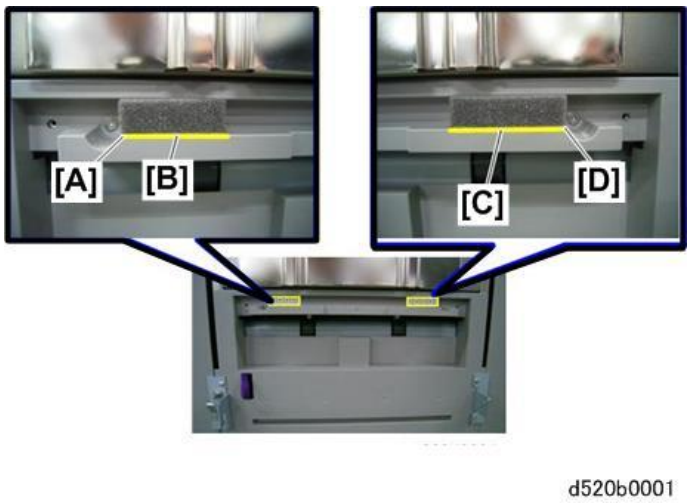
Docking

1. Attach:
   [A] Left joint bracket, marked "**L**" (x2, M4x10)
   [B] Right joint bracket, marked "**R**" (x2, M4x10)

2. Peel the tape from the back of the sponges and attach sponges ① and ②.

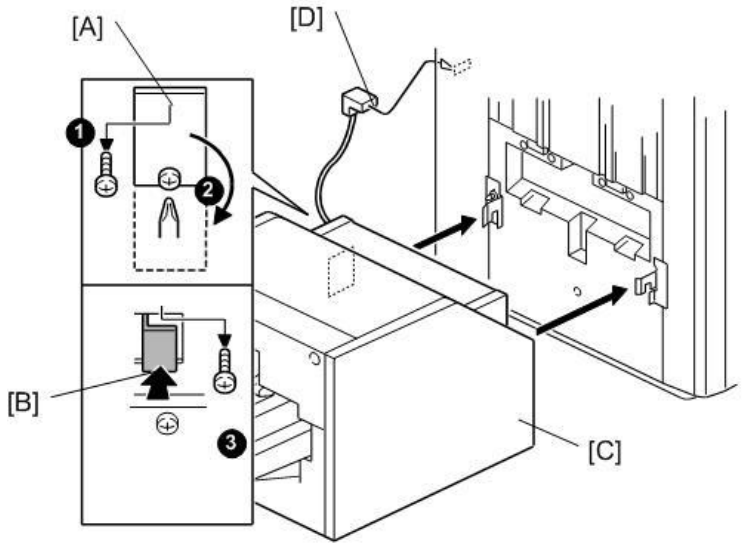


3. Attach the sponge at the rear so that it is aligned at [A] and [B].
4. Attach the sponge at the front so that it is aligned at [C] and [D].



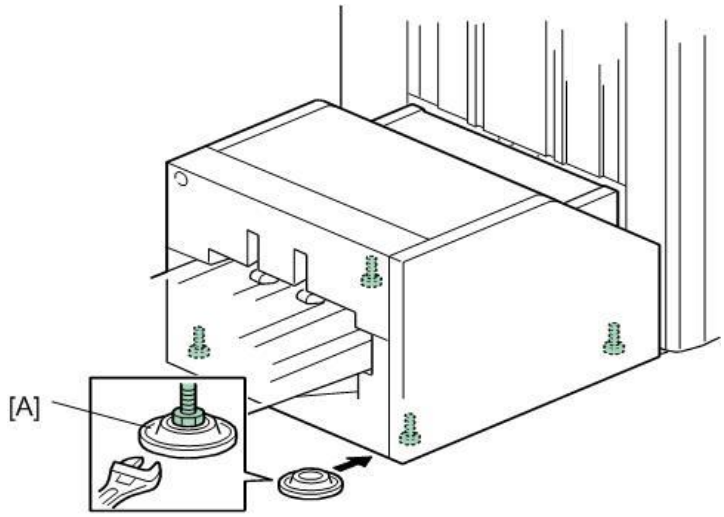
5. At the rear, remove screw ① from plate [A].
6. Loosen screw ② and lower the plate so that you can see the lock bar [B].
7. Remove the lock bar screw ③ (x1 M3x6). **Keep this screw.**
8. Push the lock bar [B] until it is unlocked.
9. Slowly push the unit [C] against the left side of the finisher so that the lock bar is directly and squarely under the arms of the joint brackets.
10. At the rear, pull the lock bar [B] toward you so that it slides up into the notches in the arms of the joint brackets.
11. Fasten the lock bar by re-attaching the screw removed in Step 7. (x1).

12. Connect the unit I/F cable [D] to the finisher.



d5200011

13. Connect the plug of the power cord to the power source.
14. Set a holder [A] under each corner of the unit.

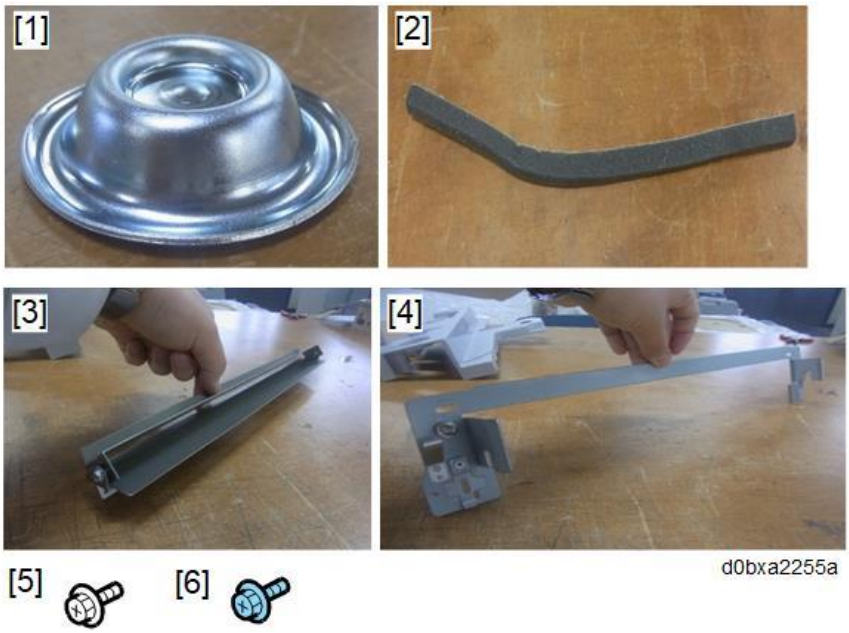


d5200012

15. At each corner, turn the leveling bolt to lower the bolt onto each holder.
16. Use a level to check each side of the unit.
17. Turn each leveling bolt to adjust the height of each corner until each side is level.

Bridge Unit BU5020 (D3GN)

Accessories



No.	Description	Q'ty	Remarks
1	Leveling Shoes	4	
2	Sponge Strip	1	
3	Entrance Guide Plate	1	
4	Joint Bracket	1	
5	Tapping Screws 4x16	4	For attaching the joint bracket
6	Tapping Screws M3x6 (Round Point)	2	For attaching the entrance guide plate
-	Tapping Screws M4x8 (Round Point)	4	Not used for this machine
-	EMC Address	1	

Installation

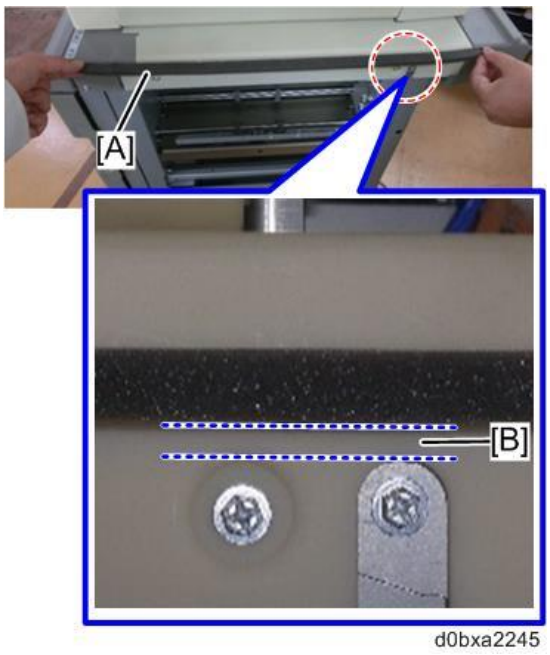
⚠CAUTION

- The unit must be connected to a close and easily accessible power source. Make sure that the main machine is switched off and that its power cord and AC power source is disconnected before doing the following procedure.
- When moving the cover interposer tray to another location, move the cover interposer tray and the downstream unit together without disconnecting the cover interposer tray from the downstream unit. If they are disconnected, the bridge unit may be overturned and may cause injury.

Attaching the Parts

1. Remove the orange tape.

2. Attach the sponge strip [A].
[B]: 0 to 5 mm (0.2 inch)



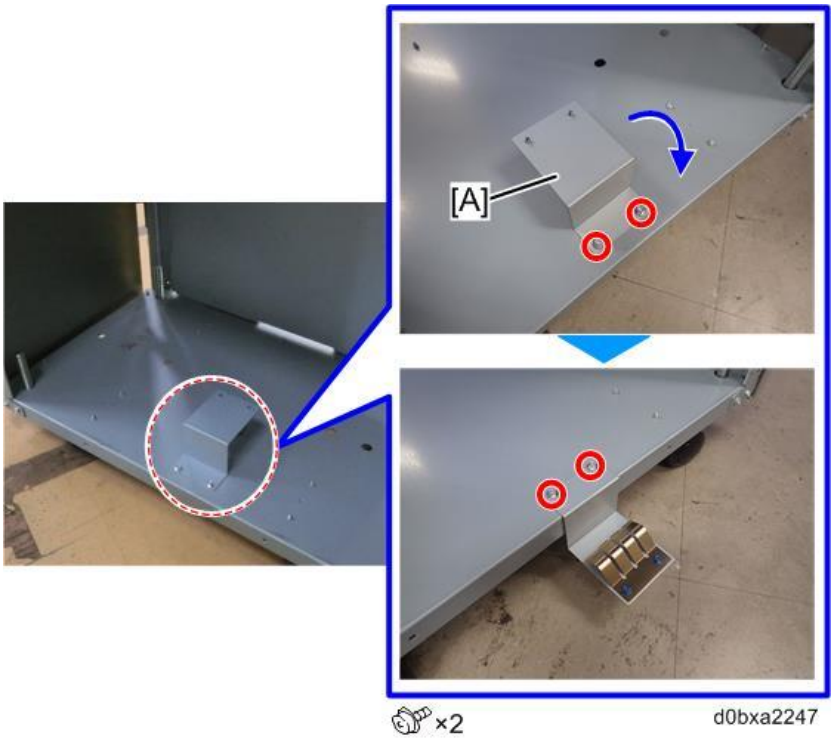
3. Attach the entrance guide plate [A].

Important

- If the upstream unit is the buffer pass unit, refer to "When Connecting to the Buffer Pass Unit".

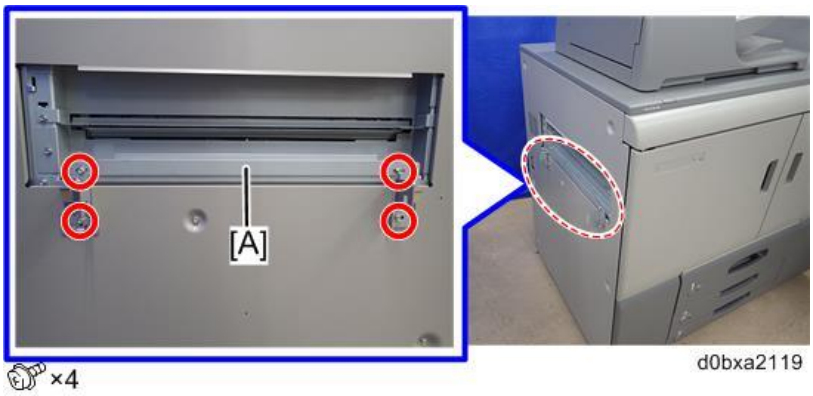
4. Remove the ground plate [A] fixed to the bottom part. Make the ground plate upside down and

reattach it.

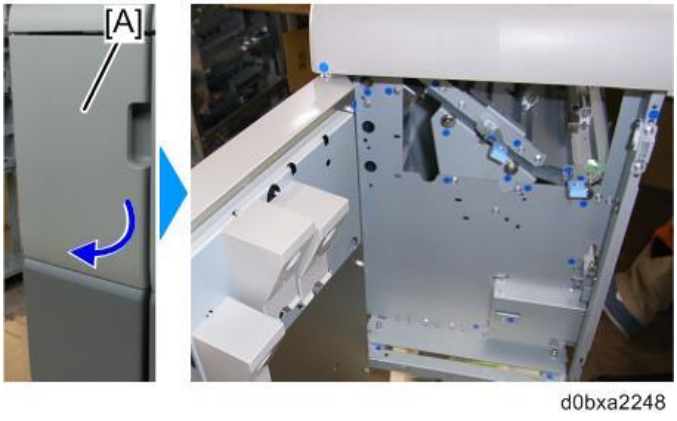


Connecting the Unit to the Main Machine

1. Attach the joint bracket [A] to the main machine. (M4×8 Round point)

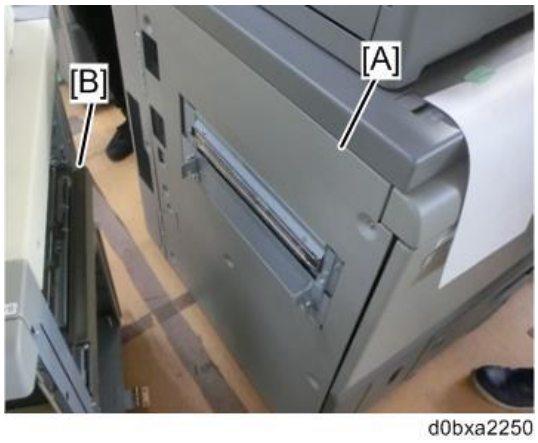


2. Open the front cover [A] of the cover interposer tray.



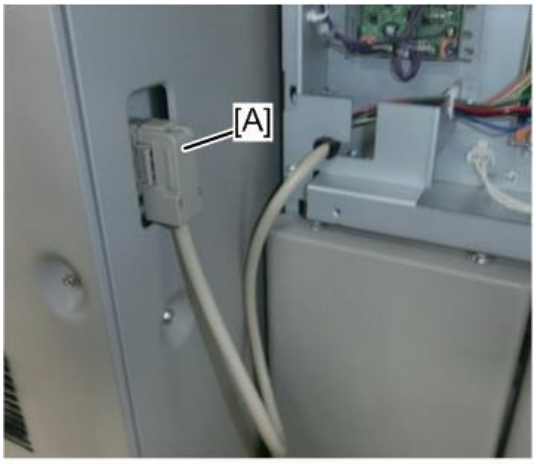
3. Remove the screw of the lock lever, and pull out the lever [A].

4. Connect the bridge unit [B] to the main machine [A].



5. Push in the lock lever [A], and then fix it with the screw that removed in step 3.

6. Connect the bridge unit [A] to the main machine.



d0bxa2252

7. Set the leveling shoes (x4) [A] under the four leveling bolts, and then adjust the level.

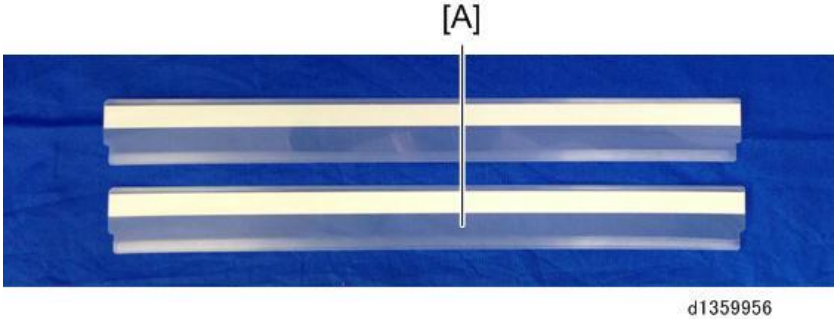
d0bxa2253

Note

- Measure the slant of the stands by the level, and then adjust the stands like you adjust the leveling bolts of the main machine. (Height and Level Adjustment)

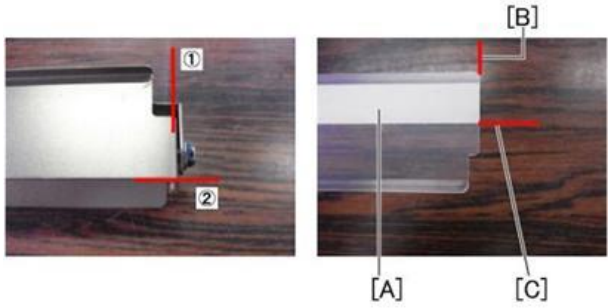
When Connecting to the Buffer Pass Unit

1. Attach the finisher guide sheet [A] provided with the buffer pass unit to the entrance guide plate of the bridge unit.



d1359956

2. Peel off the release paper from the double-sided tape [A] on the finisher guide sheet, attach the finisher guide sheet the entrance guide plate.
When attaching the entrance guide plate, align the edge [B] of the sheet with the position 1 and align the edge [C] of the double-sided tape with the position 2.



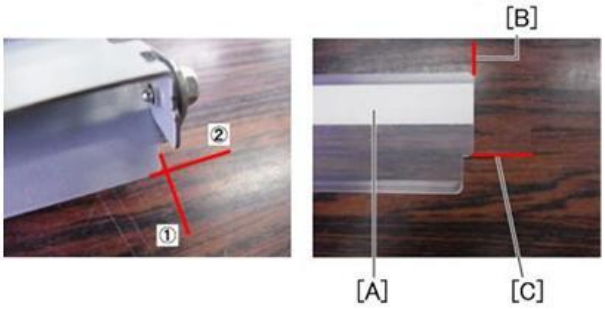
d1359968

Note

- Confirm that the finisher guide sheet is attached correctly to the entrance guide plate as shown in the photo below.

d1359968-1

3. Peel off the release paper from the double-sided tape [A] on the finisher guide sheet and stick the finisher guide sheet to the entrance guide plate.
When attaching the entrance guide plate, align the edge [B] of the sheet with the position 1 and align the edge [C] of the double-sided tape with the position 2.

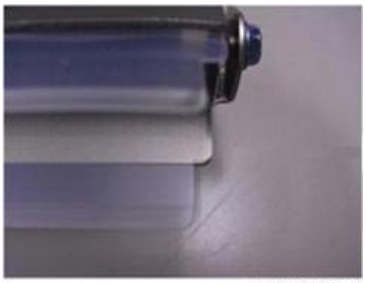


d1359969

Note

- Confirm that the finisher guide sheet is attached correctly to the entrance guide plate as

shown in the photo below.

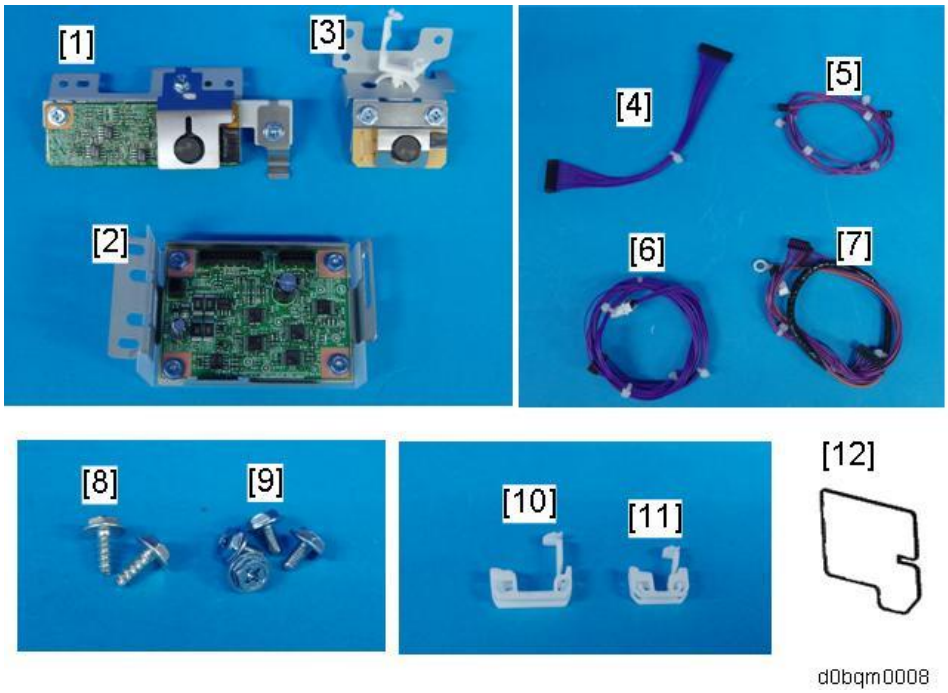


d1359969-2

Page Keeper Type M37 (D3FF)

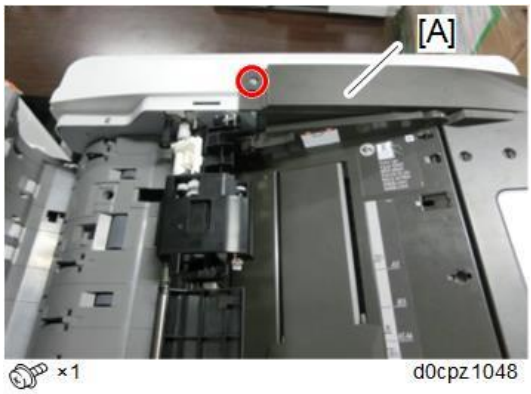
Accessory Check

No.	Description	Q'ty
1	Double-feed Sensor (Receiver)	1
2	Double-feed Sensor Board	1
3	Double-feed Sensor (Emitter)	1
4	13 pin harness	1
5	2 pin harness	1
6	7 pin harness	1
7	Long harness	1
8	Screw (M3x8)	2
9	Screw (M3x6)	4
10	Large Clamp	1
11	Small Clamp	1
12	Plastic Sheet	1

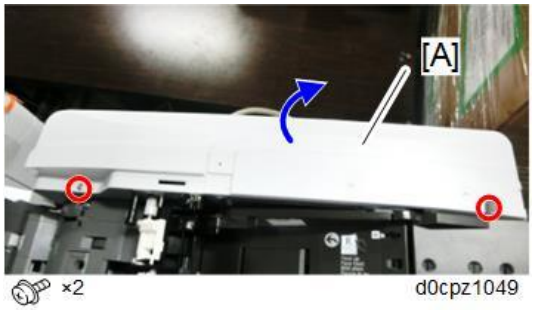


Installation Procedure

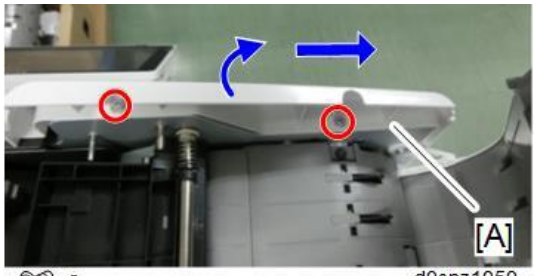
1. Open the ADF feed cover.
2. Remove the cover [A].



3. Remove the cover [A].



4. Remove the ADF front cover [A].

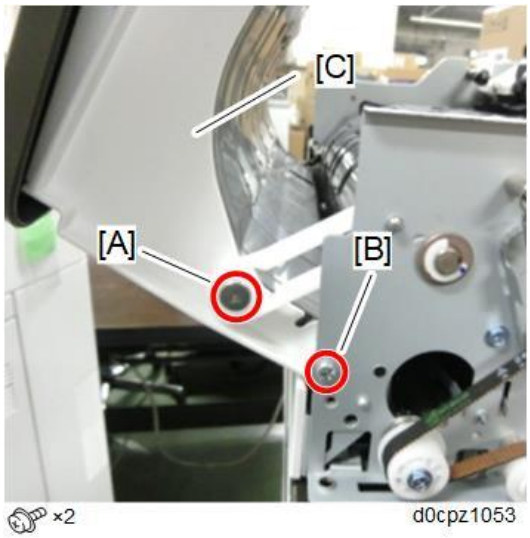


5. Remove the blue screw fixed on the rear side.

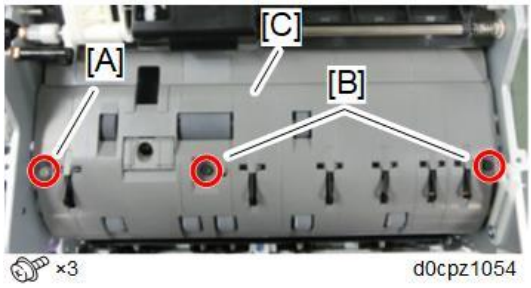
6. Release the clamps and remove the connector that connects the ADF feed cover.

7. Remove the screw [A] securing the link, and then remove the screw [B].

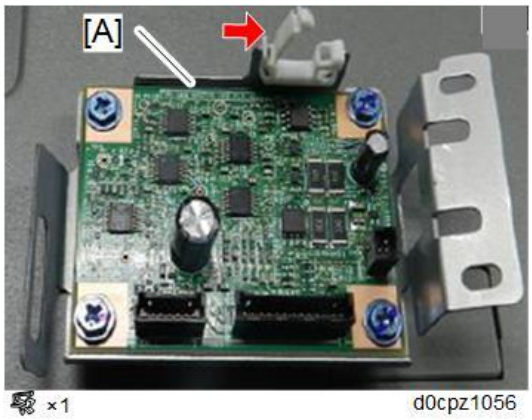
8. Remove the ADF feed cover [C].



9. Remove the screw [A] (Silver) and screws [B] (Black), and then, remove the pullout lower guide [C].

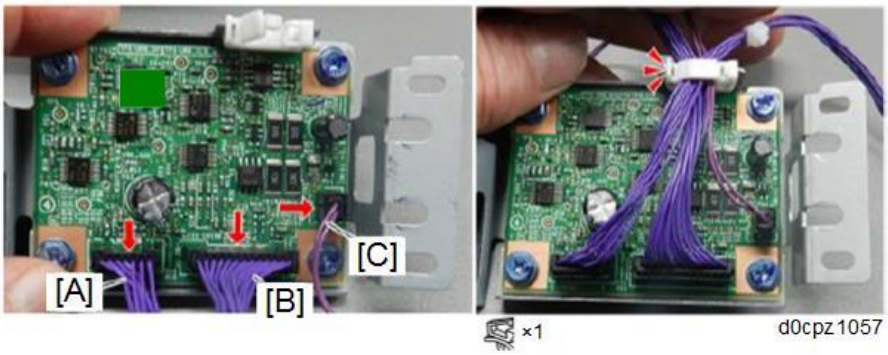


10. Attach the clamp to the URB board bracket [A].

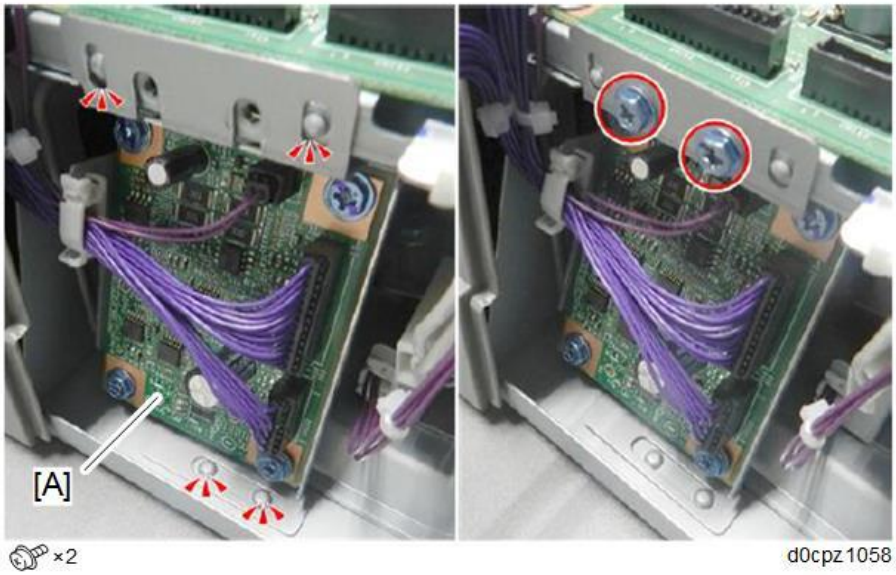


11. Connect and clamp the connector of 7-pin harness [A], 13-pin harness [B], and 2-pin harness [C] to

the URB board.

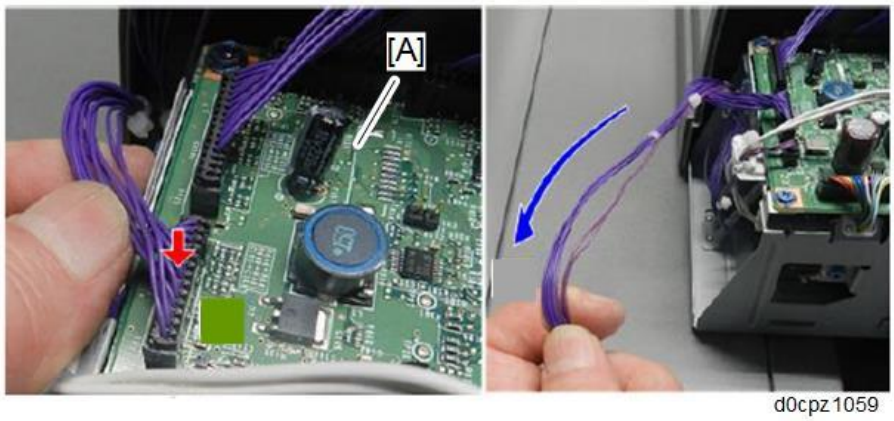


12. Attach the URB board [A] to main board. (Use blue screws)

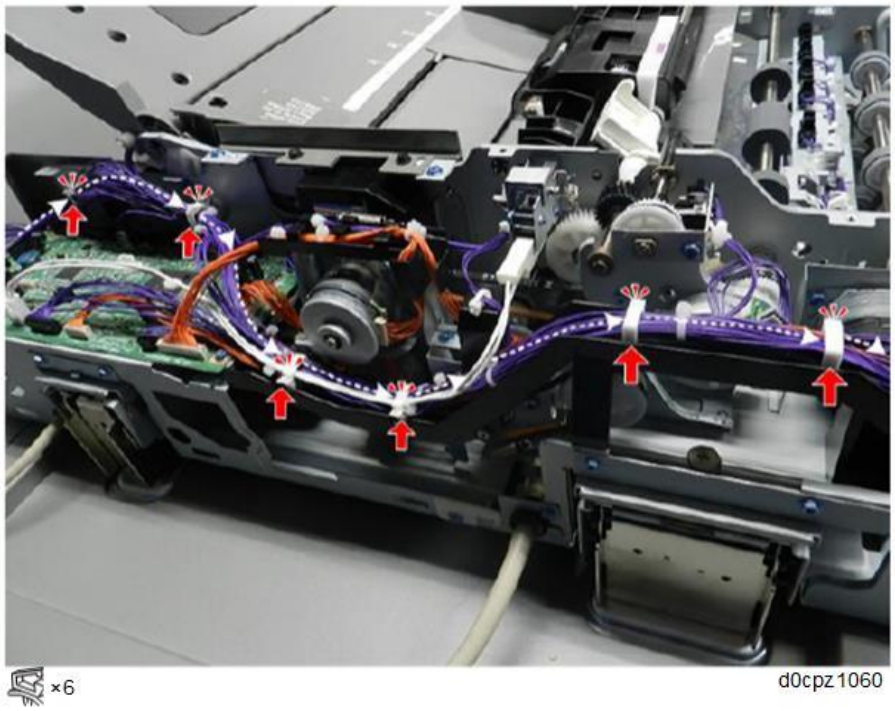


13. Connect the 13-pin harness to the main board [A].

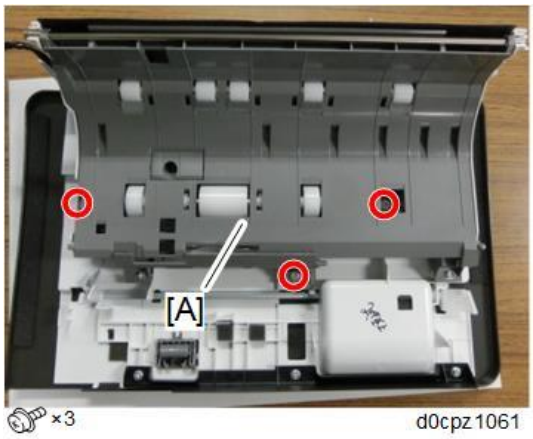
14. Pull out the two harnesses.



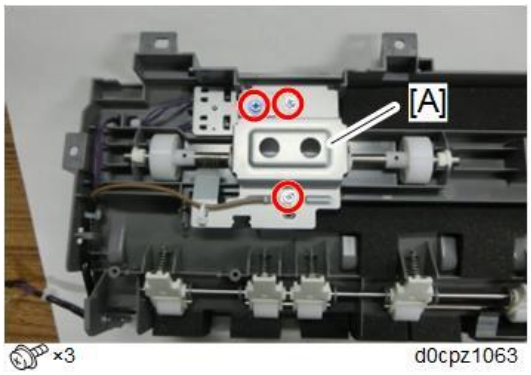
15. Route the harnesses as shown below.



16. Remove the paper feed upper guide [A].

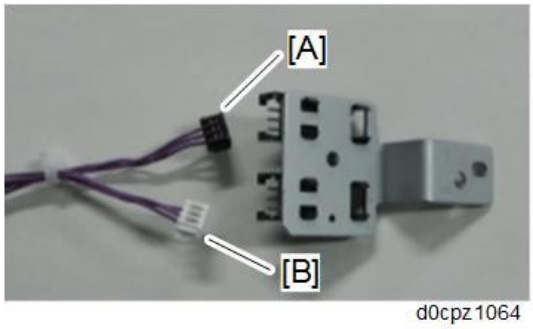


17. Remove the bracket [A].



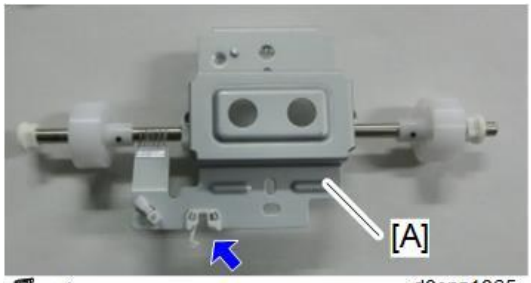
18. Discard the harness already connected, and connect the replacement harness.
Connect the connector [A] and connector [B] as shown below.

2.Installation



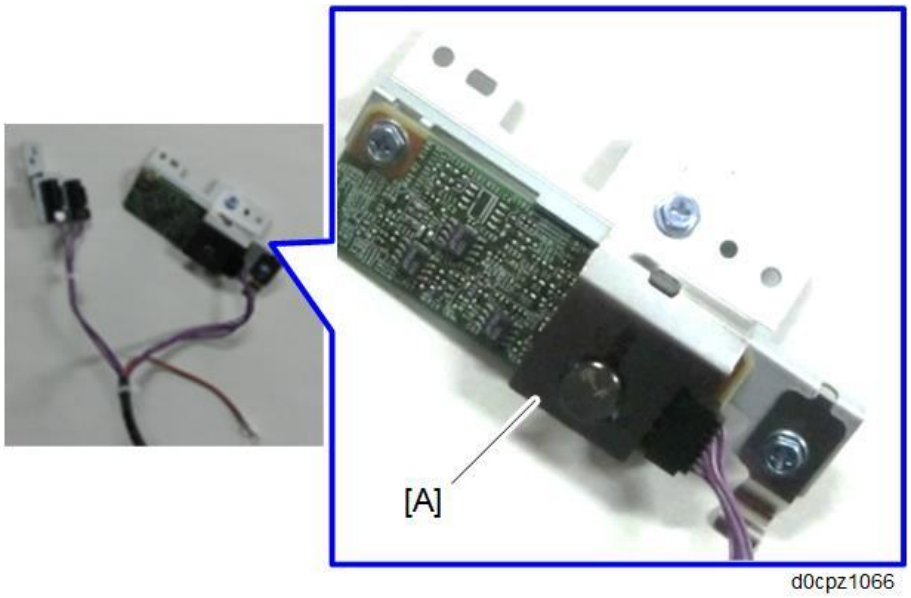
d0cpz1064

19. Attach the clamp on the bracket [A].



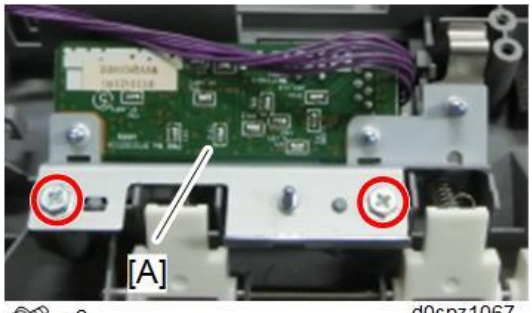
×1 d0cpz1065

20. Connect the connector of the double-feed sensor to the double-feed detector board [A].



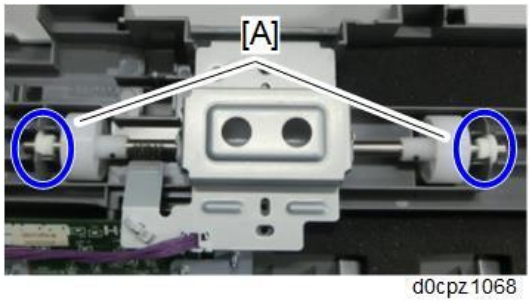
d0cpz1066

21. Attach the double-feed detector board [A].

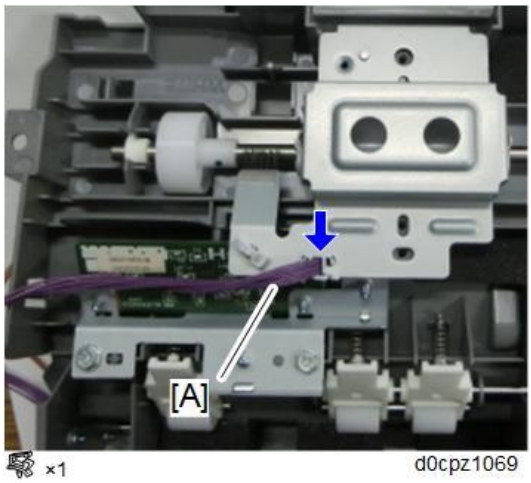


×2 d0cpz1067

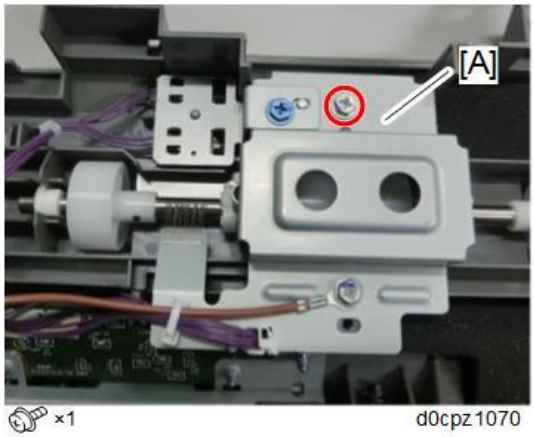
22. Set the bearing on the mounting positions [A] of the paper feed guide.



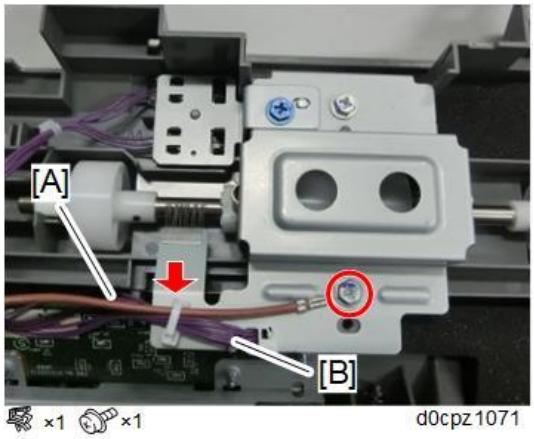
23. Clamp the harness [A].



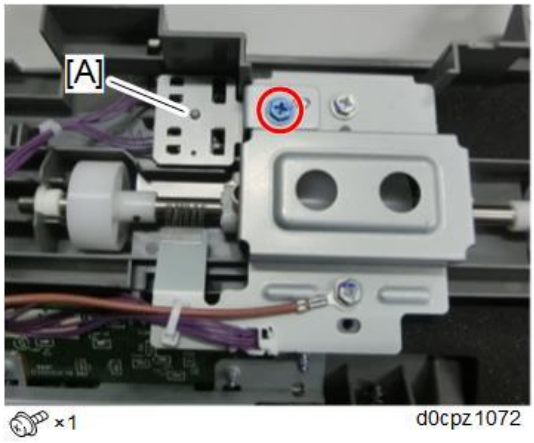
24. Attach the bracket [A].



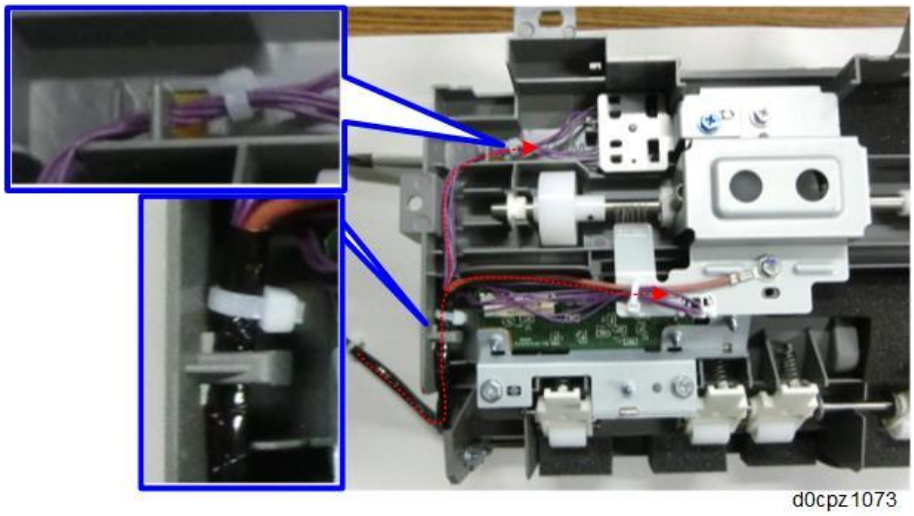
25. Attach the ground harness [A], and then clamp it together with the harness [B].



26. Attach the bracket [A].

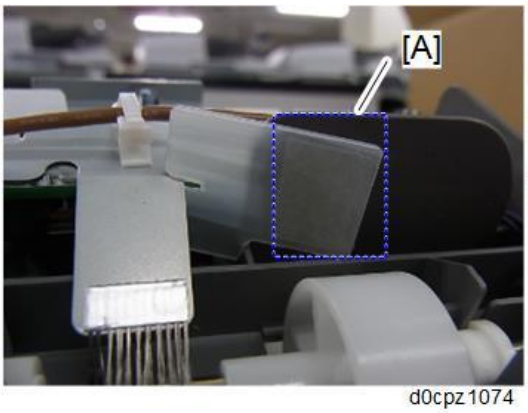


27. Route the harness as shown below.

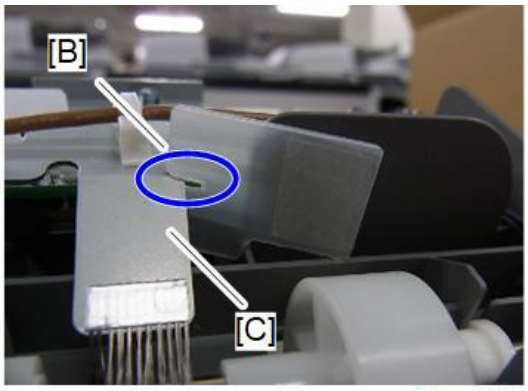


28. Wipe the attaching area [A] for double-sided tape on the paper feed upper guide with alcohol.

29. Insert the gap [B] of the shield into the bracket [C].



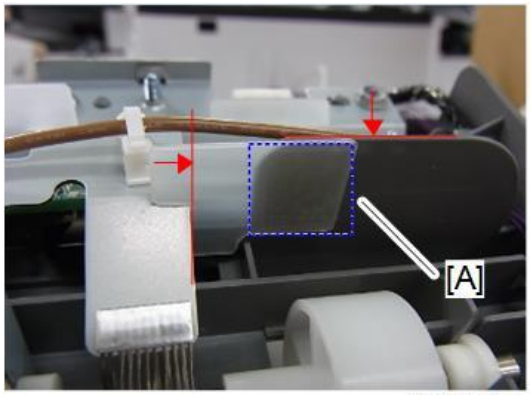
d0cpz1074



d0cpz1075

30. Align the top of the shield with the top of the paper feed upper guide within ±1mm.

31. Press the area [A] where the double-sided tape is attached several times to fix it completely.

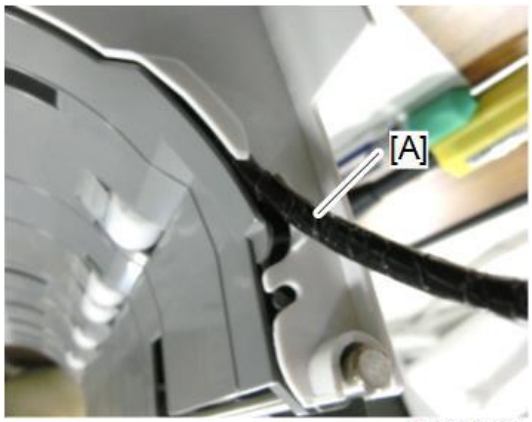


d0cpz1076

32. Reassemble the ADF feed cover and paper feed upper guide.

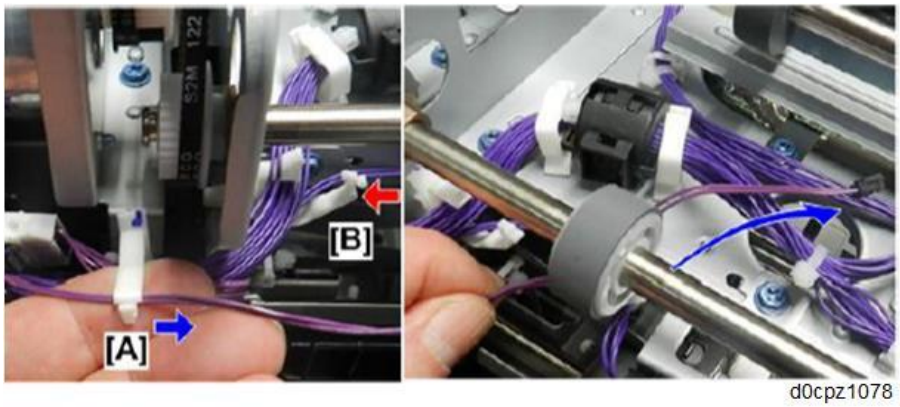
Note

Check that the harness [A] is routed as shown below.

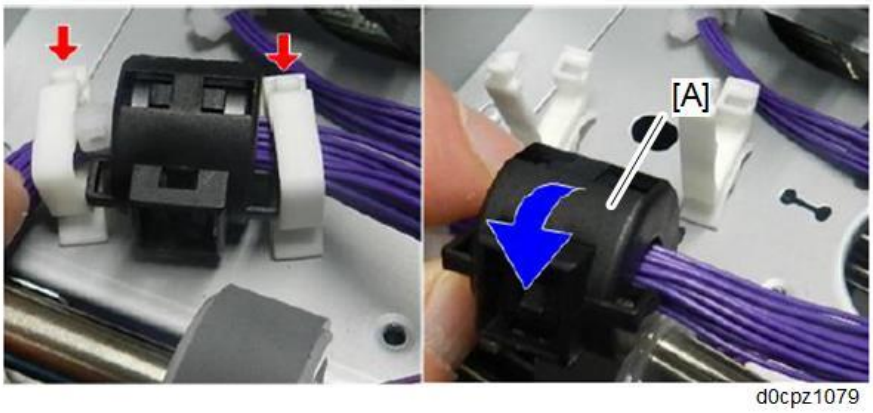


d0cpz1077

33. Clamp the 2-pin harness with clamp [A] and [B], and then pull out the harness.



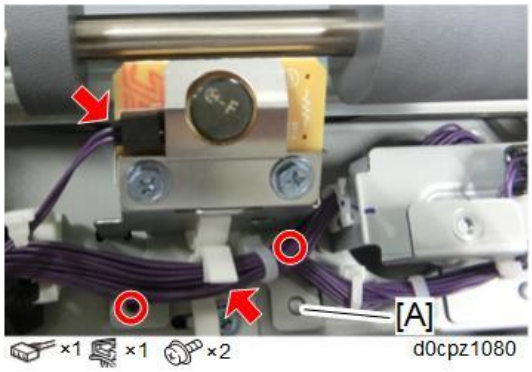
34. Release the clamps and open the ferrite core [A].



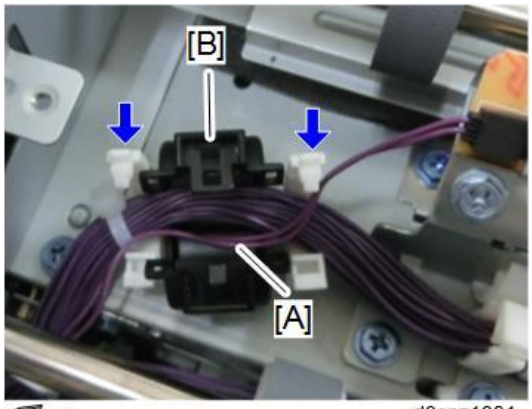
35. Connect the 2-pin harness to the double-feed detector board (Emitter).

36. Secure the bracket [A] (Blue screws)

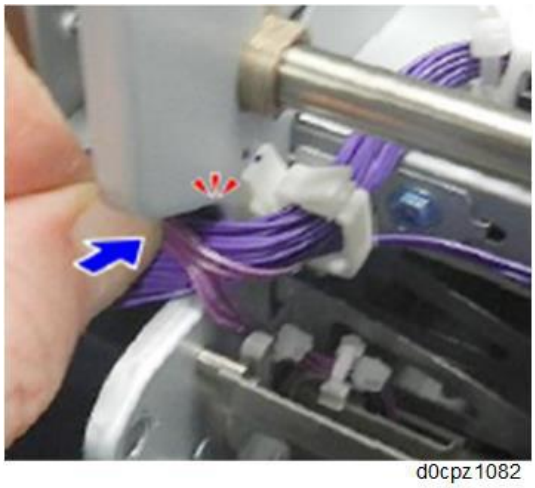
37. Clamp the harness.



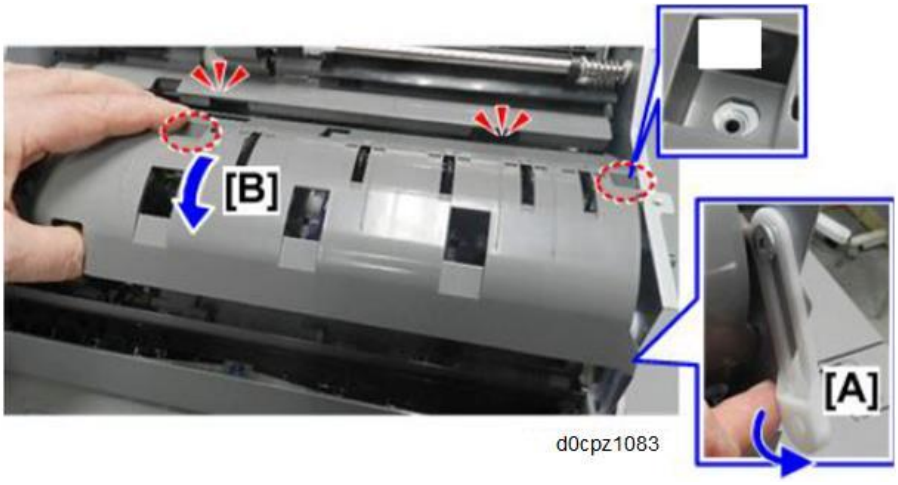
38. Route the harness [A] of the double-feed sensor, close the ferrite core [B] and clamp the harness.



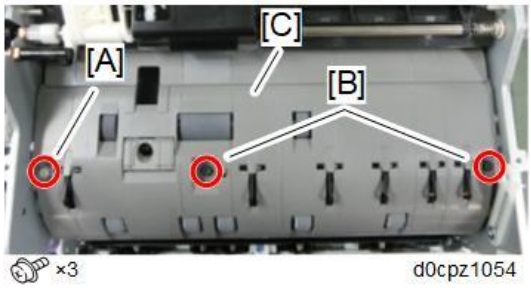
39. Insert the harness into the notch of the ADF.



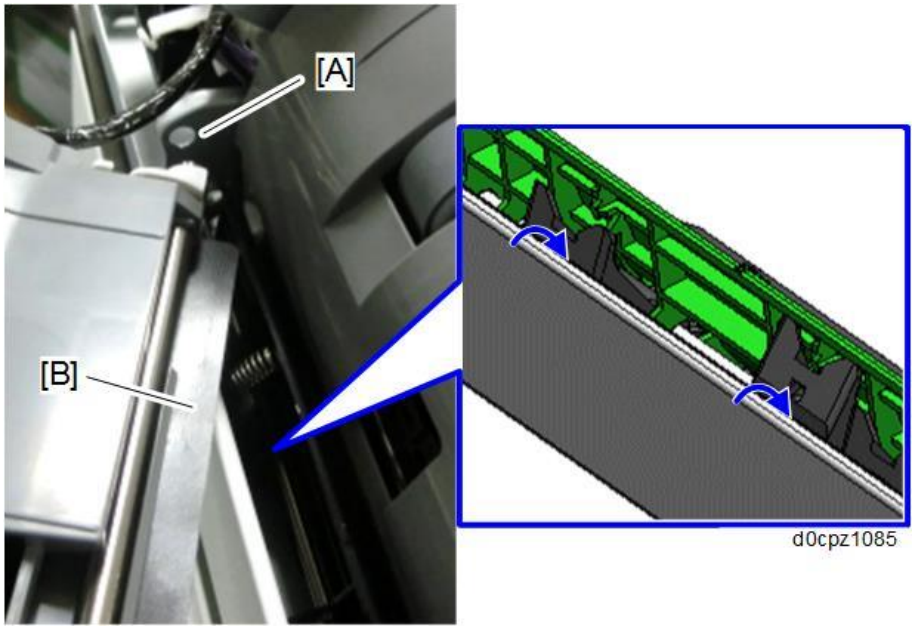
40. With the link [A] is not interfered, attach the pullout lower guide [B].



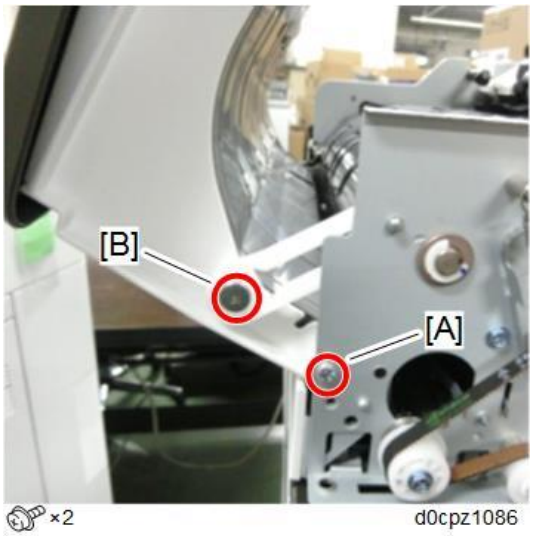
41. Secure the guide [C] with the silver screw [A] and black screws [B].



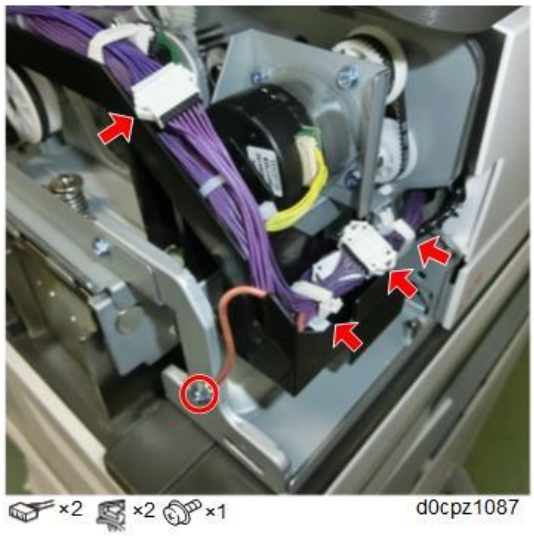
42. Insert the rotating shaft of the paper feed cover (rear) into the hole of the rear side board, so that the rubber element [B] on paper feed cover faces outer side of the boss of scanning entrance section.



43. Attach the pivot screw [A] and link securing screw [B].



44. Connect the harness from paper feed cover and secure the ground with blue screw.



45. Reassemble the exterior covers.

46. Turn On the main power.

47. Enter SP mode.

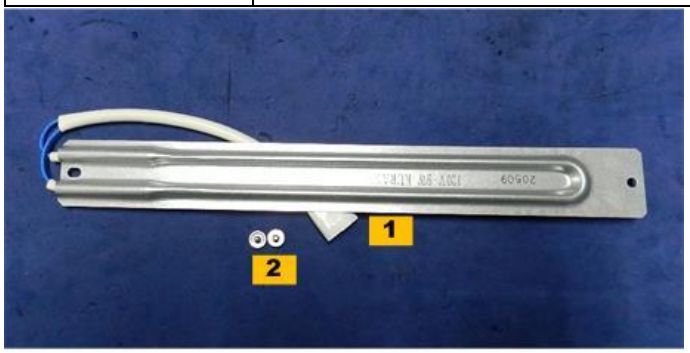
48. Check that both SP6-040-001 and SP6-040-002 are set to "1".
SP6-040-001 checks whether the double-feed sensor exists and switches automatically.
SP6-040-002 can switch through UP mode.

Scanner Heater

Accessories

The scanner heater is an option for the main machine. Check the accessories and their quantities against this list.

No.	Description	Q'ty
1	Scanner Heater	1
2	Screws M3x6	2



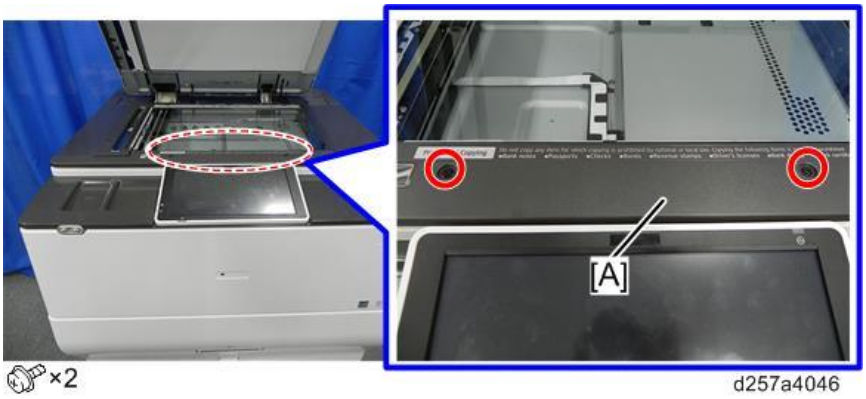
d223c1120

Installation

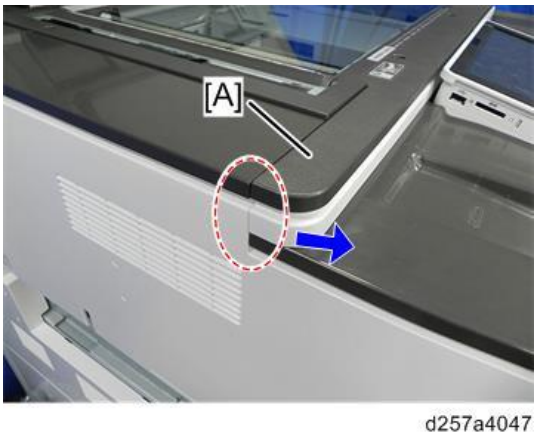
1. Remove the upper front cover.

IM C6500/C8000

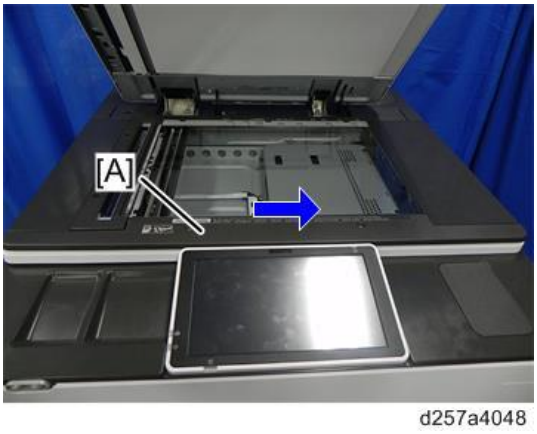
1. Open the ADF and remove the upper front cover [A].



2. Release the hook of the upper front cover [A].

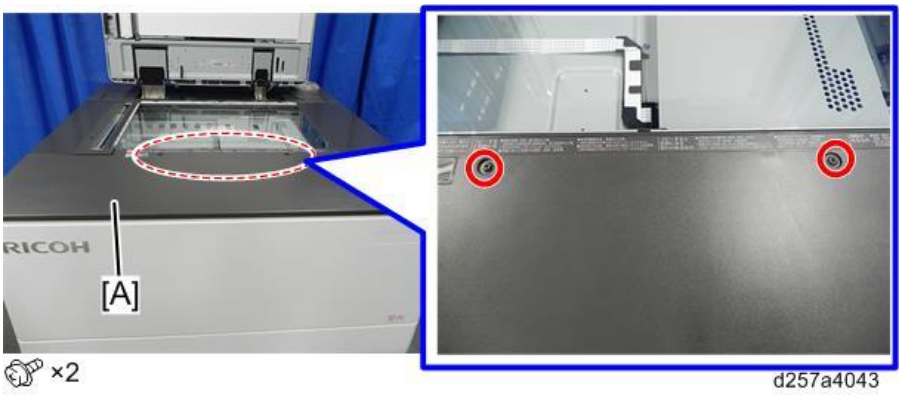


3. Slide the upper front cover [A] to the right and remove it.

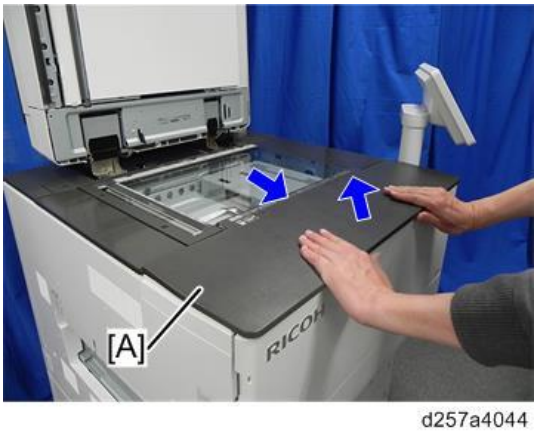


Pro C5300S

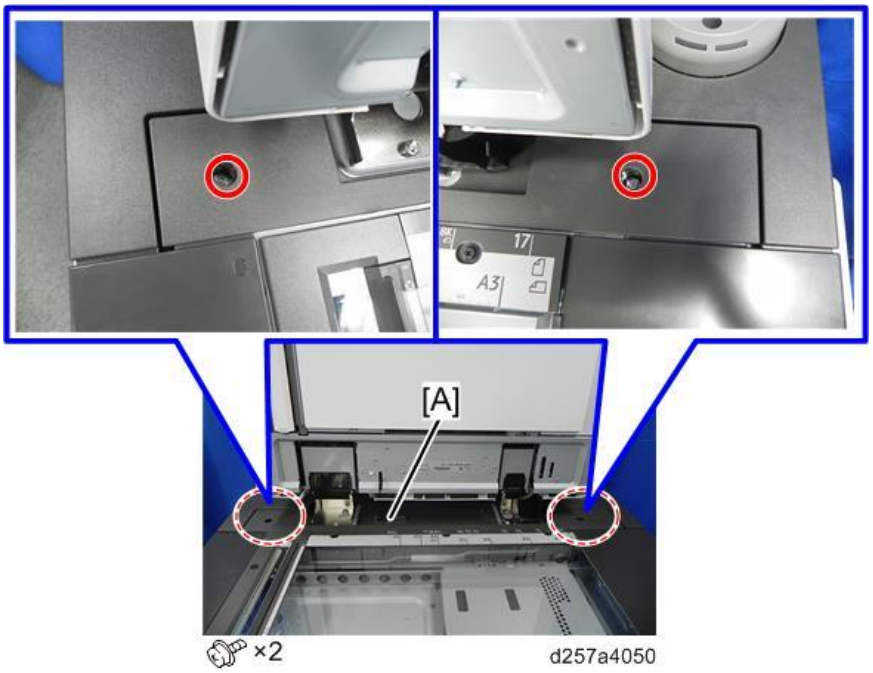
1. Open the ADF and remove the upper front cover [A].



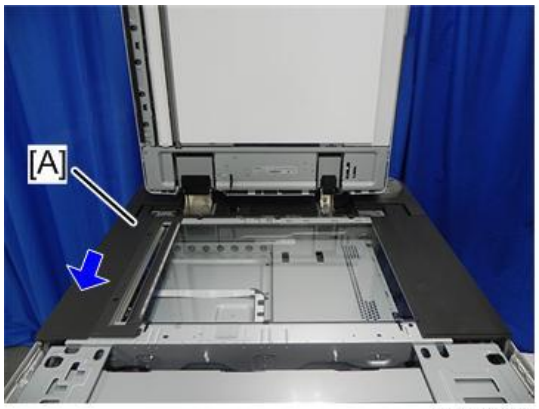
2. Slide and remove the upper front cover [A] as shown below.



2. Open the ADF and remove the upper rear small cover [A].

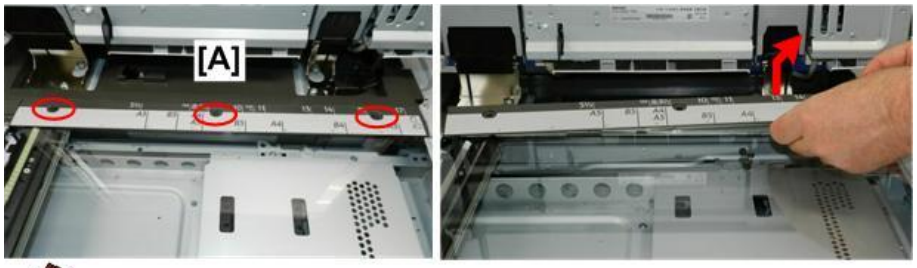


3. Slide the upper left cover [A] to the front and remove it.



d257a2141

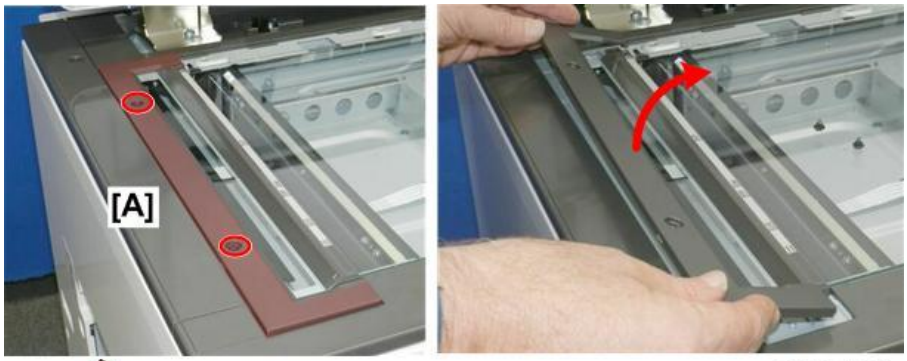
4. Remove the rear scale [A]



x3

d223c0005

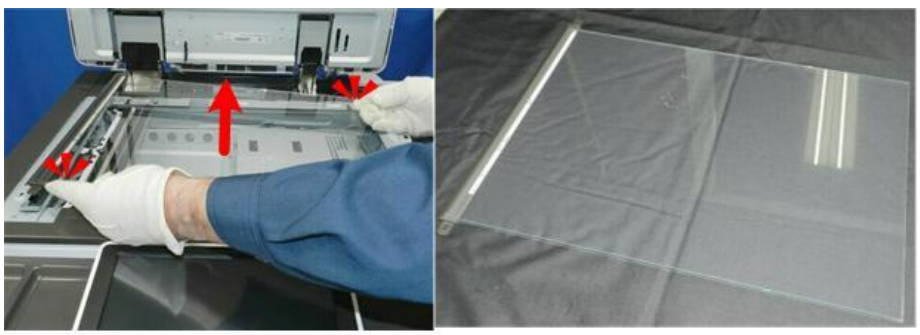
5. Remove the upper left bracket [A].



x2

d223c0006

6. Remove the exposure glass together with the left scale.



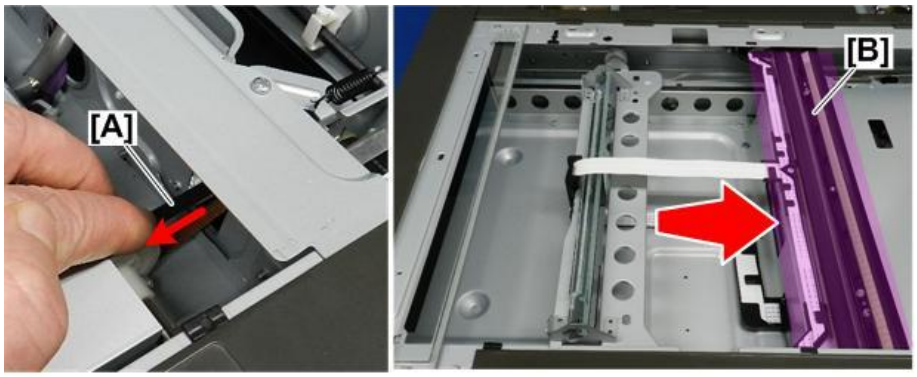
d223c0007

Note

- The left scale is attached on the exposure glass with double-sided tape.

- Do not separate the left scale and exposure glass.

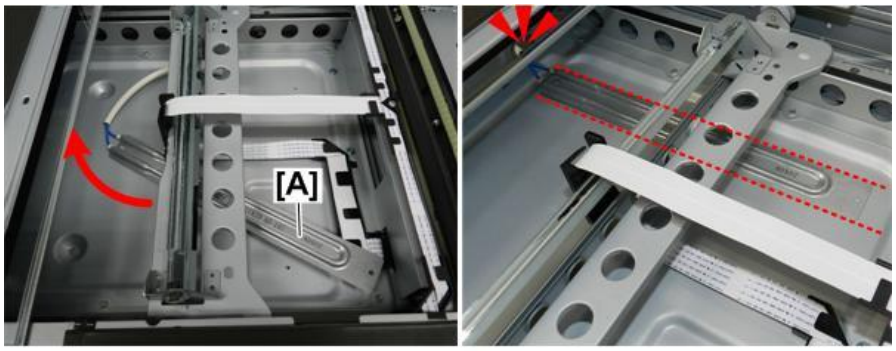
7. Slide the scanner motor timing belt [A] to the left side to move the 1st carriage [B] to near the lens block cover.



d223c1125a

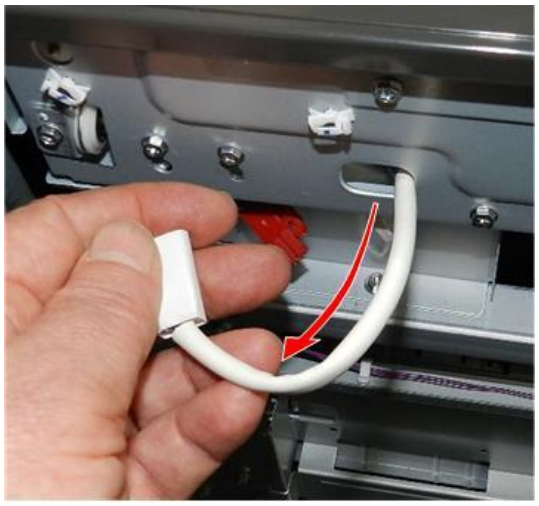
8. Set the scanner heater [A] on the position as shown below.

9. Route the harness of the heater through the opening on the left rear side.



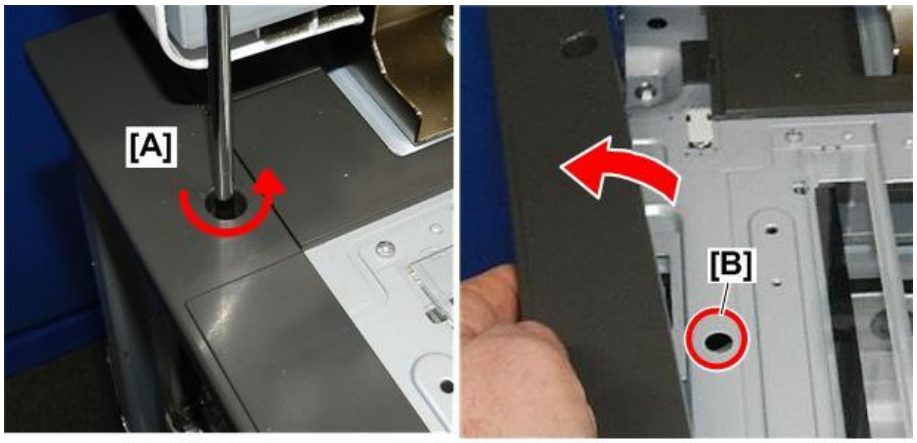
d223c1126a

10. Remove the left upper cover, and pull the harness out of the opening on the left side of the scanner unit.



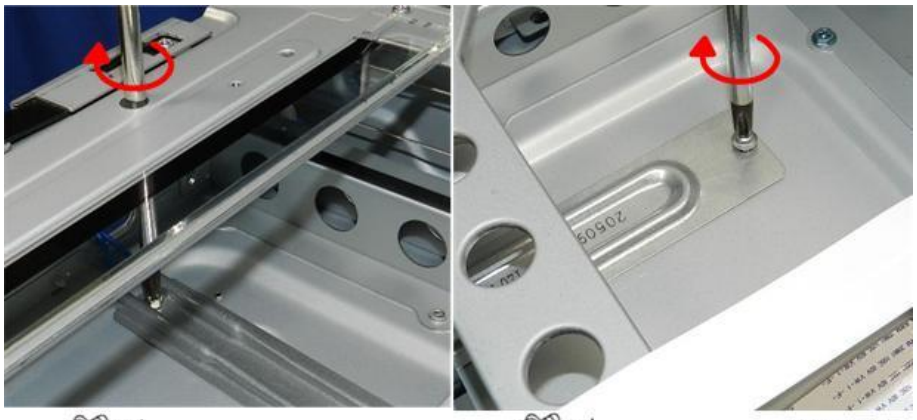
d223c1127

11. Remove the upper left cover [A], so that you can access to the hole [B] under the cover.



d223c1128a

12. Fasten the both edges of heater with the screw provided.



x1 x1 d223c1129a

13. Clamp and connect the harness of the heater.

x1 x1 d223c1130

14. Turn ON the heater switch on the side of the main machine.

d257a5095

Multi Bypass Banner Sheet Tray Type S6 (D3D1)

Accessories

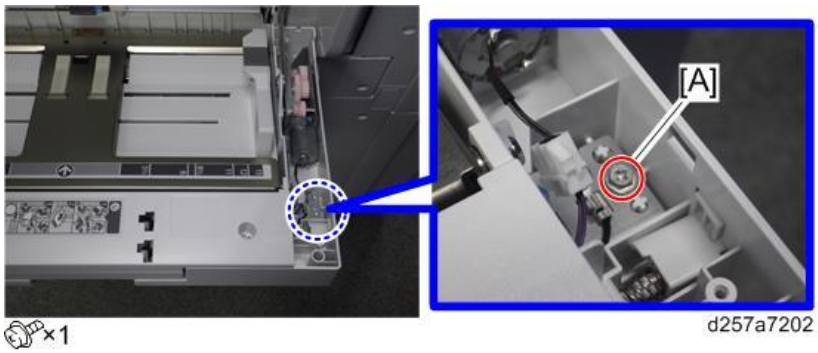
No.	Description	Q'ty	Remarks
1	PAPER FEED TRAY ASS'Y	1	
2	GROUND PLATE	1	

d257a4417

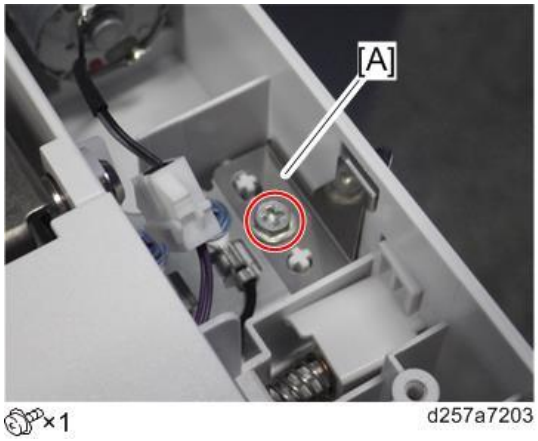
Installation Procedure

1. Remove the cover [A].

2. Remove the screw [A].



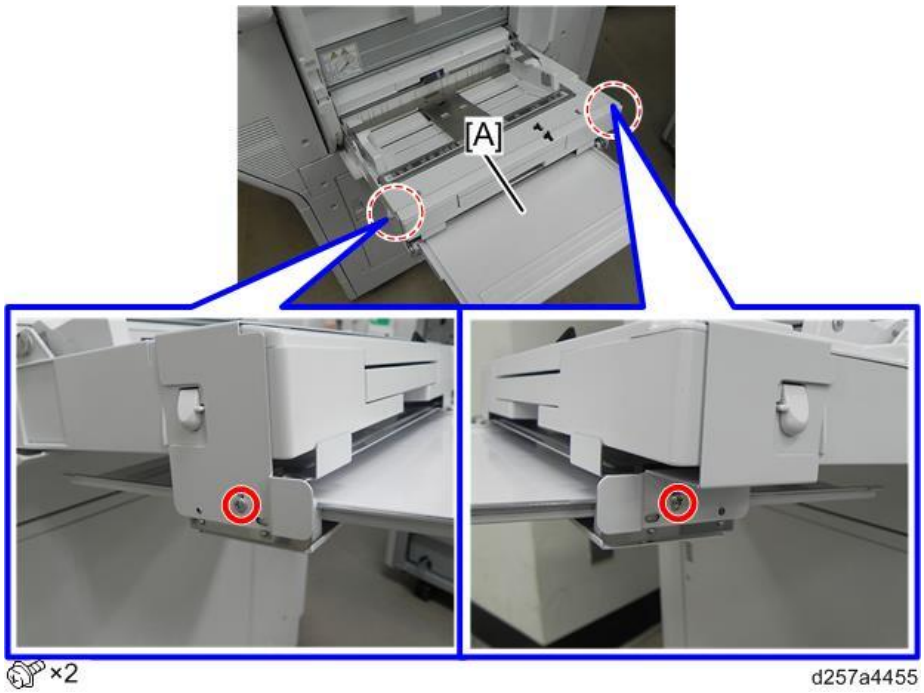
3. Attach the grounding plate [A] with the screw removed in Step 2.



4. Put the paper feed tray assembly [A] on the bypass tray.

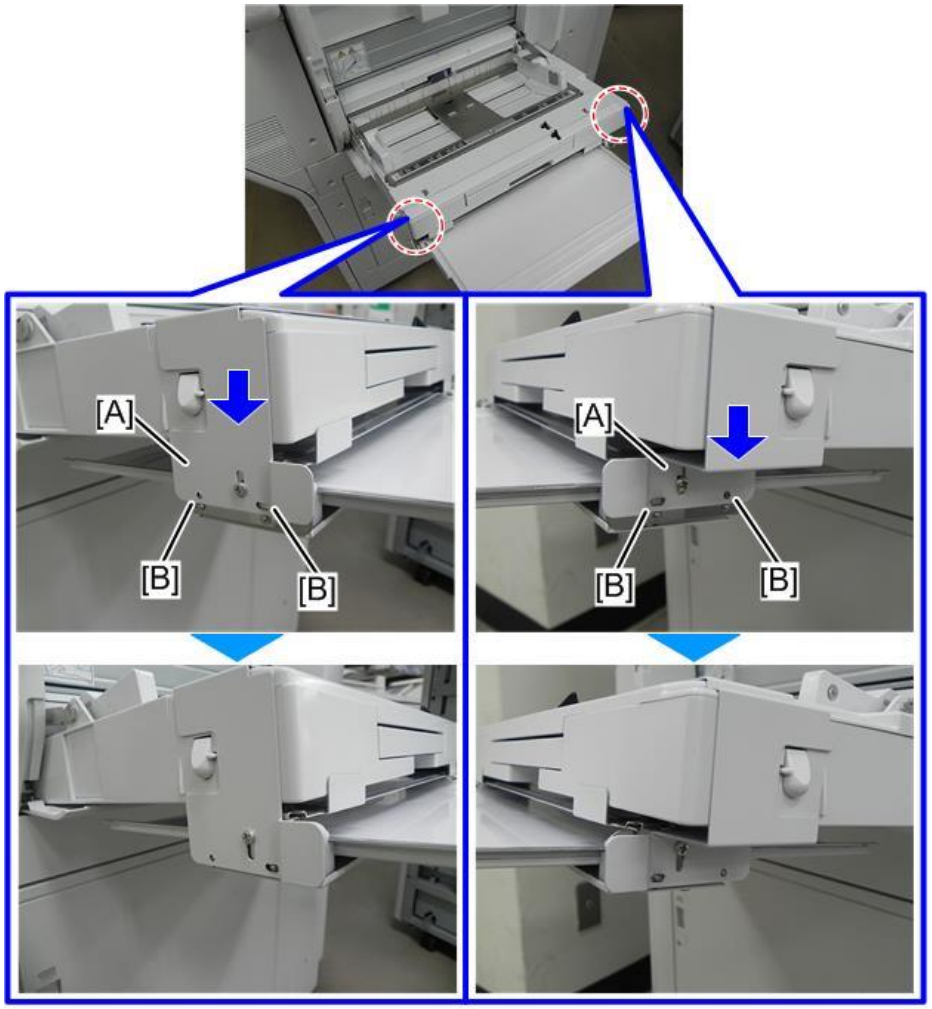
d257a4454

5. Loosen the screws of the paper feed tray assembly [A].

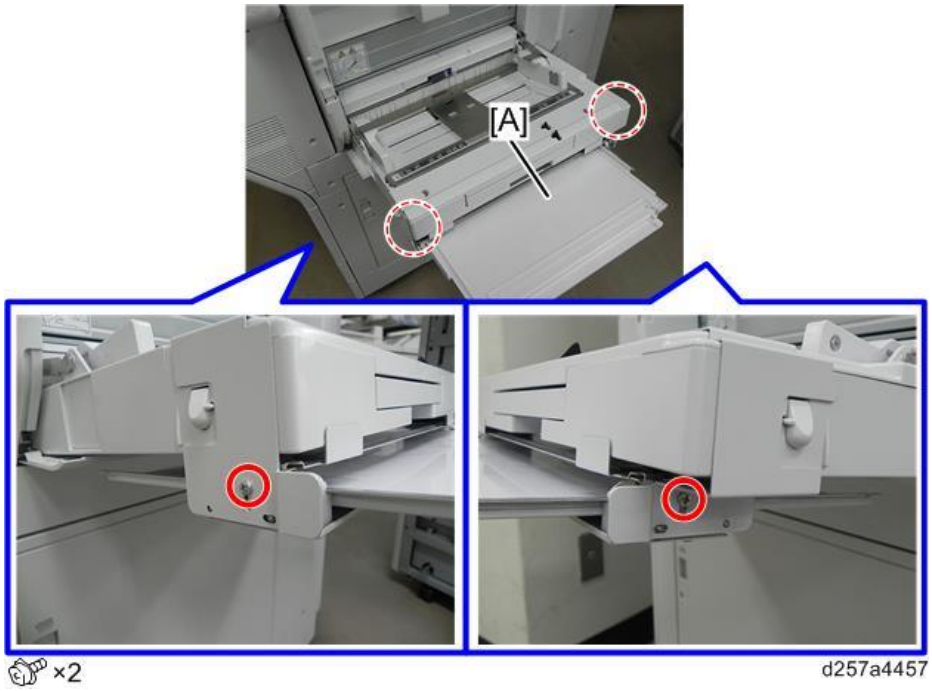


d257a4455

6. Put the bosses in the holes [B] of the counter plate [A].



7. Fix the paper feed tray assembly [A].

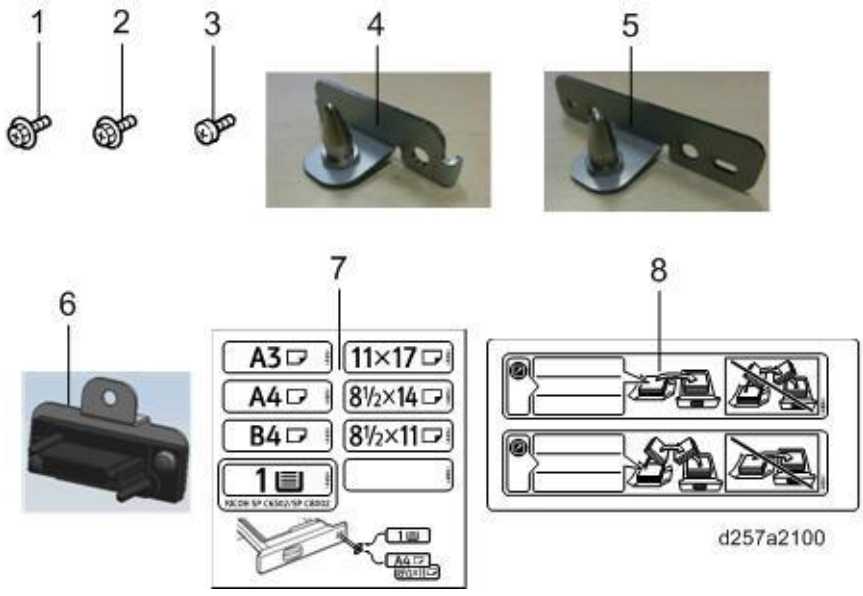


A3/11"x17" Tray Unit Type M26 (D3D202)

Component List

Check the quantity and condition of the accessories in the box against the following illustration and list.

No.	Description	Q'ty	Remark
1.	Screw – M3 x 4	4	
2.	Tapping screws –M3 x 6	3	
3.	Screw – M3 x 6	1	
4.	Pin Bracket	1	Use for the following models: • C6502 SP, MP C8002 SP • Pro C5110S, Pro C5100S
5.	Pin Bracket	1	Use for the following models: • Pro C5310S, Pro C5300S • IM C8000, CM C6500 • Pro C5210S, Pro C5200S • MP C6503 SP, MP C8003 SP
6.	Harness	1	
7.	Paper Size Decal	1	
8.	Paper Set Direction Decal	1	
-	Manual: Installation Procedure: Pin Bracket	1	



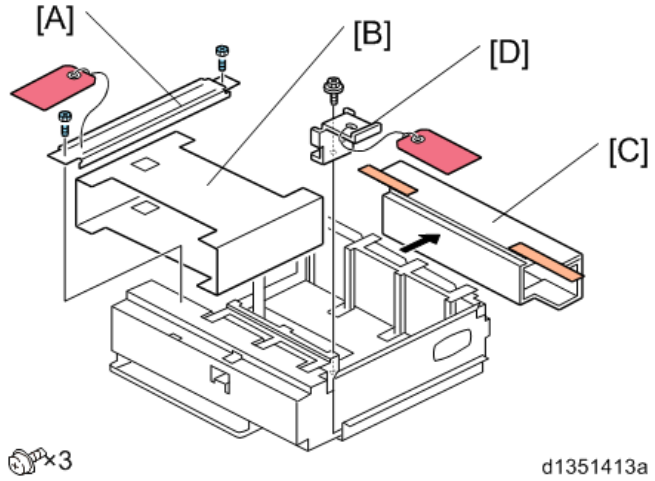
Installation

⚠CAUTION

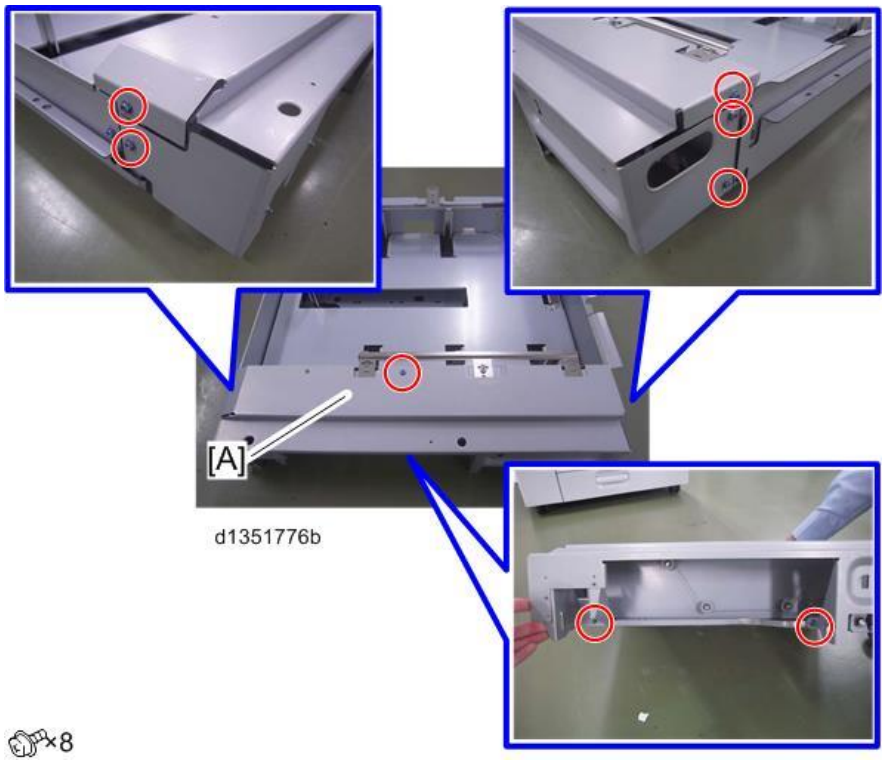
- The unit must be connected to a power source that is close to the unit and easily accessible.
- Make sure that the main machine is switched off and that its power cord is disconnected before doing the following procedure.

2.Installation

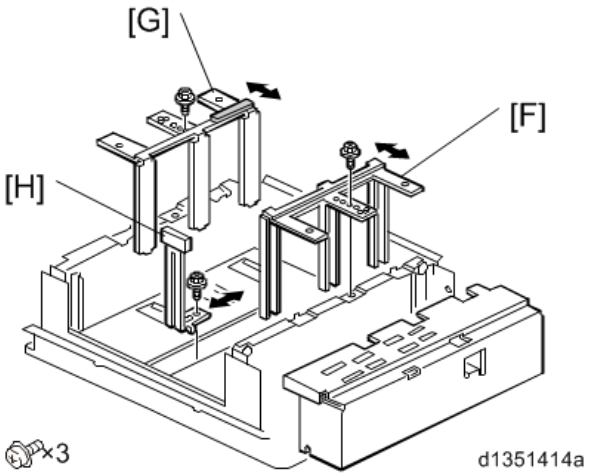
1. Remove the stay [A].
2. Remove the retainers [B] [C] and the shipping material [D].



3. Check the position of the front and back side fences and make sure that they are set for DLT or A3.
4. If you need to adjust the positions of the side fences for the paper to be loaded in the tray, remove the front panel [A].



5. Remove the fences and adjust their positions for the paper to be loaded:
   [F] Side fence
   [G] Back fence
   [H] End fence

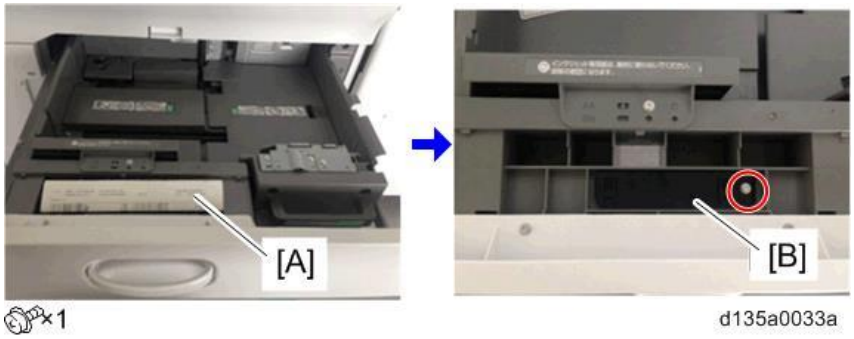


6. Reattach the front panel.
7. Open the front doors.
8. Pull out the tandem feed tray [A] and remove the paper cassette decal [B].

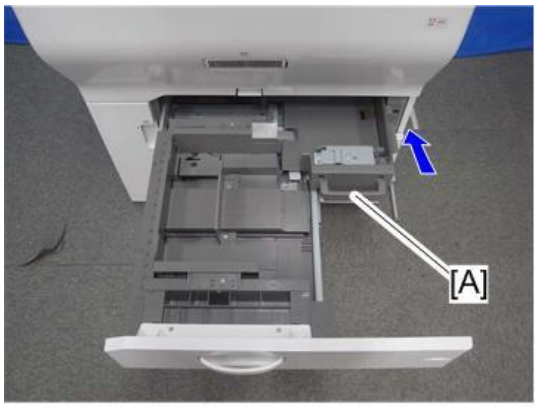
9. Remove the factory SP sheet [A] and SD card holder [B].

Important

- These parts will be installed in the A3/11"x17" Tray Unit later.

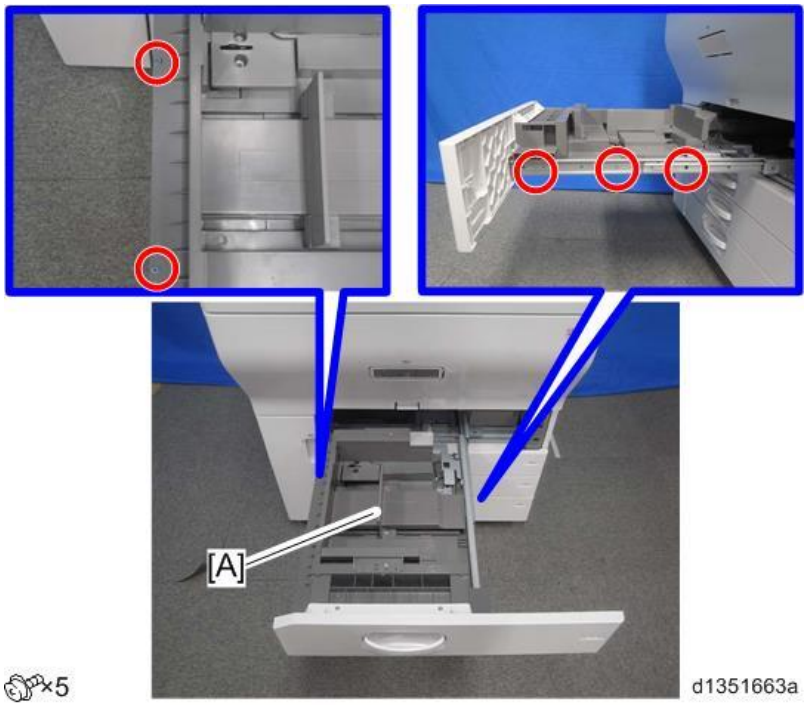


10. Push the right tandem tray [A] into the machine.



d1351662

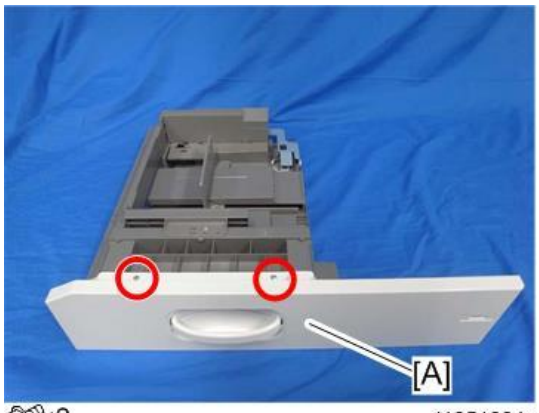
11. Remove the left tandem tray [A] (left rail: M3 x 8, right rail: M3 x 10).



×5

d1351663a

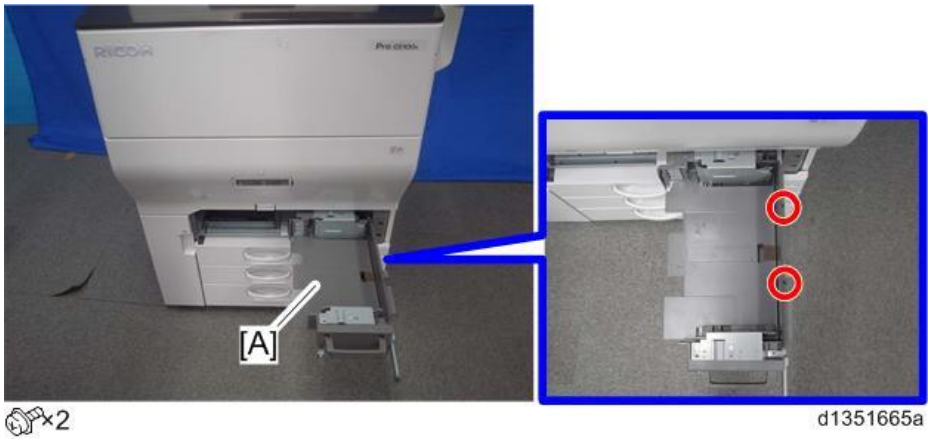
12. From the left tandem tray, remove the front cover [A].



×2

d1351664a

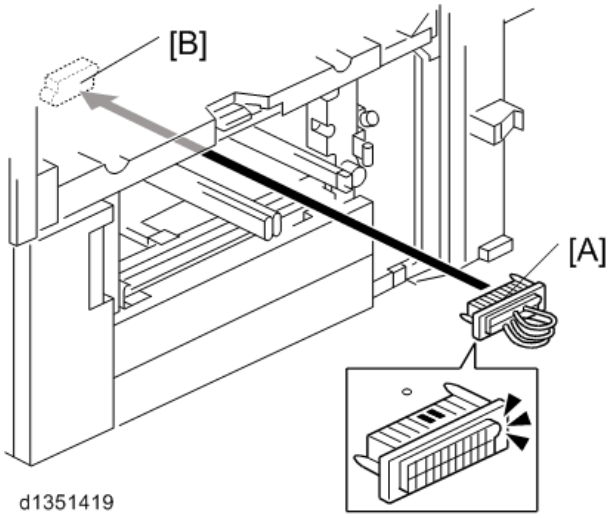
13. Pull out the right tandem tray [A] then remove it.



14. Insert the short connector [A] into the socket inside the machine [B].

Note

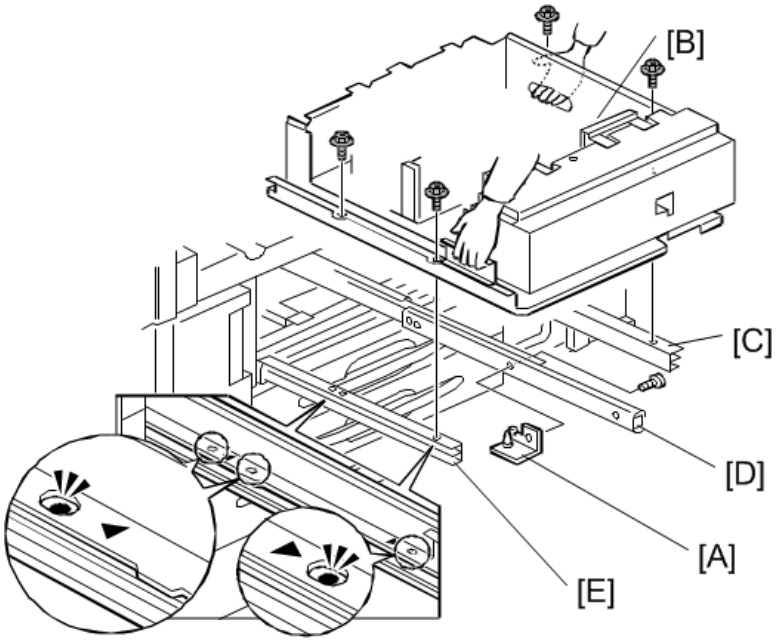
- Hold the connector as shown in the illustration.



15. Using the screw provided in the accessories, attach the pin bracket [A] to the center rail.

16. Using the screws provided in the accessories for the right rail and left rail, install the tray [B] on the

right rail [C], center rail [D], and left rail [E].

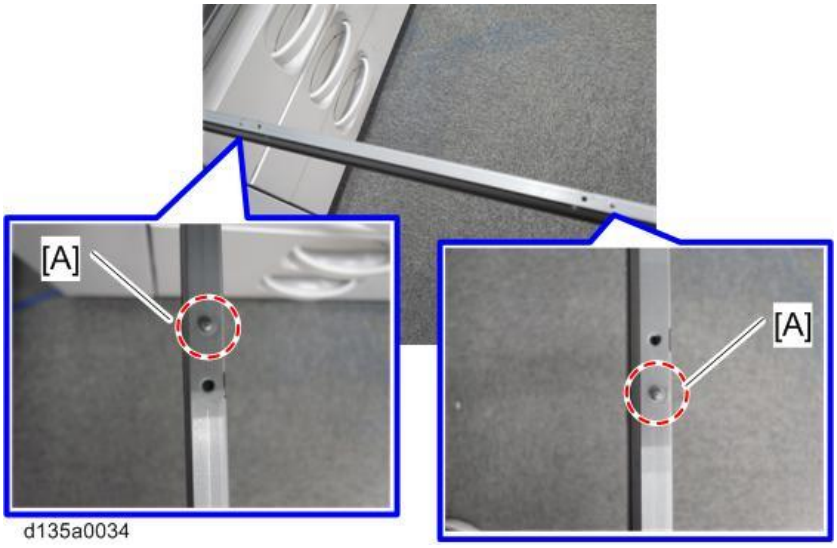


×5

d135a3120a

Important

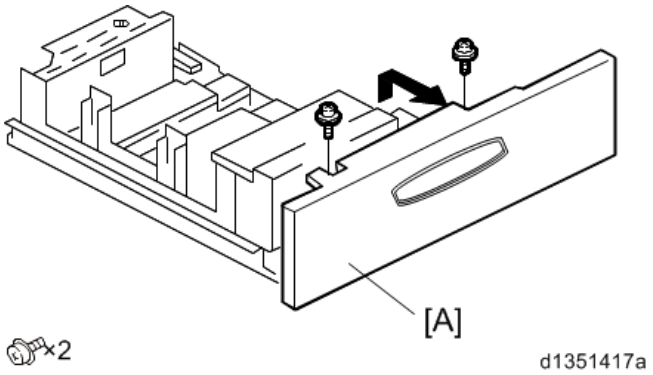
- Make sure that the pin on the pin bracket passes through the hole in the tray bottom plate.
- Make sure that bosses [A] (two each on the left and right rails) pass through the holes in the tray. If you close the tray without doing this, it will be impossible to open the tray.



d135a0034

17. Return the factory SP sheet and SD card holder that you removed in Step 9.

18. Reinstall the front cover [A].



19. Turn ON the machine.

20. Use **SP5959-2** to select the paper size for Tray 1 (A3 or DLT).

21. After selecting the paper size, switch the machine off and on and check that the selected paper size is displayed on the operation panel.

Optional Feed Roller Unit Type S13 (D3HX)

Accessory Check

No	Description	Q'ty
-	Decal	1
-	Operating Instructions	1
-	EMC Address	1

Installation Procedure

⚠CAUTION

- Always switch the machine off and unplug the cable before beginning the following procedure.

1. Remove the paper feed tray.

2. Install the optional feed roller unit.

3. Attach the decal to the feed roller unit.

4. Turn ON the main power.

5. Enter SP mode and set the value of SP1-320-003 to "1".

Tab Sheet Holder Type M2 (D750)

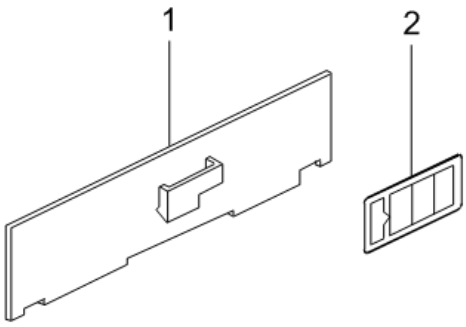
The tab sheet holder can be installed to trays 2 and 3, and allows the user to load tab stock.

Accessories

Check the quantity and condition of the accessories in the box against the following list.

No.	Description	Q'ty
1	Tab Sheet Holder	1
2	Decal	1

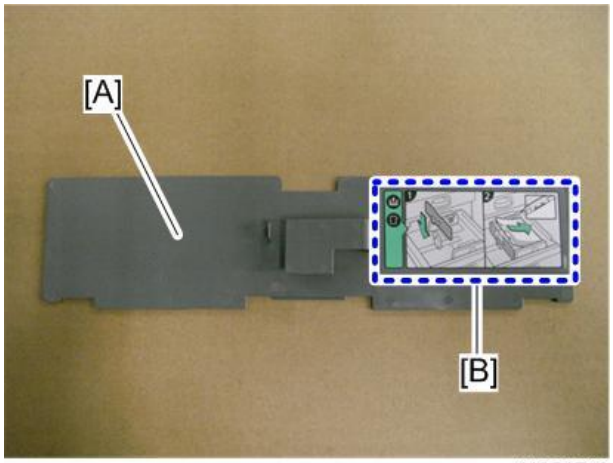
2.Installation



d1351750

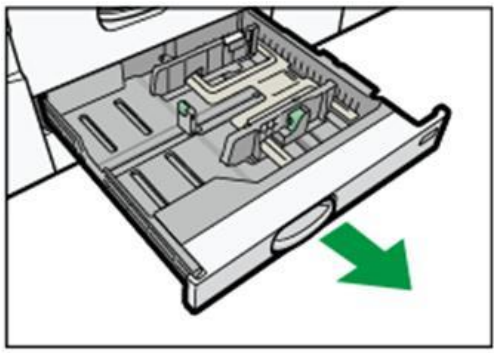
Installation

1. Attach the decal [B] to the tab sheet holder [A].



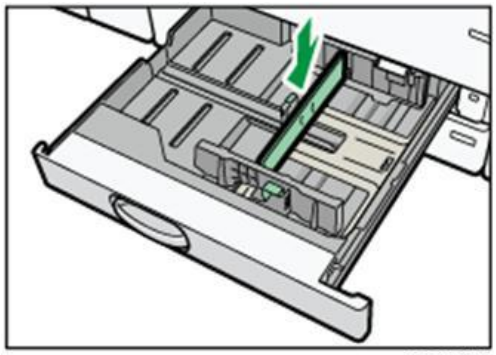
d1351749

2. Check that the paper tray is not being used, and then pull the tray carefully out until it stops.



d1351733

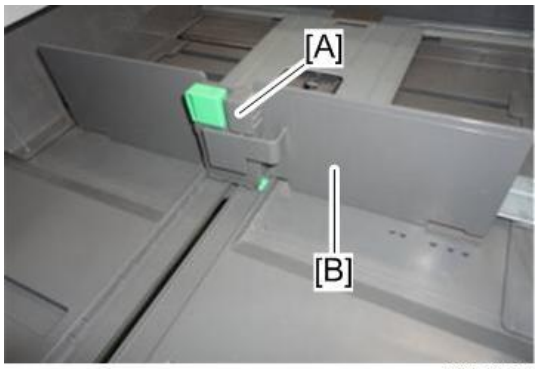
3. Install the tab sheet holder on the end fence of the paper tray.



d1351734

Note

- When the tab sheet holder is installed correctly, you can hear a clicking noise.



d1351731

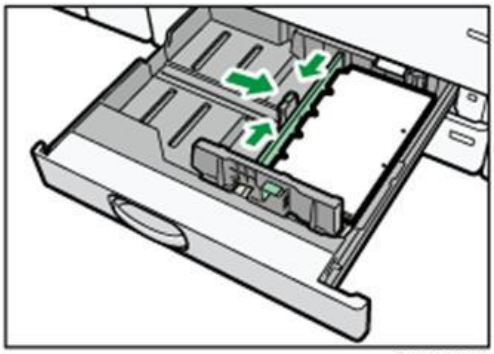
- [A]: End fence
- [B]: Tab sheet holder

4. Load tab stock in the paper tray.

Note

- Load tab stock so that the side with the tab faces the tab sheet holder.

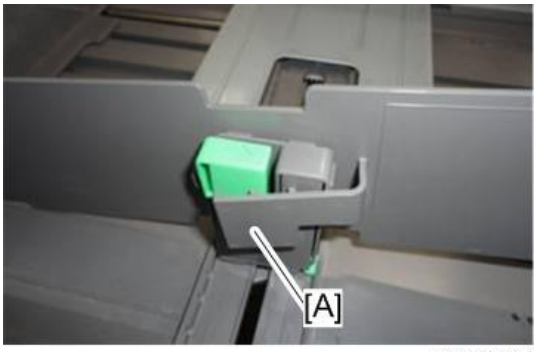
5. Adjust the end fence position so that the tab sheet holder will fit the tab stock.


d1351735

6. Carefully slide the paper tray fully in.

Note

- When removing the tab stock holder, spread the hook [A] of the tab sheet holder and then remove it as shown below.



d1351732

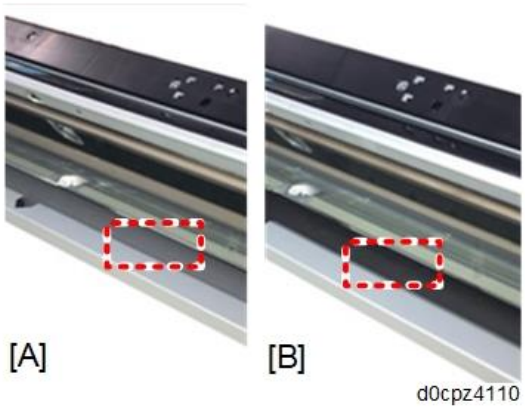
Carbonless Paper Unit Type S13 (D3HY)

Accessory Check

No	Description	Q'ty
-	EMC Address	1

How to Distinguish the Normal Registration Unit and Carbonless Paper Unit

Check the color of the rubber roller on the unit.



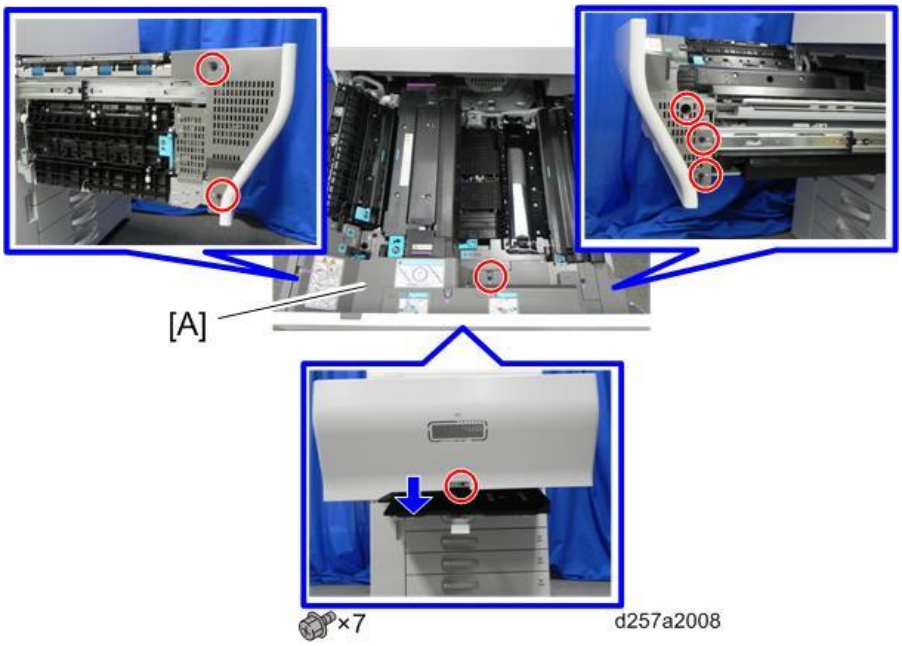
Callout	Unit	Color
[A]	Carbonless Paper Unit	Grey
[B]	Normal Registration Unit	Black

Installation Procedure

1. Remove the registration unit.

1. Open the drawer unit [A].

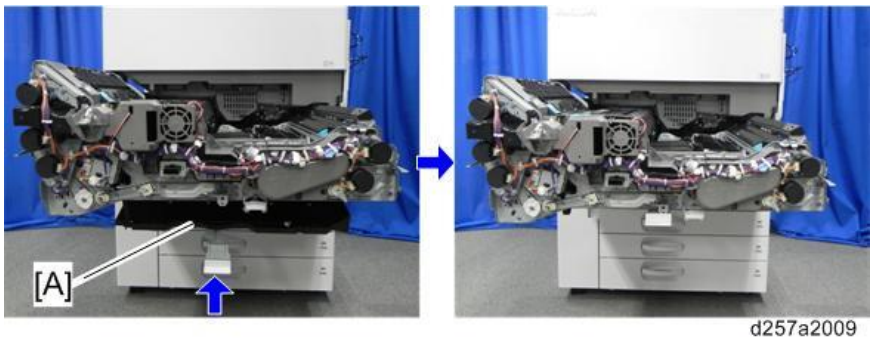
2. Remove the drawer unit cover [A].*



* Pro C5300S/C5310S use TCRU/ORU screws

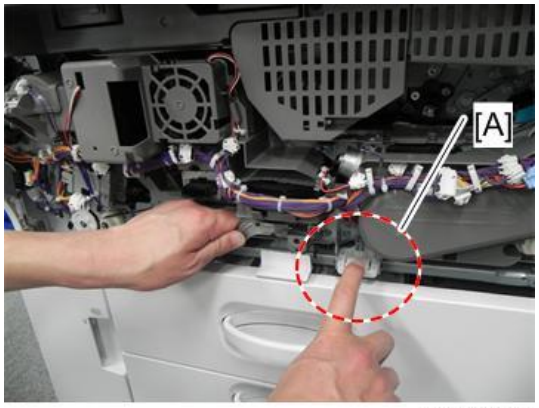
Note

- After removing the drawer unit cover, when the drawer unit is returned to the machine, you can close the guide plate [A] of the paper exit and duplex unit.



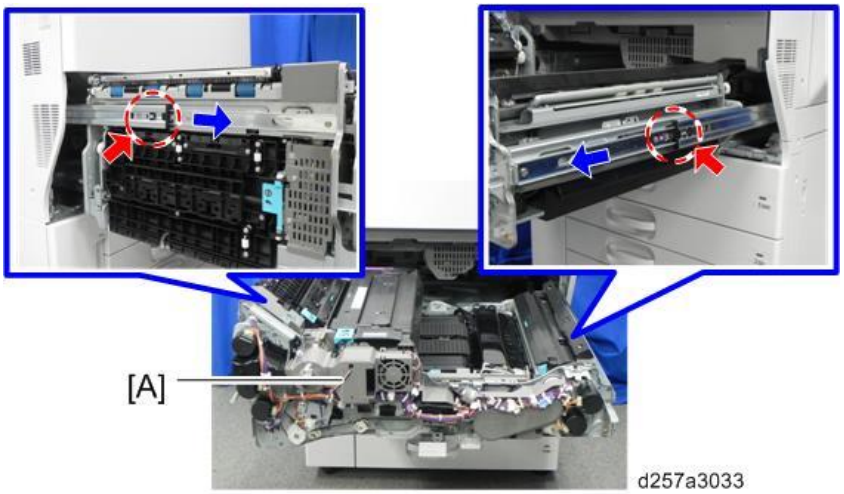
- After removing the drawer unit cover, when the drawer unit is pushed all the way in, the drawer is locked by the lock lever at the right side of the handle. If the drawer is locked, pull out the drawer unit while holding the lock lever [A] as shown in the picture

below.



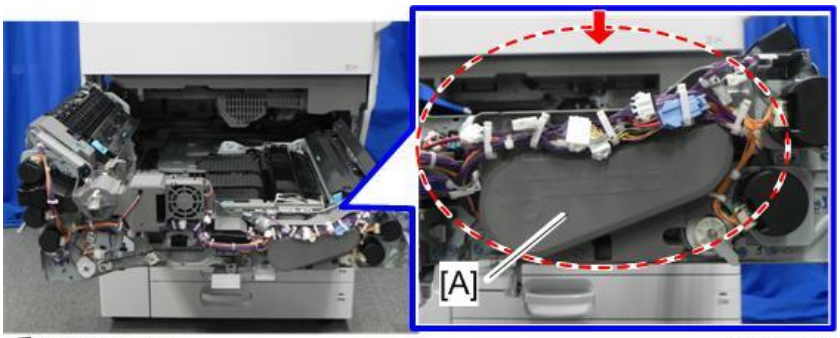
d257a2010

3. In order to facilitate the work, press the release lever to fully open the drawer unit [A].



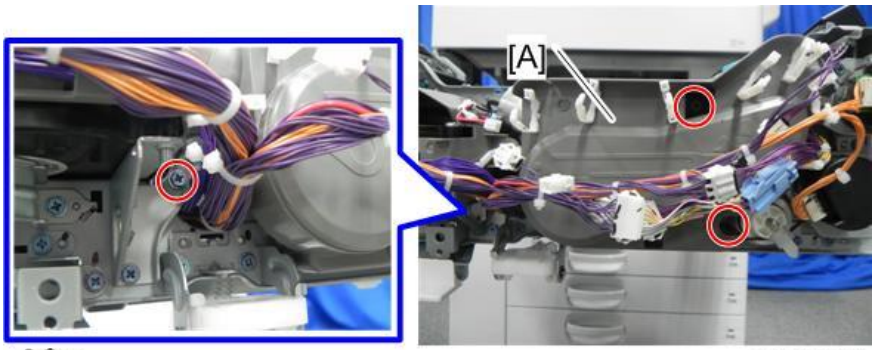
d257a3033

4. Remove the connectors and clamps to remove the drawer unit lock motor cover [A].



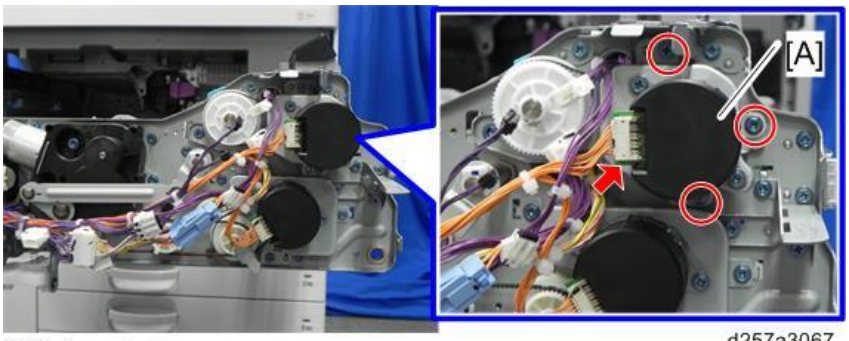
d257a3065

5. Remove the drawer unit lock motor cover [A].



×3 d257a3066

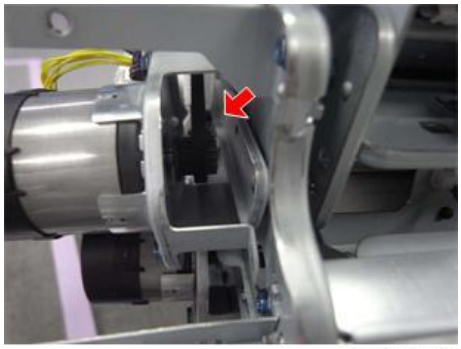
6. Remove the registration motor [A] along with the bracket.



×3 ×1 d257a3067

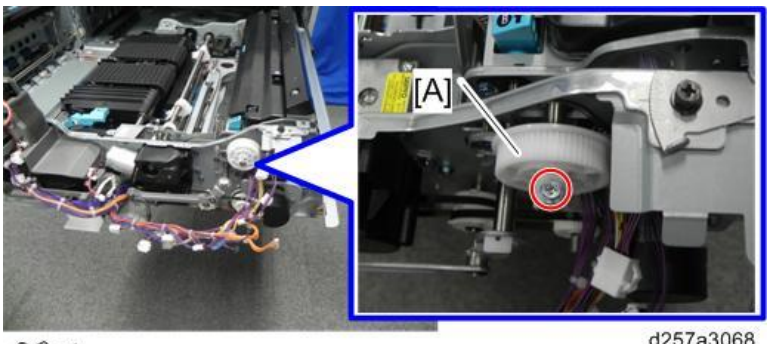
Note

- When installing the motor, attach the timing belt.



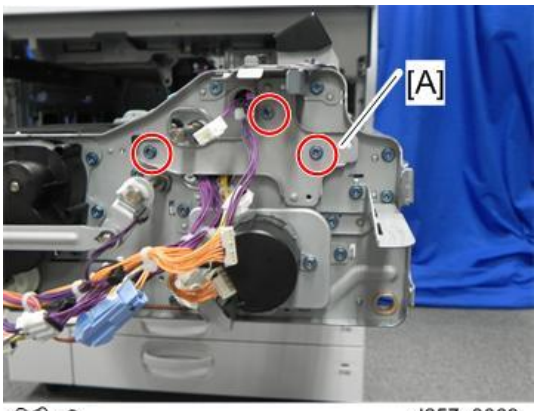
d1352399

7. Remove the timing pulley [A].

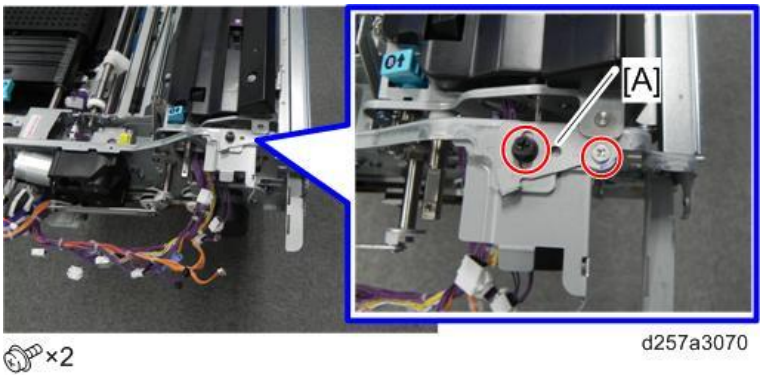


×1 d257a3068

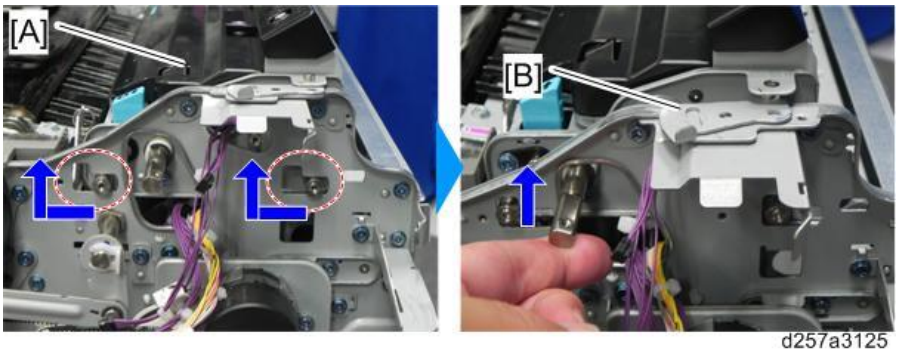
8. Remove the positioning bracket [A].



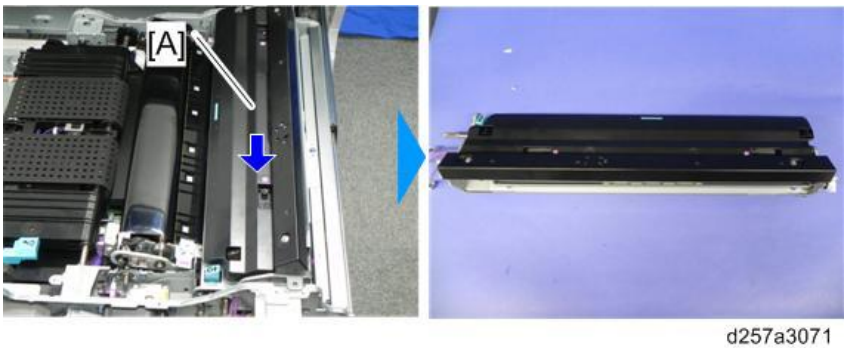
9. Remove the fixing screws of the registration adjustment bracket [A].



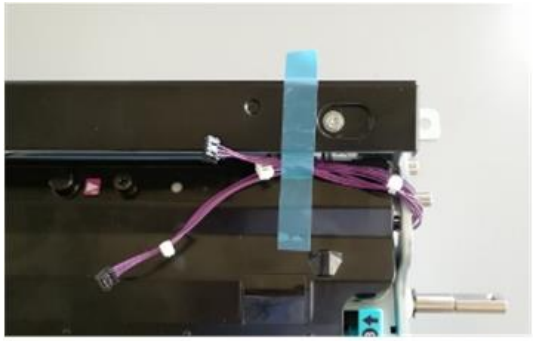
10. Move the registration unit [A] to the left and lift it, then remove the registration adjustment bracket [B].



11. Remove the registration unit [A].



2. Remove the tape attached to this option.



d0cpz4109

3. Install the carbonless paper unit to the removed section.
4. Set the value of SP1-320-011 to "1".

Numeric Keypad Type S13 (D3J1)

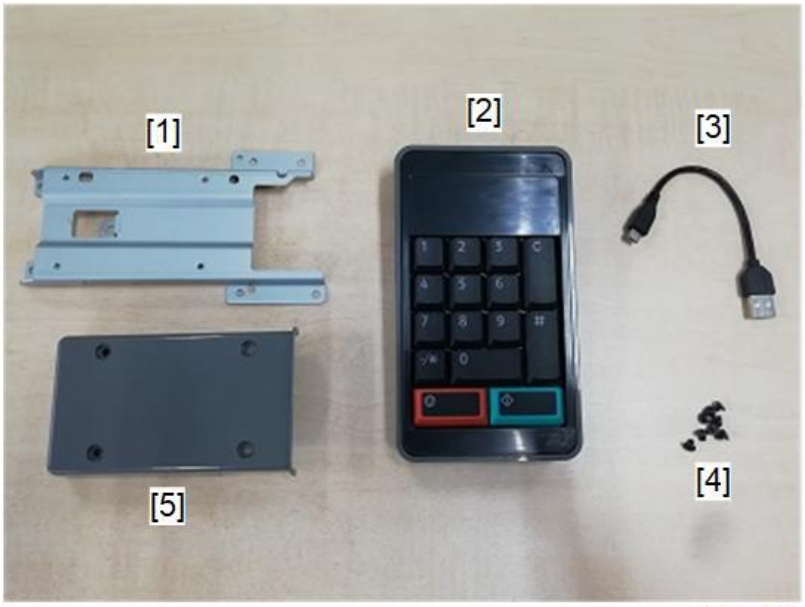
d0cpz1316

Note

Direct current [A]: To indicate on the rating plate that the equipment is suitable for direct current only; to identify relevant terminals.

2.Installation

Accessory Check



d0cpz1274

No.	Description	Q'ty
1	Bracket	1
2	Keypad	1
3	USB cable	1
4	Screw M3 x 4	8
5	Cover	1
-	EMC Address	1

Installation Procedure

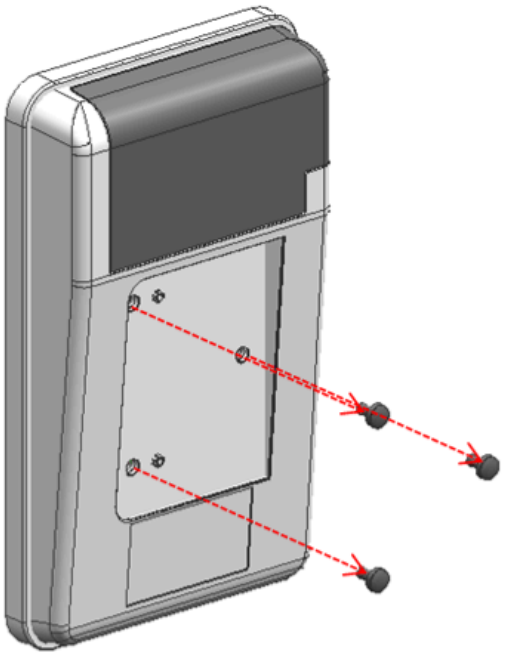
⚠CAUTION

Turn off the power of the main machine and unplug the power plug from the outlet. Installing this option while the power is ON may cause electric shock or malfunction.

Note

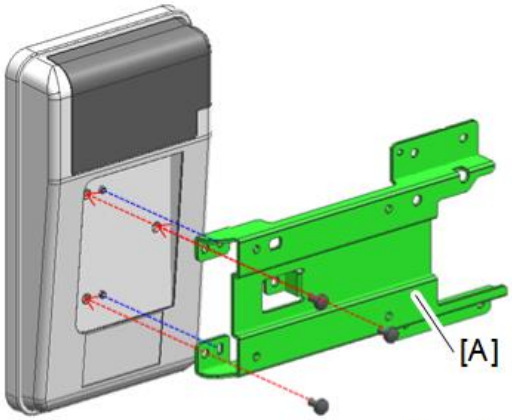
If installing both a built-in personal authentication device kit and a Numeric Keypad at the same time, install the built-in personal authentication device kit first before installing the Numeric Keypad. (If the Numeric Keypad is installed first, the cable of the kit with built-in personal authentication device cannot be inserted into the operation panel)

1. Remove the screws.



×3 d0cpz1258

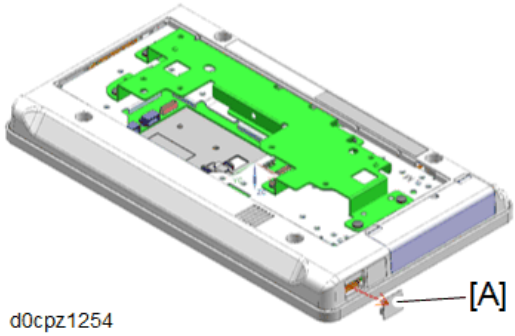
2. Attach the bracket [A].



×3 d0cpz1253

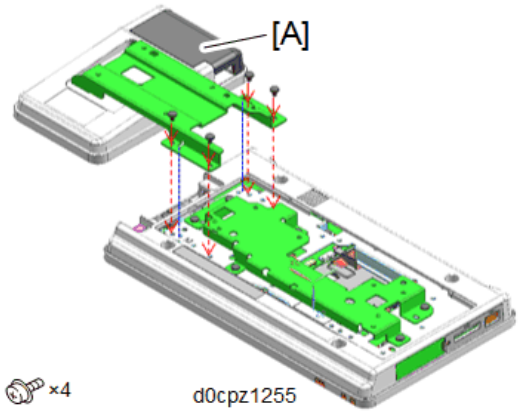
3. Remove the operation panel from the main machine.

4. Remove the cap [A] as shown below.

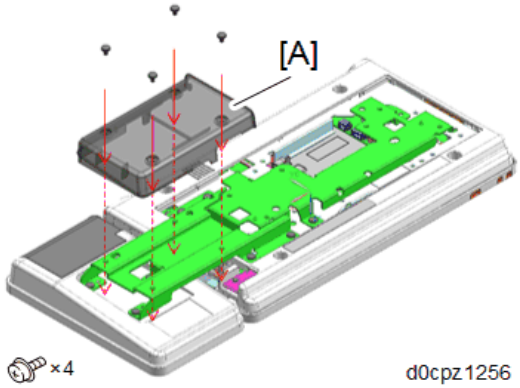


d0cpz1254

5. Attach the bracket [A].

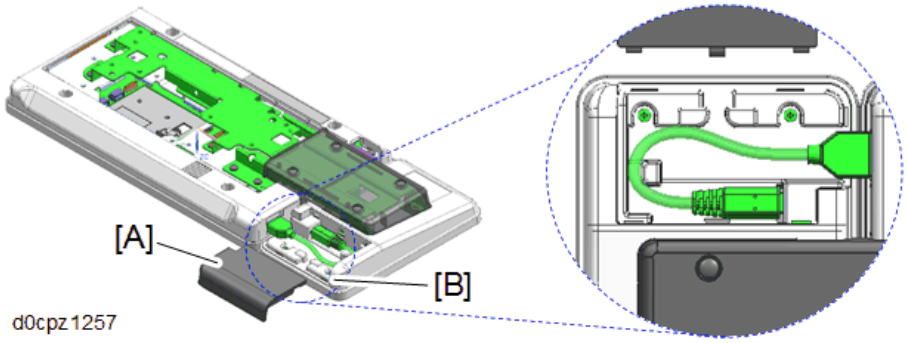


6. Install the bracket cover [A].



7. Remove the cover [A] and insert the USB cable [B].

8. Reattach the cover [A] just removed.



9. Reassemble the operation panel.

Note

Before attaching the operation panel to the hinge, fix the cable of the kit with built-in personal authentication device with the edge saddle of the hinge. (If the operation panel is attached to the hinge first, it is difficult to open and close the edge saddle)

d0cpz1047

Media Identification Unit Type S3 (D3AK)

Installation

⚠CAUTION

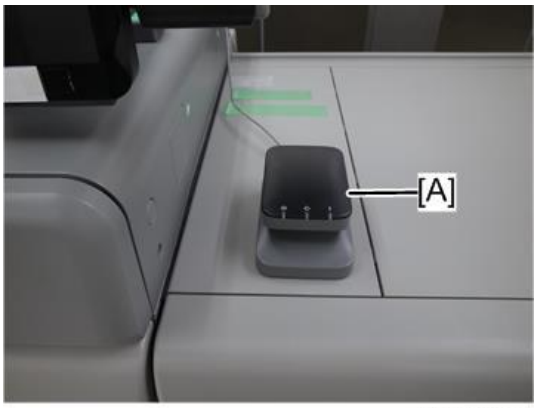
- Make sure that the main power switch and AC power switch of the machine are switched off and that its power cord is disconnected before doing the following procedure. Doing the following procedure in an energized state constitutes an electric shock hazard and could cause a malfunction.

Note

- If the media identification unit cannot be installed at the left side of the main machine, install it on a safe and level surface.
- Connect the USB cable of the unit to the USB port on the right side of the machine. This unit is not enabled when it is connected to the port on the side of the operation panel.

1. Place the media identification unit [A].

- If the LCT is connected to the machine, lay the media identification unit [A] on the top of the LCT.



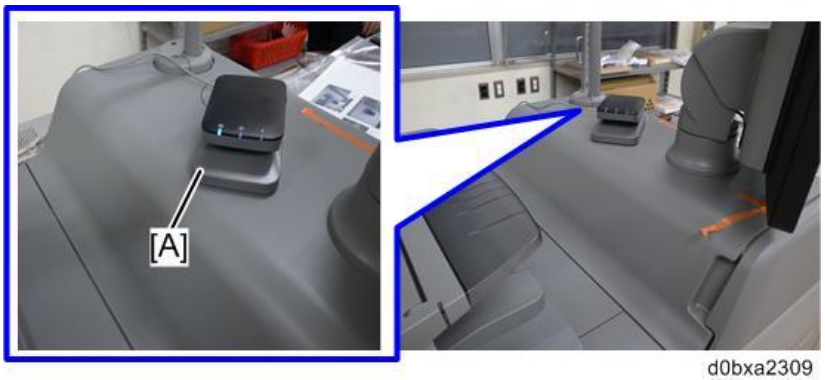
d0bxa2307

- If the LCT is connected to the multi bypass tray, lay the media identification unit [A] on the top

of the multi bypass tray.

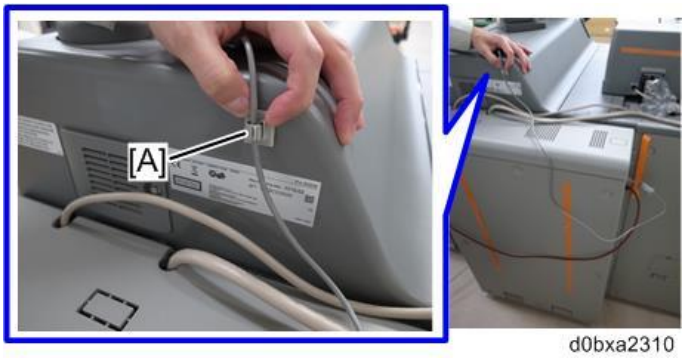
d0bxa2308

- If the LCT is not connected to the machine, lay the media identification unit [A] on the toner bottle cover.



d0bxa2309

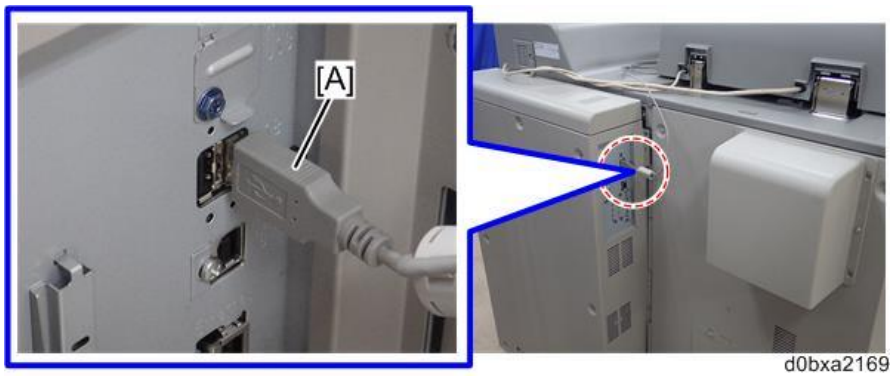
2. Attach the clamp [A] to the area attached no decal to of the rear side of the toner bottle cover, and then fix the USB cable.



d0bxa2310

3. Connect the USB cable [A] to a USB port of the machine. There is no problem whichever USB port

is used.



RPIP Interface Box Type S3 (M462)

Overview

This device is an interface (I/F) for connecting Ricoh products and peripherals of 3rd party vendors.

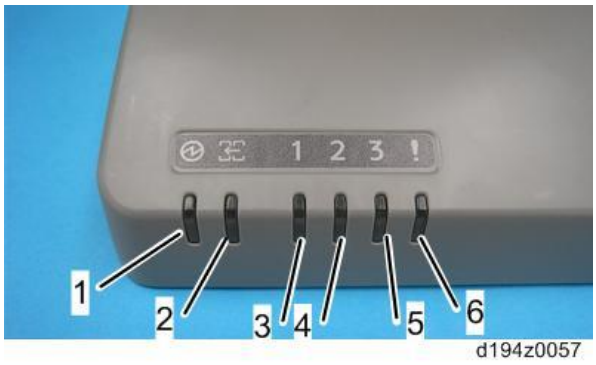
Configuration

The RPIP interface box type S3 consists of hardware and core software. It functions as an interface after a parameter settings file compatible with the 3rd party peripheral has been prepared and written to the RPIP interface box type S3.

Writing Data

The parameter setting tool is used to write the specific parameters of the 3rd party peripheral to the RPIP interface box type S3.
Only for one model, data can be written. Parameter settings files for multiple peripherals cannot be written to the RPIP interface box type S3. If you wish to use a peripheral from a different maker, it is necessary to reconnect the peripheral and then overwrite the parameter settings file.

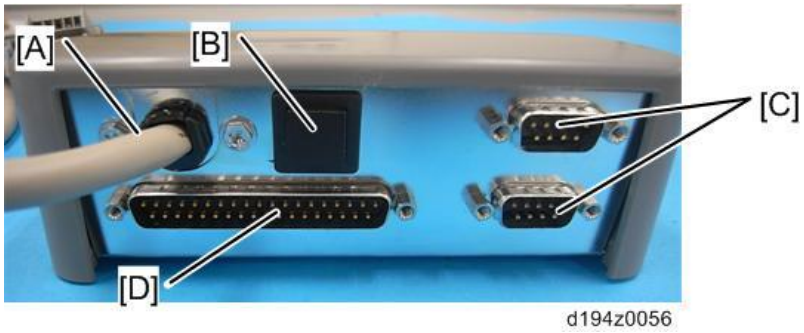
LED



	Name	Color	Description
1	Power LED	Blue	Power is supplied from the main machine and the LED lights up in tandem with the power of the main machine
2	3rd party peripheral	Blue	Lights when ready for paper feeding and blinks when feeding.

	Name	Color	Description
	status LED		
3	Spare LED1	Blue	Lights when in write mode.
4	Spare LED2	Blue	-
5	Spare LED3	Blue	-
6	Error LED	Red	Lights up red when an error occurs. Lit: 3rd party peripheral jam Blinking: Communication error, error with main machine or emergency stop switch pressed

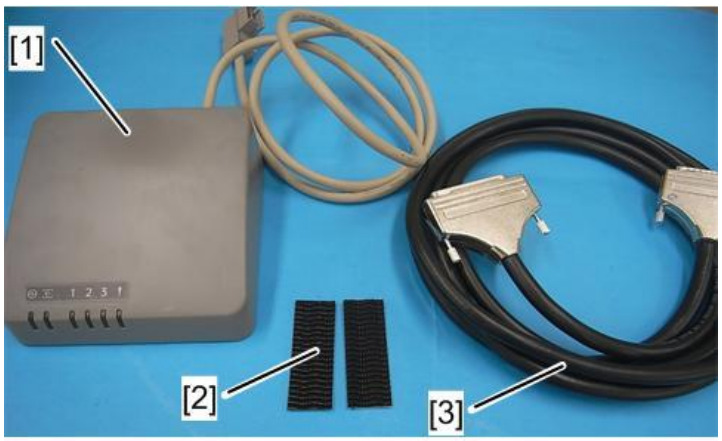
Rear Panel I/F



	Name	Description
[A]	RPIP interface box type S3 I/F cable	Connects to the main machine or the most downstream Ricoh peripheral.
[B]	Emergency stop switch	Used in emergencies to stop a job. Also used to cancel the blinking during an emergency stop.
[C]	Serial ports	Upper: Connects to a PC. Normally the upper port is used. Lower: Normally not used. Configured for potential custom applications.
[D]	Parallel port	Connects to the 3rd party peripheral.

Accessories

No.	Description	Q'ty
1	RPIP Interface Box Type S3 (The I/F cable length is 1.5 m.)	1
2	Hook-and-loop fasteners	1set
3	Parallel cable	2



d194z0058

Installation

Connect the interface box to the main machine (or the most downstream Ricoh peripheral) and the 3rd party peripheral.

⚠CAUTION

- Make sure that the main power switch and AC power switch of the main machine are turned OFF and that its power cord is disconnected before doing the following procedures.
- Also make sure that the power of the 3rd party peripheral is turned OFF and that its power cord is disconnected.
- Rated voltage of output connector for accessory: Max.DC24V.

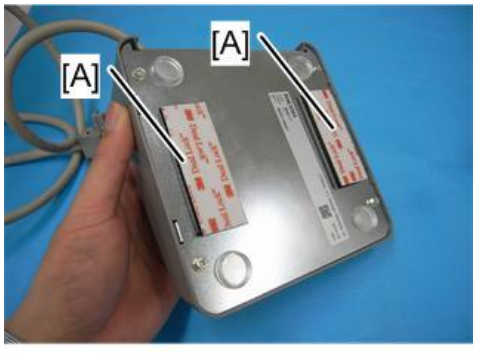
Note

- RPIP interface box type S3 is only compatible with post-processing related peripherals. At this time, it cannot be used with paper feed related peripherals.

Recommended Installation Location

- A flat space where this option can be fastened to securely and where the status indicator LEDs can be seen.

1. Attach the hook-and-loop fasteners to the bonding surface [A] on the back of the RPIP interface box type S3 (2 pieces).



d194z1002

2. Peel off the films from the hook-and-loop fasteners.
3. Press the RPIP interface box type S3 [A] onto the surface at the installation location so it sticks

securely in place.

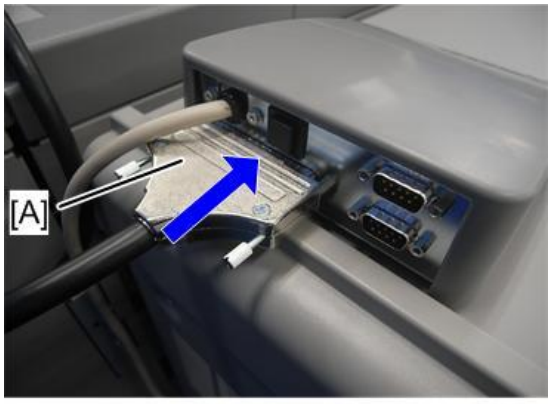
m263b1029

Before performing the subsequent steps, turn OFF the AC power switch and leave it for 5 minutes so the residual charge can dissipate.

4. Connect the I/F cable [A] to the main machine or the most downstream Ricoh peripheral.

d194z1003b

5. Connect the parallel cable [A] to the RPIP interface box type S3 (x2).



d194z1004

6. Connect a 3rd party peripheral to the main machine or the most downstream Ricoh peripheral.

7. Connect the parallel cable to the connector on the 3rd party peripheral.

d194z1003c

Settings

Required software/middleware

- Notebook PC
- RS-232C cable (for example: SANWA SUPPLY / KR-LK2)
- .NET Framework 4.0X

Note

- When using a USB-RS-232C adapter, use an adapter from a reputable manufacturer, or there might be illegible text or installation errors. We recommend the following device.
  - ELECOM / UC-SGT1

Preparation

1. Decompress the compressed folder [Parameter_Setting_Tool_ver.xx] and copy it to the desired directory (This process requires a computer).
2. Copy the specific parameter settings file for the 3rd party vendor peripheral to the desired directory (This process requires a computer).
3. Remove the connector cover [A] on the serial port [B] and connect to the computer.

Note

- Do not discard the connector cover.

d194z1005

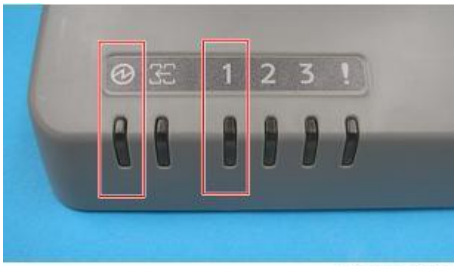
4. Turn the AC power switch [A] ON and then turn the main power switch [B] ON.
   Wait until the main machine warms up.

d194z0322a

5. Press and hold the emergency stop switch on the rear panel of the RPIP interface box for about 3 seconds to put it in the write mode.

Note

- When the RPIP interface box type S3 is in the write mode, the power LED and spare LED1 light up blue.



d194z0057a

- Jobs cannot be received while in the write mode.

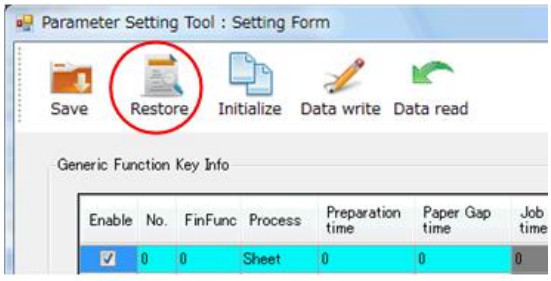
Parameter Setting Tool

Note

- Perform these procedures on the computer.

1. Launch [ParameterSettingTool.exe].

2. Press the [Restore] button.



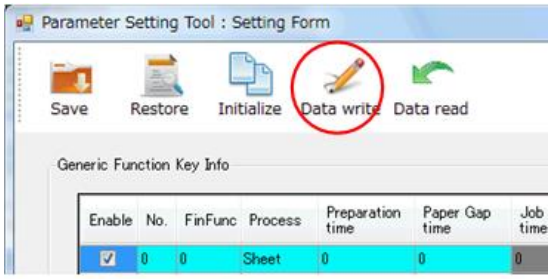
d194d9302

3. Select the parameter settings file and select [Open].

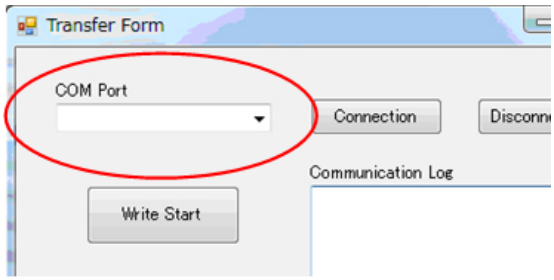
Note

- The parameters are displayed on the screen. Do not edit numerical values.

4. Press the [Data Write] button and the "Transfer Form" opens.



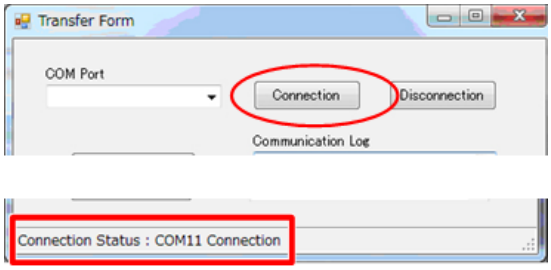
d194z0060



d194z0061

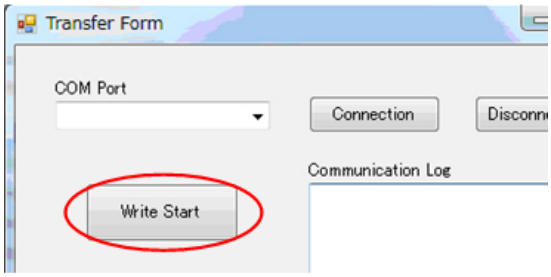
5. Select the port from the COM Port drop-down list.

6. Press the [Connection] button and check that the Connection Status bar changes to "COMXX Connection."

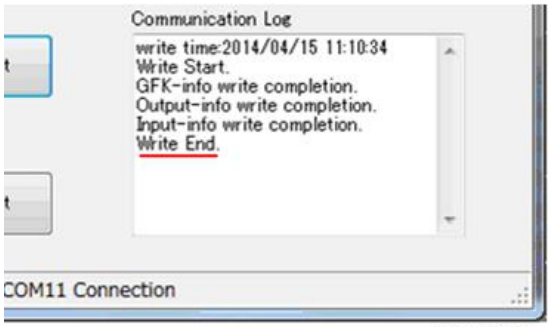


d194z0062

7. Press the [Write Start] button and data writing will begin.
When the "Write End" message displayed in the [Communication Log] window, the process is completed.

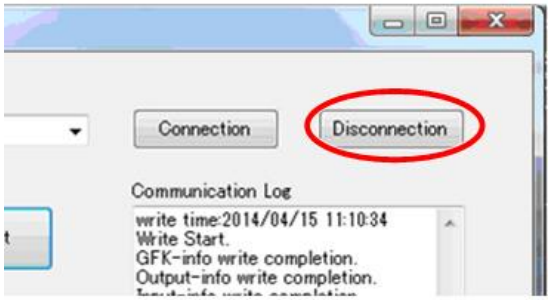


d194z0063



d194z0064

8. Press the [Disconnection] button and close the tool.



d194z0065

9. Press and hold the emergency stop switch on the rear panel of the RPIP interface box for 3 seconds to exit the write mode.

10. Make sure the LEDs, which lit up in the write mode, turn off.

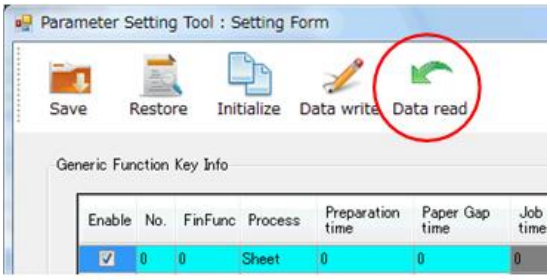
11. Turn the main power switch off.

12. Disconnect the RS-232C cable and attach the connector cover to the serial connector. Then turn the main power switch ON.

The parameter data written on the box will be effective after the device restarted. To restart, power cycle the device.

Note

- "Data read" can be used to read the current parameters written to the RPIP interface box type S3.



d194z0066

External Options (IM C6500/C8000)

LCIT RT4070 (D3HL57)

Refer to LCIT RT5140 (D3HL17).

LCIT RT4060 (D3HK)

Refer to LCIT RT4060 (D3HK).

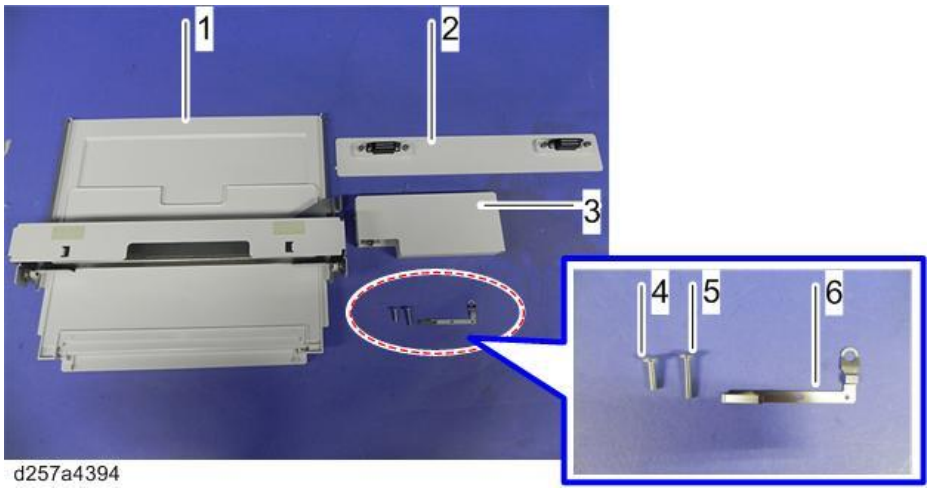
Copy Tray Type M42 (D3J0)

Refer to Copy Tray Type M42 (D3J0).

Banner Paper Guide Tray Type M26 (D3D201)

Accessories

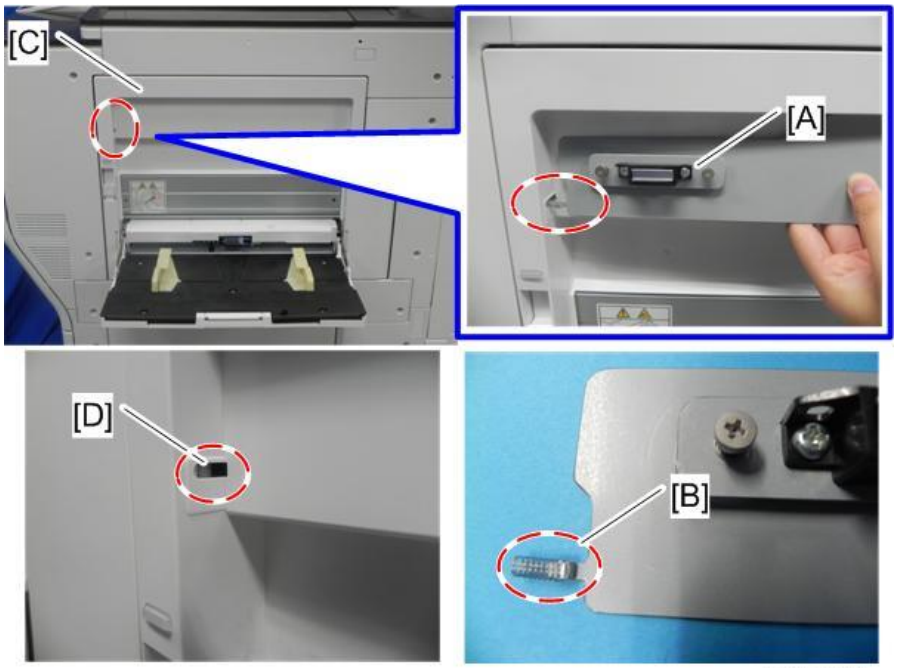
No.	Description	Q'ty	Remarks
1	PAPER FEED TRAY ASS'Y	1	
2	MAGNET PLATE	1	
3	DAMPER ASS'Y	1	
4	SCREW: M4×14	1	
5	SCREW: M4×20	1	
6	GROUND PLATE	1	



Installation Procedure

1. Peel off the release paper of the magnetic plate [A].
2. Press the spring [B] of the magnetic plate [A] against the metal part [D] of the bypass cover [C] to

make a ground connection.



d257a2130

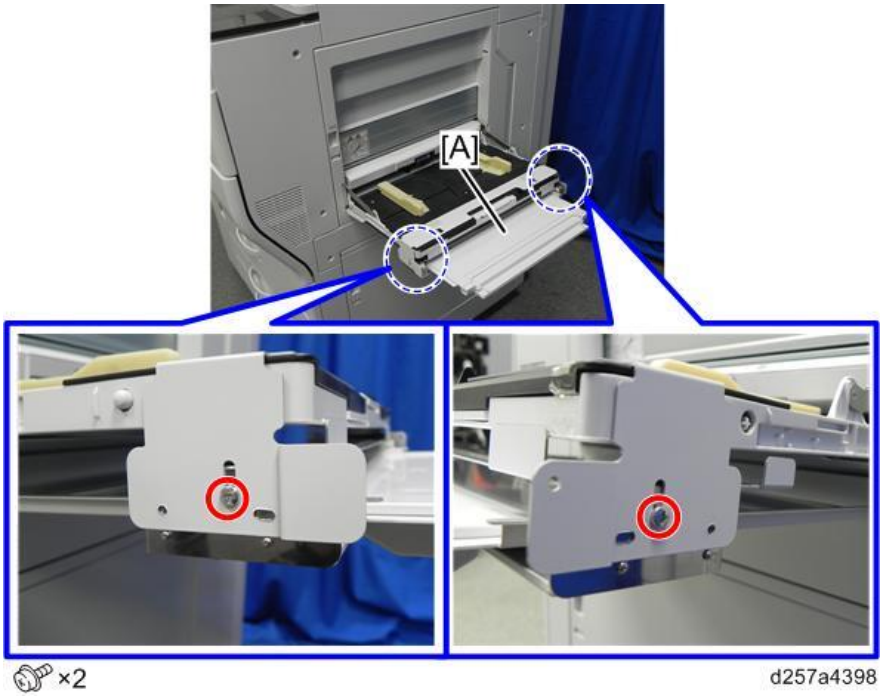
3. Attach the magnetic plate [A] to the bypass cover.

d257a2131

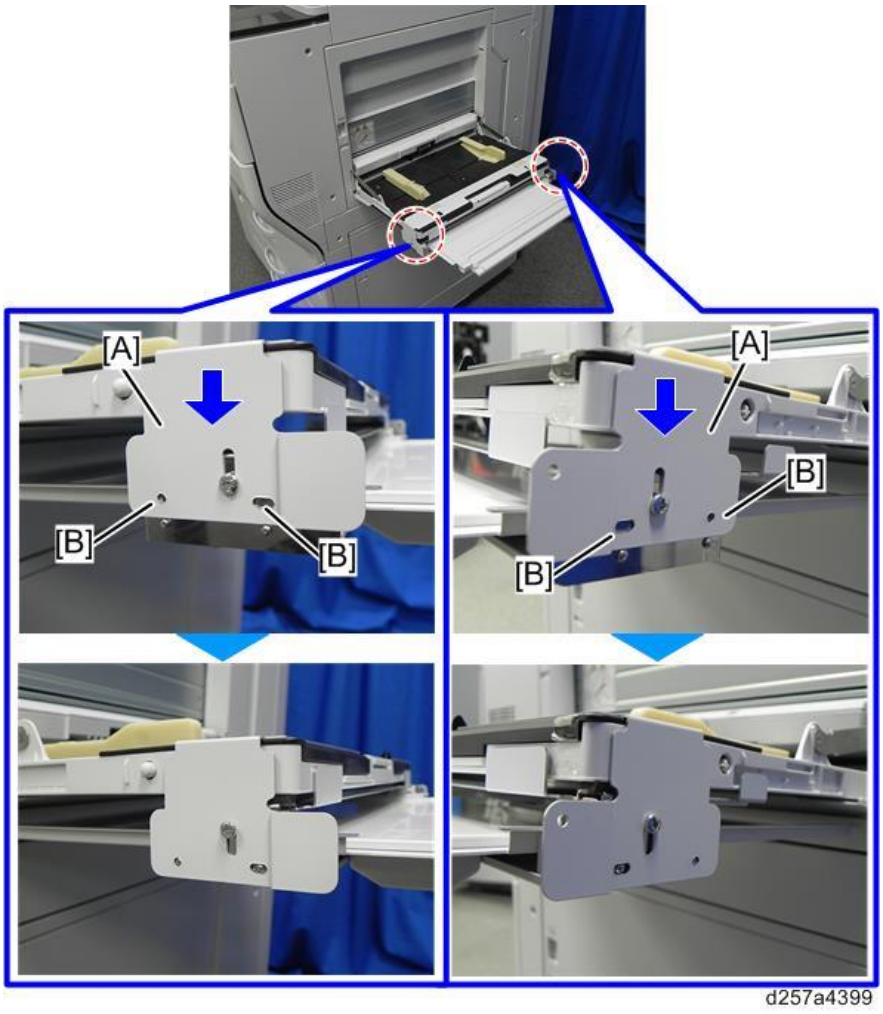
4. Put the paper feed tray assembly [A] on the bypass tray.

d257a4397

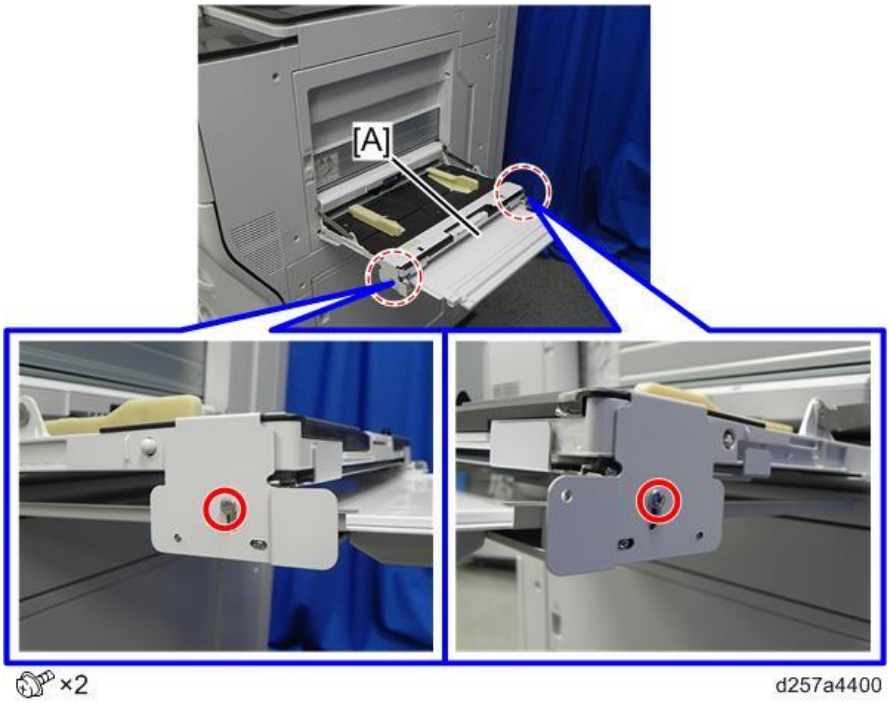
5. Loosen the screws of the paper feed tray assembly [A].



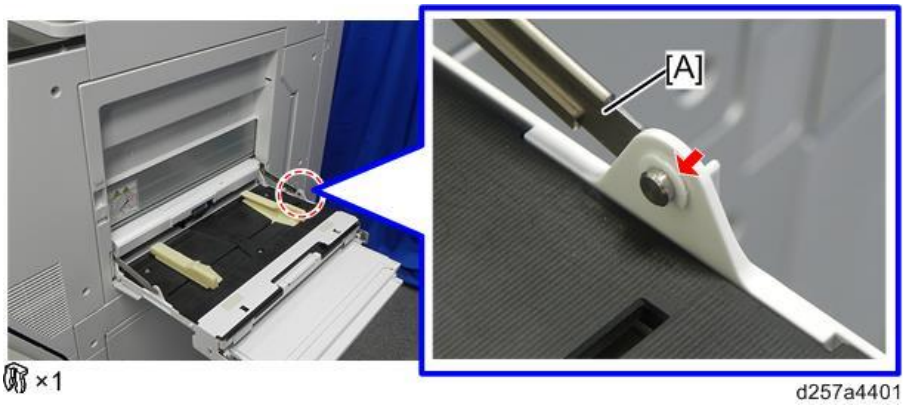
6. Put the bosses in the holes [B] of the counter plate [A].



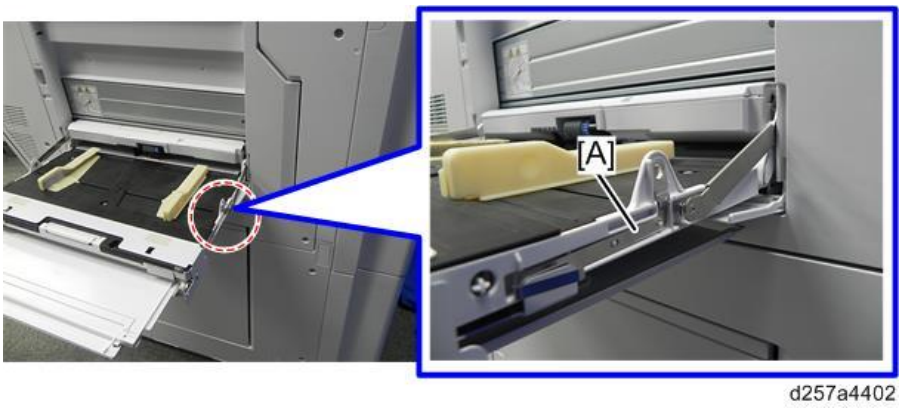
7. Fix the paper feed tray assembly [A].



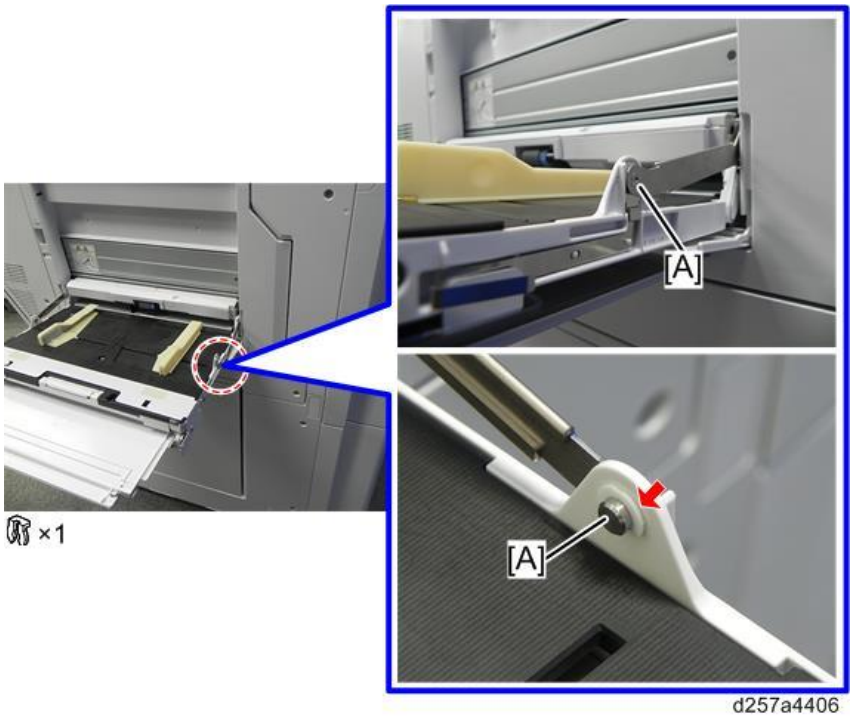
8. Remove the hinge [A].



9. Attach the grounding plate [A].



10. Attach the hinge [A].



Important

When using the Banner Paper Guide Tray with LCIT RT4020 or LCIT RT4050, the guide tray **must be set horizontally**, or skews, registration errors and jams may occur.

With LCIT RT4020

GOOD

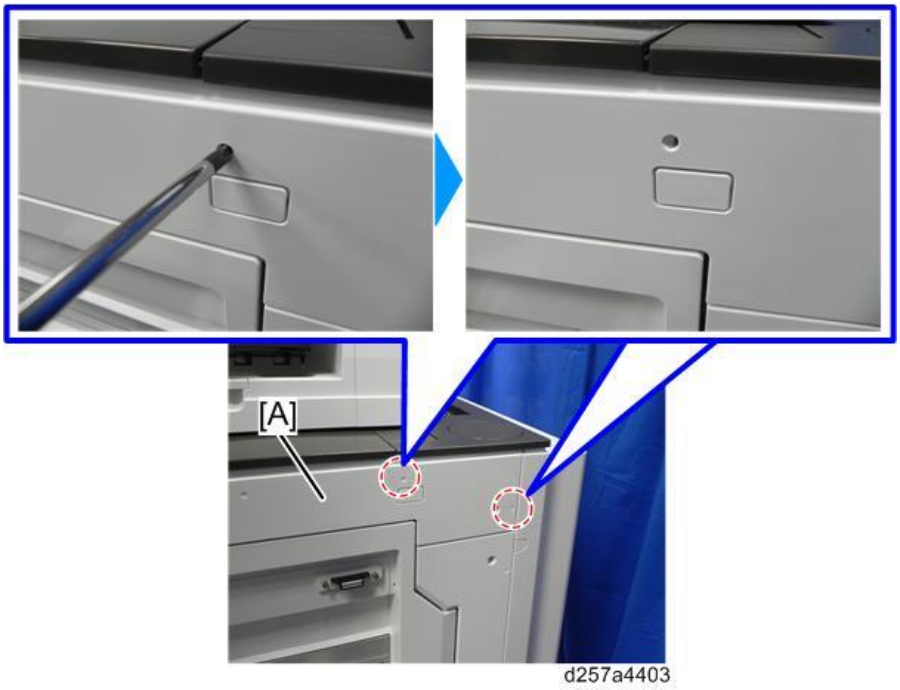
BAD

With LCIT RT4050

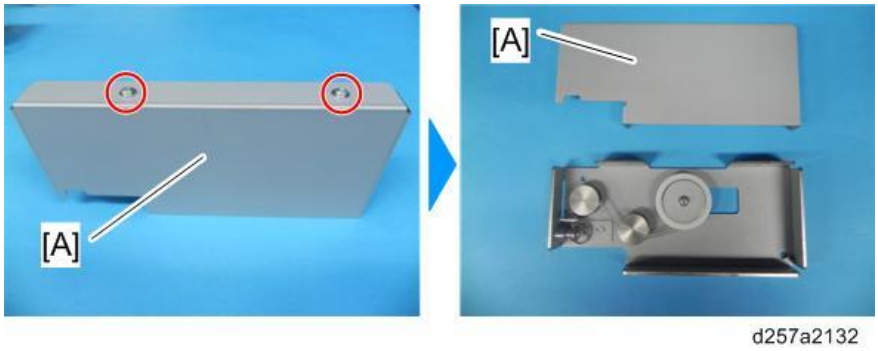
GOOD

BAD

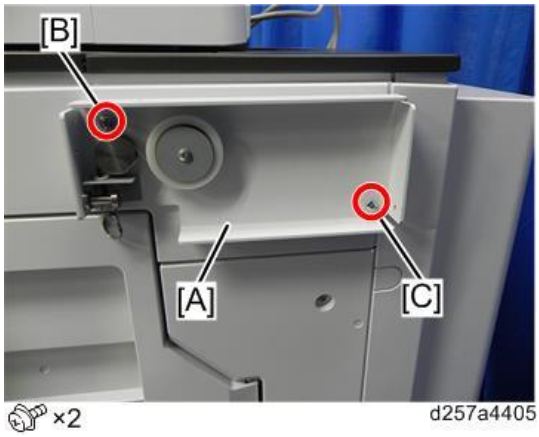
11. Make two screw holes in the right middle upper cover [A] with a screwdriver or drill.



12. Remove the cover [A] of the damper assembly.

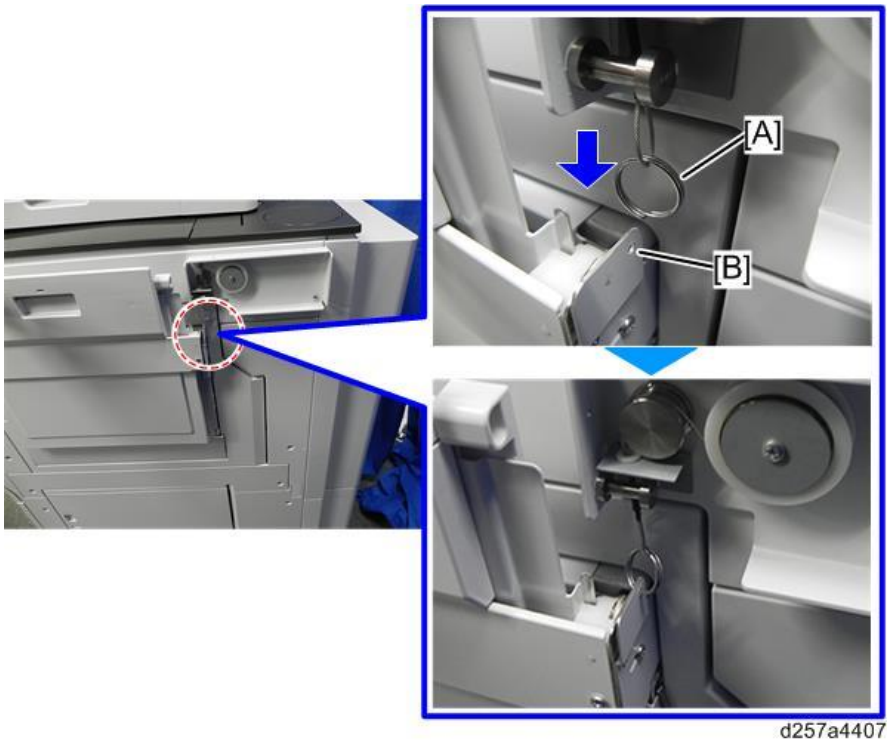


13. Attach the damper assembly [A]. ([B]: M4×20, [C]: M4×14)



14. Close the paper feed tray, so that it is held closed by the magnetic catch.

15. Pull the ring [A] of the damper assembly, and put it in the hole [B] in the paper feed tray assembly.



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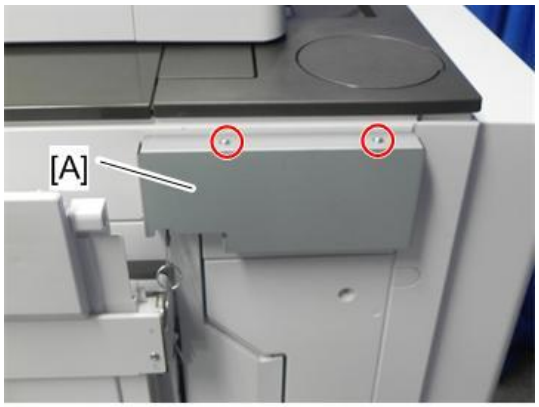
16. Attach the cover [A].



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Cover Interposer Tray CI4050 (D3HF)

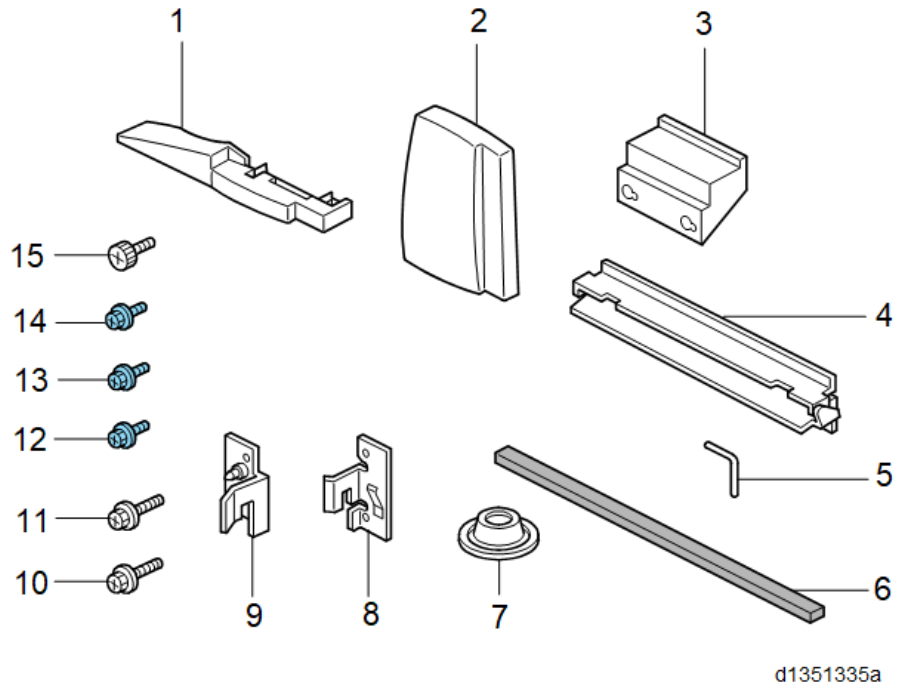
Accessory Check

Check the quantity and condition of the accessories in the box against the following list.

No.	Description	Q'ty
1.	Base Cover (Tray Unit)	1
2.	Rear Cover	1
3.	Spacer	1
4.	Entrance Guide Plate	1
5.	"L" Hinge Pins (Tray Unit Front Cover)	2
6.	Sponge Strip	1

2.Installation

No.	Description	Q'ty
7.	Leveling Shoes	4
8.	Front Docking Bracket	1
9.	Rear Docking Bracket	1
10.	Screw (M4 x 12)	2
11.	Screw (M4 x 14)	4
12.	Screw (M3 x 6)	1
13.	Screw (M3 x 8)	7
14.	Screws (M4 x 8)	1
15.	Flat Knob Screw	1
-	EMC Address	1



Installation Procedure

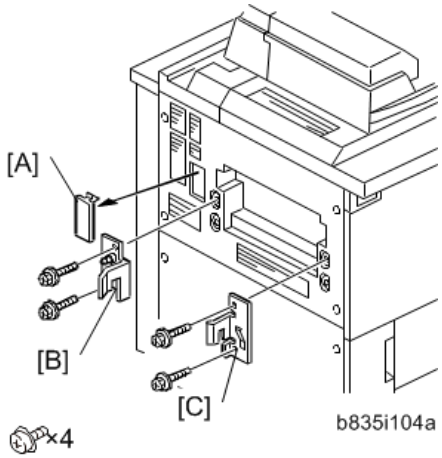
⚠CAUTION

- The unit must be connected to a power source that is close to the unit and easily accessible. Confirm the main machine is switched off, its power cord unplugged and the AC power source is disconnected before beginning the below procedure.
- When the cover interposer tray will be moved to another location, do not disconnect the downstream unit and move them together. If they are disconnected, the cover interposer tray might overturn and cause an injury.

1. Remove all the tape and shipping materials.

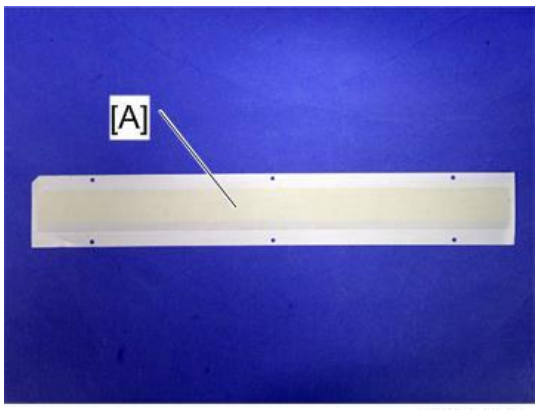
2. Remove the interface connector cover [A].

3. Attach the rear connecting bracket [B] (M4x14) and the front connecting bracket [C] (M4x14).

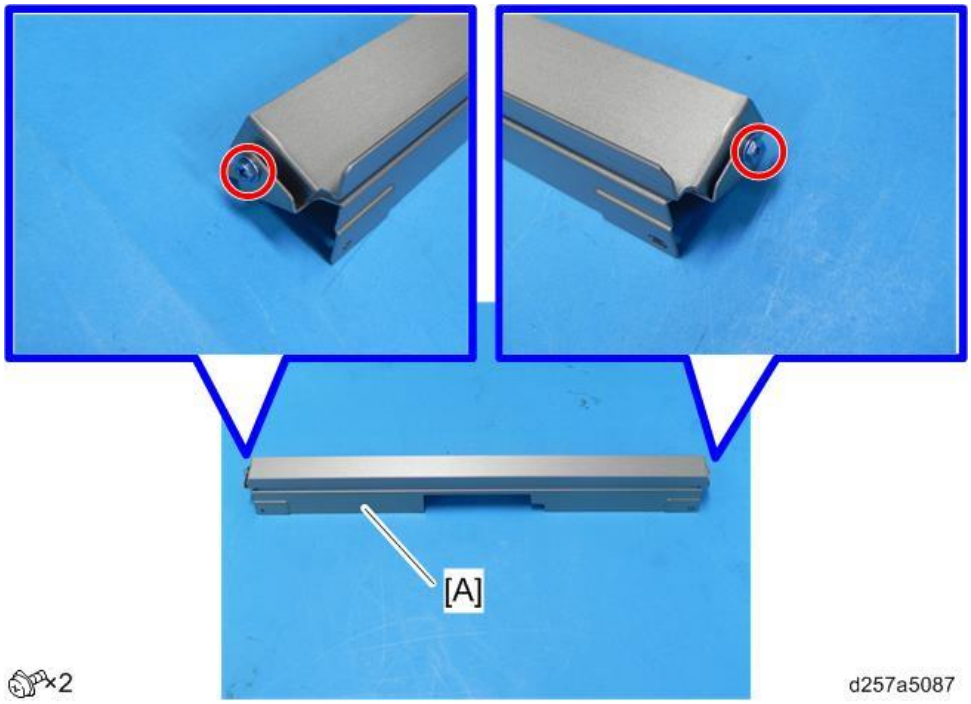


4. If the upstream device is the main machine, prepare the guide sheet [A] provided with the main machine.

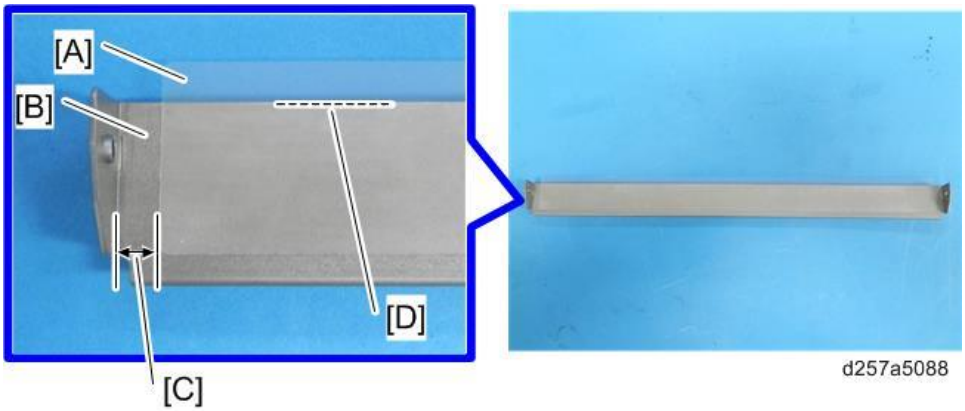
If the upstream device is not the main machine, proceed to step 8.



5. Separate the entrance guide plate [A] into two parts.



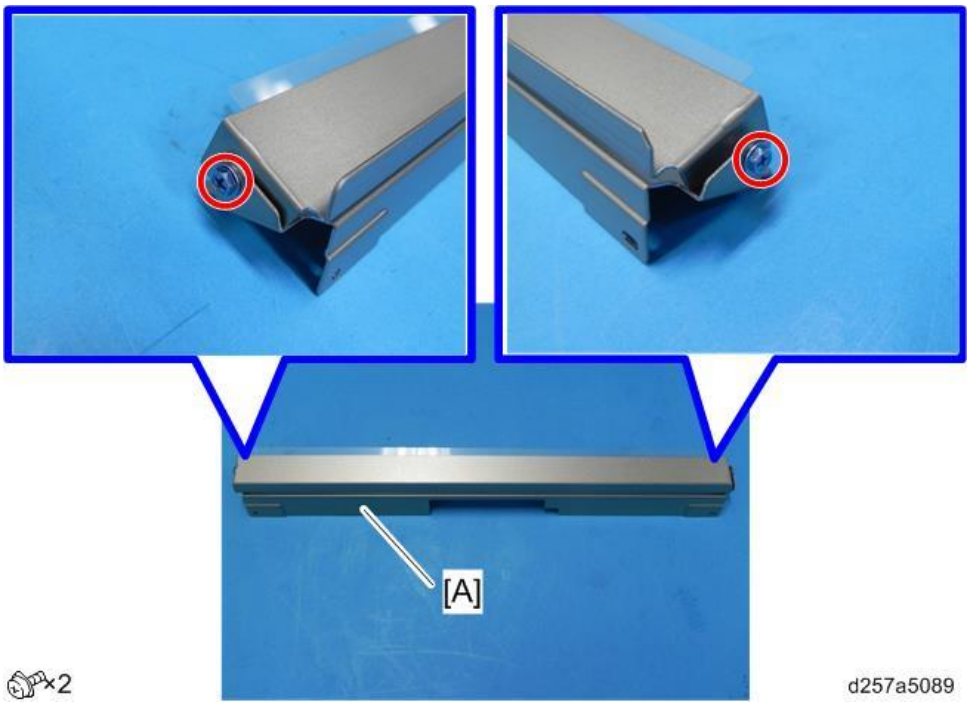
6. Remove the release paper from the guide sheet [A], and attach the guide sheet to the side of the upper entrance guide plate [B] which becomes the inner side when assembled.



[C]: Position the edge of the guide sheet 5 mm inside from the edge of the upper entrance guide plate.

[D]: Align the edge of the adhesive tape with the edge of the upper entrance guide plate.

7. Reassemble the entrance guide plate [A].

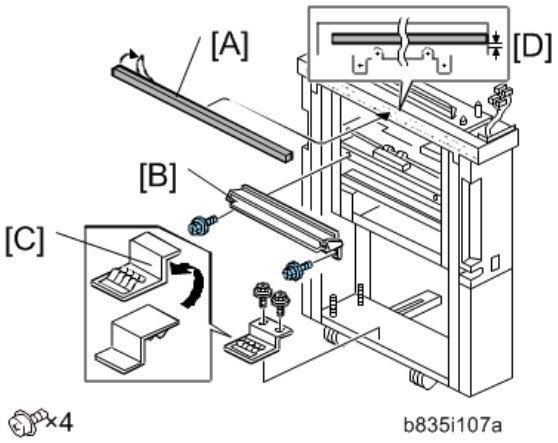


8. Peel the backing from the sponge strip tape [A] and stick it as shown below.

9. Attach the entrance guide plate [B] (M3x6).

10. Remove the grounding plate [C] from the bottom cross-piece. Then turn the grounding plate over

and reattach it with the same screws as shown. (M4x8)

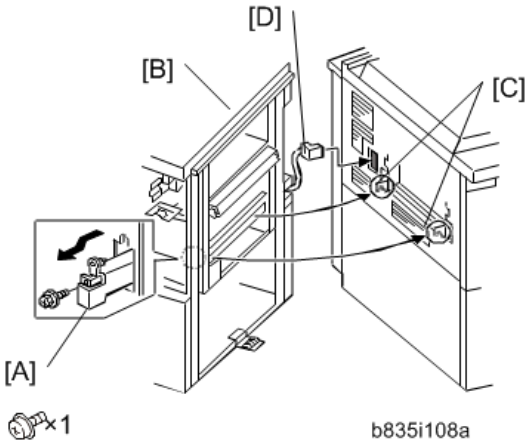


11. Remove the screw and pull out the locking lever [A].

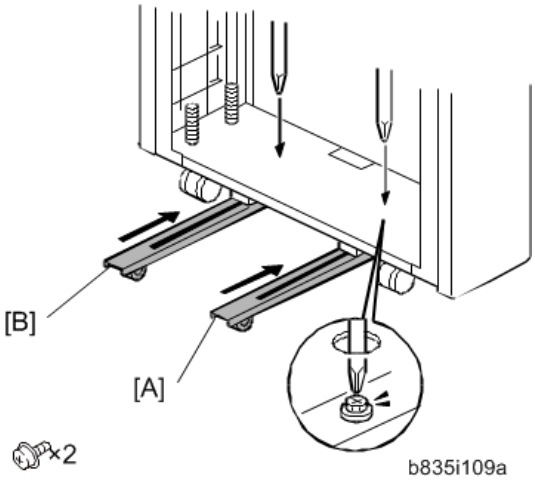
12. Align the finisher [B] with the connecting brackets [C], then slowly push the finisher onto the brackets to connect the finisher cable [D] to the copier.

13. Push in the locking lever and fasten it with the screw removed in the step 11.

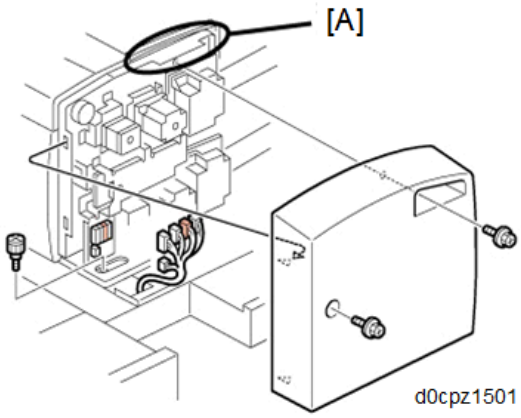
14. Connect the interface cable [D] to the main machine.



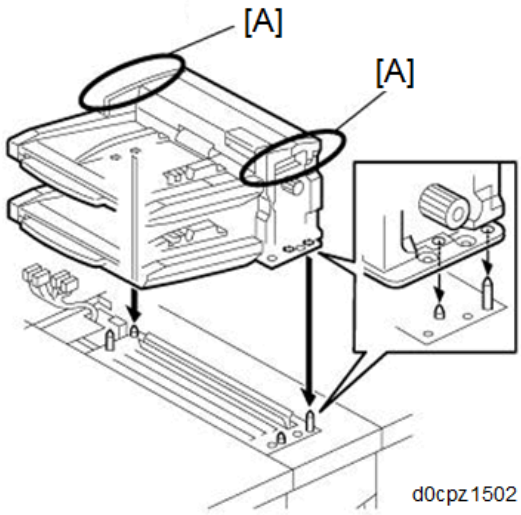
15. Push the runners [A] and [B] in and fasten again with the screws.



16. Remove the rear cover. *Holding point [A] in installing

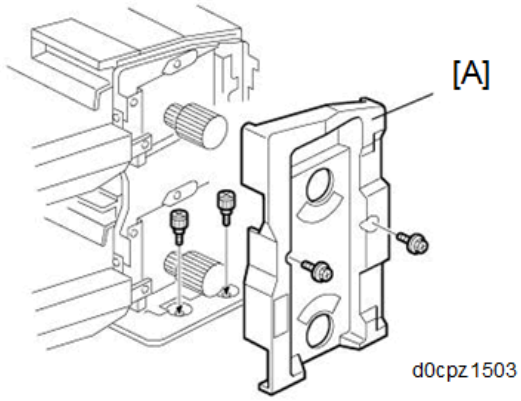


17. Install the feed unit by holding the following handles [A].



18. Remove the front cover [A].

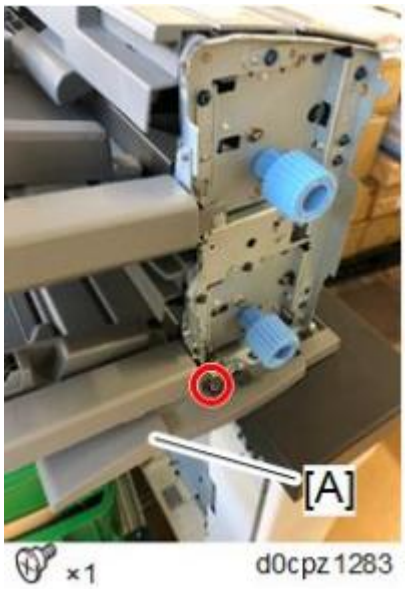
19. Secure the feed unit. (M4x8: 2 screws)



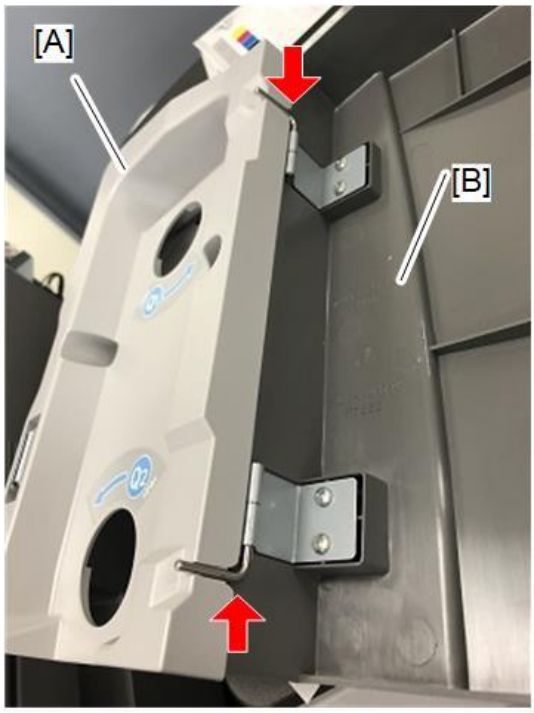
20. Attach the front spacer [A] to the feed unit. (M4x10: 1 screw)

Note

Fasten it with your hands. Do not use a driver because the screw head might break.



21. Assemble the front cover [A] and front door [B]. (Securing pin x 2)



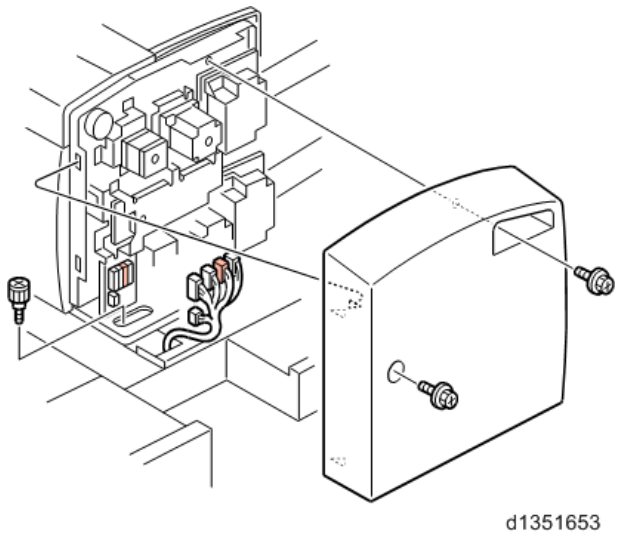
22. Attach the front cover [A].

23. Secure the rear of the feed unit with 1 screw (M4x8) and the 5 connecters.

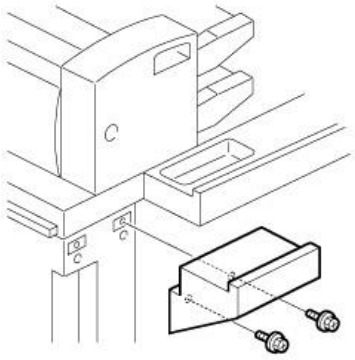
24. Attach the rear cover of the feed unit. (x2)

Note

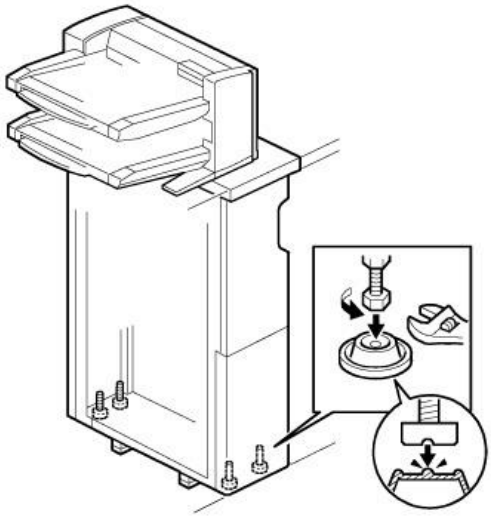
Do not pinch the harness while installing the rear cover.



25. Attach the rear spacer. (M4x12: 2 screws)



26. Set the leveling shoes and adjust the height.



27. Plug in and turn ON the main power.

Multi-Folding Unit FD4020 (D3HH)

Note

- To use Multi-Folding Unit FD4020, one of the following is also required: Finisher SR4150, Booklet Finisher SR4160, or Finisher SR4140

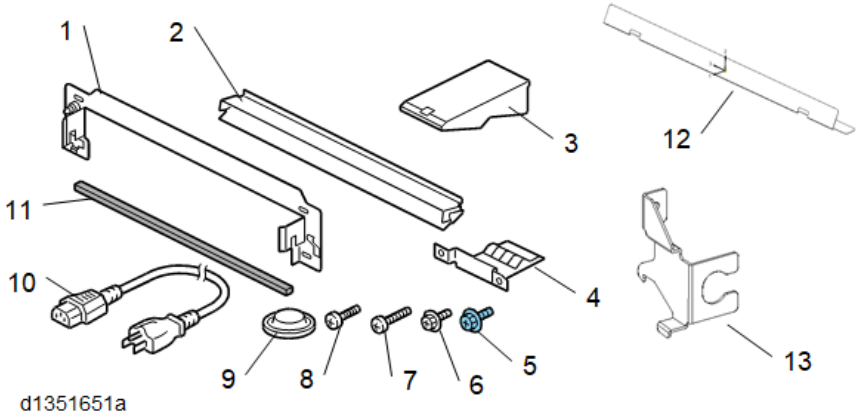
Accessories

Check the quantity and condition of the accessories in the box against the following illustration and list.

No.	Description	Q'ty
1.	Joint Bracket	1
2.	Entrance Guide Plate – Long	1
3.	Support Tray	1
4.	Ground Plate	1
5.	Screws 3x6	2
6.	Screws M3x6	2
7.	Screws M4x20	4

No.	Description	Q'ty
8.	Screws M4x14 (Not used)	4
9.	Leveling Shoes	5
10.	Power Cord *1	1
11.	Sponge Strip	1
12.	Guide Plate: Quenching	1
13.	Power cord bracket	1
-	EMC Address	1

*1: When using this unit in China, do not use this power cord provided with this unit. Contact your supervisor and use the power cord specified for use in China.



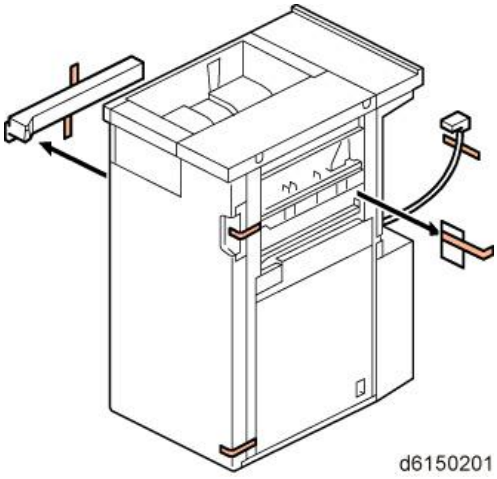
Installation

⚠CAUTION

- The unit must be connected to a power source that is close to the unit and easily accessible.
- Make sure that the main machine is switched off and that its power cord is disconnected before doing the following procedure.

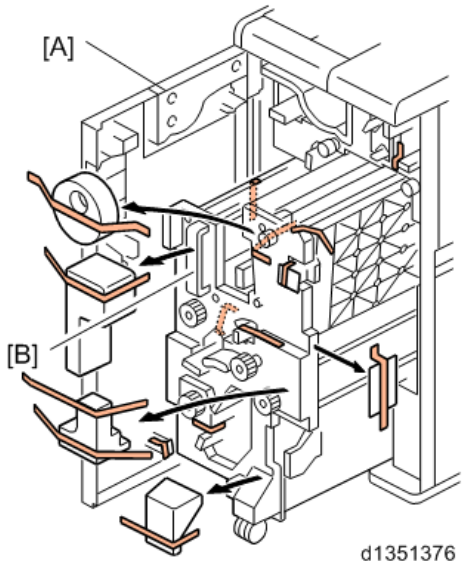
Tapes

1. Remove all tape and retainers from the front, left, rear, and right sides.



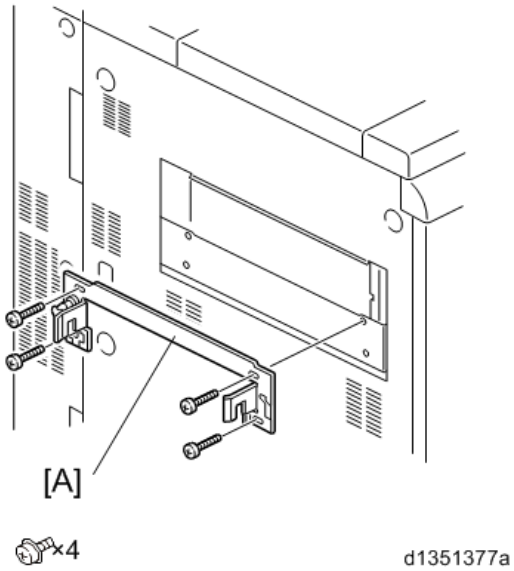
2. Open the front door [A].

3. Remove all tape from inside [B].



Paper Guide, Sponge Strip

1. Fasten the connecting bracket [A] to the left side of the upstream device. (M4x20)



2. If a downstream device will be installed then fasten the connecting bracket, provided with the device to be installed, to the left side of the multi-folding unit. (M4x14)

Note

- Use the screws provided with the downstream device.
- If no screws are provided with the downstream device, use the screw provided with this option.

3. Select the long entrance guide plate for the installation.

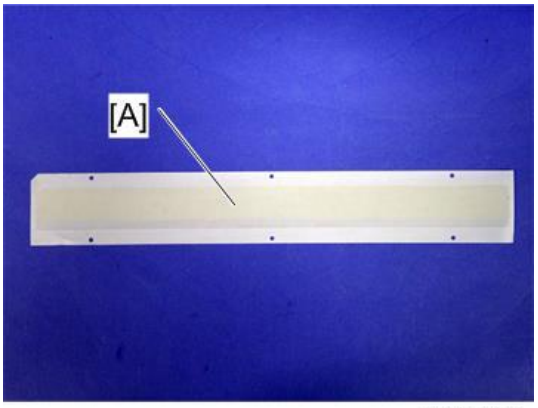
- Two entrance guide plates are provided.
- The short one is for another machine.

Important

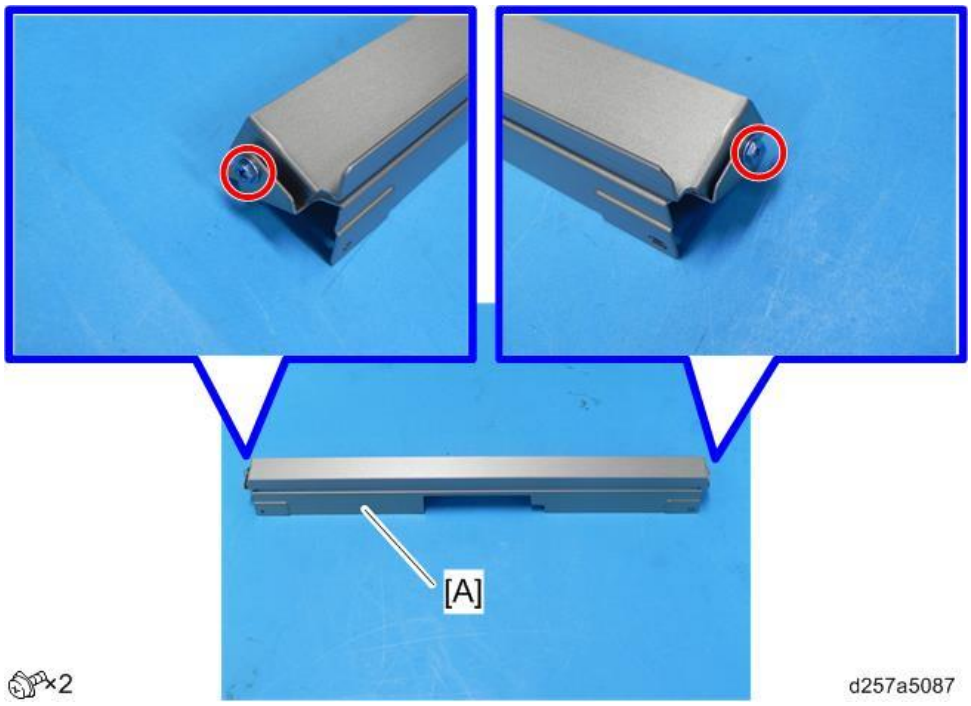
- If the upstream device is the Decurl Unit DU5020 (D727), attach the black mylar provided with the cover interposer tray (Cover Interposer Tray CI4040) or decurl unit to this entrance guide plate.

4. If the upstream device is the main machine, prepare the guide sheet [A] provided with the main machine.

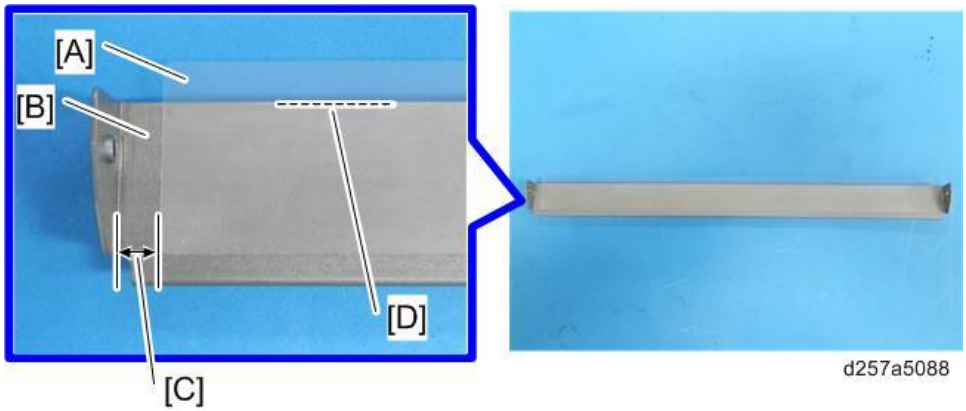
If the upstream device is not the main machine, proceed to step 8.



5. Divide the entrance guide plate [A] into two parts.



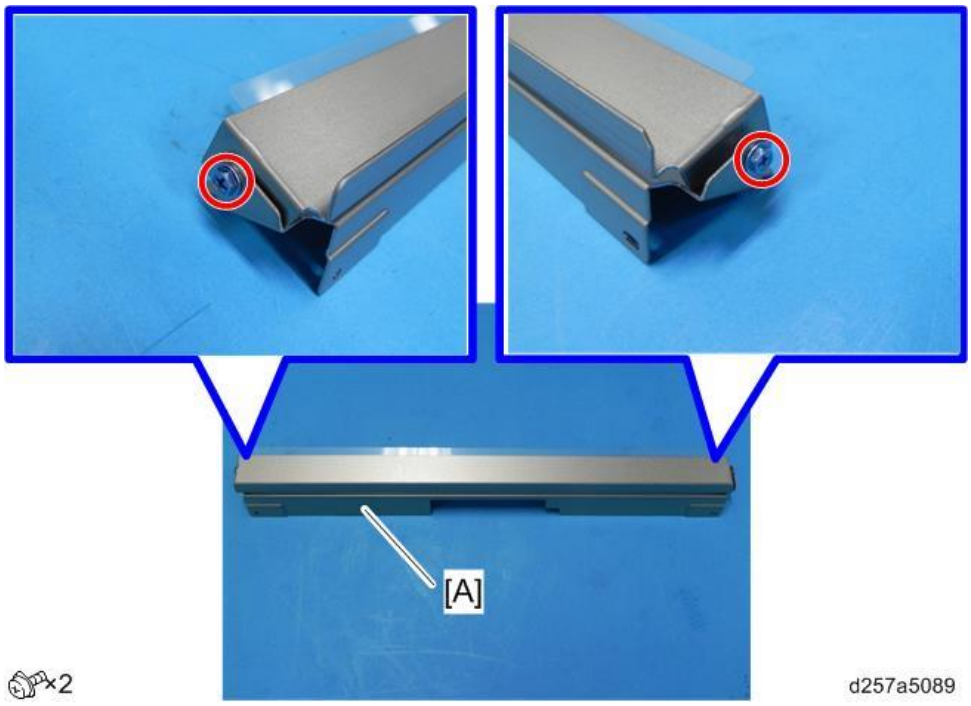
6. Remove the release paper from the guide sheet [A], and attach the guide sheet to the side of the upper entrance guide plate [B] which becomes the inner side when assembled.



[C]: Position the edge of the guide sheet 5 mm inside from the edge of the upper entrance guide plate.

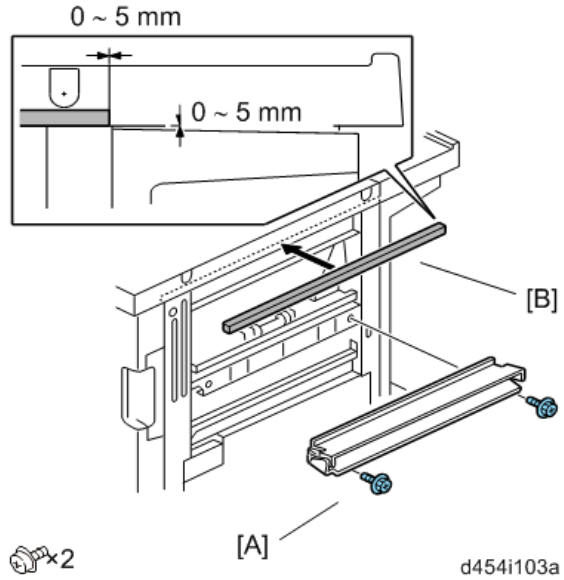
[D]: Align the edge of the adhesive tape with the edge of the upper entrance guide plate.

7. Reassemble the entrance guide plate [A].



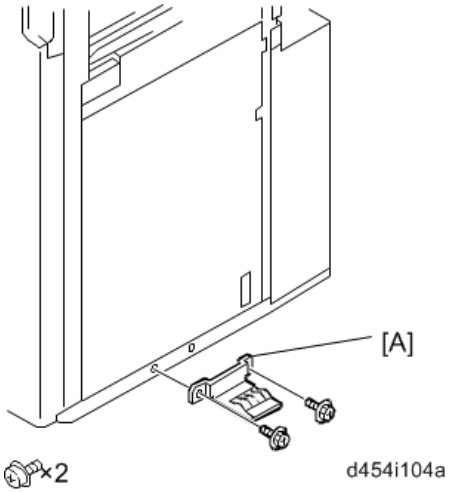
8. Attach the long entrance guide plate [A] to the left side of the multi-folding unit. (M3x6)

9. Peel the tape from the sponge strip [B], and attach the strip to the top right edge of the multi-folding unit.



Ground Plate

1. Attach the grounding plate [A] to the lower right edge of the unit. (M3x6)



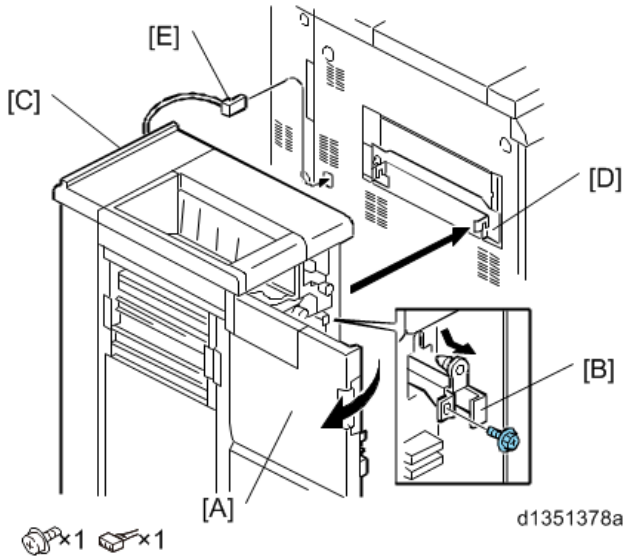
Docking

Do steps 8 to 12 only if the upstream device is the Cover Interposer Tray CI4050.

1. Open the front door [A].
2. Remove the lock bar screw [B] (M3x6) on the front right corner and keep it.
3. Pull out the lock bar.
4. Slowly push the unit [C] against the left side of the upstream device (or main machine) so that the lock bar is directly and squarely move under the arms of the connecting bracket.
5. Push in the lock bar so it slides up into the notches in the arms on both ends of the connecting bracket [D].
6. Secure the lock bar with the screw removed in Step 2.
7. Connect the I/F cable [E] to the upstream device (or main machine).

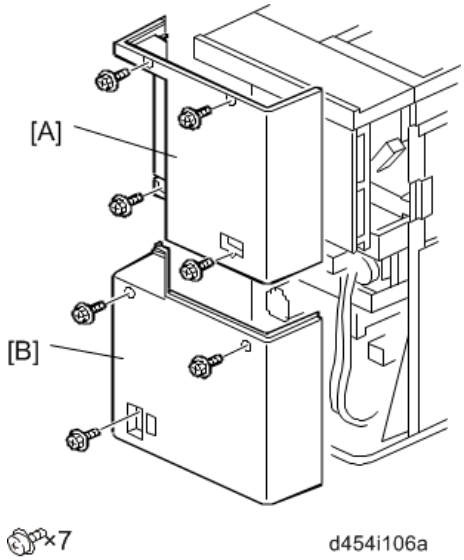
Note

- If you are connecting to the main machine, you must first remove the plastic cap on the I/F cable connection point.



8. Remove the items below:

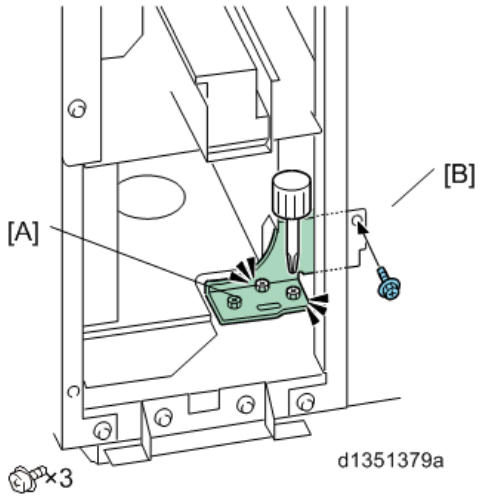
- [A] Rear upper cover
- [B] Rear lower cover



9. Use a stubby screwdriver to loosen the bracket [A].

10. Fasten the bracket to the upstream device at [B].

11. Tighten the screws.

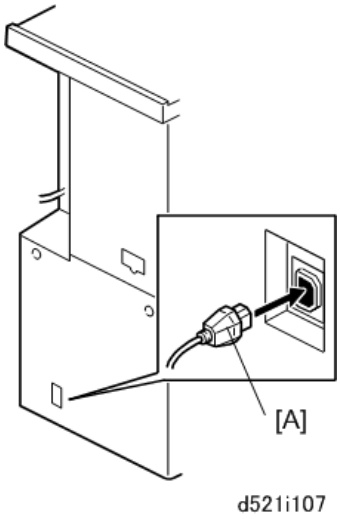


12. Re-attach the rear covers.

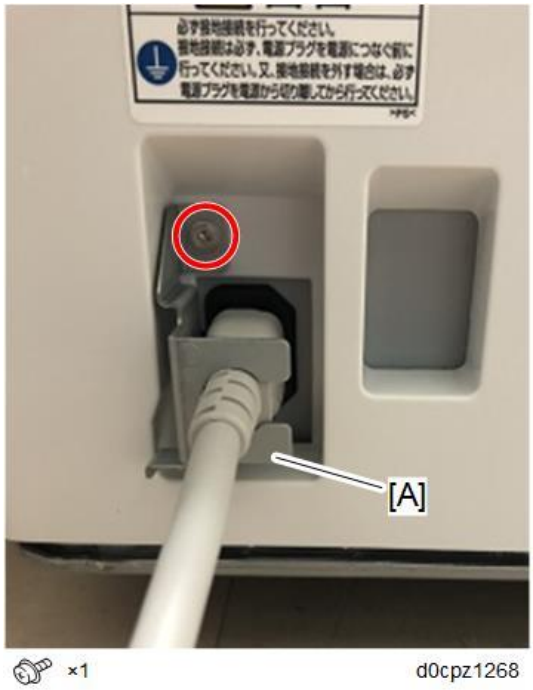
13. Insert the power cord [A] into the power connection point.

Important

- In China, do not use the power cord provided with this unit. Contact your supervisor and use the power cord specified for use in China.



14. Attach the power cord bracket [A].



15. Plug in the power cord for the Multi-Folding Unit into an AC wall outlet.

16. Disconnect the power cord from the copier, and then press the main power switch.

Important

- Pressing the main power switch will release the residual charge from the machine. If you do not do this step, the copier will not recognize the Multi-Folding Unit and cause paper jams. (See Notes on the Main Power Switch.)

17. Plug in the copier's power cord to an AC wall outlet.

18. Turn ON the main power switch.

Important

- If the copier main power turns on automatically when you plug in the cord, wait until the machine finishes warming up. Then, turn the main power OFF and ON again.

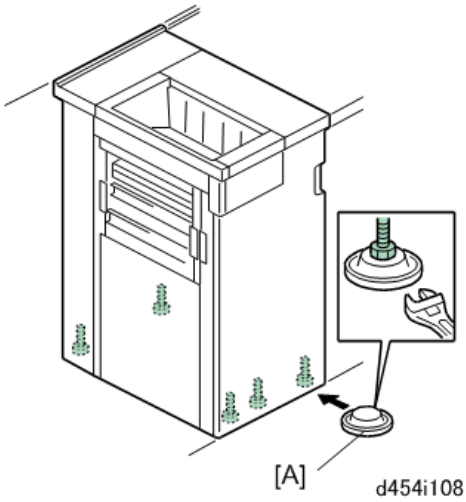
19. Make sure that the Multi-Folding Unit operates correctly.

Height Adjustment

Adjust the height of the unit and ensure it is level.

1. Turn the lower nut to lower the bolt.

2. Set the leveling shoes [A] below the bolt.



Removing Parts for the Cover Interposer Tray CI4050

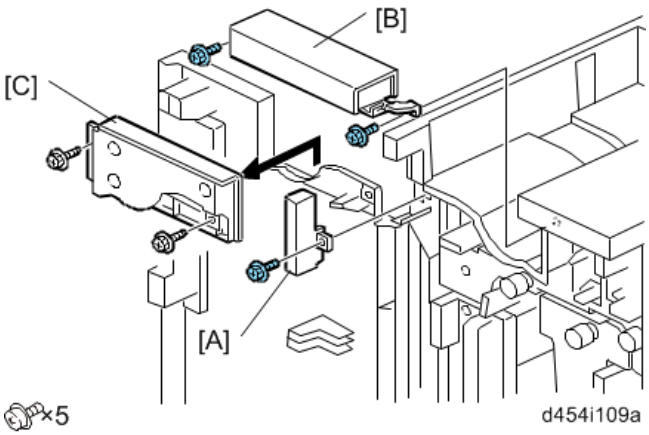
Three parts must be removed before the tray unit of the cover interposer tray can be mounted on top of the Multi Folding Unit.

1. Open the front door.

Important

- The following parts require removal only if the upstream device is the Cover Interposer Tray CI4050.
- These parts must be removed so that the tray unit of the Cover Interposer Tray will fit on top of the Multi Folding Unit.

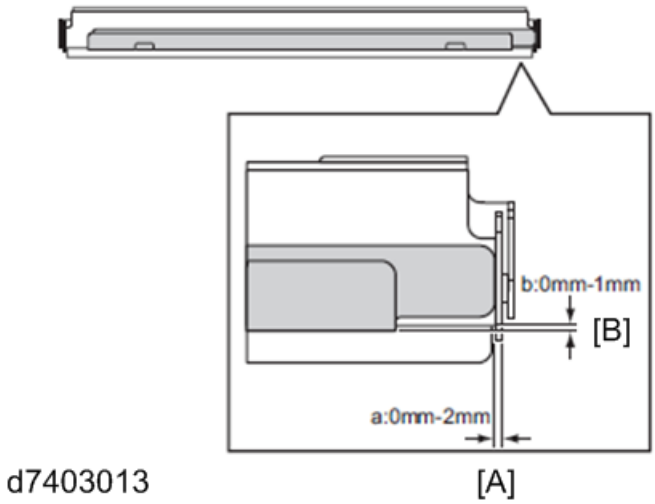
2. Remove:
   - [A] Bracket
   - [B] Cross-piece
   - [C] Metal plate from the door
3. After removing [B] and [C], reattach [A].



Attaching the Guide Plate

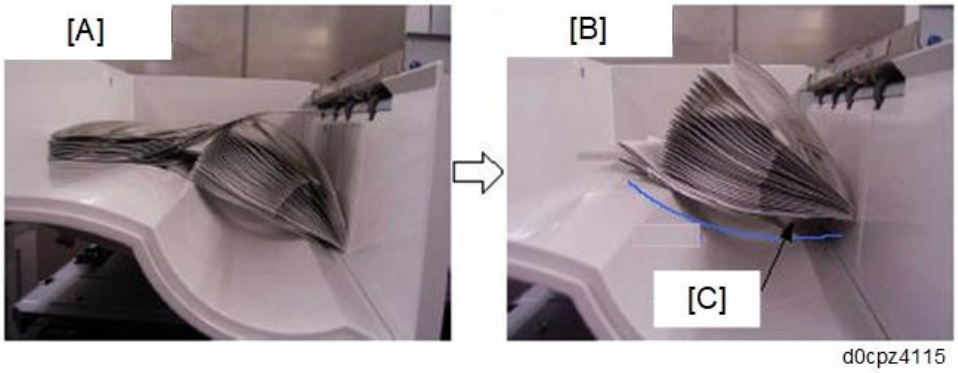
Attach the polyester film aligned along the edge of the entrance guide plate of the downstream unit.

- The gap between the polyester film and the edge should be within 2 mm at [A].
- The gap between the polyester film and the edge should be within 1 mm at [B].



Installing the Z-fold Support Tray

Use Z-fold support tray if Z-folded paper is output to the paper tray on the multi-folding unit.



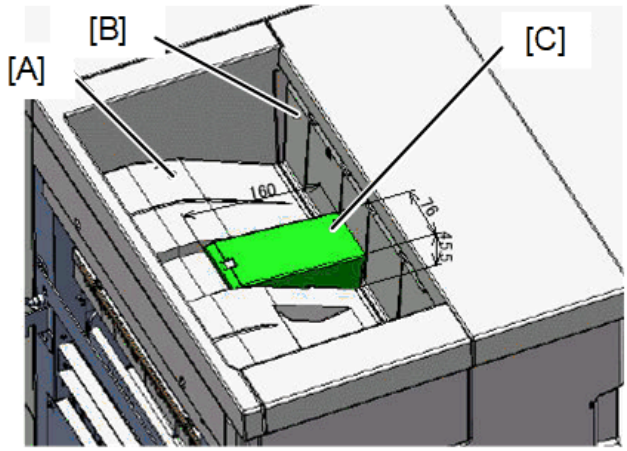
[A]: Without support tray

[B]: With support tray

[C]: Support tray

Installation Procedure

Place the support tray at the center of the concave side of the multi-folding tray [A]. The back of the support tray [C] should touch the end fence [B].



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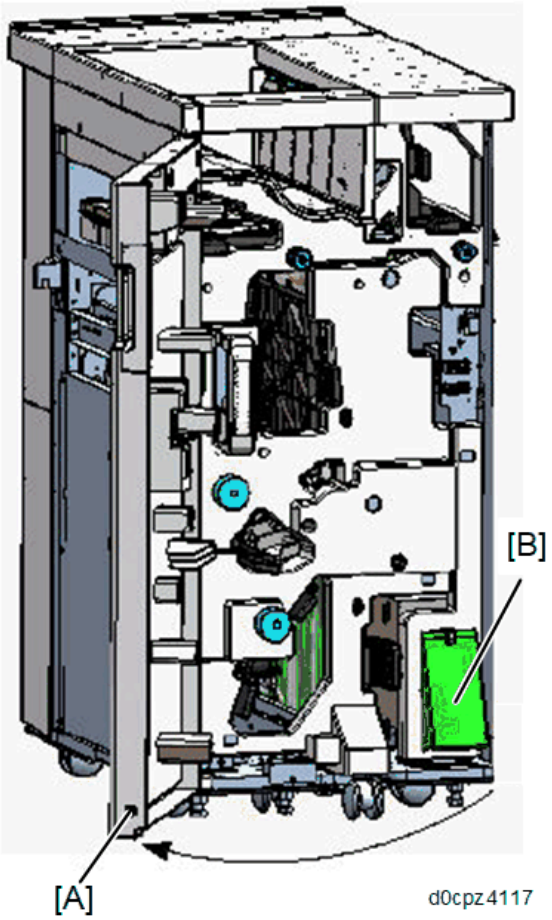
Storage Space

If the support tray is not used, open the front door [A] and hang the tray on the inner cover as shown [B].



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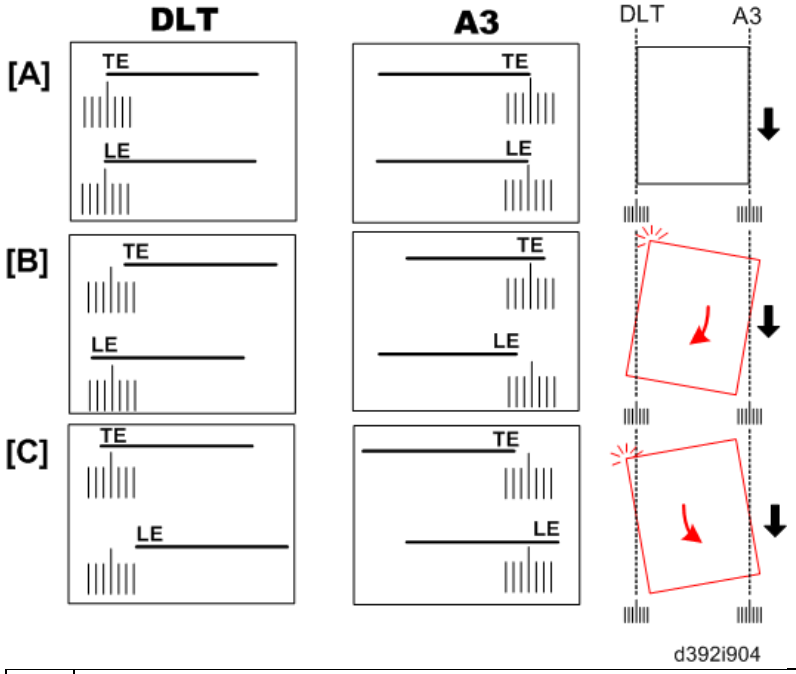
Skew Correction

Detecting Paper Skew

Do this check to detect the presence of skew in the paper path.

1. Make sure that the I/F cable of the unit is connected to the upstream device.
2. If a peripheral unit is connected on the left side, disconnect it and pull it away.
3. Execute a straight-through run.
4. Check the scale where each sheet exits.
   - The rear scale is for DLT-size paper.
   - The front scale [2] is for A3-size paper.
   - Be sure to read the correct scale for the paper size in use.



[A]	Centered. No adjustment necessary.
[B]	Trailing edge skew to the front, total skew more than ±2 mm. Adjustment required.
[C]	Trailing edge skew to the rear, total skew more than ±2 mm. Adjustment required.

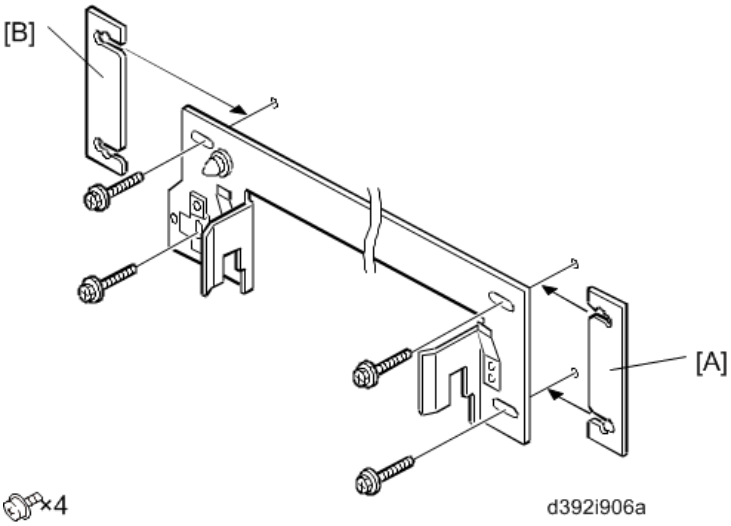
Correcting Skew

1. Disconnect the multi-folding unit from the upstream device.

2. Remove the spacers from the multi-folding unit.

d454i111

3. Loosen the screws of the connecting bracket attached to the upstream device.
4. Insert a spacer and tighten the screws.
   If the trailing edge is skewing toward the front of the machine, insert a spacer [B] under the rear end of the bracket and tighten the screws.
   Or, if the trailing edge is skewing toward the rear of the machine, insert a spacer [A] under the front end of the bracket and tighten the screws.



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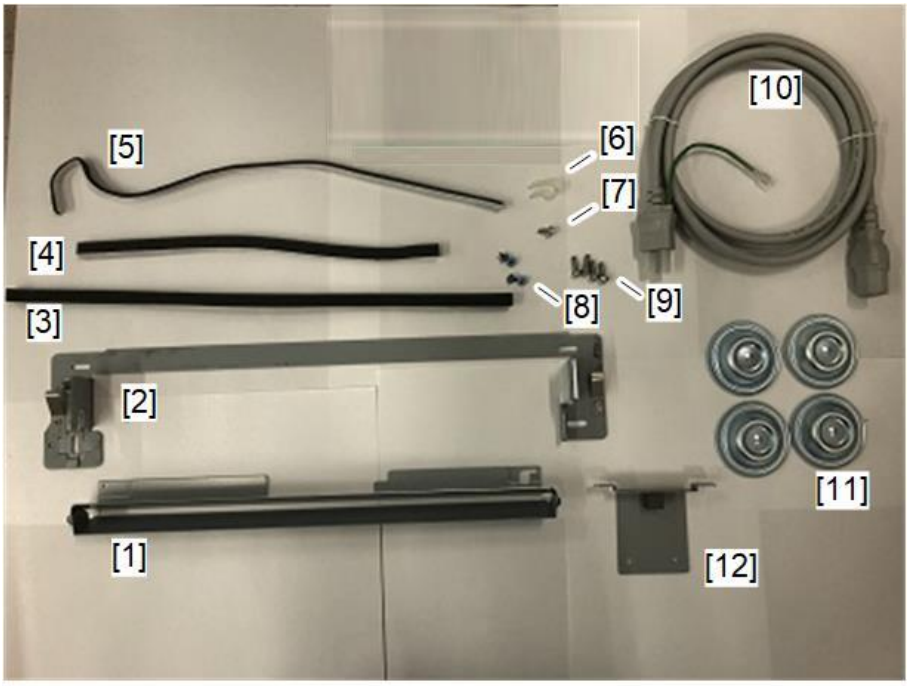
5. Do another run to check the adjustment. If skew is still present, insert another spacer.
   - Each spacer is 2 mm thick.
   - Only two spacers are provided, so the maximum adjustment is 4 mm (using two spacers).

Multi-Folding Unit FD4010 (D3HJ)

Note

- For installing this option, one of the Finisher SR4150, Booklet Finisher SR4160 or Finisher SR4140 is required.
- Multi-Folding Unit FD4020 and Multi-Folding Unit FD4010 cannot be used simultaneously.

Accessories



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No.	Description	Q'ty	Remark
1	Relay guide plate	1	
2	Docking bracket	1	
3	Sponge strip	1	
4	Sponge strip	1	
5	Sponge strip (410mm)	1	
6	Clamp	1	
7	Tapping Screw 4x10	1	
8	Tapping Screw 3x6	4	
9	Screw 4x14	4	
10	Power cord	1	
11	Leveling shoe	4	
12	Ground plate	1	
-	EMC sheet	1	EU only

Installation Procedure

⚠CAUTION

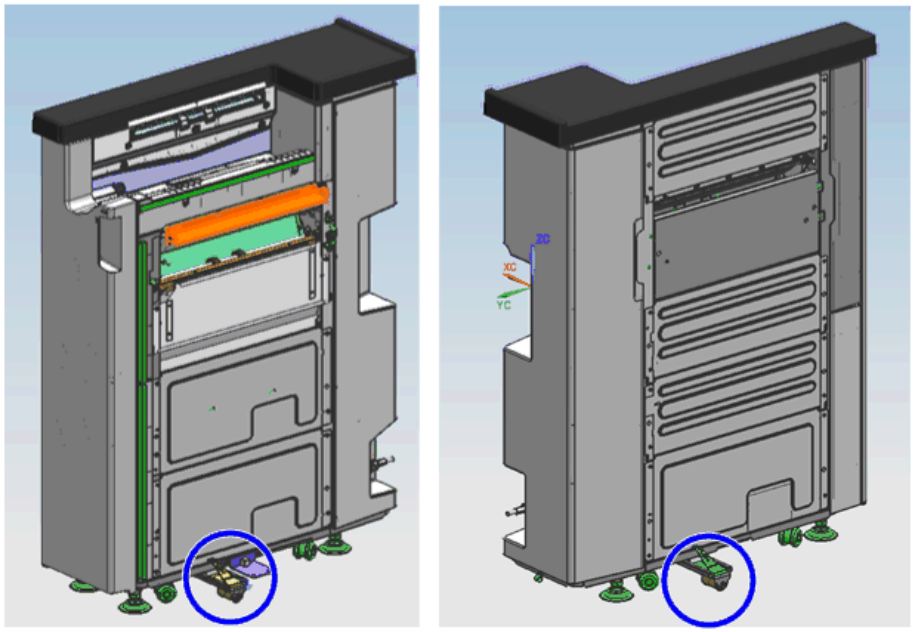
- Always turn off and unplug the power cable of the machine before the following procedure.

Note

If installing downstream options to this option, be sure to check the registration skew before installing downstream options.

Tapes

1. Remove the tape and retainers.
2. Pull out the fall-prevention parts.



Pressing the Folding Roller

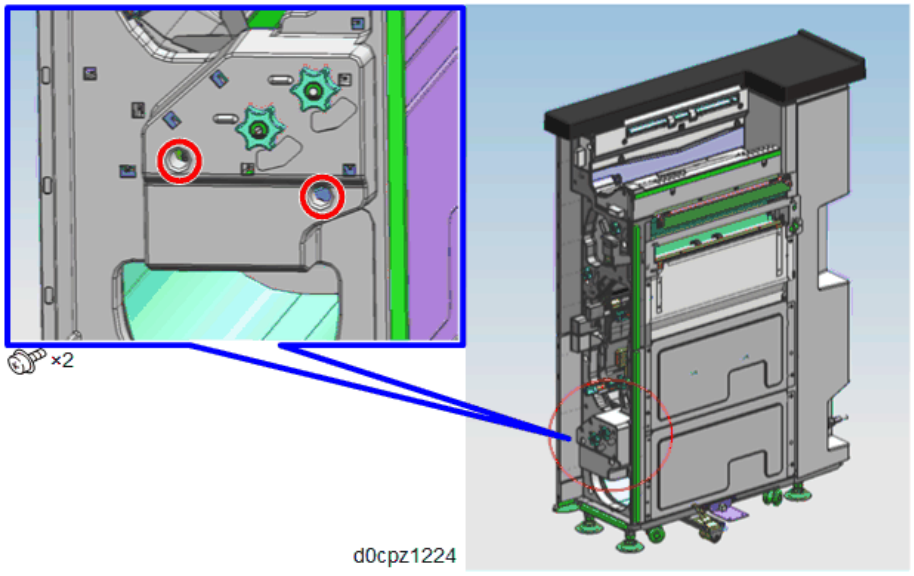
⚠CAUTION

Be sure to do this steps. Otherwise, noises or folding errors may occur.

1. Open the front cover.
2. Tighten the two screws.

Note

Do not apply excessive torque.

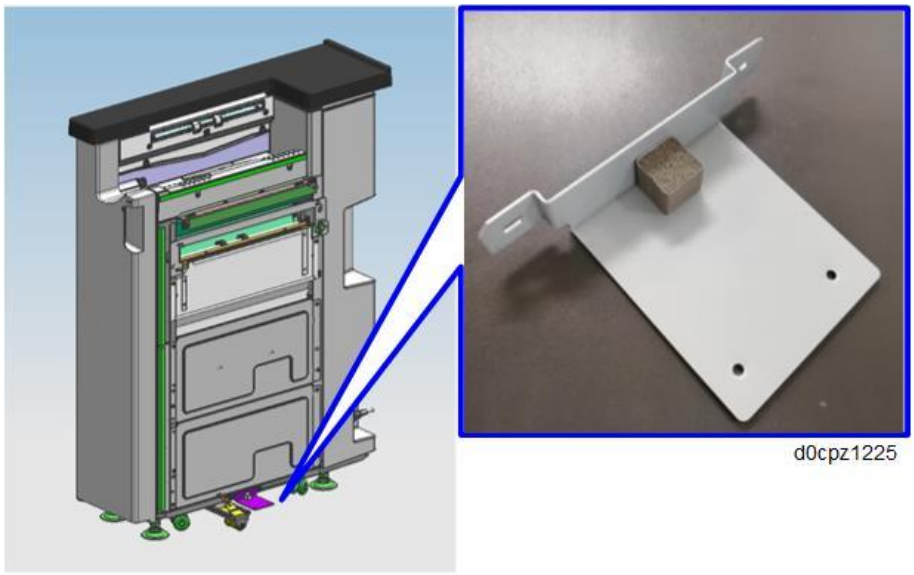


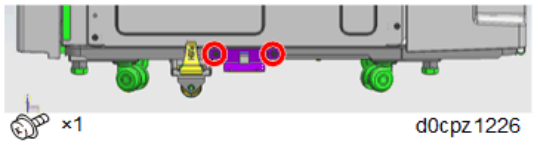
Ground Plate

1. Attach the ground plate.

Note

When tightening the screw, be careful of the unit falling off.

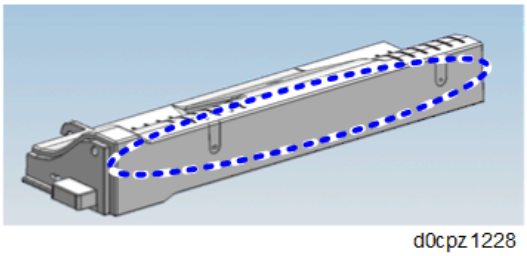




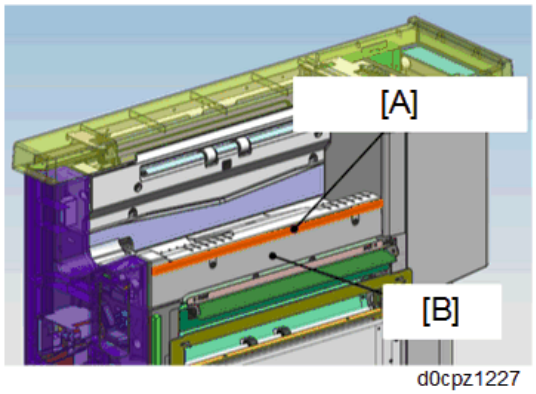
Sponge Strip

Entrance Guide Plate Sponge Strip

1. Clean the attachment surface, where the sponge strip will be adhered, with alcohol.

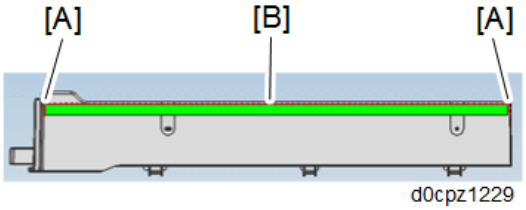


2. Adhere sponge strip [A] to the tray [B] as shown below.



Note

Checking points:



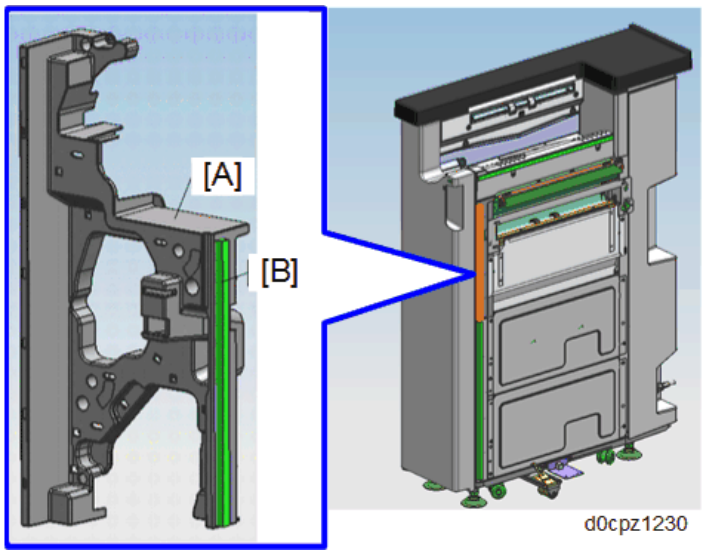
[A]: Do not extend beyond the edges.

[B]: Clearance 0 - 2 mm: Do not extend.

3. Press the sponge strip to fix it completely.
4. Make sure that the sponge strip is not twisted, floating or peeled off.

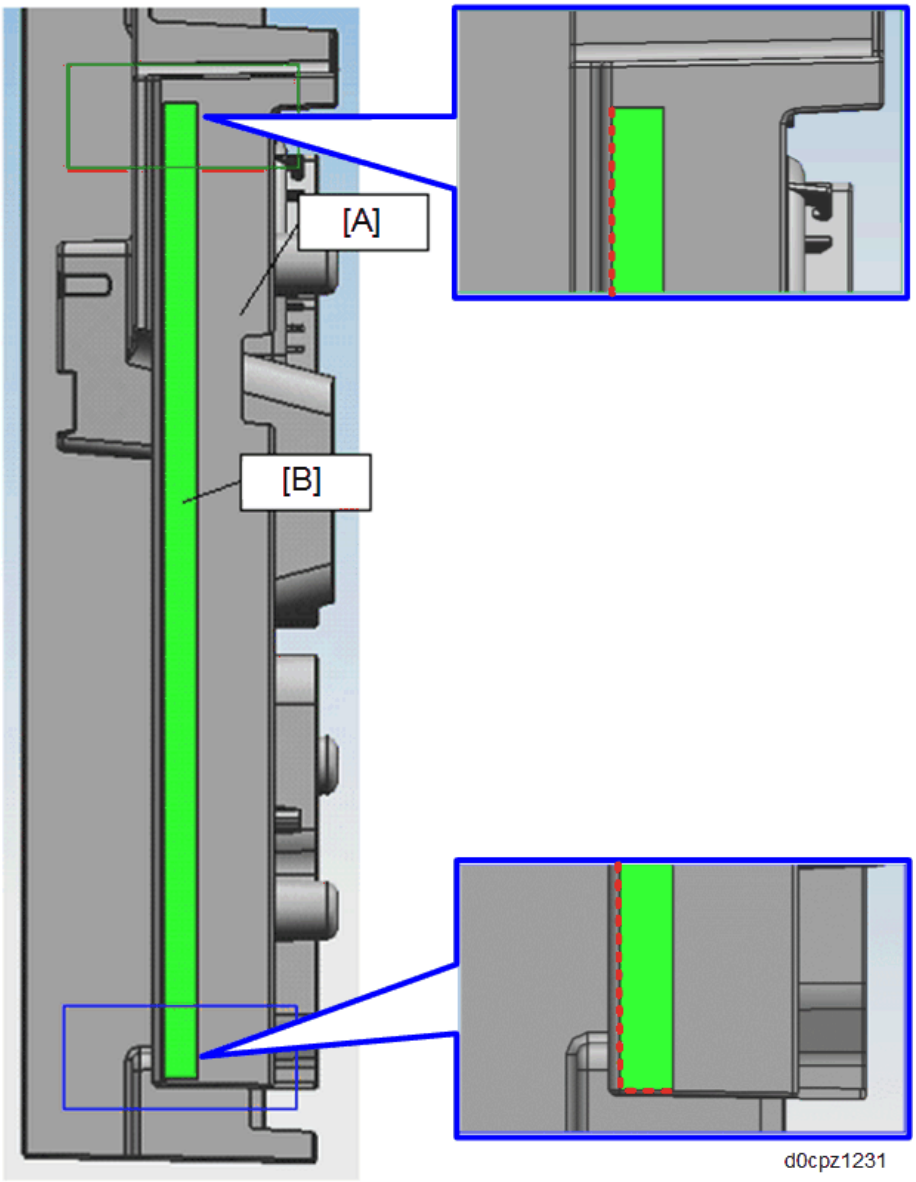
Inner Cover Upper Sponge Strip

1. Clean the attachment surface with alcohol.
2. Stick the sponge strip [A] to the inner cover [B] as shown below.



Note

Checking points:



[A]: Inner cover

[B]: Sponge strip

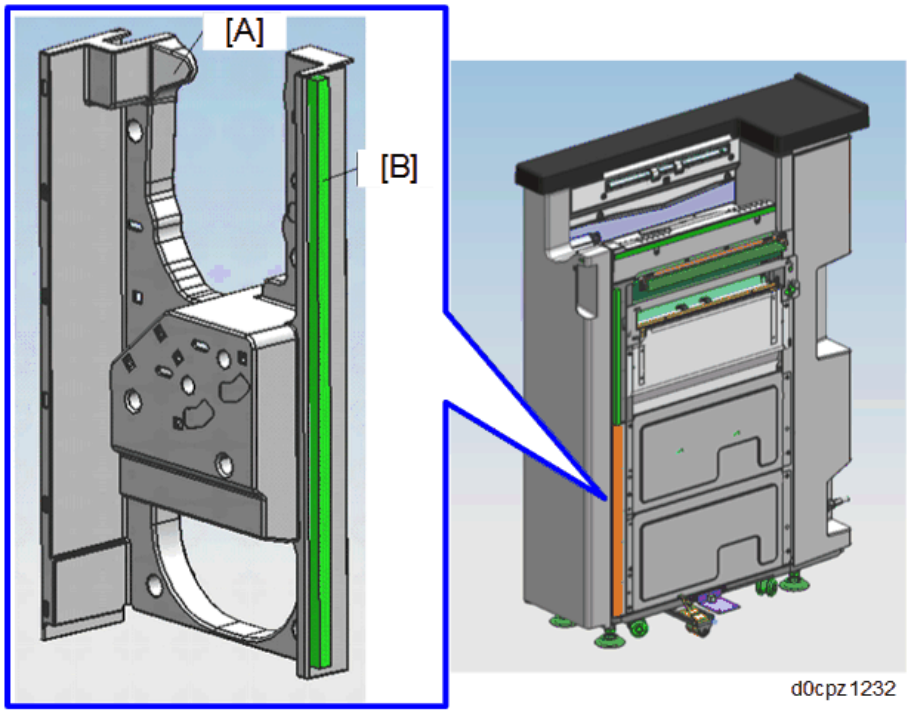
3. Press the sponge strip to fix it completely.

4. Make sure that the sponge is not twisted, floating or peeled off.

Inner Cover Lower Sponge Strip

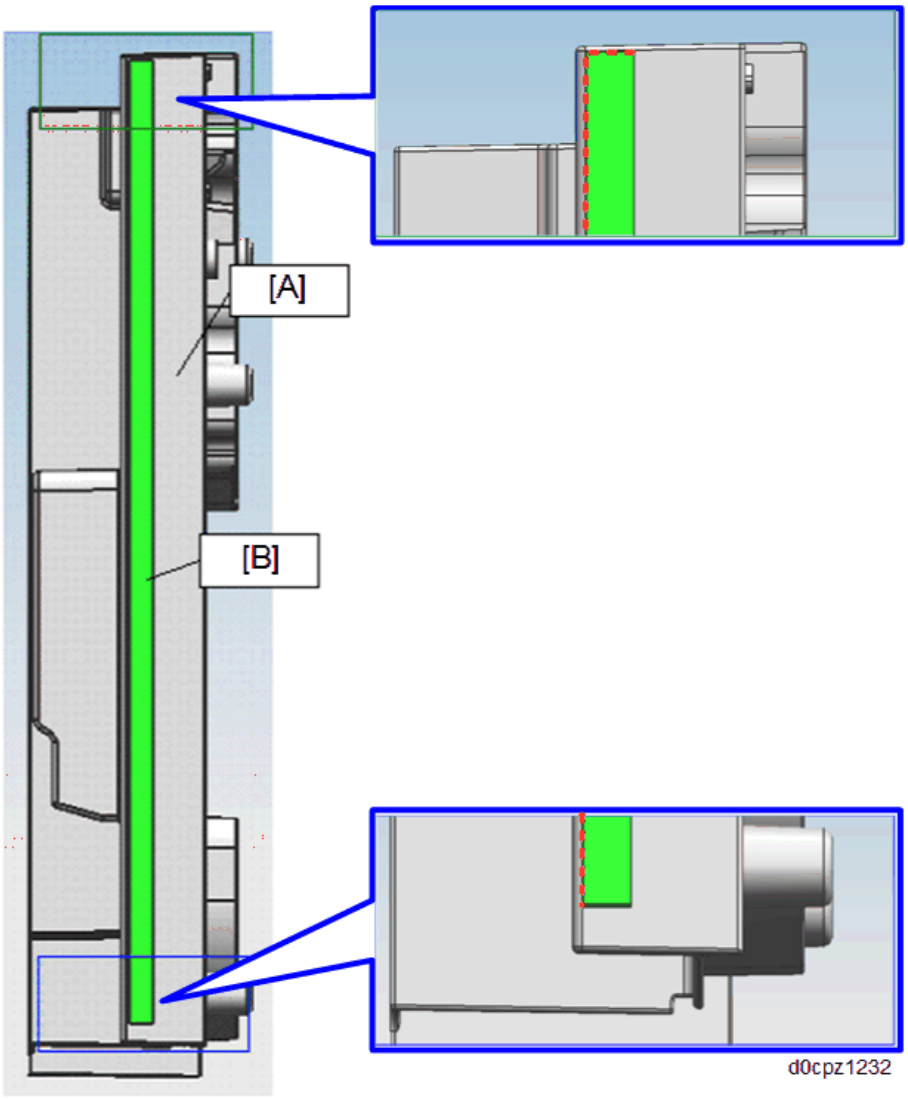
1. Clean the attachment surface with alcohol.

2. Attach the sponge strip [B] to the inner cover [A] as shown below.



Note

Checking points:



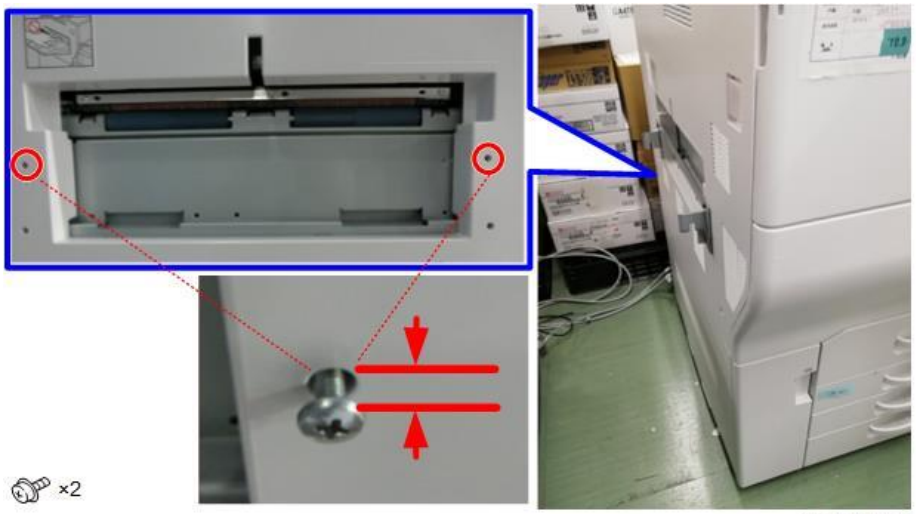
[A]: Inner cover

[B]: Sponge strip

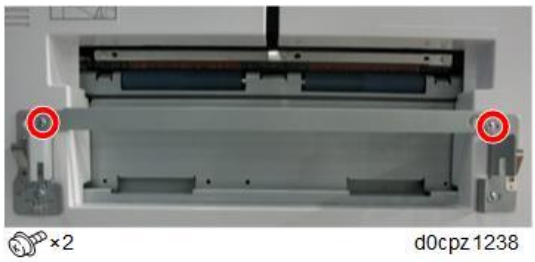
3. Press the area where the sponge strip is attached to fix it completely.
4. Make sure that the sponge is not twisted, floating or peeled off.

Docking Bracket, Relay Guide Plate

1. Temporarily fasten the 2 screws to the hole [A].
   Leave a gap of 3 mm and hang the docking bracket on the screws.

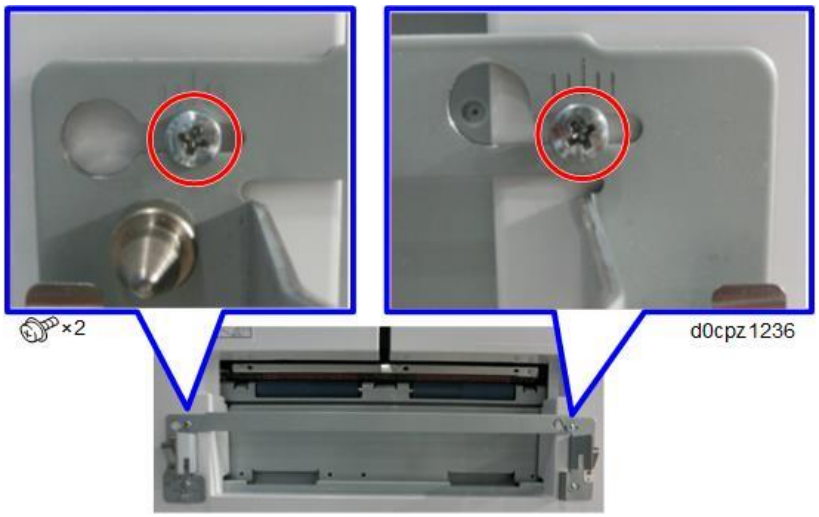


2. Hang the docking bracket on the screws fastened in step 1.

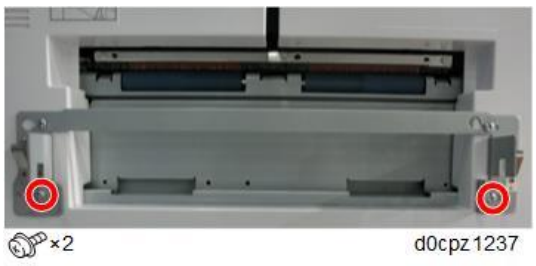


Ensure the bracket can slide freely.

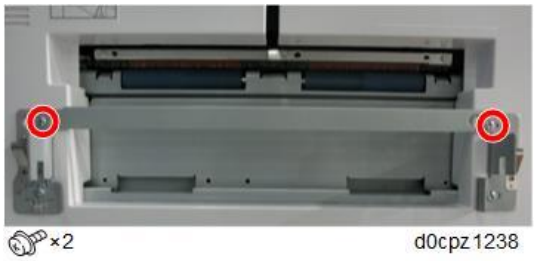
3. Align the center of the right screw with the scale on the docking bracket.



4. Attach the screws.

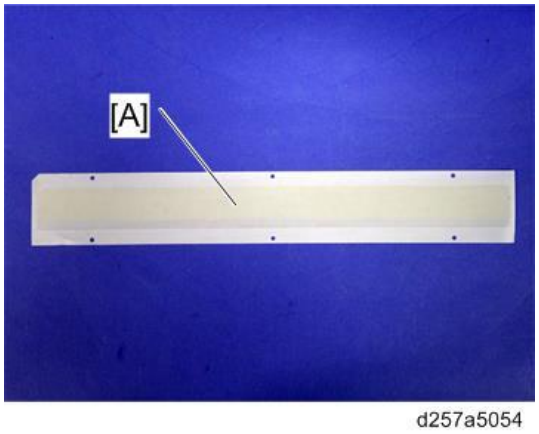


5. Tighten the screws attached in step1.

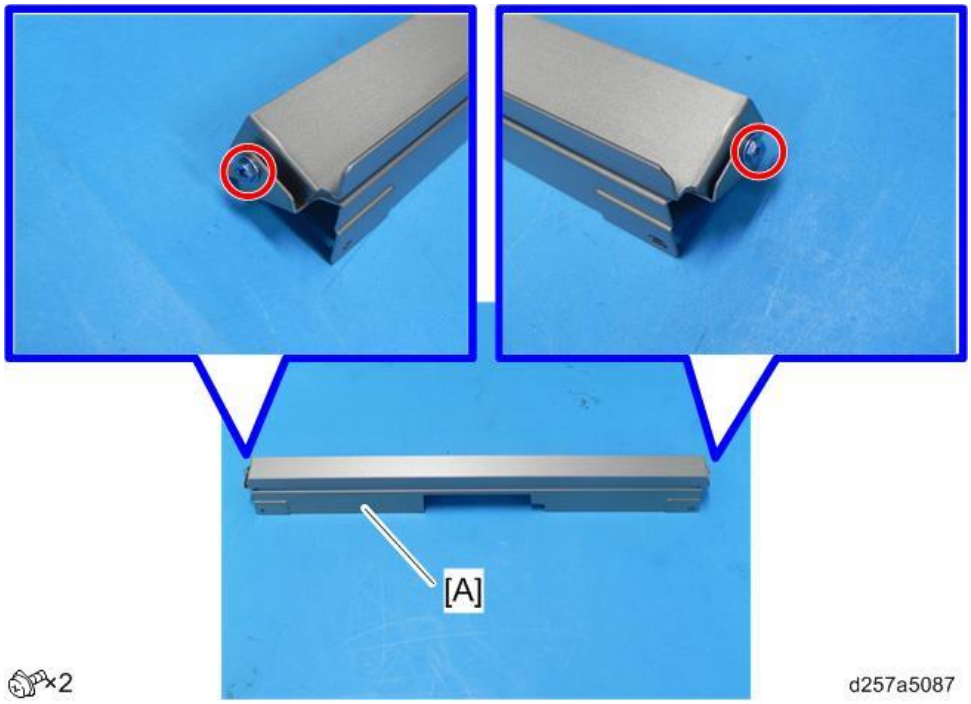


6. Ensure the center of the right screw and the scale are aligned.

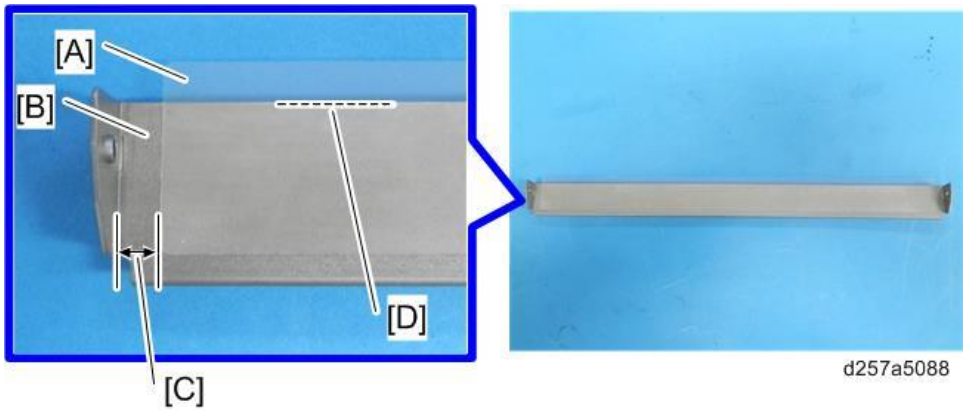
7. Prepare the guide [A] that comes with the main machine.



8. Separate the upper and lower parts of the relay guide plate [A].



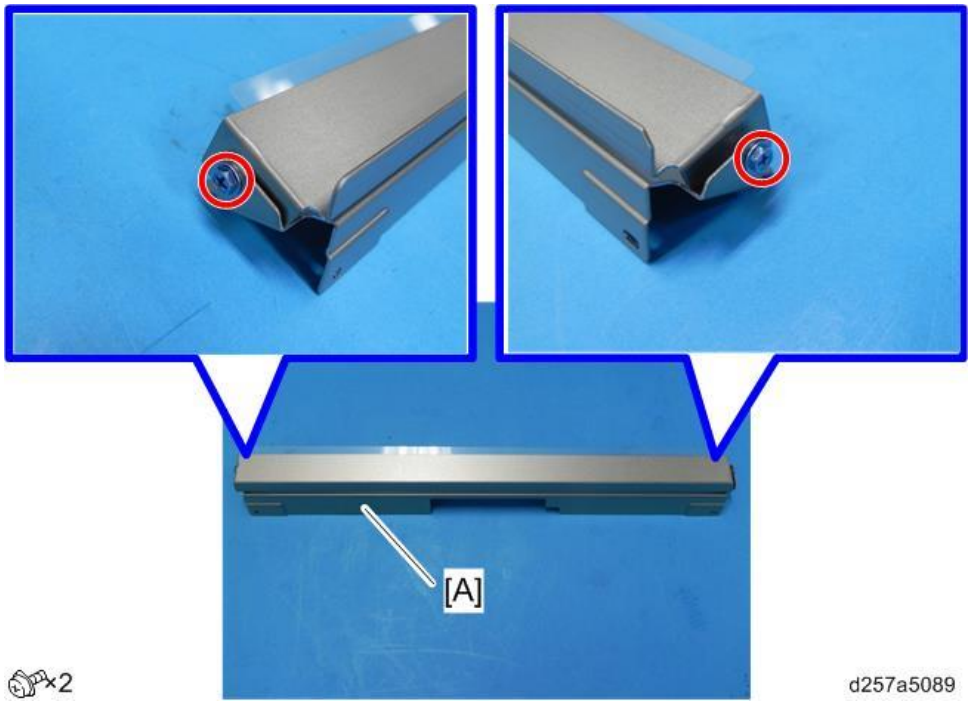
9. Peel off the release paper of the guide [A], and stick it to the inner surface [B].



[C]: Attach 5 mm away from guide edge

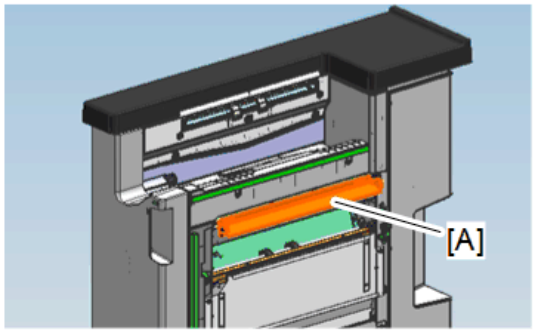
[D]:Align both edges of the guide plate and the double-sided tape.

10. Assemble the relay guide plate [A].



11. Attach the relay guide plate [A].

1. Attach the screw. Leave a gap of 3 mm so that the docking bracket can be hanged on it.
2. Hang the relay guide plate [A] on the screws attached here.
3. Ensure the docking bracket is not misaligned and tighten the screws.



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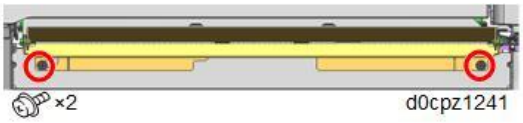

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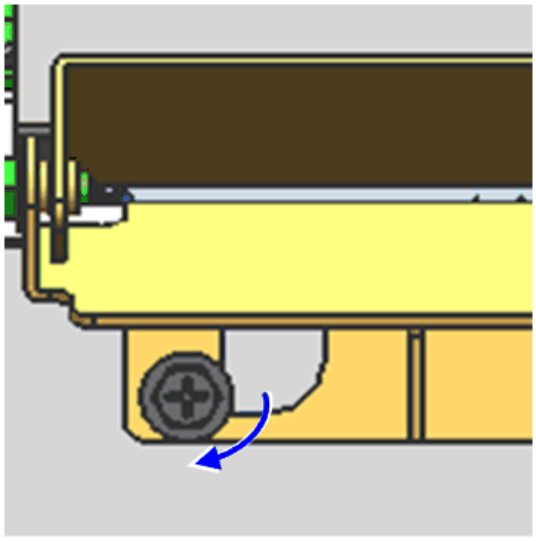
Note

Hang the relay guide plate on the temporarily attached screws, in the direction of the arrow.



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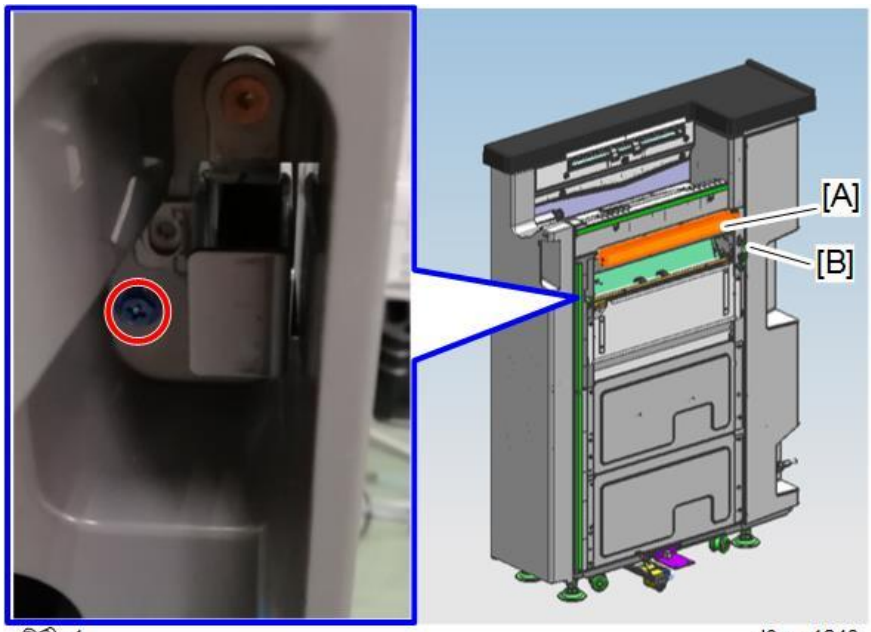
Docking the Unit with the Main Machine

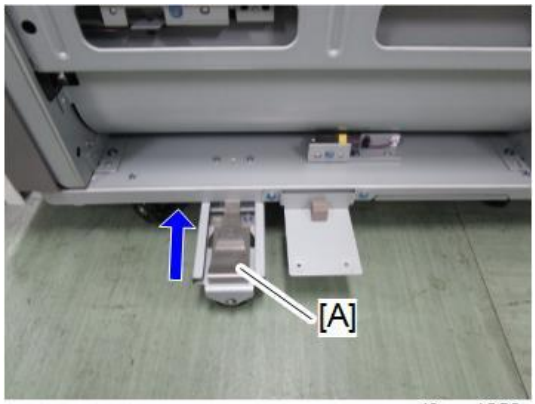
1. Open the front door.

2. Remove the screw of the docking lever and pull out the docking lever.



[A]: Relay Guide Plate

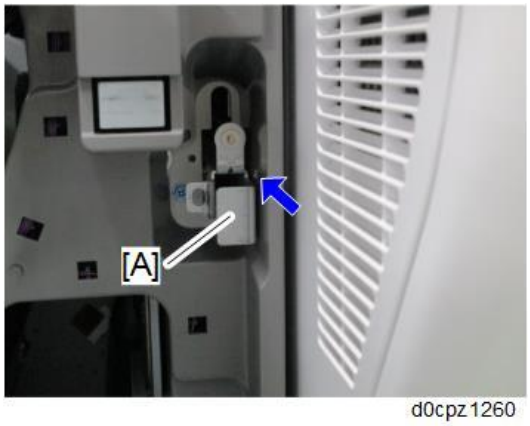
[B]: Docking Socket



3. Slide the fall-prevention part under the unit and hide it.

4. Pull the multi-folding unit so that the bending part of the docking bracket of upstream devices comes between the side plate of the multi-folding unit.

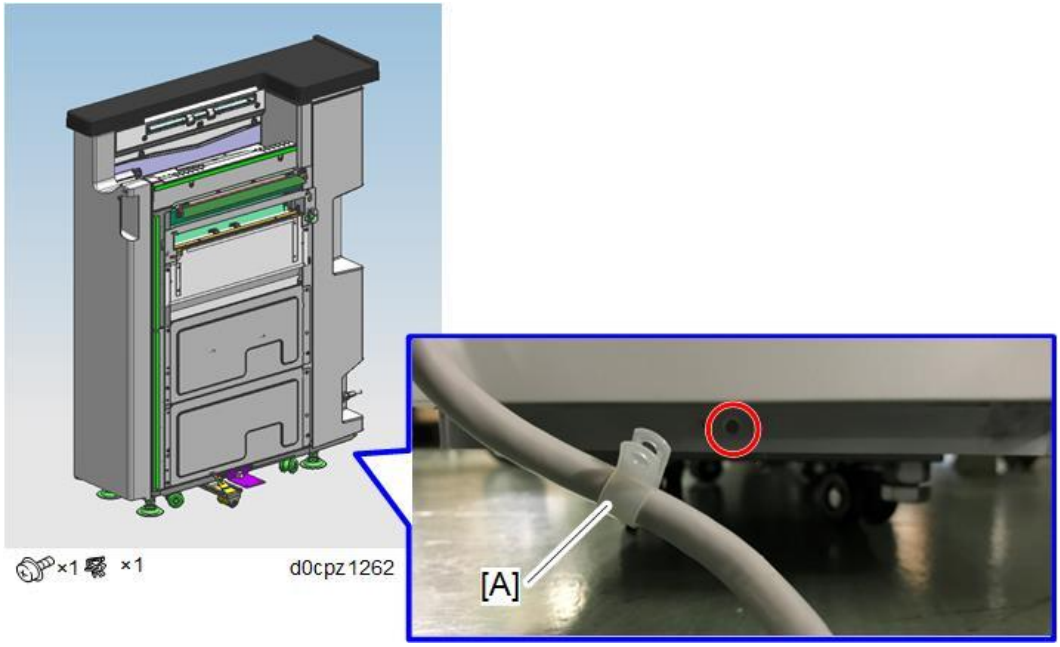
5. Push the docking lever into the notch of the docking bracket.



6. Fasten the docking lever with the screw removed in step 2.

7. Plug the interface cable of the multi-folding unit into the main machine.

8. Using the clamp [A], secure the power cord to the marked area of the unit.



Note

When securing the clamp, allow enough space for the power cord to plug in and pull out.

9. Plug in the power cord of the multi-folding unit first, and then, plug in the AC power cord of the main

machine.

Important

- If the residual charge in the main machine is not discharged, it will not recognize the Multi-Folding Unit and cause paper jams.
- To release residual charge inside the main machine, pull out the power cord and push the main power switch several times. (Characteristics of the Push Switch (DC Switch))

10. Turn ON the main power switch.

Important

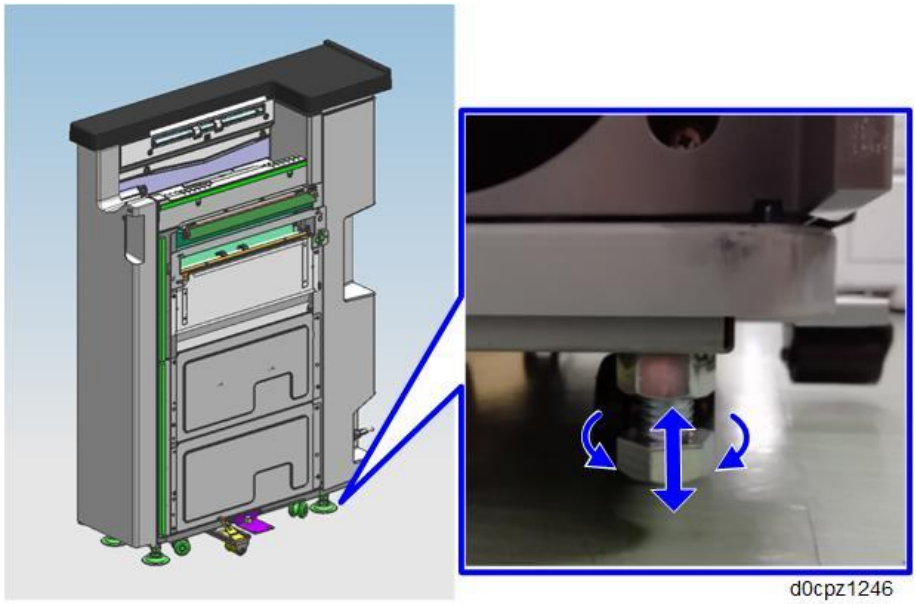
- If the main machine is automatically turned ON when the AC power cord is plugged in, then turn OFF then ON the main power again.

11. Make sure that the multi-folding unit works correctly.

Height Adjustment

Adjust the height of the unit and make sure that it is level.

1. Turn the nuts to lower the bolt until the bolts reach the holders [A].



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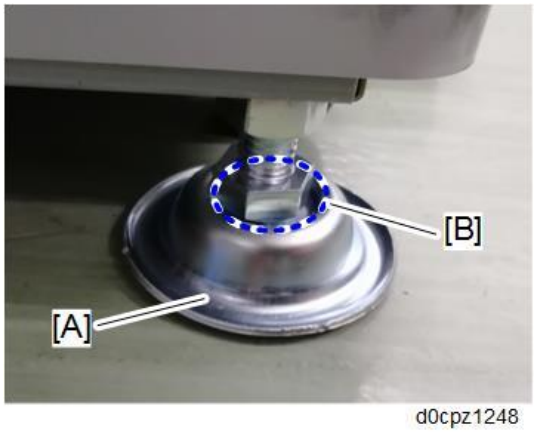
Note

Make sure that the bolts fits within the frame [B].



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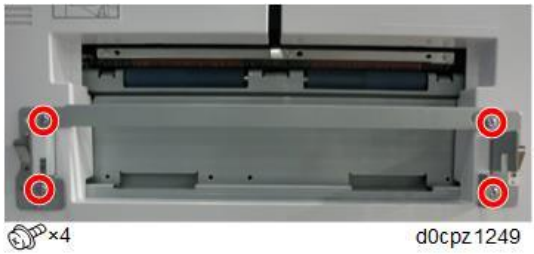
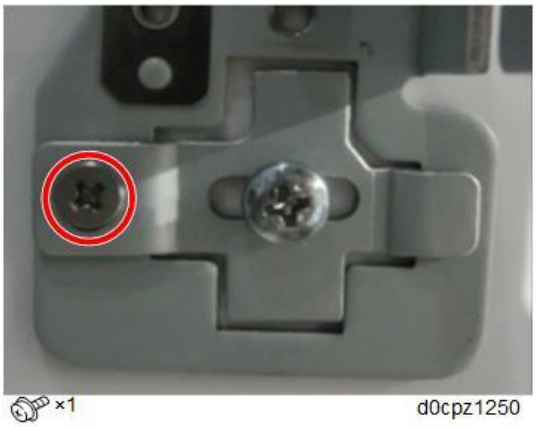
Side-to-side Registration Adjustment

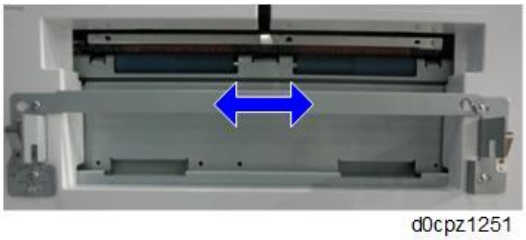
1. Loosen the screws. (Do not remove the bracket.)



2. Unscrew the securing bracket and change the direction of it.



3. Fasten the securing bracket with the screws.
4. Adjust the position with sliding the docking bracket.



5. Tighten the screws of the docking bracket.

Note When Moving the Option

⚠CAUTION

- When moving the folding unit, move it together with the main machine or upstream devices linked to it. If you try to move only the folding unit, it may fall down, causing injury.

Mailbox CS4010 (D708)

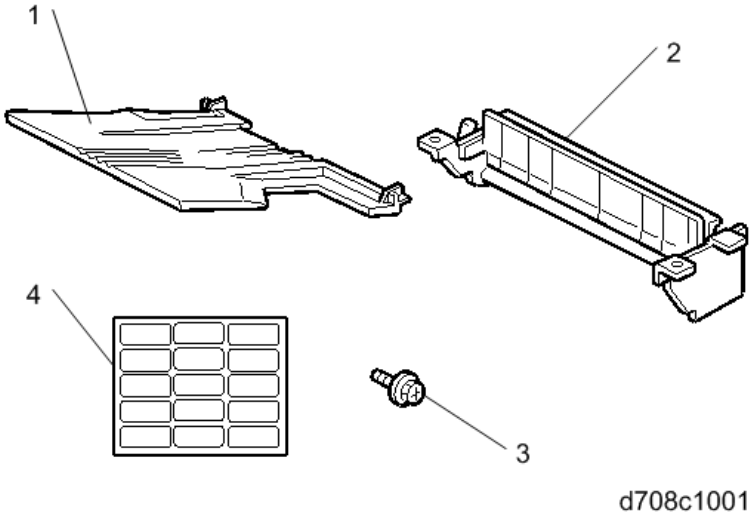
Important

- The Mail Box and Cover Interposer tray cannot be installed together. (Only one will fit on top of the finisher.)

Accessories

Check the accessories and their quantities against this list.

No.	Description	Qty
1.	Trays	9
2.	Guide plate	1
3.	Screws - M3x8	6
4.	Decals (bin display)	1



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Installation

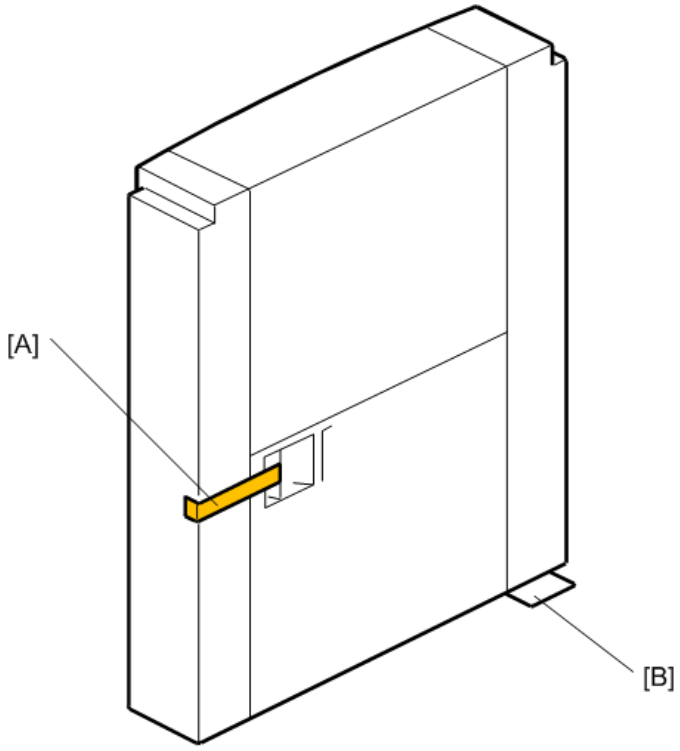
⚠WARNING

- Turn the machine off and disconnect the machine power cord before you start this procedure.

1. Remove the filament tape [A].

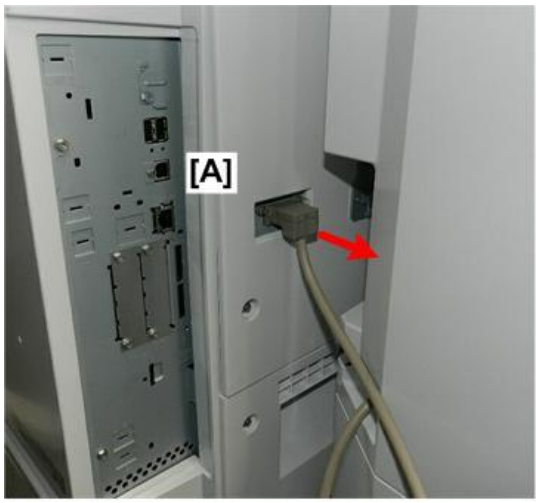
Important

- Move the mailbox carefully, the corner leaf [B] is soft and can be damaged easily.



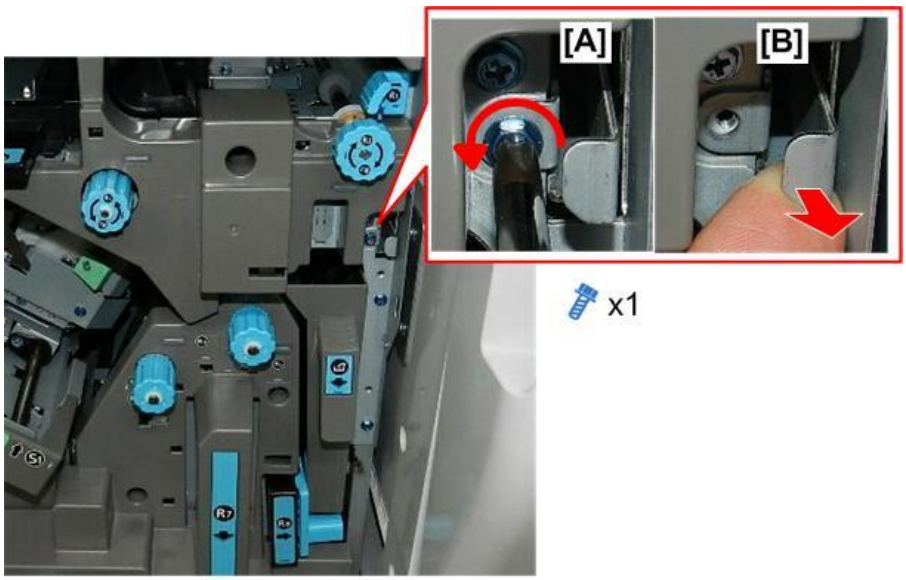
d708c1002

2. Disconnect the finisher cable [A] connected on the back of the main machine.



d708c1003

3. Open the front door of the finisher.
4. Remove lock screw [A]. Keep this screw.
5. Pull the lock bar [B] out until it stops.



d708c1004

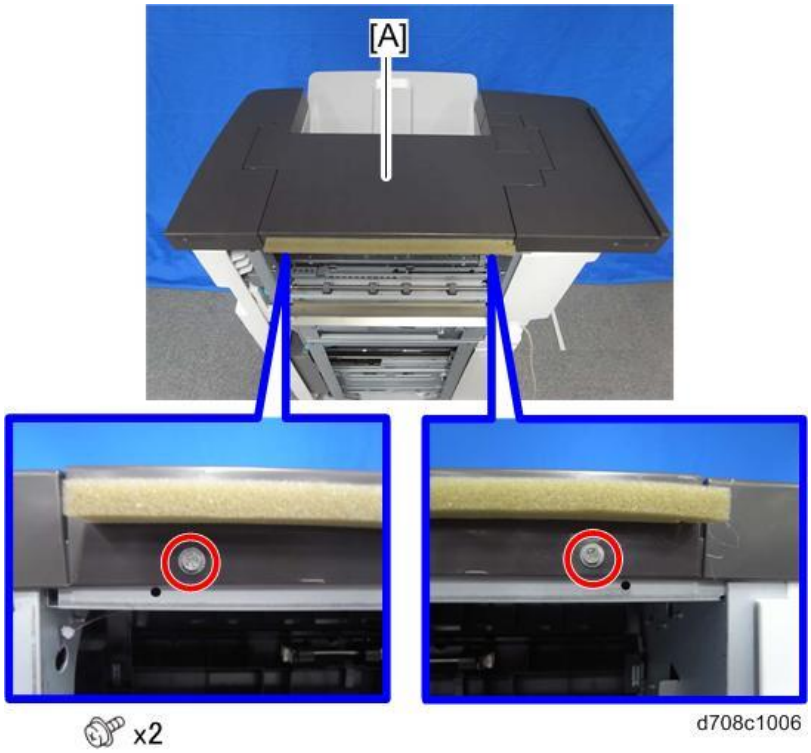
6. Pull the finisher away from the machine.

d708c1005

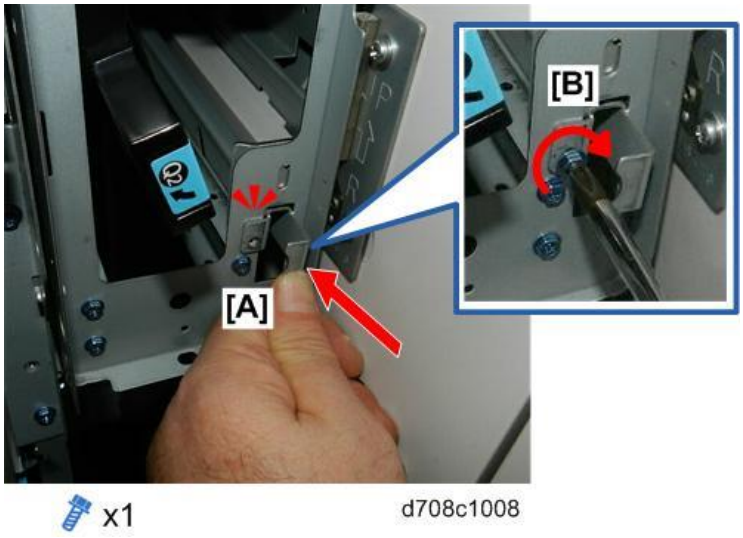
Important

- If the Cover Interposer Tray is installed on the Finisher, it must be removed at this step.

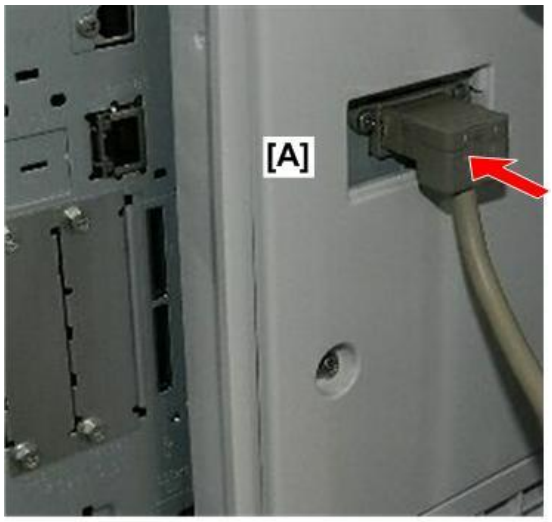
7. Remove the top cover [A] of the finisher.



8. Open the finisher door, and confirm the lock bar is pulled out completely.
9. Slowly move the finisher to the left side of the main machine with its door open.
10. Push the lock lever [A] into the finisher, and secure with the screw [B].

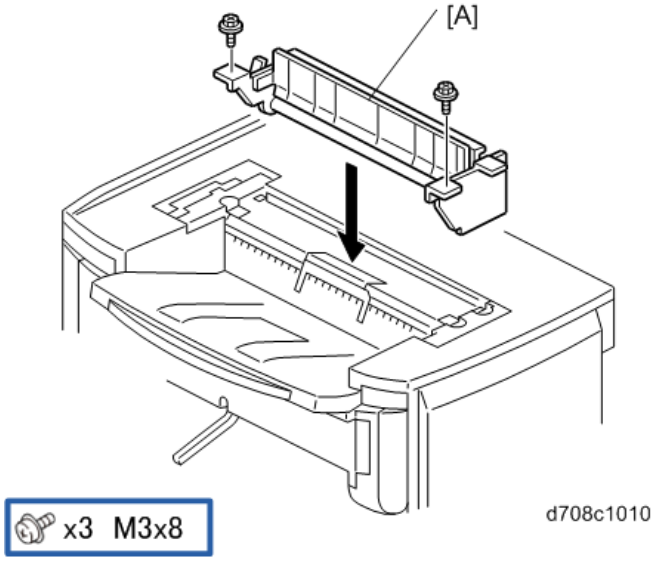


11. At the left rear corner of the main machine, connect finisher cable [A].



d708c1009

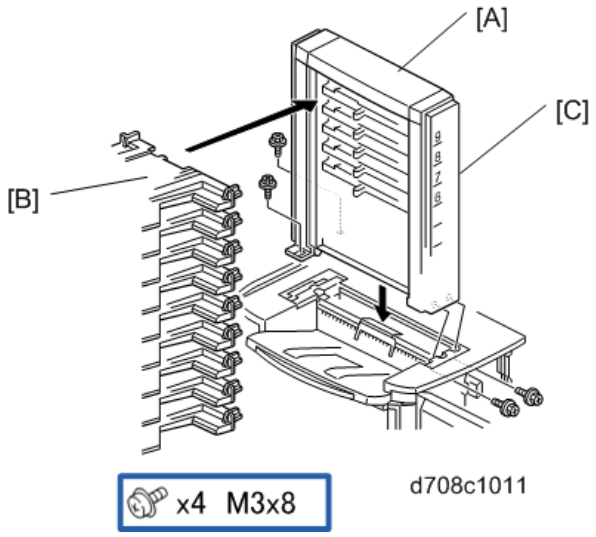
12. Attach guide plate [A] to the top of the finisher.



d708c1010

13. Attach the mailbox [A] to the top of the finisher.
14. Attach the 9 trays [B] to the mailbox.
15. Give the decals [C] to the customer. The operator will fill out the decals and attach them at the

desired locations.



16. Turn the machine on.
17. Check the finisher operation.

Cover Interposer Tray CI4040 (D3CN)

Cover Interposer Tray CI4040 inserts cover or slip sheets into copied or printed output.

Note

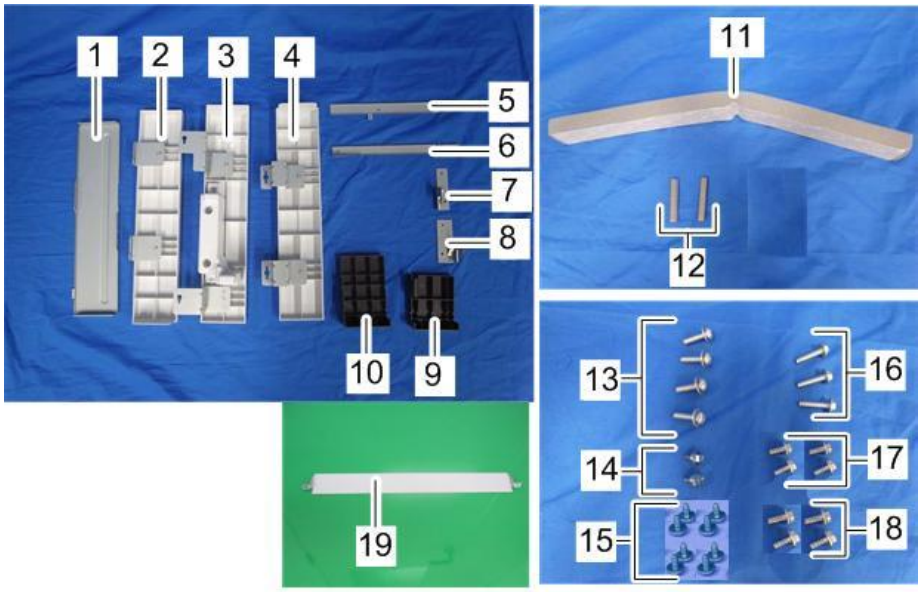
To use Cover Interposer Tray CI4040, one of the following is also required: Finisher SR4150 or Booklet Finisher SR4160

Accessories

Check the accessories and their quantities against this list.

No.	Description	Q'ty
1	Plate Extension (bottom)	1
2	Rear cover extension (bottom)	1
3	Front door extension (top)	1
4	Front door extension (bottom)	1
5	Connecting Bracket (rear)	1
6	Connecting Bracket (front)	1
7	Front Joint Bracket	1
8	Rear Joint Bracket	1
9	Right front corner plate	1
10	Right Rear Cover Plate	1
11	Cushion (with double-sided tape)	1
12	Gasket	2
13	Screws– M4 x 14	4

No.	Description	Q'ty
14	Shoulder screw	2
15	Tapping screws – M3 x 6	8
16	Tapping screws – M4 x 16	3
17	Tapping screws – 3 x 6	4
18	Tapping screws – M4 x 8	4
19	Entrance Guide Plate	1



d223d8606

Installation Procedure

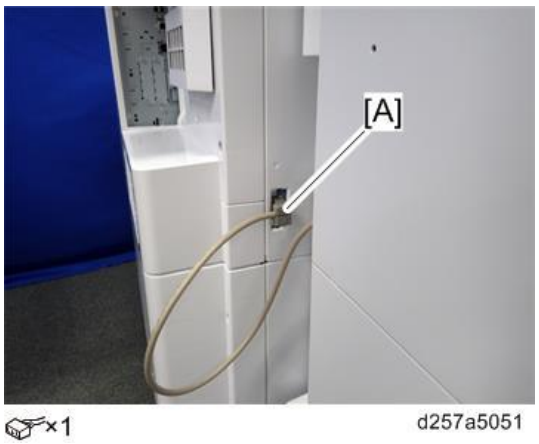
⚠CAUTION

- Always switch the machine off and unplug the power cord before beginning the following procedure.

Installation Procedure for Machines With a Finisher Installed

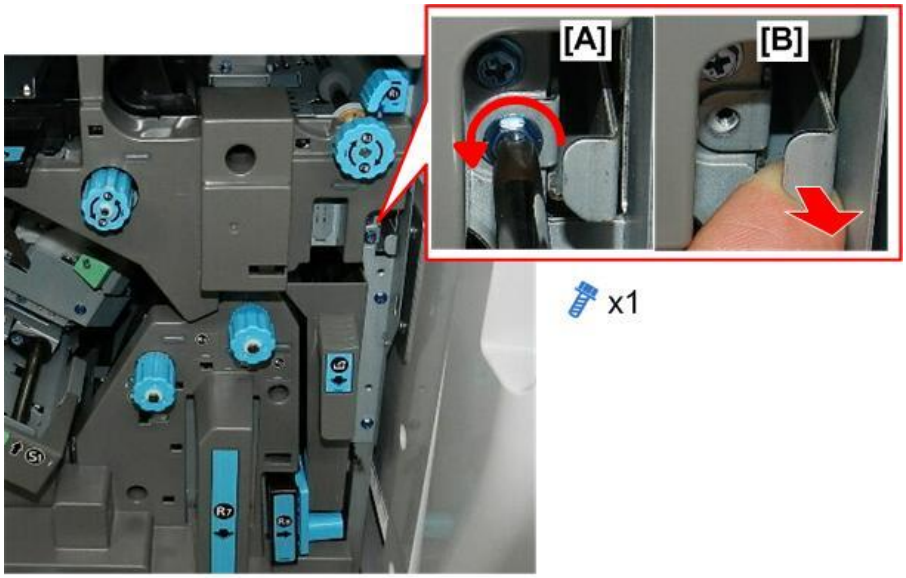
If the finisher is installed, it must be separated from the main machine.

1. Disconnect the finisher connector [A] from the main machine.



×1 d257a5051

2. Open the finisher front door. Remove the screw [A], and then pull the lock lever [B].

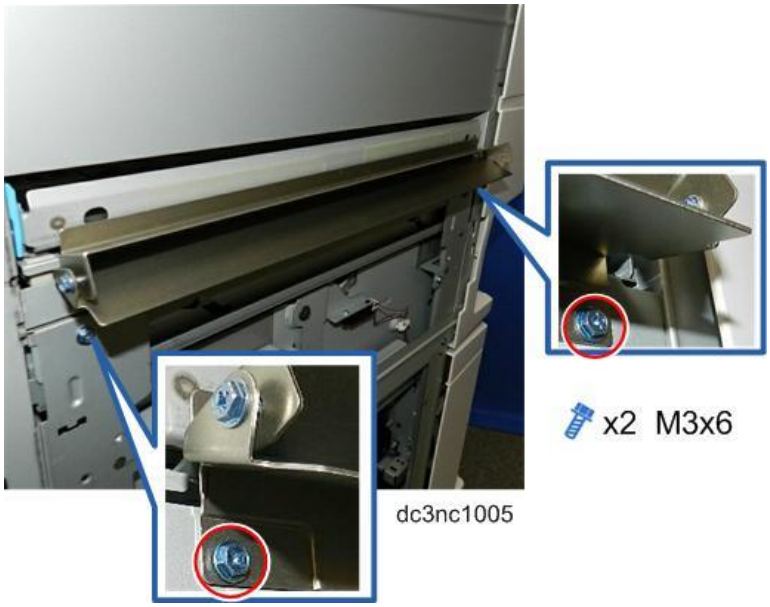


dc3nc1003

3. Pull the finisher away from the side of the machine.

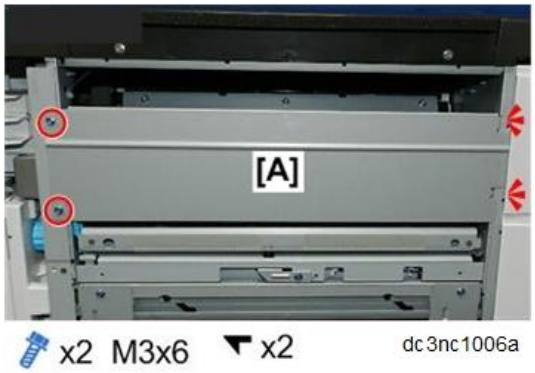
Prepare the Finisher

1. Remove the entrance guide plate from the finisher.

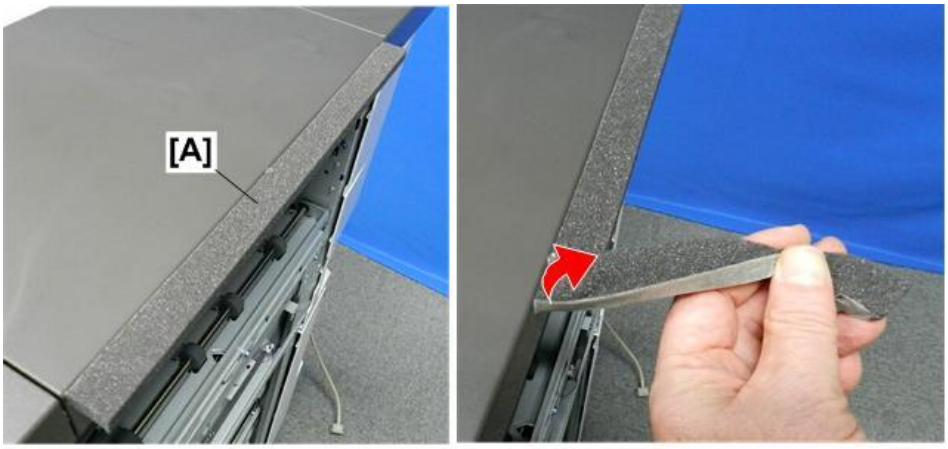


dc3nc1005

2. SR4160 only: Remove the finisher top right cover [A].

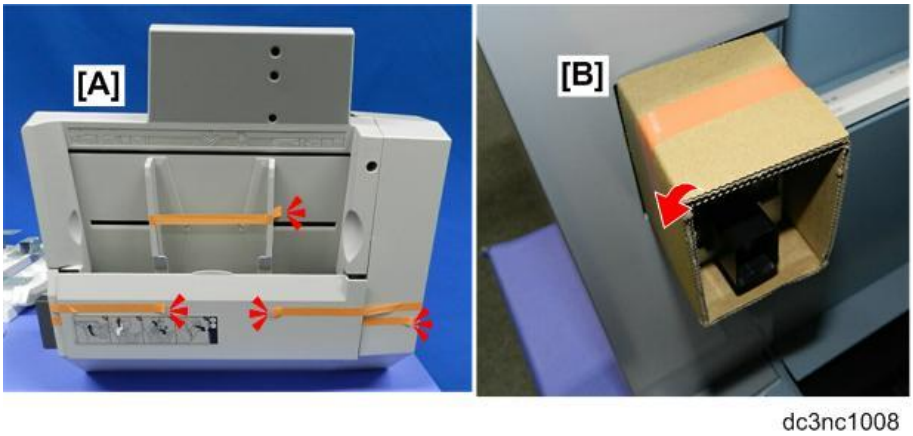


3. Peel off the sponge strip [A] from the finisher.

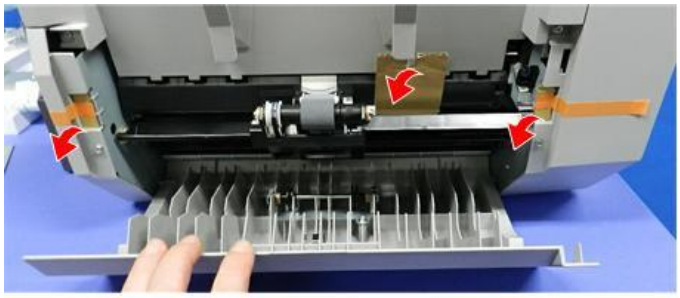


Shipping Tapes and Retainers

1. Remove tape from the top [A] of the tray.
2. Under the tray, remove the tape and cardboard on the connector [B].



3. Open the tray, and remove all tape and pieces of cardboard.



dc3nc1009

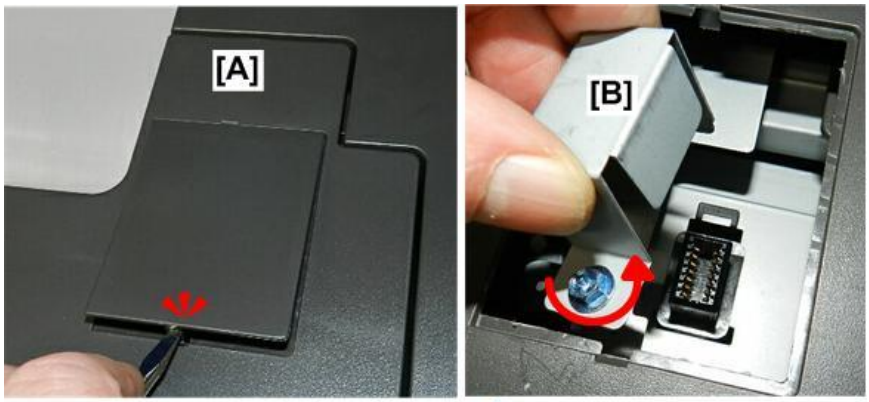
Prepare the Main Machine

1. Remove the connecting bracket [A] from the main machine.

×4 M4×20 d257a5047

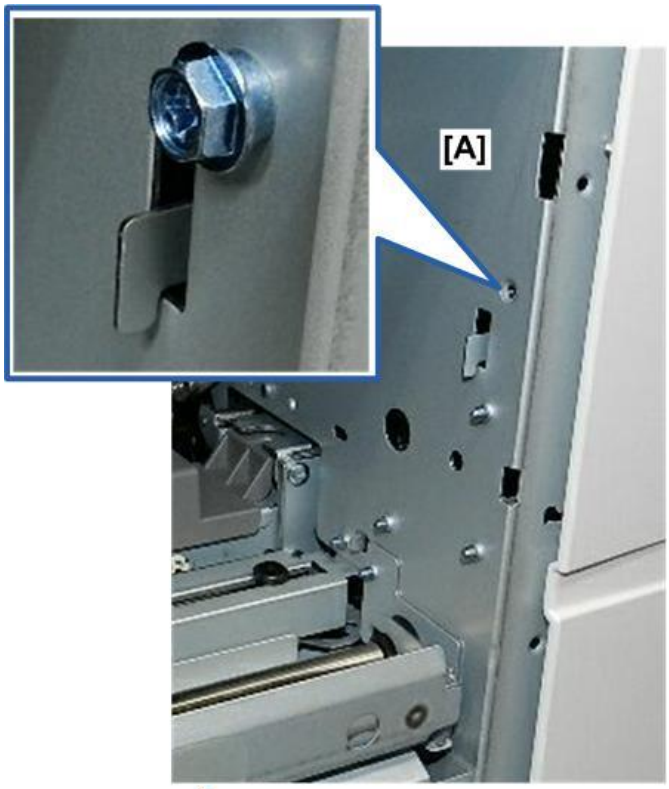
Cover Interposer Tray

1. Remove the connector cover located on top of the finisher [A].
2. Remove metal cover [B].

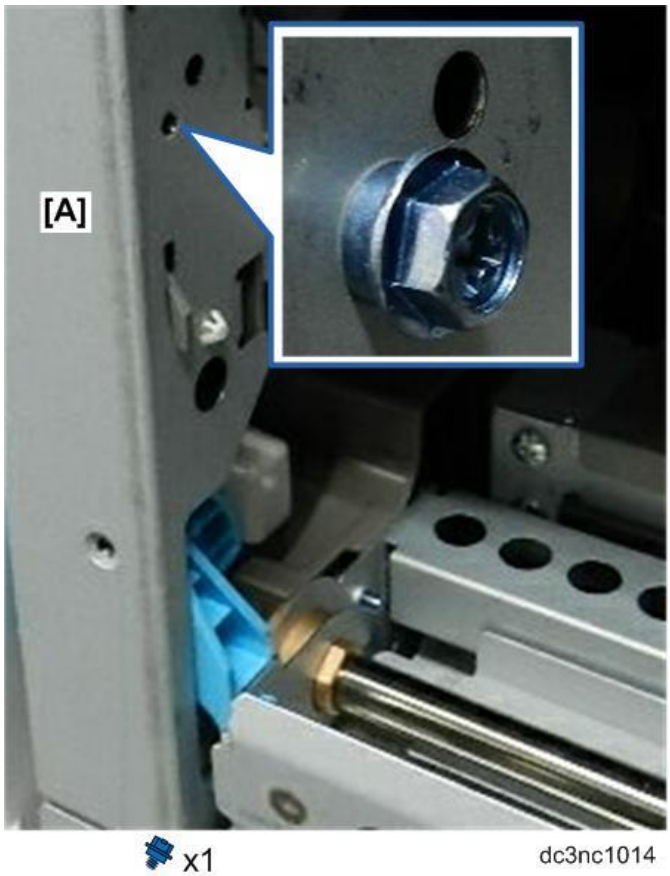


x1 dc3nc1012

3. Fasten the shoulder screw on the right rear inner panel of the finisher [A].

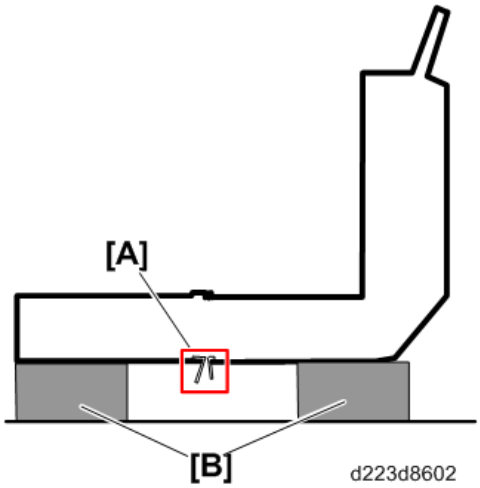


4. On the right front post of the finisher [A], fasten the other shoulder screw.

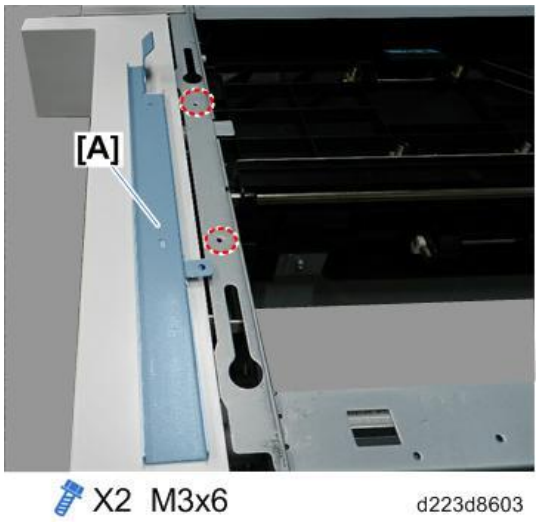


5. To avoid damaging the guides [A] on the right side of the unit, elevate the unit with some blocks,

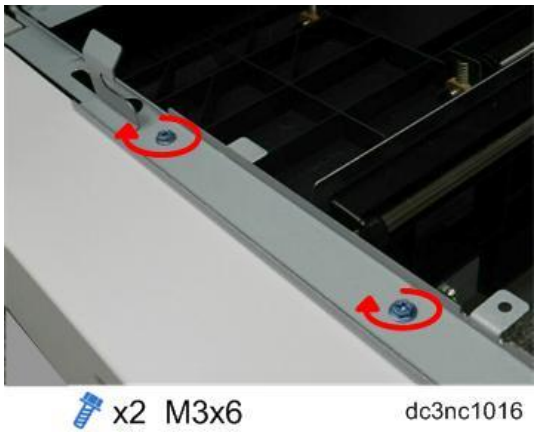
boxes, etc. [B] so it is not flat on the floor.



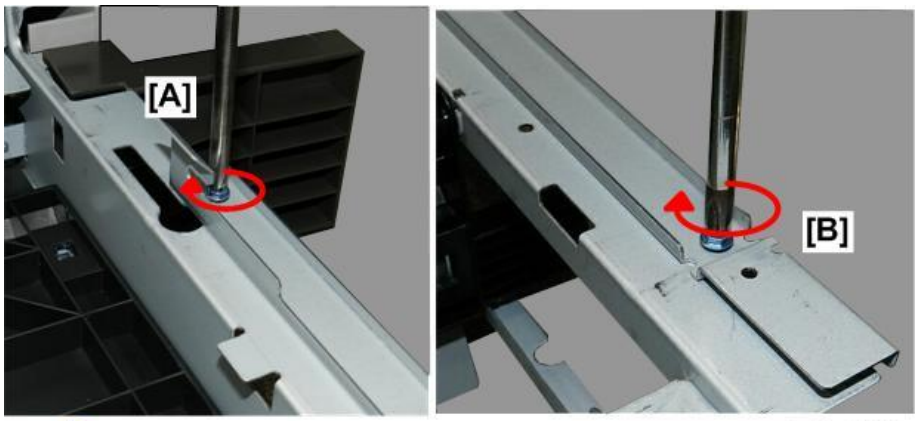
6. Select the rear tray mounting bracket [A], and then locate its screw holes between the keyholes on the rear frame.



7. Align the holes, and screw the tray mounting bracket on the frame.



8. Fasten the other mounting bracket with screws [A] and [B], to the front frame.

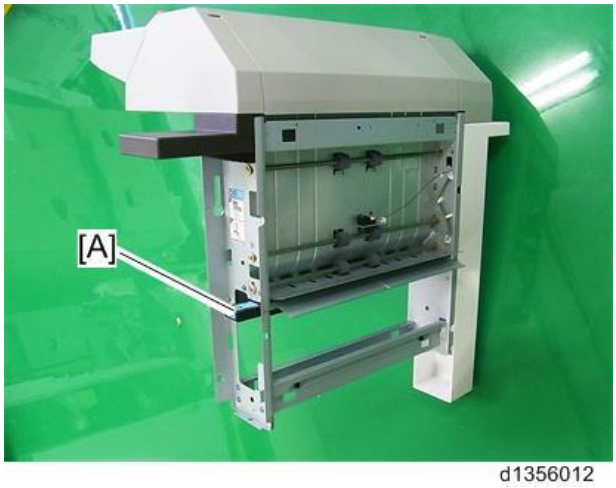


9. If the upstream device is another option, replace the original guide plate [A] with "GUIDE PLATE: CONNECTING: LOWER" (Item #19 in the Accessories List).

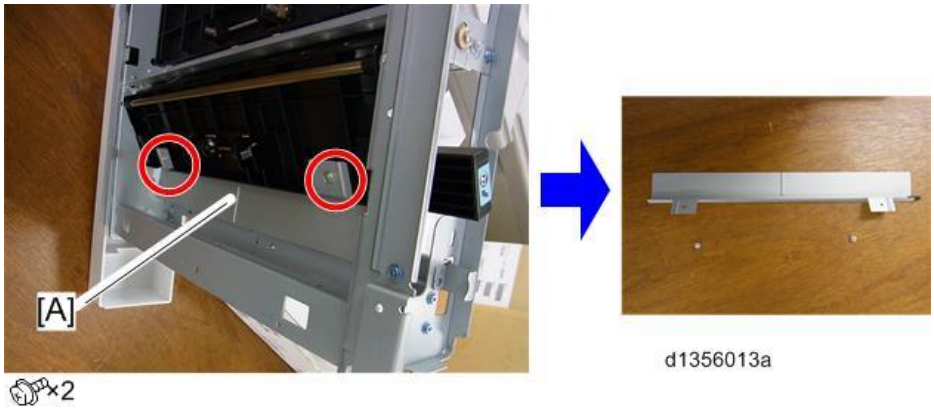
Important

- With the original guide plate installed, lever [A] will catch the optional device if released for jam recovery.

1) Release the lever [A].



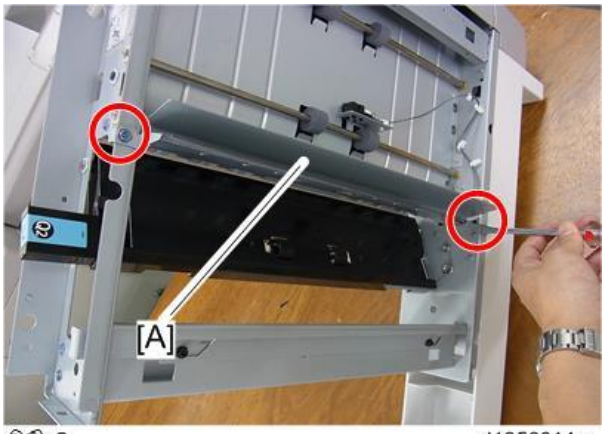
2) Remove the entrance guide plate [A].



The original guide plate will no longer be used and does not have to be stored.

3) Attach the new entrance guide plate [A] (item #19 of the accessories) to the frame of the cover

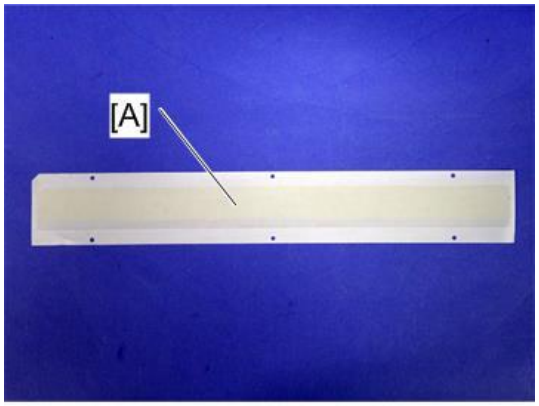
interposer.



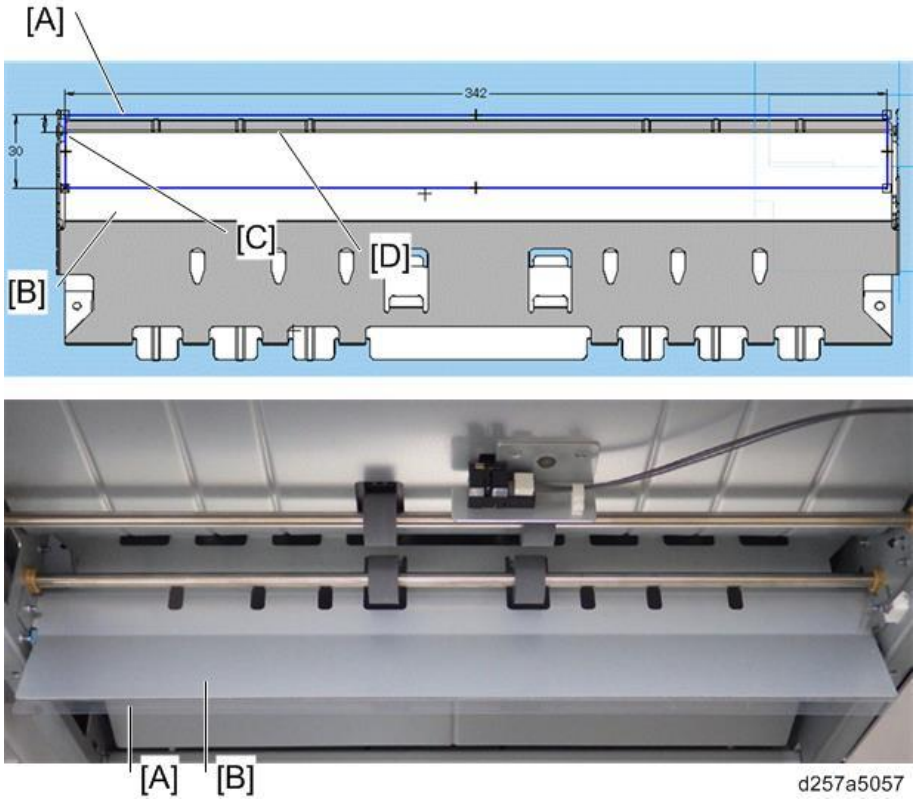
4) Lift up the lever to its home position.

10. If the upstream device is the main machine, attach the guide sheet provided with the main machine. If the upstream device is not the main machine, proceed to step 11.

1) Prepare the guide sheet [A] provided with the main machine.



2) Remove the release paper from the guide sheet [A], and attach the guide sheet to the bottom side of the upper entrance guide plate [B].



[C]: Align the edge of the guide sheet with the edge of the upper entrance guide plate.

[D]: Align the edge of the adhesive tape with the edge of the upper entrance guide plate.

11. On the right side of the finisher, hold the tray unit over the finisher, and then align the hooks of the mounting brackets with the installed shoulder screws in the finisher.

12. Slowly, lower the tray unit hooks onto the shoulder screws inside the finisher.

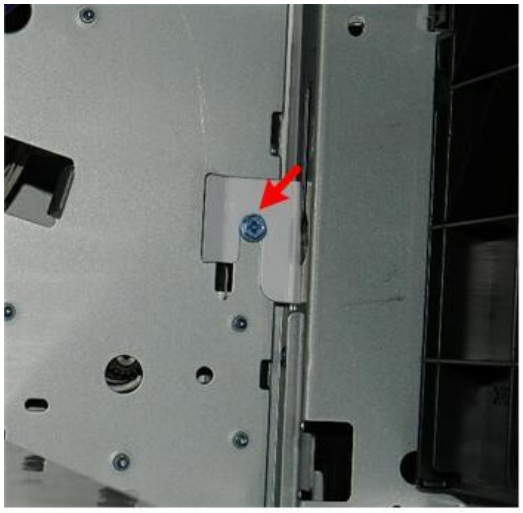
Note

- The shoulder screws are located on the front panel [A] and rear panel [B] inside the

finisher.

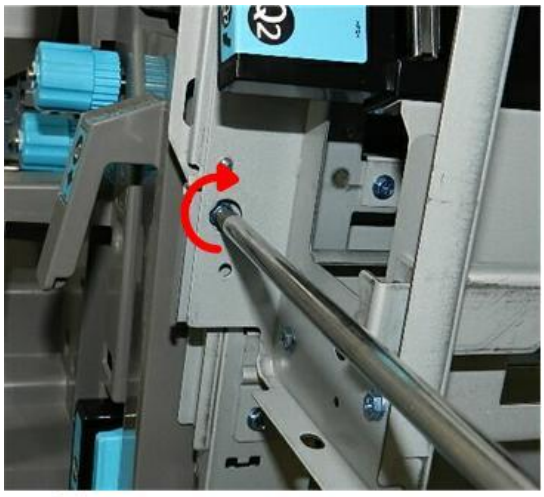
d257a7180

13. Look inside the finisher to confirm that the hook of the rear bracket is seated correctly on the shoulder screw.



dc3nc1019

14. Fasten the screw below the Q2 lever to fasten the tray to the frame.



x1 M3x6 dc3nc1020

15. Raise Q2.

dc3nc1021

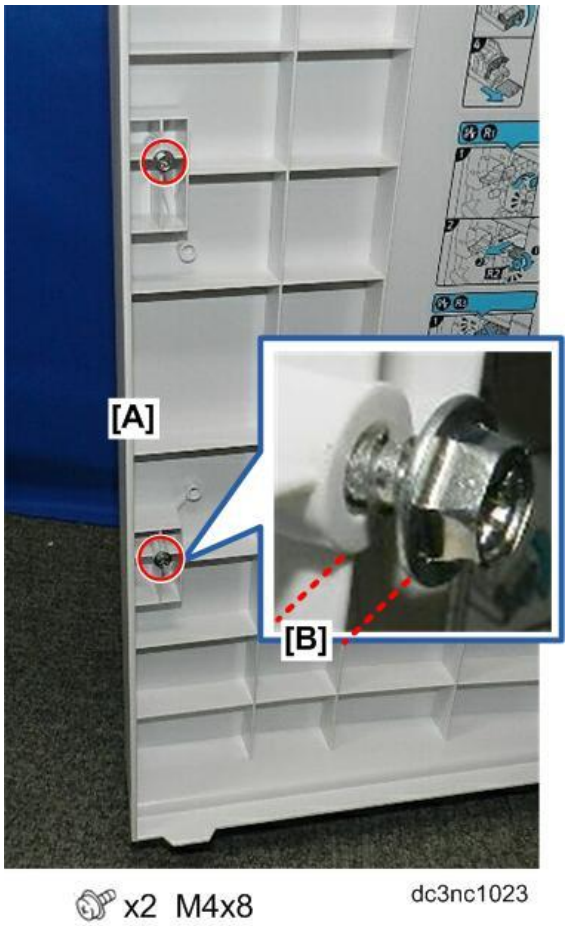
16. Fasten the screw, marked in the below photo, to fasten the tray to the frame in the back.

x1 M3x6 dc3nc1022

Extensions

1. Set two screws in the bottom half of the finisher front door [A].

2. Do not tighten these screws [B].

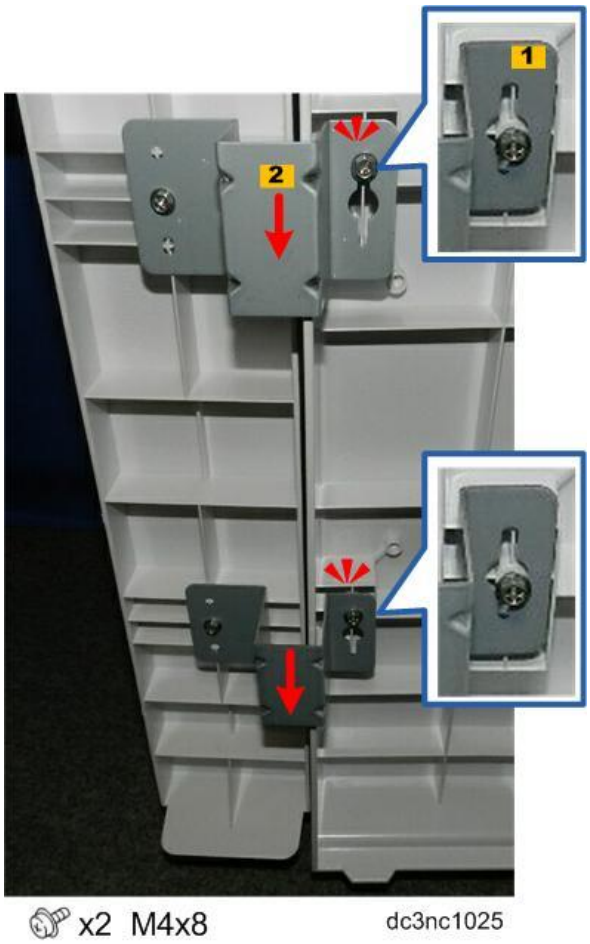


3. Set two screws in the top half of the finisher front door [A].

4. Do not tighten these screws [B].

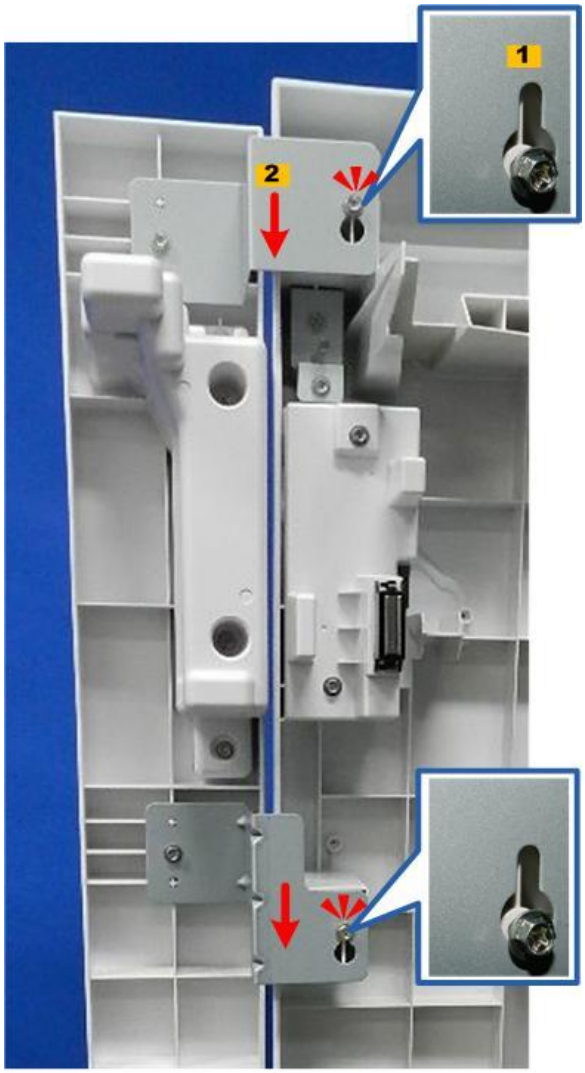
5. Select the front door bottom extension.
6. Align the keyholes of the hinges [1] with the screw heads and slide the extension [2] down.

7. Tighten both screws.



8. Select the front door top extension.

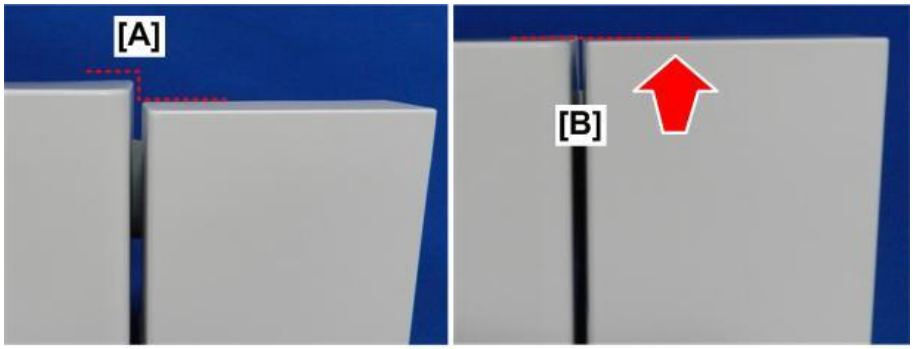
9. Align the keyholes of the hinges [1] with the screw heads and slide the extension [2] down.



dc3nc1026

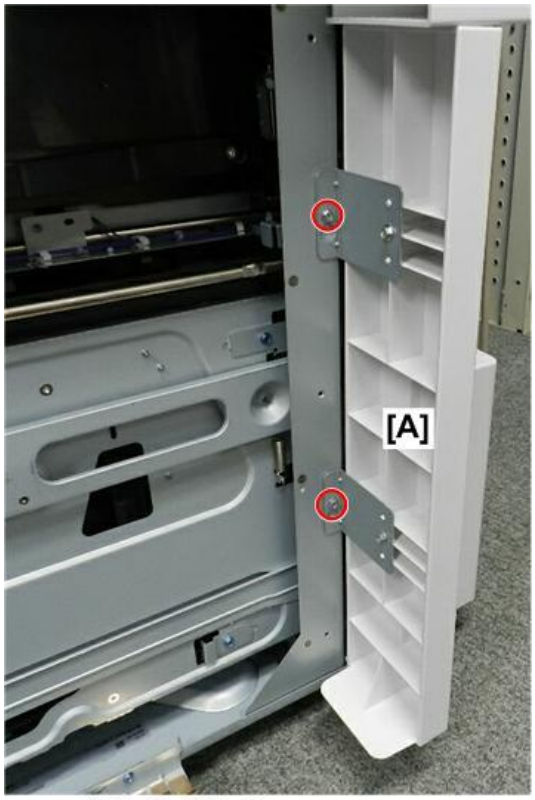
10. Check the top of the door and the top of the extension.

- If the top edge of the door is not level with the top of the extension [A], slide the extension up slightly.
- Tighten the screws.



dc3nc1045

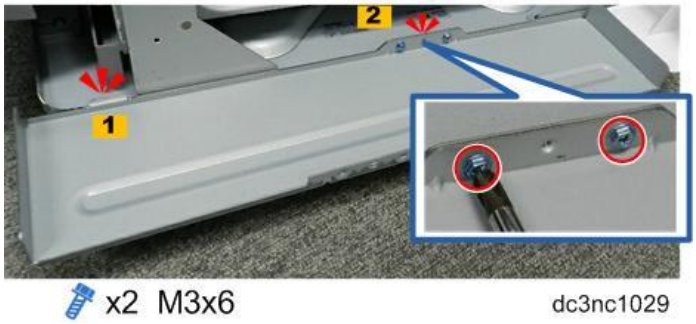
11. Attach the rear cover extension [A].



12. Remove the grounding plate [A] from the bottom right edge of the finisher.

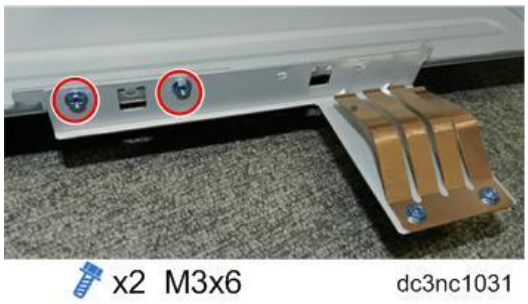
13. Set the tab [1] and boss [2] of the grounding plate extension on the bottom edge, and then fasten it

with the screws.



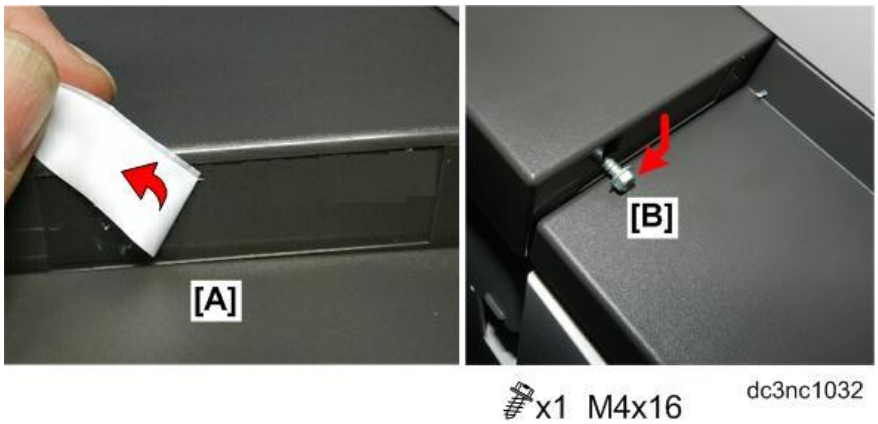
14. Hook the grounding plate onto the right edge of the extension.

15. Fasten the grounding plate to the extension.



16. Peel off the backing of the tape on the front right corner of the finisher [A].

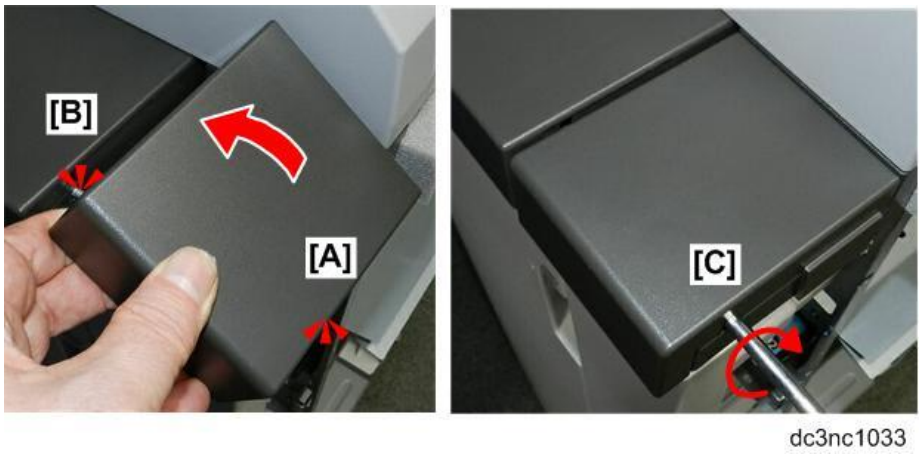
17. Insert a screw [B] but do not tighten it.



18. Take the right front corner plate (the smaller one).

19. Place it on the right edge [A] and lower down as the cutout aligned with the screw.

20. Using a long screwdriver, inserted through the hole [C], secure the plate by tightening the screw.



dc3nc1033

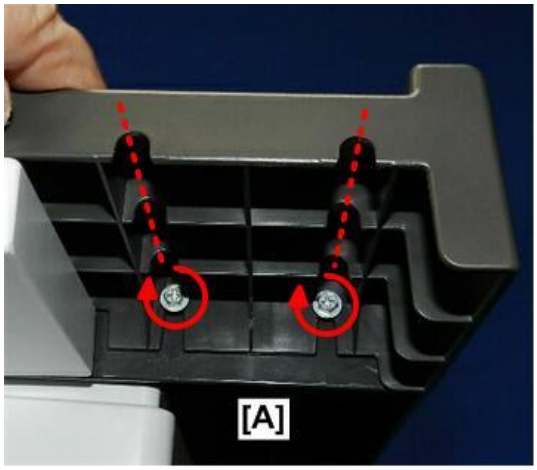
21. Peel off the backing of the tape on the back right corner of the finisher [A].

22. Insert two screws [B] but do not tighten them.

23. Attach the plate [C] and line up the cutouts under it with the previously inserted screw heads.

x2 M4x16 dc3nc1034

24. Insert a long screwdriver through the cutouts under the plate [A] and tighten the screws.

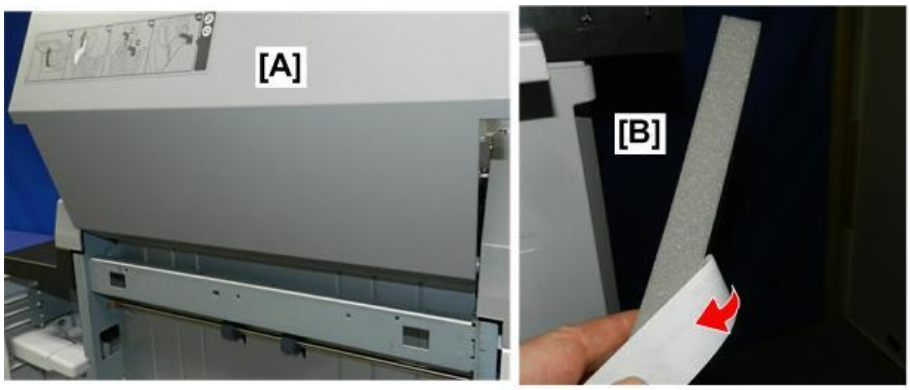


dc3nc1035

Sponge Strip

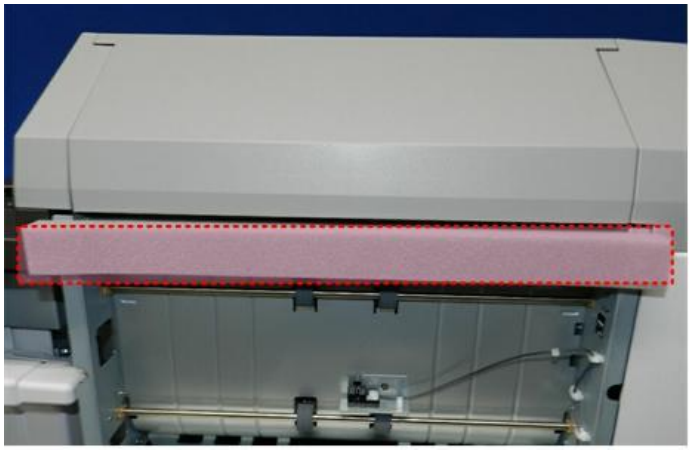
1. Open the tray [A].

2. Peel off the backing [B] from the sponge strip.



dc3nc1036

3. Attach the sponge to the plate, marked in the photo below.

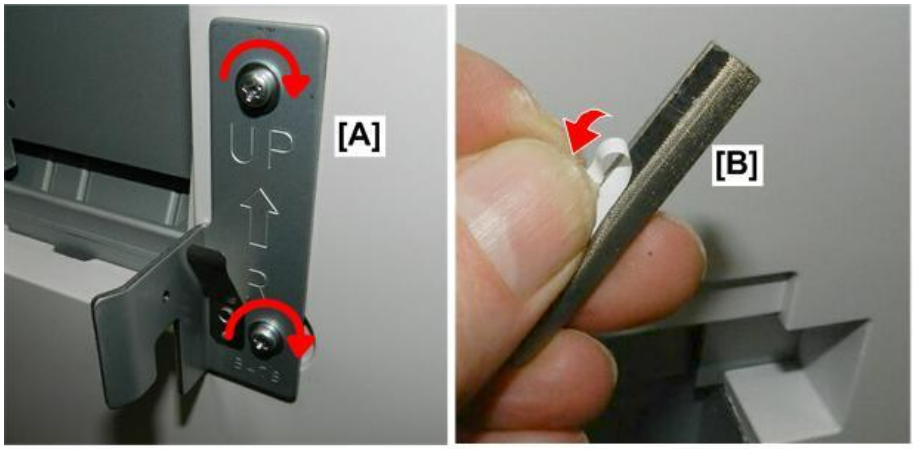


dc3nc1037

4. Raise and lower the tray a few times to make sure that the strip is not sticking to the tray.

Prepare the Main Machine (2)

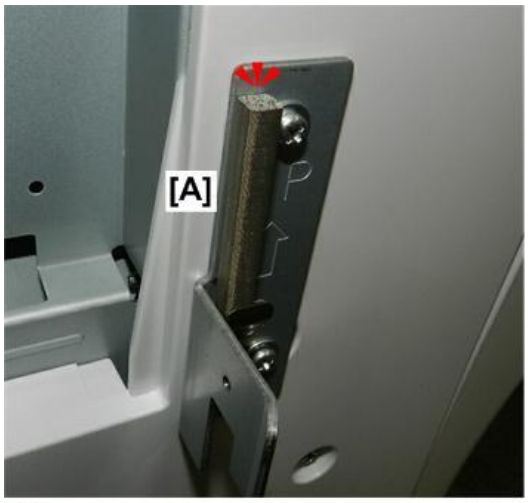
1. On the left side of the main machine, attach the front connecting bracket (marked "R") on the right side of the paper exit [A].
2. Remove the tape from one gasket [B].



x2 M4x14

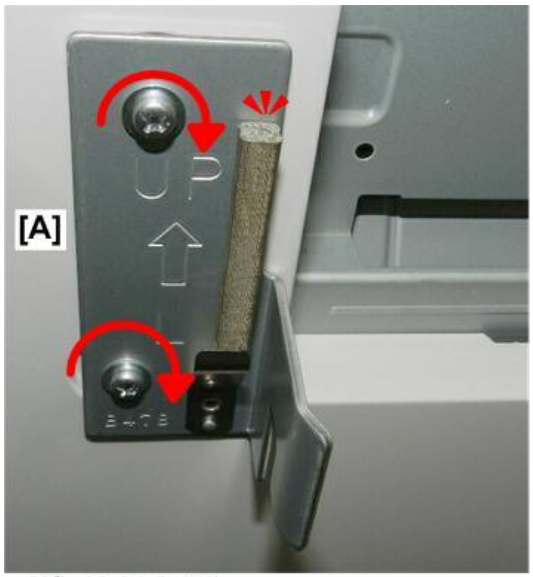
dc3nc1038

3. Attach the gasket [A] to the front connecting bracket.



x2 M4x14 dc3nc1044

4. Attach the rear connecting bracket (marked "L") on the left side of the paper exit [A].
5. Attach the other gasket to this bracket.

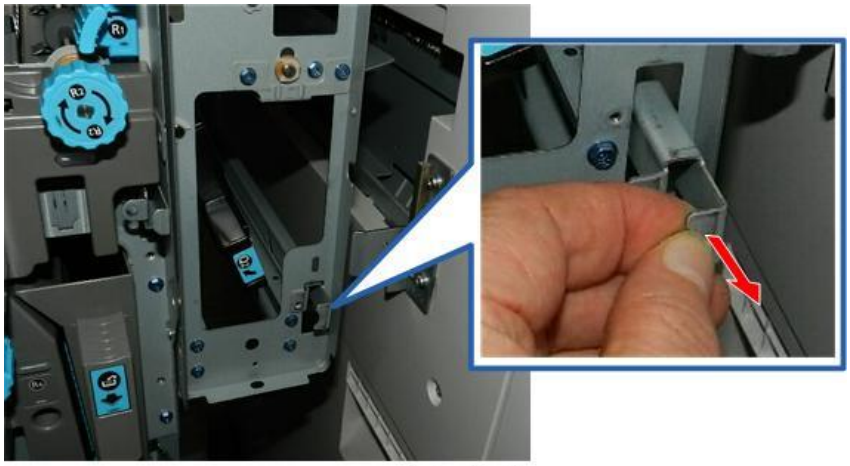


x2 M4x14 dc3nc1039

Docking the Finisher

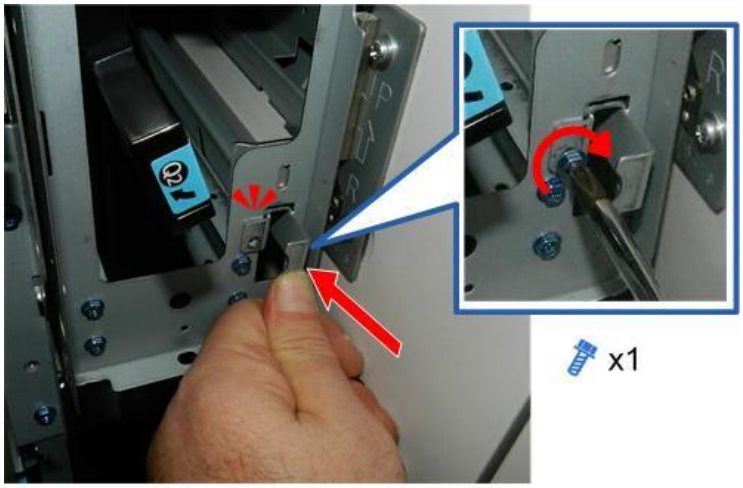
1. Push the finisher close to the left side of the main machine.

2. Confirm that the lock bar is pulled out completely.



dc3nc1041

3. Push in the lock bar, and then fasten it with its screw.

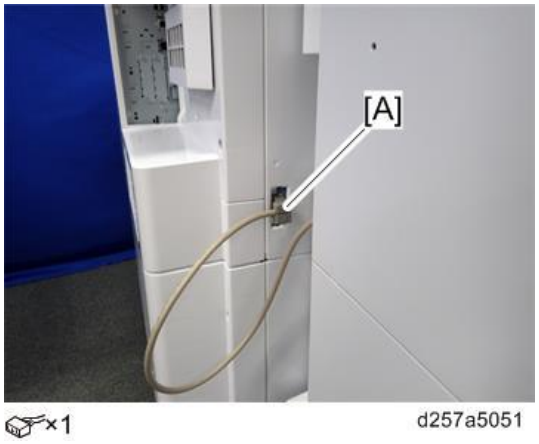


dc3nc1042

Important

- After docking the finisher, lower and raise guide Q2 to confirm that it opens and closes smoothly.
- If it does not operate smoothly, make sure that the right side of the finisher is straight against the left side of the machine (or upstream device).
- Also, check the guide Q2 and the paper guide above to see if either is bent or loose.

4. Connect the finisher cable [A] to the machine.



Finish the Installation

1. Plug in the machine and switch the machine on.
2. Enter the [System Settings].
3. Select Cover Sheet Tray > Front Cover Sheet Tray > Back Cover Sheet Tray > Tray Paper Settings > Designation Sheet 2 Tray.

Finisher SR4150 (D3HB), Booklet Finisher SR4160 (D3HC)

Refer to Finisher SR5090 (D3GD), Booklet Finisher SR5100 (D3GC).

Output Jogger Unit Type M25 (D3CJ)

Refer to Output Jogger Unit Type M25 (D3CJ).

Finisher SR4140 (D3HD)

Note

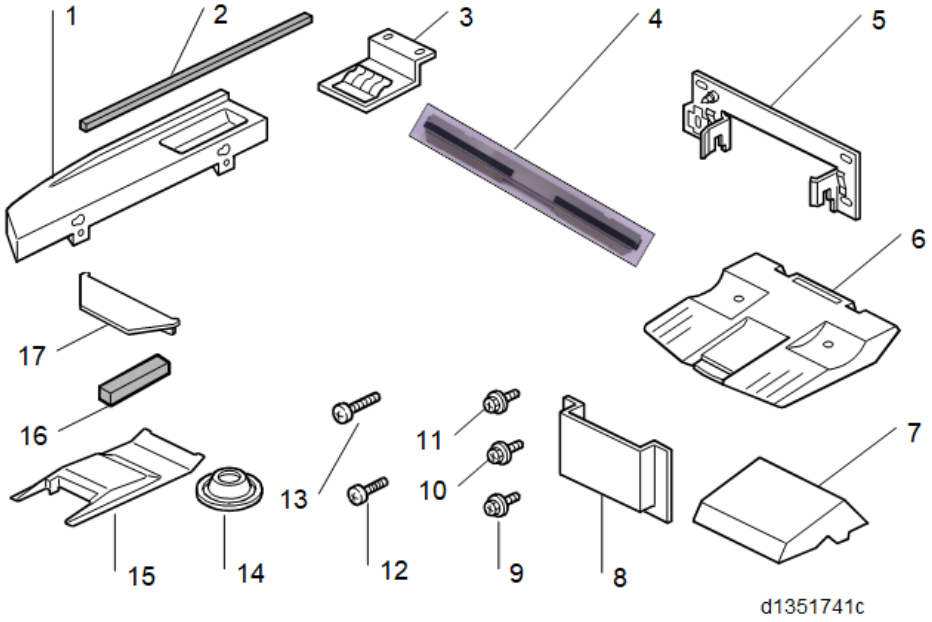
- You cannot install more than one finisher at the same time.

Accessories

Check the accessories and their quantities against this list.

	Description	Q'ty
1.	Side Tray	1
2.	Sponge Strip	1
3.	Ground Plate	1
4.	Entrance Guide Plate	1
5.	Joint Bracket	1
6.	Shift Tray	4
7.	Support Plate	1

	Description	Q'ty
8.	Support Plate Pocket	1
9.	Tapping Screws – M3 x 6	2
10.	Tapping Screws – M3 x 8	4
11.	Tapping Screws – M4 x 8	2
12.	Screws – M4 x 14	4
13.	Screws – M4 x 20	4
14.	Leveling Shoes	4
15.	Support Plate for Shift Tray	1
16.	Coupling Seal	1
17.	Support Plate for Proof Tray	1



Important

- The output jogger unit is pre-installed on this finisher, so it is not an option.

Spacer

A spacer for correcting paper skew is attached to the bottom right of the finisher.

d135a3123

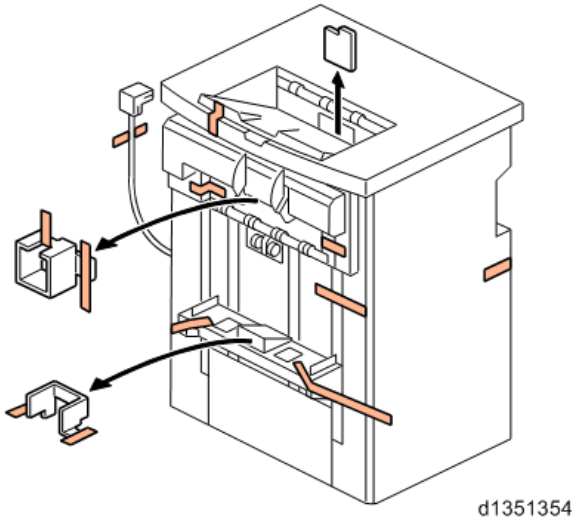
[A]: Spacer for skew correction and side-to-side registration adjustment

Installation Procedure

⚠WARNING

- Turn the machine off and disconnect the machine power cord before you do this procedure.

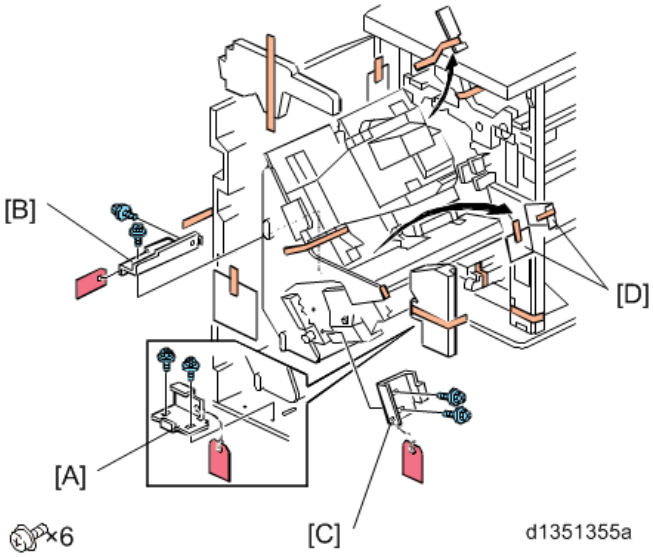
1. Unplug the machine power cord before starting the following procedure.
2. Unpack the finisher and remove all tape and shipping retainers.



d1351354

3. Open the front door and remove the shipping retainers.
4. Remove the brackets, tags, and wires in this order: [A] > [B] > [C].

5. Be sure to remove the two sheets of paper [D].

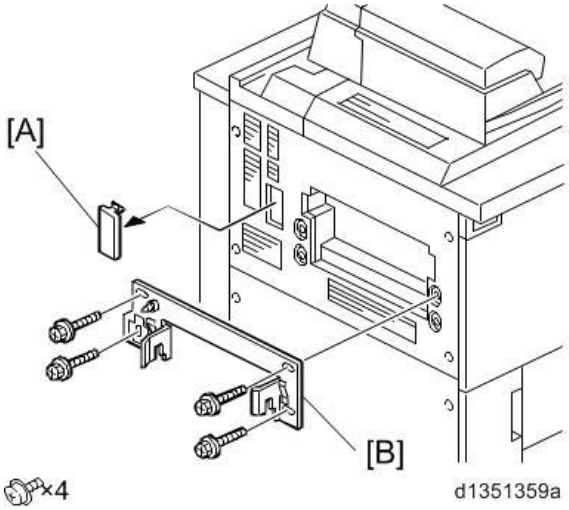


6. Attach the joint bracket to devices to be connected.

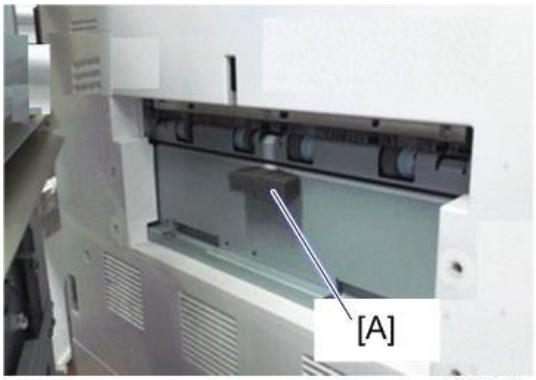
Note

Refer to the installation procedure of each device for attaching the joint bracket.

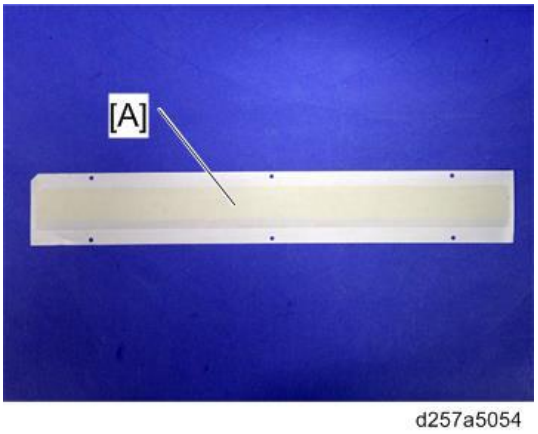
The illustration below is for connecting it to the main machine. ([A]: Connector cover, [B]: Joint bracket)



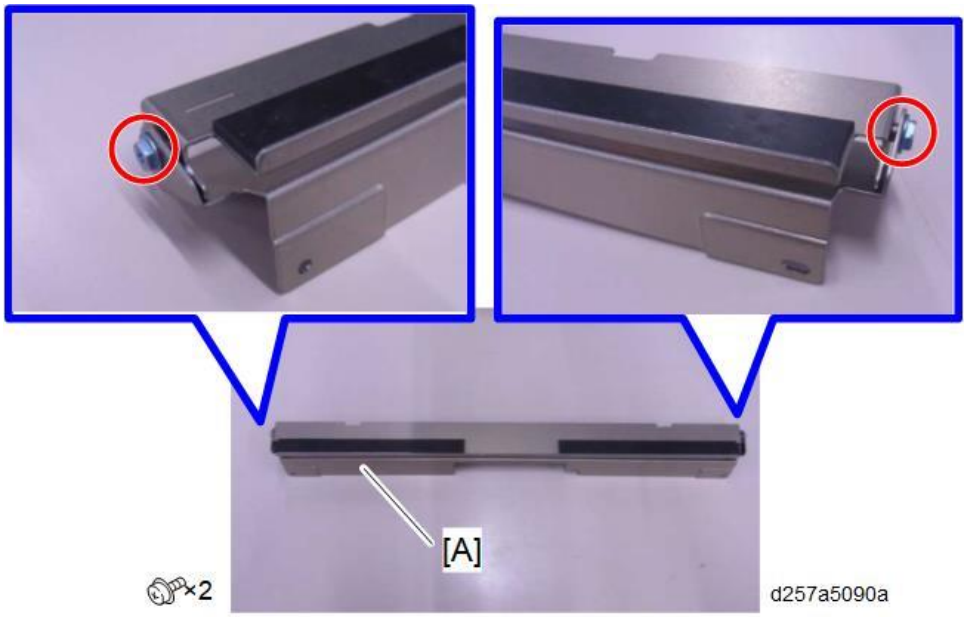
Attach the coupling seal [A]:



7. If the upstream device is the main machine, prepare the guide sheet [A] provided with the main machine.
If the upstream device is not the main machine, proceed to step 10.

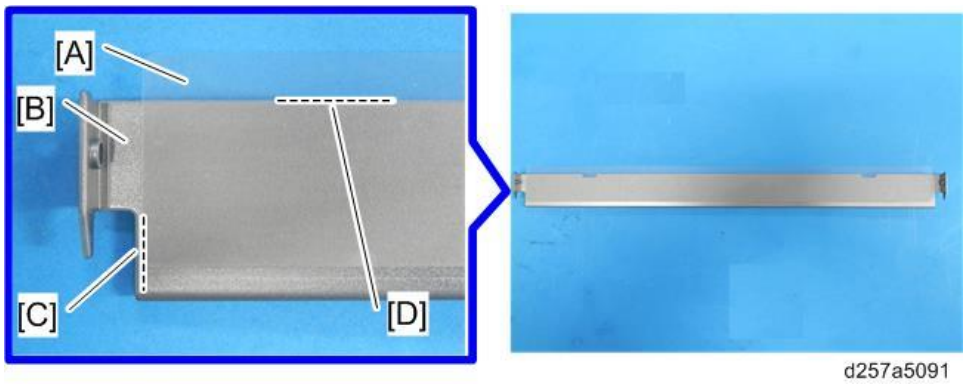


8. Separate the entrance guide plate [A] into two parts.



9. Remove the release paper from the guide sheet [A], and attach the guide sheet to the side of the

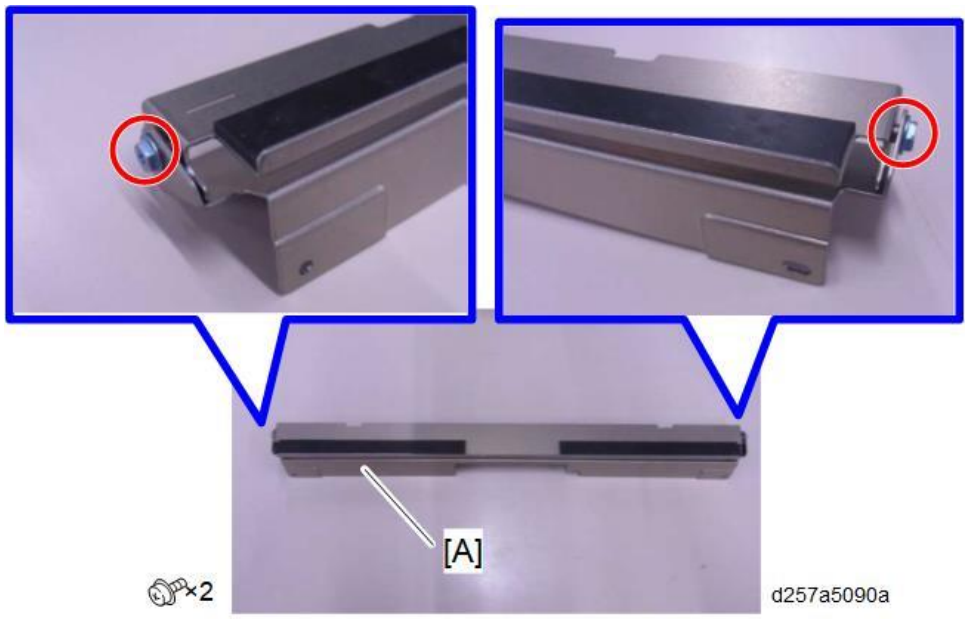
upper entrance guide plate [B] which will become the inner side once assembled.



[C]: Align the edge of the guide sheet with the edge of the upper entrance guide plate.

[D]: Align the edge of the adhesive tape with the edge of the upper entrance guide plate.

10. Reassemble the entrance guide plate [A].



11. Attach the sponge strip [C] to the right side of the upper cover.

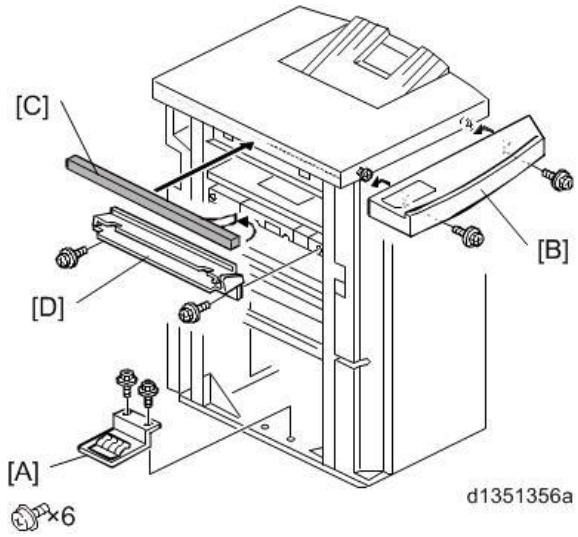
Note

The sponge strip prevents the sheets from falling down the sheet in between the finisher and the main machine during transport.

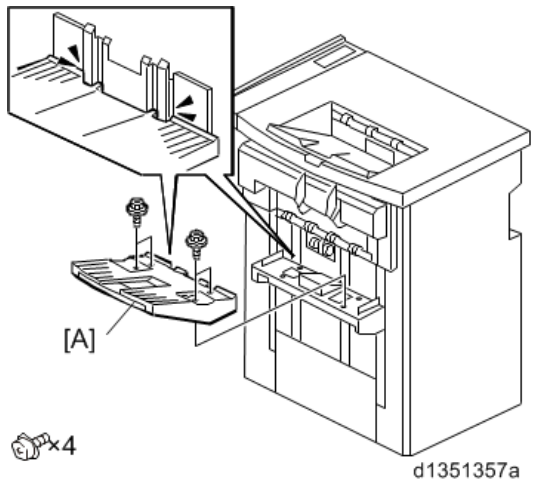
[A]: Front, [B]: Center, [C]: Rear

12. Install the entrance guide plate [D] (M3 x 6), the side tray [B] (M4 x 8) and the ground plate [A] (M3

x 8).



13. Insert the shift tray [A] into the grooves and fasten it. (M3 x 8)



14. Pull out the locking lever [A].

15. Align the finisher [B] with the connecting brackets [C], then slowly push the finisher onto the brackets.

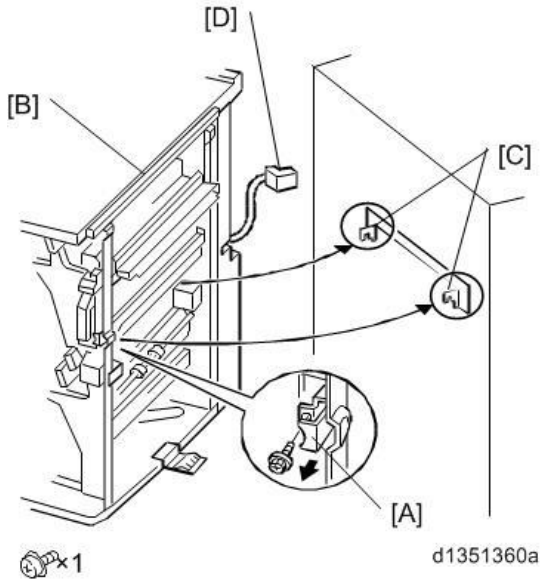
16. Push in the locking lever. [A]

17. Connect the finisher cable [D] to the copier. (Install the punch unit at this point)

18. Check that the top edges of the finisher are parallel with the edges of the device (or the copier) to the right.

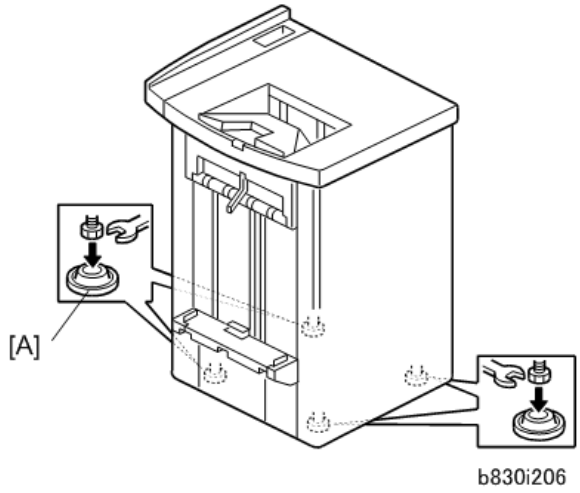
19. Fasten the locking lever [A].

20. Close the front door.



21. Set the leveling shoes [A] under the feet.

22. Turn the nuts to adjust the height of the finisher until it is level.



How to Use the Spacer to Correct Paper Skew

A spacer for correcting paper skew is attached to the bottom right of the finisher.

[A] Spacer for skew correction and side-to-side registration adjustment

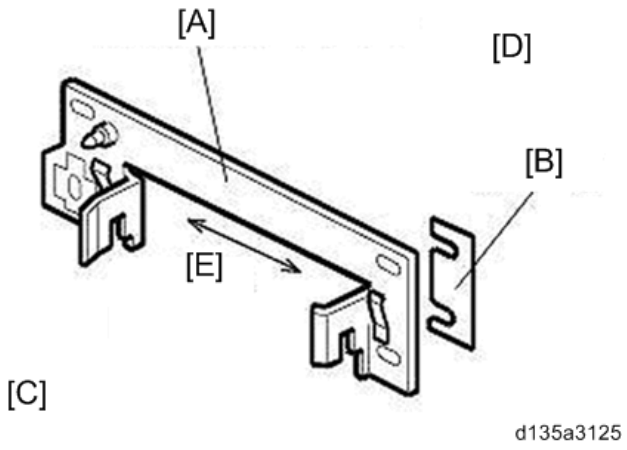
1. Check to see if the paper is skewed when it exits the machine.
2. If a skew correction is required, dock the finisher to the copier using the **M4x20** screws provided with the finisher.

Note

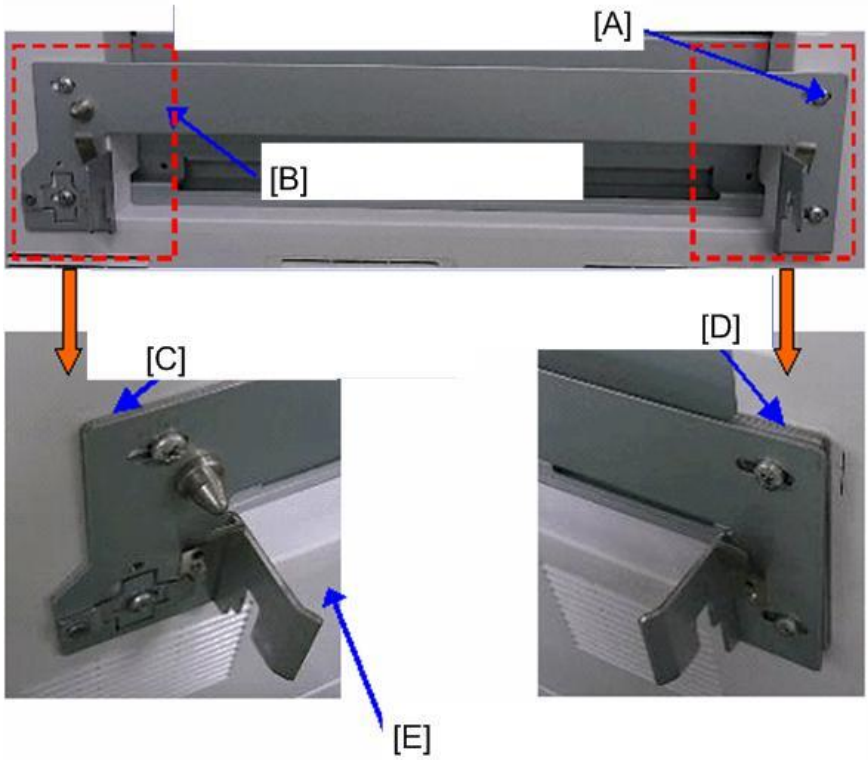
- M4x20 screws are required to dock because M4x14 screws are not long enough when the spacer(s) are attached.

Important

- When you attach the bracket, attach the spacer(s) as follows:
  - If the leading edge is skewed about 2mm toward the **front** (operator) side of the machine, attach a 2mm spacer to the **rear** side of the connecting bracket.
  - If the leading edge is skewed about 2mm toward the rear (the opposite side of the operator) side of the machine, attach a 2mm spacer to the front side of the connecting bracket.



[A]: Joint Bracket
[B]: Spacer
[C]: Finisher side
[D]: Main machine (Mainframe) side
[E]: Adjustable direction



d135a3126

[A]: Screws (with spacer(s): M4 x 20, without spacer(s): M4 x 14)

[B]: Joint Bracket

[C]: Without spacer

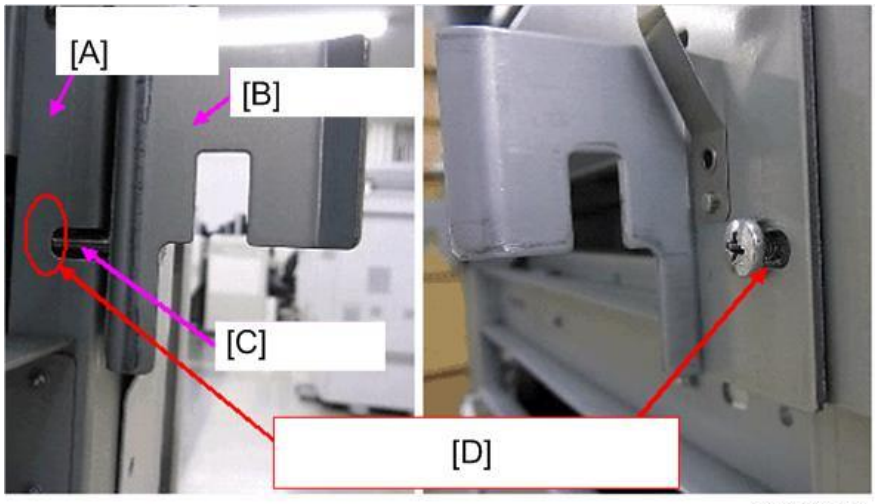
[D]: With 1-2 spacers

[E]: Exterior Cover

3. If skew correction is **NOT** required, dock the finisher to the copier using the **M4x14** screws included with the finisher.

Note

- If docked without spacers and using M4 x 20 screws the bracket cannot be tightened enough in place because the M4 x 20 screws too long.



d135a3127

[A]: Folding Unit

[B]: Joint Bracket

[C]: Screw (M4 x 20)

[D}: Screw is too long and cannot be fully inserted

SP Setting

1. Enter the SP mode.
2. Do SP5841-11 and enter the name of the staples used for corner stapling.
   - This is the name that shows when the user prints the Inquiry List.
   - To print this list, push User Tools > [Inquiry] > [Print Inquiry List] > [Start].

Cooling Fan Unit Type M31 (D770)

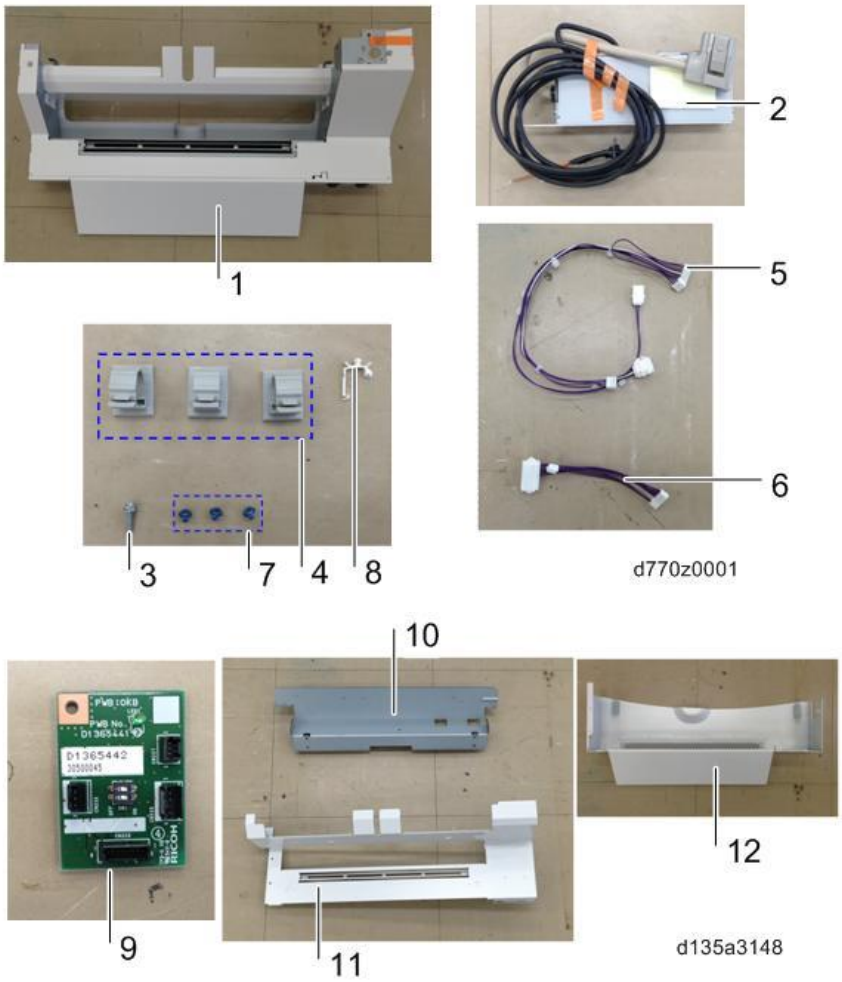
Important

- This option can be installed on Finisher SR4140.
- This option cools down the sheets delivered to the finisher shift tray.

Component Check

Check the quantity and condition of the accessories against the following list.

No	Description	Qty
1	Cooling Fan Assembly	1
2	I/F Unit	1
3	Tapping Screw M3 X 16	1
4	Locking Wire Saddle CKN-13	3
5	Harness: Fan: Separation	1
6	Harness: Fan	1
7	Tapping Screw M3 X 6	3
8	Clamp	1
9	PCB: OKB	1
10	Bracket	1
11	Lower Cover	1
12	Upper Cover	1

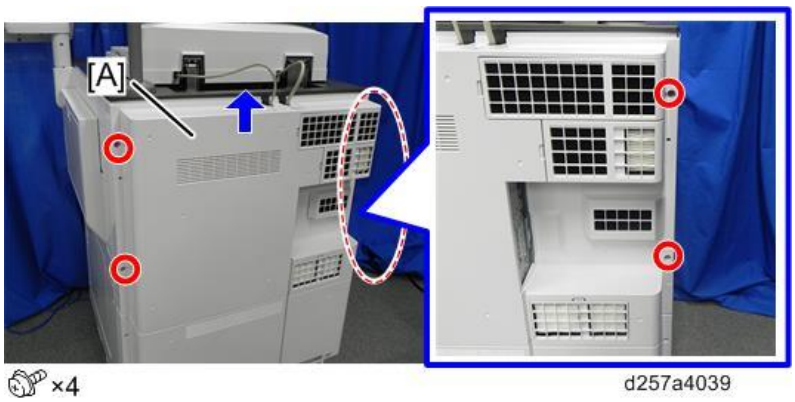


Preparing the Main Machine

⚠CAUTION

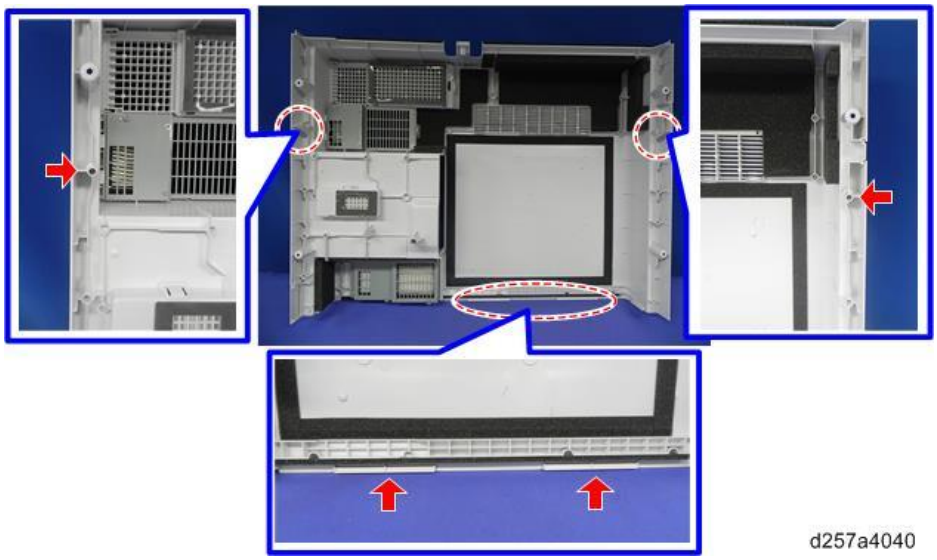
- Always switch the machine off and unplug the cable before beginning the following procedure.

1. Remove the rear middle cover.



Note

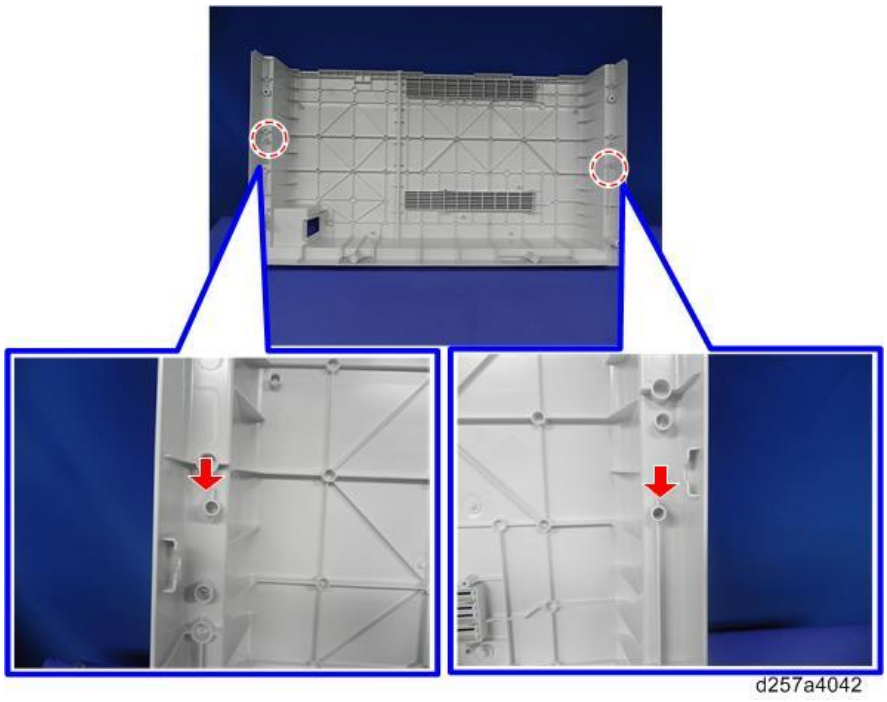
Check the positions of the bosses and hooks before removing the cover.



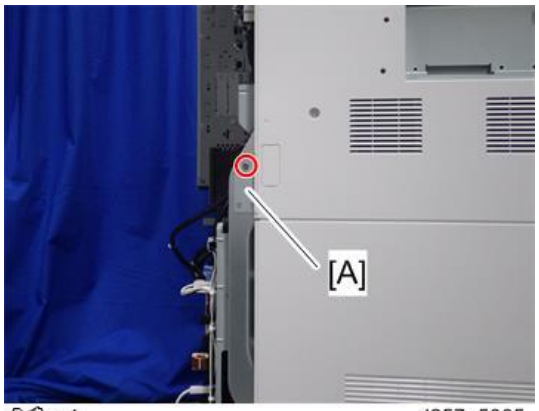
2. Remove the rear lower cover.

Note

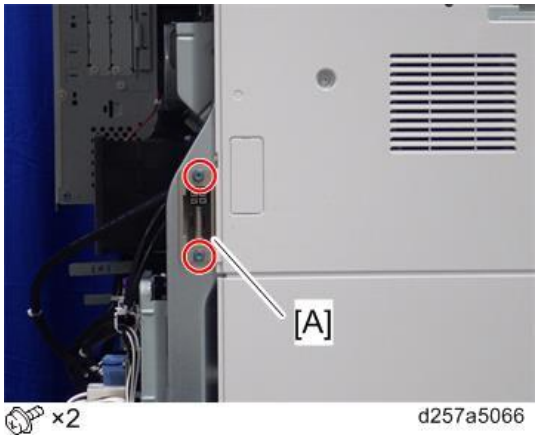
Check the positions of the bosses before removing the cover.



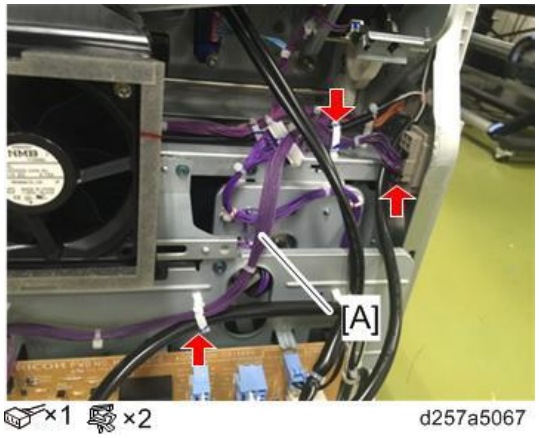
3. Remove the cover [A].



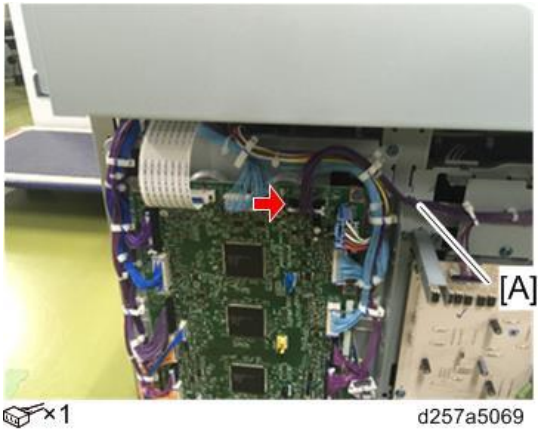
4. Attach the connector [A] provided with the cooling fan unit.



5. Connect the harness [A] provided with the cooling fan unit to the connector, and then clamp the harness.

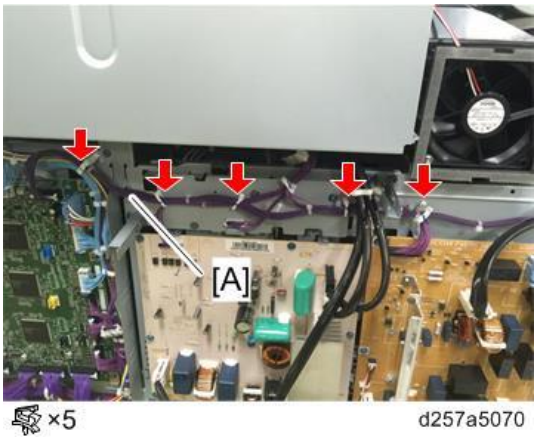


6. Connect the harness [A] to CN272 of the PFB.

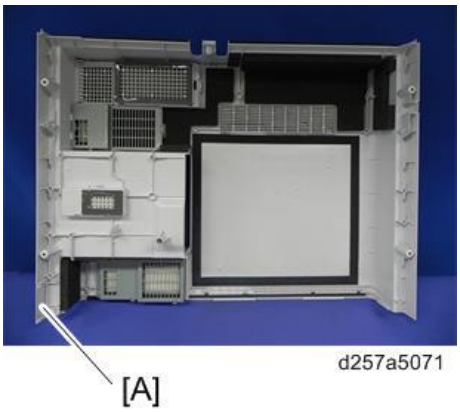


7. Clamp the harness [A].

Pass the harness under the black tubes.



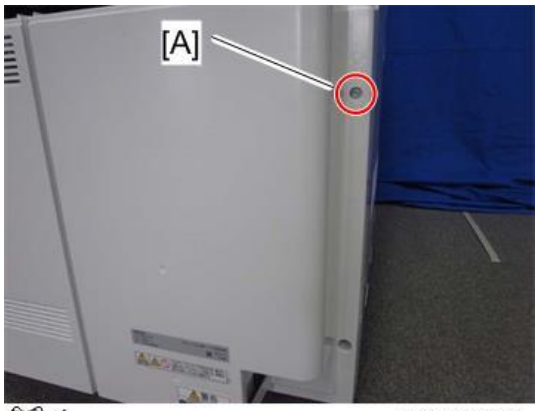
8. Remove the connector cover [A] from the rear middle cover.



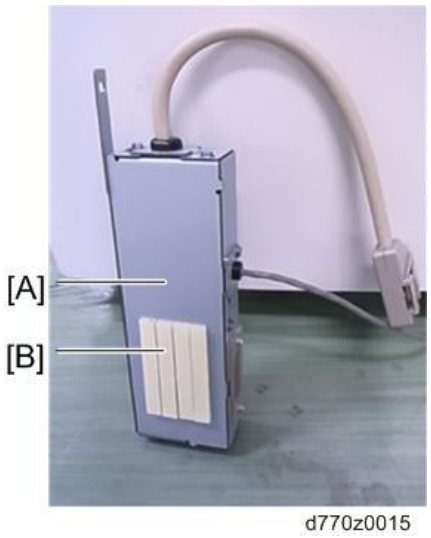
9. Reattach the rear lower cover.

10. Reattach the rear middle cover.

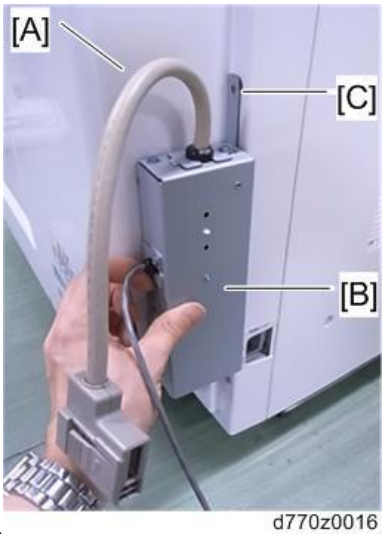
11. Remove the upper screw [A] from the rear lower cover.



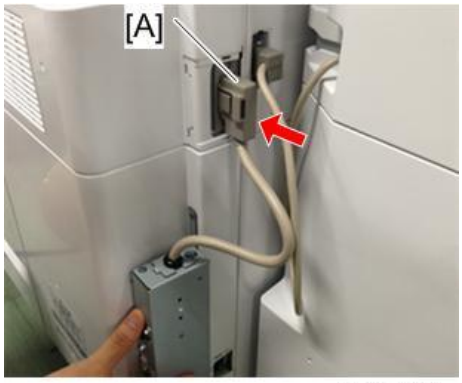
12. Peel off the tape from the hook and loop fastener [B] attached to the interface unit [A] (accessory #2).



13. Align the I/F Unit screw hole [C] with the hole on the cover [A] and attach it with the hook and loop fasteners.



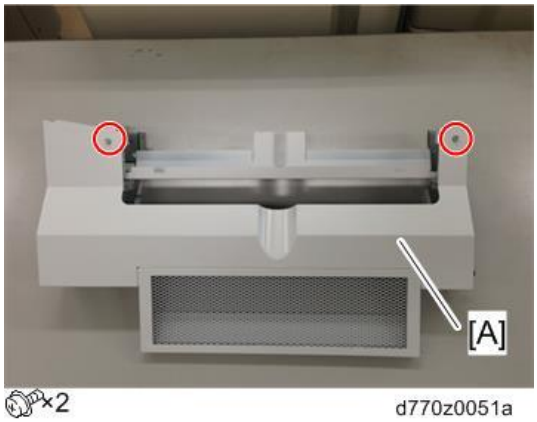
14. Attach the I/F Unit [A] to the lower left cover with an M3x16 screw (accessory #3).



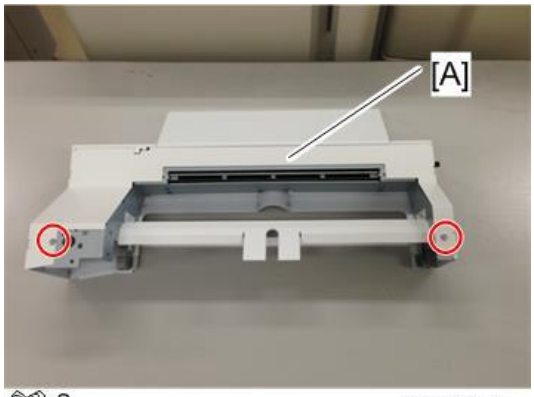
15. Plug in the connector's cable [A] to the machine.

Cooling Fan Unit Installation

1. Remove the upper cover [A] from the cooling fan assembly.

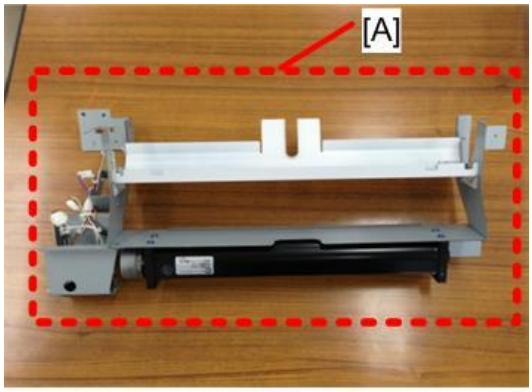


2. Remove the lower cover [A] from the cooling fan assembly.



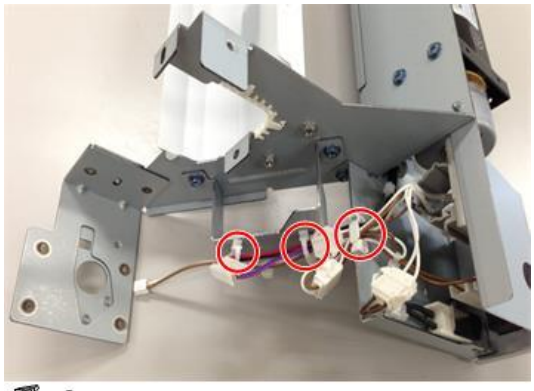
×2 d770z0052a

3. Place the fan assembly [A] on a table with the upper and lower covers removed.



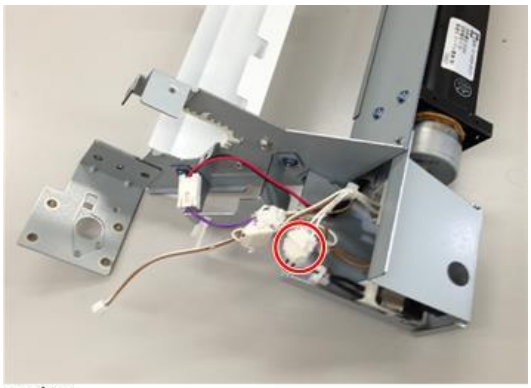
d770z0053

4. Release the 3 clamps attached to the cooling fan assembly.

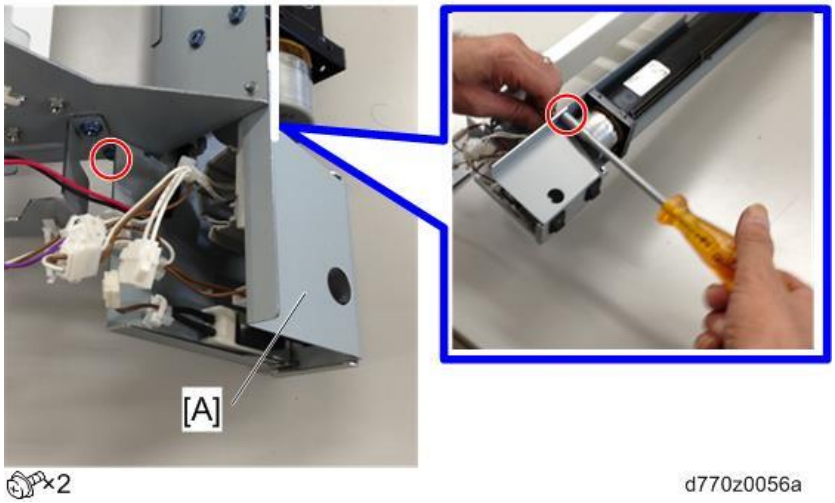


×3 d770z0054a

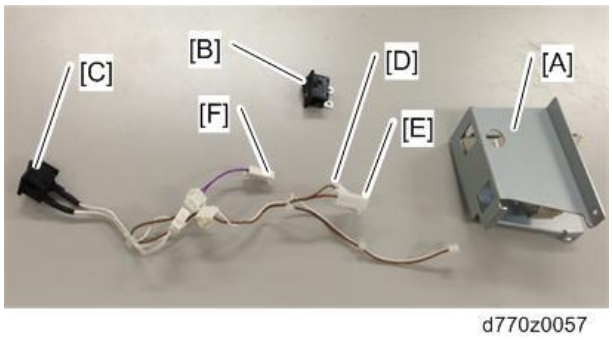
5. Disconnect the connector.



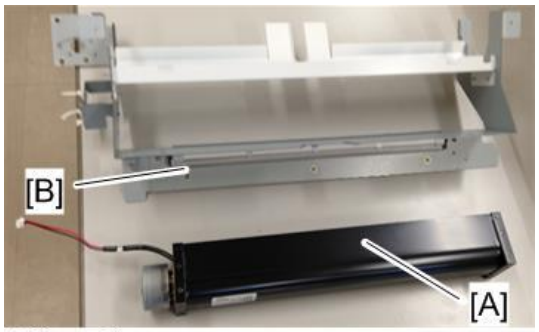
6. Remove the bracket [A].



7. Remove the rocker switches [B] and [C] from the bracket [A] removed in step 6 (connectors [D], [E] and [F]).

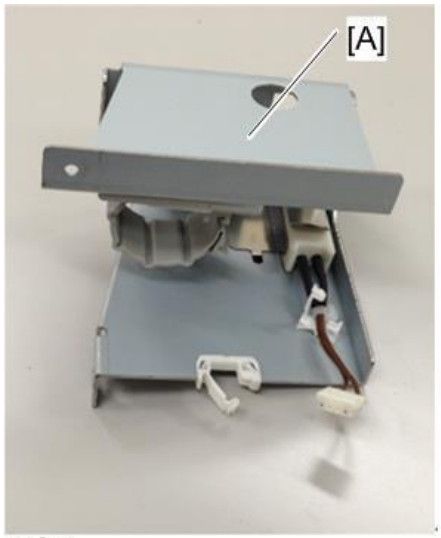


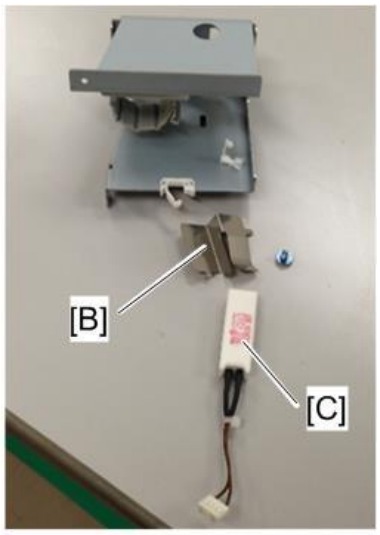
8. Remove the fan motor [A] from the bracket [B].



×4 ×1 d770z0058a

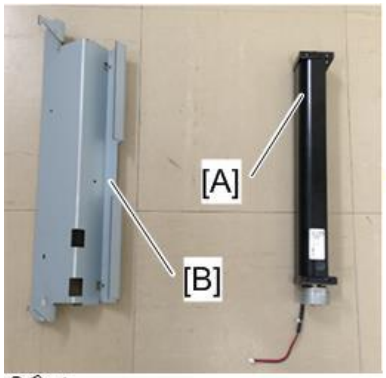
9. Remove the spring plate [B] and the resistor harness [C] from the bracket [A].





×1 d770z0059a

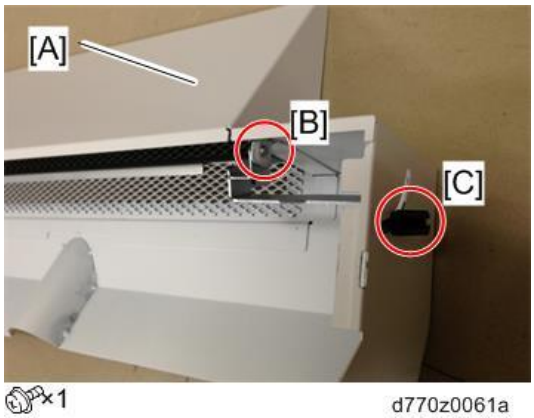
10. Assemble the fan motor [A] and bracket [B] (for the finisher) (accessory #10).



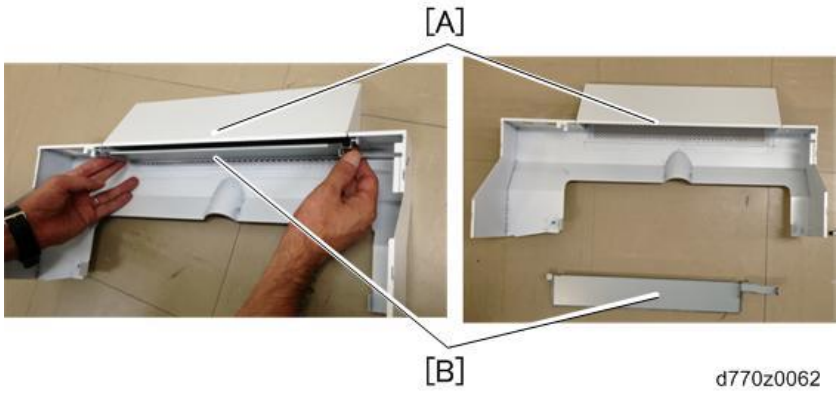
×4 d770z0060a

11. Remove the knob screw [C] and snap ring [B] from the upper cover [A] removed from the cooling

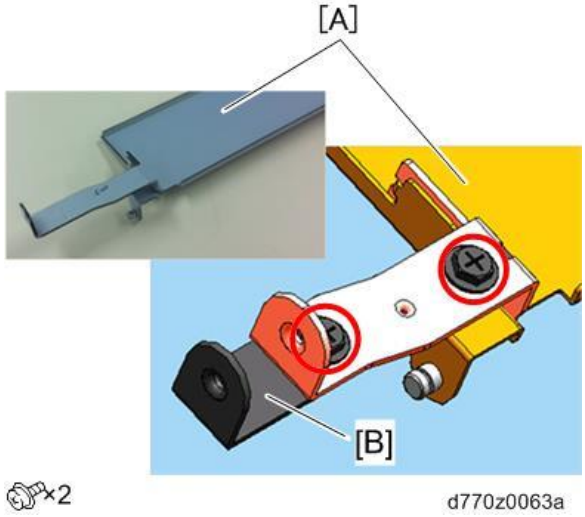
fan unit in step 1.



12. Remove the air shield [B] from the upper cover [A].

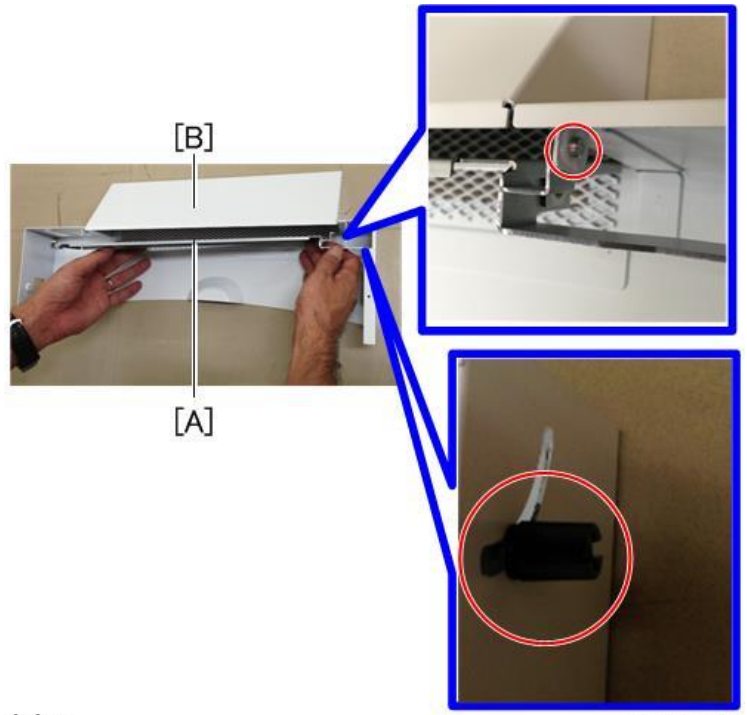


13. Remove the bracket [B] from the air shield [A].

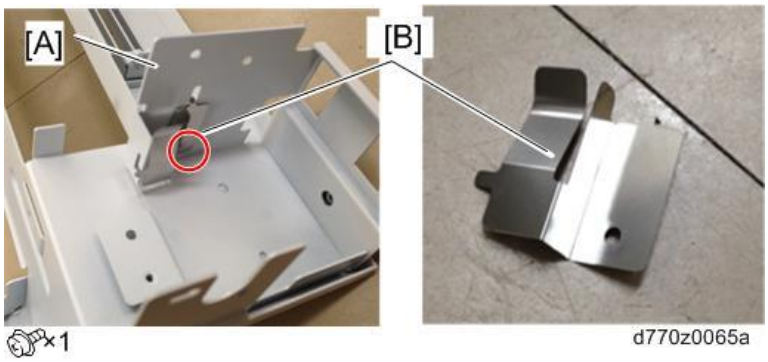


14. Assemble the air shield [A] and Upper Cover (for the finisher) [B] (accessory #12) with the snap

ring and knob screw removed in step 11.

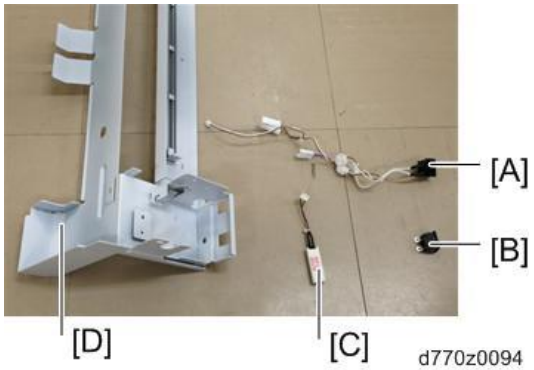


15. Attach the spring plate [B] removed in step 9 to the Lower Cover (for the finisher) (accessory #11) [A].



16. Prepare the following parts:

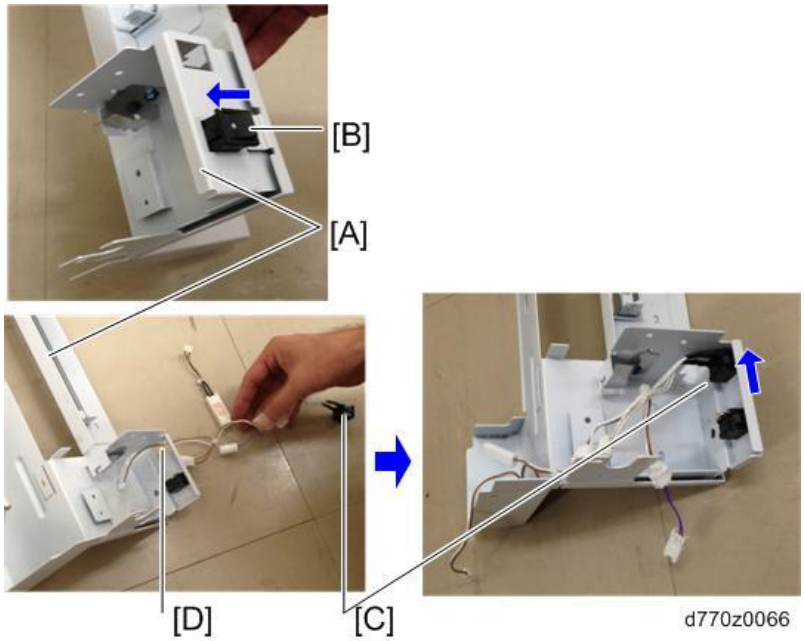
- Rocker switches [A] and [B]
- Harness removed in step 9 [C]
- Lower cover of the finisher [D]



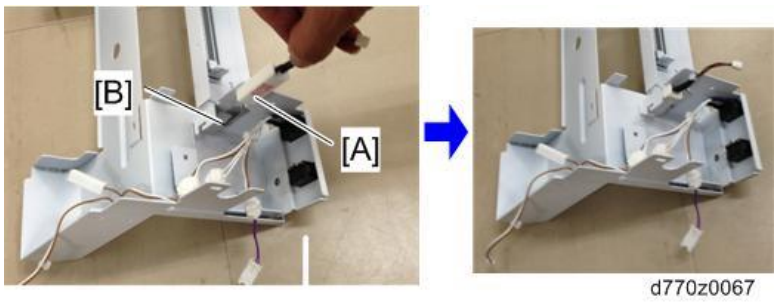
17. Route the harnesses through the openings [D], and attach the rocker switches [B] and [C] to the lower cover of the finisher [A].

Important

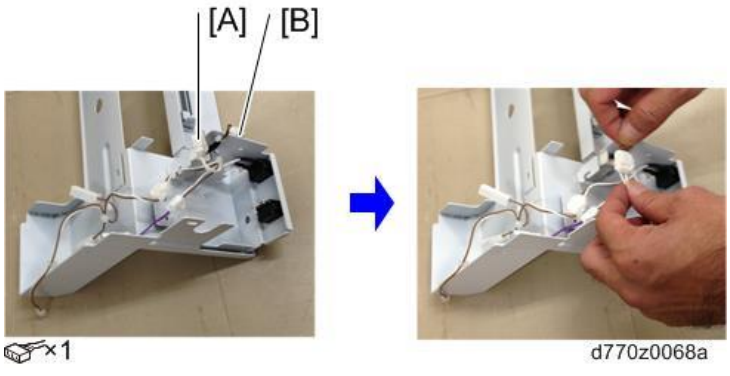
- Attach the rocker switch [B] so that the white dot is to the side indicated with the arrow in the photo below.
- Attach the rocker switch [C] so that the side connected with the harness corresponds to the direction of the arrow shown in the photo below.



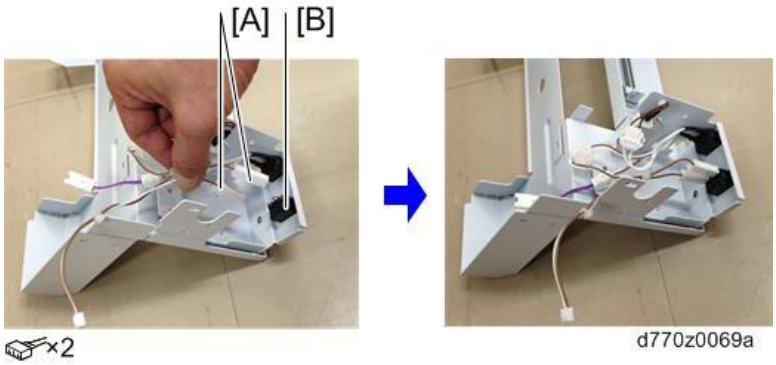
18. Insert the resistor harness [A] into the spring plate [B].



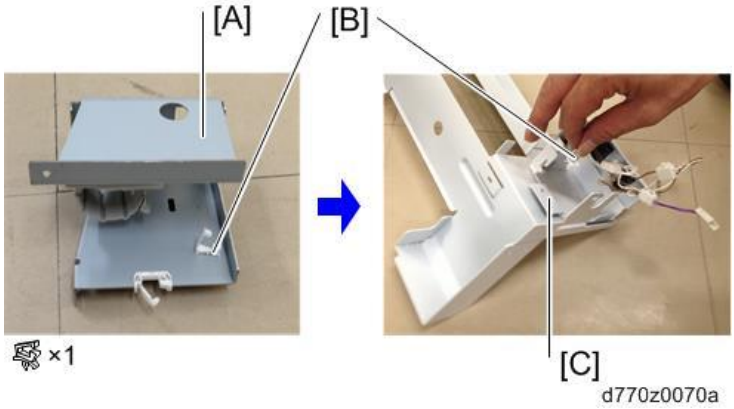
19. Connect the connectors [A] and [B].



20. Connect the 2 connectors [A] to the rocker switch [B].

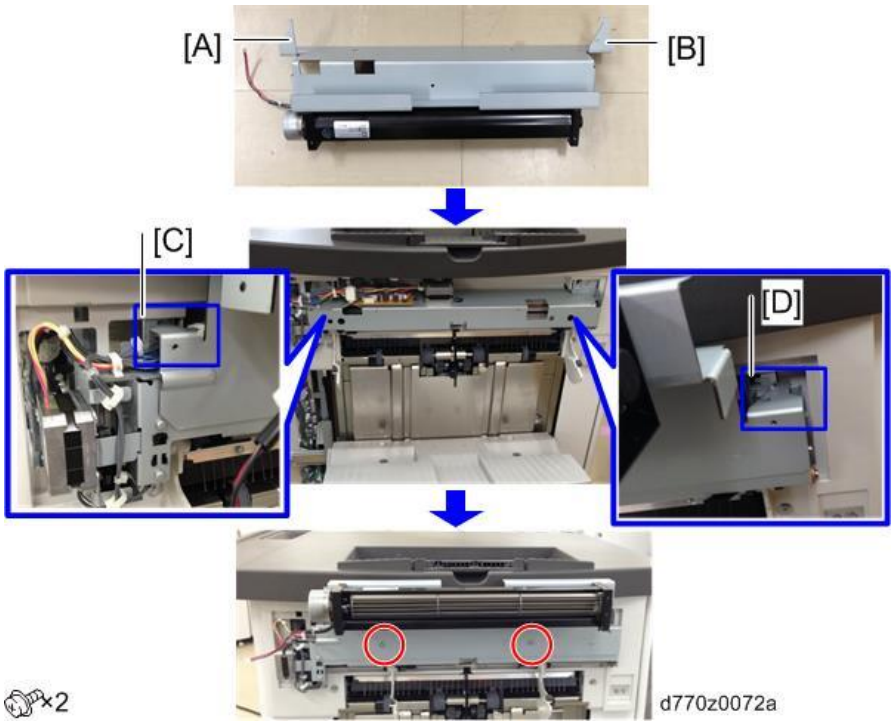


21. Remove the clamp [B] from the bracket [A] removed in step 7. Then attach the clamp [B] to the hole [C] in the lower cover of the finisher.



22. Remove the jogger unit cover [A] from the finisher.

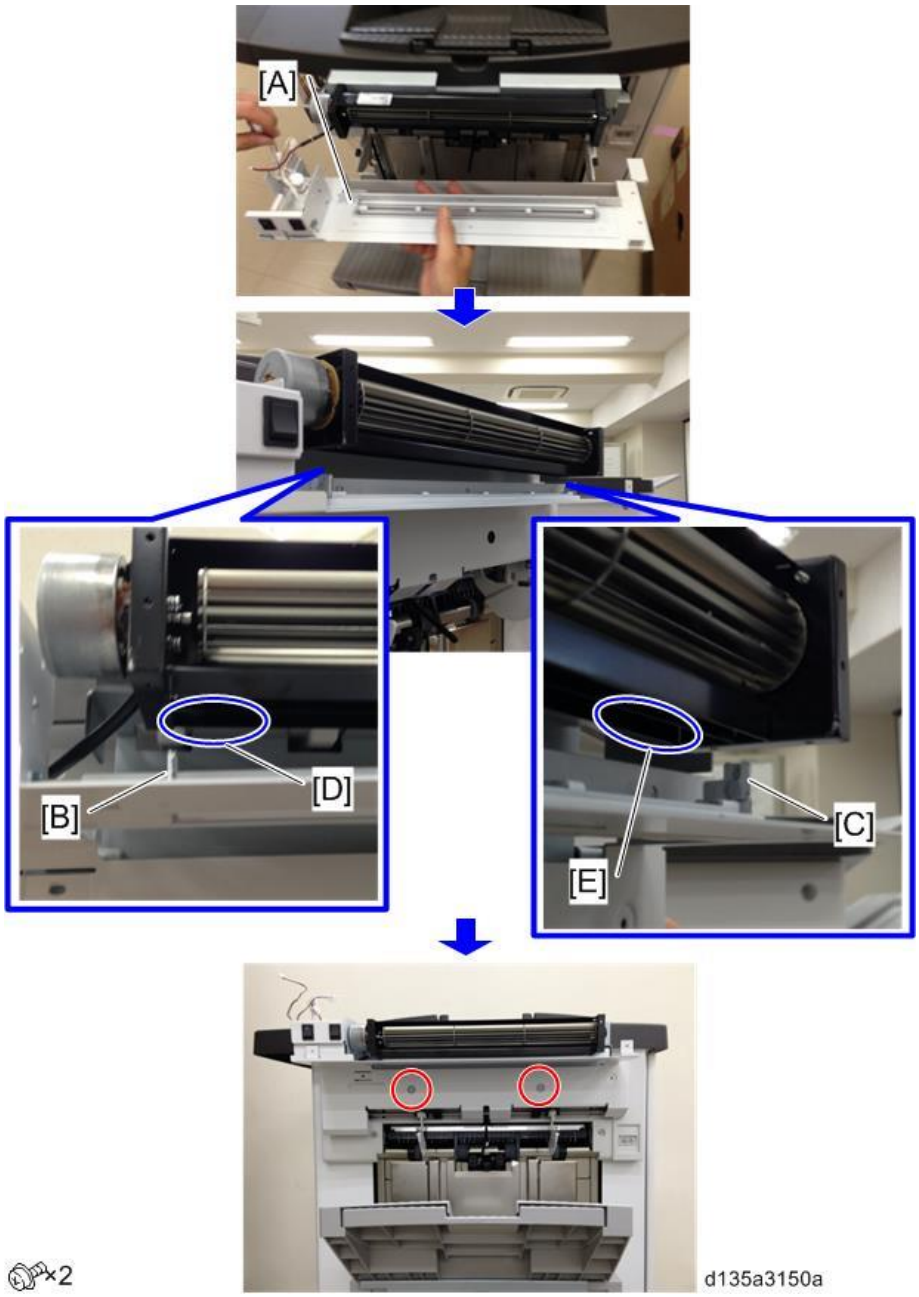
23. Align the fan motor unit hooks [A] and [B] with the cutouts [C] and [D], mount on the finisher.



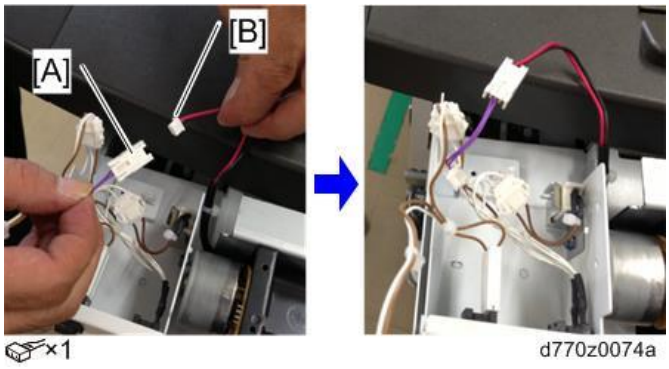
24. Attach the lower cover [A] assembled in step 21 by inserting the tabs [B] and [C] into the grooves [D] and [E] located under the cooling fan unit.

Note

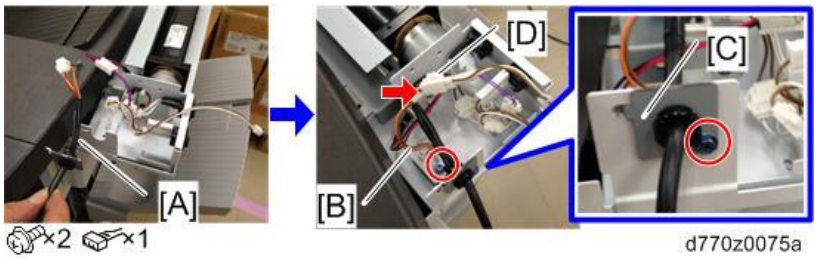
- Grooves [D] and [E] refer to the wider groove (towards the upstream direction from the unit).



25. Connect the connectors [A] and [B].

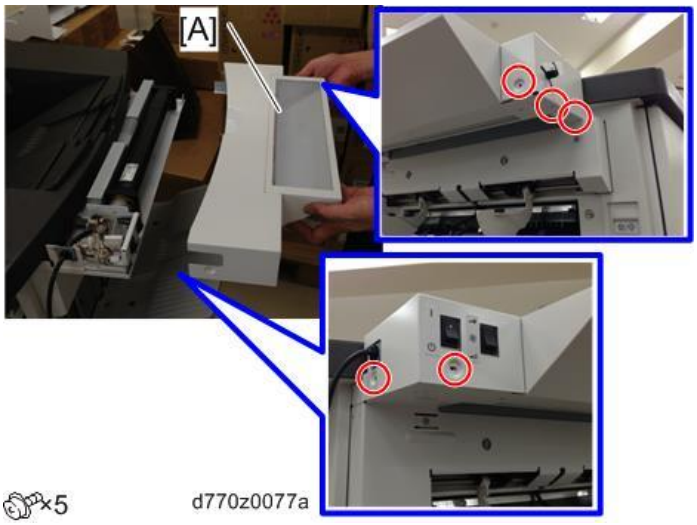


26. Fix the harness [A] from the interface unit mounted on the copier in Preparing the Main Machine. (Ground wire [B], bracket [C], and connector [D])



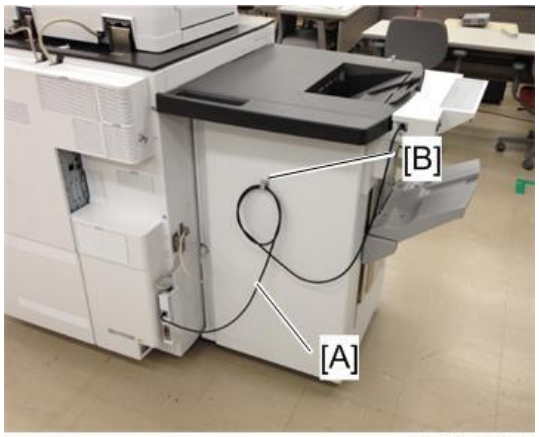
27. Clamp the harness.

28. Mount the upper cover [A] assembled in step 14 on the cooling fan unit.



29. Bind the harness of the interface unit [A] and clamp it with Locking Wire Saddle CKN-13 [B]

(accessory #4).



d770z0078

Note

- Depending on the number of options installed between the copier and the finisher, 3 pcs of Locking Wire Saddle CKN-13 might be needed to clamp the harness.

Information for Cooling Fan Unit Type M31

Cooling Fan Unit Type M31 activates under the following condition.

Main Power Switch [A] of Cooling Fan Unit Type M31	Mainframe	
	Printing/Copying	Ready status
ON	Active	Inactive
OFF	Inactive	Inactive

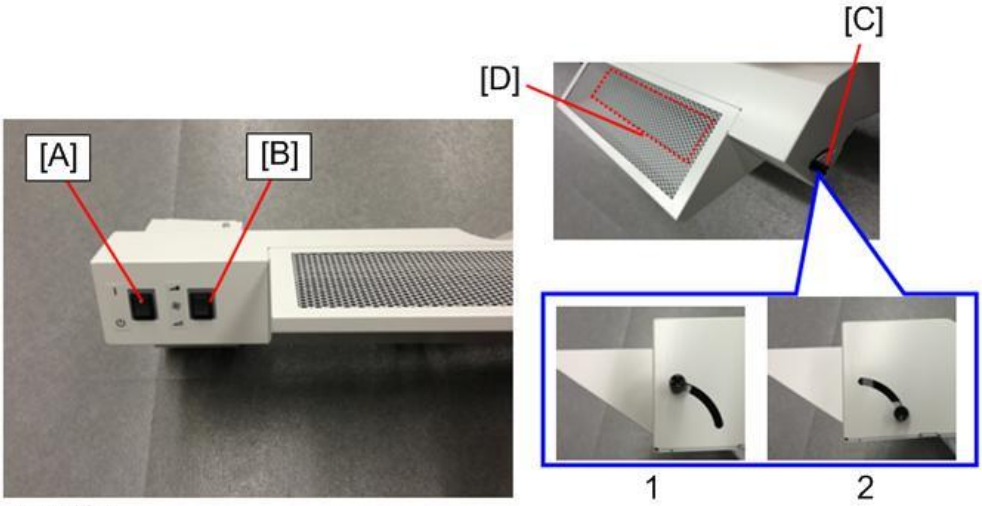
Important

- Always keep the main power switch of the Cooling Fan Unit Type M31 **ON**, because the power is supplied from mainframe.
- Even if the machine is powered on and ready, the cooling fan will not be activated, it is only activated when printing or copying.

Instruction for Customers

How to adjust the fan power

Cooling Fan Unit Type M31 has a power adjustment switch [B]. Fan power can be set to either maximum or minimum. If stacking is poor as a result of excess air volume, set this switch to minimum. If the air volume needs to be finely adjusted, rotate the knob screw [C], which will let you change the position of the air shield [D] inside the unit. The air shield can be fixed at the desired position by tightening the knob screw. (The air shield [D] is inside the meshed cover.)



d135a3151

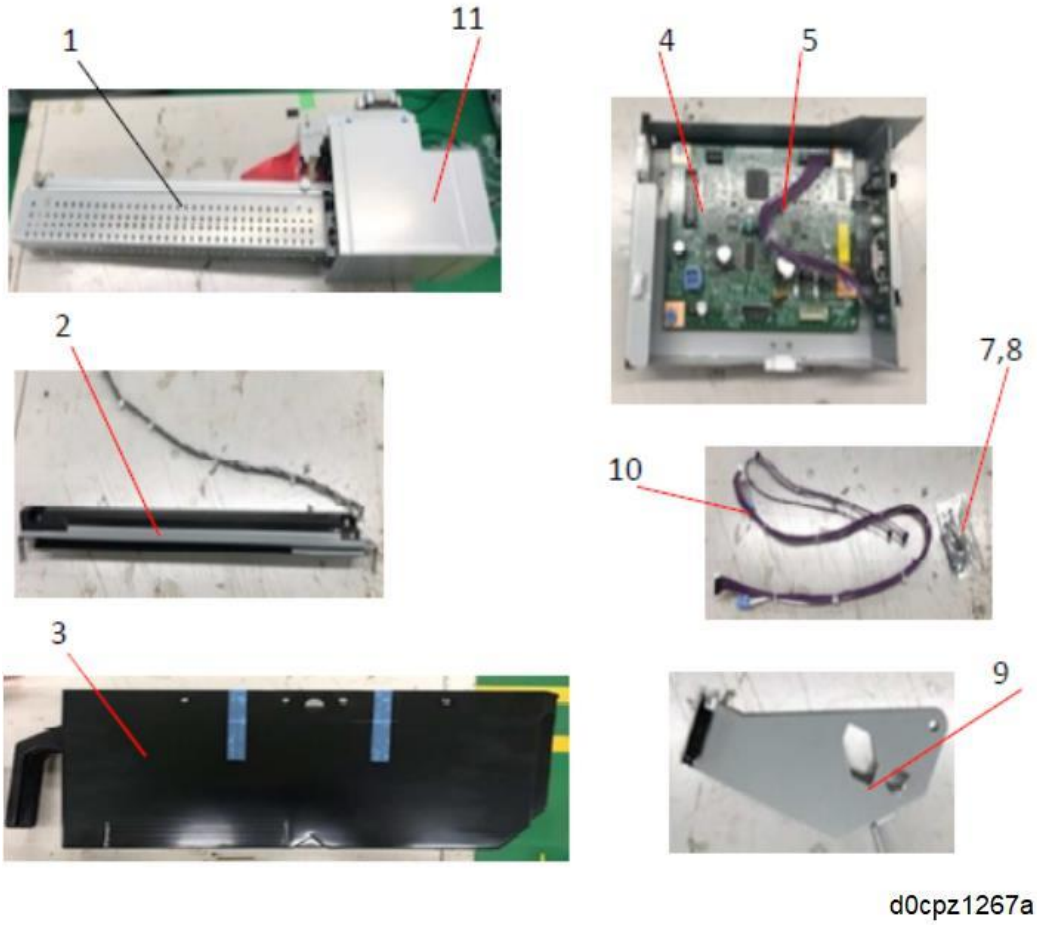
1: Maximum air volume

2: Minimum air volume

Punch Unit PU5050 (D3HE)

Component Check

Check the quantity and condition of the accessories in the box against the following list:



d0cpz1267a

No.	Description	Q'ty
1.	Punch Unit	1
2.	Guide plate	1
3.	Hopper	1
4.	Bracket	1
5.	Harness	1
6.	Screw (M3x6)	7
7.	Spring	1
8.	Stepped screw	1
9.	Hopper	1
10.	Harness	1
11.	Bracket	1

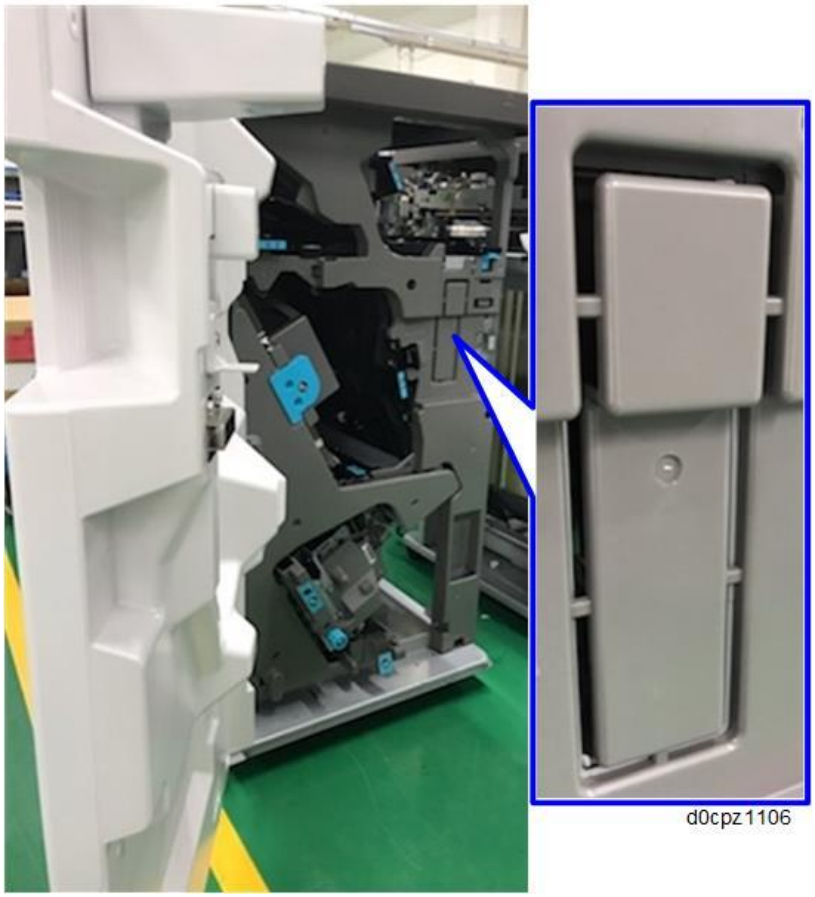
Installation Procedure

This punch unit is for the Finisher SR4140 only.

⚠CAUTION

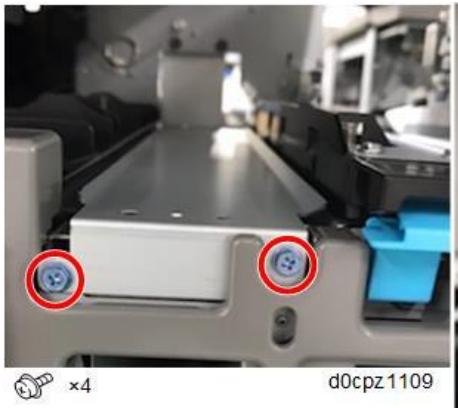
- Switch the machine off and unplug the machine before starting the following procedure.

1. Open the front cover and cut out the following points with a nipper.



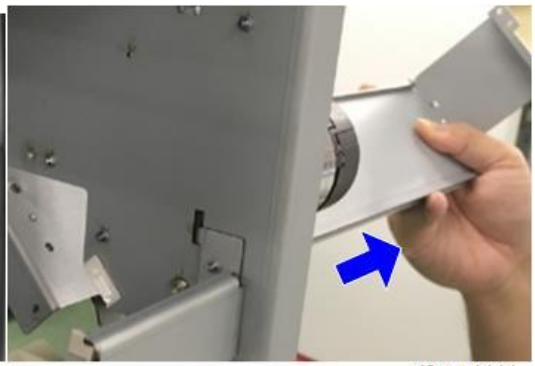
2. Remove the rear cover.

3. Remove the guide plate.



Note

Go to the left side seeing from the rear side, lift the guide plate up and pull it out from the rear side.



4. Insert the guide plate for the image sensor from the rear side.

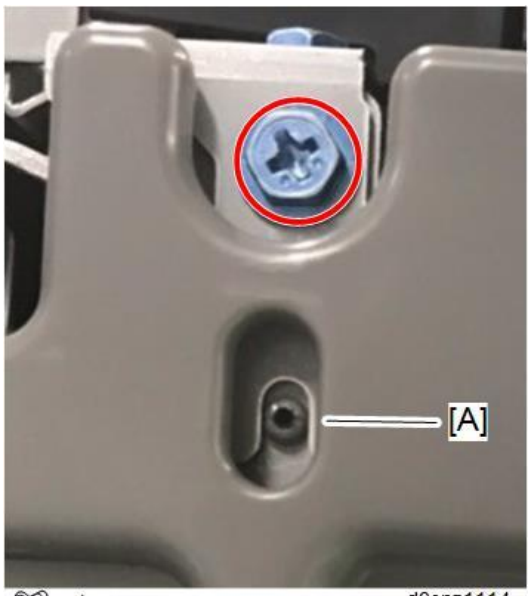
5. Insert the front side of the guide plate between the inner cover and the side plate.

6. Set the rear side of the guide plate on the front of the side plate.

d0cpz1112

d0cpz1113

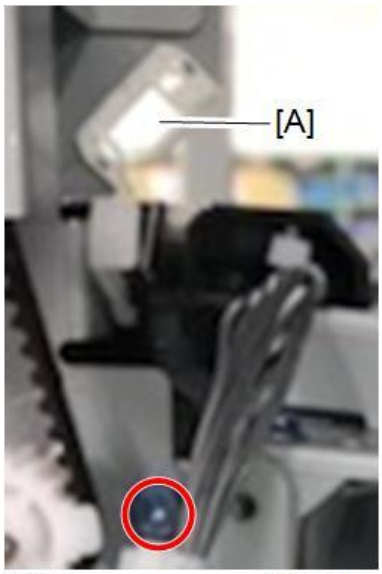
7. Set the guide plate on the positioning boss [A] and fasten the blue screw.



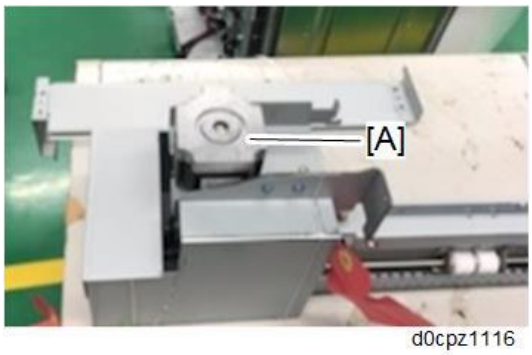
×1 d0cpz1114

8. Attach the blue screw to the rear side of the guide plate.

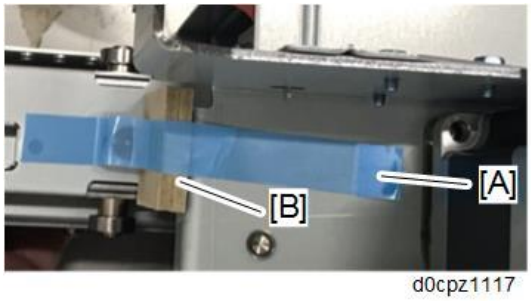
9. Secure the harness with edge saddle [A].



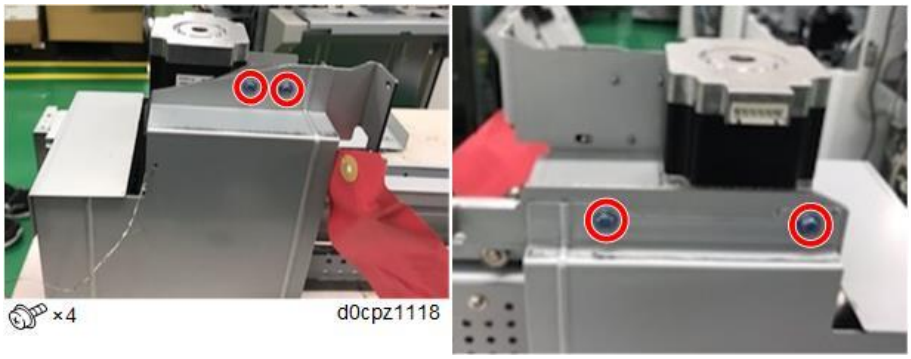
10. Position the punch unit so that the motor [A] faces up.



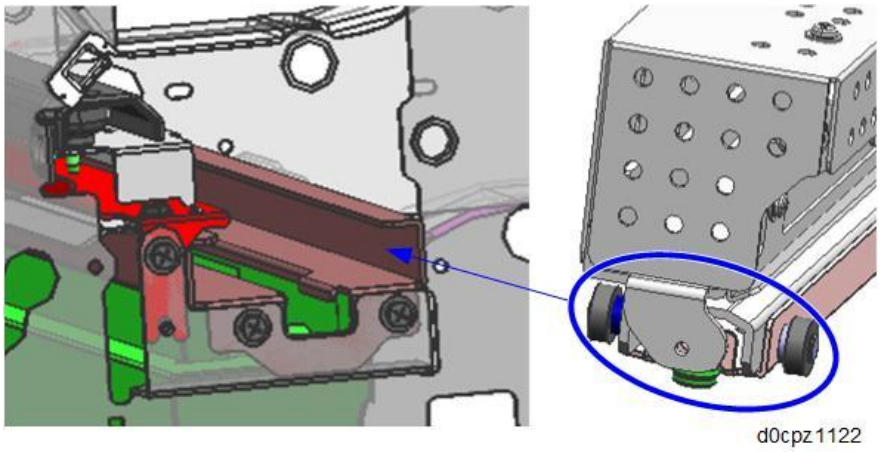
11. Remove the tape [A] and then remove the spacer [B].

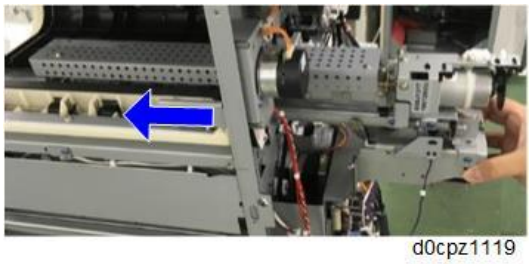


12. Remove the punch unit cover.

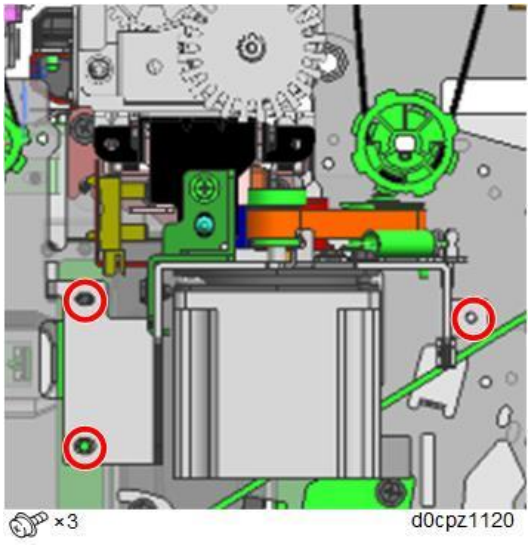


13. Slide the guide roller on the guide.





14. Secure the punching unit.



15. Remove the stepped screw with red tag.

16. Ensure the punch unit can move back and forth smoothly.

17. Fasten the PCB.

18. Remove the bracket [A] and [B]

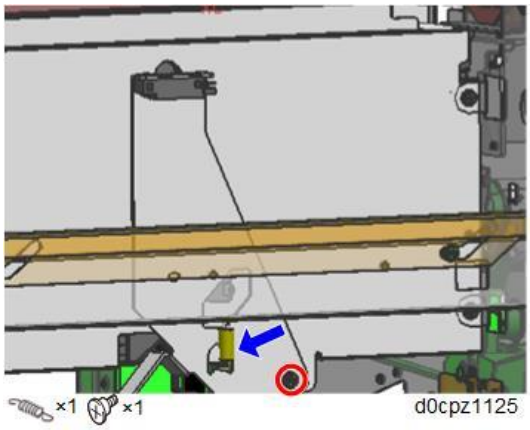
Note

To remove the bracket [B], raise it and then pull near side.

d0cpz1126

19. Secure the bracket of punch full sensor with a stepped screw.

20. Insert the spring in the hang hole of the frame and bracket.

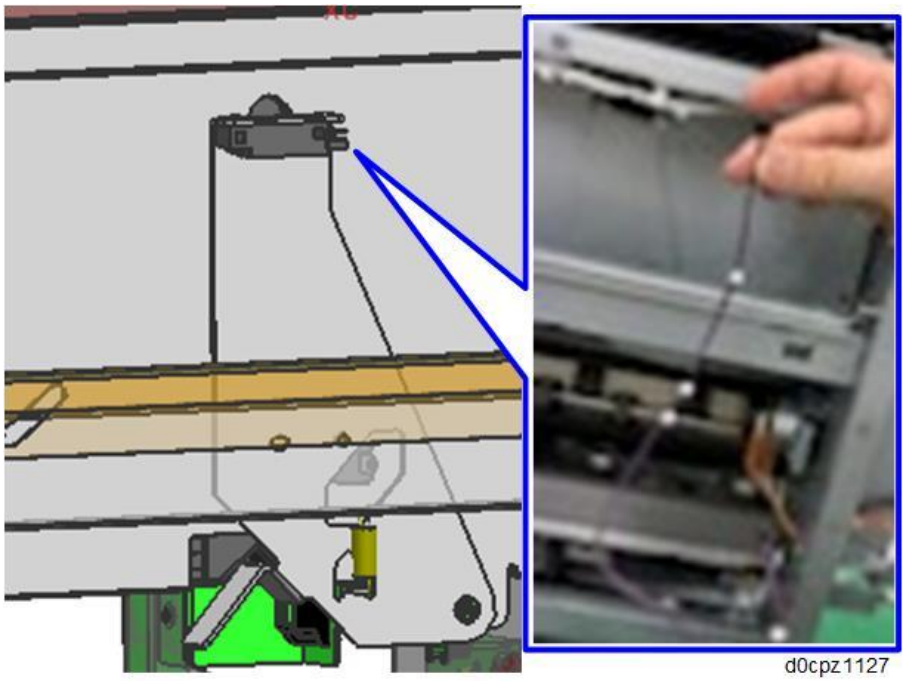


d0cpz1125

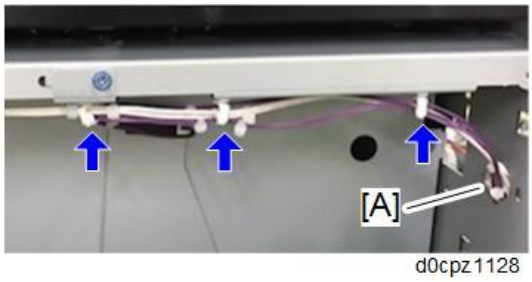
21. Ensure the bracket of punch full sensor can move smoothly.

22. Prepare the shorter harness provided with this option.

23. Connect the harness to the punch full sensor.

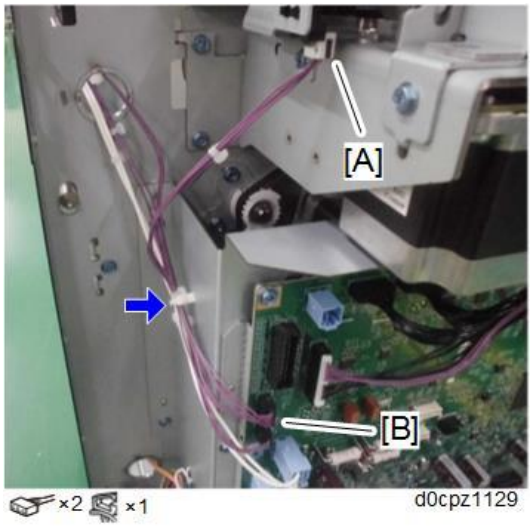


24. Run the opposite end of the harness through the hole [A].



25. Connect the 3-pin connector to the punch move HP sensor [A].

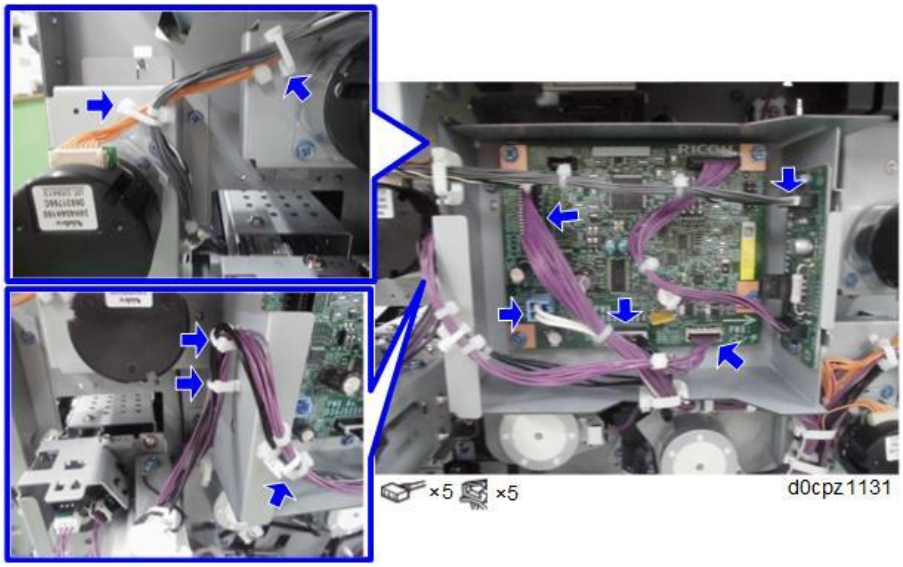
26. Connect the 6-pin connector to the PCB [B].



27. Route the harness as shown below.

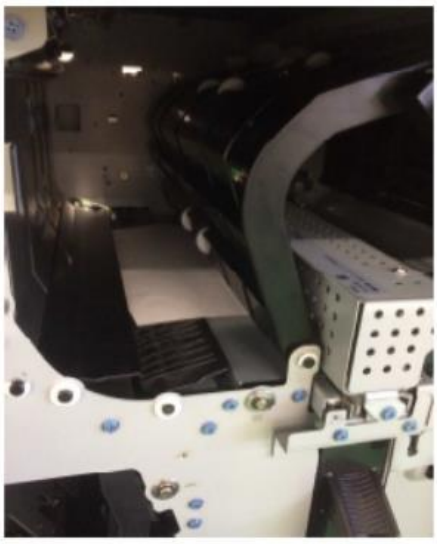
Note

Ensure the harnesses are connected firmly.


×5
×5
d0cpz1131

×3
×6
d0cpz1133

28. Perform INPUT Check for the following 3 items. (Executing condition)



d0cpz1287

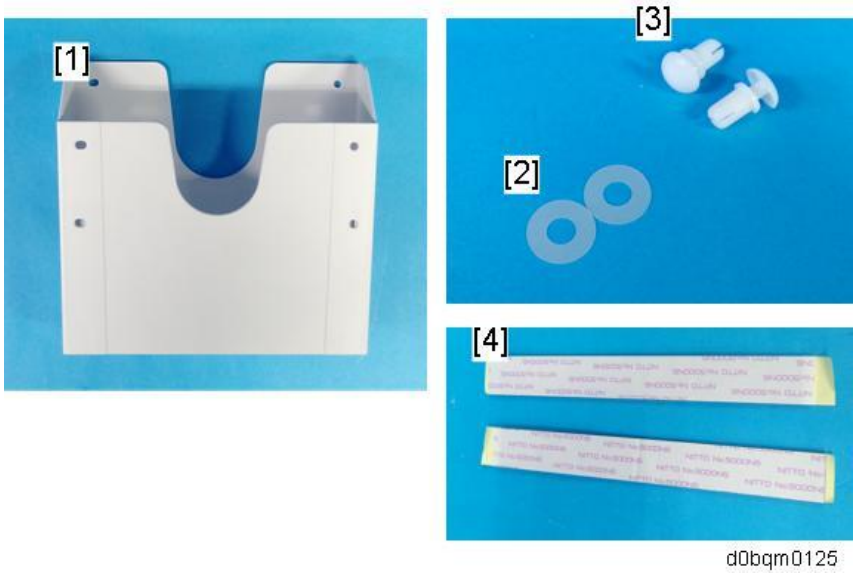
- The values of SP6-147-053 are all "0". (Front door closed, and no sheet remains in the finisher)
- The values of SP6-147-053 are all "1". (Front door closed, and inserted a sheet into the front side of the punching area)
- All the values of SP6-147-053 are NOT "1" and "0". (Front door closed, and inserted a sheet into the center of the punching area)

29. If the result in the previous steps are not met the conditions, the registration is failed.

Small Paper Feeding Unit Type M37 (D3FF)

Accessories

No.	Item	Q'ty
1	Pocket	1
2	Spacer	2
3	Rivet	2
4	Seal	2



d0bqm0125

Installation Procedure

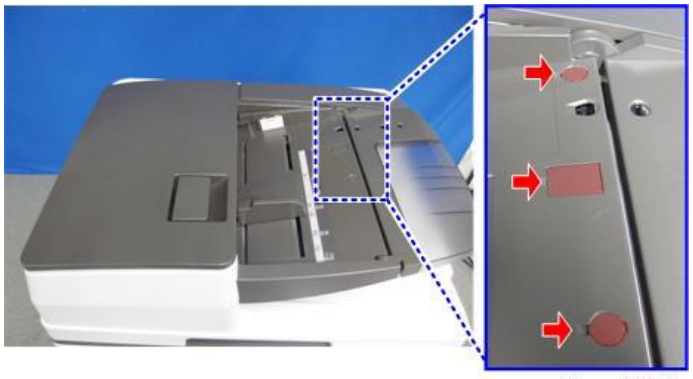
Installing this option to the document feeder allows the handling of A6 originals.

Following apps can be handled:

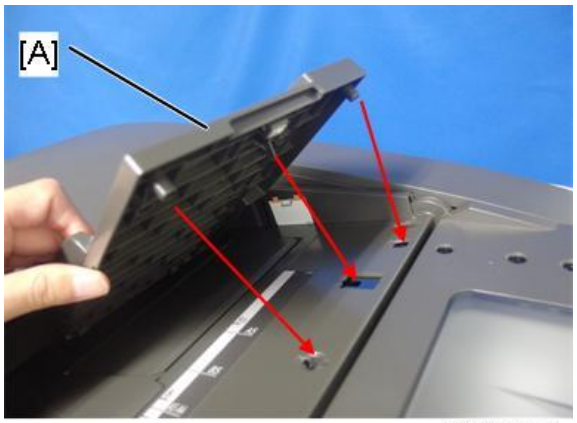
•Copy
•Scanner
•Media print and Scan
Other apps such as fax are not available.

Installing the option

1. Enter SP mode.
2. Set the value of SP6-050-001 to "1".
3. Exit SP mode.
4. Turn the main power OFF then ON.
5. Remove the caps on the original tray.


d0bqm0125

6. Attach the small size tray [A] on the original tray.



7. Start one of the following apps.

- Copy
- Scanner
- Media print and Scan

8. A message that small size unit is ready appears.

When an original is set on the tray, you can select paper size in the display.

Attaching the Pockets

The pocket can be installed on the left side of the main machine, the front or rear side of the finisher. Store the small paper unit in the pocket when it is not used.

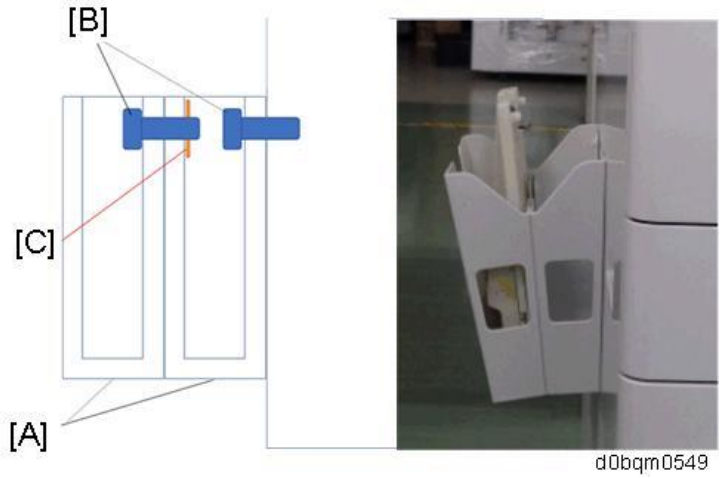
Note

If the customer wishes to use two pockets together in piles, attach the spacers provided as shown below.

[A]: Pocket

[B]: Rivet

[C]: Spacer



Related SPs:

Adjust the image positions for small paper mode with the following SPs.

- SP6-006-017 (ADF Adjustment Side-to-Side Regist:Front: with Feeding Unit)
- SP6-006-018 (ADF Adjustment Side-to-Side Regist:Rear: with Feeding Unit)
- SP6-006-019 (ADF Adjustment L-Edge Regist (1-pass):Front: with Feeding Unit)
- SP6-006-020 (ADF Adjustment L-Edge Regist (1-Pass):Rear:with Feeding Unit)
- SP6-006-021 (ADF Adjustment T-Edge Erase (1-Pass):Front:with Feeding Unit)
- SP6-006-022 (ADF Adjustment T-Edge Erase (1-Pass):Rear:with Feeding Unit)
- SP6-006-023 (ADF Adjustment 1st Buckle (1-Pass):with Feeding Unit)

A3/11"x17" Tray Unit Type M26 (D3D202)

Refer to A3/11"x17" Tray Unit Type M26 (D3D202).

Tab Sheet Holder Type M2 (D750)

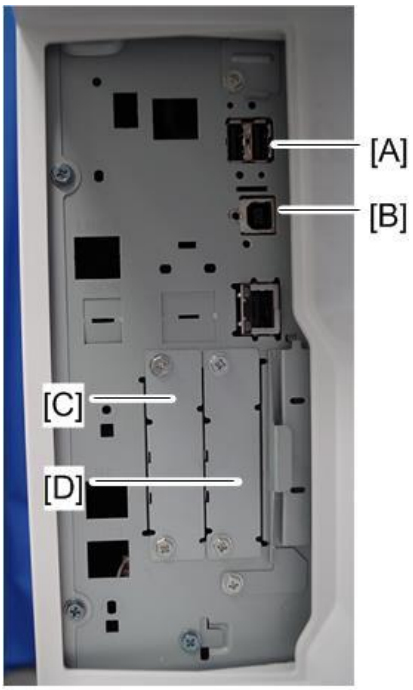
Refer to Tab Sheet Holder Type M2 (D750).

Scanner Heater

Refer to Scanner Heater.

Internal Options

List of Slots

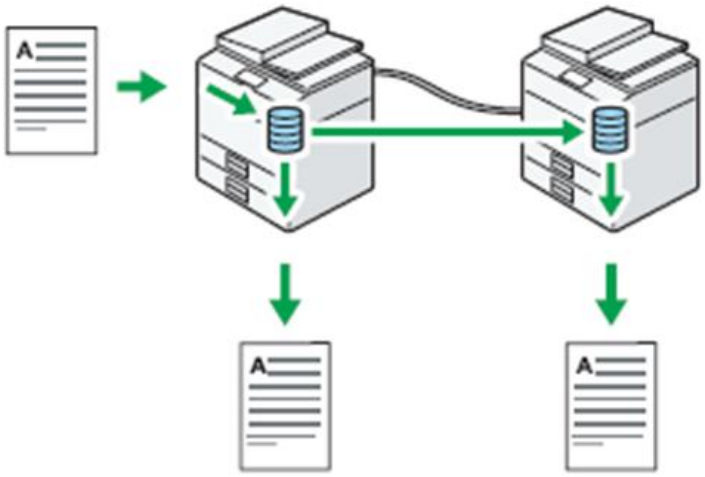


d257a8047

Slot		Option
[A]	USB Port Type-A	-
[B]	USB Port Type-B	-
[C]	I/F slot A	• Device Server Option Type M37 • Extended USB Board Type M19 • IEEE 1284 Interface Board Type M19 • IEEE 802.11a/g/n Interface Unit Type M19 • File Format Converter Type M19 Only one option can be connected at one time.
[D]	I/F slot B	• Copy Connector Type M25 • USB Device Server Option Type M19[*1] Only one option can be connected at one time.

Copy Connector Type M25 (D3D3)

With this option you can connect two machines to perform simultaneous copying for the same job.

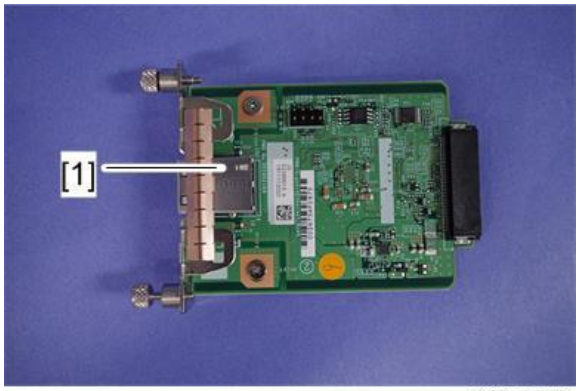


d223d8708

Accessories

Check the accessories and their quantities against this list:

No.	Description	Q'ty
1	PCB D3D3	2
-	LAN Cable	1



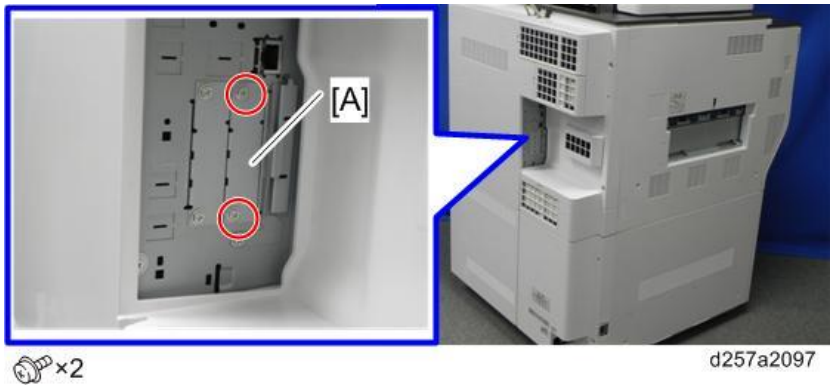
d257a8046

Installation

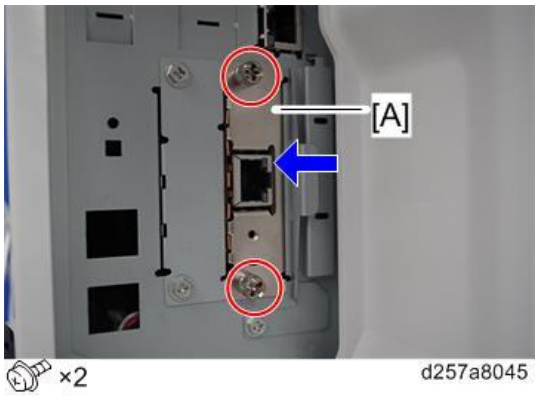
⚠CAUTION

- Before doing this procedure, turn the machine off and disconnect its power cord from the power source.
- Before you handle the boards, touch a metal surface to discharge accumulated static charge from your hands. A static discharge could damage the boards.
- Handle the boards carefully to avoid damaging them.

1. Remove the slot cover [A] from the I/F slot B.



2. Insert one of the boards in the slot.



3. Tighten the knob screws with your fingers.

Important

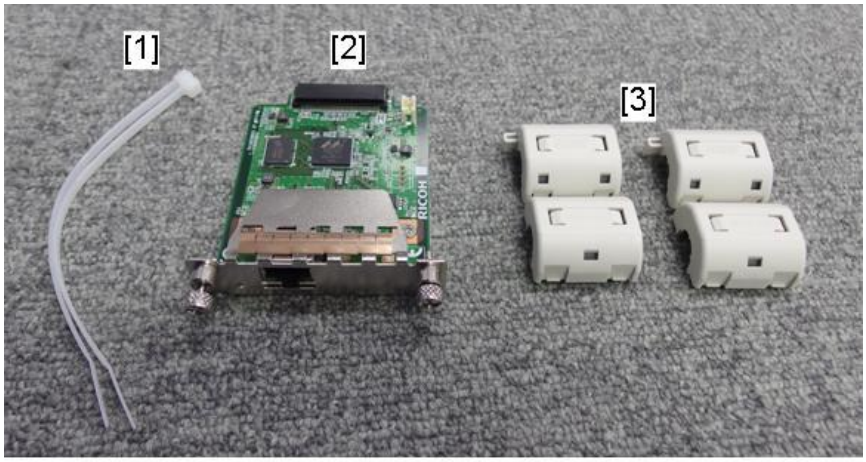
- To avoid damage to the board, never tighten these knob screws with a screwdriver.

4. In the same way, install the other board in the right slot of the other machine.
5. Connect the provided LAN cable to both boards.

Device Server Option Type M37 (D3GF) (IM C6500/C8000 Only)

Component Check

No	Description	Q'ty
1	Interface Board	1
2	Ferrite Core	2
3	Cable Ties	2

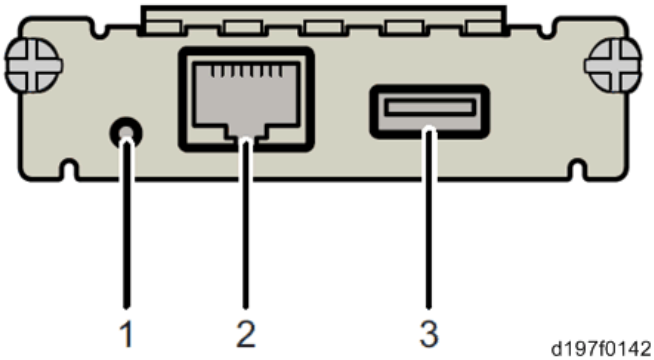


d0bqm0392

Note

An Ethernet cable is not packed with this option.

Interface Board Surface

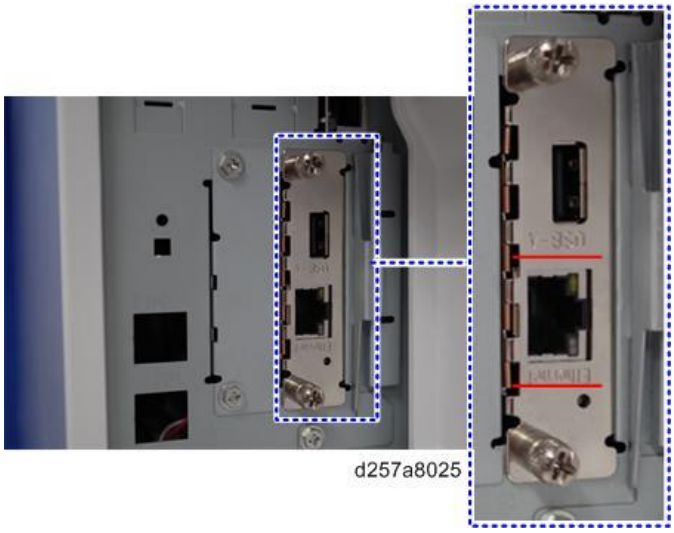


d197f0142

No.	Item	Description
1	Switch	Used to reset to the factory settings.
2	Ethernet port	Used to connect the Ethernet cable.
3	USB port	Used to connect this option to the main machine. Do not use this port with other options.

Note

When installing the USB device server option, make sure that the labels 'USB-A' and 'Ethernet' are upside down.



Installation Procedure

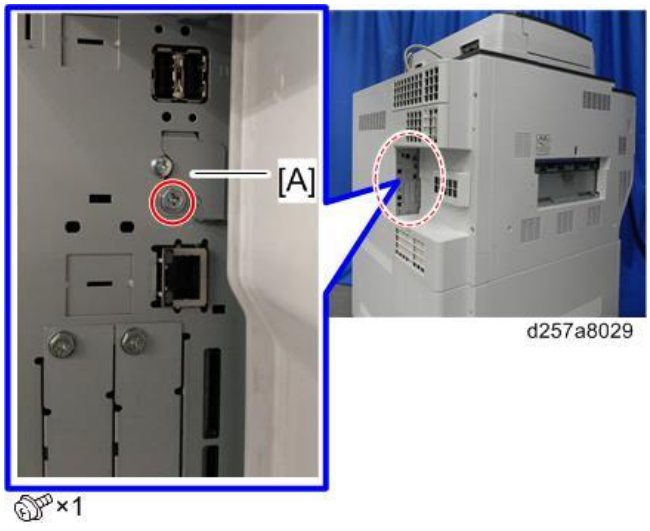
⚠CAUTION

When installing this option, turn OFF the main power and unplug the power cord from the wall socket. If installing without turning OFF the main power, an electric shock or a malfunction may occur.

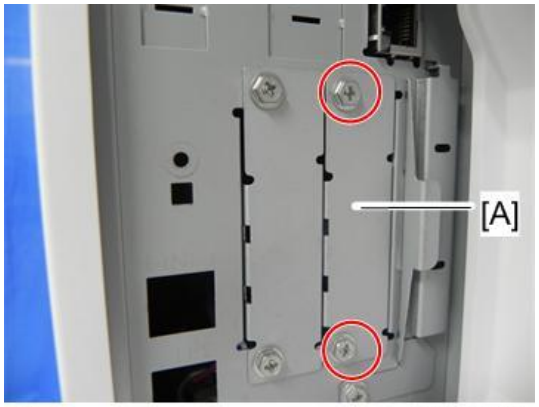
Important

The USB device server option has an IP address stored on the PCB. This is different from the machine's IP address. The IP address and other network settings of the USB device server option must be configured after installing this option.

1. Turn OFF the main power of the machine, and unplug the power cord from the wall socket.
2. Remove the cover [A].



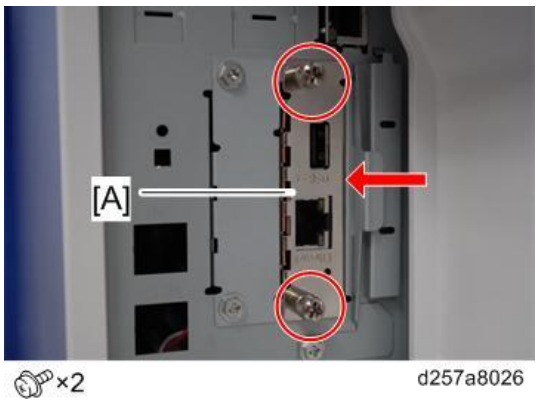
3. Remove the slot cover [A] from the I/F slot B.



Note

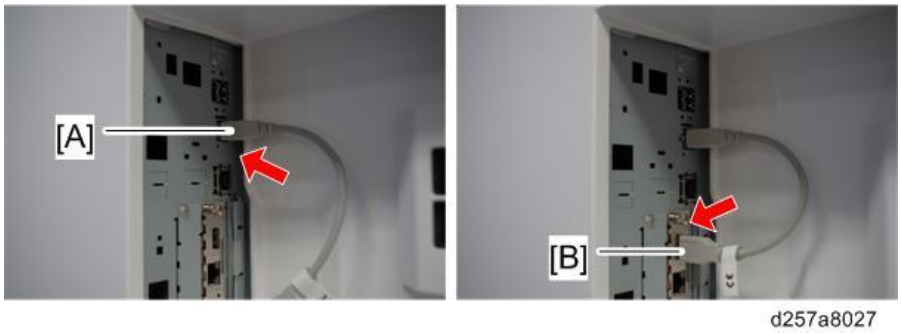
- The USB Device Server Option Type M19 can be connected to either of I/F slot A and B.

4. Insert the interface board [A] into the slot.



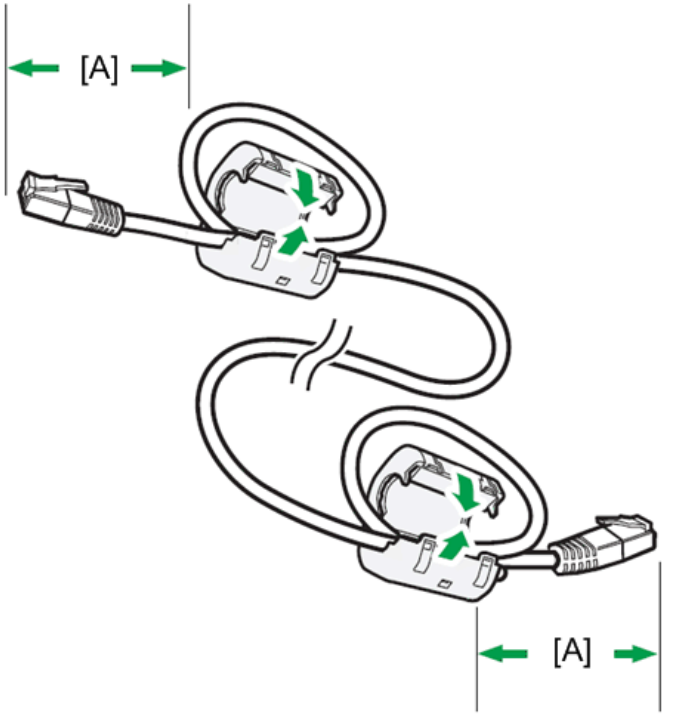
5. Insert the USB cable [A] into the USB port (Type A) on the machine I/F.

6. Insert the other side of the USB cable [B] into the USB port (Type B) on this option board.



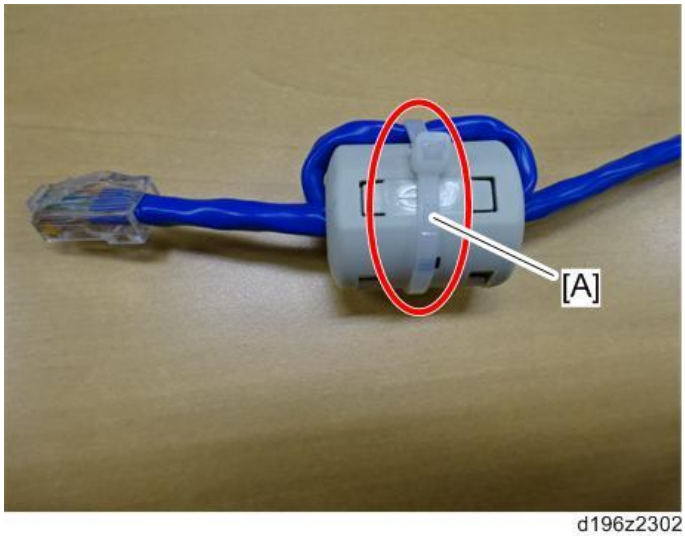
7. Attach the ferrite cores to the Ethernet cable, while looping the cable at 3 cm (approx. 1.2 inch) [A]

from each end of the cable.



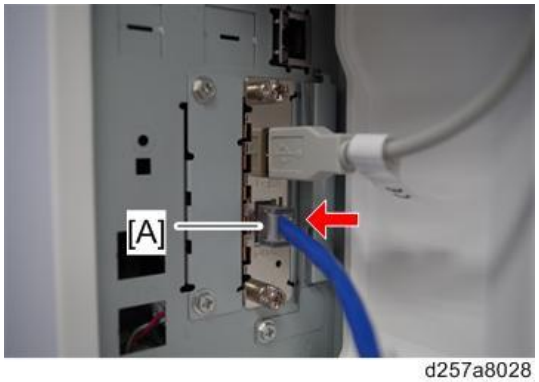
d197f0147

8. Only for installing this option in North America, bind both cores with cable ties [A] as shown below.



d196z2302

9. Insert the Ethernet cable [A] into the Ethernet port on this option.



d257a8028

10. Insert the other end of the Ethernet cable to a PC for network setting.

11. Plug the power cord into the wall socket and turn on the main power of the machine.

Note

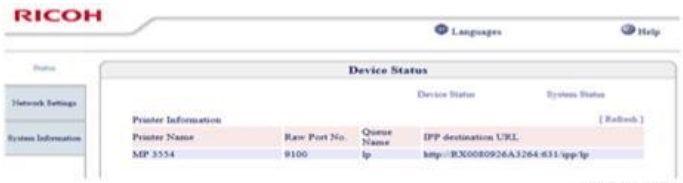
Do not unplug the USB cable while the machine is recognizing this option. It may take between 30 seconds to 1 minute to finish recognizing it (the LEDs on the Ethernet port of this option light up after recognizing this option; see below). If unplugged, connect the cable again.

12. Make sure that the machine recognizes this option correctly by doing one of the following:

1. Using the option's IP address, access the interface via a web browser.
2. Ping the option's IP address using a computer in the same network as the mainframe. If the IP address cannot be found, use the MAC address. The PCB has a label MAC address is printed.

d196z2350

3. Add the "RX" prefix to the MAC address and access the interface via a web browser. Example:



d196z2351

http://RX0080926A3264

4. Ping the MAC address with the prefix added. Example: ping RX0080926A3264.

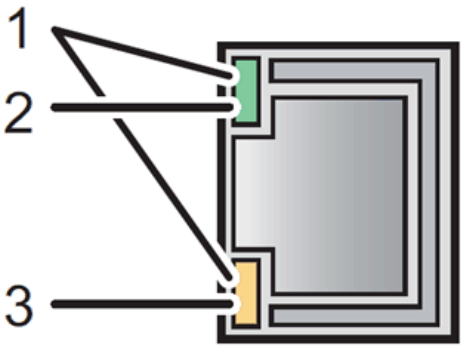
d196z2352

Note

- When installing the USB Device Server Option Type M19, the installation status is not shown on the Configuration Page.
- The customer should keep the removed slot covers.

LED Status Indicators

When this option installed and recognized by the main machine, the LED indicators light up under the following conditions:



d197f0149

No.	Light Color	Lights Up When
1	Green and Yellow	1000BASE-T operates
2	Green	10BASE-T operates
3	Yellow	100BASE-TX operates

Notes for Energy Save Mode Setting

When a machine with this option enters energy save mode, attempting to print will result in a communication error.

1. Enter SP mode, and then set SP5-191-001 (Power Setting: Power Str) to "0 (Off)".

Manually Assigning an IP Address

This section describes assigning an IPv4 address manually. Note that an IPv4 address can be entered which is not only on the same network segment but also on a different network segment to share a single printer with multiple devices, on multiple networks.

Important

The IPv4 address cannot be assigned using the operation panel of the machine. It must be set from the option's user interface accessed via a web browser.

The network setting of this option is initially assigned as follows:

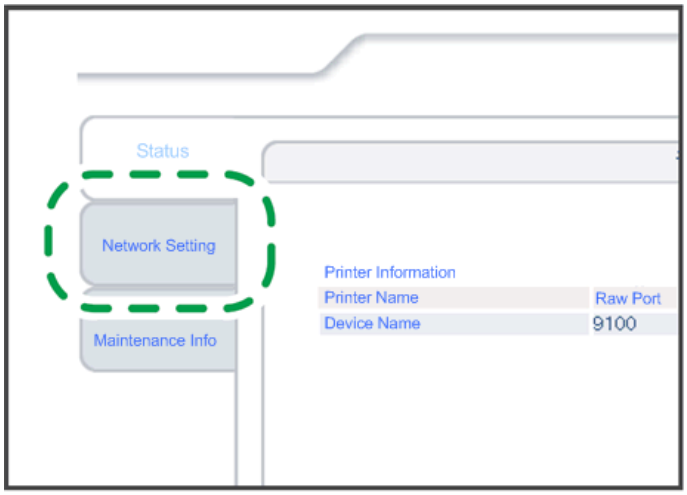
IP address: 192.168.100.100

Subnet mask: 255.255.255.0

The network setting of your PC must be in the same network segment to change the network setting of this option.

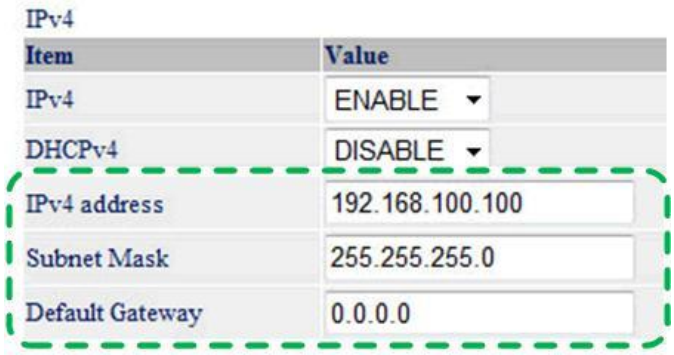
1. Make a note of the current network settings of your PC.
2. Change the IP address on your PC to [192.168.100.xxx (*0 - 255)].
3. Change the subnet mask on your PC to [255.255.255.0].
4. Open a web browser.

5. Type [http://192.168.100.100/] in the address bar.
6. Press the "Enter" key.
   The setting screen for this option appears.
7. Click [Network Setting].



d197f0134

8. Type [root] in the user name textbox and click [OK].
9. Input [IP Address], [Subnet Mask] and [Default Gateway].



d197f0135a

10. Set other items if needed.
11. Press [Set].
12. Close the web browser.
13. Disconnect the Ethernet cable from the PC.
14. Connect the Ethernet cable to a network device (e.g. switching hub).
15. Set the IP address of this option in the printer driver which you use.

IEEE 1284 Interface Board Type M19 (D3C0)

Note

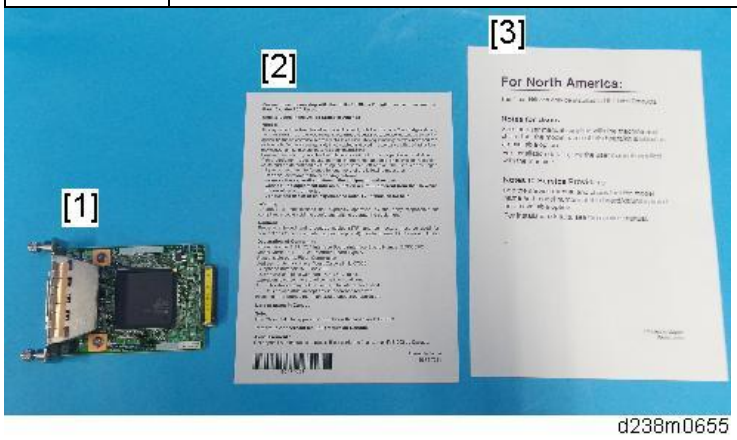
- You can only install one of the following units at the same time: IEEE 802.11a/g/n Interface Unit Type M19, IEEE 1284 Interface Board Type M19, File Format Converter Type M19.

2.Installation

Component List

Check the quantity and condition of the accessories in the box against the following list.

No	Description	Q'ty
1	IEEE 1284 Interface Board	1
2	FCC document	1
3	Notes for users	1

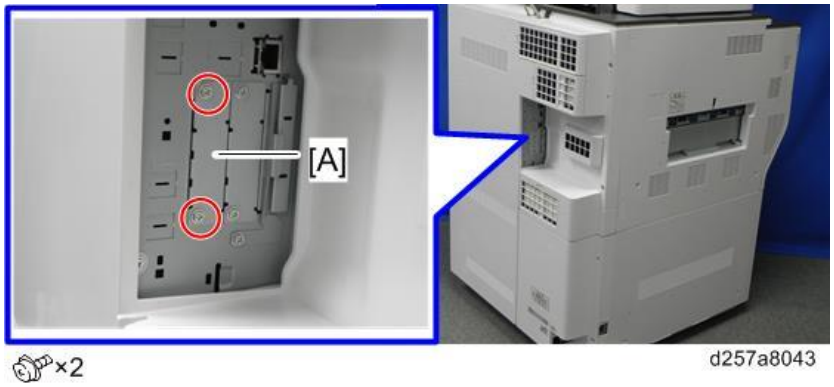


Installation Procedure

⚠CAUTION

- When installing this option, turn OFF the main power and unplug the power cord from the wall socket. If installing without turning OFF the main power, an electric shock or a malfunction may occur.
- Do not put your hands in the controller box. It will result in a malfunction or injury.
- Before doing any work, touch a metal object to discharge static electricity from the body. There is a possibility that the IEEE 1284 Interface Board may malfunction due to static electricity.

1. Remove the slot cover [A] from the I/F slot A.



2. Insert the IEEE1284 interface board into the slot A and fasten it with the screws.

3. Turn ON the main power.

4. Check that the system settings list is output, and that the board is recognized correctly.

Note

The customer should keep the removed slot covers.

IEEE 802.11a/g/n Interface Unit Type M19 (D3BR)

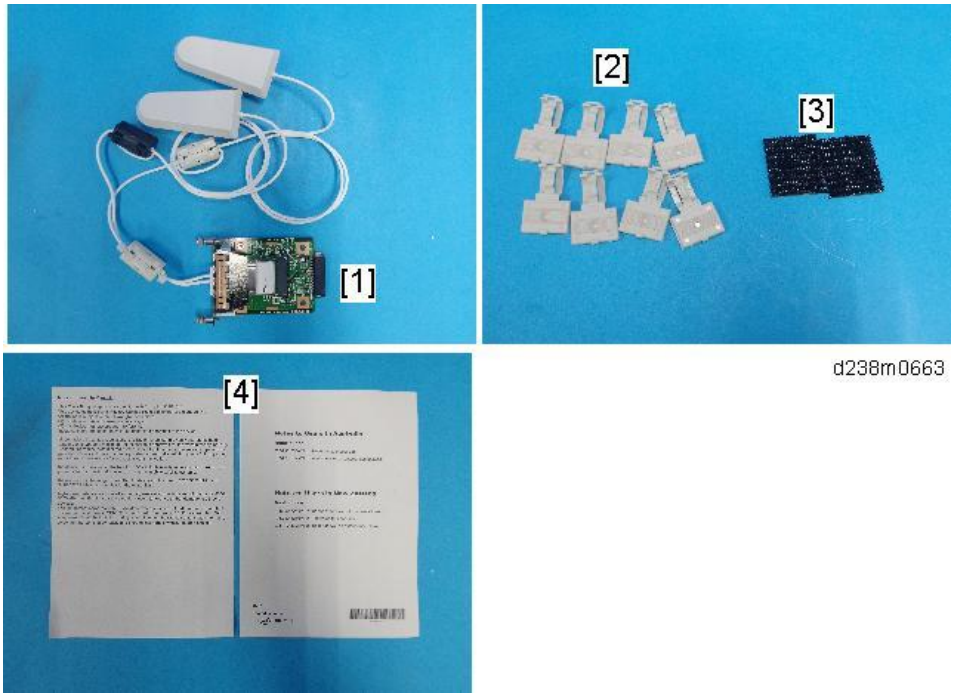
Note

- This option is not available in China, Taiwan, and Korea.
- You can only install one of the following units at the same time: IEEE 802.11a/g/n Interface Unit Type M19, IEEE 1284 Interface Board Type M19, File Format Converter Type M19.

Component List

Check the quantity and condition of the accessories in the box against the following list.

No	Description	Q'ty
1	IEEE 802.11a/g/n Unit	1
2	Clamps	8
3	Hook and Loop Fasteners	2
4	Notes for Users	2



Important

- Since disassembly/alteration of a wireless LAN board is illegal, during service replacements, replace the whole PCB assembly.
- Be sure to give the provided leaflet to the customer.

Installation Procedure

⚠CAUTION

- When installing this option, turn OFF the main power and unplug the power cord from the wall socket. If installing without turning OFF the main power, an electric shock or a malfunction may occur.
- Do not put your hands in the controller box. It will result in a malfunction or injury.

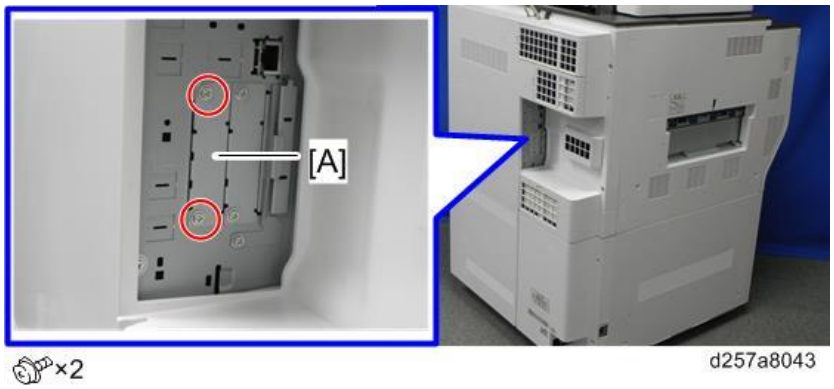
- Before doing any work, touch a metal object to discharge static electricity from the body. Electrostatic discharge damage electronic components and PCBs; the wireless LAN board might malfunction due to the static electricity.

Important

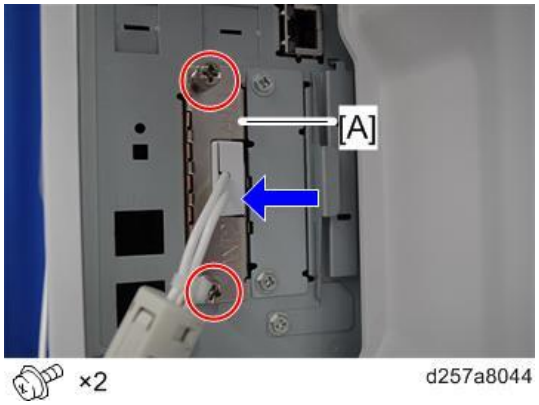
- This wireless LAN card uses the IEEE 802.11b/g/n 2.4 GHz frequency band. Industrial, medical and scientific devices using the same frequency band should not be used near.
- If there is interference, communication may become unstable. Check that there are no devices likely to cause interference in the surrounding area.

Installing the Wireless LAN Board

1. Remove the slot cover [A] from the I/F slot A.



2. Insert the wireless LAN board [A] into the slot A and fasten it with the screws.

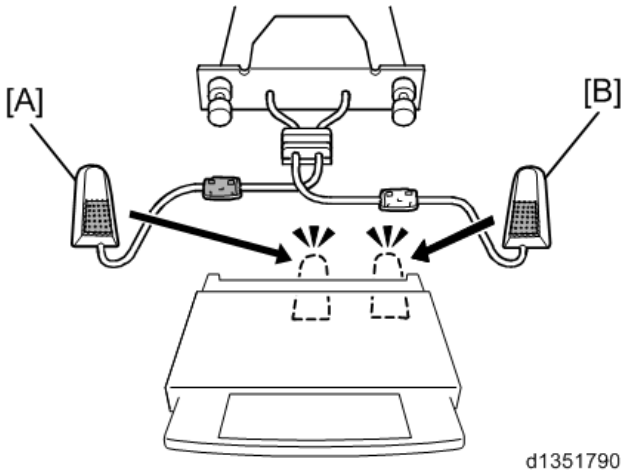


Note

- Press the wireless LAN board firmly in, and check it is firmly connected.
- The customer should keep the removed slot covers.

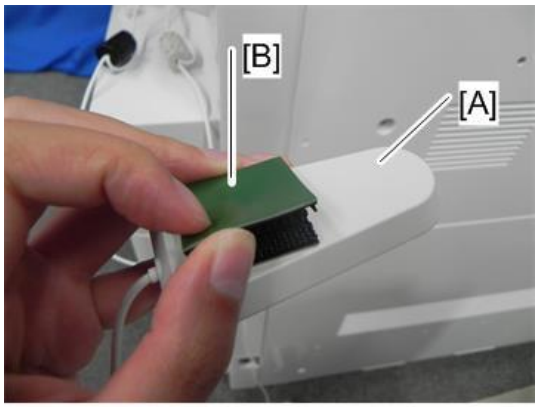
Installing the Antenna

1. Check the ferrite cores on the antenna cables.
   - Antenna 1 [A]: The core on the Antenna 1 cable is black.
   - Antenna 2 [B]: The core on the Antenna 2 cable is white.



d1351790

2. Attach the hook and loop fastener [B] to the antenna [A].



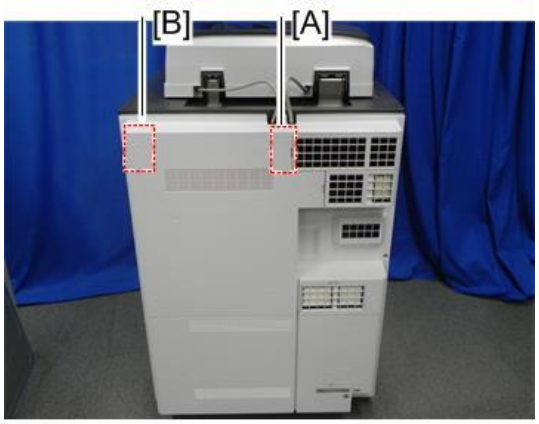
d257a8021

Note

- The fastener should be attached to the cable side.

3. Peel off the backings from the hook and loop fasteners, stick them on the back of the machine.
4. Stick the antenna [A] closer to the middle and the antenna [B] near the left corner of the machine. Refer to the photo below:

.



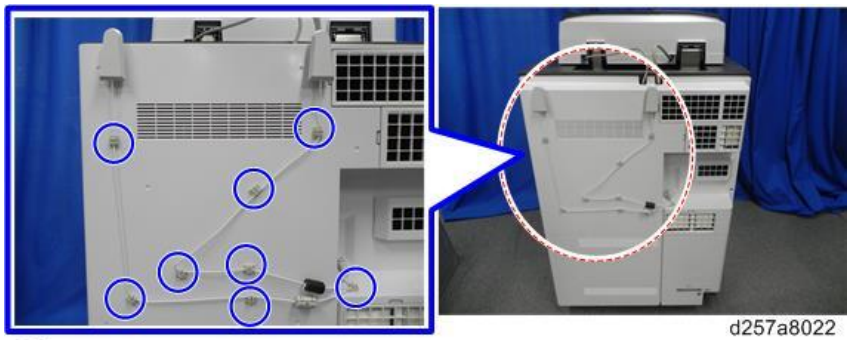
d257a8019

Note

- Antennas must be at least 12 cm away from each other.

5. Attach the eight clamps as shown below.

6. Secure the antenna cables with the previously attached clamps.



×8

Note

- Make sure that the cables are not slack. Keep them wired tightly along the covers.

7. Turn ON the main machine.
8. Make sure that the machine can recognize the option: Settings > Printer Settings > List/Test Print > Machine Information > Configuration Page

If the reception is poor, it may be necessary to move the machine.

- Make sure that the machine is not located near an appliance or any type of equipment that generates strong magnetic fields.
- Put the machine as close as possible to the access point.

User Tool Settings for IEEE 802.11a/g/n

Enter the UP mode. Follow the procedure below to perform the initial interface settings for IEEE 802.11a/g/n. These settings take effect every time the machine is powered on.

Note

- If Ethernet is connected, the wireless LAN cannot be used.

1. Press the "Settings" icon.
2. Press "System Settings".

Note

- Select "Network/Interface"> "IEEE802.X Authentication" > "IEEE802.X Authentication for Ethernet". Either the Ethernet or the wireless LAN must be set to "Inactive".

3. Select "Network/Interface" > "Control Panel:Wireless LAN". Only the wireless LAN options show.
4. Set the “Communication Mode”.
5. Enter the SSID setting. (The SSID is case sensitive.)
6. Set the “Adhoc Channel”. You need this setting when Ad Hoc Mode is selected. The allowed range for the channel settings may vary for different countries.

   Region A (mainly Europe and Asia)

   Range: 1-13, 36, 40, 44 and 48 channels (default: 11)

   In some countries, only the following channels are available:

   Range: 1-11 channels (default: 11)

   Region B (mainly North America)

Range: 1-11, 36, 40, 44 and 48 channels (default: 11)

7. Set the “Security Method” to specify the encryption of the Wireless LAN.

- The WEP (Wired Equivalent Privacy) setting is designed to protect wireless data transmission. The same WEP key is required on the receiving side to unlock encoded data. There are 64 bit and 128 bit WEP keys.
  Range of Allowed Settings:
  - 64 bit: 10 characters
  - 128 bit: 26 characters
- Specify “WPA2” when “Communication Mode” is set to “Infrastructure Mode”. Set the “WPA2 Encryption Method” and “WPA2 Authent. Method”.
  WPA2 Encryption Method: CCMP (AES) is fixed.
  WPA2 Authent. Method: Select either “WPA2-PSK” or ”WPA2”.
  If you select “WPA2-PSK”, enter the pre-shared key (PSK) of 8 -63 characters in ASCII code.
  When “WPA2” are selected, authentication settings and certificate installation settings are required.

8. Press "Wireless LAN Signal Status" to check the machine’s radio wave status using the operation panel.

Note

Press "Restore Factory Defaults" to initialize the following settings:

- Transmission mode
- Channel
- WEP
- SSID
- WEP Key

SP Mode Settings for IEEE 802.11 Wireless LAN

The following SP commands and UP modes can be set for IEEE 802.11a/g/n:

SP No.	Name	Function
SP5-840-011	WEP Key Select	Used to select the WEP key (Default: 00).
UP mode	Name	Function
	SSID	Used to confirm the current SSID setting.
	WEP Key	Used to confirm the current WEP key setting.
	WEP Mode	Used to show the maximum length of the string that can be used for the WEP Key entry.

File Format Converter Type M19 (D3BR)

Note

- You can only install one of the following units at the same time: (a) IEEE 802.11a/g/n Interface Unit Type M19, (b) IEEE 1284 Interface Board Type M19, (c) File Format Converter Type M19.

Component List

Check the quantity and condition of the accessories in the box against the following list.

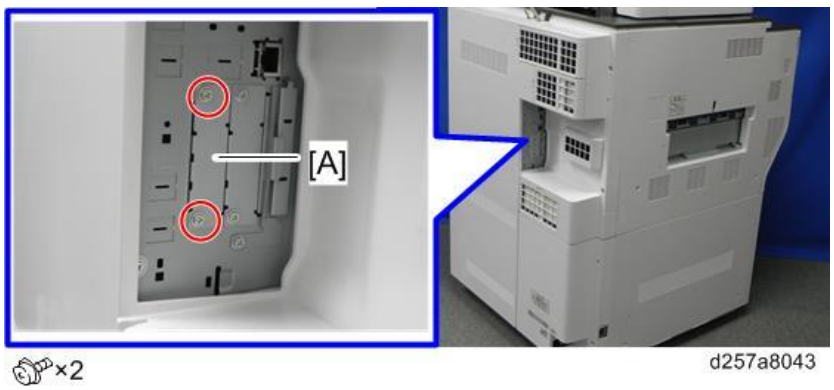
No	Description	Q'ty
1	File Format Converter	1
2	Notes for Users	1

Installation Procedure

⚠CAUTION

- When installing this option, turn OFF the main power and unplug the power cord from the wall socket. If installing without turning OFF the main power, an electric shock or a malfunction may occur.
- Do not put your hands in the controller box. It will result in a malfunction or injury.
- Before doing any work, touch a metal object to discharge static electricity from the body. There is a possibility that the board may malfunction due to static electricity.

1. Remove the slot cover [A] from the I/F slot A.



2. Insert the file format converter into slot [A] and fasten the screws.

3. Check the system settings list is output, and that the option is recognized correctly.

Settings > Printer Settings > List/Test Print > Machine Information > Configuration Page

Note

The customer should keep the removed slot covers.

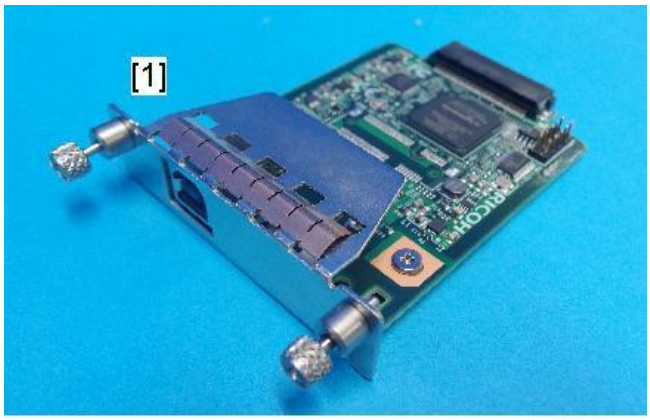
Extended USB Board Type M19 (D3BS) (Pro C5300S/C5310S only)

Note

You can only install one of the following units at the same time: (a) IEEE 802.11a/g/n Interface Unit Type M19, (b) IEEE 1284 Interface Board Type M19, (c) File Format Converter Type M19.

Component Check

No.	Description	Q'ty
1	Extended USB Board	1



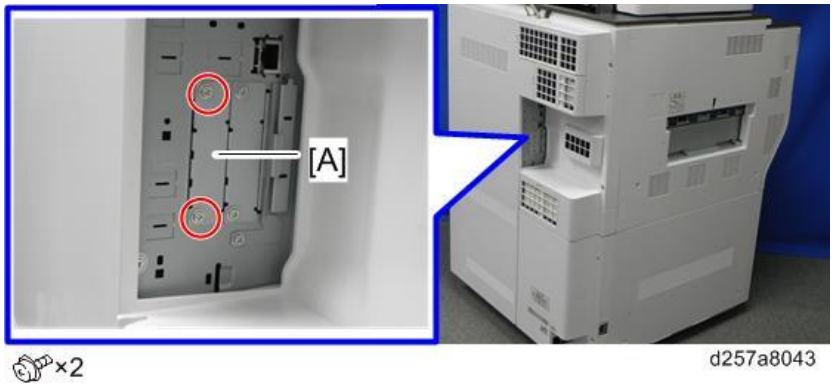
d238m0668

Installation Procedure

⚠CAUTION

When installing this option, turn OFF the main power and unplug the power cord from the wall socket. If installing without turning OFF the main power, an electric shock or a malfunction may occur. Do not put your hand into the controller box. It will result in a malfunction or injury. Before doing any work, touch a metal object to discharge static electricity from the body.

1. Remove the slot cover [A] from the I/F slot A.



d257a8043

2. Insert the Extended USB Board into the slot [A].
3. Turn ON the main power.

4. Print out the "Configuration Page", and then check if this option is correctly recognized.
Settings > Printer Settings > List/Test Print > Machine Information > Configuration Page

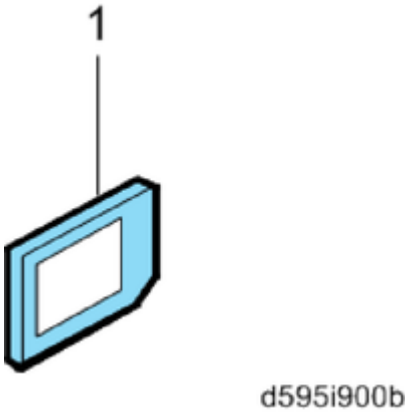
Note

The customer should keep the removed slot covers.

VM Card Type P18 (D3EN) (Pro C5300S/C5310S Only), VM Card Type M37 (D3GF) (IM C6500/C8000 Only)

Accessories

No.	Description	Q'ty
1	SD Card	1

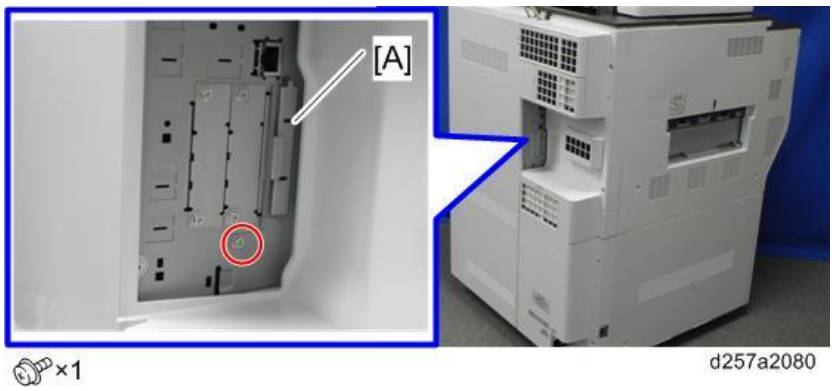


Installation

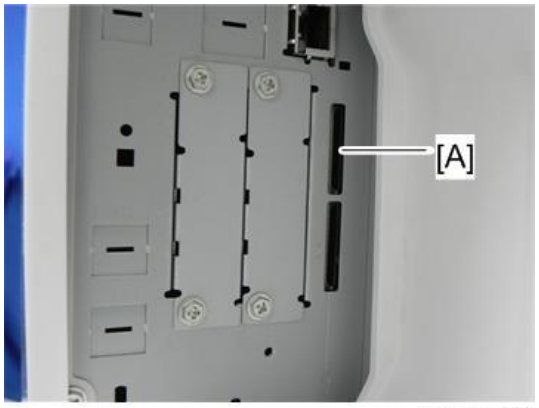
⚠CAUTION

- When installing this option, turn OFF the main power and unplug the power cord from the wall socket. If installing without turning OFF the main power, an electric shock or a malfunction may occur.

1. Remove the SD card slot cover [A].



2. Insert the SD card in Slot 1 (the option slot: upper side) [A].



d257a2099

3. Reattach the SD card slot cover.
4. Turn on the main power switch.
5. Make sure that the machine recognizes the option by outputting the list of system setting.

SD Card Appli Move

Overview

The service program "SD Card Appli Move" (SP5-873) lets you move application programs from one SD card to another SD card.

Be very careful when you do the SD Card Appli Move procedure:

- The data necessary for authentication is transferred with the application program from an SD card to another SD card. Authentication fails if you try to use the SD card after you move the application program from one card to another card.
- Do not use the SD card if it has been used before for other purposes. Normal operation is not guaranteed when such an SD card is used.
- Open the tandem tray [A] and remove the paper cassette decal [B]. Keep the SD card inside after you move the application program from one card to another card. This is done for the following reasons:
  - The SD card can be the only proof that the user is licensed to use the application program.
  - You may need to check the SD card and its data to solve a problem in the future.

d1352740

Note

- Do not move OCR Unit Type M2 (optional) to another SD card.

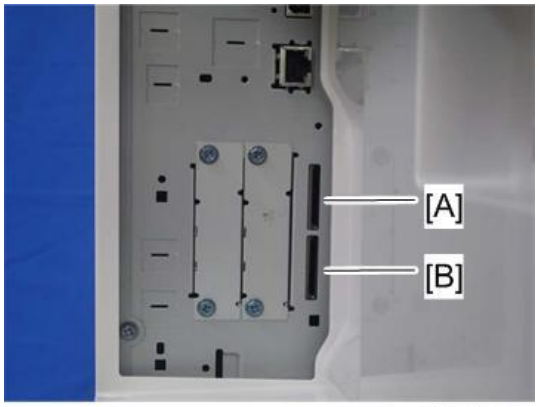
Move Exec

The menu "Move Exec" (SP5-873-001) lets you move application programs from the original SD card to another SD card.

Important

- Do not turn ON the write protect switch of the system SD card or application SD card on the machine. If the write protect switch is ON, a download error (e.g. Error Code 44) occurs during a firmware upgrade or application merge.

1. Turn the main switch off.
2. Make sure that a target SD card is in SD Card Slot 1 [A]. The application program is moved to this SD card.
3. Insert the source SD card with the application program in SD Card Slot 2 [B].The application program is copied from this source SD card.



d1352315

4. Turn the main switch on.
5. Start the SP mode.
6. Select SP5-873-001 "Move Exec".
7. Follow the messages shown on the operation panel.
8. Turn the main switch off.
9. Remove the source SD card from Slot 2 [B].
10. Turn the main switch on.
11. Check that the application programs run normally.

Undo Exec

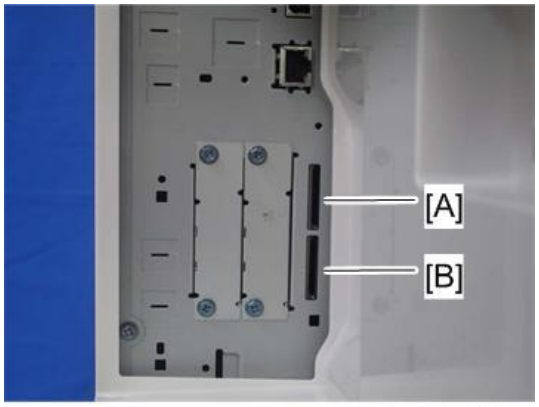
"Undo Exec" (SP5-873-002) lets you move back application programs from an SD card in SD Card Slot 1 (upper) to the original SD card in SD Card Slot 2 (lower). You can use this program when, for example, you have mistakenly copied some programs by using Move Exec (SP5-873-001).

Important

- Do not turn ON the write protect switch of the system SD card or application SD card on the machine. If the write protect switch is ON, a download error (e.g. Error Code 44) occurs during a firmware upgrade or application merge.

1. Turn the main switch off.

2. Insert the original SD card in SD Card Slot 2 [B]. The application program is copied back into this card.
3. Insert the SD card with the application program in SD Card Slot 1 [A]. The application program is copied back from this SD card.



d1352315

4. Turn the main switch on.
5. Start the SP mode.
6. Select SP5-873-002 "Undo Exec."
7. Follow the messages shown on the operation panel.
8. Turn the main switch off.
9. Remove the SD card from Slot 2 [B].
10. Turn the main switch on.
11. Check that the application programs run normally.

Caution

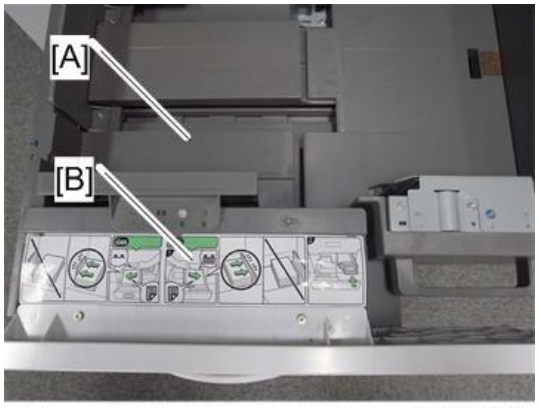
- If the customer uses the SD card on a PC, operation cannot be guaranteed.
- The SD card from which you moved an application cannot be used again.
- The SD card itself is the proof of purchase. Therefore, the application must be purchased again if the card is lost.
- Follow the procedure below to store the SD card from which you moved an application in the machine.

Important

- If the SD card is lost, it will be impossible to determine which application has been installed in the case of a machine failure.
- Also, the empty SD card is required when moving back an application.

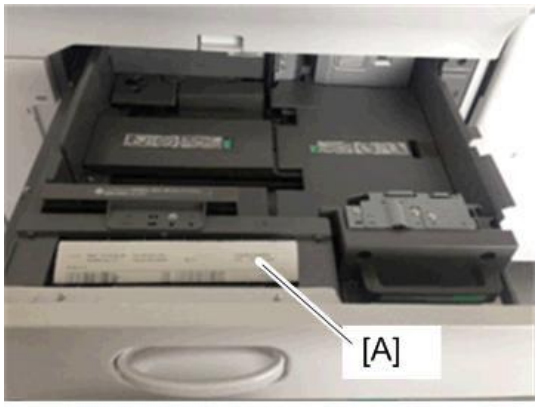
2.Installation

1. Pull out the tandem tray [A] and remove the paper cassette decal [B].



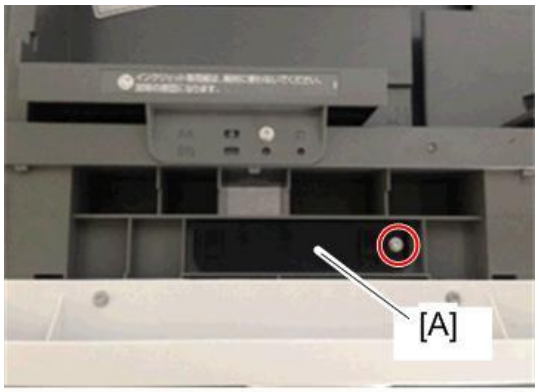
d1352740a

2. Remove the factory SP sheet [A].



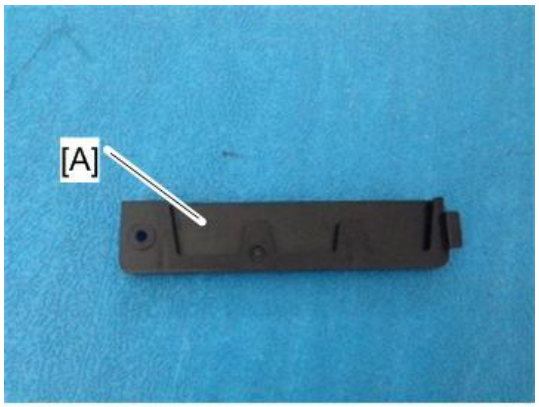
d135a0010

3. Remove the SD card holder [A] (x 1).



d135a0011

4. Set the SD card in the holder.

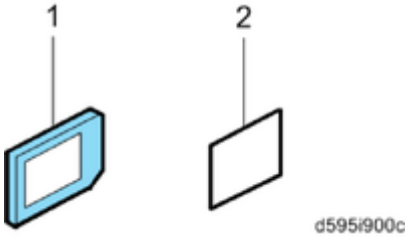


PostScript3 Unit Type M42 (D3HM)

Accessories

Check the quantity and condition of the accessories in the box against the following list.

No.	Description	Q'ty
1	PostScript3 Emulation SD Card	1
2	Decal	1

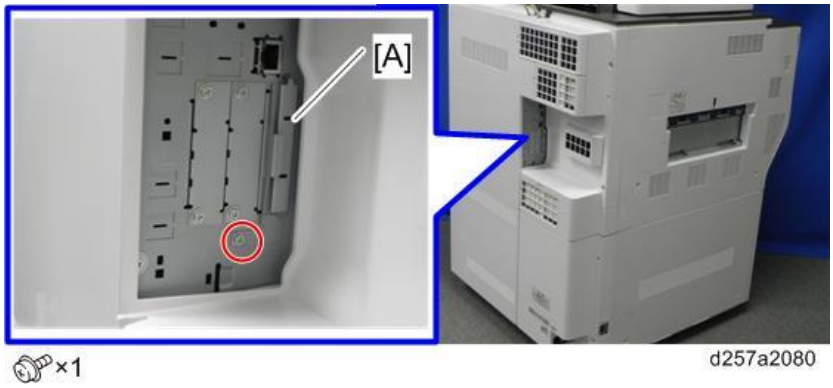


Installation Procedure

Note

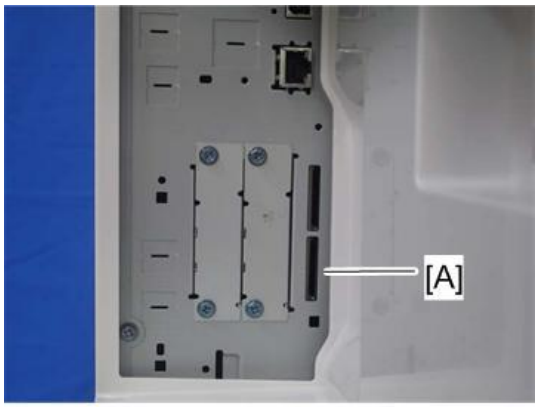
When installing more than one SD card, perform the merge operation (SD Card Appli Move).

1. Remove the SD card slot cover [A].



2. Insert the SD card in the bottom slot [A] with the label facing the machine's front.

2.Installation



d1352316

3. Reattach the SD card slot cover.
4. Stick the "Adobe PostScript3" decal on the front face of the MFP.
5. Turn ON the main power.
6. Print out the "Configuration Page", and then check if this option is correctly recognized.
   Settings > Printer Settings > List/Test Print > Machine Information > Configuration Page

Note

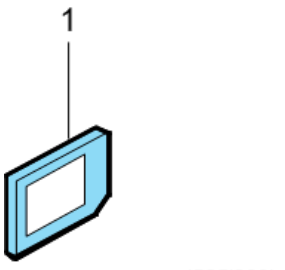
- The PDF firmware installed as standard contains a program required to print PS3 data as default. However, this PS3 program is normally disabled.
- The PS3 firmware is a dongle (key) which enables PS3 data printing functions. When the PS3 firmware is installed, the PS3 program in the PDF firmware is enabled. Due to this specification, the self-diagnosis result report shows the ROM part number/software version of the PDF firmware contained in the PS3 program.

OCR Unit Type M13 (D3AC)

Accessories

Check the quantity and condition of the accessories in the box against the following list.

No.	Description	Q'ty
1.	SD Card	1



d595i900b

Searchable PDF Function Outline

This option adds a searchable PDF function to the scanning function.

- The searchable PDF function performs OCR by the MFP on a document read with the scanner,

and embeds text data in the PDF. This permits PDF text browsing, automatic assignment of filenames, and automatic alignment of document orientation.

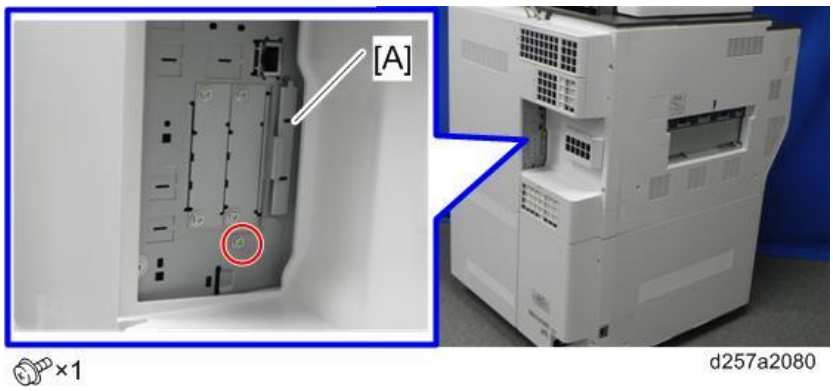
- This option is provided with an SD card. By installing an SD card in the MFP, a functional icon is added to the control unit. It is not necessary to install software in a PC.
- If this option is installed, various settings related to the searchable PDF function are available.
- After reading of the document is completed (after it is read by the ADF and output), OCR is performed. Therefore, after reading is completed, documents can be collected from the document glass or ADF.
- Other functions, such as the copy function and printer function, can be used during OCR.

Installation Procedure

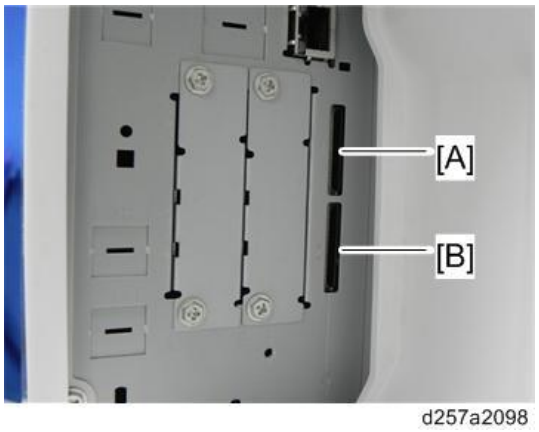
⚠WARNING

When installing more than one SD card, perform the merge operation (SD Card Appli Move).

1. Remove the SD card slot cover [A].



2. Insert the SD card (OCR Unit) in SD card slot 1 (upper) [A] or SD slot 2 (lower) [B] with its label face towards the front of the machine. Then push it slowly into the SD slot until you hear a click.



3. Turn ON the main power.
4. Enter the SP mode, and then press "Enter" in SP5-878-004 (Option Setup: OCR Dictionary).
   The SD card ID is saved in the NVRAM, and the ID of the MFP is saved on the SD card. The MFP and SD card are thereby linked.

5. When "operation complete" is displayed, press "Close".

Note

- If installation fails, "Failed" is displayed.
- If installation fails, perform the following steps.

1. Check whether it is a used SD card.
2. Switch the power OFF, and repeat steps 1-5.

6. Turn the machine OFF and back ON again.
7. Press "Enter" in SP5-878-004 (Option Setup: OCR Dictionary).
   Dictionary data is copied to the HDD.

Note

On the first run, SP5-878-004 links the SD card, and on the second run, copies dictionary data.

8. Turn OFF the main power.
9. Remove the SD card from the SD card slot.

Note

Keep the SD card in the SD card storage location of the MFP. The original SD card is needed in the event of a HDD malfunction.

10. Reattach the SD card slot cover.
11. Turn ON the main power.
12. Press [Scanner (Classic Mode)] on the Home screen.
13. Press [Send File Type / Name].
14. Check if [OCR Settings] is displayed on the [Send File Type / Name] screen.

Note

- After installation, the OCR setting can be changed on the "OCR setting" screen.
- When setting up OCR, set [OCR setting] to [Yes]. (Default setting: [No])

Recovery Procedure

When this option is installed, a function is saved on the HDD, and ID information of the SD card is saved on the NVRAM. When replacing HDD or NVRAM, this option must be reinstalled.

When the original SD card exists

- When only the HDD is replaced
  Reinstall using the original SD card.
- When only the NVRAM is replaced
  When performing upload/download of NVRAM data, reinstall using the original SD card.
  When not performing upload/download of NVRAM data, order and reinstall a new SD card (service part).
- When the HDD and NVRAM are replaced simultaneously
  Reinstall using the original SD card.

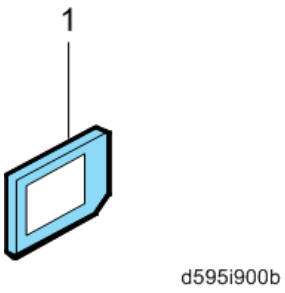
When the original SD card is lost

Order and reinstall a new SD card (service part).

XPS Direct Print Option Type M42 (D3HM)

Accessories

No.	Description	Q'ty
1	XPS Direct Print SD Card	1



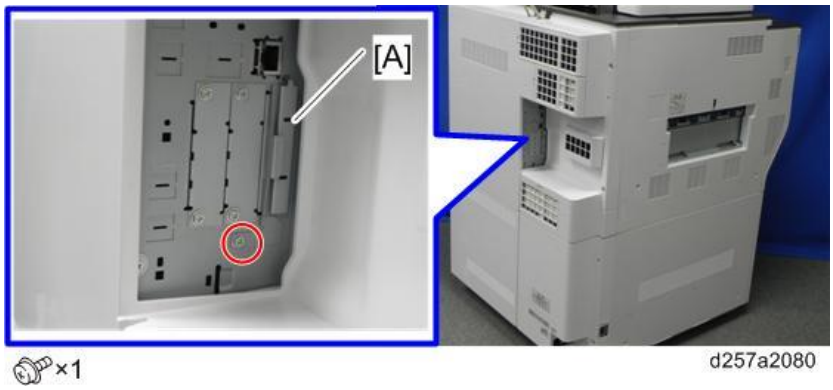
d595i900b

Installation Procedure

Note

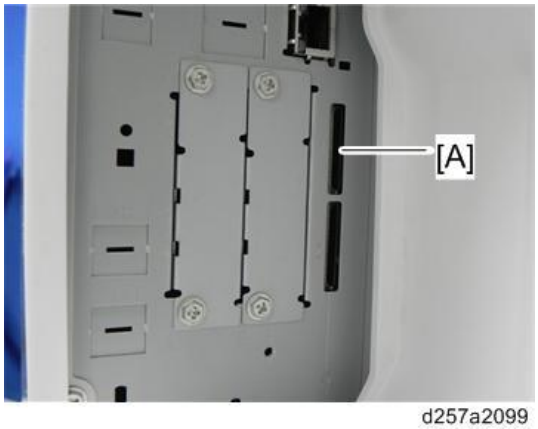
When installing more than one SD card, perform the merge operation (SD Card Appli Move).

1. Remove the SD card slot cover [A].



d257a2080

2. Insert the SD card in SD slot 1 (upper) [A] with its label face towards the front of the machine.



d257a2099

3. Reattach the SD card slot cover.

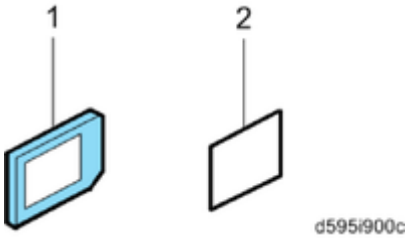
4. Turn ON the main power.
5. Print out the "Configuration Page", and then check if this option is correctly recognized.
   Settings > Printer Settings > List/Test Print > Machine Information > Configuration Page

IPDS Unit Type M42 (D3HM)

Accessories

Check the quantity and condition of the accessories in the box against the following list.

No	Description	Q'ty
1	IPDS Emulation SD Card	1
2	Decal	1
-	EULA Sheet	1
-	Caution Sheet	1
-	CD-ROM	1

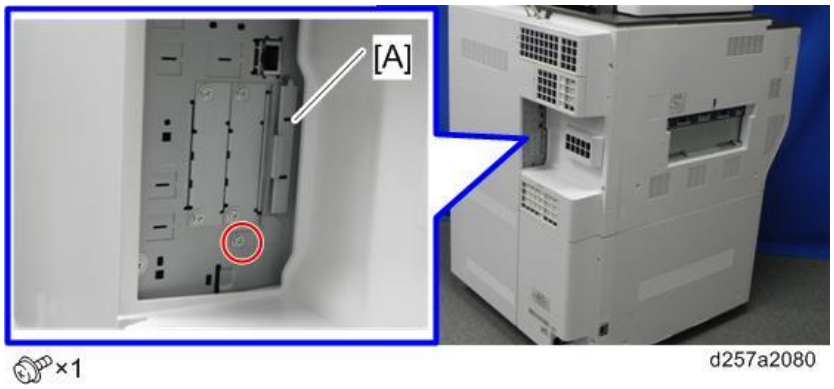


Installation Procedure

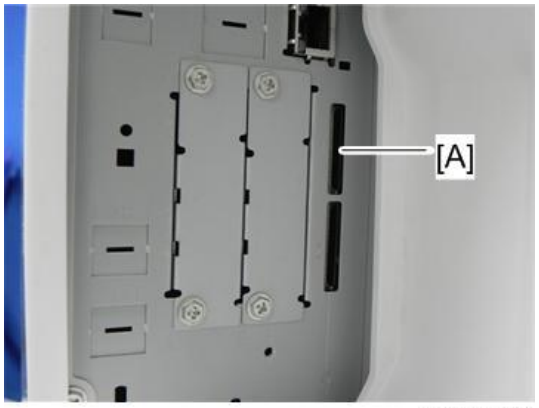
Note

When installing more than one SD card, perform the merge operation (SD Card Appli Move).

1. Remove the SD card slot cover [A].



2. Insert the SD card in SD slot 1 (upper) [A] with its label face towards the front of the machine.



3. Reattach the SD card slot cover.
4. Follow one of the methods below, A or B, to enable the IPDS:

   A. Enabling the IPDS using Telnet

   1. Make a Telnet connection to the machine.
   2. Execute the following command:

      msh> set ipds up

      To disable, execute the following command:

      msh> set ipds down

   B. Enabling the IPDS using Web Image Monitor

   1. Log in to Web Image Monitor.
   2. Change the setting to enable IPDS.

5. Attach the decal.
6. Print out the "Configuration Page", and then check if it is recognized correctly.

   Settings > Printer Settings > List/Test Print > Machine Information > Configuration Page

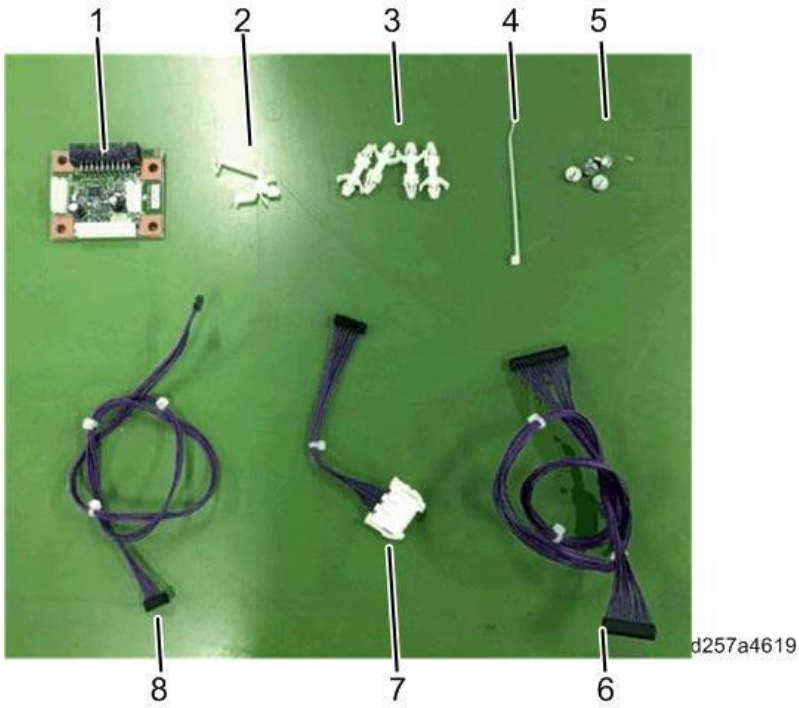
Optional Counter Interface Unit Type M12 (B870)

Component Check

Check the quantity and condition of the components against the following list.

No.	Description	Q'ty
1	Key Counter Interface Board	1
2	Harness Clamp	1
3	PCB Spacers	4
4	Cable Tie	1
5	Tapping Screw: M3 x 6	4
6	Harness (Not used)	1
7	Harness (Not used)	1
8	Harness (Not used)	1

2.Installation

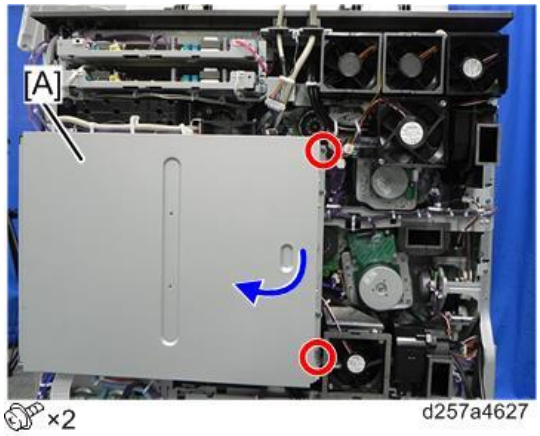


Installation Procedure

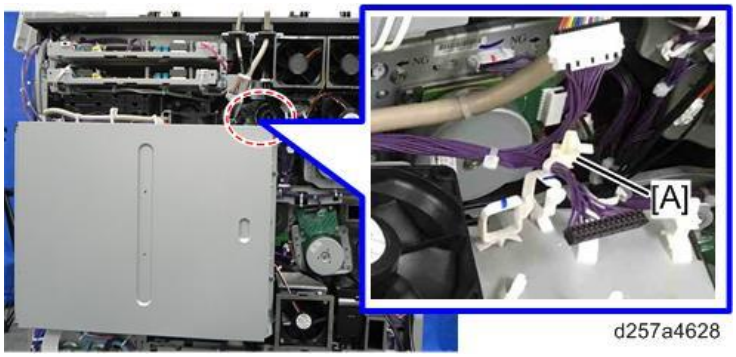
⚠CAUTION

- Unplug the main machine power cord before starting the following procedure.

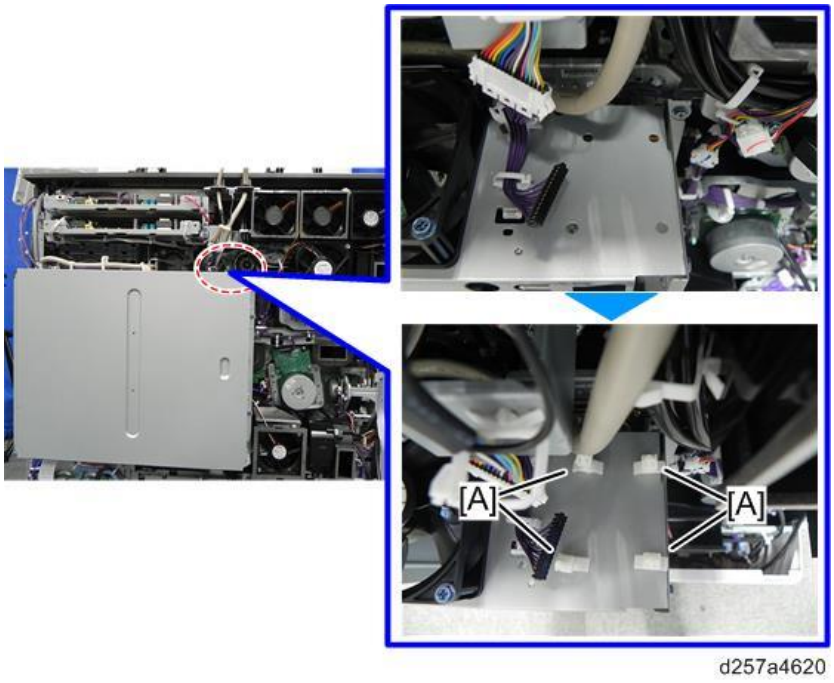
1. Remove the rear middle cover. (Exterior Covers)
2. Remove the controller box cover [A].



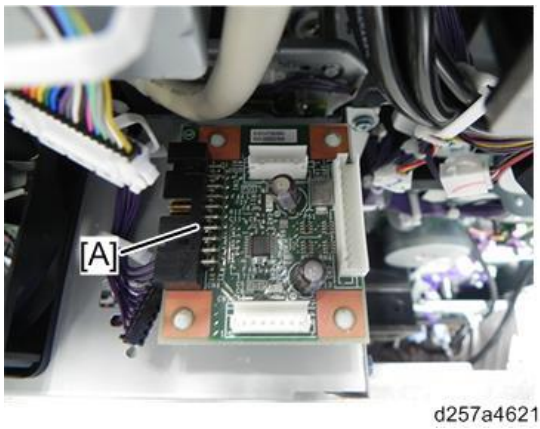
3. Remove the clamp [A].



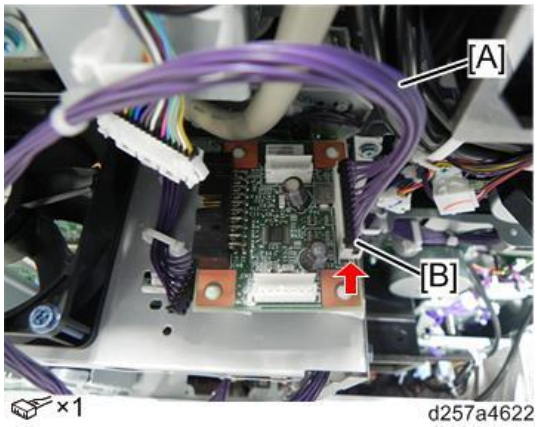
4. Install the four PCB Standoffs [A] on the controller box.



5. Install the optional counter interface board [A] on the four stud stays.



6. Connect the harness [A] to CN3 [B] on the optional counter interface board.

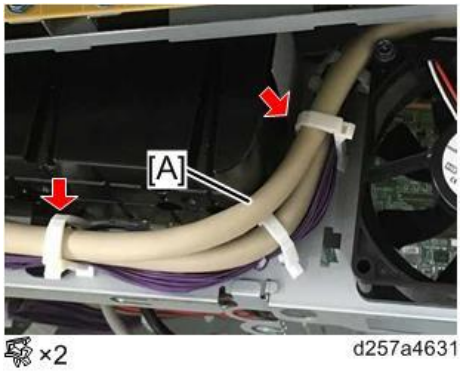


7. Break off the notch [A], on the edge of the back cover, with a flat screwdriver.

8. Connect the harness from the optional counter device to CN4 [A] on the optional counter interface board.

9. Fix the ground cable with a screw and clamp it together with the unused connector (white, 7-pin).

10. Guide the harness [A] of the optional counter through the clamps.

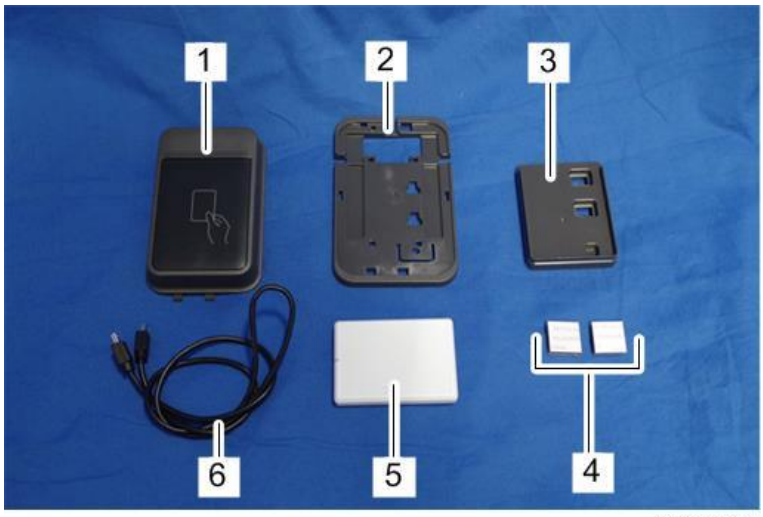


11. Reassemble the machine.

NFC Card Reader Type S6 (D3DH) (Pro C5300/C5310 Only)

Accessory Check

No.	Description	Q'ty	Remarks
1	IC Card Reader Upper Cover	1	
2	IC Card Reader Base	1	
3	IC Card Reader Spacer	1	
4	Sponge	2	
5	IC Card Reader	1	
6	Interface Cable	1	
-	RoHS Decal	1	
-	RoHS Label	1	
-	EMC Address Decal	1	
-	Caution Chart: JA	1	
-	Caution Chart: 27 Languages	1	



Installation Procedure

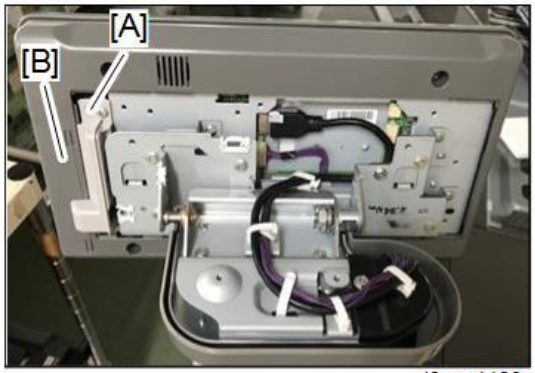
⚠CAUTION

- When installing this option, turn OFF the main power and unplug the power cord from the wall socket. If installing without turning OFF the main power, an electric shock or a malfunction may occur.

1. Remove the covers as shown below.

d0cpz1039

2. Remove the cover [A] and cover [B].



d0cpz1190

3. Route the cable [A] of the card reader through the arm cover.

d0cpz1040

4. Insert the cable [A] into the connector of the operation panel.

d0cpz1041

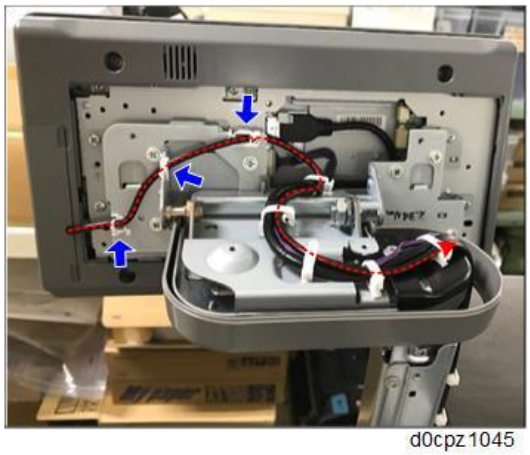
5. Reattach the cover [A].

d0cpz1042

Note

Route the cable through the opening [B].

6. Route the cable as shown below.



d0cpz1045

7. Reattach the exterior covers removed.

Note

Pull out the cable of the card reader through the opening [A].

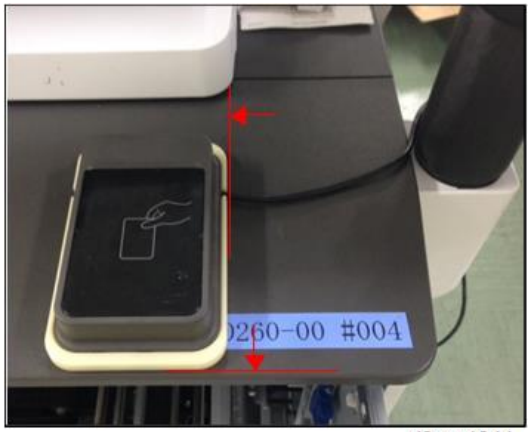
d0cpz1043

8. Assemble the card reader.

9. Install the card reader.

Note

Check the installing positions as shown below:

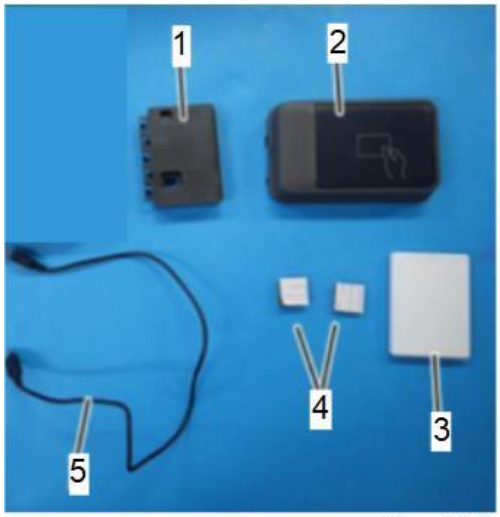


d0cpz1044

NFC Card Reader Type M42 (D3HP) (IM C6500/C8000 Only)

Accessory Check

No.	Description	Q'ty	Remarks
1	SPACER:IC CARD	1	
2	COVER:IC CARD:ASS'Y	1	
3	IC CARD:NFC_R/W:ASS'Y	1	
4	SPONGE:20X20	2	Use only 1 piece
5	CABLE:USB:NFC	1	



d0cpz1288

Installation Procedure

⚠CAUTION

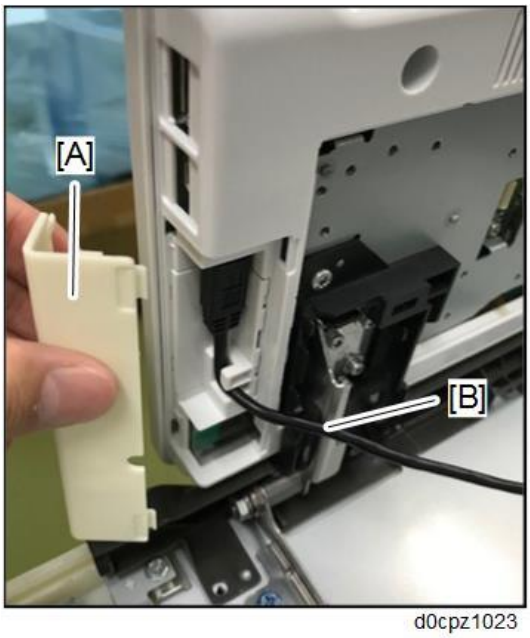
- When installing this option, turn OFF the main power and unplug the power cord from the wall socket. If installing without turning OFF the main power, an electric shock or a malfunction may occur.

2.Installation

1. Remove the exterior covers as shown below.

d0cpz1022

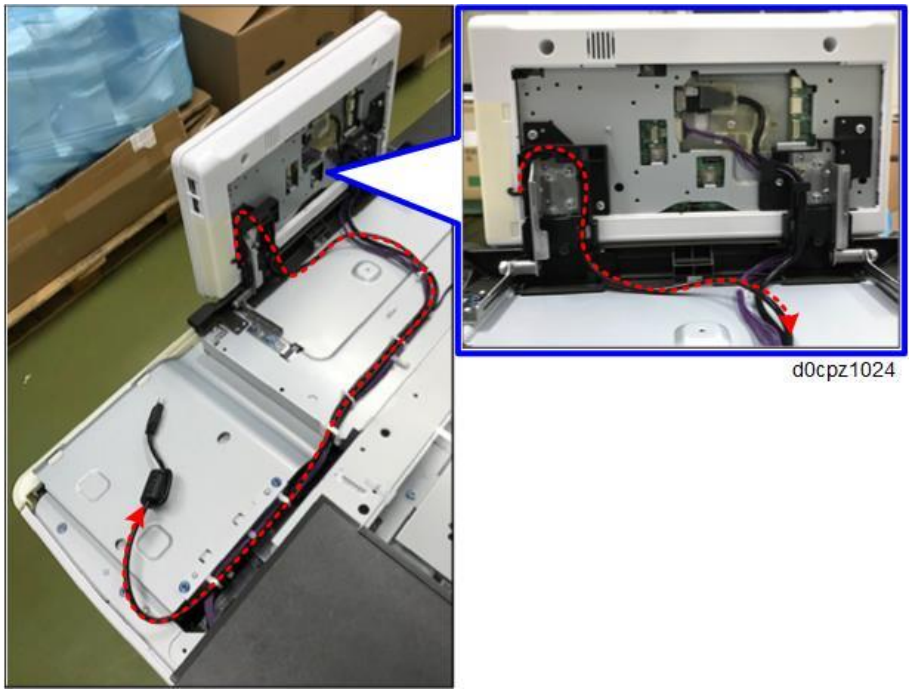
2. Remove the cover [A], and then insert the cable [B] that comes with this option.



d0cpz1023

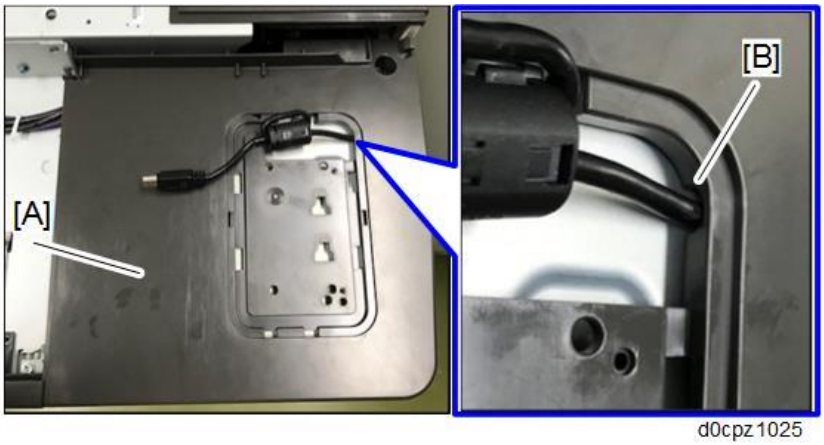
3. Reattach the cover just removed.

4. Route the harness as shown below.



d0cpz1024

5. Remove the cover [A] and attach the main machine. Insert the cable [B] into the opening [B].



d0cpz1025

6. Attach the base of this kit to the exterior cover.

7. Attach the card reader as shown below.

d0cpz1026

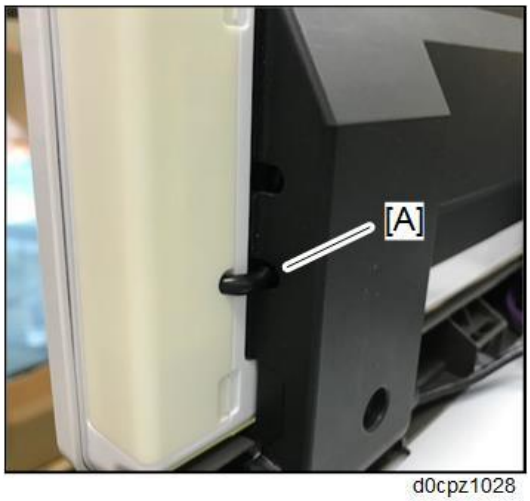
8. Attach the card reader cover [A].

d0cpz1027

9. Reattach the exterior covers.

Note

When attaching the cover to the operation panel, route the cable through the opening [A].



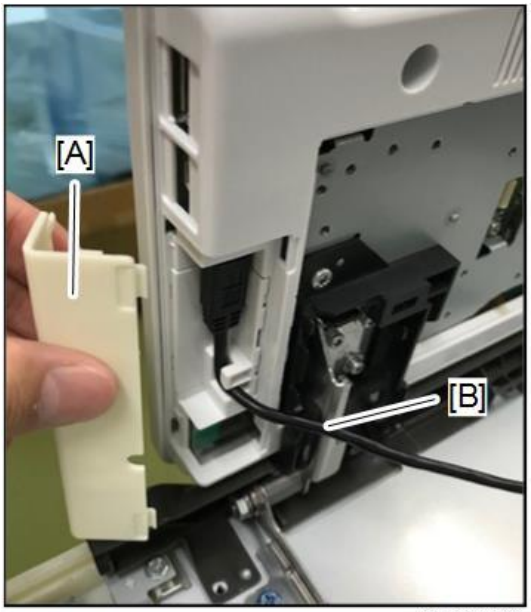
d0cpz1028

Installing with the Keyboard Bracket

1. Remove the exterior covers as shown below.

d0cpz1022

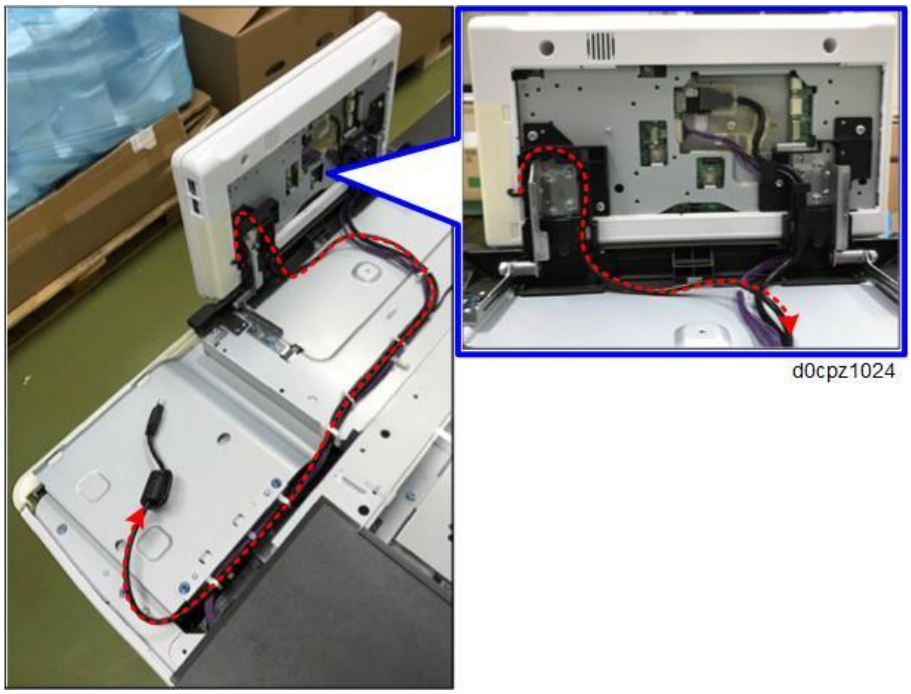
2. Remove the cover [A], and then insert the cable [B] that comes with this option.



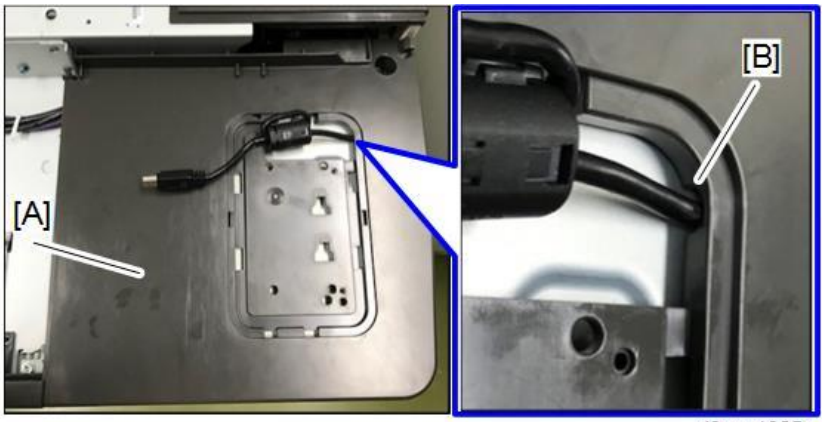
d0cpz1023

3. Reattach the cover just removed.

4. Route the harness as shown below.


d0cpz1024

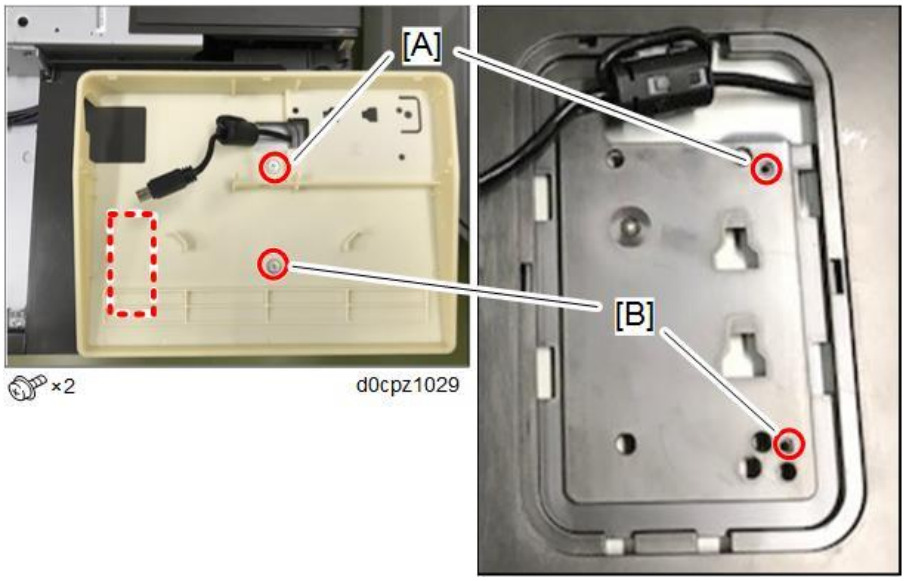
5. Remove the cover [A] and attach the main machine, and then insert the cable into the opening [B].



d0cpz1025

6. Attach the double-sided tape to the left of the bottom of the Keyboard Bracket.

7. Peel off the release paper of the double-sided tape and attach the double-sided tape to the cover.

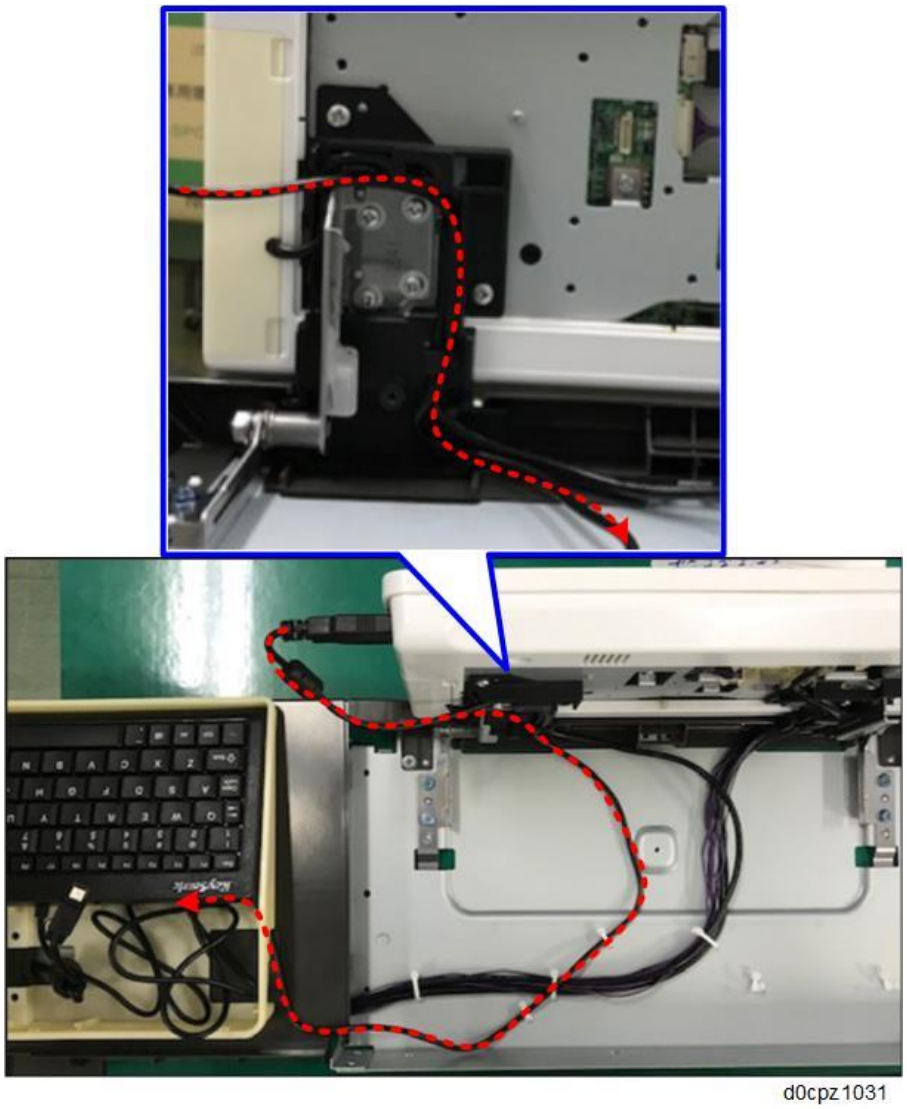


×2 d0cpz1029

8. Set the keyboard on the Keyboard Bracket and insert the cable into the opening of the bracket.

d0cpz1030

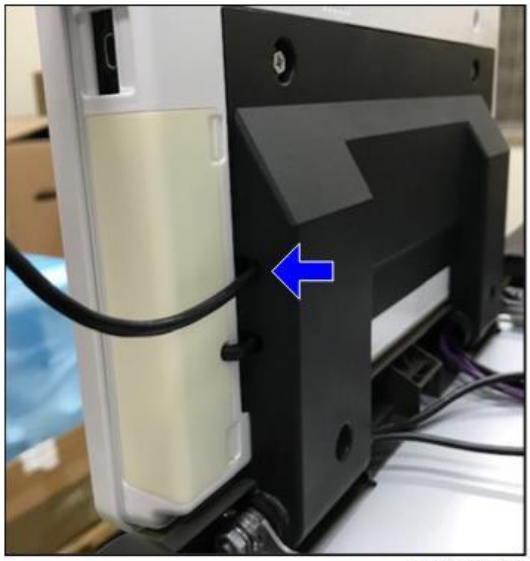
9. Route the harness of the keyboard as shown below.



d0cpz1031

Note

When attaching the panel cover, insert the cable of the keyboard through the upper opening.



d0cpz1032

10. Attach the panel center lower cover.

Note

Insert the cable of the keyboard through the opening [A].

d0cpz1033

11. Attach the base of card reader to the keyboard bracket and then set the card reader.

d0cpz1034

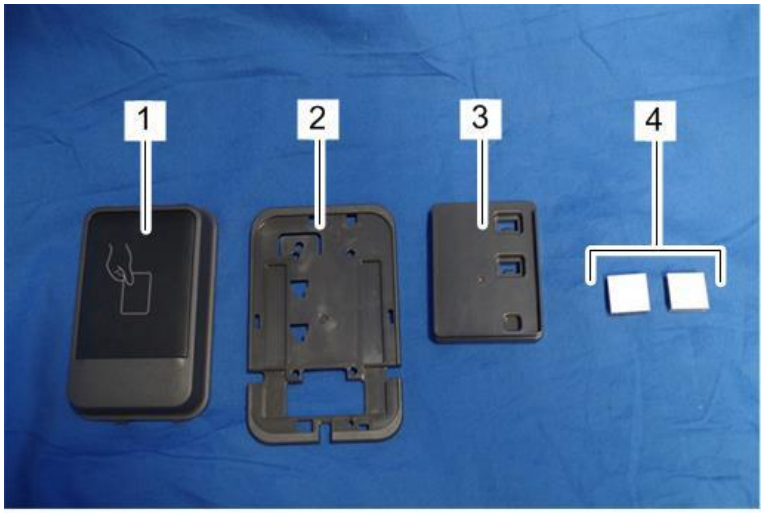
12. Attach the cover of the keyboard bracket.

d0cpz1035

Smart Card Reader Built-in Unit Type S6 (D3DH-07) (Pro C5300/C5310 Only)

Accessory Check

No.	Description
1	IC Card Reader Top Cover
2	IC Card Reader Base
3	IC Card Reader Spacer
4	Sponge
-	RoHS Decal
-	RoHS Label



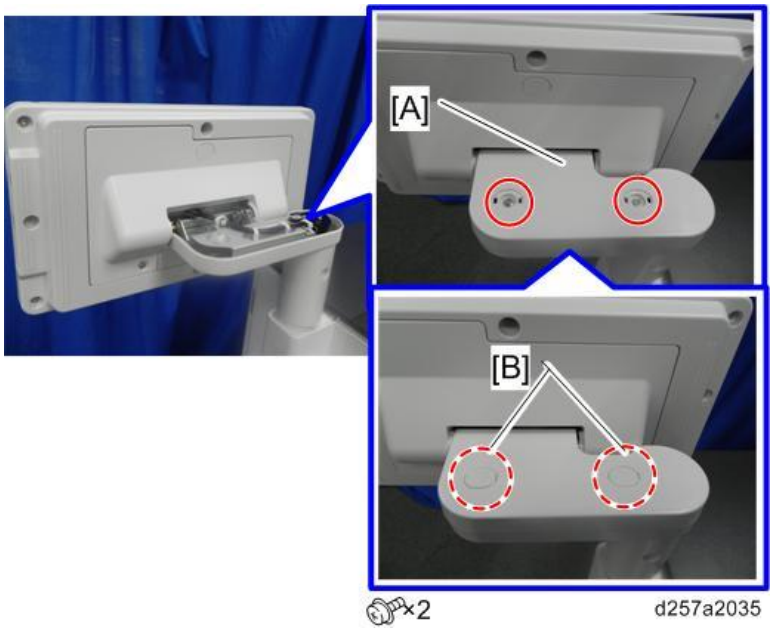
d257a7573

Installation Procedure

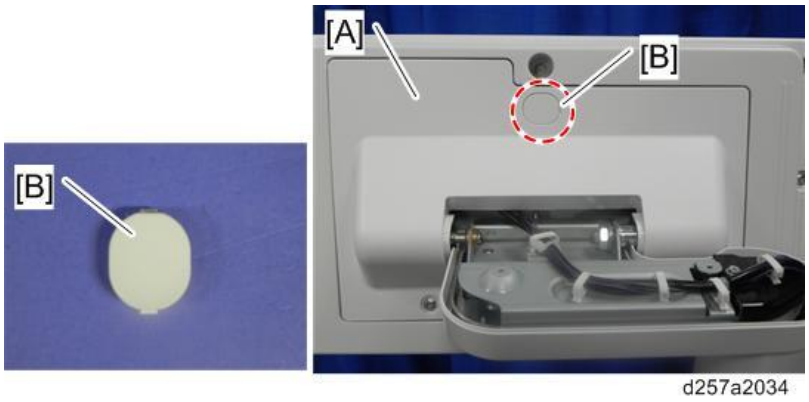
⚠CAUTION

- When installing this option, turn OFF the main power and unplug the power cord from the wall socket. If installing without turning OFF the main power, an electric shock or a malfunction may occur.

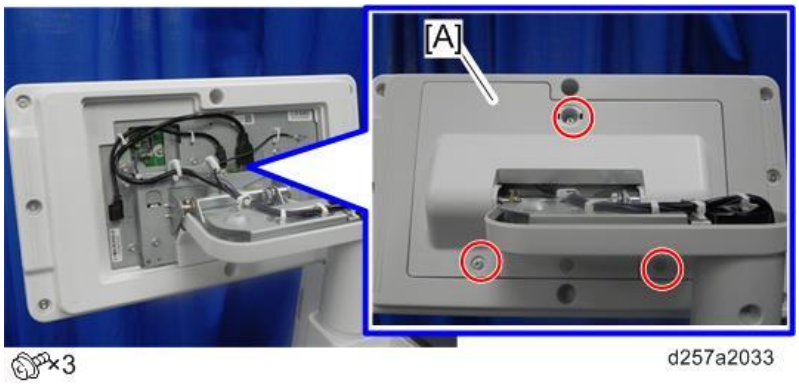
1. Remove the screw covers [B] on the back of the operation panel. Remove the arm upper cover [A].



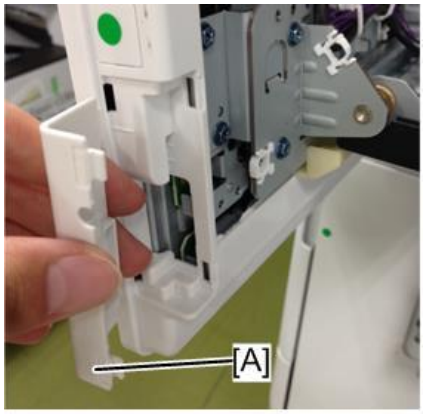
2. Remove the screw cover [B] from the rear cover [A].



3. Remove the rear cover [A].

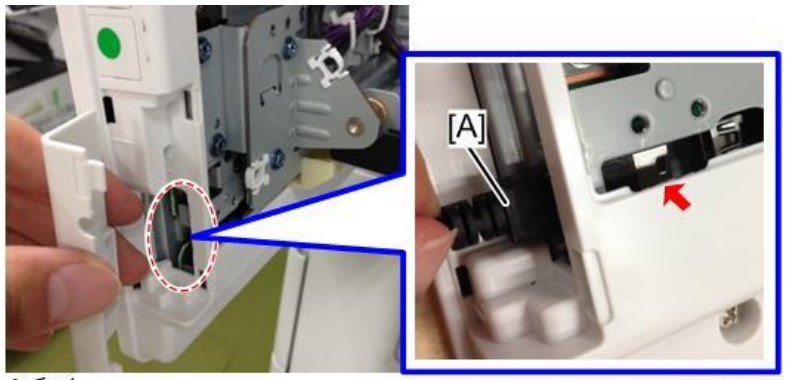


4. Remove the cover [A] from the right side of the operation panel.



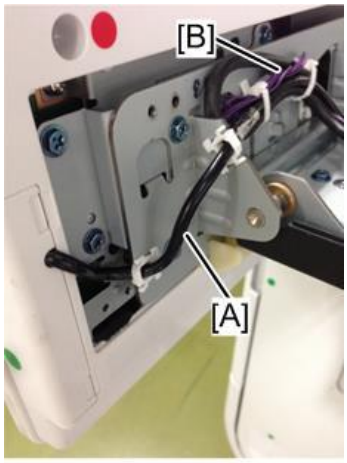
d257a4591

5. Insert the USB cable [A] into the media slot of the operation panel.



×1 d257a4592

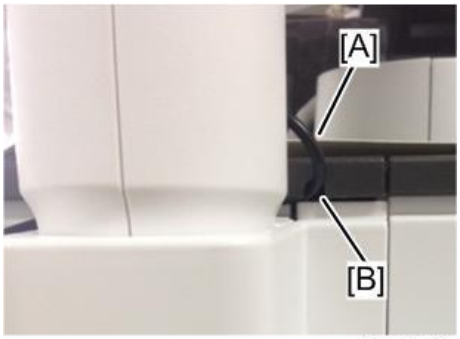
6. Route the USB cable [A] on the back side of the operation panel, and then secure it together with the operation panel harness [B] as shown below.



d257a4593

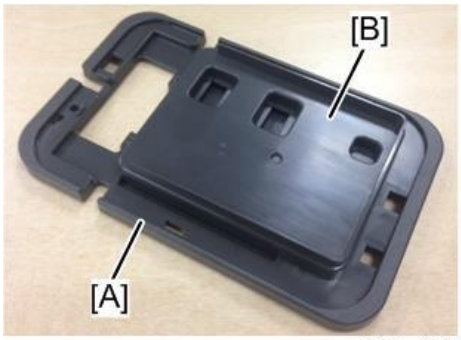
7. Put back the covers on the operation panel.

8. Pull out the USB cable [A] from the cut-out [B].



d257a4594

9. Attach the spacer [B] to the base cover [A].



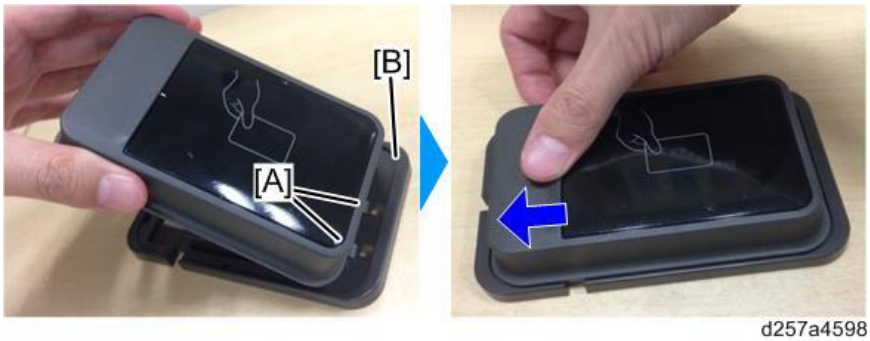
d257a4595

10. Attach the NFC card reader [A] to the spacer.

11. Connect the USB cable [B] to the card reader [A], and guide the cable to the notch as shown below.

×1 d257a4596

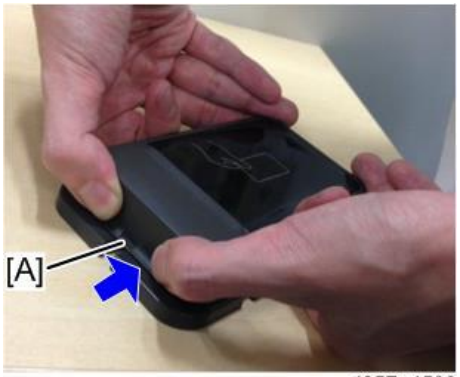
12. Align and insert the top cover clips [A] to the base [B] and gently push to seat in the base.



d257a4598

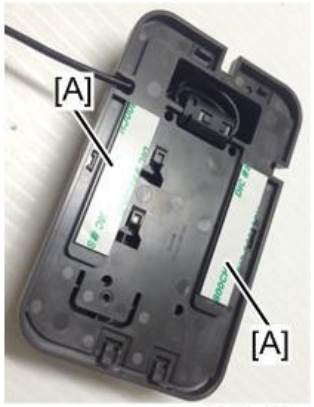
Note

To remove the top cover, gently hold and move it [A] in the direction to release the top cover clips as shown below.



d257a4599

13. Peel off the tape backing [A] attached to the bottom of the base.



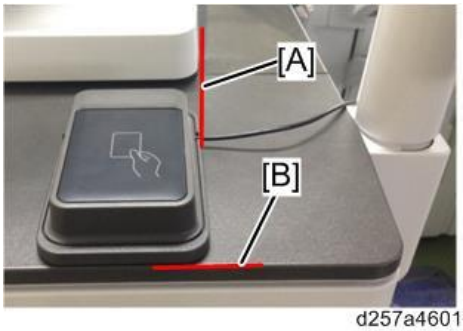
d257a4600

14. Attach the base cover to the upper front cover [A] of the main machine.

d257a4602

Note

When attaching the base cover to the upper front cover of the main machine, align the base cover with the lines [A] and [B] as shown below.



d257a4601

DataOverwriteSecurity Unit Type M19 (D3BS03)

Overview

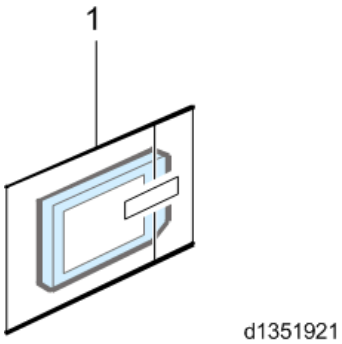
All the documents from the Copier, Printer, and Scanner functions are stored on the hard disk drive. It also stores the data of users' Document Server and code counters, and the Address Book. To prevent data on the hard disk being leaked before disposing of the machine, you can overwrite all data stored on the hard disk (Erase All Memory). You can also automatically overwrite temporarily-stored data (Auto Erase Memory).

The function of this option is completely the same as the Data Overwrite Security in Security Functions, which is standard on this model. (Security Function Installation)
This option should be installed only for customers requiring the **CC certified Data Overwrite Security function**.

Component List

Check the quantity and condition of the accessories in the box against the following list.

No.	Description	Q'ty
1.	SD Card	1
-	Comments Sheet	1
-	Operating Instructions CD-ROM	1



d1351921

Before You Begin the Procedure

1. Confirm that the Data Overwrite Security unit SD card is the correct type for the machine. The

correct type for this machine is, "Type M19".

Important

- If you install any version other than "**Type M19**" for this machine, you will have to replace the NVRAM and do this installation procedure again.

2. Make sure that the following settings are not at their factory default values:
   - Supervisor login password
   - Administrator login name
   - Administrator login password

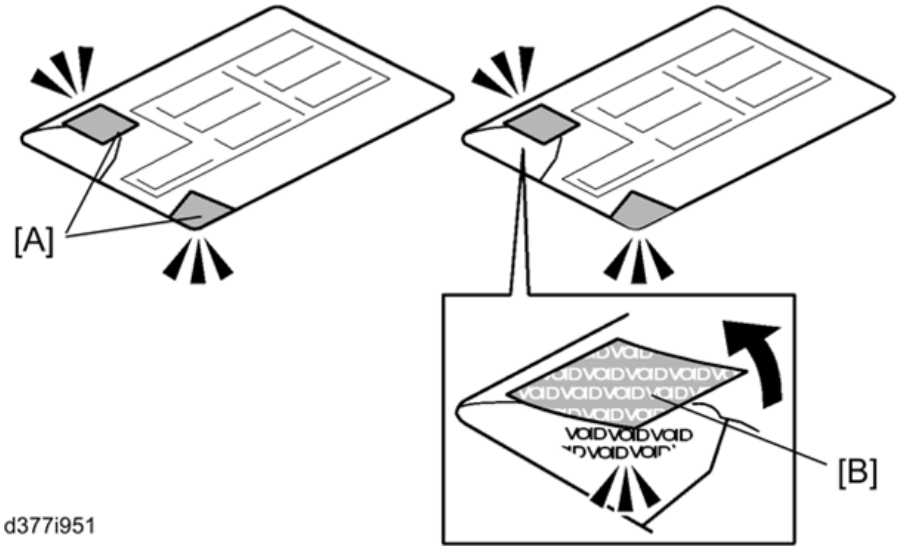
   If any of these settings is at a factory default value, tell the customer these settings must be changed before you do the installation procedure.
3. Make sure that "Admin. Authentication" is ON.
   [Settings] > [System Settings] > [Settings for Administrator] > [Authentication/Charge] > [Administrator Authentication/User Authentication/App Authentication] > [Administrator Authentication Management] > [Admin. Authentication]
   If this setting is OFF, tell the customer this setting must be ON before you do the installation procedure.
4. Make sure that "Administrator Tools" is enabled (selected).
   [Settings] > [System Settings] > [Settings for Administrator] > [Authentication/Charge] > [Administrator Authentication/User Authentication/App Authentication] > [Administrator Authentication Management]> [Available Settings]
   If this setting is disabled (not selected), tell the customer this setting must be enabled (selected) before you do the installation procedure.

Note

- See the Operating Instructions (Security Guide) for the factory default values.

Seal Check and Removal

Before opening the corrugated envelope, make sure that the seal has not been broken or peeled off. If the seal has been broken or peeled off (even partially), this is considered an arrival defect.
Once the tamper-evident seal peeled off, it will leave a "VOID" message on the envelope.



⚠CAUTION

- Make sure the box seals have not been removed before installation.

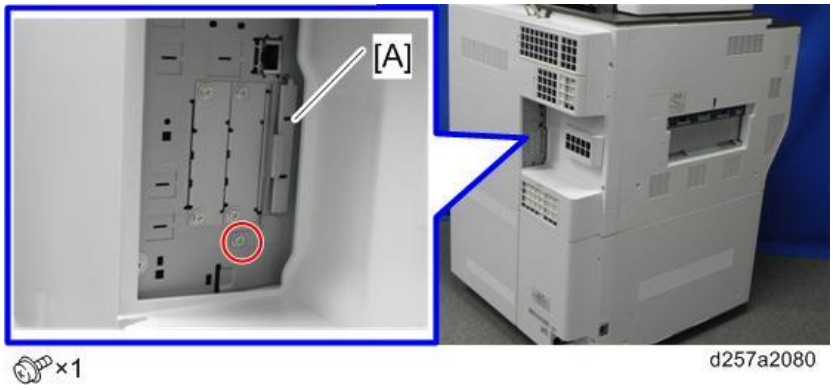
1. Check the box seals [A] on each corner of the box.
   - Make sure that a tape is attached to each corner.
   - The surfaces of the tape must be blank. If you see "VOID" on the tape, do not install the components in the box.
2. If the surfaces of the tape do not show "VOID", remove them from the corners of the box.
3. You can see the "VOID" marks [B] when you remove each seal. In this condition, they cannot be attached to the box again.

Installation Procedure

Note

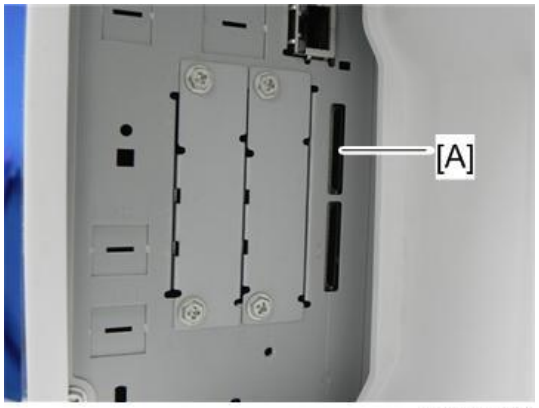
When installing more than one SD card, perform the merge operation (SD Card Appli Move).

1. Turn the main power off, and then remove the power plug and cables that are connected.
2. Remove the SD card slot cover [A].



3. Insert the DataOverwriteSecurity Unit Type M19 SD card in SD slot 1 (upper) [A] with its label

facing the front of the machine.



4. Reattach the SD card slot cover.(×1)
5. Plug the power cord into the socket and turn ON the main power.
6. Enter the SP mode.
7. Do this step only if you are installing the option on a machine that is already in use (not a new machine):
   - **If the customer wishes to** continue using the same hard disk, execute all three SP modes below.
     - SP5-801-014 (Clear DCS Setting)
     - SP5-832-001 (HDD Formatting (ALL))
     - SP5-832-002 (HDD Formatting (IMH))
   - **If customer wishes to** replace the hard disk with a new one, execute SP5-801-014 only.

Note

If the customer continues to use the same HDD, overwriting the data, stored on it before the option is installed, cannot be guaranteed. It is highly recommended to replace the hard disk with a new one.

8. Set SP5-836-001 (Capture Function (0:Off 1:On)) to a value of 0 (disable).
9. Execute SP5-878-001 ([Option Setup: Data Overwrite Security)
   If the installation fails, "Installation failed" is displayed when this SP is executed.
10. Print out the System Settings List and make sure that the option was installed successfully.
11. Reconnect the network cable.
12. Execute SP5-990-005 (SP print mode Diagnostic Report).
    Make sure to shut down and reboot the machine once before printing the SMC. Otherwise, the latest settings may not be collected when the SMC is printed.
13. Make sure that ROM number "D3BC5757A" and firmware version "1.02" appear in both of the following areas on the report (they must match):
    - "ROM Number / Firmware Version" - "HDD Format Option"
    - "Loading Program"

Configuring "Auto Erase Memory" (Performed by the Customer)

Refer to Using "Auto Erase Memory"

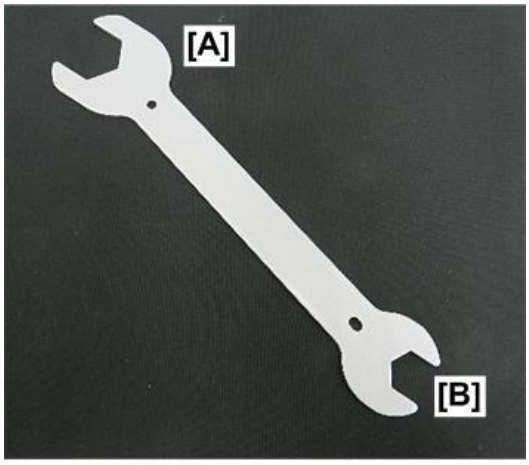
Common Adjustments

Height and Level Adjustment

Before you begin:

- The main machine should be installed first and adjusted to level front-to-back, and side-to-side.
- Note the settings on the leveling gauge. Due to the length of the paper path with optional peripheral units installed, it is extremely important that every unit be leveled to match the front-to-back and side-to-side measurements of the main machine.
- The height and level of each peripheral unit must be adjusted at installation.
- The height and level of each unit must be adjusted before testing for the presence of skew and checking that side-to-side registration is correct.

1. Use the wide end [A] of the accessory wrench provided with the machine to adjust the front and rear feet of the main machine.
2. The narrow end of the wrench [B] is for the feet of the peripheral units.



d1790999

Setting the Leveling Shoes

Important

- Do this procedure near each caster where an adjustable bolt is provided.
- The number of leveling shoes will differ, depending on which unit you are leveling.

1. Turn the lower nut to lower the bolt.

Note

- The upper bolt is spot-welded to the frame and does not move.

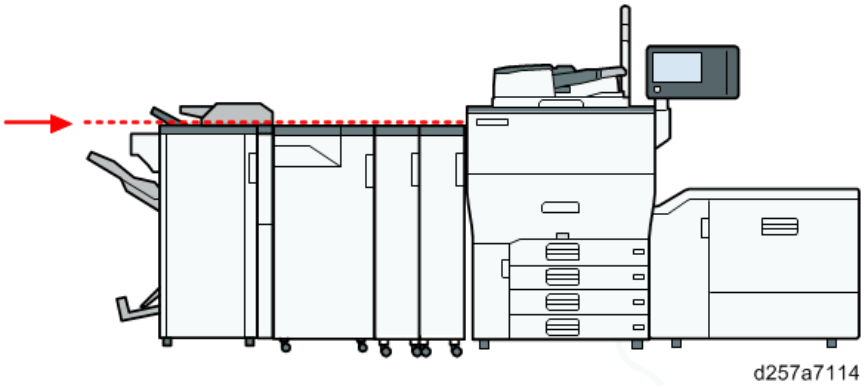
d1795700

2. Set a leveling shoe below the bolt.
3. Continue to turn the lower nut until it stops against the shoe.

d1795701

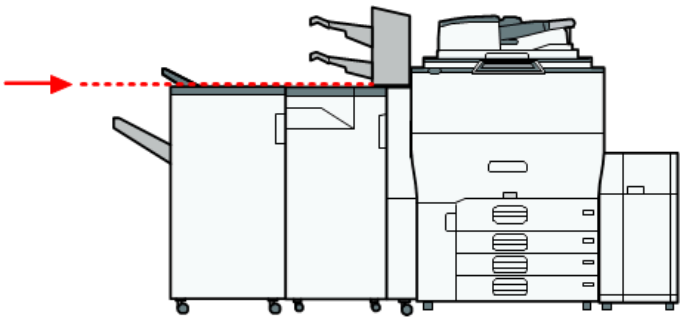
4. Set a level on the front, rear, and side edges to determine if the unit is level.
5. Adjust the height at each corner until the unit is level.
6. Check the results of the adjustments.
   - The tops of the peripheral units on the left where the units are joined must be at the same height.

     Pro C5300S/C5310S



d257a7114

     IM C6500/C8000

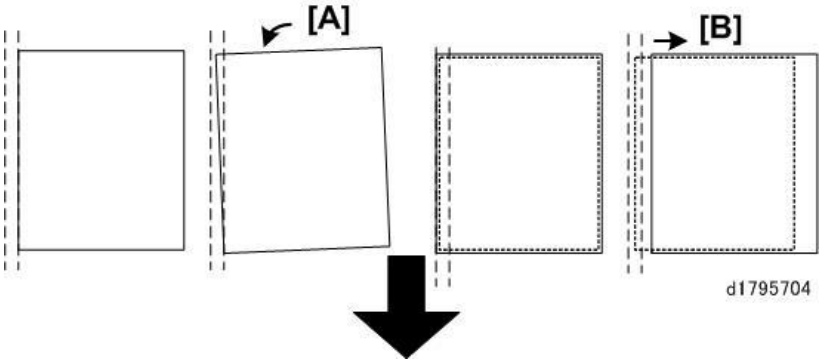


- Make sure that the plate at the paper exit on the left side of the main machine [A] moves freely and is not bent. It must be able to move to handle thick paper.
- Between the right side [B] of the main machine and the LCIT, make sure that the LCIT guide plate moves freely and does not interfere with the main machine guide plate.

Skew and Side-to-Side Registration

The paper feed path is extremely long when many peripheral units are installed. In such a long path, the cumulative effect of paper skew or deviation in side-to-side registration may require adjustment.

- Skew [A] occurs when the trailing edge of the paper rotates away from the direction of paper feed.
- If side-to-side registration shift [B] occurs, the sheet remains straight but shifts left or right away from center of the paper path.

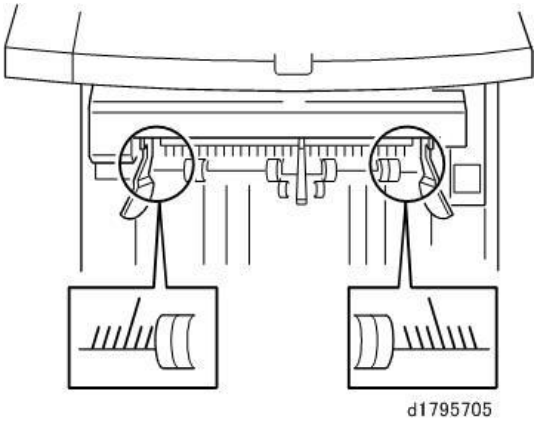


Important

- Before adjusting skew manually, be sure to enter the SP mode and set SP1-206-001 to "2" (OFF). This disables side-to-side registration in the main machine's registration unit.

Scales

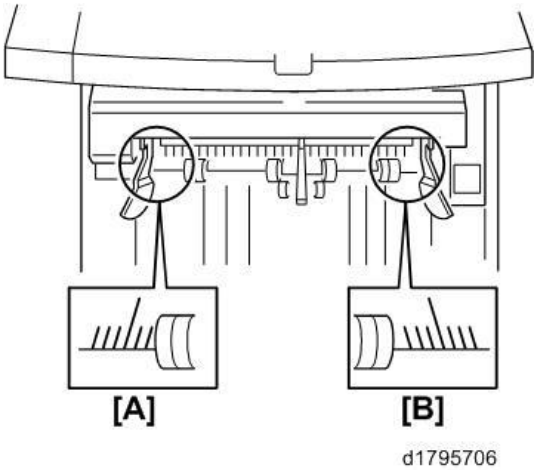
- Skew and side-to-side registration are checked with graduated scales (shown below) where paper exits the units.



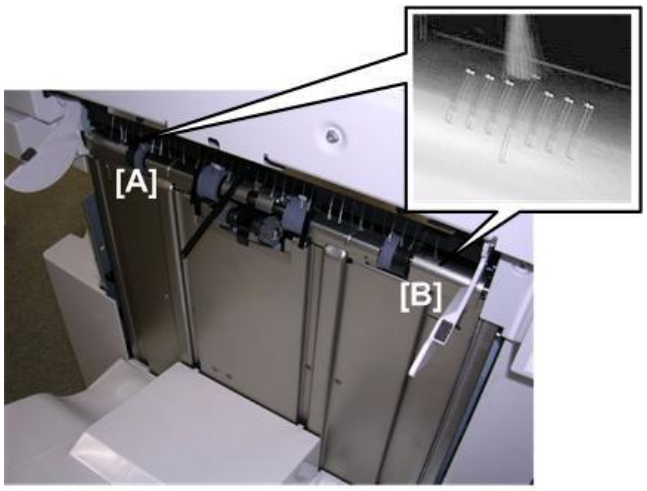
- The scales are provided so that you can visually check and measure the amount of skew or deviation in side-to-side registration.
- A scale for detecting skew and checking side-to-side registration ("S-to-S") is provided on the following peripheral units.
- Correction for both skew and side-to-side registration are possible.

Name	Skew	S-to-S	Comment
LCIT	---	---	Correction is done in the registration unit of the main machine.
Other Peripheral Units	Yes	Yes	Correction for both skew and side-to-side registration are possible when the unit is attached to the upstream device with the single-piece bracket (see the red lines in the illustration later in this section).

- Use either the rear scale or front scale, depending on the type of paper used in your area:
  - Rear [A]: DLT SEF (LT LEF for Ring Binder)
  - Front [B]: A3 SEF (A4 LEF for Ring Binder)



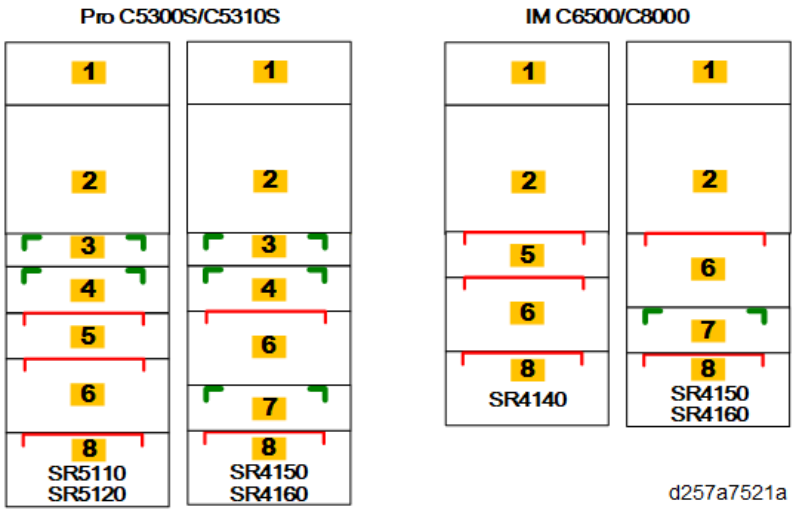
- The scale is located at the paper exit for each peripheral unit.
  The illustration shows the scale on the left side of the Booklet Finisher tray:



d1795707

[A]: DLT/ [B]: A3

- In the illustration below:
  - The RED lines indicate the single-piece brackets where adjustments can be done to eliminate skew and to correct side-to-side registration.
  - The GREEN lines indicated 2-piece connecting brackets where the adjustment is not possible.



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No.	Name
[1]	LCIT
[2]	Main Machine
[3]	Decurl Unit
[4]	Buffer Pass Unit
[5]	Two-tray Cover Interposer
[6]	Multi-folding Unit
[7]	One-tray Cover Interposer
[8]	Finisher

Note

- Here are some general rules for testing and adjusting for paper skew or a shift in side-to-side registration.

1. After installation of each peripheral device, do some test prints and check for the presence of skew, and check that side-to-side registration is correct.
2. When you detect a problem with skew or side-to-side registration, do the adjustment on the connecting bracket attached to the peripheral unit upstream of the unit where the problem occurred.
3. Side-to-side registration is corrected by shifting the upstream connecting bracket left or right.
4. Skew is eliminated by inserting spacers (shims) under the rear or front end of the connecting bracket. These attached by screws to the peripheral units before they leave the factory.

Checking Side-to-Side Registration

Do this procedure to confirm that the paper is centered on the paper path.

1. Make sure that the I/F cable of the unit is connected to the upstream device.

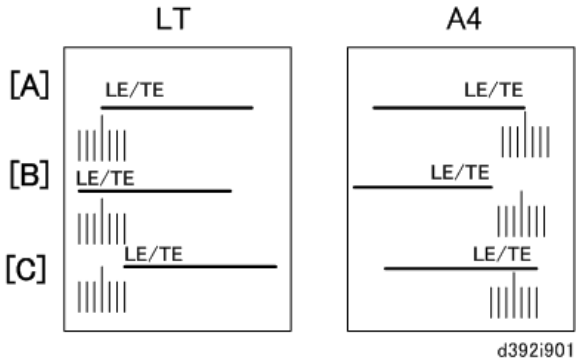
2. Disconnect the unit to the left of the unit to be tested.

3. Execute a run by feeding paper from Tray 2 of the host machine.

4. When each sheet exits, check the position of the paper on the scale to see if the paper is centered.

- Read the rear scale for DLT-size paper
- Read the front scale for A3-size paper.
- The scale lines are spaced 2 mm apart.

5. The paper must not deviate more than ±2 mm on the scale.



[A]	Leading/trailing edges centered. No adjustment necessary.
[B]	Leading/trailing edges offset to the rear by more than 2 mm. Adjustment required.
[C]	Leading/trailing edges offset to the front by more than 2 mm. Adjustment required.

If the edge of the paper is on the scale at the center [A], no adjustment is required.

-or-

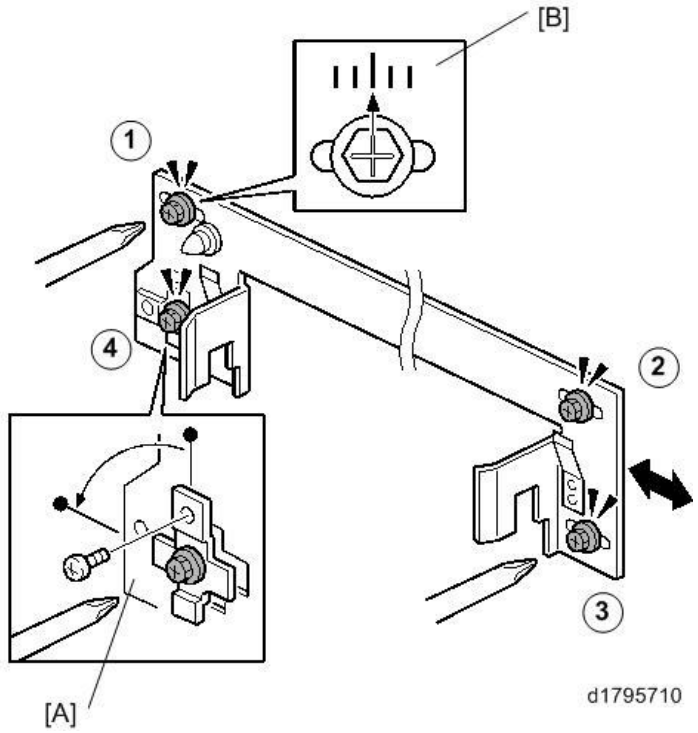
If the edge of the paper is ±2 mm off the center line on the scale, adjustment is required. Do the procedure in the next section.

Correcting Side-to-Side Registration

Each peripheral unit for this machine has the same single-piece connection bracket shown below. This adjustment can be done for every unit on the connection bracket attached to the upstream device

1. Disconnect the peripheral unit from the upstream device.

2. On the connecting bracket attached to the upstream device, loosen screw ①,②,③, and④.
3. Remove bracket [A] (x1), rotate it 90 degrees, and re-fasten the screw. Changing the position of this bracket aligns the oval cut-out horizontally and frees the connecting bracket so it can slide from side to side.
4. Look at the scale [B].
5. Slide the bracket to the left or right and tighten the screw.
6. If the deviation from center was toward the front, slide the bracket to the rear and tighten screw ①.
   -or-
   If the deviation from center was toward the rear, side the bracket to the front and tighten screw ①.
7. Tighten screws ②,③, and④.



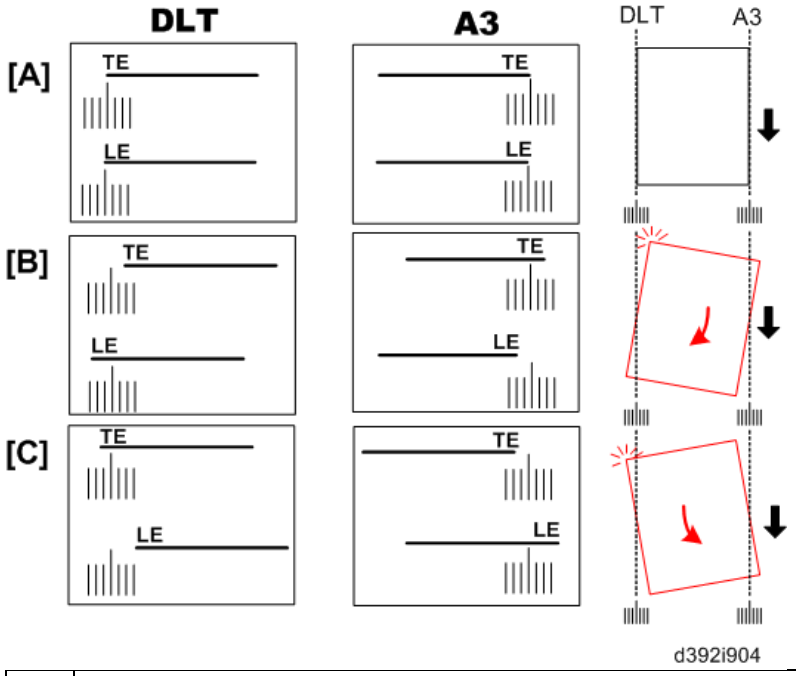
8. Do another test run, so that you can check the results of the adjustment.

Detecting Paper Skew

Do this check to detect the presence of skew in the paper path.

1. Make sure that the I/F cable of the unit is connected to the upstream device.
2. If a peripheral unit is connected on the left side, disconnect it and pull it away.
3. Execute a straight-through run.
4. Check the scale where each sheet exits.
   - The rear scale is for DLT-size paper.
   - The front scale [2] is for A3-size paper.

- Be sure to read the correct scale for the paper size in use.



[A]	Centered. No adjustment necessary.
[B]	Trailing edge skew to the front, total skew more than ±2 mm. Adjustment required.
[C]	Trailing edge skew to the rear, total skew more than ±2 mm. Adjustment required.

Correcting Skew

Removing Spacers

1. Disconnect the peripheral unit from the upstream device.
2. Remove the spacers from the peripheral unit where the problem occurred.

   The photos below show where you can find the spacers for each unit.

Multi-folding Unit

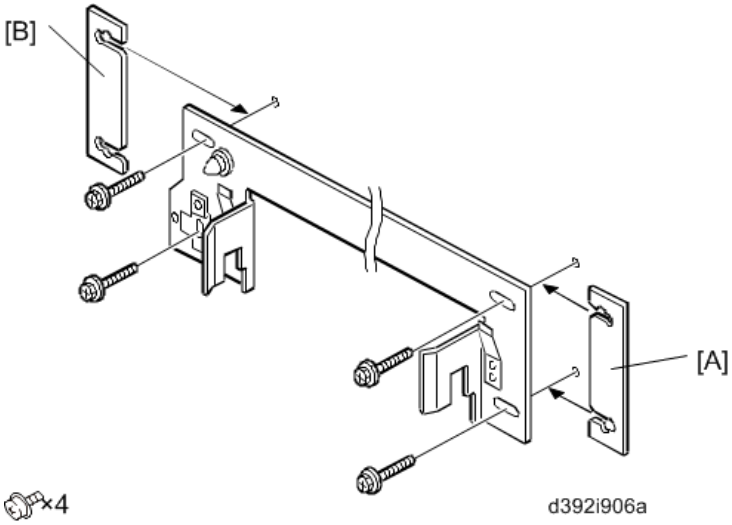
d454i111

Booklet Finisher, Finisher

d1795713

Inserting Spacers

1. Loosen the screws of the connecting bracket attached to the peripheral upstream of the unit where the problem occurred.
2. Insert a spacer and tighten the screws.
   If the trailing edge is skewing toward the **front** of the machine, insert a spacer [B] under the **rear** end of the bracket and tighten the screws.
   -or-
   If the trailing edge is skewing toward the **rear** of the machine, insert a spacer [A] under the **front** end of the bracket and tighten the screws.



3. Do another run to check the adjustment. If skew is still present, insert another spacer.
   - Each spacer is 2 mm thick.
   - Only two spacers are provided, so the maximum adjustment is 4 mm (using two spacers).

Note for Using the Main Machine in Taiwan

If installing/using the main machine for other than Taiwan (D0CP29, D0CQ29, D0CM29, D0CN29), change the value of SP5-085-001 to "2". This allows you to operate the software keyboard in Traditional Chinese characters.

"Web Help Support" Settings

Overview

The Web Help Support function is a feature that assists users on the operation panel.
When a user encounters problems while operating the machine, the solution is displayed on the operation panel, so they can attempt to resolve the problem themselves. By offering this solution, we aim to reduce the number of calls, thereby improving the rate of self-resolution. This function is available when the machine is connected to the Internet.

[A]: Tap "?" to display help contents

The Web Help Support function is preinstalled and enabled by default. Specify whether or not to enable or disable the function in SP or UP mode.

How to Enable/Disable Web Help Support

This function is enabled by default. If a customer is not willing to use this function, the function can be disabled via UP and SP as follows:

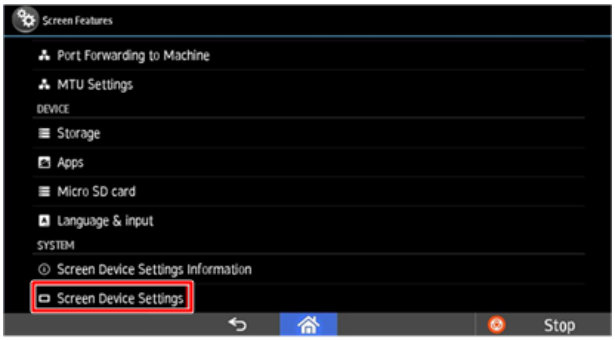
UP setting

1. Enable machine administrator authentication and login as administrator.
2. Press "Settings" icon.
3. Press [System Settings].
4. Press [Machine] > [Others] > [Support Settings].
5. Select [On] or [Off] for "Help Functions".

SP setting

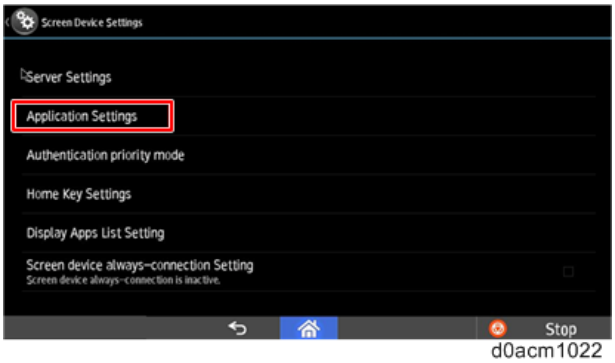
1. Log in to Screen SP mode.

2. Select "Screen Device Settings".



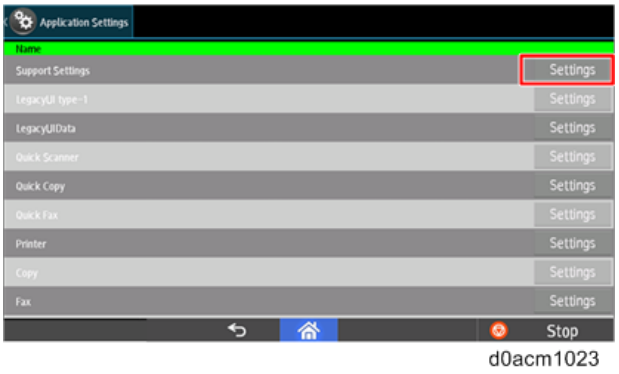
d0acm1021

3. Select "Application Settings".



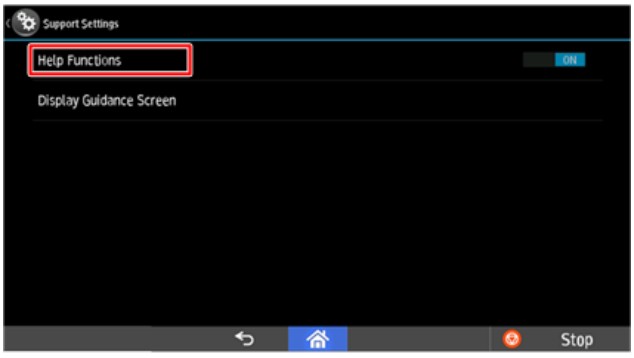
d0acm1022

4. Select "Settings" for “Support Settings”.



d0acm1023

5. Enable or disable Help Functions.



d0acm1024

If this function is disabled in SP mode (5-828-091(Network Setting Web)), the function in the UP setting menu will not be displayed.

"RemoteConnect Support" Settings

Overview

The RemoteConnect Support function allows monitoring and remote control of the customer's machine's operation panel.

- Allow a customer support operator to remotely connect with client's machine equipped with the Smart Operation panel (SOP-G2), or PC over the internet.
- Enable the support center to diagnose and resolve the issue through real-time screen sharing, remote guidance, and operation.

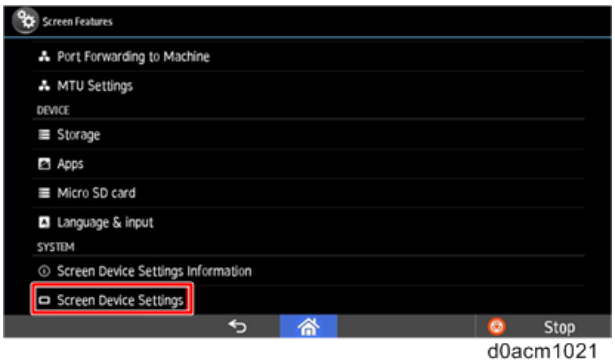
w_d0acm2004_en

Previously, to avoid security concerns, the function was disabled by default. However, this has changed and the application is now enabled by default on machines produced since September 2018. (This setting is enabled by default on the current model.)

So, it's necessary to confirm with customers whether enabling the remote function is acceptable. If after explaining the function and benefits, the customer does not agree, then disable it via SP mode.

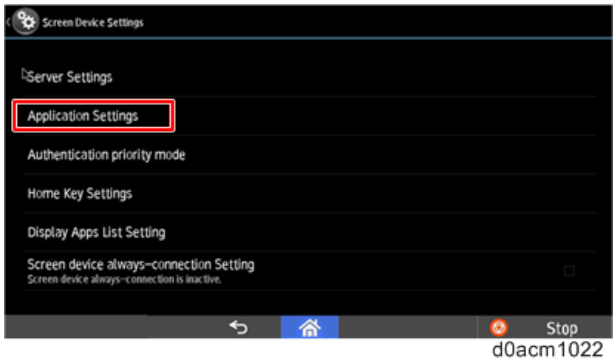
How to Enable/Disable RemoteConnect Support

1. Log in to Screen SP mode.
2. Select "Screen Device Settings".



d0acm1021

3. Select "Application Settings".



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4. Select "Settings" in "RemoteSupportService" and check "Service availability".

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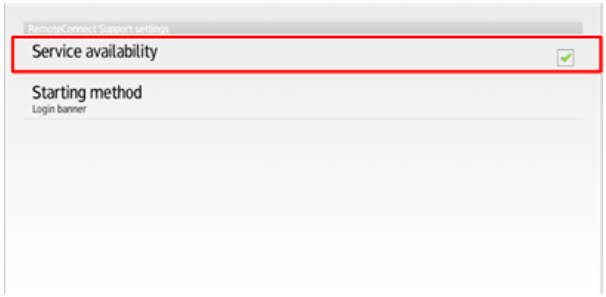


d0acm1026

Note

- The application is enabled by default on machines produced from August 2018.
- The setting is located in RemoteSupport Service. However, the name of the settings menu is RemoteConnect Support settings,
  You can find “RemoteConnectSupport” in the applications list, however, it does not have any settings. Be sure to open the settings of “RemoteSupportService”.

d0acm1027

5. Confirm if a connection can be established.

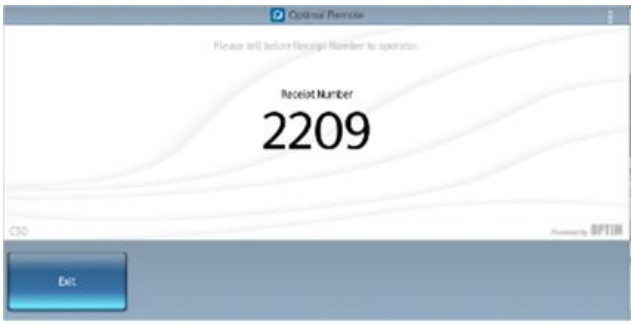
To confirm if RemoteConnect Support is working properly, open the application from the "Check Status" menu or by pressing down on the status bar on the Smart Operation Panel for over five

seconds.

After pressing down for over five seconds, stop pressing on the panel and RemoteConnect Support will open.

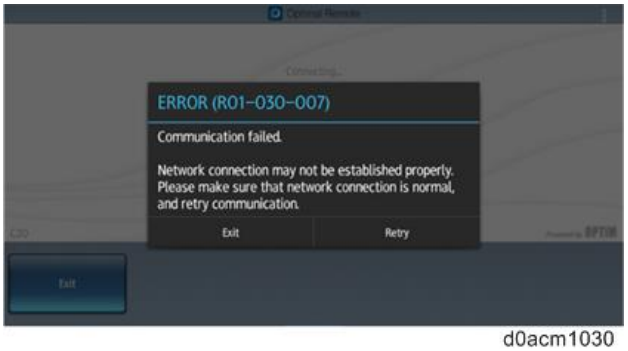
d0acm1028

If setup was done correctly, four digits will be displayed on the panel. If the setup was not done correctly, the four digits will not be displayed.



d0acm1029

RemoteConnect Service needs an Internet connection, so the following error message might appear after long-pressing the status bar if an Internet connection is not detected. To check the connection, open the web browser in Smart Operation Panel and navigate to a webpage to confirm that the machine is connected to the Internet.



d0acm1030

Note

- If the browser cannot load webpages, check the network settings such as IP address and proxy settings.

Uninstalling RemoteConnect Support

Some customers might ask for this feature to be disabled because of security precautions. In many cases, disabling RemoteConnect Support should be sufficient.

However, if a customer asks for RemoteConnect Support to be completely uninstalled, remove it by conducting the following procedure:

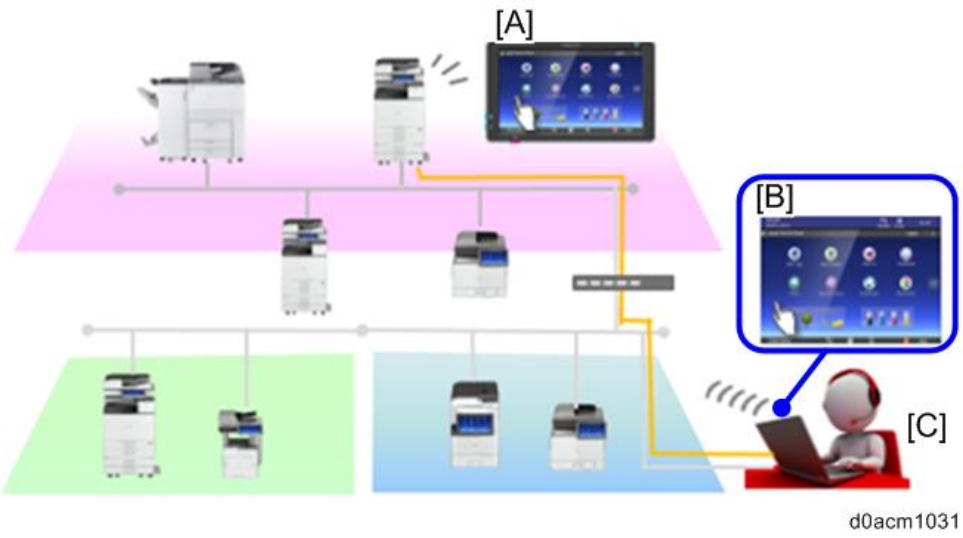
1. Log in to Screen SP mode.
2. Select Apps > Install.
3. Select Uninstall for the following two applications:

Firmware Type	Part Number	Version
RemoteConnectSupport	D2411470A	1.0.5
RemoteSupportService	D1961459A	1.0.1

"Remote Panel Operation" Settings

Overview

Remote Panel Operation will be preinstalled in models that have Smart Operation Panel G2.5. This is a built-in function.
With the Web Image Monitor, you can view and operate the operation panels of devices on the same network. For example, in a large company, the machine administrator can use the remote control to check for errors, operate machines, and change settings to provide support and manage machines easily.



[A]: Smart Operation Panel G2.5
[B]: Web browser
[C]: IT manager/ administrator

- Eliminating a trip to device
- Reducing end user's wait time

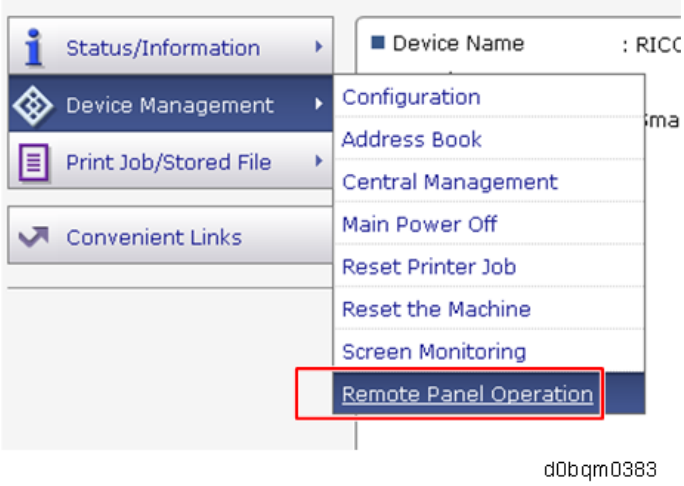
Usage

- Remote Panel Operation enables the IT manager or in-house help desk staff to remotely view and operate the Smart Operation Panel G2 screen through a Web UI.
- It can be used to provide real-time interactive user support and also facilitate customer training.

Startup

1. Log in to Web Image Monitor as the administrator.

2. Click [Device Management] > [Remote Panel Operation]



Notes

- When connected by the Remote Panel Operation function, the machine does not automatically switch to Sleep mode, and the Auto Logout and System Auto Reset functions do not operate.
- You cannot connect to a single unit from multiple computers and operate it by the Remote Panel Operation function.
- The Remote Panel Operation function is supported by Internet Explorer 11 and later versions, Google Chrome 62 and later versions, Firefox 56 and later versions, and Microsoft Edge 40 and later versions.

About the Settings

- This function has been preinstalled. (Its icon does not appear on the operation panel.)
- For security reasons, the settings have not been specified by default. Enable or disable each setting according to the customer's request.

How to Enable/Disable Remote Panel Operation/Monitoring

1. Enable machine administrator authentication and login as administrator.
2. Press the "Settings" icon on the Home screen.
3. Press [System Settings].
4. Press [Settings for Administrator] > [Remote Panel Operation].
5. Select [Active] or [Inactive] for "Remote Operation/Monitoring".

Note

- "Remote Operation/Monitoring" Functions is disabled by default. When it is disabled, Remote Panel Operation is not displayed in the Web Image Monitor.

Security Settings

Security Function Installation

If the “Enhanced Security HDD Option Type M12” is installed at the same time as the main machine’s installation, do not execute these settings described below.

Important

- When the “Enhanced Security HDD Option Type M12” and security functions (Data Overwrite Security and HDD Encryption functions) are activated in the same machine, the function of the “Enhanced Security HDD Option” is not guaranteed.

The machine contains the security functions (Data Overwrite Security and HDD Encryption functions) in the controller board.

If you are installing a new machine, it is recommended to activate Data Overwrite Security and HDD Encryption by selecting "Format All Data" in "Machine Data Encryption Settings". ("Settings" icon> [System Settings] > [Settings for Administrator] > [File Management] > [Machine Data Encryption Settings])

Note

- This method is recommended because there is no user data saved on the hard drive yet such as Address Book, image data, etc.

If the customer wishes to activate the Data Overwrite Security and HDD Encryption functions on a machine that is already running, it is recommended to activate these functions by selecting "All Data" in "Machine Data Encryption Settings". ("Settings" icon> [System Settings] > [Settings for Administrator] > [File Management] > [Machine Data Encryption Settings])

Important

- If "All Data" is selected, all the data saved on the HDD will be preserved. If "Format All Data" is selected, all the user data saved on the HDD will be erased.

After enabling encryption, the setting process takes several minutes to complete before the machine can be used.

Note

- If encryption is enabled after data has been stored on the HDD, or if the encryption key is changed, this process can take up to three and a half hours or more.

The machine cannot be operated while data is being encrypted.

Once the encryption process begins, it cannot be stopped.

DO NOT turn off the power while the encryption process is in progress.

If the machine's main power is turned OFF while the encryption process is in progress, the HDD will be damaged and all data on it will be unusable.

Print the encryption key or save to SD card and keep the encryption key (which is printed as a paper sheet).

Keep the encryption key in a safe place. If the encryption key is lost and is needed, the controller board, HDD and NVRAM must all be replaced at the same time.

Note

- "NVRAM" mentioned here means the NVRAM on the Controller Board (PCB24).
- SMB on the BICU has nothing to do with this.

If you need to reactivate the Data Overwrite Security and HDD Encryption functions, perform the steps in the following sections:

Data Overwrite Security

Before You Begin the Procedure

1. Make sure that the following settings (1) to (3) are not at their factory default values.
   (1) Supervisor login password
   (2) Administrator login name
   (3) Administrator login password
   If any of these settings is at a factory default value, tell the customer these settings must be changed before the installation procedure.
2. Make sure that “Administrator Authentication” is On.
   "Settings" icon > [System Settings] > [Administrator Authentication/User Authentication/App Auth.] > [Administrator Authentication Management] > [Administrator Authentication]
   If this setting is off, tell the customer this setting must be on before the installation procedure.
3. Make sure that “Administrator Tools” is enabled (selected).
   "Settings" icon > [System Settings] > [Administrator Authentication/User Authentication/App Auth.] > [Administrator Authentication Management] > [Administrator Tools]
   If this setting is disabled (not selected), tell the customer this setting must be enabled (selected) before the installation procedure.

Using "Auto Erase Memory"

The Auto Erase Memory function can be enabled by the following procedure.

1. Log in as the machine administrator from the operation panel.
2. Press "Settings" icon.
3. Press [System Settings].

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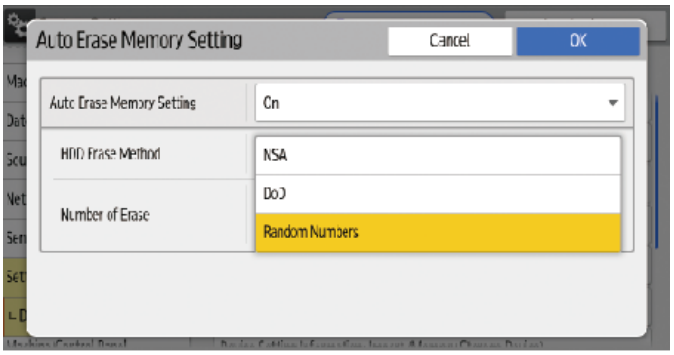
4. Press [Settings for Administrator] > [Data Management] > [Auto Erase Memory Setting].
5. From the list next to Auto Erase Memory Setting, select [On], and then select an erase method.

   The default erase method is [Random Numbers], and the default number of overwrites is [3].



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- NSA*1: Overwrites data twice with random numbers and once with zeroes.
- DoD*2: Overwrites data with a random number, then with its complement, then with another random number, and the data is verified.
- Random Numbers: Overwrites data multiple times with random numbers. Select the number of overwrites from one to nine.

  *1 National Security Agency (U.S.A)

  *2 Department of Defense (U.S.A)

6. Press [OK].
7. Press [ ], and then log out of the machine.

   If you enable both overwriting and data encryption, the overwriting data will also be encrypted.

To check the overwriting process on the operation panel

When Auto Erase Memory is enabled, the Data Overwrite icon is displayed at the bottom right of the operation panel screen to indicate the status of data that is not overwritten.

1. Check the overwrite erase icon.

   The icon [1] is lit when there is temporary data to be overwritten, and blinks during overwriting.

   The icon [2] is lit when there is no temporary data to be overwritten.

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	Icon [1]	This icon lights up when there is data to be overwritten, and flashes during overwriting. Overwriting starts automatically once the job is completed. The Copier, Fax, and Printer functions take priority over the Auto Erase Memory function. Overwriting will start after the job is completed.
	Icon [2]	The trash box of the icon is empty when there is no data to be overwritten. This icon is also displayed when there is Hold Print/Stored Print/Locked Print/Sample Print data in the hard disk.

HDD Encryption

Before You Begin the Procedure

1. Make sure that the following settings (1) to (3) are not at their factory default values.
   (1) Supervisor login password
   (2) Administrator login name
   (3) Administrator login password
   If any of these settings is at a factory default value, tell the customer these settings must be changed before the installation procedure.
2. Make sure that “Administrator Authentication” is On.
   "Settings" icon > [System Settings] > [Administrator Authentication/User Authentication/App Auth.] > [Administrator Authentication Management] > [Administrator Authentication]
   If this setting is off, tell the customer this setting must be on before the installation procedure.
3. Make sure that “Administrator Tools” is enabled (selected).
   "Settings" icon > [System Settings] > [Administrator Authentication/User Authentication/App Auth.] > [Administrator Authentication Management] > [Administrator Tools]
   If this setting is disabled (not selected), tell the customer this setting must be enabled (selected) before the installation procedure.

Enable Encryption Setting

The data saved on the HDD, such as Address Book, authentication information, saved documents, can be encrypted to prevent data leakage in case the HDD is removed from the machine.
Once encryption is enabled, all data subsequently stored on the machine will be encrypted.
The encryption algorithm used in the machine is AES-256.

Setting Up Encryption

Important

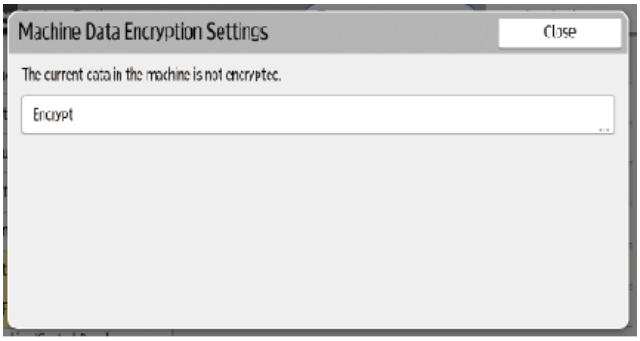
- This function is only available for the standard hard disk. If your machine is equipped with the Enhanced Security HDD Option, data on the hard disk is always encrypted. Therefore, this function can only encrypt the machine's NVRAM data.
- The machine cannot be operated while encrypting data, updating the encryption key, or

canceling encryption.

- The encryption process takes several hours. Once the encryption process starts, it cannot be stopped.

When setting up encryption, specify whether to start encryption after deleting data (initialize) or encrypt and retain existing data. If data is retained, it may take some time to encrypt it.

1. Turn ON the main power.
2. Log in as the machine administrator from the operation panel.
3. Press "Settings" icon > [System Settings].
4. Press [Settings for Administrator] > [File Management] > [Machine Data Encryption Settings].
5. Press [Encrypt].



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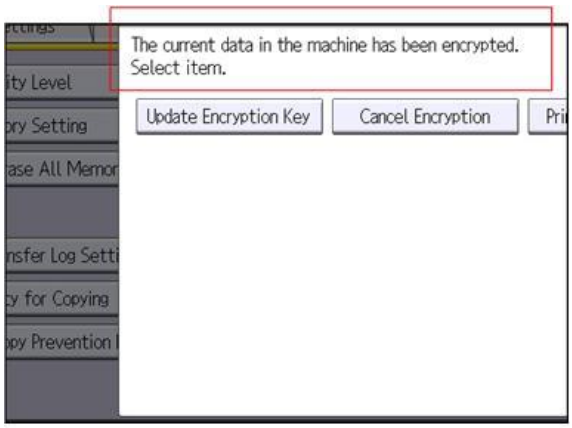
- If the data has been encrypted, you can decrypt the data, update the encryption Key, or back up the data.
  - Update Encryption Key: Encrypts data again and creates a new encryption Key.
  - Cancel Encryption: Cancels encryption.
  - Back Up Encryption Key: Makes a backup of the encryption key. The encryption setting is not changed. Proceed to Step 7.

6. Select one of the options from among [All Data], [File System Data Only], and [Format All Data] to encrypt the data.
   - **All Data:** Encrypts all data.
   - **File System Data Only**: The following data are encrypted or initialized:
     - **Data that are encrypted**
       Program/log of the Embedded Software Architecture application, Address Book, registered fonts, job logs, access logs, thumbnail images of stored documents, sent/ received e-mail, documents transferred to the document management server, files received by Mail to Print, spooled jobs
     - **Data that are initialized**
       Stored documents (documents in the Document Server, documents related to Locked Print/Sample Print/Stored Print/Hold Print, documents of fax stored reception), registered data (stamps/forms)
   - **Format All Data**: Initializes all data without encryption. The NVRAM data (memory that remains even after the machine is turned off) will not be deleted (initialized).

7. Select the backup method.
   If you have selected [Save to SD Card], load an SD card into the media slot on the side of the operation panel and press [OK] to back up the machine's data encryption key.
   If you have selected [Print on Paper], press the [Print] key. Print out the machine's data encryption key.
8. Press [OK].
9. When the confirmation dialog is displayed, press [OK].
10. Press [], and then log out of the machine.
11. Turn OFF the main power, and then turn the main power back ON.
    The machine will start to convert the data on the memory after you turn ON the machine. Wait until the message "Memory conversion complete. Turn the main power switch OFF." appears, and then turn the main power OFF again.

Check the Encryption Settings

1. Log in as the machine administrator from the operation panel.
2. Press "Settings" icon > [System Settings].
3. Press [Settings for Administrator] > [File Management] > [Machine Data Encryption Settings].
4. Confirm whether the encryption has been completed or not on this display.



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Backing Up the Encryption Key

The encryption key can be backed up. Select whether to save it to an SD card or to print it.

Important

- The encryption key is required for data recovery if the machine malfunctions. Be sure to store the encryption key safely for retrieving backup data.

1. Turn ON the main power.
2. Log in as the machine administrator from the operation panel.
3. Press "Settings" icon > [System Settings].
4. Press [Settings for Administrator] > [File Management] > [Machine Data Encryption Settings].
5. Press [Print Encryption Key].
6. Select the backup method.

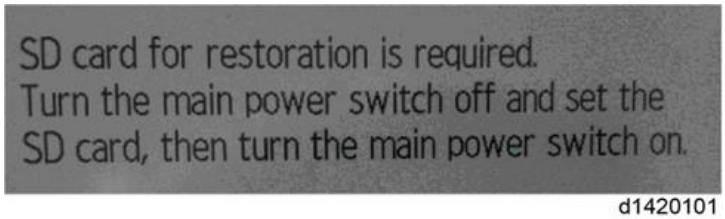
If you have selected [Save to SD Card], load an SD card into the media slot on the side of the control panel and press [OK]. After the machine's data encryption key is backed up, press [Exit].
If you have selected [Print on Paper], press the [Print] key. Print out the machine's data encryption key.

7. Press [Exit].
8. Log out.

Encryption Key Restoration

How to restore the old encryption key to the machine

The following message appears after the controller board (PCB24) is replaced. In such a case, it is necessary to restore the encryption key to the new controller board (PCB24).



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To do this, follow the procedure below.

1. Prepare an SD card that has been initialized in FAT16 format.
2. Using a PC, create a folder in the SD card and name it "restore_key".
3. Create a folder in the “restore_key” folder and name it the same as machine’s serial number, “xxxxxxxxxx” (11 digits).
4. Create a text file called "key_xxxxxxxxxx.txt" and save it in the "xxxxxxxxxx“ folder. Write the encryption key in the text file.
   /restore_key/xxxxxxxxxx/key_xxxxxxxxxx.txt

   Note

   - Ask an Administrator to enter the encryption key. The key has already been printed out by the user and may have been saved in the "key_xxxxxxxxxx.txt" file.
5. Turn ON the main power.
6. Confirm that a message is displayed on the LCD telling to insert the SD card that contains the encryption key.
7. Turn OFF the main power.
8. Insert the SD card that contains the encryption key into SD card slot 2 (the lower slot).
9. Turn ON the main power.

   Note

   - The machine will automatically restore the encryption key to the flash memory on the controller board (PCB24).
10. Turn OFF the main power when the machine has returned to normal status.
11. Remove the SD card from SD card slot 2.

How to do a forced start up with no encryption key

2.Installation

If the encryption key backup has been lost, follow the procedure below to do a forced start-up.

Important

- The HDD will be formatted after the forced start-up.
- Encrypted data will be deleted.
- User settings will be cleared.

1. Prepare an SD card.
2. Create a directory named “restore_key” inside the root directory of the SD card. Then, save the “nvram_key.txt” file using the following name:
   /restore_key/nvram_key.txt
3. Create a text file and write "nvclear".

   Important

   - Write this string at the head of the file.
   - Use all lower-case letters.
   - Do not use quotation marks or blank spaces.
   - It is judged that a forced start has been selected when the content of "nvclear" is executed and the machine shifts to the alternate system (forced start).
4. Confirm that a message is displayed on the LCD telling to insert the SD card that contains the encryption key.
5. Turn OFF the main power.
6. Insert the SD card that contains the encryption key into SD card slot 2 (the lower slot).
7. Turn ON the main power and the machine automatically clears the HDD encryption.
8. Turn OFF the main power when the machine has returned to normal status.
9. Remove the SD card from SD card Slot 2.
10. Turn ON the main power.
11. Memory clear SP5-801-xx (Exclude SP5-801-001: All Clear and SP5-801-002: Engine), and clear SP5-846-046: address book.
12. Set necessary user settings with the User Tools key.

3. Preventive Maintenance

Preventive Maintenance Tables

See "Appendices" for the following information:

- Preventive Maintenance Tables

PM Parts Settings

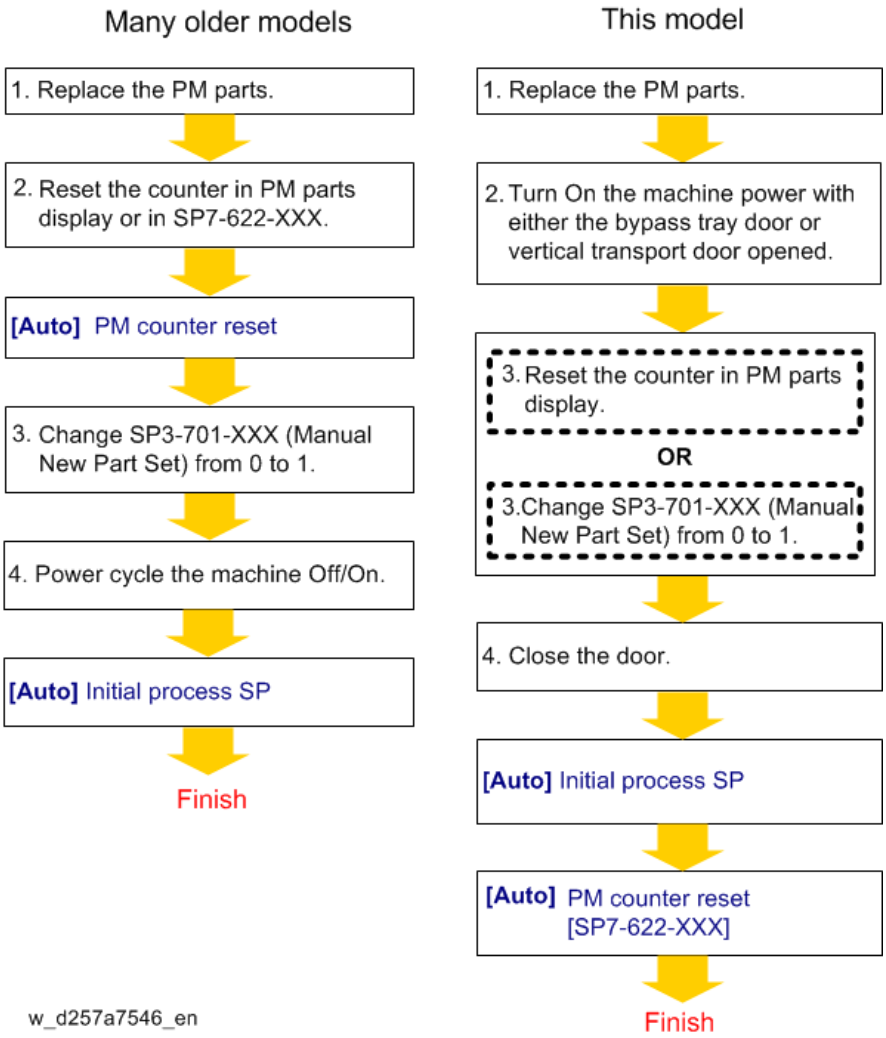
Checking the SC Jam Report

Execute SP5-990-051 to print the SC Jam Report before doing the preventive maintenance.
Depending on the SC/Jam occurrence, separately take measures from preventive maintenance to prevent EM.
Refer to "SC Jam Report" for more details.

PM Parts Replacement Procedure

Comparison of the PM parts replacement procedures

PM parts replacement procedure for this model is different from many older models. If the PM counter is reset in “PM parts display”, a flag is set (SP3-701-XXX) and initial process SPs are run automatically for the replaced part. See below for details. If the PM counter is reset in SP7-622-XXX, the procedure is the same as many older models.



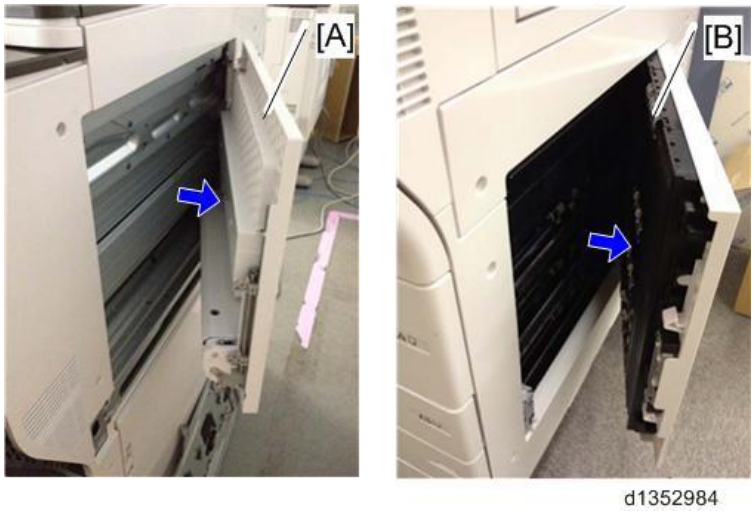
Important

- If the counter for the Lubricant Bar is reset in SP7-622-XX, make sure to set SP3-701-XXX to

"1". Otherwise, the lubricant end detection (SP3-810-XXX) will not be reset and the banner message indicating near-end will remain on the operation panel.

PM part replacement procedure

1. Turn OFF the power on the operation panel button, and unplug the AC power cord.
2. Turn OFF the main power switch located inside the door.
3. Replace the PM parts.
4. Plug in the AC power cord and turn on the main power switch with either the bypass tray door [A] or vertical transport door [B] opened.



Note

- Make sure to open either the bypass tray or vertical transport door before turning on the main power. Otherwise, problems could occur as a result of unnecessary initialization processes.

5. Enter the SP mode and push the PM parts counter reset button in the PM Parts display. (PM Counter Display)

Note

- Pressing the reset button in the PM Counter Display does not reset the PM counter. The PM counter is reset after closing the door in step 6.

6. Close the bypass tray door (or the vertical transport door). The machine will reset the PM counters automatically followed by an initialization process.
7. Execute initialization in the SP mode, if required. (For details about which SPs to execute, see the replacement and adjustment procedures for each part.)
8. Enter SP5-990-004 and check the counter values in the SMC logging data.
   Make sure that the PM counters for the replaced units are "0" in the PM parts display.
   If a PM counter for a unit that had been replaced does not display “0,” reset that counter in the procedure described above.
9. Exit the SP mode.

Note

- The machine will automatically stop when the PM counters for the fusing cleaning web and drum lubricant bar reach their yield.
- Counter clearance is not required when replacing the developer, because this counter is cleared by SP3-024 (Developer Fill: Execute).
- Counter clearance triggers the initialization of the parts described in this section. When initialization is required for these parts, open the front door and clear the counter.

Preparation before Operation Check

1. Clean the exposure glasses (for DF and book scanning). Check the PM table to see if any other cleaning is scheduled at this time.
2. Press "Settings" icon.
3. Press "Maintenance", and then press "Auto Color Calibration".
4. Perform auto color calibration for the copier function & printer function.
5. Move back to the home screen, and then enter the SP mode.
6. Do the "Forced line position adjustment"
   - First do SP2-111-3 (Mode c).
   - Then do SP2-111-1 (Mode a).
   - Check the process by viewing the operation panel to confirm successful results. Results can also be viewed in SP 2-194-10 to 12.
7. Exit the SP mode.

Adjustment for the Nip Width of the Fusing Unit (Pro C5300S/C5310S only)

After installing the new fusing unit for Pro C5300S/C5310S, adjust the nip width of the fusing unit with the following procedure.

1. Open the drawer unit [A].

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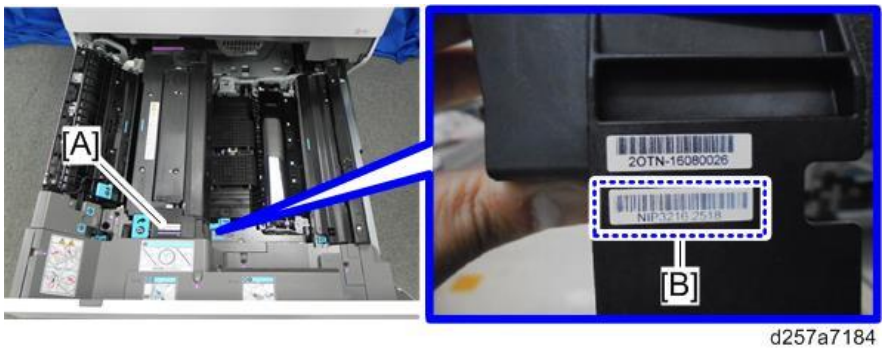
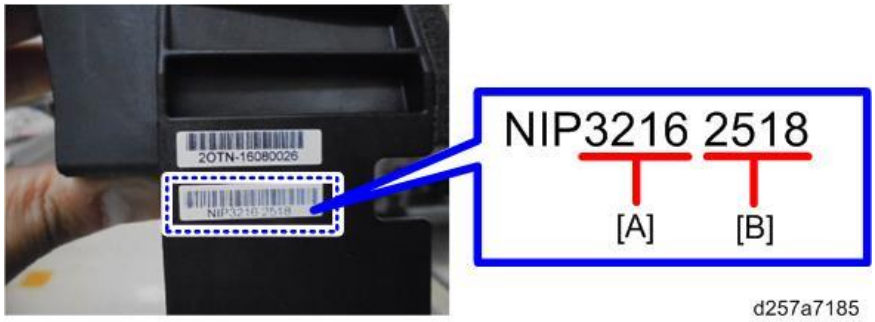
2. Check the label [B] attached to the fusing front cover [A].
The adjustment value for the fusing nip width is printed on the label.



3. Take a note of the first half of the number [A] and the second half of the number [B] on the label.



4. Slide the drawer unit back in.
5. Display the "Adjustment Settings for Operators" screen.
    1. Press "Adjustment Settings for Operators".
    2. Enter the user name in the user name entry screen.
    3. Enter the password in the password entry screen.
6. Press "02 Machine: Image Quality", and then press "0212: Slope for Envelope Nip Width".
7. Enter the first half [A] of the number on the label, in "02: Coefficient of Linear Function: I".
8. Enter the second half [B] of the number on the label, in "03. Constant Term: m".

Operation Check

Print out a sample image to confirm the quality.

PM Counter Display

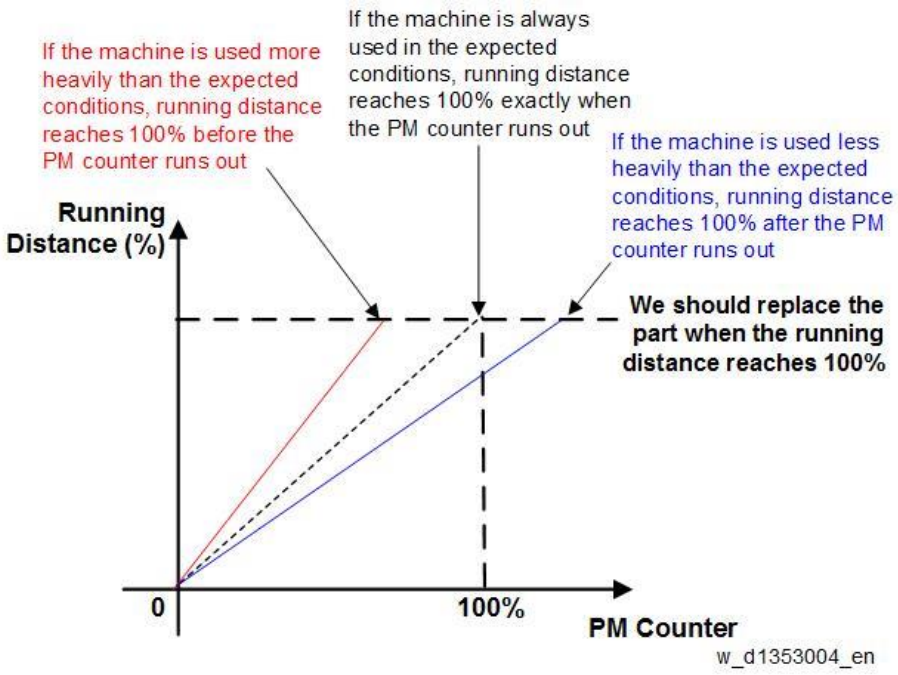
The PM Counter main menu and sub menu allow you to view the PM counts for both units and individual components.

There are menus for estimated usage ratio, remaining days, and commissioning status report. The machine applies the running distance calculation to display the usage ratio and remaining days of parts. With this system, PM can be scheduled with more accuracy in accordance with the machine usage conditions unique to every user. Please refer to the usage ratio and remaining days when doing PM for the machine.

Note concerning Running Distance Data

Since the PM parts yield is based on set conditions (for example, Pro C5300S/C5310S: A4LEF, 26P/J, FC70%, etc), if a machine is used in an unexpected manner, parts could reach their life before the prescribed yield (EM), or could exceed the prescribed yield.

However, if the machine uses the running distance of the parts (which is a calculation based on the total number of revolutions made by the parts), PM can be carried out at more precise times, because the running distance reflects the actual status of the machine.



Opening the PM Counter

In the SP mode, there is a management screen for the PM counter.

1. Enter the SP mode.

2. Press [PM Counter/New Unit Set].

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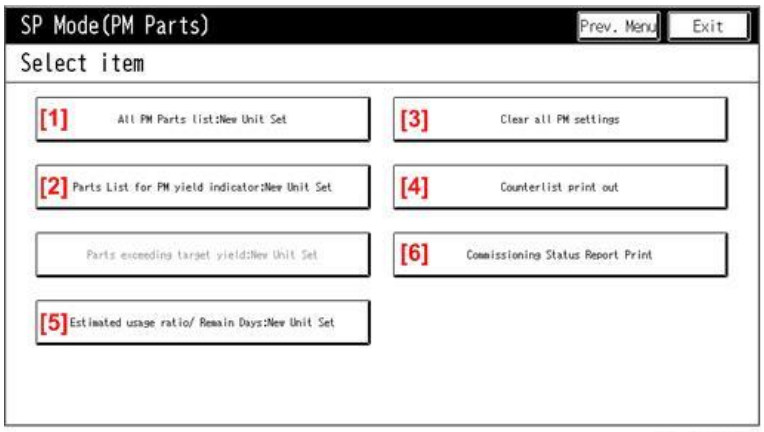
3. Select the item you want to configure.



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[1] All PM Parts List: New Unit Set

Displays all PM items (all PM items, not only PM units). Lists all PM items regardless of PM yield indicator settings.

[2] Parts List for PM yield indicator: New Unit Set

Displays only the items with their PM yield indicator settings set to "Yes".

[3] Clear all PM settings

Resets all PM counter settings to "0" at the same time. PM items can be reset one by one in the "All PM Parts List: New Unit Set" menu.

[4] Counterlist print out

Prints the PM counter on paper.

[5] Estimated usage ratio/Remain Days: New Unit Set

Displays the estimated usage ratio (0 to 100%) and remaining days (255 to 0 days) of the PM items, in which the calculation is based on page counter value and running distance, allowing more accuracy in comparison to the conventional PM page counter.

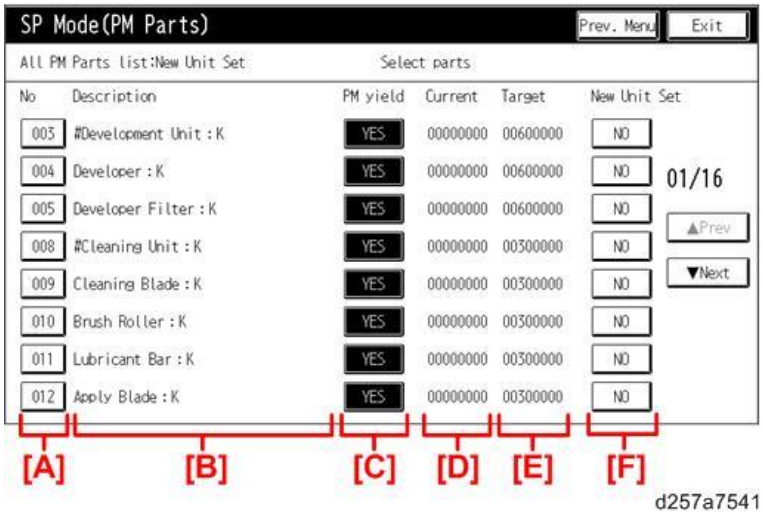
[6] Commissioning Status Report Print

Prints the status report.

PM Parts Screen Details

All PM Parts list: Main Menu

The "All PM Parts list" displays all PM units and individual items. This list shows all PM items, regardless of their "PM yield indicator settings".



[A]: Number buttons. Pressing a number button opens a sub menu.

[B]: Descriptions. The # mark denotes a "unit" (not an individual item).

[C]: PM yield buttons. The function is the same as the "PM yield indicator settings" in the sub menu.

[D]: Current PM counter value.

[E]: Target PM interval. This can be changed by pressing a number button [A].

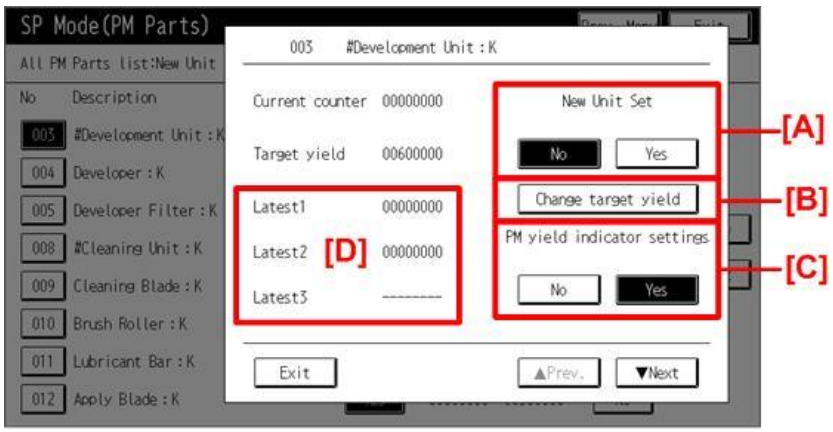
[F]: PM counter clear button. The function is the same as "New Unit Set" in the sub menu.

Note

- The fusing belt smoothing roller and fusing cleaning web unit are prescribed as PM parts only for Pro C5300S/C5310S. These parts do not appear in the "All PM Parts list" because the PM counter of these parts is not based on page count. To check if PM is needed or not for these parts, check the "Remain Days" on the "Estimated usage ratio/Remain Days : New Unit Set" screen. (See Estimated Usage Ratio/Remaining Days) Make sure to clear the counter after replacing these parts.

Number Button Sub Menu

Press any number button to open the sub menu for a part. In the example below, the number button [003: #Development Unit: K] was pressed.



[A]: New Unit Set

Press [Yes] to reset the selected PM counter (in this example 003 #Development Unit: K) to "0". You can also clear the settings by pressing the [No] button on the right side of the PM Counter Main Menu ([F] in the previous section).

[B]: Change target yield

Press to change the target PM yield. To change the setting:

- Press [Change target yield]
- Enter the number for the new target with the 10-key pad.
- Press [#].

[C]: PM yield indicator settings

[Yes] is the default. Press [No] to remove the current item from the "Parts list for PM yield indicator : New Unit Set" menu.

- When set to "Yes", items marked with the # mark (# = a unit) will not have their individual items displayed automatically in the "Parts list for PM yield indicator list".
- When set to "No", items marked with the # mark (# = a unit) only the individual components will appear in the list (the units will not appear).

[D]: PM counter history

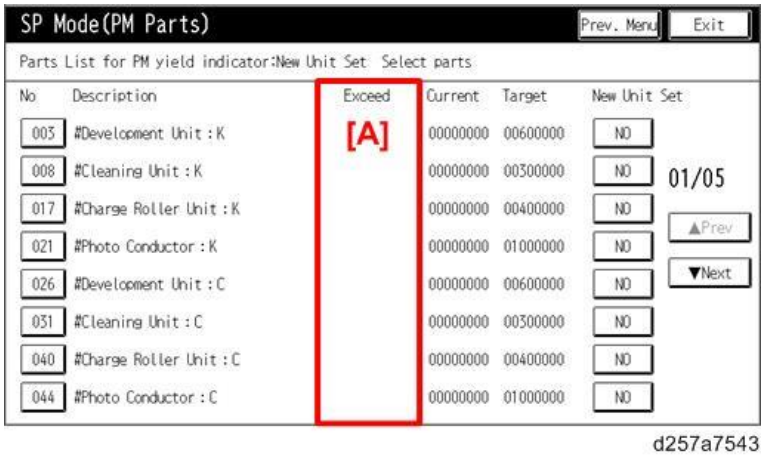
This is a summary of the most recent counts

- Latest 1. The latest PM count since the unit (or part) was replaced.
- Latest 2. The previous PM count since the unit (or part) was replaced.
- Latest 3. The previous but one PM count since the unit (or part) was replaced.

Parts List for PM Yield Indicator: New Unit Set

This list shows the PM Parts Main Menu with only items with the PM yield indicator set to "Yes" displayed.

An asterisk (*) will appear in the Exceed column [A] to show items that have exceeded their target PM yields.



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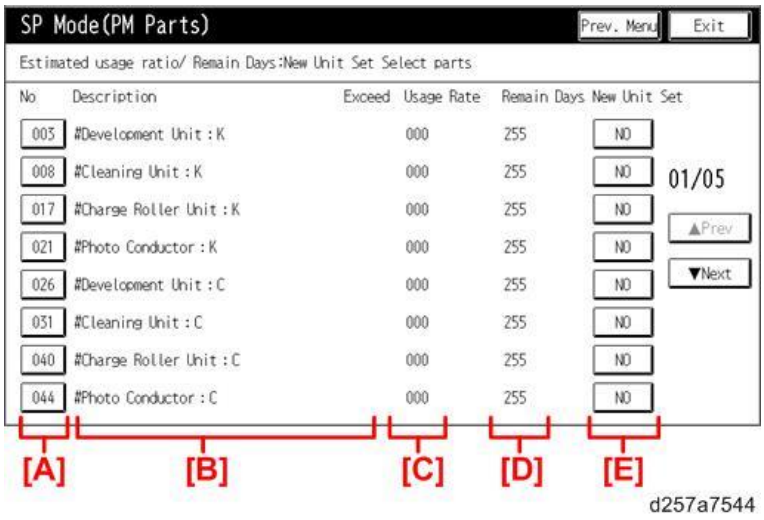
Estimated Usage Ratio/Remaining Days

Displays the estimated usage rate (0 to 100%) and remaining days (255 to 0 days) of the PM items against the PM yield, which are based on calculations using the page counter and running distance.



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[A]: Number buttons. Pressing a number button opens a sub menu.

[B]: Descriptions. The # mark denotes a “unit” (not an individual item)

[C]: Displays the estimated usage rate (0 to 100%)

[D]: Displays the estimated remaining days (255 to 0 days)

[E]: Press [No] to reset the selected PM counter to "0".

Calculation of Estimated remaining days (255 to 0 days) and Estimated usage ratio (0 to 100%)

- Calculation of estimated remaining days (255 to 0 days)
  Displays either the page counter (SP7-951-XXX) or the running distance (SP7-952-XXX), whichever is smaller. Note that parts such as rollers always show the page counter value, because running distance is not counted.
  Remaining days by page counter (SP7-951-XXX) = (A – B) / C
  A: Standard end value as pages (SP7-623-xxx)
  B: PM page counter (SP7-621-xxx)

C: Average PM page counter per day = PM page counter (SP7-621-xxx)/Number of days since last replacement

Remaining days by running distance (SP7-952-XXX) = (A – B) / C

A: Standard end value as distance (SP7-940-xxx)

B: PM distance counter (SP7-944-xxx)

C: Average distance per day = PM distance counter (SP7-944-xxx) / Number of days since last replacement

- Calculation of estimated usage rate (0 to 100%)
  Displays either the page counter (SP7-954-xxx) and running distance (SP7-942-xxx), whichever is larger. Note that parts such as rollers always show the page counter value, because running distance is not counted.
  Estimated usage ratio % (by Page counter) is calculated as follows.
  Current page counter value <SP7-621-xxx> / Standard page end value <SP7-623-xxx> x 100
  Estimated usage ratio % (by Running distance) is calculated as follows.
  Current distance <SP7-944-xxx> / Standard distance end value <SP7-940-xxx> x 100

Commissioning Status Report Print

Prints out the status report.

The status report contains the following information:

SP No.	Description
SP7-403-001 to 010	SC History
SP7-507-001 to 010	Print Engine Jam History
SP7-508-001 to 010	Original Jam History
SP7-910-001, 002	ROM No (-001: System/Copy, -002: Engine)
SP7-911-001, 002	Firmware version (-001: System/Copy, -002: Engine)
SP8-581-001	T: Counter (-001: Total, -002: Total Full Color, -003: B&W/Single Color, -010: Total Color, -011: Total B/W)
SP8-591-001	O: Counter (-001: A3/DLT Counter, -002: Duplex Counter)

Cleaning Points

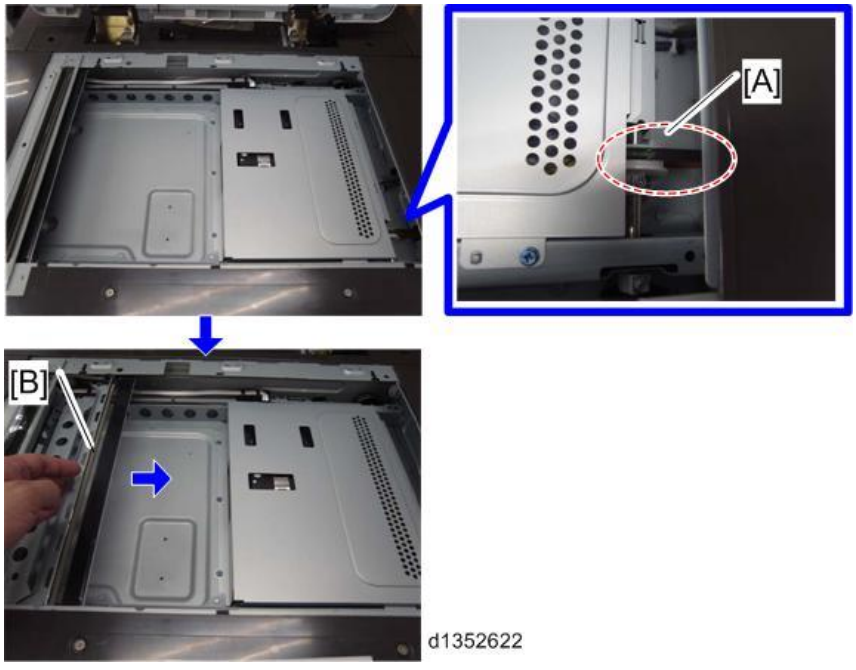
Scanner

Exposure Glass, ADF Exposure Glass, 1st Mirror, 2nd Mirror, 3rd Mirror, Original Size Sensors

1. Remove the exposure glass (Exposure Glass)
2. Clean the front and back of the exposure glass with a glass cleaner.
3. Open the ADF exposure glass [A] from its left side, and then clean the front and back of the ADF exposure glass with a glass cleaner.

d1352621a

4. First, turn the gear [A] and move the 1st scanner carriage [B] to the center.

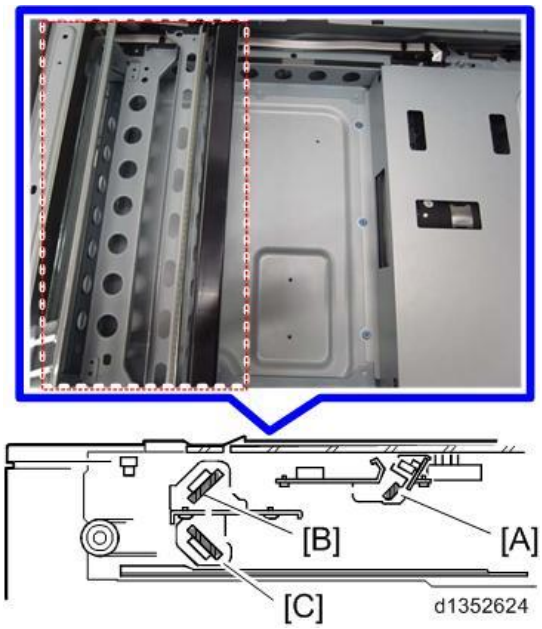


d1352622

Note

- Do not touch the mirror or light guide plate in the scanner carriage.

5. Clean the 1st mirror [A], 2nd mirror [B] and 3rd mirror [C] with a dry optical cloth.



6. Clean the original size sensors [A] with a dry cloth.

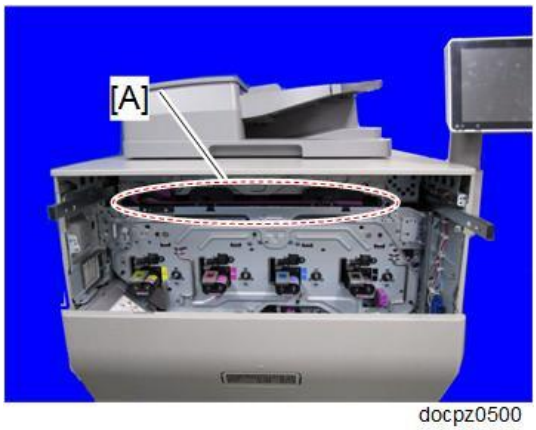
Laser Unit

Toner shield glass

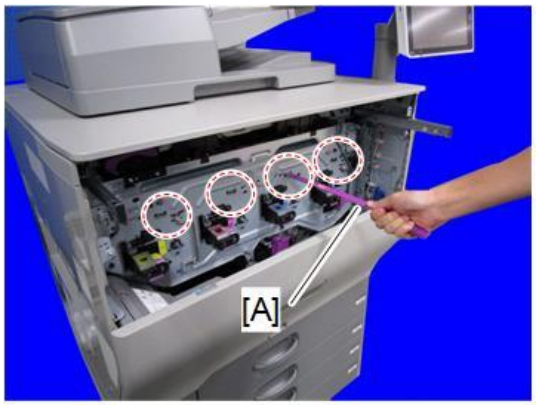
Do the following cleaning at 300k.

1. Remove the toner supply unit. (Toner Supply Unit)

2. Remove the Toner Shield Glass Cleaning Tool [A].



3. Insert the Toner Shield Glass Cleaning Tool [A] into the slot (red circles in the photo below), and slide it back-and-forth about 5 times to clean the toner shield glass on the laser units. Do this procedure for all 4 colors.

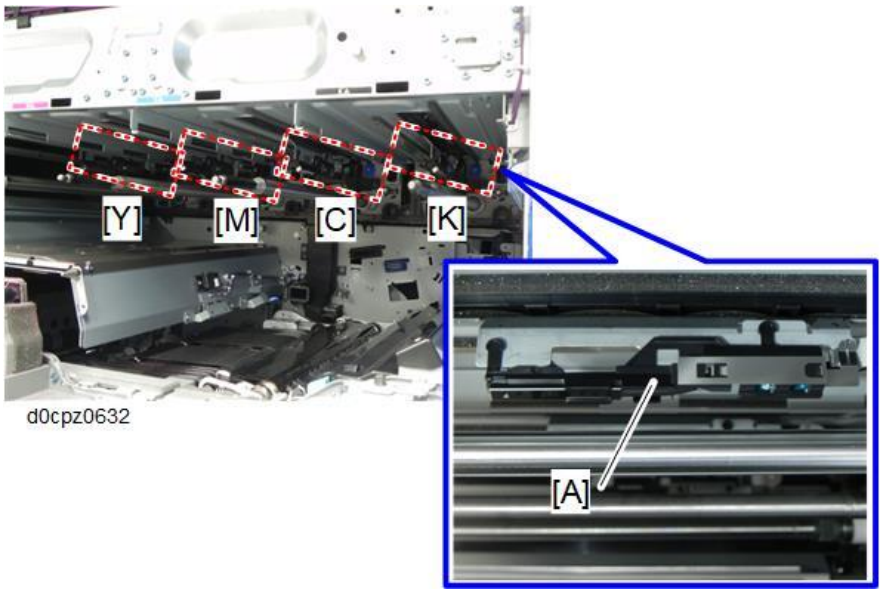


docpz0501

Drum

Potential Sensor

1. Remove the PCDU.PCDU)
2. Wipe the potential sensor [A] with a dry cloth.

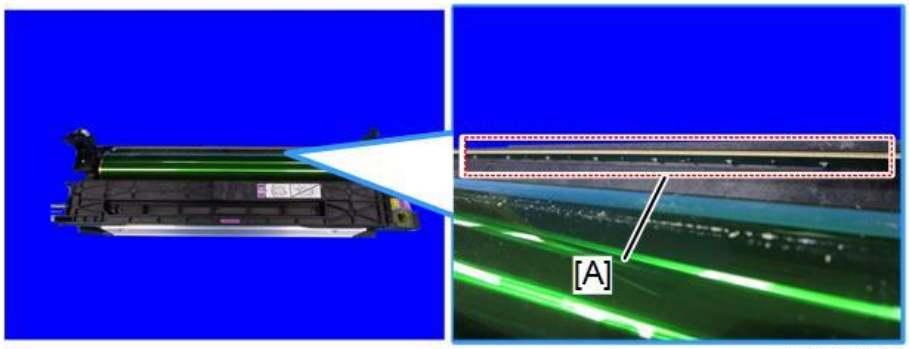


d0cpz0632

Quenching Lamp

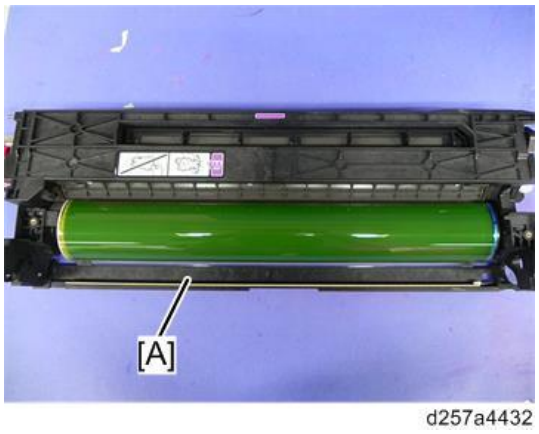
1. Remove the PCDU. (PCDU)
2. Remove the drum cleaning unit. (Drum Cleaning Unit Removal)

3. Wipe the quenching lamp with a dry cloth.



Drum shaft

1. Remove the PCDU. (PCDU)
2. Remove the drum cleaning unit. (Drum Cleaning Unit Removal)
3. Wipe the drum shaft with a dry cloth.



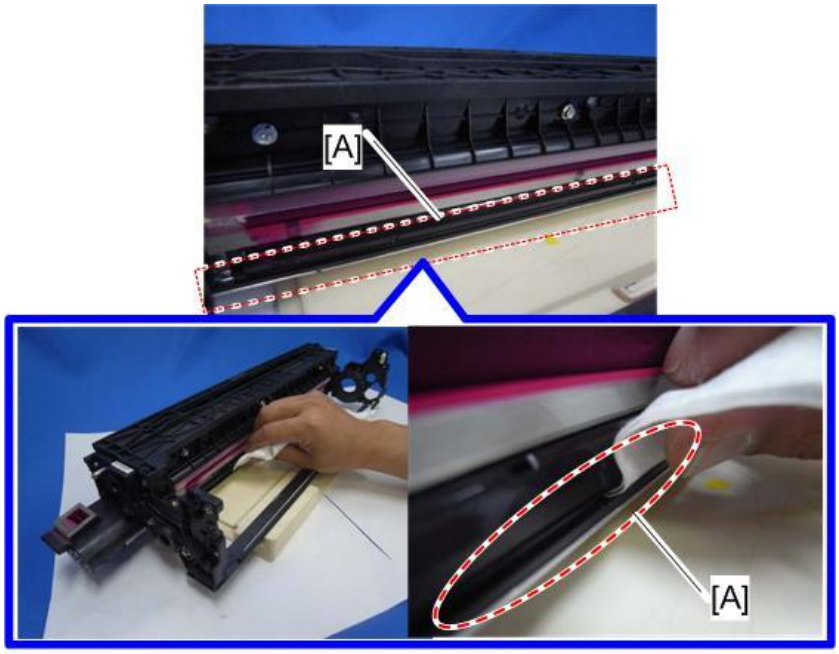
Developer

Development Unit

Do the following cleaning at 300k.

1. Development unit (Development Unit)

2. Wipe off the toner at the toner receptacle [A] with a dry cloth.

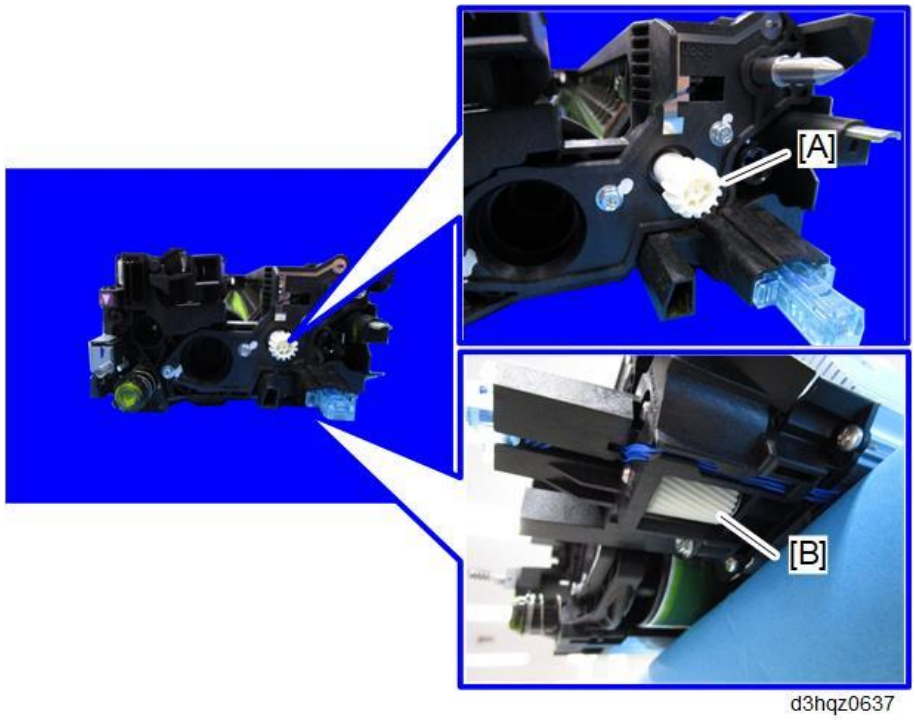


3. Clean off the toner adhering around the unit with a dry cloth.

Gears

1. Remove the PCDU.

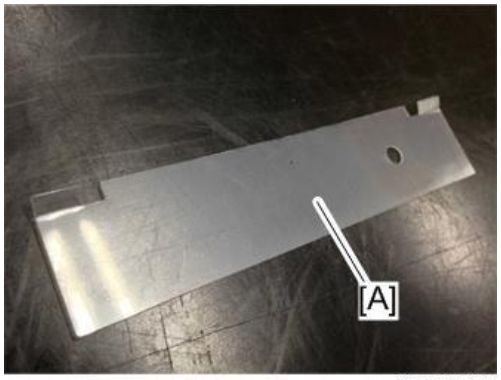
2. Wipe the gear [A] of the PCDU with a blow brush and a dry cloth.



Doctor Gap

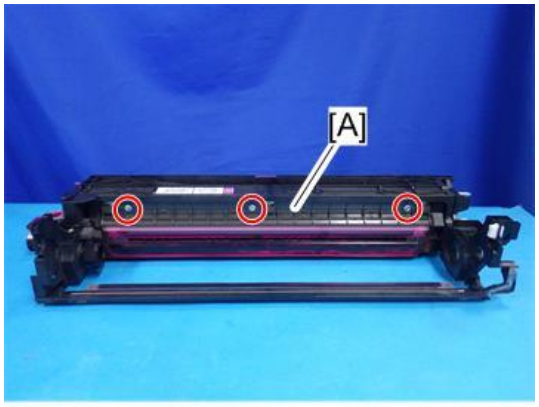
Note

Prepare the cleaning tool [A] (D0749548: DG CLEANER 5PCS/SET) in advance. This is a service part and is not supplied with the machine accessories.



d257a7580

1. Remove the development unit. (Development Unit)
2. Remove the bracket [A] from the development unit.



d257a7577

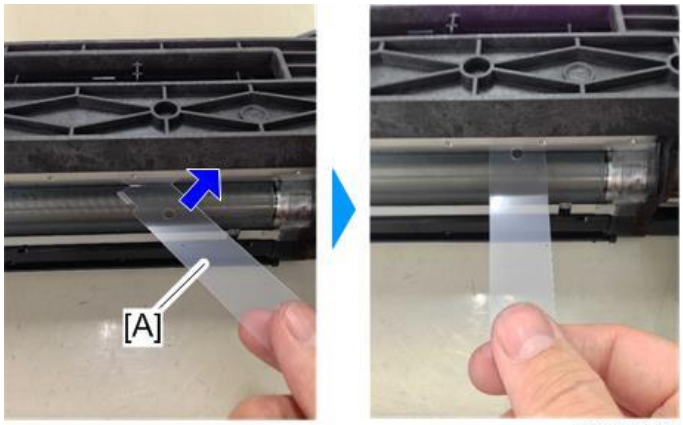
3. Tilt the development unit 90 degrees so that the left side (viewed from the front) faces the bottom. Then rotate the development roller in the direction indicated with the arrow (counterclockwise viewed from rear) until the loose developer on the roller surface is removed.

d257a7578

Important

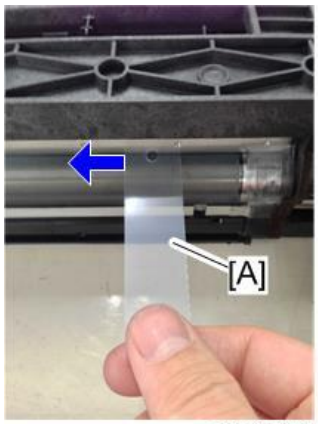
Do not rotate the development roller in the opposite direction or the polyester film may get caught by the roller.

4. Insert the corner of the cleaning tool [A] without the folded tab into the doctor gap. The tab scrapes off the toner/dust adhered to the doctor blade as you slide the cleaning tool across the doctor gap.



d257a7579

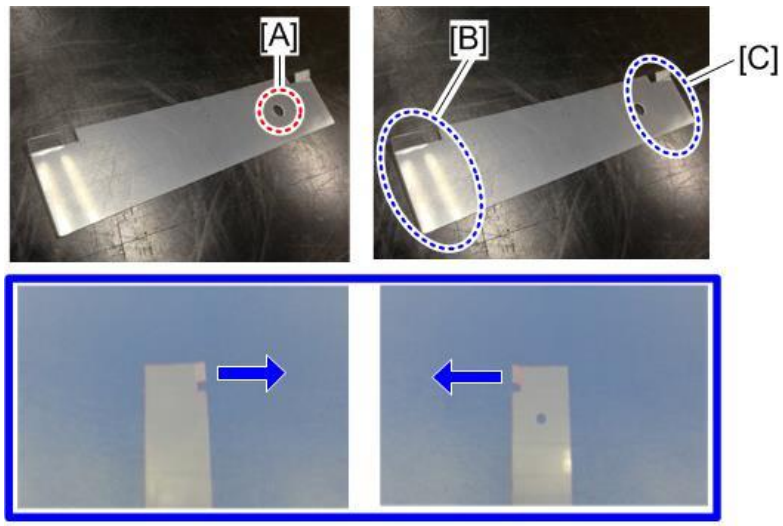
5. Slide the cleaning tool [A] from right to left. Keep it level as you slide it, to prevent scratches on the development roller.



d257a7581

Note

Both ends of the cleaning tool can be used. Locate the hole [A] on the cleaning tool. Slide the cleaning tool from right to left when inserting the end that has the hole. Slide the cleaning tool from left to right when using the other end.



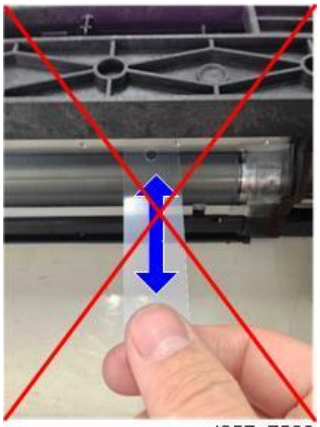
d257a7582

- [B]: Use this end to slide the cleaning tool from left to right.
- [C]: Use this end to slide the cleaning tool from right to left.

Important

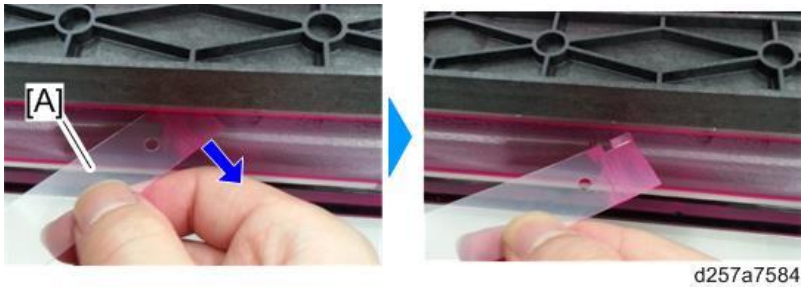
Make sure to note the following points to prevent scratches on the surface of the development roller.

- Do not push or pull the cleaning tool.


d257a7583

- Do not press the cleaning tool against the development roller with your thumb.
- Do not touch the development roller with your fingers.

6. After sliding the cleaning tool [A] across the doctor gap, remove it by taking out the corner without the tab first.



d257a7584

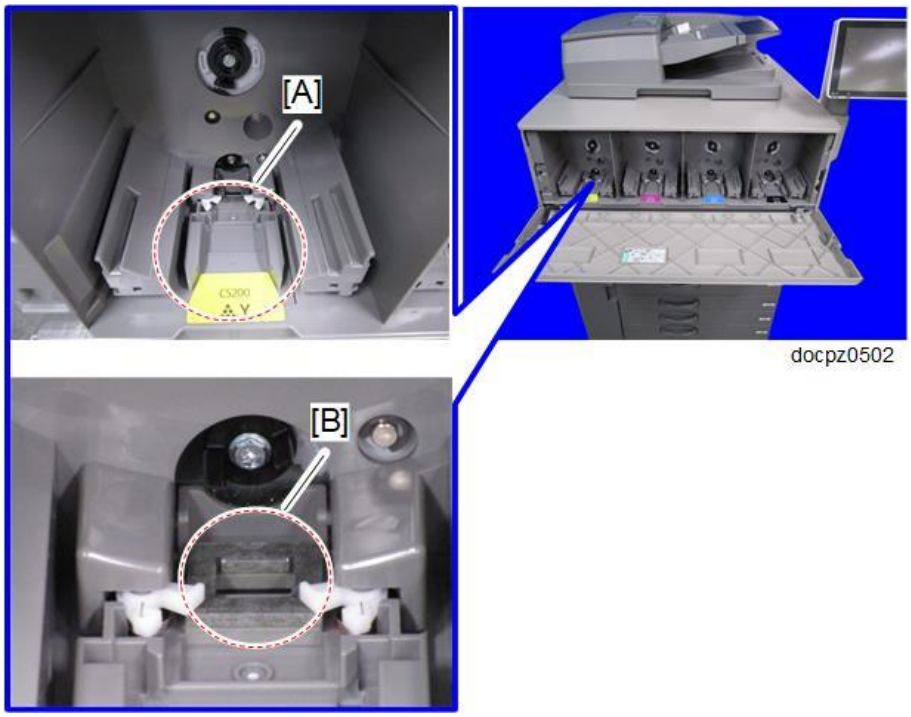
Note

- For a thorough cleaning of the doctor gap, it is recommended to repeat the cleaning procedure 2 to 3 times.
- The cleaning tool can be used many times. Use the other end of the cleaning tool or use a new one when the tab becomes worn and jagged.

Toner Supply

Toner Supply Unit

1. Open the toner supply unit front cover [A].
2. Remove the toner cartridge.
3. Clean the toner supply unit [A] with a damp cloth that has been wrung out.
   Clean the sponge seal [B] of the supply port with a dry cloth.
   e.g.: Y

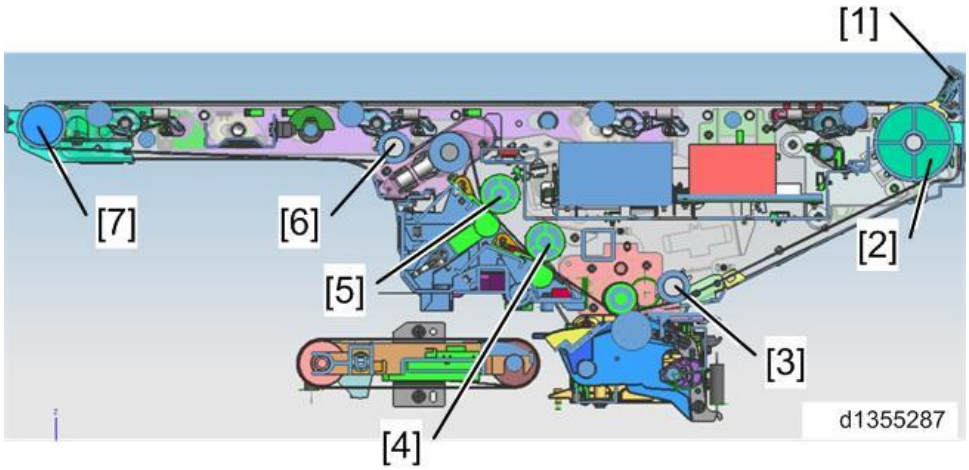


Note

- In order to prevent the scattering of toner, do not use a blower brush to clean.

ITB Unit

As shown below, there are seven parts to clean at a certain interval.



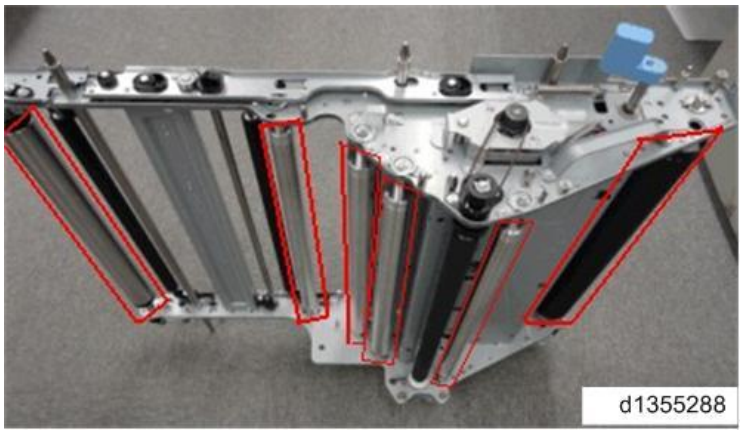
1. ID Sensor
2. ITB Drive Roller
3. Pre-Transfer Roller
4. ITB Cleaning Blade Counter Roller
5. ITB Lubricant Blade Counter Roller
6. Back-up Roller
7. ITB Driven Roller

Rollers

Rollers need cleaning every 1000k prints.

1. Transfer Belt (ITB Replacement)

2. With a dry cloth, wipe each roller.

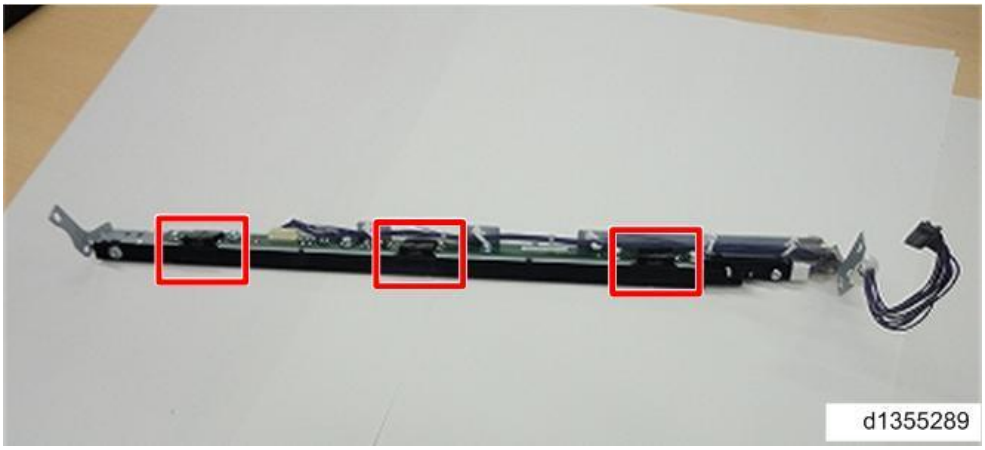


ID/MUSIC Sensor

Clean the ID/MUSIC sensor every 1000k prints.

1. Bracket with the ID/MUSIC sensor

2. With a damp cloth, wipe the ID/MUSIC sensor (three areas indicated below).



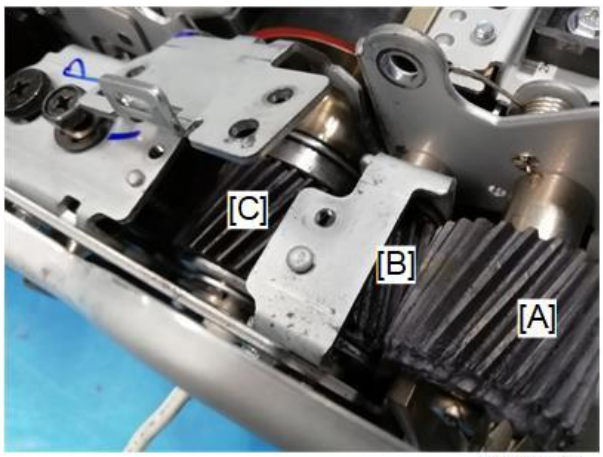
Fusing

Gears

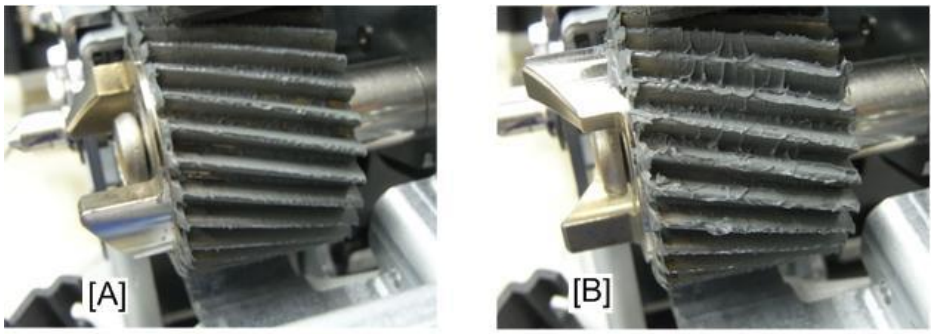
When replacing a gear individually or at the 600K PM, apply grease to reduce the wearing of the gears in the fusing drive gear train and to prevent abnormal noise (Grease: Fluotribo MG).

1. Apply the grease to 3 gears [A][B][C] by rotating the pressure roller gear [A].

2. Check that the grease is applied to all the gears in the gear train (whole circumference and full width).



Pressure Roller Gear: Grease Amount ([A]: lower limit, [B]: upper limit)



d1355207

Stripper Plates (Fusing/Pressure)

1. Pull the fusing unit out and then raise the stripper unit to open it.
2. With a dry cloth, wipe the circled areas shown below.

   Fusing Stripper Plate: Clean the surface and the back.

   Pressure Stripper Plate: Clean the seven pawls of the stripper plate.

d1355263r

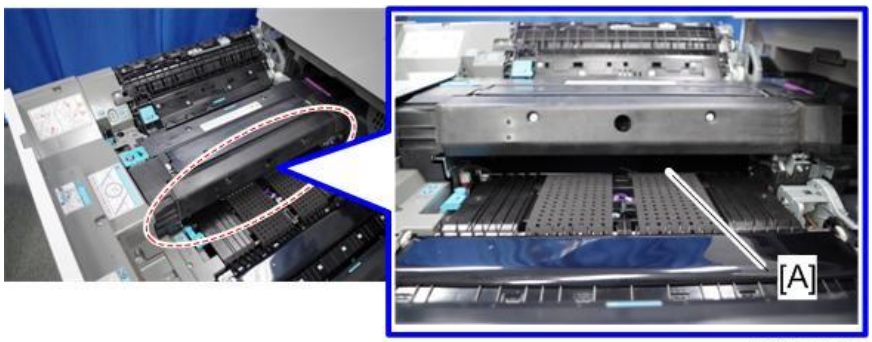
Important

- Do not wipe too strongly.

Fusing Entrance Guide

1. Pull the fusing unit out.

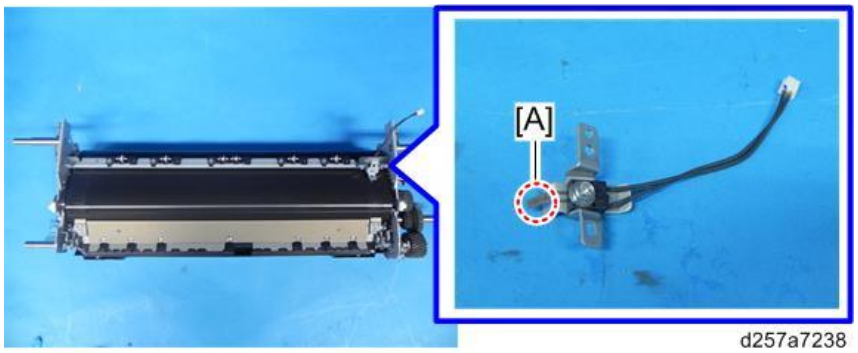
2. With a dry cloth, wipe the top of the fusing entrance guide [A].



d257a8032

Fusing Belt Thermistor

1. Remove the fusing belt thermistor. (Fusing Belt Thermistor (TH5) (Pro C5310S/C5300S Only))
2. With a dry cloth, wipe the fusing belt thermistor. [A].



d257a7238

Hot Roller Shaft Thermistor (Pro C5300S/5310S Only)

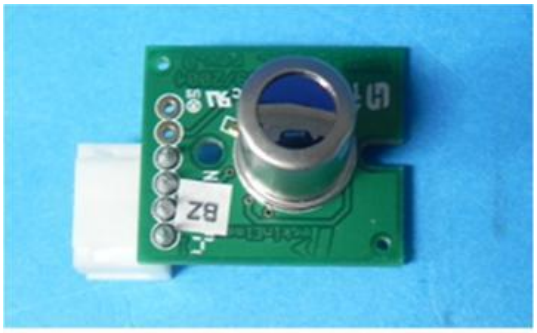
1. Access the thermistor (hot roller shaft) (Hot Roller Shaft Thermistor (TH4))
2. With a dry cloth, wipe the circled area shown below.

d1355163a

Thermopile

1. Access the thermopile. (Pressure Roller Thermopile (S53), Heating Roller Thermopile (S23))

2. With a dry cloth, wipe the surface of the lens.



d257a8040

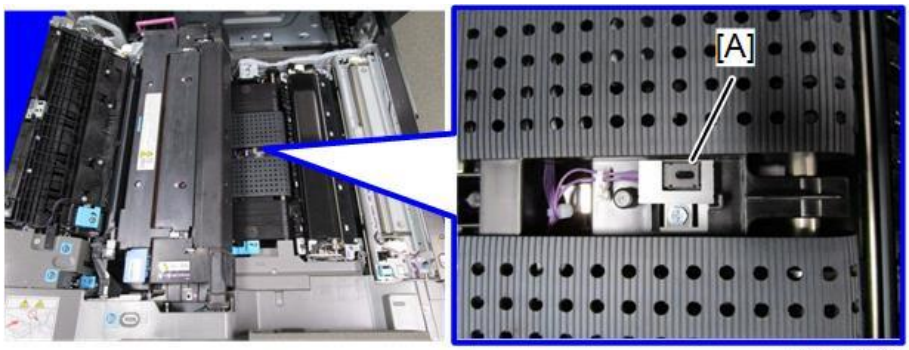
Important

- Do not apply excessive force when cleaning.

Other

Paper Transport Belt Unit Set Sensor

1. Pull the drawer unit.
2. Clean the paper transport belt unit set sensor [A] with a blow brush.



d0cpz0630

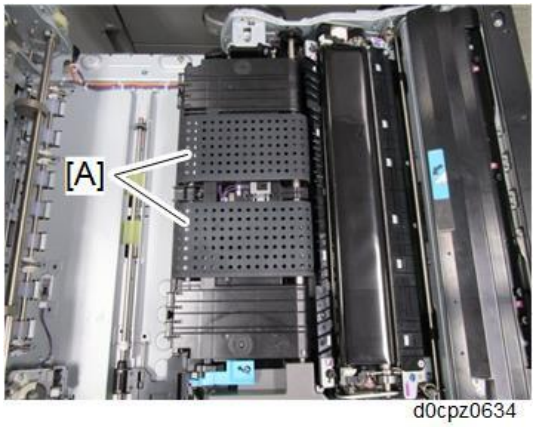
Paper Transfer Belt Drive Joint

Refer to (Applying Grease after Replacing the Paper Transfer Belt Unit)

Paper Transport Belt

1. Remove the fusing unit. (Removing the Fusing Unit)

2. Wipe the paper transfer belt [A] with a damp cloth.



d0cpz0634

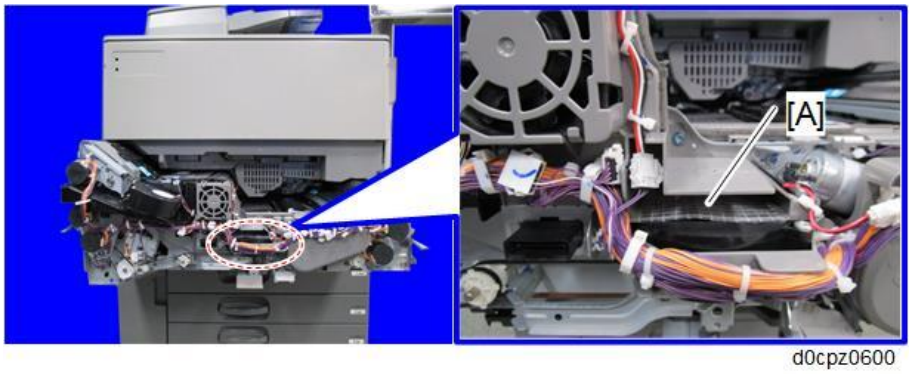
Development Intake Dust Filter

1. Access the development intake filter. (Development Intake Fans (FAN2) (KCMY))
2. Clean the locations marked with a red circle below with some dry cloth.

d0cpz0503

Pressure Roller Dust Filter (Pro C5300S/C5310S only)

1. Access the pressure roller intake filter. (Pressure Roller Intake Filter (Pro C5310S/C5300S))
2. Clean the pressure roller dust filter [A] with some dry cloth.



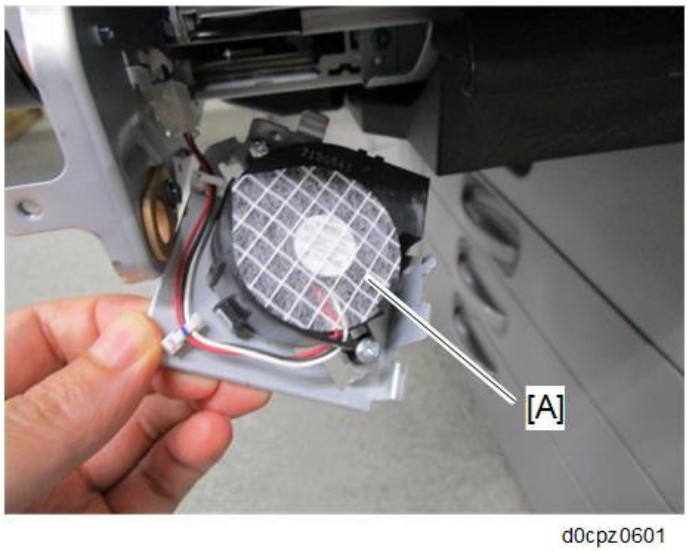
d0cpz0600

Paper Transfer Belt Cooling Fan (Upper/Lower) Dust Filter

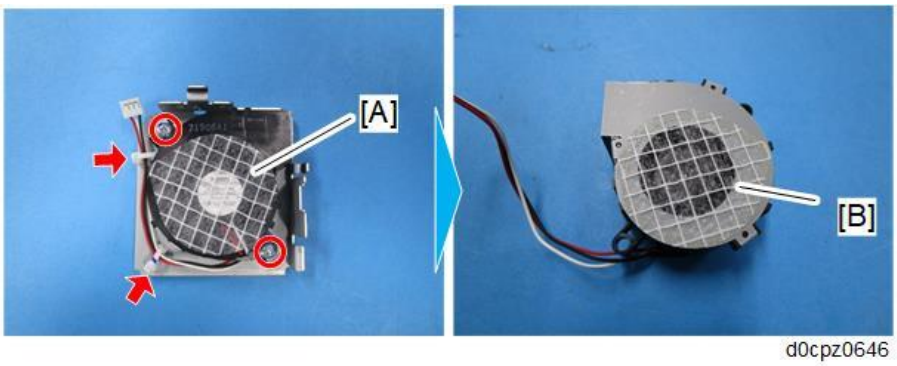
1. Remove the drawer unit cover. (Drawer Unit Cover)

2. Remove the paper transfer belt cooling fan (upper) along with the bracket.

3. With a dry cloth, clean the paper transfer belt cooling fan (upper) dust filter [A].



4. Remove the paper transfer belt cooling fan from the bracket and clean the paper transfer belt cooling fan (upper) dust filter.

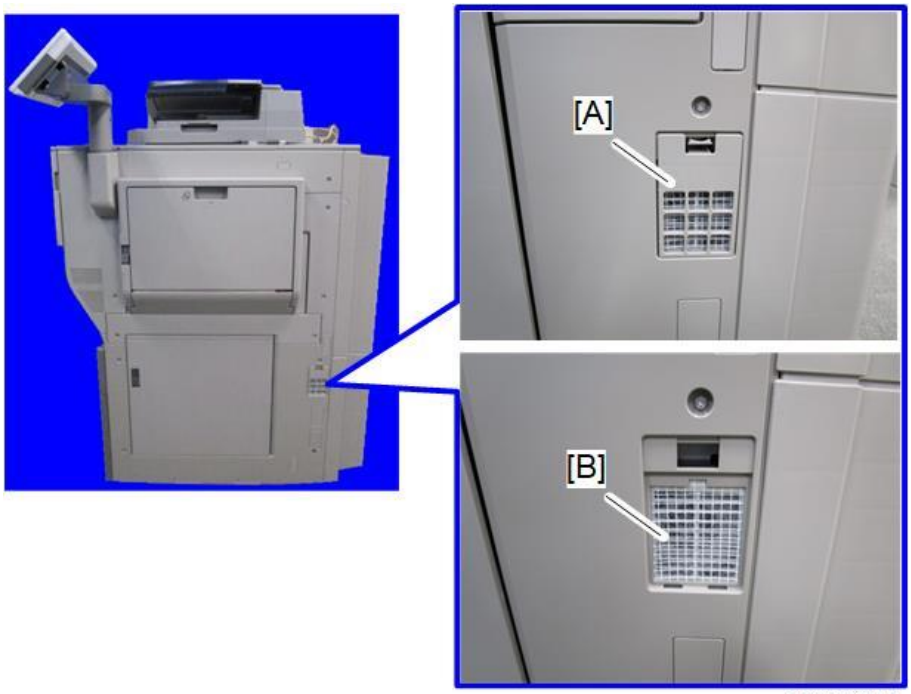


Right Lower Intake Filter

Note

If Bridge Unit BU5030 is installed on the main machine, refer to the FSM for Bridge Unit BU5030 for how to access this filter.

1. Remove the filter cover [A] and clean the right lower intake filter [B] with a dry cloth.



d0cpz0528

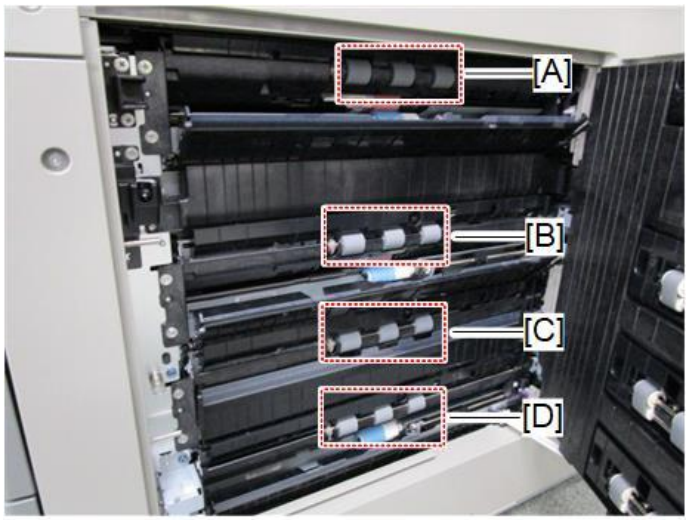
Paper Feed

Transport Rollers (Drive/Idle)

1. Open the vertical transport door [A].

d1353018

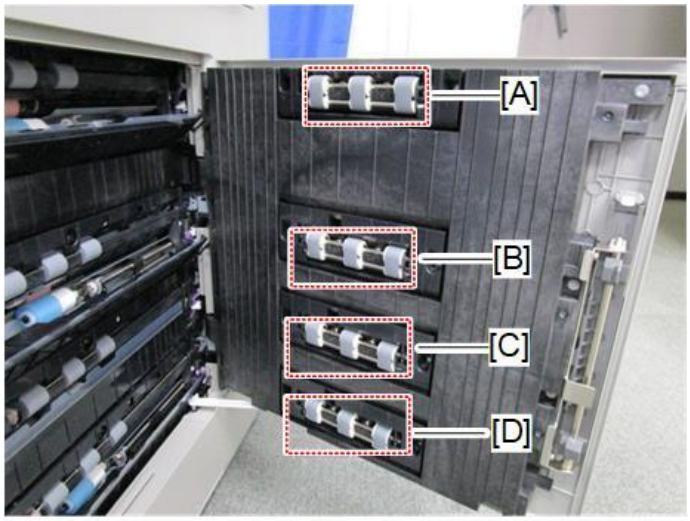
2. With a damp cloth, wipe the feed rollers (drive).



d0cpz0602

- [A]: 1st feed roller (drive)
- [B]: 2nd feed roller (drive)
- [C]: 3rd feed roller (drive)
- [D]: 4th feed roller (drive)

3. With a damp cloth, wipe from the feed rollers (idle).



d0cpz0631

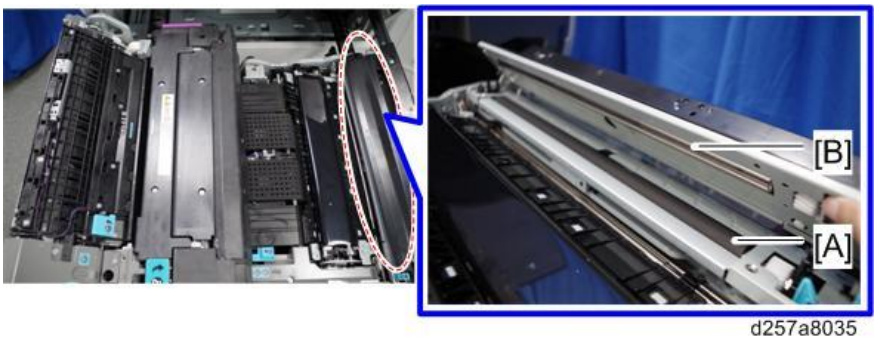
- [A]: 1st feed roller (idle)
- [B]: 2nd feed roller (idle)
- [C]: 3rd feed roller (idle)
- [D]: 4th feed roller (idle)

Registration Roller (Drive/Idle)

1. Pull out the drawer unit [A].

d0cpz0604

2. Open the registration section and wipe the registration roller (drive/idle) with a damp cloth.

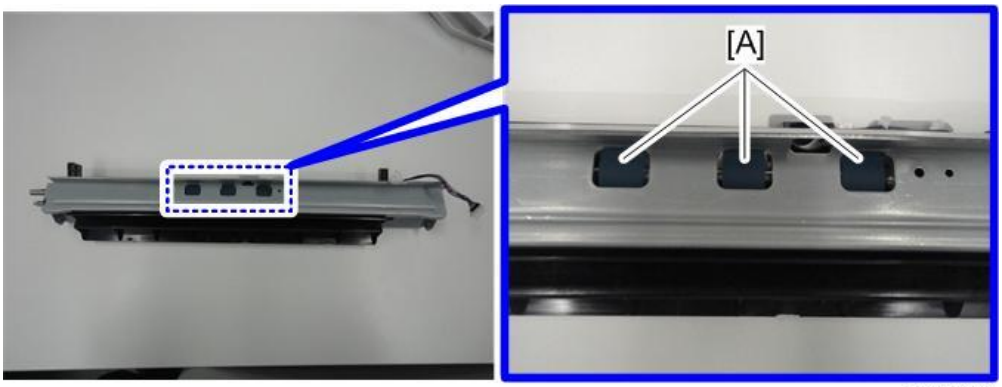


d257a8035

- [A]: Registration roller (Drive)
- [B]: Registration roller (Idle)

Relay Roller (Drive/Idle)

1. Remove the registration unit. (Registration Unit)
2. Remove the relay unit. (Relay Unit)
3. Wipe the relay roller (drive) [A] with a damp cloth.



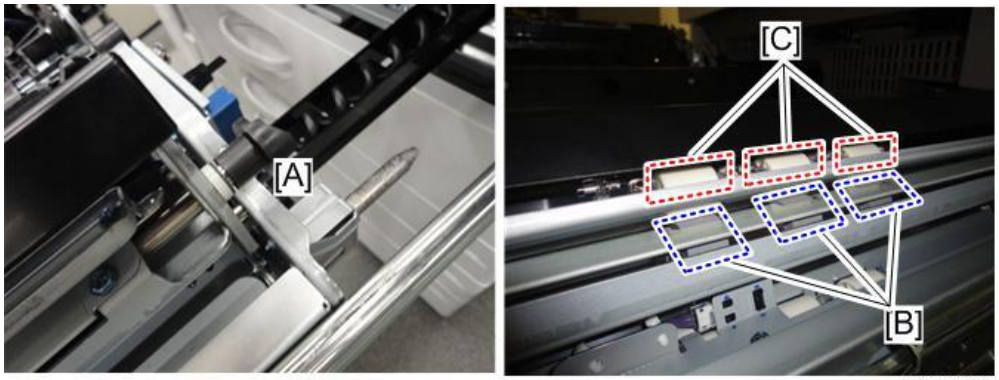
d1351942

4. Remove the relay sensor. (Relay Sensor (S68))
5. Wipe the relay roller (idle) [A] with a damp cloth.

d1351943

Bypass Relay Roller (Drive/Idle)

1. Pull out the drawer unit.
2. Wipe the bypass relay roller (drive/idle) with a damp cloth while rotating the joint [A].

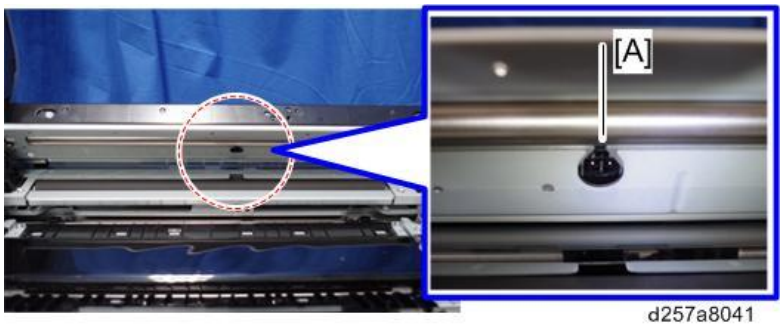


d1351941

- [B]: Bypass relay roller (Drive)
- [C]: Bypass relay roller (Idle)

Registration Sensor

1. Pull out the drawer unit.
2. Open the registration section and clean the registration sensor [A] with a dry blower brush.

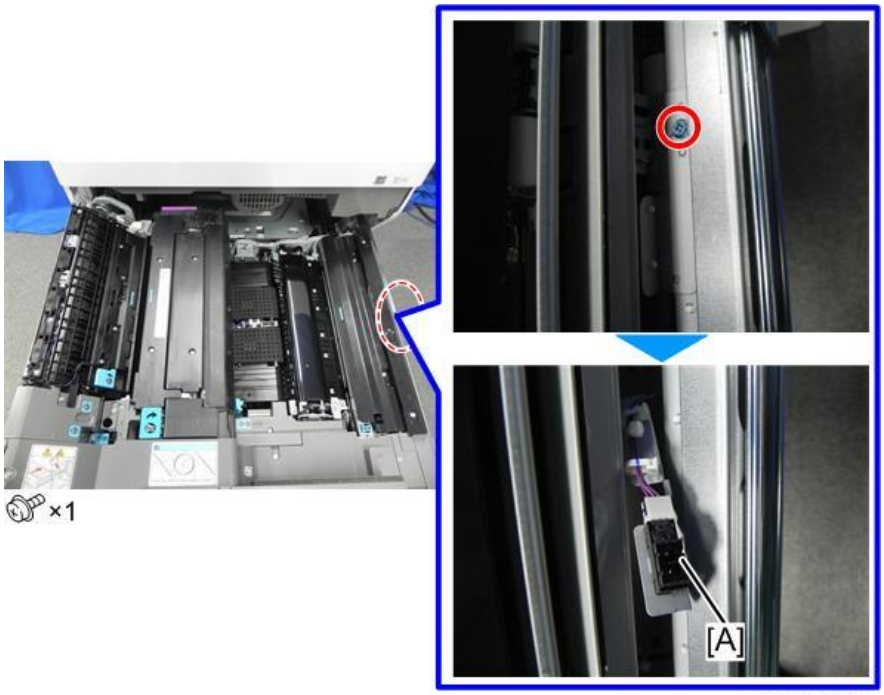


d257a8041

Relay Sensor

1. Open the drawer unit cover.

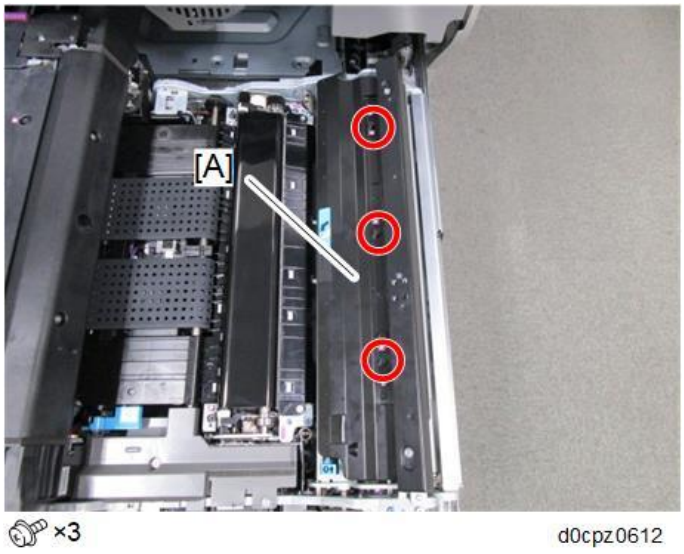
2. Clean the relay sensor [A] with a dry blower brush



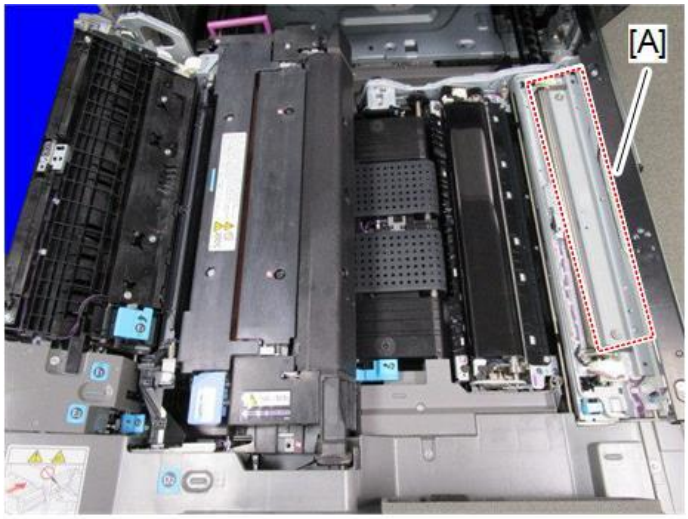
Paper Dust Collection Unit

1. Pull out the drawer unit.

2. Remove the upper cover [A] of the paper dust collection unit.



3. Remove the paper dust, and then wipe the dust collection unit [A] with a dry cloth.



d0cpz0606

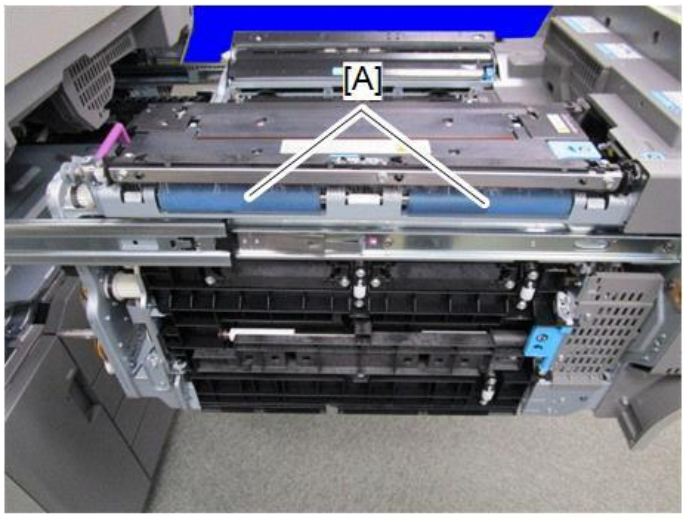
Transfer Timing Sensor

Refer to (Transfer Timing Sensor (S129))

Duplex

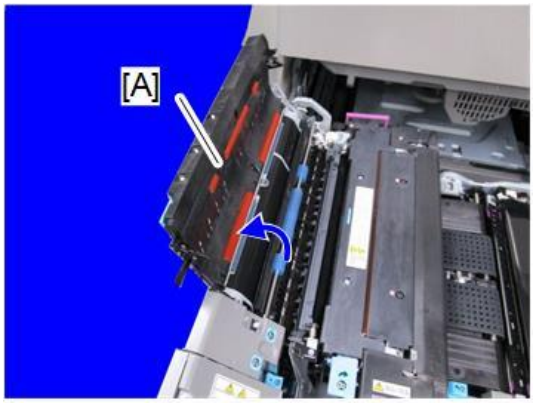
Paper Exit Roller (Drive/Idle)

1. Pull out the drawer unit.
2. Wipe the paper exit roller (drive) [A] with a damp cloth.



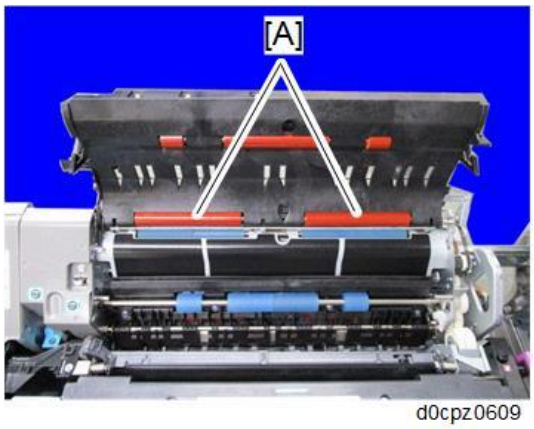
d0cpz0607

3. Hold up the exit guide plate [A].



d0cpz0608

4. Wipe the paper exit roller (idle) [A] with a damp cloth



d0cpz0609

Note

- Before wiping the paper exit roller (idle), squeeze out excess moisture from a damp cloth.

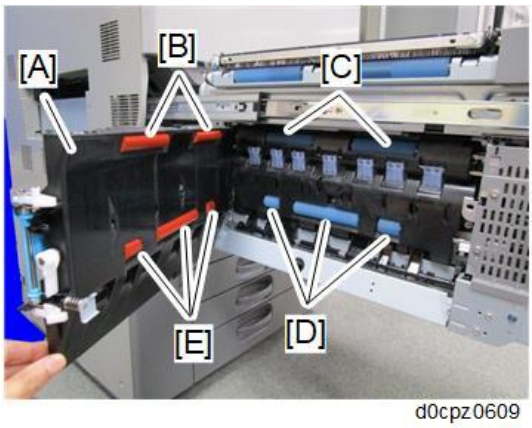
Inverter Feed Out Roller (Drive/Idle)

1. Pull out the drawer unit.

2. Open the paper exit feed guide plate [A].

3. Wipe the inverter feed out roller (idle) [B] and inverter feed out roller (drive) [C] with a damp cloth.

4. Wipe the inverter exit roller (drive) [D] and inverter exit roller (idle) [E] with a damp cloth.



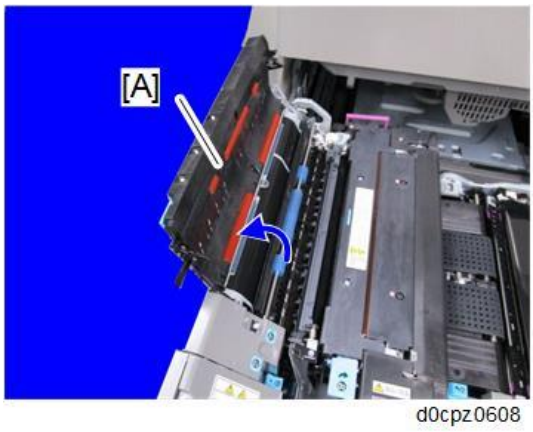
d0cpz0609

Note

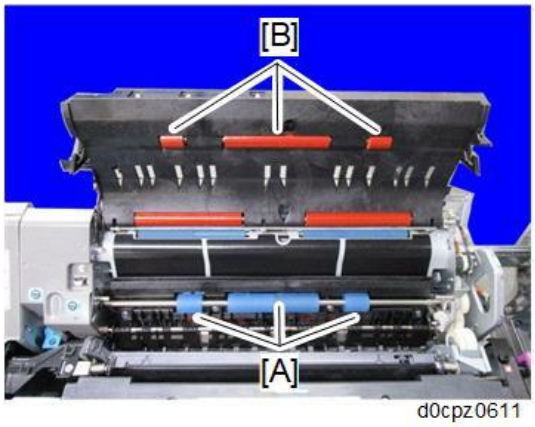
- Before wiping the idle rollers, squeeze out excess moisture from a damp cloth.

Paper Exit Relay Roller (Drive/Idle)

1. Pull out the drawer unit.
2. Hold up the exit guide plate [A].



3. Wipe the paper exit relay roller (drive/idle) with a damp cloth.



- [A]: Paper exit relay roller (Drive)
- [B]: Paper exit relay roller (Idle)

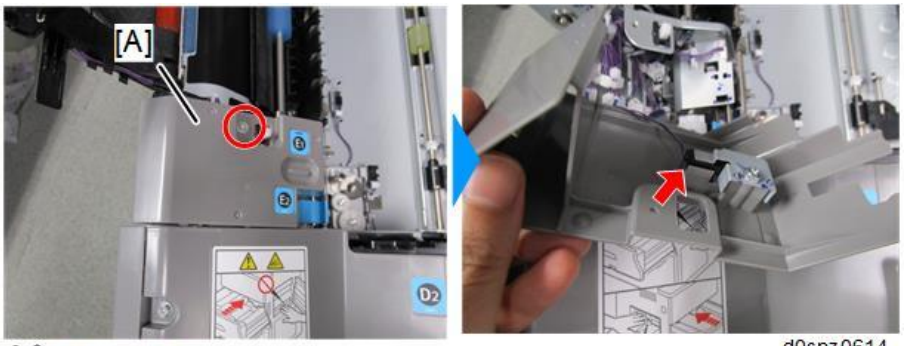
Note

- Before wiping the paper exit relay roller (idle), squeeze out excess moisture from a damp cloth.

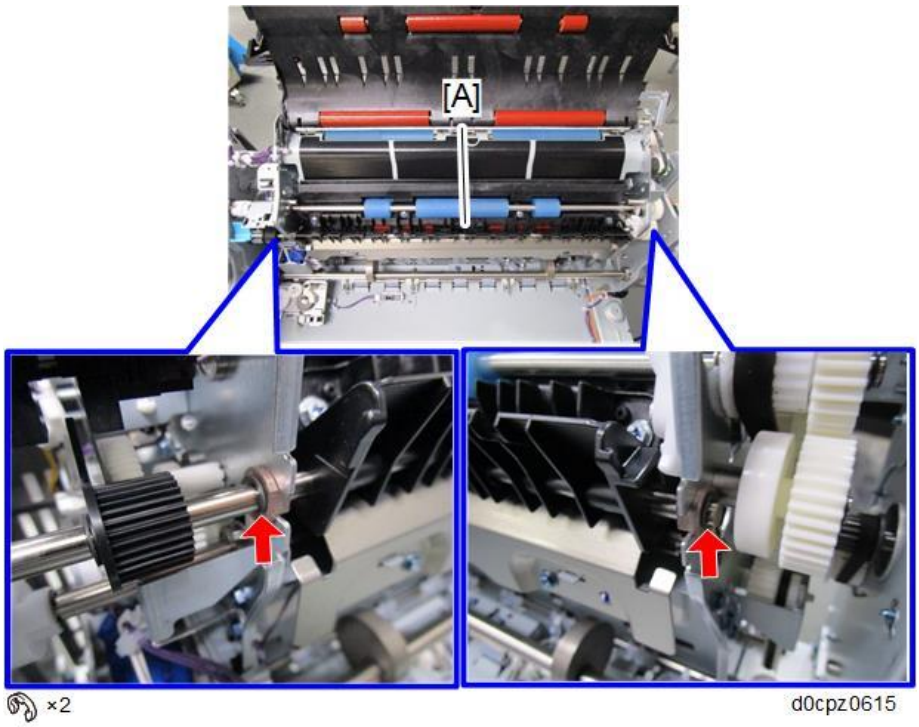
Inverter Feed In Roller (Drive/Idle)

1. Remove the fusing unit. (Removing the Fusing Unit)

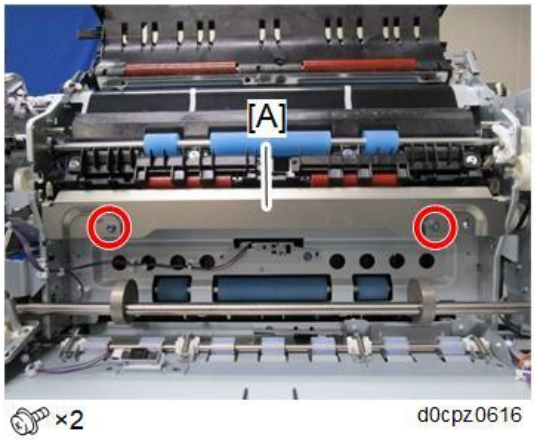
2. Remove the cover [A].



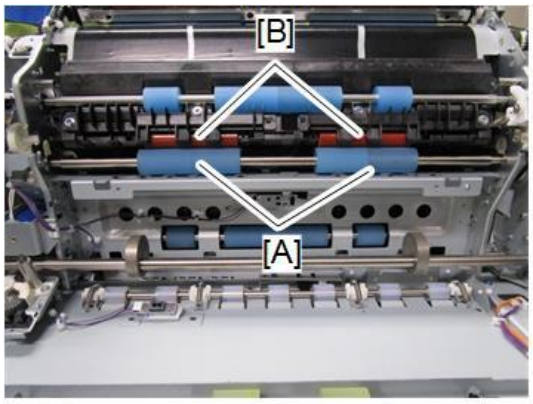
3. Remove the separation pawl [A].



4. Remove the guide plate [A].



5. Wipe the inverter feed roller (drive/idle) with a damp cloth.



d0cpz0617

- [A]: Inverter feed roller (Drive)
- [B]: Inverter feed roller (Idle)

Note

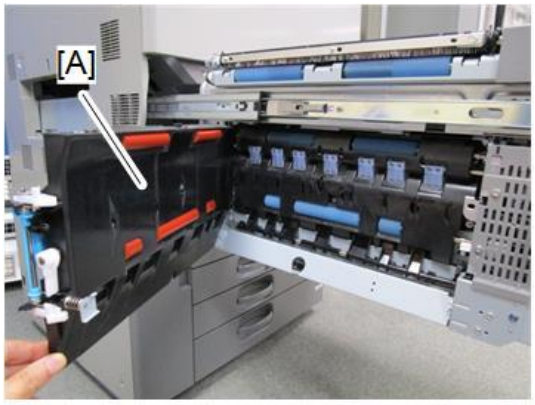
- Before wiping the inverter feed roller (idle), squeeze out excess moisture from a damp cloth.

Exit Transport Guide Plate (Upper/Middle/Left)

1. Pull out the drawer unit.

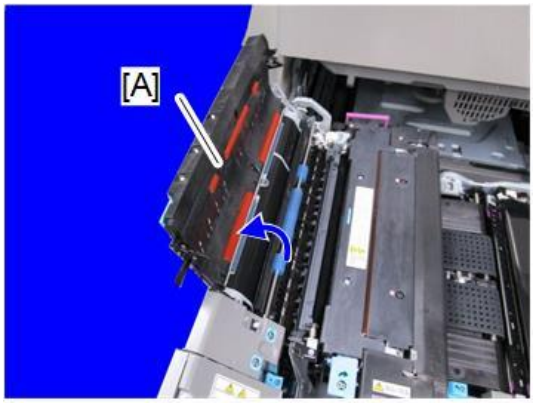
2. Open the paper exit feed guide plate.

3. Wipe the paper exit feed guide plate (left) [A] with a dry cloth.



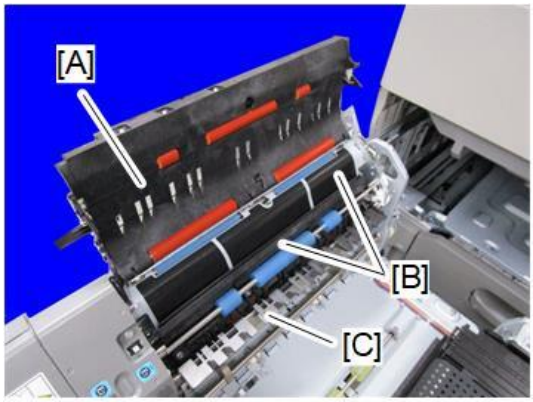
d0cpz0618

4. Hold up the paper exit guide plate [A].



d0cpz0608

5. Wipe the paper exit feed guide plate (upper/middle) with a dry cloth.



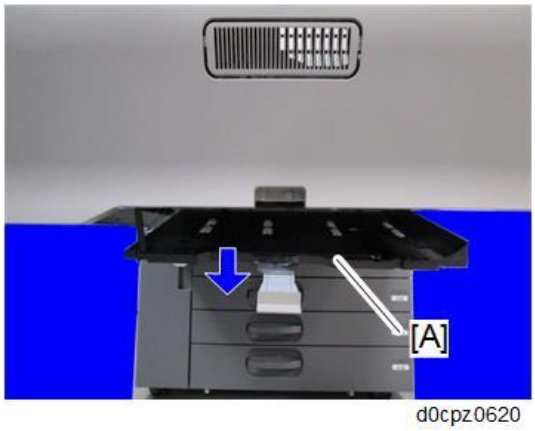
d0cpz0619

- [A]: Paper exit feed guide plate (Upper)
- [B]: Paper exit feed guide plate (Middle)
- [C]: Separation pawl

1st to 4th Duplex Feed Rollers (Drive/Idle)

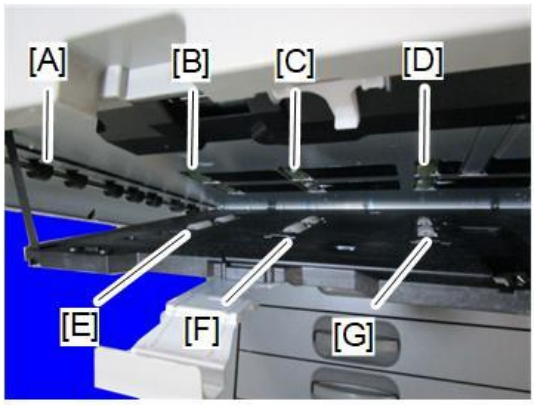
1. Pull out the drawer unit.

2. Push down the guide plate [A].



d0cpz0620

3. Wipe the 1st to 4th duplex feed rollers (drive) and the 2nd to 4th duplex feed rollers (idle) with a damp cloth.

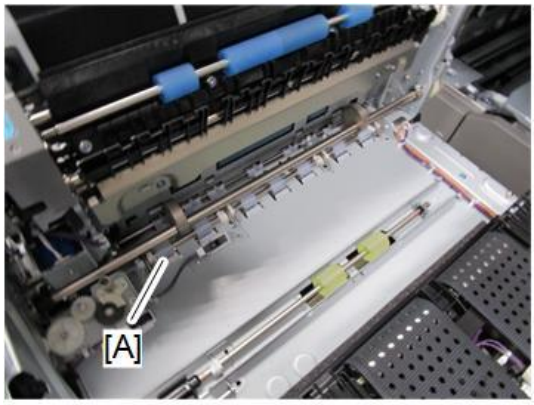


d0cpz0621

- [A]: 1st duplex feed roller (Drive)
- [B]: 2nd duplex feed roller (Drive)
- [C]: 3rd duplex feed roller (Drive)
- [D]: 4th duplex feed roller (Drive)
- [E]: 2nd duplex feed roller (Idle)
- [F]: 3rd duplex feed roller (Idle)
- [G]: 4th duplex feed roller (Idle)

4. Remove the fusing unit. (Removing the Fusing Unit)

5. Wipe the duplex feed roller 1st (idle) [A] with a damp cloth.

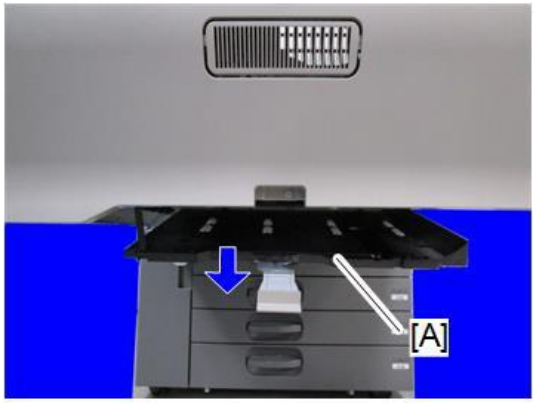


d0cpz0622

Duplex Exit Roller (Drive/Idle)

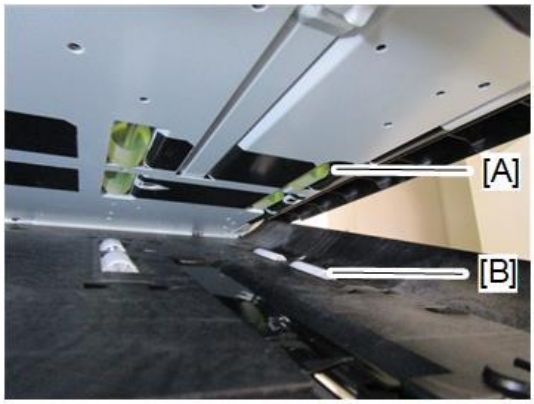
1. Pull out the drawer unit.

2. Push down the guide plate [A].



d0cpz0620

3. Wipe the duplex exit roller (drive/idle) with a damp cloth.



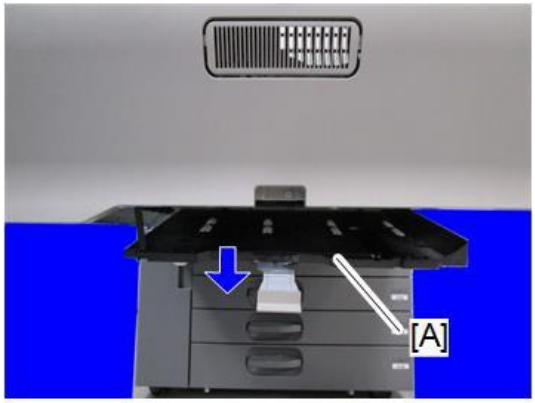
d0cpz0623

- [A]: Duplex exit roller (Drive)
- [B]: Duplex exit roller (Idle)

Transport Guide Plate (Upper/Lower)

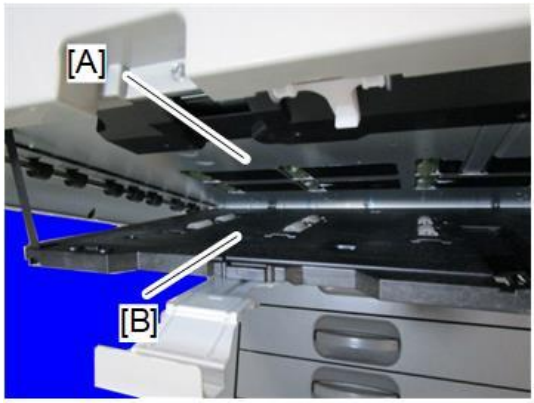
1. Pull out the drawer unit.

2. Push down the guide plate [A].



d0cpz0620

3. Wipe the transport guide plate (upper/lower) with a damp cloth.

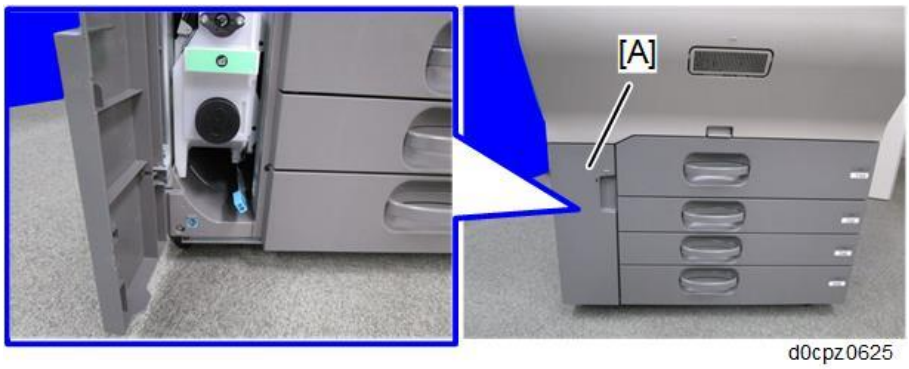


d0cpz0624

- [A]: Transport guide plate (Upper)
- [B]: Transport guide plate (Lower)

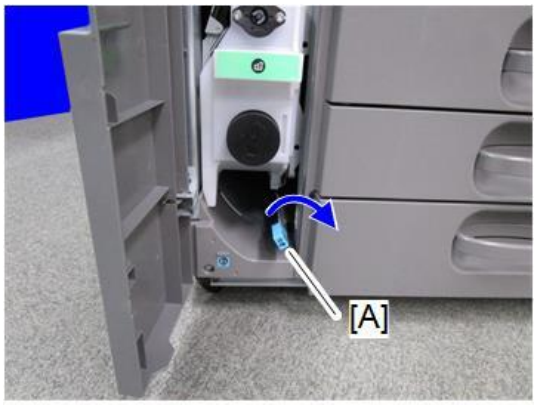
Purge Guide Plate (Lower)

1. Open the purge door [A].



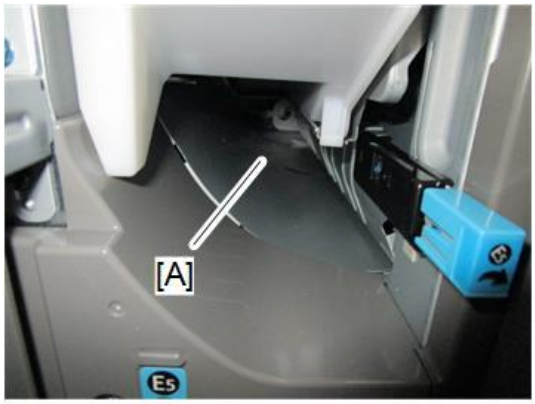
d0cpz0625

2. Move the purge guide plate (lower) [A] to the upright position.



d0cpz0626

3. Wipe the area [A] under the transport guide plate (lower) with a damp cloth.



d0cpz0627

Note for PM Alert Banner Message

SP5-062 provides the option to choose whether or not to display the replacement alert (0: Not display, 1: Display).

However, by spec, the alert message will appear for the above parts regardless of the SP setting, because these are critical components to maintain machine operation.

- Lubrication Bar: K
- Lubrication Bar: C
- Lubrication Bar: M
- Lubrication Bar: Y
- #Fuser Cleaning Unit
- Toner: K
- Toner: C
- Toner: M
- Toner: Y
- Waste Toner Bottle

Note that the machine will automatically stop if they are not replaced at the appropriate timing.

4. Replacement and Adjustment

Notes on the Main Power Switch

Push Switch

The main power button of this machine has been changed to a push-button switch (push button) from the conventional rocker switch. The push switch has characteristics and specifications different from the rocker switch. Care must be taken when replacing and adjusting parts.

Characteristics of the Push Switch (DC Switch)

Power is supplied to the machine even when the main power switch is turned OFF.

The push switch in this machine uses DC (direct current). Therefore, if the AC power cord is connected to an electrical outlet, power is supplied to the controller board, the operation unit and other modules even when the main power is turned OFF.
Replacing the controller board and operation unit in this state will damage the boards and other electrical components.
So, when performing maintenance work such as replacing parts, in addition to turning off the main power with the push switch, always unplug the AC power cord.

When you disconnect the power cord from the AC wall outlet, inside the machine there is still residual charge.

When you disconnect the power cord from the AC wall outlet, inside the machine for a while there is still residual charge. Therefore, if you remove boards in this state, it can cause a blown fuse or memory failure.

- How to remove the residual charge inside the machine
  After you unplug the power cord from the AC wall outlet, in order to remove the residual charge from inside the machine, be sure to press the main power switch. Thus, the charge remaining in the machine is released, and it is possible to remove boards.

When you reconnect the AC power cord into an AC wall outlet, the machine will start automatically.

In order to remove the residual charge, push the main power switch while you disconnect the AC power cord. At that time, the power ON flag inside the machine is set. Therefore, after you finish work on the machine and reconnect the power cord to the AC, even if you do not press the main power switch, the machine will start automatically and the moving parts will begin to move. **When working on moving parts, be careful that fingers or clothes do not get caught.**

Note

- Automatic restart deals with cases when you accidentally unplugged the AC power cord or

unexpected power outages. By keeping the power flag ON, after the resumption of power, the machine will start up automatically.

In rare cases, when you reconnect the AC power cord to a power outlet, the machine does not start automatically. In this case, the machine has not failed. The cause is due to the timing of releasing the residual charge. If you press the main power switch while the residual charge was already released, the power ON flag will not be set. At this time, start the machine manually by pressing the main power switch.

Important

- If an option that is powered independently from a different power source, i.e. the Multi-Folding Unit FD4000 (for IM C6500/C8000, Pro C5300S/C5310S) or the Buffer Pass Unit Type 5020 (for Pro C5300S/C5310S), is included in the configuration, always follow the procedure below when reconnecting the AC power cord into an AC wall outlet after disconnecting it and pressing the main power switch to release the charge. If you do not follow the procedure below, the option that is powered independently will not be recognized by the copier and paper jams will occur.
  1. Connect the AC power cord of the option into an AC wall outlet, and then connect the AC power cord of the copier into an AC wall outlet.
  2. After the copier starts up automatically, press the main power switch of the copier again to power the machine off and on, and then run a copy job to check the operation.

Shutdown Method

1. Press the main power switch [A] on the left side of the machine.
2. Take out the power cord
3. Wait 3 minutes (this is the time required if you will remove the rear cover and access the interior of the machine, to take out the controller board for example).

Note: If some LEDs on any of the boards are blinking or lit, current is still flowing.

After the shutdown process, the main power is turned off automatically.

When the shutdown is complete:

Main power LED: Off

Operation panel LED: Off

Note

- To start the machine, press the main power switch. However, if you press the main power switch between the beginning and the end of a shutdown, the machine will not start.

Forced Shutdown

If the machine does not shut down normally for some reason, the machine has a forced shutdown function.

To force the shutdown, press and hold the main power switch for 6 seconds.
In general, do not use the forced shutdown.

Important

- Forced shutdown may damage the hard disk and memory and can cause damage to the machine. Use a forced shutdown only if it is unavoidable.

Special Tools and Lubricants

No.	Part No.	Description	Use for
1	VSST9000	Test Chart S-5	Checking image quality
2	A1729001	Test Chart C5	Checking image quality
3	VSSM9000	DIGITAL MULTIMETER-FLUKE189/FVF	Measuring electrical characteristics
4	A1849501	OPTICS ADJUSTMENT TOOL	Adjusting Scanner position
5	VSSG9005	MOLYKOTE EM-50L	ADF rollers
6	52039502	GREASE 501	Resin drive gears
7	A2579300	GREASE - BARRIERTA S552R	Gears in the fusing unit (Except for pressure roller)
8	VSSG9002	FLUOTRIBO MG GREASE : 100G	Pressure roller bearing, shaft
9	D0159501	ZINC STEARATE	PCDU blade
10	D0159500	G104 YELLOW TONER	PCDU blade
11	D0747690	BRUSH:BLOWER	PCDU blade
12	D0149800	GREASE-KS660B	Drum shaft's edge
13	VSSG9006	MOLYKOTE(R) G-1077 GREASE 50G	Drive shaft: Buffer Pass Unit *Pro C5300S/C5310S only
14	A2579100	SILICONE OIL TYPE SS	Metal bearings
15	54429103	LAUNA OIL 40	Metal bearings
16	VSSC0001	SPARKL EM	Cleaning ADF exposure glass
17	A0129111	OPTICS CLOTH	Cleaning scanner mirror
18	M0774287	WEB:POLISH:FUSING:ASS'Y	Polishing the edge of the fusing belt and pressure roller
19	M0774288	WEB:POLISH:FUSING	Polishing the edge of the fusing belt and pressure roller
20	B6455010	SD-CARD:128MB	Firmware Update
21	B6455020	SD-CARD:1GB	Firmware Update
22	B6455030	SD-CARD:2GB	Firmware Update, capturing the device log
23	B6455040	SD-CARD:8GB	Firmware Update, capturing the device log
24	A0099017	GROUND CLOTH - L	Maintenance
25	A0099019	GROUND CLOTH - S	Maintenance
26	C4019503	20X MAGNIFICATION SCOPE	Checking image quality
27	-	Level	0.1mm/m sensitivity
28	-	Mobiltemp 78	Tray lift drive unit on the stacker unit *Pro C5300S/C5310S only

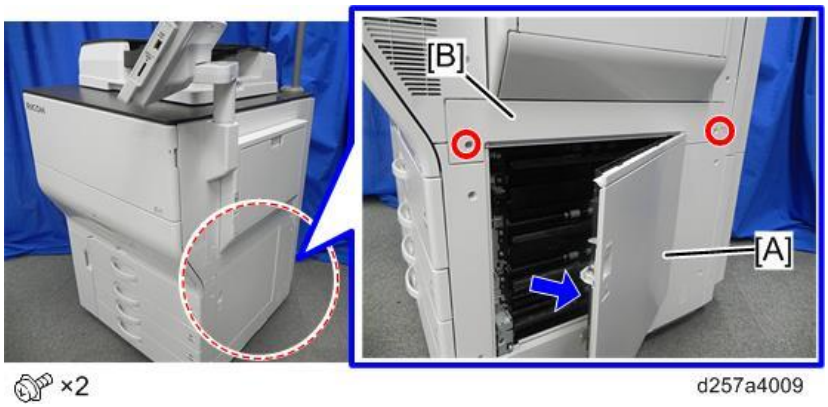
No.	Part No.	Description	Use for
29	D3HQ4857	JIG:ROTARY:GATE:PEEN	BU5030 Rotary gate roller *Pro C5300S/C5310S only
30	D0749548	DG CLEANER 5PCS/SET	Doctor gap

Exterior Covers

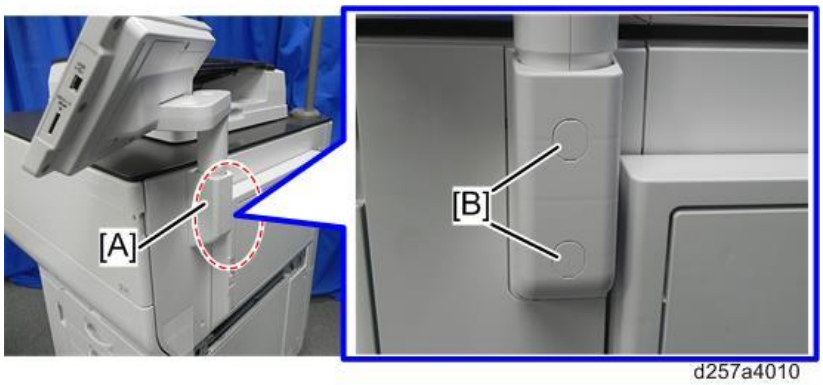
Right Cover

Right Middle Front Cover (Pro C5300S/C5310S)

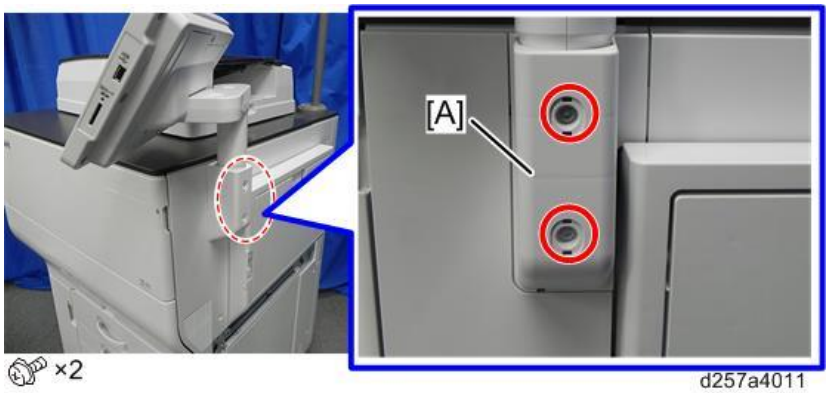
1. Open the vertical transport door [A]. Remove the LCIT cover [B].



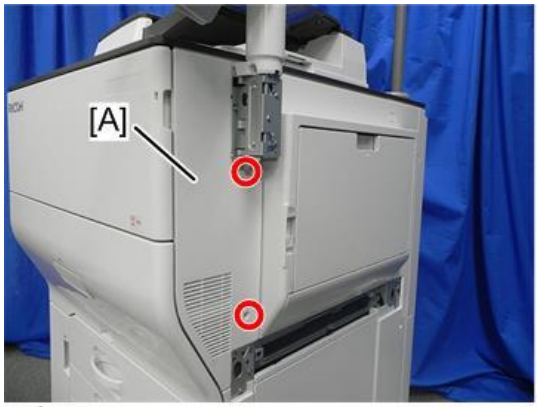
2. Remove the screw covers [B] on the arm cover [A] of the operation panel.



3. Remove the arm cover [A] of the operation panel.

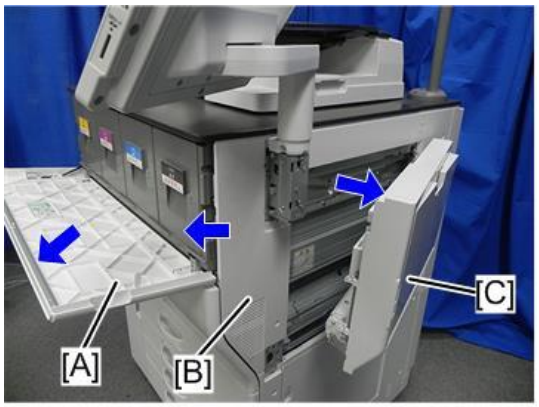


4. Remove the fixing screws of the right middle front cover [A].



×2 d257a4012

5. Open the toner supply unit front cover [A] and bypass tray unit [C]. Slide the right middle front cover [B] to the left.



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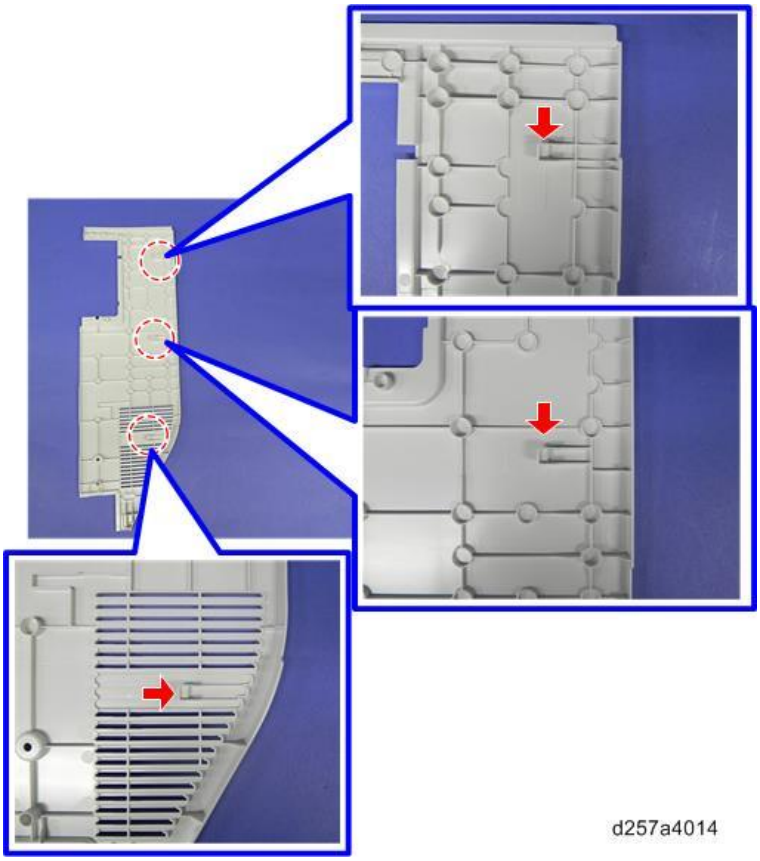
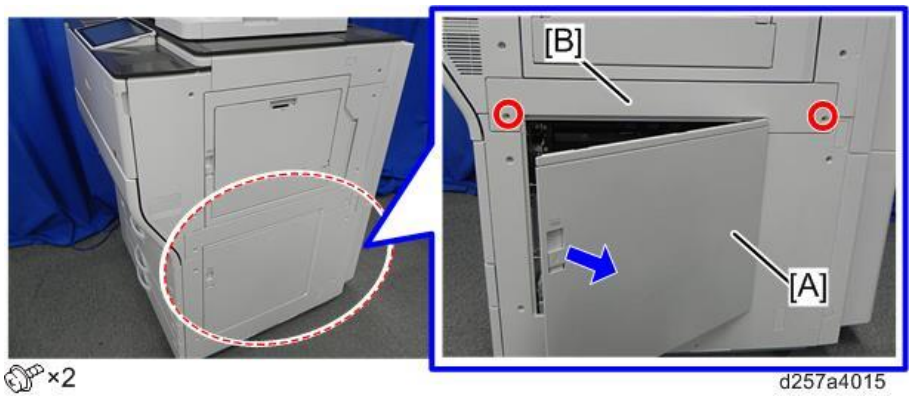
Note

- Check the position of the hooks in the photo below before removing.

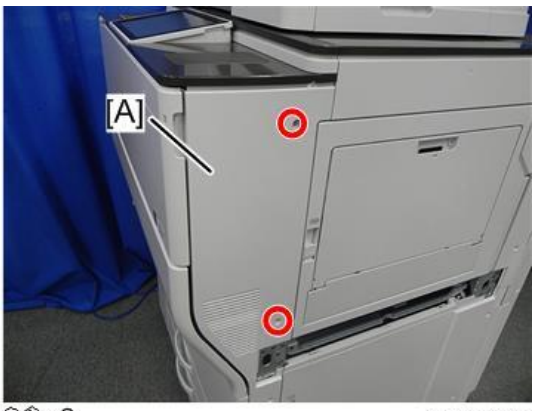


Right Middle Front Cover (IM C6500/C8000)

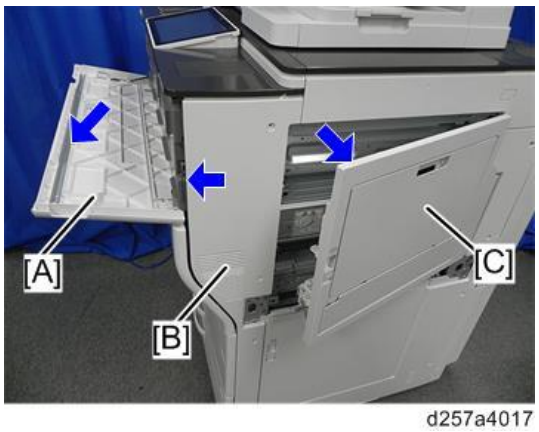
1. Open the vertical transport door [A]. Remove the LCIT cover [B].



2. Remove the fixing screws of the right middle front cover [A].

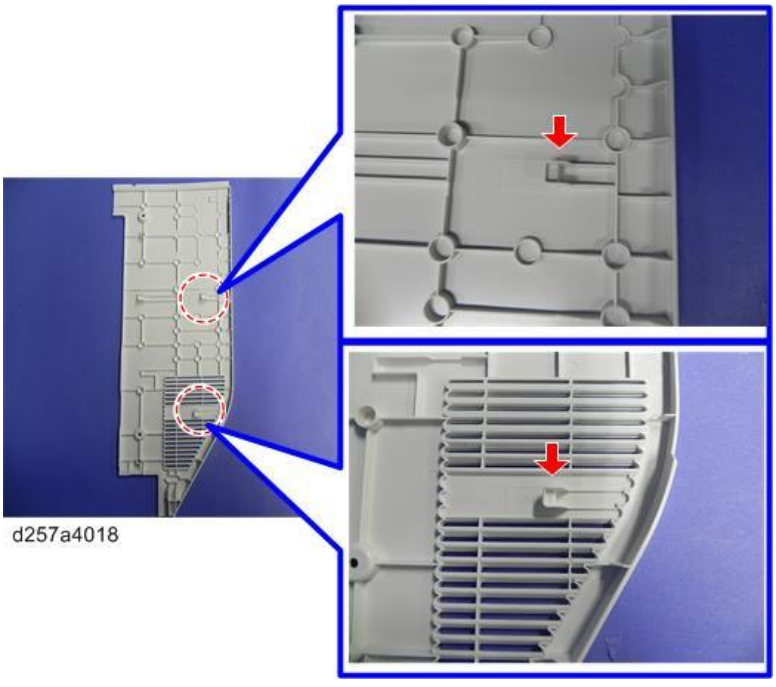


3. Open the toner supply unit front cover [A] and bypass tray unit [C]. Slide the right middle front cover [B] to the left.



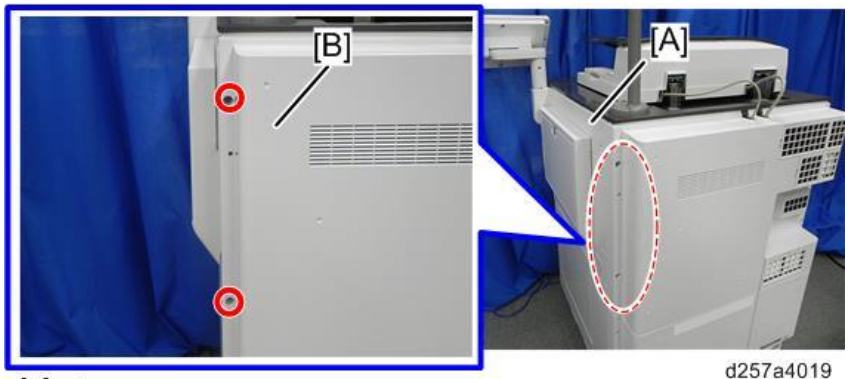
Note

- Check the position of the hooks in the photo below before removing.

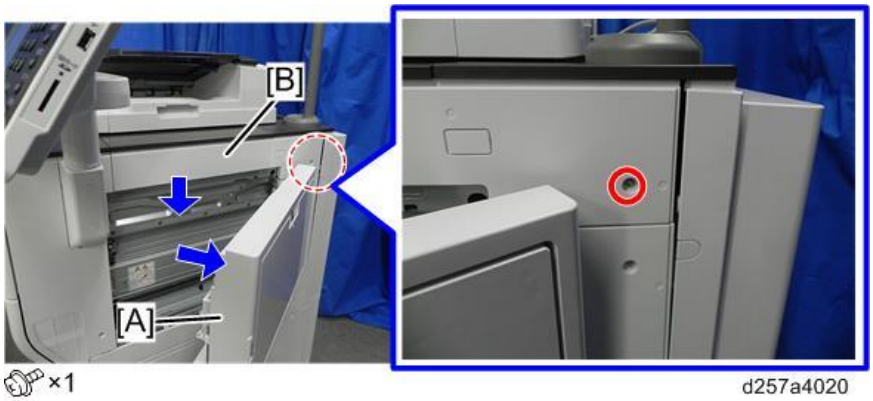


Right Middle Upper Cover (Pro C5300S/C5310S)

1. In order to easily remove the right middle upper cover [A], remove the fixing screws on the left side of the rear middle cover [B].

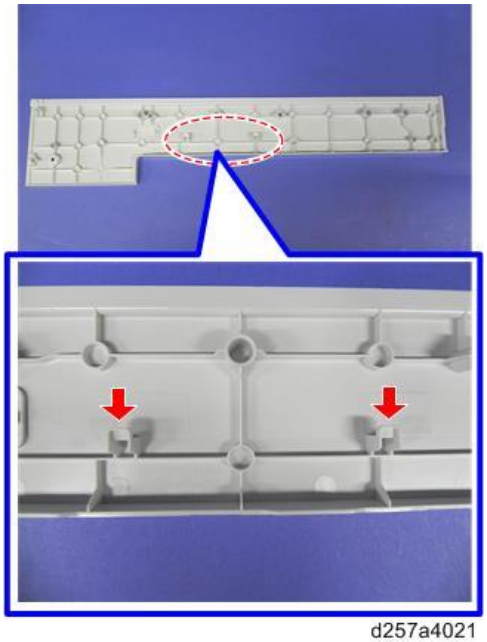


2. Open the bypass tray unit [A]. Remove the right middle upper cover [B], moving it downward.



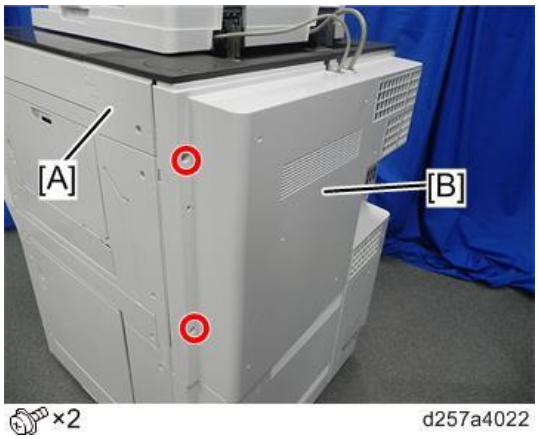
Note

- Check the position of the hooks in the photo below before removing.

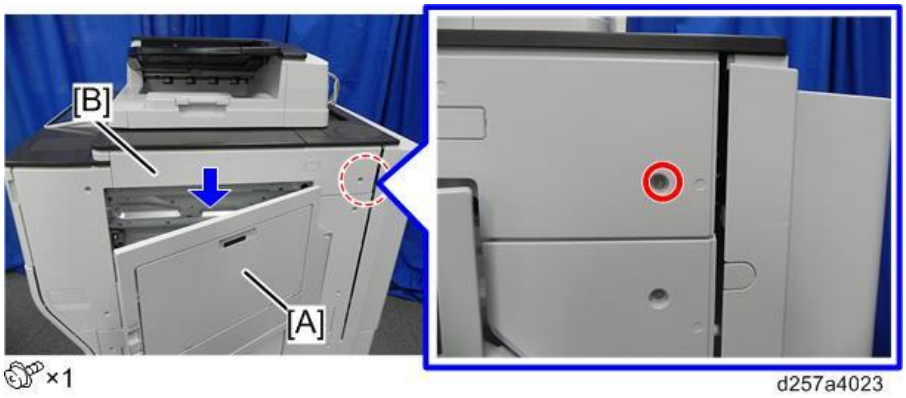


Right Middle Upper Cover (IM C6500/C8000)

1. In order to easily remove the right middle upper cover [A], remove the fixing screws on the left side of the rear middle cover [B].

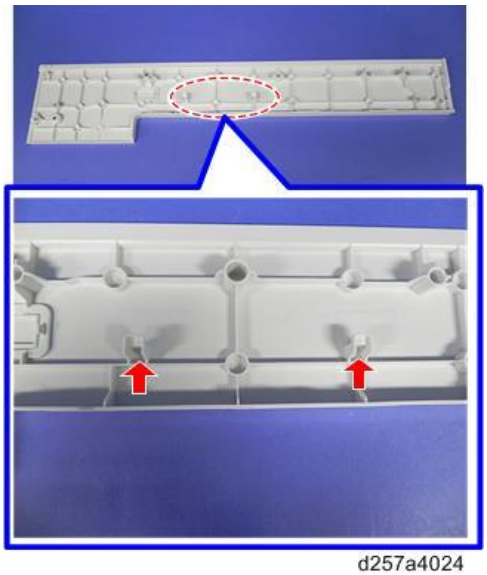


2. Open the bypass tray unit [A]. Remove the right middle upper cover [B], moving it downward.



Note

- Check the position of the hooks in the photo below before removing

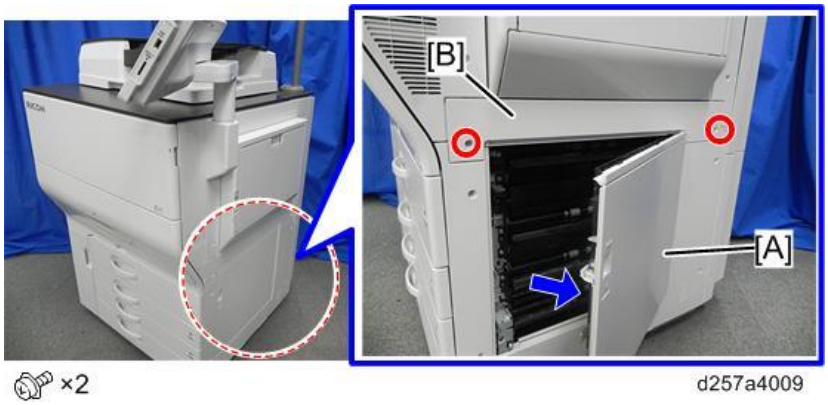


Right Middle Rear Cover (Pro C5300S/C5310S)

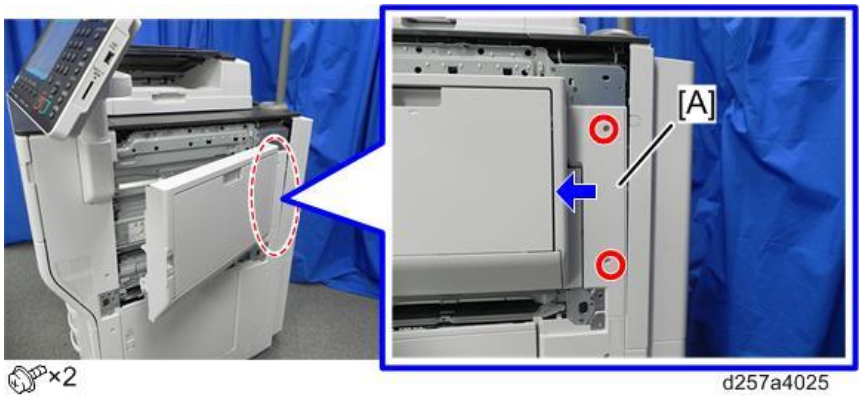
1. Remove the right middle upper cover (Pro C5300S/C5310S). (Right Middle Upper Cover (Pro

C5300S/C5310S))

2. Open the vertical transport door [A]. Remove the LCIT cover [B].

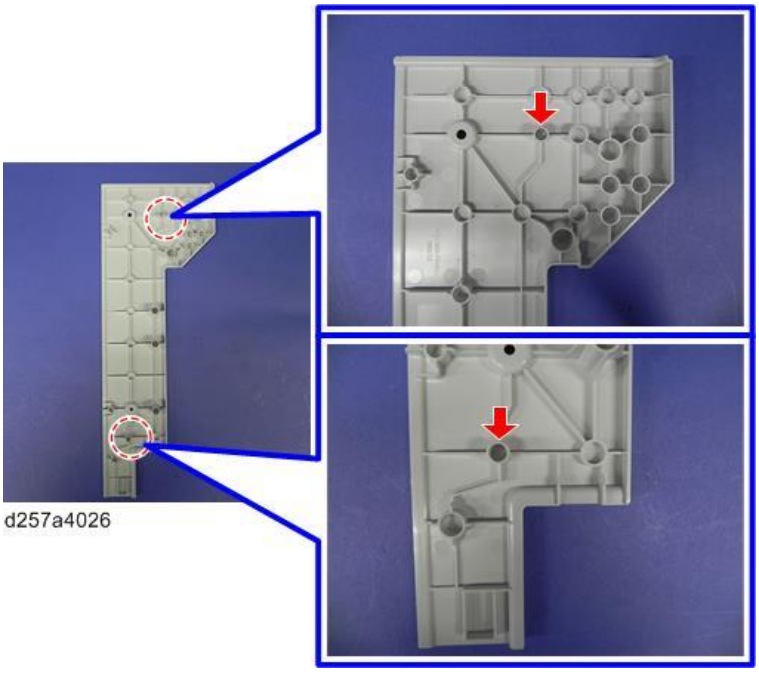


3. Slide the right middle rear cover [A] to the left.



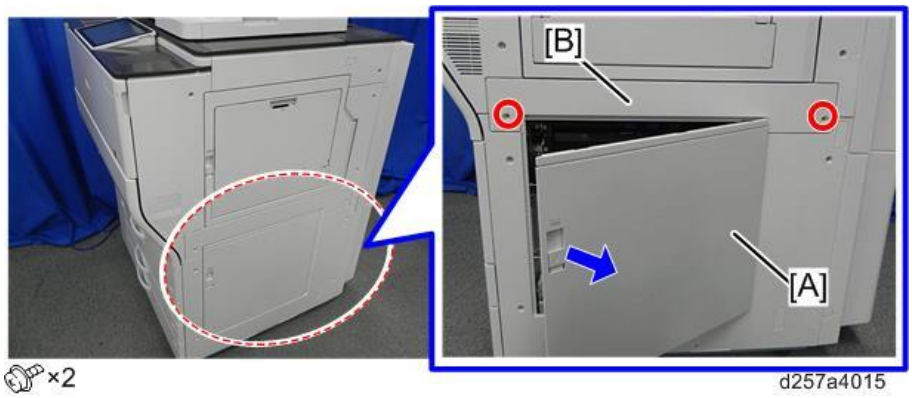
Note

- Check the position of the hooks in the photo below before removing.

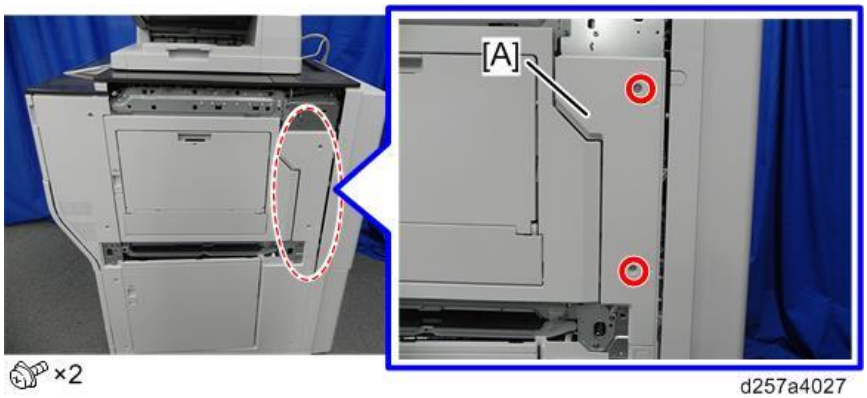


Right Middle Rear Cover (IM C6500/C8000)

1. Remove the right middle upper cover (IM C6500/C8000). (Right Middle Upper Cover (IM C6500/C8000))
2. Open the vertical transport door [A]. Remove the LCIT cover [B].

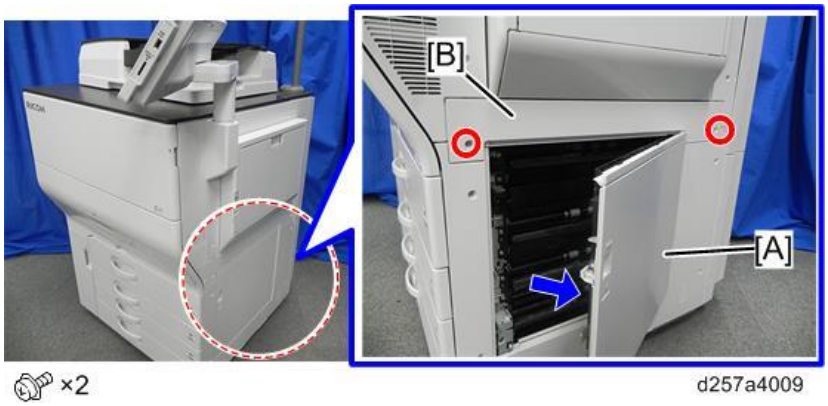


3. Slide the right middle rear cover [A] to the left.



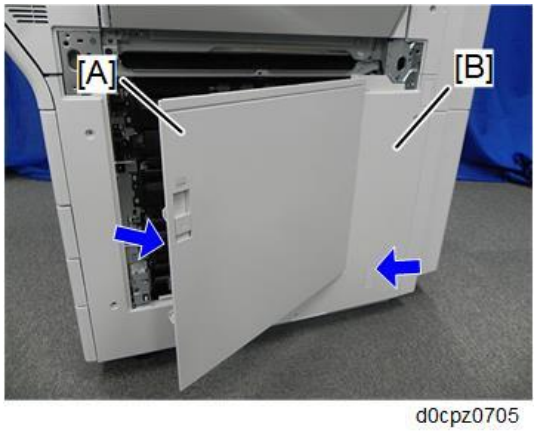
Right Lower Cover

1. Open the vertical transport door [A]. Remove the LCIT cover [B].



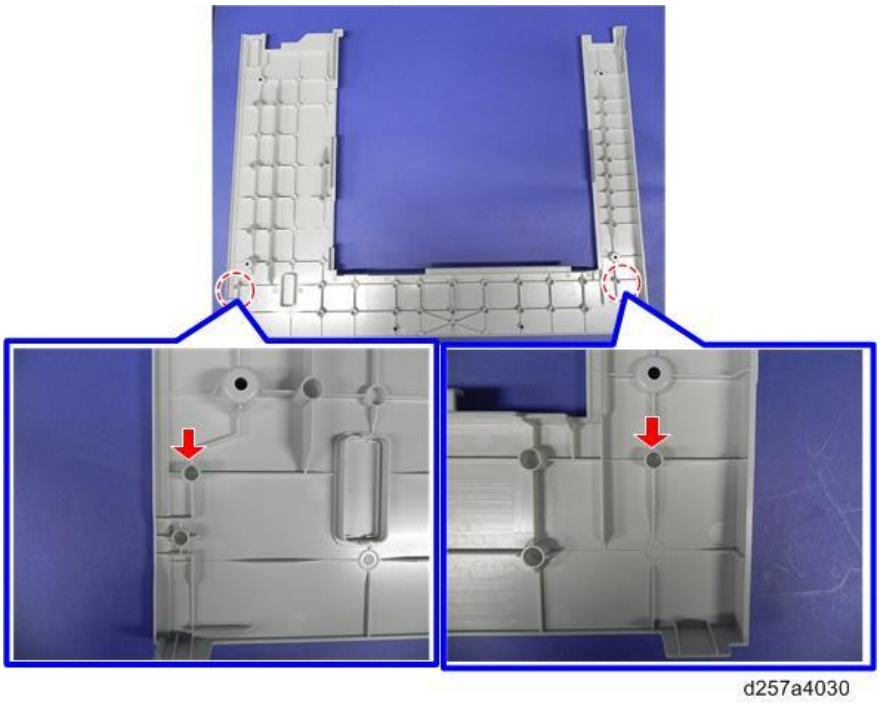
2. Remove the fixing screws of the right lower cover.

3. Open the vertical transport door [A]. Remove the right lower cover [B], moving it to left side.



Note

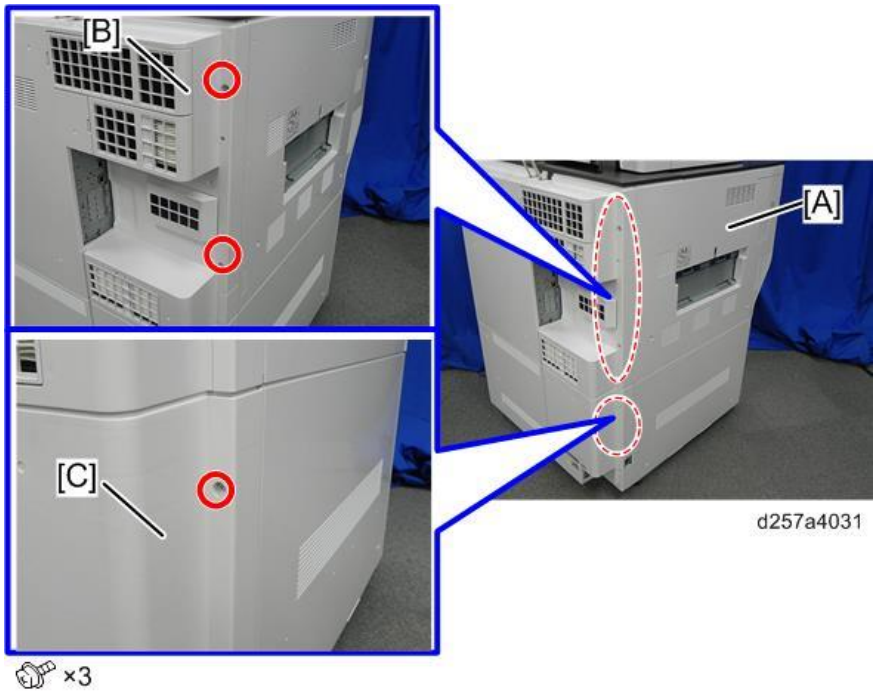
- Check the position of the bosses in the photo below before removing.



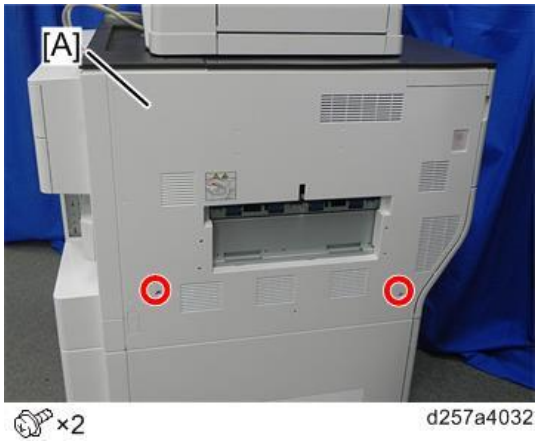
Left Cover

Left Middle Cover

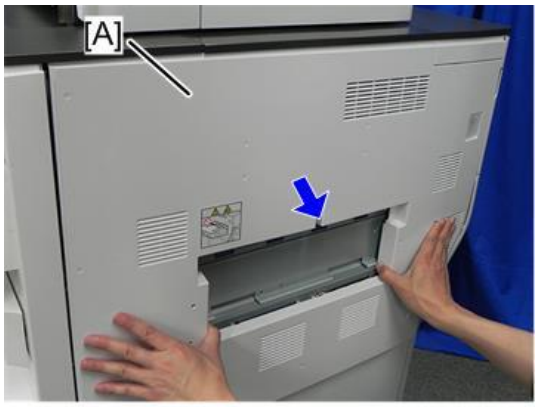
1. In order to easily remove the left middle cover [A], remove the fixing screws on the left side of the rear middle cover [B] and rear lower cover [C].



2. Remove the fixing screws of the left middle cover [A].



3. Remove the left middle cover [A].



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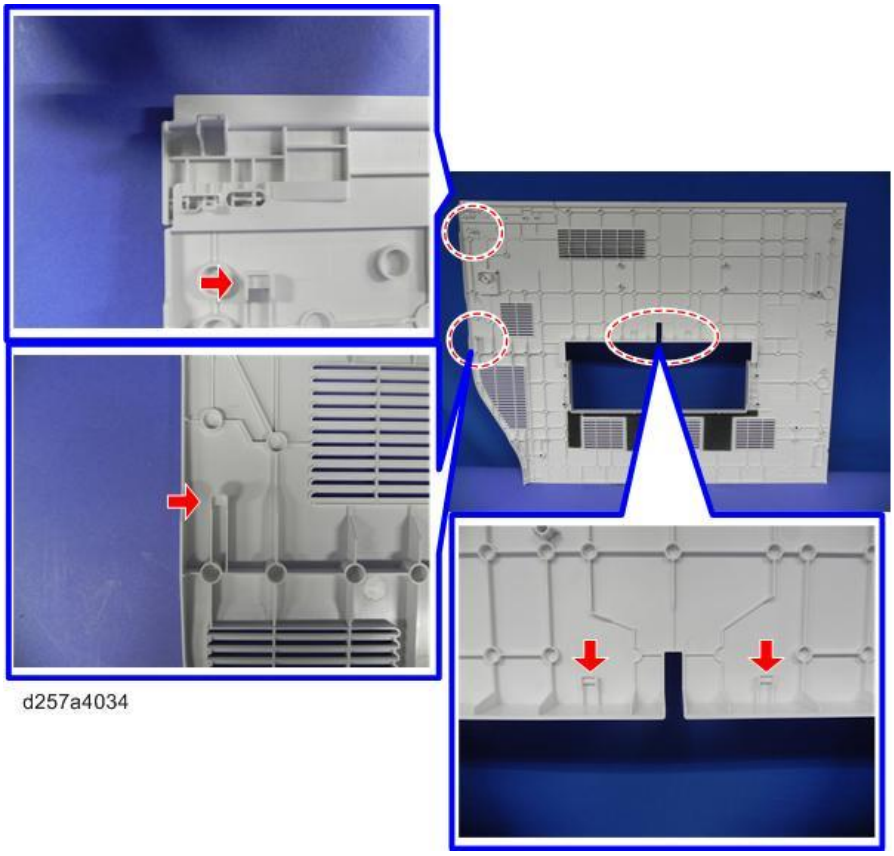
Note

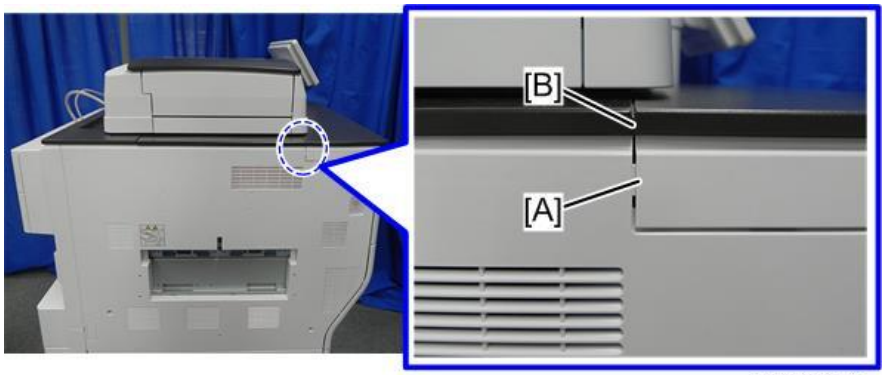
- Check the position of the hooks in the photo below before removing.



d257a4034

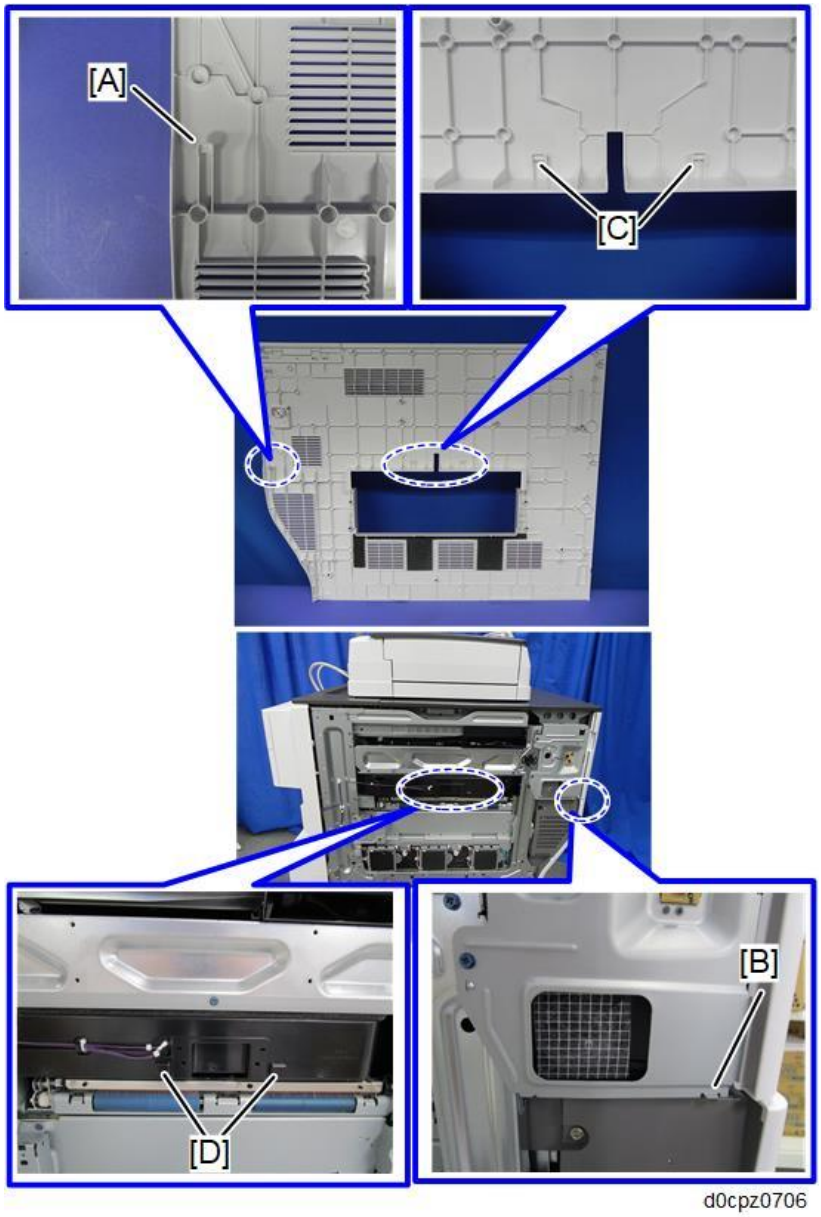
Notes on left middle cover attachment

- Attach the left middle cover to align the left middle cover [A] and the upper cover [B].



d257a4035

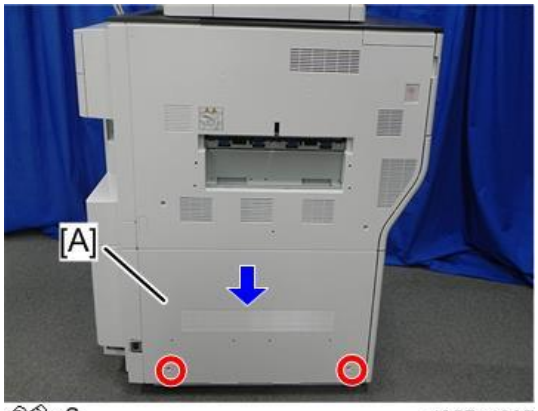
- Attach the hook [A] to fit location [B] on the machine.
- Attach the hooks [C] to fit locations [D] on the machine.



d0cpz0706

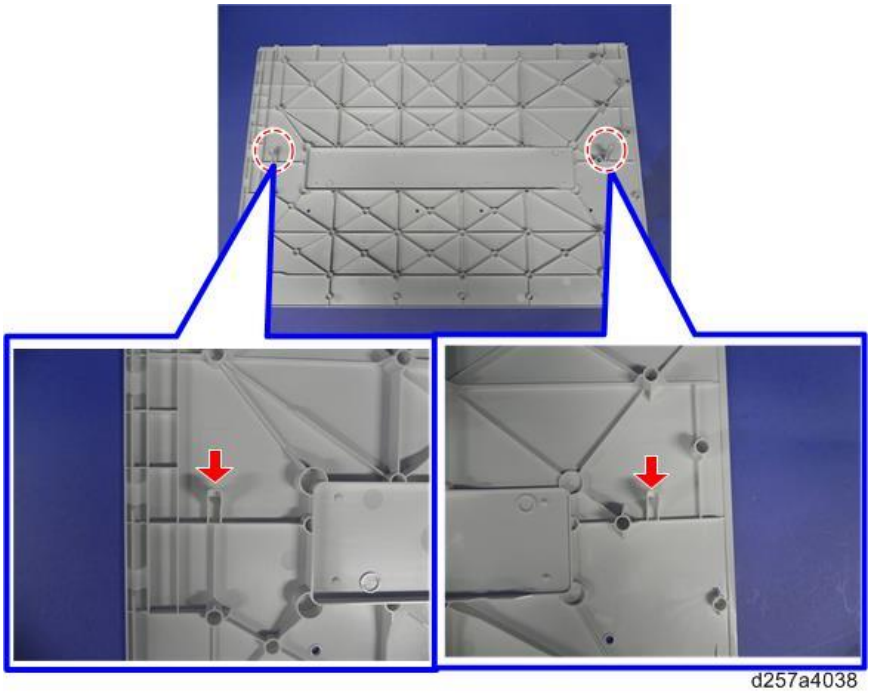
Left Lower Cover

1. Remove the left lower cover [A], moving it downward.



Note

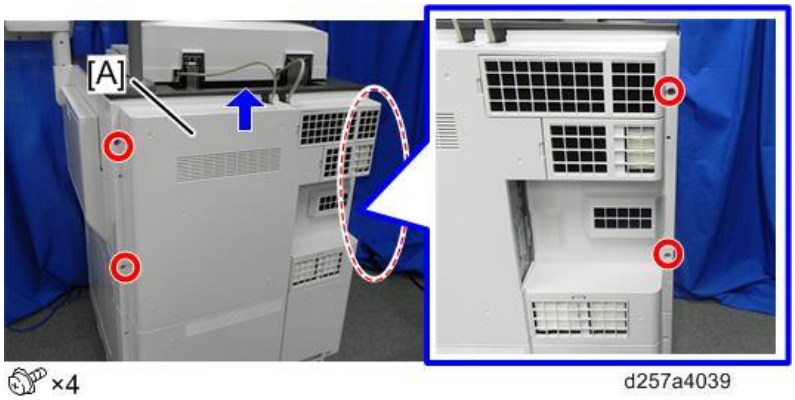
- Check the position of the hooks in the photo below before removing.



Rear Cover

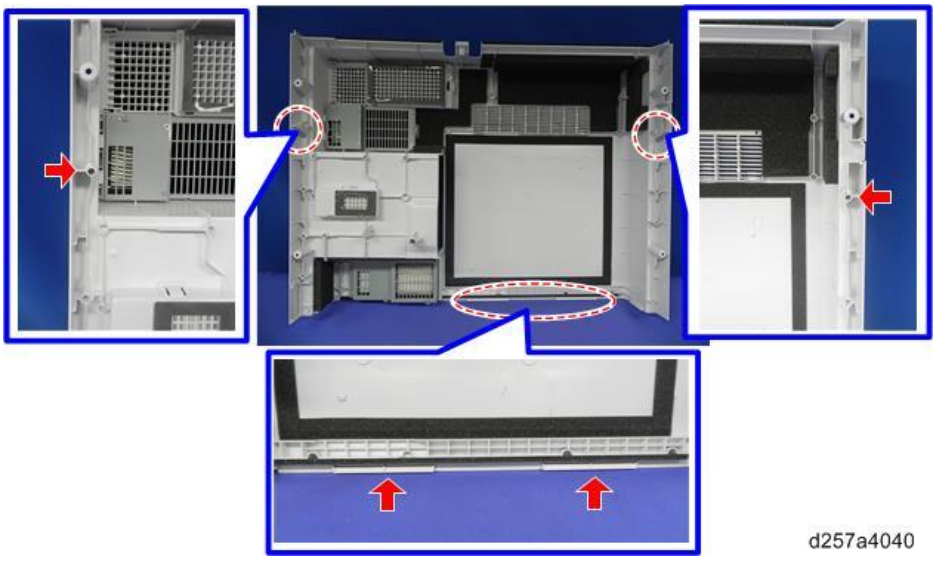
Rear Middle Cover

1. Remove the rear middle cover [A] by moving it upward.



Note

- Check the position of the hooks and bosses in the photo below before removing.



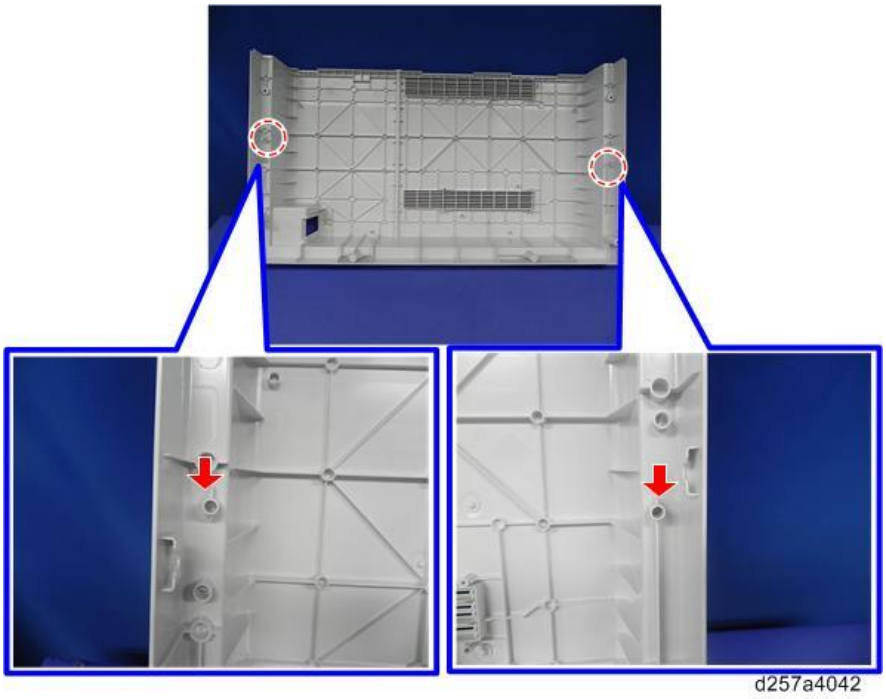
Rear Lower Cover

1. Remove the rear middle cover. (Rear Middle Cover)

2. Remove the rear lower cover [A].

Note

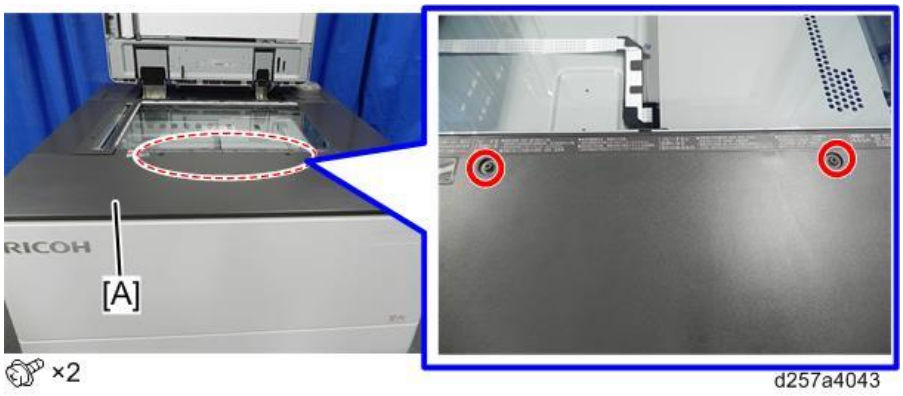
- Check the position of the bosses in the photo below before removing.



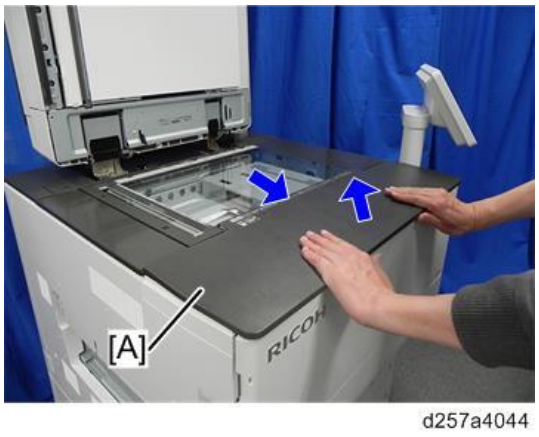
Upper Cover

Upper Front Cover (Pro C5300S/C5310S)

1. Open the ADF and remove the fixing screws of the upper front cover [A].

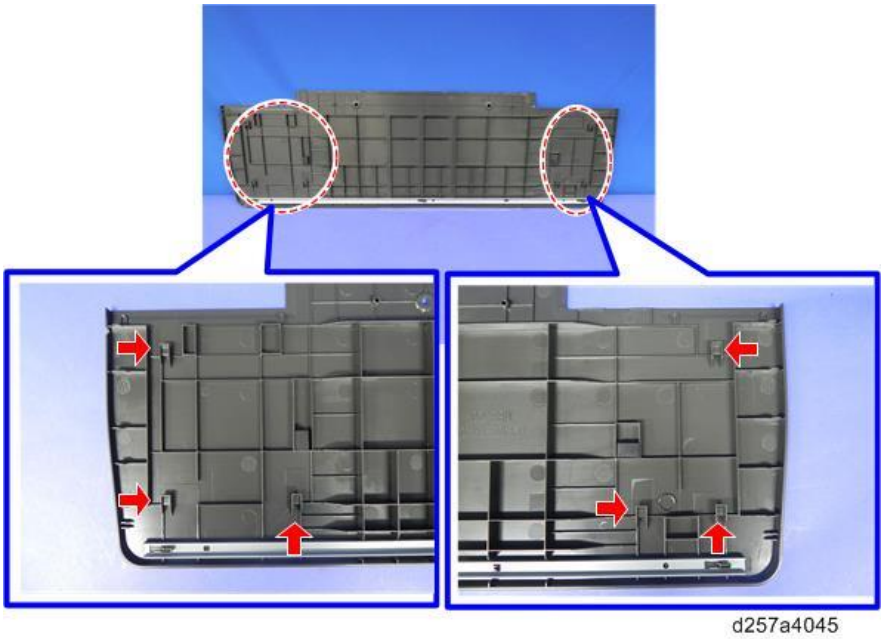


2. Lift the upper front cover [A] and slide it forward.



Note

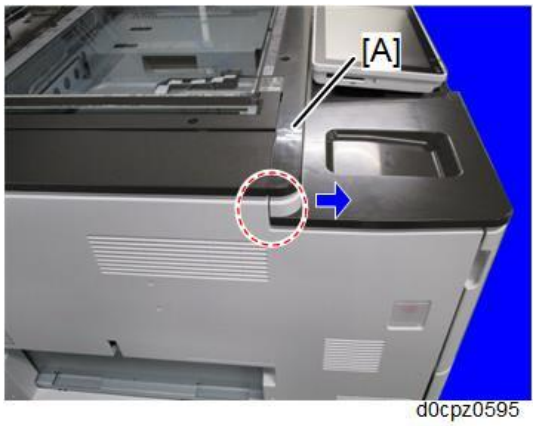
- Check the position of the hooks in the photo below before removing.



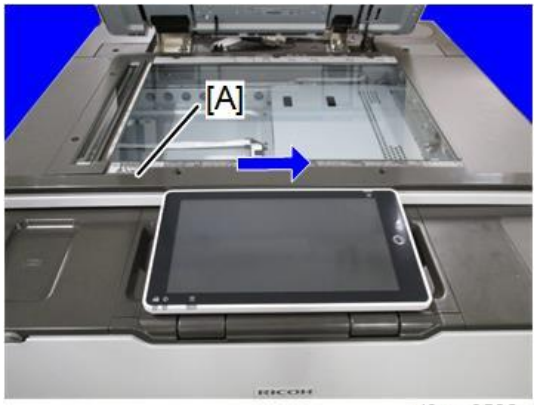
Upper Front Cover (IM C6500/C8000)

1. Open the ADF, and remove the screws securing the upper front cover [A].

2. Release the hook of the upper front cover [A].

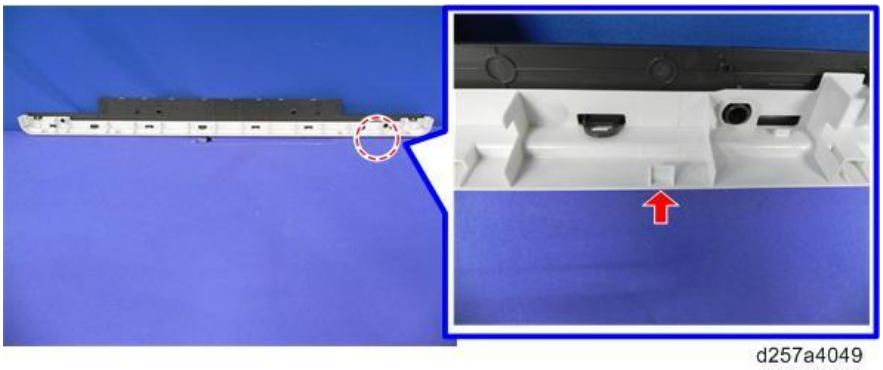


3. Remove the upper front cover [A] by sliding it to the right.



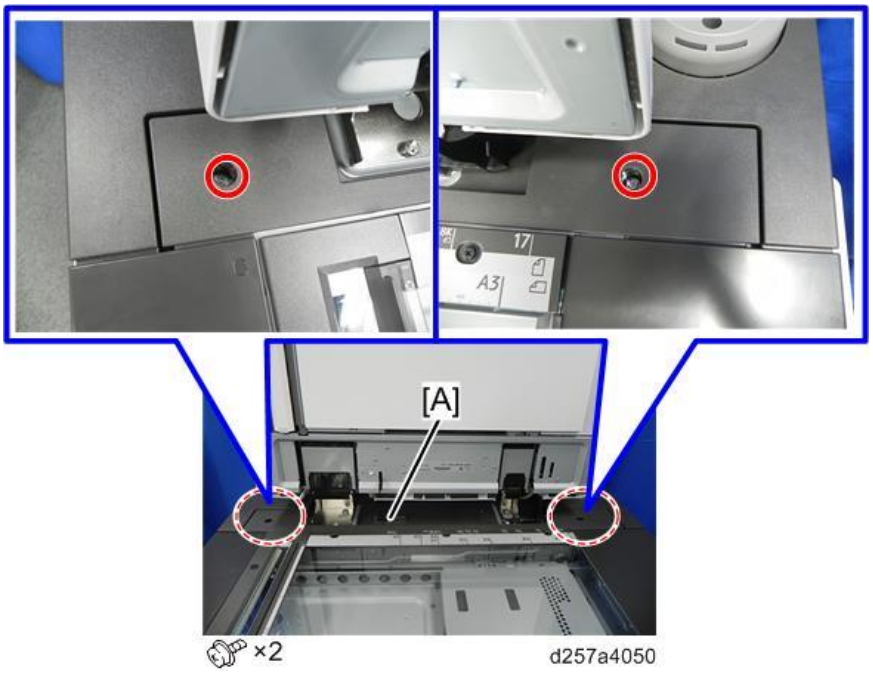
Note

- Check the hook location:



Upper Rear Cover (Small)

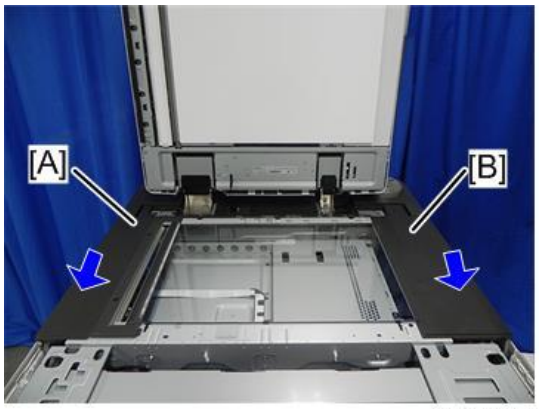
1. Open the ADF and remove the fixing screws of the upper rear cover (small) [A].



Upper Left Cover, Upper Right Cover

1. Remove the upper front cover. (Pro C5300S/C5310S: Upper Front Cover (Pro C5300S/C5310S), IM C6500/C8000: Upper Front Cover (IM C6500/C8000))
2. Remove the upper rear cover (small). (Upper Rear Cover (Small))

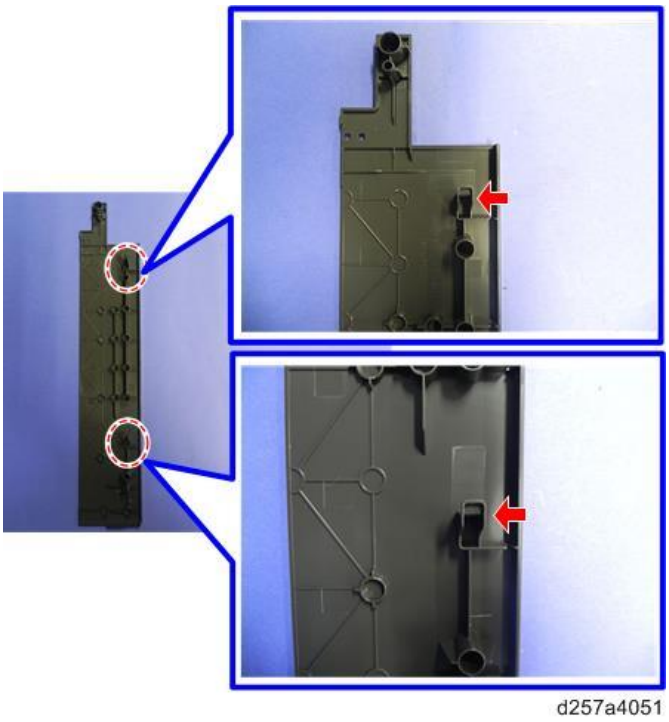
3. Remove the upper left cover [A] and upper right cover [B] by sliding them toward the front.



d257a4069

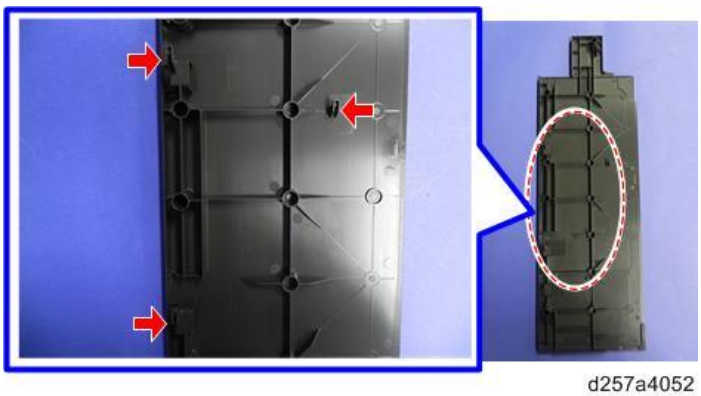
Note

- Check the position of the hooks in the photo below before removing.
- Upper left cover



d257a4051

- Upper right cover



d257a4052

- When attaching the upper right cover, be careful not to pinch the harness.

Operation Panel (Pro C5300S/C5310S)

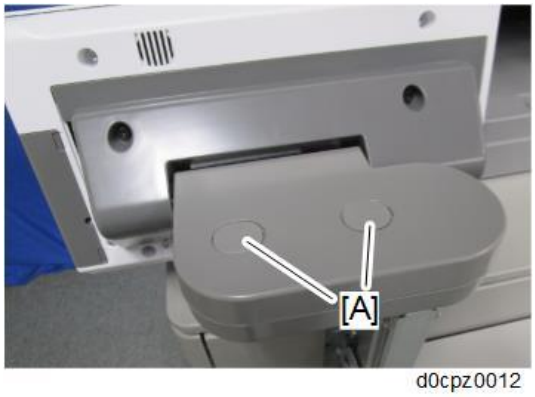
Operation Panel Unit

Note

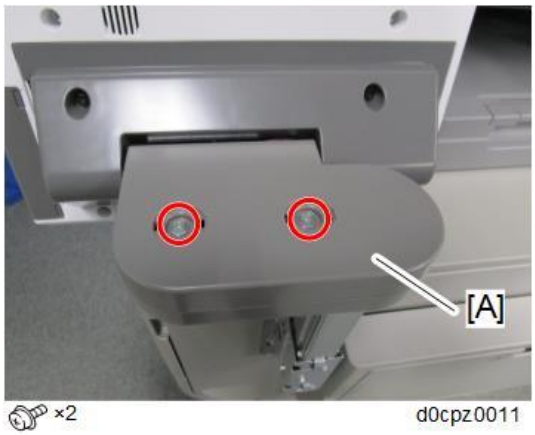
Silver and black screws are used for the operation panel unit.

Be sure to use the correct screws. Using the incorrect screw type might damage the exterior covers.

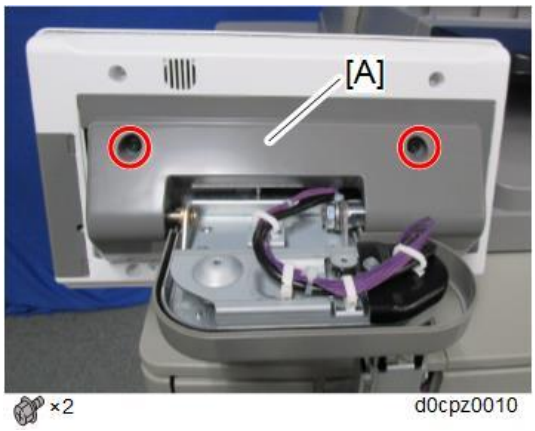
1. Remove the screw covers [A]



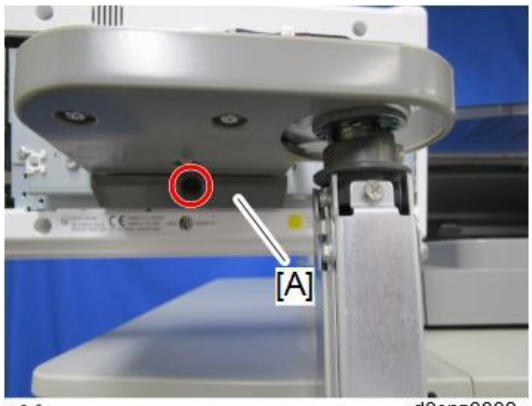
2. Remove the arm upper cover [A].



3. Remove the operation panel rear upper cover [A].

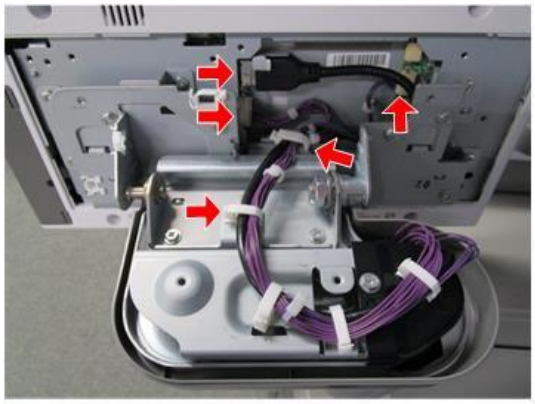


4. Remove the operation panel rear lower cover [A].



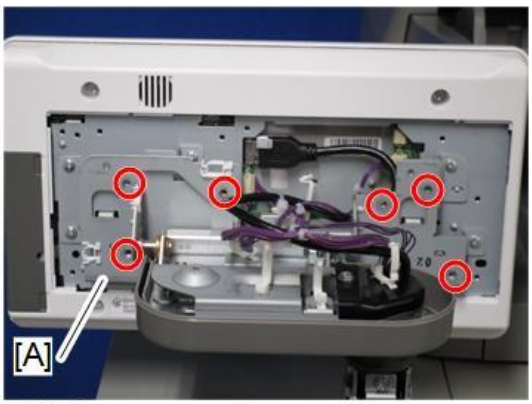
×1 d0cpz0009

5. Remove the connectors.



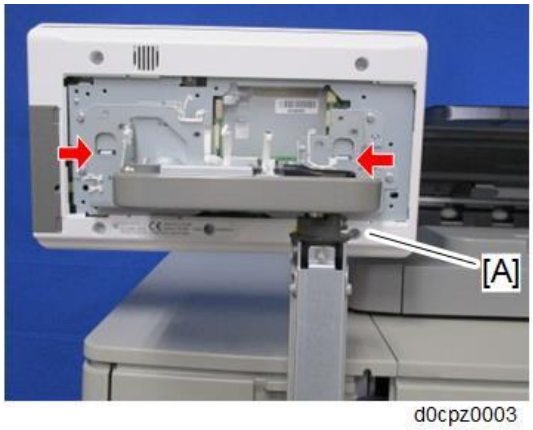
×2 ×3 d0cpz0008

6. Remove the fixing screws of the operation panel [A].



×6 d0cpz1324

7. Remove the operation panel [A].



d0cpz0003

8. Make sure that DIP switches 3 and 7 of the new operation panel [A] are set to ON and install the new operation panel on the arm.

d257a7239

Note

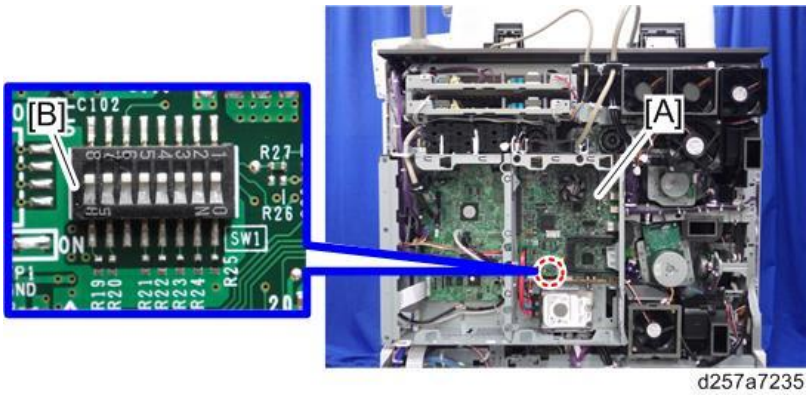
If the DIP switch setting is not correct, the machine will issue SC672.

9. Remove the rear middle cover. (Rear Middle Cover)

10. Remove the controller box cover [A].

d257a4141

11. Make sure that all the DIP switches [B] on the controller board [A] are set to OFF.



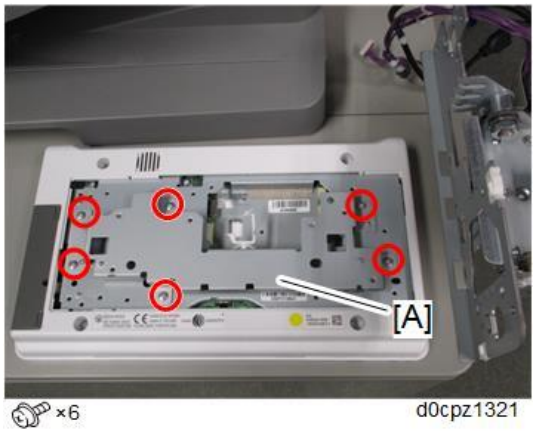
12. Attach the controller box cover and rear middle cover.

13. After replacing the operation panel, make sure that the latest version of the Smart Operation Panel firmware has been installed. For details, refer to Updating the Smart Operation Panel

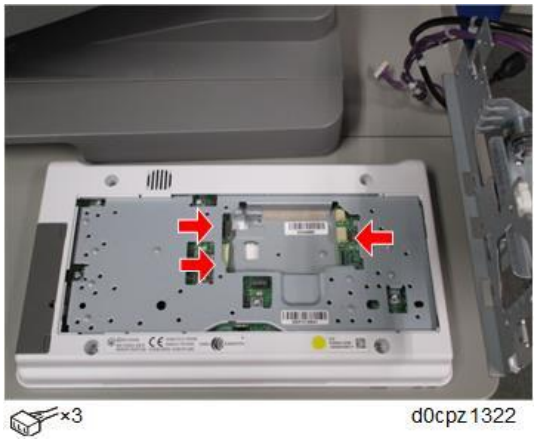
Installing the Operation Panel

1. Place the operation panel on the main machine.

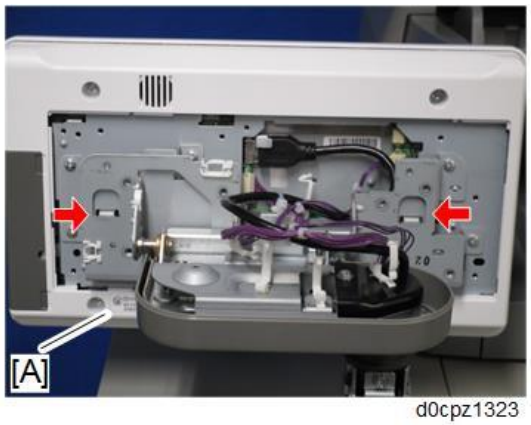
2. Remove the bracket [A].



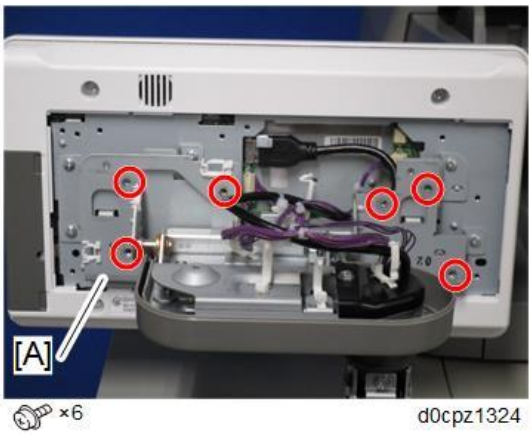
3. Connect the connectors.



4. Hang the operation panel [A] to the hooks.



5. Fasten the operation panel to the arm [A].



6. Clamp the harness [A].

Note

Route the harness as shown below.

The cable ties * shown in the blue circle must be placed near the control panel beyond the clamp [A].

*The 2nd tie from the connector for the purple harnesses.

*The 1st tie from the connector for the black harness.

7. Attach the covers of the operation panel.

Internal Parts

For details about disassembling the Smart Operation Panel, refer to Replacement and Adjustment

Operation Panel (IM C6500/C8000)

Operation Panel Unit

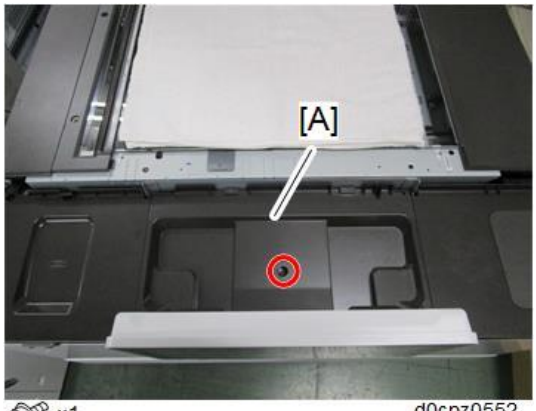
1. Remove the upper right cover. (Upper Left Cover, Upper Right Cover)
2. Cover the exposure glass with a sheet [A] to prevent the exposure glass from damage.

d0cpz0551

3. Open the toner supply unit front cover [A].

d0cpz0588

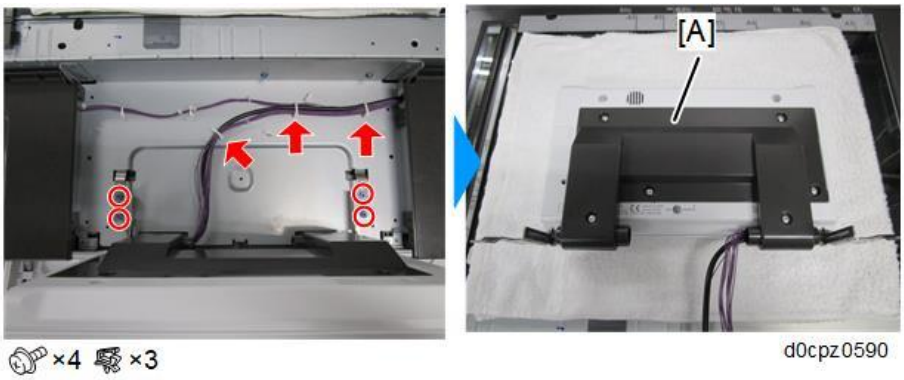
4. Remove the operation panel lower center cover [A].



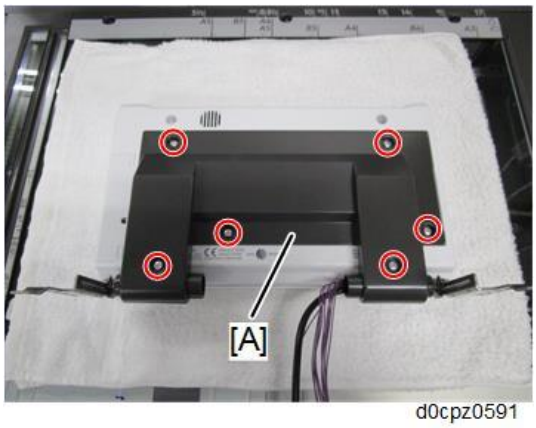
×1 d0cpz0552

5. Remove the operation panel lower front cover [A].

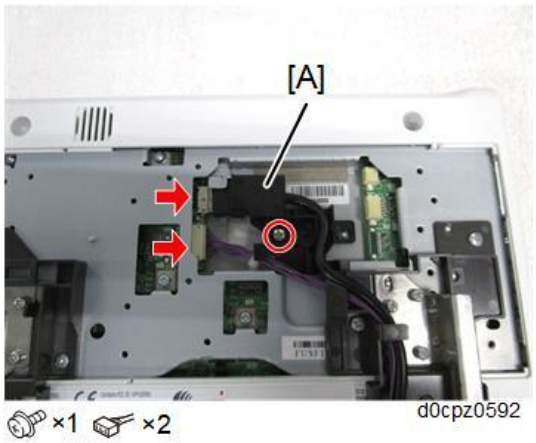
6. Remove the operation panel [A] and put it on the scanner.



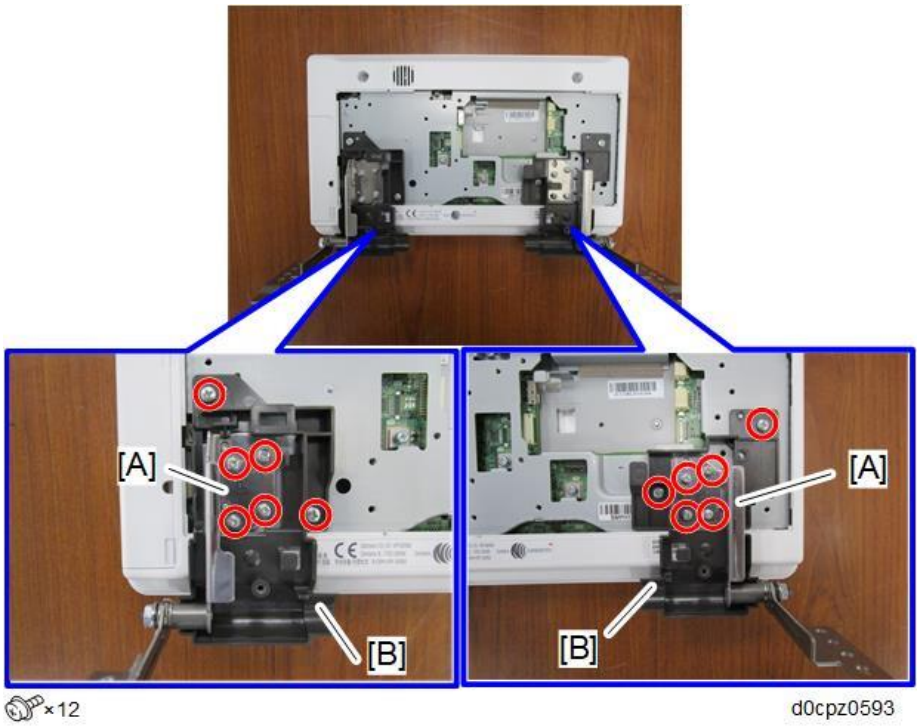
7. Remove the operation panel rear cover [A].



8. Remove the harness guide [A] and connectors.



9. Remove the hinge [A] and bracket [B] from operation panel.



10. Make sure that the DIP switch 1, 3 and 6 on the main board is set to ON.

Important

- If the DIP switch setting is not correct, the machine will issue SC672.

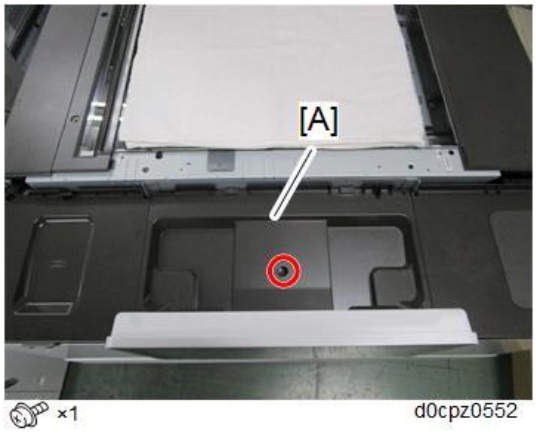
11. After replacing the operation panel, make sure that the latest version of the Smart Operation Panel firmware has been installed. For details, refer to Updating the Smart Operation Panel.

Internal Parts

For details about disassembling the Smart Operation Panel, refer to Replacement and Adjustment

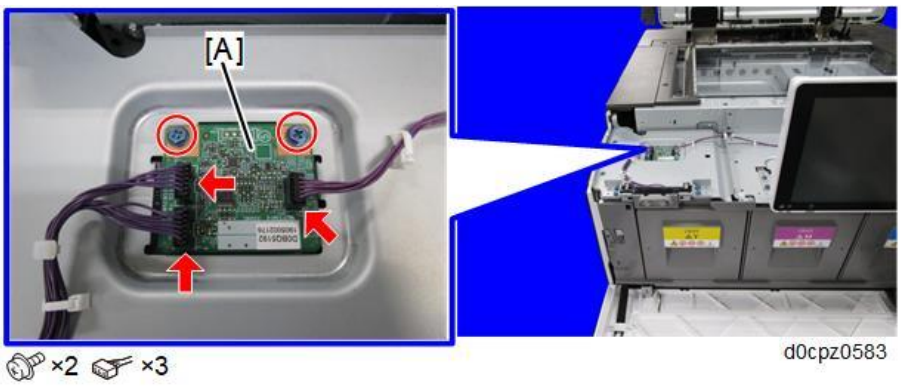
Proximity Sensor (S28)

1. Remove the upper front cover. (Upper Front Cover (IM C6500/C8000))
2. Remove the operation panel lower center cover.

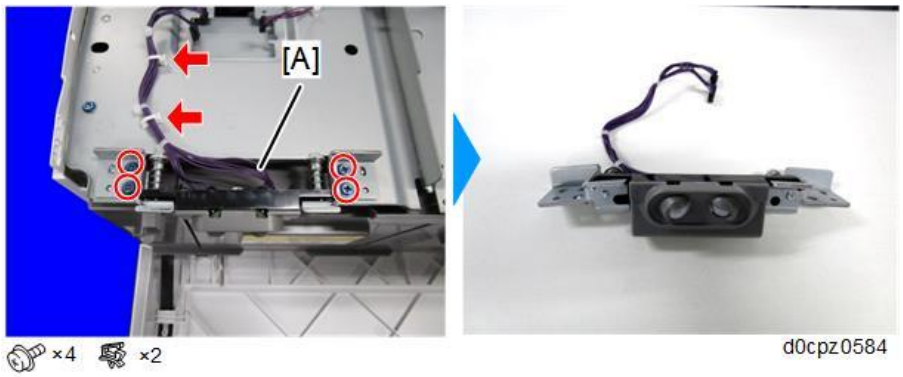


3. Remove the operation panel lower left cover [A].

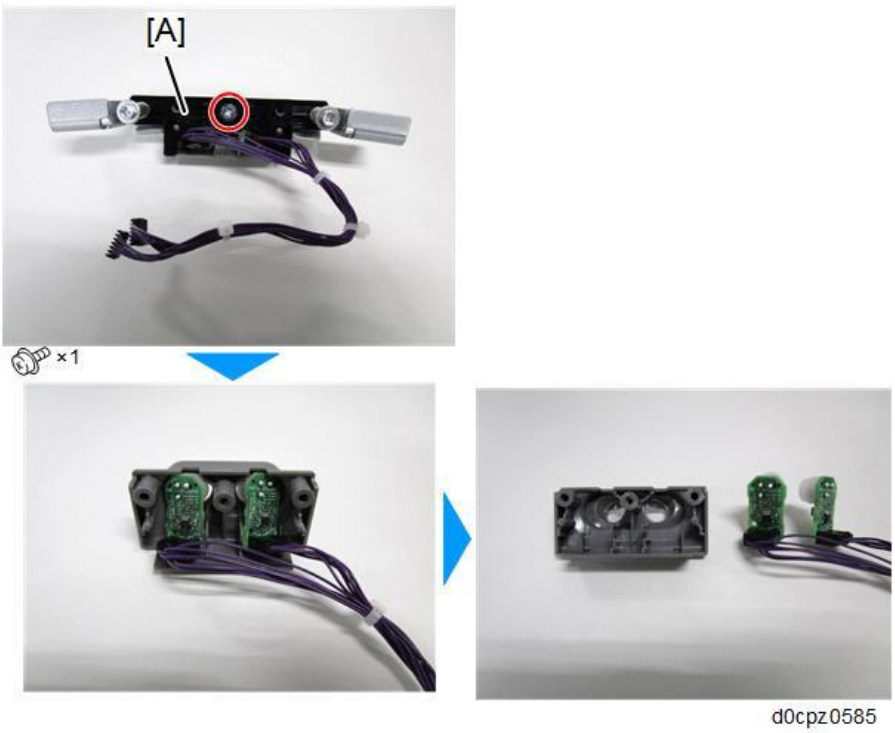
4. Remove the proximity sensor board (PCB29) [A].



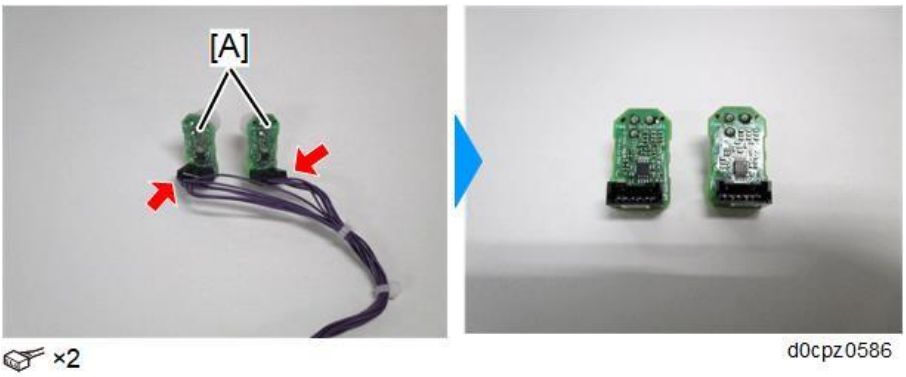
5. Remove the proximity sensor unit [A].



6. Remove the bracket [A].



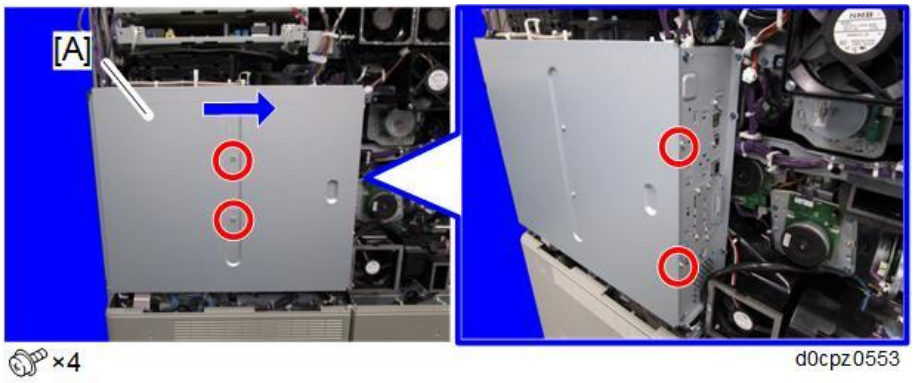
7. Remove the proximity sensor (S28) [A].



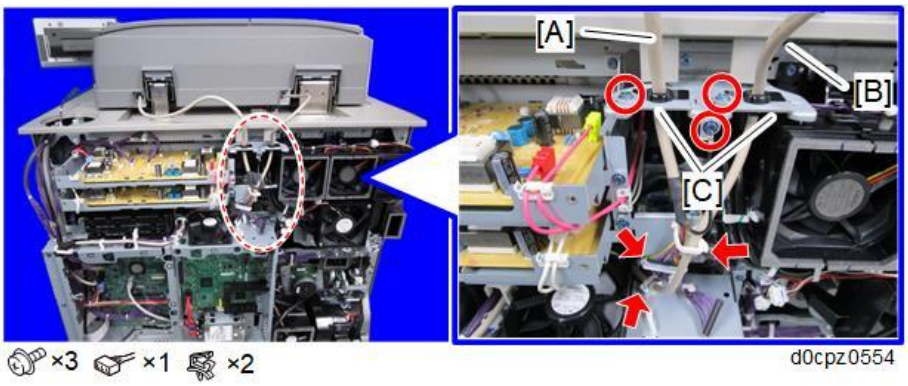
ADF

ADF Removal

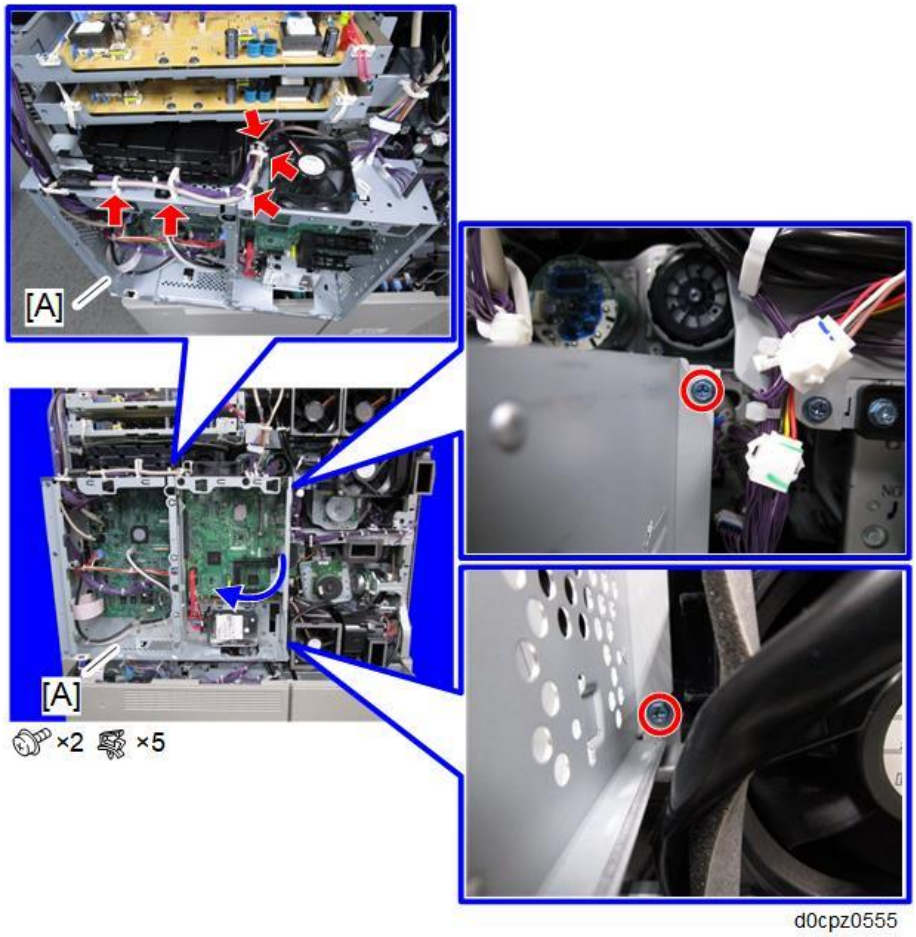
1. Remove the rear middle cover. (Rear Middle Cover)
2. Remove the controller box cover [A].



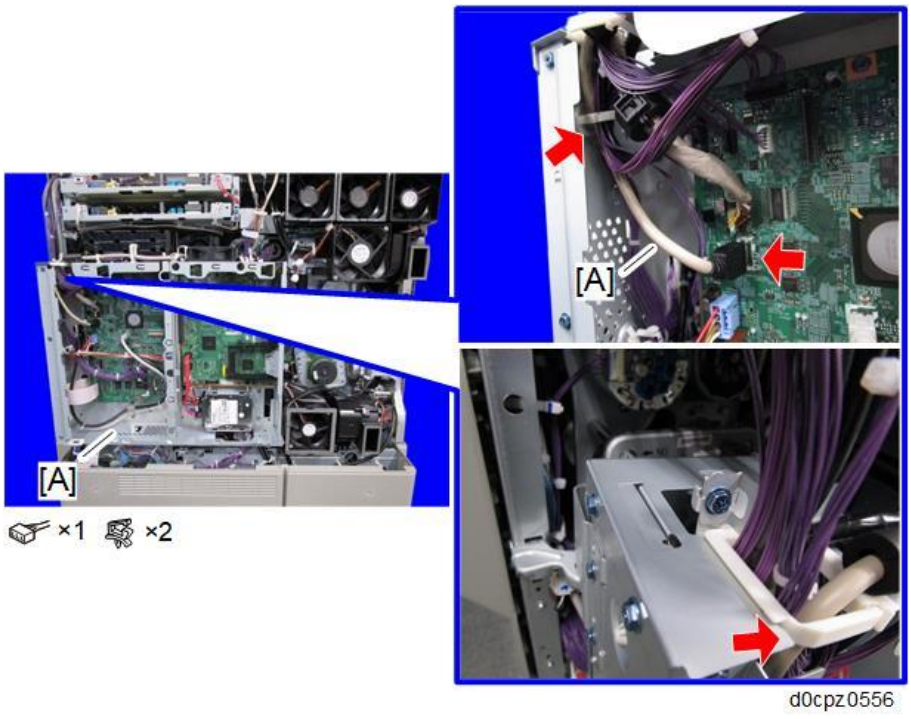
3. Disconnect the interface cable [A]. Remove the bracket [C] of the CIS unit cable [B].



4. Open the controller box [A].

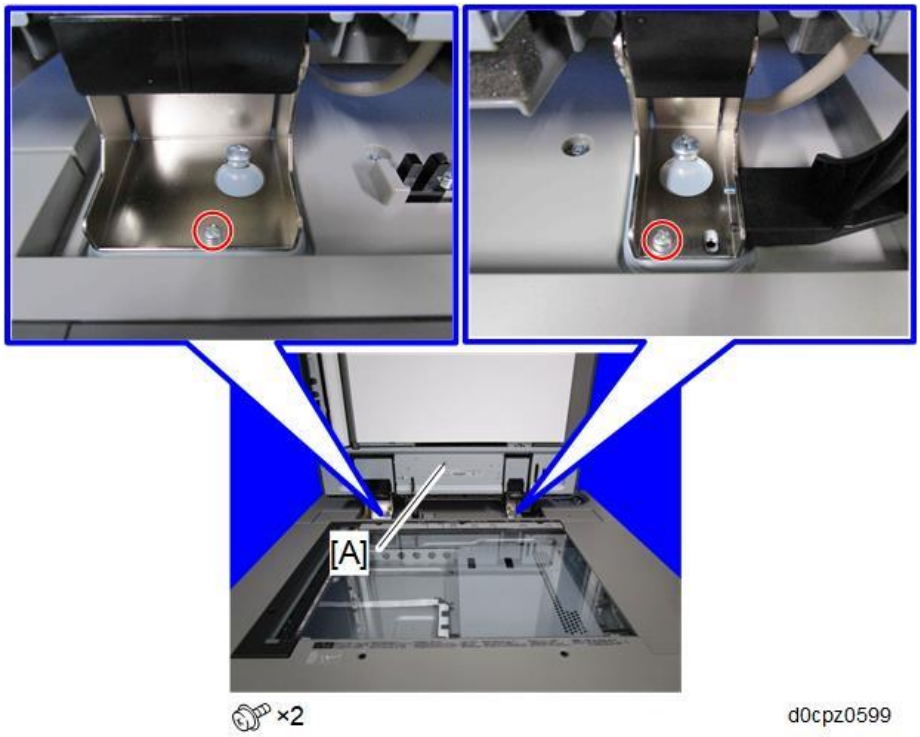


5. Remove the CIS unit cable [A].



6. Open the ADF [A].

7. Remove the fixing screws of the ADF [A].



8. While holding the left and right sides of the ADF, lift up to remove it.

Note

Route the white cable so that it comes outer side.

9. Execute SP4-730-002.

Adjustment after Replacing the ADF

CIS RGB Adjustment

Enter the four-digit numeric values for RGB that are listed on the paper that comes with the ADF into the following SP.

R: SP4-712-001 (CIS GB Adj Value: R)

G: SP4-713-001 (CIS GB Adj Value: G)

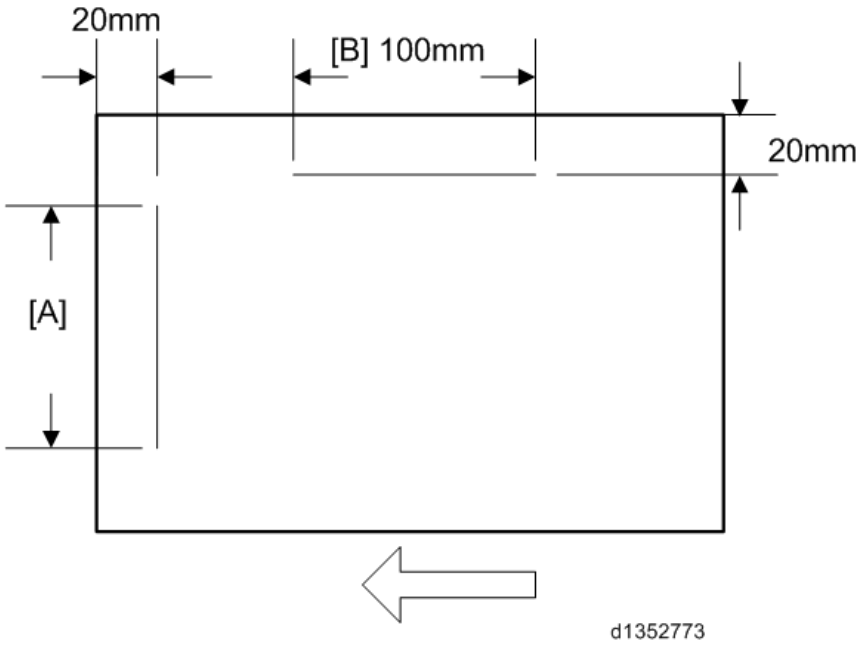
B: SP4-714-001 (CIS GB Adj Value: B)

Checking the vertical registration

SP6-006-001 (ADF Adjustment Side-to-Side Regist: Front)

SP6-006-002 (ADF Adjustment Side-to-Side Regist: Rear)

1. Create an original as shown in the following picture.



The arrows indicate the direction of feed.

2. Copy the original and make sure that the position of the line [A] is within 0±1mm
3. If not within the standard, adjust with the SP modes.

Checking the horizontal registration

SP6-006-010 (ADF Adjustment L-Edge Regist (1-Pass): Front)

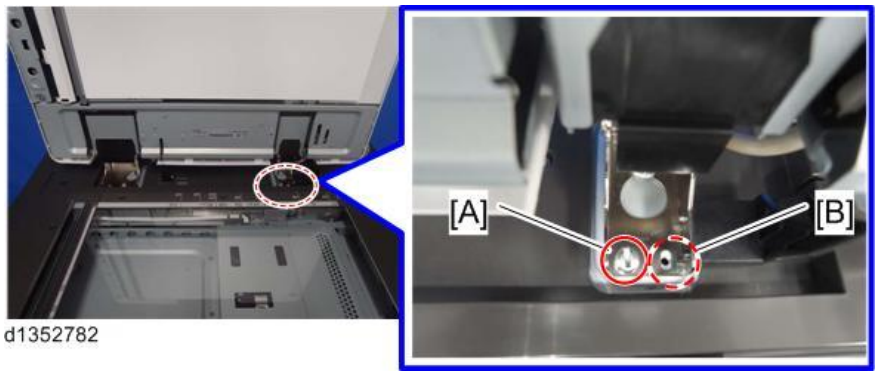
SP6-006-011 (ADF Adjustment L-Edge Regist (1-Pass): Rear)

1. Copy the original and make sure that the position of the line [B] is within 0±2mm.
2. If not within the standard, adjust with the SP modes.

Checking the skew

1. Make sure that the difference between both ends of the line [A] is within 0±2mm.

2. If not within the standard, change the position of the fixing screw [A] to the long hole [B] at the right hinge.



d1352782

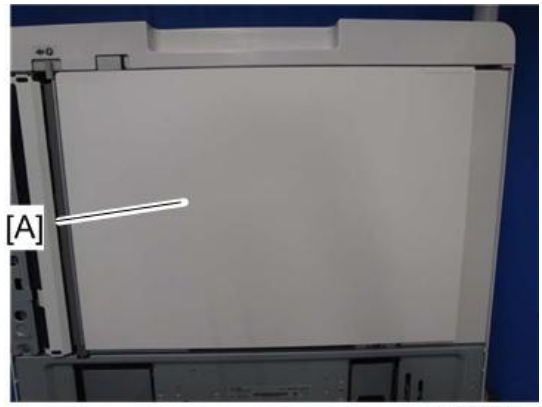
Checking the magnification

SP6-017-001 (DF Magnification Adj.)

1. Copy the original and make sure that the length of the line [B] is within 100±1mm.
2. If not within the standard, adjust with the SP mode.

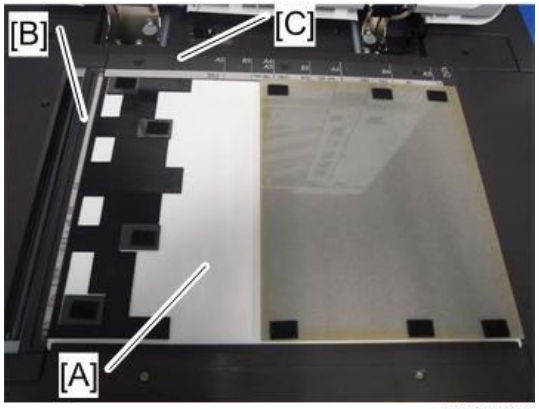
Platen Adjustment

1. Open the ADF and remove the white cover [A] (magic tape x 10).



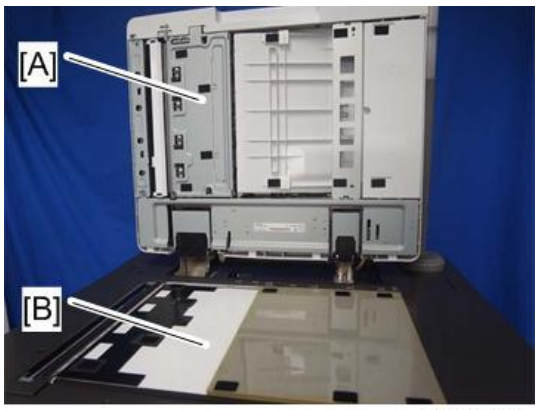
d1352781

2. Put the white cover [A] in the correct position on the exposure glass, aligning it with the glass cover [B] and the rear scale [C].



d1352783

3. Close the ADF [A] slowly and attach the white cover [B] to the ADF with the magic tape.

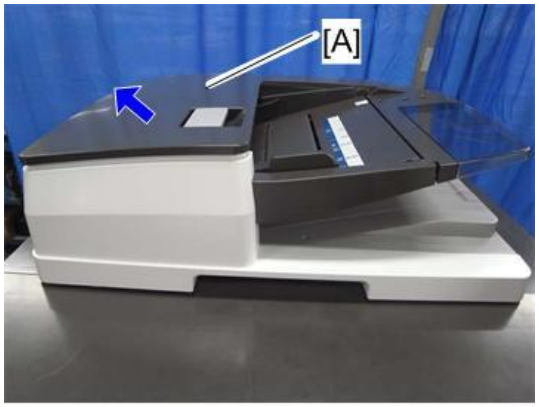


d1352784

ADF Cover

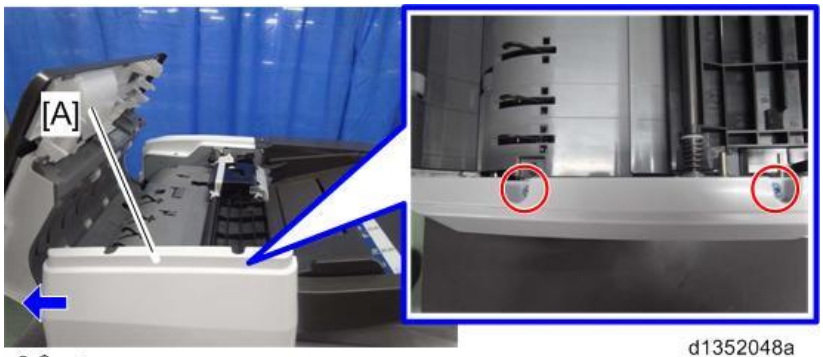
ADF Front Cover

1. Open the ADF feed cover [A].



d1352047

2. Slide the ADF front cover [A] to the left.



d1352048a

×2

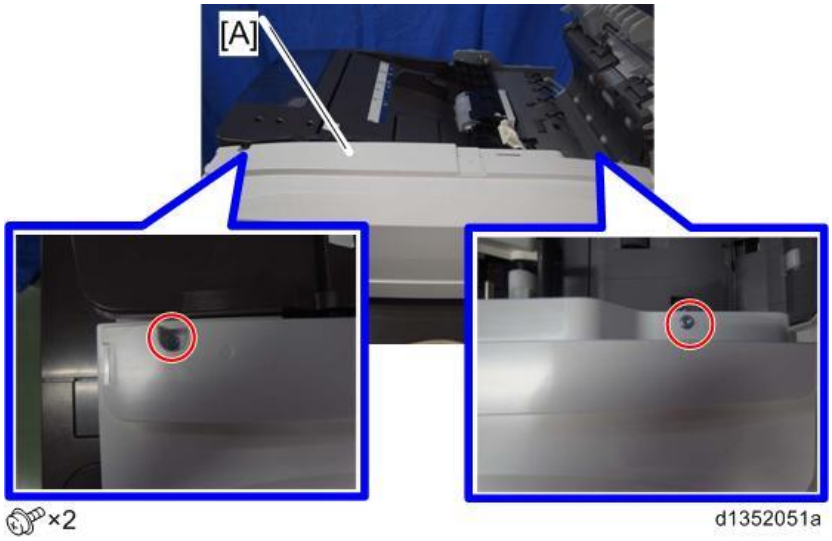
Note

- Check the position of the hooks in the photo below before removing.

ADF Rear Cover

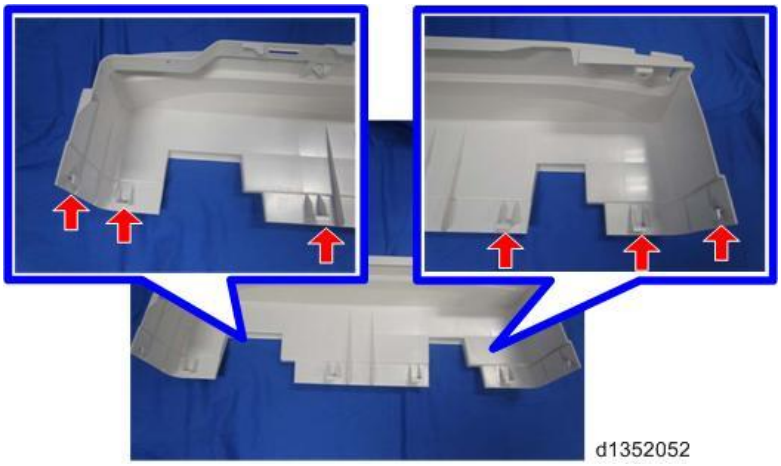
1. Open the ADF feed cover.
2. Remove the cover [A].

3. Lift off the rear cover [A].



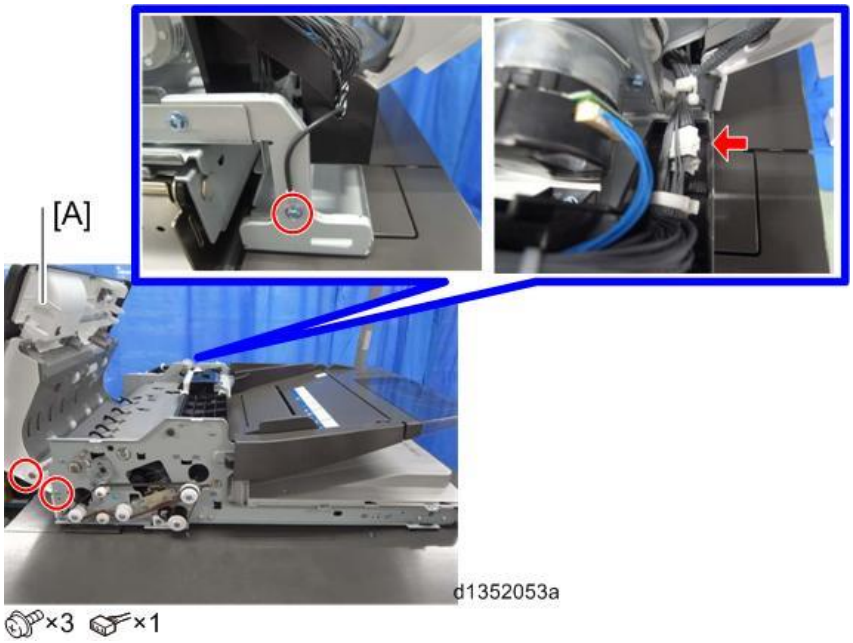
Note

- Check the position of the hooks in the photo below before removing



ADF Feed Cover

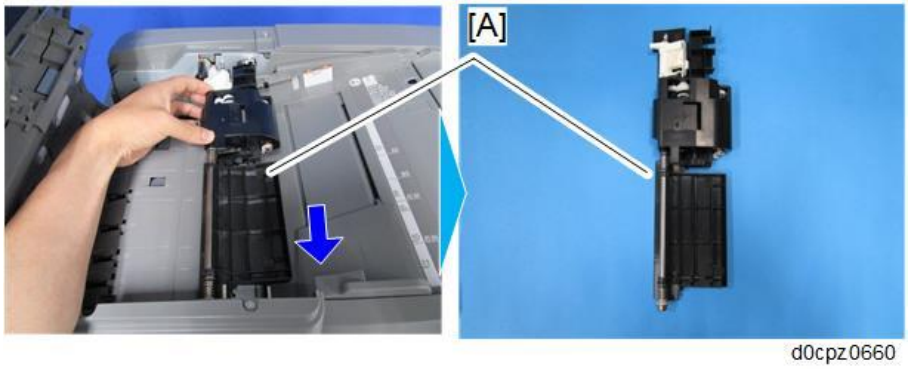
1. Remove the ADF front cover. (ADF Front Cover)
2. Remove the ADF rear cover. (ADF Rear Cover)
3. Remove the ADF feed cover [A].



Original Feed Unit

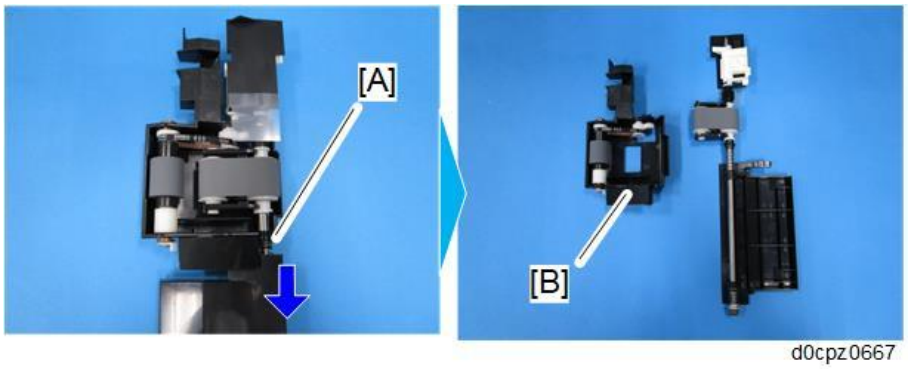
1. Open the ADF feed cover.
2. Remove the original feed unit [A]. (Pull the original feed unit, and remove the back side of the shaft.

Then remove the bushing in the foreground.)



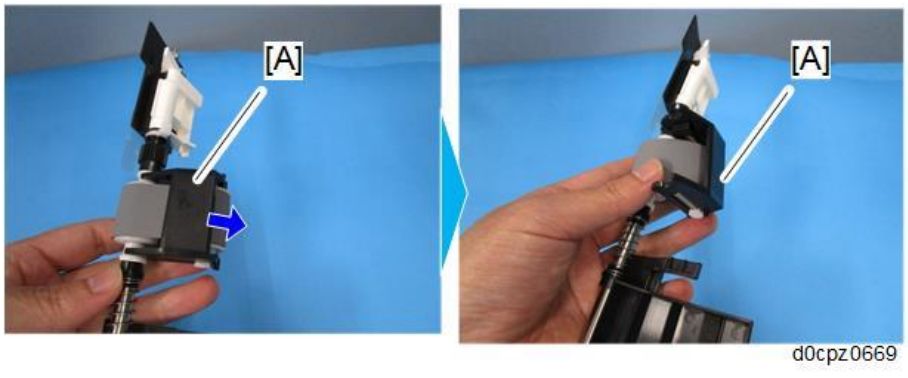
Pick-up Roller, Transport Belt

1. Remove the original feed unit. (Original Feed Unit)
2. Slide the resin bushing [A], and then remove the pick-up roller unit [B].

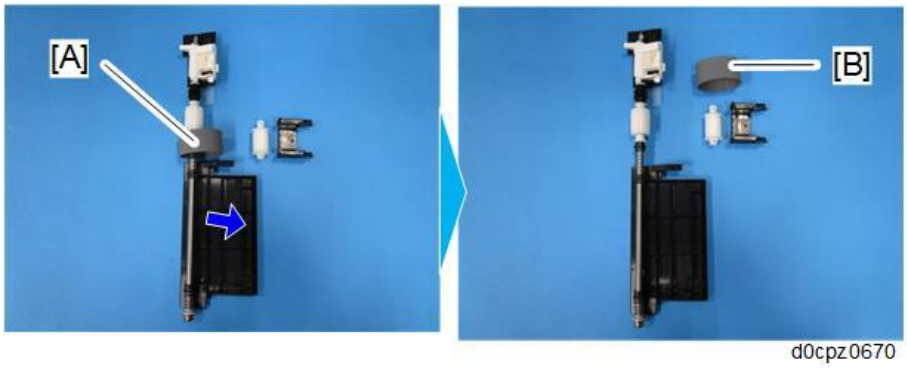


3. Remove the pick-up roller [B].

4. Lift the left and right sides of the feed belt holder [A], then remove it.



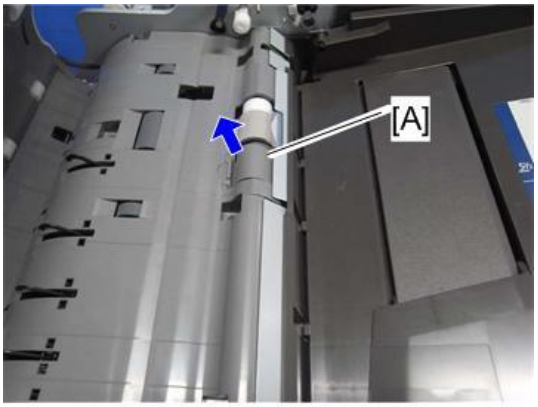
5. Remove the feed belt [B] from the feed belt holder [A].



d0cpz0670

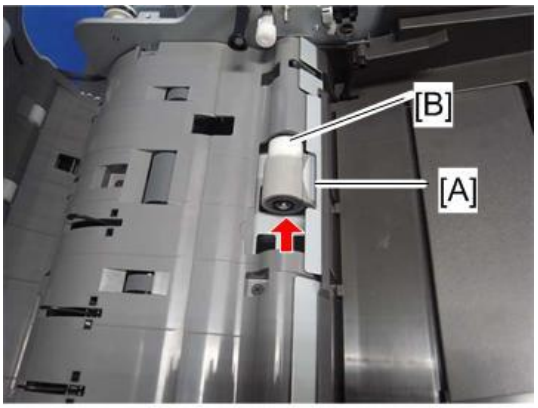
ADF Separation Roller

1. Remove the original feed unit (Original Feed Unit)
2. Remove the ADF separation roller cover [A].



d1352056

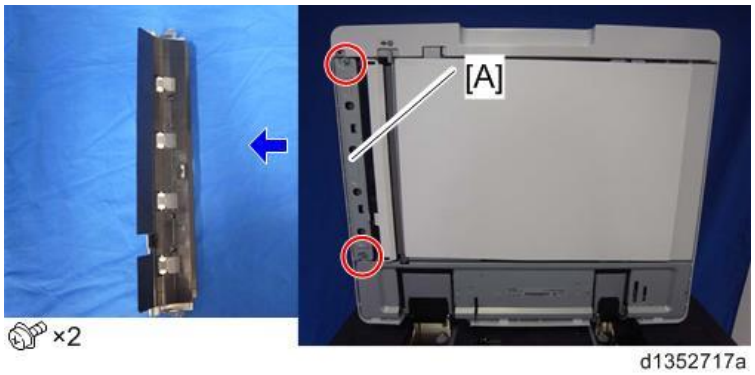
3. Remove the snap-fit. Then, remove the ADF separation roller [A] and torque limiter clutch [B].



d1352057

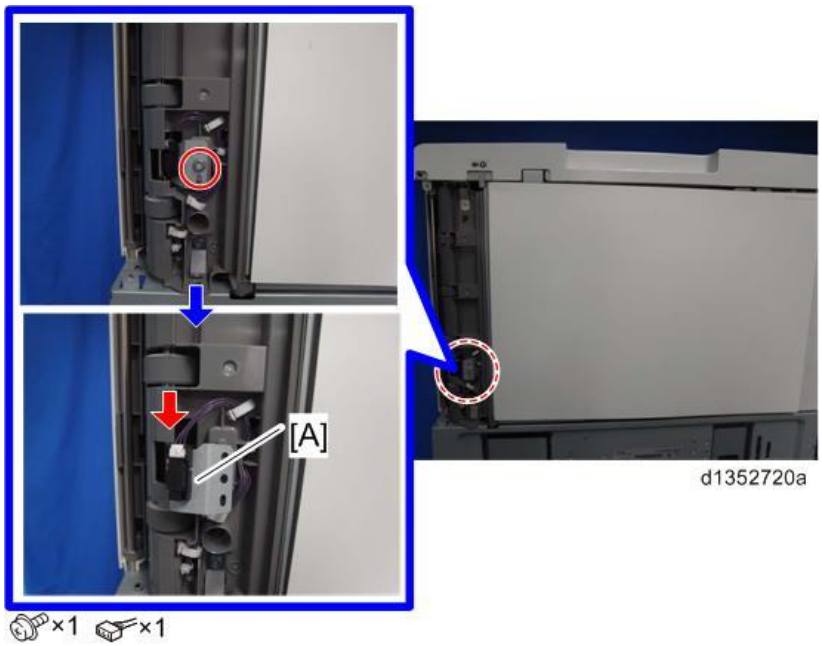
Original Registration Sensor (S143)

1. Remove the entrance lower guide [A].

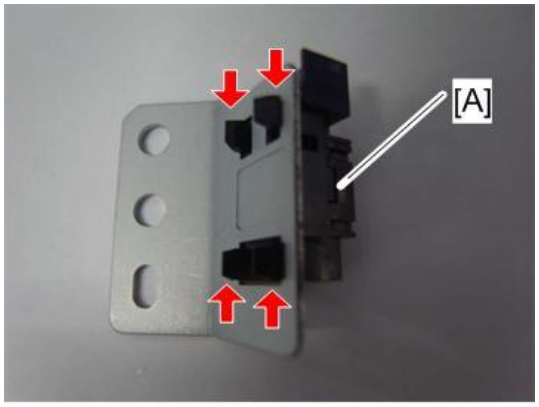


2. Disconnect a hook, and remove the scanning guide plate [A].

3. Remove the original registration sensor(S143) [A] along with the bracket.



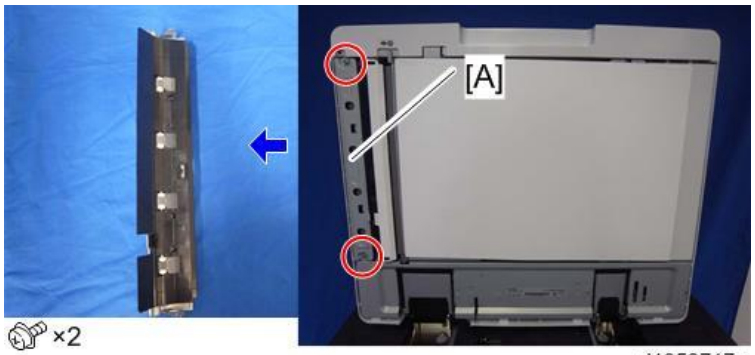
4. Disconnect the hooks, and remove the original registration sensor(S143) [A].



d1352064

Original Exit Sensor (S144)

1. Remove the entrance lower guide [A].

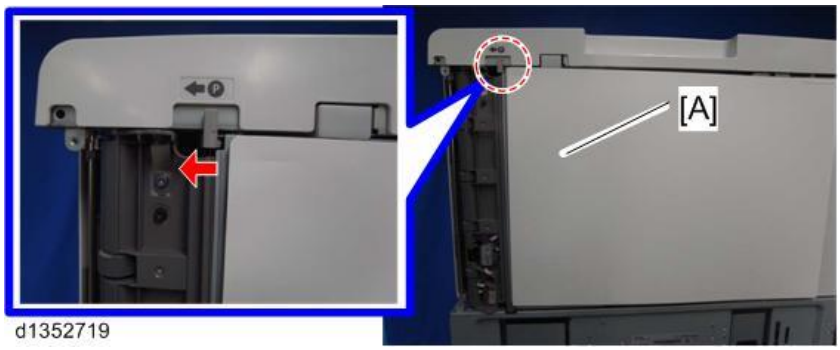


d1352717a

2. Disconnect a hook, and remove the scanning guide plate [A].

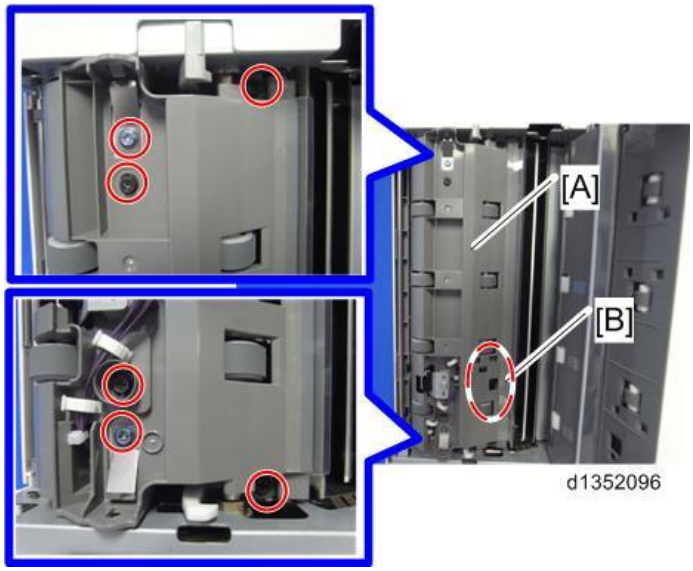
d1352718

3. Open the white cover [A].

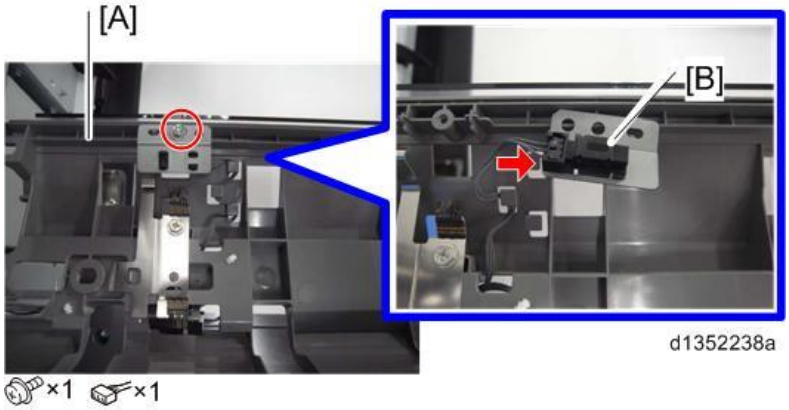


d1352719

4. Remove the original exit sensor (S144) [B], which is mounted on the upper guide [A]. (x 6)

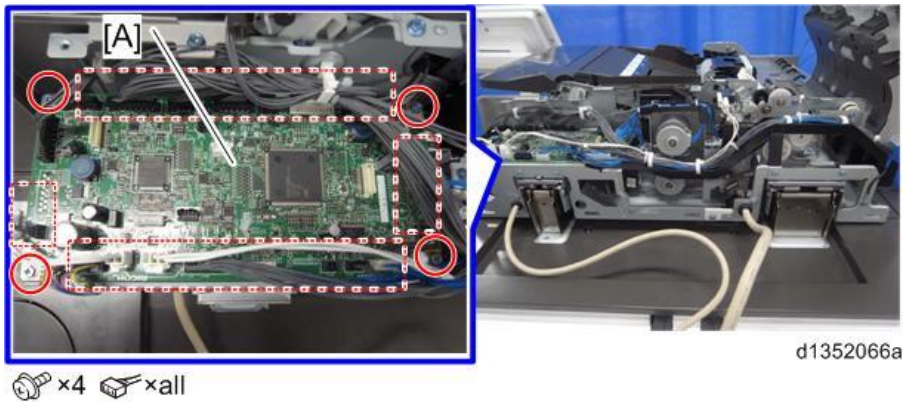


5. Remove the original exit sensor (S144) [B] from the upper guide [A].



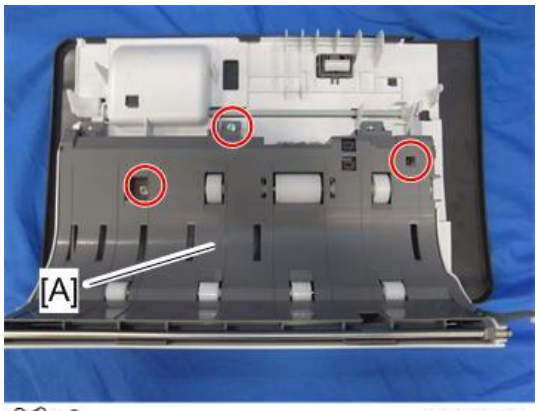
ADF Controller Board (PCB40)

1. Remove the ADF rear cover. (ADF Rear Cover)
2. Remove the ADF control board (PCB40) [A].

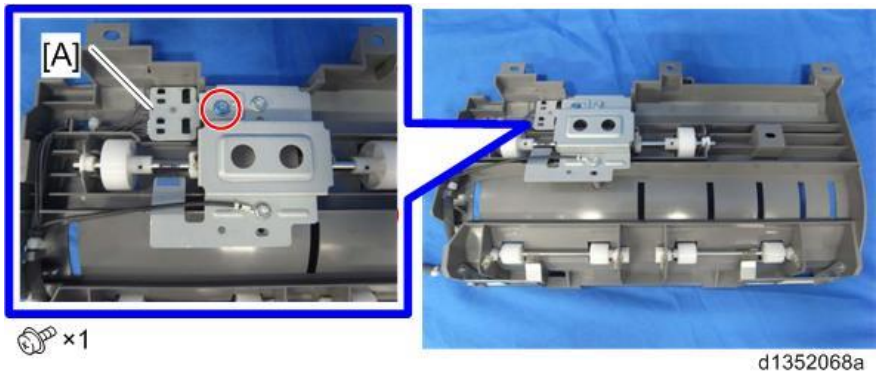


Separation Sensor (S140), Skew Correction Sensor (S141)

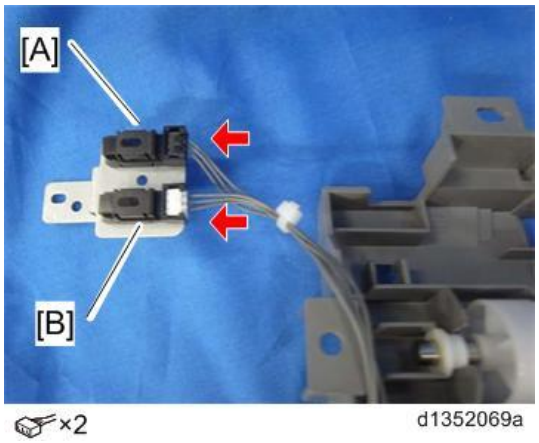
1. Remove the feed upper guide [A] in the ADF feed cover.



2. Remove the sensors along with the bracket [A].



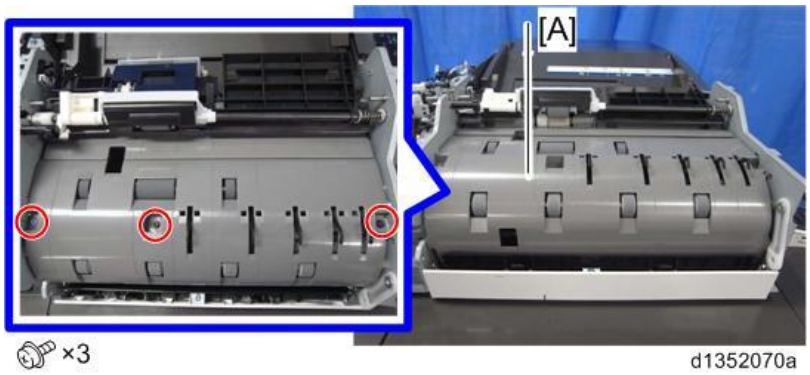
3. Remove the separation sensor (S140) [A] and skew correction sensor (S141) [B].



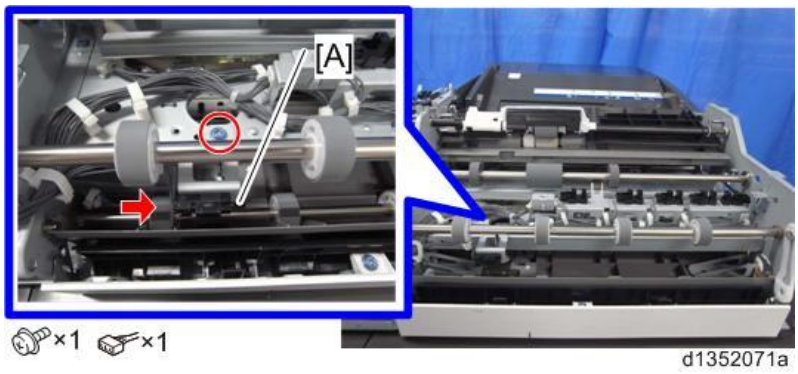
Original Width Sensors (S134), Interval Sensor (S142)

1. Remove the ADF feed cover. (ADF Feed Cover)

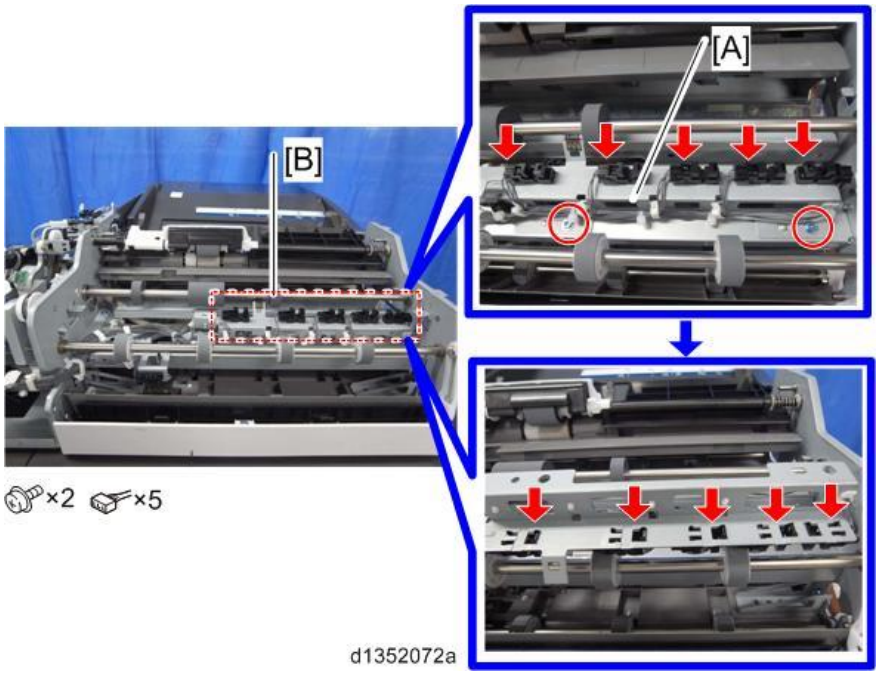
2. Remove the guide plate [A].



3. Remove the interval sensor (S142) [A].



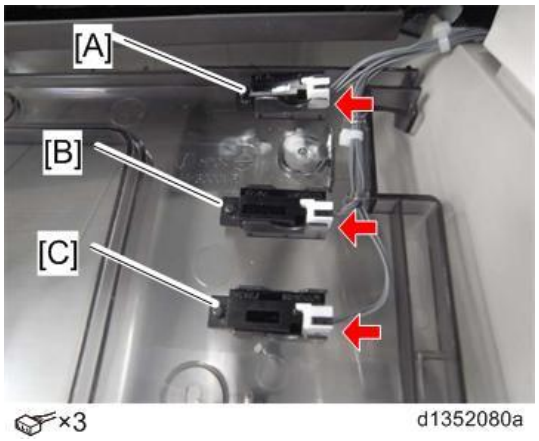
4. Remove the original width sensor guide plate [A], then remove the original width sensors (S134) (x 5) [B].



Original Length Sensor (B5, A4, LG) (S130)(S131)(S132)

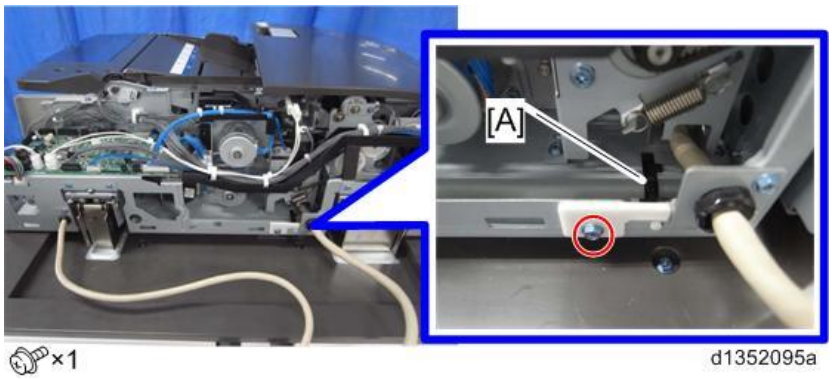
1. Raise the document tray [A], then remove the lower cover [B].

2. Remove the original length sensor (B5) (S130) [A], original length sensor (A4) (S131) [B] and original length sensor (LG) (S132) [C].



APS Feeler

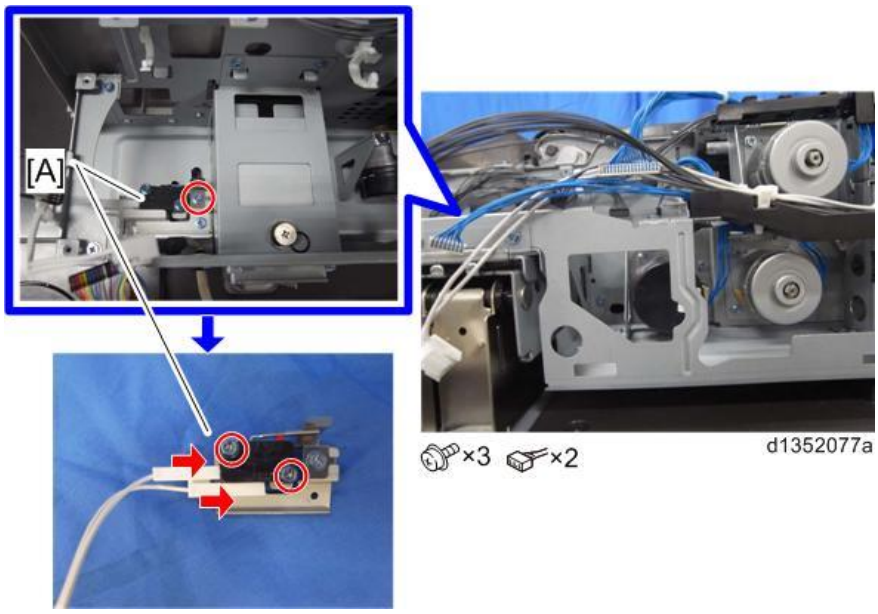
1. Remove the ADF rear cover (ADF Rear Cover)
2. Remove the APS feeler [A].



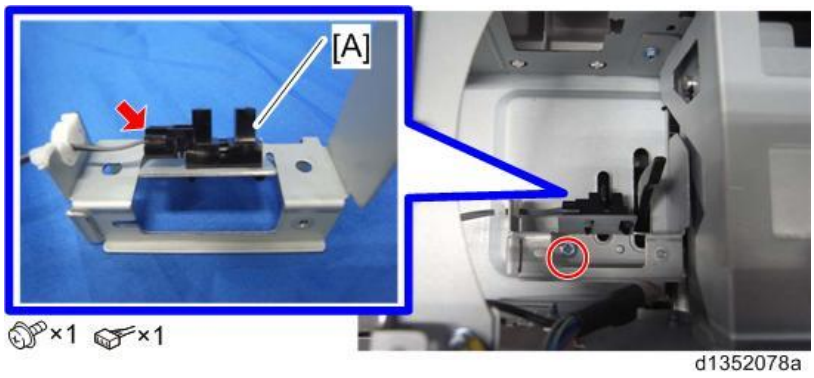
ADF Lift-Up Interlock Switch (SW16), Lift Sensor (S146)

1. Remove the ADF control board. (ADF Controller Board (PCB40))

2. Remove the ADF lift-up interlock switch (SW16) [A] along with the bracket.



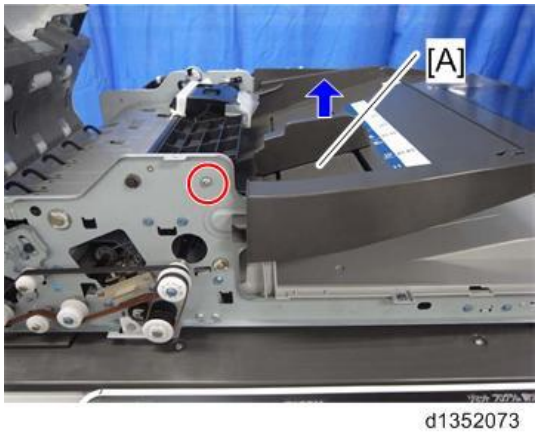
3. Remove the lift sensor (S146) [A].



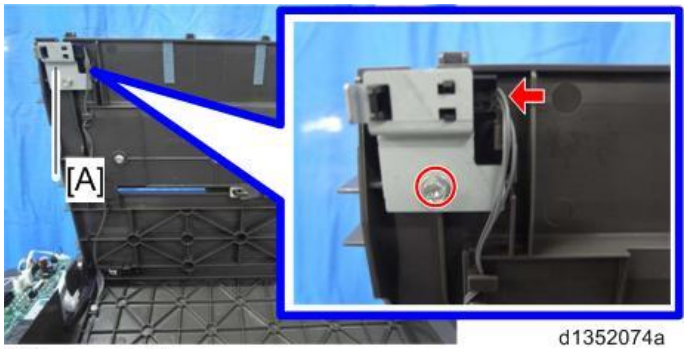
Original Set Sensor (S139)

1. Remove the ADF front cover. (ADF Front Cover)

2. Remove the screw and raise the original tray [A].



3. Remove the original set sensor (S139) [A].



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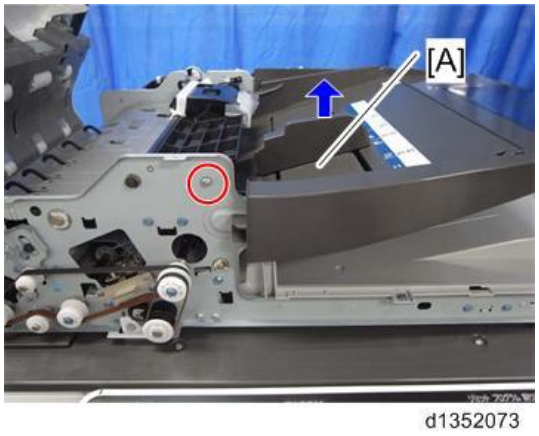
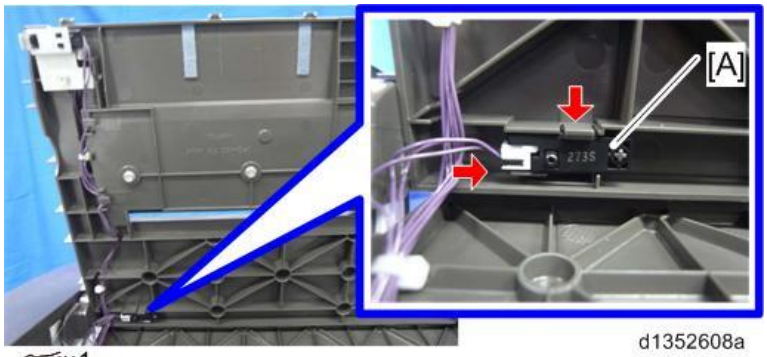
Original Length Sensor (A4/LT) (S133)

1. Remove the ADF front cover. (ADF Front Cover)
2. Remove the screw and raise the original tray [A].



3. Disconnect a hook, and remove the original length sensor (A4/LT) (S133) [A].



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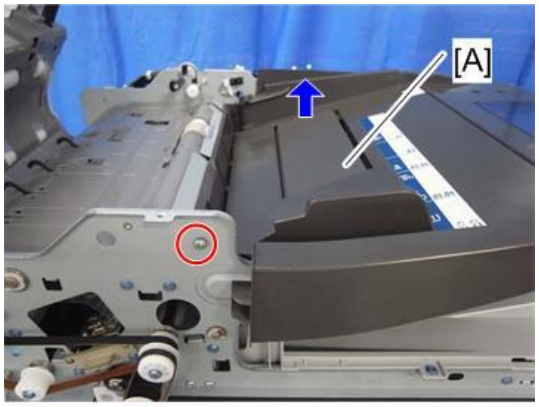
Bottom Plate HP Sensor (S148)

1. Remove the original feed unit. (Original Feed Unit)
2. Remove the ADF front cover. (ADF Front Cover)

3. Remove the screw and raise the original tray [A].



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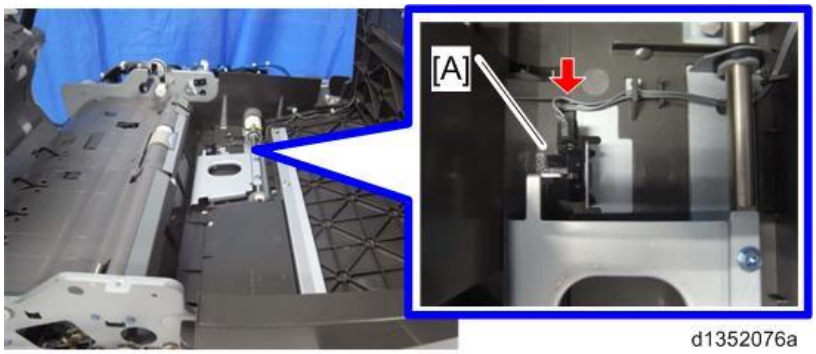
4. Remove the bottom plate HP sensor (S148) [A].



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Bottom Plate Position Sensor (S149)

1. Remove the original feed unit. (Original Feed Unit)
2. Remove the ADF front cover. (ADF Front Cover)
3. Remove the bottom plate position sensor (S149) [A].

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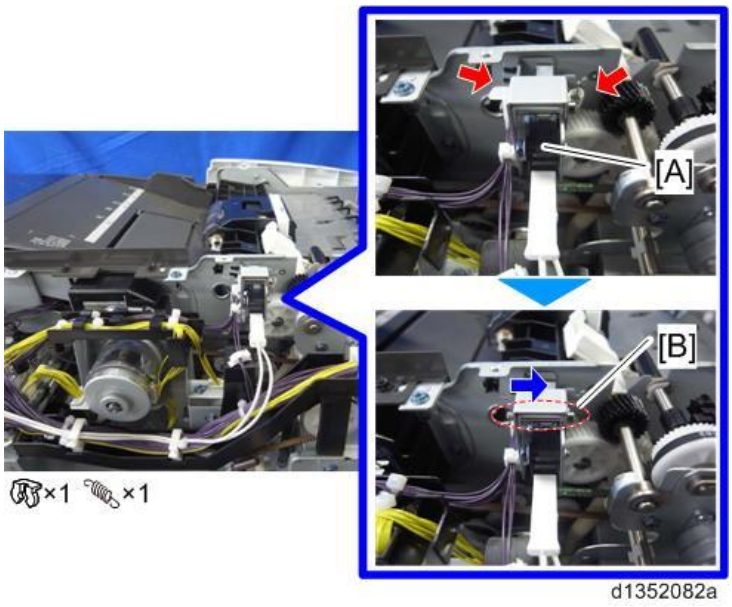
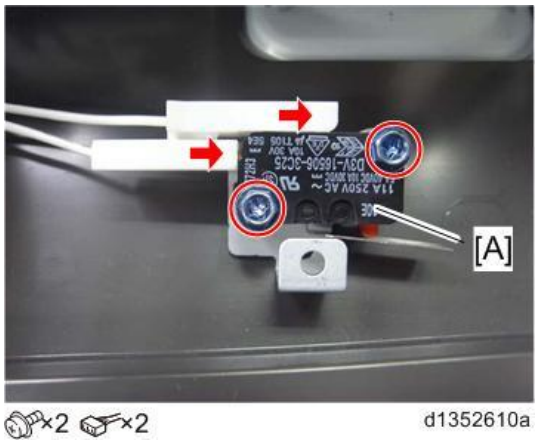
ADF Feed Cover Interlock Switch (SW15), Pick-up Roller HP Sensor (S147)

1. Remove the ADF rear cover. (ADF Rear Cover)
2. Remove the ADF feed cover interlock switch (SW15) [A] from the retaining bracket. (Pull the pin [B]

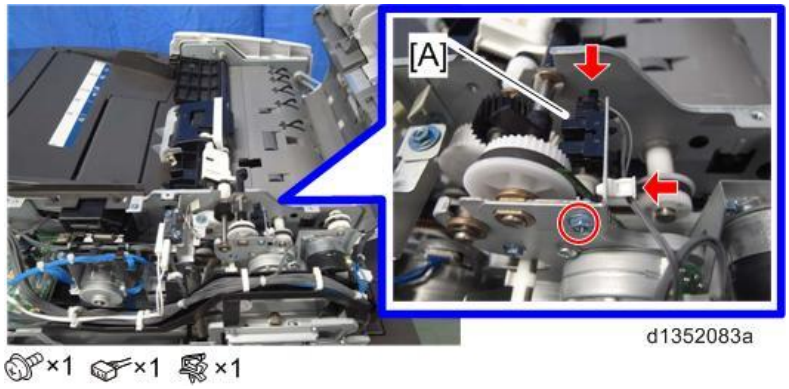
to the right.)



3. Remove the ADF feed cover interlock switch (SW15) [A].



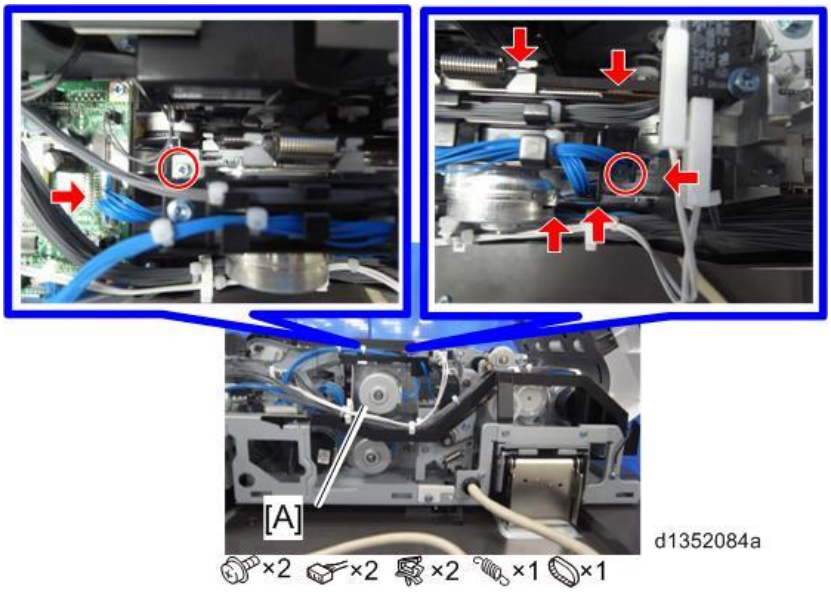
4. Remove the pick-up roller HP sensor (S147) [A] along with the bracket.



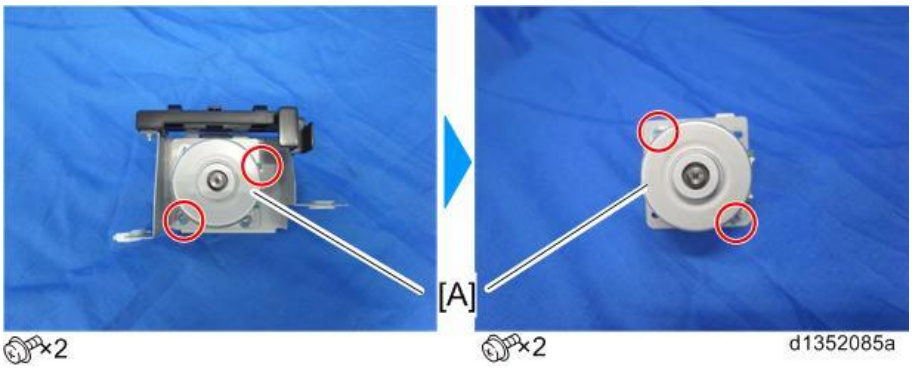
Pull-out Motor (M73)

1. Remove the ADF rear cover. (ADF Rear Cover)

2. Remove the Pull-out Motor (M73) [A] along with the frame.



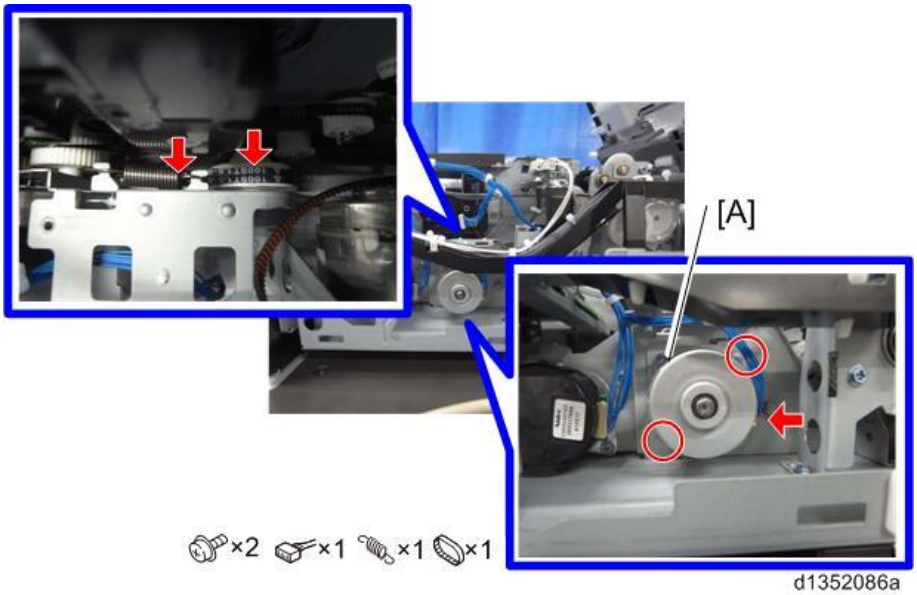
3. Remove the Pull-out Motor (M73) [A] from the bracket.



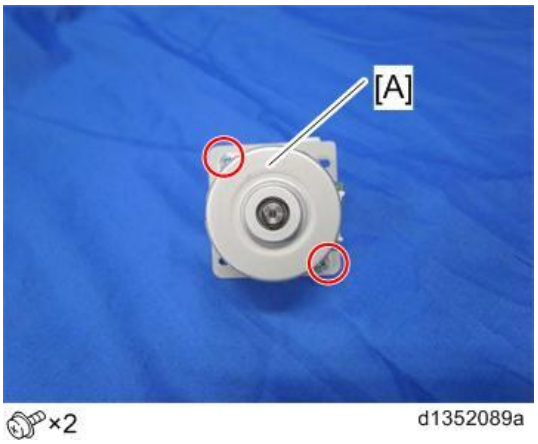
ADF Scanning Motor (M75)

1. Remove the ADF entrance motor along with the frame. (Pull-out Motor (M73))

2. Remove the ADF scanning motor (M75) [A] along with the bracket.



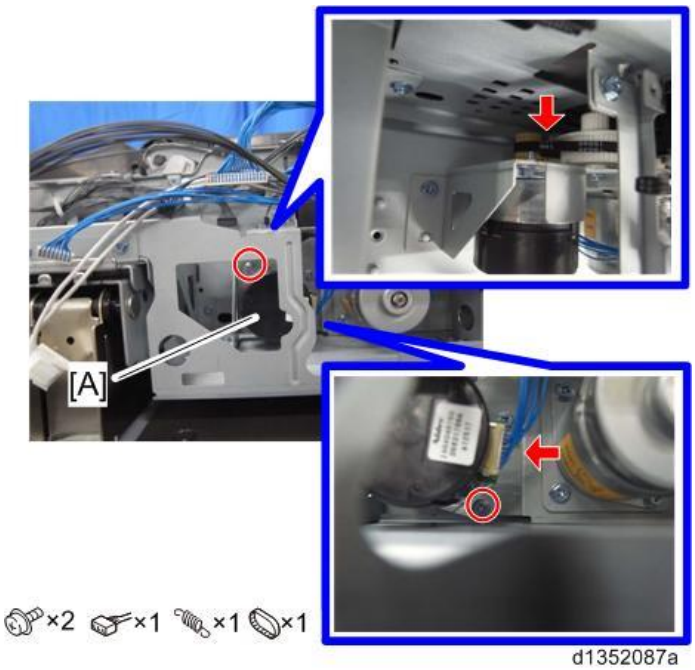
3. Remove the ADF scanning motor (M75) [A] from the bracket.



ADF Exit Motor (M74)

1. Remove the ADF control board. (ADF Controller Board (PCB40))

2. Remove the ADF exit motor (M74) [A].



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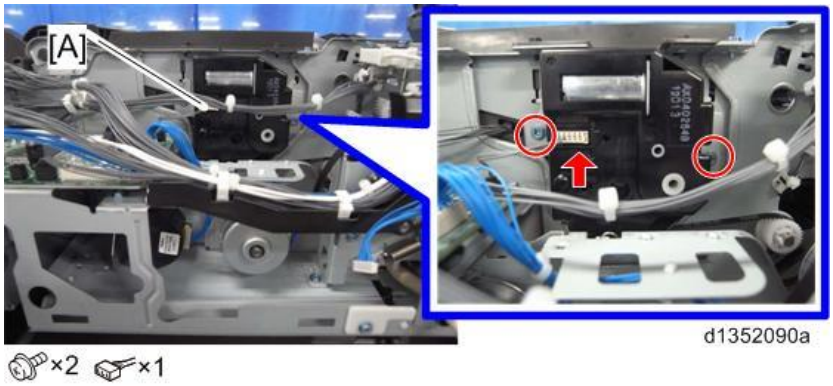
ADF Bottom Plate Lift Motor (M70)

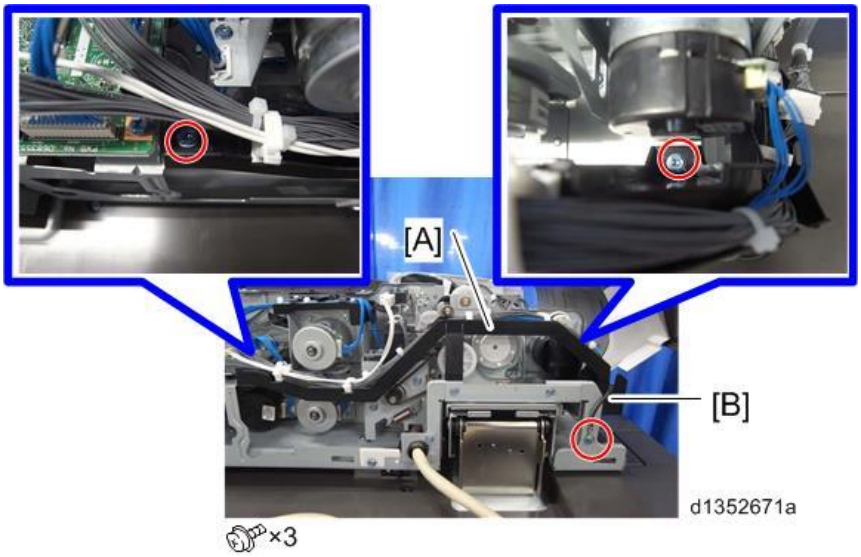
1. Remove the pull-put motor along with the frame. (Pull-out Motor (M73))

2. Remove the ADF bottom plate lift motor (M70) [A].

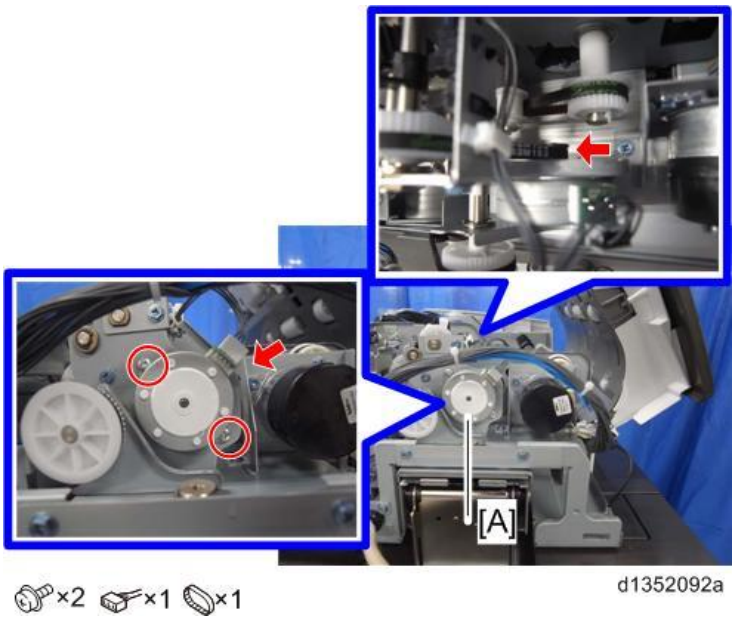


ADF Pick-up Roller Lift Motor (M71)

1. Remove the ADF rear cover. (ADF Rear Cover)
2. Remove the frame (black) [A] and the grounding wire [B].



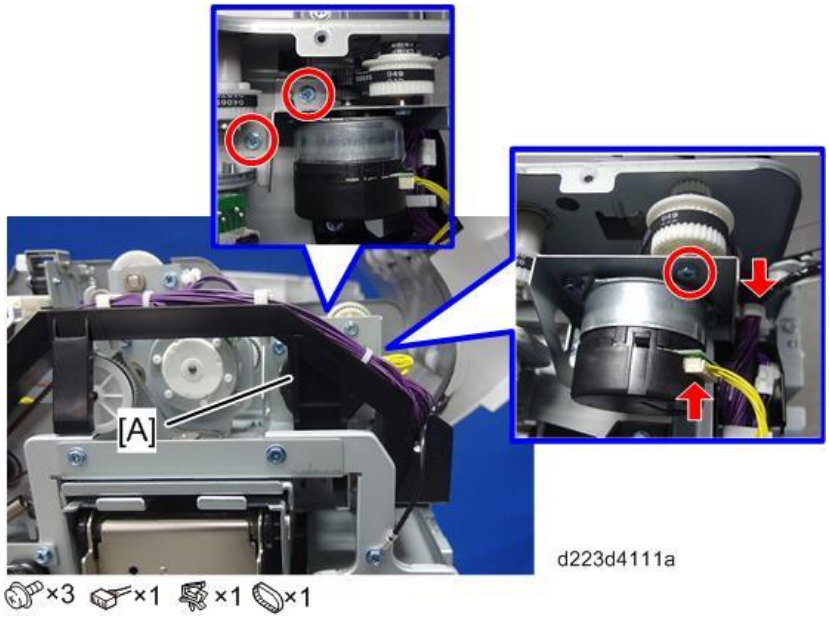
3. Remove the ADF pick-up roller lift motor (M71) [A].



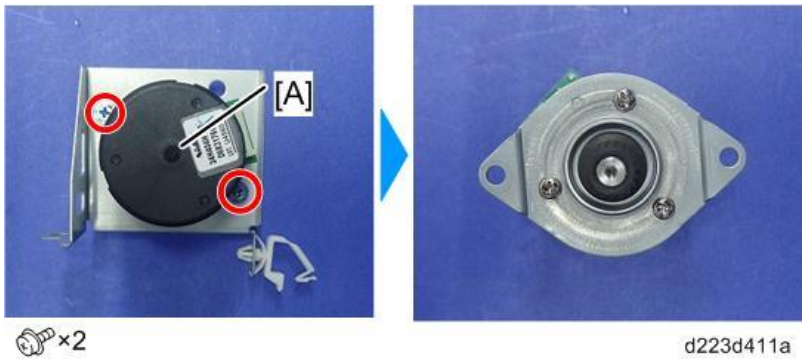
ADF Transport Motor (M76)

1. Remove the ADF rear cover. (ADF Rear Cover)

2. Remove the ADF transport motor (M76) along with the bracket.

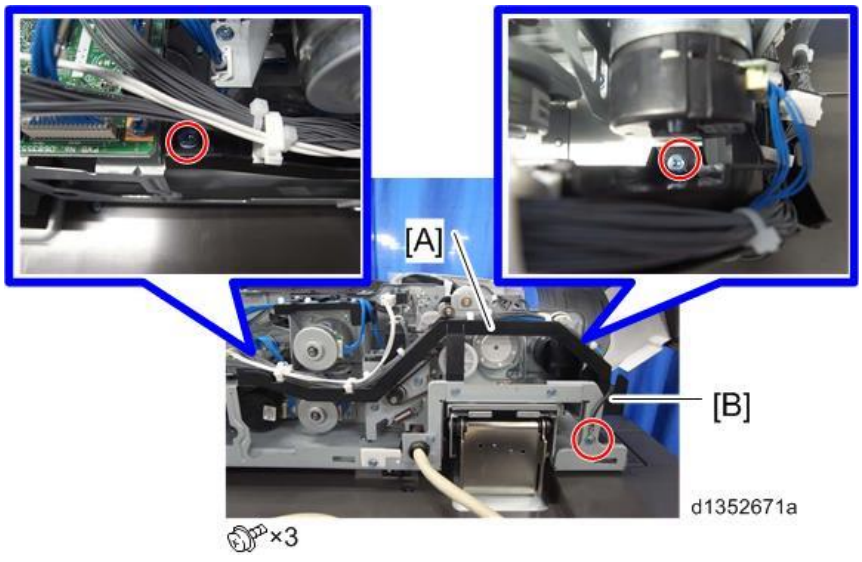


3. Remove the ADF transport motor (M76) from the bracket.

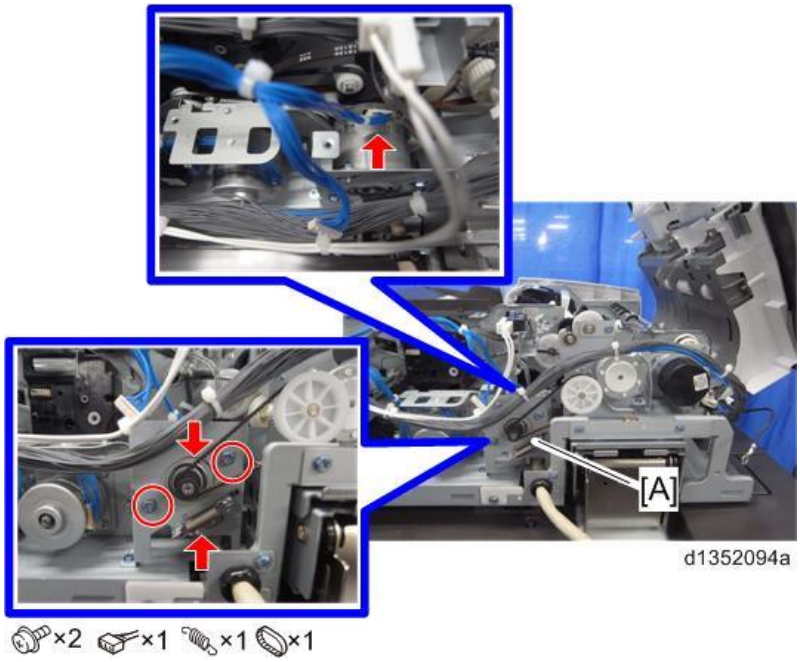


ADF Feed Motor (M72)

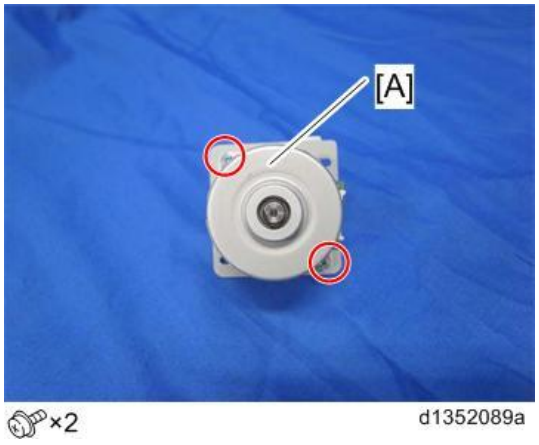
1. Remove the ADF rear cover. (ADF Rear Cover)
2. Remove the frame (black) [A] and the grounding wire [B].



3. Remove the pull-out motor along with the frame. (Pull-out Motor (M73))
4. Remove the ADF feed motor (M72) [A] along with the bracket.



5. Remove the ADF feed motor (M72) [A] from the bracket.

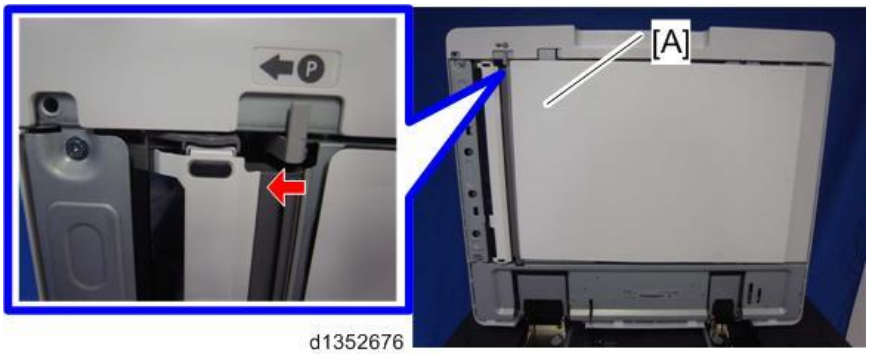


CIS Unit (PCB41)

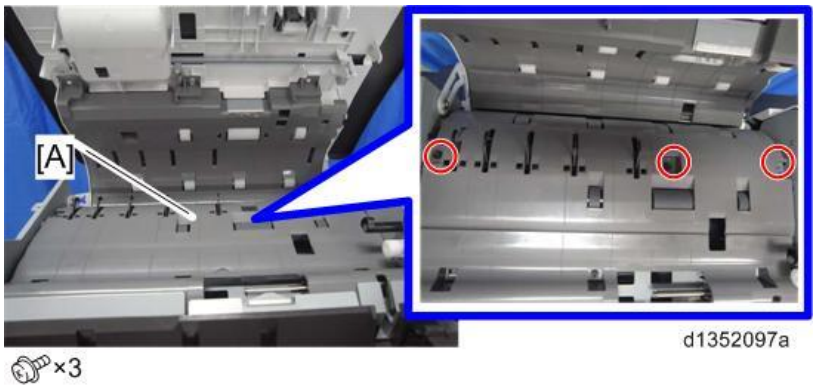
Note

- To prevent scratches on the surface of the CIS glass, removal of the CIS unit (PCB41) must be

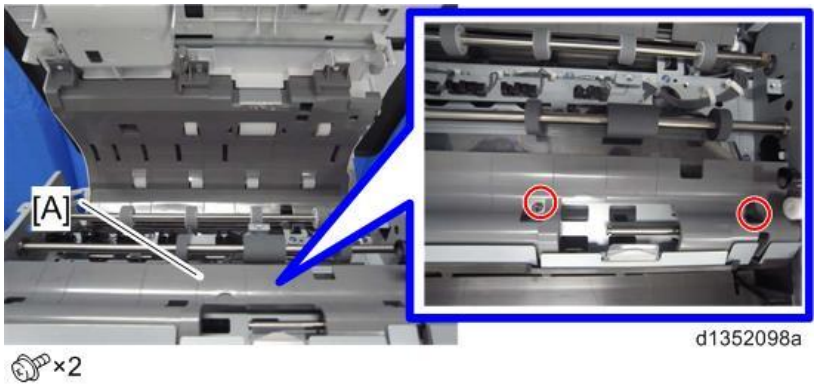
done with the white cover [A] open.



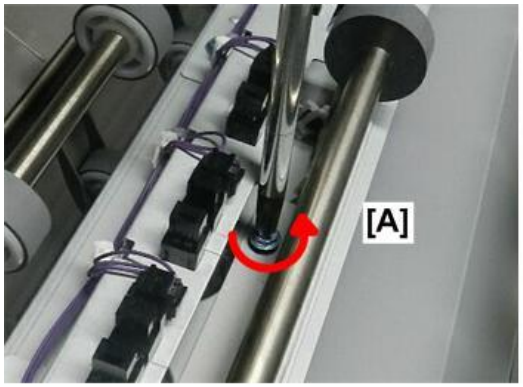
1. Remove the original feed unit. (Original Feed Unit)
2. Remove the ADF separation roller. (ADF Separation Roller)
3. Remove the ADF front cover. (ADF Front Cover)
4. Remove the guide plate (large) [A].

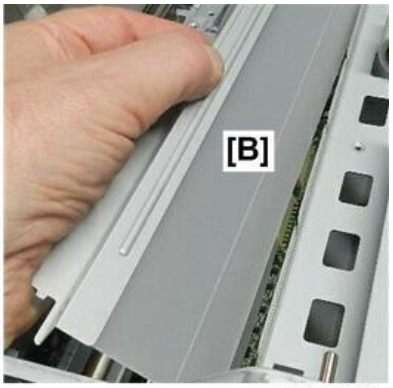


5. Remove the guide plate (small) [A].



6. Remove the guide plate [A].





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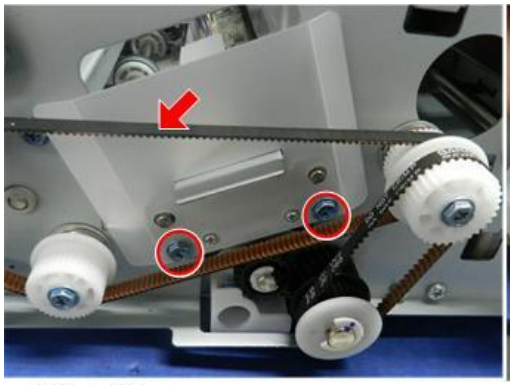
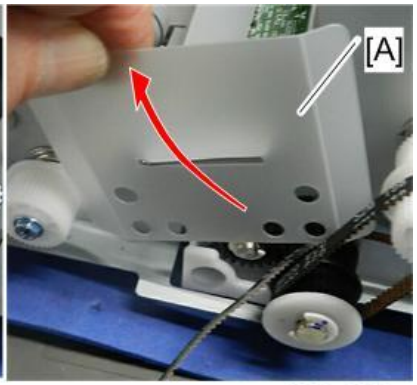
Note

- Do not fold or bend the guide plate [A], because the mylar [B] is attached to the plate.

7. Remove the polyester film [A] from the front side.





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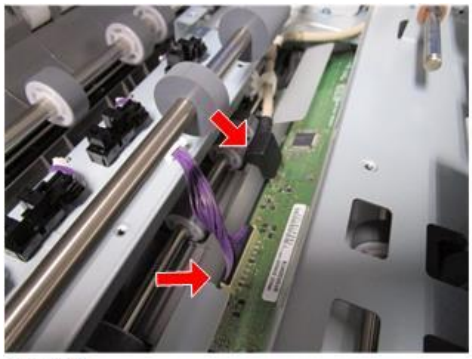
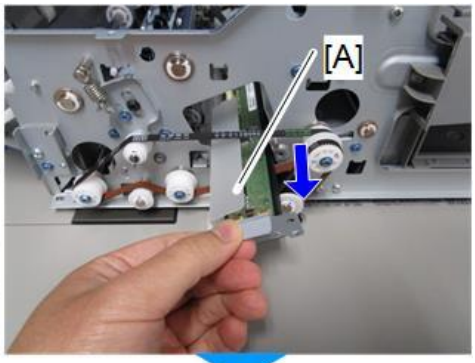
8. Pull the CIS unit (PCB41) [A] out slowly, and lay it on a flat and clean surface.





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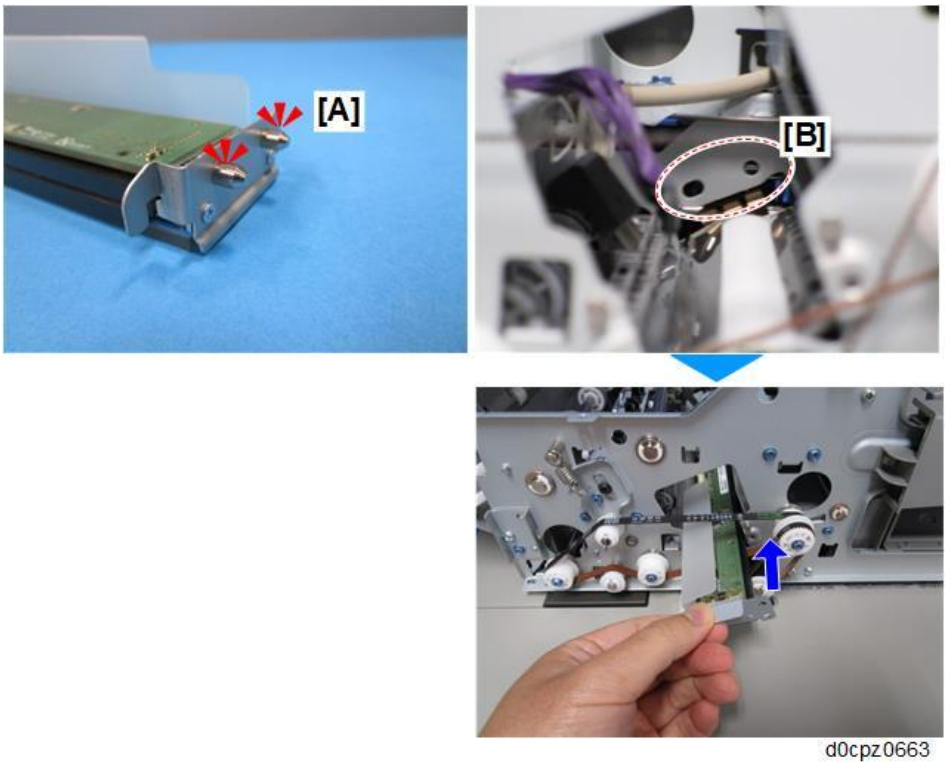
Note

- To re-install the CIS unit, two pegs [A] of the CIS unit fit into two holes [B] at the back of the ADF unit. Set the CIS in its channel so it is perfectly flat, and push it slowly to the rear until the pegs slide into the holes.



9. Execute SP4-721-001, and then execute SP4-730-004.

Note

Close the ADF when executing the SP.

CIS White Roller Cleaning

Note

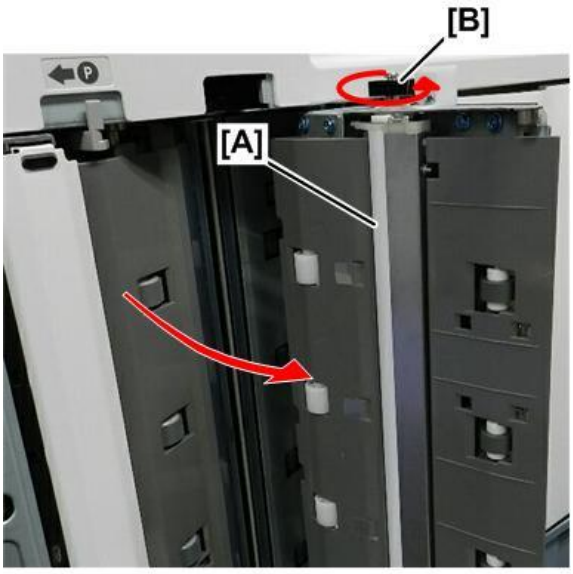
- Frequently inspect the CIS white roller. A dirty or incorrectly installed white roller will cause the machine to issue SC152-00 (White Level Error: Back Side).

1. Open the ADF.

2. Release the pawl at the upper left corner, and open the white plate.

d223c3741

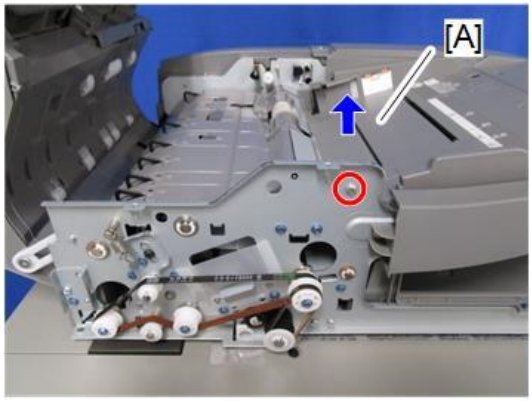
3. Keep the white cover opened, and rotate the white roller [A] by its gear [B], while using a clean, dry cloth to wipe the surface of the roller clean.



d223d4110

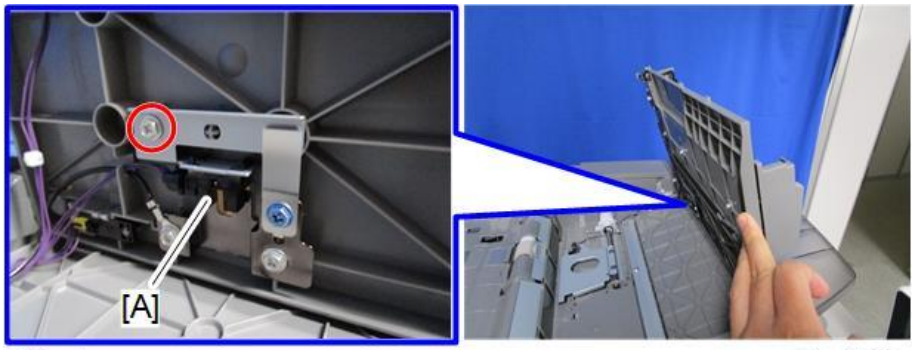
Small Size Paper Tray Set Sensor (S145)

1. Remove the original feed unit.
2. Remove the ADF front cover.
3. Remove the screw and raise the original tray [A].



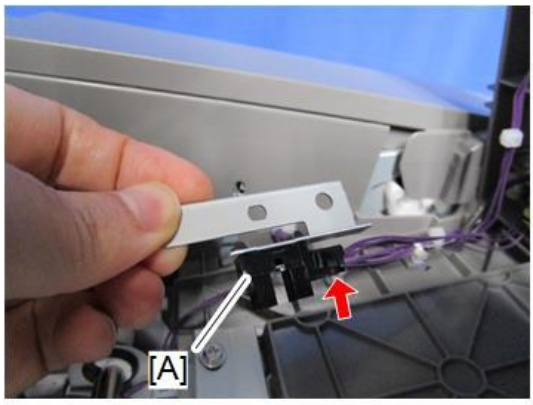
×1 d0cpz0664

4. Remove the small size paper tray set sensor (S145) [A] with bracket.



×1 d0cpz0665

5. Remove the small size paper tray set sensor (S145) [A].

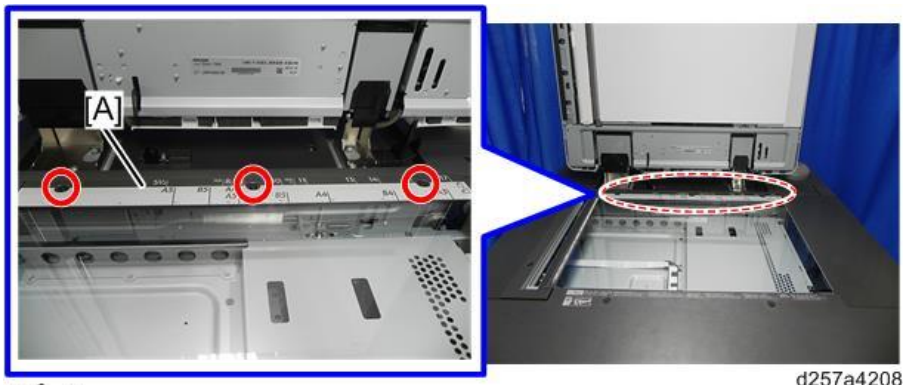


×1 ×1 d0cpz0666

Scanner Unit

Exposure Glass

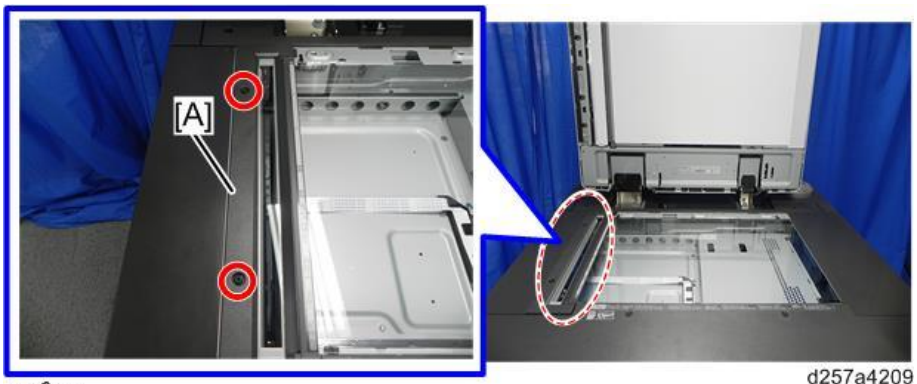
1. Remove the rear scale [A].



d257a4208

×3

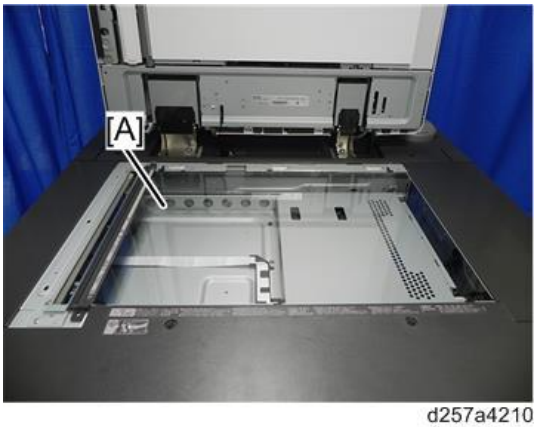
2. Remove the glass cover [A].



d257a4209

×2

3. Remove the exposure glass [A].



d257a4210

Note

- When attaching the glass cover, ensure that the glass cover is not riding on the upper front cover or the upper rear small cover.

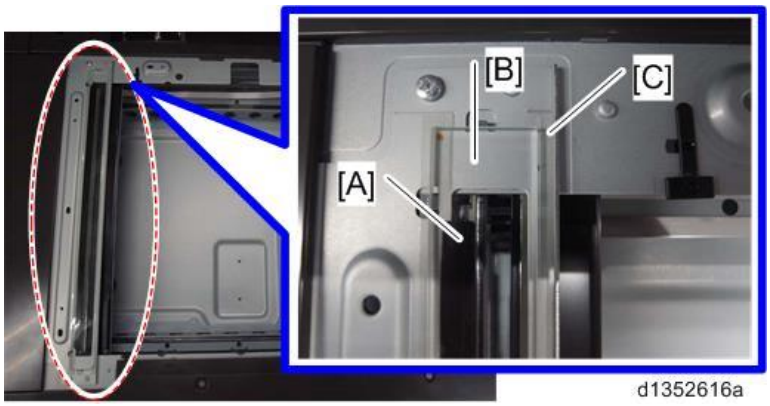
ADF Exposure Glass, Gap Sheet (IM C6500/C8000)

Note

- The IM C6500/C8000 and Pro C5300S/C5310S have different ADF document transport systems. IM C6500/C8000 uses a non-contact transport system, so the glass replacement procedure is changed accordingly.

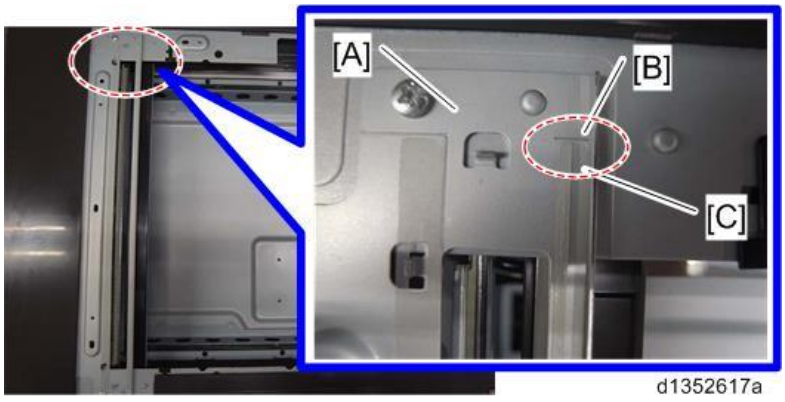
How to Remove the ADF Exposure Glass and the Gap Sheet

1. Remove the exposure glass (Exposure Glass)
2. Remove the gap sheet (black) [A], ADF exposure glass [B] and exposure glass seal (transparent) [C].

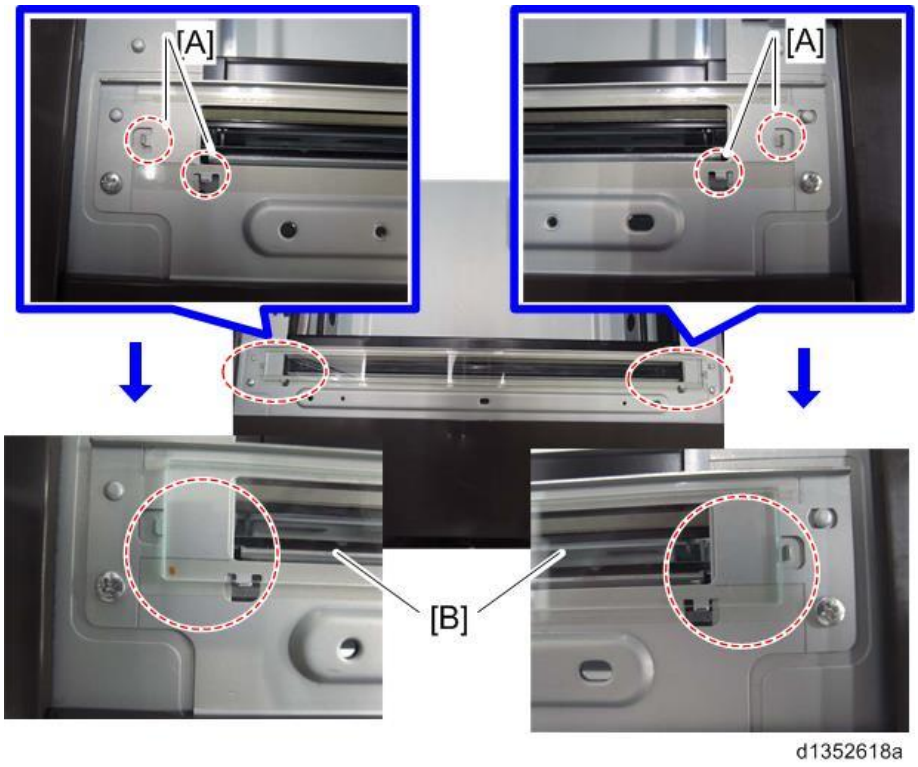


How to Attach the ADF Exposure Glass and the Gap Sheet

1. Clean the place to attach the exposure glass seal on the exposure glass bracket with alcohol.
2. Attach the exposure glass seal [C] so that the corner with the angle cut off aligns with the marking [B] on the exposure glass bracket [A].



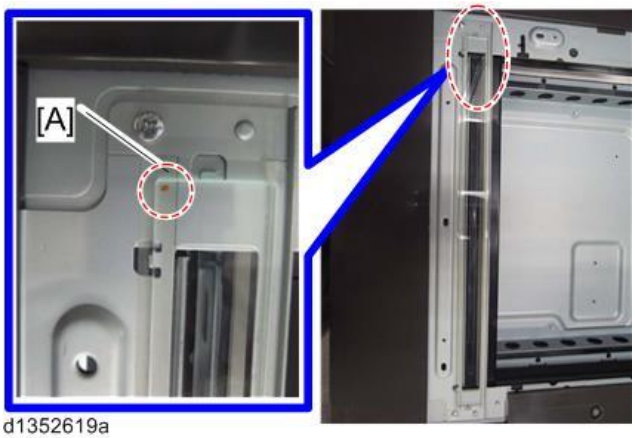
3. Peel off the release paper of the exposure glass seal.
4. Attach the ADF exposure glass [B], so that the edges of the ADF exposure glass touch the tabs [A] on the exposure glass bracket.



d1352618a

Note

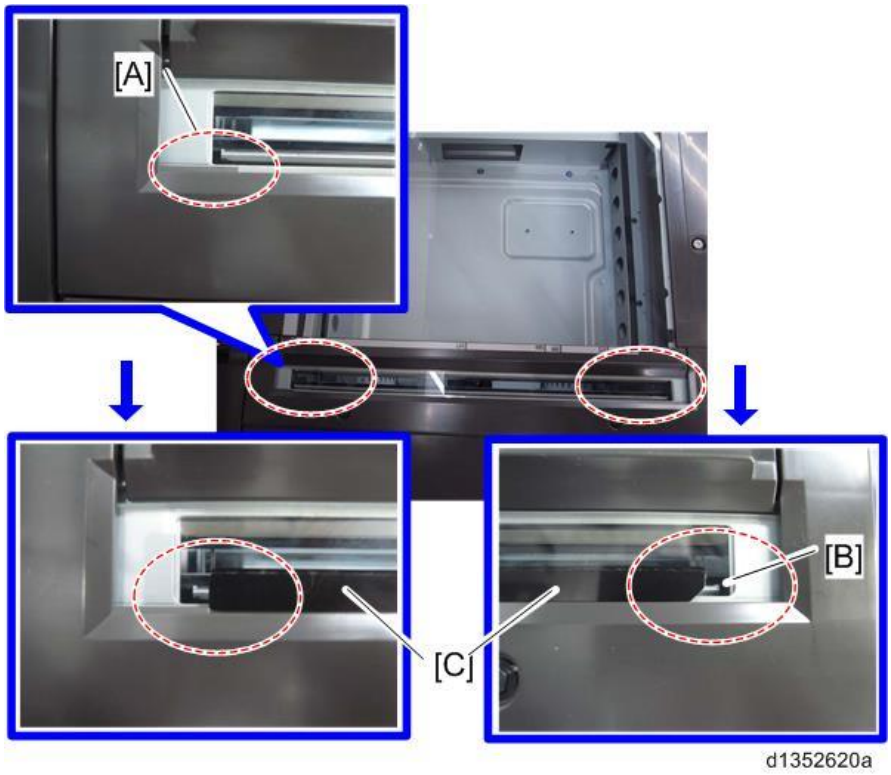
- Attach the ADF exposure glass, so that the marking [A] is on the upper left.



d1352619a

5. Attach in the order of exposure glass, glass cover and rear scale.
6. Clean the ADF exposure glass with a dry cloth.
7. Peel off the release paper of the gap sheet.
8. Fit the gap sheet [C] to the indented part [A] of the glass cover so that the corner with the angle cut

off is at the front [B].



Note

- When replacing an ADF exposure glass, replace with a new exposure glass seal and a gap sheet as well.
- ADF Exposure Glass (Pro C5300S/C5310S): Same as for IM C6500/C8000, except there is no gap sheet.

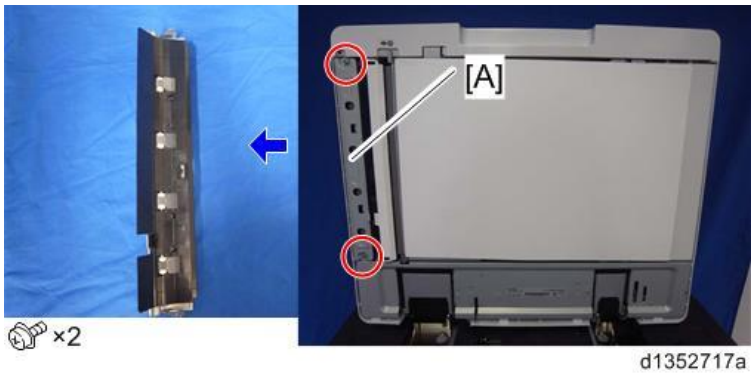
Modification Procedure for Original Transport

For IM C6500/C8000, if you change from contact transport to non-contact transport, it is necessary to replace parts of the scanner unit and the ADF.

Replacing Parts of the ADF

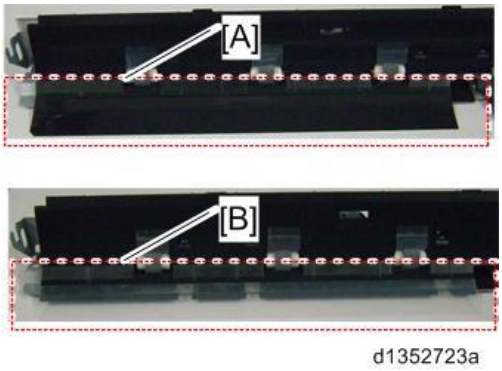
1. Open the ADF.

2. Remove the entrance lower guide unit [A].



Note

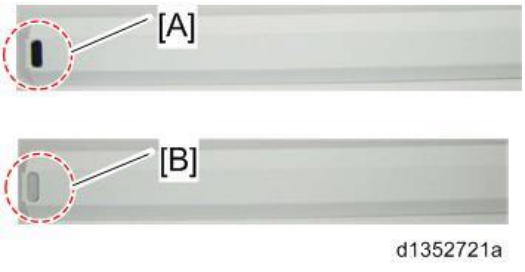
- Entrance lower guide unit for non-contact transport: the areas [A] are black.
- Entrance lower guide unit for contact transport (part number: D6833401): the areas [B] are clear.



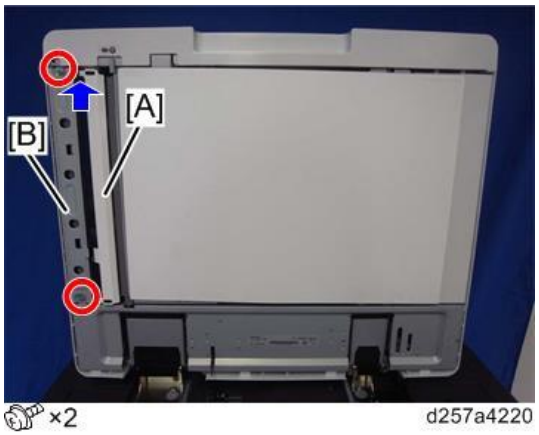
3. Remove the scanning guide plate [A].

Note

- Scanning guide plate for non-contact transport: the area [A] is black.
- Scanning guide plate for contact transport (part number: D6833350): the area [B] is white.



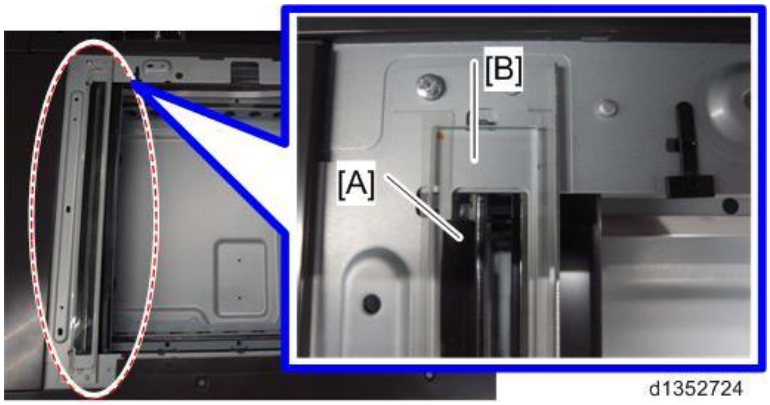
4. Attach the scanning guide plate for contact transport [A].
5. Attach the entrance lower guide unit for contact transport [B].



6. Enter the SP mode, set "98" at SP4-688003 (Scan Image Density Adjustment 1-pass).

Removing the Scanner Parts

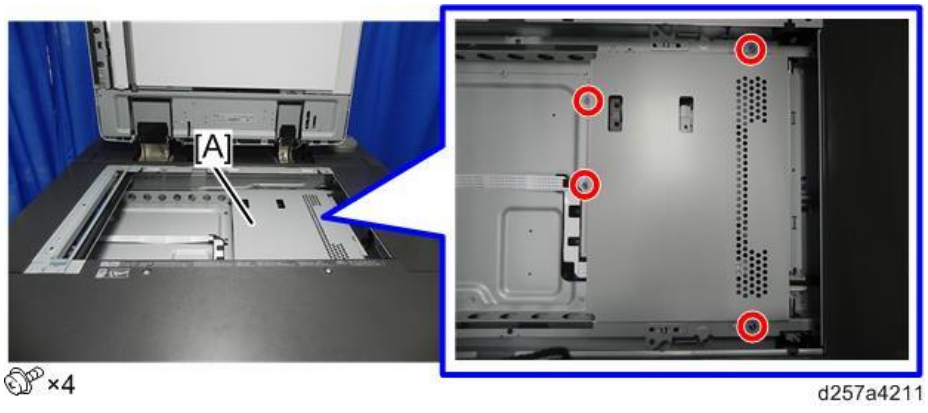
1. Remove the exposure glass. (Exposure Glass)
2. Remove the gap sheet (black) [A] from the ADF exposure glass [B].



3. Clean the ADF exposure glass with alcohol.

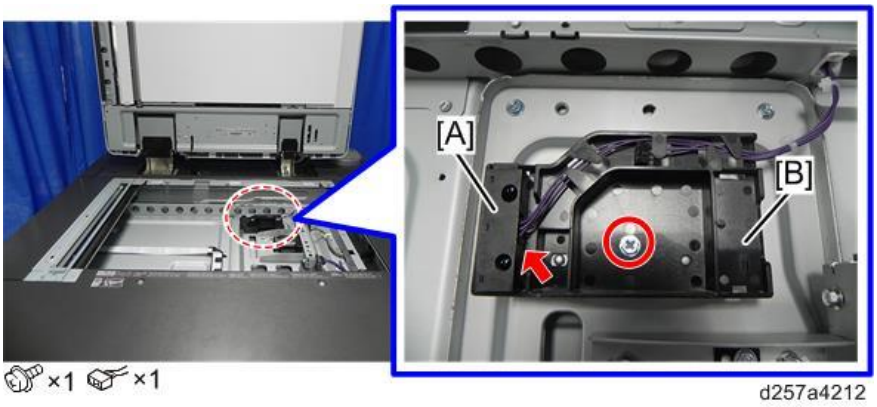
Lens Block, Original Length Sensor (S25)

1. Remove the exposure glass. (Exposure Glass)
2. Remove the lens cover [A].

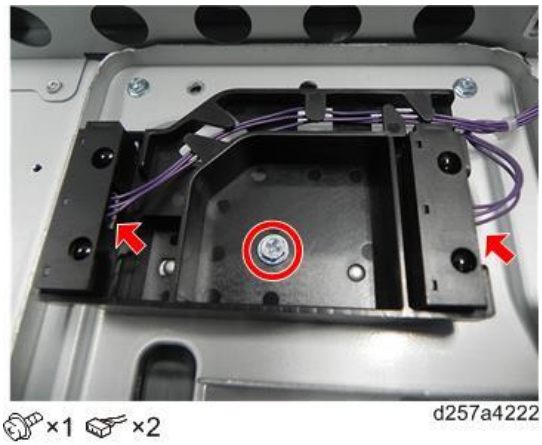


3. Remove the original length sensor (S25) [A] and the sensor cradle [B].

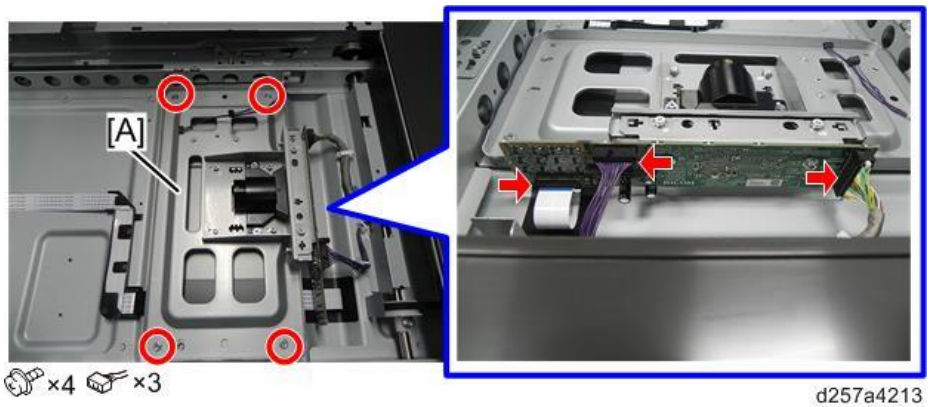
- Pro C5300S/C5310S



- IM C6500/C8000



4. Remove the lens block [A].



Adjustment after Replacing the Lens Block

SP4-008-001: Sub Scan Magnification Adj (”Sub Scan Magnification Adjustment” in Magnification and Registration Adjustment)

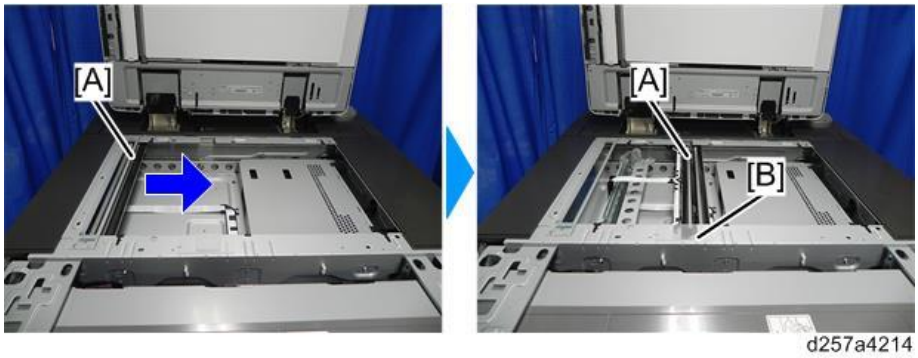
SP4-010-001: Sub Scan Registration Adj (”Sub Scan Registration Adjustment” in Magnification and Registration Adjustment)

SP4-011-001: Main Scan Reg (”Main Scan Registration Adjustment” in Magnification and Registration

Adjustment)

Exposure Lamp (LED1)

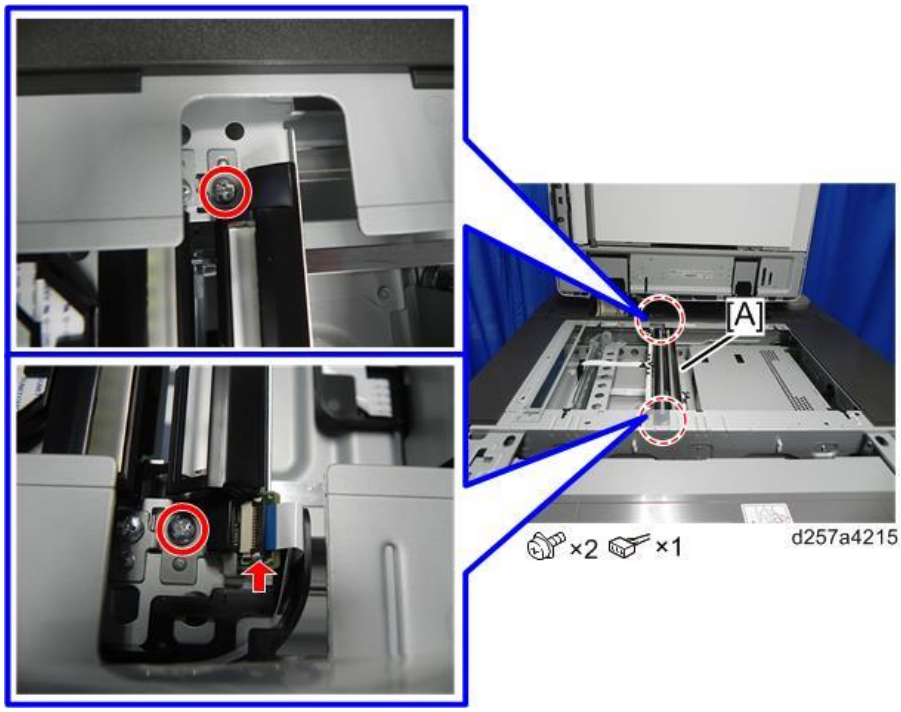
1. Remove the exposure glass. (Exposure Glass)
2. Remove the upper front cover. (Pro C5300S/C5310S: Upper Front Cover (Pro C5300S/C5310S), IM C6500/C8000: Upper Front Cover (IM C6500/C8000))
3. Move the 1st scanner carriage [A] to the notched section [B].



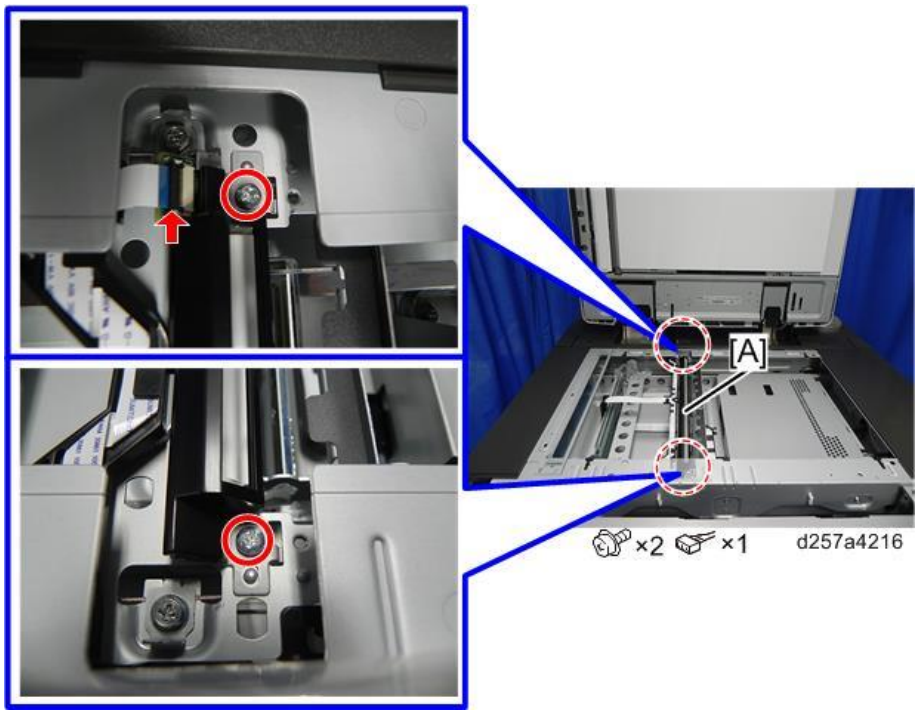
Note

- Do not touch the mirror, reflector, or light guide plate in the scanner carriage.

4. Remove the exposure lamp (LED1) [A] on the right side.

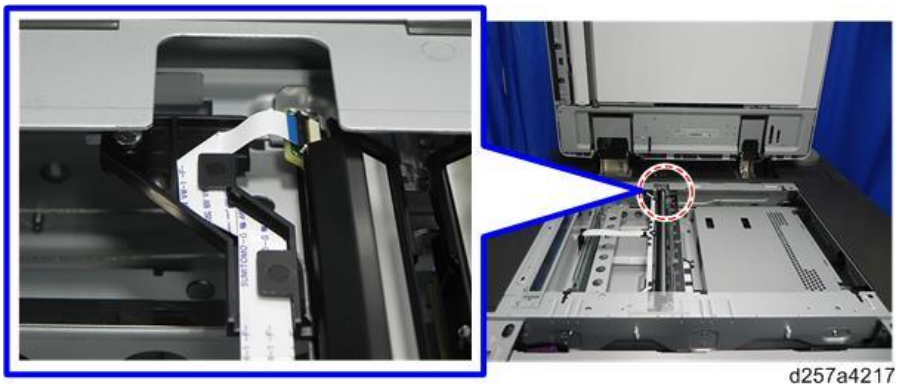


5. Remove the exposure lamp (LED1) [A] on the left side.



Note

- When attaching the exposure lamp, put the harness under the hook.



Scanner Drive Motor (M23)

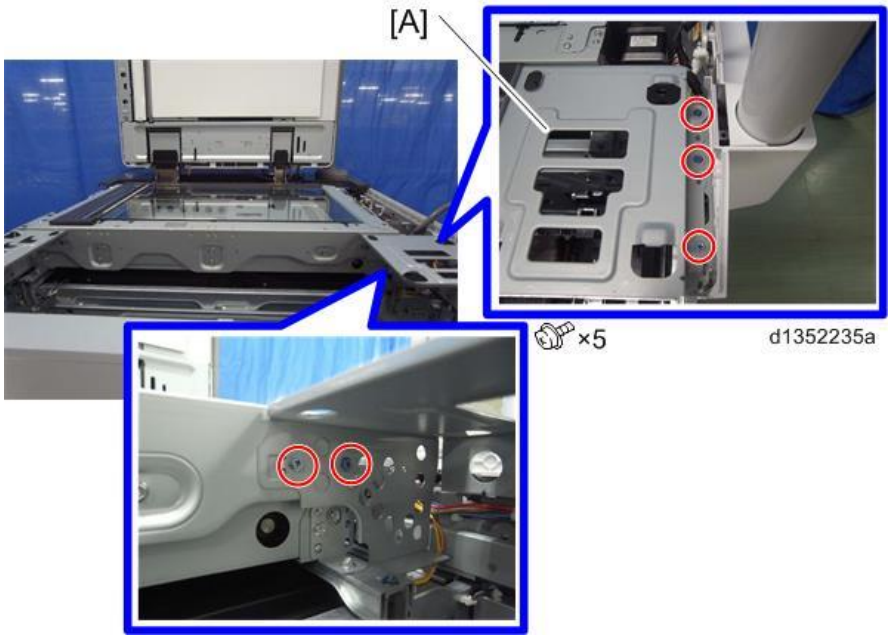
1. Remove the upper right cover. (Upper Left Cover, Upper Right Cover)

Note

- In the case of IM C6500/C8000, also remove the operation panel. (Operation Panel Unit)

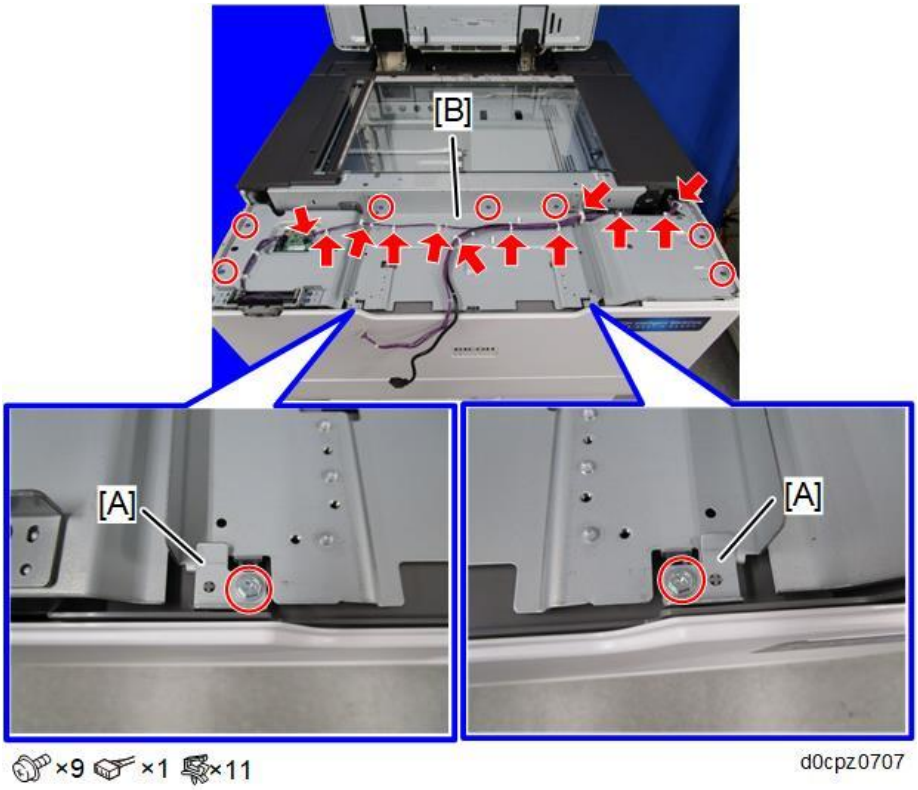
2. Pull out the toner supply unit. (Toner Supply Unit)

3. Remove the right side stay [A].

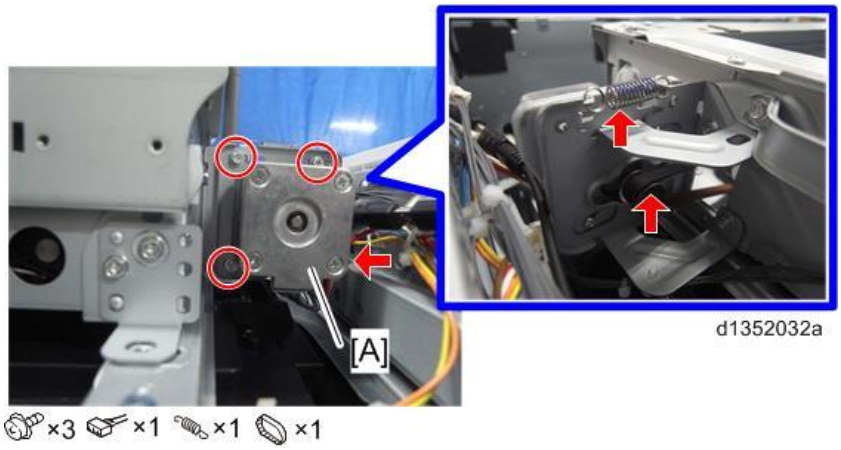


Note

- In the case of IM C6500/C8000, remove both the brackets [A] and the operation panel bracket [B].

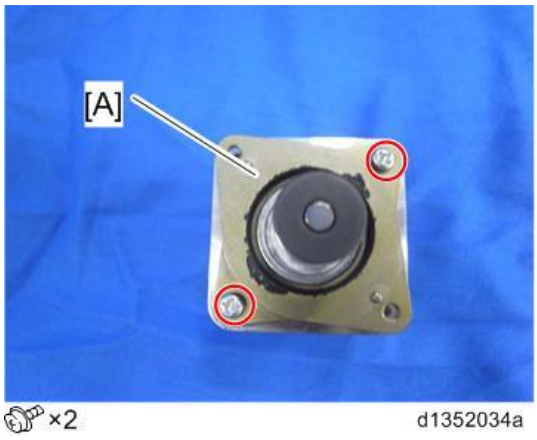


4. Remove the scanner drive motor (M23) [A] along with the bracket.



5. Remove the bracket [A] from the motor.

6. Remove the motor cushion [A] from the motor.



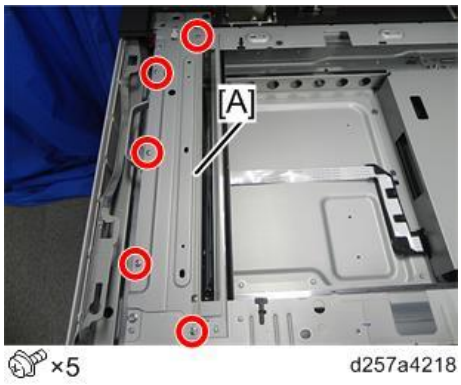
Note

- When attaching the motor, make sure that the timing belt does not come off. Slide the motor a few times. Screw the motor into place while the spring is pulled.

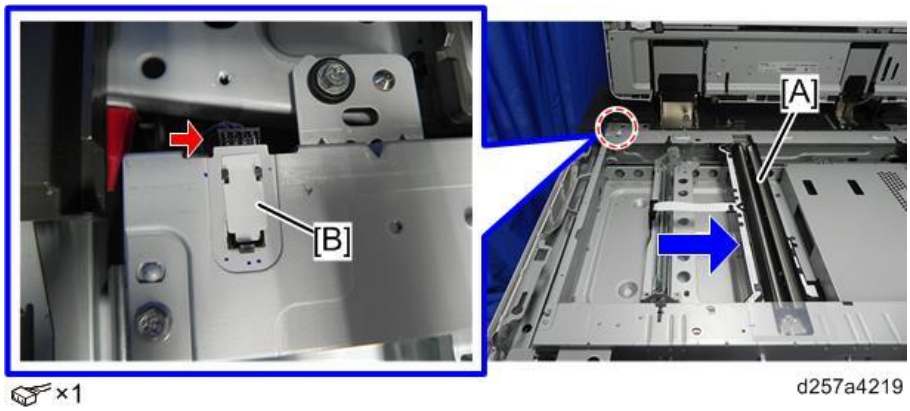
Scanner HP Sensor (S24)

1. Remove the exposure glass. (Exposure Glass)
2. Remove the upper left cover. (Upper Left Cover, Upper Right Cover)

3. Remove the left bracket [A].



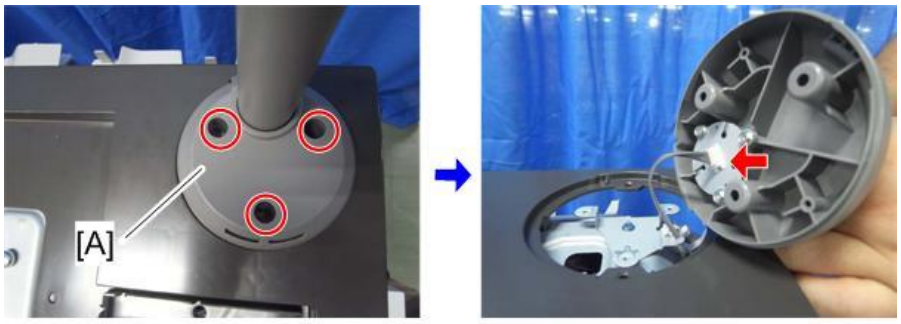
4. Move the 1st scanner carriage [A] to the center. Peel off the shielding plate [B], then remove the scanner HP sensor (S24).



DF Position Sensor (S27)

1. Remove the ADF. (ADF Removal)
2. Remove the upper rear small cover [A].

3. Remove the operator call light [A].



d1352044

Note

- The operator call light is not attached to IM C6500/C8000, so this step is not required.

4. Remove the upper rear cover [A].

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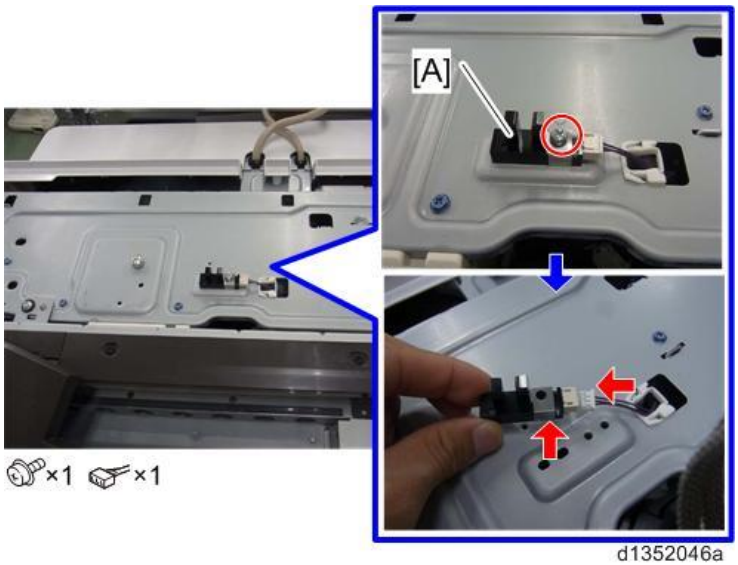
×2

5. Remove the DF position sensor (S27) [A].



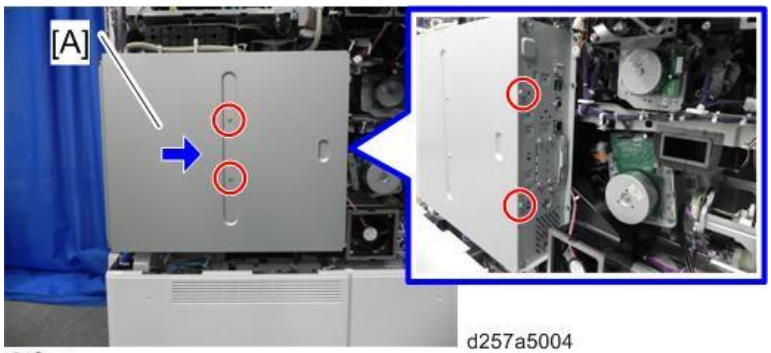
×1 ×1

d1352046a

Scanner Unit

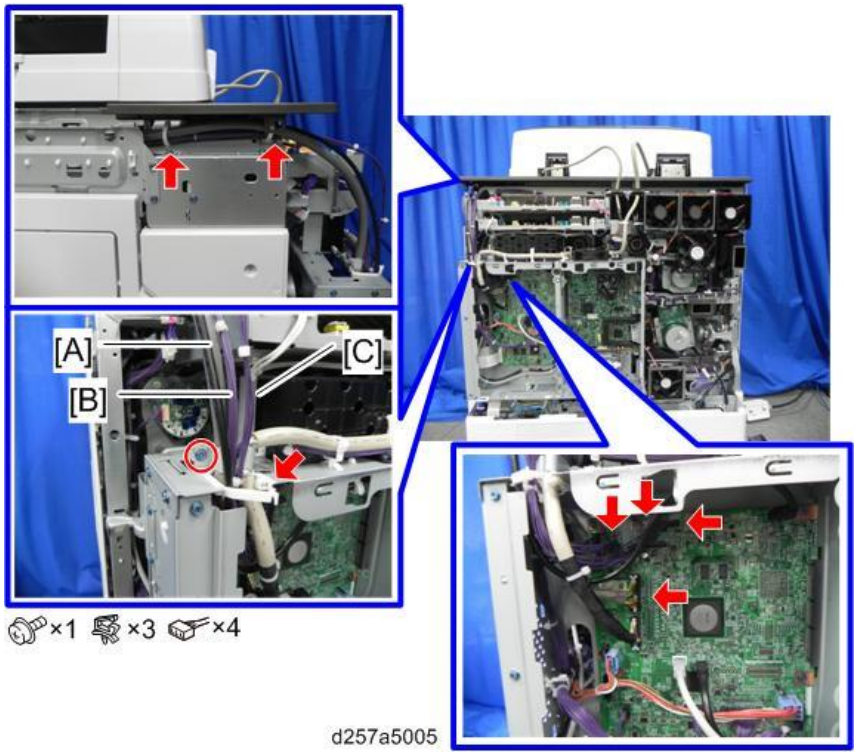
1. Remove the upper left cover and upper right cover. (Upper Left Cover, Upper Right Cover)
2. (IM C6500/C8000 only) Remove the operation panel. (Operation Panel Unit)
3. Remove the rear middle cover.

4. Slide the controller box cover [A] to the right.



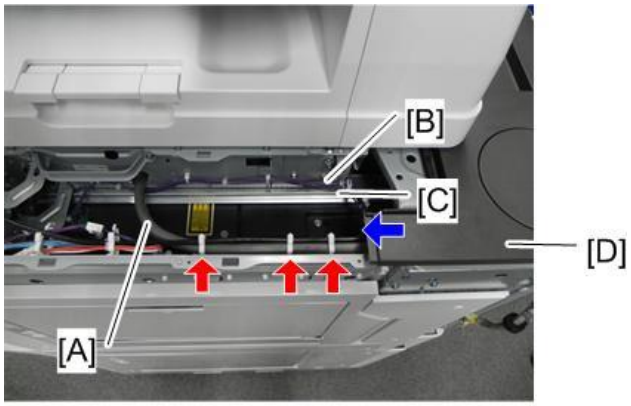
×4

5. Disconnect the interface cables [A], [B] and [C] from the rear of the machine.



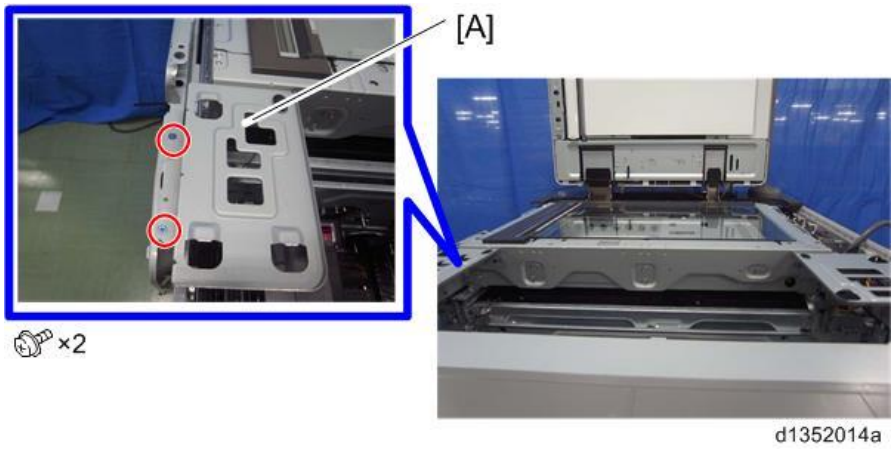
×1 ×3 ×4

6. Remove the interface cables [A], [B] and [C] through the right side [D] of the machine.

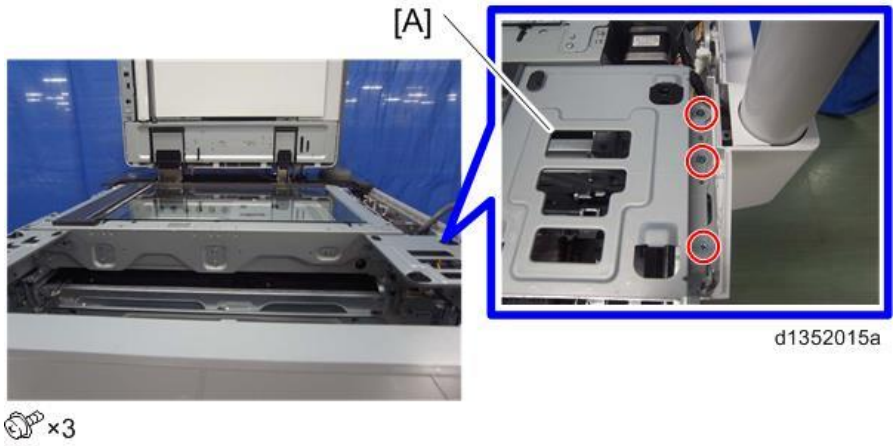


×3

7. Pro C5300S/C5310S: Remove the fixing screws on the left side stay [A].



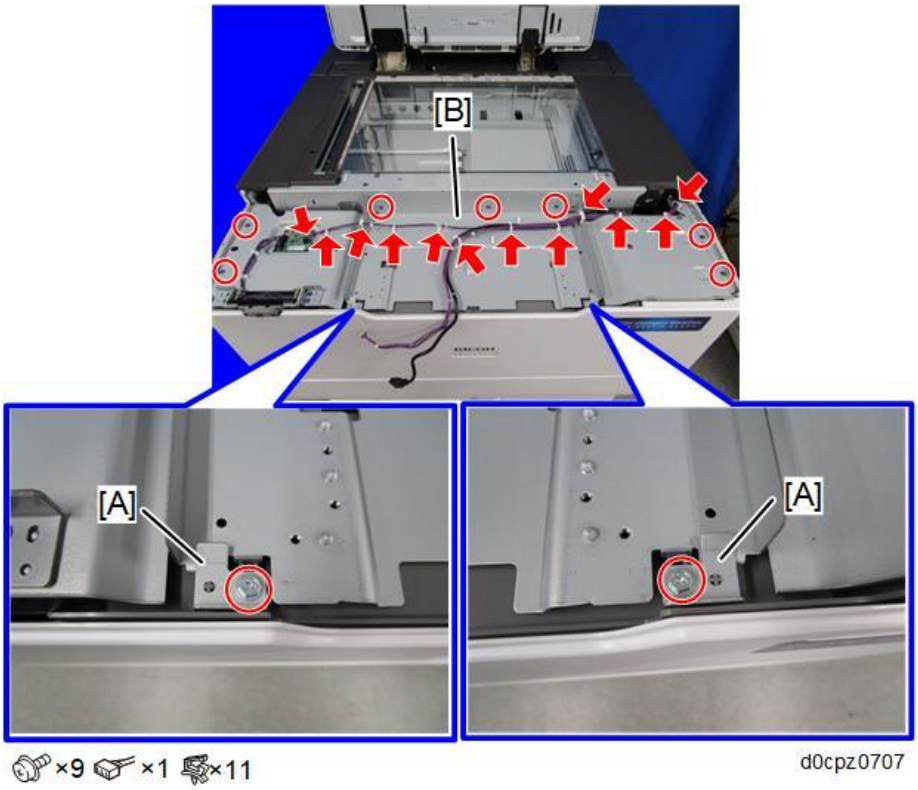
8. Pro C5300S/C5310S: Remove the fixing screws on the right side stay [A].



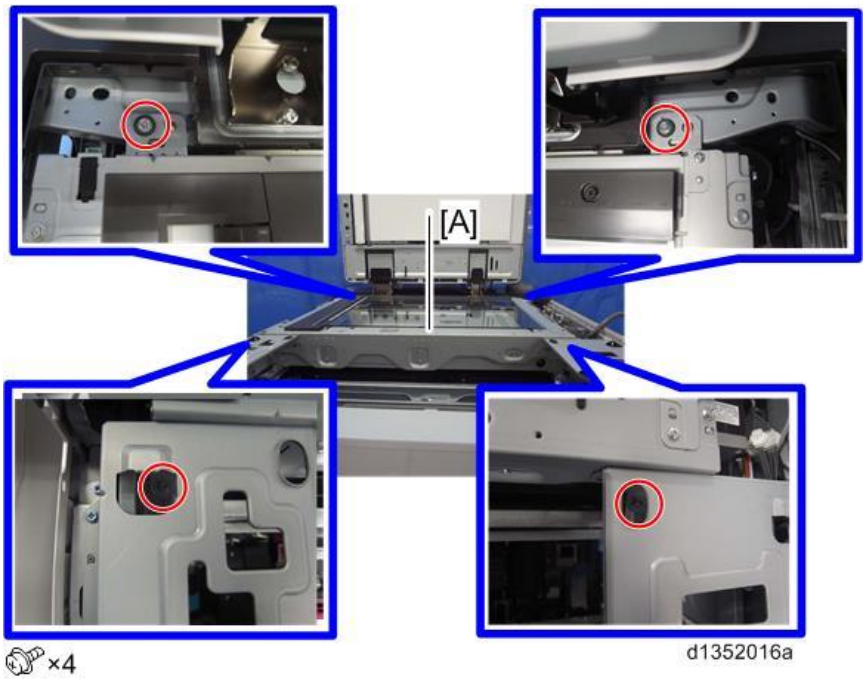
Note

- For steps 6-7 in the procedure described above, in the case of IM C6500/C8000, remove

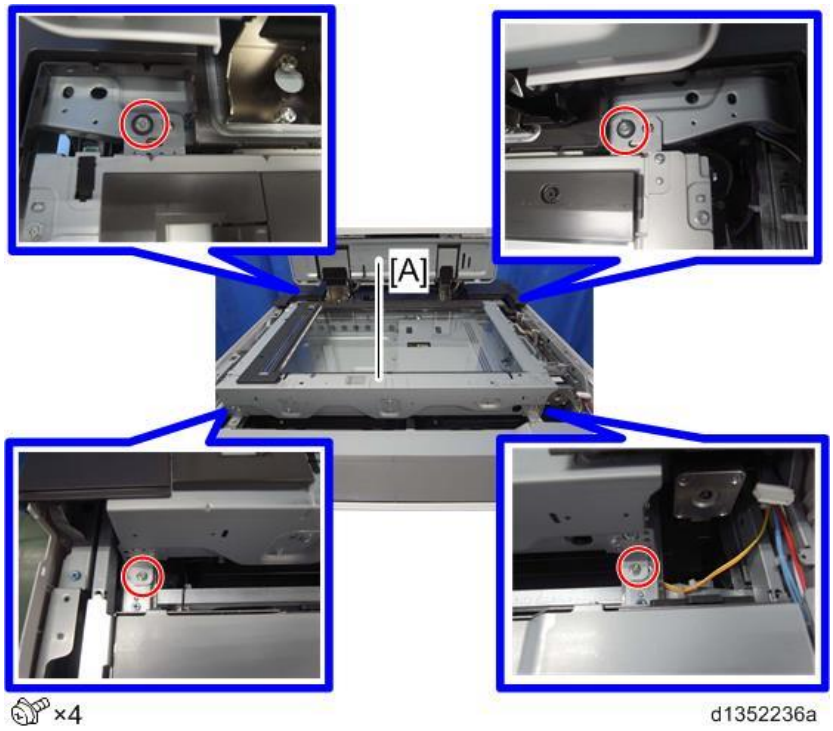
both the brackets [A] and the operation panel bracket [B].



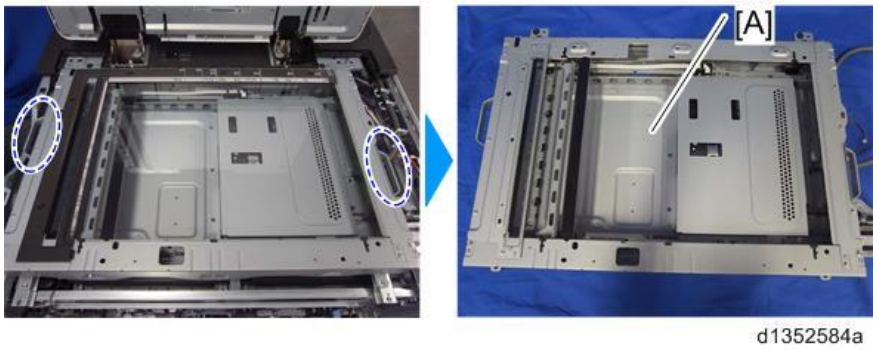
9. Pro C5300S/C5310S: Remove the scanner unit [A].



10. IM C6500/C8000: Remove the scanner unit [A].



11. Hold the handles at the left and right, and remove the scanner unit [A] from the machine.



Scanner Wire

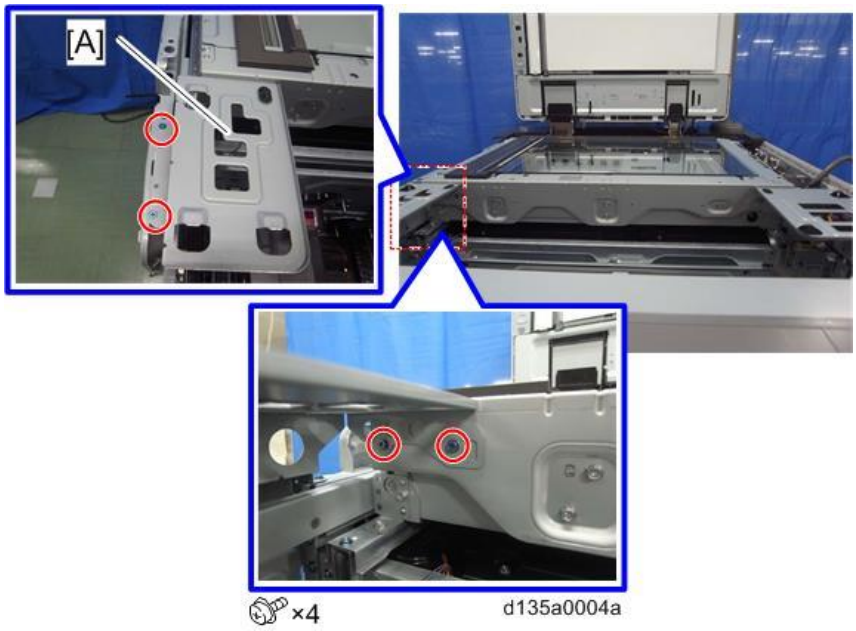
Preparation for Replacing a Scanner Wire

1. Remove the upper left cover/ the upper right cover. (Pro C5300S/C5310S: Upper Front Cover (Pro C5300S/C5310S), IM C6500/C8000: Upper Front Cover (IM C6500/C8000))

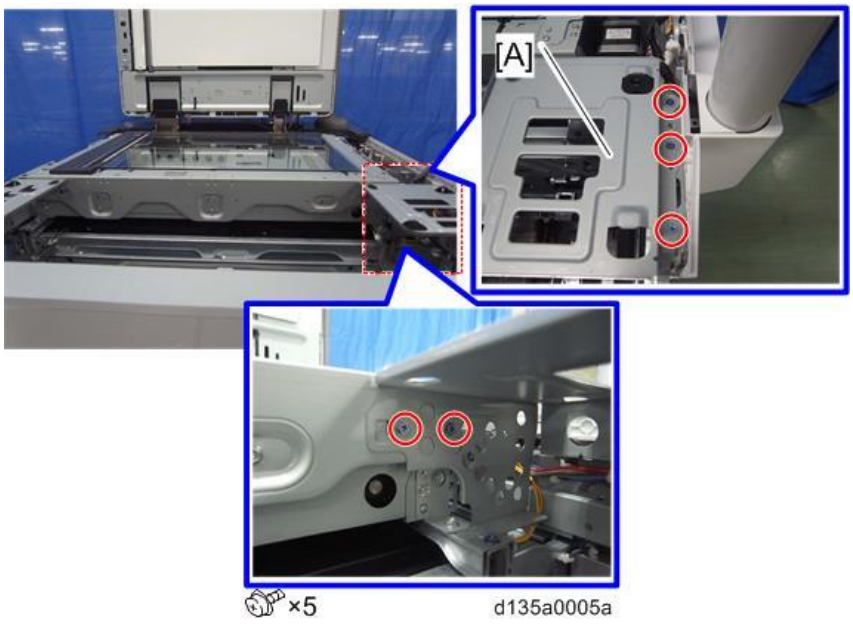
Note

- In the case of IM C6500/C8000, also remove the operation panel. (Operation Panel Unit)

2. Pro C5300S/C5310S: Remove the left side stay [A].



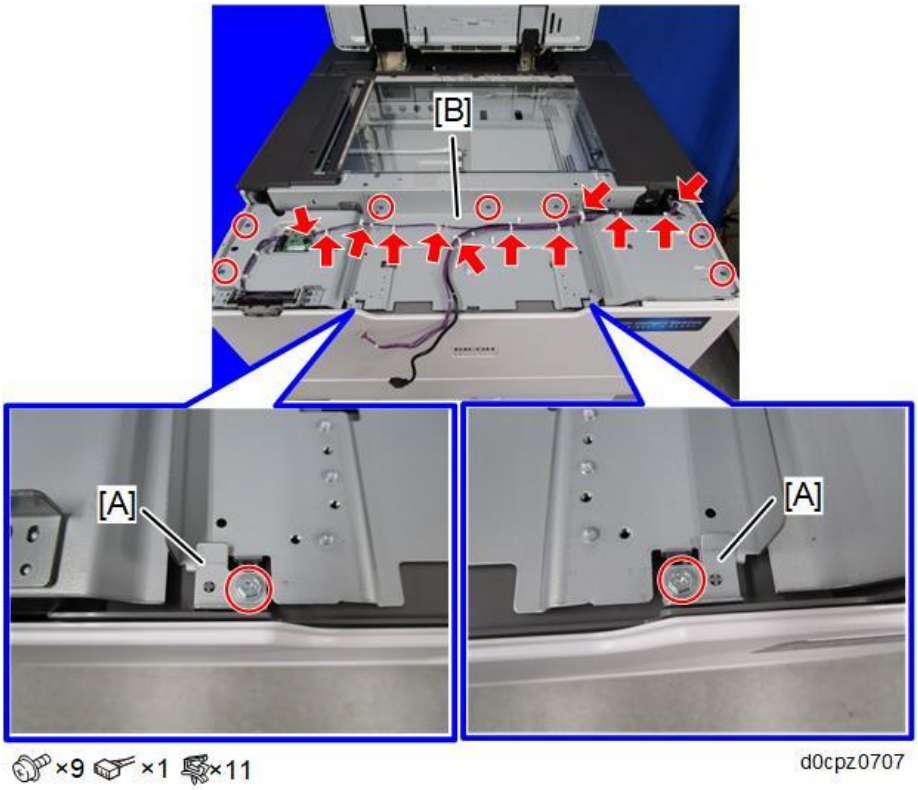
3. Pro C5300S/C5310S: Remove the right side stay [A].



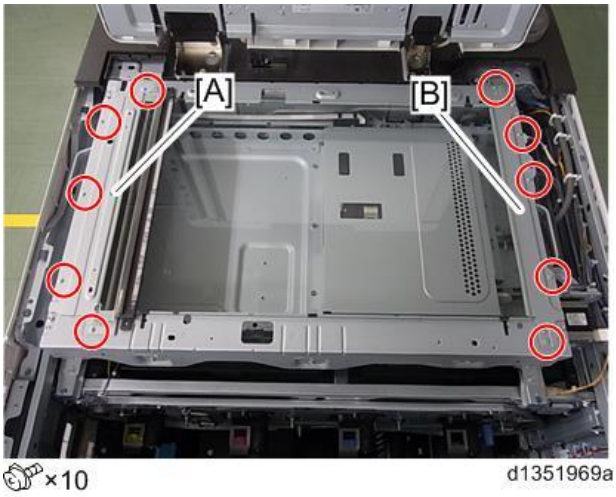
Note

- For steps 2-3 in the procedure described above, in the case of IM C6500/C8000, remove

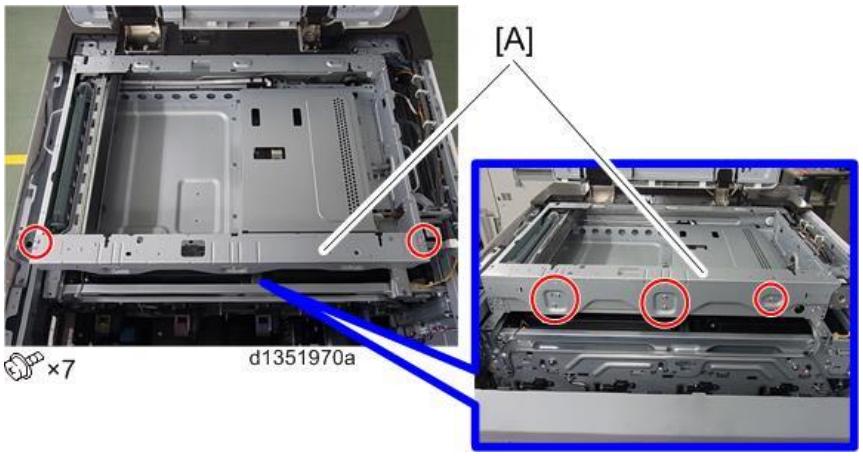
both the brackets [A] and the operation panel bracket [B].



4. Remove the exposure glass. (Exposure Glass)
5. Remove the left stay [A] and the right stay [B].

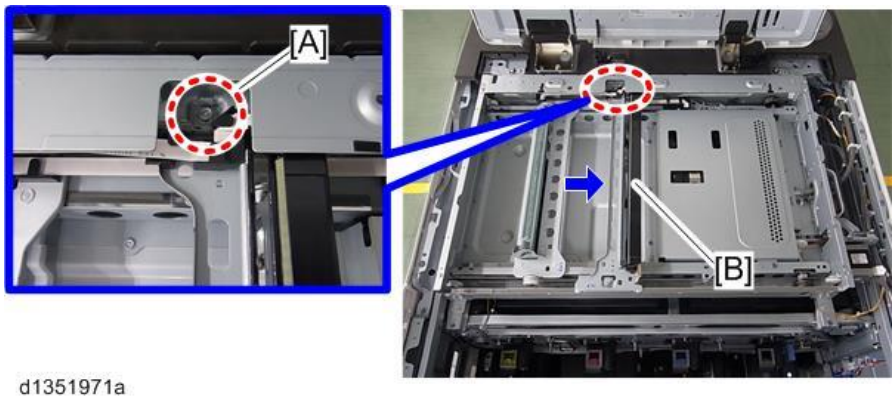


6. Remove the front frame [A].

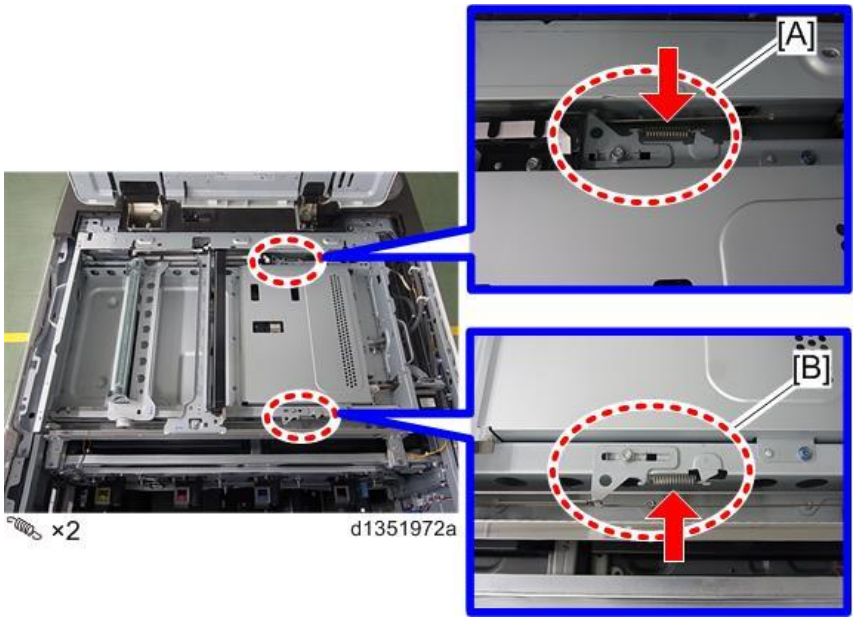


Replacing the Scanner Wire

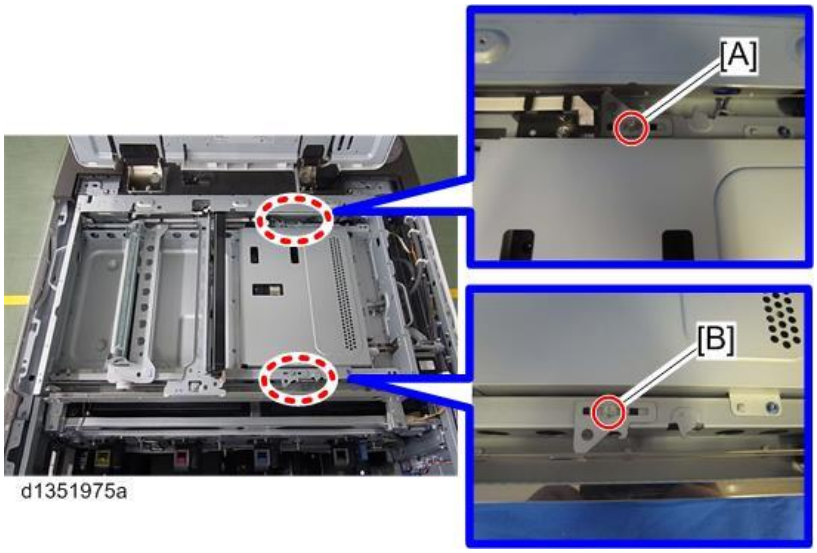
1. Move the 1st scanner carriage [B] to a position where the screw [A] of the bracket can be seen.



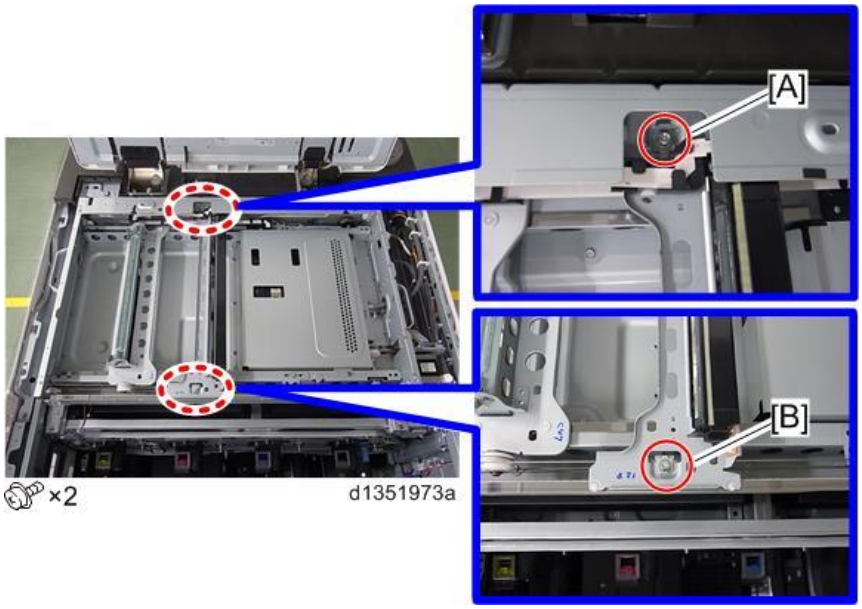
2. Remove the springs of the tension brackets (rear: [A] / front: [B]).



3. Loosen the fixing screws of the tension brackets (rear: [A] / front: [B]).



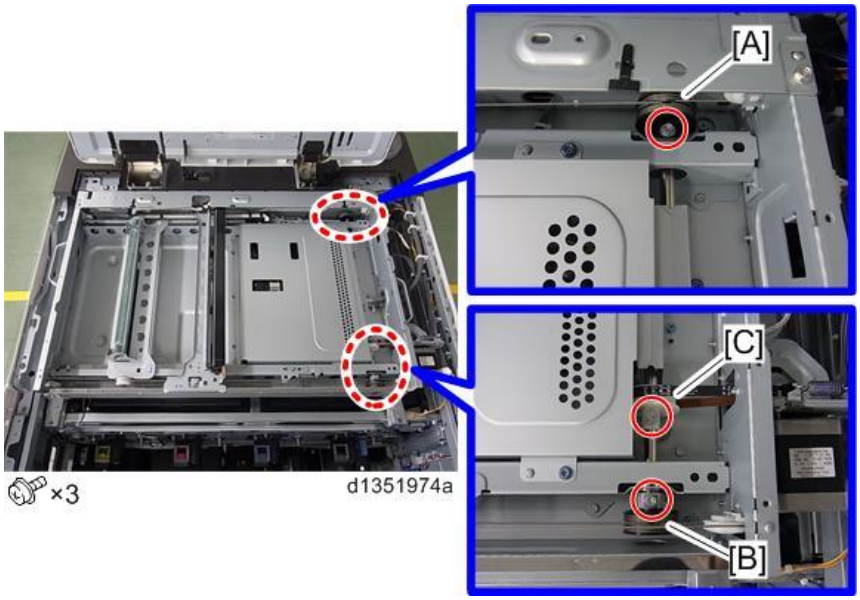
4. Remove the retaining brackets (rear: [A] / front [B]) from the wire.



5. Remove the tip and the rear end of the wire (rear / front).

6. Unscrew the wire pulleys (rear: [A] / front [B]) and drive pulley [C]. Remove the wire pulleys from

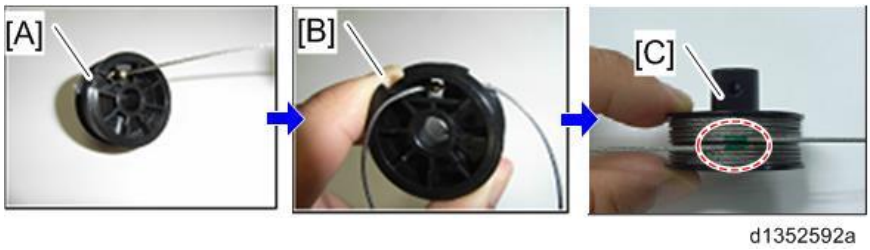
the shaft.



7. Remove the rear and front wires.

Preparation for Reassembling the Scanner Wire

1. Pass the wire from the side where there is no projection on the pulley. [A]
2. Place the beads on the middle of the wire in the groove. [B]
3. Attach tape across the pulley to temporarily hold the wires in place. [C]



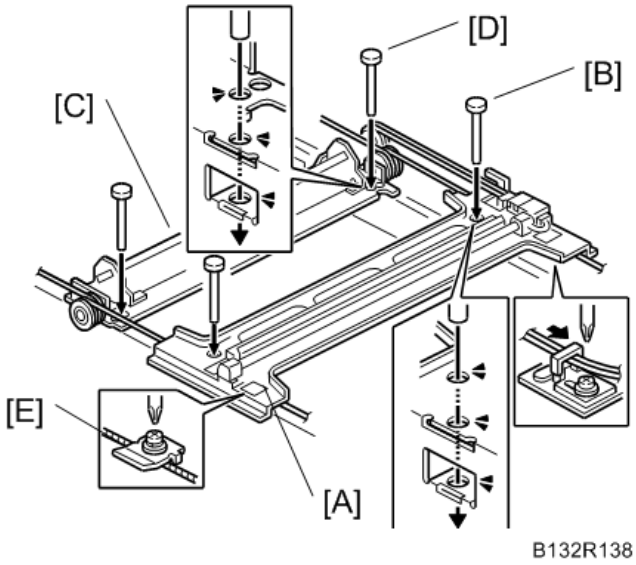
Reassembling the Scanner Wire

1. Remove the 1st scanner carriage [A] from the scanner unit.
2. Position the 2nd scanner carriage [C] with the positioning pins [D] (part number: A1849501)
3. Set the wire pulley through the shaft. (Do not tighten the screw of the front side pulley yet.)
4. Turn the wire and remove the tape.
5. Set the spring. (Do not tighten the screw yet.)
6. Tighten the screw of the drive pulley.
7. Remove the positioning pins temporarily. Then move the 2nd carriage to fit in the wire.
8. Set the positioning pins again and tighten screws of the front pulley and tension bracket.

Note

- If the scanner does not move smoothly, and it is possible to set positioning pins, readjust using the above procedure.

9. Set the 1st scanner carriage [A] with the positioning pins [B]. Attach the retaining bracket. Then fix the wire and the carriage [E].



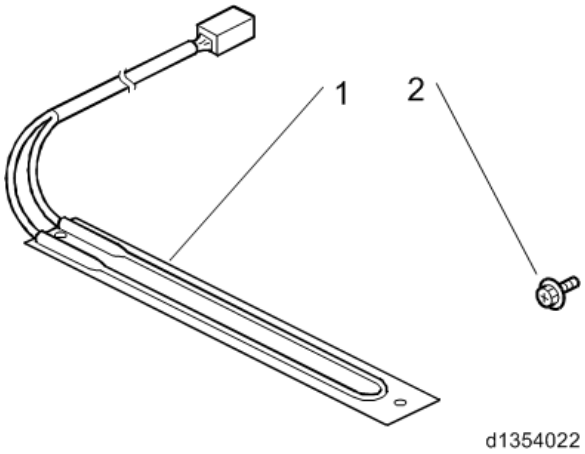
Note

- If replacing anything other than the wire, adjust SP4-010-001 (Sub Scan Registration Adj).

Installing the Scanner Anti-Condensation Heater (H5)

Accessories

Check the accessories against the list below.



No	Description	Q'ty
1	Heater	1
2	Tapping Screw - M3x6	2

Note

- The part number for the scanner heater is the same across all models except the Pro C5300S (NA). See the table below.

Model	Area	Voltage	Part number
	NA	120 to 127V	B2291678

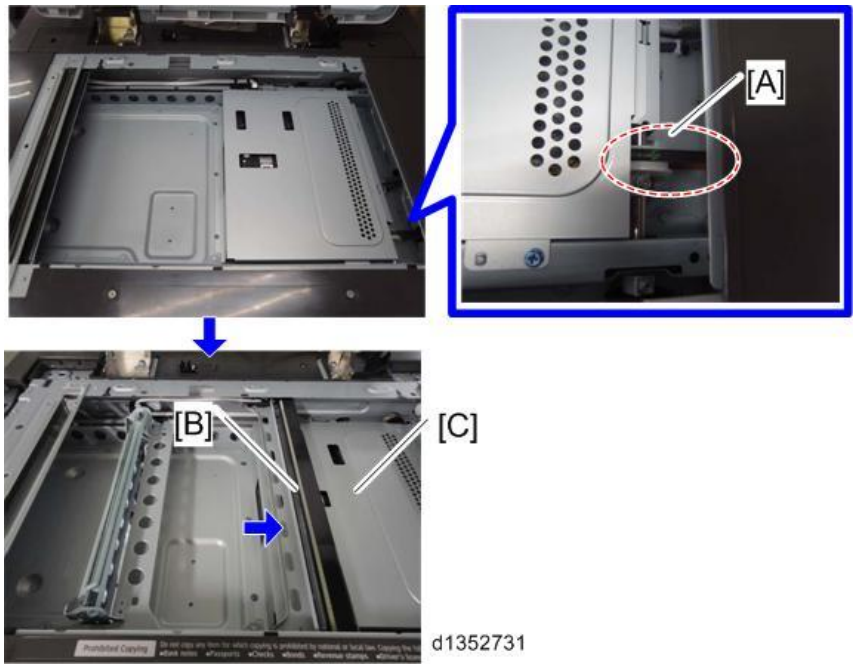
Model	Area	Voltage	Part number
Pro C5300S	CHN	220 to 240V	D2611688
	EU	220 to 240V	D2611688
	AP	220 to 240V	D2611688
Pro C5310S	NA	208 to 240V	D2611688
	CHN	220 to 240V	D2611688
	EU	220 to 240V	D2611688
	AP	220 to 240V	D2611688

Installation

⚠CAUTION

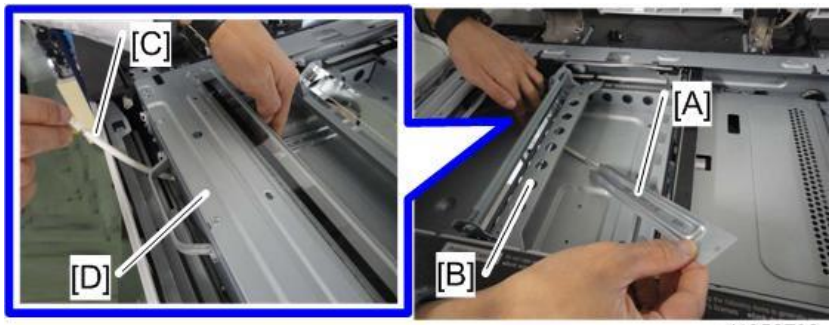
- Unplug the machine power cord before starting the following procedure.
- Do the following procedure not to damage any harnesses.
- Check that all harnesses are not damaged nor pinched after installation.

1. Exposure Glass (Exposure Glass)
2. Left middle cover (Left Middle Cover)
3. First, turn the gear [A] and move the 1st scanner carriage [B] next to the lens cover [C].



4. Pass the scanner heater [A] under the 2nd carriage [B]. Then insert the connector [C] from the left

side of the scanner unit [D].



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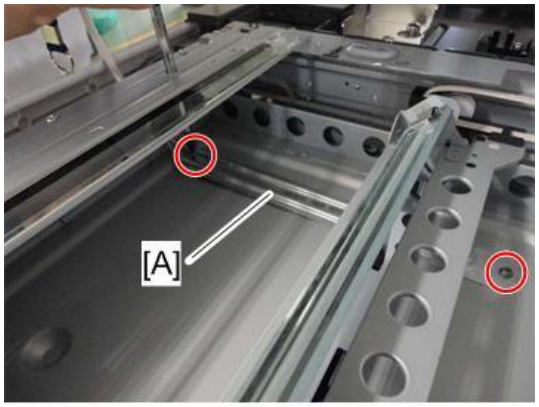
5. Attach the scanner heater [A] (x 2).



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Note

- The screw on the left side of the scanner heater is accessed from the scanner frame.

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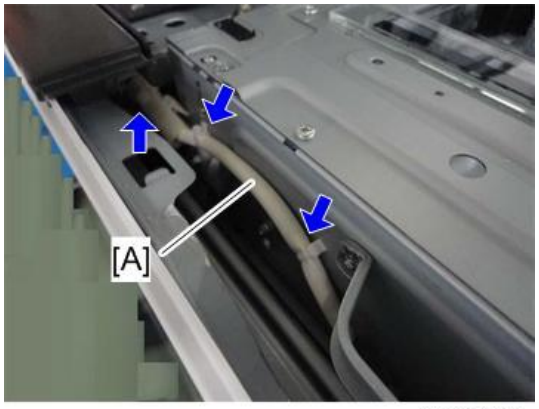
6. Connect the connector [A] of the scanner heater to the machine (x 1, x 2).



d1352734

Magnification and Registration Adjustment

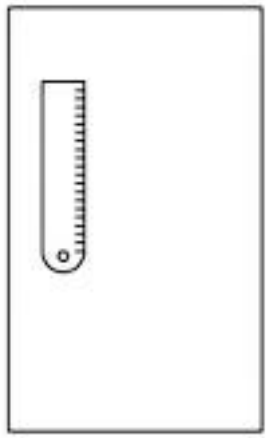
Sub Scan Magnification Adjustment

Measuring Tool

150 mm scale

Adjustment Method

Copy the scale and check that the length of the 100 mm scale on the copy is the same as the original, within the standard value (±0.8%) for a 100 mm scale.
It should be measured 10 minutes after the copy has been fed out.



Adjustment Procedure

1. Enter SP mode.
2. Select SP4-008.

If you decrease the adjustment value, this will increase the scanner speed, and the output image is compressed in the feed direction.
If you increase the adjustment value, this will decrease the scanner speed, and the output image is extended in the feed direction.

Sub Scan Registration Adjustment

Measuring Tool

C4 chart

Adjustment Method

Copy the C4 chart. Check whether there is an image in the center of the paper.

Adjustment Procedure

1. Enter SP mode.
2. Select SP4-803.

The image is moved downward by increasing the adjustment value.

The image is moved upward by decreasing the adjustment value.

Main Scan Registration Adjustment

Measuring Tool

C4 chart

Adjustment Method

Copy the C4 chart. Check whether there is an image in the center of the paper.

Adjustment Procedure

1. Enter SP mode.
2. Select SP4-011.

The image is moved to the right by increasing the adjustment value.

The image is moved to the left by decreasing the adjustment value.

Laser Unit

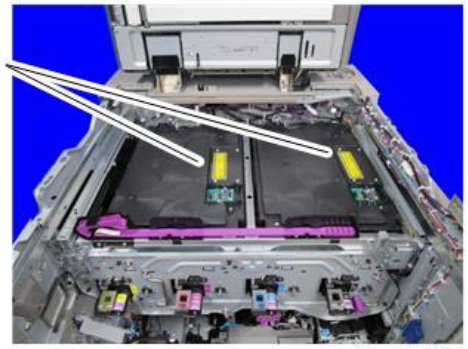
Before You Begin

⚠WARNING

- This laser unit employs 80 laser beams produced by a Class III LD with a wavelength of 772 to 792 nm and intensity of 1.23 mW (40 beams). Direct exposure to the eyes could cause permanent blindness.
- Before adjusting or replacing the laser unit, push the main power switch to power the machine off then unplug the machine from the power source. Allow the machine to cool for a few minutes. The polygon motor continues to rotate for approximately one to three minutes after the machine is switched off.
- Do not turn on the power when the laser unit and the polygon cover are not installed. Ensure that after assembly, the polygon cover is completely closed.
- Do not turn on the power when the synchronization detectors are disconnected. Ensure that after assembly, the synchronization detectors are set correctly.

Caution Decals

Pro C5300S/C5310S, IM C6500/C8000



d0cpz0651

IM C6500/C8000 only

d0cpz2000

Laser Unit

Note

- Each laser unit is composed of two laser diode assemblies.

Before Replacement

1. Plug in the power cord, and then turn ON the main power switch.
2. Enter the SP mode, and note the following SP values.
   - SP2-104-040 (Skew Adjustment: Manual: K: CE)
   - SP2-104-041 (Skew Adjustment: Manual: K: User)
   - SP2-104-002 (Skew Adjustment: Manual: C)
   - SP2-104-003 (Skew Adjustment: Manual: M)
   - SP2-104-004 (Skew Adjustment: Manual: Y)
3. Set the following SP values to "0".
   - SP2-104-040 (Skew Adjustment: Manual: K: CE)
   - SP2-104-041 (Skew Adjustment: Manual: K: User)
   - SP2-104-002 (Skew Adjustment: Manual: C)
   - SP2-104-003 (Skew Adjustment: Manual: M)
   - SP2-104-004 (Skew Adjustment: Manual: Y)

   Note

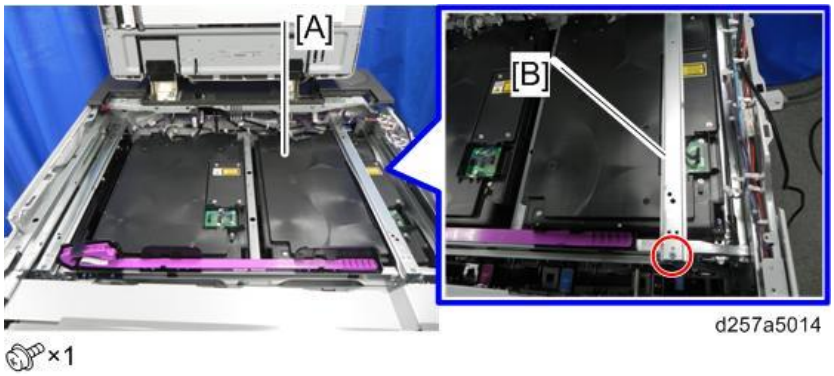
   - If you do not do the above adjustment, MUSIC may not work. This is because one or more of the motors may be at or near the upper or lower limit (± 100). In such a case, if you do not zero the motor positions before MUSIC is done, the range that the motor can move will be restricted and the adjustment may not be done correctly.
4. Enter the SP mode, and set the following SPs.
   - SP2-102-001 (Magnification Adjustment: Main Mag.: K): set to "0"
   - SP2-102-002 (Magnification Adjustment: Main Mag.: C): set to "0"
   - SP2-102-003 (Magnification Adjustment: Main Mag.: M): set to "0"
   - SP2-102-004 (Magnification Adjustment: Main Mag.: Y): set to "0"
   - SP2-102-005 (Magnification Adjustment C: Left Sub Mag.): set to "0"
   - SP2-102-006 (Magnification Adjustment C: Right Sub Mag.): set to "0"
   - SP2-102-007 (Magnification Adjustment M: Left Sub Mag.): set to "0"
   - SP2-102-008 (Magnification Adjustment M: Right Sub Mag.): set to "0"
   - SP2-102-009 (Magnification Adjustment Y: Left Sub Mag.): set to "0"
   - SP2-102-010 (Magnification Adjustment Y: Right Sub Mag.): set to "0"

   Note

   Perform only the SP for the laser unit to be replaced.

Replacement

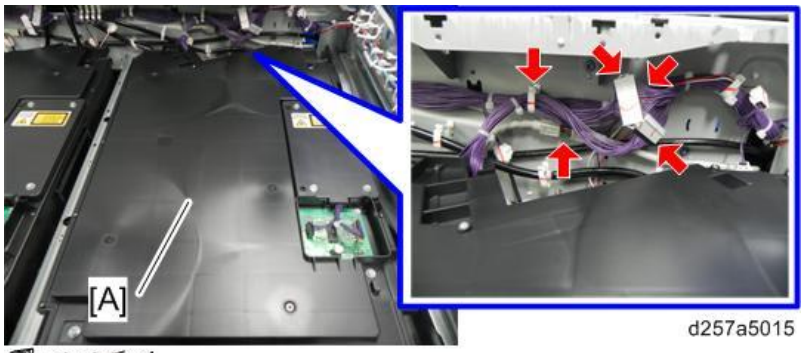
1. Remove the scanner unit. (Scanner Unit)
2. For the laser unit (CK) [A], remove the stay [B] first.



×1

3. Remove the connectors from the laser unit [A].

e.g.: CK

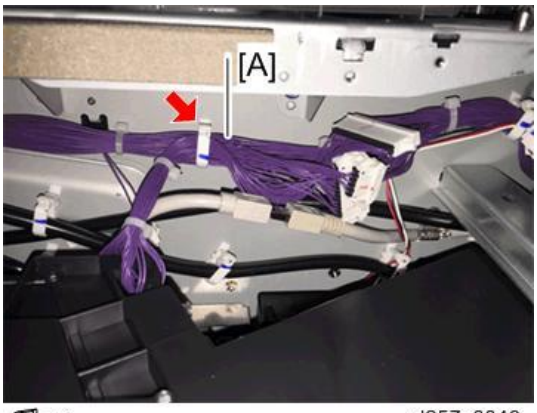


×1 ×4

Note

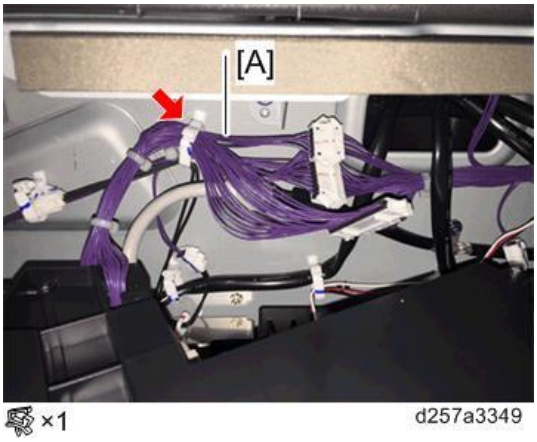
- When reinstalling, fix the harness [A] with the clamp as shown below and put it back in the original state. If it is not fixed sufficiently with the clamp, SC204-03 (polygon motor error) will occur due to noise.

  Laser Unit (CK)



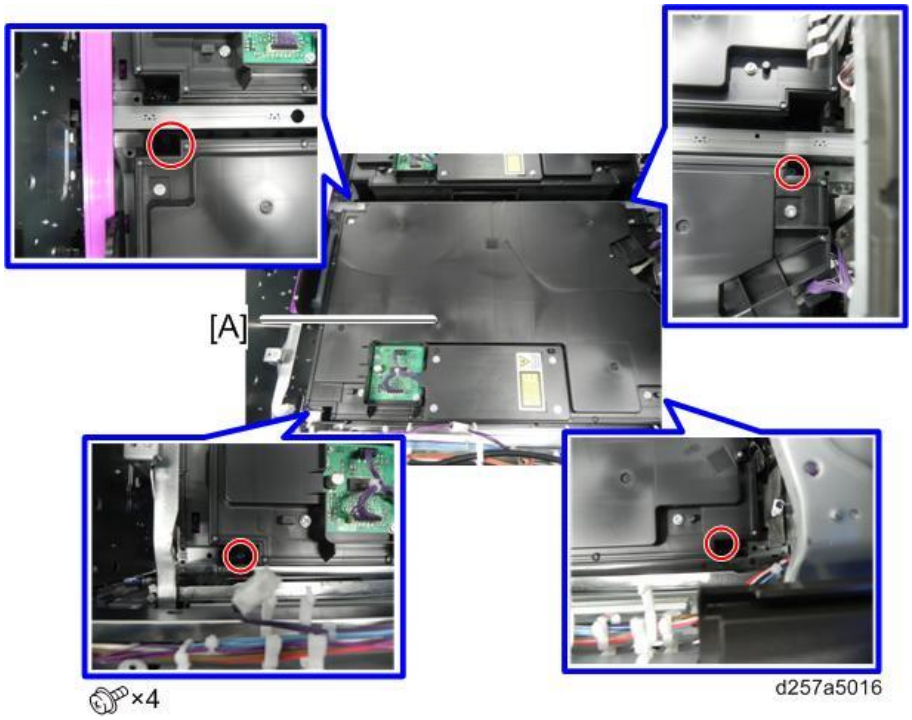
×1

  Laser Unit (MY)



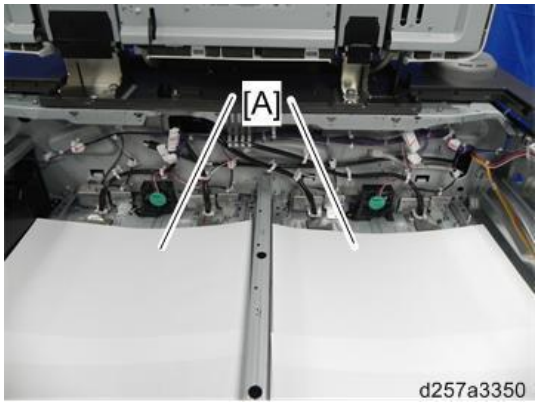
4. Remove the laser unit [A].

e.g.: CK



5. Grasp the handles on the left and right, and lift out the laser unit.

6. After removing the laser unit, place a sheet of paper [A] as shown to guard the OPC drum from direct light.

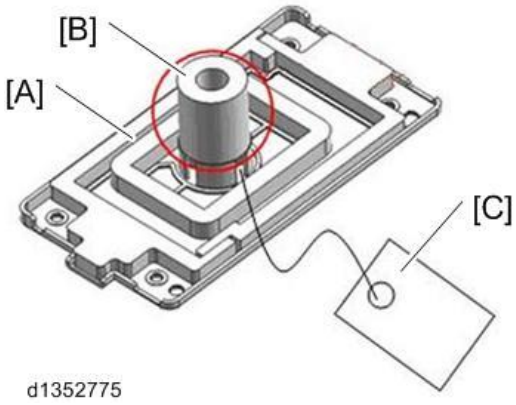


Notes on Installation of a New Laser Unit

The polygon mirror of the new laser unit contains protective material. Remove this material when installing the unit.

1. Remove the polygon cover [A].

2. Turn over the polygon cover [A], remove the protective material [B] and the red tag [C].



3. Attach the polygon cover to the laser unit (x 4).

Adjustment after Laser Unit Replacement

Do the following steps.

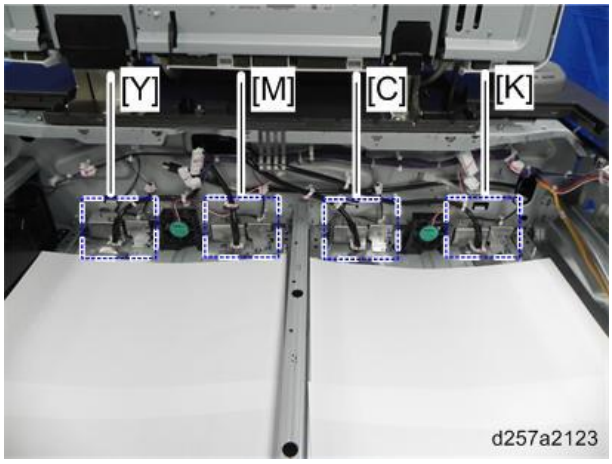
1. Plug in the power cord, and then turn ON the main power switch.
2. Execute the following SPs to download the correction values from the new laser unit.
   - SP2-108-1: (Image Parameter: K/C Writing Unit)
   - SP2-108-2: (Image Parameter: Y/M Writing Unit)

   Note
   - During the download of the correction values, you can turn off the power, or open the door.
   - If an SC or a display of "failure" occurs, you can run the download again after turning the power OFF and ON.
3. Correct the color registration with the User Tools.
   - [HOME] - [Settings] - [Machine Features Settings] - [Maintenance] - [Color Registration] - [OK]

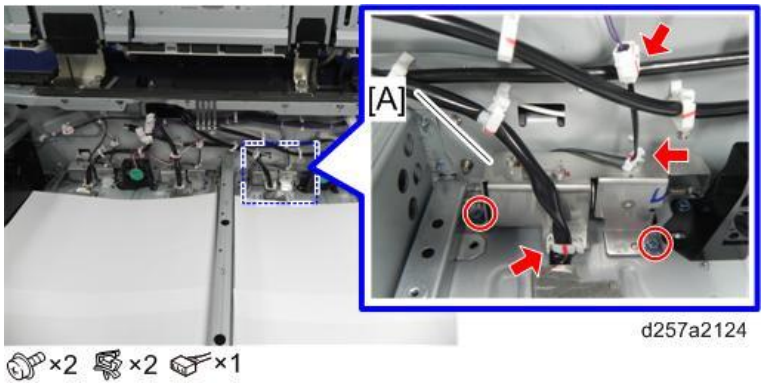
4. If necessary, adjust the registration, skew, and magnification. For information about how to adjust, refer to Adjustment in Troubleshooting.

Charge Roller Cleaning Roller Solenoid (SOL1) (KCMY)

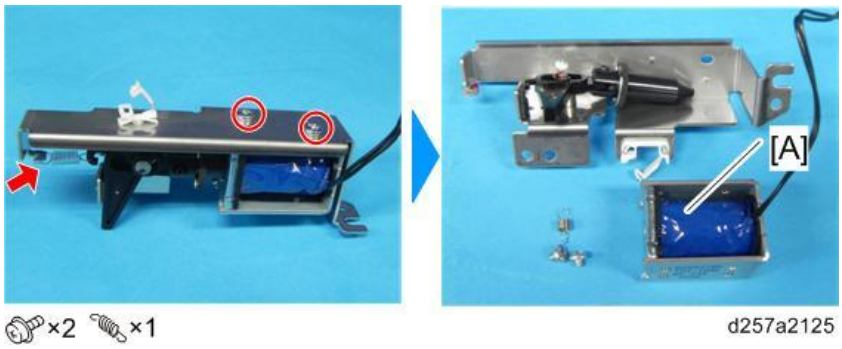
Following is the layout of the charge roller cleaning roller lift solenoids:



1. Remove the laser unit. (Laser Unit)
2. Remove the charge roller cleaning roller solenoid (SOL1) [A] along with the bracket.
   e.g.: C



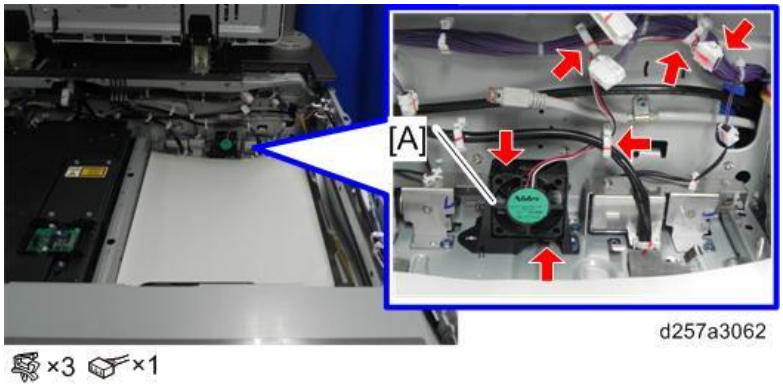
3. Remove the charge roller cleaning roller solenoid (SOL1) [A].



Laser Unit Cooling Fan (Right) (FAN10)

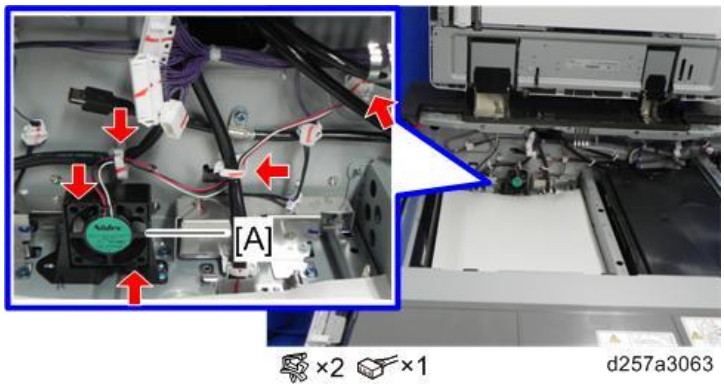
1. Remove the laser unit (CK). (Laser Unit)

2. Remove two pawls, and remove the laser unit cooling fan (right) (FAN10) [A].



Laser Unit Cooling Fan (Left) (FAN11)

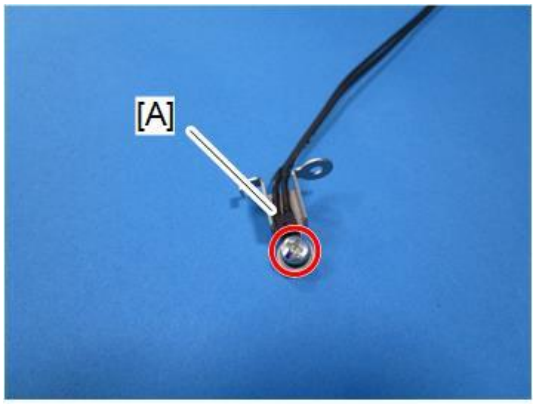
1. Remove the laser unit (YM). (Laser Unit)
2. Remove two pawls, and remove the laser unit cooling fan (left) (FAN11) [A].



Machine Temperature Thermistor (TH1)

1. Remove the scanner unit. (Scanner Unit)
2. Remove the laser unit. (Laser Unit)
3. Remove the charge roller cleaning roller lift solenoid (Y).
4. Remove the machine temperature thermistor (TH1) [A] with its bracket.

5. Remove the machine temperature thermistor (TH1) [A].



Toner Supply Unit

Toner Supply Unit Front Cover

1. Open the toner supply unit front cover [A].

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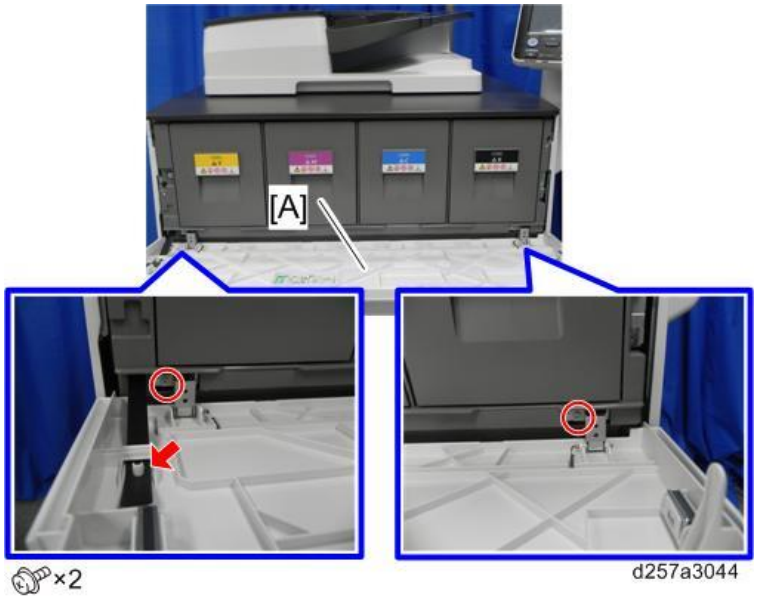
2. Remove the toner supply unit front cover [A] by sliding it to the left.



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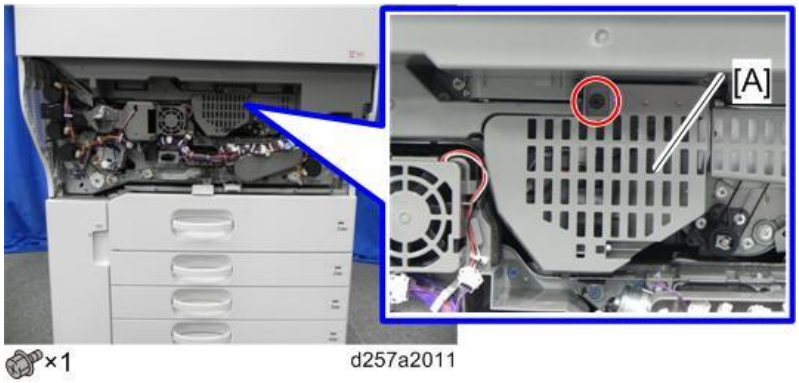
Toner Supply Unit

1. Remove the drawer unit cover. (Drawer Unit Cover)

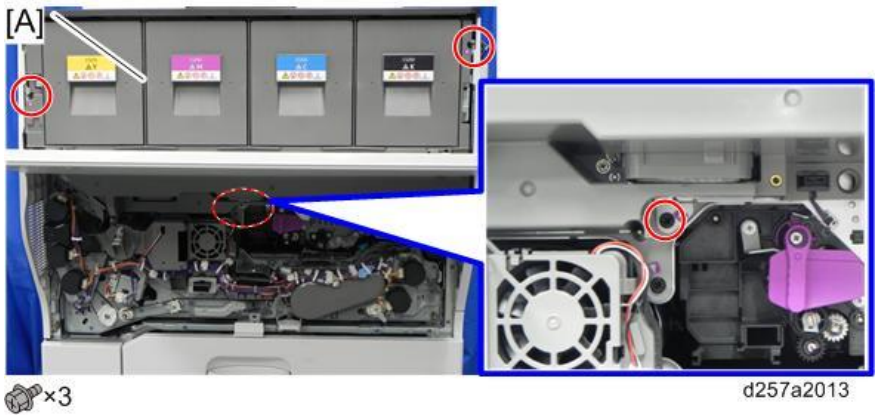
2. ITB cleaning intake fan [A] along with the duct.*



* Pro C5300S/C5310S use TCRU/ORU screws

3. Open the toner supply unit front cover.

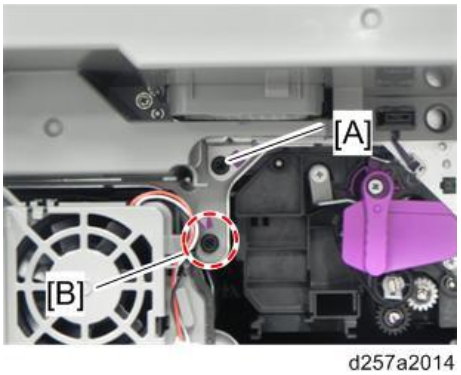
4. Remove the fixing screws of the toner supply unit [A].*



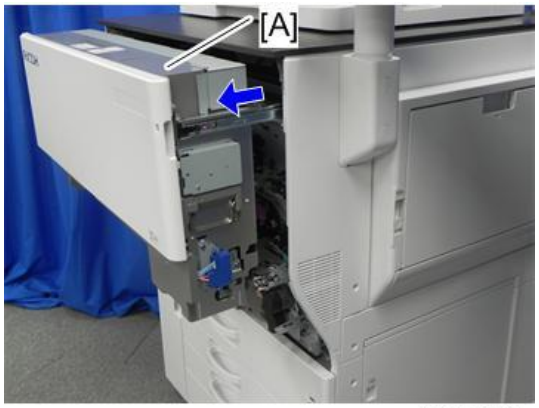
* Pro C5300S/C5310S use TCRU/ORU screws

Note

- The screw [B] under the fixing screw [A] of the toner supply unit fixes the faceplate. Take care not to remove it.

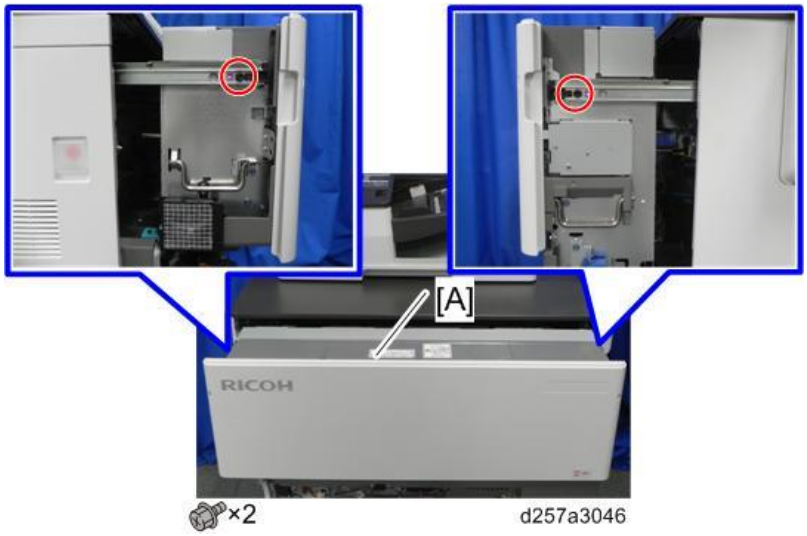


5. Slide the toner supply unit [A] to the front.



d257a3045

6. Pull out the toner supply unit [A], and remove it from the slide rail with the handles on the left and right.*



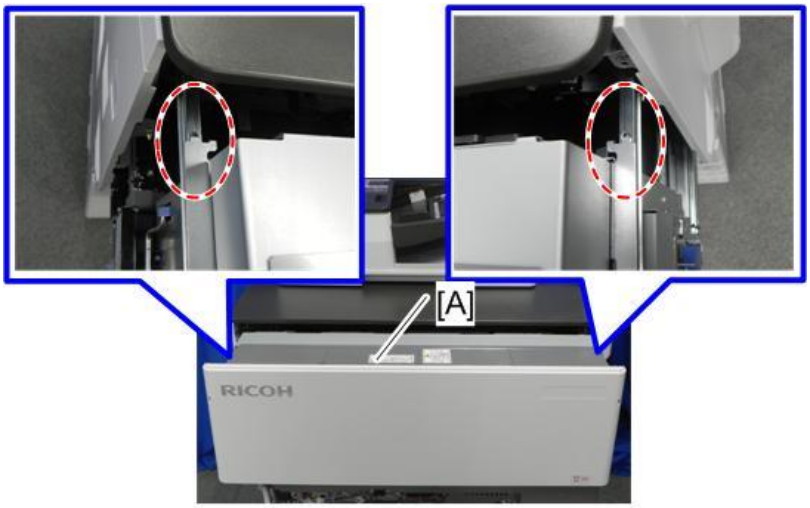
d257a3046

* Pro C5300S/C5310S use TCRU/ORU screws

Note

- When attaching the toner supply unit to the machine, the hooks of the toner supply unit

should be fit into the holes in the slide rails.

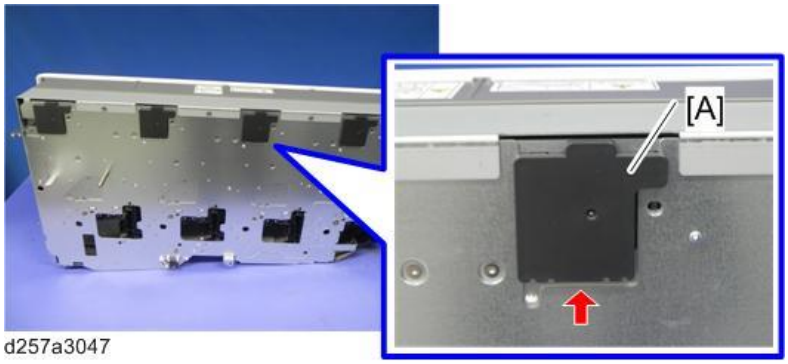


d257a3049

ID Chip Connector Board (PCB5) (KCMY)

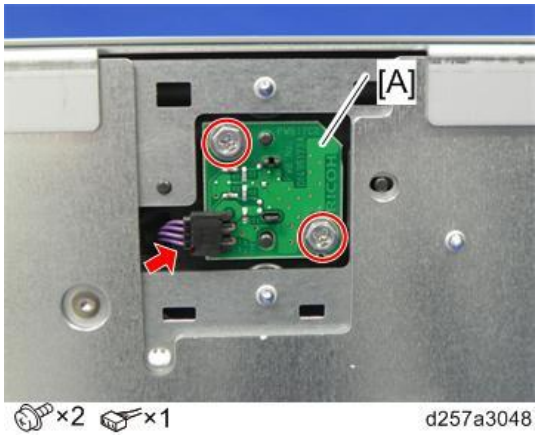
1. Remove the toner supply unit. (Toner Supply Unit)
2. Remove the ID chip connector board cover [A].

   e.g.: M



d257a3047

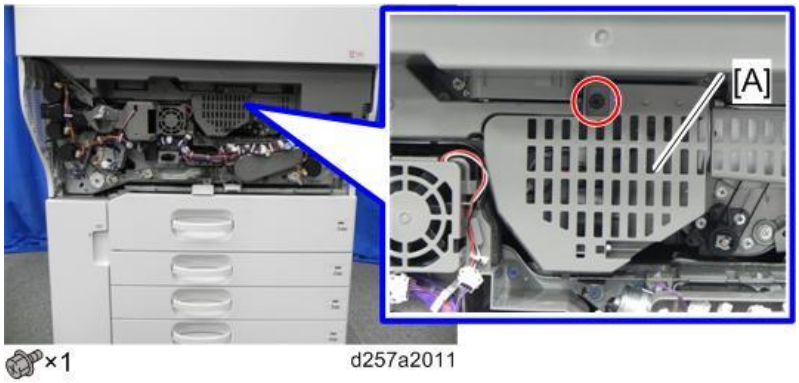
3. Remove the ID chip connector board (PCB5) [A].



d257a3048

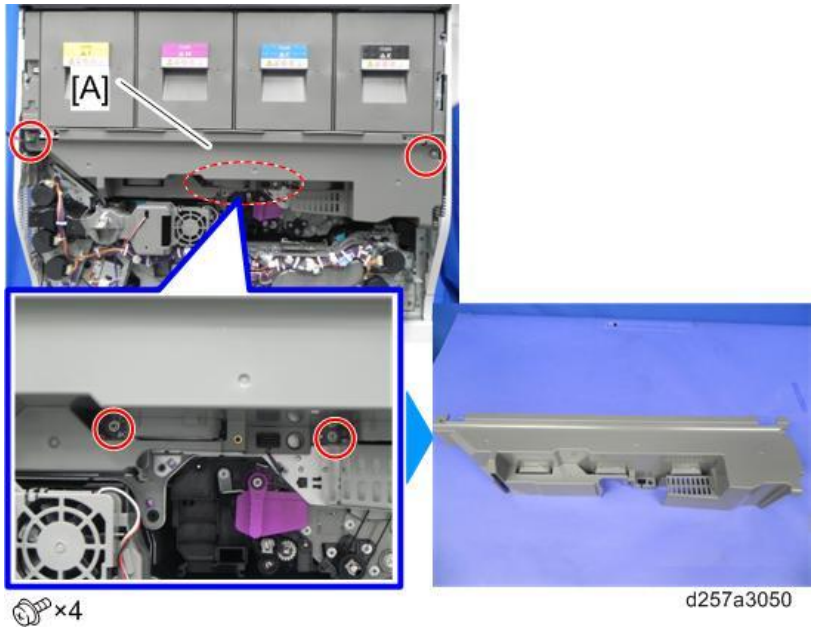
Toner Supply Unit Inner Cover

1. Remove the toner supply unit front cover. (Toner Supply Unit Front Cover)
2. Remove the drawer unit cover. (Drawer Unit Cover)
3. Remove the ITB cleaning intake fan [A] along with the duct.*



* Pro C5300S/C5310S use TCRU/ORU screws

4. Remove the toner supply unit inner cover [A].



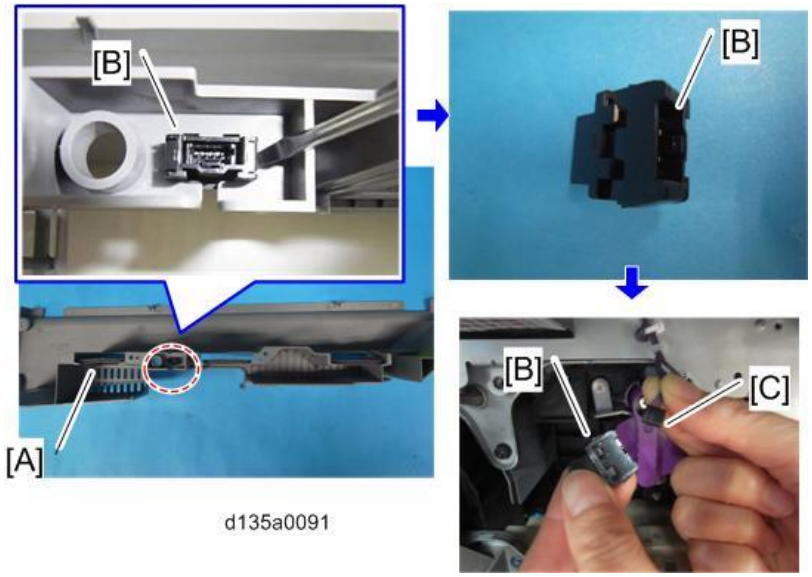
Note

- When removing the toner supply unit inner cover, the harness is also disconnected from the drawer connector attached inside the cover.

Attaching the Toner Supply Unit Inner Cover

1. Remove the drawer connector [B] from the toner supply unit inner cover [A].

2. Connect the drawer connector [B] to the harness [C] of the toner supply unit.

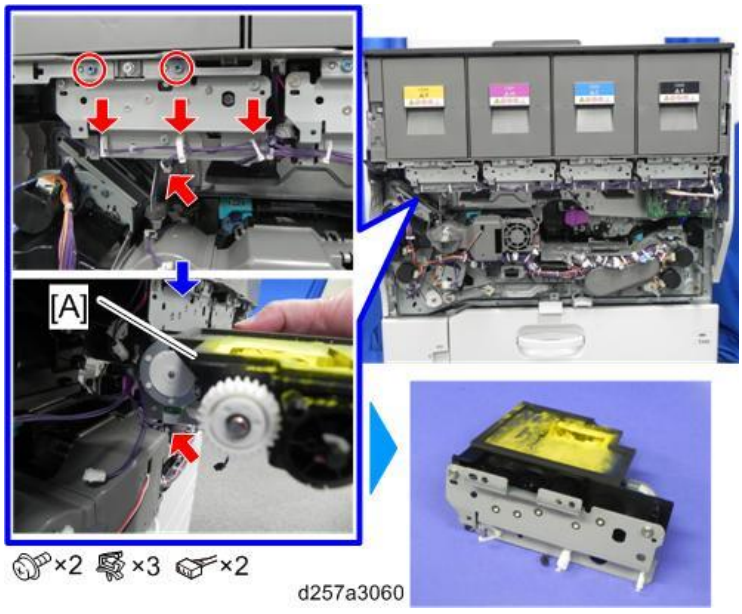


3. Attach the toner supply unit inner cover to the machine, and then insert the drawer connector from the front side of the inner cover.

Sub Hopper Unit (KCMY)

1. Remove the toner supply unit inner cover. (Toner Supply Unit Inner Cover)
2. Remove the toner cartridge.
3. Remove the sub hopper unit [A].

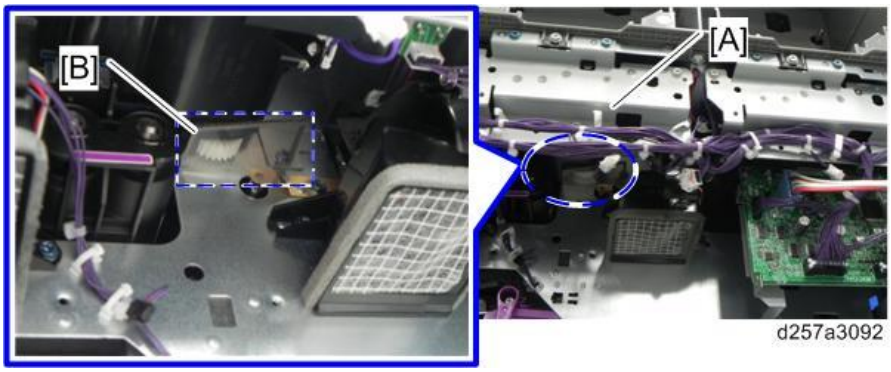
e.g.: Y



Note

- For the following models and colors, the toner fall prevention sheet is attached to the toner supply unit side.
  - Pro C5300S/C5310S: K, C
  - IM C6500/C8000: K

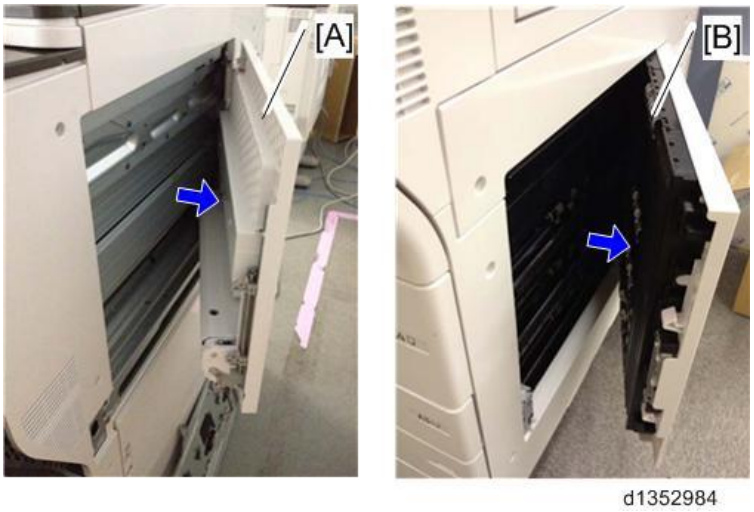
- When installing the sub hopper unit [A], take care not to tuck the toner fall prevention sheet [B]. The following picture shows the normal state.
  e.g.:C



Adjustment after Sub Hopper Unit (KCMY) replacement

After replacing the sub hopper unit, you have to execute Density Adjustment Process Control.

1. Turn ON the main power switch with the bypass tray unit [A] or the vertical transport door [B] open.

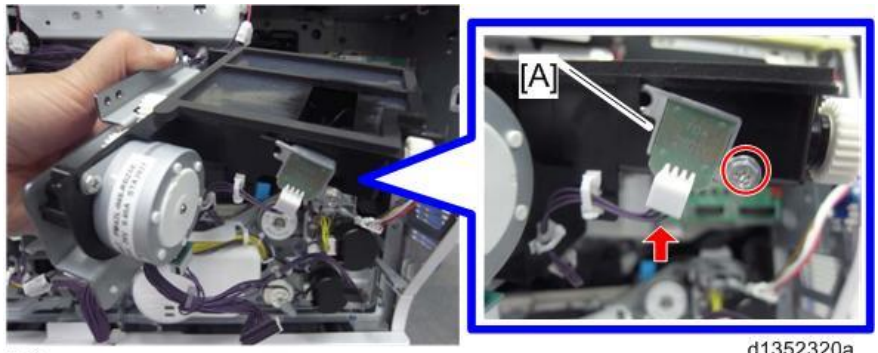


2. Enter SP mode and close the bypass tray unit or vertical transport door.
3. Execute SP3-011-002 (Manual ProCon:Exe > Density Adjustment).
4. Confirm that SP3-012-001 (ProCon OK? > History:Latest) shows “11111111”.

Toner End Sensor (S3) (KCMY)

1. Remove the sub hopper unit. (Sub Hopper Unit (KCMY))

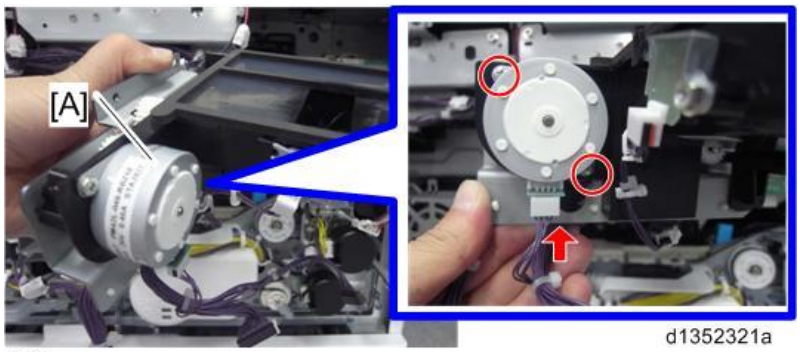
2. Remove the toner end sensor (S3) [A].



×1 ×1

Sub Hopper Motor (M7) (KCMY)

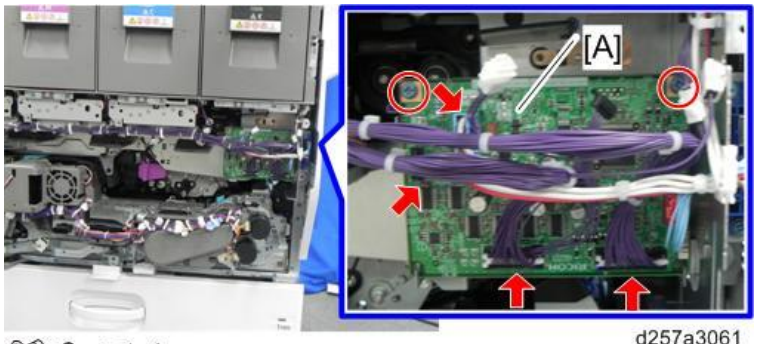
1. Remove the sub hopper unit. (Sub Hopper Unit (KCMY))
2. Remove the sub hopper motor (M7) [A].



×2 ×1

Toner Supply Board (PCB9)

1. Remove the sub hopper unit (K). (Sub Hopper Unit (KCMY))
2. Remove the toner supply board (PCB9) [A].

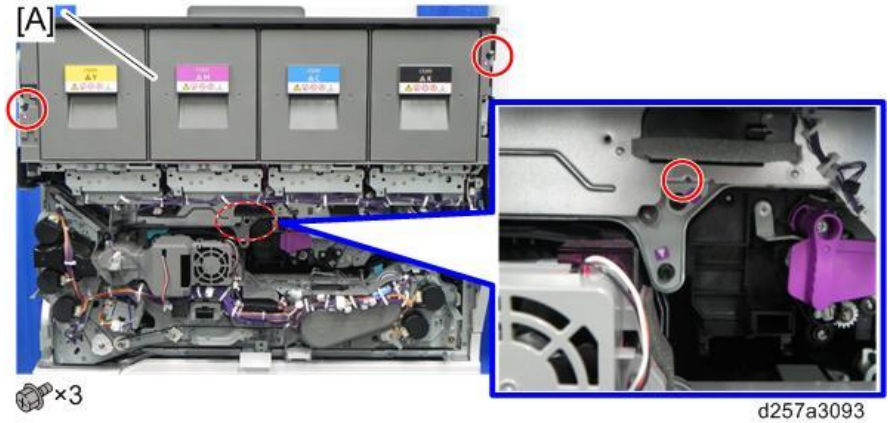


×2 ×4

Toner Cartridge Guide

1. Remove the toner supply unit inner cover. (Toner Supply Unit Inner Cover)

2. Remove the fixing screws of the toner supply unit [A].*

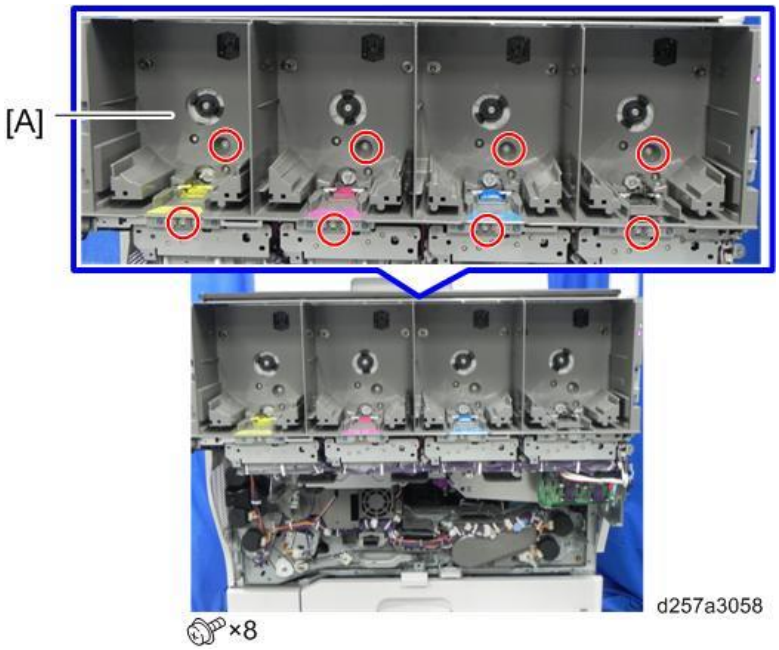


* Pro C5300S/C5310S use TCRU/ORU screws

3. Slide forward the toner supply unit [A].

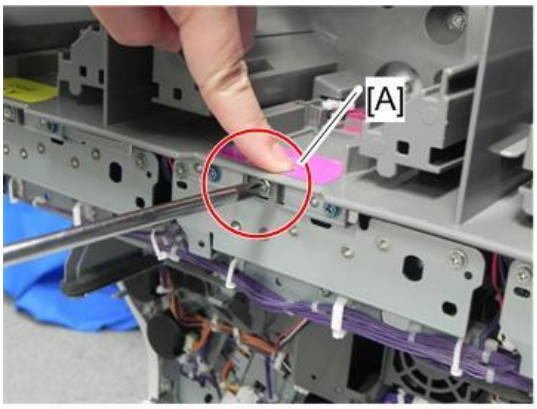
4. Remove the toner cartridge [A].

5. Remove the toner cartridge guide [A].

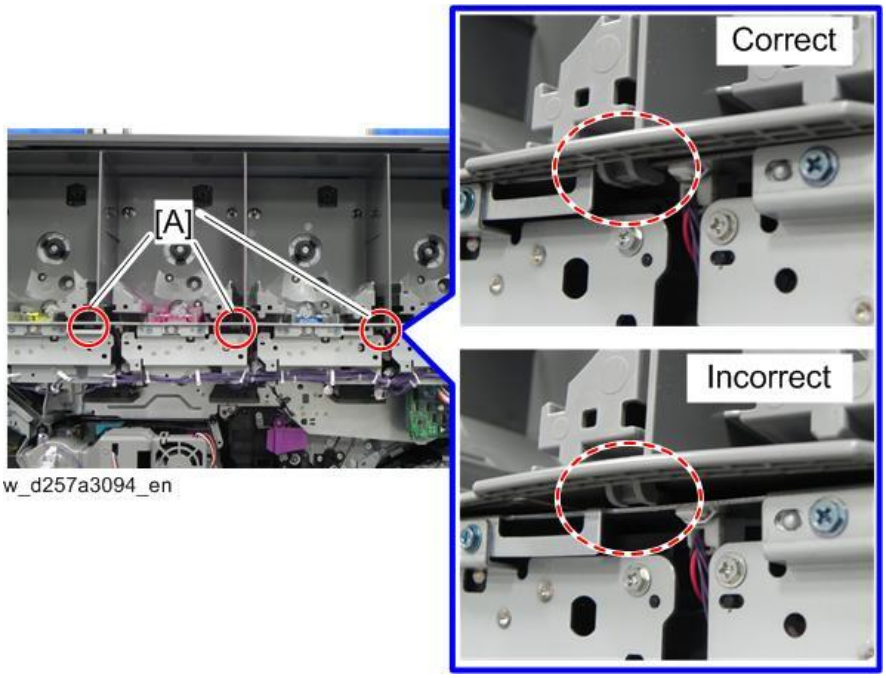


Note

- When installing, tighten the screws on the bottom [A] while holding from the top as shown below.

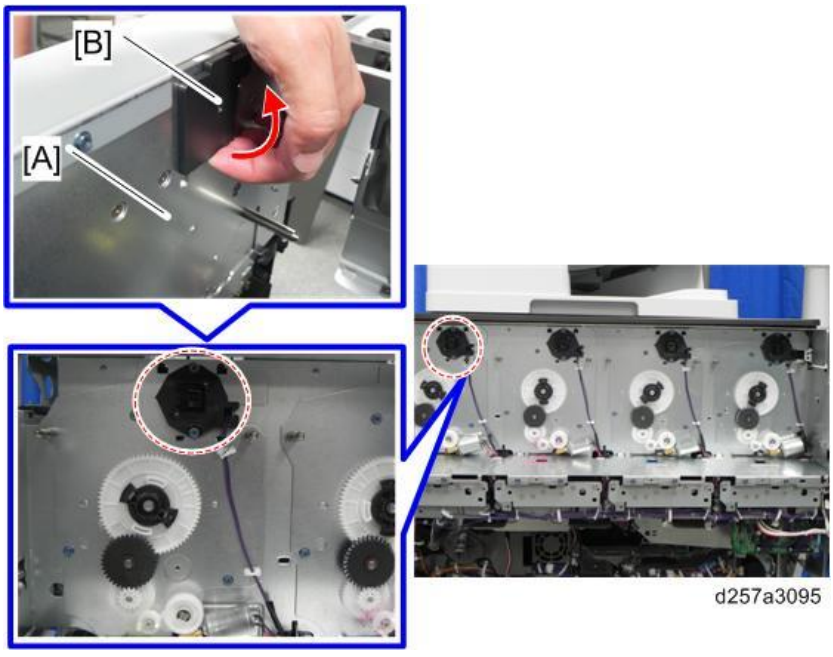


- When installing, hook the hooks [A] under the bottom of the guide correctly.

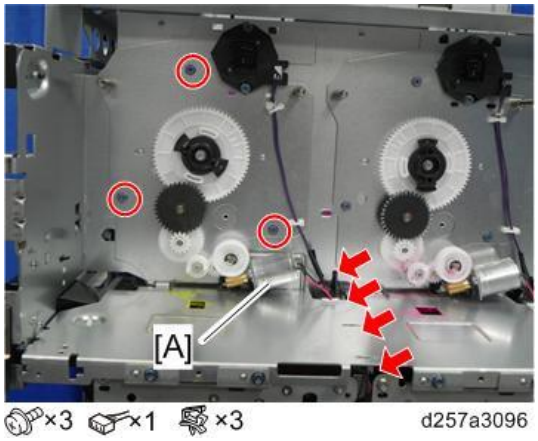


Toner Supply Motor (M3) (KCMY)

1. Remove the toner cartridge guide. (Toner Cartridge Guide)
2. Remove the ID chip connector cover [B] from the back of the toner supply unit [A].
   e.g.: Y

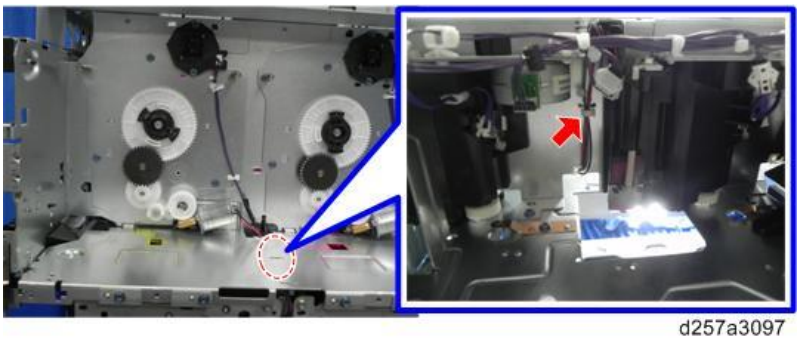


3. Remove the toner supply motor [A] along with the bracket.



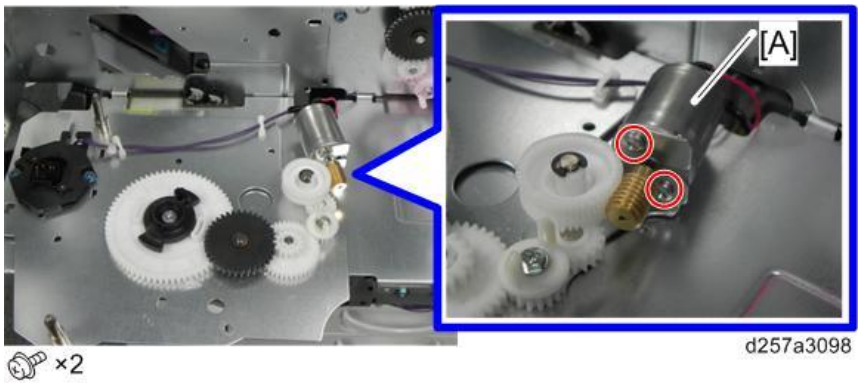
Note

- It will be easier to access the clamp shown below if you remove the development intake fan. (Development Intake Fans (FAN2) (KCMY)



4. Remove the toner supply motor (M3) [A].

e.g.: Y



Applying Grease after Replacing the Toner Supply Motor

After replacing the toner supply motor, apply grease to the motor shaft gear to reduce motor noise (Grease: G-1077).

Lower Limit	Upper Limit
d257a3373	d257a3374

Caution When Reattaching the Toner Supply Unit

- Be sure to lay down the operation panel [A] when reattaching the toner supply unit.

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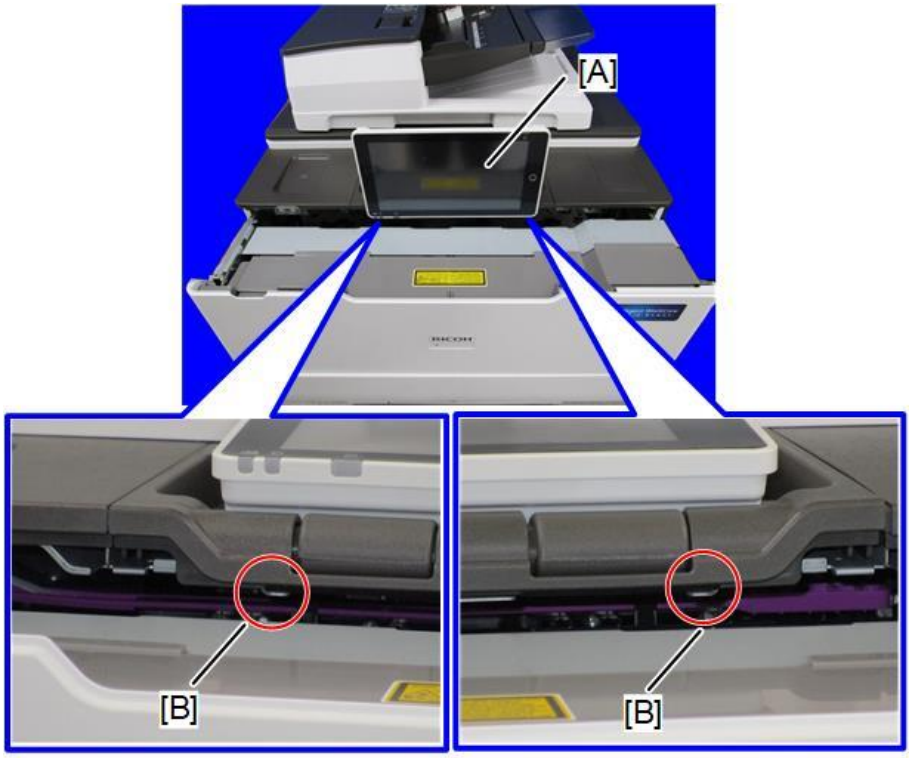
- Otherwise, the operation panel brackets [B] and the toner supply unit may interfere.



d0cpz0709

Drawer Unit

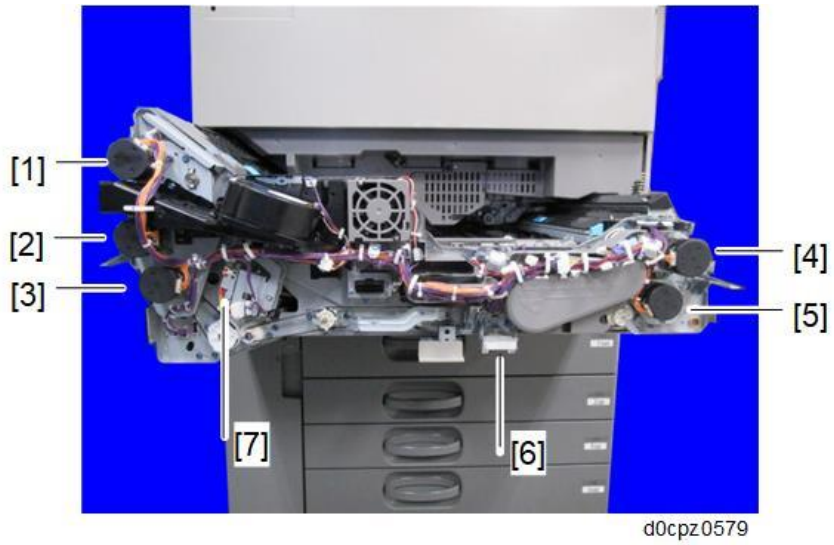
Important

- After replacing the drawer unit, the paper transfer belt unit must be adjusted. (Adjustment of the Paper Transfer Belt Unit)

Layout (Motors)

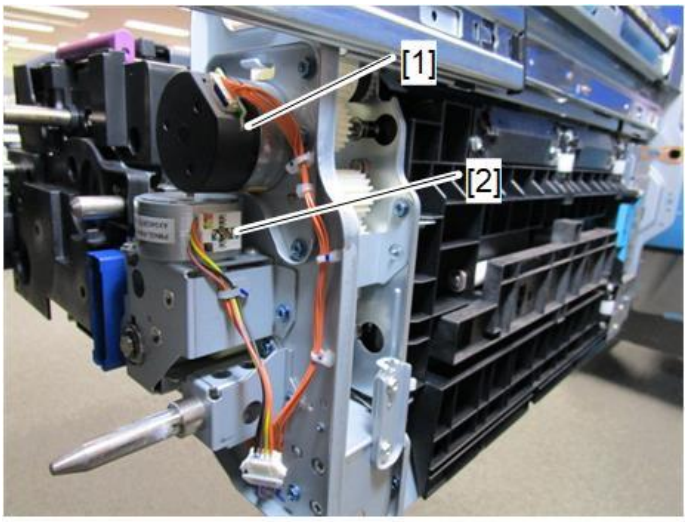
Drawer Unit (Front)

To replace the motors on the front of the drawer unit, first remove the drawer unit cover. (Drawer Unit Cover)



No.	Part Name	Replacement procedure	Remarks
1	Exit Motor (M45)	Exit Motor (M45)	
2	Duplex Inverter Entrance Motor (M46)	Duplex Inverter Entrance Motor (M46)	
3	Duplex Transport Motor (M48)	Duplex Transport Motor (M48)	
4	Registration Motor (M43)	Registration Motor (M43)	
5	Duplex Exit Motor (M47)	Duplex Exit Motor (M47)	
6	Drawer Unit Lock Motor (M44)	Drawer Unit Lock Motor (M44)	
7	Cleaning Web Motor (M49)	Cleaning Web Motor (M49) (Pro C5300S/C5310S only)	Pro C5300S/C5310S only

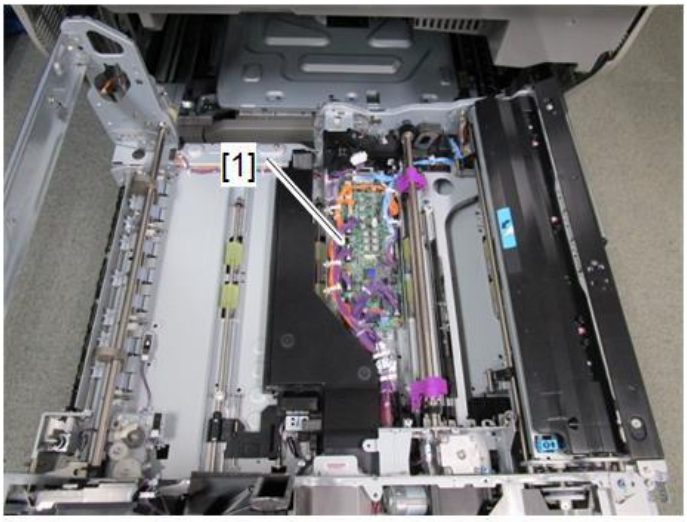
Drawer Unit (Rear)



d0cpz0580

No.	Part Name	Replacement procedure	Remarks
1	Exit Inverter Motor (M42)	Exit Inverter Motor (M42)	
2	Cleaning Web Contact Motor (M50)	Cleaning Web Contact Motor (M50) (Pro C5300S/C5310S only)	Pro C5300S/C5310S only

Layout (Boards)



d0cpz0581

No.	Part Name	Replacement procedure	Remarks
1	DUB (PCB37)	DUB (PCB37)	

Drawer Unit Cover

1. Open the drawer unit [A].

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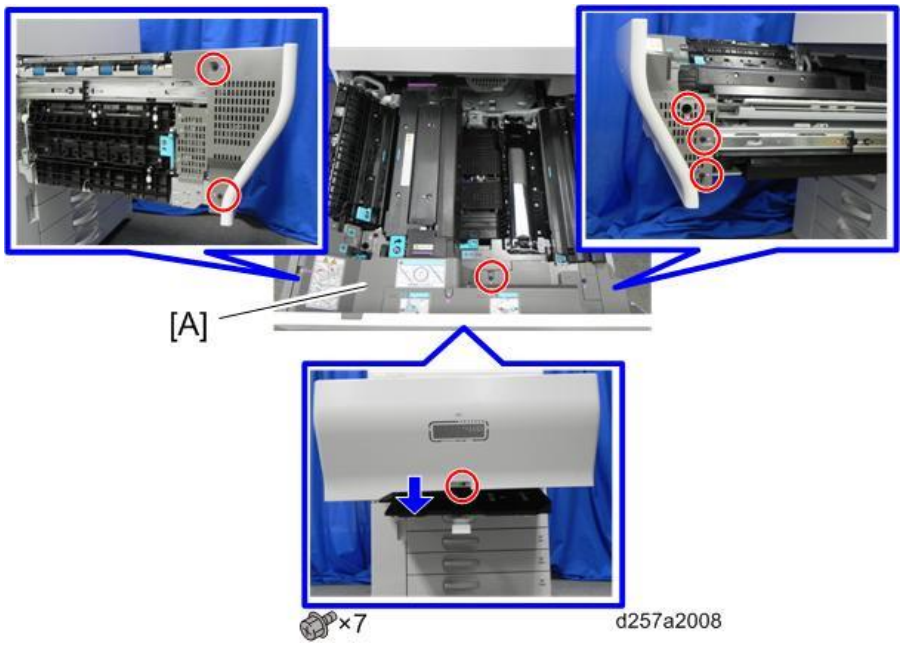
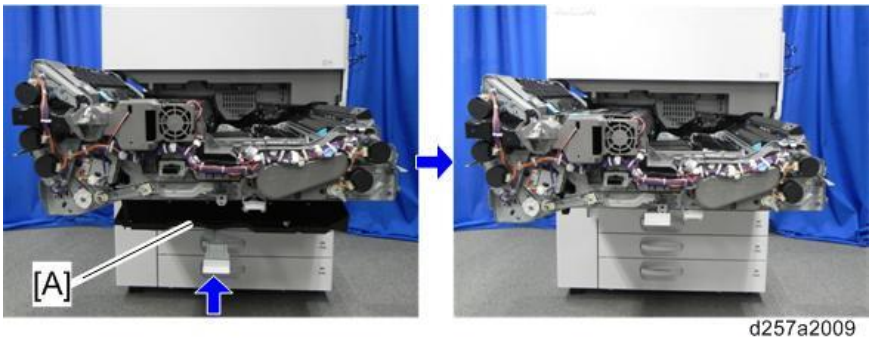
2. Remove the drawer unit cover [A].



d257a2008

Note

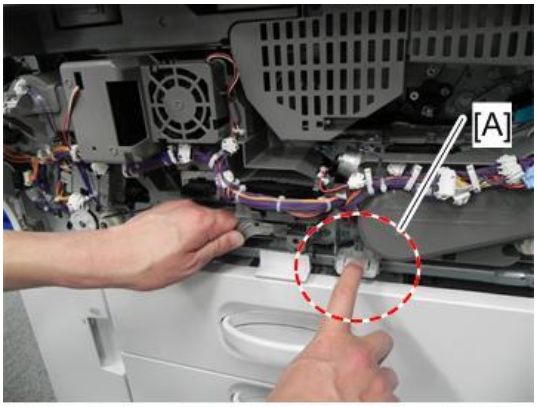
- After removing the drawer unit cover, when the drawer unit is returned to the machine, you can close the guide plate [A] of the paper exit and duplex unit.



d257a2009

- After removing the drawer unit cover, when the drawer unit is pushed all the way in, the

drawer is locked by the lock lever at the right side of the handle. If the drawer is locked, pull out the drawer unit while holding the lock lever [A] as shown in the picture below.



d257a2010

If the Drawer is Locked

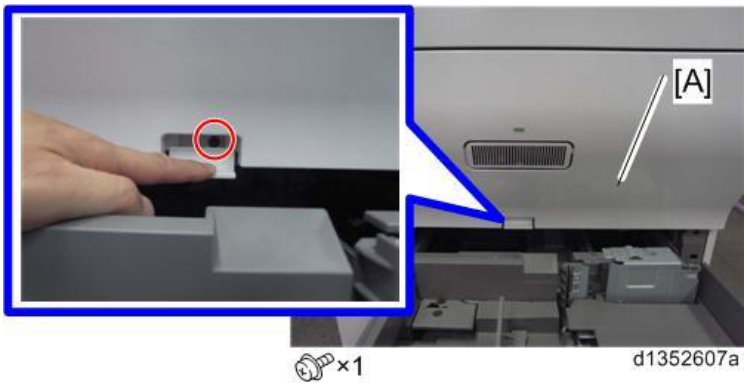
When the drawer is locked, deal with the problem depending on the symptom. (Drawer Unit Lock Motor Emergency)

This section shows the procedure to unlock when there is a failure of the drawer unit lock sensor or drawer unit lock motor.

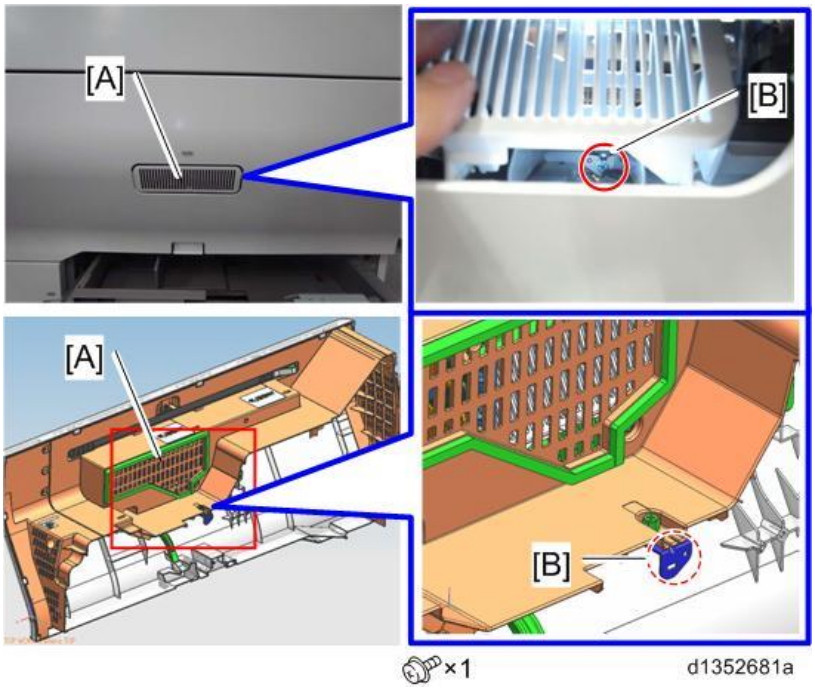
1. Remove the left middle cover of the outer cover (Left Middle Cover)
2. Remove the right middle front cover of the outer cover (Pro C5300S/C5310S: Right Middle Front Cover (Pro C5300S/C5310S). IM C6500/C8000: Right Middle Front Cover (IM C6500/C8000))
3. Remove the fixing screws of the left and right sides of the drawer unit cover [A].

d1352606a

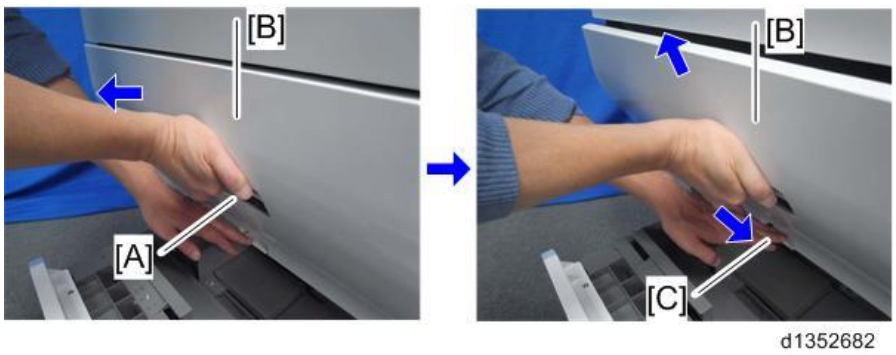
4. Open the paper feed tray, then remove the fixing screw on the bottom of the drawer unit cover [A].



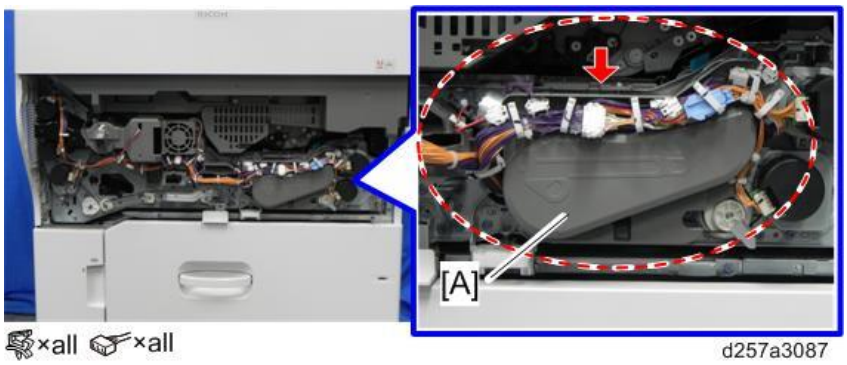
5. Insert the driver from the flapper handle [A], and remove the bracket screw [B].



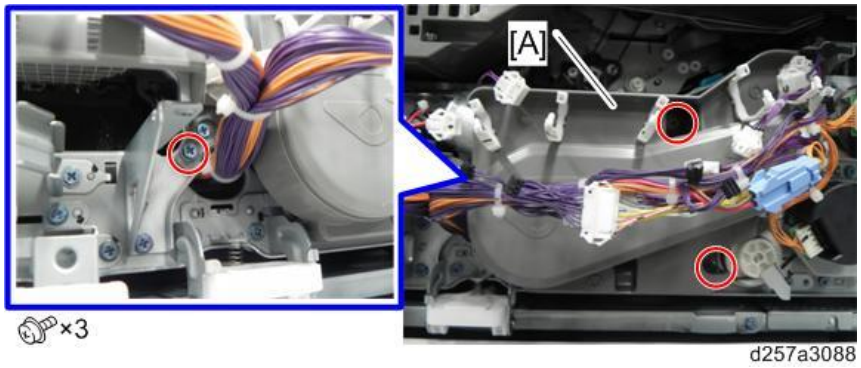
6. Put a hand in the flapper handle [A] and pull the drawer unit cover [B] to the front. Then hold the guide plate [C] of the paper exit and duplex unit, and remove the drawer unit cover [B] in an upward direction.



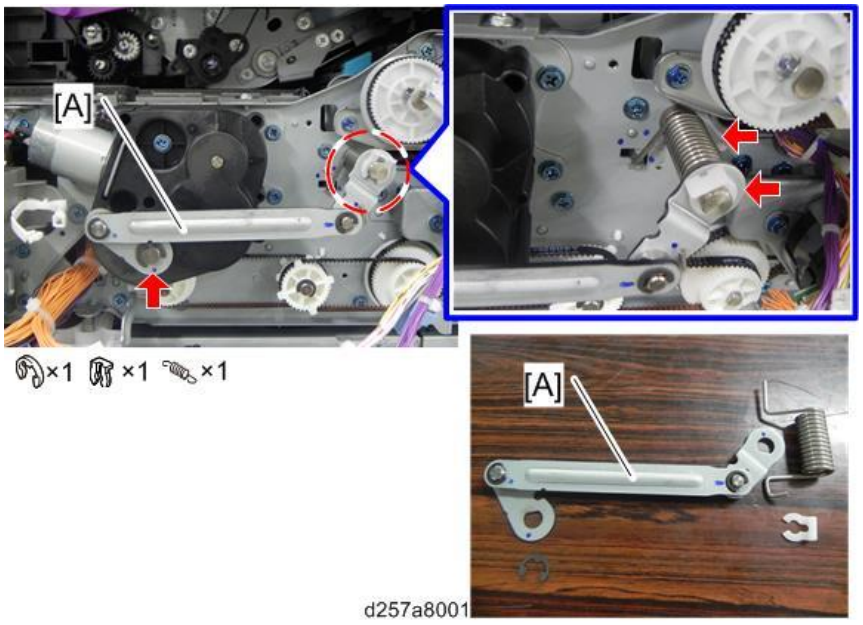
7. Disconnect the connectors, clamps, etc., in order to remove the drawer unit lock motor cover [A].



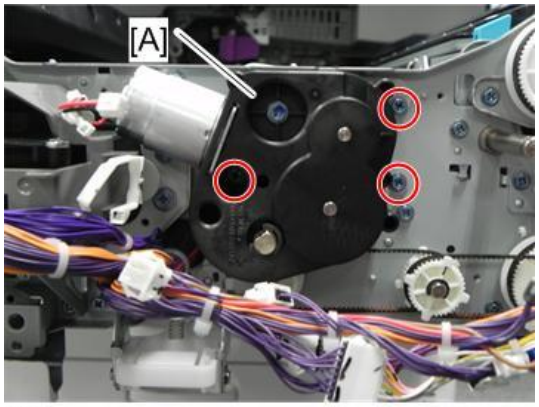
8. Remove the drawer unit lock motor cover [A].



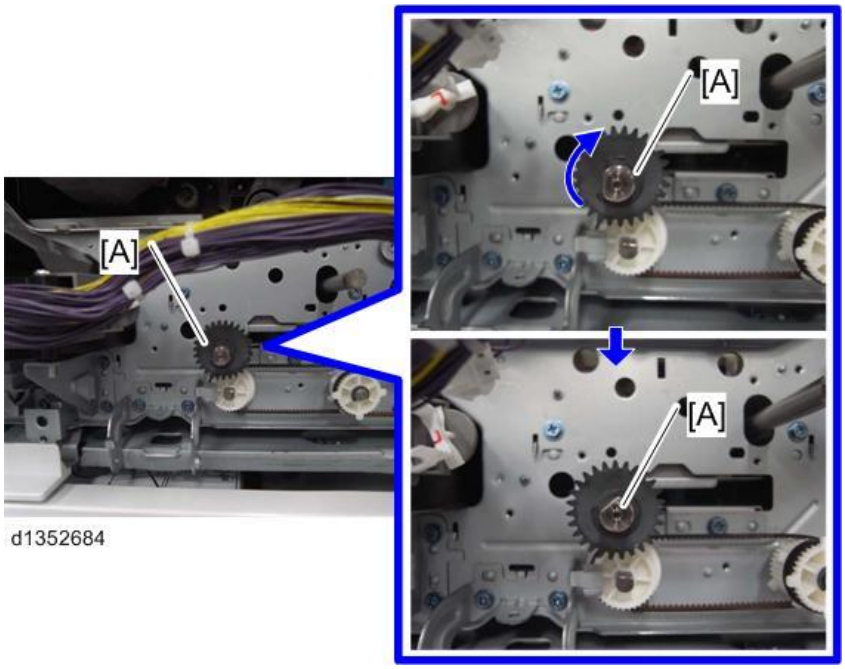
9. Remove the link [A].



10. Remove the drawer unit lock motor block [A].

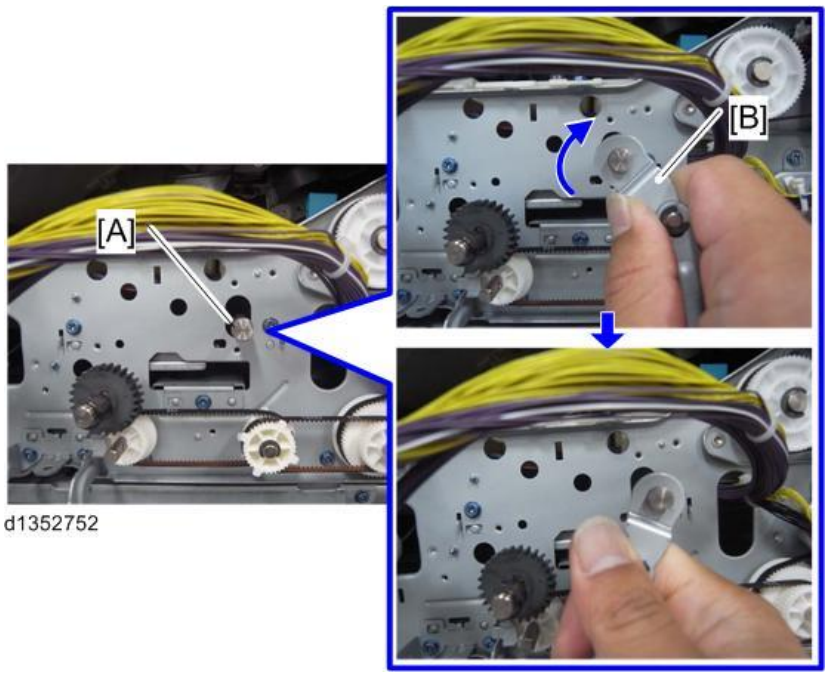


11. Turn the lock shaft [A] clockwise to release the lock.



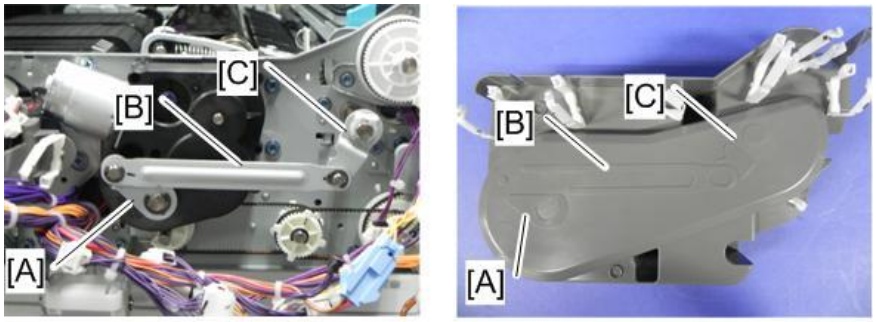
12. Turn the paper transfer roller shaft [A] clockwise by using the link [B] to separate the paper transfer

roller unit from the ITB. You can pull the drawer unit out.



Note

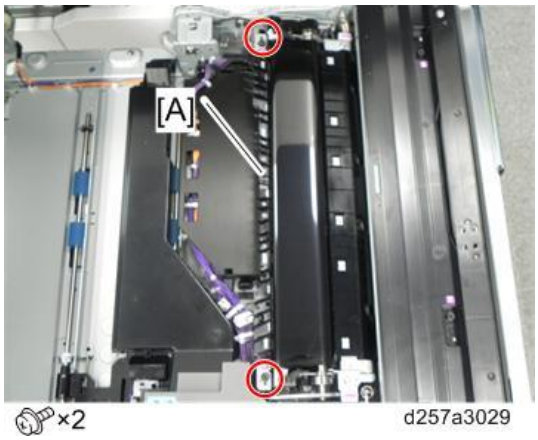
- When mounting the motor block, screw the motor in first. Then, assemble links [A], [B] and [C] as shown below. There is also a diagram embossed on the motor cover to help you to install the links correctly.
  - Lock shaft (Cut surface to the upper left) [A]
  - Link [B]
  - Paper transfer roller shaft (Cut surface to the lower side) [C]



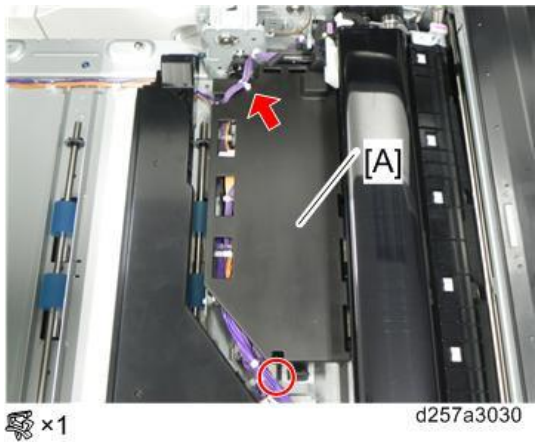
DUB (PCB37)

1. Remove the paper transport belt unit. (Paper Transport Belt Unit)

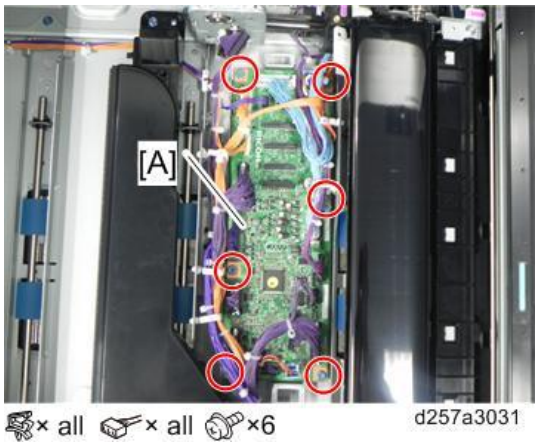
2. Remove the exit guide plate [A].



3. Remove the DUB cover [A].



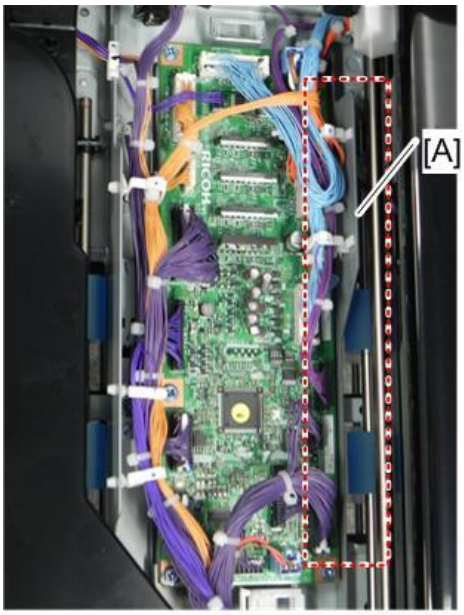
4. Remove the DUB (PCB37) [A].



Note

- When you install the DUB (PCB37), take care not to pinch the harness between the DUB

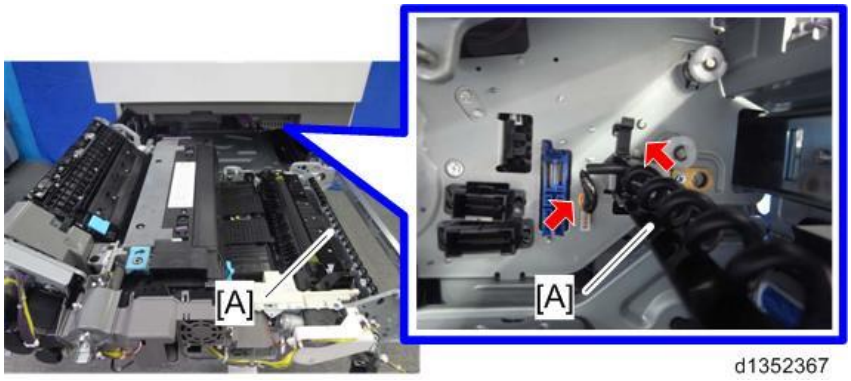
cover and the plate [A].



Curled Cord

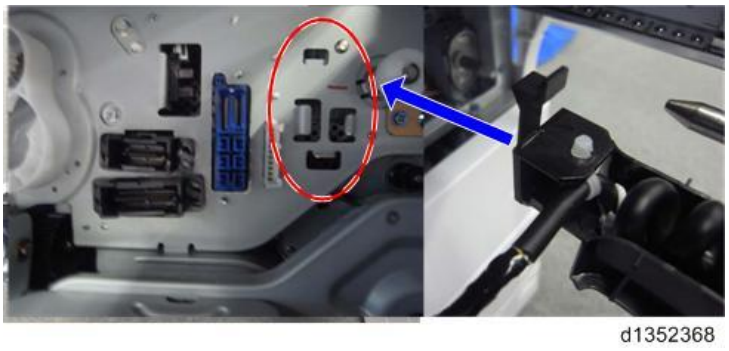
1. Remove the drawer unit cover. (Drawer Unit Cover)
2. Remove the registration unit. (Registration Unit)
3. Remove the relay unit. (Relay Unit)
4. Remove the paper transfer roller unit. (Paper Transfer Belt Unit)
5. Remove the guide plate.
6. Open the bypass tray unit [A]. Remove the guide plate [B].

7. Remove the curled cord support material [A] that is connected to the rear of the machine.

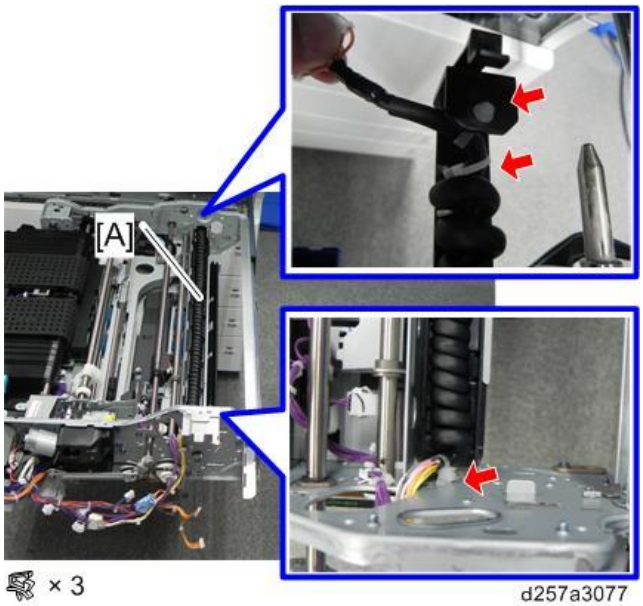


Note

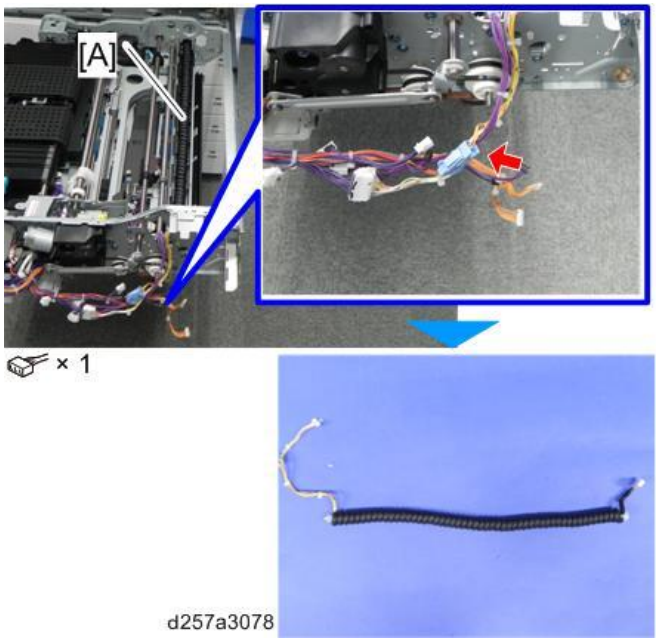
- When mounting the curled cord, fit the support material in the hole in the rear of the machine.



8. Remove the left and right clamps fixing the curled cord [A].

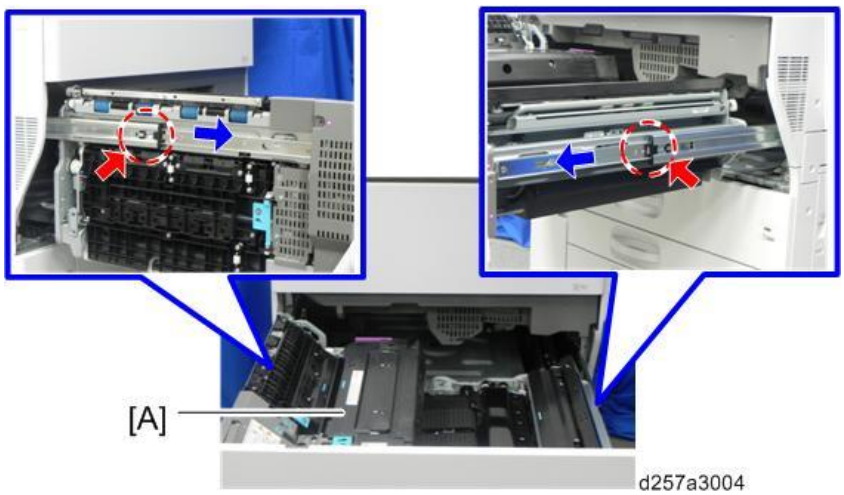


9. Remove the curled cord [A].



Drawer Unit Connector

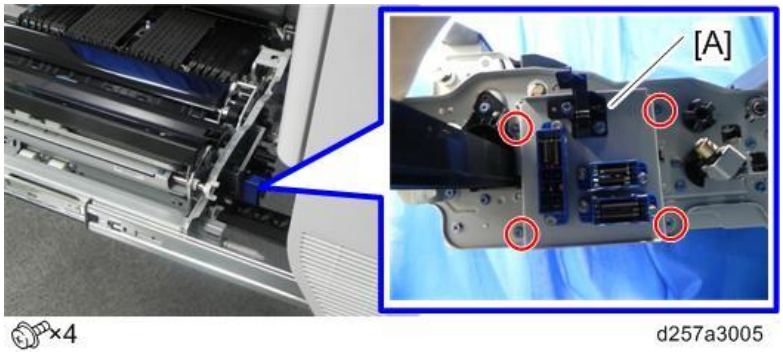
1. Pull the drawer unit out halfway , then press the release levers (one on the left side and one on the right side, shown by the red arrows) and pull the drawer unit [A] out fully.



Note

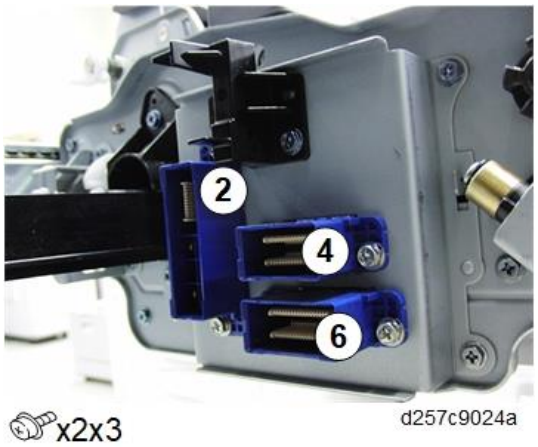
- In a low-temperature environment (below 15°C), the tension of the curled cord may be reduced. Do not keep the drawer unit pulled out for an extended period of time, or the curled cord will be deformed and will not curl up again when you try to slide the drawer unit back in. As a guide, every 30 minutes, push the drawer unit back to the halfway position. The tension of the curled cord will not decrease in a low-temperature environment if the drawer unit is open halfway.

2. Remove the drawer unit connector bracket [A].

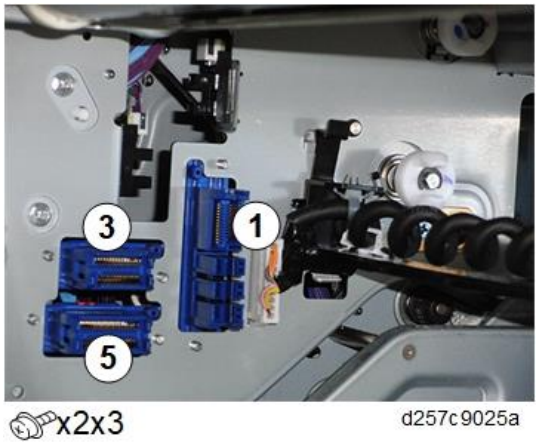


3. Remove the drawer unit connector [A].

Drawer side:

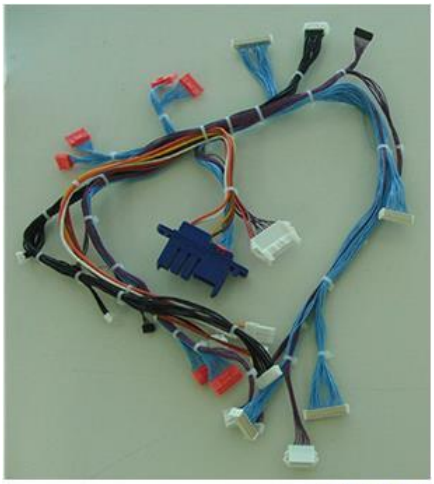
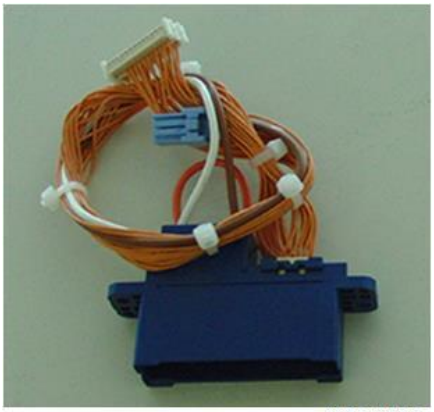


Main machine side:



Drawer Connector List

	P-to-P	Delivery Pattern
①	CN950	Integrated harness and connector

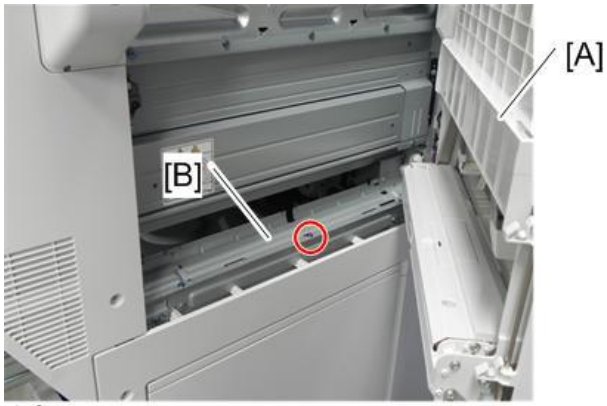
	P-to-P	Delivery Pattern
		 d257c9026
②	CN950	Integrated harness and connector  d257c9027
③	CN960	Only drawer connector d257c9028
④	CN960	Only drawer connector d257c9029
⑤	CN955	Only drawer connector

	P-to-P	Delivery Pattern
		d257c9030
⑥	CN955	Only drawer connector d257c9031

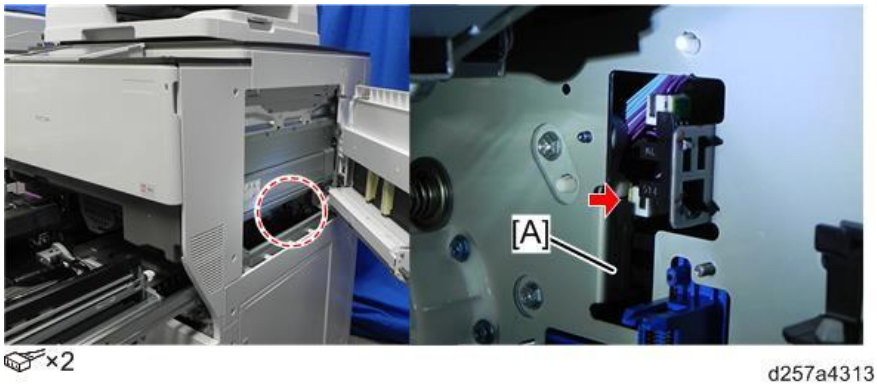
Drawer Set Sensor 1 (S56)

1. Open the drawer unit.

2. Open the bypass unit [A]. Remove the guide plate [B].



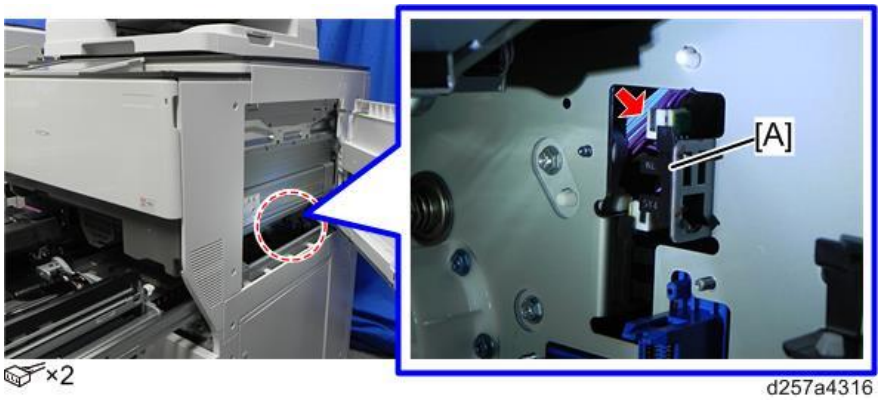
3. Remove the drawer set sensor 1 (S56) [A].



Drawer Set Sensor 2 (S57)

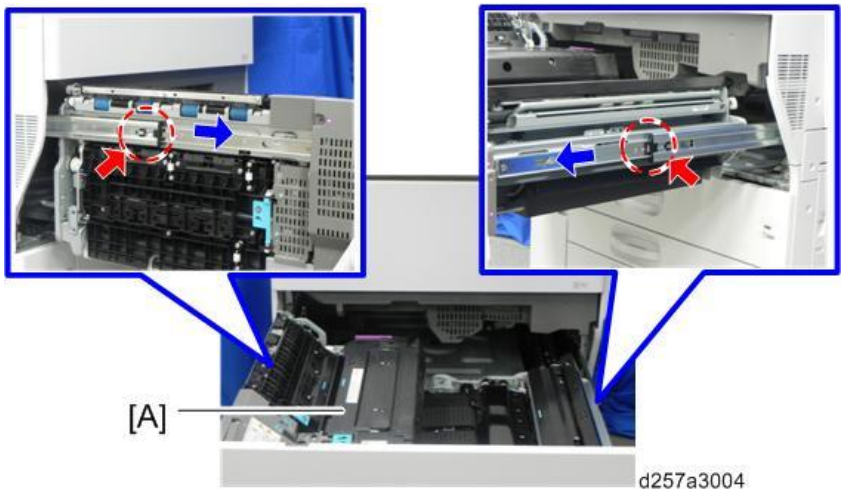
1. Open the drawer unit.
2. Open the bypass unit [A]. Remove the guide plate [B].

3. Remove the drawer set sensor 2 (S57) [A].



Drawer Unit Lock Sensor (S61)

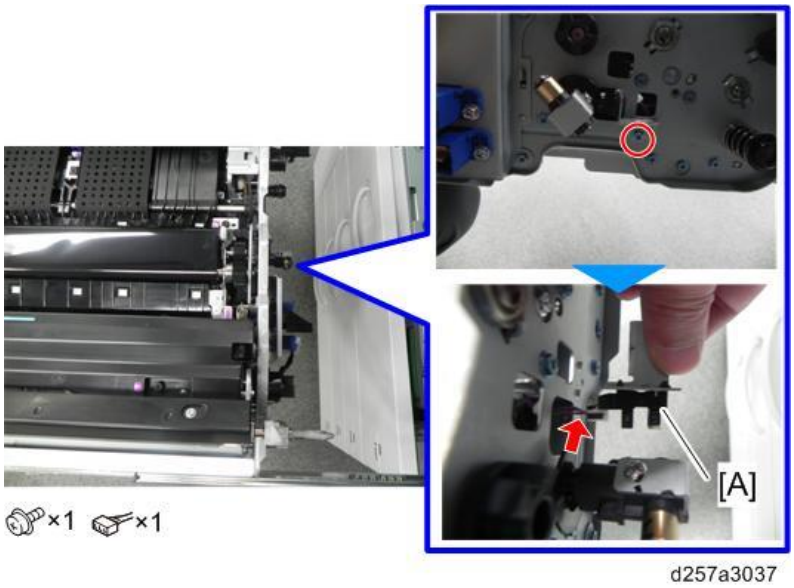
1. Pull the drawer unit out halfway, then press the release levers (one on the left side and one on the right side, shown by the red arrows) and pull the drawer unit [A] out fully.



Note

- In a low-temperature environment (below 15°C), the tension of the curled cord may be reduced. Do not keep the drawer unit pulled out for an extended period of time, or the curled cord will be deformed and will not curl up again when you try to slide the drawer unit back in. As a guide, every 30 minutes, push the drawer unit back to the halfway position. The tension of the curled cord will not decrease in a low-temperature environment if the drawer unit is open halfway.

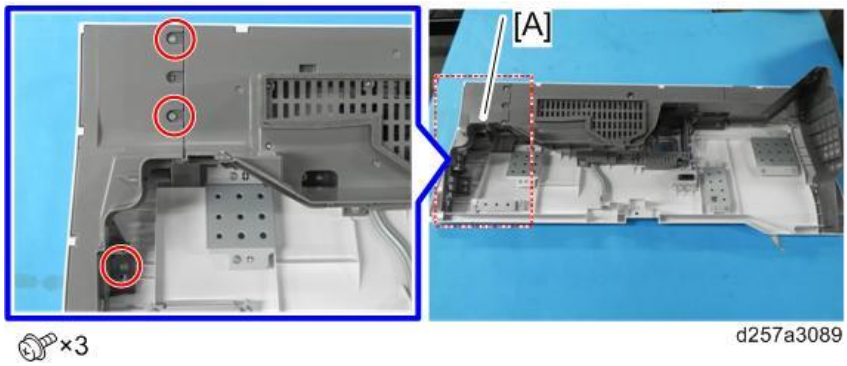
2. Remove the drawer unit lock sensor (S61) [A].



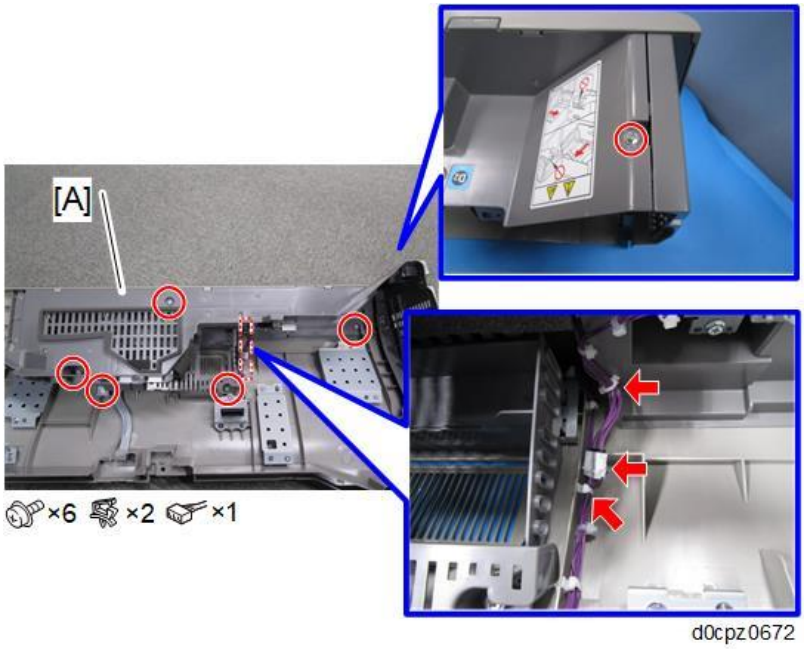
Drawer Unit Flapper Sensor (S81)

1. Remove the drawer unit cover. (Drawer Unit Cover)

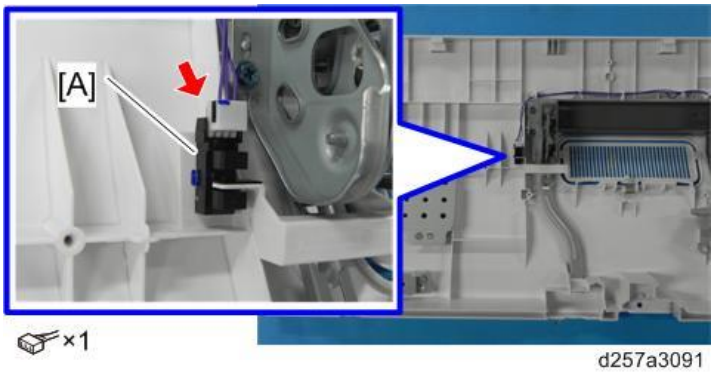
2. Remove the left cover [A].



3. Remove the middle cover [A].



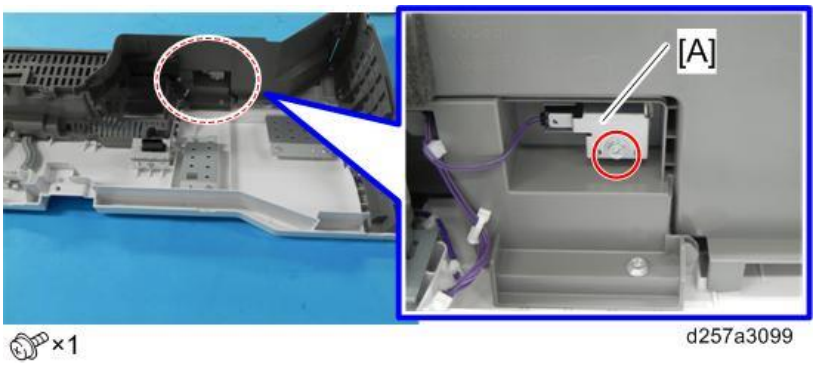
4. Remove the drawer unit flapper sensor (S81) [A].



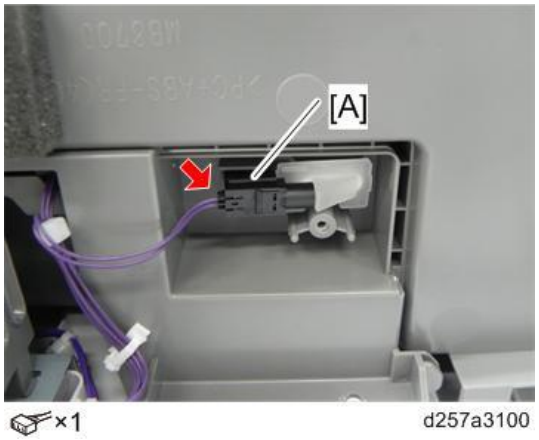
Drawer LEDs (LED 1-4)

Duplex Guide Plate JAM Process LED (LED7)

1. Remove the drawer unit cover. (Drawer Unit Cover)
2. Remove the bracket [A].

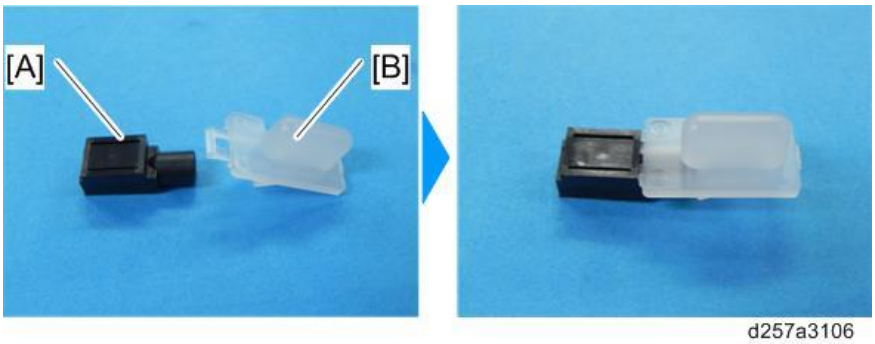


3. Remove Duplex Guide Plate JAM Process LED (LED7) [A].



Note

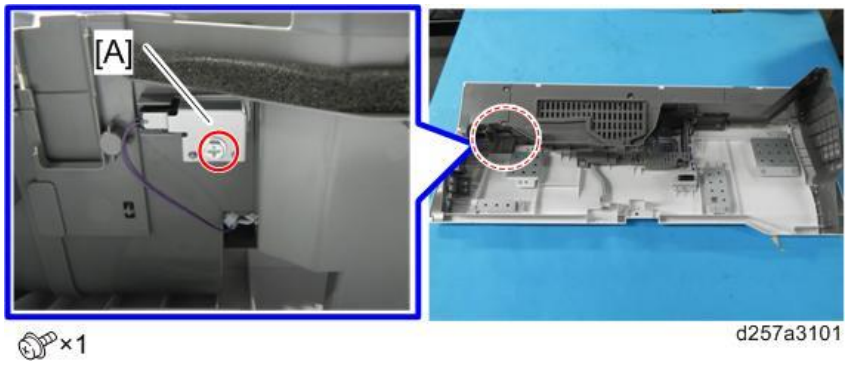
- Put the lens [B] on the LED [A] before installing.



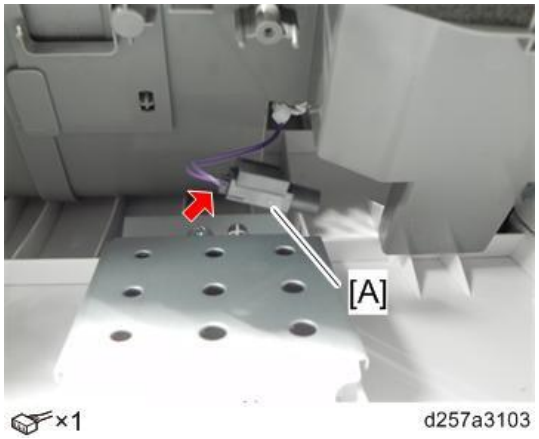
Upper Guide Plate LED (LED5)

1. Remove the drawer unit cover. (Drawer Unit Cover)

2. Remove the bracket [A].

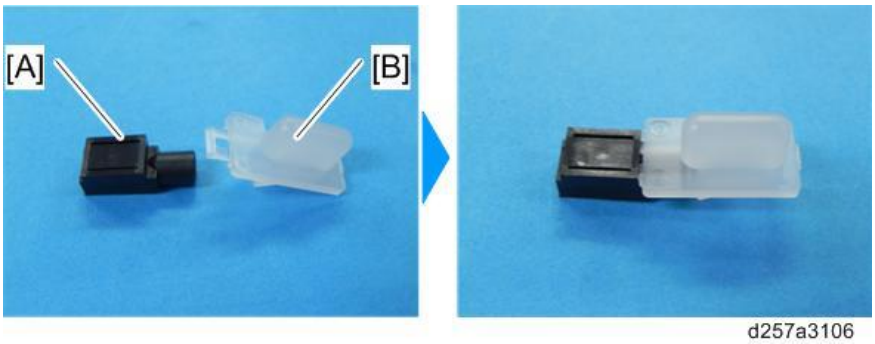


3. Remove upper guide plate LED (LED5) [A].



Note

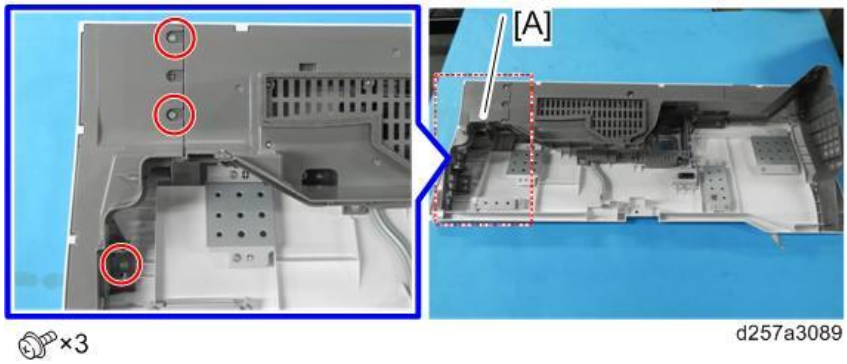
- Put the diffuser [B] on the LED [A] before installing.



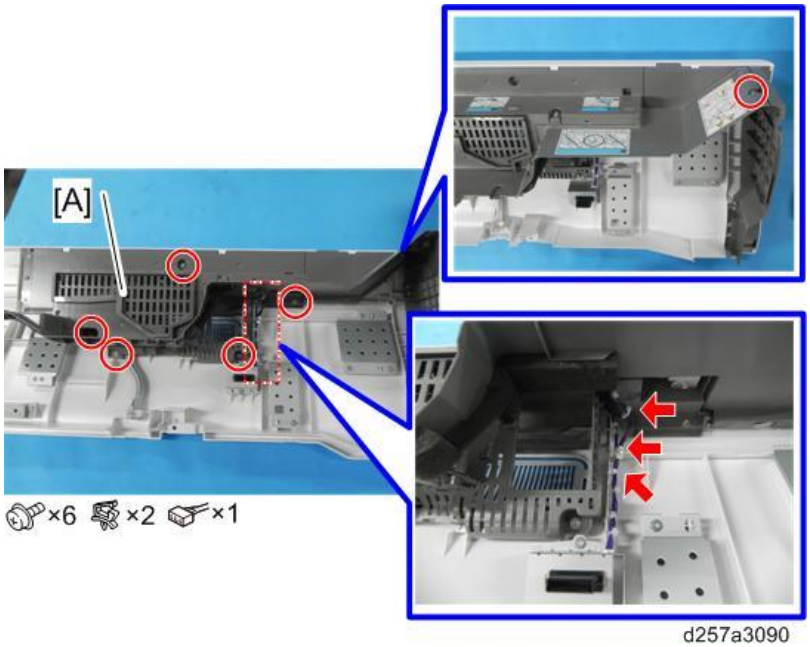
Drawer Unit LED (LED8)

1. Remove the drawer unit cover. (Drawer Unit Cover)

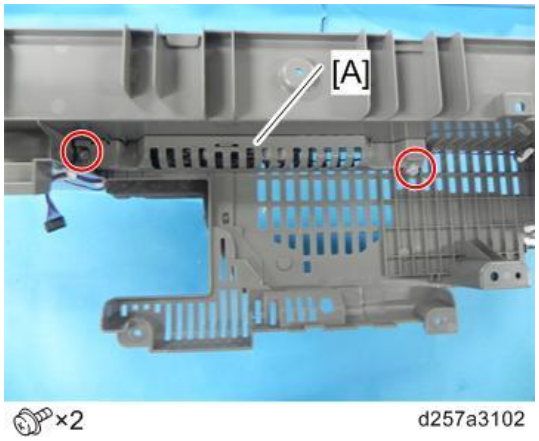
2. Remove the left cover [A].



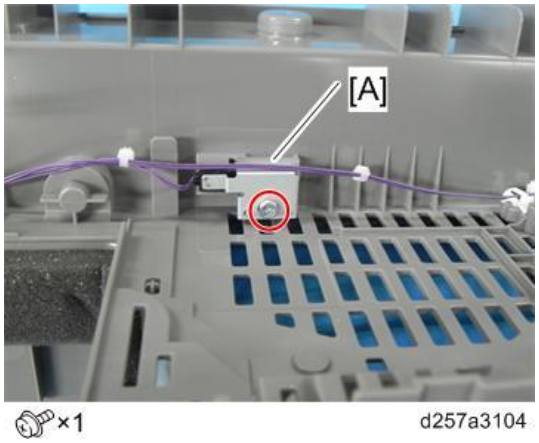
3. Remove the middle cover [A].



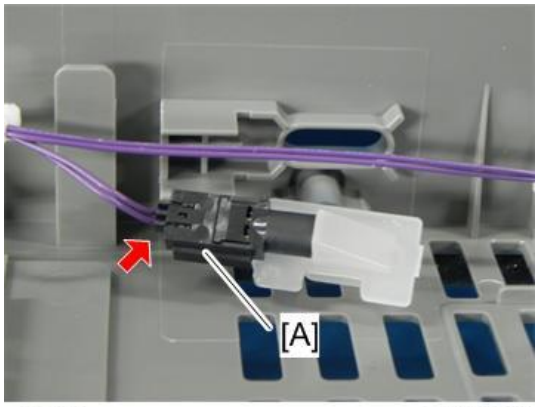
4. Remove the cover [A].



5. Remove the bracket [A].

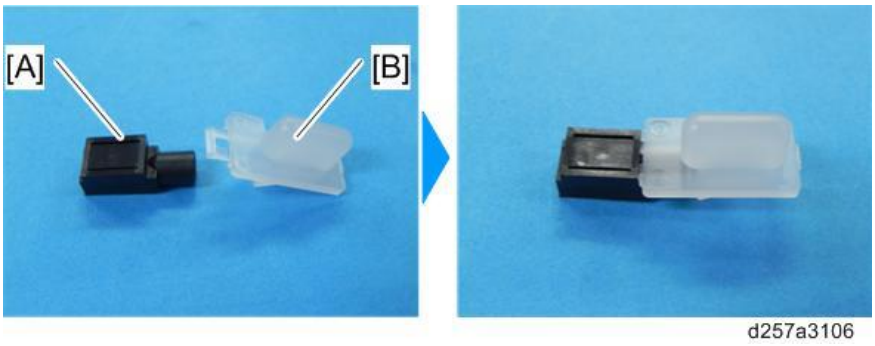


6. Remove the drawer unit LED (LED8) [A].



Note

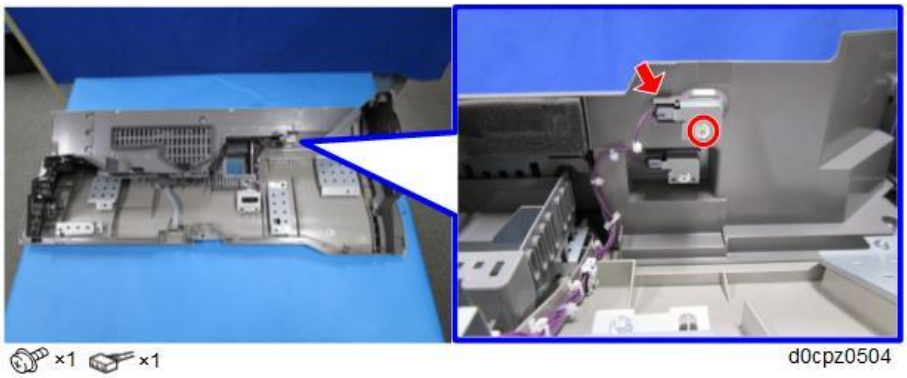
- Put the lens [B] on the LED [A] before installing.



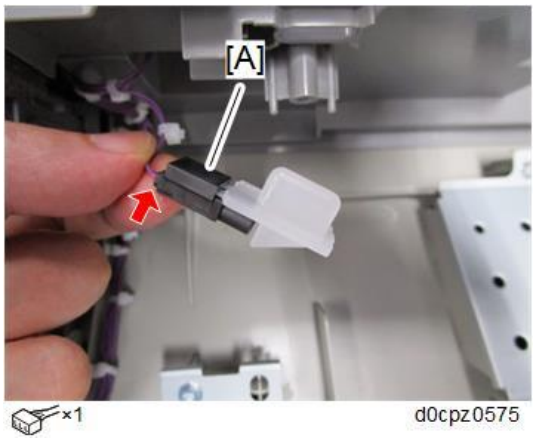
Fusing Separation Plate Guide Grip LED (LED18)

1. Remove the drawer unit cover. (Drawer Unit Cover)

2. Remove the bracket [A].

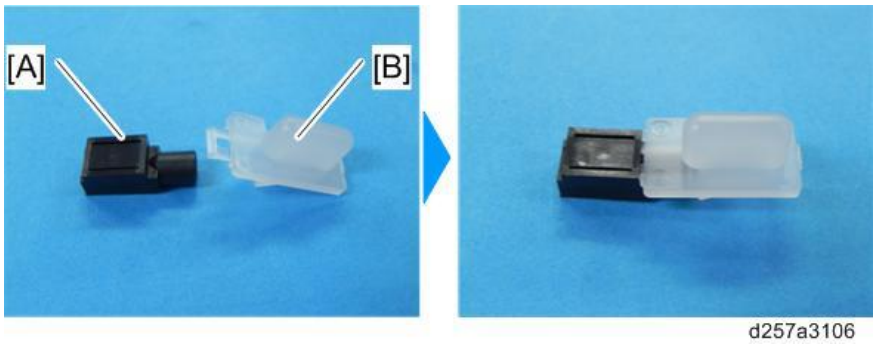


3. Remove the fusing separation plate guide grip LED (LED18) [A].



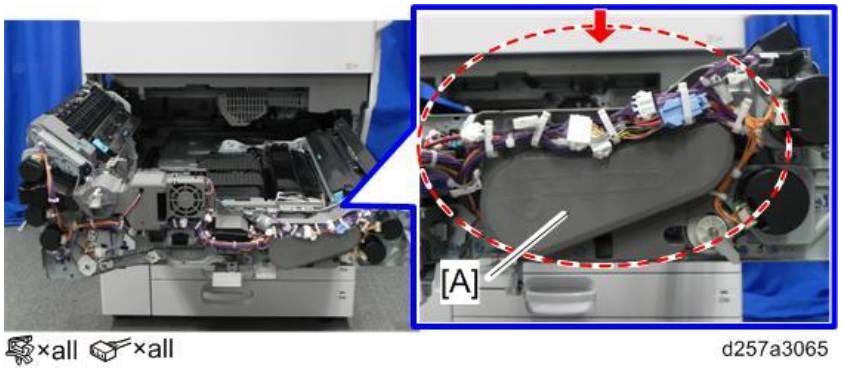
Note

Put the diffuser [B] on the LED [A] before installing.

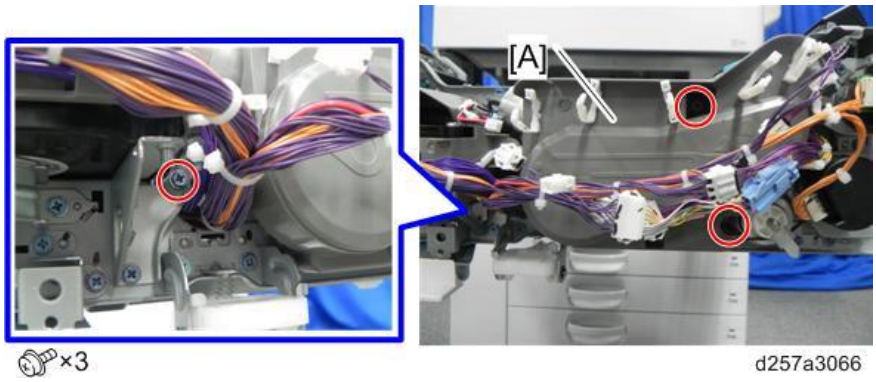


Drawer Unit Lock Motor (M44)

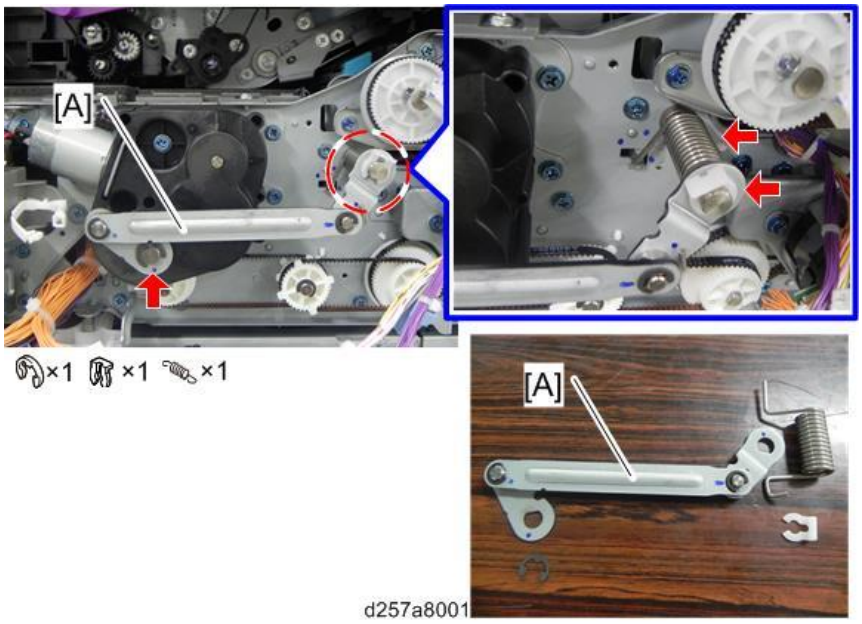
1. Remove the drawer unit cover. (Drawer Unit Cover)
2. Disconnect the connectors, clamps, etc., in order to remove the drawer unit lock motor cover [A].



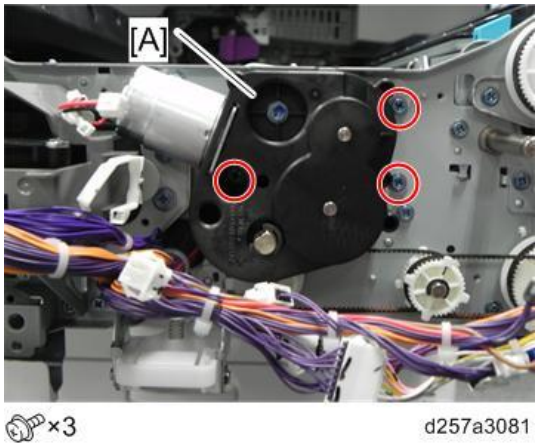
3. Remove the drawer unit lock motor cover [A].



4. Remove the link [A].



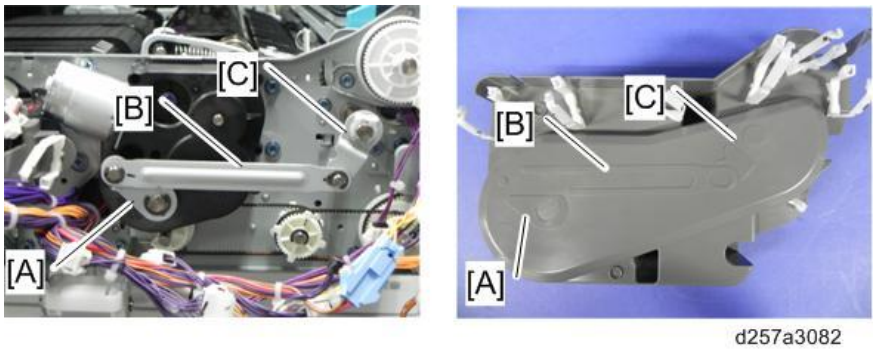
5. Remove the drawer unit lock motor block [A].



Note

- When mounting the motor block, screw the motor in first. Then, assemble links [A], [B] and [C] as shown below. There is also a diagram embossed on the motor cover to help you to install the links correctly.
  - Lock shaft (Cut surface to the upper left) [A]

- Link [B]
- Paper transfer roller shaft (Cut surface to the lower side) [C]



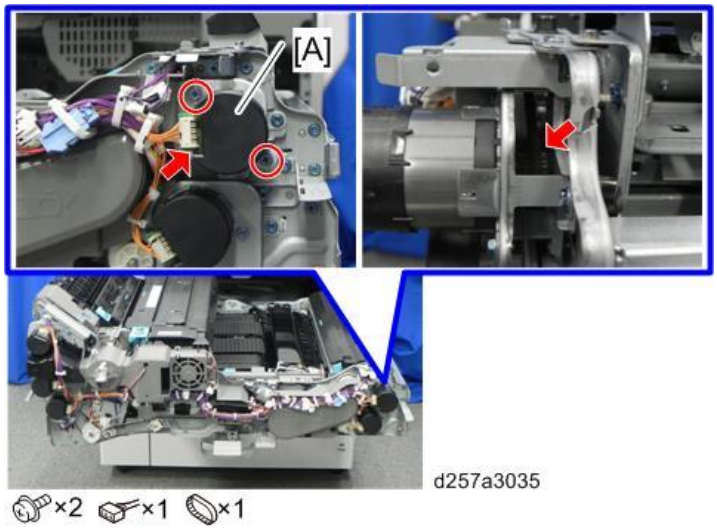
6. Remove the drawer unit lock motor holder [A].

7. Take off the gears, and remove the drawer unit lock motor(M44) [A].

Registration Motor (M43)

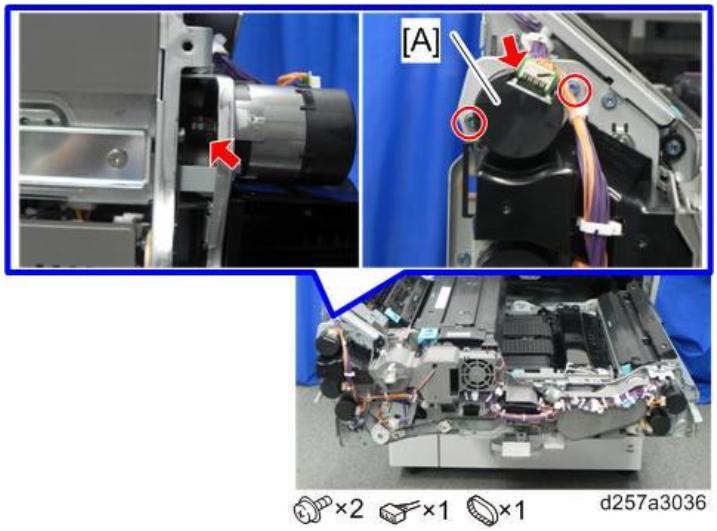
1. Remove the drawer unit cover. (Drawer Unit Cover)

2. Remove the registration motor (M43) [A].



Exit Motor (M45)

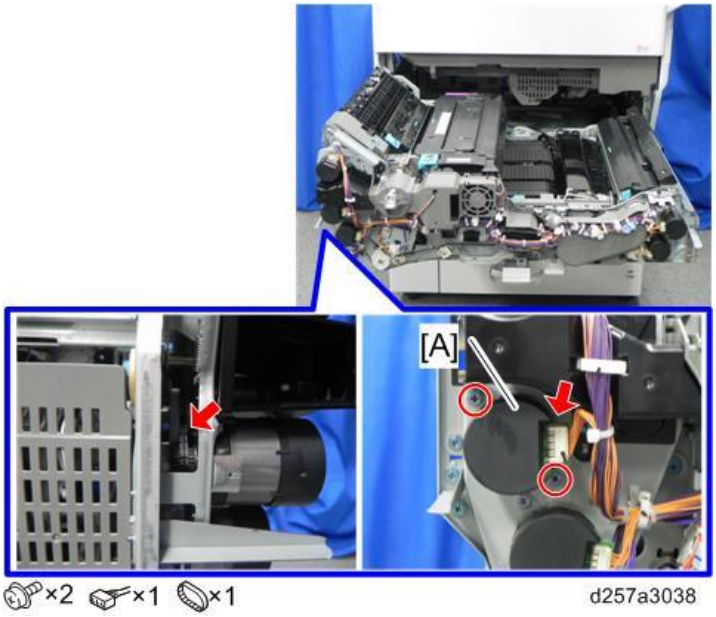
1. Remove the drawer unit cover. (Drawer Unit Cover)
2. Remove the exit motor (M45) [A].



Duplex Inverter Entrance Motor (M46)

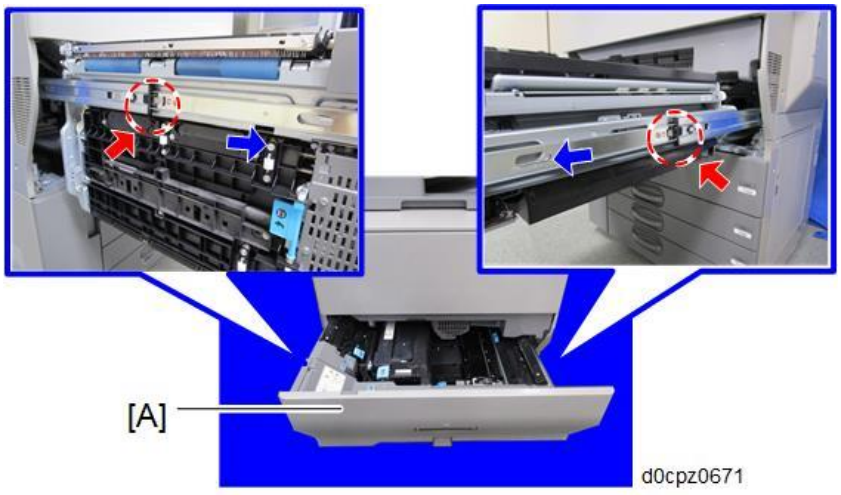
1. Remove the drawer unit cover. (Drawer Unit Cover)

2. Remove the duplex inverter entrance motor (M46) [A].



Exit Inverter Motor (M42)

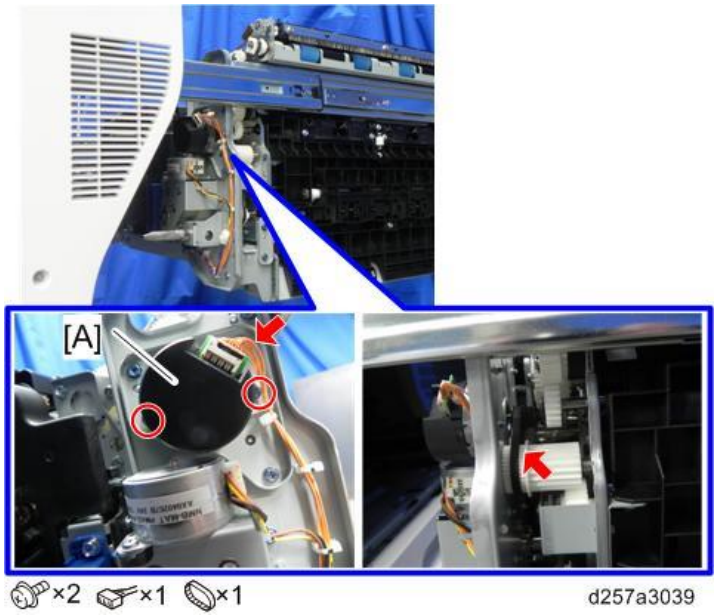
1. Pull the drawer unit out halfway, then press the release levers (one on the left side and one on the right side, shown by the red arrows) and pull the drawer unit [A] out fully.



Note

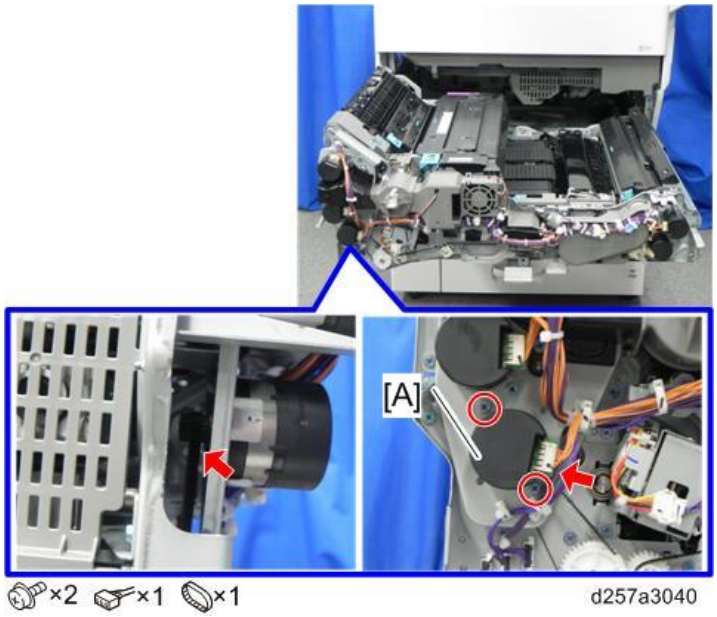
- In a low-temperature environment (below 15°C), the tension of the curled cord may be reduced. Do not keep the drawer unit pulled out for an extended period of time, or the curled cord will be deformed and will not curl up again when you try to slide the drawer unit back in. As a guide, every 30 minutes, push the drawer unit back to the halfway position. The tension of the curled cord will not decrease in a low-temperature environment if the drawer unit is open halfway.

2. Remove the exit inverter motor (M42) [A].



Duplex Transport Motor (M48)

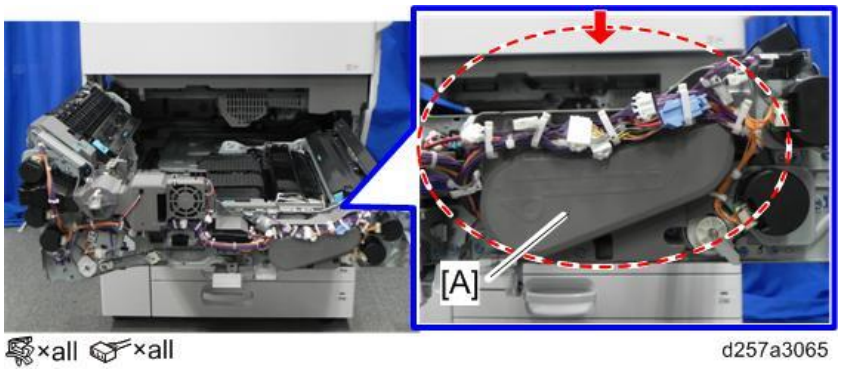
1. Remove the drawer unit cover. (Drawer Unit Cover)
2. Remove the duplex transport motor (M48) [A].



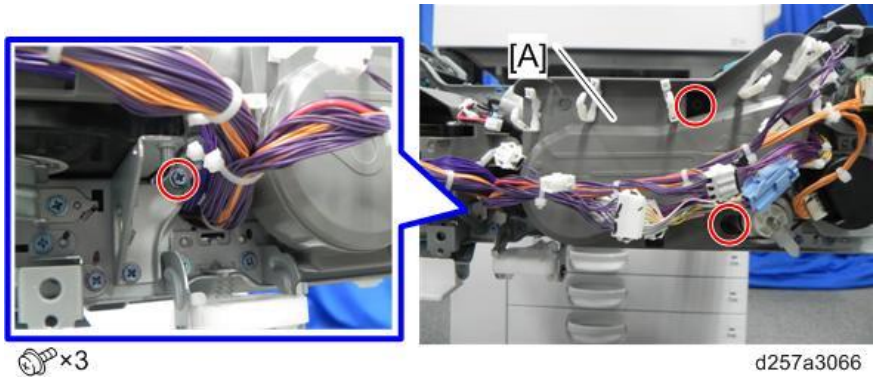
Duplex Exit Motor (M47)

1. Remove the drawer unit cover. (Drawer Unit Cover)

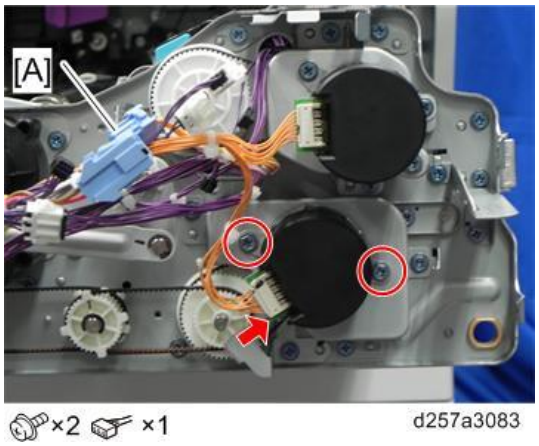
2. Disconnect the connectors, clamps, etc., in order to remove the drawer unit lock motor cover [A].



3. Remove the drawer unit lock motor cover [A].



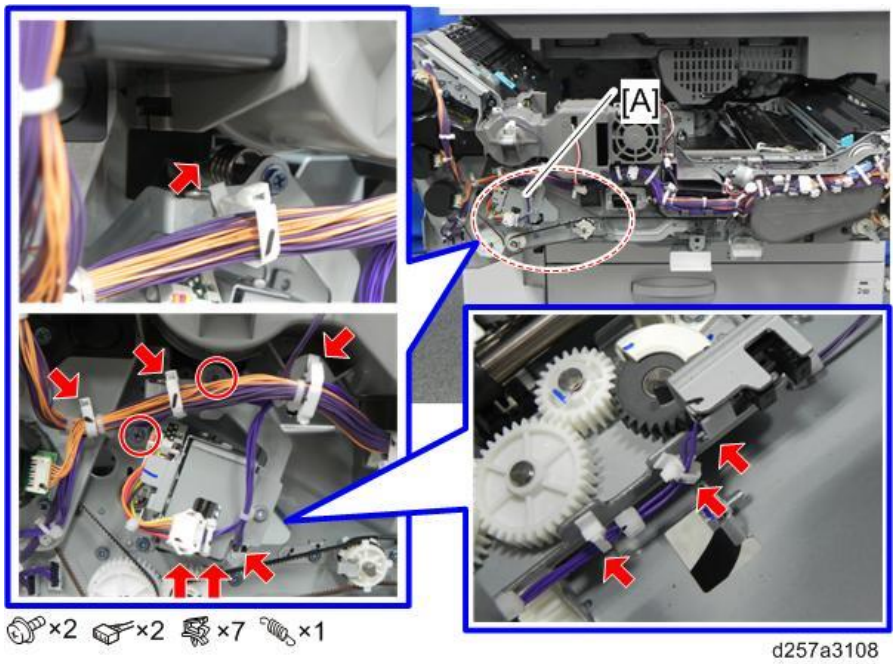
4. Remove the duplex exit motor (M47) [A].



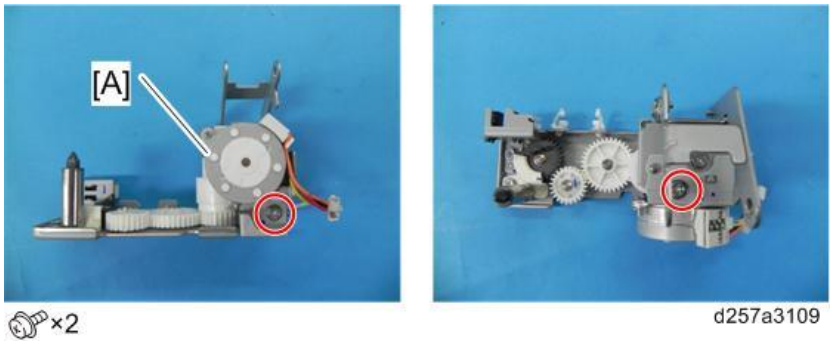
Cleaning Web Motor (M49) (Pro C5300S/C5310S only)

1. Remove the drawer unit cover. (Drawer Unit Cover)
2. Remove the fusing unit. (Removing the Fusing Unit)

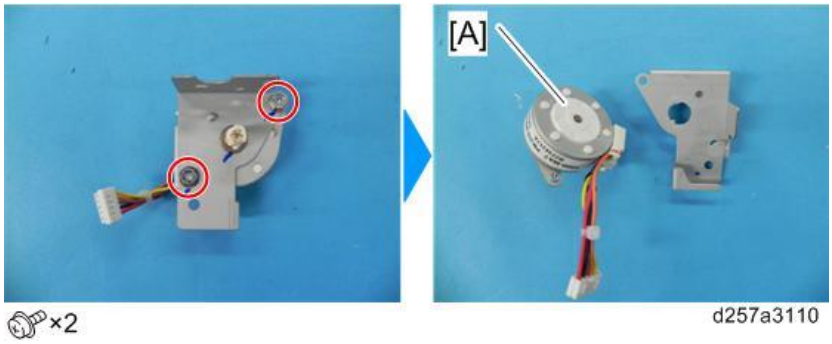
3. Remove the cleaning web motor block [A].



4. Remove the cleaning web motor (M49) [A] along with the bracket.



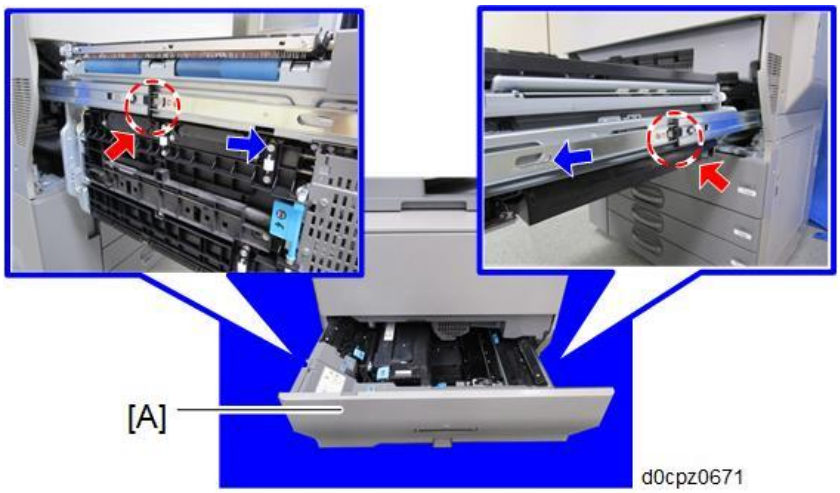
5. Remove the cleaning web motor [A] from the bracket



Cleaning Web Contact Motor (M50) (Pro C5300S/C5310S only)

1. Pull the drawer unit out halfway, then press the release levers (one on the left side and one on the

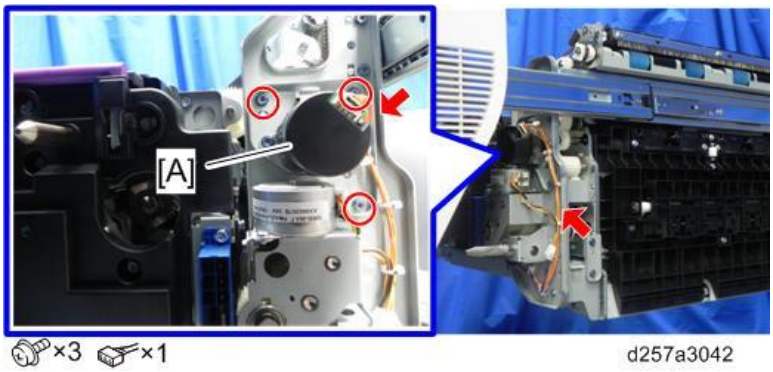
right side, shown by the red arrows) and pull the drawer unit [A] out fully.



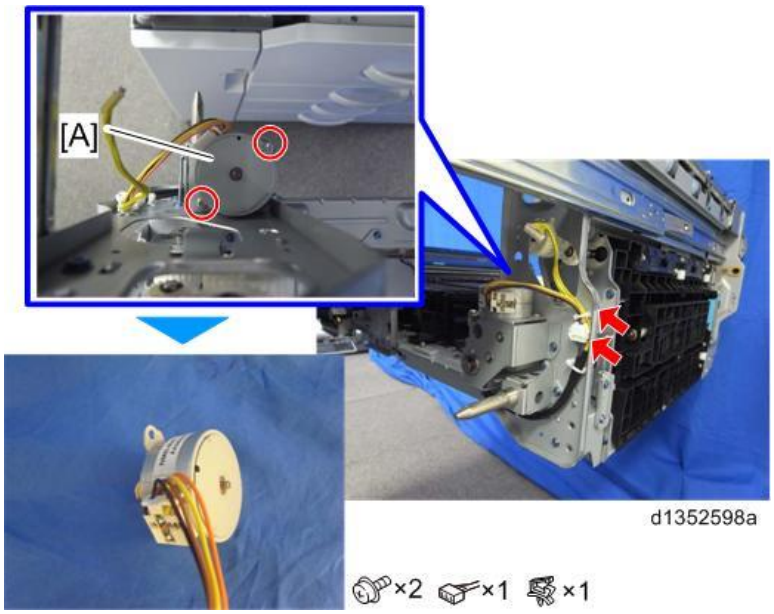
Note

- In a low-temperature environment (below 15°C), the tension of the curled cord may be reduced. Do not keep the drawer unit pulled out for an extended period of time, or the curled cord will be deformed and will not curl up again when you try to slide the drawer unit back in. As a guide, every 30 minutes, push the drawer unit back to the halfway position. The tension of the curled cord will not decrease in a low-temperature environment if the drawer unit is open halfway.

2. Remove the exit inverter motor (M42) [A] along with the bracket.



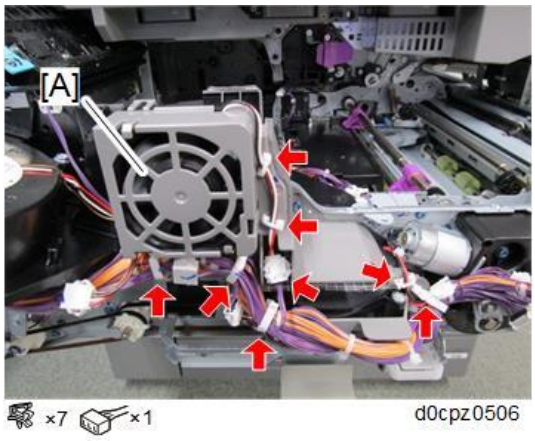
3. Remove the cleaning web contact motor (M50) [A].



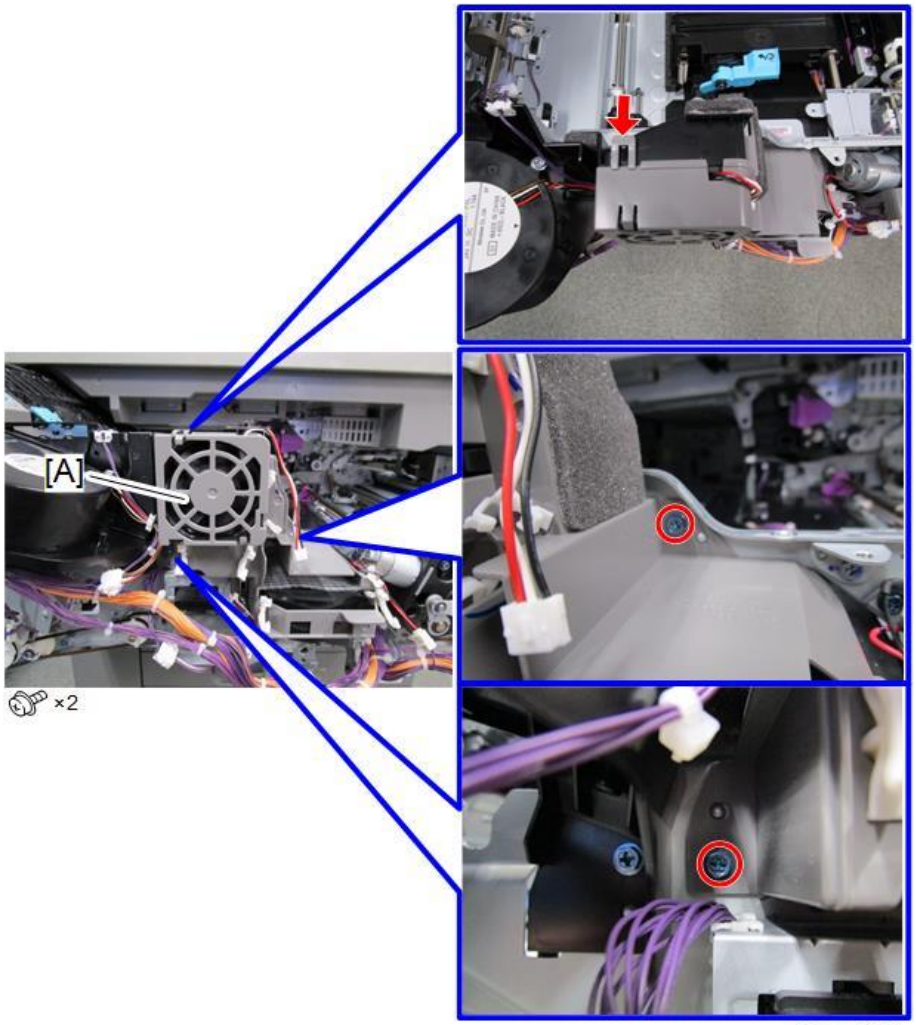
IH Coil Cooling Fan (FAN27)

1. Remove the drawer unit cover. (Drawer Unit Cover)

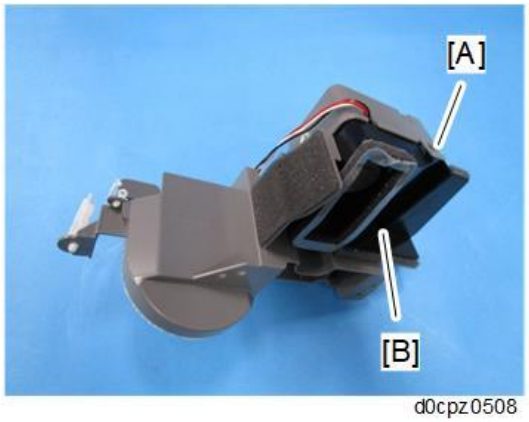
2. Disconnect the connectors, clamps, etc., in order to remove the duct together with the fusing heat pipe cooling fan [A].



3. Remove the hooks and remove the IH coil cooling fan (FAN27) [A] along with the duct.



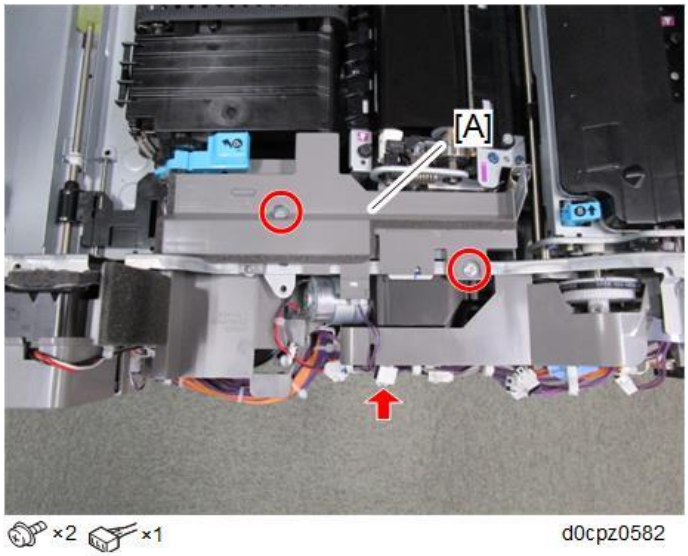
4. Remove the IH coil cooling fan (FAN27) [A] with bracket.



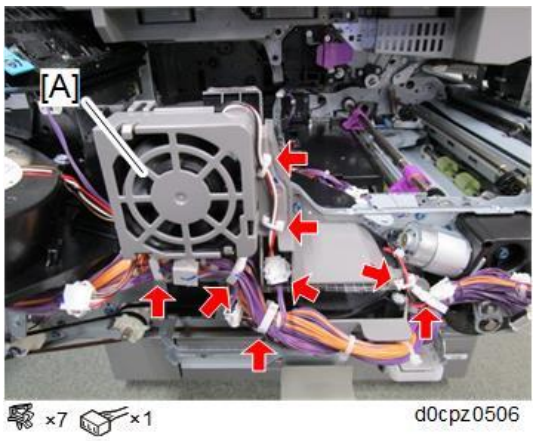
5. Remove the IH coil cooling fan (FAN27) [A].

Fusing Pressure Roller Intake Fan (FAN32) (Pro C5300S/C5310S only)

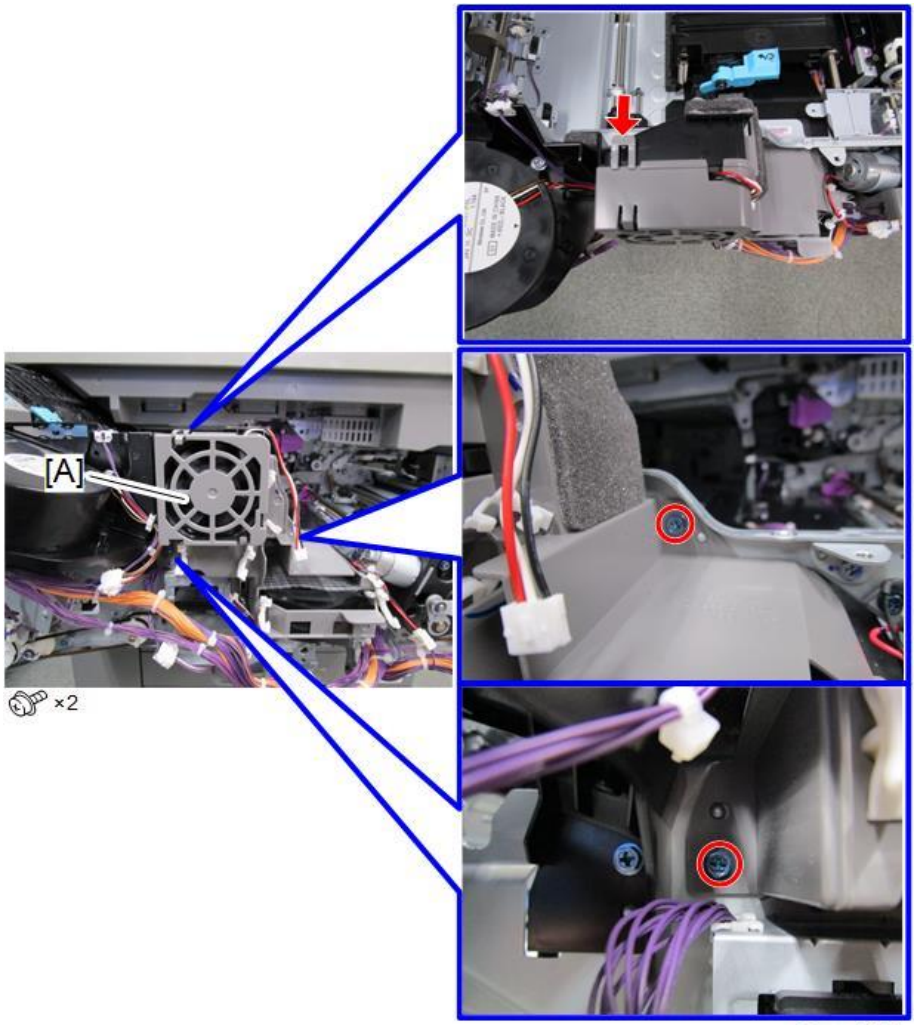
1. Remove the drawer unit cover. (Drawer Unit Cover)
2. Remove the fusing unit. (Removing the Fusing Unit)
3. Remove the inner cover [A].



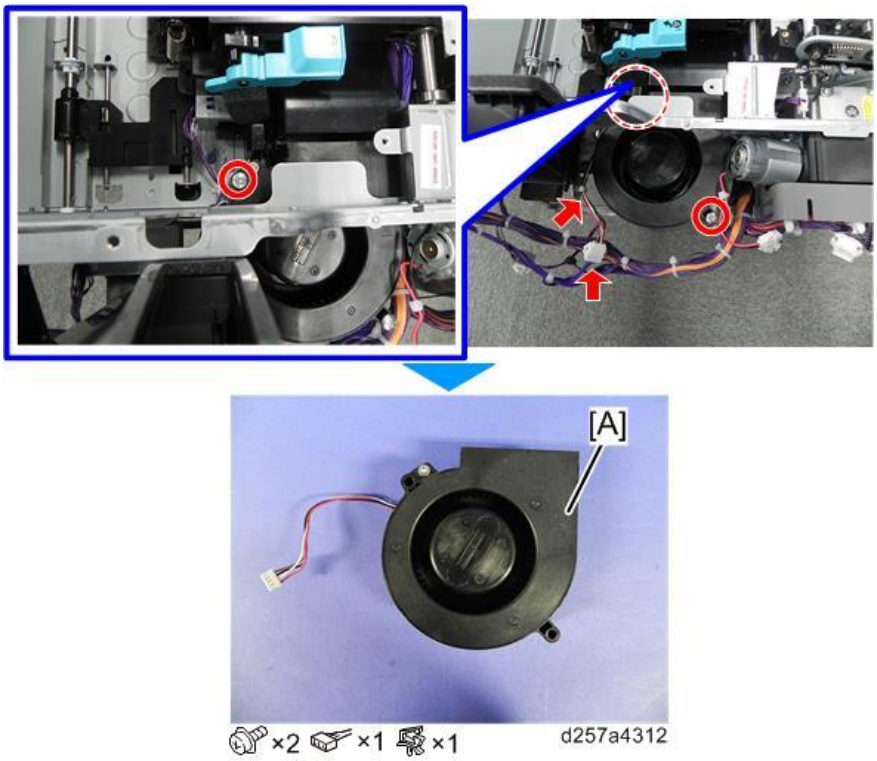
4. Disconnect the connectors, clamps, etc., of the duct [A] for the IH coil cooling fan.



5. Remove the hooks, and remove the duct [A] for the IH coil cooling fan.



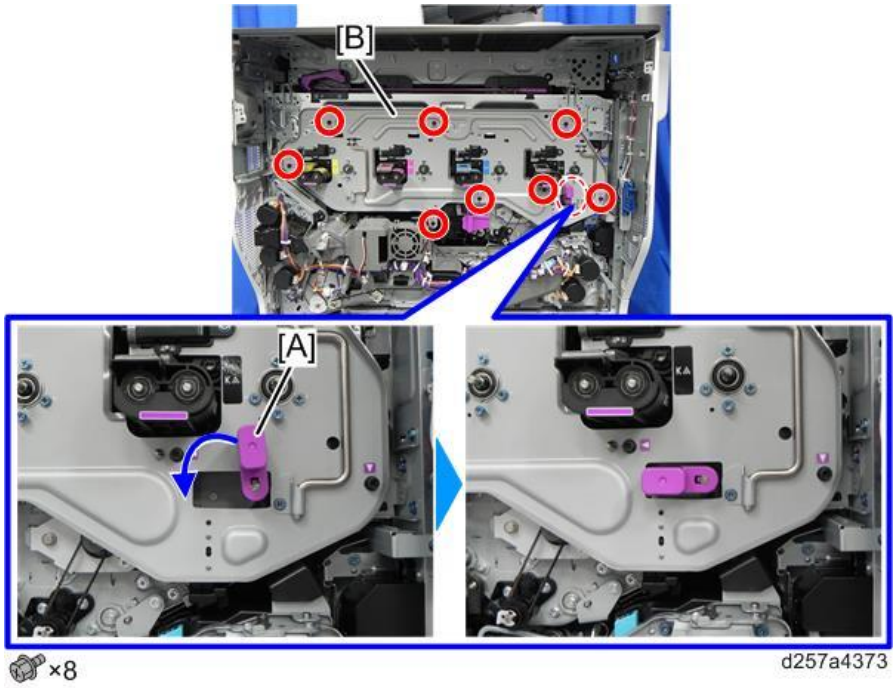
6. Remove the fusing pressure roller intake fan (FAN32) [A].



PCDU

Faceplate

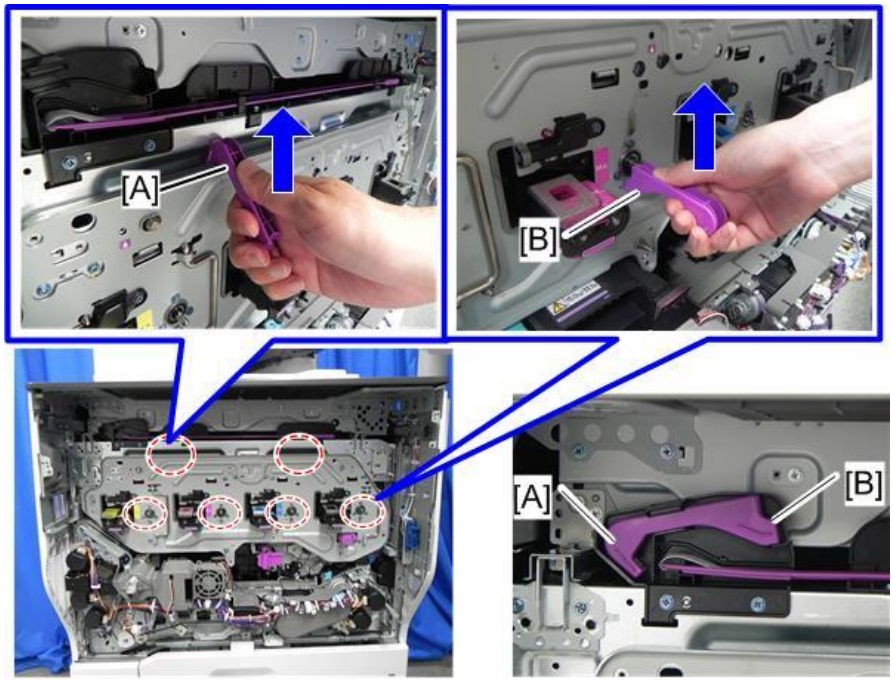
1. Remove the toner supply unit. (Toner Supply Unit)
2. Turn the transfer belt release lever [A] counterclockwise and remove the fixing screws of the faceplate [B].



3. Take off the handles [A].

4. Pull out the units using both handles [A] and [B] in the circled areas as shown below. Pull out little

by little over the entire surface uniformly throughout.



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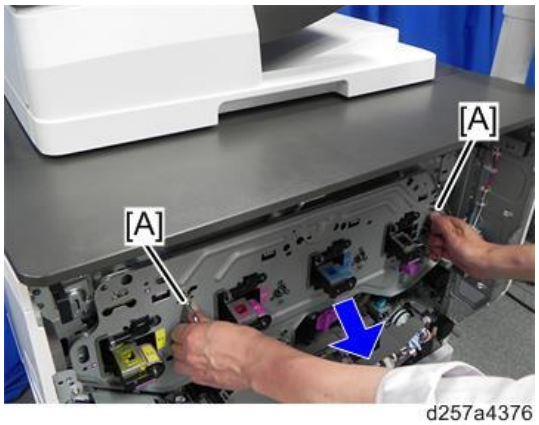
5. Remove the faceplate with the grips [A]



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Applying Grease to the Top Edge of the Drum Shaft

Grease (KS660B) must be applied to the top edge of the drum shaft every 300K or whenever removing the PCDU.

Important

- If grease is not applied to the shaft, it will rust, causing the faceplate and PCDU to stick and not be able to be pulled out.
- The PCDU must be in the machine when cleaning or applying the grease because the drum shaft is weak and unstable without the presence of the PCDU.

1. Remove the faceplate. (Faceplate)

2. Wipe the top edge of the drum shaft [A] with a damp cloth.

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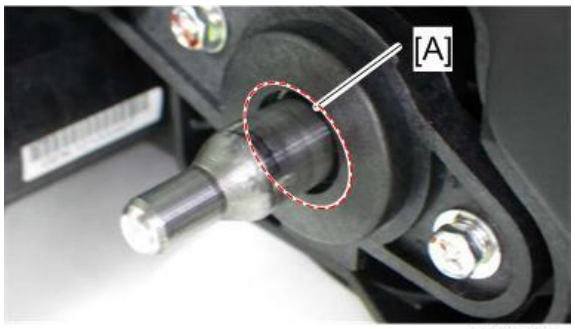
3. Apply the grease (KS660B) to the contact part of the faceplate bearings [A] as shown below.



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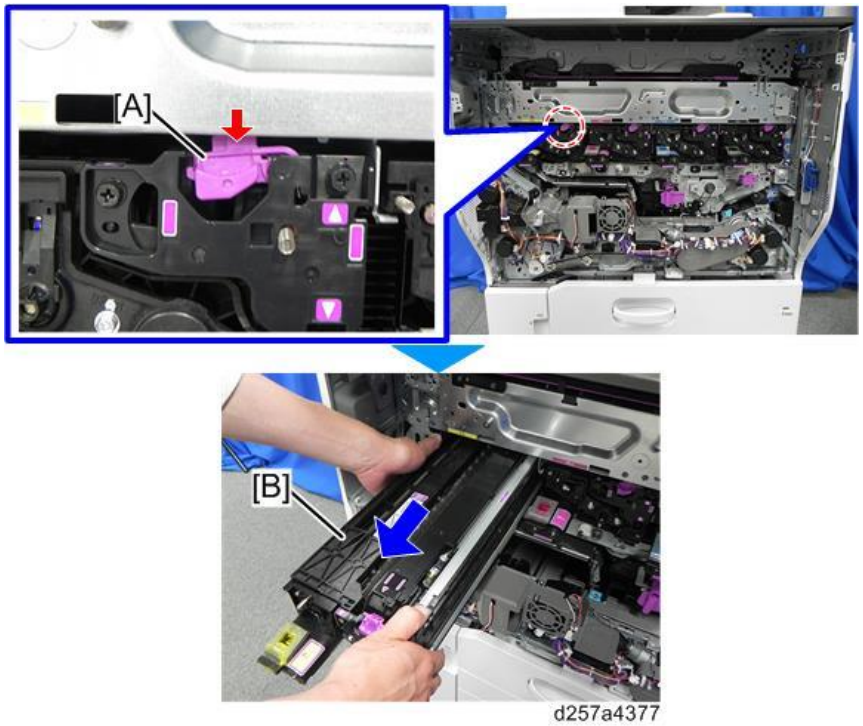
PCDU

1. Remove the faceplate. (Faceplate)
2. Unlock the lever [A] and pull out the PCDU [B] from the machine.



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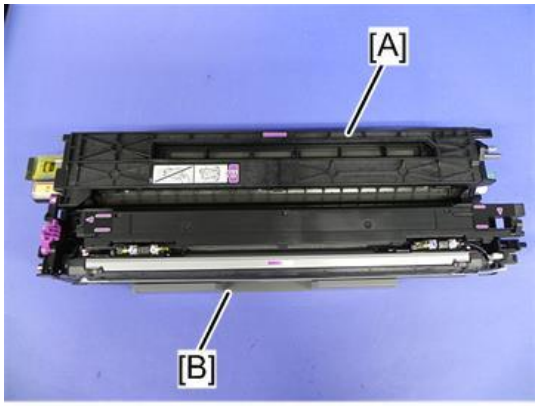
3. Place the PCDU [A] on the cradle [B] that was laid down on paper in advance.



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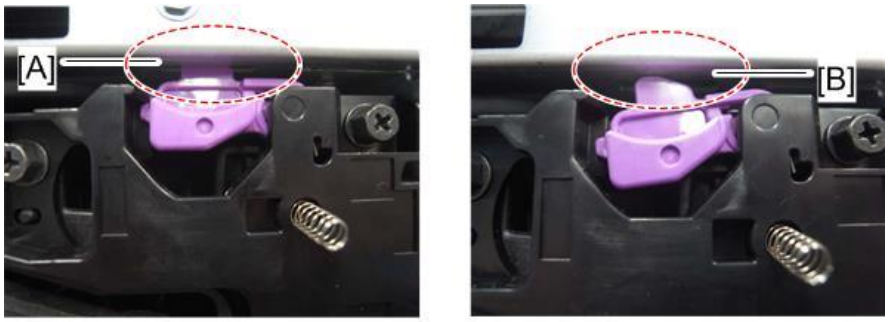
Note

Use the dedicated cradles for Pro C5300S/C5310S and IM C6500/C8000.

Notes on Attaching the PCDU

- When installing the PCDU, ensure that the lock lever fits into the hole in the machine frame.
  [A]: The lock lever securely fits into the hole in the machine frame.
  [B]: The lock lever does not securely fit into the hole in the machine frame.



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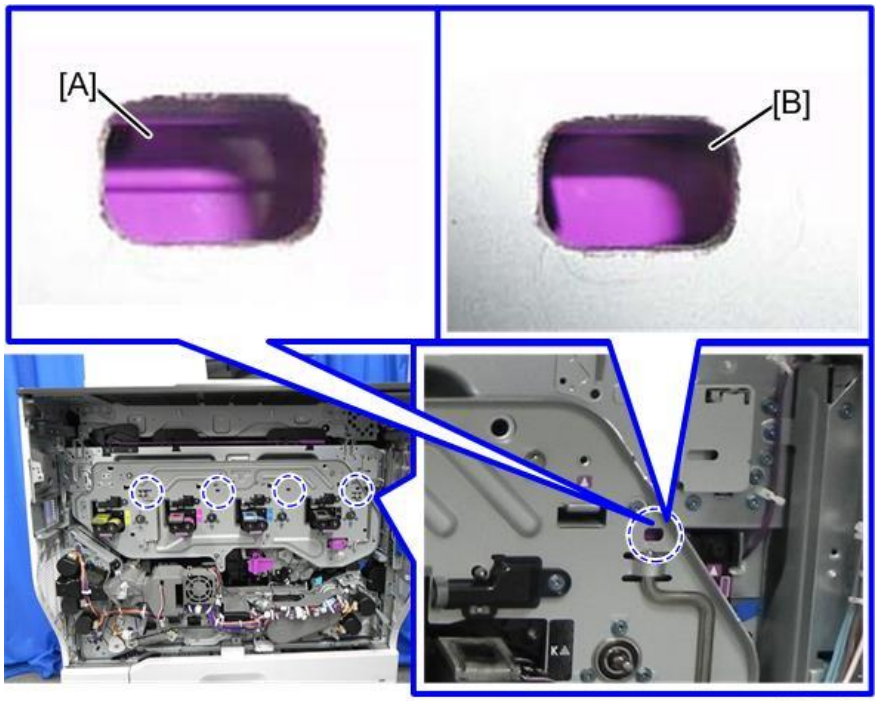
- After installing the faceplate, check the status of the lock levers (four) again by looking through the holes as shown below. The levers should be straight, as shown above [A], and not at an angle [B]. However, some force is required to attach the faceplate, and this could knock the levers out of their horizontal alignment.
  [A]: The lock lever securely fits into the hole in the machine frame.
  [B]: The lock lever does not securely fit into the hole in the machine frame.



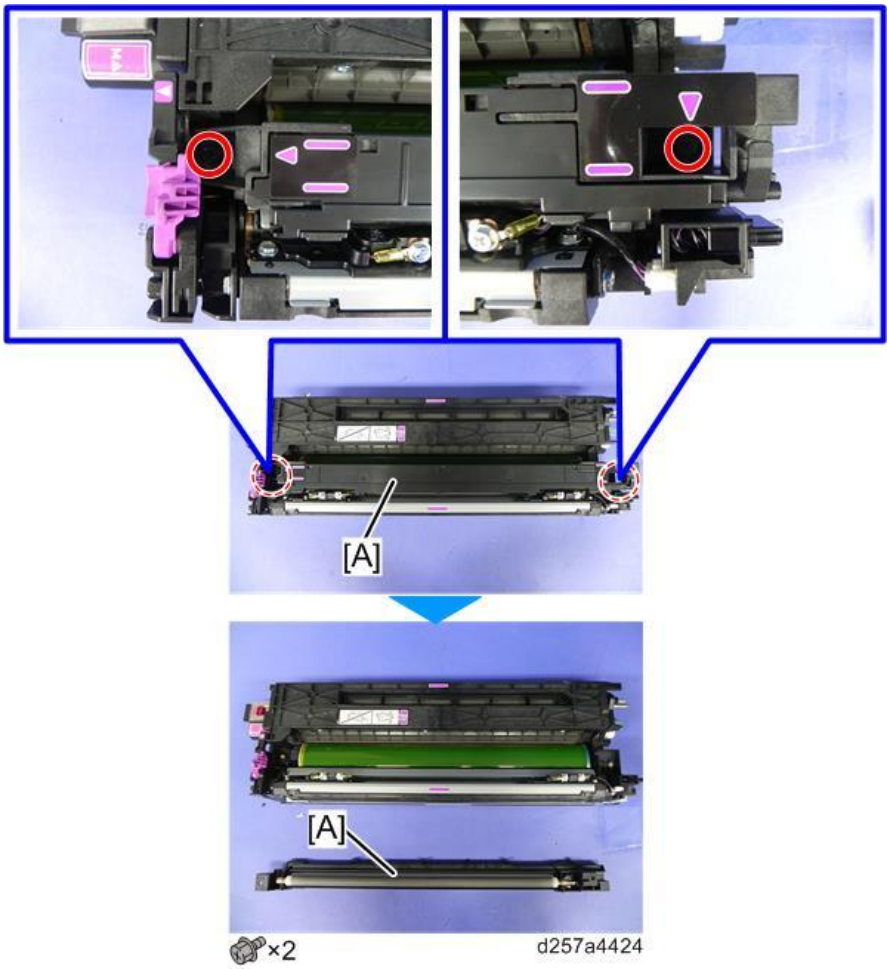
- After installing the faceplate, check the status of the lock levers by pushing the PCDU.
- If you cannot push the PCDU all the way in or fit the lock lever properly, remove the PCDU from the machine and do the following procedure.

  1. Remove the charge roller unit.
  2. Use the drum holders for the OPC drum, turn the drum counterclockwise for about 0.5 teeth of the gear and push it again.
- Pro C5300S/C5310S: After you take the PCDU out of the machine and put it back, or replace it with a new one, carry out SP3-040-001 (DEMS: Execute).

Charge Roller Unit

1. Remove the PCDU. (PCDU)

2. Remove the charge roller unit [A].



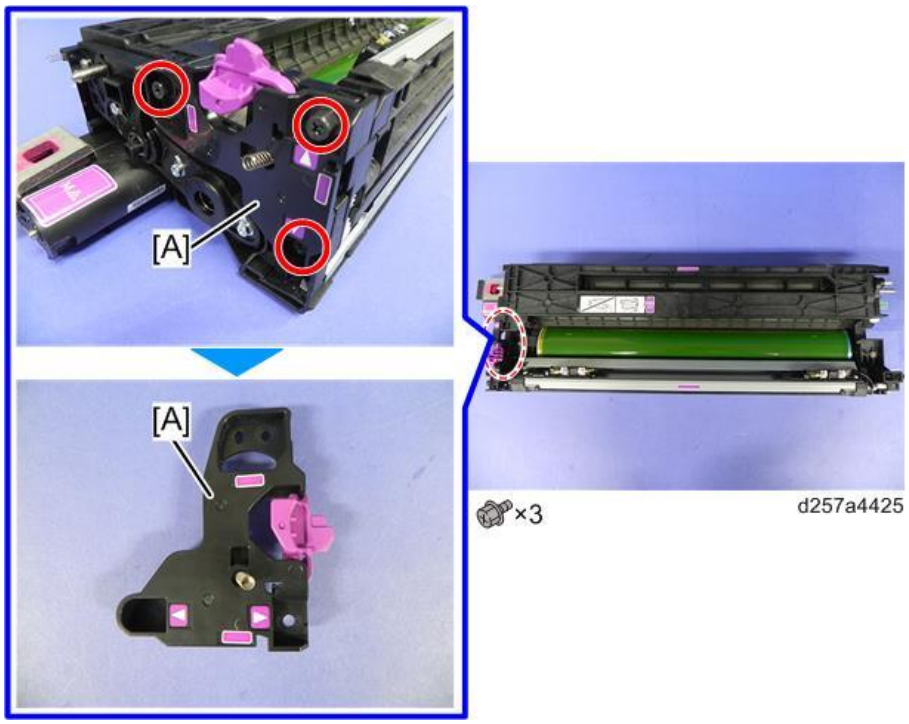
Note

- After removing the charge roller unit, place it on a clean, flat surface with the roller facing up.

Drum Cleaning Unit Removal

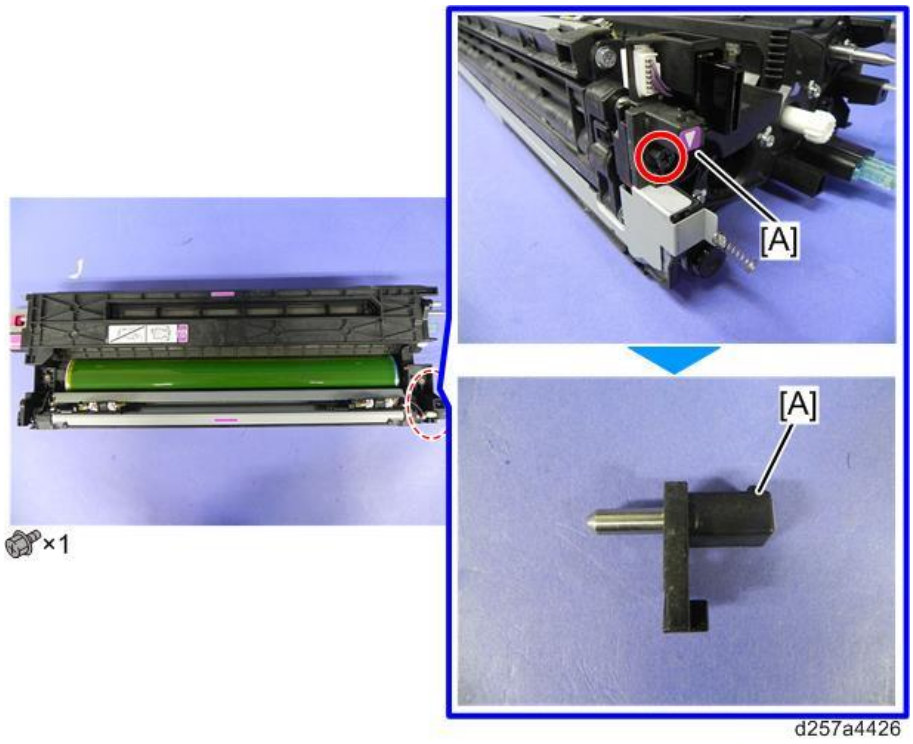
1. Remove the PCDU. (PCDU)

2. Remove the front faceplate [A].*



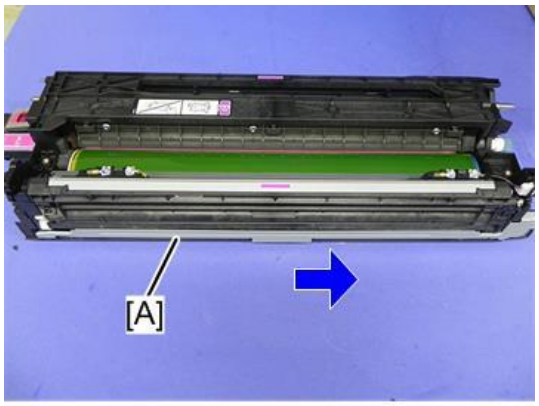
* Pro C5300S/C5310S use TCRU/ORU screws

3. Remove the stopper [A] at the rear.*



* Pro C5300S/C5310S use a TCRU/ORU screw

4. Slide the bracket [A] to the rear.



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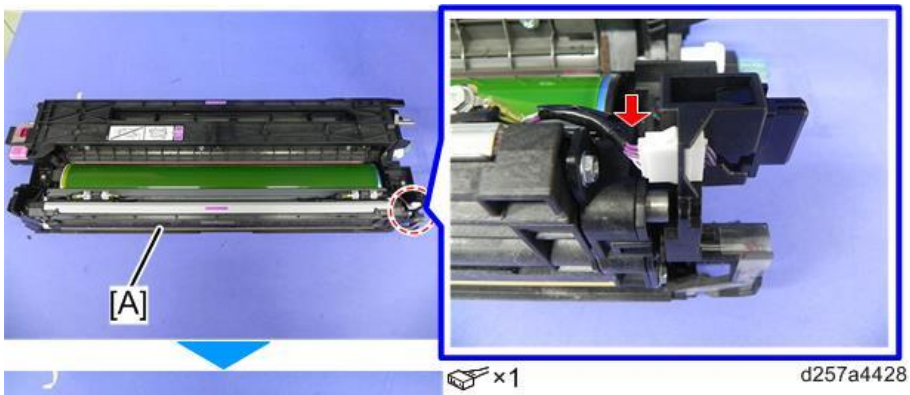
5. Remove the drum cleaning unit [A].



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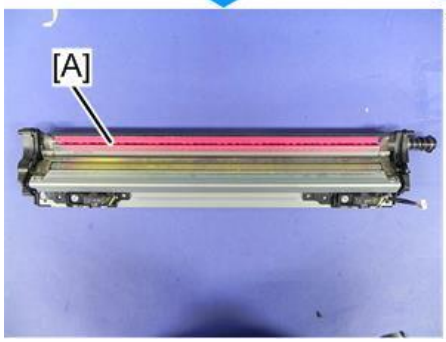
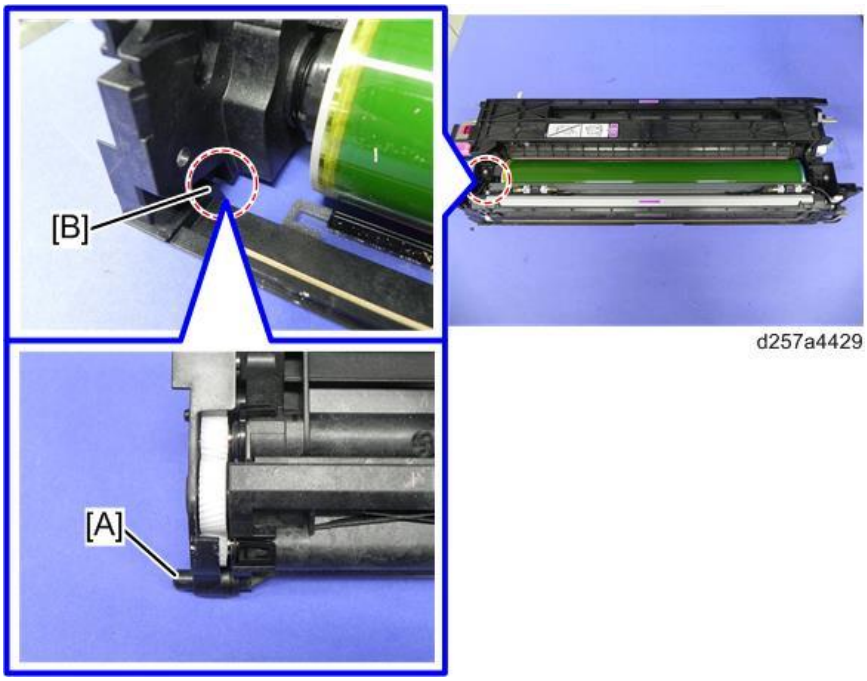


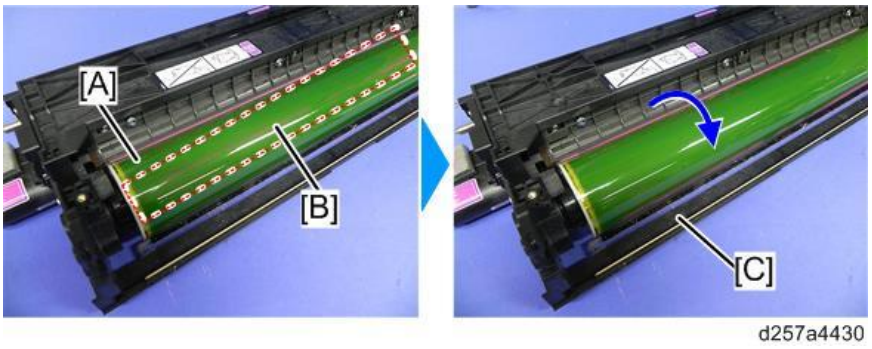
Note

- When installing the drum cleaning unit, ensure that the front side [A] is fit into the grooves

[B] of the development unit.

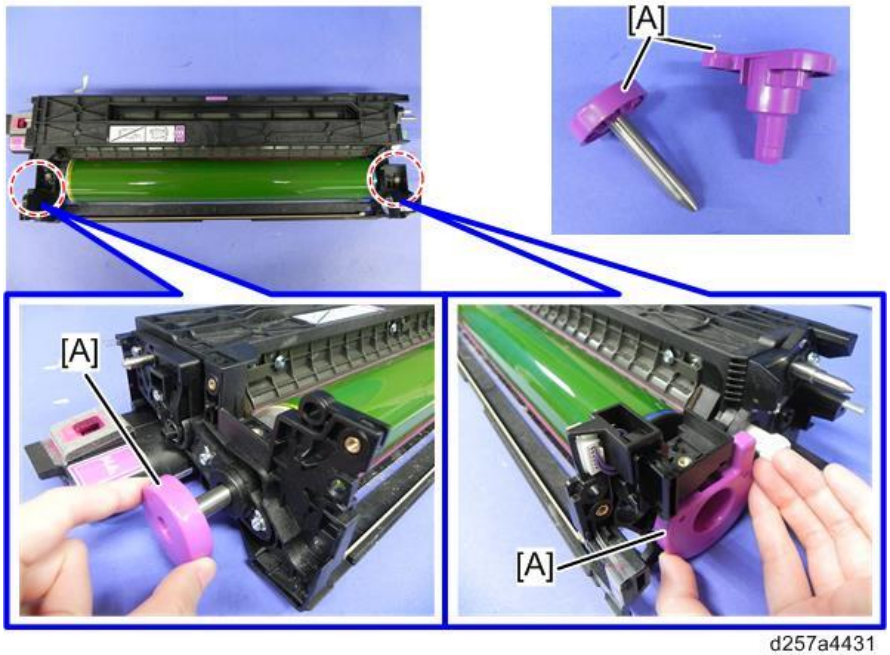


- After removing the drum cleaning unit, lubricant and toner streaks [B] remain on the surface of the OPC drum [A]. This will cause stains on the charge roller. Therefore, rotate the OPC drum in the direction of the arrow [C] before you install the new drum cleaning unit.



- Attach the drum holders [A] to the OPC drum (these are shipped with the cleaning unit) so that the drum rotates precisely on its axis. Make sure the drum holders [A] are inserted all

the way in.



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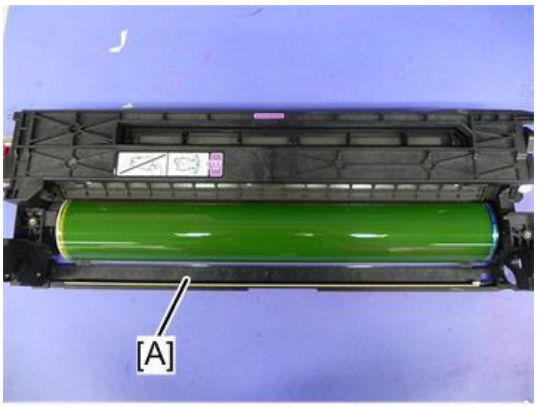
- After replacing or removing the drum cleaning unit, clean the toner receptacle [A].



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Notes on Replacing the Drum Cleaning Unit and Drum Cleaning Blade

Do not replace the drum cleaning unit or the drum cleaning blade at the same time as the following parts.

- ITB
- ITB Cleaning Unit
- ITB Cleaning Blade (ITB Cleaning Unit Component)
- ITB Lubricant Bar (ITB Cleaning Unit Component)
- ITB Lubricant Blade (ITB Cleaning Unit Component)

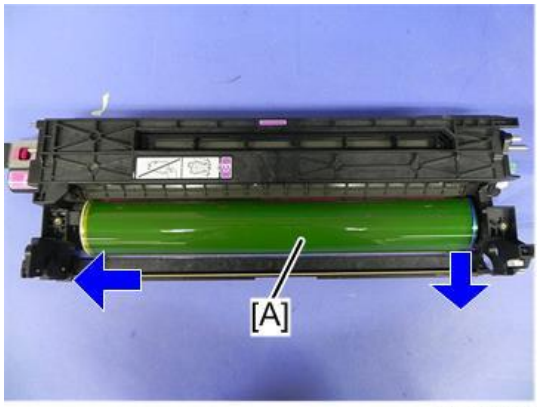
After replacing the drum cleaning unit or the drum cleaning blade, the initial cleaning setting is performed automatically. On the other hand, after replacing the above five parts, you need to run SP2-696-001 (Force Apply Lubricant Execute) manually before cleaning initial setting runs. (Lubrication after replacement). This is because, if cleaning initial setting runs automatically before running SP2-696-001 (Force Apply Lubricant Execute) manually, the ITB cleaning blade will be turned up.

If you need to replace the above five parts at the same time as replacing the drum cleaning unit or the drum cleaning blade, use the following procedure.

1. In the PM counter screen, set "New Part Set" to ON for the drum cleaning unit or the drum cleaning blade.
2. Replace the drum cleaning unit or the drum cleaning blade. (The cleaning initial setting automatically runs)
3. In the PM counter screen, set "New Part Set" to ON for the above five parts.
4. Replace the above five parts.
5. Enter the SP mode and run SP2-696-001 (Force Apply Lubricant Execute) manually.

OPC Drum

1. Remove the charge roller unit. (Charge Roller Unit)
2. Remove the drum cleaning unit. (Drum Cleaning Unit Removal)
3. To remove the drum [A], move it to the front side (to the left as shown above), then pull it out from the rear side (the right side as shown above).



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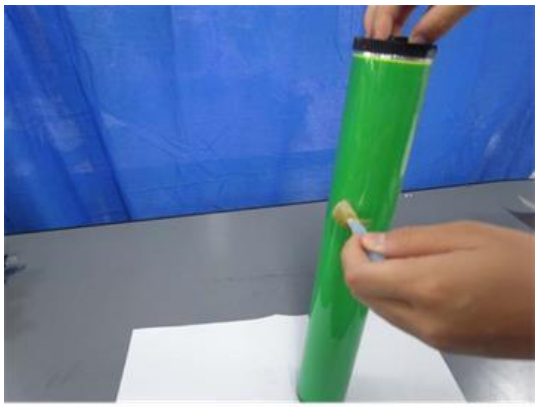
Note

- After removing the OPC drum, place it on a clean, flat surface.

Attaching the New OPC Drum

1. When replacing, apply the lubricant powder (D0159501) (zinc stearate) to the OPC drum evenly

with a brush.



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2. Remove the protective sheet (black) [B] from around the new OPC drum and lay it on the development unit [A].

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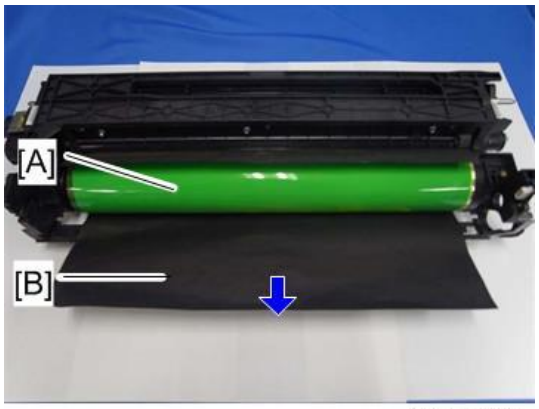
3. Attach the new OPC drum [A] and remove the protective sheet (black) [B] from the bottom.



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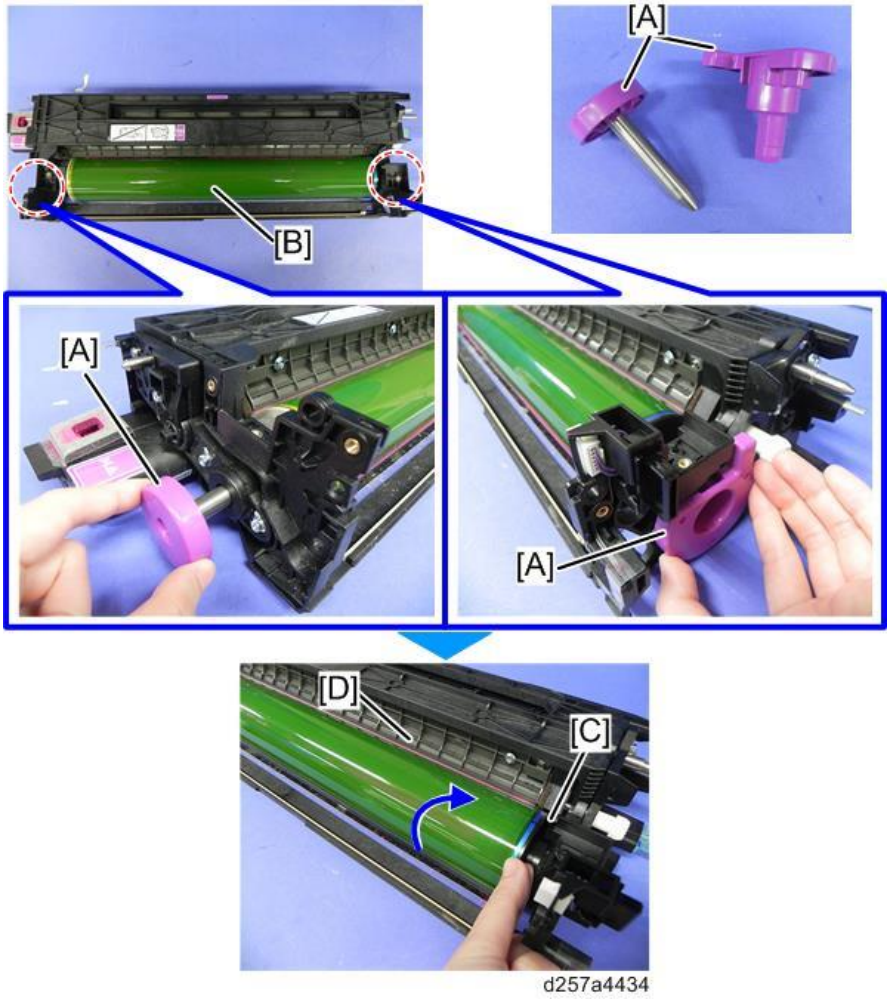
Note

- The surface of a newly replaced drum needs to be lubricated. In the lubrication process where the drum is manually rotated, the two drum holders [A] fix the shaft so that the

drum rotates precisely on its axis.

- Attach the drum holders [A] to the front and rear sides of the drum [B].
- Make sure the drum holders are inserted all the way in. Hold the flange [C] and rotate the drum in the direction of the development unit [D].
- The two drum holders [A] are accessory parts of the machine.

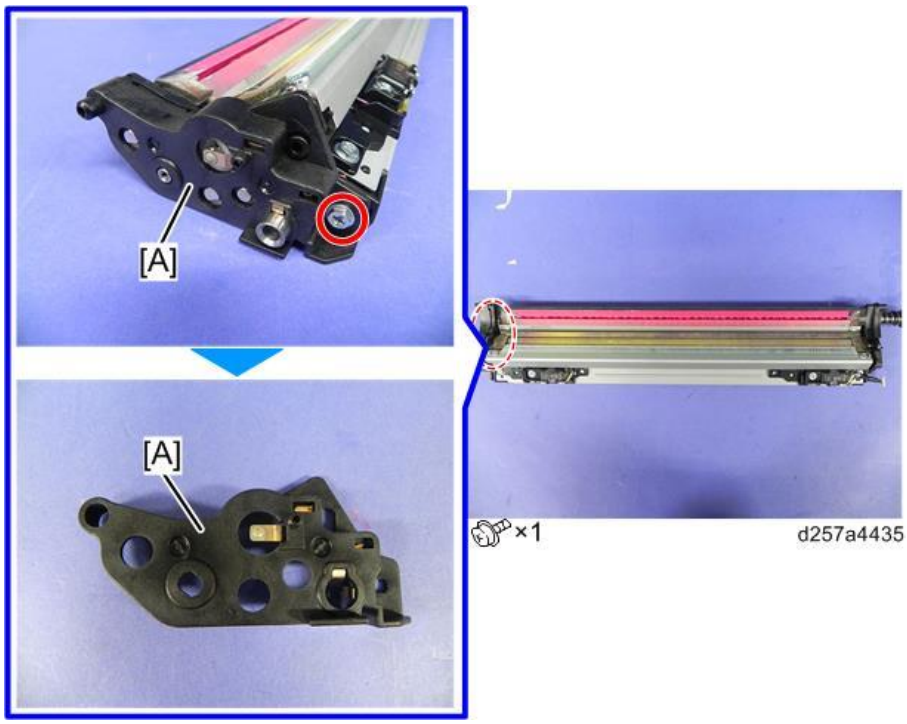


Drum Cleaning Unit Internal Components

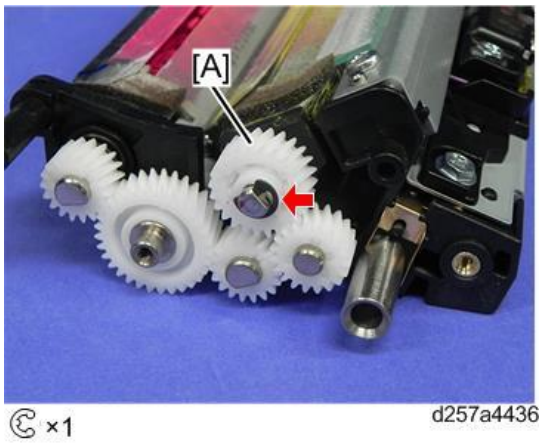
Separation of the Lubrication Unit and Cleaning Unit

1. Remove the drum cleaning unit. (Drum Cleaning Unit Removal)

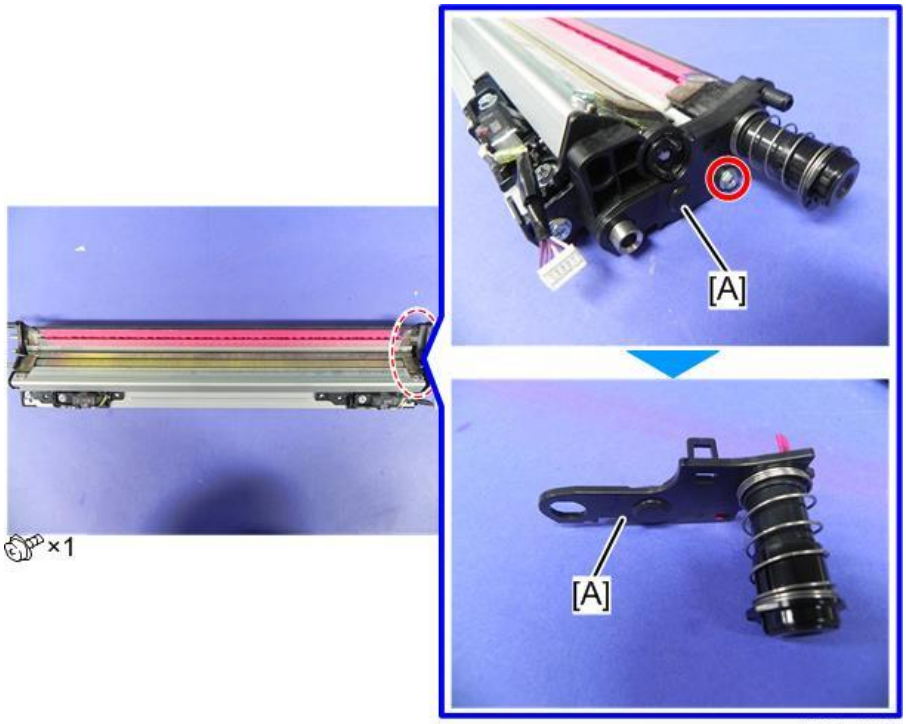
2. Remove the front cover [A] of the cleaning unit.



3. Remove the following five gears. Remove the E ring for the gear [A].

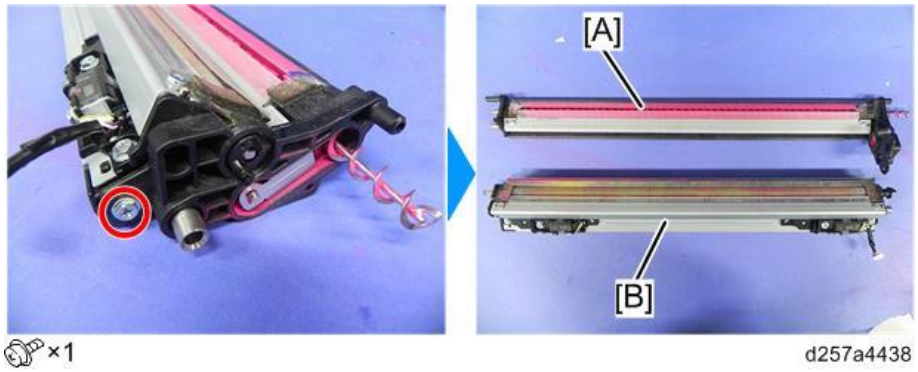


4. Remove the rear cover [A] of the cleaning unit.



d257a4437

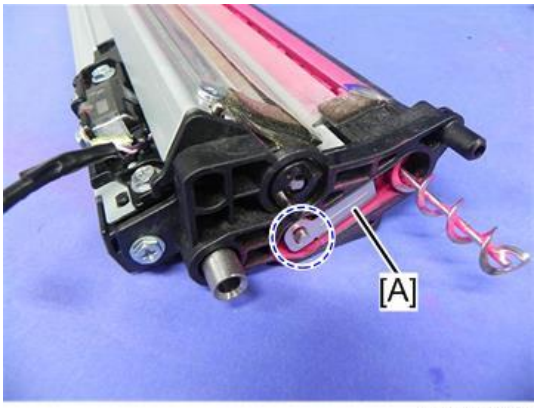
5. Remove the fixing screw on the rear side and separate the cleaning unit [A] from the lubrication unit [B].



d257a4438

Note

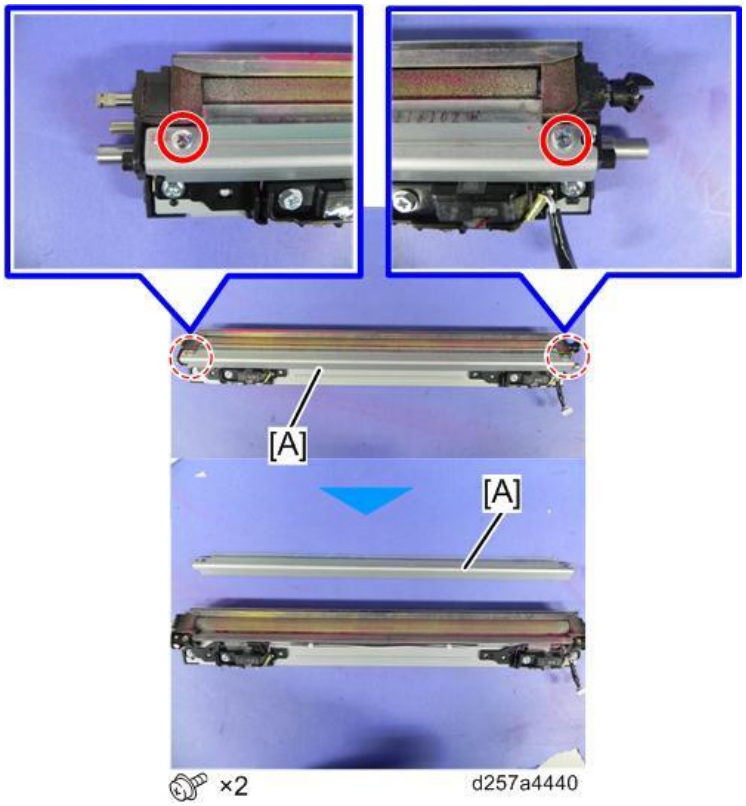
- When installing the cleaning unit and the lubrication unit, ensure that the shaft of the cleaning unit fits into the hole in the vibration plate [A].



d257a4439

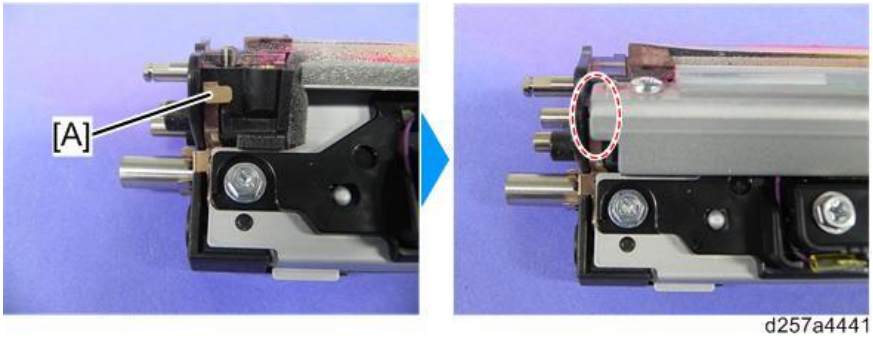
Lubrication Unit

1. Separate the drum cleaning unit into the lubrication unit and cleaning unit. (Separation of the Lubrication Unit and Cleaning Unit)
2. Remove the lubricant blade [A].

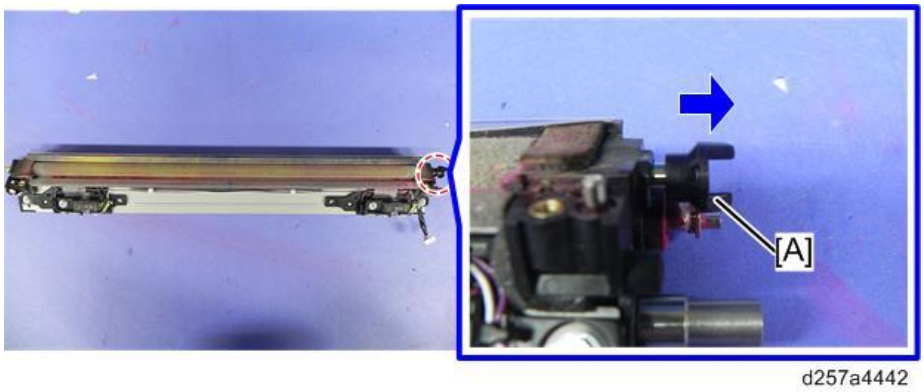


Note

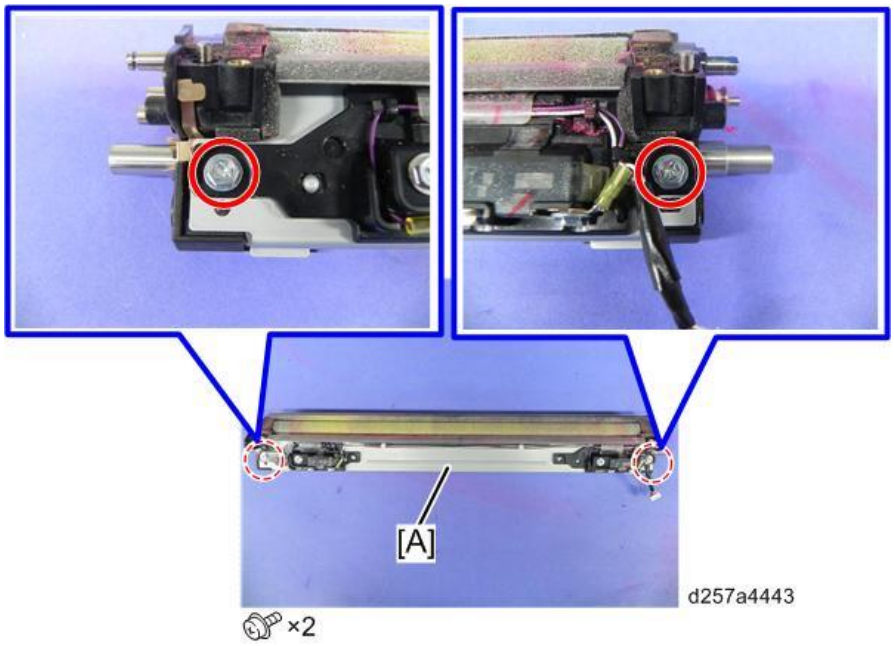
- When assembling, position the lubricant blade on the grounding plate [A] of the lubrication unit.



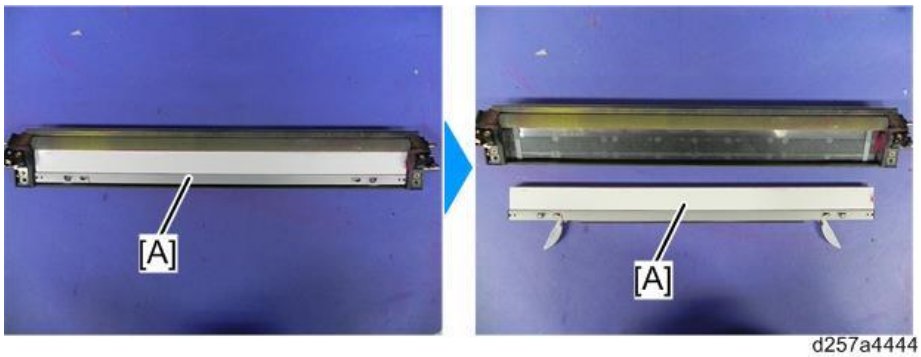
3. Remove the joint [A] at the rear side.



4. Remove the cover [A].

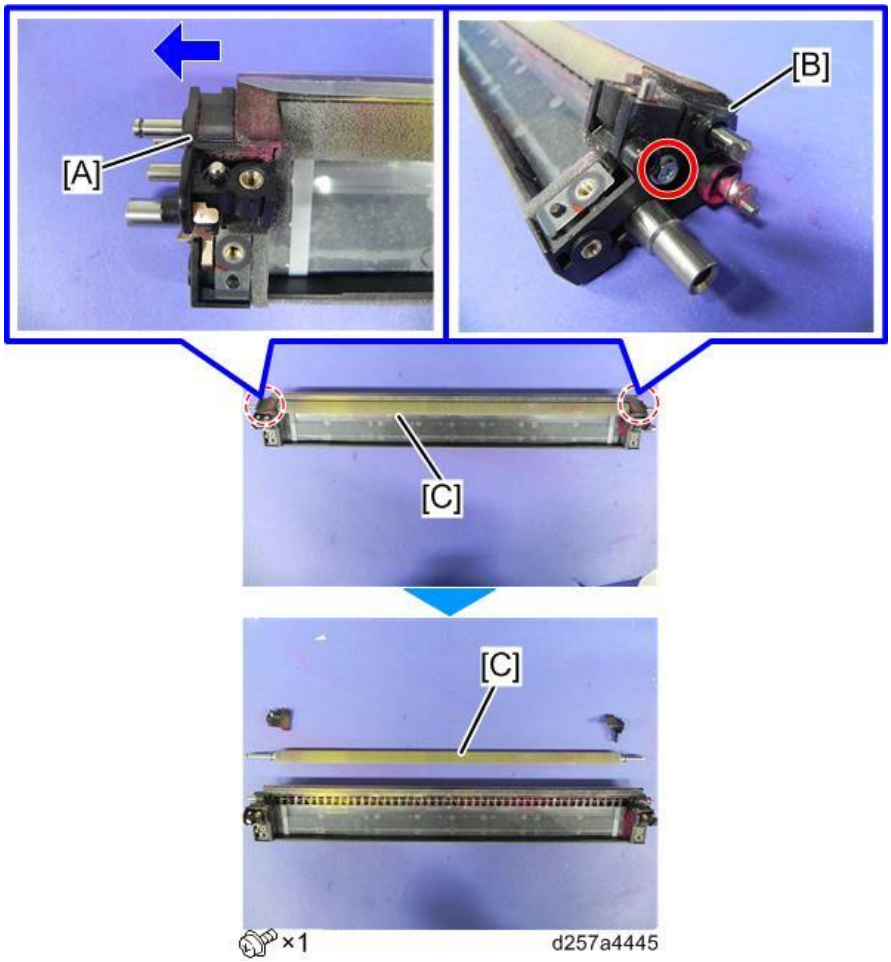


5. Remove the lubricant bar [A].



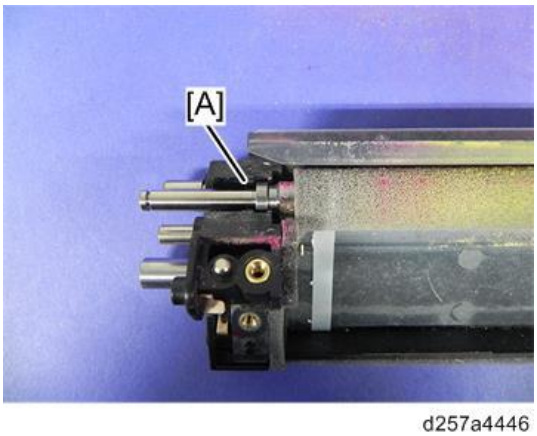
6. Remove the bearing with the side seal (front) [A], bearing with the side seal (rear) [B] and

lubrication roller [C].

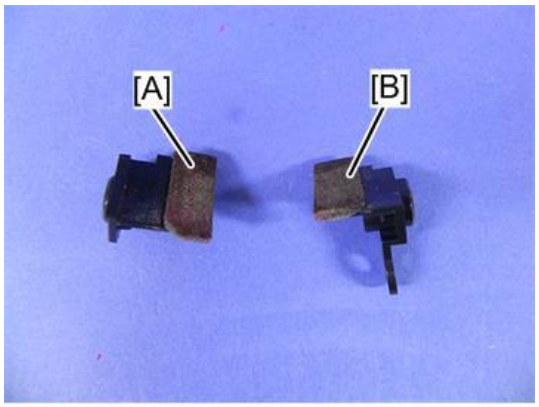


Note

- When installing a new lubricant bar, a new lubrication roller must be installed.
- When installing the lubrication roller, ensure that the roller is fit into the groove [A] in the lubrication unit.



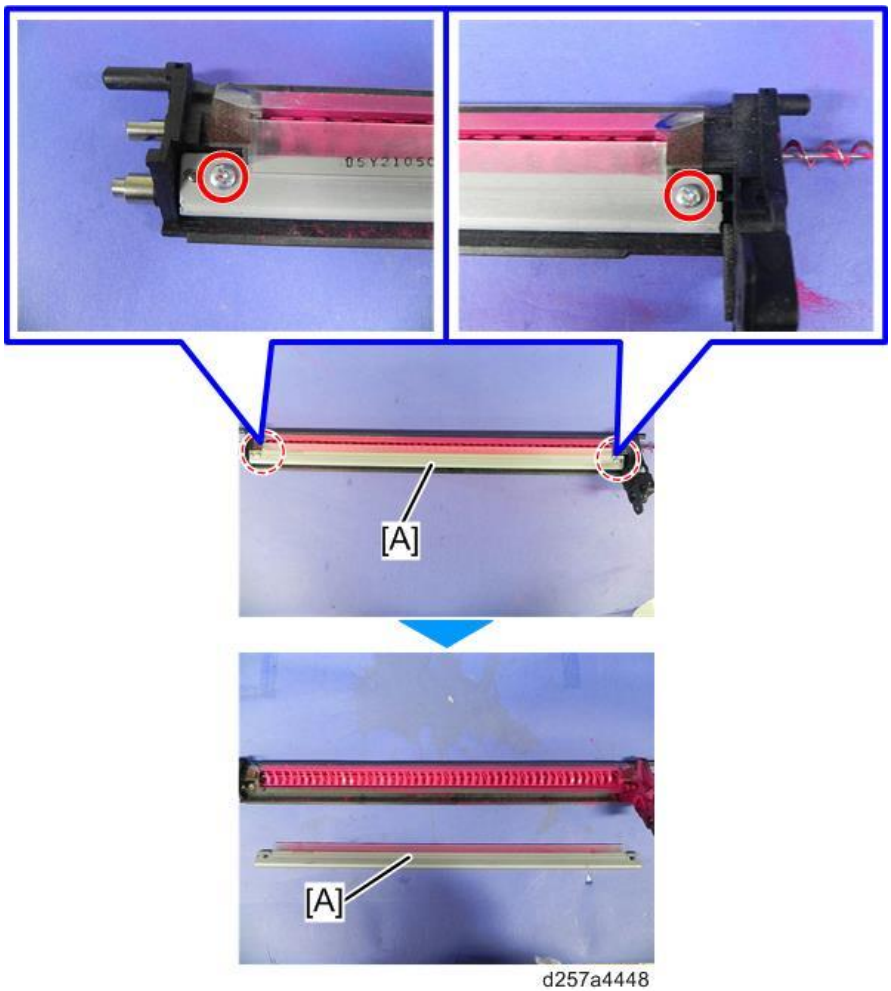
7. Remove the side seal (front) [A] and the side seal (rear) [B] from the bearings.



d257a4447

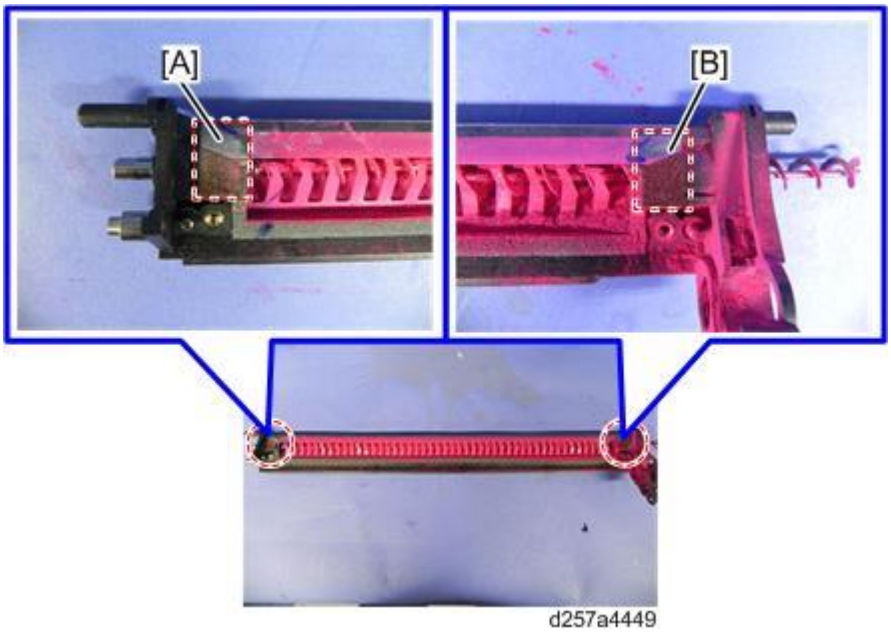
Cleaning Unit

1. Separate the lubrication unit and cleaning unit. (Separation of the Lubrication Unit and Cleaning Unit)
2. Remove the drum cleaning blade [A].



d257a4448

3. Remove the side seal (front) [A] and the side seal (rear) [B] from the cleaning unit.

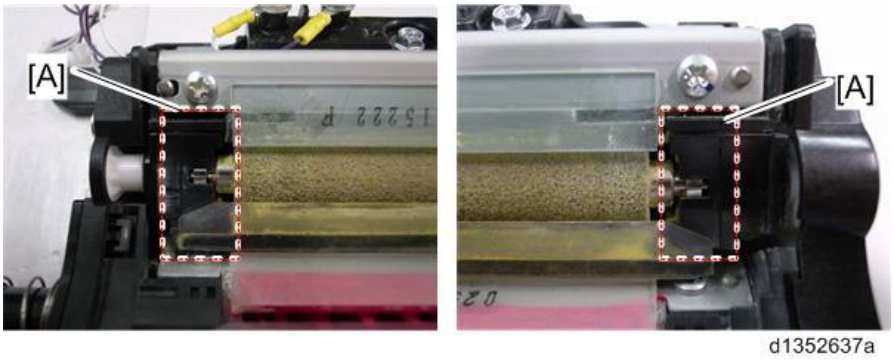


Assembling the Cleaning Unit and Lubrication Unit with New Seals

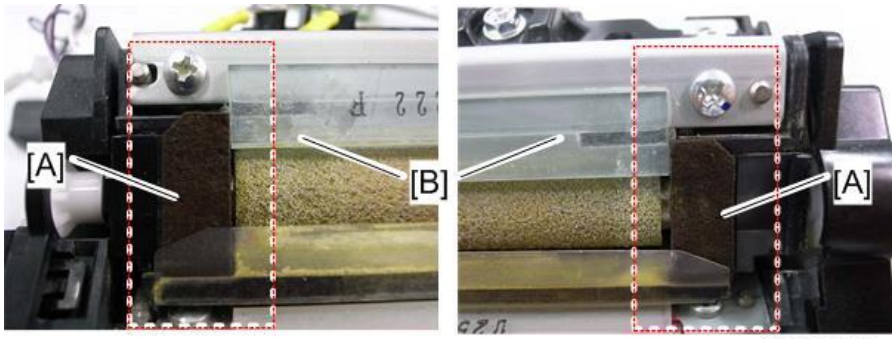
Note

- Replace the cleaning blade, lubrication blade and side seals as a set.

1. Assemble the cleaning unit and the lubrication unit. (Drum Cleaning Unit Internal Components)
2. Clean the area [A] of the cleaning unit and the lubrication unit where the side seals were attached with alcohol and a cloth.
   e.g.: cleaning unit

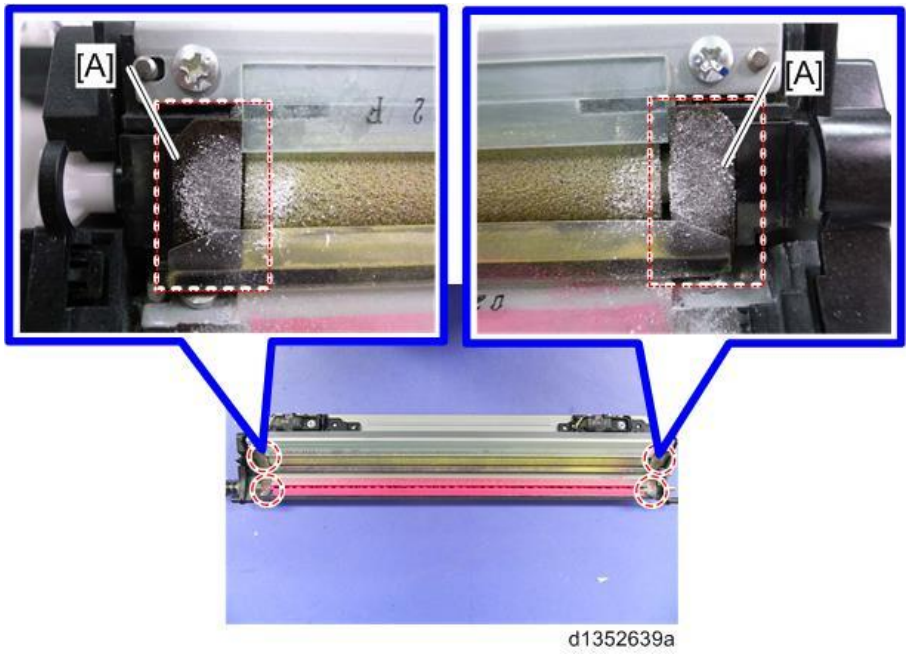


3. Attach new side seals [A] to both sides of the cleaning unit and the lubrication unit.
   Align the edges of the side seal with the edges of the unit and attach them.
   Ensure there is no gap between the side seals and the blade [B].
   e.g.: cleaning unit



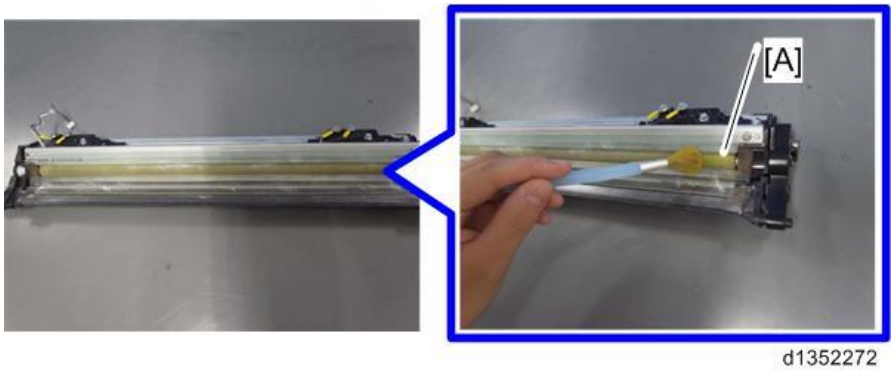
d1352638a

4. After attaching the side seals (x 2 each) on the cleaning unit and the lubrication unit, apply the lubricant powder (D0159501) (zinc stearate) with a brush on the side seals [A].
e.g. (enlarged): cleaning unit



d1352639a

5. Apply the lubricant powder (D0159501) (zinc stearate) and yellow toner (D0159500) at the lubrication roller [A].



d1352272

Note

- Use the blower brush (D0747690) when applying lubricant powder (zinc stearate) and

yellow toner in steps 4 and 5.

d135a3512

Cleaning and Lubrication Procedures

What you will need:

D0159501 ZINC STEARATE

D0159500 G104 YELLOW TONER

D0747690 BRUSH:BLOWER

1. Place a few sheets of paper on the table to prevent toner from staining the table.
2. Remove the PCDU [A] from the machine and place it on the cradle [B] on the table.

d0cpz1000

3. Remove the charge roller unit [A].

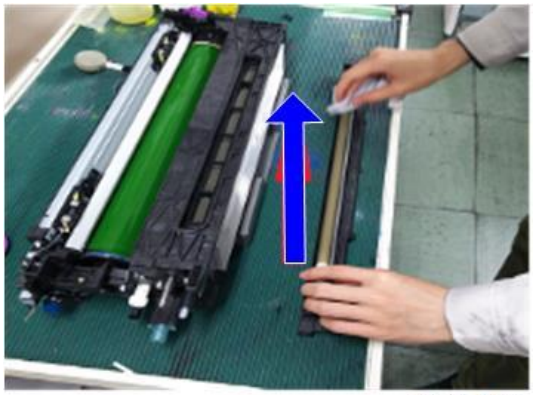
d0cpz1001

Note

After removing the charge roller unit, place it on a clean, flat surface with the roller facing up.

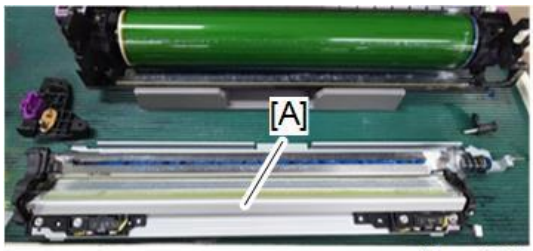
4. Clean the charge roller unit by wiping in one direction as indicated with the arrow. Use a wet cloth

first, and then a dry cloth.



d0cpz1002

5. Remove the drum cleaning unit [A].

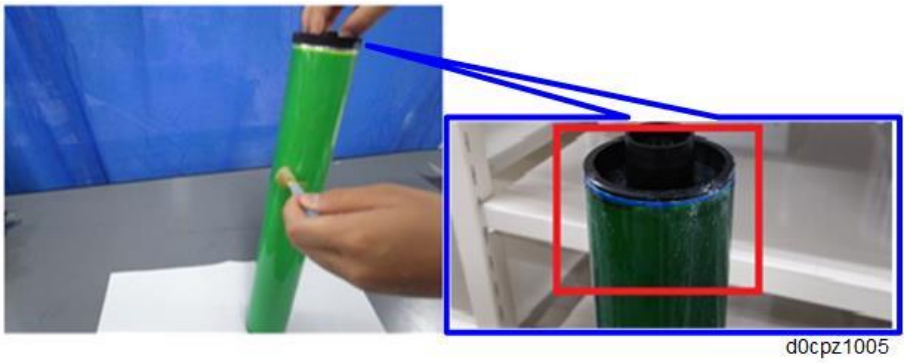


d0cpz1003

6. Remove the drum.

d0cpz1004

7. Using the blower brush (D0747690), clean the drum, toner catcher of the development unit, and toner receptacle at the bottom of the drum cleaning unit. Then, apply the lubricant powder (D0159501; zinc stearate) across the entire surface of the drum evenly.

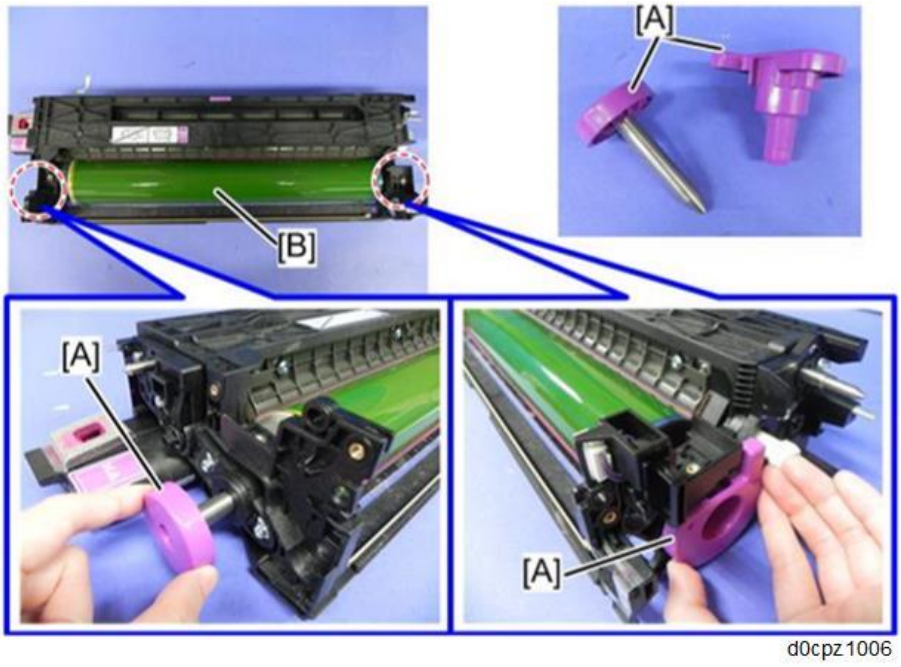


d0cpz1005

Note

Heavy load is put on the edges of the drum. Make sure to apply the lubricant powder at both edges evenly.

8. Put back the drum. Attach the drum holders [A] to the front and rear sides of the drum [B]. To prevent drum fatigue, cover the drum surface with drum protective sheet or sheet of paper.

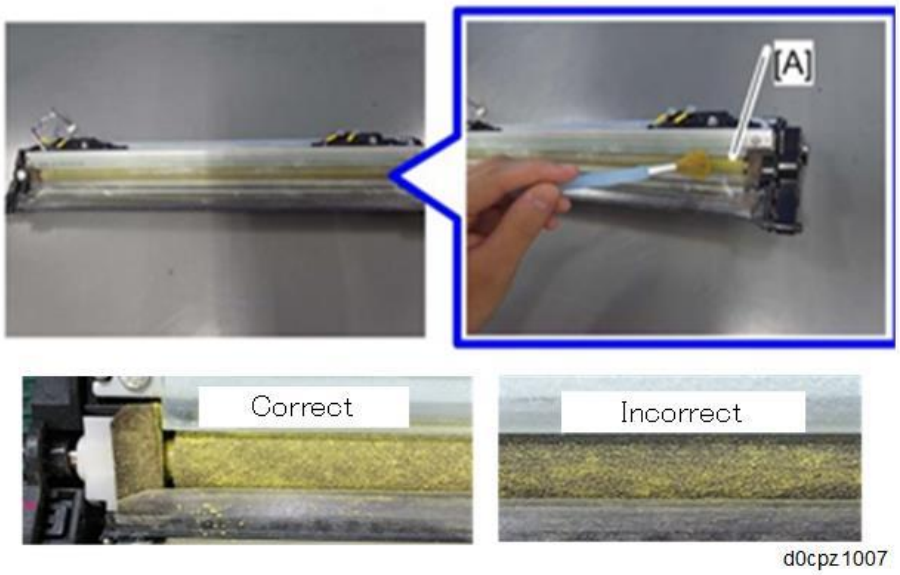


d0cpz1006

If you have replaced the drum cleaning unit, continue with step 9. If not, do steps 9a and 10a instead of steps 9 and 10.

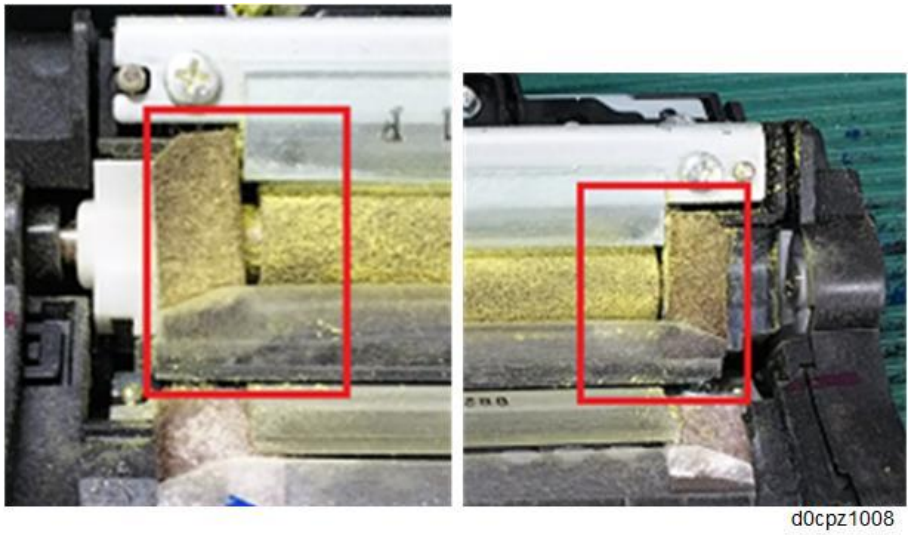
When the drum cleaning unit was replaced

9. Mix the lubricant powder and yellow toner in a 1:1 ratio and apply it to the entire surface of the lubrication roller [A] with the brush of the blower brush as you rotate the roller.



d0cpz1007

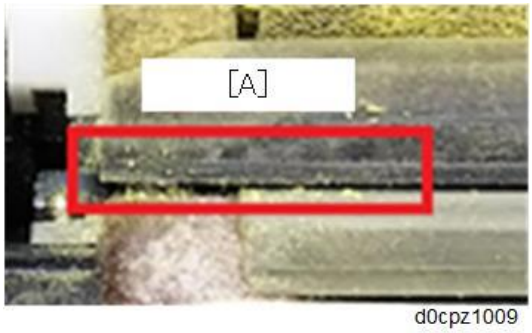
10. Apply the mixture to the side seals and entrance seal edge.



d0cpz1008

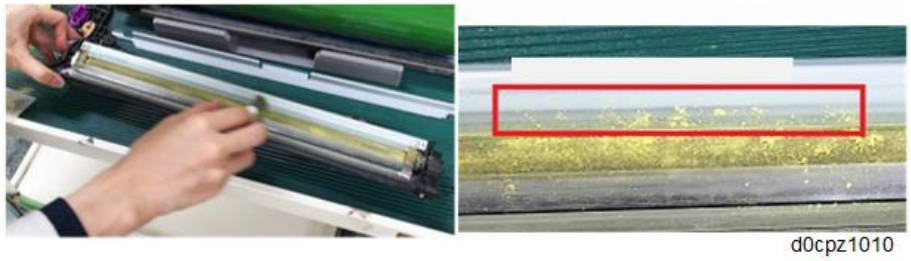
Note

Heavy load is put on both edges of the entrance seal [A], which can cause the seal to lift up. If so, press it down.



d0cpz1009

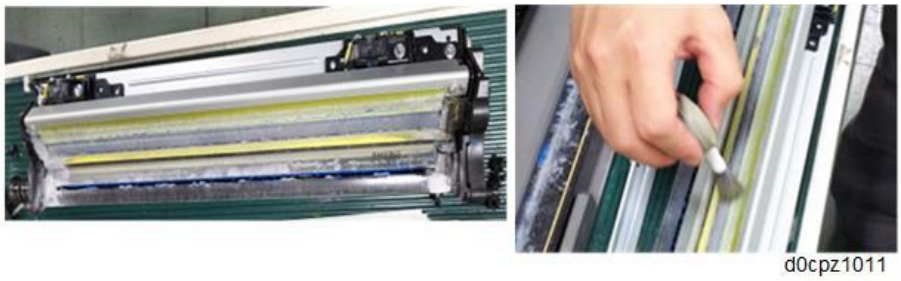
11. Make sure no lubricants remain on the lubricant blade. If any lubricants remain on the blade, clean with a brush and move them to the lubricant roller.



d0cpz1010

When the drum cleaning unit was not replaced

12. Clean the drum cleaning unit.

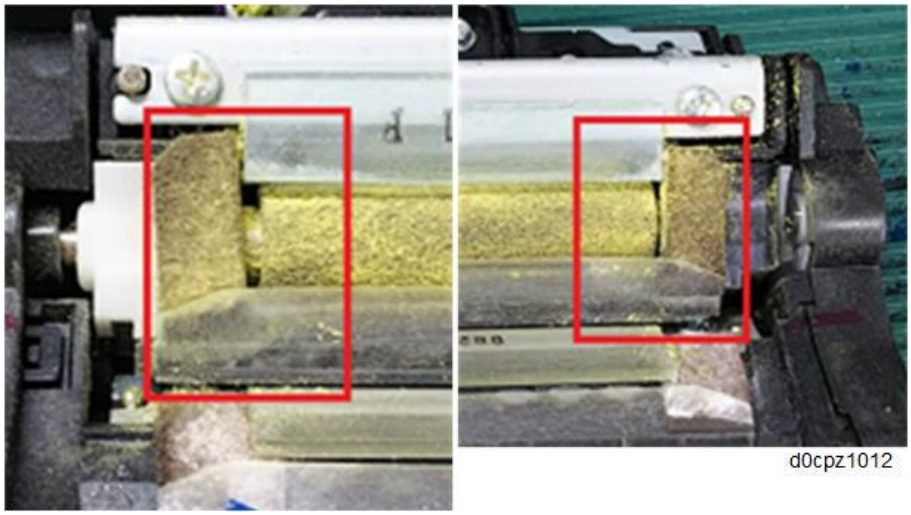


d0cpz1011

Note

Do not use a vacuum cleaner. Clean the cleaning blade with the blower brush until you confirm no lubricant remains on the cleaning blade. To drop waste toner to the toner collection coil, tap the casing at the opposite side of the cleaning unit. Clean the entrance seal positioned toward the lubricant blade. Do not rotate the lubricant roller, to prevent the lubricant powder from dropping. Clean any dust observed.

13. Mix the lubricant powder and yellow toner in a 1:1 ratio and apply it to the side seals and entrance seal and entrance seal edge.



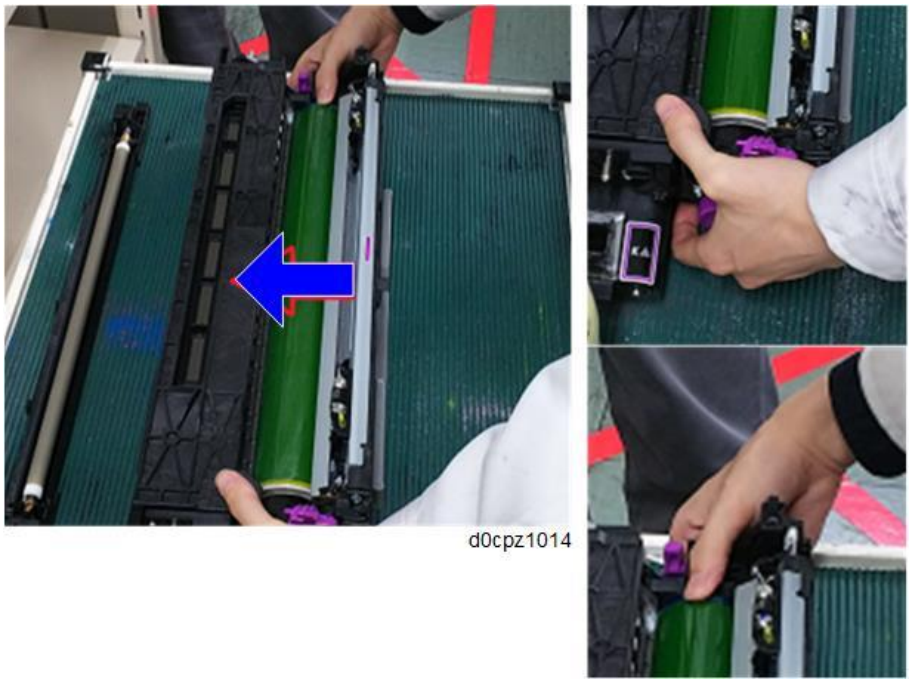
d0cpz1012

14. Put back the cleaning unit to the PCDU and then put back the front face plate [A].

d0cpz1013

15. Rotate the drum two or three times in the direction shown with the arrow. Use your thumbs and

index fingers.



16. Put back the charge roller unit and remove the drum holders from the front and rear sides of the drum.

17. Put back the PCDU to the machine.

Notes on when the drum cleaning unit or the cleaning blade was replaced

Enter the SP mode. In the PM counter screen, set "New Part Set" to ON for the drum cleaning unit or the drum cleaning blade. This setting triggers to run process control, cleaning setting initialization and (DEMS:Pro only) after the main switch turns Off and then On.

Notes on when the drum cleaning unit or the cleaning blade was not replaced

Pro C5300S/C5310S: After putting back the PCDU into the machine, do SP3-040-001 (DEMS: Execute) to correct uneven image density.

IM C6500/C8000: After putting back the PCDU into the machine, do SP3-011-001 (Manual ProCon:Exe - Normal ProCon).

Notes on replacing the drum cleaning unit and drum cleaning blade

Do not replace the drum cleaning unit or the drum cleaning blade together with the following parts.

- ITB
- ITB Cleaning Unit
- ITB Cleaning Blade (ITB Cleaning Unit Component)
- ITB Lubricant Bar (ITB Cleaning Unit Component)
- ITB Lubricant Blade (ITB Cleaning Unit Component)

Reason:

After replacing the drum cleaning unit or the drum cleaning blade, the cleaning setting is initialized

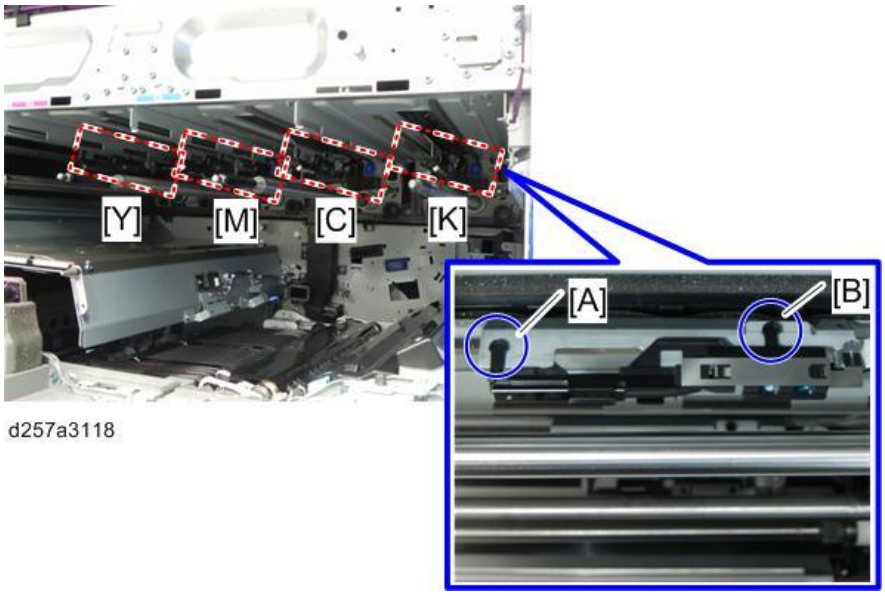
automatically. However, after replacing the five parts above, you need to run SP2-696-001 (Force Apply Lubricant Execute) manually to lubricate the parts before the cleaning setting initialization runs. This is to prevent the ITB cleaning blade from flipping up, which may occur if the cleaning setting initialization runs before the replaced parts are lubricated.

If you need to replace the above five parts together with the drum cleaning unit or the drum cleaning blade, use the following procedure.

1. In the PM counter screen, set "New Part Set" to ON for the drum cleaning unit or the drum cleaning blade.
2. Replace the drum cleaning unit or the drum cleaning blade. (The cleaning setting initialization will run automatically.)
3. In the PM counter screen, set "New Part Set" to ON for the above five parts.
4. Replace the above five parts.
5. Enter the SP mode and run SP2-696-001 (Force Apply Lubricant Execute) manually.

Potential Sensor (S42) (KCMY)

Following is the layout of the potential sensor (S42) (KCMY).

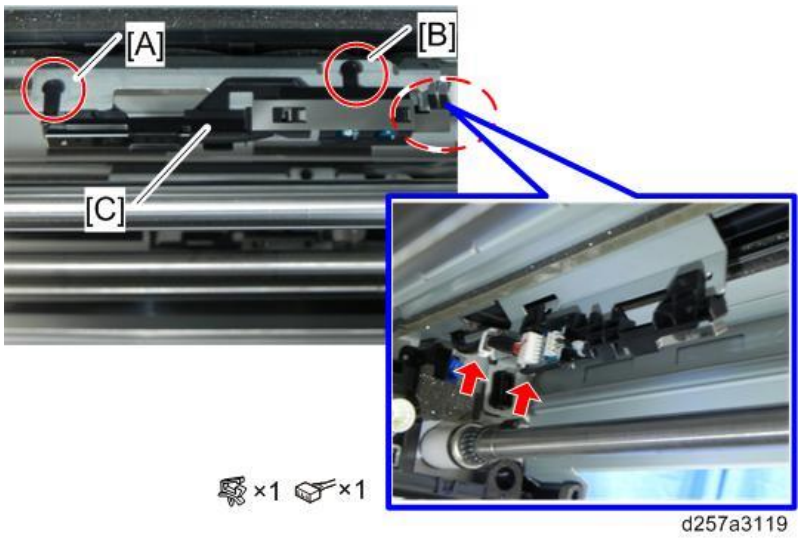


Note

The potential sensor consists of the main part (front side of the machine) and sub part (rear side of the machine).

1. Remove the PCDU. (PCDU)
2. Remove the ITB unit. (ITB Unit Removal)
3. Remove the hook of the sub part [B] first, and then remove the hook of the main part [A]. Then

remove the potential sensor (S42) [C].



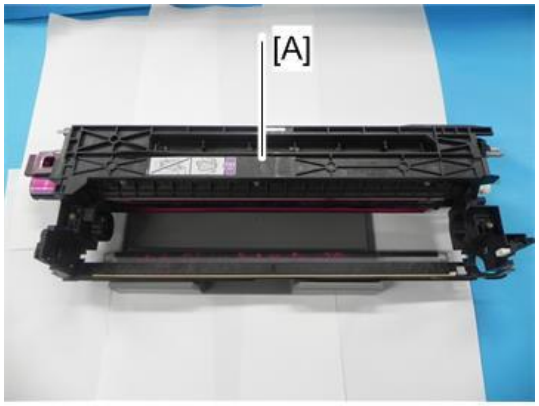
Note

When attaching the potential sensor, hook the main part first, and then hook the sub part.

Development Unit

Development Unit

1. Remove the PCDU. (PCDU)
2. Remove the charge roller unit. (Charge Roller Unit)
3. Remove the drum cleaning unit. (Drum Cleaning Unit Removal)
4. Remove the OPC drum. (OPC Drum)
5. Only the development unit [A] remains.



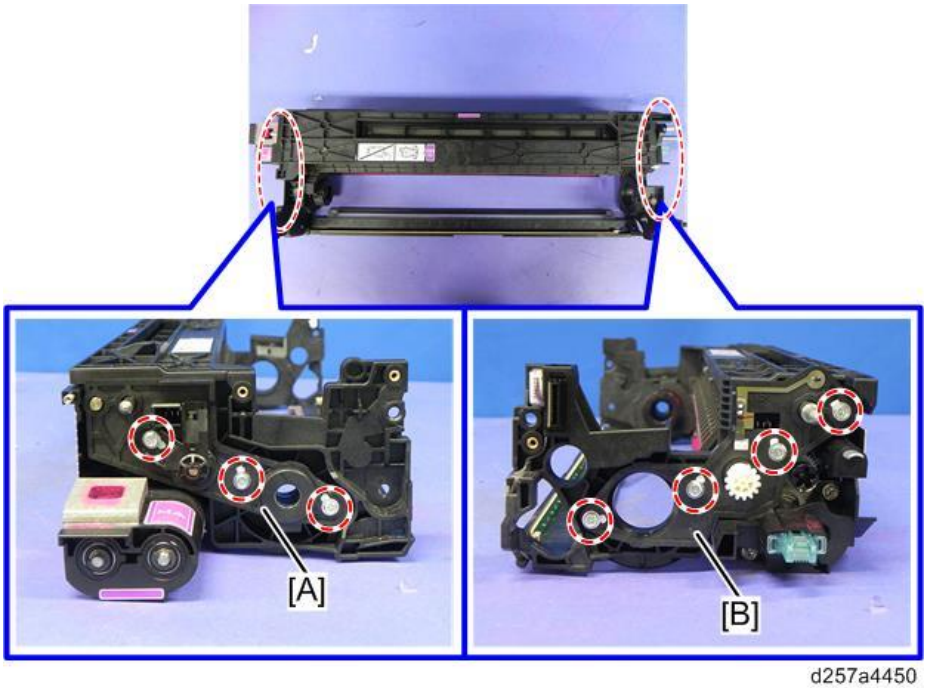
d257a8013

Note

- Pro C5300S/C5310S: After you take this part out of the machine and put it back, or replace it with a new one, carry out SP3-040-001 to SP3-040-005 (DEMS: Execute).

Important

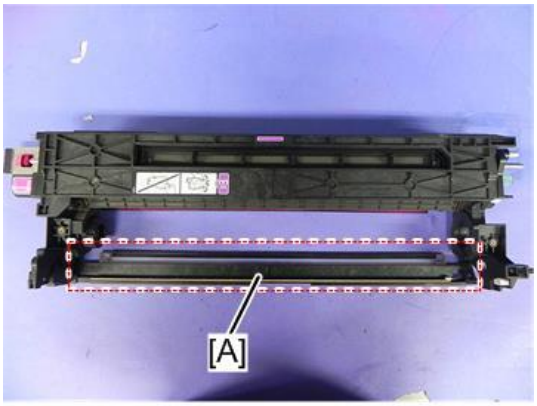
- Since the development unit and face plates (front [A], rear [B]) are integrated, do not remove the following screws.



d257a4450

- When carrying the development unit, do not hold the frame [A]. The frame may bend or

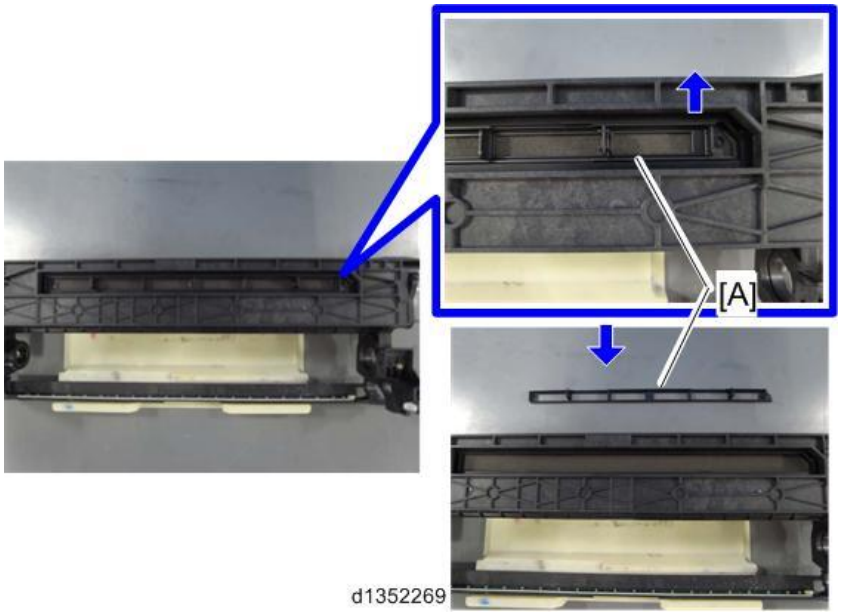
break if load is applied to it.



d257a4451

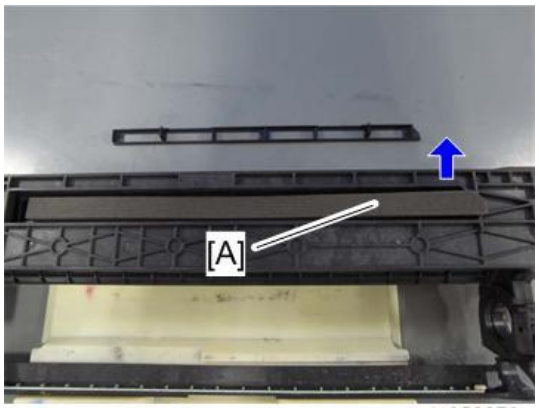
Development Filter

1. Remove the filter cover [A].



d1352269

2. Remove the development filter [A].



d1352270

Removing Old Developer

General

Replacing the developer without completely removing old developer causes the machine to operate in a condition in which the applied toner density value is lower than the actual value. This happens because the toner density sensor (TD sensor) initialization process (SP3-030-001 to 006), which is performed when replacing the developer, always sets back the toner density readings to the prescribed standard value 7.0% regardless of the actual toner density, e.g. actual toner density could be 8% after replacing with fresh developer but the TD sensor is calibrated to read this as 7%.
Continuous machine operation in this condition and incomplete developer replacement will eventually cause the actual toner density to become too high and result in toner scattering.
This procedure explains how to remove old developer to prevent toner scattering, in two parts.
Here are the expected effects of following this procedure:

- Easier developer removal as a result of improved developer fluidity
- Toner density will come close to the standard 7% after developer replacement even if the dev unit is not completely cleared and contains a slight amount of old developer.

PART 1: Preparations for Developer Removal

1. Before removing the developer, enter the SP mode and check the current toner density.

Table 1 Toner density check SP

SP No.	Color
SP 3-200-001	K
SP 3-200-002	C
SP 3-200-003	M
SP 3-200-004	Y

If the toner density is 7%±0.5, skip the following steps and go to PART 2.
If the toner density is not 7%±0.5 (7.5% or higher), continue this procedure.

2. Refer to the table below and determine the print volume according to the toner density that was found in the previous step. The actual printing will be done in step 5.

Table 2 Print volume based toner density and paper size

Toner Density	A4/LT	A3/DLT
12%	110	55
11%	90	45
10%	70	35
9%	45	23
8%	20	10
7.5%	10	5

Toner Density	A4/LT	A3/DLT
7%	0	0

3. Refer to the tables below and change the SP values for toner supply mode and supply rate to “0” for the development unit(s) requiring developer replacement.

Table 3-1 Toner Supply Mode

SP No.	Color	Default	Change to
SP 3-400-001	K	4	**0**
SP 3-400-002	C	4	**0**
SP 3-400-003	M	4	**0**
SP 3-400-004	Y	4	**0**

Note

- The default value “4” supplies toner in DANC (Divided Image Active Noise Control) mode.
- The changed value “0” supplies toner in constant supply mode.

Table 3-2 Toner Supply Rate

SP No.	Color	Default	Change to
SP 3-440-001	K	5	**0**
SP 3-440-002	C	5	**0**
SP 3-440-003	M	5	**0**
SP 3-440-004	Y	5	**0**

4. Select test pattern “26” from SP2-109-003 and specify the color in SP2-109-005.

Table 4 Test Pattern Settings

SP No.	Settings	
SP 2-109-003	**26**	Solid
SP 2-109-005	Specify color	

5. Print the test pattern on A4/LT or A3/DLT for the print volume determined in step 2.
6. Check the latest toner density in SP3-200-001 to 004. (Table 1)
7. Repeat steps 1 to 5 until you achieve the standard toner density 7%±0.5.
8. Set the SP settings for toner supply mode and supply rate (changed in step 3) back to the default values; “4” for toner supply mode and “5%” for supply rate.

Important

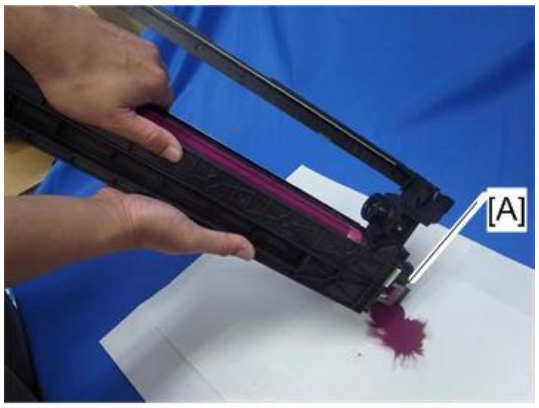
- Make sure to set the toner supply mode and supply rate back to the defaults. Otherwise, image density will appear light.

9. Continue with the procedure in “Part 2”.

PART 2: Developer Removal Procedure

1. Take out the PCDU and remove the OPC drum so that only the development unit remains. (Development Unit)

2. Take out the old developer from the supply port [A], and put it into the plastic bag that came with the new developer.



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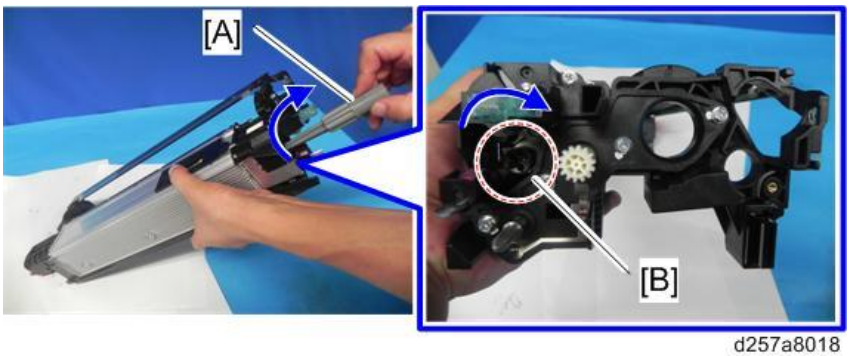
Important

- When lifting the development unit, hold it with the development roller facing up and the development supply port facing down.
- When lifting the development unit, do not hold the frame. It may become bent or broken if load is applied to the frame.
- First, tilt the development unit to 60° and take out the old developer, and then tilt the unit to 90°. If you take out the old developer with the unit at 90° from the start, the developer will spread out and stack in the supply port.
- When the old developer cannot be removed smoothly, try the following procedure while doing step 3, in addition to the operation specified in step 3.
  Tilt the development unit, and rotate the screw [B] clockwise using the development jig [A] to remove the old developer.



d257a8018

3. When the developer is no longer ejected from the supply port, rotate the development roller [B]

counterclockwise using the development jig [A].

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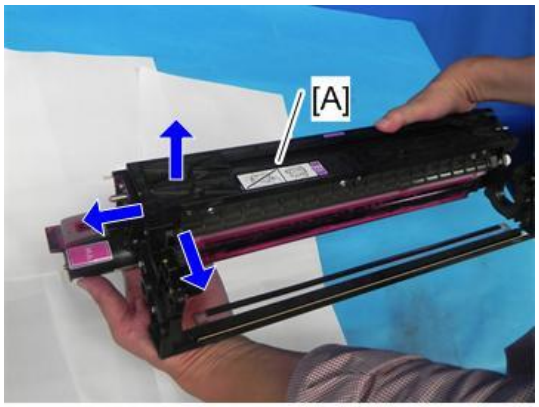
4. Repeat Step 2 until no more developer comes out of the supply port.
5. Shake the development unit [A] up and down, left and right, and back and forth 5 times each. (The swing width is about 10 cm.)

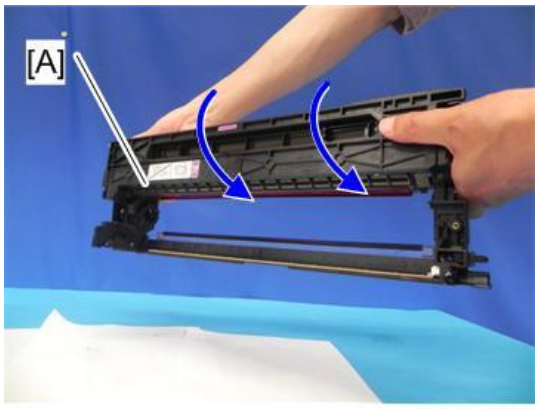


d257a8015

Note

- This improves the fluidity of the remaining developer, and makes it easier to remove.

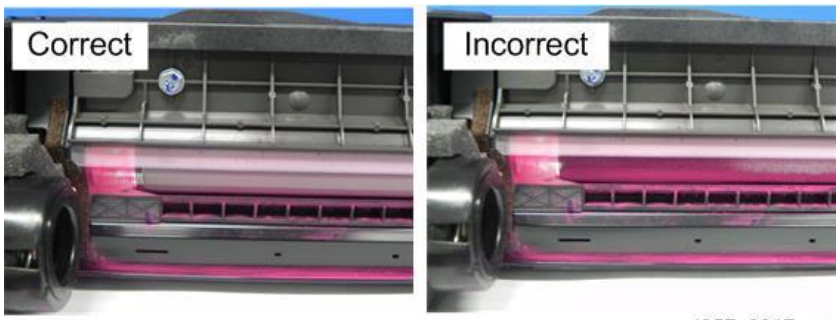
6. Repeat Step 3 and Step 2 (in that order) until no more developer comes out of the supply port.
7. Tilt the development unit [A] towards the development roller. The developer in the unit is gathered at the development roller side.



d257a8016

8. Turn the development roller clockwise, and make sure that there is no adhesion of developer around the roller.
9. Keep removing the old developer until the developer adhered to the front development roller is about 1cm from the edge. When you cannot take out the old developer, try these steps in the

following order: steps 5 -> 3 -> 2 -> 7 -> 8.



w_d257a8017_en

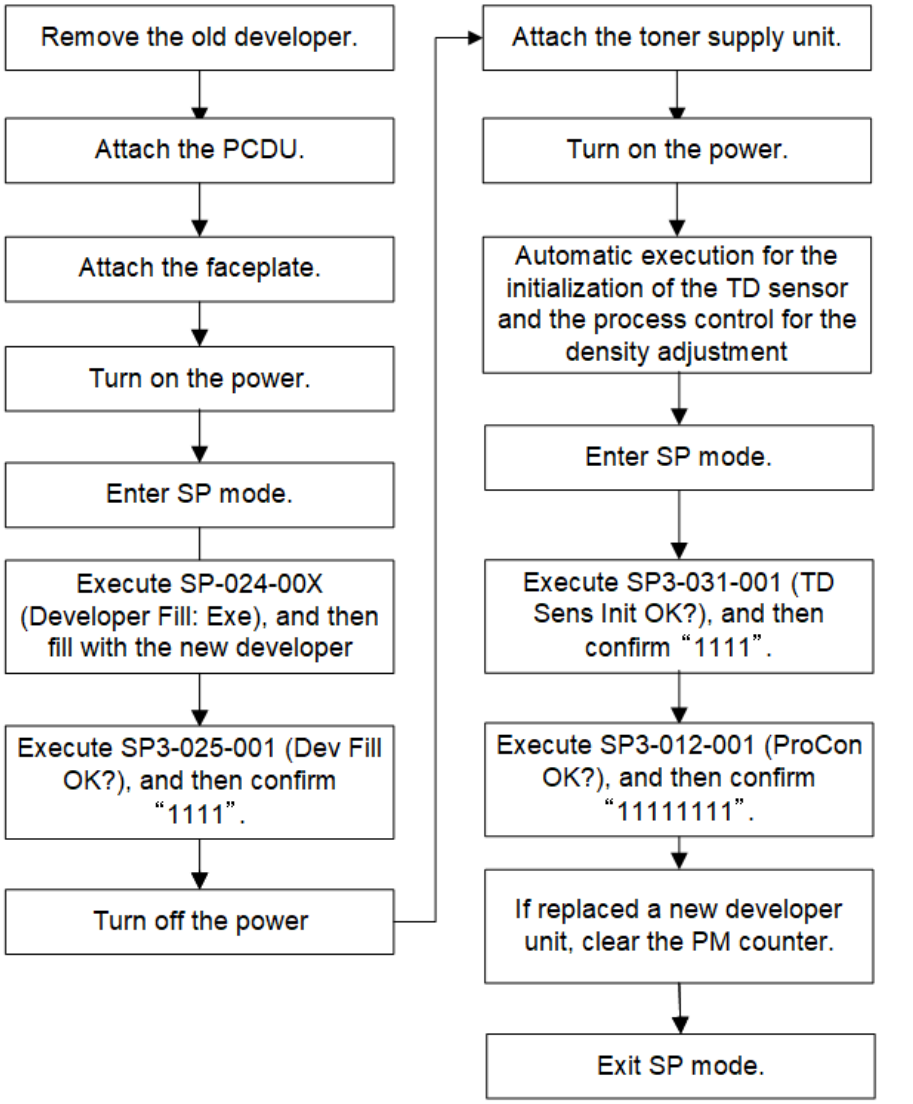
10. When there is a lot of remaining developer, tilt the development unit toward the development roller and shake it (in the same way as in step 5).

Adding New Developer

Before you refill a development unit, remove all the old developer in accordance with the ‘Removing Old Developer’ procedure above.

If there is no toner, add the new developer after installing new toner. This is because when there is no toner, TD sensor initialization and process control for density adjustment do not start after adding new developer.

Adding New Developer (Summary)



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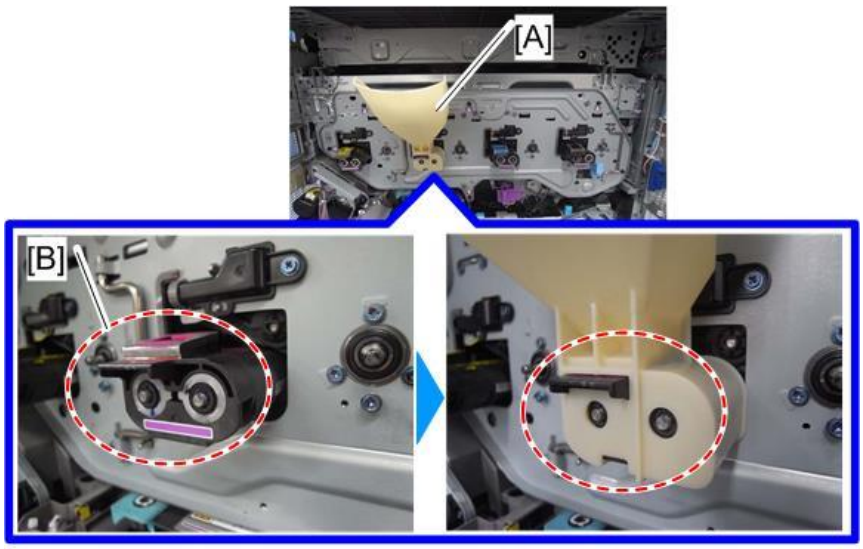
Adding New Developer and Adjustment

Note

- Replace the development unit before adding new developer.
- When there is no more toner, replace the toner before adding new developer because initialization of the TD sensor and density adjustment process control will not be executed if there is no toner.
- The drawer unit, vertical transport door, and bypass tray door should be opened when adding new developer, otherwise SC682-07 is logged.

1. Turn OFF the power.
2. Remove the toner supply unit. (Toner Supply Unit)
3. Remove the faceplate. (Faceplate)
4. Remove the PCDU. (PCDU)

5. Replace the development unit. (Development Unit)
6. Attach the PCDU.
7. Attach the faceplate.
8. Turn ON the machine.
9. Attach the funnel [A] to the supply port [B] of the development unit.



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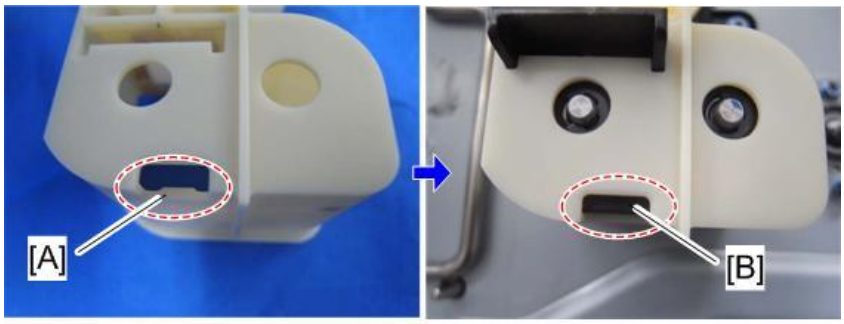
Note

- The protrusion [A] at the bottom of the funnel is a stopper. Make sure that the protrusion is inserted securely into the slot at the back side of the supply port [B] of the development unit.



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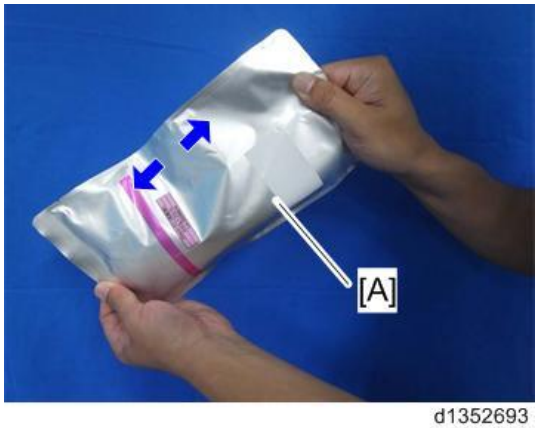
10. Shake the developer pack [A] 5 or 6 times.



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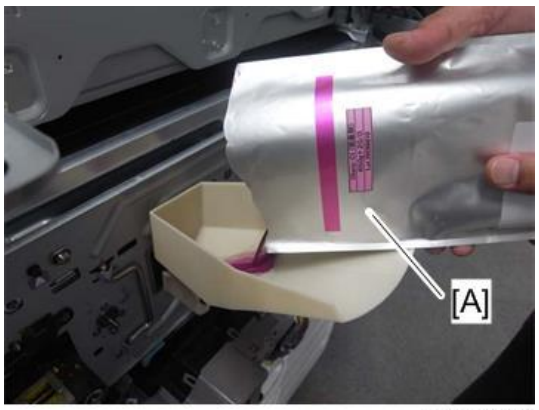
11. Enter SP mode and execute SP3-024-00x (Developer Fill). See the table below.

Filling Developer SP

SP	Description
3-024-001	Developer Fill :Exe Execute: ALL
3-024-002	Developer Fill :Exe Execute: COL
3-024-003	Developer Fill :Exe Execute: K
3-024-004	Developer Fill :Exe Execute: C
3-024-005	Developer Fill :Exe Execute: M
3-024-006	Developer Fill :Exe Execute: Y
3-024-007	Developer Fill :Exe Choose: From Left: YMCK
3-024-008	Developer Fill :Exe Execute: Chosen Color

12. Fill the developer [A] while tapping the funnel. It should finish within 60 seconds. Make sure that the error message "Failed" does not appear.



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Important

- The default execution time for filling developer is 60 seconds. The time interval for execution can be adjusted. If more time is needed to empty the developer pack, increase the time interval with SP3-024-11 (Developer Fill: Exe Drive Time Upper Limit).
- If the filling is not completed in time, see the result code table below.
- If the error message "Failed" is displayed after executing SP3-024-XXX (Developer Fill :Exe Execute), check the execution result code with SP3-025-001 (Dev Fill OK?). Then perform the recovery procedure shown in "Result code table for filling developer" below. After performing the recovery procedure, make sure that "1" is displayed in SP3-025-001 (Dev Fill OK?).

13. After the filling completion message is displayed on the touch panel display, enter SP3-025-001 (Dev Fill OK? From Left:YMCK) to confirm that developer installation succeeded.
You will see a 4-digit number: 1111. Reading from left-to-right, each number is a result code for the Y, M, C, K developer execution with SP3-024-00. Refer to the result code table below.

Result code table for filling developer

Code	Meaning	Comment	Conditions	Recovery Procedure
0	No execution	-	-	-

Code	Meaning	Comment	Conditions	Recovery Procedure
1	Succeeded	-	-	Even though the results display of SP3025 shows success, developer may remain in the funnel. In this case, implement the following output checks in order to fill the remaining developer. • Set SP5-805-114 (Output Check Used Toner Bottle Motor) to ON “1”. • Set SP5-805-115 (Output Check Toner Discharge Motor) to ON “1”. • Set SP5-805-112, -113, -114 or 115 (Output Check Dev Motor) to ON “1”. • After the completion of filling, set the output checks to OFF.
2	No developer exited	Before execution, TD sensor output was above 1.0V (developer present).	The developer is filled with about 150 to 200g when the time expires	Deal with this in the following order. • Turn OFF the main power. • Carefully remove the funnel for which the developer is remaining. • Remove the PCDU and attach the cap to the supply port. • Tilt the PCDU about 45 degrees towards the toner supply unit, closer to the developer supply port side in the

Code	Meaning	Comment	Conditions	Recovery Procedure
				vicinity of the TD sensor. • Attach the PCDU. • Attach the funnel that has the developer remaining. • Turn ON the main power and run the developer filling with SP3-024. • Make sure that "1" is the result with SP3-025.
2	No developer exited	Before execution, TD sensor output was above 1.0V (developer present).	When removing the developer during EM, if developer remains in the development unit	Deal with this in the following order. • Turn OFF the main power. • Remove the PCDU and remove the developer in the PCDU. • Attach the PCDU and the funnel • Enter SP mode and execute SP3-024-00x (Developer Fill). • Fill the developer
3	No developer entered	After execution, TD sensor output was below 1.0V (no developer present).	Remaining developer is less than 150g when the time expires	• Enter SP mode and execute SP3-024-00x (Developer Fill).
4	Used toner bottle not set	The used toner bottle was not detected.	No waste toner bottle in the machine	• Put the waste toner bottle in the machine. • Enter SP mode and execute SP3-024-00x (Developer Fill).
5	Used toner bottle full	The used toner bottle was detected	If the waste toner bottle is full when	• Replace the waste toner bottle.

Code	Meaning	Comment	Conditions	Recovery Procedure
		full.	filling the developer	• Enter SP mode and execute SP3-024-00x (Developer Fill).
7	Development motor lock	The development motor was not operating.	If the development motor is locked (SC325 to SC328) when filling the developer	• Clear the SC325 to SC328. • Enter SP mode and execute SP3-024-00x (Developer Fill).
8	Used toner transport lock	One or both motors locked: Used Toner Transport Motor, Used Toner Bottle Motor.	One or both motors is locked: Used Toner Transport Motor, Used Toner Bottle Motor. (SC 486/SC488)	• Clear the SC 486/SC488. • Enter SP mode and execute SP3-024-00x (Developer Fill).
9	Forced abort	Bypass tray cover opened, waste toner front cover opened, the machine was powered off, or some other event interrupted execution.	When the situation on the left happened when filling the developer	Deal with this in the following order. • Enter SP mode and execute SP3-024-00x (Developer Fill). • If the result code is not "1", replace the developer.

14. Remove the funnel and turn off the power.

15. Attach the toner supply unit and turn on the power.

Note

- After turning on the main power switch, initialization for the TD sensor and process control automatically starts.

16. Check the initialization results for the TD sensor (SP3-031-00x (Init TD Sensor: Exe Execute)). If the initialization is successful, the result shows “1111”.

Note

- If "1111" is not displayed, solve using the steps that are described in the table above.

17. Check the initialization results for process control (SP3-012-001 (ProCon OK? History:Latest)). If the initialization is successful, the result shows “11111111”.

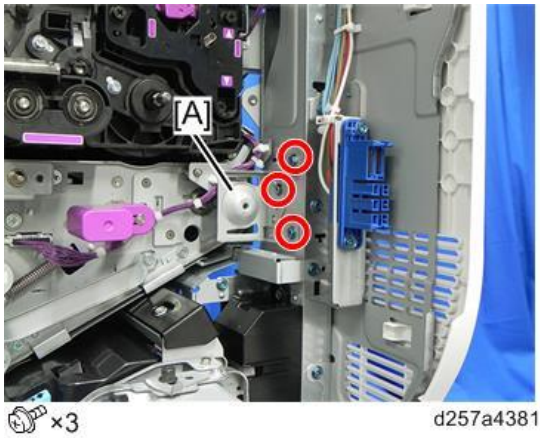
Image Transfer Belt (ITB) Unit

ITB Unit Removal

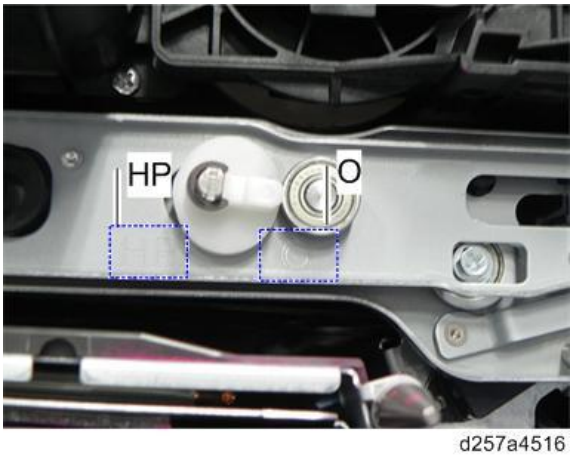
Important

- After replacing the ITB unit, the paper transfer belt unit must be adjusted. (Adjustment of the Paper Transfer Belt Unit)

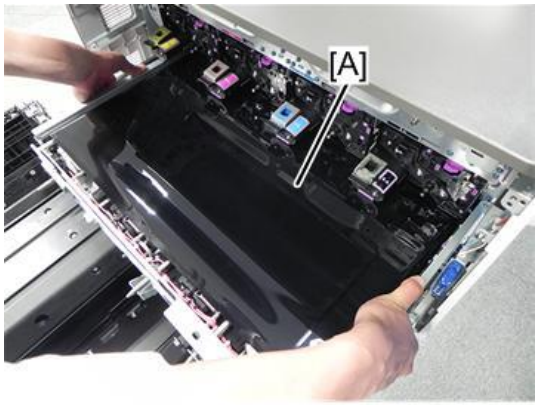
1. Remove the ITB cleaning unit. (ITB Cleaning Unit)
2. Remove the faceplate. (Faceplate)
3. Remove the bracket [A].



4. Check that the image transfer rollers (YMC) do not contact the transfer belt. You can check it with the lever shown in the picture below. The lever indicates either “HP” or “O” depending on the state of the image transfer rollers.
   - **HP:** Image transfer rollers contact the ITB.
   - **O:** Image transfer rollers are detached from the ITB.



5. Pull the drawer unit. Then pull the ITB unit [A] out to detach it.



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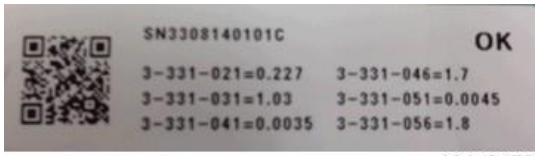
Important

- When you remove or install the ITB unit, be sure not to let the transfer belt touch the drawer unit.
- Be sure to place the ITB unit on a flat surface.
- Execute SP2-924-004 after you remove and re-install the ITB unit.

Adjustment after Replacement

1. Plug in and turn ON the main power.
2. Enter SP mode.
3. Referring to the barcode sheet provided, enter the setting value for the ID sensor.
   If the sheet describes [SP3-331-021＝0.227] [SP3-331-031＝1.03], Set "0.227" to SP3-331-021, and Set "1.03" to SP3-331-031.



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4. Execute SP3-011-001.

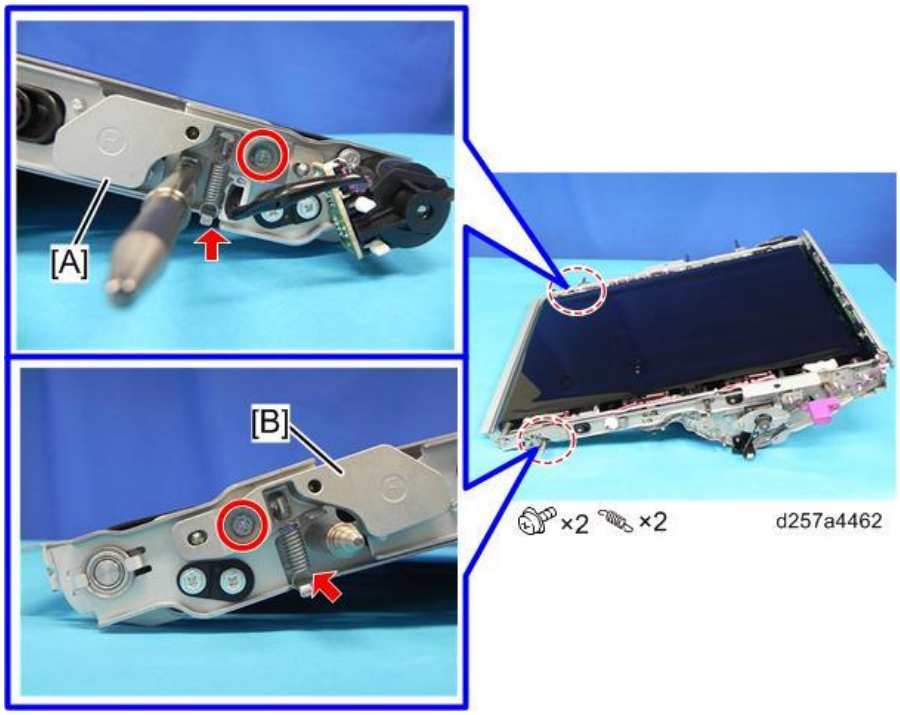
ITB Replacement

Before you start:

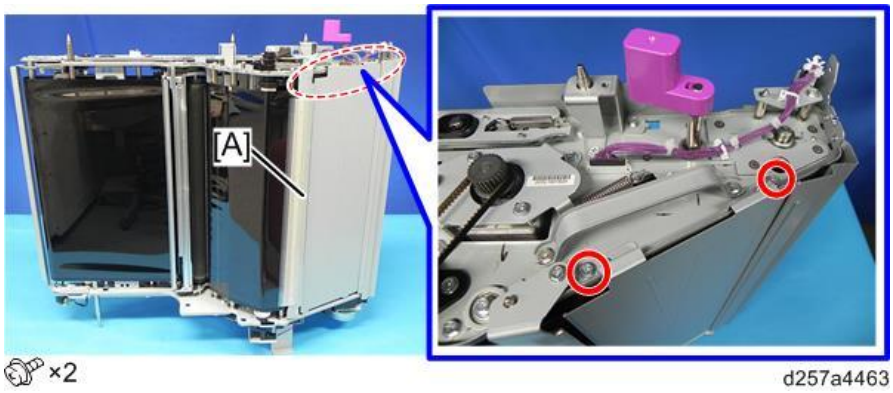
- Clear the counter for the ITB in PM counter mode (or use SP mode to turn SP3701-093 or 094 “0 → 1”)
- Turn the machine off.

1. Remove the ITB unit. (ITB Unit Removal)

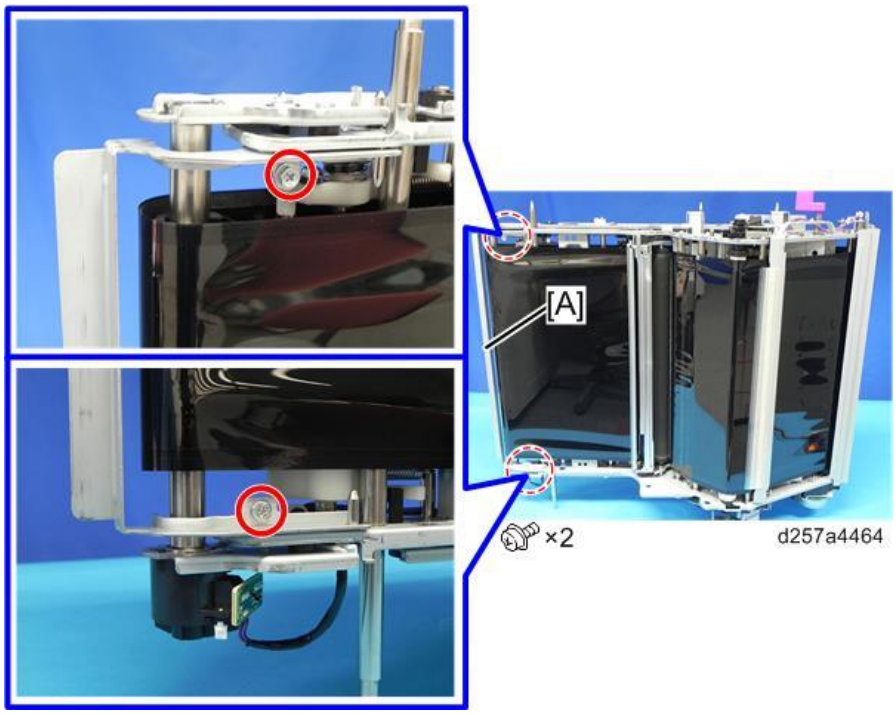
2. Remove both side brackets [A], [B].



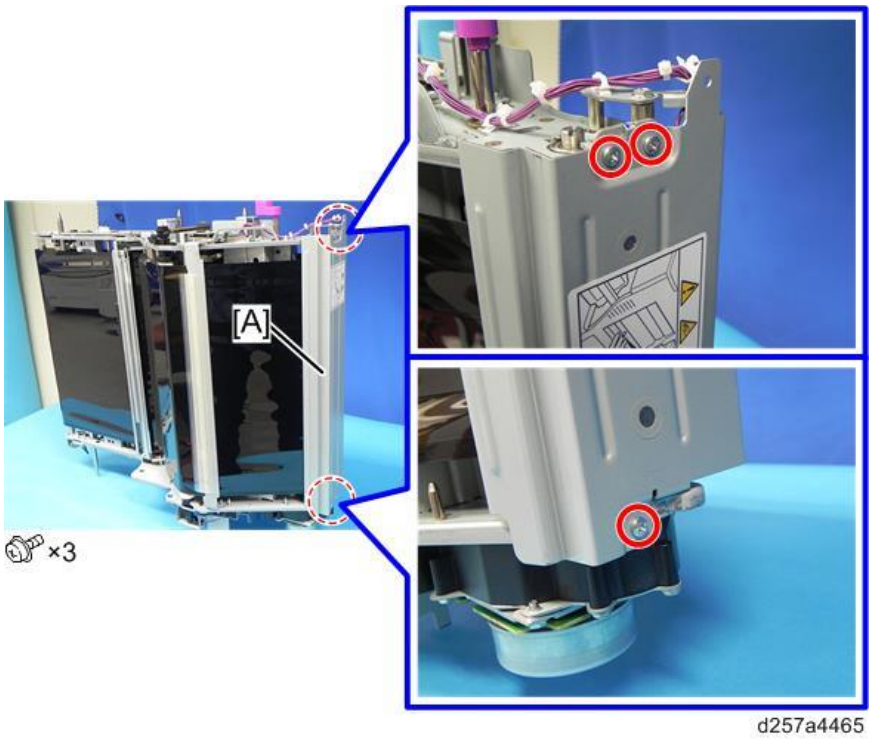
3. Remove the anti-toner-scattering cover [A].



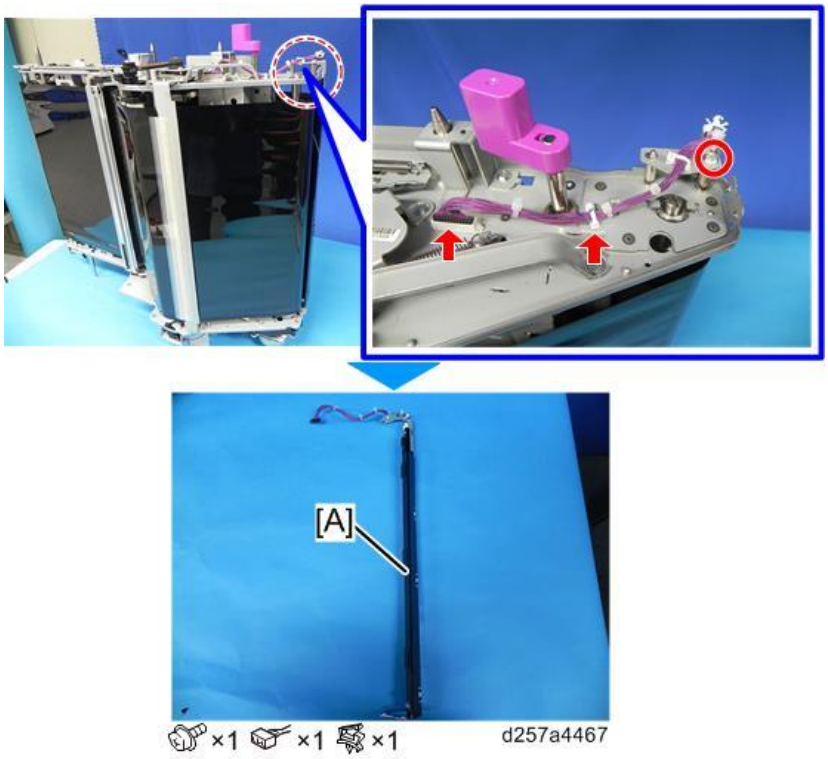
4. Remove the stay [A] on the left side.



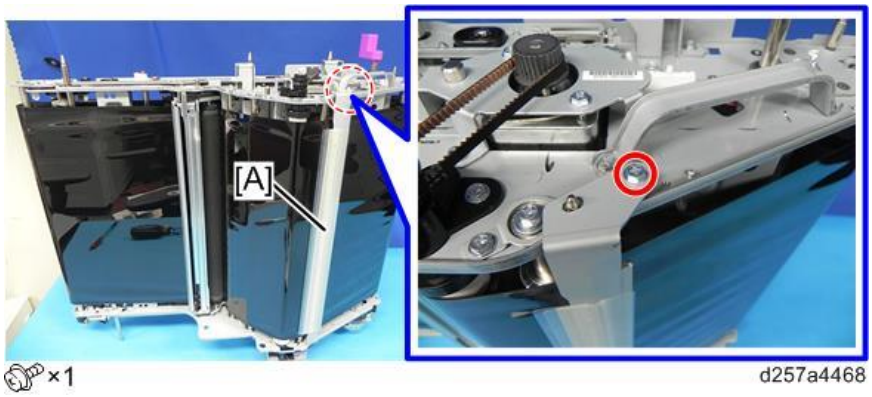
5. Remove the stay [A] on the right side.



6. Remove the bracket with ID/MUSIC sensors [A].

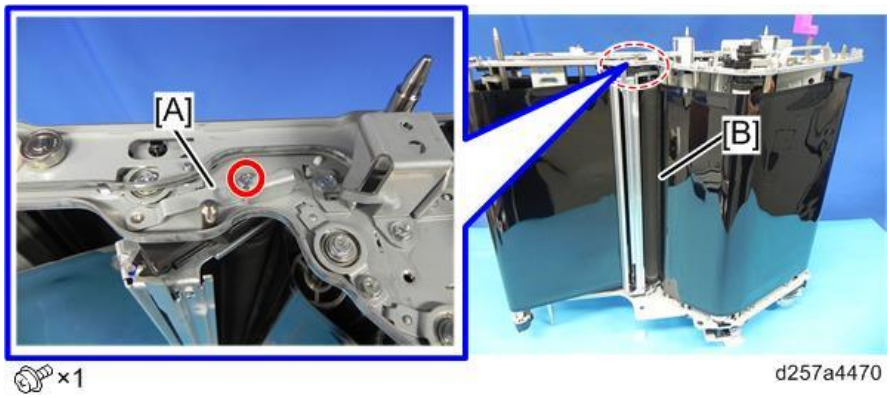


7. Remove the center stay [A].

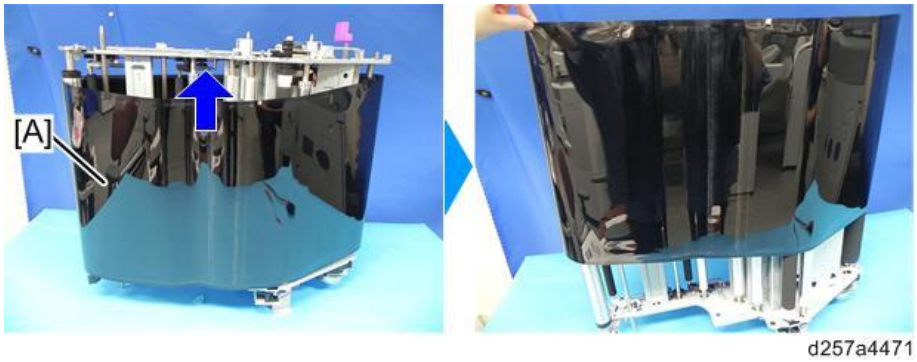


8. Hold the frames [A] of the encoder roller and pull them towards you.

9. Remove the bracket [A]. Remove the tension roller [B].



10. Pull the transfer belt [A] upward to remove it.



⚠CAUTION

- Be sure to install the new transfer belt with the number at the rear of the machine (the lower side in the picture below).
- Be sure to attach the new transfer belt without slackness.

Note

- After the replacement, some procedures need to be done. See “Lubrication after replacement” described below.

Lubrication after replacement

1. Turn ON the machine

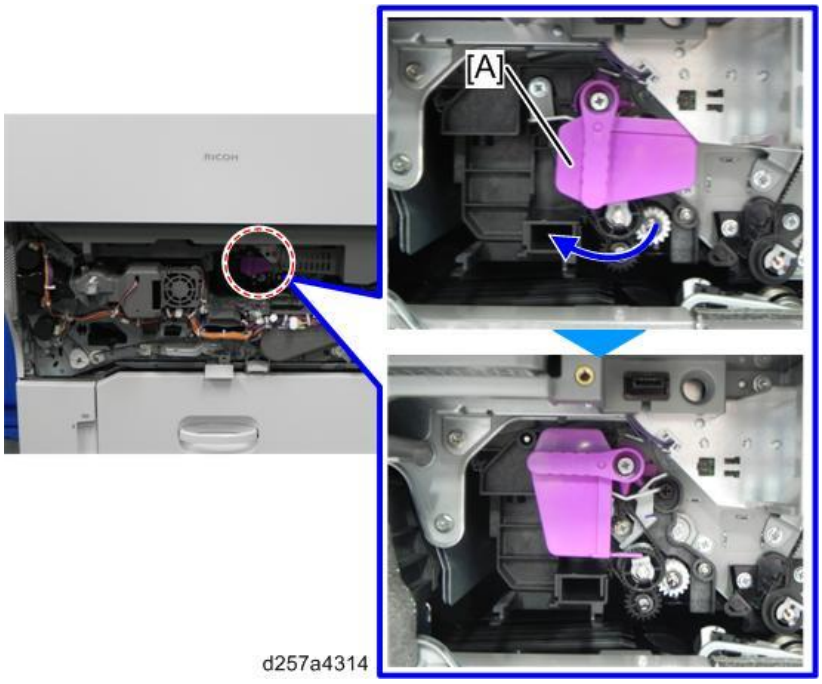
2. Enter the SP mode.

3. Push the PM parts counter reset button in the PM Parts display (Image Transfer Belt Unit or Image Transfer Belt).
4. Turn OFF the machine.
5. Replace the image transfer belt.
6. Attach the faceplate and toner supply unit.

Note

- Do not install the belt cleaning fan yet.

7. Rotate the blade release lever [A] to move the cleaning blade away from the ITB.



8. Attach the drawer unit cover.
9. Remove the paper transfer belt unit. (Paper Transfer Belt Unit)
10. Pull out (open) the drawer unit.
11. Keep the drawer unit open, and then turn ON the machine main power.

Note

- The automatic adjustment will not be performed when the machine is turned ON, since the drawer unit is pulled out/open.

12. Enter the SP mode and choose SP2-696-001 (Force Apply Lubricant Execute).
13. Push [Execute] on the operation panel and then push the drawer unit into the machine.

Note

- When the drawer unit is pushed into the machine, lubrication starts automatically. This operation takes about 3 minutes to complete.

14. Turn OFF the machine when the lubrication finishes (the machine stops).
15. Withdraw the drawer unit and rotate the blade release lever in order to make the cleaning blade contact the ITB.
16. Re-install the belt cleaning fan.

17. Re-attach the paper transfer belt unit.
18. Push the drawer unit into the machine.
19. Turn ON the machine.

Note

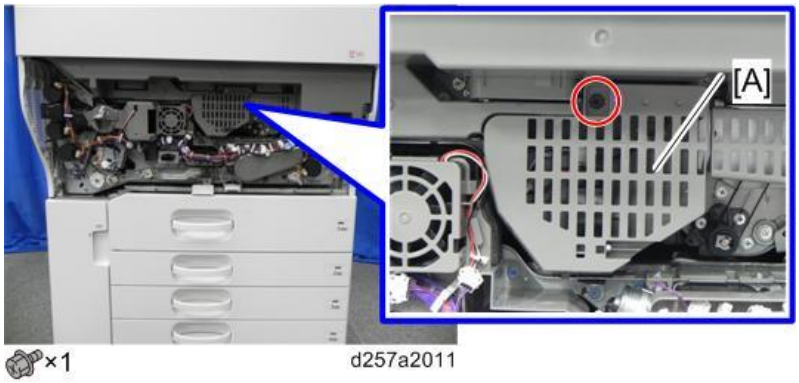
- The machine will then execute the automatic corrections.

How to Lubricate Forcibly

Important

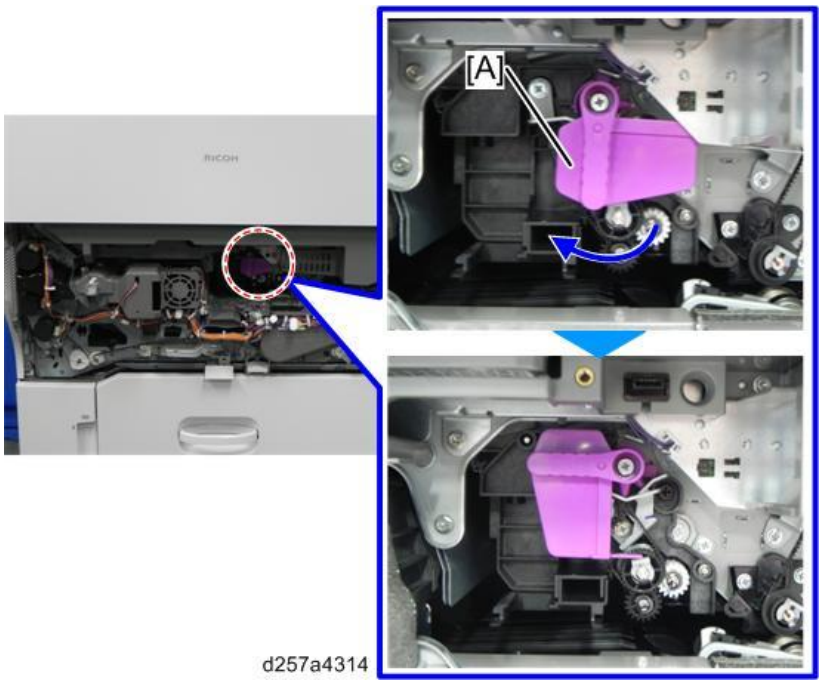
- This procedure shows how to lubricate forcibly without replacing the image transfer belt.
- If replacing the image transfer belt, Lubrication after replacement is required.

1. Turn Off the main power.
2. Remove the drawer unit cover. (Drawer Unit Cover)
3. Remove the ITB Cleaning Intake Fan [A] along with the duct.*



* Pro C5310S/C5300S uses TCRU/ORU screw

4. Rotate the blade release lever [A] to move the cleaning blade away from the ITB.



5. Attach the drawer unit cover.

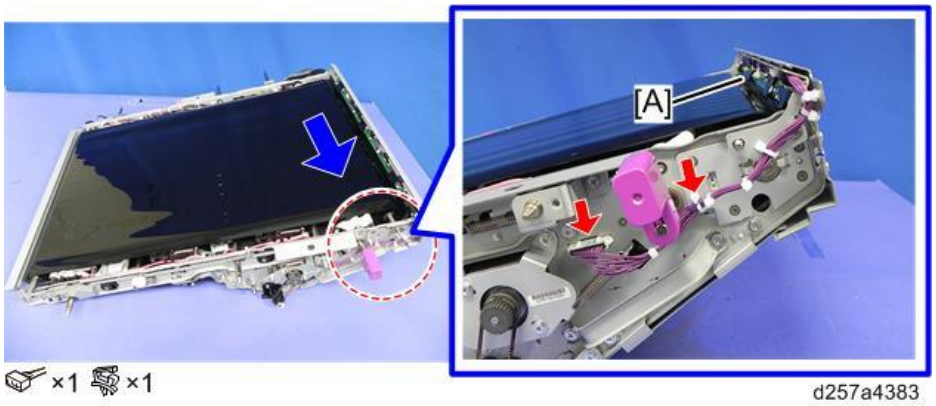
6. Turn OFF the main power.
7. Enter SP mode.
8. With the drawer unit open, execute SP2-696-001.
9. Close the drawer unit. Lubrication starts automatically. This operation takes about 3 minutes to complete.
10. Turn OFF the machine lock the blade release lever.
11. Attach the ITB Cleaning Intake Fan [A].

Note

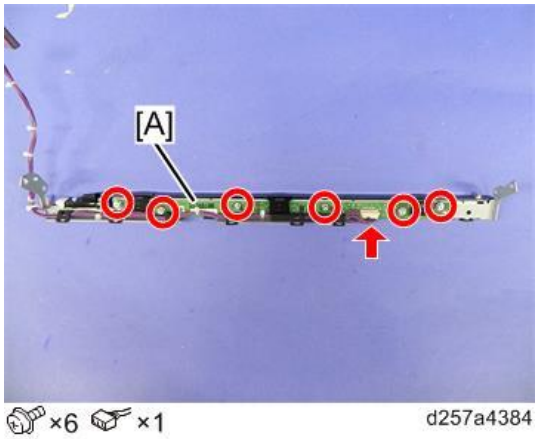
- If the drawer unit cover is not closed, lubrication cannot be started.

ID/MUSIC Sensor (S2)

1. Remove the ITB unit. (ITB Unit Removal)
2. Remove the bracket with the ID/MUSIC sensor (S2).



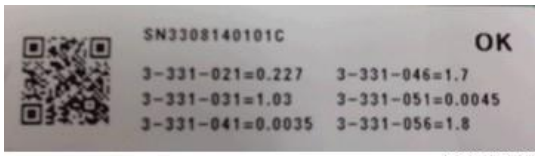
3. Detach the ID/MUSIC sensor (S2) [A] from the bracket.



Adjustment after Replacement

1. Plug in and turn ON the main power.
2. Enter SP mode.
3. Referring to the barcode sheet provided, enter the setting value for the ID sensor.
   If the sheet describes [SP3-331-021＝0.227] [SP3-331-031＝1.03], Set "0.227" to SP3-331-021,

and Set "1.03" to SP3-331-031.



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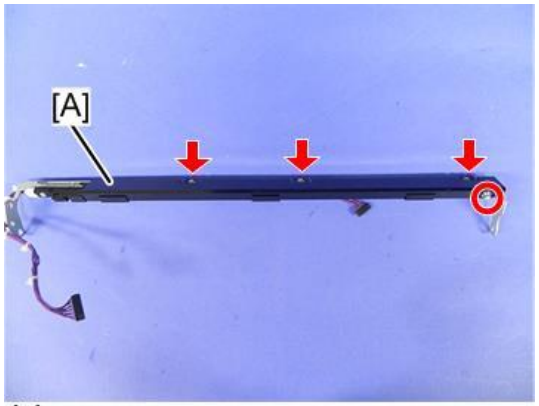
4. Execute SP3-011-001.

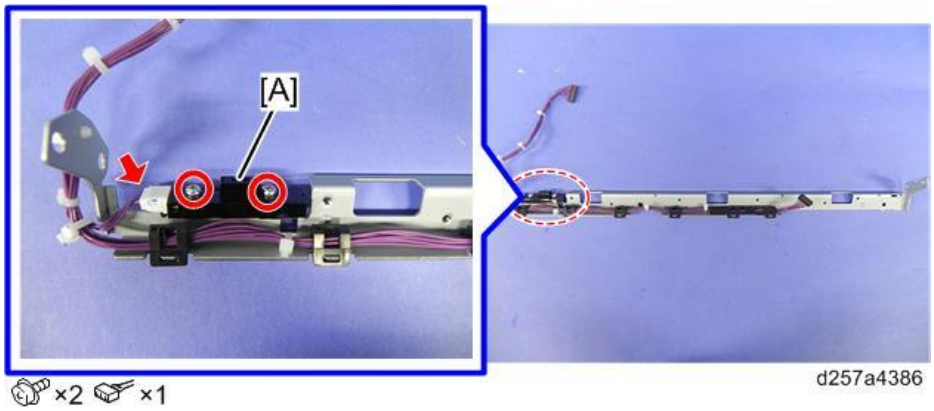
ITB HP Sensor (S1)

1. Detach the ID/MUSIC sensor from the bracket. (ID/MUSIC Sensor (S2))
2. Remove the hooks. Remove the cover [A].



×1 d257a4385

3. Remove the ITB HP sensor (S1) [A].

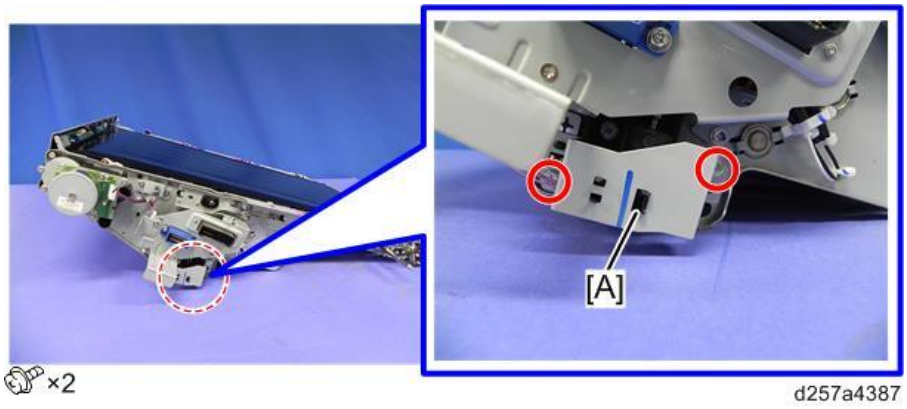


×2 ×1 d257a4386

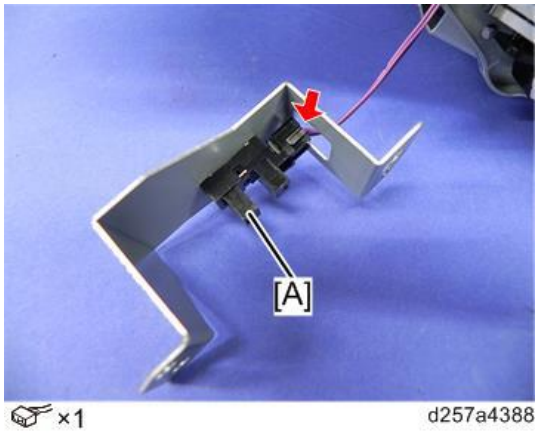
Paper Transfer Belt Separation Sensor (S11)

1. Remove the ITB unit. (ITB Unit Removal)

2. Remove the bracket with paper transfer belt separation sensor (S11) [A].



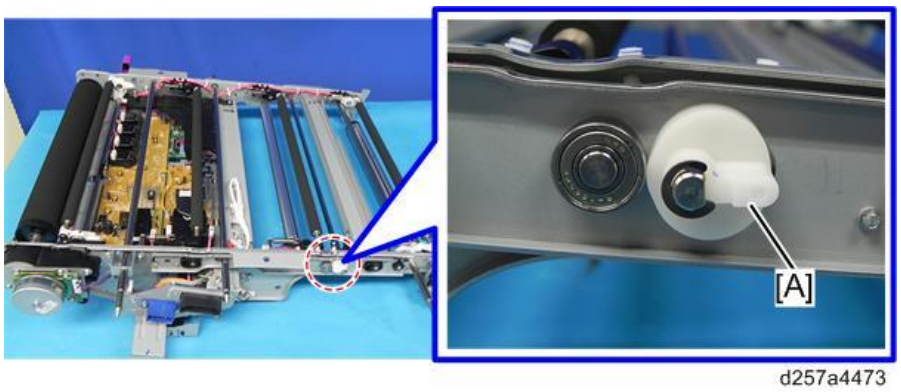
3. Detach the paper transfer belt separation sensor (S11) [A] from the bracket.



ITB Lift (YMC) Sensor (S10)

1. Remove the transfer belt. (ITB Replacement)

2. Rotate the cam [A] to the position (HP side) shown below.



⚠CAUTION

- Be sure to re-rotate the cam to the previous position (O side) and drop the image transfer roller down after the replacement.

3. Remove the hook. Remove the ITB lift (YMC) sensor (S10) [A].

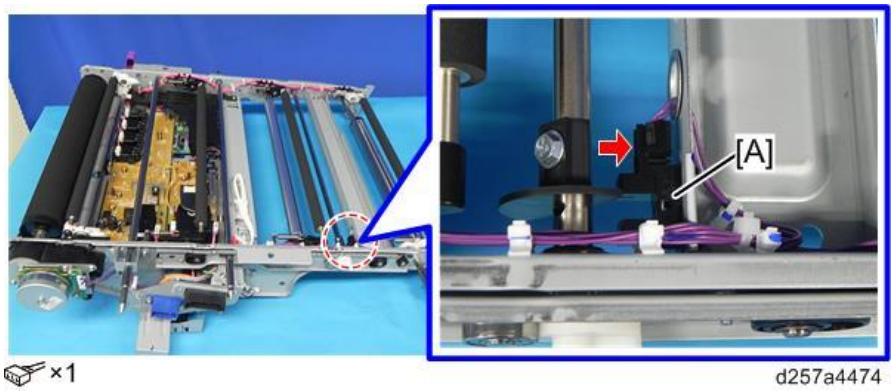
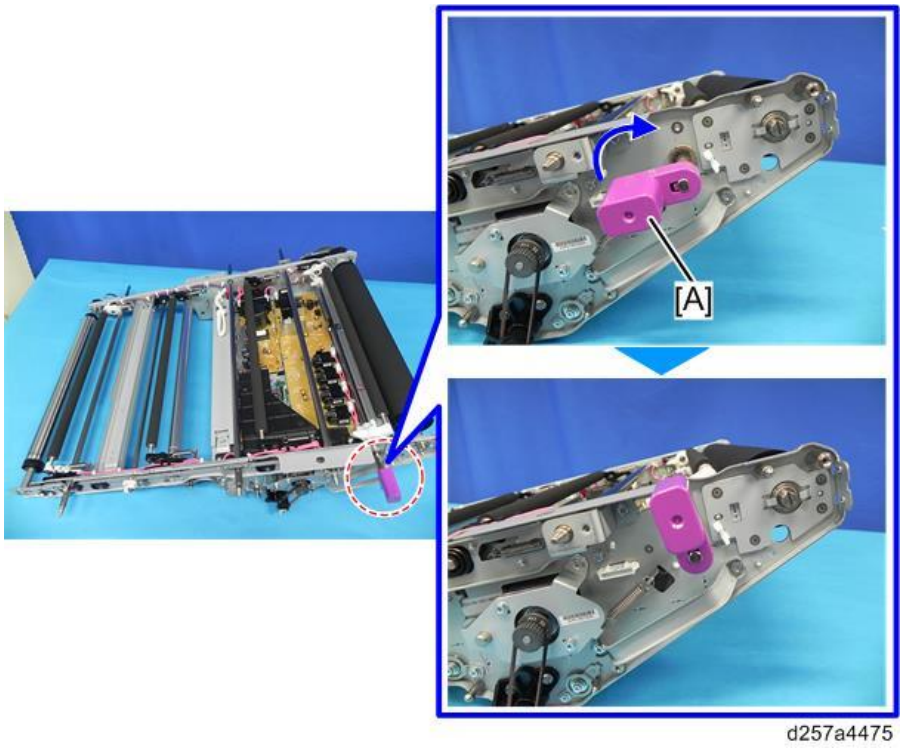


Image Transfer Roller (K)

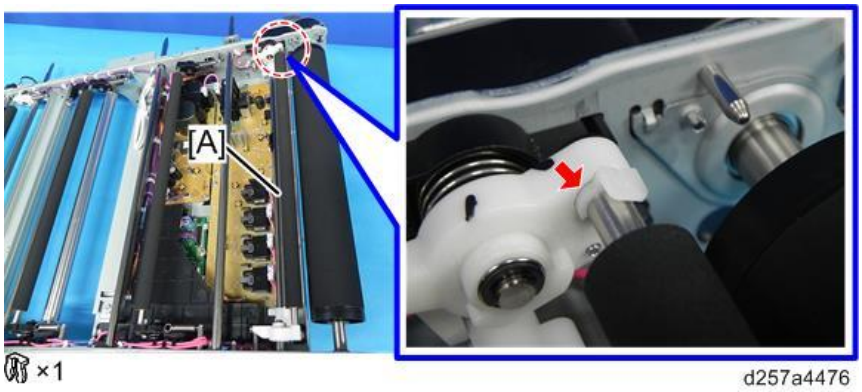
1. Remove the transfer belt. (ITB Replacement)
2. Raise the lever [A].



⚠CAUTION

- Be sure to push down the lever and drop the image transfer roller down after the replacement.

3. Remove the clip that fixes the image transfer roller (K) [A].



4. Slide the image transfer roller (K) [A] towards you and remove it.

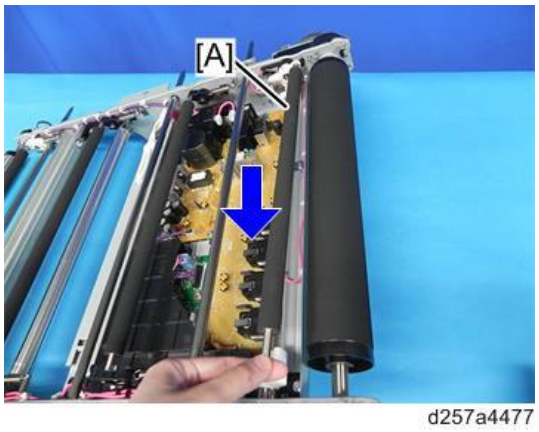


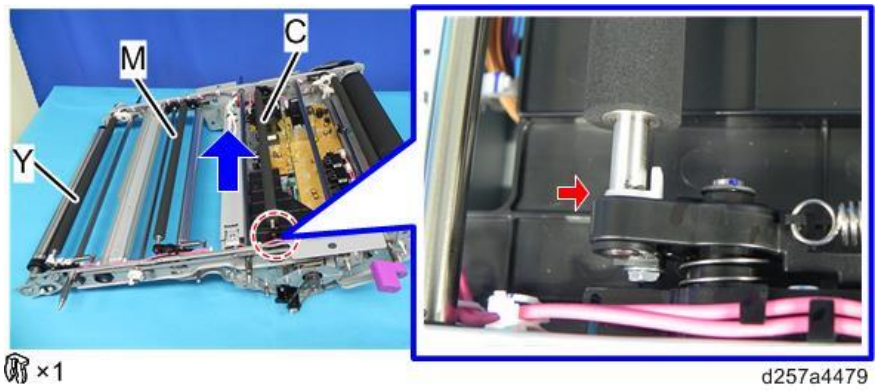
Image Transfer Roller (YMC)

1. Remove the transfer belt. (ITB Replacement)
2. Rotate the cam [A] to the HP side.

⚠CAUTION

- Be sure to re-rotate the cam to the O side and drop the image transfer roller down after the replacement.

3. Slide the image transfer roller (C) to the rear side and remove it.



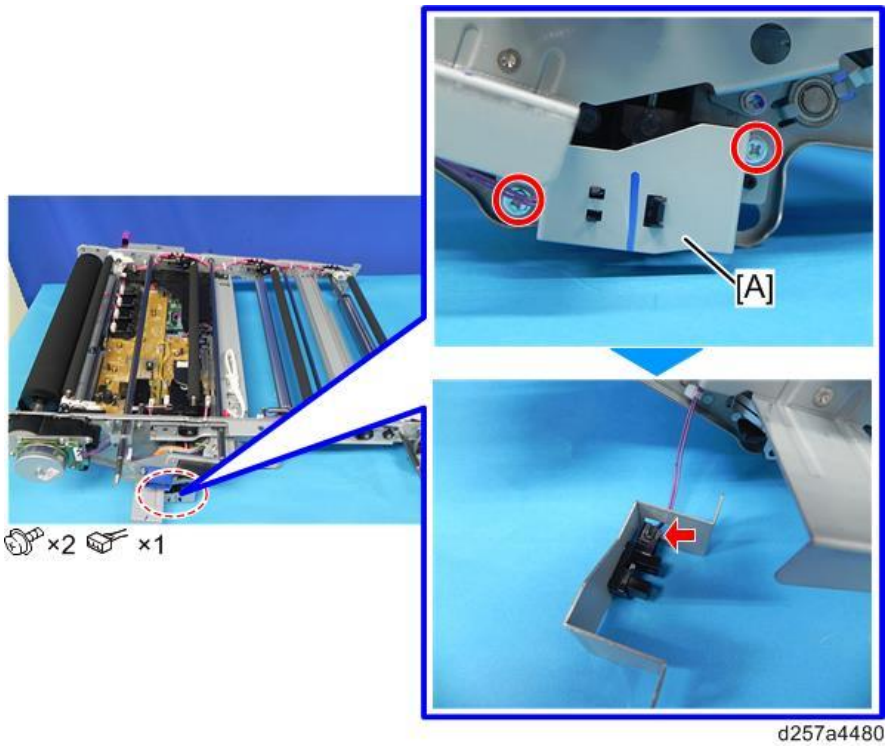
Note

- Replace the image transfer roller (M), (Y) and (C) using the same steps.

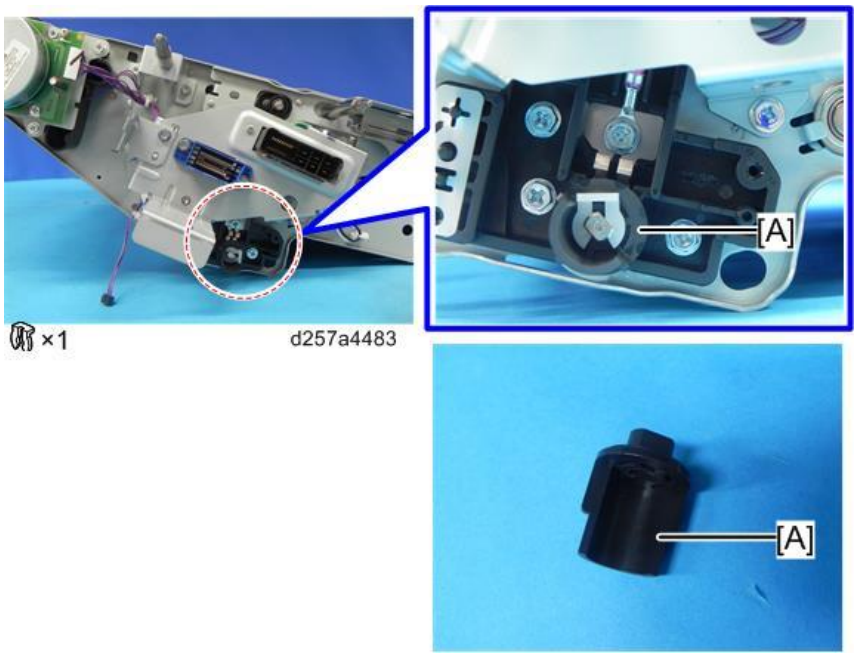
ITB Bias Roller

1. Remove the transfer belt. (ITB Replacement)

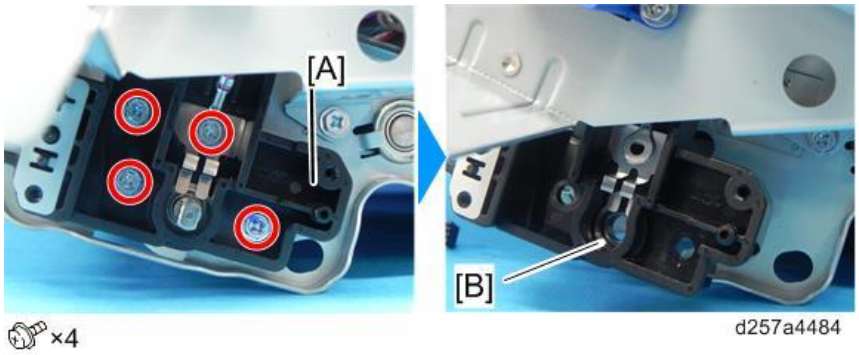
2. Remove the paper transfer belt separation sensor bracket [A].



3. Remove the actuator [A].



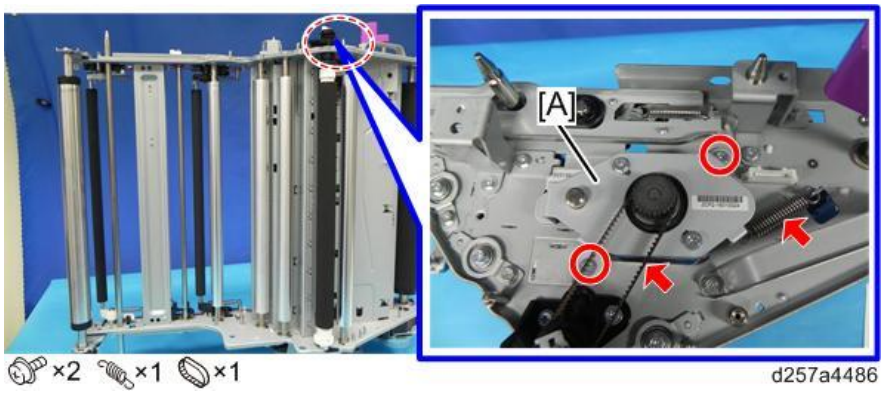
4. Remove the bracket [A] and the bearing [B].



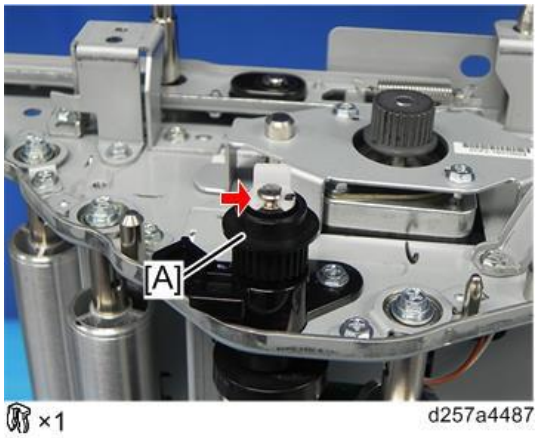
Note

For Pro C5310S/C5300: Remove the 3 screws of the bracket [A].

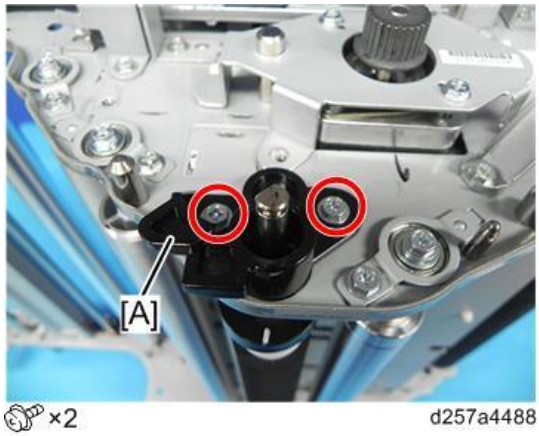
5. Loosen the fixing screws of the motor bracket [A].



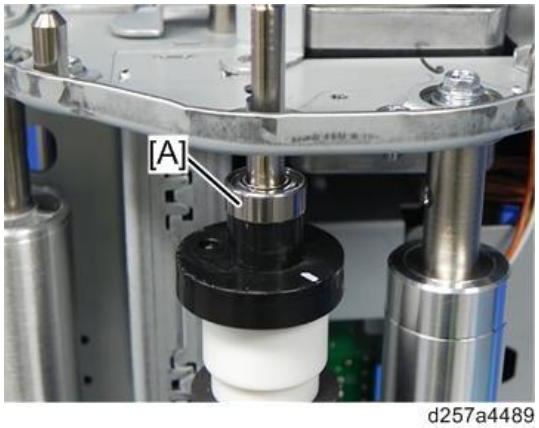
6. Remove the pulley [A].



7. Remove the bearing bracket [A].



8. Remove the bearing [A].



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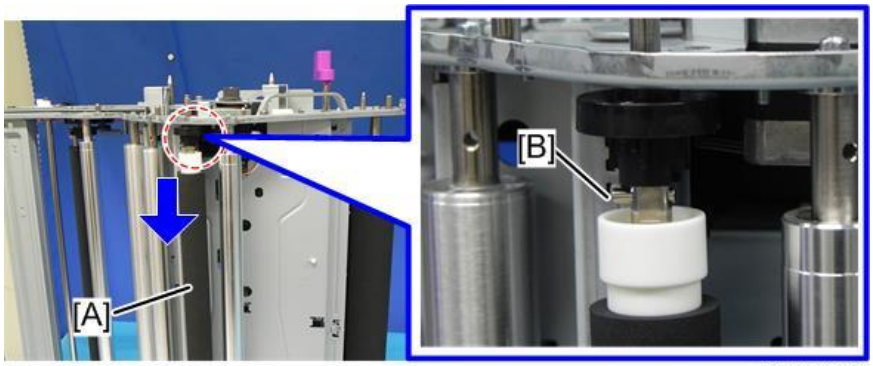
9. Drop the ITB bias roller [A] down and remove the parallel pin [B].



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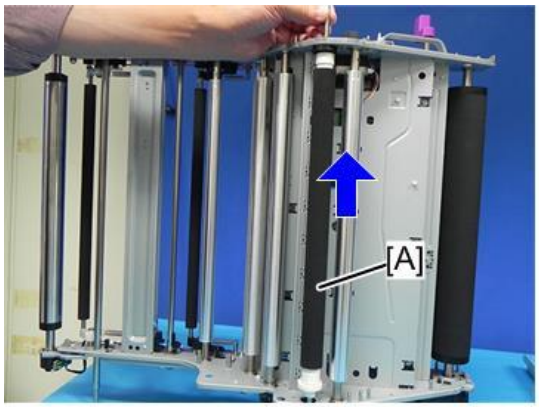
10. Pull the ITB bias roller [A] upward and release its lower end to remove it.



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Transfer Power Pack/Separation Power Pack (PCB2)

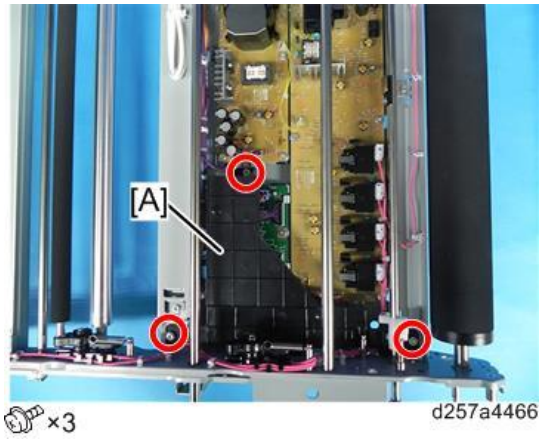
1. Remove the transfer belt. (ITB Replacement)

2. Remove the image transfer roller (K). (Image Transfer Roller (K))

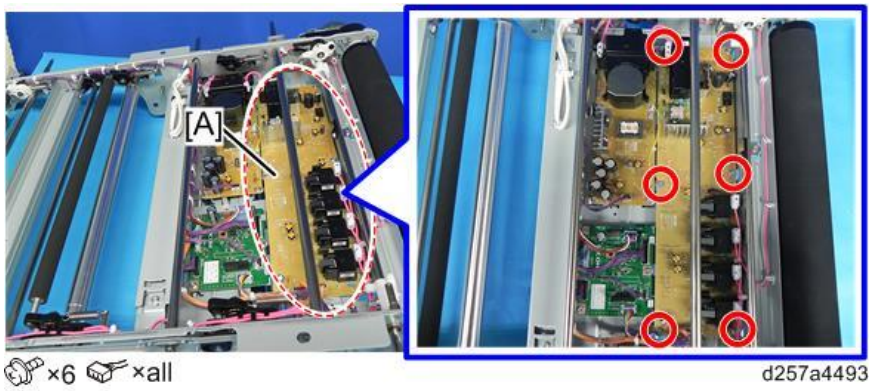
3. Remove the image transfer roller (C). (Image Transfer Roller (YMC))

4. Remove the bracket [A].

5. Remove the cover [A].



6. Remove the transfer power pack/separation power pack (PCB2) [A].

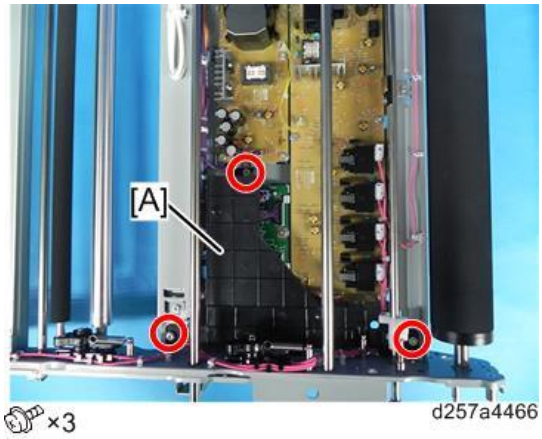


TDRB (PCB4)

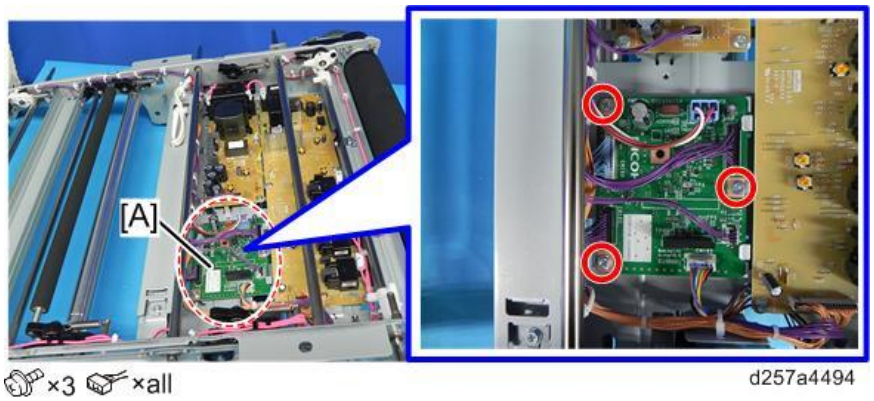
1. Remove the transfer belt. (ITB Replacement)
2. Remove the image transfer roller (K). (Image Transfer Roller (K))
3. Remove the image transfer roller (C). (Image Transfer Roller (YMC))

4. Remove the bracket [A].

5. Remove the cover [A].



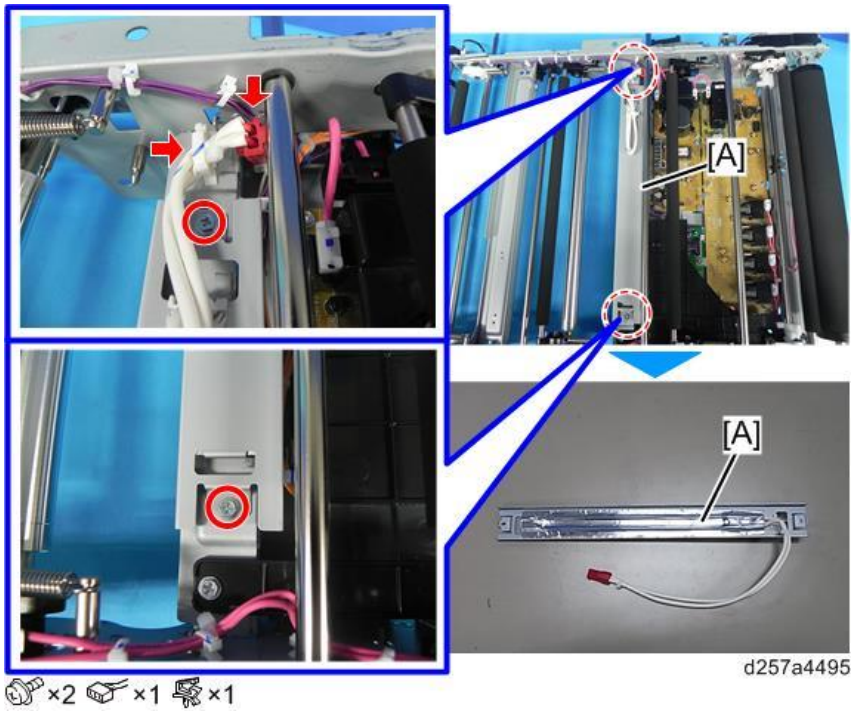
6. Remove the TDRB (PCB4) [A].



Anti-condensation Heater (H1)

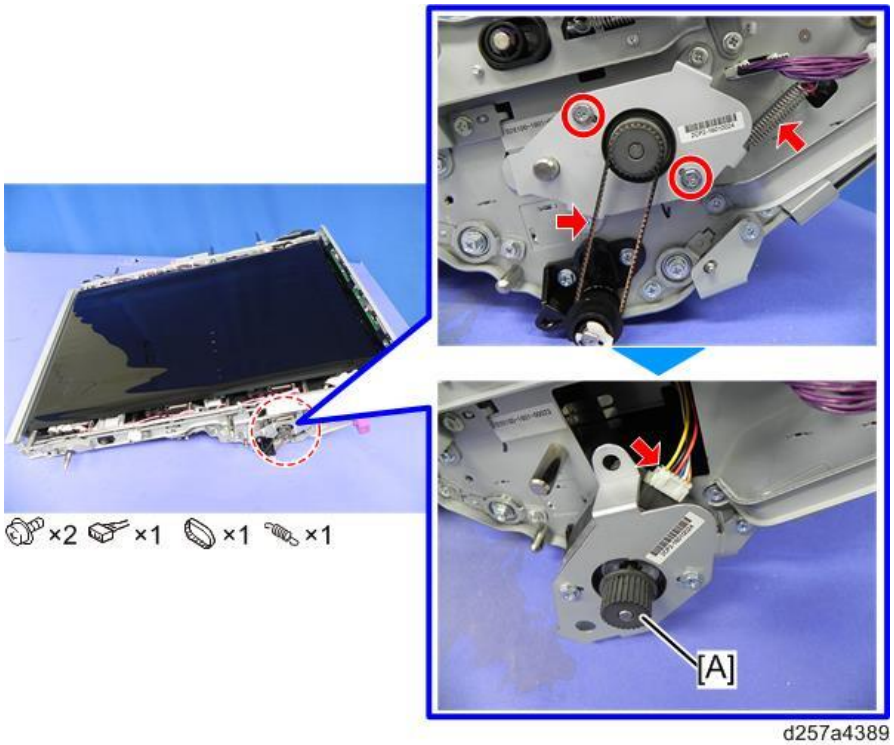
1. Remove the transfer belt. (ITB Replacement)

2. Detach the anti-condensation heater (H1) [A].

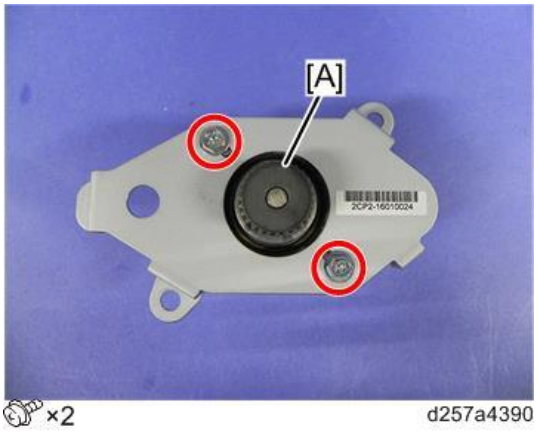


Paper Transfer Belt Separation Motor (M1)

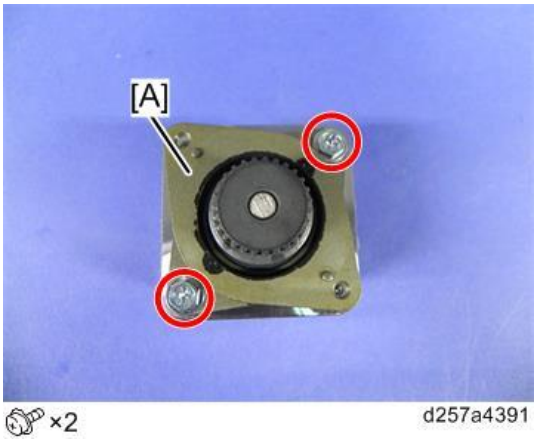
1. Remove the ITB unit. (ITB Unit Removal)
2. Remove the bracket with the paper transfer belt separation motor (M1) [A].



3. Detach the paper transfer belt separation motor (M1) [A] from the bracket.

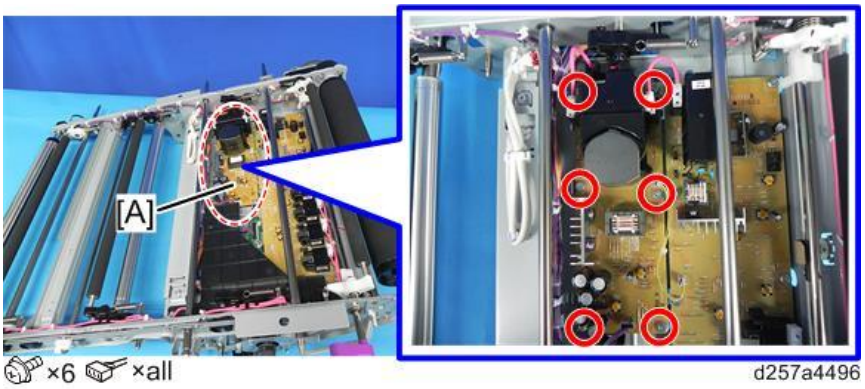


4. Detach the vibration-proof pad [A] from the motor.



AC Transfer Power Pack (PCB3) (Pro C5300S/C5310S Only)

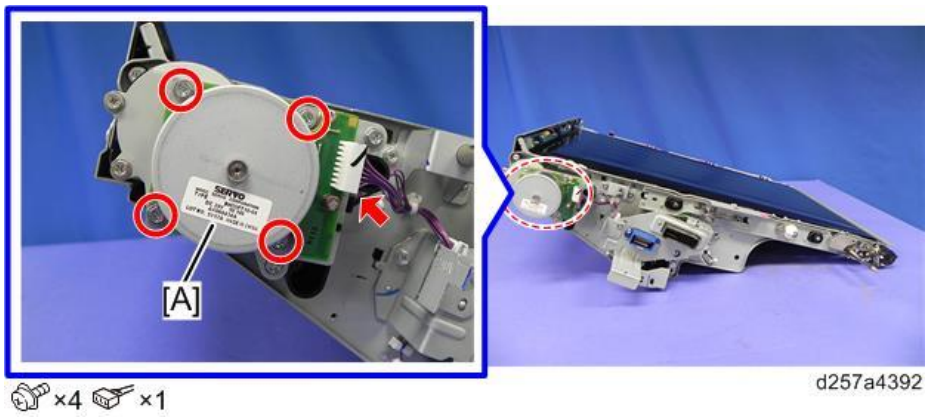
1. Remove the image transfer roller (C). (Image Transfer Roller (YMC))
2. Remove the AC transfer power pack (PCB3) [A].



ITB Motor (M2)

1. Remove the ITB unit. (ITB Unit Removal)

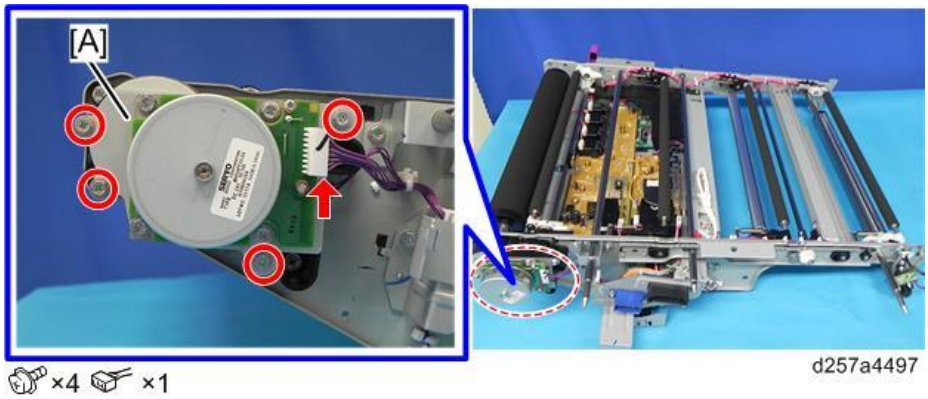
2. Remove the ITB motor (M2) [A].



×4 ×1

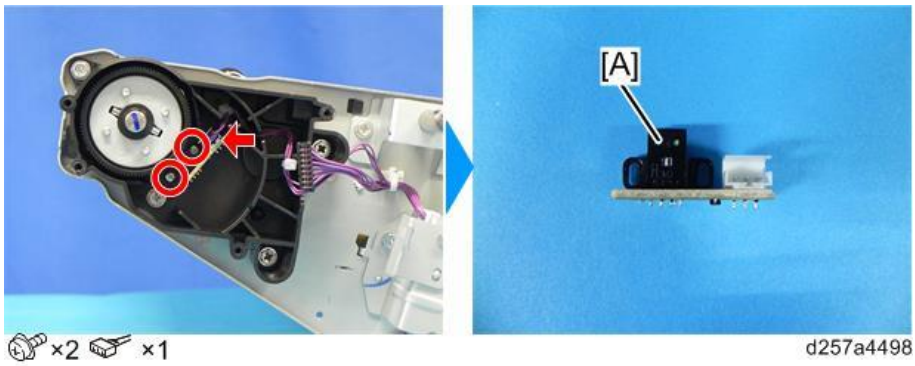
ITB Drive Shaft Gear, ITB Drive Shaft Encoder Sensor (S8)

1. Remove the transfer belt. (ITB Replacement)
2. Remove the motor bracket [A].



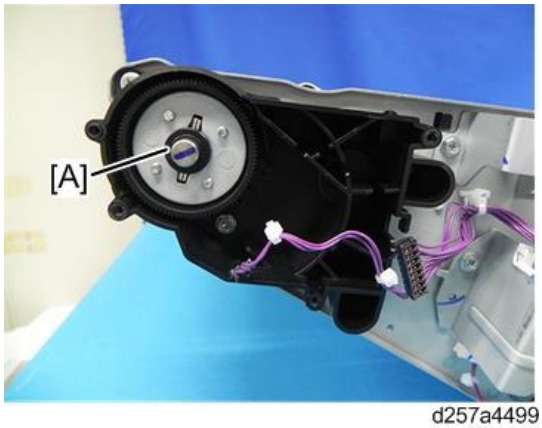
×4 ×1

3. Remove the ITB drive shaft encoder sensor (S8) [A].



×2 ×1

4. Remove the spacer [A].



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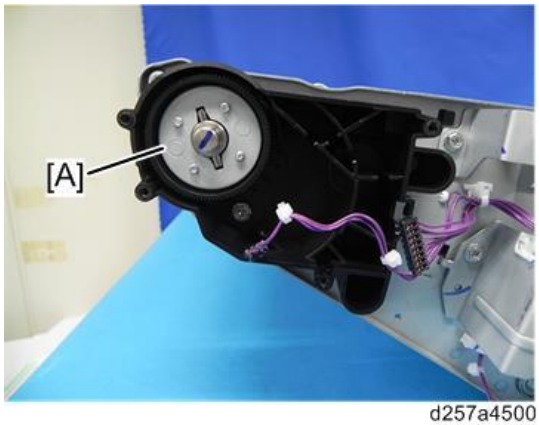
5. Remove the ITB drive shaft gear [A].



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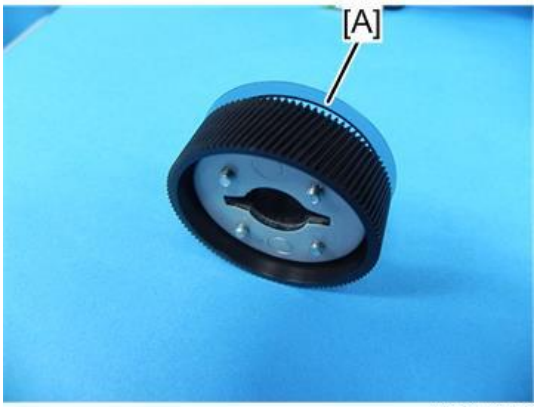
⚠CAUTION

- Be sure to handle the gear carefully. Take care not to break the encoder [A].



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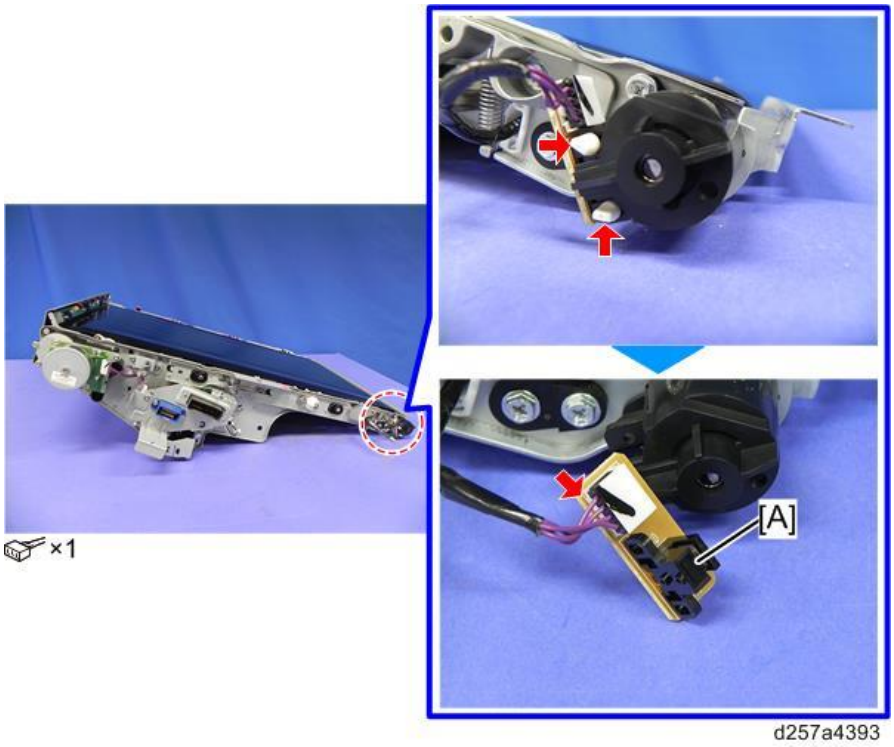
- To prevent breaking the encoder [A] when you install the ITB drive shaft gear, remove the ITB drive shaft encoder sensor from the housing first. Then install the ITB drive shaft gear.

ITB Driven Shaft Encoder Sensor (S9)

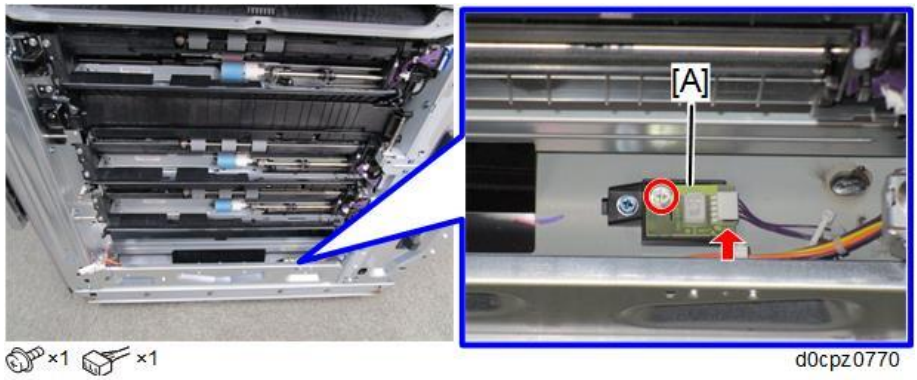
1. Remove the ITB unit. (ITB Unit Removal)

2. Remove the pins, and remove the ITB driven shaft encoder sensor (S9) [A].



ITB Temperature/Humidity Sensor (S97)

1. Remove the vertical transport door. (Vertical Transport Door)
2. Remove the 3rd paper feed unit. (Paper Feed Unit)
3. Remove the ITB temperature/humidity sensor [A].



ITB Cleaning Unit

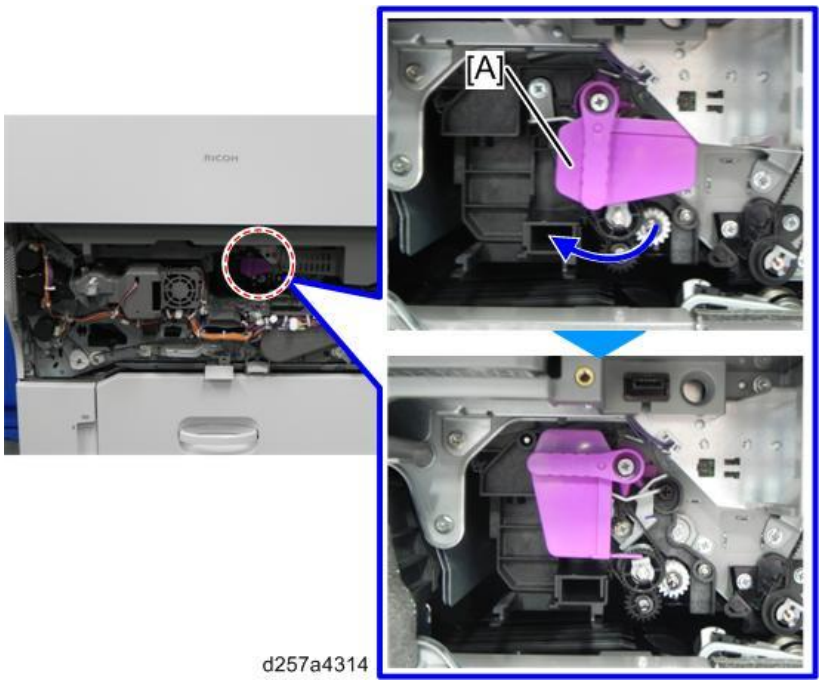
Before you start replacement of the ITB cleaning unit or its components (ITB cleaning blade, ITB lubricant bar, ITB lubricant blade, ITB lubricant brush):

1. In the PM counter screen, set "New Part Set" to ON.
2. Turn the machine off.

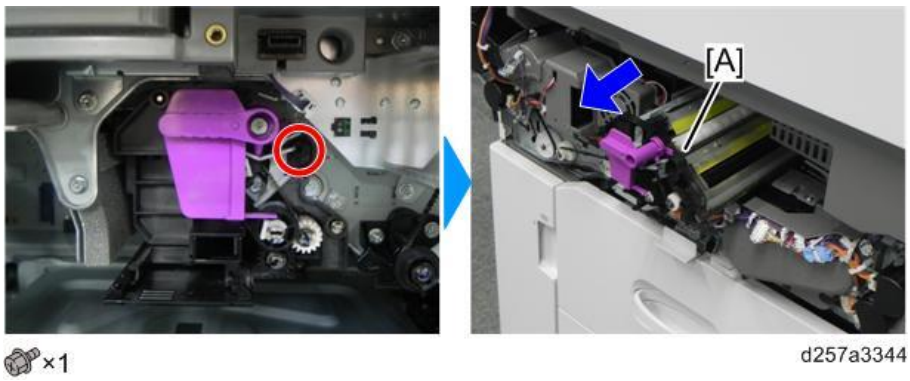
ITB Cleaning Unit

1. Remove the ITB cleaning intake fan. (ITB Cleaning Intake Fan (FAN1))

2. Release the lock lever [A].



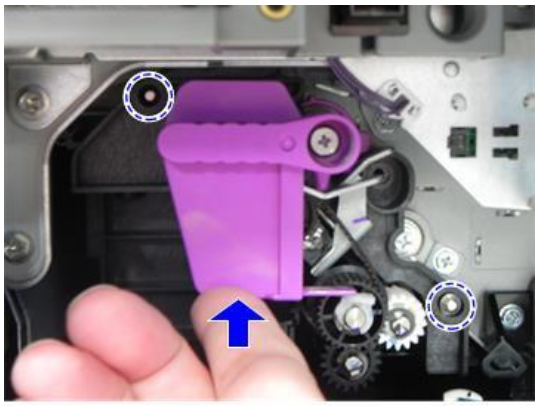
3. Pull the ITB cleaning unit [A] out.



Note

- When reinstalling the ITB cleaning unit, pay attention to the following points:
  - Ensure that the lock lever is unlocked.

- Lift and set the ITB cleaning unit to put the two positioning pins into the unit.



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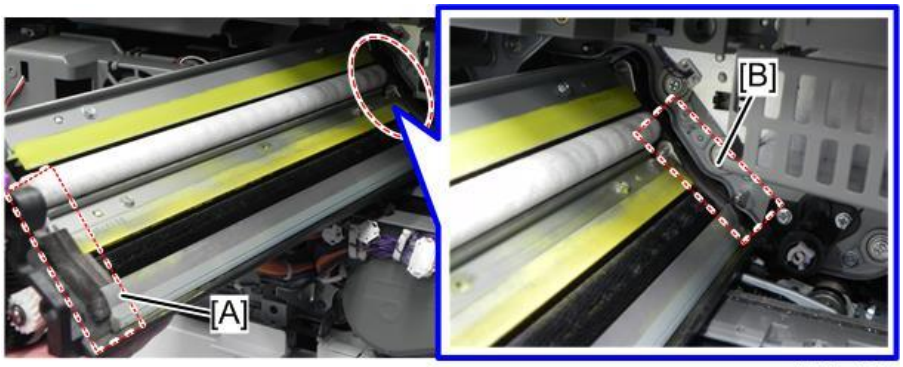
- Do not peel off the side seals [A]. Take care not to touch the side seals [A] and the plate [B], because the side seals [A] might peel off.



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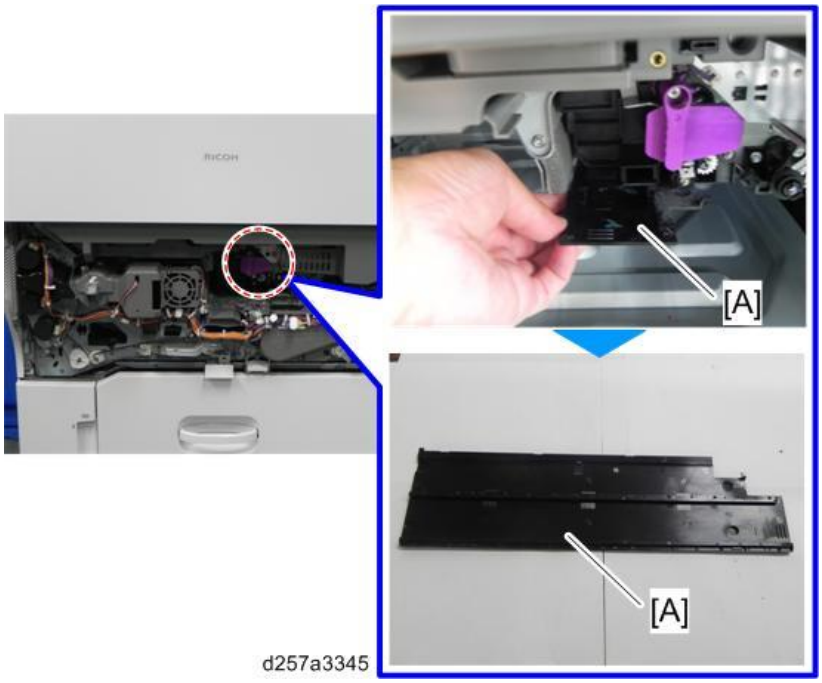
4. Lubricate the ITB cleaning unit. (Lubrication after Replacement)

Bottom Cover

1. Remove the ITB cleaning intake fan. (ITB Cleaning Intake Fan (FAN1))
2. Pull the bottom cover [A] to remove it.

3. Clean the bottom cover [A].

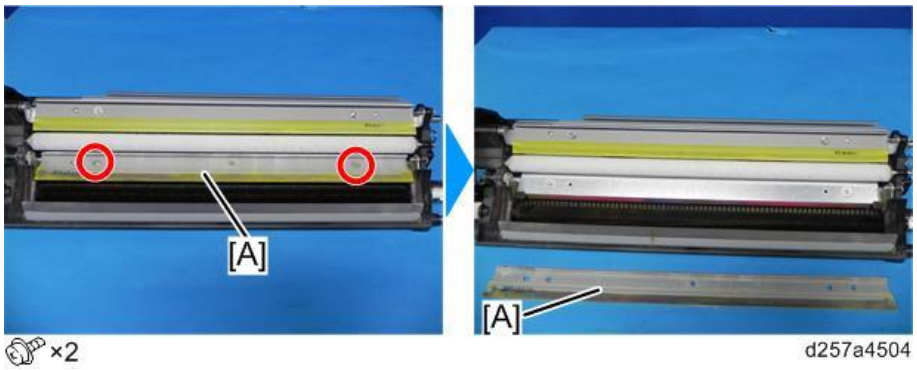


ITB Cleaning Blade

Note

- The ITB cleaning blade, ITB lubricant brush, and ITB lubricant bar must be replaced together as a set.

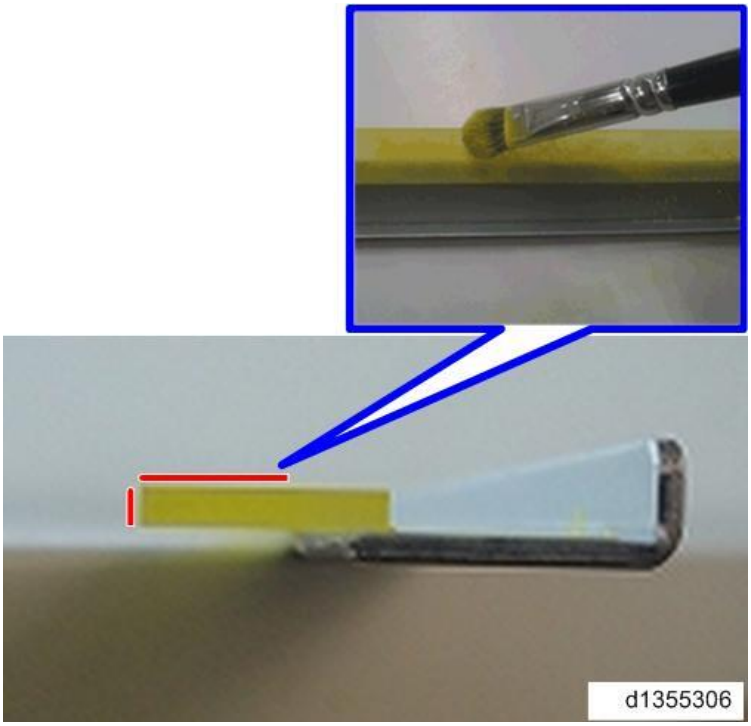
1. Pull the ITB cleaning unit out. (ITB Cleaning Unit)
2. Remove the ITB cleaning blade [A].



Note

- Use a brush to apply yellow toner (D0149500) evenly on the faces of the new blade

shown below with red lines before installing it.



- Use the blower brush (D0747690) when applying yellow toner to the new ITB cleaning blade.

3. Lubricate the ITB cleaning blade. (Lubrication after Replacement)

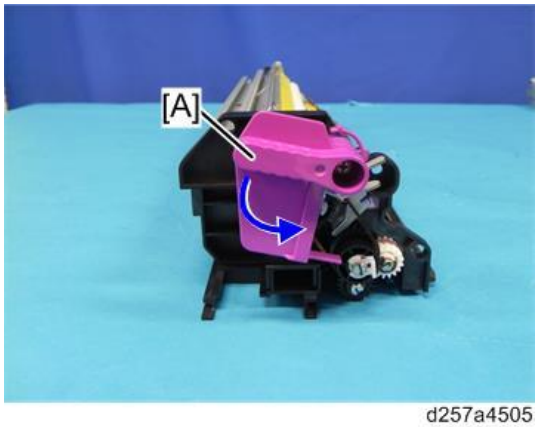
ITB Lubricant Brush

Note

- The ITB cleaning blade, ITB lubricant brush, and ITB lubricant bar must be replaced together as a set.

1. Pull the ITB cleaning unit out. (ITB Cleaning Unit)

2. Rotate the lock lever [A] in the arrowed direction as shown below.



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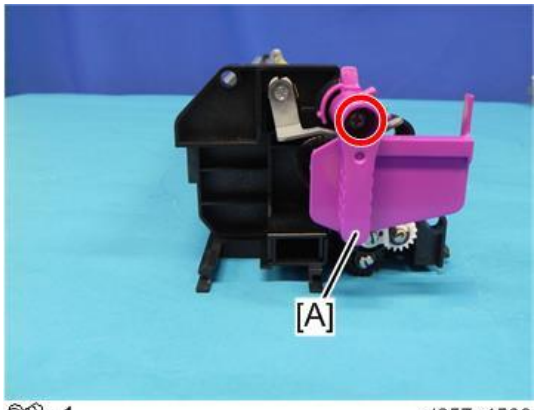
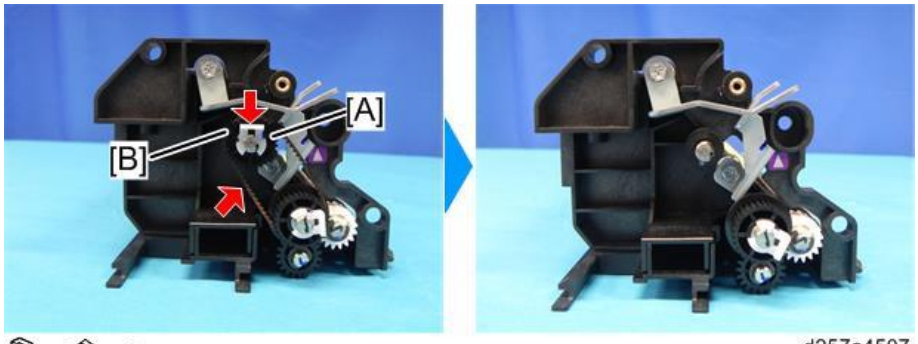
3. Remove the lock lever [A].



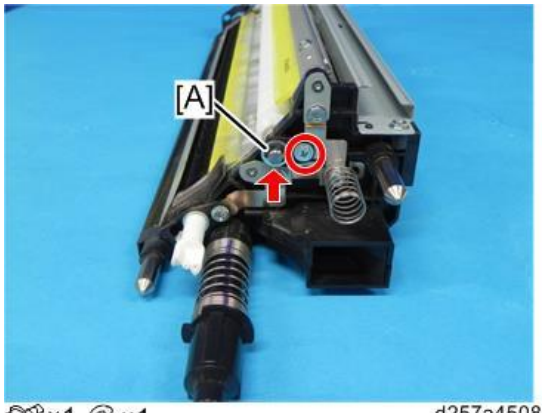
×1 d257a4506

4. Remove the gear [A] and bearing [B].



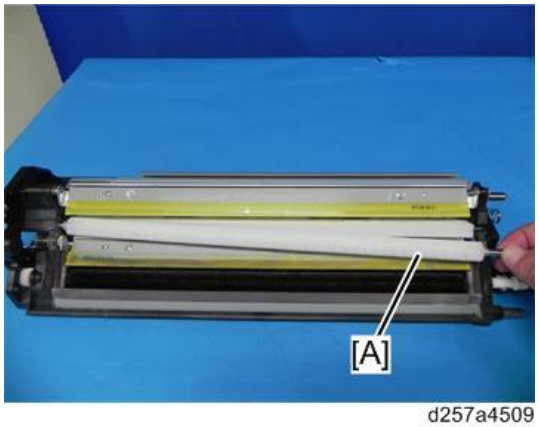
×1 ×1 d257a4507

5. Remove the bearing [A] (including the spacer).



×1 ×1 d257a4508

6. Remove the ITB lubricant brush [A].

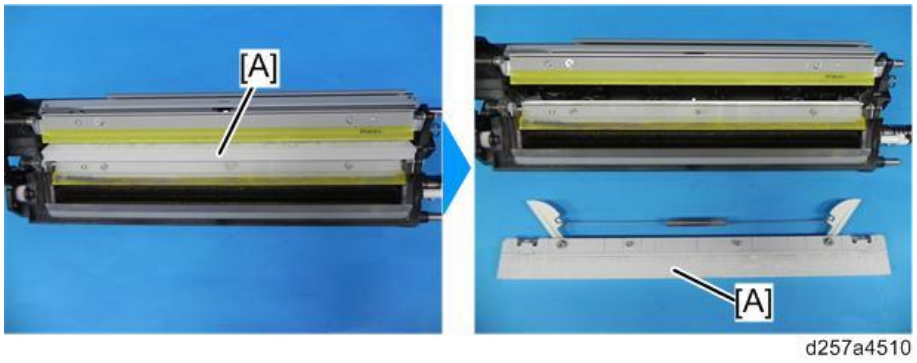


ITB Lubricant Bar

Note

- The ITB cleaning blade, ITB lubricant brush, and ITB lubricant bar must be replaced together as a set.

1. Remove the ITB lubricant brush. (ITB Lubricant Brush)
2. Detach the ITB lubricant bar [A] from the ITB cleaning unit.



3. Lubricate the ITB lubricant bar. (Lubrication after Replacement)

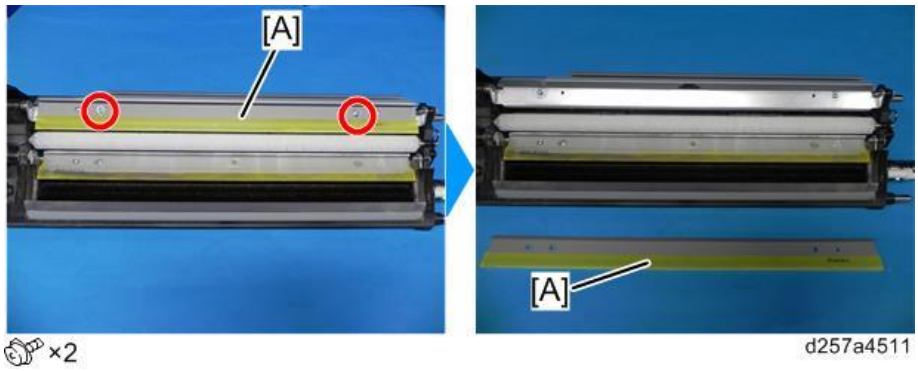
ITB Lubricant Blade

Note

- The ITB cleaning blade, ITB lubricant brush, and ITB lubricant bar must be replaced together as a set.

1. Pull the ITB cleaning unit out. (ITB Cleaning Unit)

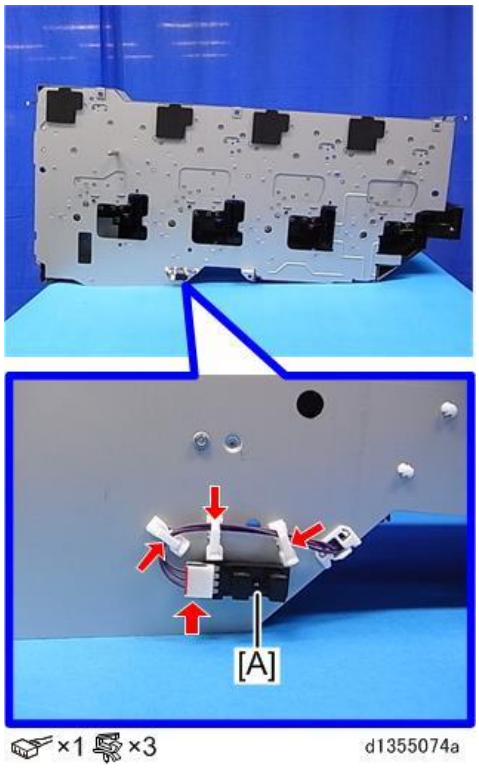
2. Remove the ITB lubricant blade [A].



3. Lubricate the ITB lubricant blade. (Lubrication after Replacement)

ITB Cleaning Unit Set Sensor (S7)

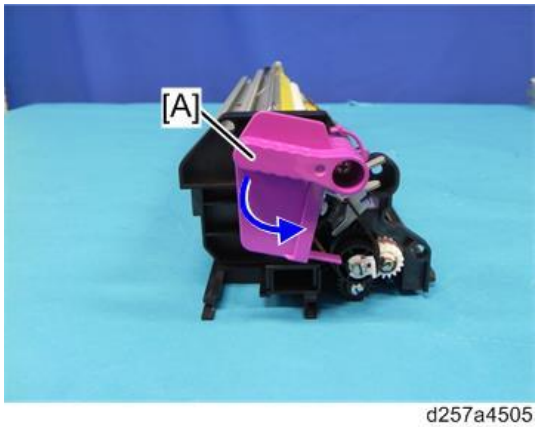
1. Remove the toner supply unit. (Toner Supply Unit)
2. Remove the ITB cleaning unit set sensor (S7) [A].



ITB Paper Dust Cleaning Brush Roller

1. Pull the ITB cleaning unit out. (ITB Cleaning Unit)

2. Rotate the lock lever [A] in the arrowed direction as shown below.



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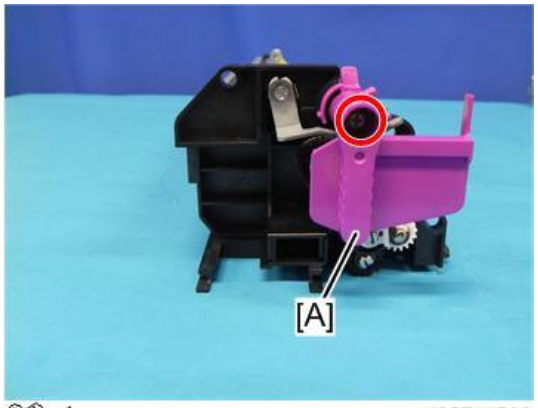
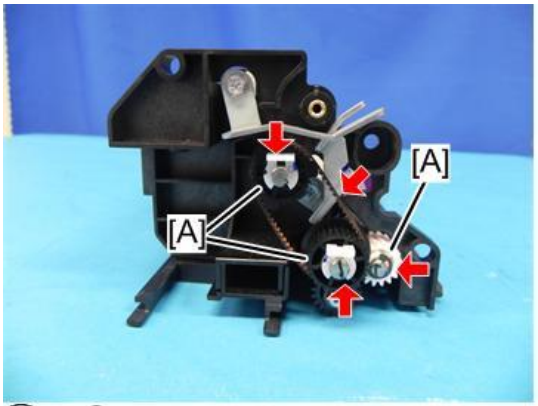
3. Remove the lock lever [A].



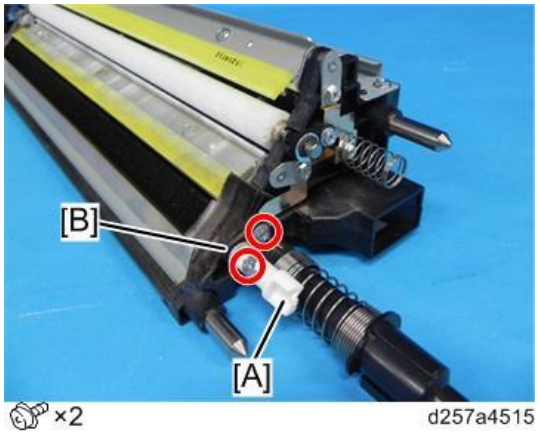
×1 d257a4506

4. Remove the gears [A].



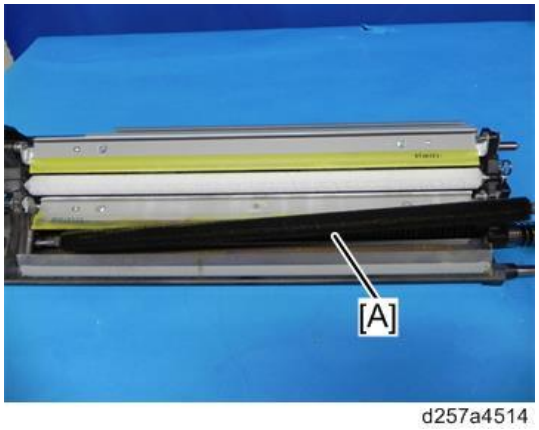
×2 ×1 ×1 d257a4512

5. Remove the coupling [A] and the bearing [B] (including the spacer).



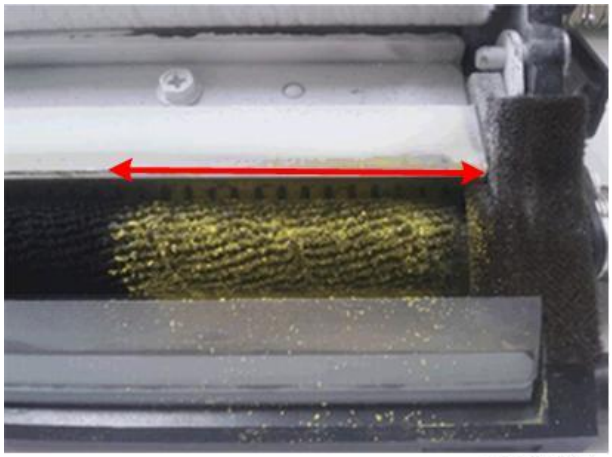
6. Remove the bearing [A] that has the side seal.

7. Remove the ITB paper dust cleaning brush roller [A].



8. Install the new cleaning brush roller and then use a brush to apply zinc stearate (D0149501) and yellow toner (D0149500) in an area 40 ~ 50 mm wide (shown below) on the installed cleaning

brush roller.



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Note

- Use the blower brush (D0747690) when applying zinc stearate and yellow toner to the cleaning brush roller.

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Lubrication after Replacement

Be sure to lubricate after replacing the ITB cleaning unit or one of the following components:

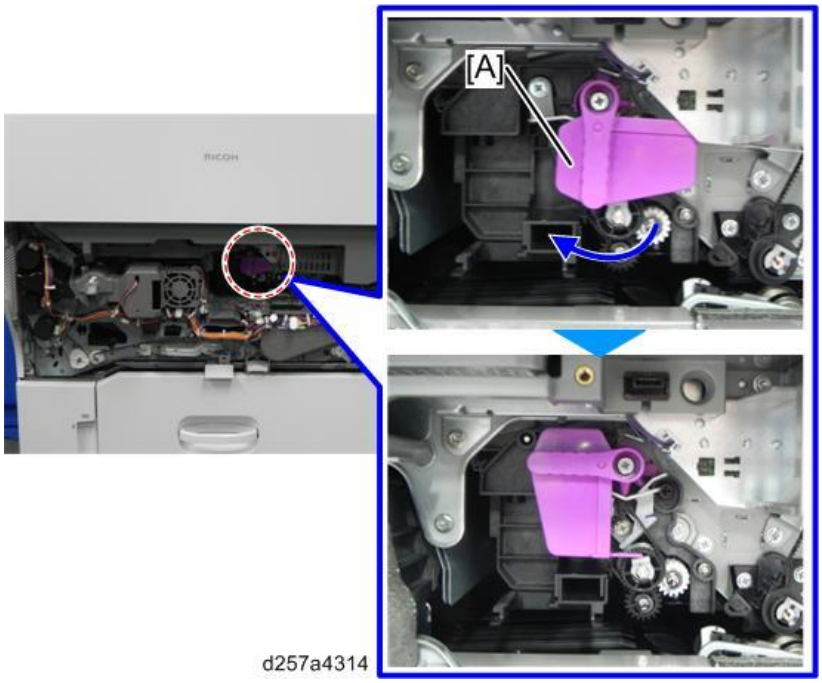
- ITB cleaning blade
- Lubricant bar
- ITB lubricant blade

1. Turn ON the main power, and enter the SP mode. Then push the PM parts counter reset button in the PM Parts display (ITB cleaning unit or its components).
2. Turn OFF the main power.
3. Replace the ITB cleaning unit or its components.
4. Attach the faceplate and toner supply unit.

Note

- Do not install the belt cleaning fan yet.

5. Rotate the blade release lever to move the cleaning blade away from the ITB.



6. Attach the drawer unit cover.
7. Remove the paper transfer belt unit. (Paper Transfer Belt Unit)
8. Open the drawer unit.
9. Keep the drawer unit open, and then turn ON the machine main power.

Note

- The automatic adjustment will not be performed when the machine is turned ON, since the drawer unit is pulled out/opened.

10. Enter SP mode and choose SP2-696-001 (Force Apply Lubricant Execute).
11. Push [Execute] on the operation panel and then push the drawer unit into the machine.

Note

- When the drawer unit is pushed into the machine, lubrication starts automatically. This operation takes about 3 minutes to complete.

12. Turn OFF the main power when the lubrication finishes (the machine stops).
13. Withdraw the drawer unit and rotate the blade release lever in order to make the cleaning blade contact the ITB.
14. Re-install the belt cleaning fan.
15. Re-attach the paper transfer belt unit.
16. Push the drawer unit into the machine.
17. Turn ON the main power.

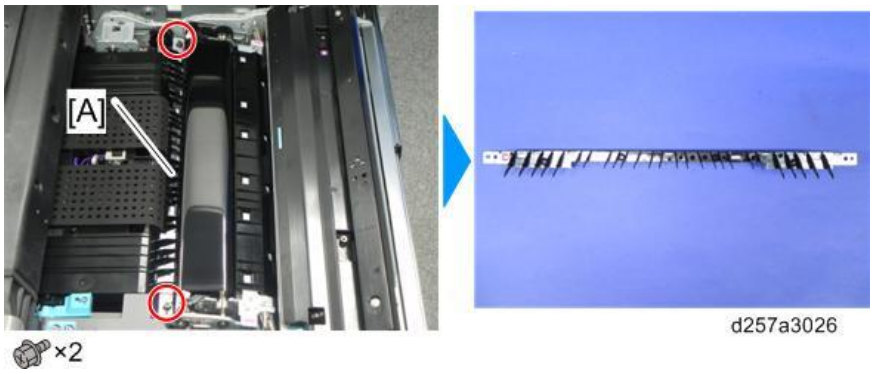
Note

- The machine will then execute the automatic corrections.

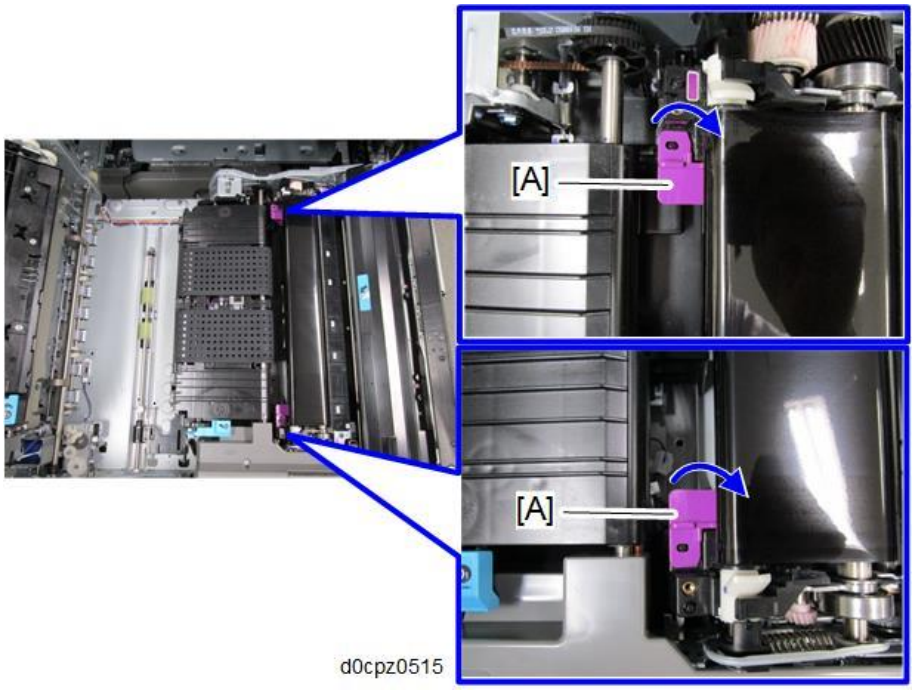
Paper Transfer Belt Unit

Paper Transfer Belt Unit

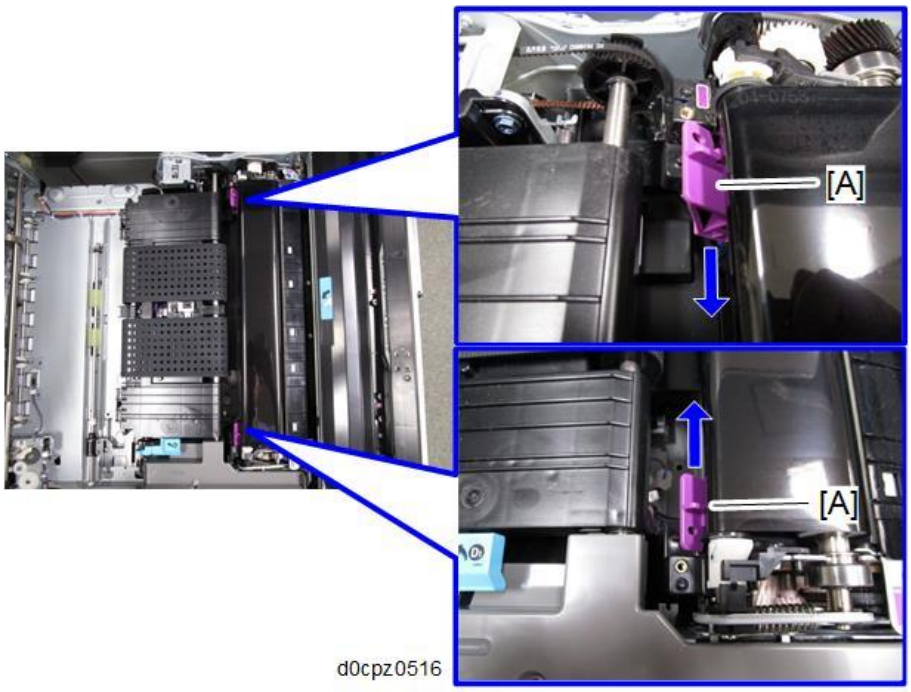
1. Pull the drawer unit out.
2. Remove the exit guide plate.



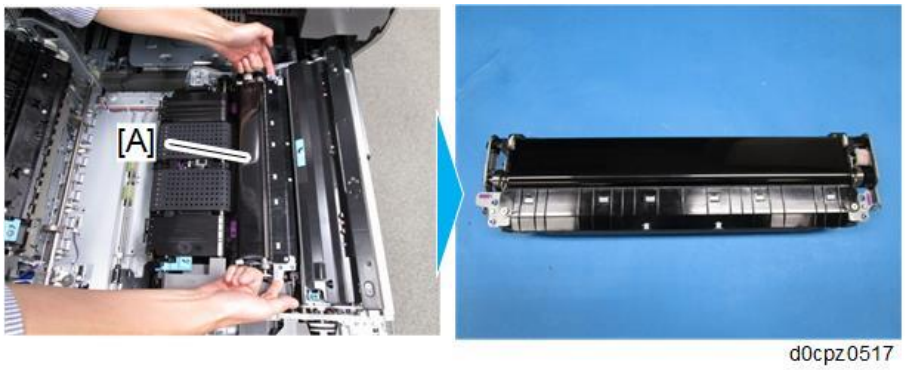
3. Release the stopper [A].



4. Release the stopper [A].



5. Hold the handles. Remove the paper transfer belt unit [A].



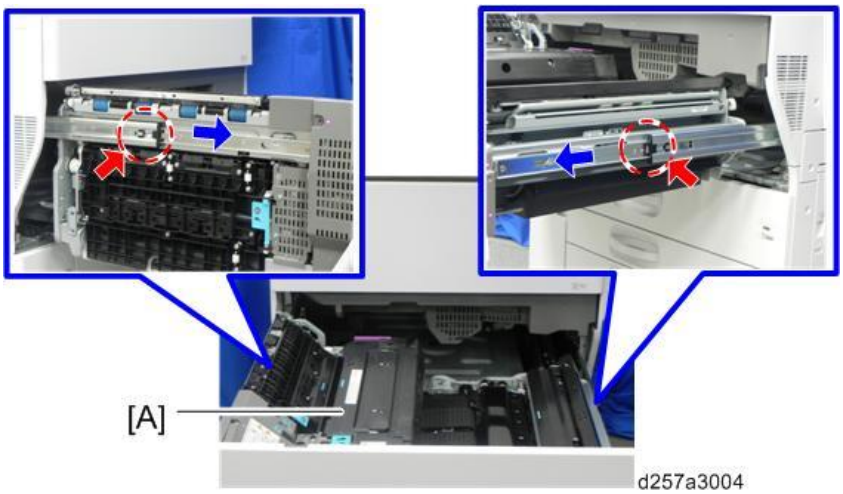
6. Lubricate the paper transfer belt unit. (Lubrication after Replacement)

Applying Grease after Replacing the Paper Transfer Belt Unit

When replacing the paper transfer belt unit or when doing the 500K PM, apply grease to the inner diameter of the joint of the unit rotation fulcrum shaft (Grease: Barrierta-S552R).

1. Pull the drawer unit out halfway, then press the release levers (one on the left side and one on the

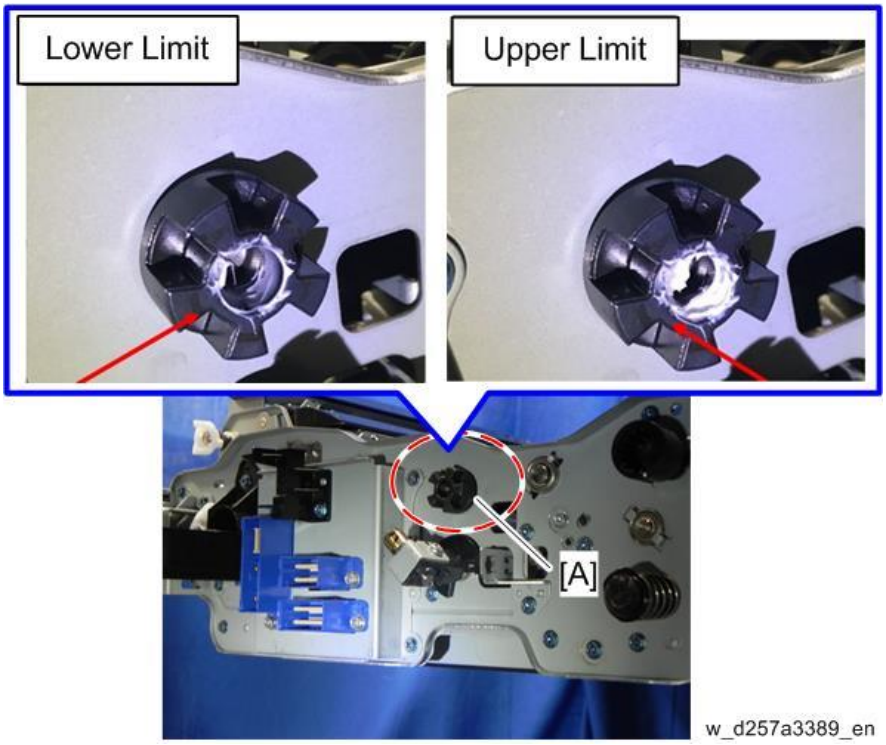
right side, shown by the red arrows) and pull the drawer unit [A] out fully.



Note

- In a low-temperature environment (below 15°C), the tension of the curled cord may be reduced. Do not keep the drawer unit pulled out for an extended period of time, or the curled cord will be deformed and will not curl up again when you try to slide the drawer unit back in. As a guide, every 30 minutes, push the drawer unit back to the halfway position. The tension of the curled cord will not decrease in a low-temperature environment if the drawer unit is open halfway.

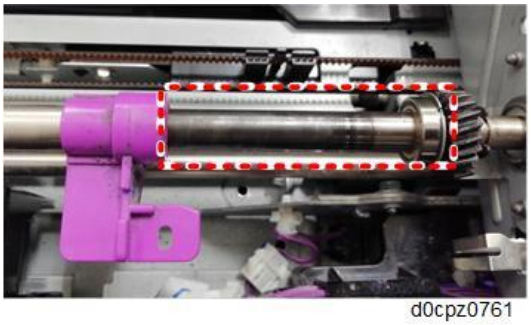
2. Apply the grease to the inner surface of the joint on the right rear side of the drawer unit.



Paper Transfer Drive Shaft Cleaning

Note

To prevent the paper transfer belt drive shaft from locking, wipe the drive shaft with an alcohol if it is dirty when removing the paper transfer belt unit.



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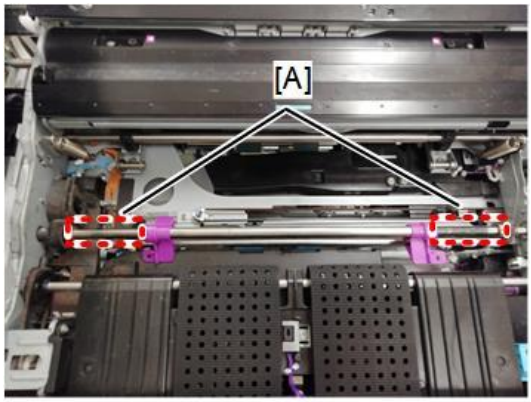
1. Remove the paper transfer belt unit. (Paper Transfer Belt Unit)
2. Check the drive shaft [A]. Wipe it with an alcohol if it is dirty.



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Adjustment of the Paper Transfer Belt Unit

When you have replaced the following parts, the position of the paper transfer belt unit must be adjusted with the adjustment jig packed with the main machine accessories.

Adjust the paper transfer belt unit after replacing any of these parts

- Drawer Unit [A]

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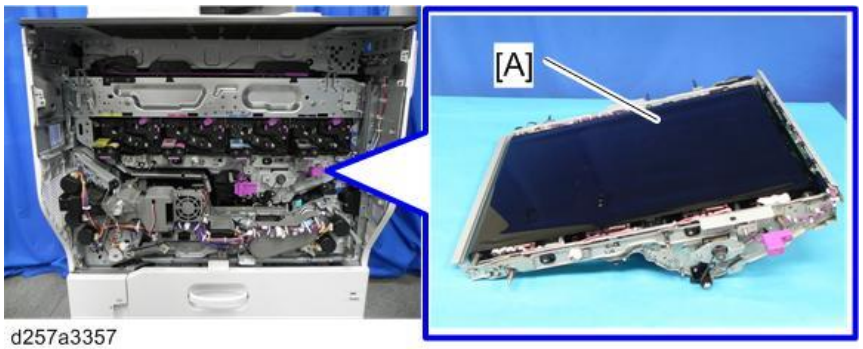
- Image Transfer Belt Unit [A]



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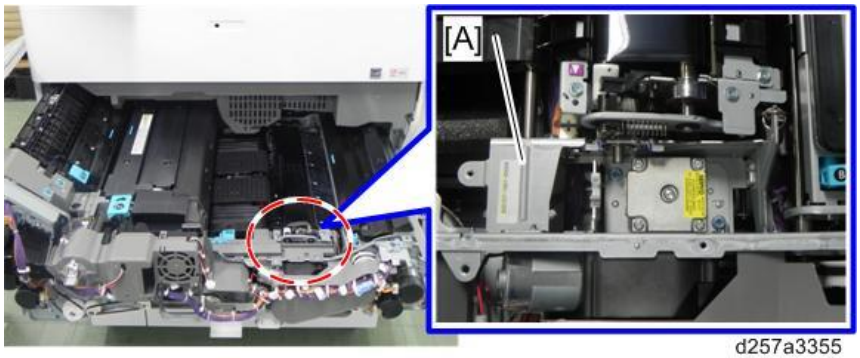
- Paper Transfer Belt Bracket [A]



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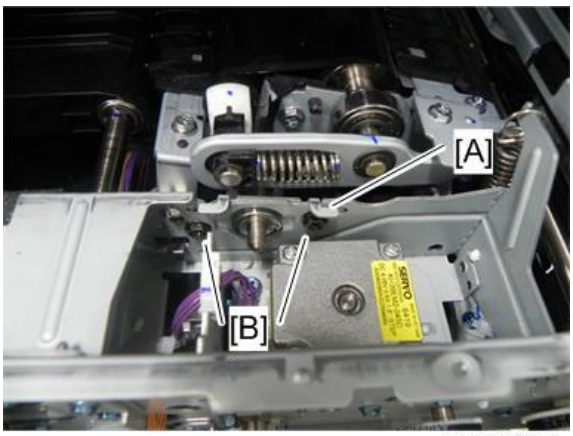
Note

- You also need to adjust the paper transfer belt unit when you have replaced the paper transfer belt adjustment bracket [A]. The adjustment is also required when you have loosened the adjustment screws [B] of the paper transfer belt adjustment bracket.



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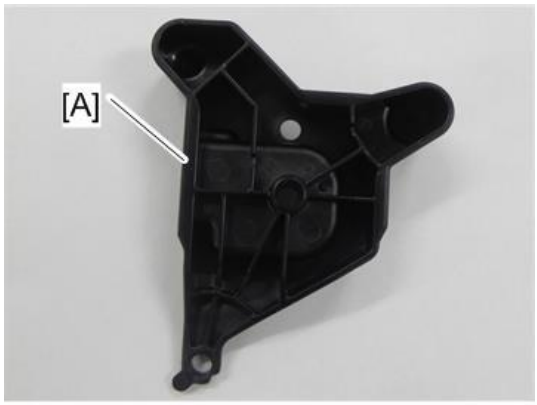
The adjustment jig [A]



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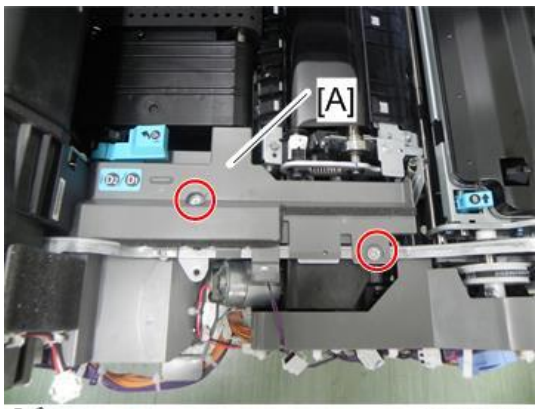
Adjustment Procedure (Example: When replacing the paper transfer belt adjustment bracket)

1. Remove the paper transfer belt unit. (Paper Transfer Belt Unit)
2. Remove the drawer unit cover. (Drawer Unit Cover)
3. Remove the inner cover [A].



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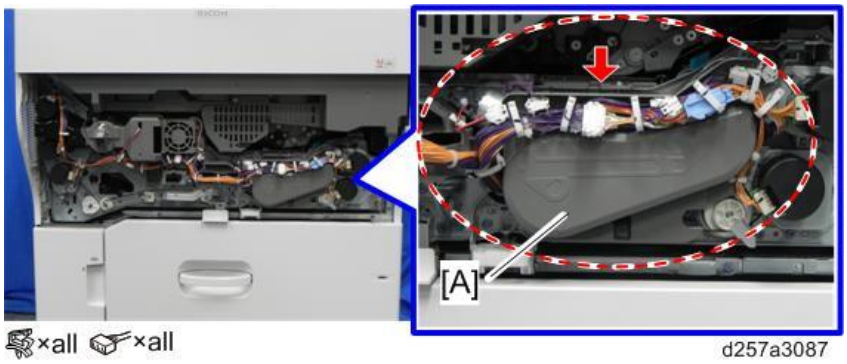
4. Close the drawer unit.
5. Remove the connectors and clamps to take out the drawer unit lock motor cover [A].



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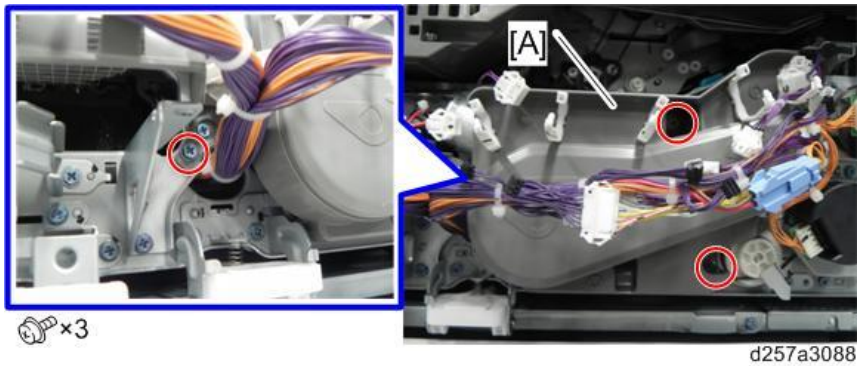
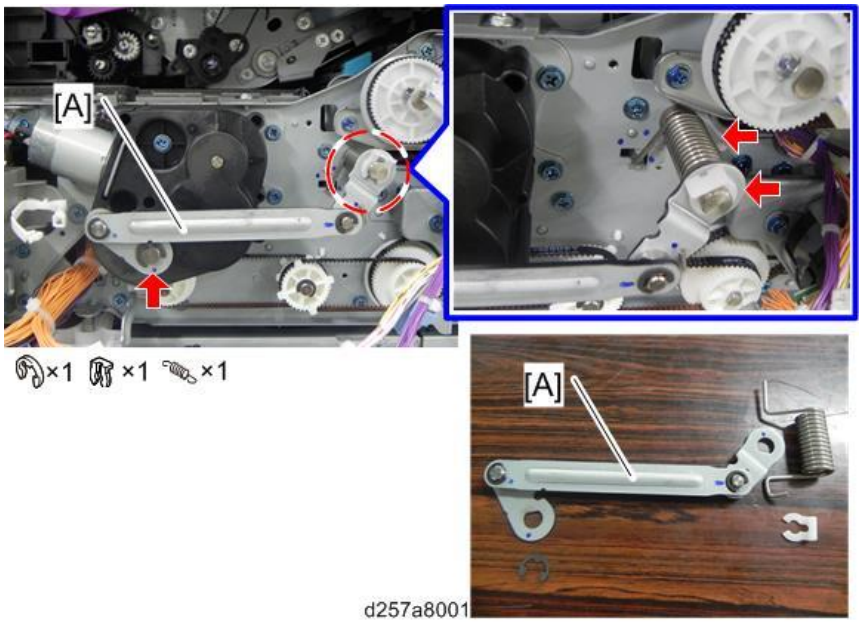
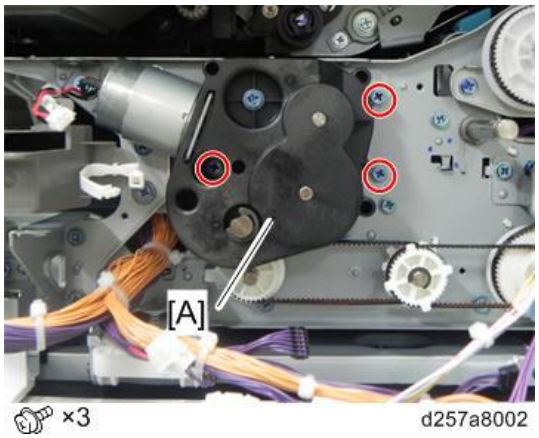
6. Remove the drawer unit lock motor cover [A].



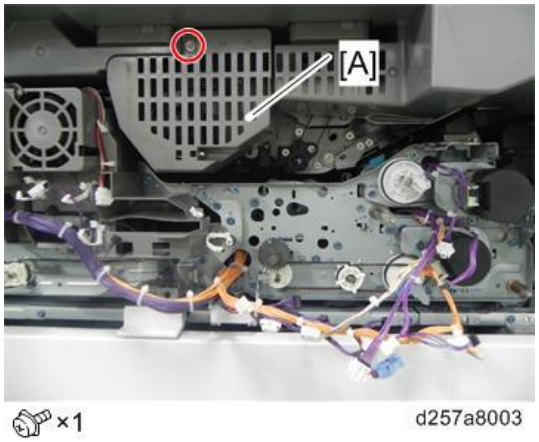
7. Remove the link [A].



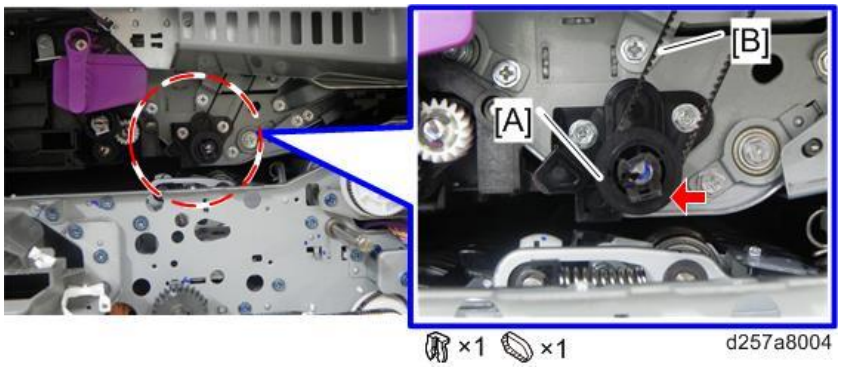
8. Remove the drawer unit lock motor block [A].



9. Remove the ITB cleaning intake fan [A] along with the duct.

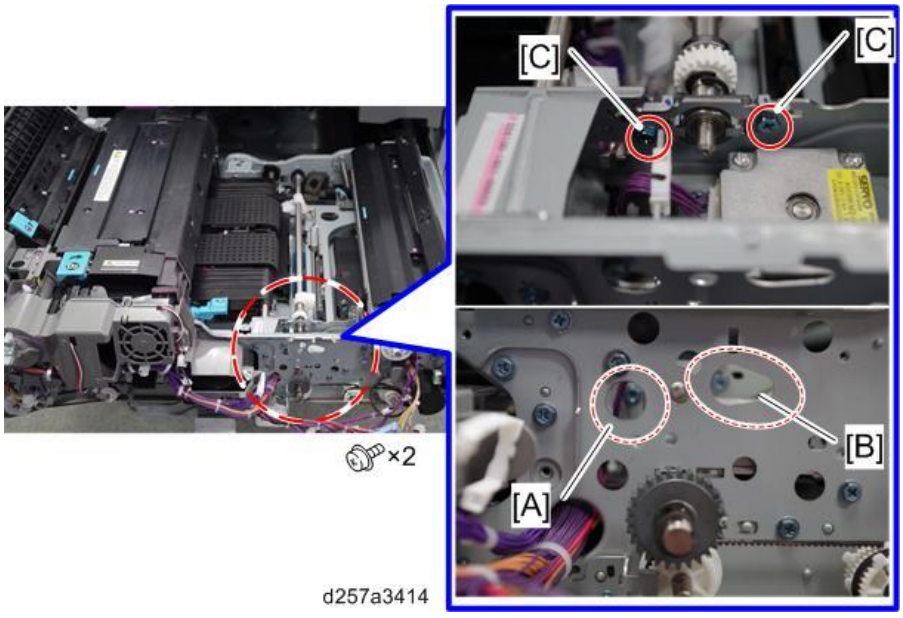


10. Remove the ITB roller drive pulley [A] and the timing belt [B].

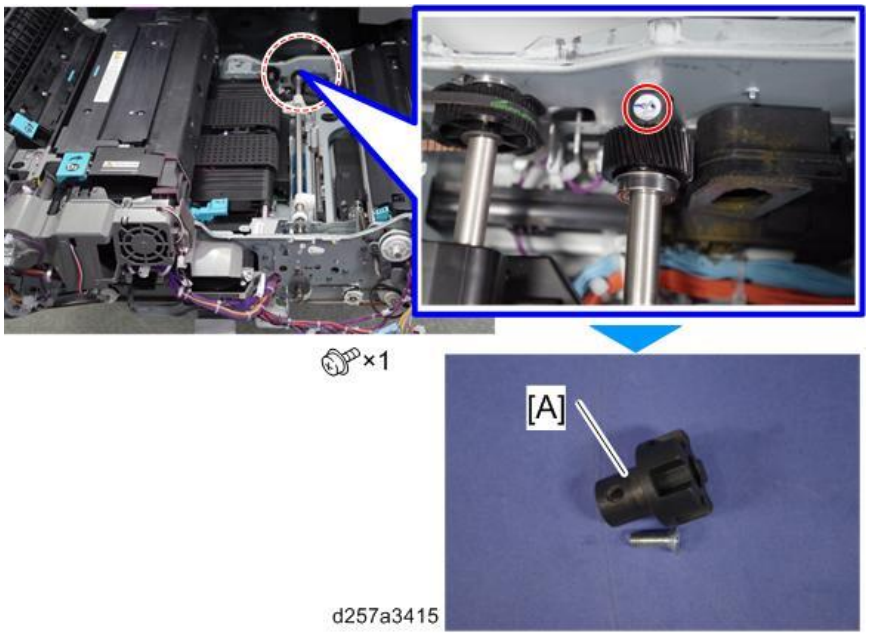


11. Pull out the drawer unit.

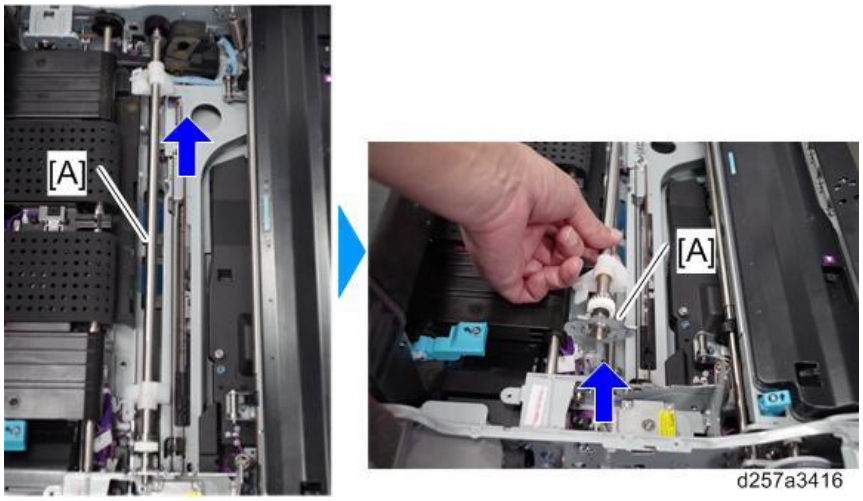
12. Insert a driver into the holes [A] and [B], and remove the adjustment screws [C] and [D] of the paper transfer belt adjustment bracket.



13. Remove the coupling [A] of the paper transfer belt drive shaft.



14. Remove the paper transfer belt drive shaft [A].

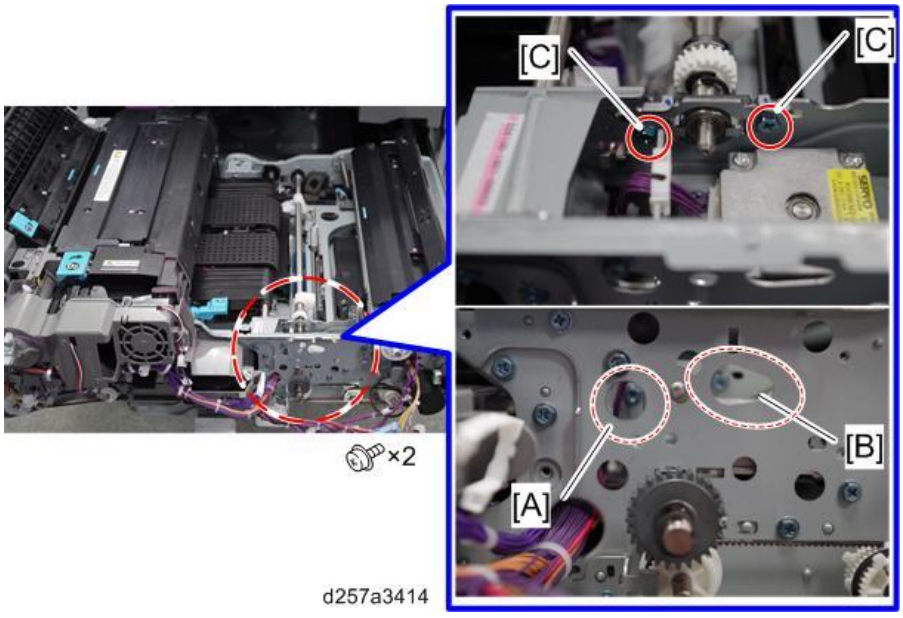


15. Remove the paper transfer belt adjustment bracket [A].

16. Replace the paper transfer adjustment bracket, and attach the new bracket to the paper transfer belt drive shaft.

17. Attach the coupling to the paper transfer belt drive shaft.

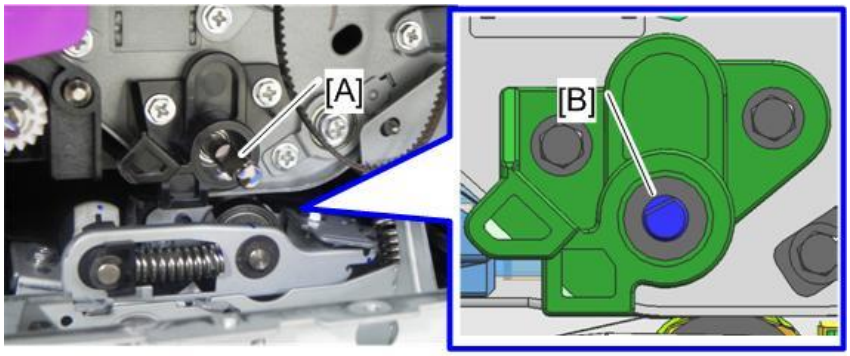
18. Insert a driver into the holes [A] and [B], and loosely attach the adjustment screws [C] and [D] of the paper transfer adjustment bracket.



19. Install the paper transfer belt unit.

20. Close the drawer unit.

21. Rotate the roller shaft [A] to place the straight part [B] of the D-cut to the upper left.



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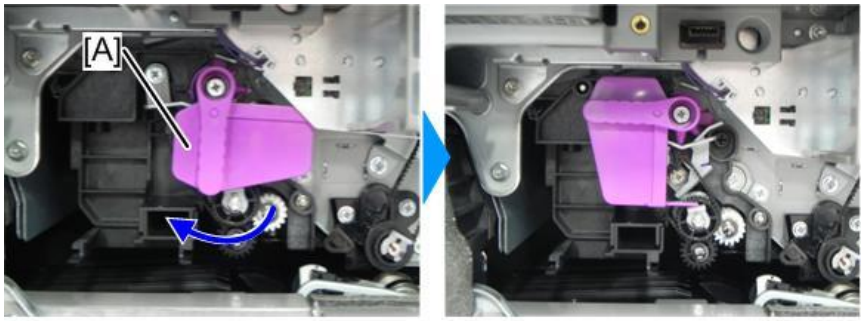
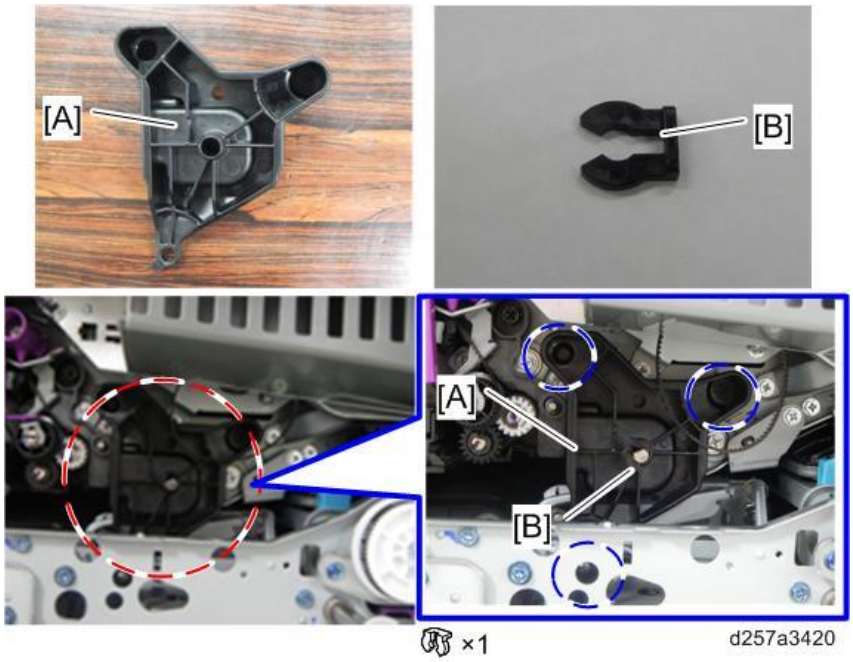
22. Release the lock lever of the ITB cleaning unit.



d257a3419

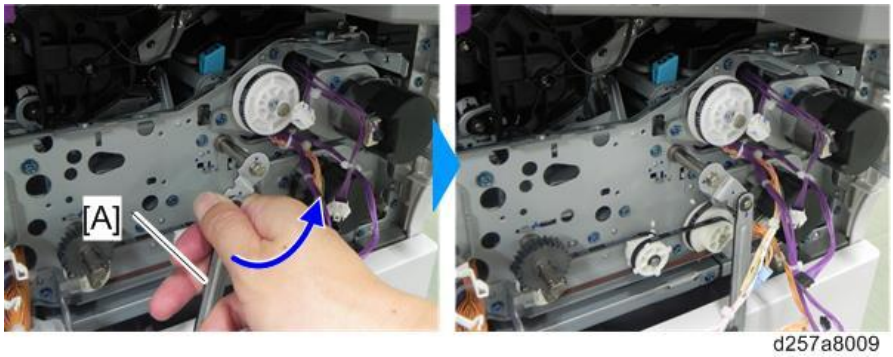
23. Position the three corners (blue circles in the photo) of the adjustment jig [A], and fix it with the clip ring [B].



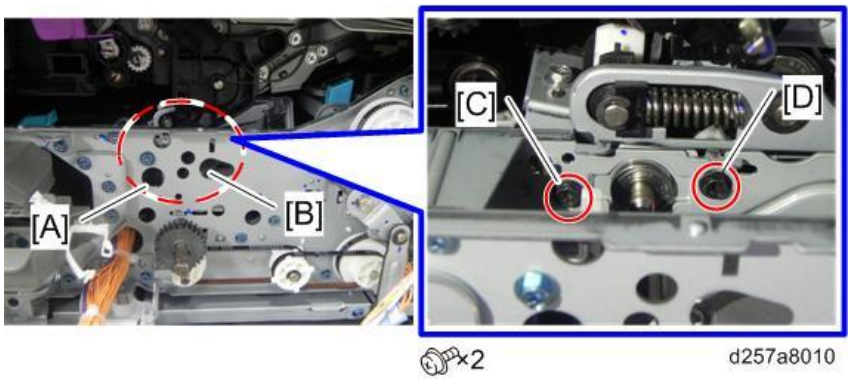
d257a3420

24. Rotate the paper transfer belt shaft counterclockwise by using the link [A] to make the paper

transfer belt unit touch the ITB unit.



25. Insert the driver into the holes [A] and [B] in the bracket, and tighten the adjustment screws [C] and [D] while holding the adjustment jig.



Important

- When inserting the driver into the holes, be careful not to be caught by the harness. If the driver is caught by the harness, this could be the cause of defective contact of connectors.
- When tightening the adjustment screws, be careful not to catch the driver on the surrounding components.
- When tightening the adjustment screws, tighten the screws in the order of [D] and [C] with one hand while holding the adjustment jig with the other free hand.

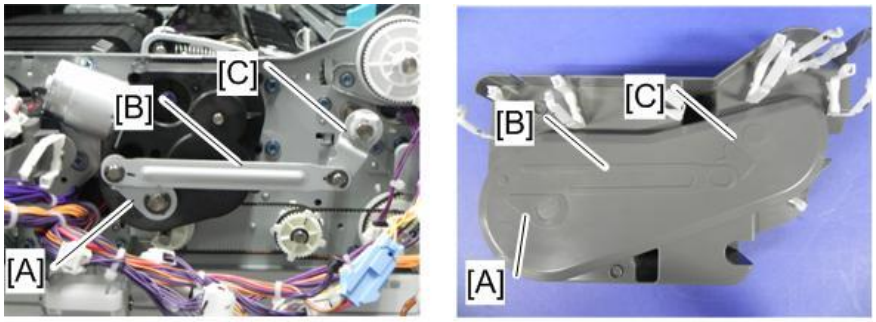
26. Remove the adjustment jig.

27. Re-install the parts removed in previous steps.

Note

- When mounting the motor block, screw the motor in first. Then, assemble links [A], [B] and [C] as shown below. There is also a diagram embossed on the motor cover to help you to install the links correctly.
  - Lock shaft (Cut surface to the upper left) [A]
  - Link [B]

- Paper transfer roller shaft (Cut surface to the lower side) [C]



d257a3082

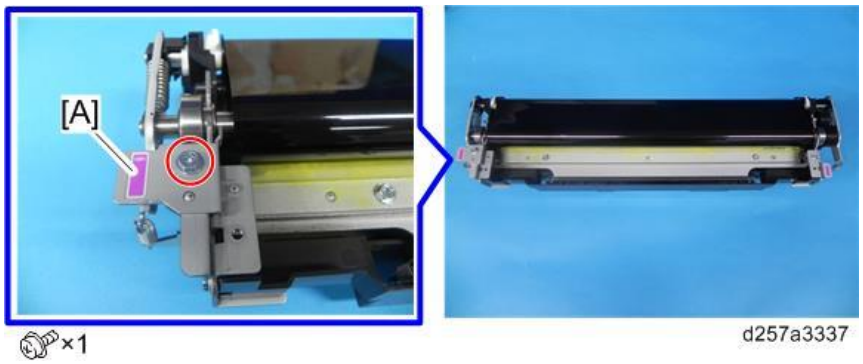
Belt Unit

Belt Unit (IM C6500/C8000)

1. Remove the paper transfer belt unit. (Paper Transfer Belt Unit)
2. Remove the guide plate [A].

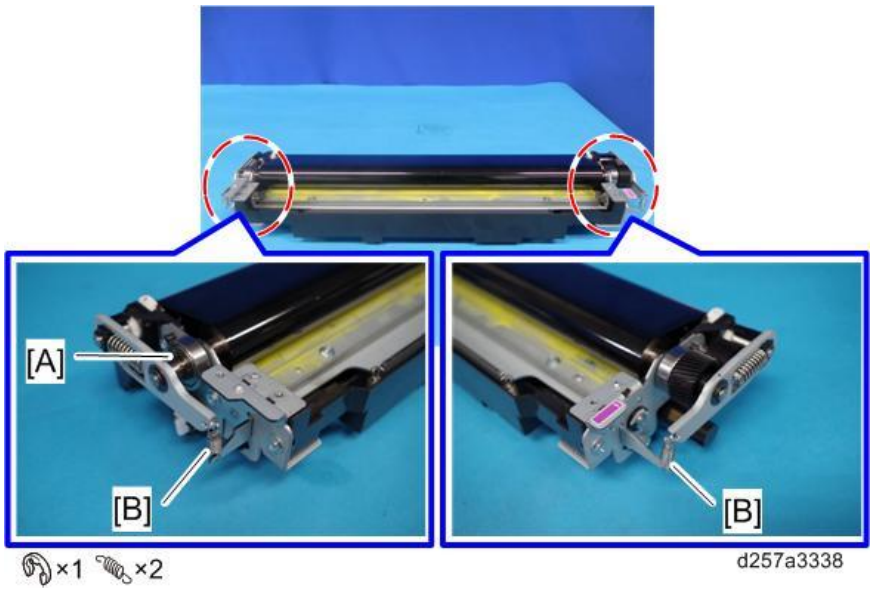
d257a3336

3. Remove the bracket [A].



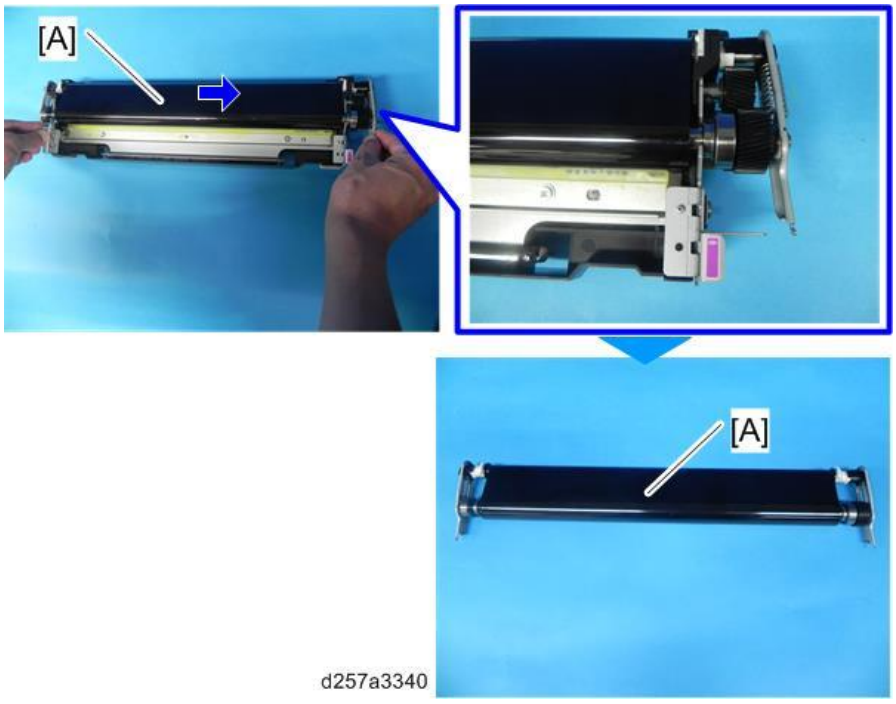
d257a3337

4. Remove the E-ring [A] and springs [B].



5. Slide the bearing [A].

6. Hold the edges on both sides of the belt unit [A], and slide it to remove it.

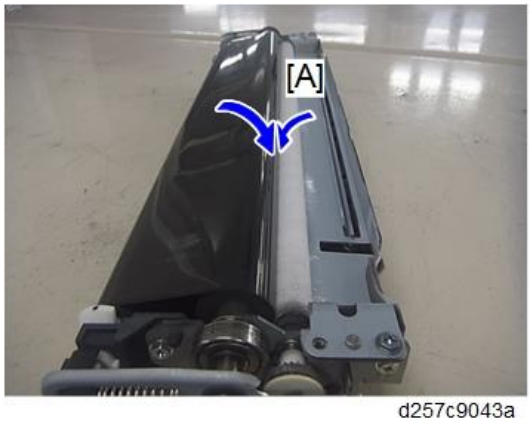


7. Install the new belt unit.

8. Put back the parts removed in step 5, 4, and 3 to the paper transfer belt unit.
9. Use a brush to apply the lubricant powder (p/n: D0159501) evenly across the surface of the new belt.

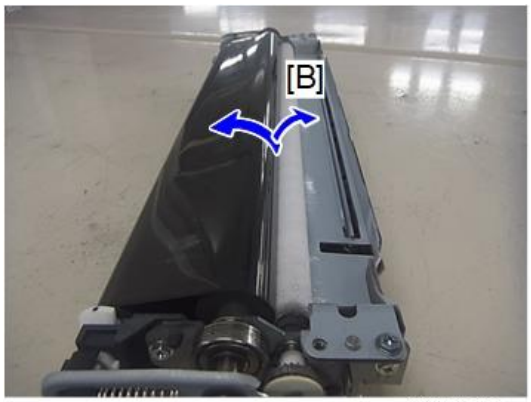
d257c9040

10. Turn the belt three or more times in the direction [A] shown with the arrow.



d257c9043a

11. Turn the belt in the opposite direction [B] more than one time.



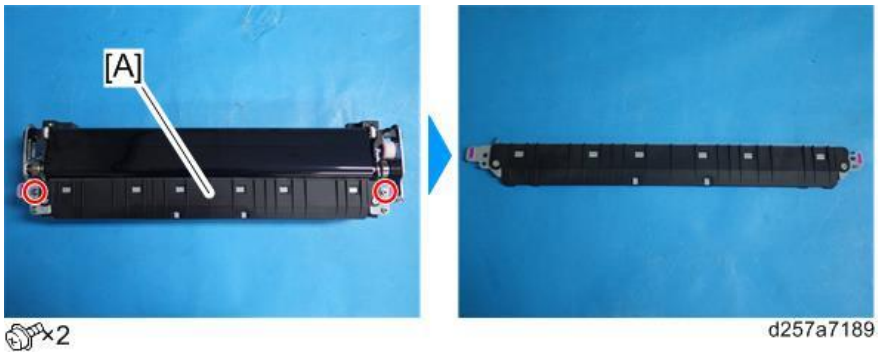
d257c9044a

12. Attach the guide plate removed in step 2.
13. Lubricate the belt unit. (Lubrication after Replacement)

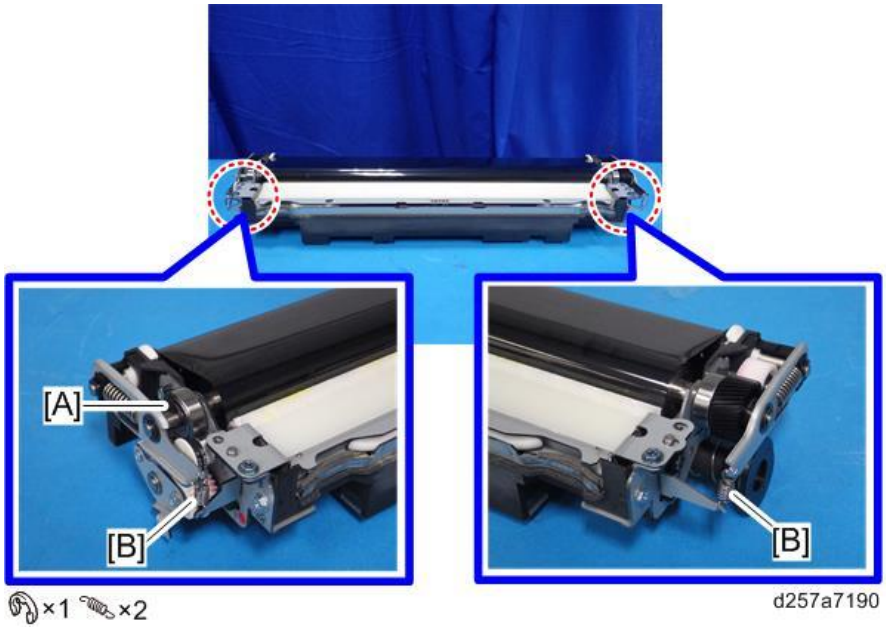
Belt Unit (Pro C5300S/C5310S)

1. Remove the paper transfer belt unit. (Paper Transfer Belt Unit)

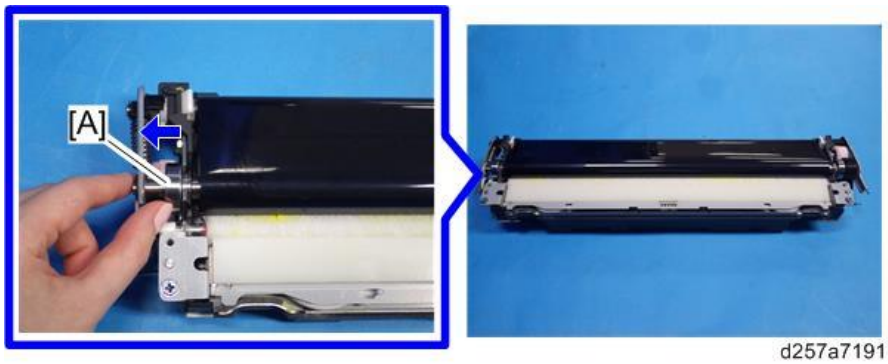
2. Remove the guide plate [A].



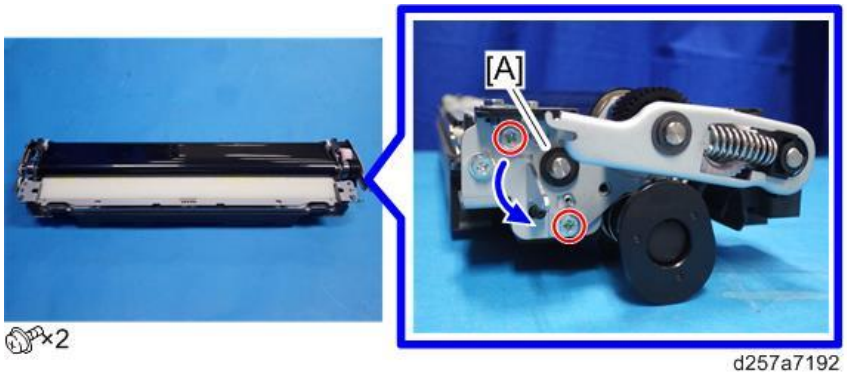
3. Remove the E-ring [A] and springs [B].



4. Slide the bearing [A].

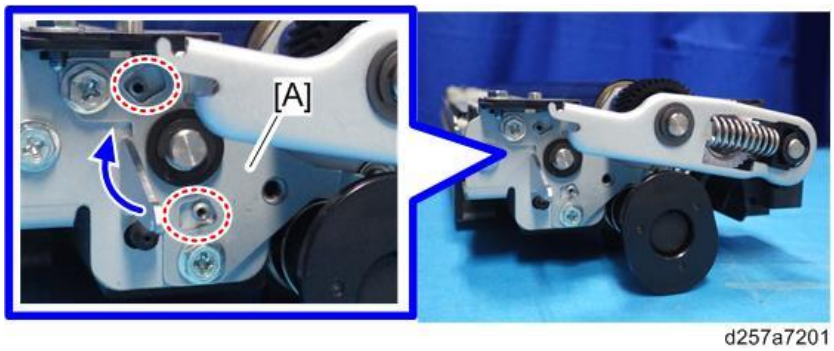


5. Remove the two screws, and then rotate the bracket [A] in the direction of the blue arrow.

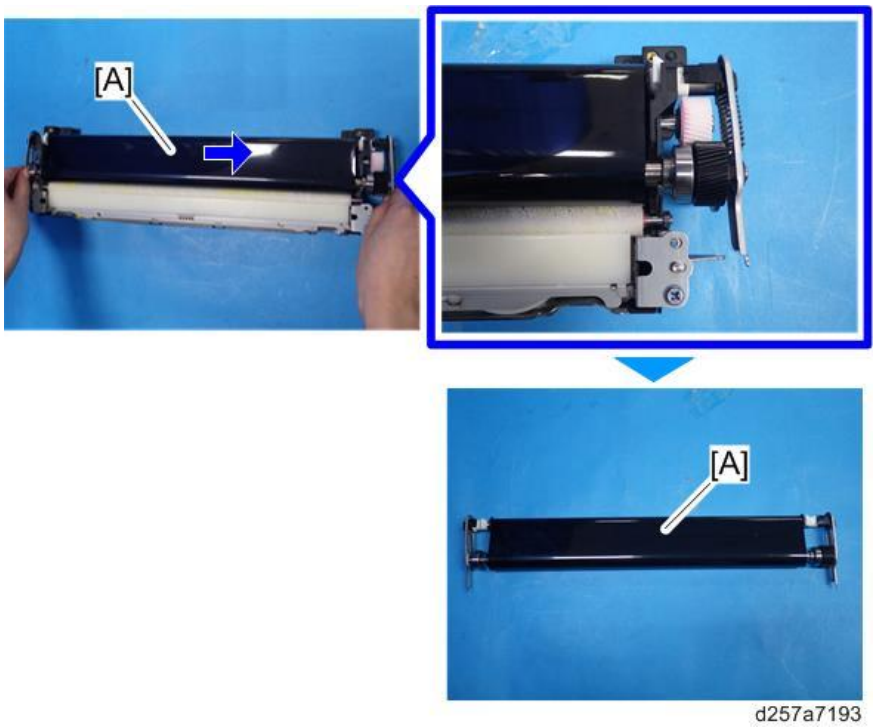


Note

When installing the bracket, make sure that the bracket [A] fits over the embossed part of the paper transfer belt unit. Then rotate the bracket [A] so that the embossed part is at the position shown below.



6. Hold the edges on both sides of the belt unit [A], and slide it to remove it.

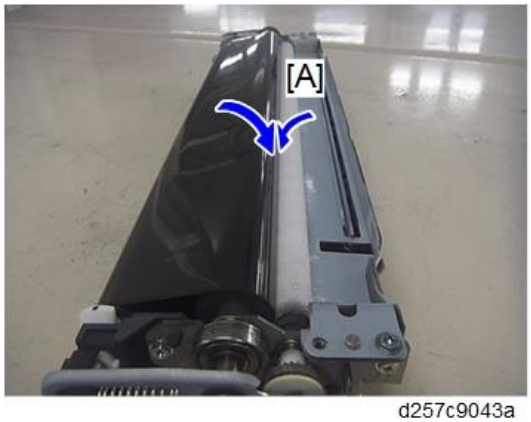


7. Install the new belt unit.

8. Put back the parts removed in step 5, 4, and 3 to the paper transfer belt unit.
9. Use a brush to apply the lubricant powder (p/n: D0159501) evenly across the surface of the new belt.

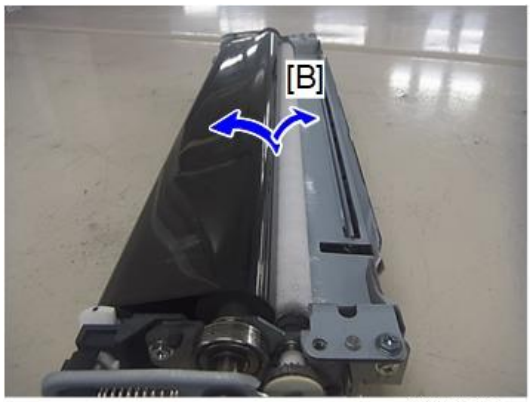
d257c9040

10. Turn the belt three or more times in the direction [A] shown with the arrow.



d257c9043a

11. Turn the belt in the opposite direction [B] more than one time.



d257c9044a

12. Attach the guide plate removed in step 2.
13. Lubricate the belt unit. (Lubrication after Replacement)

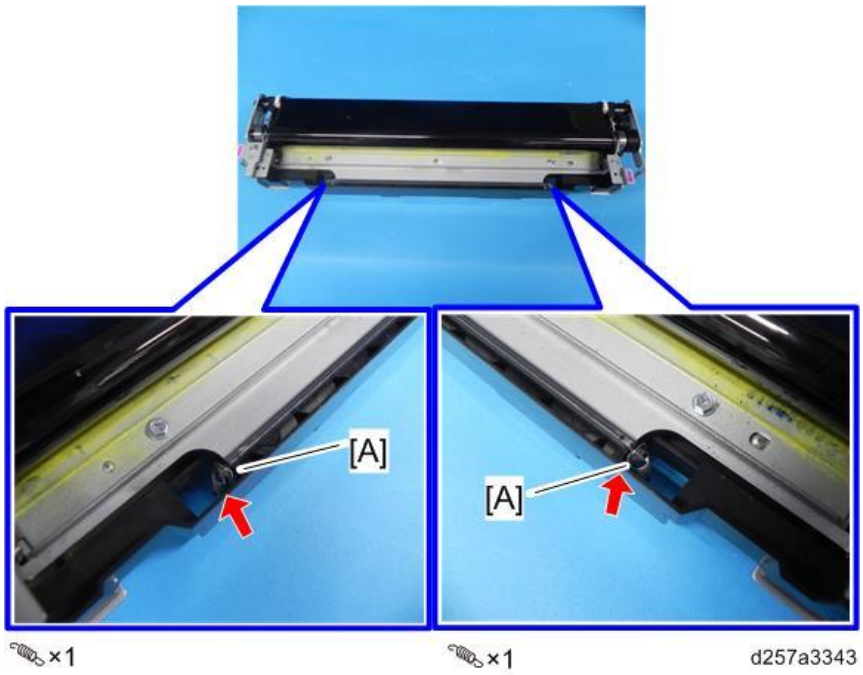
Cleaning Blade

Cleaning Blade (IM C6500/C8000)

1. Remove the paper transfer belt unit. (Paper Transfer Belt Unit)

2. Remove the guide plate [A].

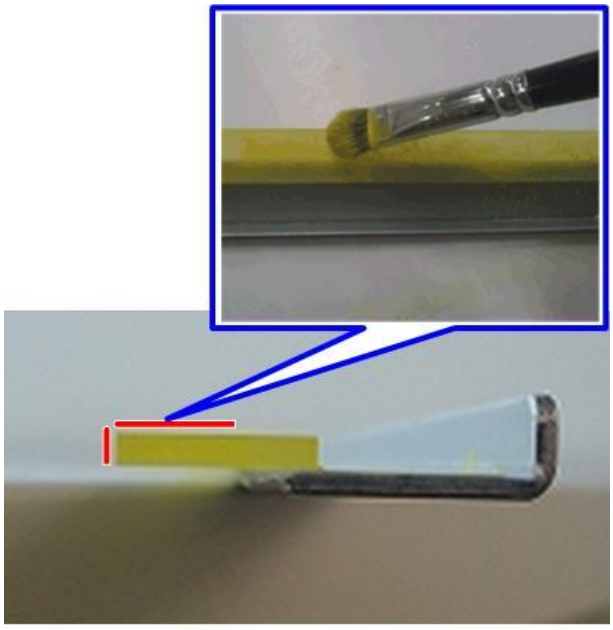
3. Remove the pressure springs [A].



4. Remove the cleaning blade [A].

Note

Before installing the cleaning blade, use a brush to apply yellow toner (D0149500) evenly across the surfaces of the new blade indicated with the red lines in the illustration below.



d1355306b

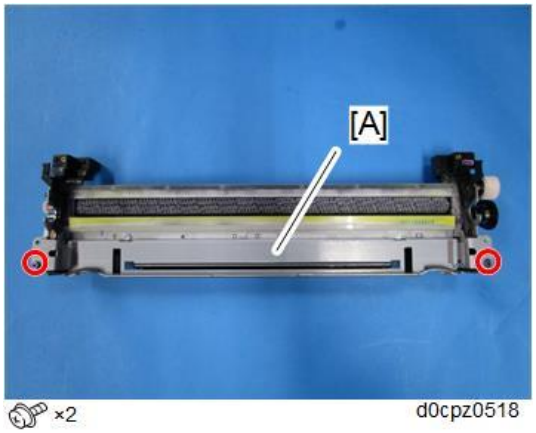
Use the blower brush (D0747690) when applying yellow toner to the new cleaning blade.

d135a3512

5. Lubricate the cleaning blade. (Lubrication after Replacement

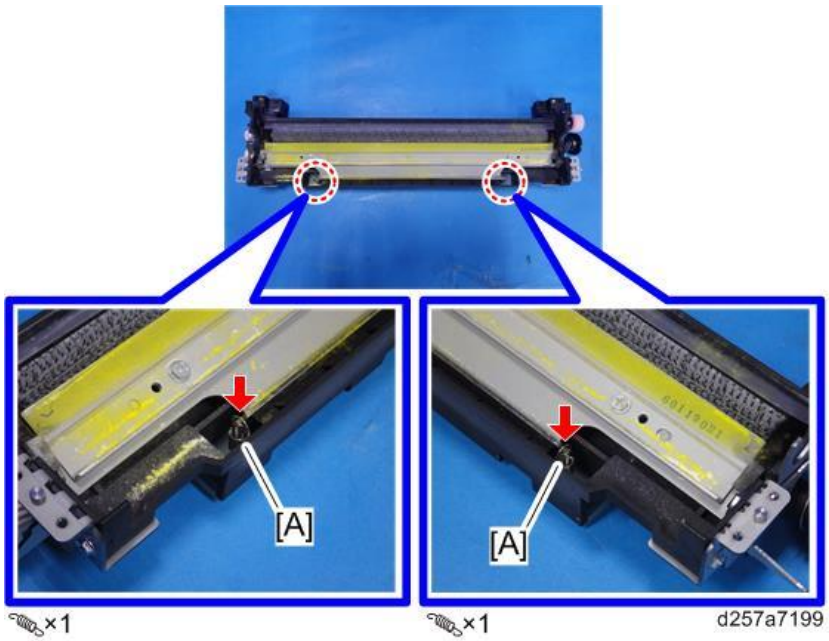
Cleaning Blade (Pro C5300S/C5310S)

1. Remove the paper transfer lubrication roller. (Paper Transfer Lubrication Roller (Pro C5300S/C5310S Only))
2. Remove the bracket [A].

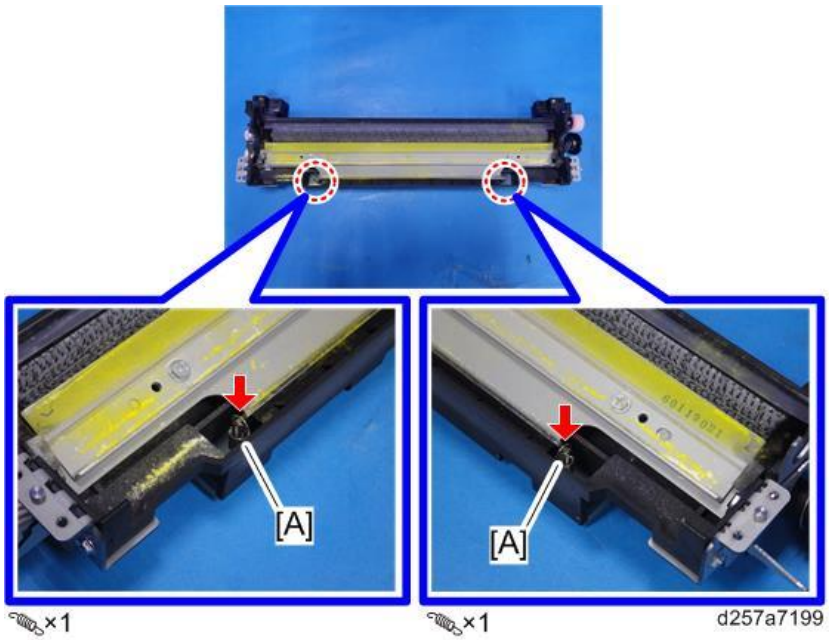


d0cpz0518

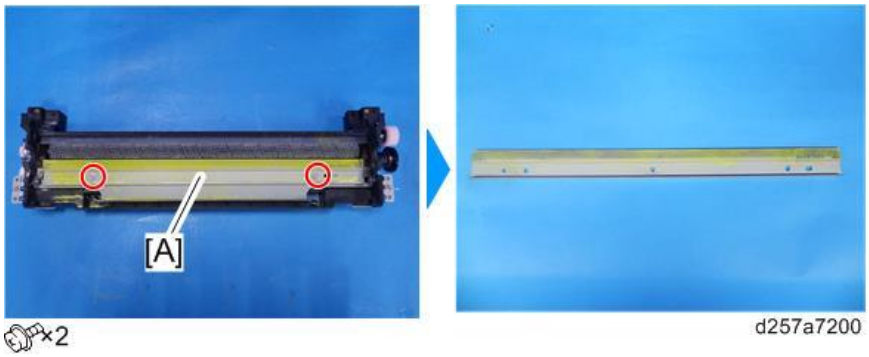
3. Remove the pressure springs [A].



4. Remove the pressure spring [A].

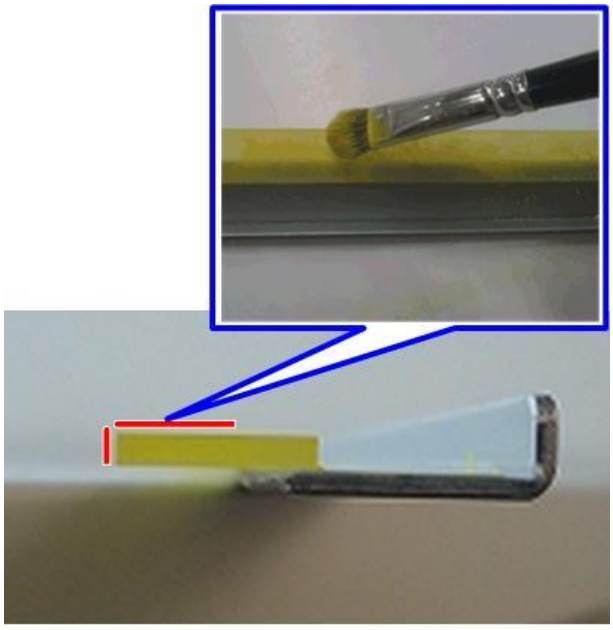


5. Remove the cleaning blade [A].



Note

Before installing the cleaning blade, use a brush to apply yellow toner (D0149500) evenly across the surfaces of the new blade indicated with the red lines in the illustration below.



d1355306b

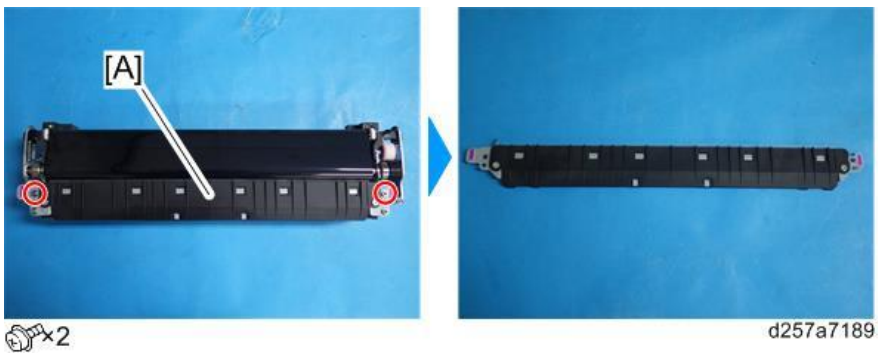
Use the blower brush (D0747690) when applying yellow toner to the new cleaning blade.

d135a3512

6. Lubricate the cleaning blade. (Lubrication after Replacement

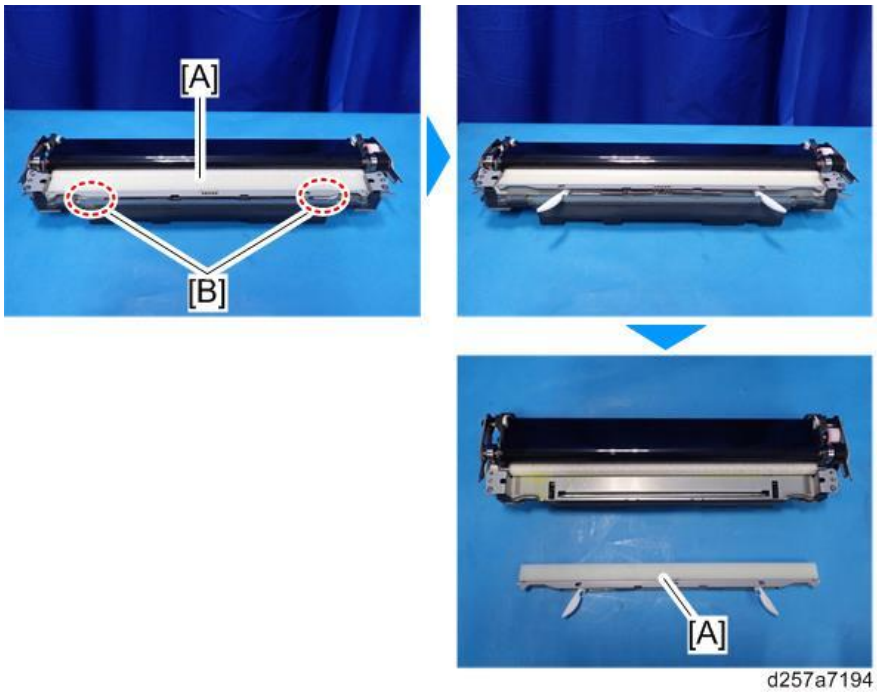
Paper Transfer Lubricant Bar (Pro C5300S/C5310S Only)

1. Remove the paper transfer belt unit. (Paper Transfer Belt Unit)
2. Remove the guide plate [A].



d257a7189

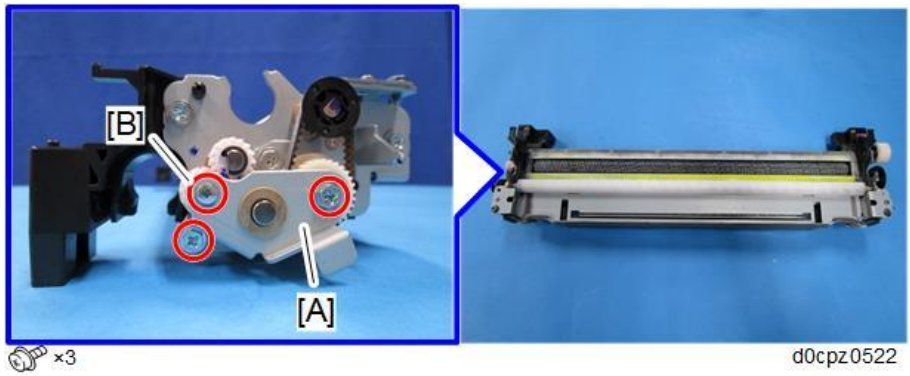
3. Release the springs [B] of the paper transfer lubricant bar [A], and then remove it.



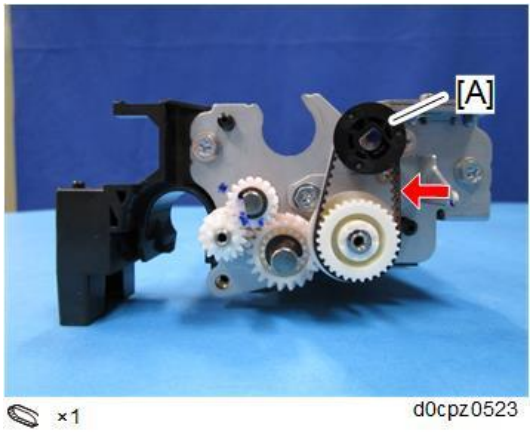
4. Lubricate the paper transfer lubricant bar. (Lubrication after Replacement)

Paper Transfer Lubrication Roller (Pro C5300S/C5310S Only)

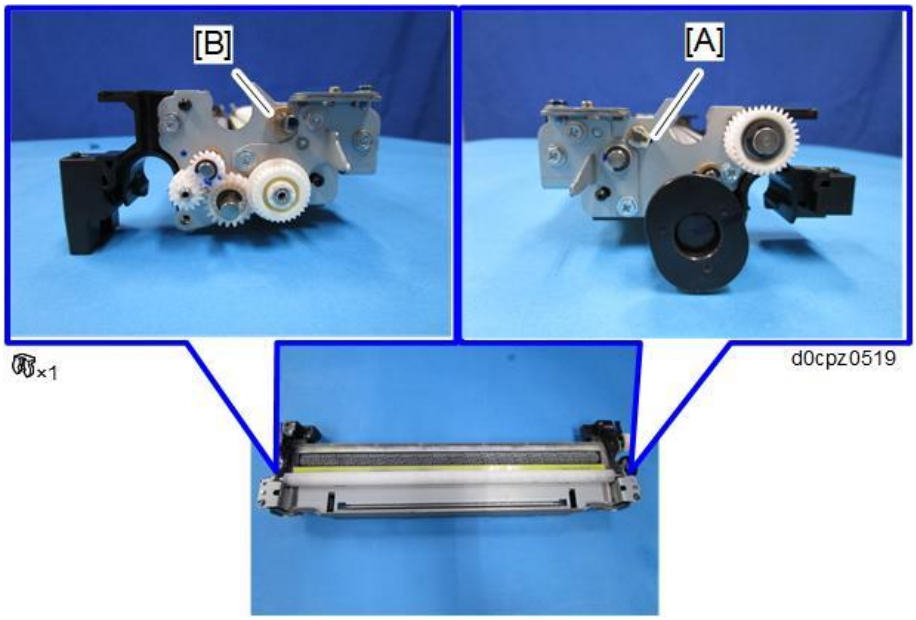
1. Remove the paper transfer belt unit. (Paper Transfer Belt Unit)
2. Remove the paper transfer lubricant bar. (Paper Transfer Lubricant Bar (Pro C5300S/C5310S Only))
3. Remove the bracket [A]. ([B]: Round head screw)



4. Remove the bracket [A].



5. Remove the E-ring [A] and bearing [B].



6. Remove the paper transfer lubrication roller [A].

7. Lubricate the paper transfer lubricant roller. (Paper Transfer Lubrication Roller (Pro C5300S/C5310S Only))

Lubrication after Replacement

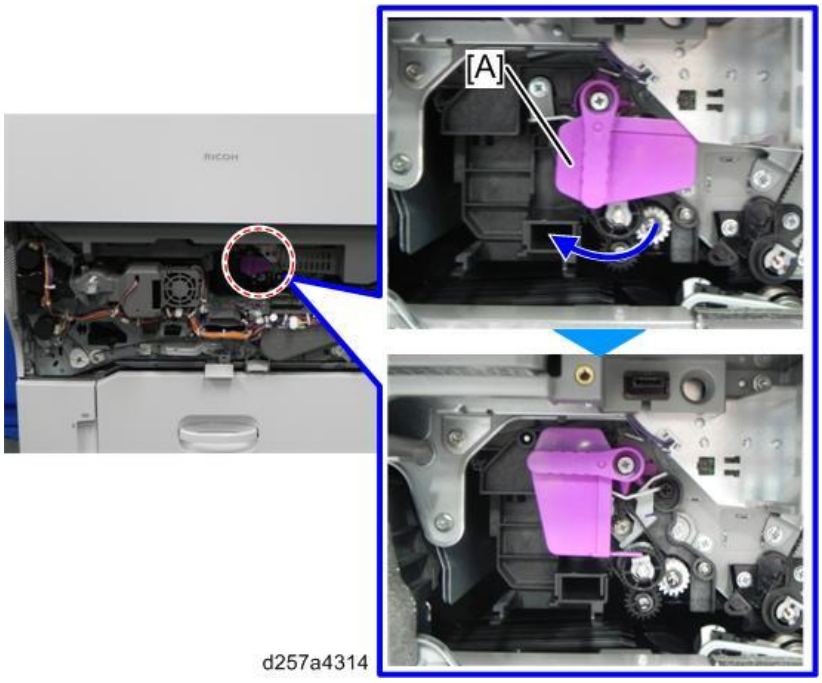
Be sure to lubricate after replacing the paper transfer belt unit or one of the following components:

- Belt unit
- Cleaning blade
- Lubricant bar
- Lubrication roller

Important

- If the lubricant of the cleaning blade or the lubrication roller reaches its end of PM cycle, then replace them first and do this procedure.

1. Turn ON the main power.
2. Enter SP mode.
3. Push the PM parts counter reset button in the PM Parts display (Paper Transfer Belt Unit or its components)
4. Turn OFF the main power.
5. Replace the paper transfer belt unit or its components.
6. Rotate the blade release lever [A] to move the cleaning blade away from the ITB.



7. Attach the drawer unit cover.
8. Open the drawer unit.
9. Keep the drawer unit open and then, turn ON the main power.

Note

The automatic adjustment will not be performed when the machine is turned ON, since the drawer unit is pulled out/open.

10. Enter SP mode and choose SP2-696-001 (Force Apply Lubricant Execute).

11. Push [Execute] on the operation panel and then push the drawer unit into the machine.

Note

When the drawer unit is pushed into the machine, lubrication starts automatically. This operation takes about 3 minutes to complete.

12. Turn OFF the machine when the lubrication finishes (the machine stops).

13. Open the drawer unit, and rotate the blade release lever to make the cleaning blade contact the ITB.

14. Re-install the belt cleaning fan.

15. Push the drawer unit into the machine.

16. Turn ON the main power.

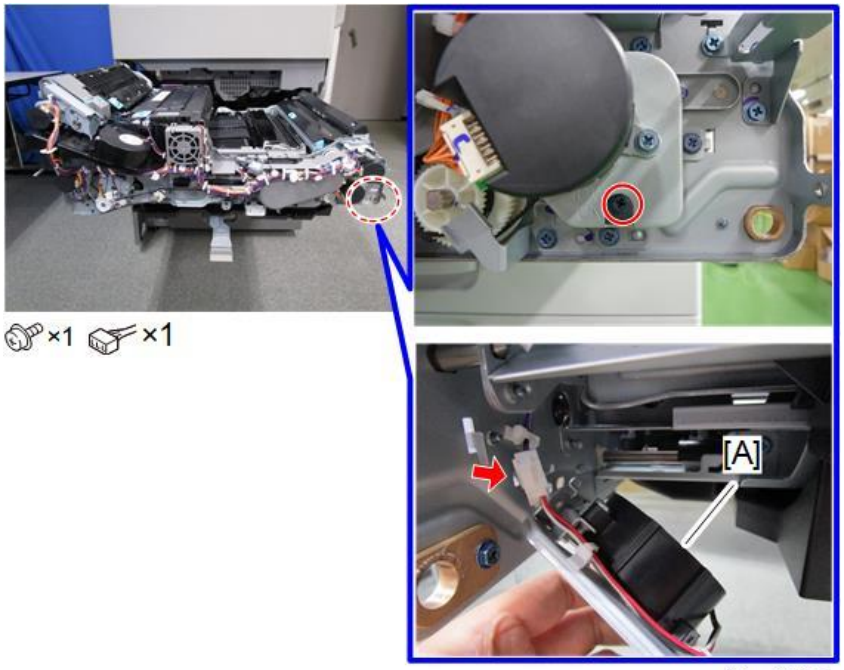
Note

- The machine will then execute the automatic corrections.

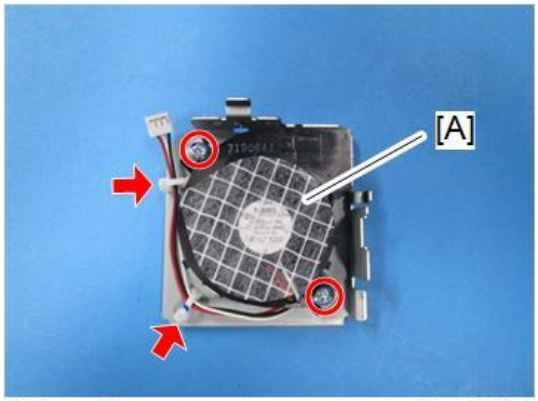
Paper Transfer Belt Cooling Fan (FAN30)

1. Remove the drawer unit cover. (Drawer Unit Cover)

2. Remove the paper transfer belt cooling fan (FAN30) [A] with the bracket.



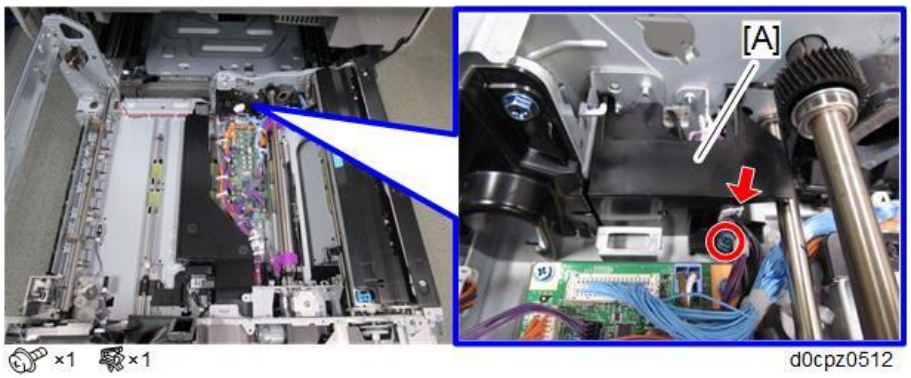
3. Remove the paper transfer belt cooling fan (FAN30) [A].



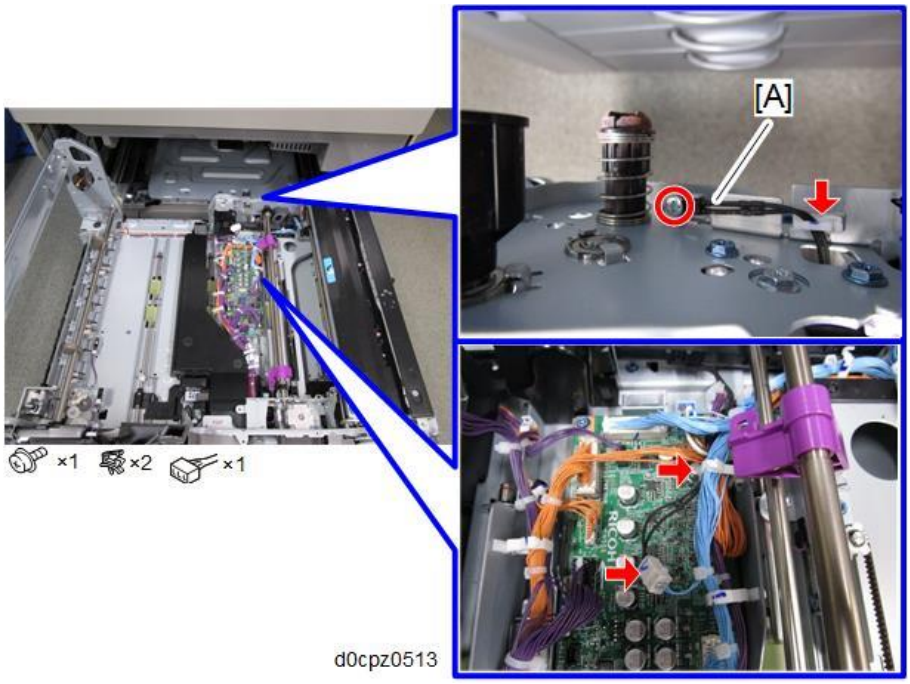
Paper Transfer Belt Waste Toner Thermistor (TH6)

1. Remove the paper transport belt unit. (Paper Transport Belt Unit)
2. Remove the paper transfer belt unit. (Paper Transfer Belt Unit)
3. Remove the DUB cover [A].

4. Remove the cover [A].



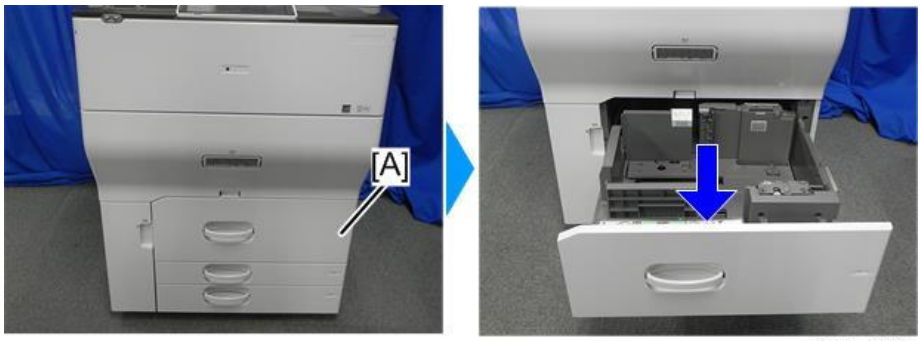
5. Remove the paper transfer belt waste toner thermistor (TH6) [A].



Tandem Tray

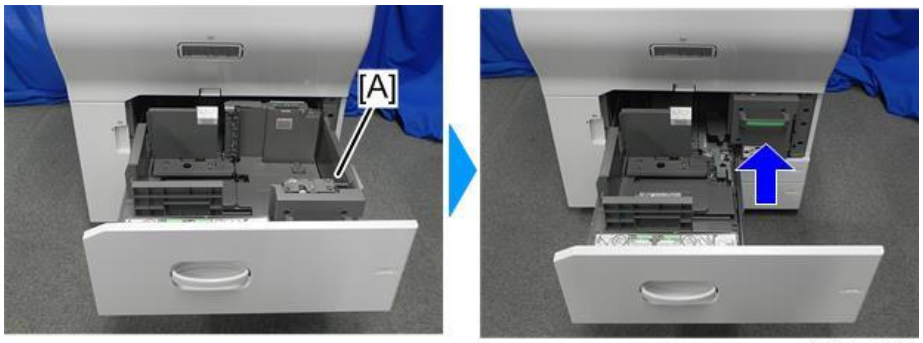
Left Tandem Tray, Right Tandem Tray

1. Pull out paper tray 1 [A].



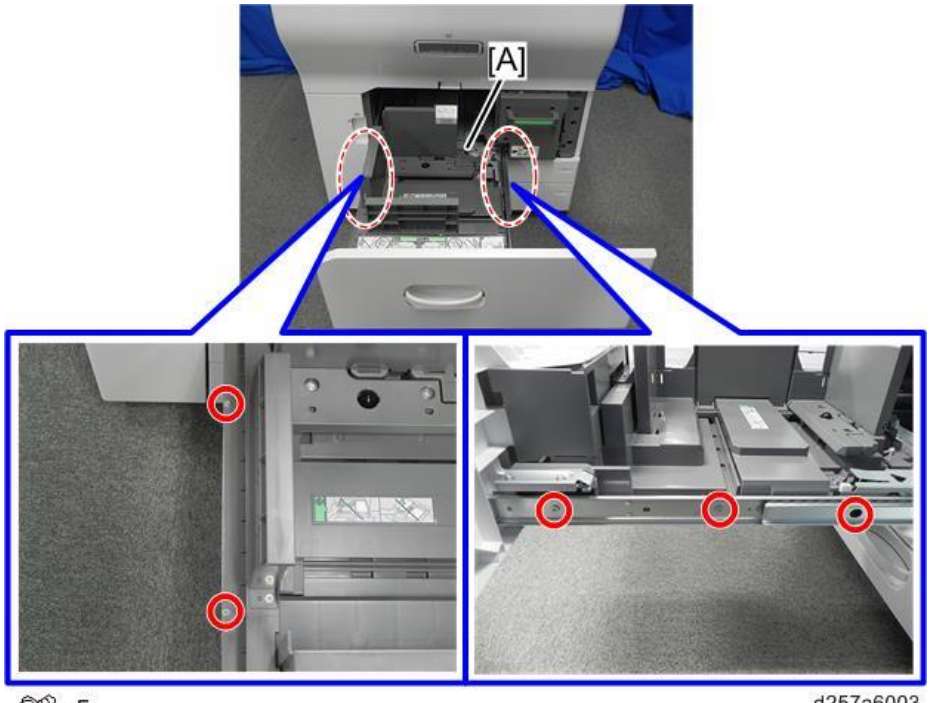
d257a6001

2. Push the right tandem tray [A] into the machine.



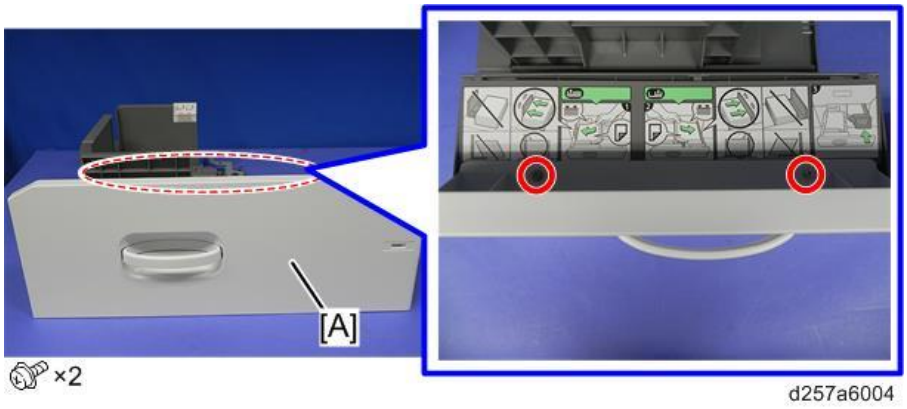
d257a6002

3. Remove the left tandem tray [A] (M3 x 8; on the left side, shoulder screws; on the right side).

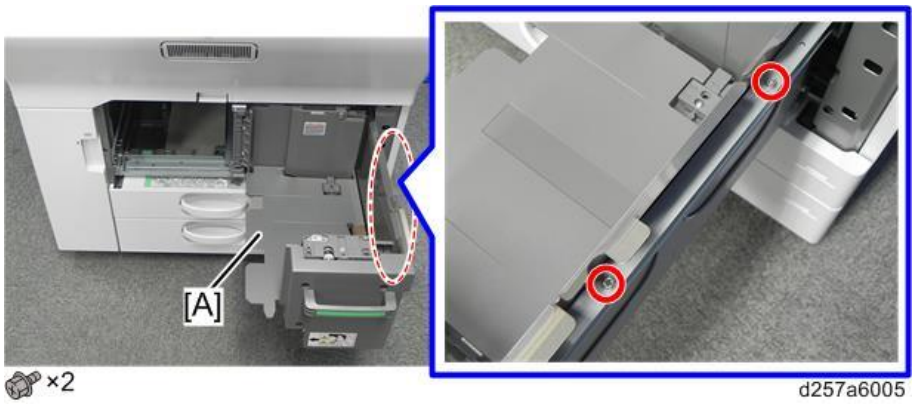


d257a6003

4. Remove the front cover [A] from the left tandem tray.



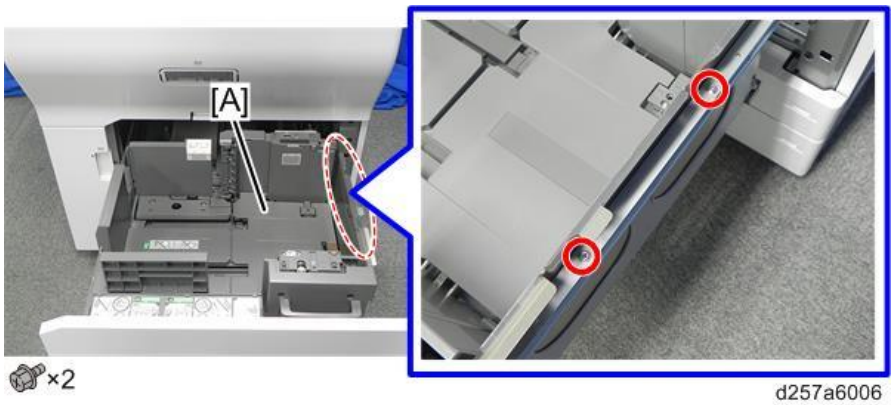
5. Pull out the right tandem tray [A] and remove it.*



* Pro C5300S/C5310S use TCRU/ORU screws

Feed Roller, Pick-up Roller and Separation Roller

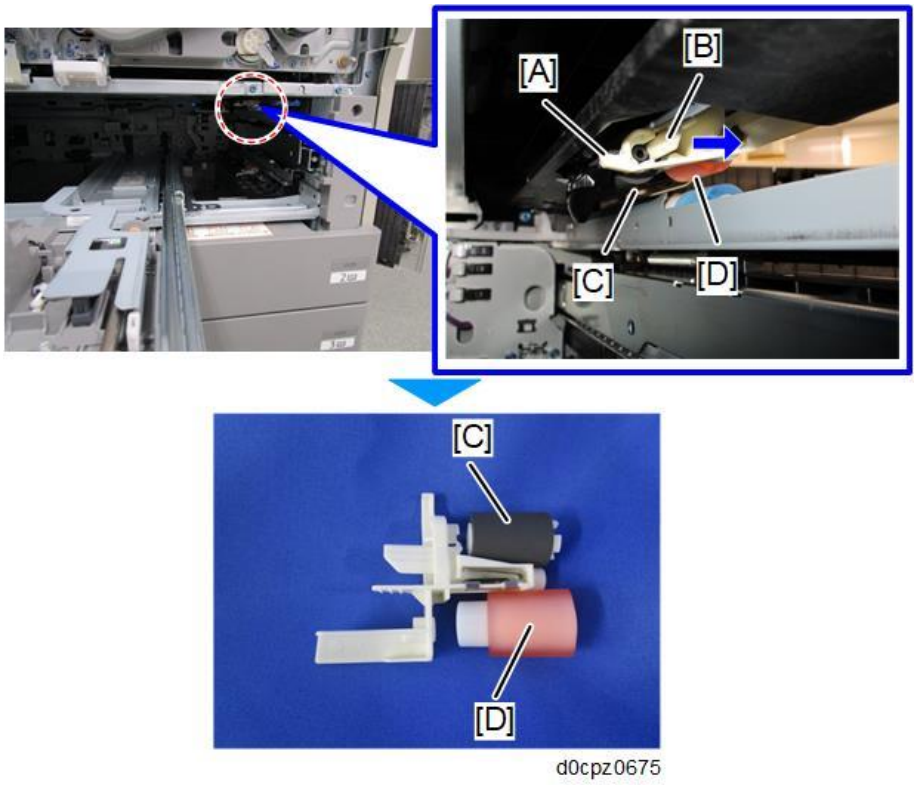
1. Pull out the paper tray 1.
2. Remove the right side of the tray [A].*



* Pro C5300S/C5310S use TCRU/ORU screws

3. Release the knob [B] toward the direction of the arrow as shown below and remove the holder [A].

4. Remove the pick-up roller [C] and feed roller [D].

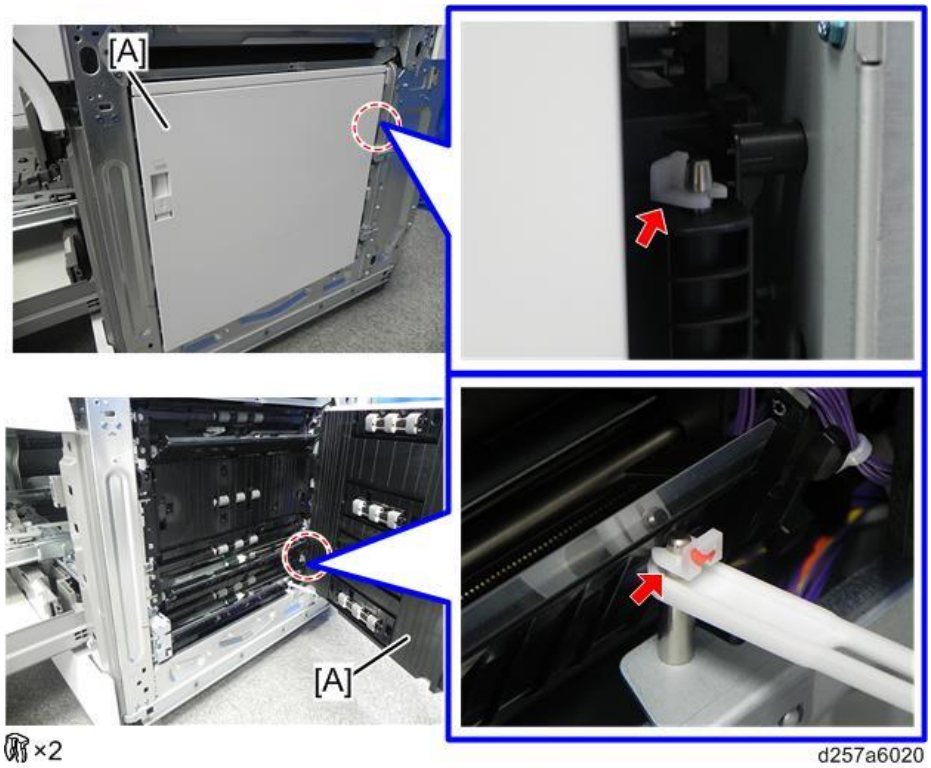


5. Open the vertical transport door and remove the separation roller [C].

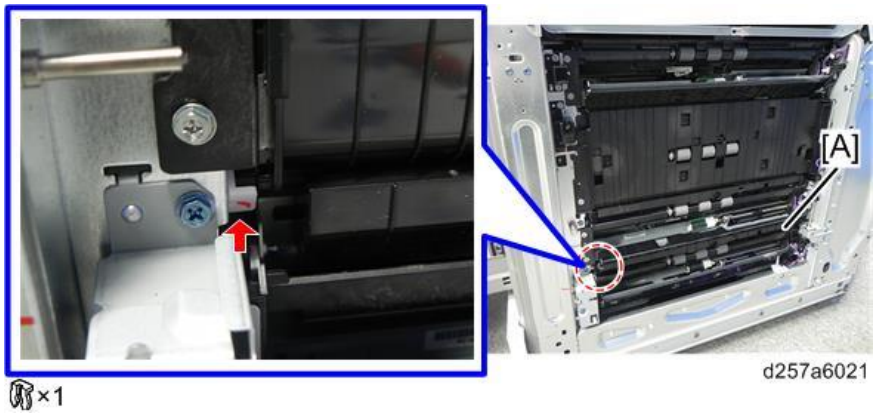
Paper Feed Unit for Tray 1

1. Remove the right lower cover of the machine exterior. (Right Lower Cover)
2. Pull out paper trays 1 and 2.

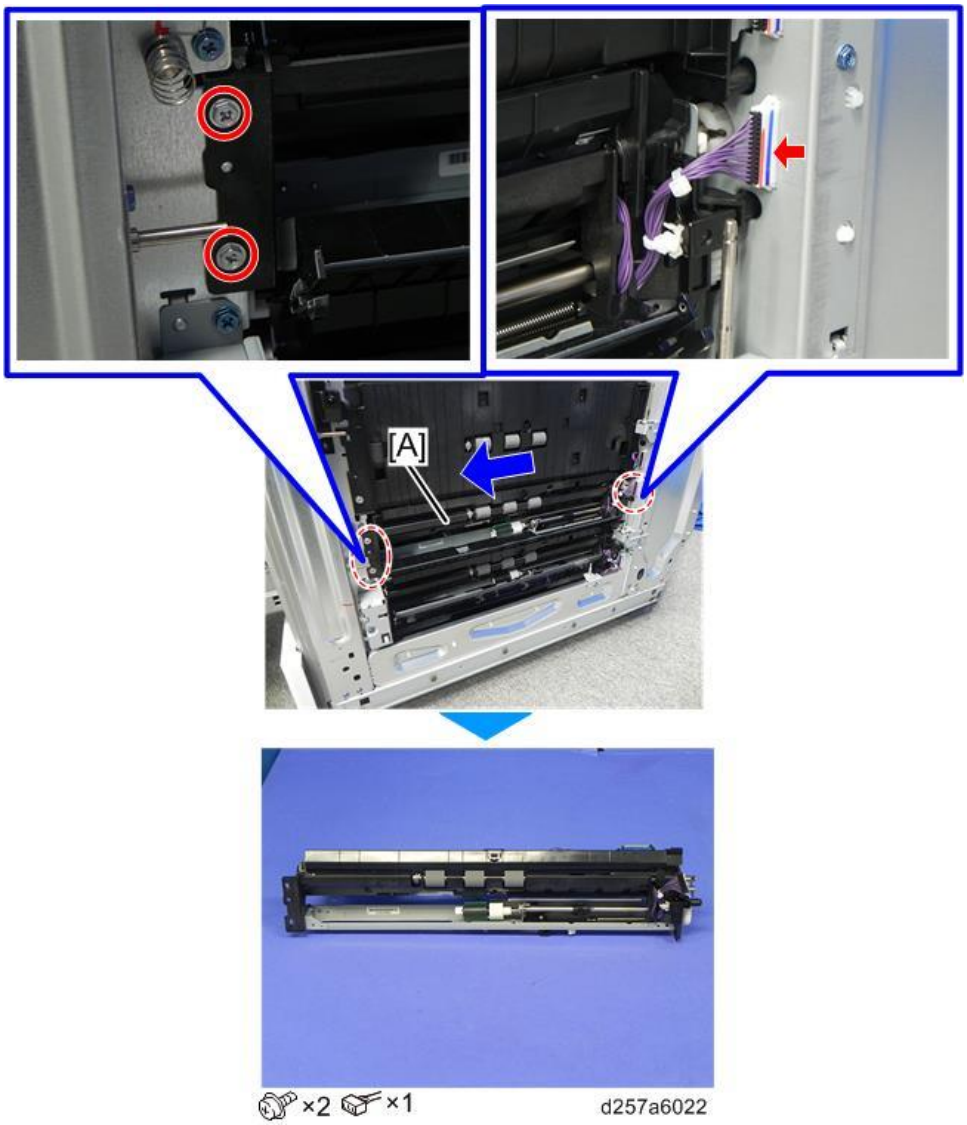
3. Remove the vertical transport unit [A].



4. Remove the frame for tray 2 [A].

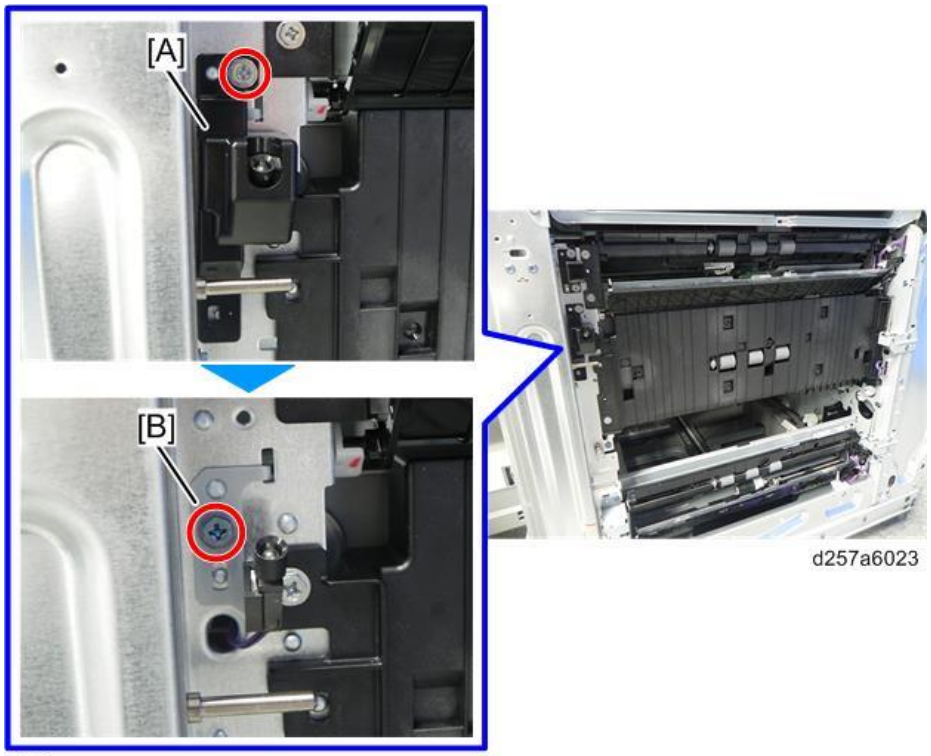


5. Remove the paper feed unit for tray 2 [A].

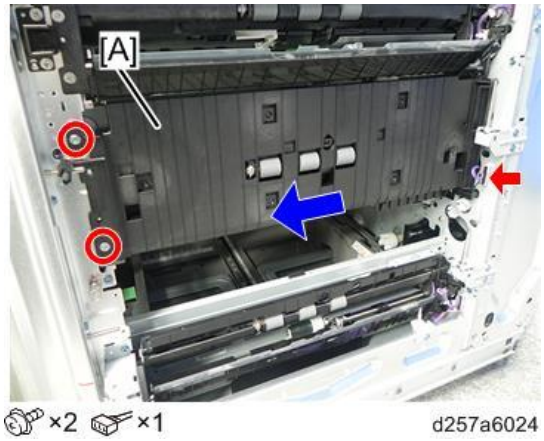


6. Remove the LED cover [A].

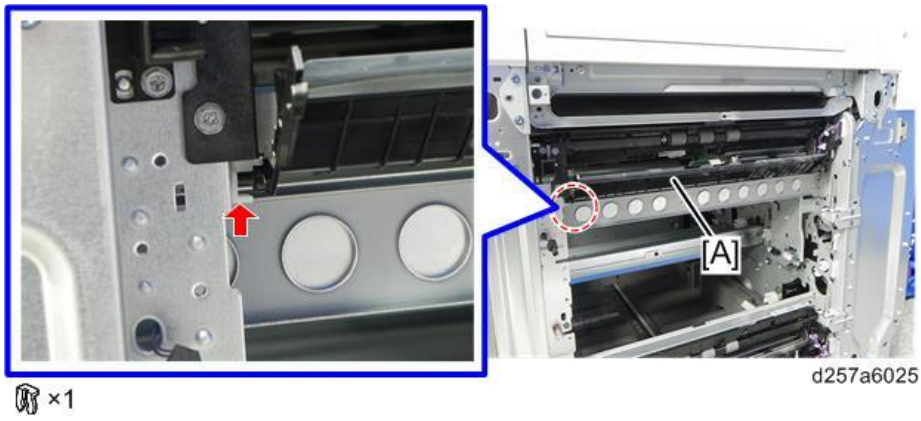
7. Remove the vertical transport LED (LED14) [B] along with the bracket.



8. Remove the relay cover [A].



9. Remove the paper guide plate for tray 1 [A].

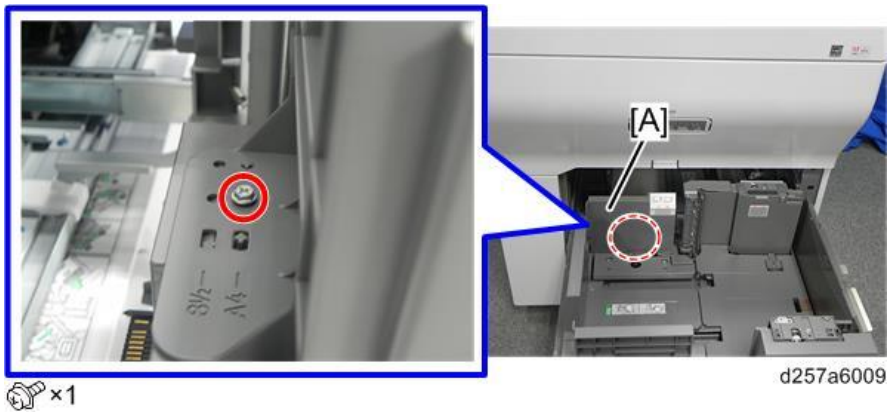


10. Pull out the left side of the paper feed unit for tray 1 [A], and then remove it.
(Remove the bracket [B] in order to remove the paper feed unit for tray 1 easily)

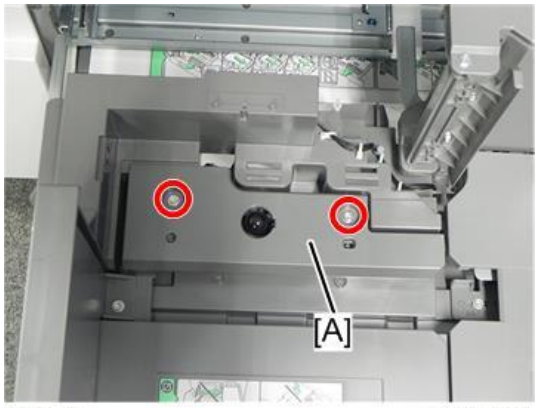
Rear Fence HP Sensor (S102), Left Tray Paper Sensor (S104)

1. Pull out paper tray 1.

2. Remove the side fence [A].

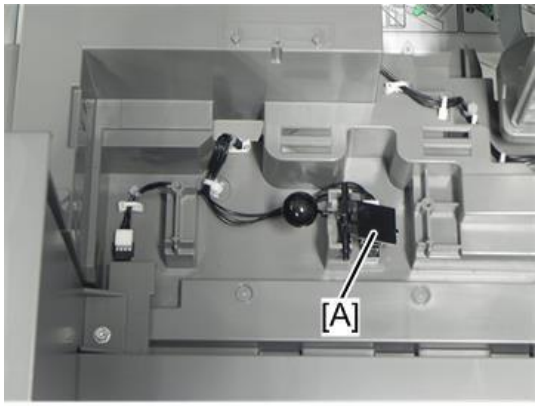


3. Remove the cover [A].



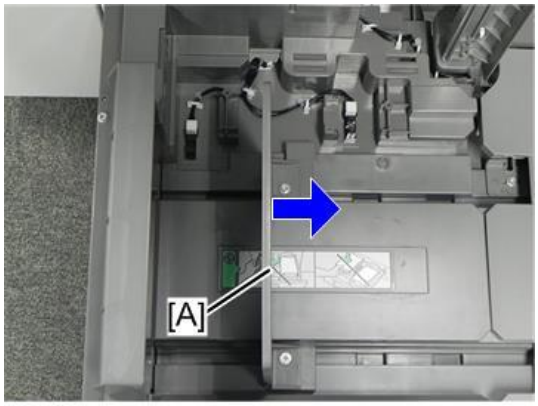
×2 d257a6010

4. Remove the feeler [A].



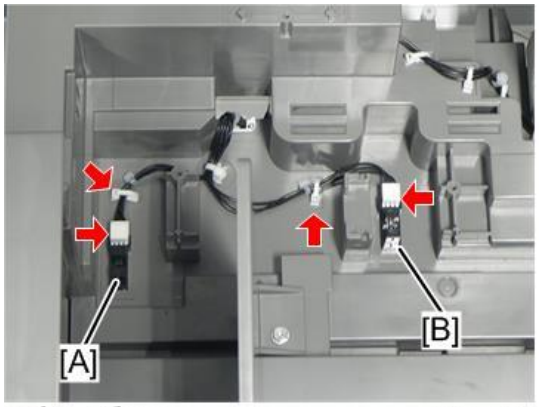
d257a6011

5. Slide the left tray back fence [A].



d257a6012

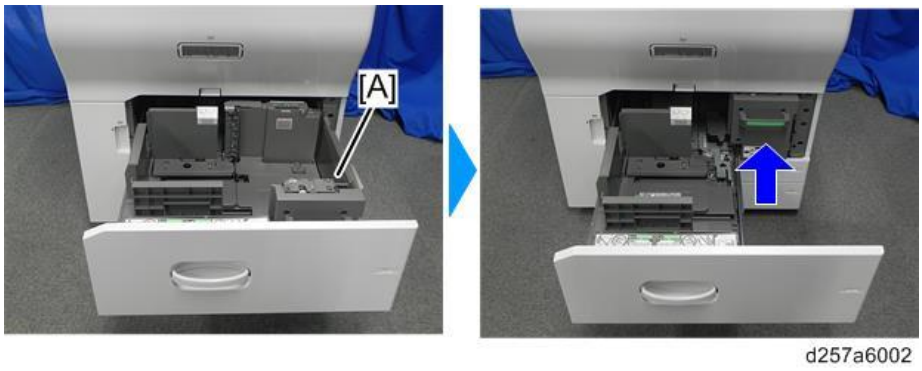
6. Remove the rear fence HP sensor (S102) [A] and the left tray paper sensor (S104) [B].



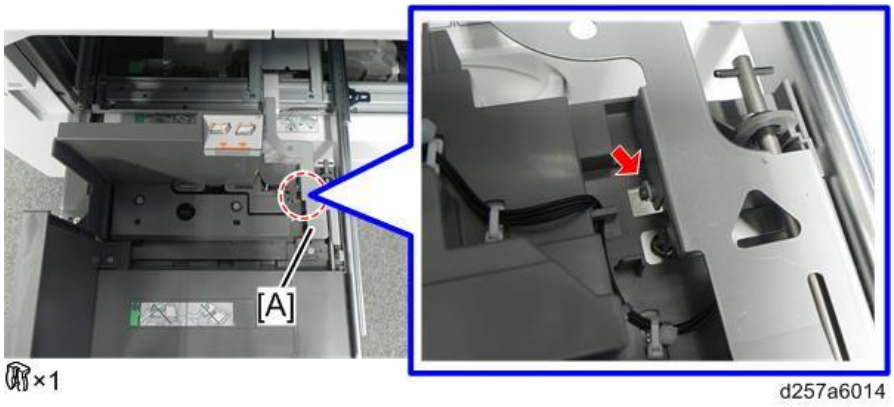
Rear Fence Return Sensor (S105)

1. Pull out paper tray 1.

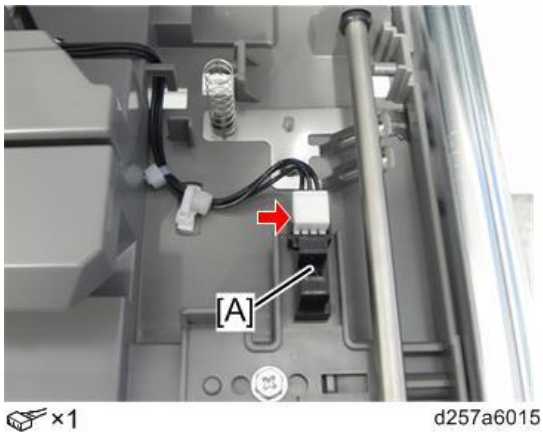
2. Push the right tandem tray [A] into the machine.



3. Remove the bracket [A].

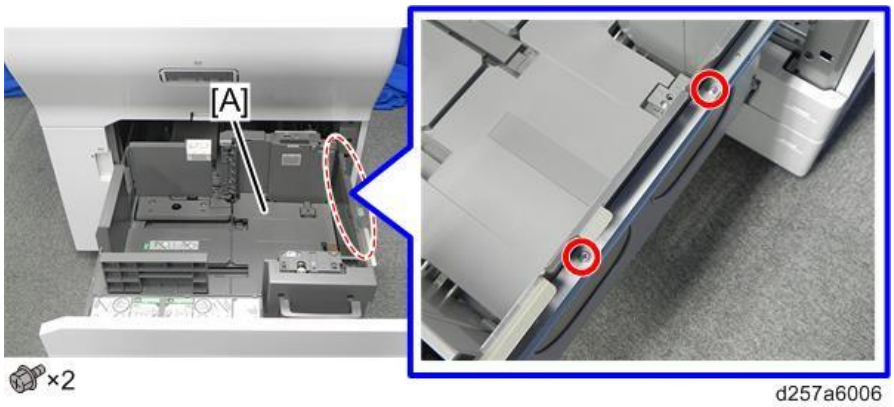


4. Remove the rear fence return sensor (S105) [A].



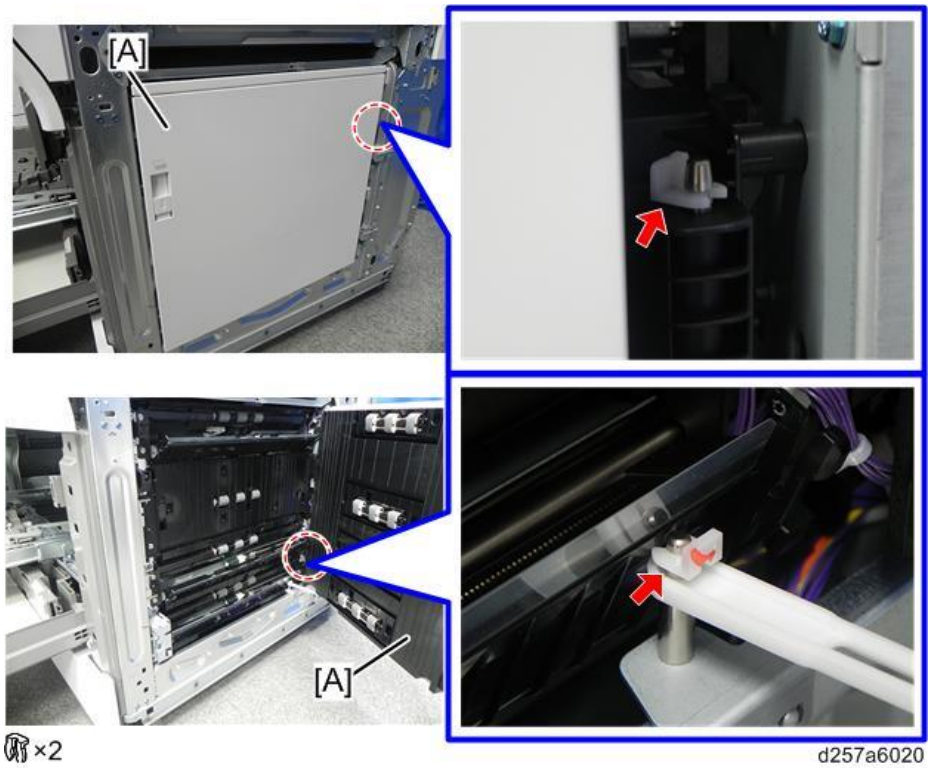
Paper Height Sensors 1-3, Tray Down Sensor, Right Tray Set Sensor

1. Remove the right lower cover of the machine exterior. (Right Lower Cover)
2. Pull out paper trays 1 and 2.
3. Remove the right side of paper tray 1 [A].*

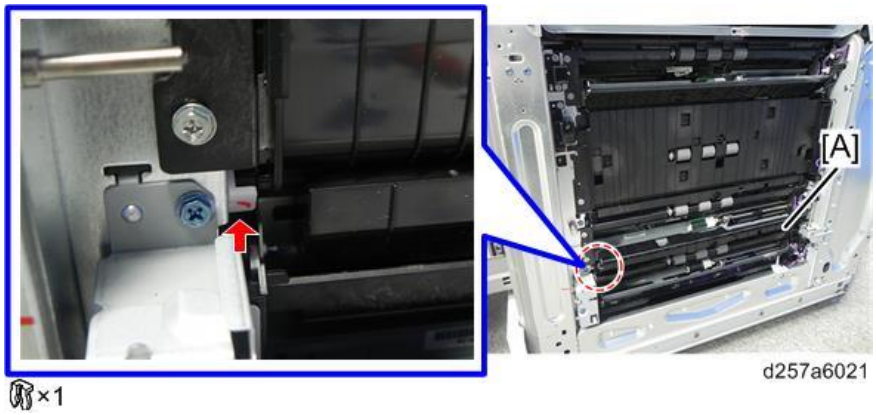


* Pro C5300S/C5310S use TCRU/ORU screws

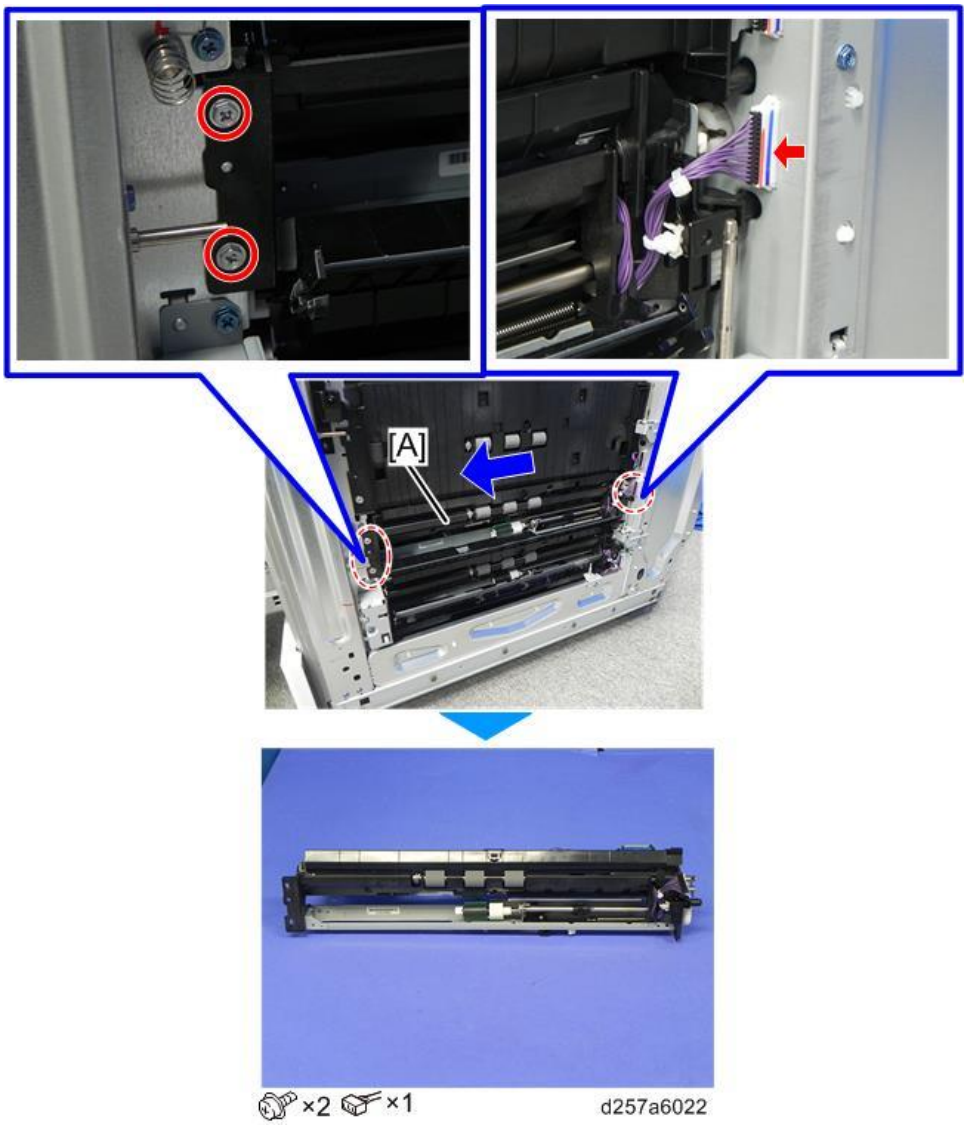
4. Remove the vertical transport unit [A].



5. Remove the paper guide plate for tray 2 [A].

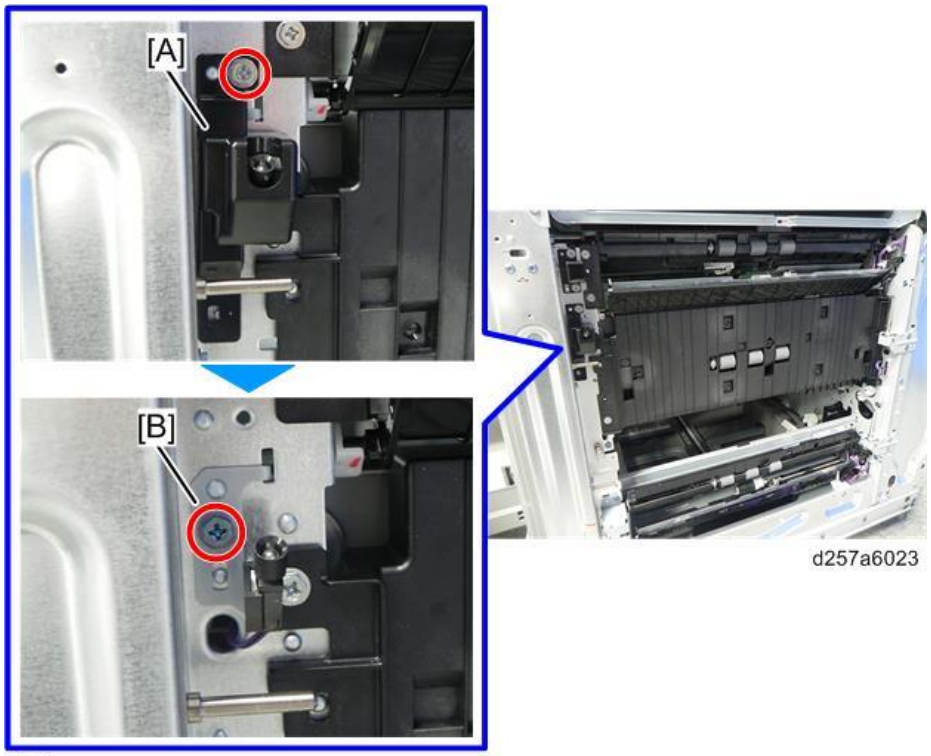


6. Remove the paper feed unit for tray 2 [A].

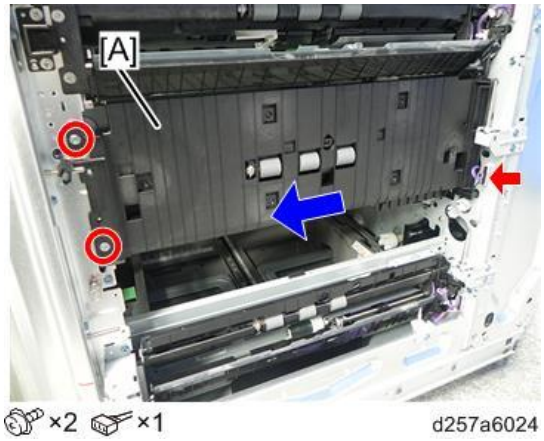


7. Remove the LED cover [A].

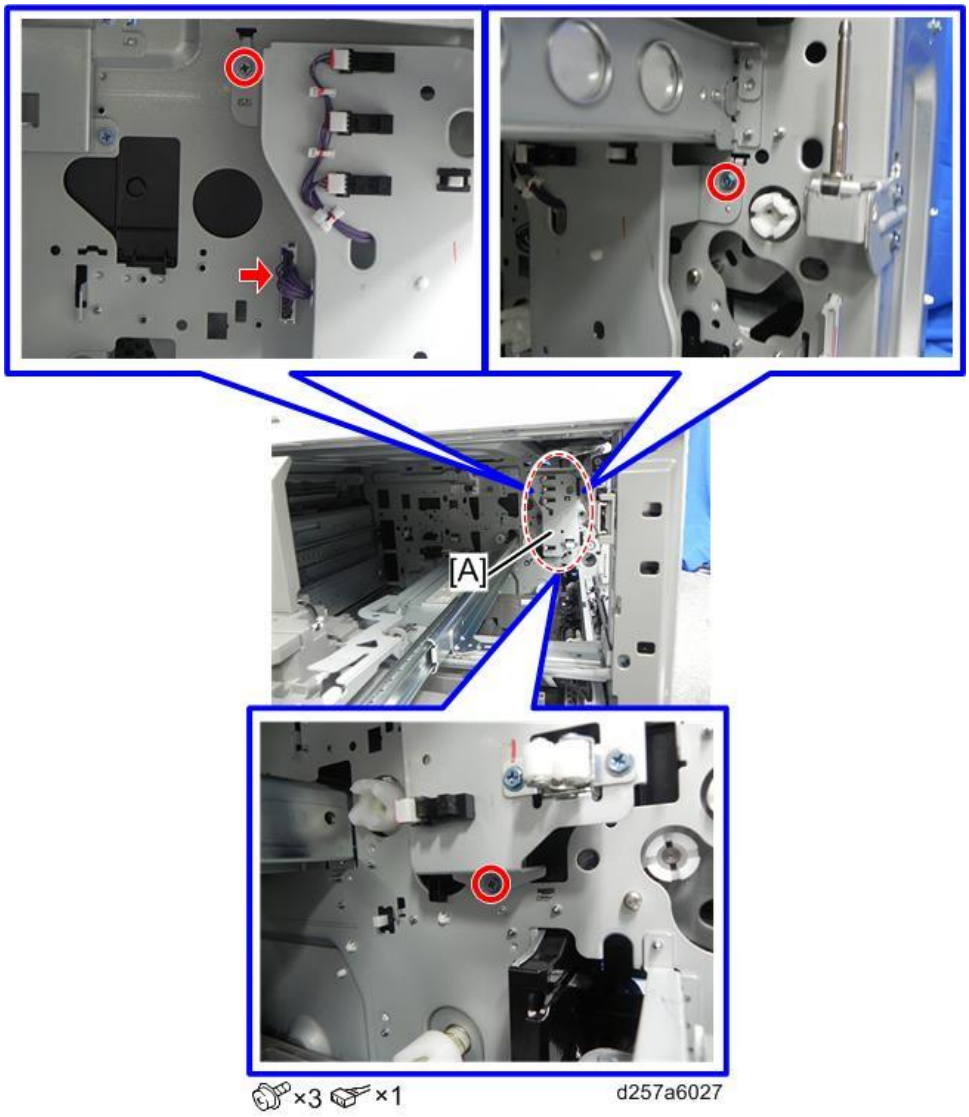
8. Remove the vertical transport LED [B] along with the bracket.



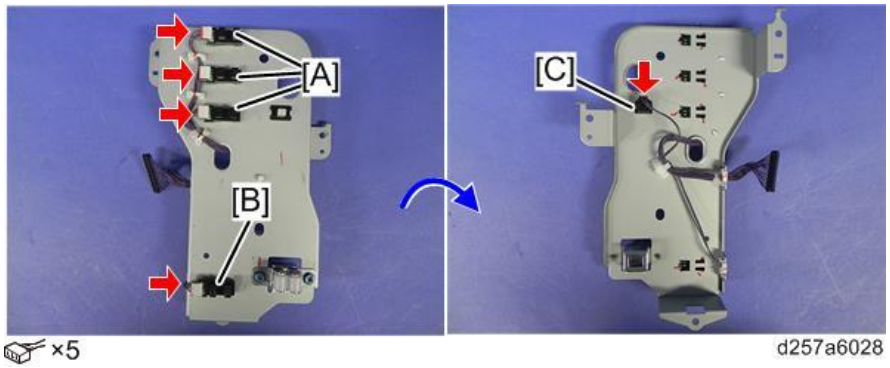
9. Remove the relay cover [A].



10. Remove the 5 sensors [A] along with the bracket, located inside the rear face of the machine.



11. Remove the paper height sensors 1, 2, 3 [A], tray down sensor [B] and right tray set sensor [C].

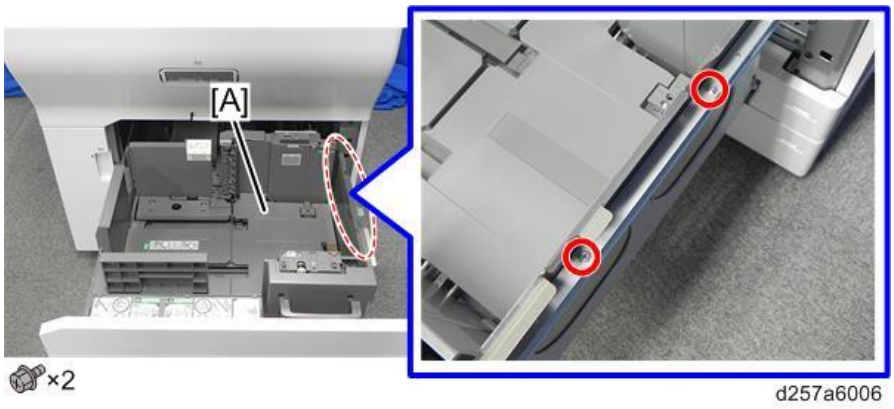


Rear End Fence Closed Sensor (S103)

1. Remove the right lower cover of the machine exterior. (Right Lower Cover)

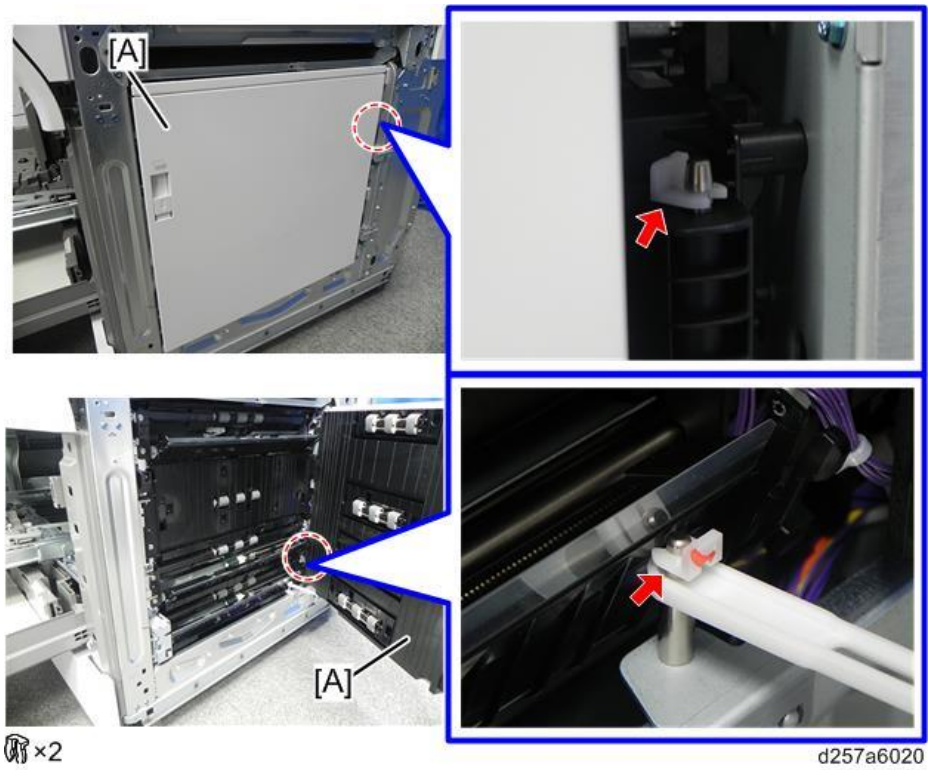
2. Pull out paper trays 1 and 2.

3. Remove the right side of paper tray 1 [A].*

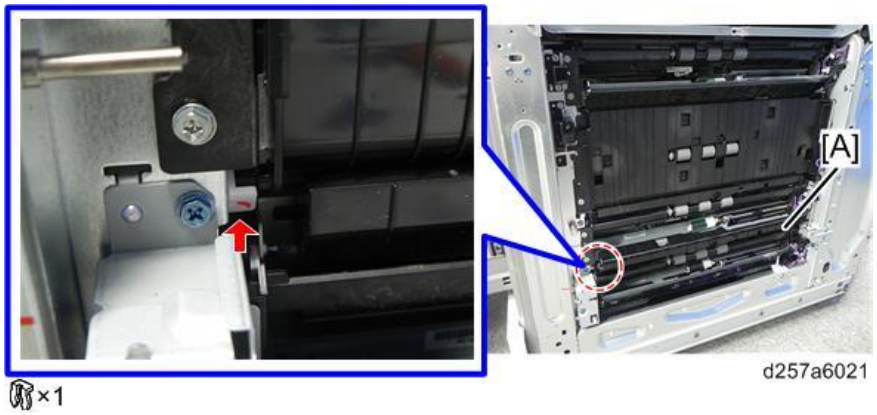


* Pro C5300S/C5310S use TCRU/ORU screws

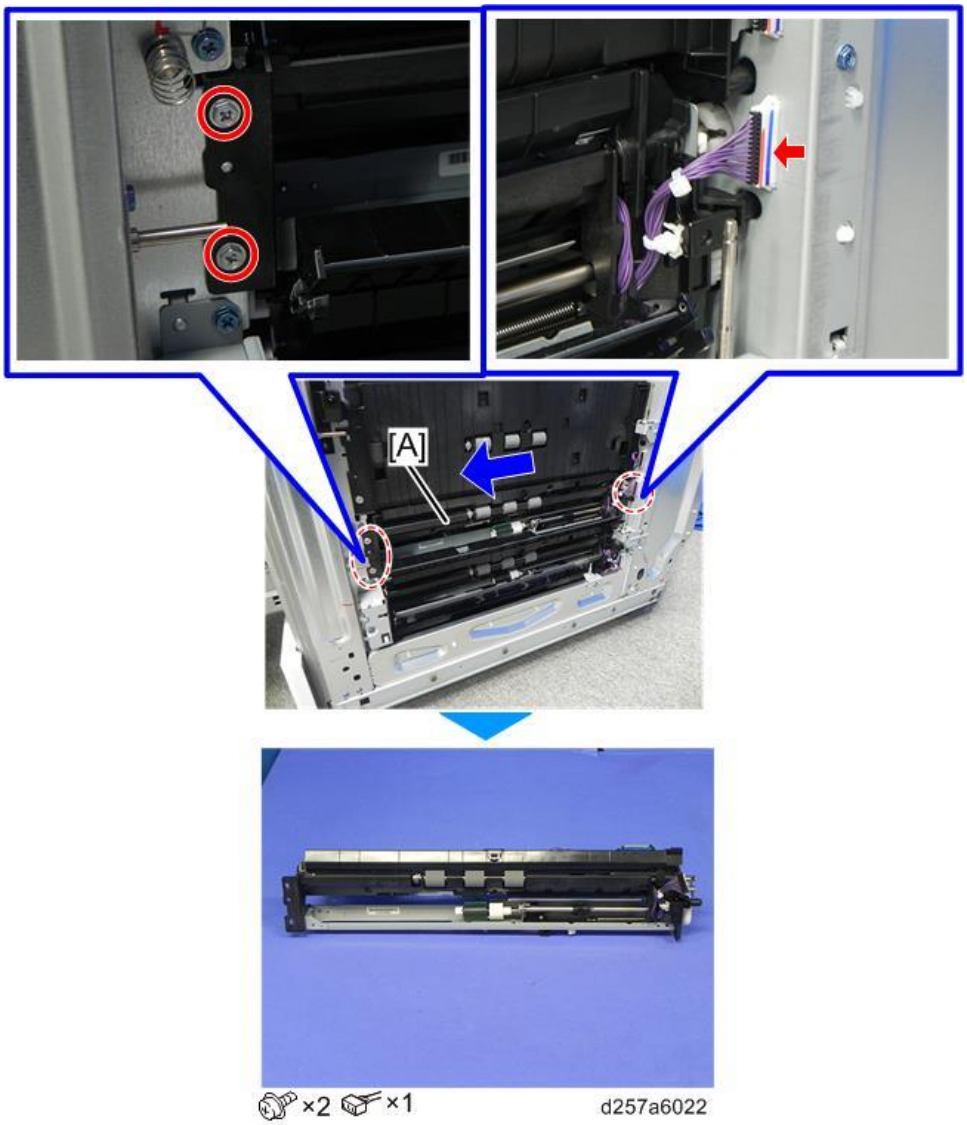
4. Remove the vertical transport unit [A].



5. Remove the paper guide plate for tray 2 [A].

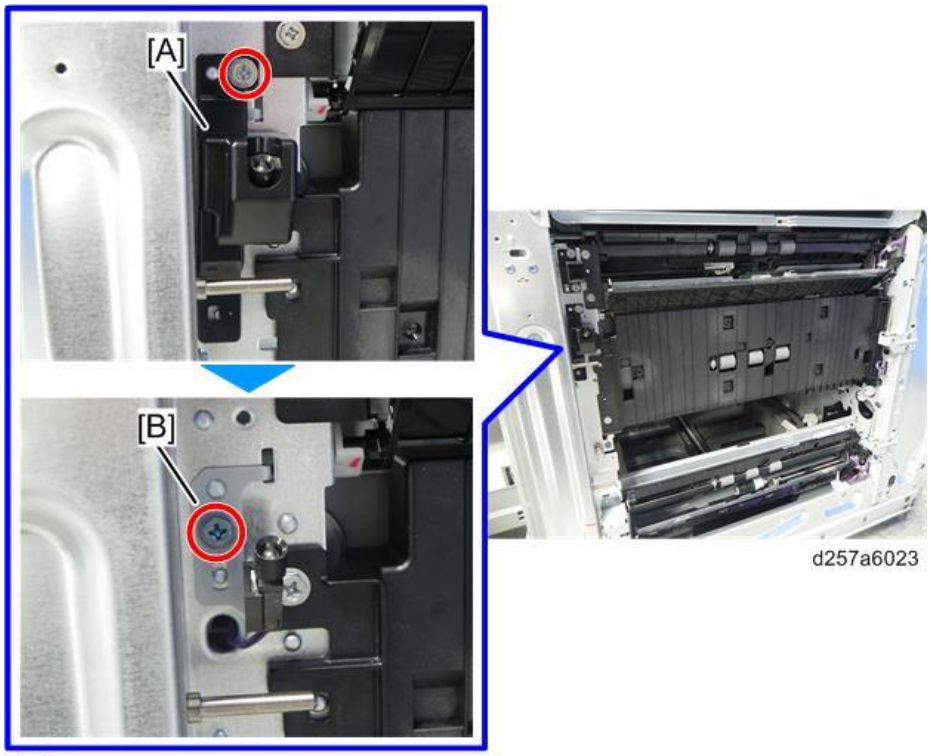


6. Remove the paper feed unit for tray 2 [A].

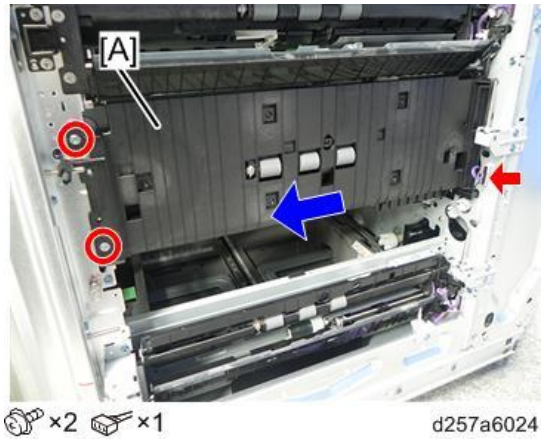


7. Remove the LED cover [A].

8. Remove the vertical transport LED [B] along with the bracket.

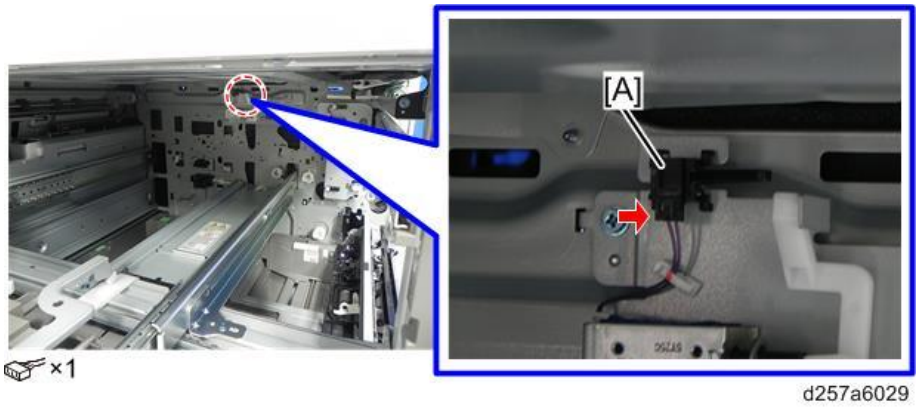


9. Remove the relay cover [A].



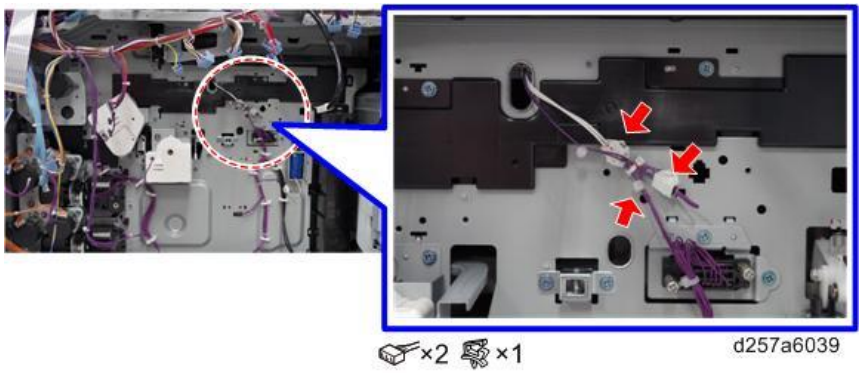
10. Remove the rear end fence closed sensor (S103) [A], located inside of the rear face of the

machine.



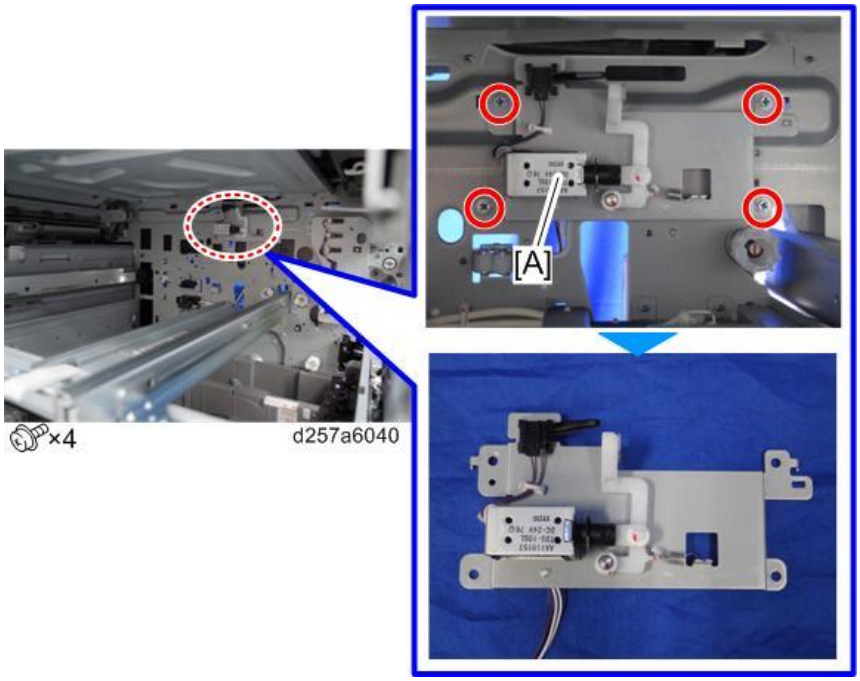
End Fence Rear Solenoid (SOL10)

1. Remove the PSU1 / PSU2 along with the bracket, located on the back side of the machine (When removing the motors and sensors that are behind the PSU1 and PSU2)
2. Disconnect the connectors for the rear end fence closed sensor and the end fence rear solenoid.

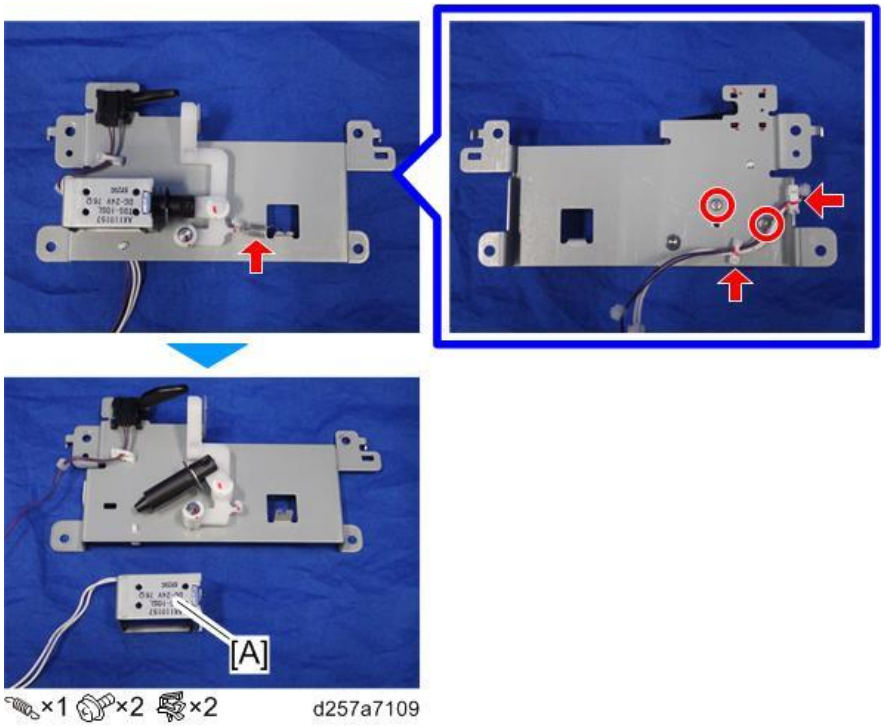


3. Remove the relay cover. (Rear End Fence Closed Sensor (S103))
4. Remove the end fence rear solenoid (SOL10) [A] along with the bracket, located inside the rear

face of the machine.



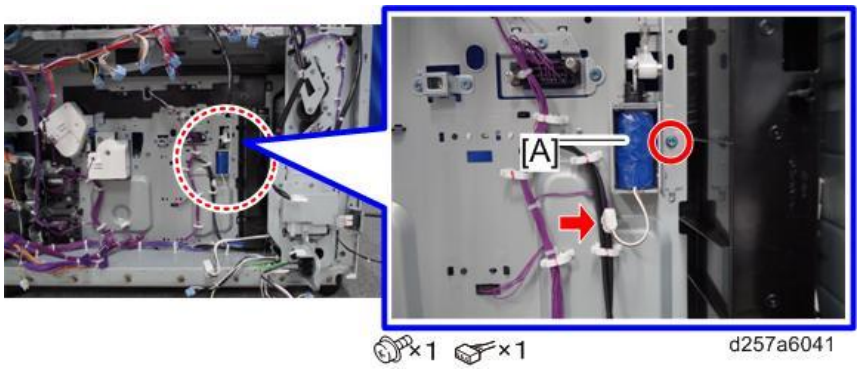
5. Remove the end fence rear solenoid (SOL10) [A].



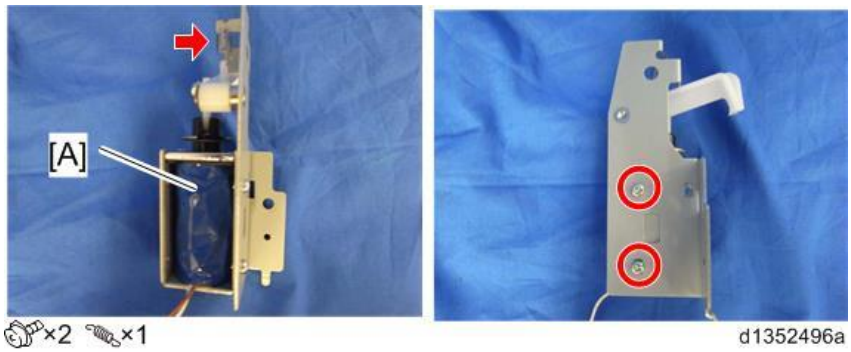
Left Tray Lock Solenoid (SOL12)

1. Remove the PSU1 / PSU2 along with the bracket, located inside the rear face of the machine.
(When removing the motors and sensors that are behind the PSU1 and PSU2)

2. Remove the left tray lock solenoid (SOL12) [A] along with the bracket.



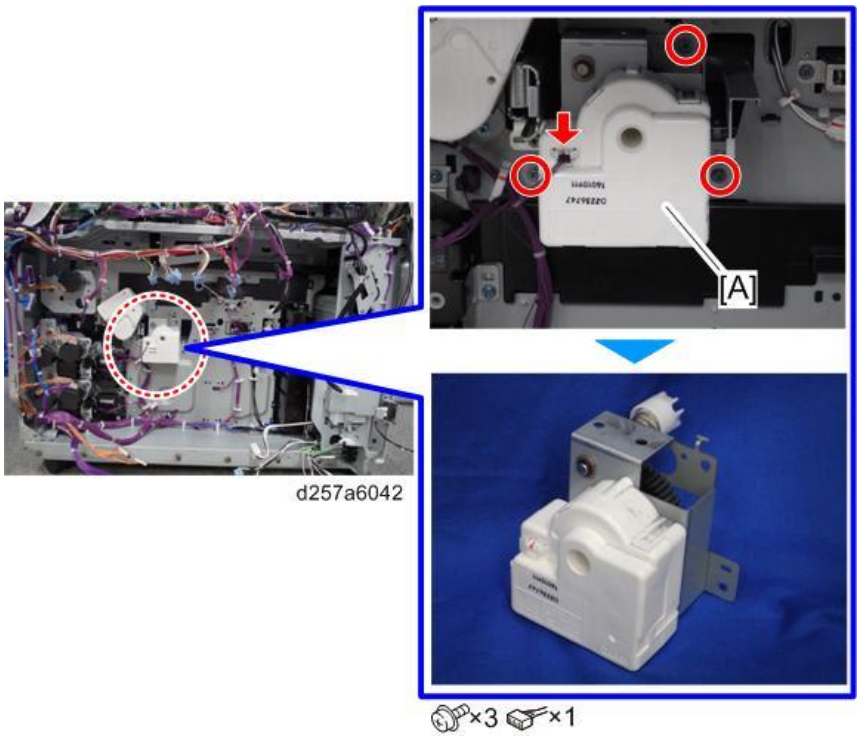
3. Remove the left tray lock solenoid (SOL12) [A].



Rear Fence Drive Motor (M61)

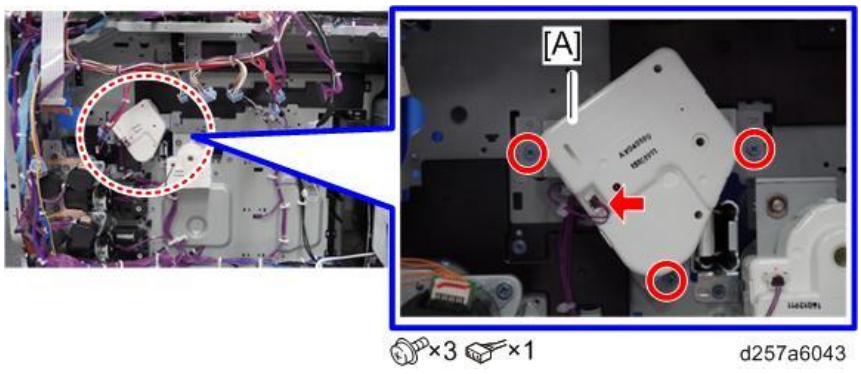
1. Remove the PFB along with the bracket, located on the back side of the machine. (When removing the motors that are behind the PFB)
2. Remove the PSU1 / PSU2 along with the bracket, located on the back side of the machine. (When removing the motors and sensors that are behind the PSU1 and PSU2)

3. Remove the rear fence drive motor (M61) [A].



1st Tray Lift Motor (M58)

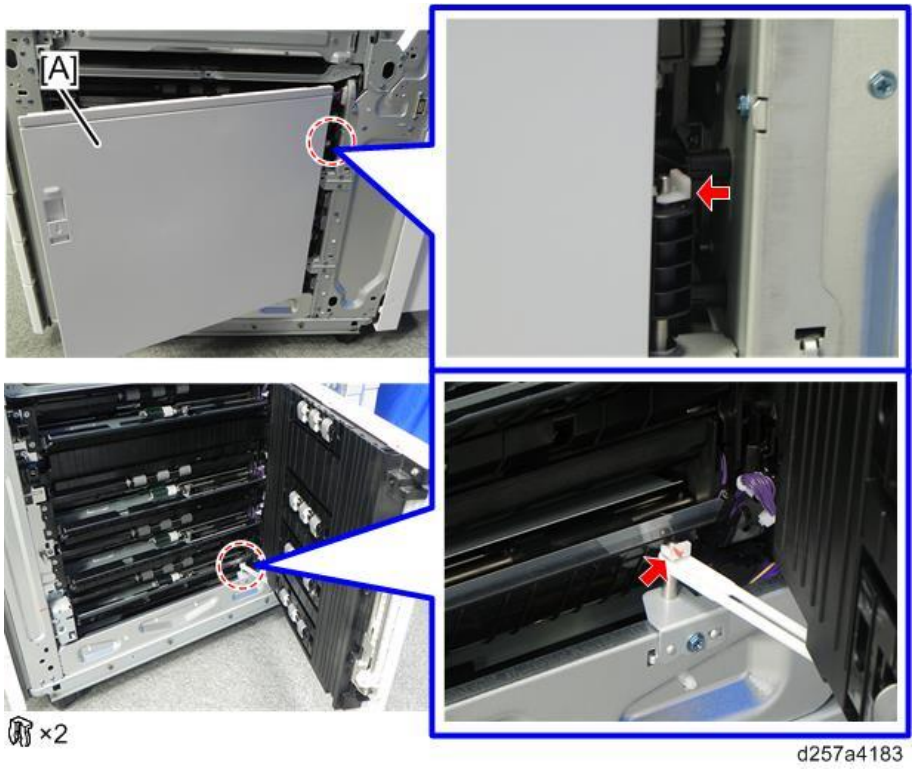
1. Remove the PFB along with the bracket, located on the back side of the machine. (When removing the motors that are behind the PFB)
2. Remove the PSU1 / PSU2 along with the bracket, located on the back side of the machine. (When removing the motors and sensors that are behind the PSU1 and PSU2)
3. Remove the vertical transport motor along with the bracket. (Vertical Transport Motor (M63))
4. Remove the 1st tray lift motor (M58) [A].



Paper Feed Section (Tray 2-3, Vertical Transport)

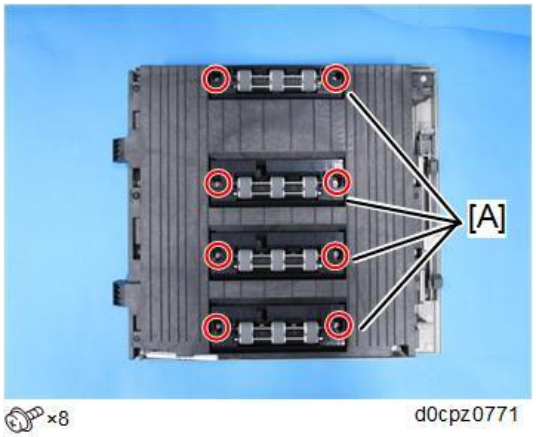
Vertical Transport Door

1. Remove the right lower cover. (Right Lower Cover)
2. Remove the vertical transport door [A].

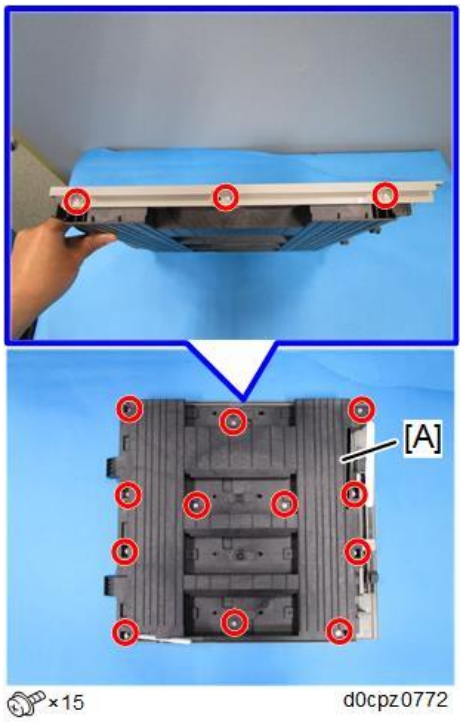


Vertical Transport Inner Cover

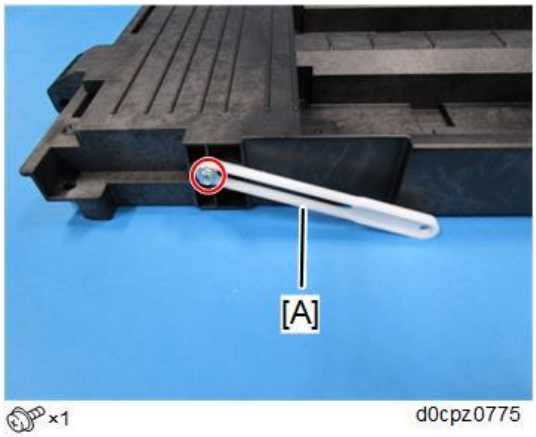
1. Remove the vertical transport door. (Vertical Transport Door)
2. Remove all the vertical transport belt units [A].



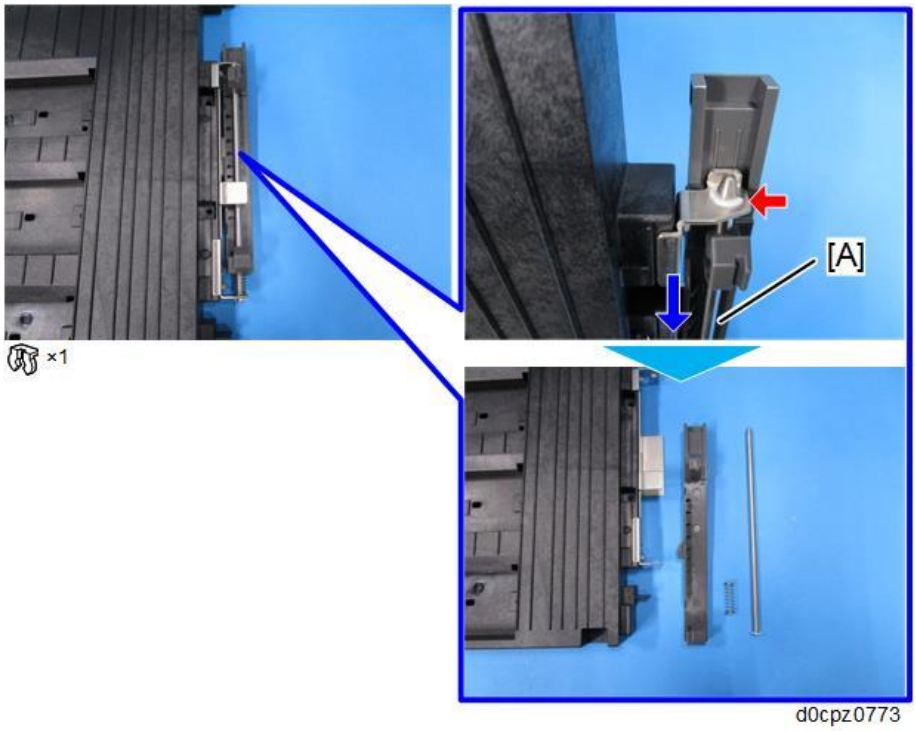
3. Remove the vertical transport inner cover [A].



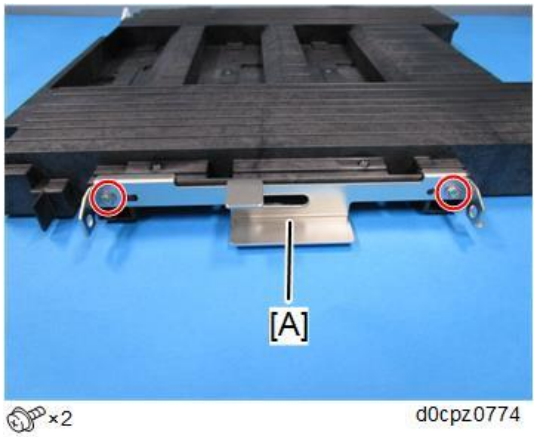
4. Remove the hinge [A].



5. Remove the shaft [A].

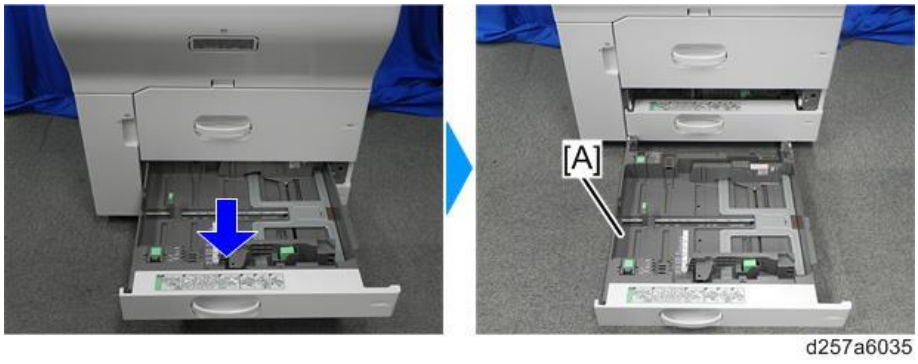


6. Remove the bracket [A].



Paper Tray

1. Pull out the paper tray [A].



Installing the Side Fence Support Plate (IM C6500/C8000)

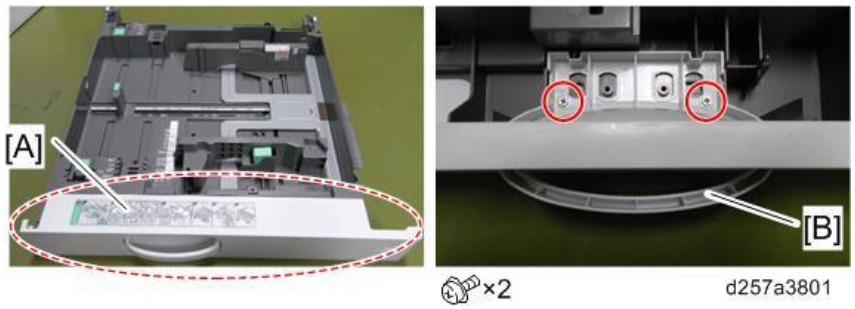
For IM C6500/C8000, a side fence support plate to help the paper feed straight can be installed in the paper tray.

This is provided as a service part for IM C6500/C8000. (The paper tray for Pro C5300S/C5310S is originally equipped with the side fence support plate.)

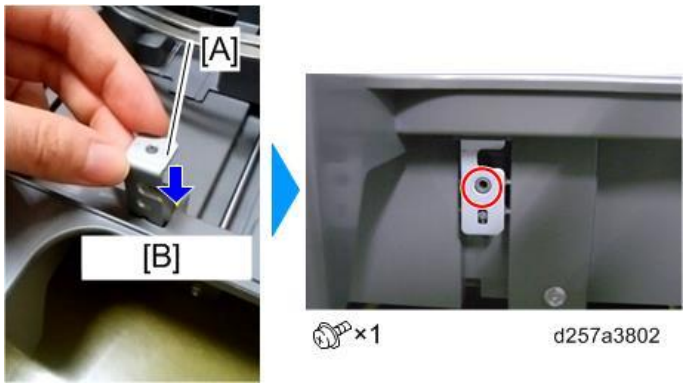
Accessories

No.	Description	Q'ty
1	Plate Nut for Tray	1
2	Tapping Screw: 3x10	1
3	Side Fence Support Plate	1
4	Screw: 2.5mm	1
5	Plate Nut Holder	1
6	Plate Nut for Side Fence	1
7	Spacer	1
8	Knob Screw for Support Plate	1
9	Knob Screw for Side Fence	1
10	E-Rings	1

1. Remove the cover [A] and handle [B] from the paper tray.

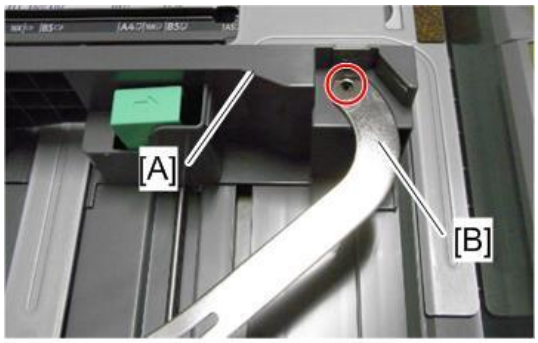


2. Install the plate nut for tray [A] as shown below. (M3x10)

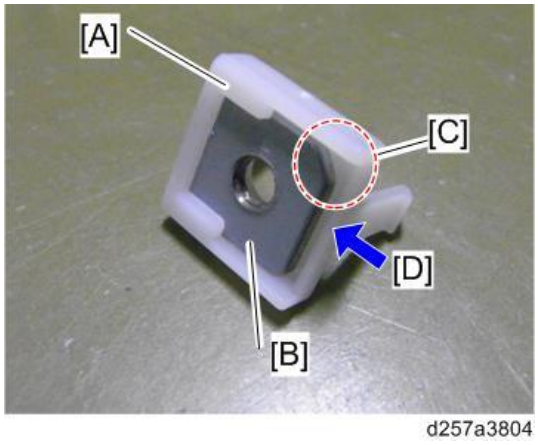


[B]: Insert the plate nut for the tray.

3. Install the side fence support plate [B] on the side fence [A]. (Screw: 2.5mm)



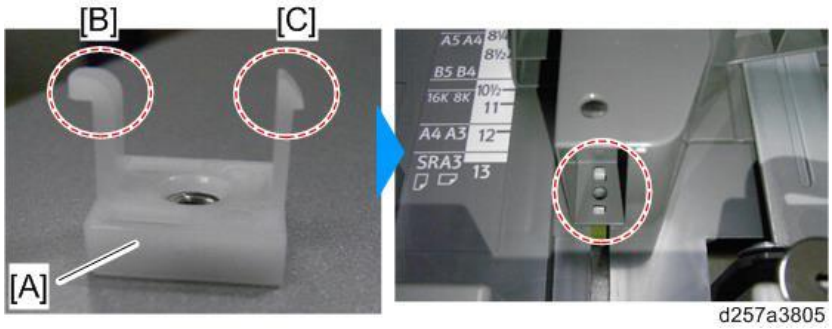
4. Attach the plate nut for side fence [B] to the plate nut holder [A].



[C]: Cut-out in the nut

[D]: Insert in this direction

5. Install the plate nut holder [A] on the side fence, so that the hook is at the front side and the bent part is at the rear side as shown below.

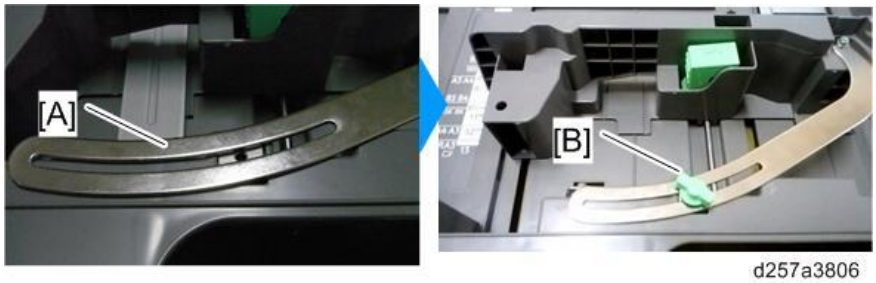


[B]: Bent part (rear side)

[C]: Hook (front side)

6. Align the side fences gently against the stack of paper. Then secure the side fence support plate

[A] by fastening the knob screw for the support plate [B].

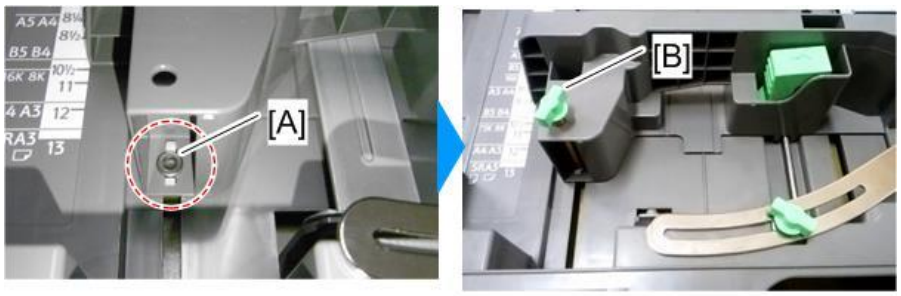


d257a3806

7. Attach the E-ring to the knob screw for the support plate.

d257a3807

8. Place the spacer [A], and then secure the side fence by fastening the knob screw for the side fence [B].



d257a3808

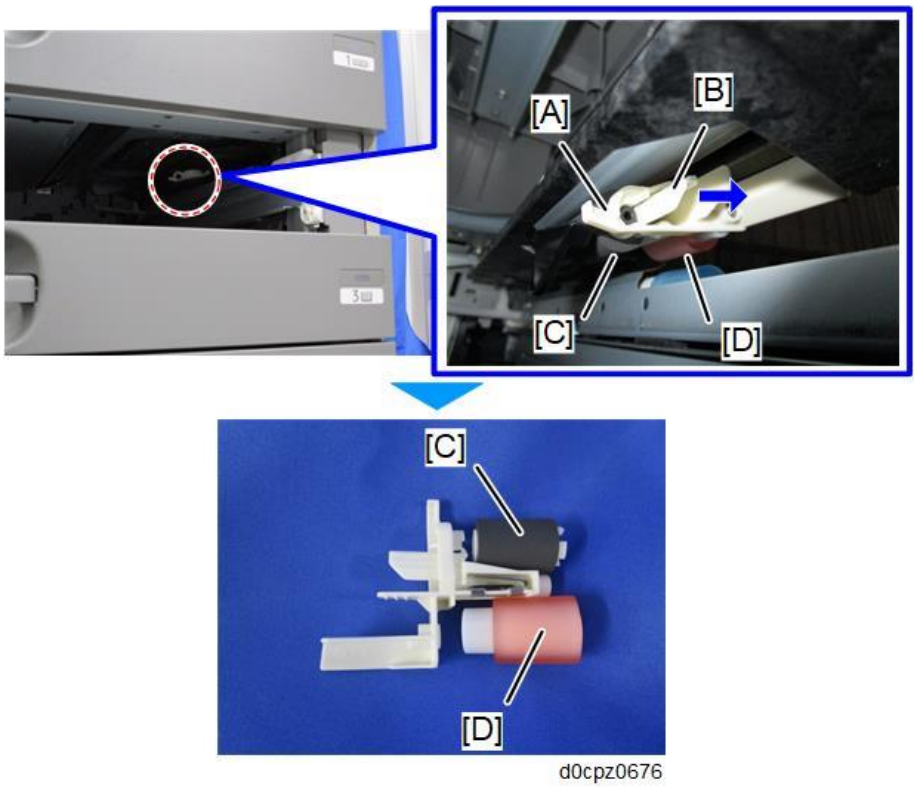
9. Attach the E-ring to the knob screw for the side fence.

d257a3809

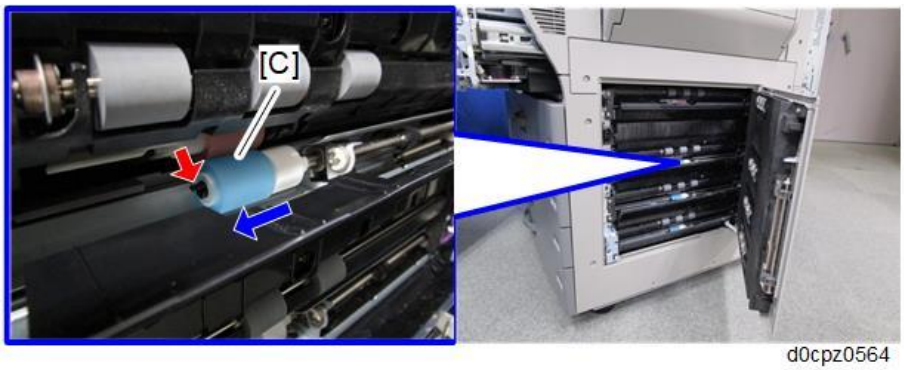
10. Put back the cover and handle removed in step 1.

Feed Roller, Pick-up Roller and Separation Roller

1. Pull out the paper tray.
2. Release the knob [B] toward the direction of the arrow as shown below and remove the holder [A].
3. Remove the pick-up roller [C] and feed roller [D].
   e.g.: Tray 2



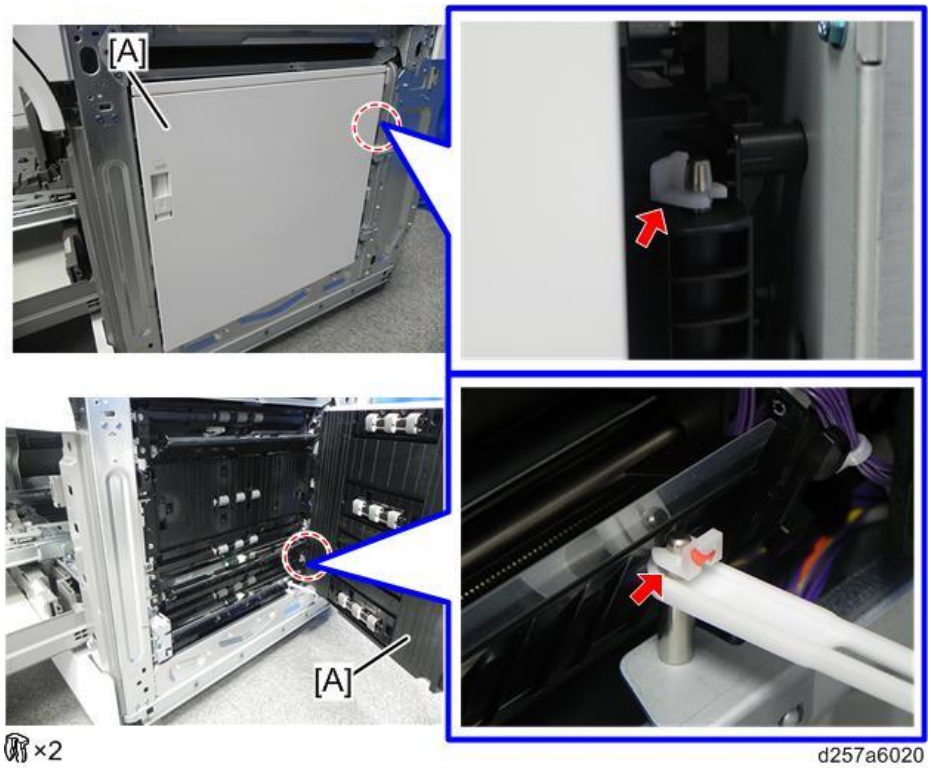
4. Open the vertical transport door, and then remove the separation roller [C].
   e.g.: Tray 2



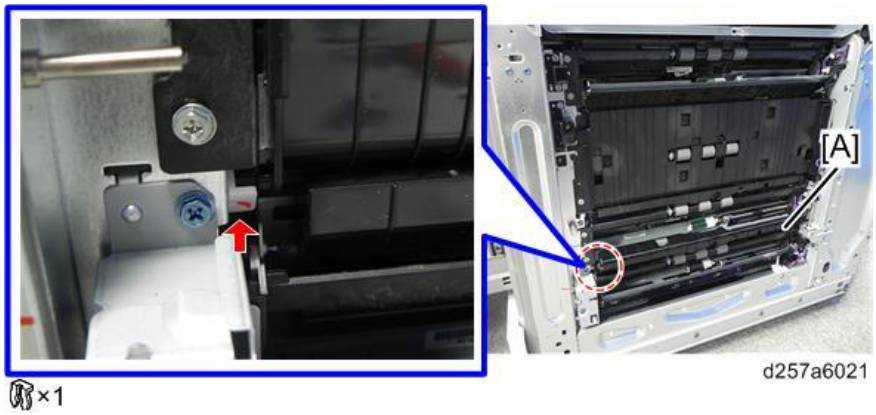
Paper Feed Unit

1. Remove the right lower cover of the machine exterior. (Right Lower Cover)
2. Pull out paper tray 2 (in the case of the paper feed unit for tray 2).

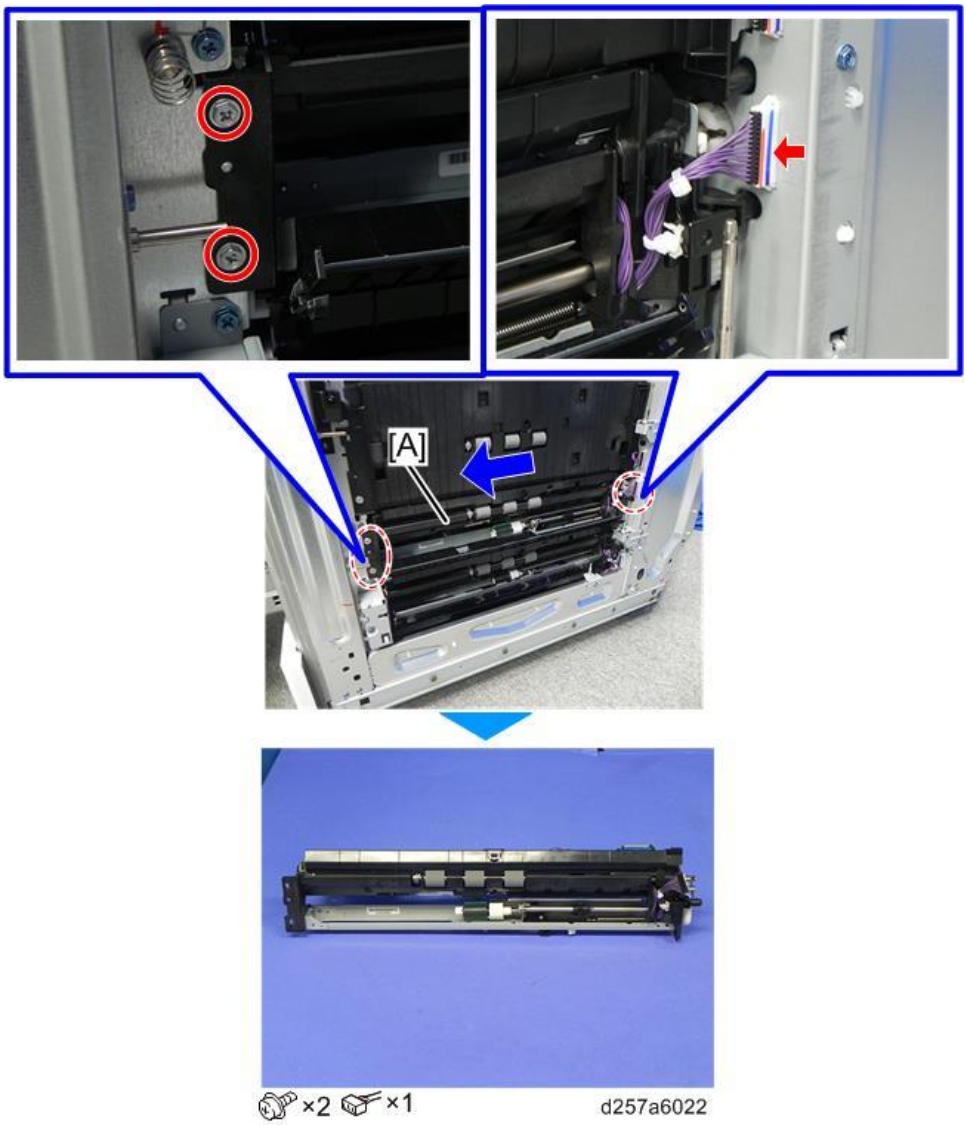
3. Remove the vertical transport unit [A].



4. Remove the paper guide plate [A].



5. Remove the paper feed unit for tray 2 [A].



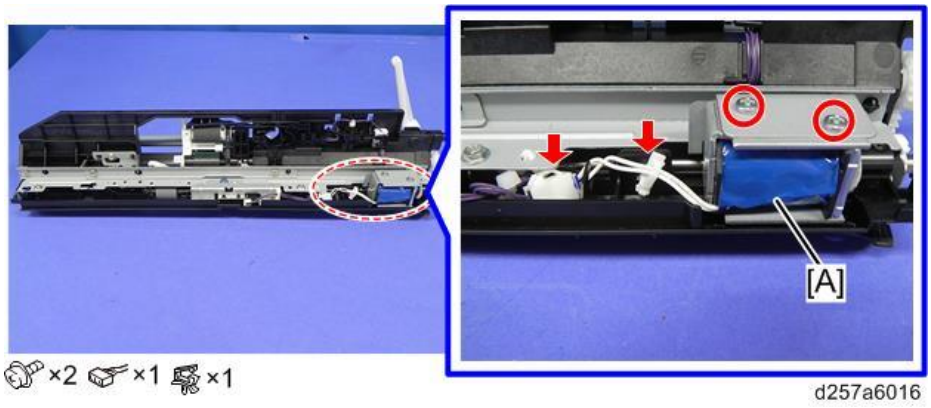
Note

- For tray 3, replace with the same procedure as for tray 2.

Pick-up Solenoid (SOL7)

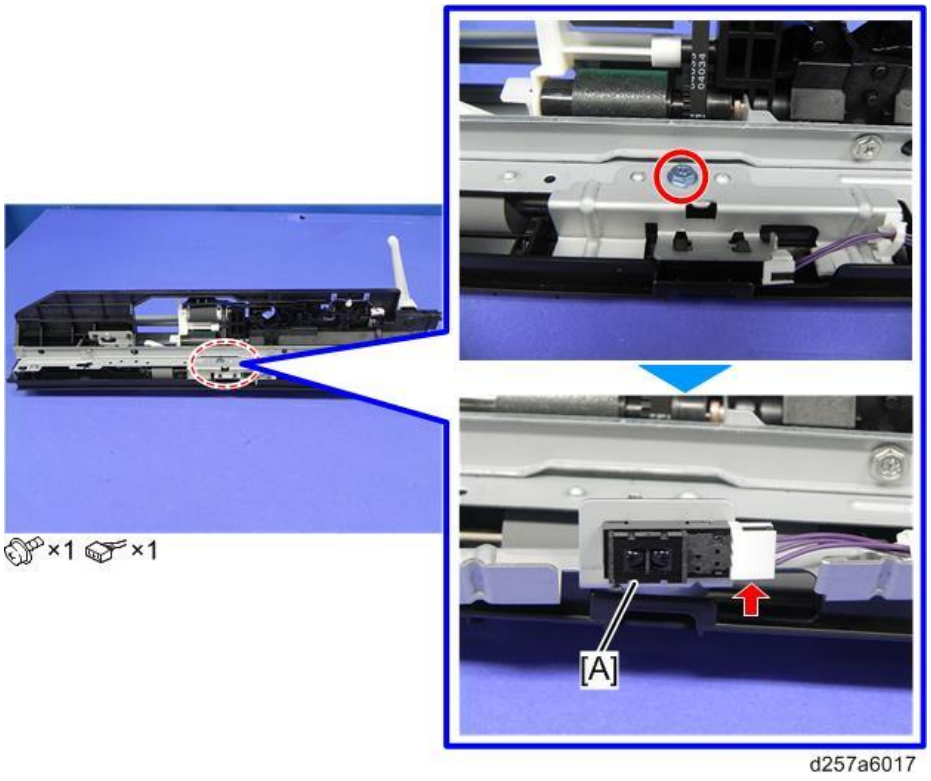
1. Remove the paper feed unit. (Paper Feed Unit)

2. Remove the pick-up solenoid (SOL7) [A].



Transport Sensor (S91)

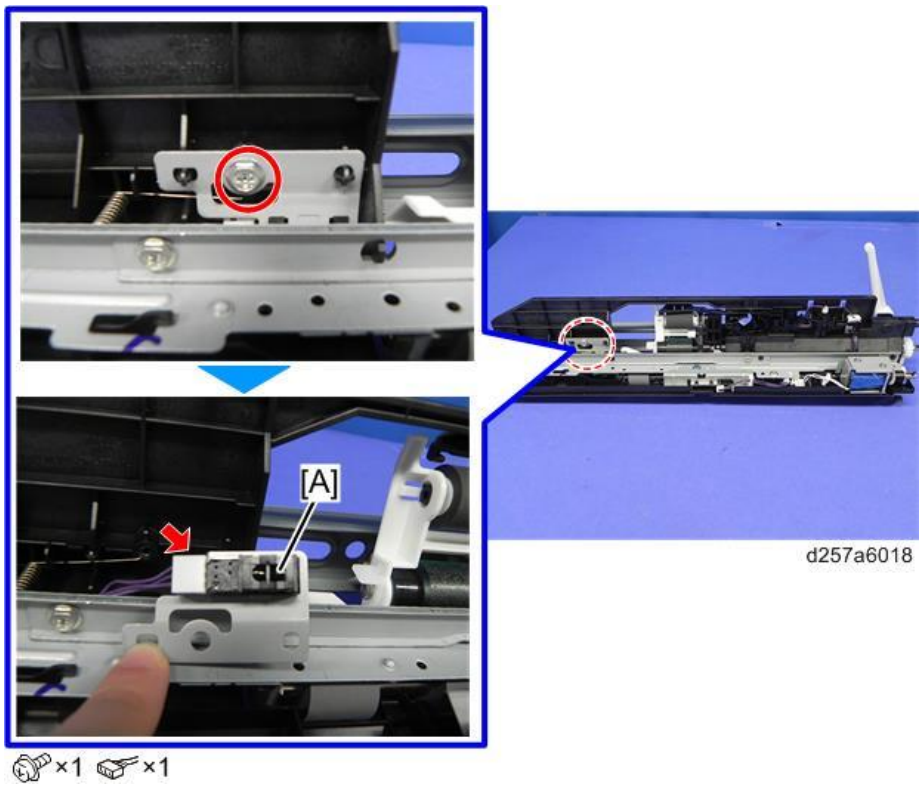
1. Remove the paper feed unit. (Paper Feed Unit)
2. Remove the transport sensor (S91) [A].



Paper Feed Sensor (S92)

1. Remove the paper feed unit. (Paper Feed Unit)

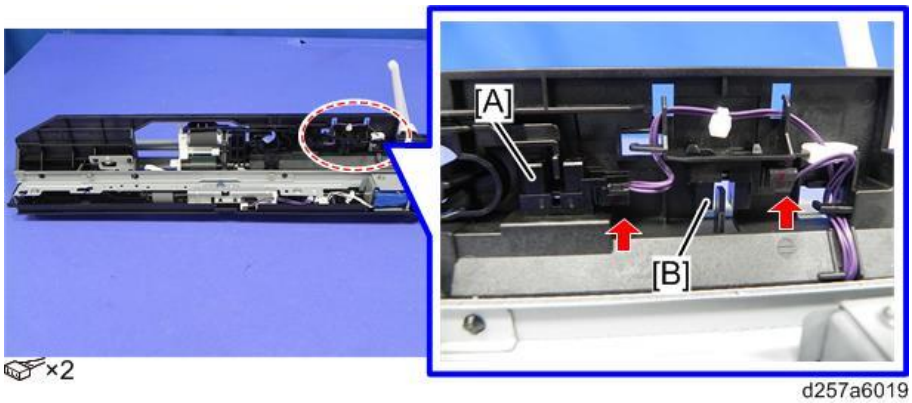
2. Remove the paper feed sensor (S92) [A].



Paper Tray Upper Limit Sensor (S89), Paper End Sensor (S90)

1. Remove the paper feed unit. (Paper Feed Unit)

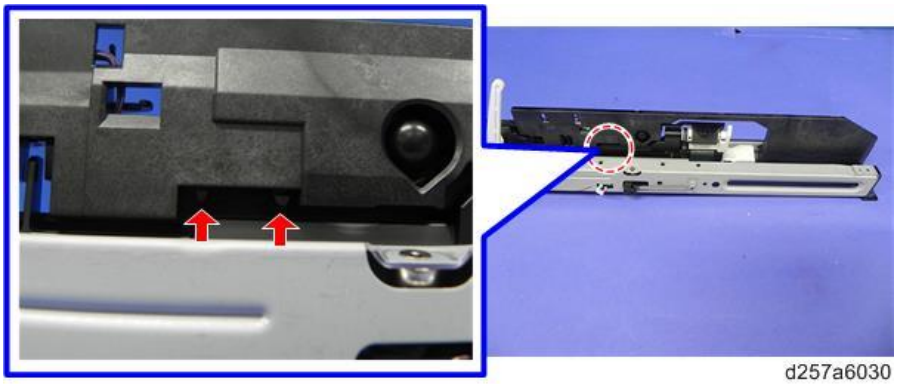
2. Remove the paper tray upper limit sensor (S89) [A] and paper end sensor (S90) [B].



Note

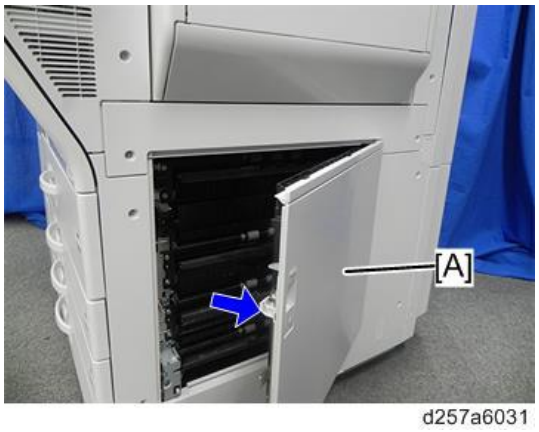
- When removing the paper end sensor, remove the hook from the opposite side as shown

in the photo above.



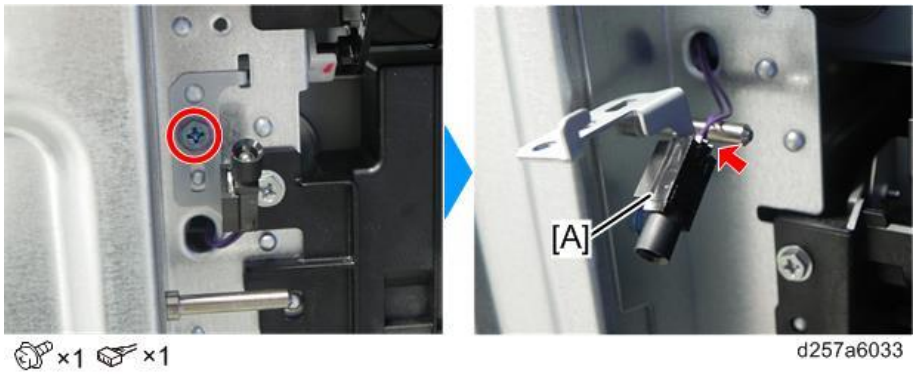
Vertical Transport LED (LED14)

1. Open the vertical transport door [A].

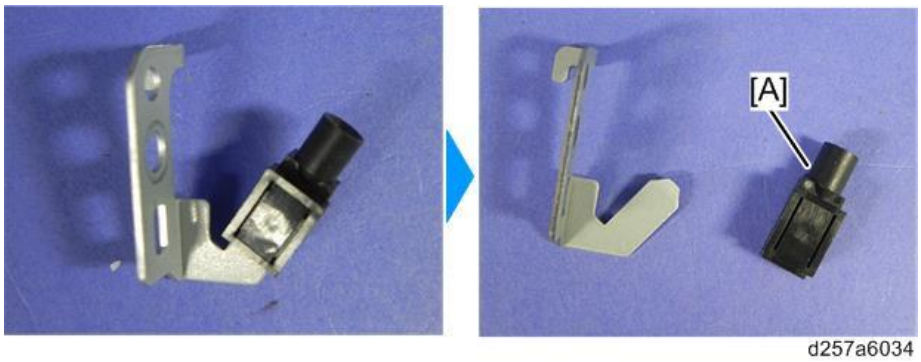


2. Remove the LED cover [A].

3. Remove the vertical transport LED (LED14) [A] along with the bracket.

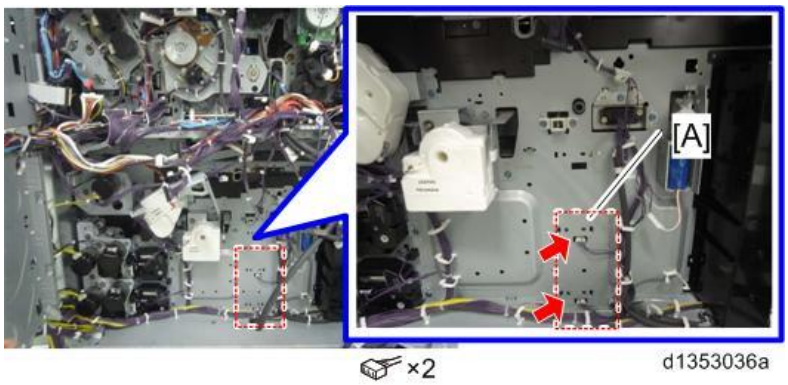


4. Remove the vertical transport LED (LED14) [A].



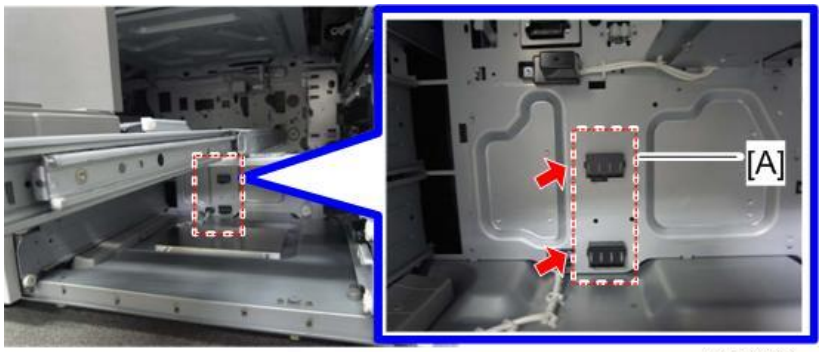
Tray Size Switch (SW13)

1. Remove the PSU1 / PSU2 along with the bracket, located on the back side of the machine. (When removing the motors and sensors that are behind the PSU1 and PSU2)
2. Disconnect two connectors [A] from the tray size switches.



3. Pull out the paper trays from the front side of the machine and remove the tray size switches

(SW13) [A].



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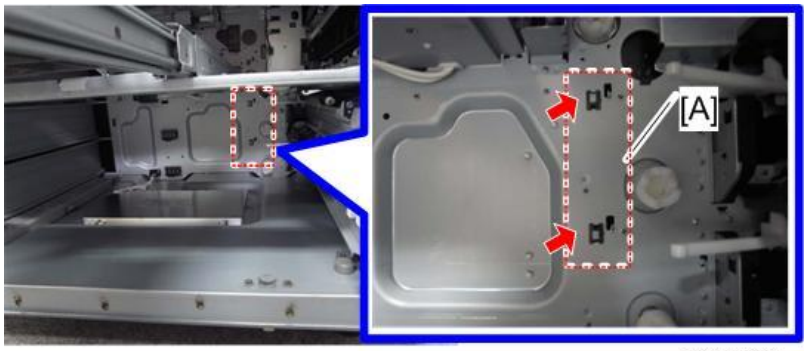
Tray Set Switches (SW14)

1. Remove the PSU1 / PSU2 along with the bracket, located on the back side of the machine. (When removing the motors and sensors that are behind the PSU1 and PSU2)
2. Disconnect two connectors [A] from the tray set switches (S114).

d1353037a

3. Pull out the paper trays from the front side of the machine and remove the two tray set switches (SW14) [A].



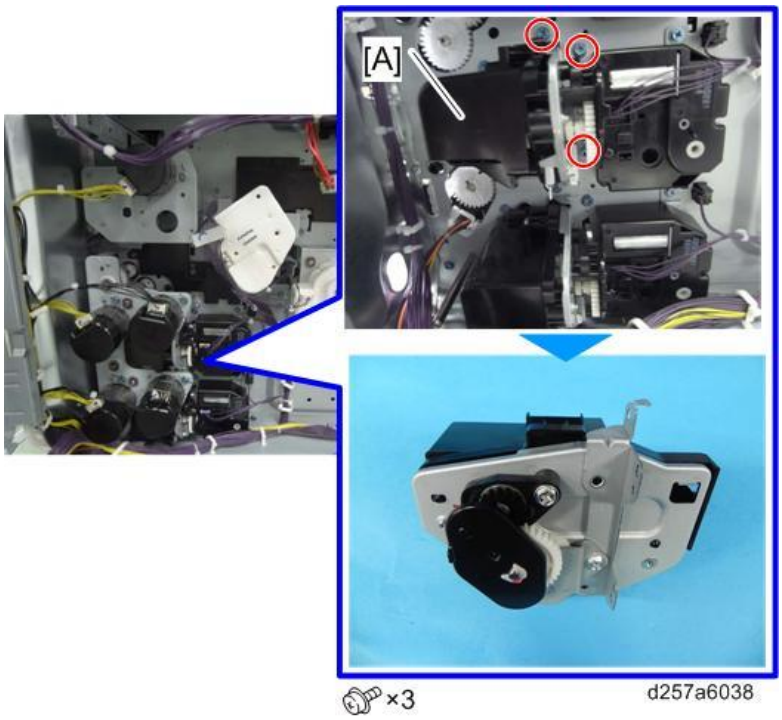
d1353022

Tray Pull-In Device

1. Remove the PFB along with the bracket, located on the back side of the machine. (When removing the motors that are behind the PFB)
2. Remove the PSU1 / PSU2 along with the bracket, located on the back side of the machine. (When

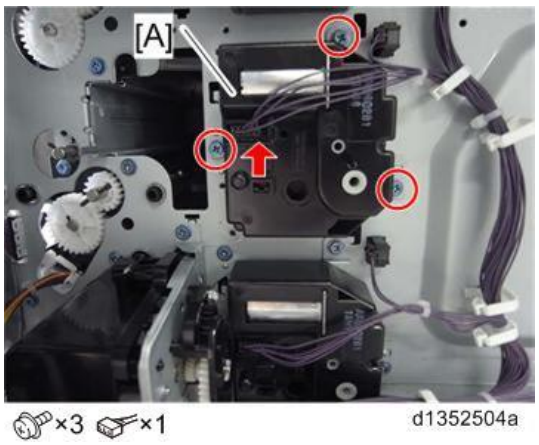
removing the motors and sensors that are behind the PSU1 and PSU2)

3. Remove the paper feed motor for paper tray 2, or the paper feed motor for paper tray 3. (2nd Paper Feed Motor (M64), 2nd Transport Motor (M65), 3rd Paper Feed Motor (M66), 3rd Transport Motor (M67))
4. Remove the tray pull-in device [A].



Paper Tray Lift Motor (M57)

1. Remove the tray pull-in device. (Tray Pull-In Device)
2. Remove the paper tray lift motor (M57) [A].
   e.g.: for paper tray 2



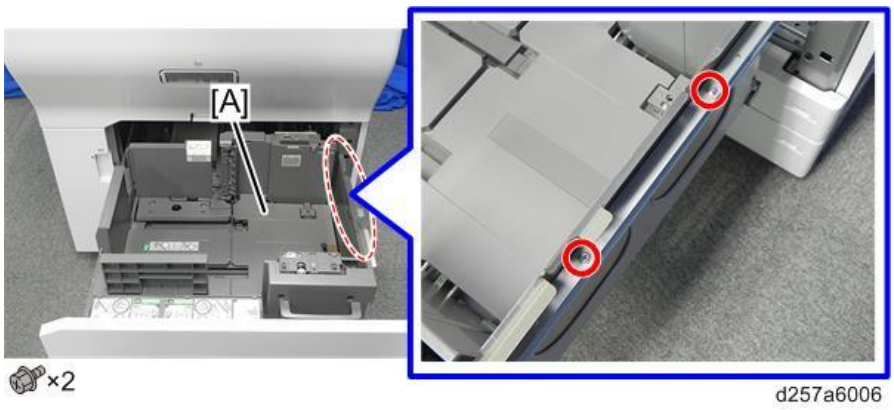
Note

- For tray 3, replace with the same procedure as for tray 2.

Tray Heater

Upper Tray Heater (H2)

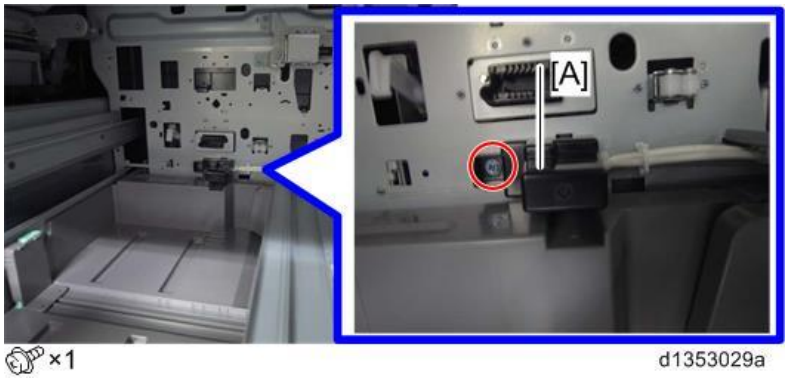
1. Pull out the paper tray.
2. Remove the right side of paper tray 1 [A].*



* Pro C5300S/C5310S use TCRU/ORU screws

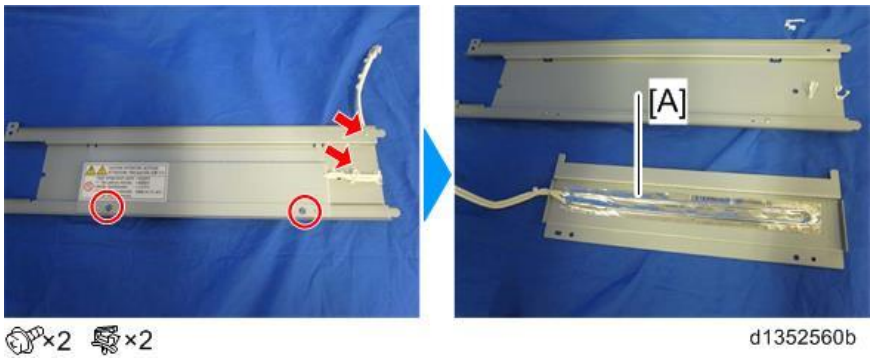
3. Remove the fixing screws of the bracket for the upper tray heater (H2) [A].

4. Remove the connector cover [A].



5. Remove the upper tray heater (H2) [A] along with the bracket.

6. Remove the upper tray heater (H2) [A].



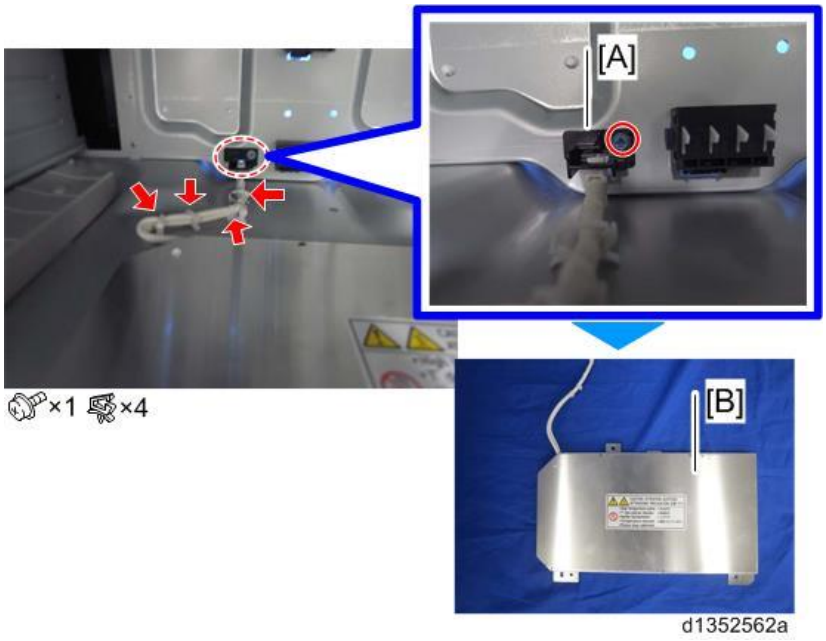
Lower Tray Heater (H3)

1. Pull out the paper tray.

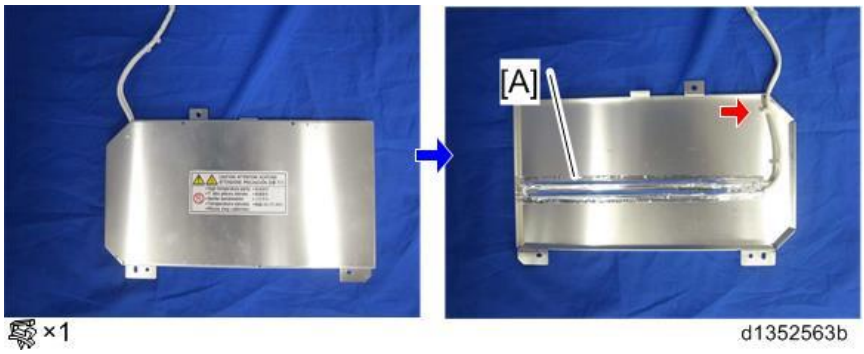
2. Remove the fixing screws of the bracket for the lower tray heater (H3) [A].

3. Remove the connector cover [A].

4. Remove the lower tray heater (H3) [B] along with the bracket.



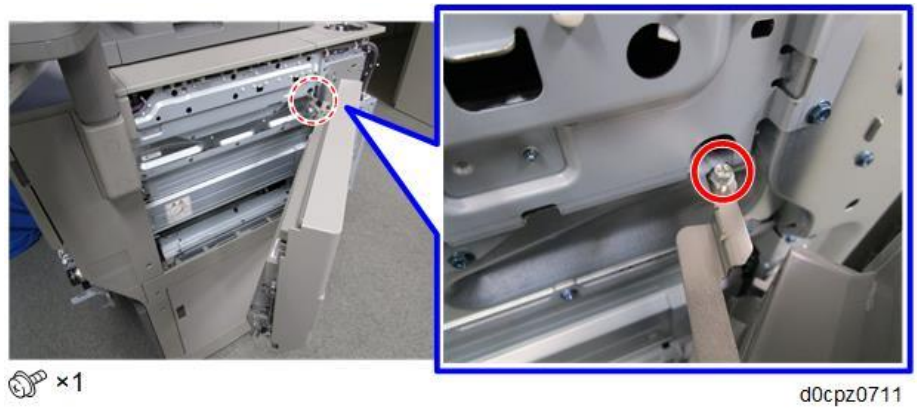
5. Remove the lower tray heater (H3) [A].



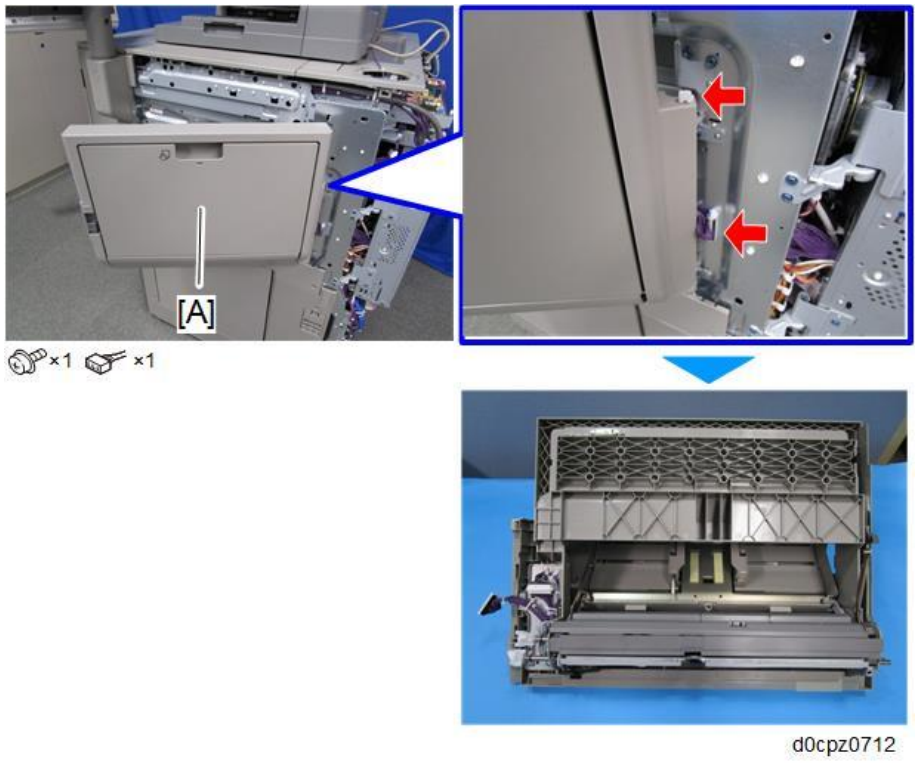
Bypass Tray Unit (Pro C5300S/C5310S)

Bypass Tray Unit Removal

1. Remove the right middle rear cover. (Right Middle Rear Cover (Pro C5300S/C5310S))
2. Remove the screw.



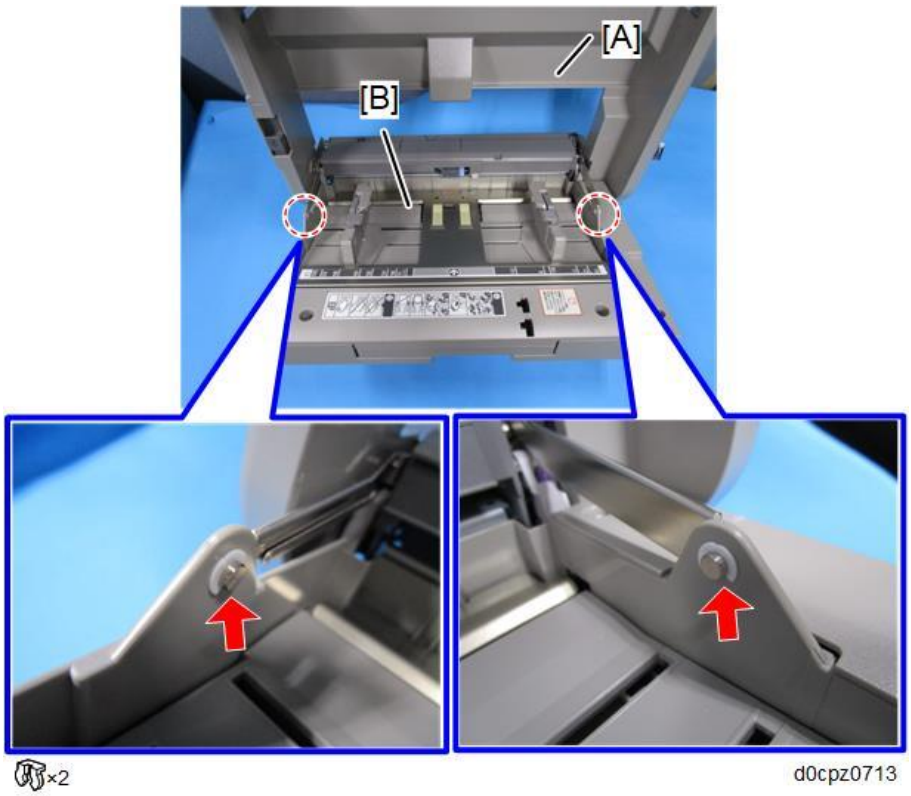
3. Remove the bypass tray unit [A] from the machine.



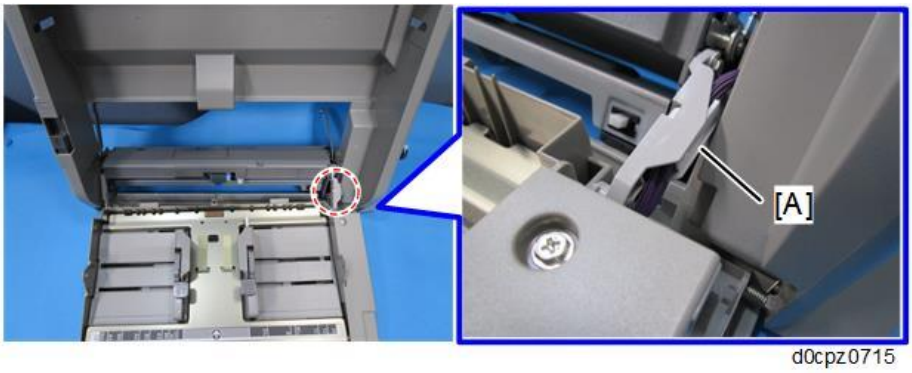
Bypass Tray Unit Separation

1. Disconnect the metal studs that connect the paper feed unit [A] to the bottom plate [B] of the

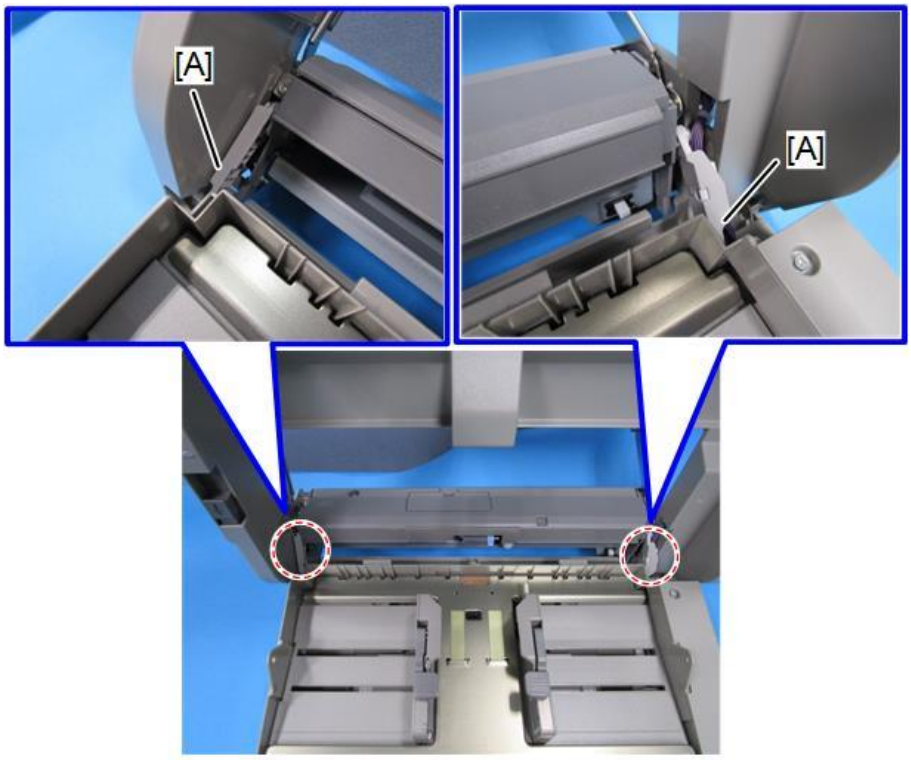
bypass tray unit.



2. Disconnect the arms [A] and separate the paper feed unit and bottom plate of the bypass tray unit.

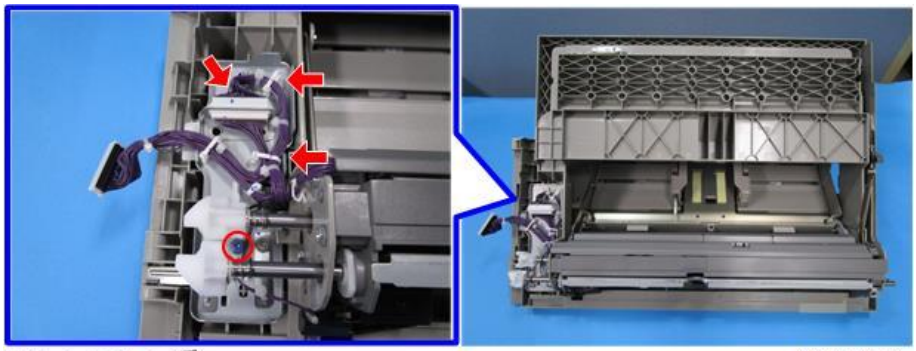


3. Remove the harness cover [A].



d0cpz0714

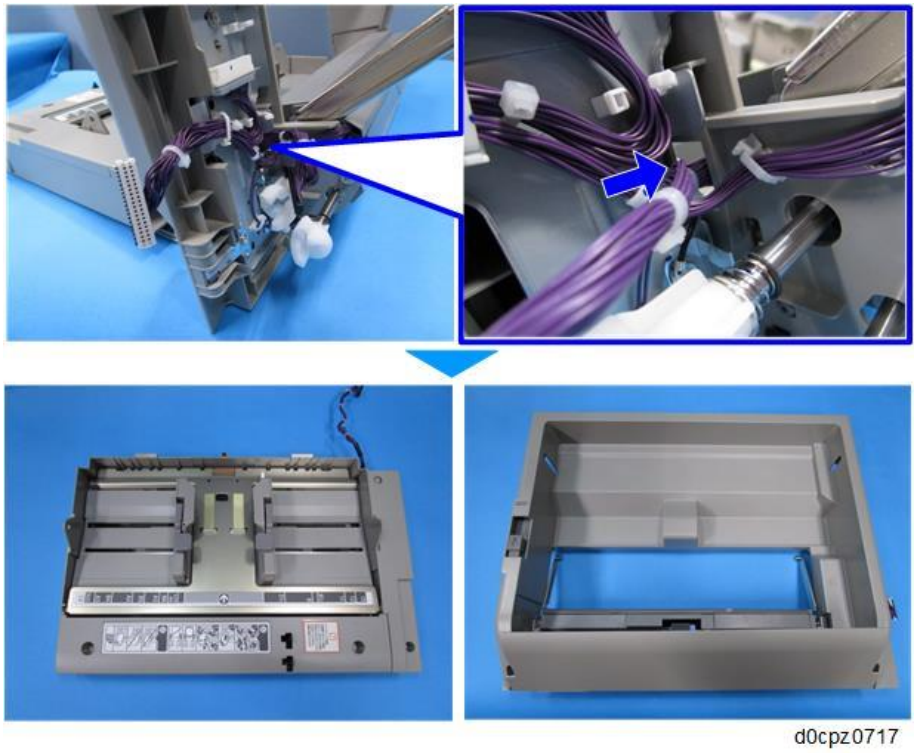
4. Disconnect the harness and the grounding wire.



×1 ×1 ×2

d0cpz0716

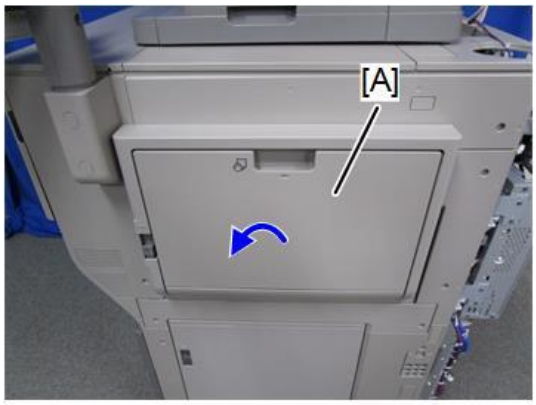
5. Pull out the harness and separate the bypass tray unit.



d0cpz0717

Bypass Pick-up Roller, Bypass Feed Roller, Bypass Separation Roller

1. Open the bypass tray [A].



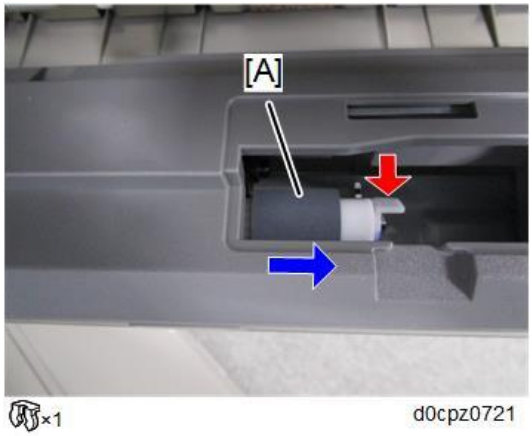
d0cpz0718

2. Remove a hook and remove the bypass pick-up roller [A].

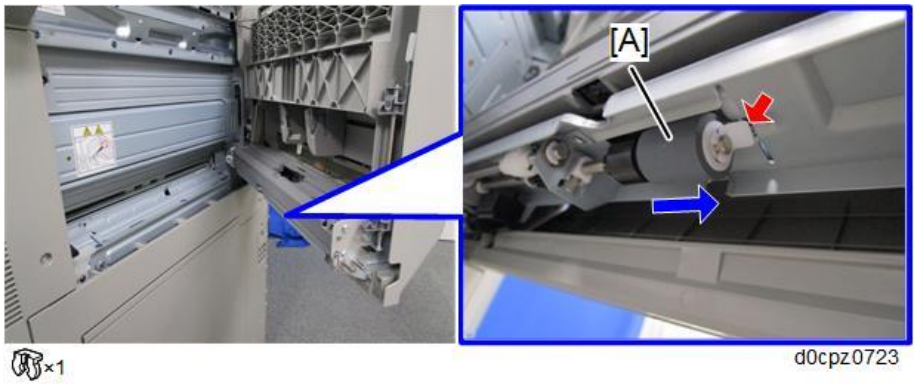
d0cpz0719

3. Open the bypass tray unit and remove the cover [A].

4. Remove the bypass feed roller [A].



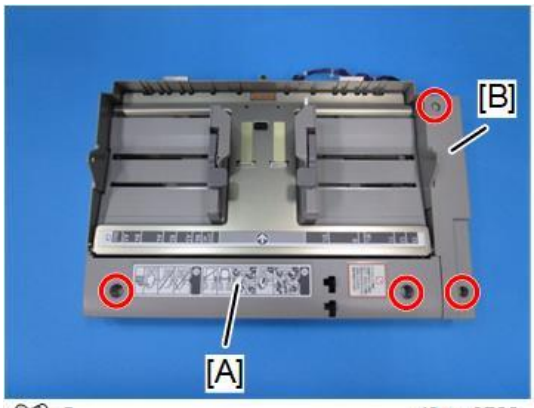
5. Remove the bypass separation roller [A] from the back of the bypass tray unit.



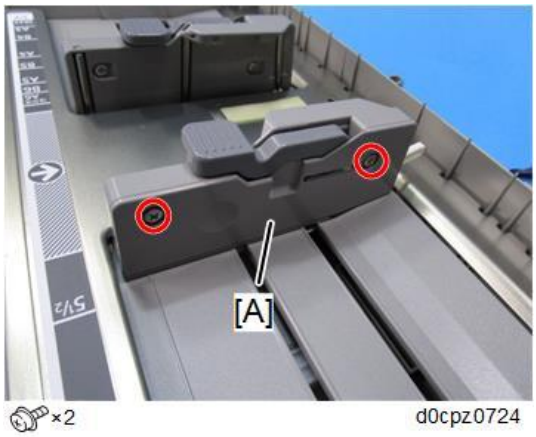
Bypass Tray Paper End Sensor (S108)

1. Separate the paper feed unit and bottom plate of the bypass tray unit. (Bypass Tray Unit Separation)

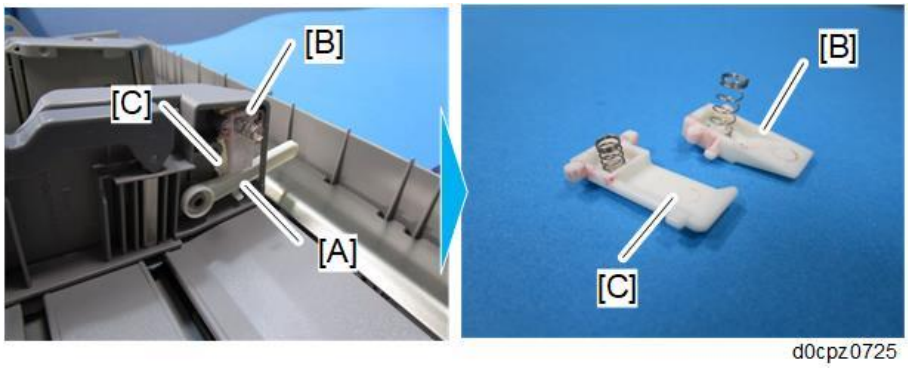
2. Remove the cover [A] and the cover [B].



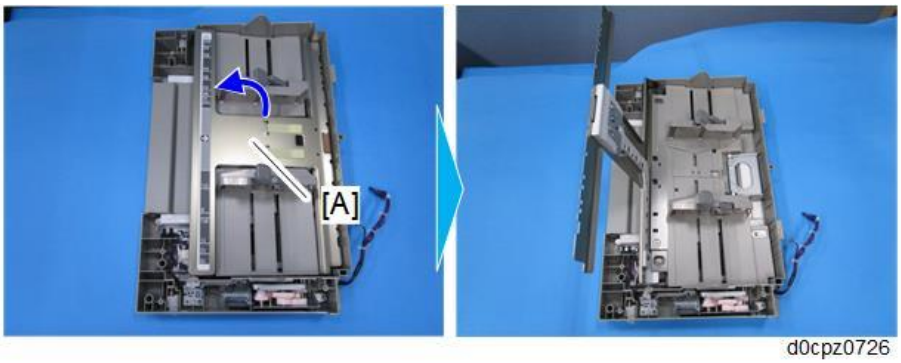
3. Remove the side fence [A].



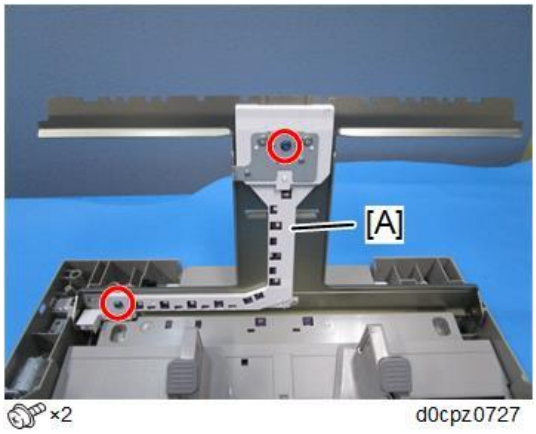
4. Remove the pressure plate [A] and the link [B].



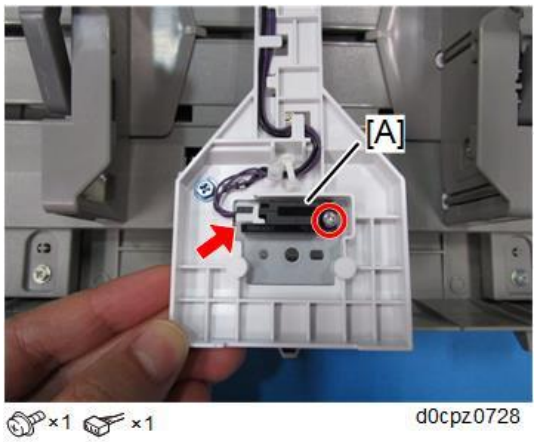
5. Turn over the bottom plate [A].



6. Remove the bracket [A].



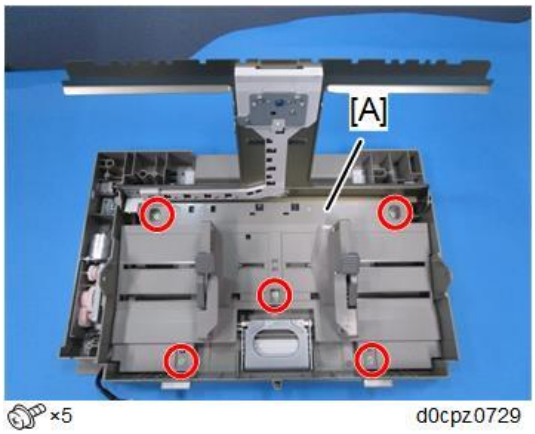
7. Remove the bypass tray paper end sensor (S108) [A].



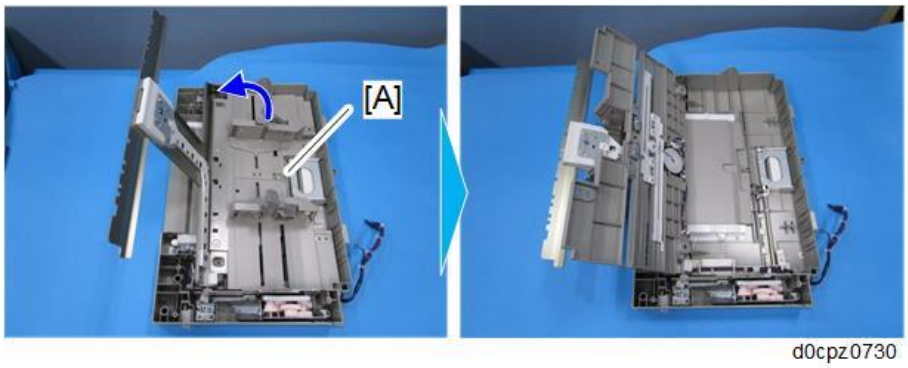
Bypass Paper Width Sensor (S110)

1. Turn over the bottom plate. (Bypass Tray Paper End Sensor (S108))

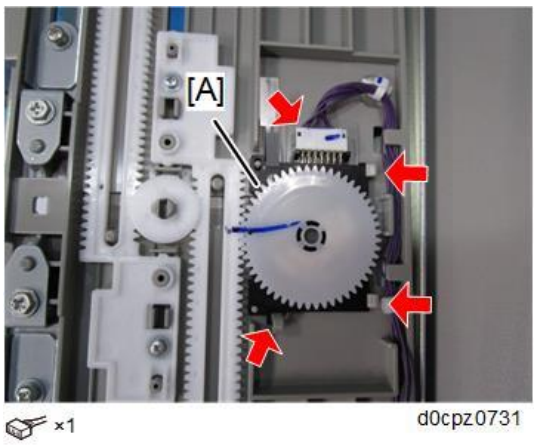
2. Remove the screws of the partition plate [A].



3. Turn over the partition plate [A].



4. Remove the bypass paper width sensor (S110) [A] from the hooks.

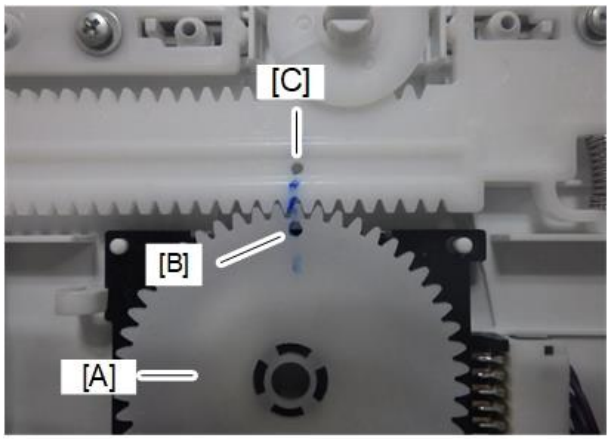


Installation Procedure

1. Center the side fence.

2. Set the bypass paper width sensor [A]. Align the reference hole of the disk [B] with the concave of

the rack [C]. (×1)

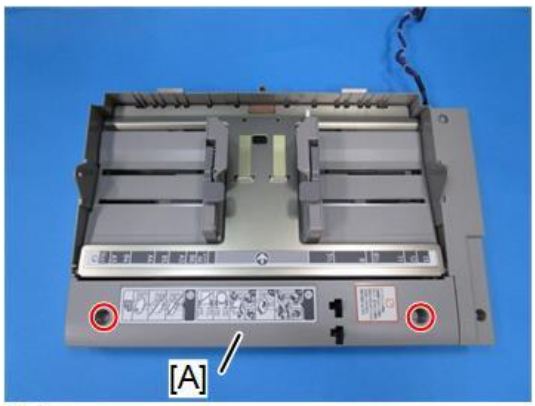


d257c9006a

3. Check SP5-803-109 and make sure that the size detection is correct.

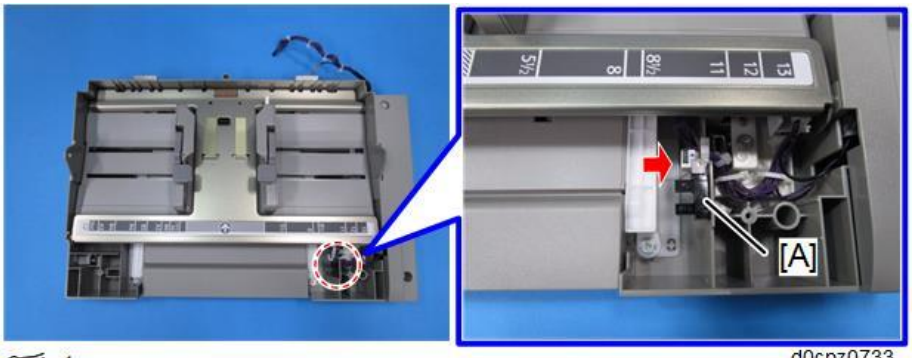
Bypass Paper Length Sensor (S109)

1. Separate the paper feed unit and bottom plate of the bypass tray unit. (Bypass Tray Unit Separation)
2. Remove the cover [A].



×2 d0cpz0732

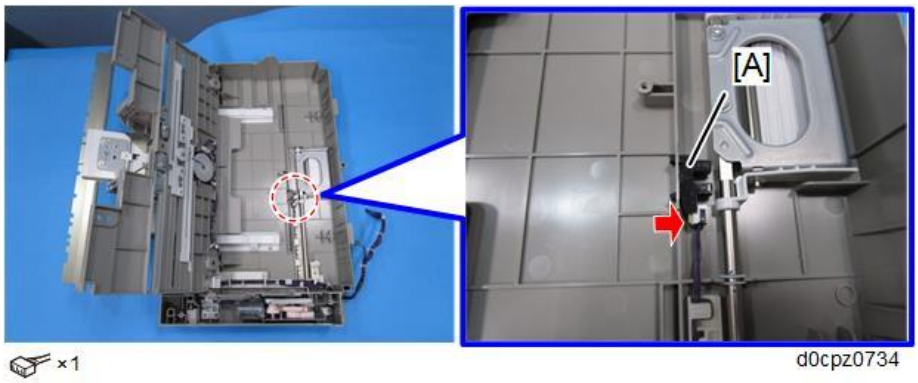
3. Remove the bypass paper length sensor (S109) [A].



×1 d0cpz0733

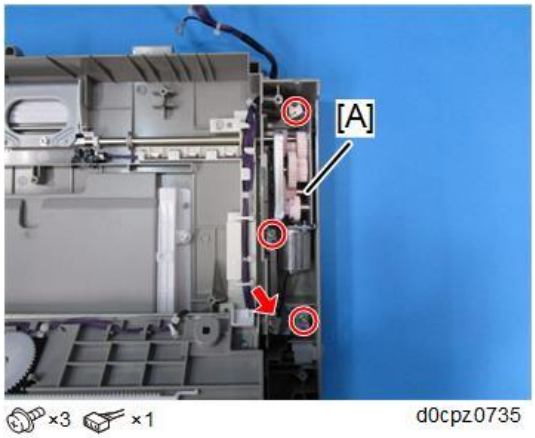
Bypass Tray Lower Limit Sensor (S107)

1. Turn over the partition plate. (Bypass Paper Width Sensor (S110))
2. Remove the bypass tray lower limit sensor (S107) [A].

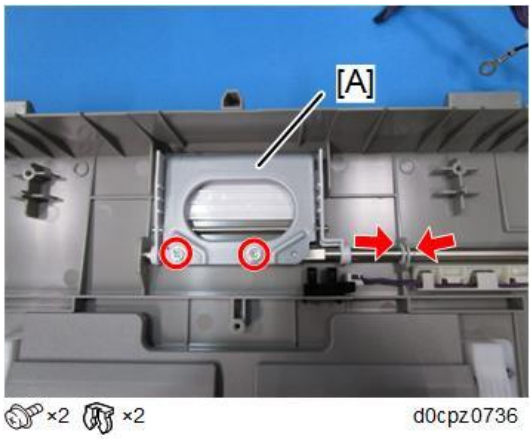


Bypass Tray Lift Motor (M52)

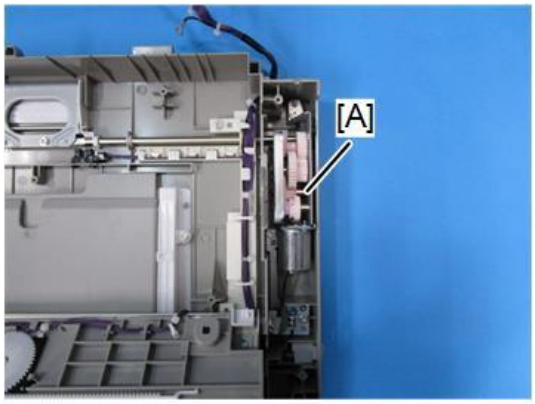
1. Turn over the partition plate. (Bypass Paper Width Sensor (S110))
2. Remove the fixing screws of the bypass tray lift motor block.



3. Remove the stay [A] (including the shaft) for the bypass tray lift motor block.

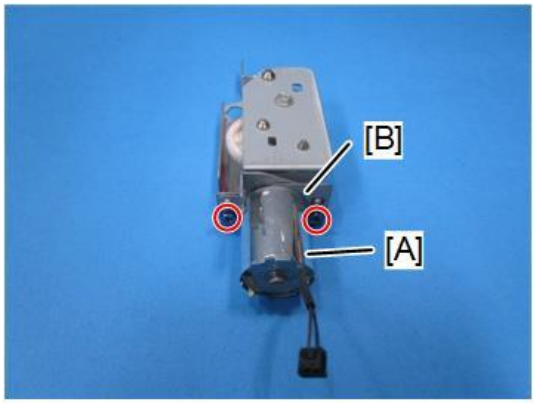


4. Remove the bypass tray lift motor block [A].



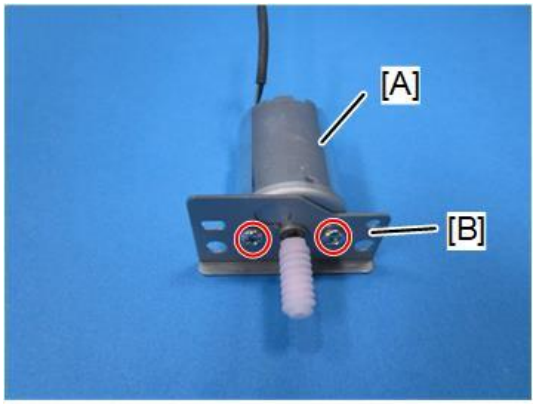
d0cpz0759

5. Remove the bypass tray lift motor (M52) [A] along with the bracket [B].



×2 d0cpz0737

6. Remove the bypass tray lift motor (M52) [A] from the bracket [B].

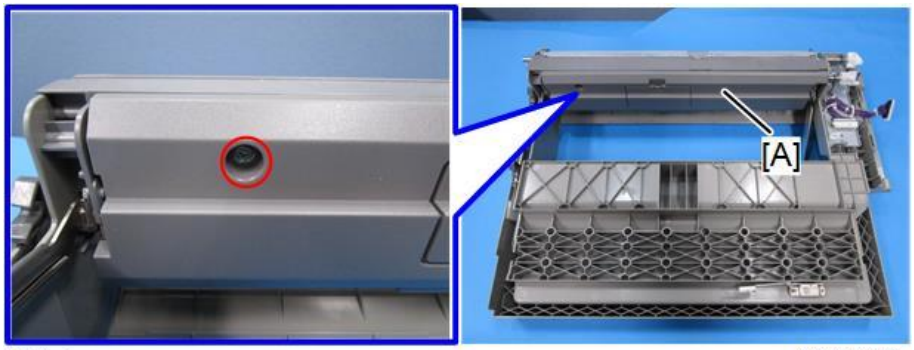


×2 d0cpz0738

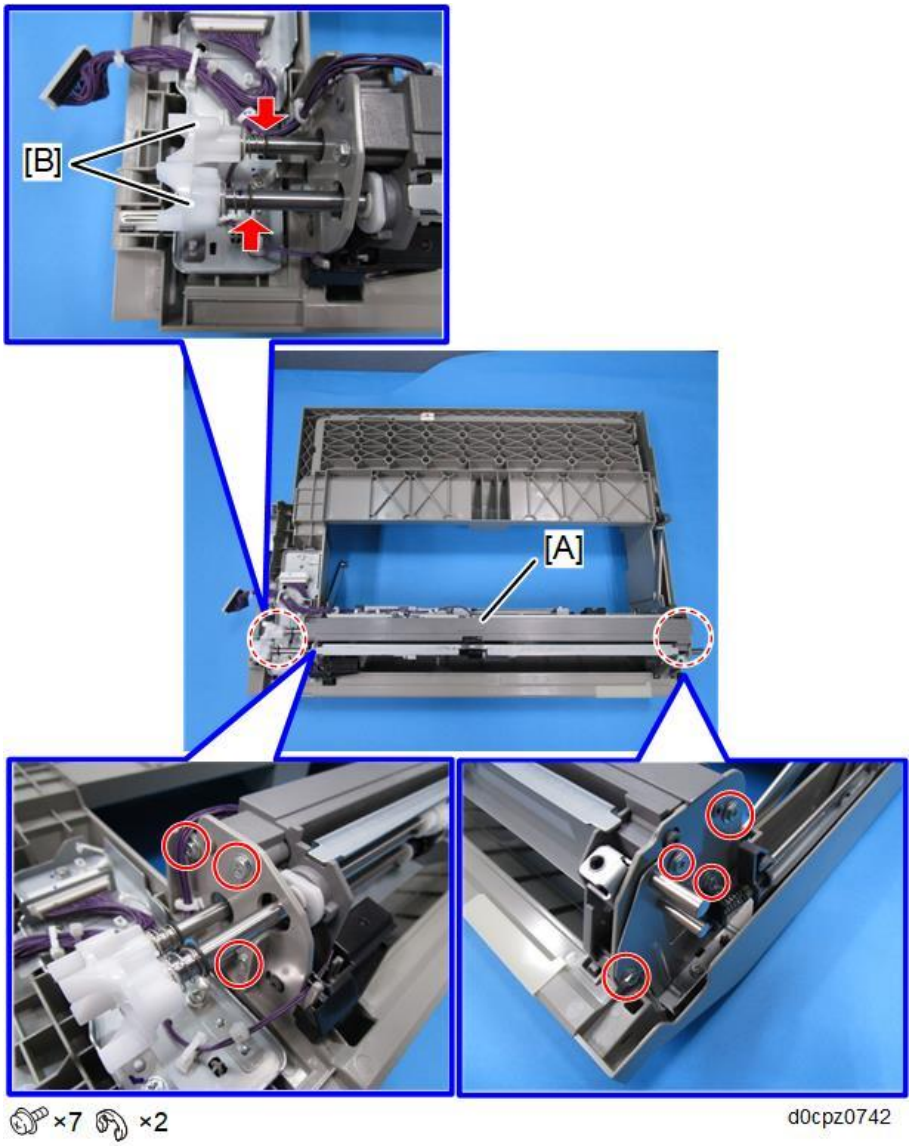
Bypass Tray Upper Limit Sensor (S113), Bypass Paper Feed Sensor (S111)

1. Separate the paper feed unit and bottom plate of the bypass tray unit. (Bypass Tray Unit Separation)

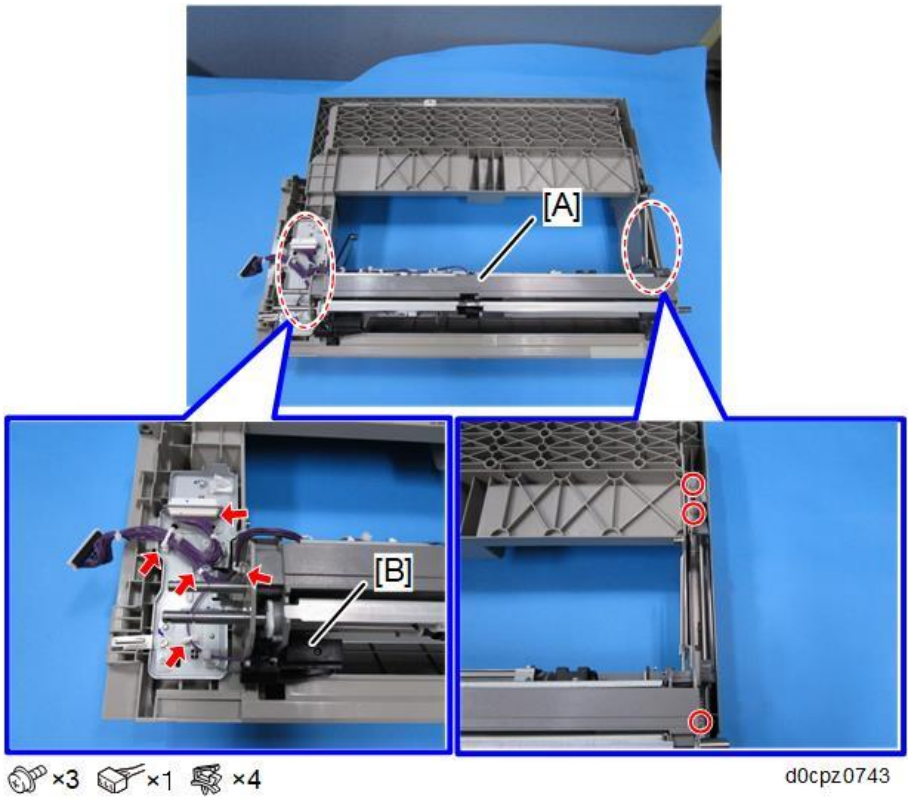
2. Remove the bypass paper feed unit cover [A].



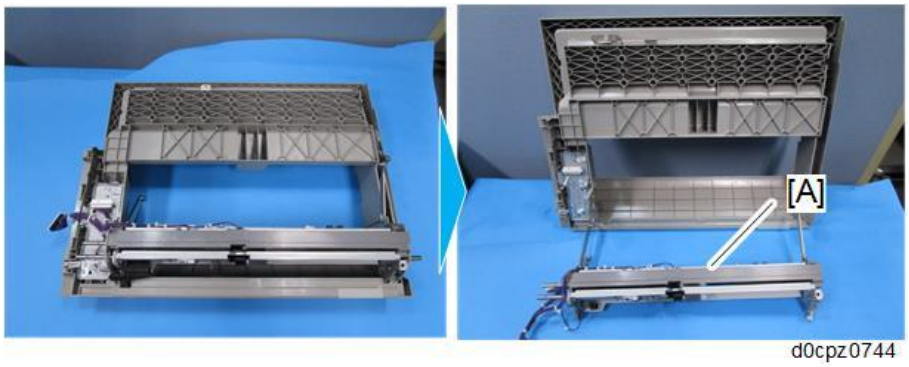
3. Remove the fixing screws and joints [B] of the bypass paper feed unit [A].



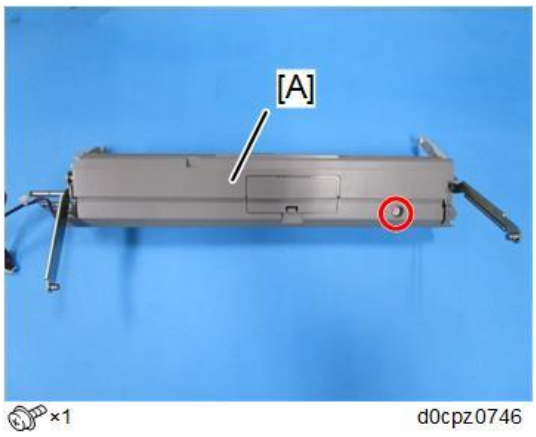
4. Remove the bracket [A], the cover [B] and connectors.



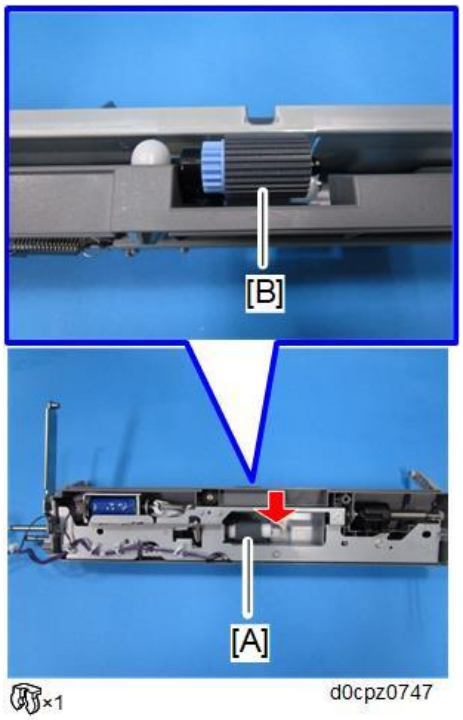
5. Remove the paper feed unit [A].



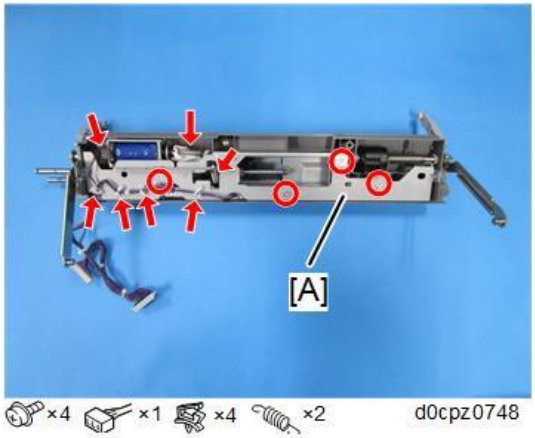
6. Remove the cover [A].



7. Remove the bypass paper feed roller [A] and bypass pick-up roller [B].

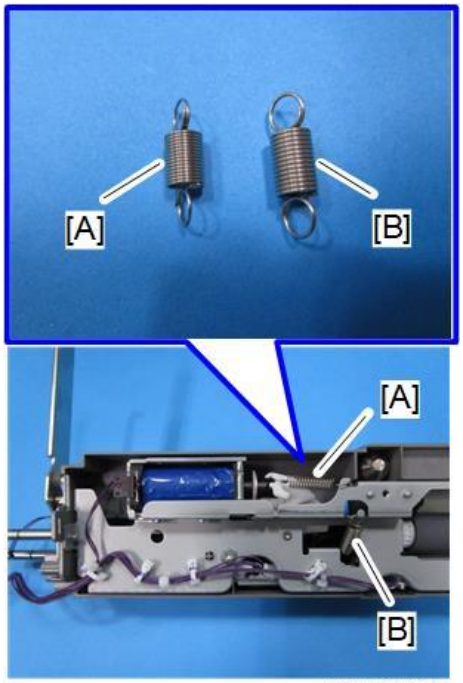


8. Remove the screws, clamps, connector and springs from the bracket [A].

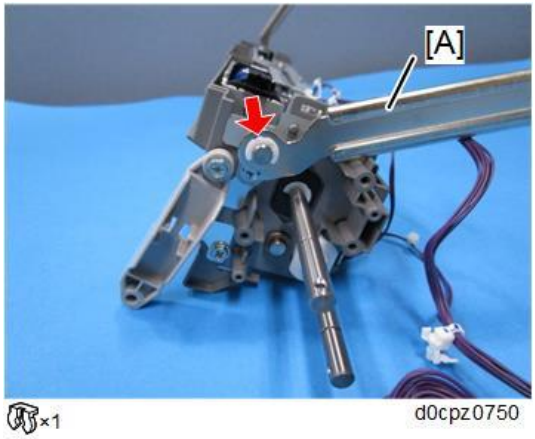


Note

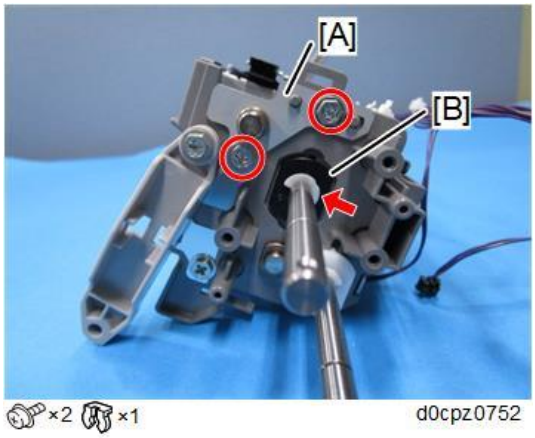
When installing the springs, attach them on the correct locations.



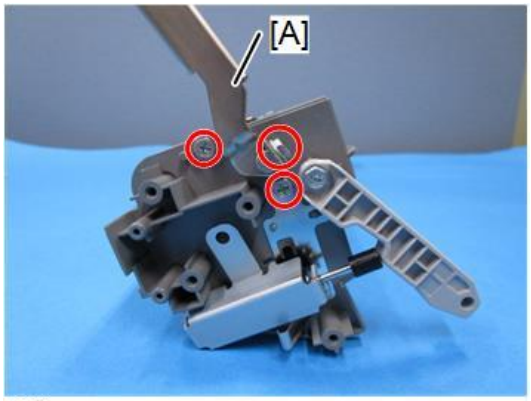
9. Remove the arm [A].



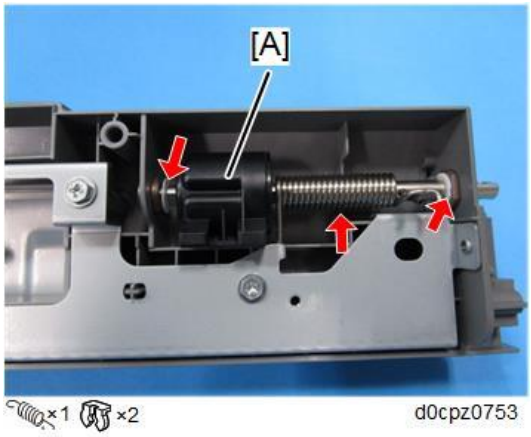
10. Remove the bracket [A] and bearing [B].



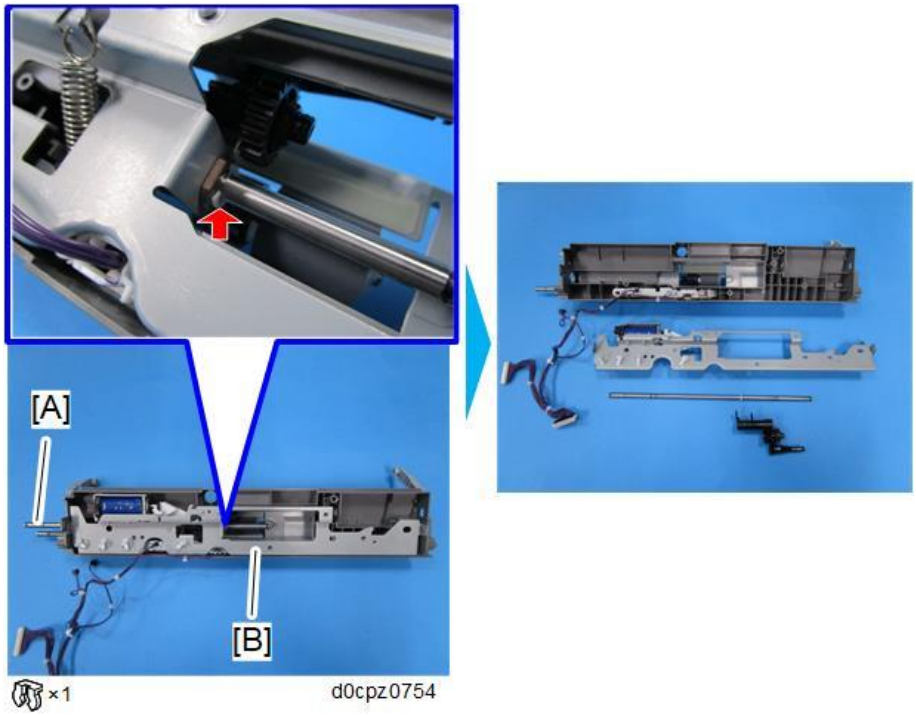
11. Remove the fixing screws and the damper [A] of the bracket.



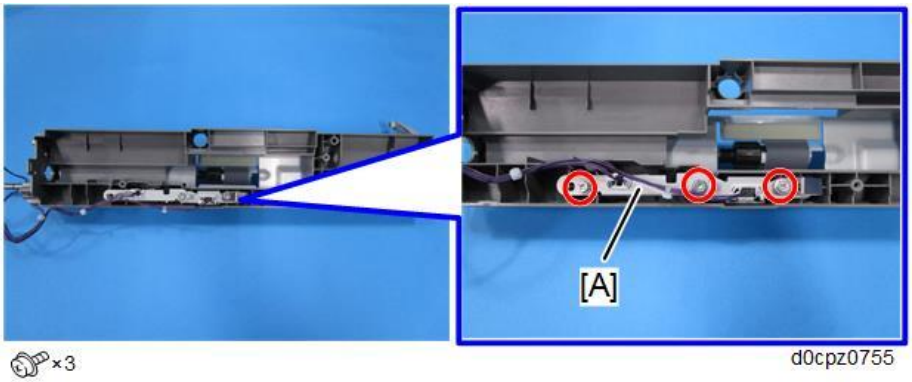
12. Remove the damper [A].



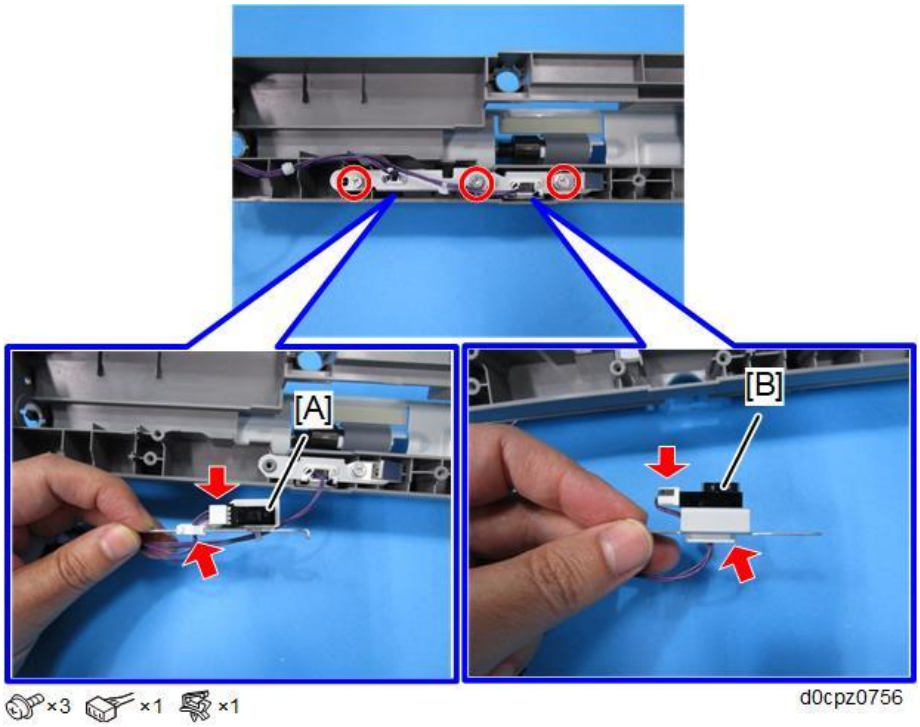
13. Pull out the shaft [A] and remove the bracket [B].



14. Remove the bracket [A].



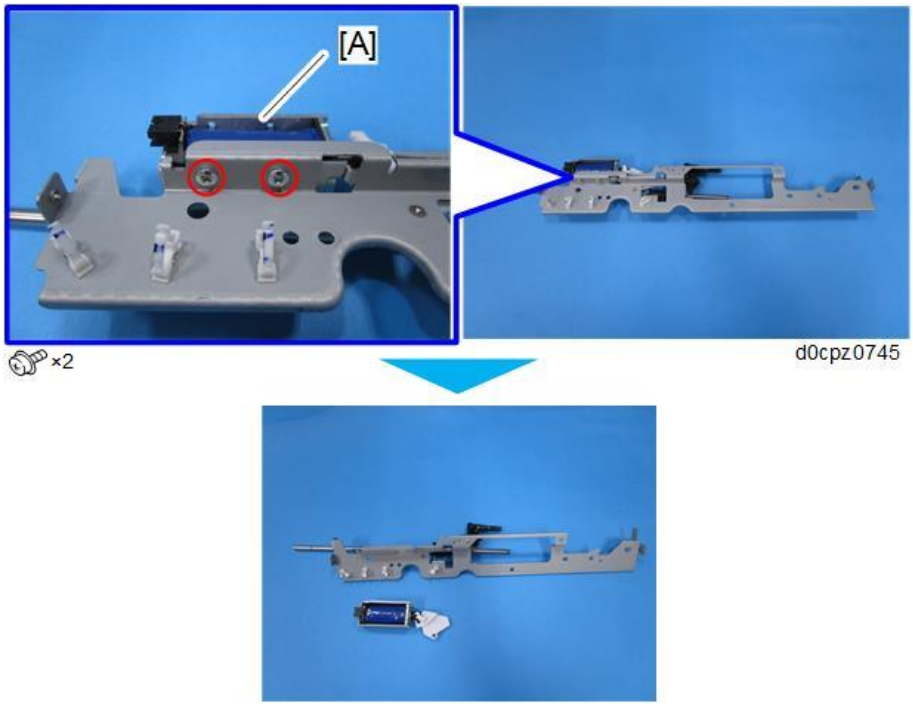
15. Remove the bypass tray upper limit sensor (S113) [A] and the bypass paper feed sensor (S111) [B].



Bypass Pick-up Solenoid (SOL11)

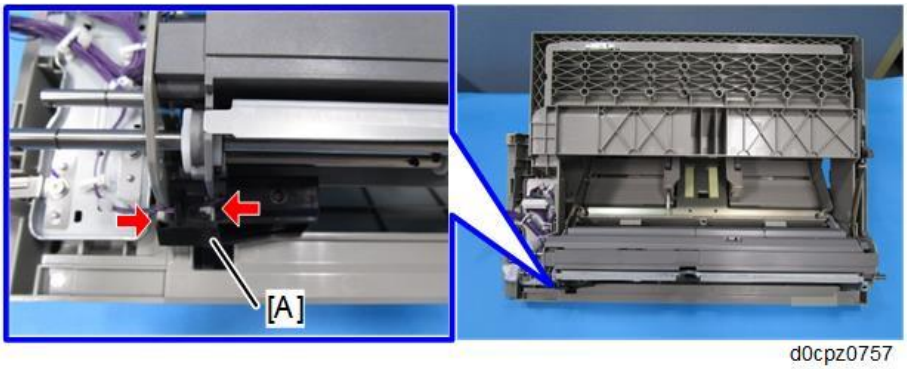
1. Remove the bracket of the bypass paper feed unit. (Bypass Tray Upper Limit Sensor (S113), Bypass Paper Feed Sensor (S111))

2. Remove the bypass pick-up solenoid (SOL11) [A].

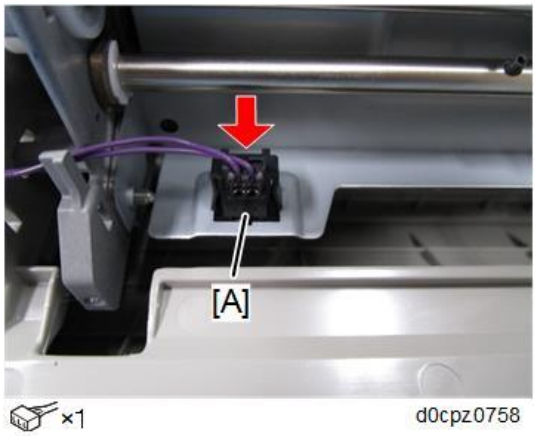


Bypass Tray Set Sensor (S112)

1. Remove the bracket of the bypass paper feed unit. (Bypass Tray Upper Limit Sensor (S113), Bypass Paper Feed Sensor (S111))
2. Remove the cover [A].

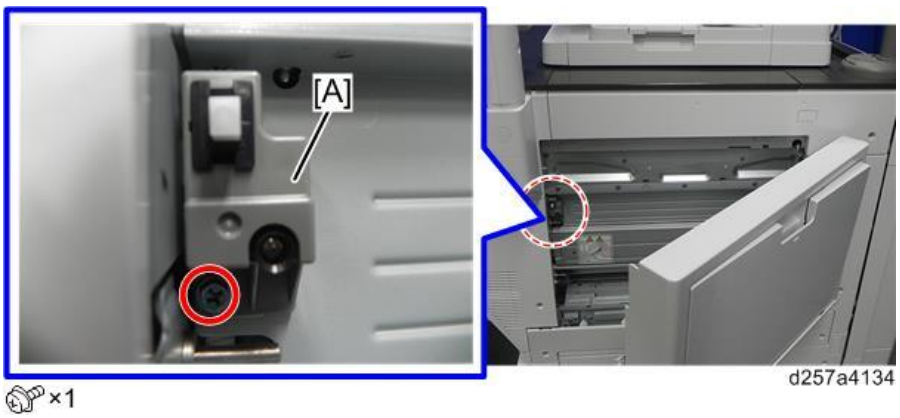


3. Remove the bypass tray set sensor (S112) [A].

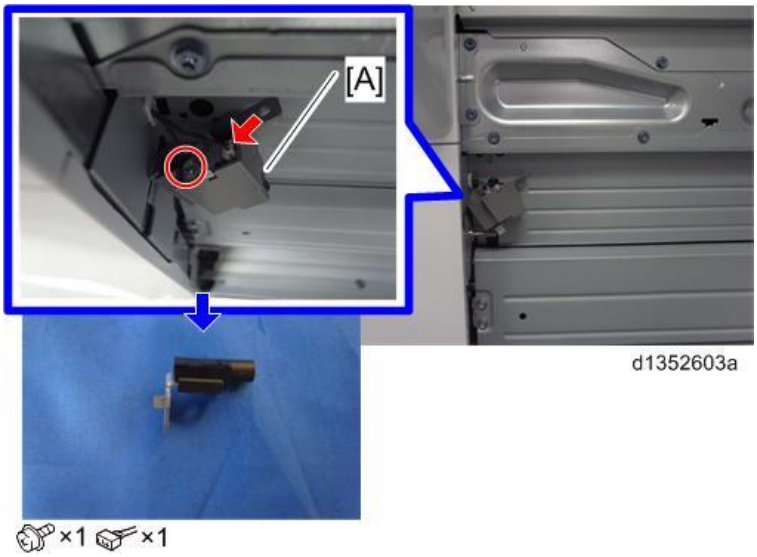


Bypass Tray LED (LED3)

1. Open the bypass tray unit and remove the LED cover [A].

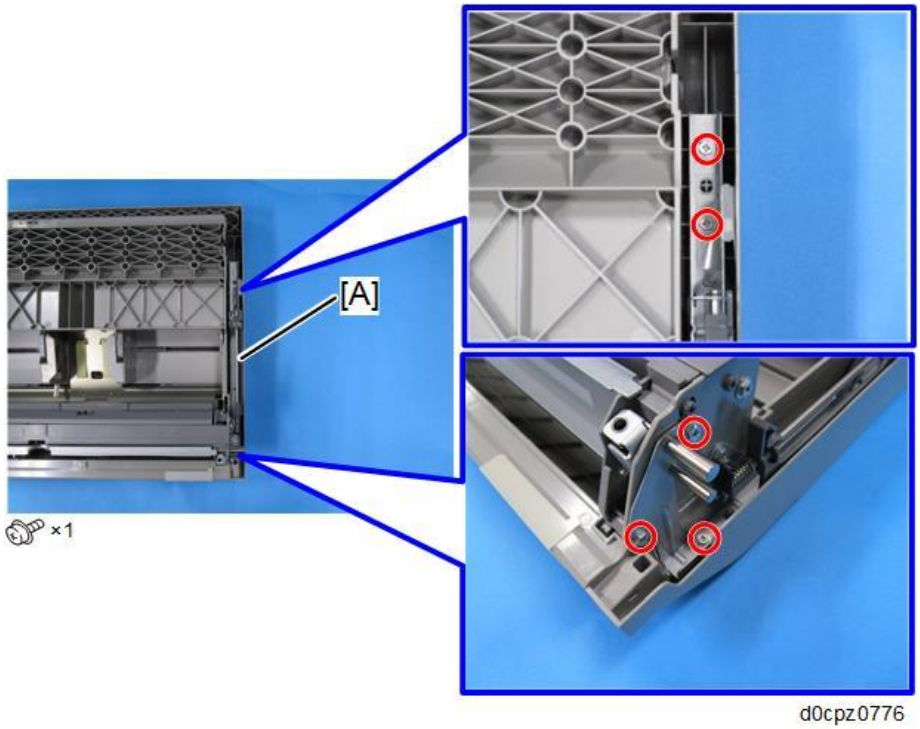


2. Remove the bypass tray LED (LED3) [A].

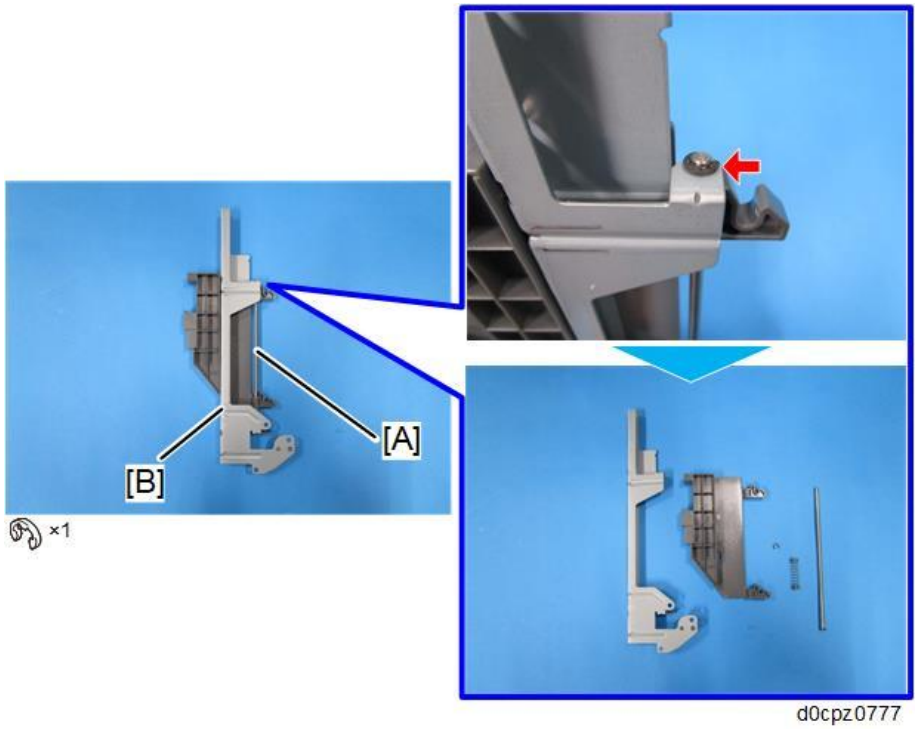


Bypass Lock Bracket

1. Remove the bypass tray unit. (Bypass Tray Unit Removal)
2. Remove the bypass lock unit [A].



3. Remove the shaft [A] and remove the bypass lock bracket [B].



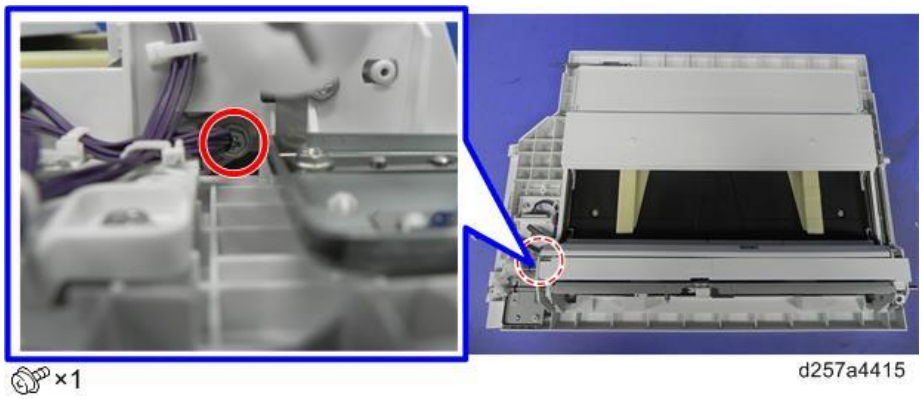
Bypass Tray Unit (IM C6500/C8000)

Bypass Tray Unit Removal

1. Remove the right middle rear cover. (Right Middle Rear Cover (IM C6500/C8000))
2. Remove the bypass tray unit [A] from the machine.

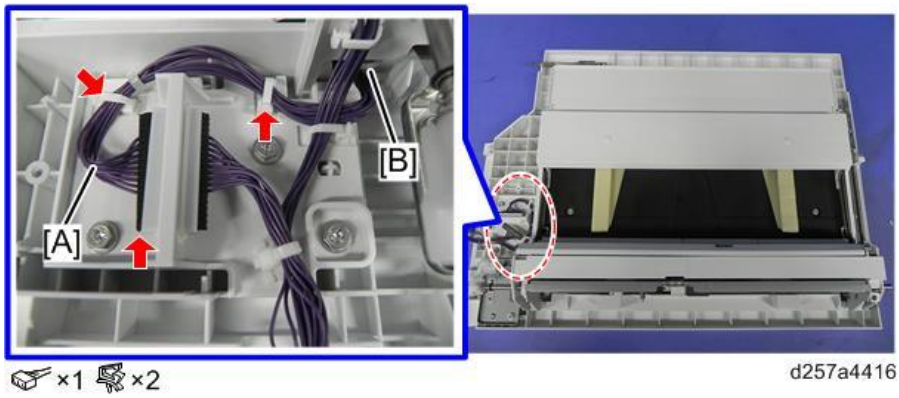
Bypass Tray Unit Separation

1. Remove the screw.

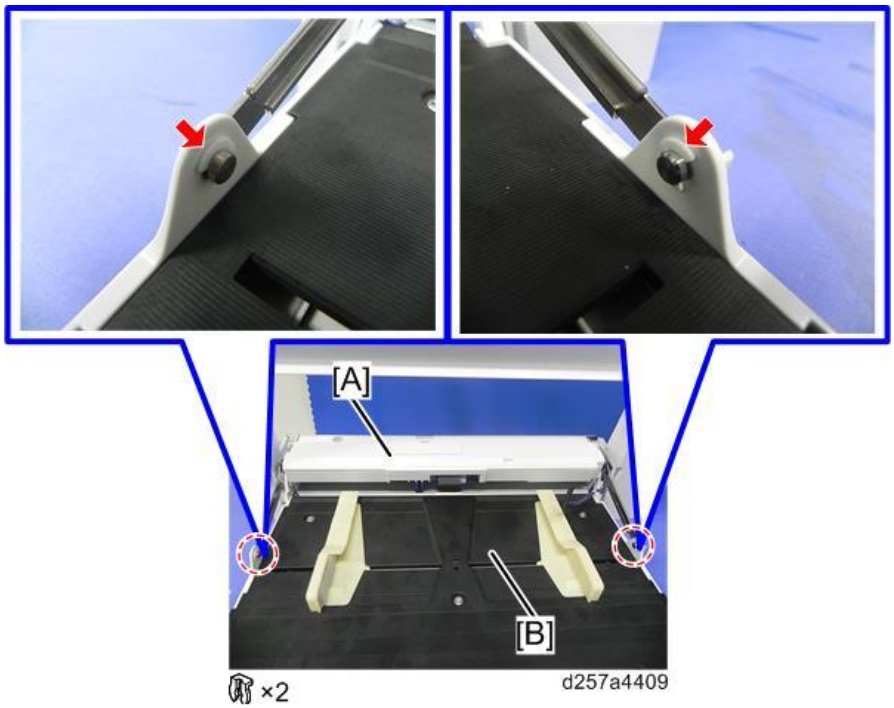


2. Open the bypass tray.

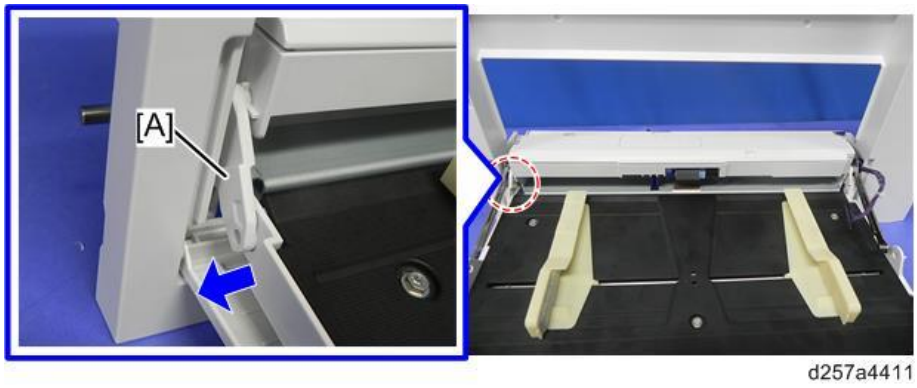
3. Pass the harness [A] through the hole [B].



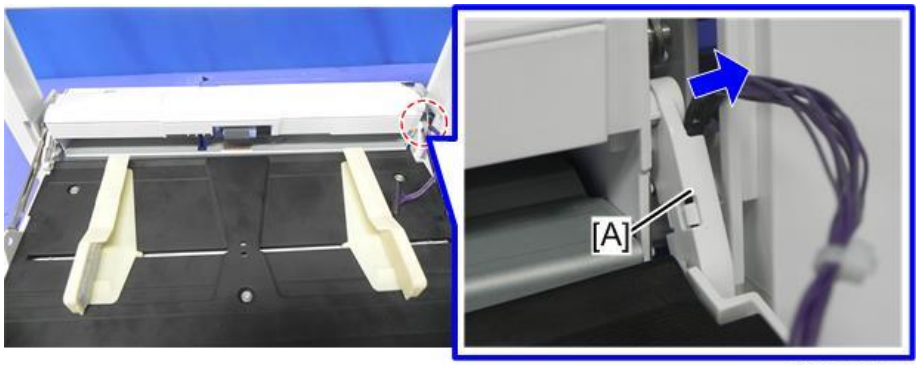
4. Separate the paper feed unit [A] and bottom plate [B] of the bypass tray unit.



5. Disconnect the arm [A] at the front side.



6. Disconnect the arm [A] at the rear side.



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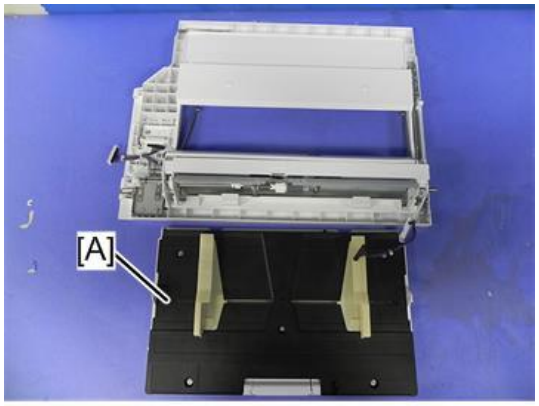
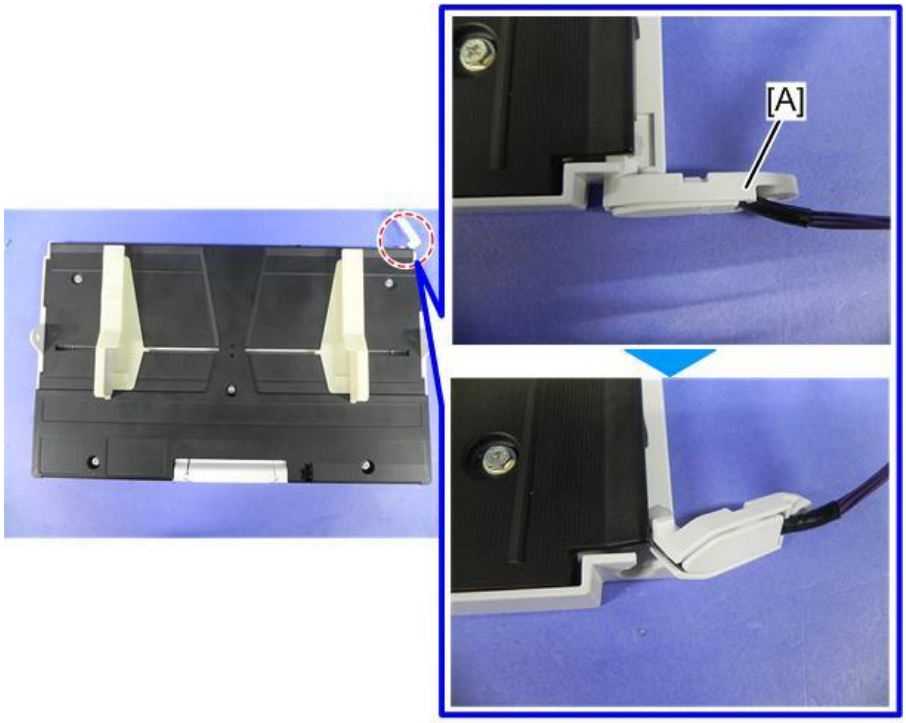
7. Remove the bypass tray [A].



d257a4413

8. Remove the arm [A].



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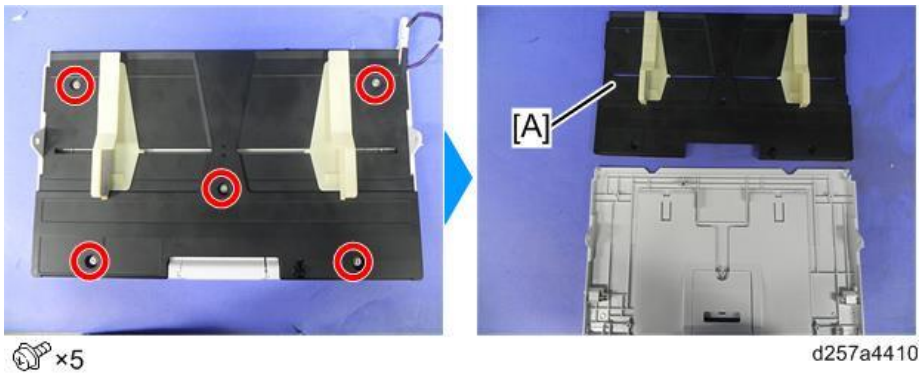
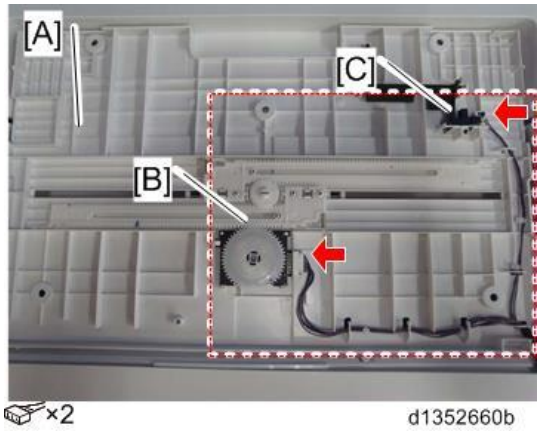
Note

- Move the arm out of the hole, or the harness might snap.

9. Remove the bottom plate [A] of the bypass tray.

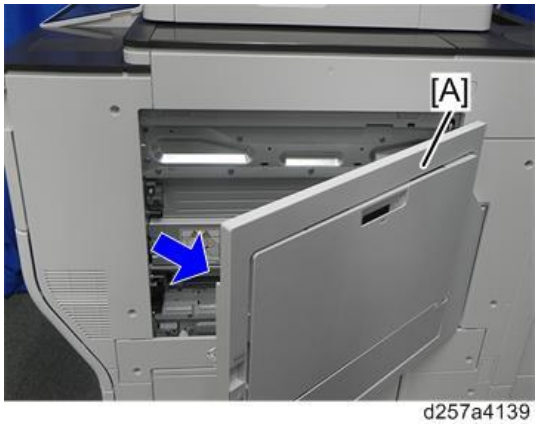


10. Turn over the bypass tray [A], then disconnect the connectors and clamps of the bypass paper width sensor [B] / bypass paper length sensor [C].

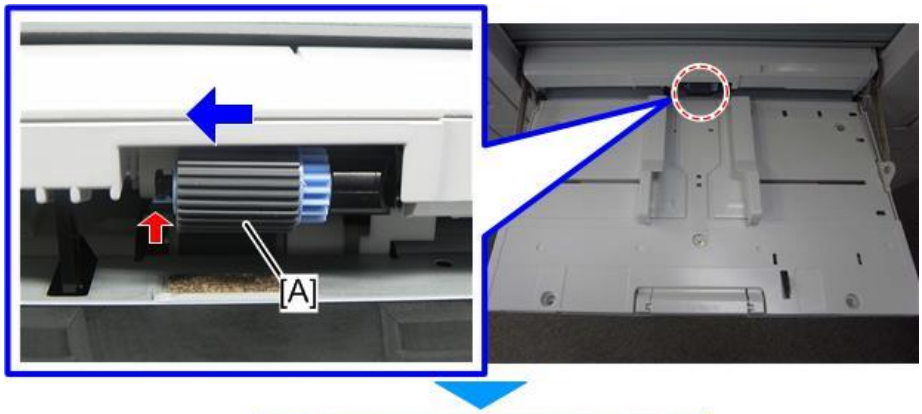


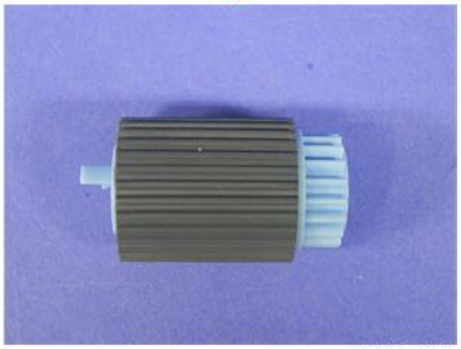
Bypass Pick-up Roller, Bypass Feed Roller, Bypass Separation Roller

1. Open the bypass tray [A].



2. Remove a hook and remove the bypass pick-up roller [A].





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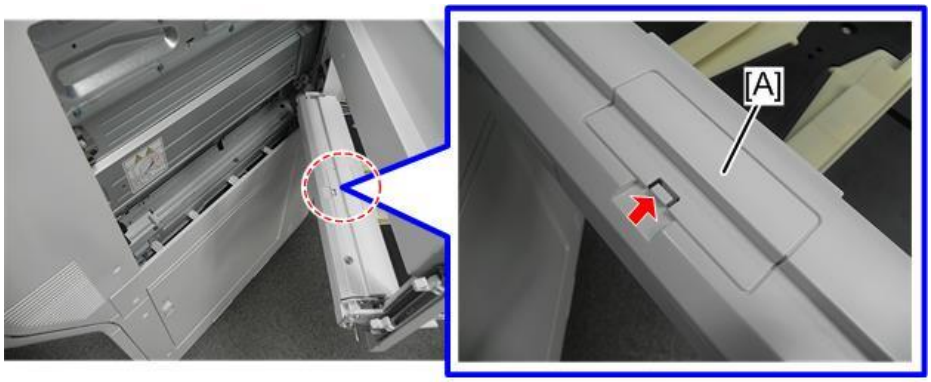
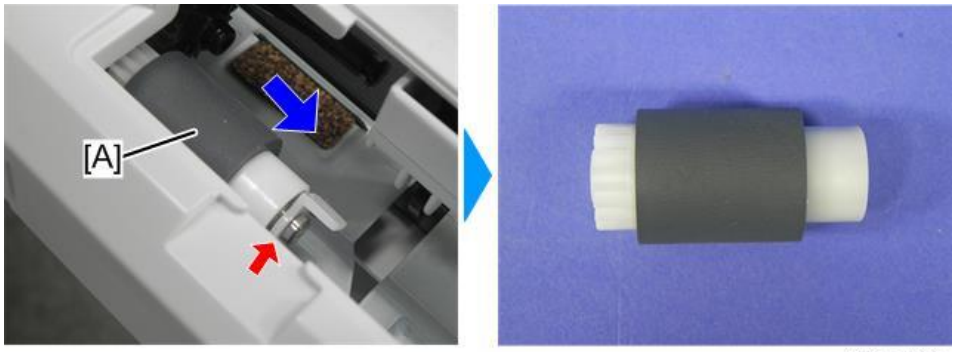
3. Open the bypass tray unit and remove the cover [A].



d257a4116

4. Remove the bypass feed roller [A].



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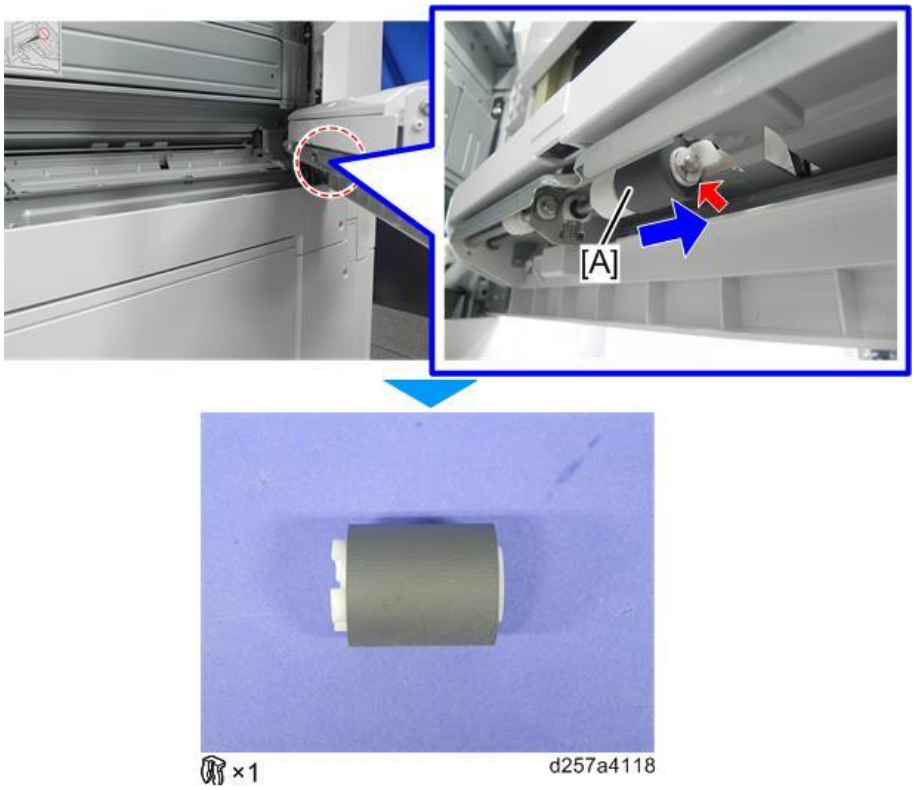
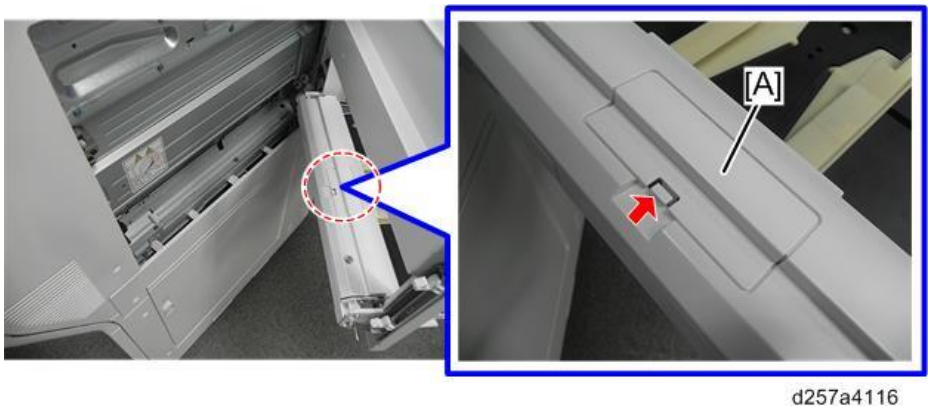
5. Remove the bypass separation roller [A] from the back of the bypass tray unit.



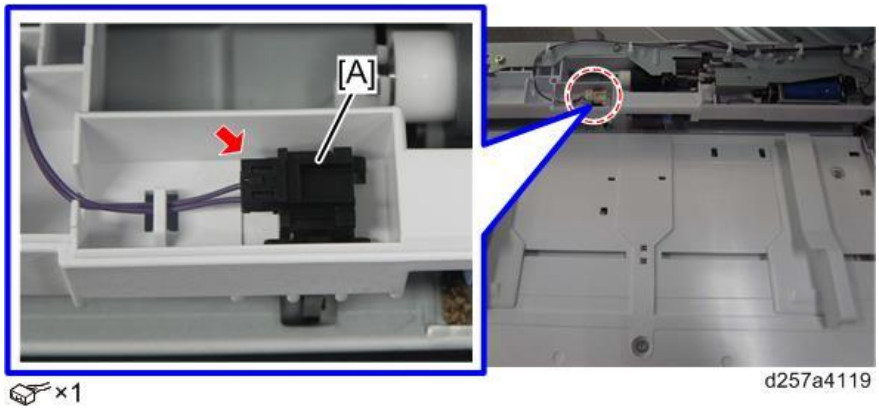
Bypass Tray Paper End Sensor (S108)

1. Open the bypass tray.

2. Remove the paper feed unit cover [A].

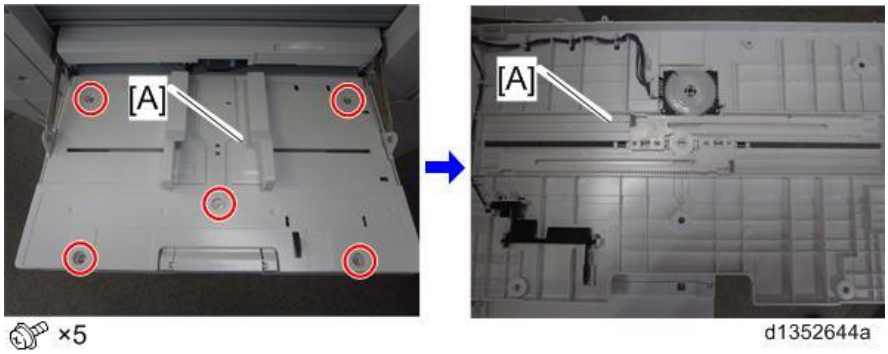


3. Remove the bypass tray paper end sensor (S108) [A].

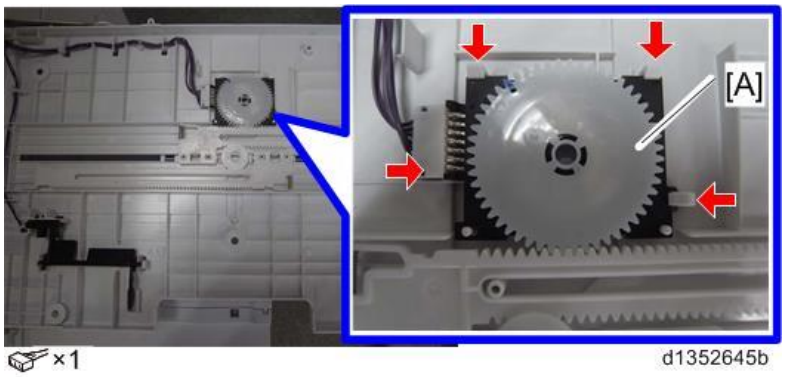


Bypass Paper Width Sensor (S110)

1. Open the bypass tray.
2. Remove the bottom plate [A] of the bypass tray and turn it over.



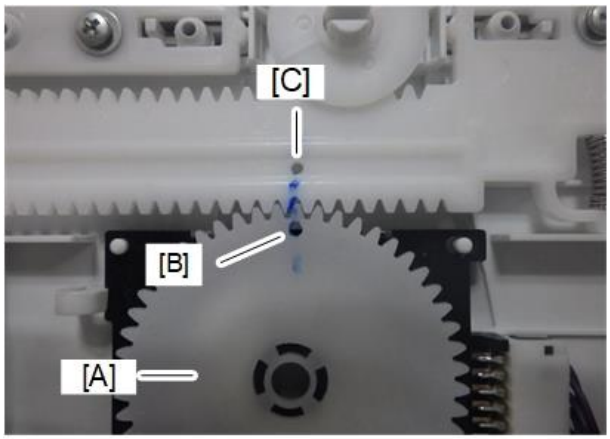
3. Remove the hooks and remove the bypass paper width sensor (S110) [A].



Installation Procedure

1. Center the side fence.
2. Set the bypass paper width sensor [A]. Align the reference hole of the disk [B] with the concave of

the rack [C]. (×1)

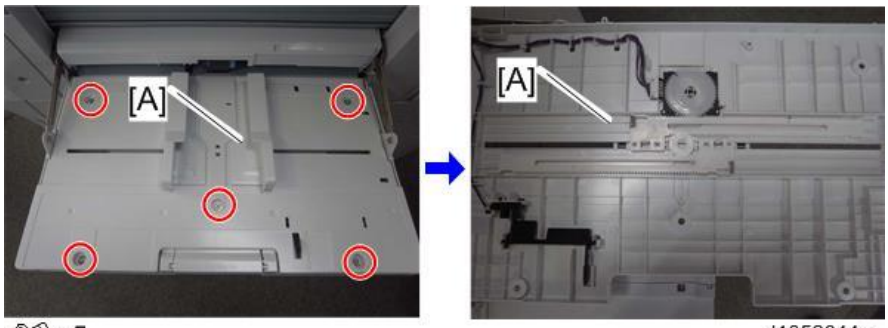


d257c9006a

3. Check SP5-803-109 and make sure that the size detection is correct.

Bypass Paper Length Sensor (S109)

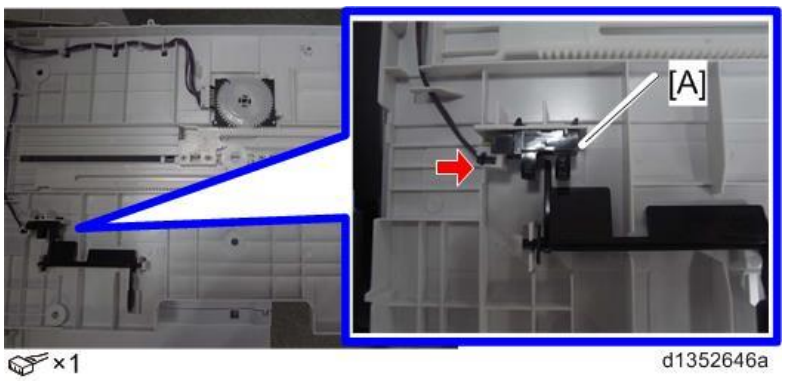
1. Open the bypass tray.
2. Remove the bottom plate [A] of the bypass tray and turn it over.



×5

d1352644a

3. Remove the bypass paper length sensor (S109) [A].



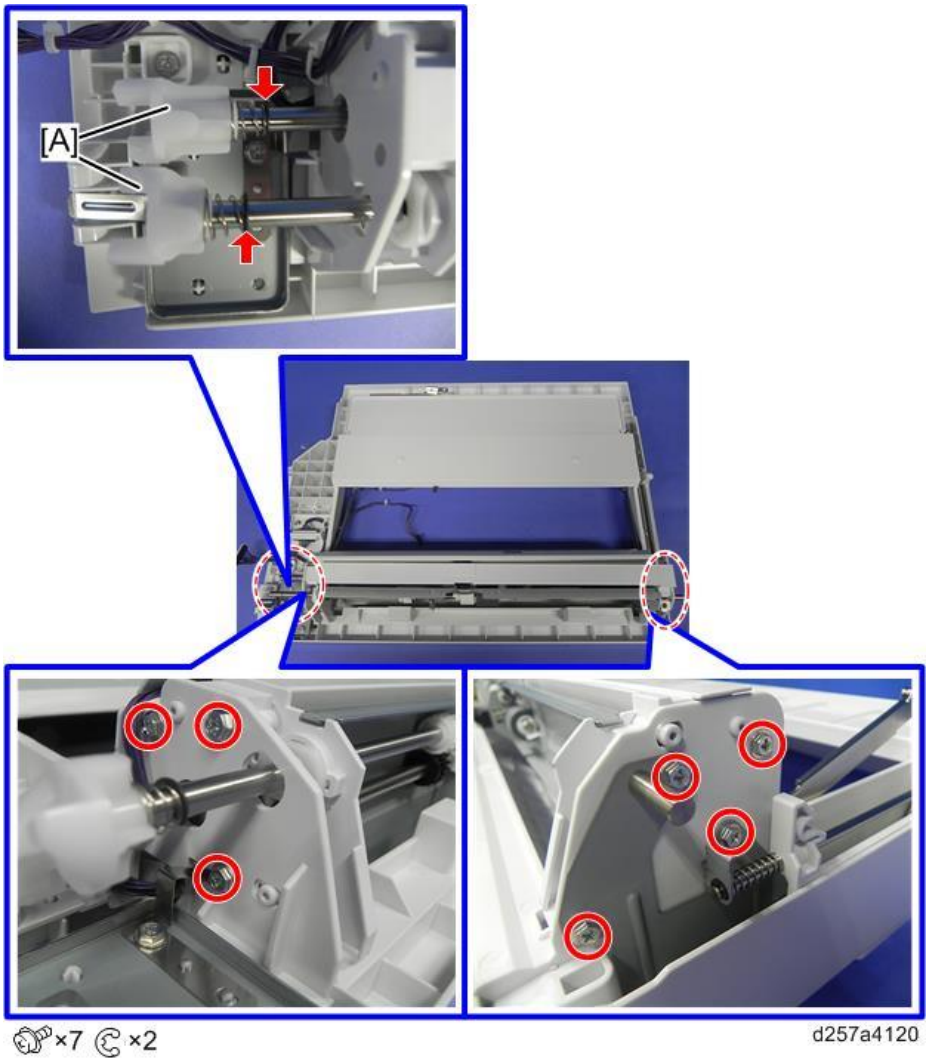
×1

d1352646a

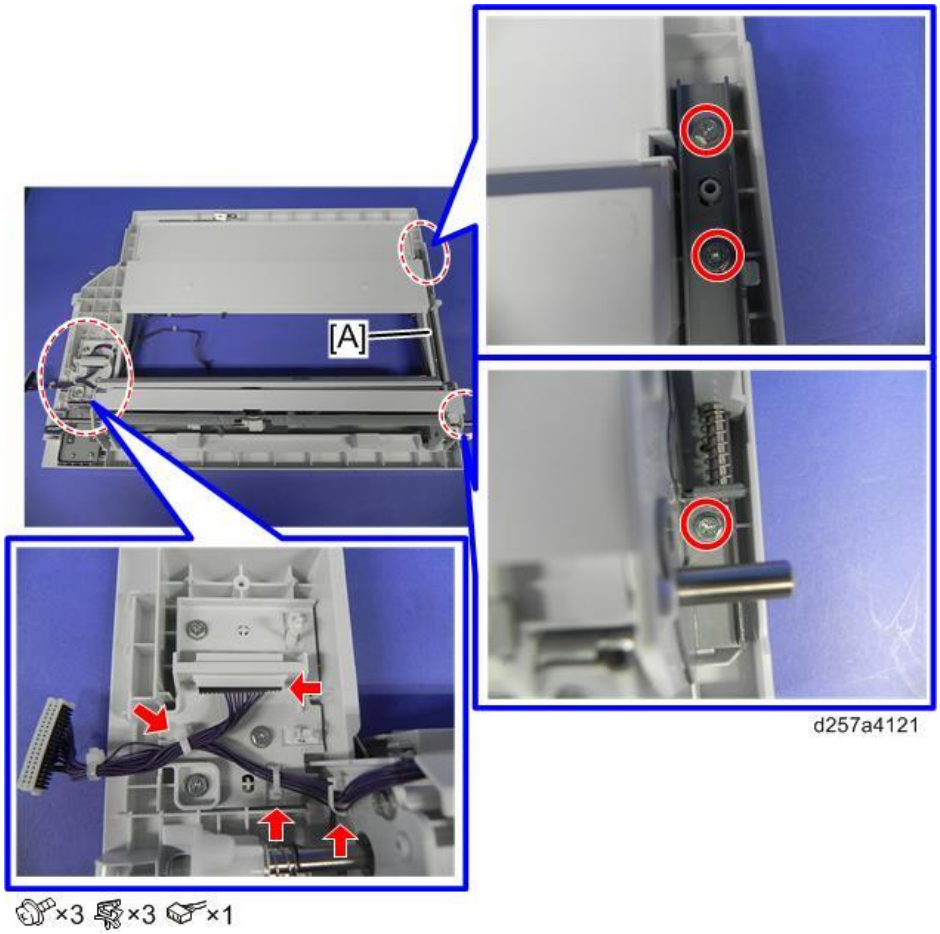
Bypass Paper Feed Sensor (S111)

1. Separate the paper feed unit and bottom plate of the bypass tray unit. (Bypass Tray Unit Separation)

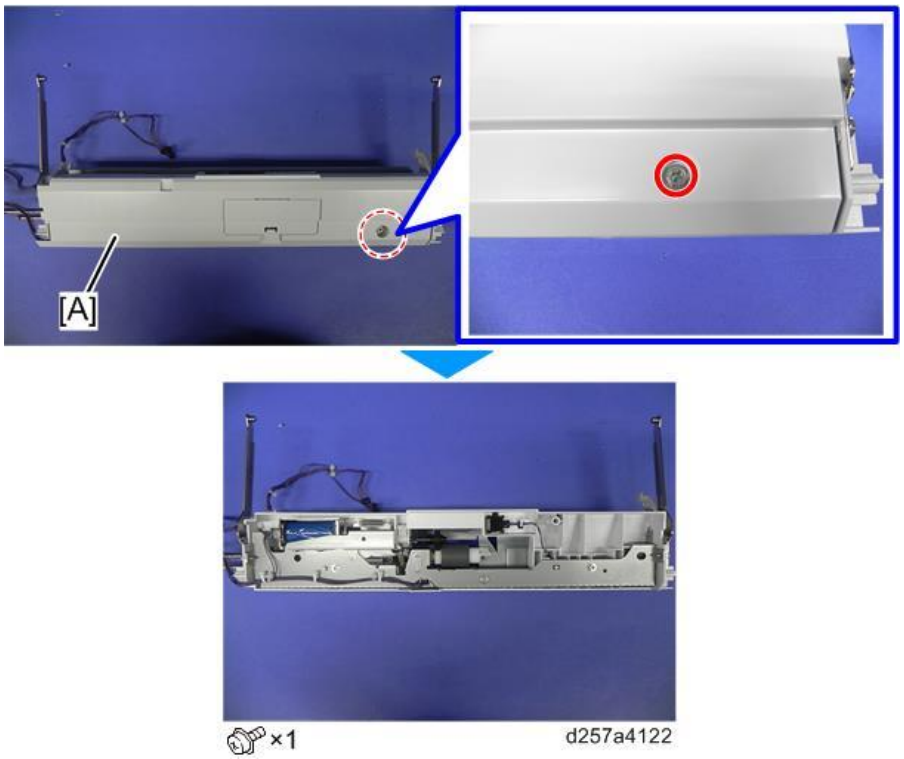
2. Remove the fixing screws and joints [A] of the bypass paper feed unit.



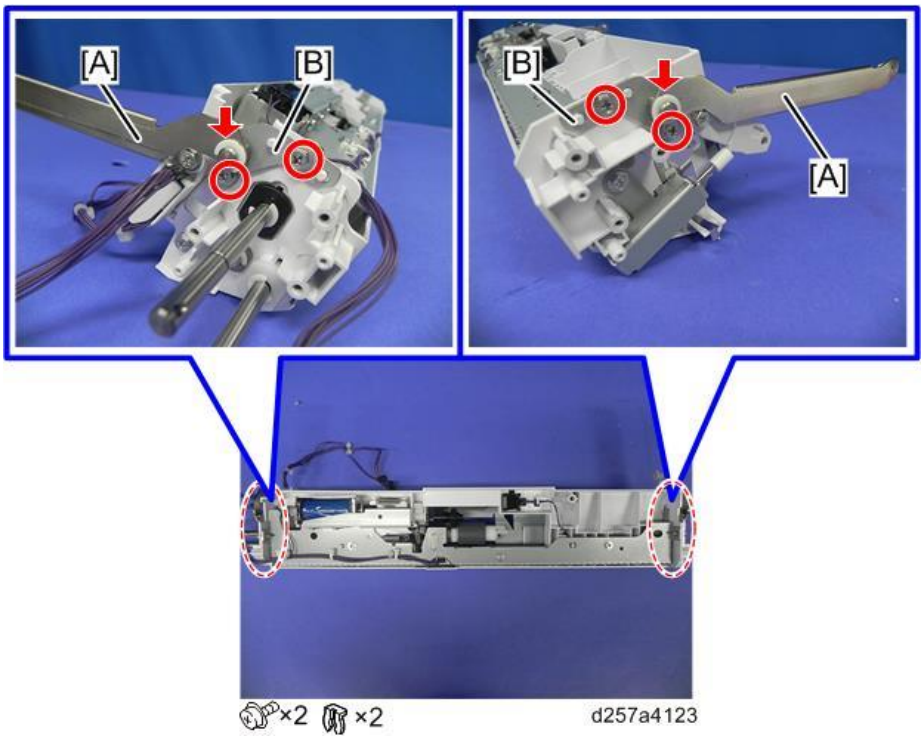
3. Remove the bracket [A] and connectors, then take out the paper feed unit.



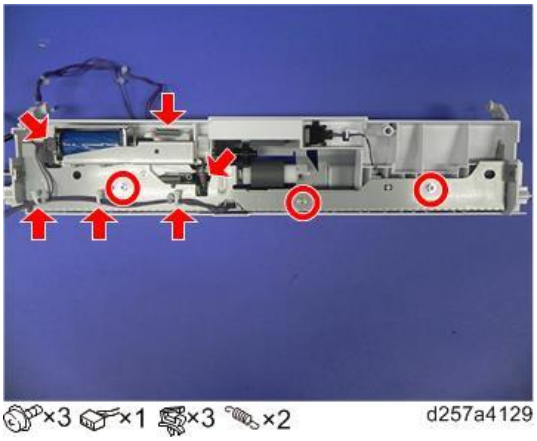
4. Remove the bypass paper feed unit cover [A].



5. Remove the arm [A] and the bracket [B].

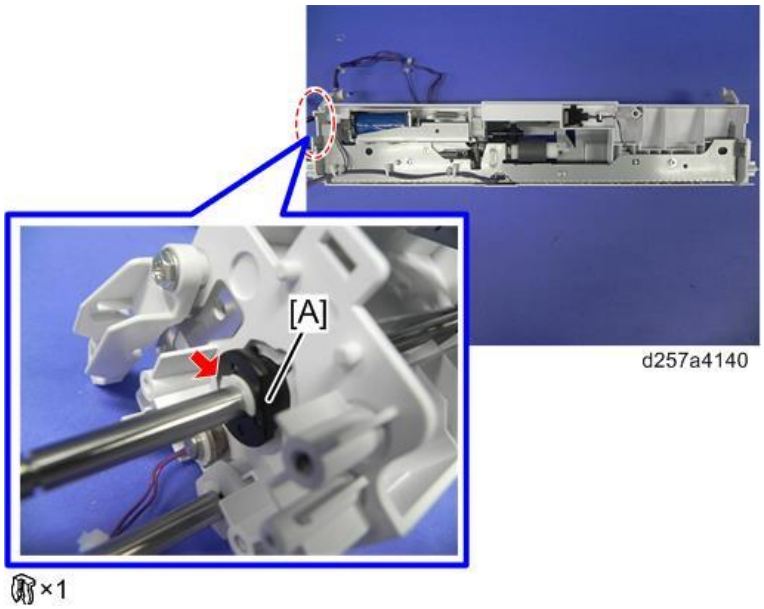


6. Remove the screws and springs, open the clamps, and disconnect the connector.

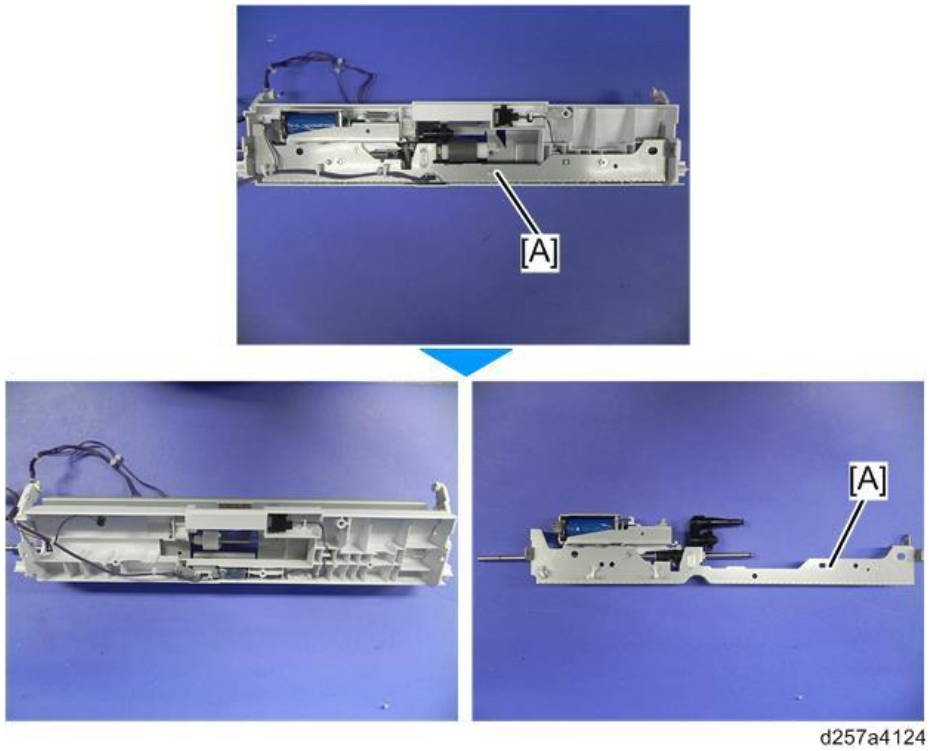


7. Remove the bypass pick-up roller and the bypass feed roller. (Bypass Pick-up Roller, Bypass Feed Roller, Bypass Separation Roller)

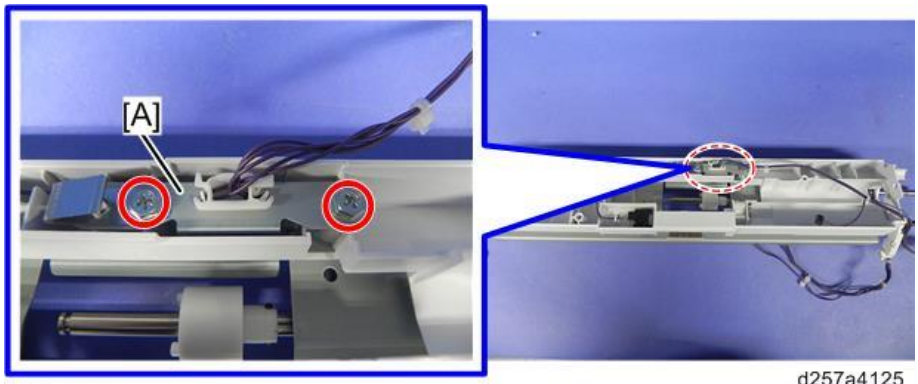
8. Remove the bearing [A].



9. Lift the bracket [A] to remove it.

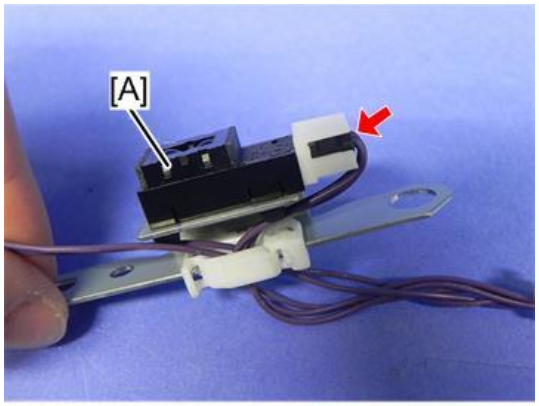


10. Remove the bracket [A].



×2

11. Remove the bypass paper feed sensor [A].

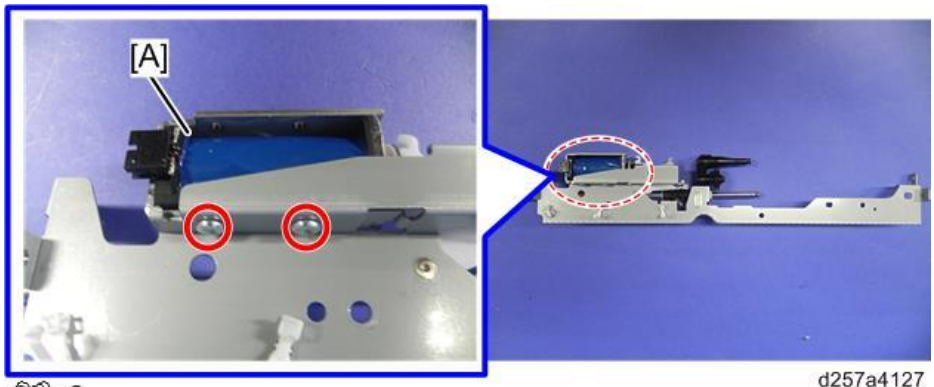


×1

Bypass Pick-up Solenoid (SOL11)

1. Remove the bracket of the bypass paper feed unit. (Bypass Paper Feed Sensor (S111))

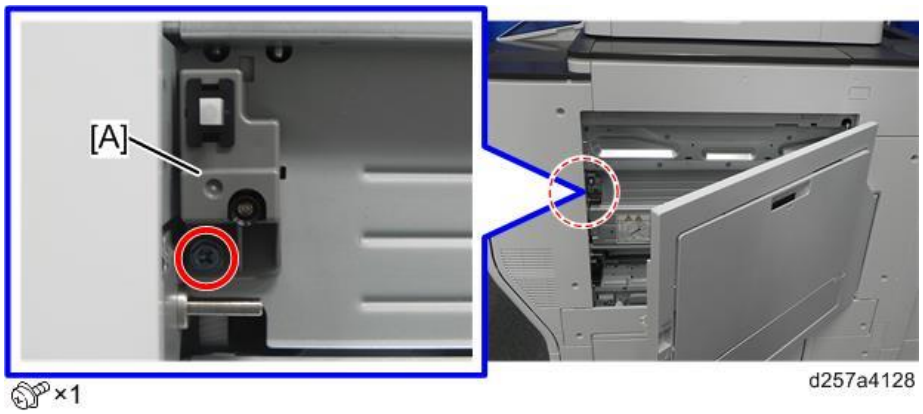
2. Remove the bypass pick-up solenoid (SOL11) [A].



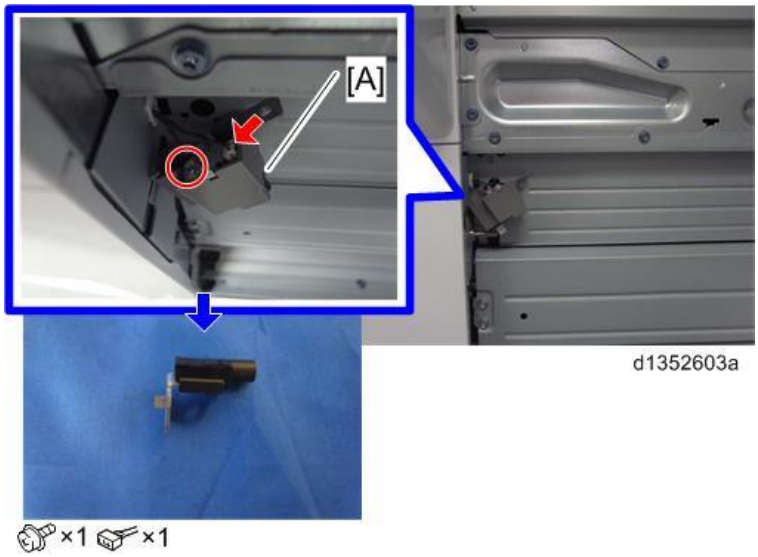
×2

Bypass Tray LED (LED3)

1. Open the bypass tray unit and remove the LED cover [A].



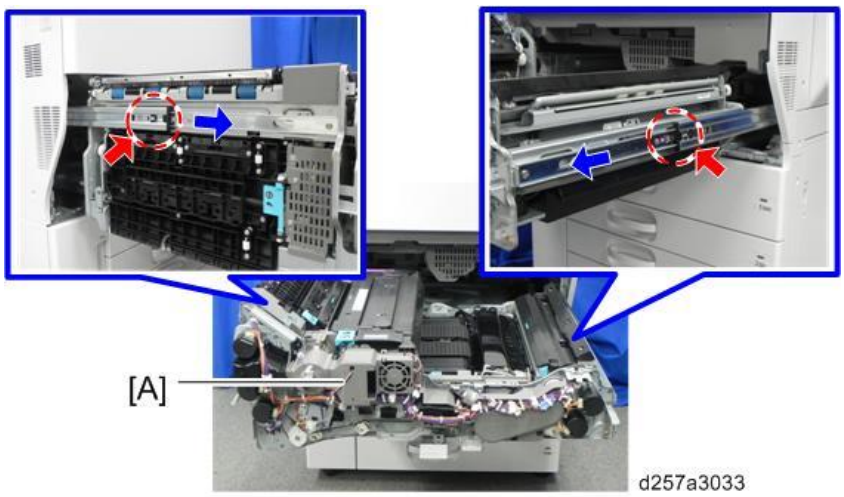
2. Remove the bypass tray LED (LED3) [A].



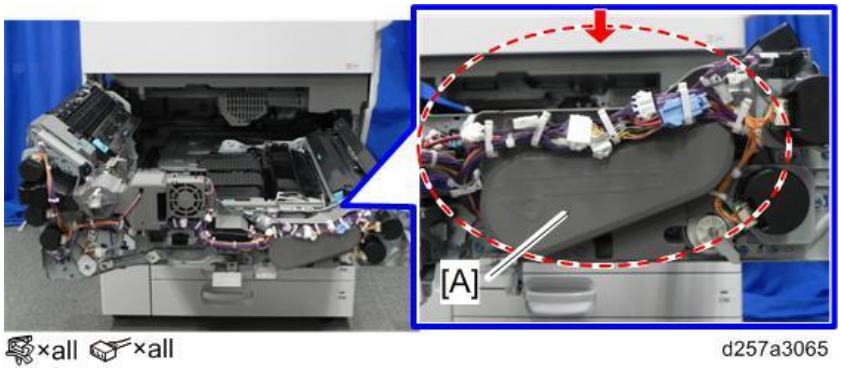
Paper Relay and Registration Section

Registration Unit

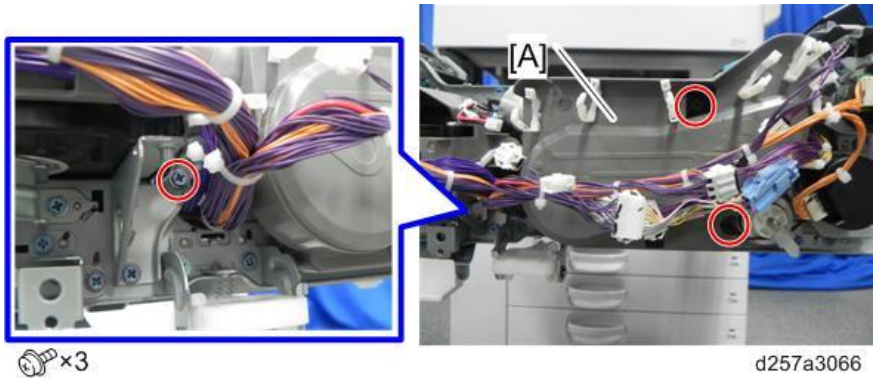
1. Remove the drawer unit cover. (Drawer Unit Cover)
2. In order to facilitate the work, press the release lever to fully open the drawer unit [A].



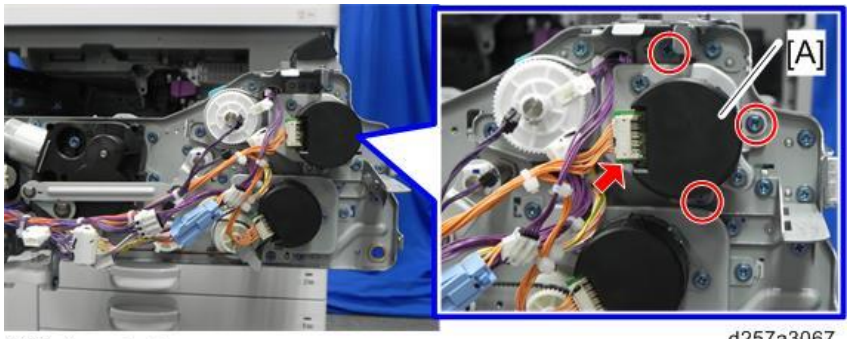
3. Remove the connectors and clamps to remove the drawer unit lock motor cover [A].



4. Remove the drawer unit lock motor cover [A].



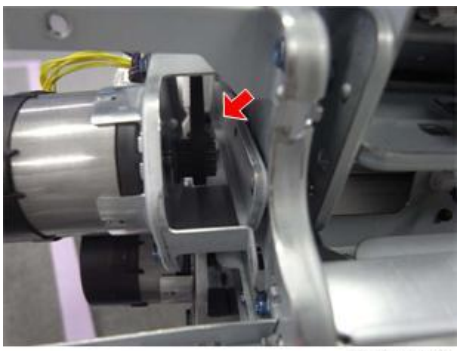
5. Remove the registration motor [A] along with the bracket.



×3 ×1 d257a3067

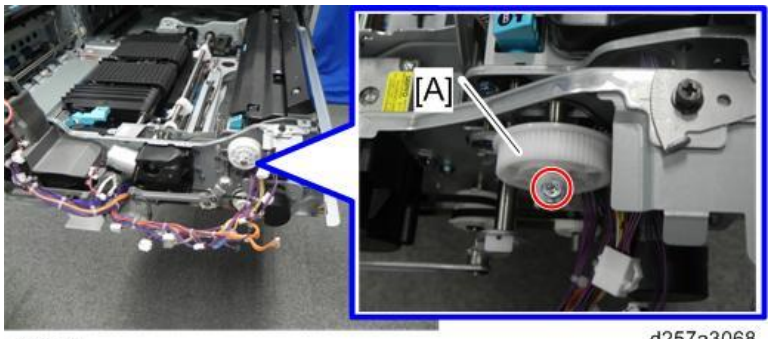
Note

- When installing the motor, attach the timing belt.



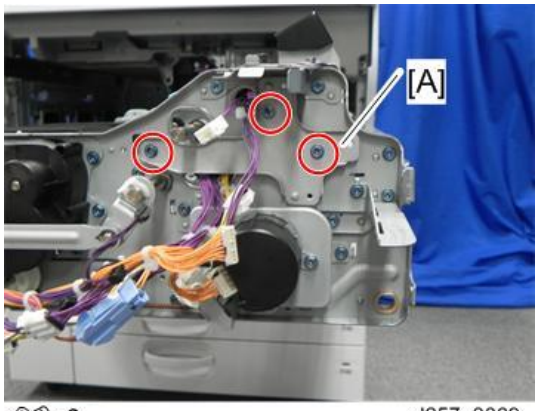
d1352399

6. Remove the timing pulley [A].



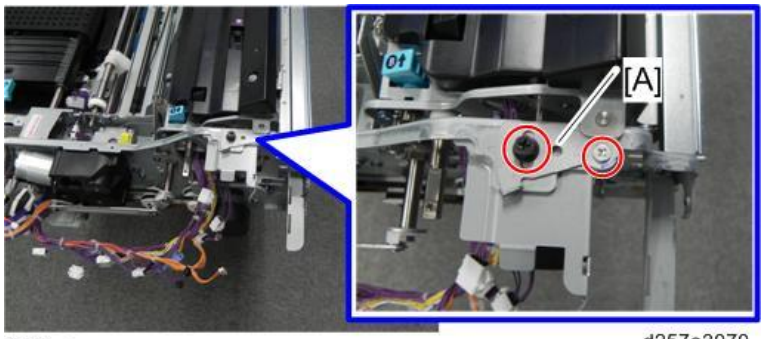
×1 d257a3068

7. Remove the positioning bracket [A].

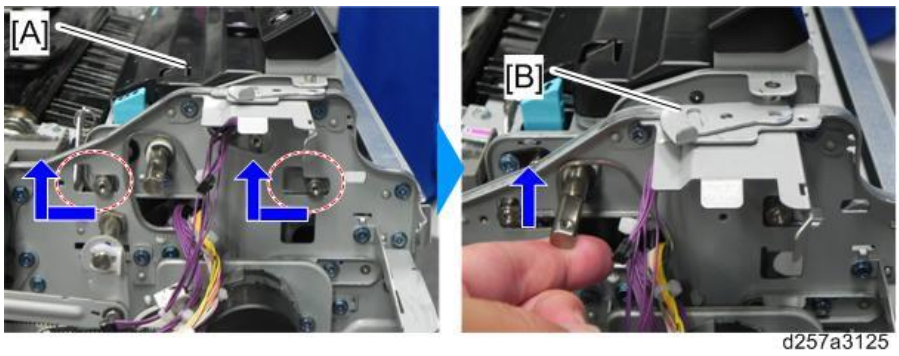


×3 d257a3069

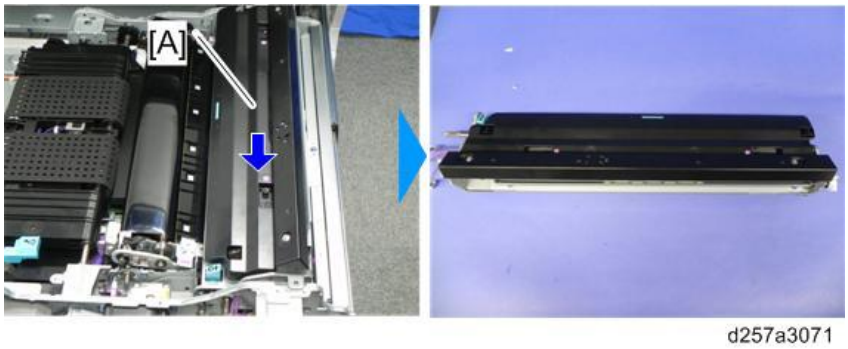
8. Remove the fixing screws of the registration adjustment bracket [A].



9. Move the registration unit [A] to the left and lift it, then remove the registration adjustment bracket [B].



10. Remove the registration unit [A].



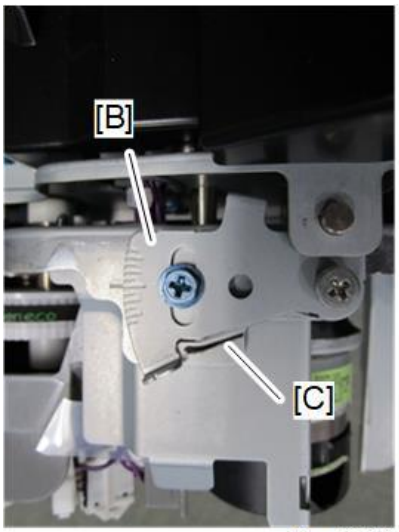
After re-installing the registration unit:

1. Adjust the dial of the registration adjustment bracket [B] to the factory set position.

Note

The factory set position is marked with a black* line [C] as shown below.

*The color is subject to change.



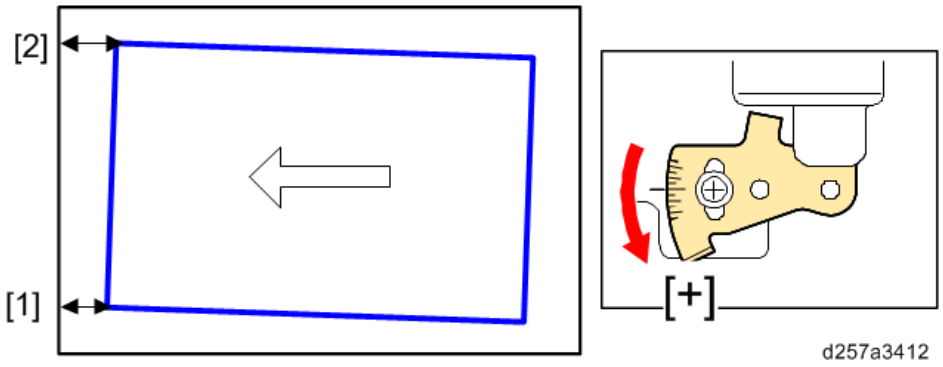
d0cpz0704

2. Print copies of the test pattern Trimming Area (SP2-109-003).

If the trim position is not correct, adjust the skew.

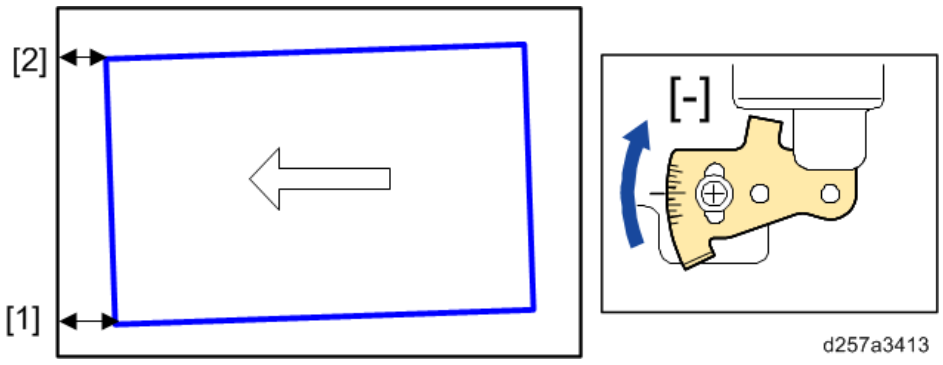
The range of adjustment is ±1 on the dial against the black mark [C] (See step 1).

- If the width of [1] is less than [2] in the paper feed direction, adjust the position of the adjustment bracket in the [+] direction.



d257a3412

- If the width of [1] is more than [2] in the paper feed direction, adjust the position of the adjustment bracket in the [-] direction.

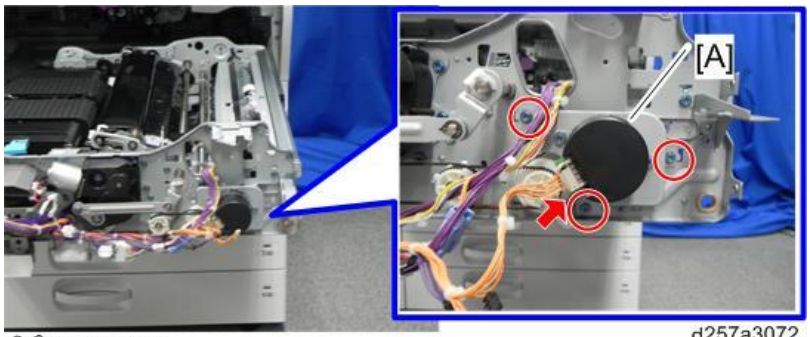


d257a3413

Relay Unit

1. Remove the registration unit. (Registration Unit)

2. Remove the duplex exit motor [A] along with the bracket.



d257a3072

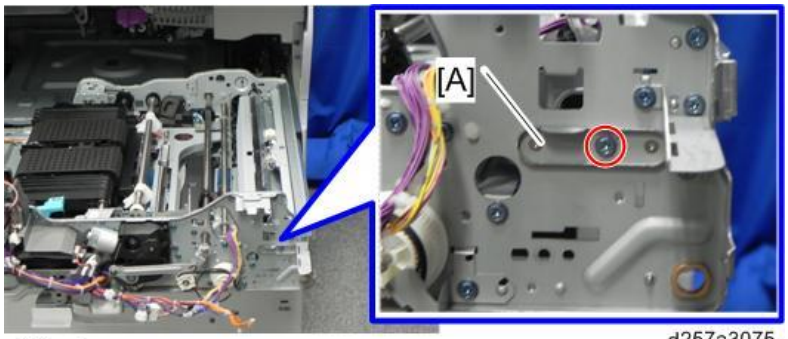
×3 ×1

Note

- When installing the motor, attach the timing belt.

d1352363

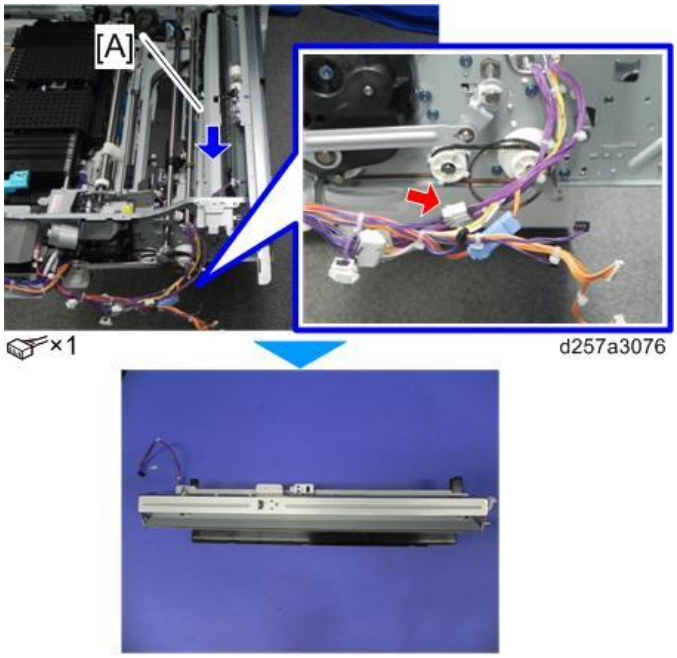
3. Remove the positioning bracket [A] of the relay unit.



d257a3075

×1

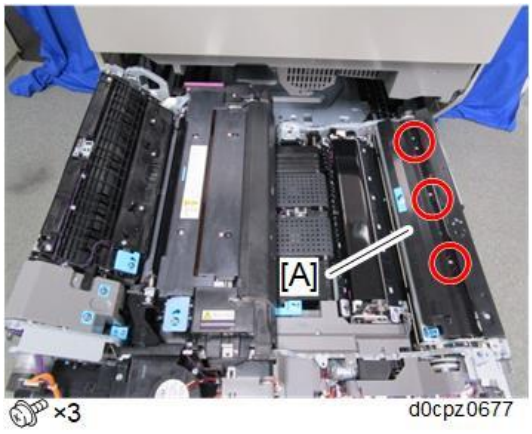
4. Remove the relay unit [A].



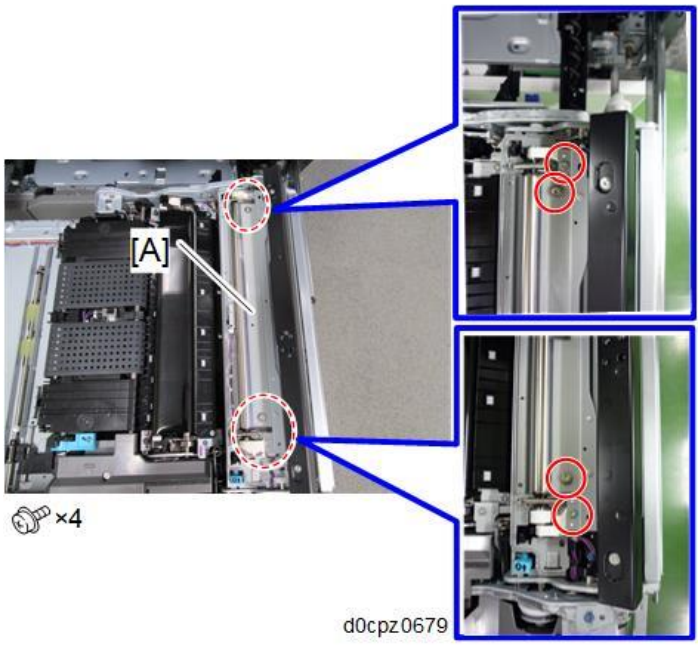
Registration Sensor (S66)

1. Open the drawer unit.

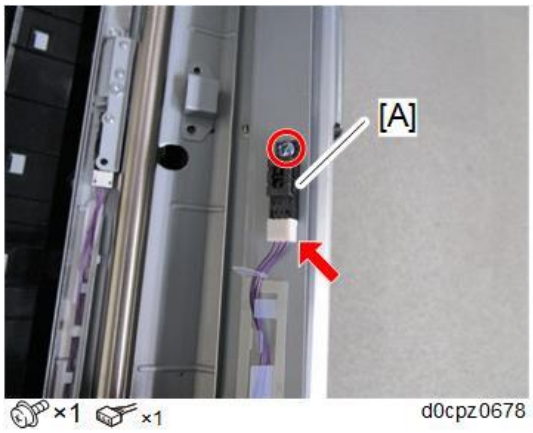
2. Remove the registration unit cover [A].



3. Remove the bracket [A].



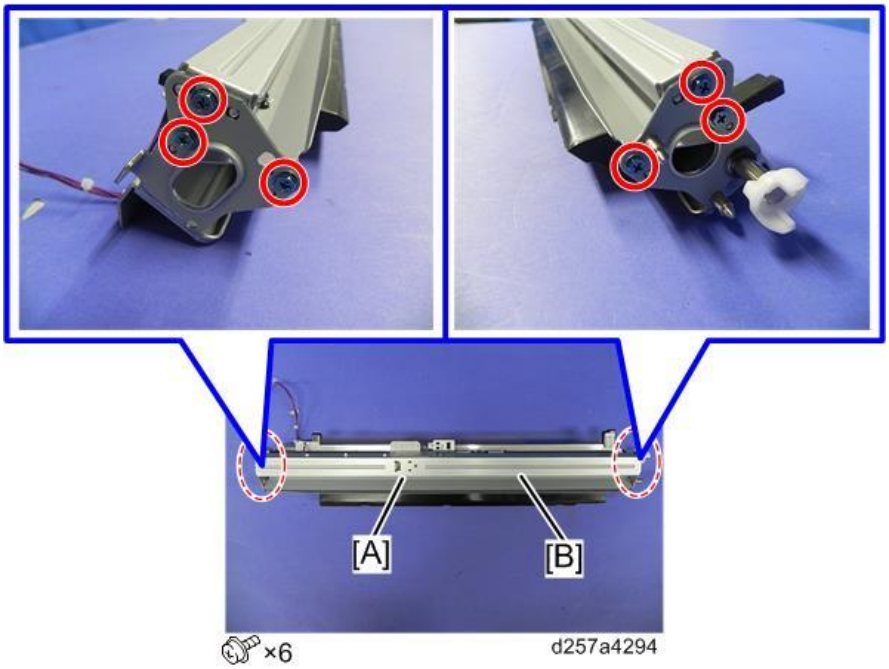
4. Remove the registration sensor (S66) [A].



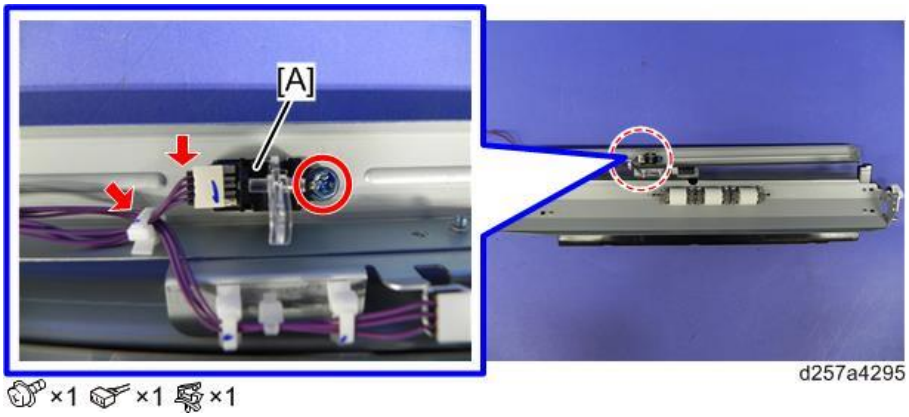
Paper Type Sensor (S69)

1. Remove the relay unit. (Relay Unit)

2. Remove the relay unit bracket [B] where the paper type sensor (S69) [A] is located.



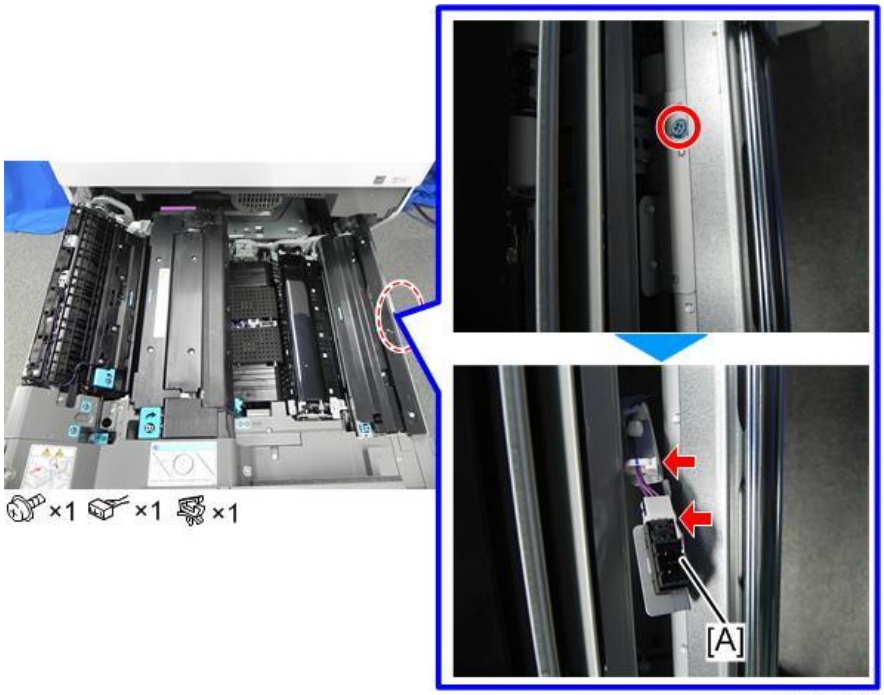
3. Remove the paper type sensor (S69) [A].



Relay Sensor (S68)

1. Open the drawer unit.

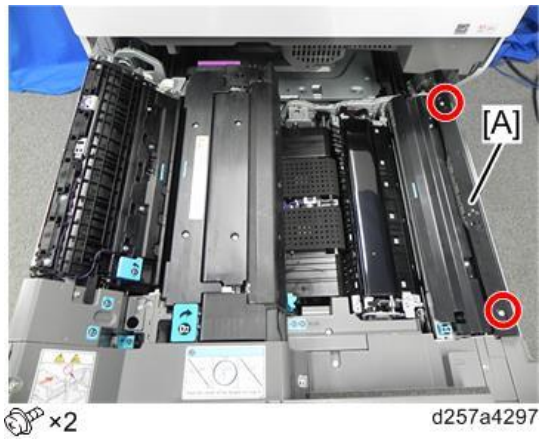
2. Remove the relay sensor (S68) [A].



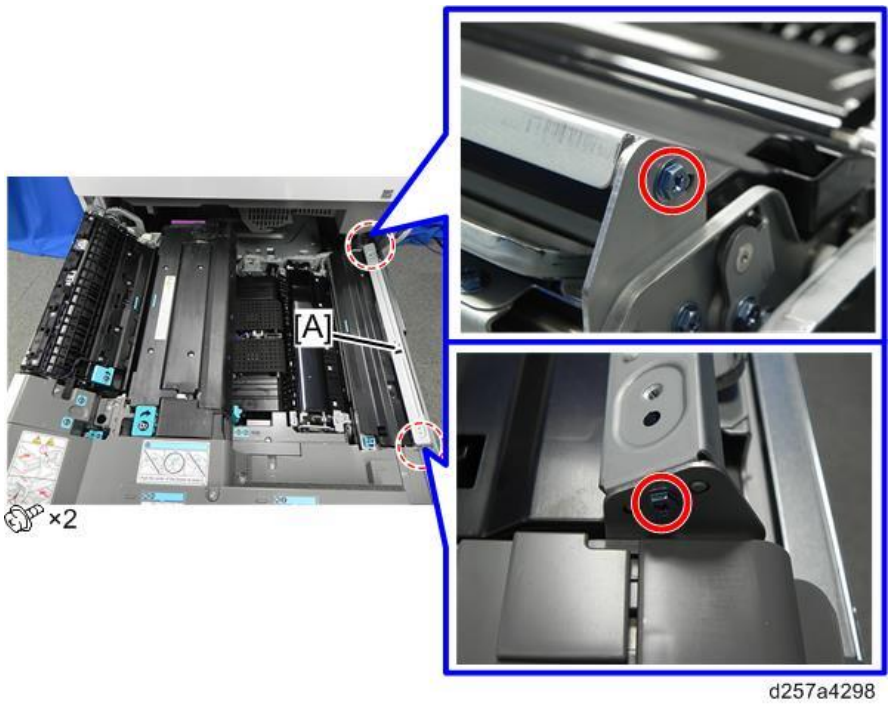
Bypass Tray Paper Type Sensor (S67)

1. Open the drawer unit.

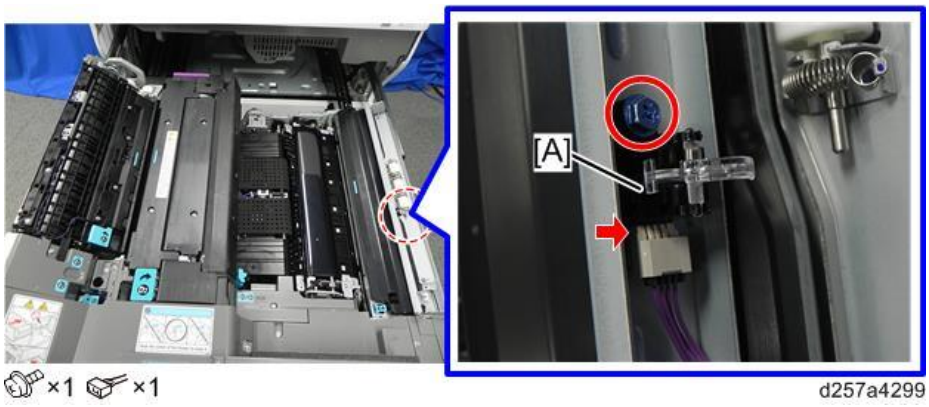
2. Remove the cover [A].



3. Remove the bracket [A].



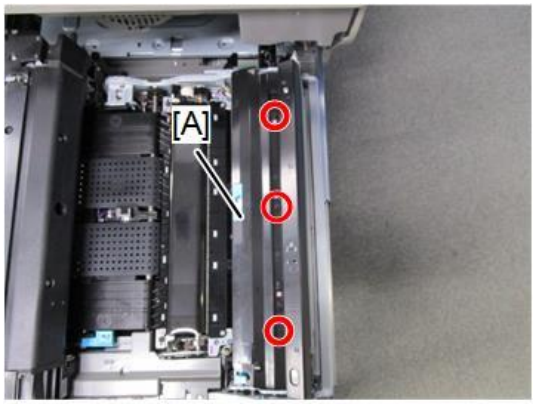
4. Turn over the bracket and remove the bypass tray paper type sensor (S67) [A].



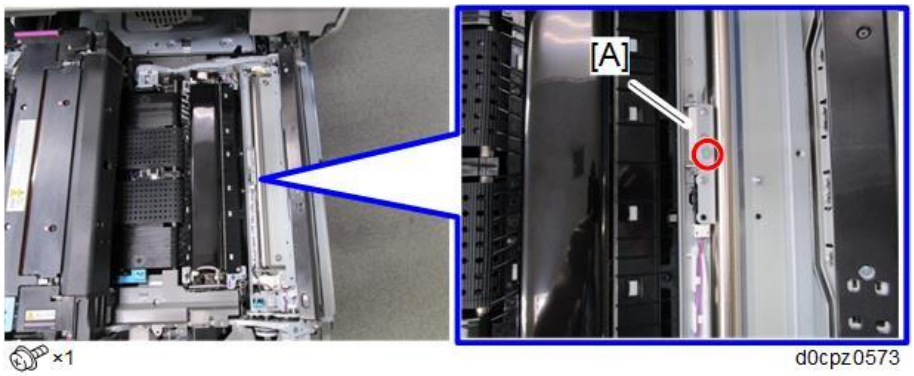
Transfer Timing Sensor (S129)

1. Open the drawer unit.

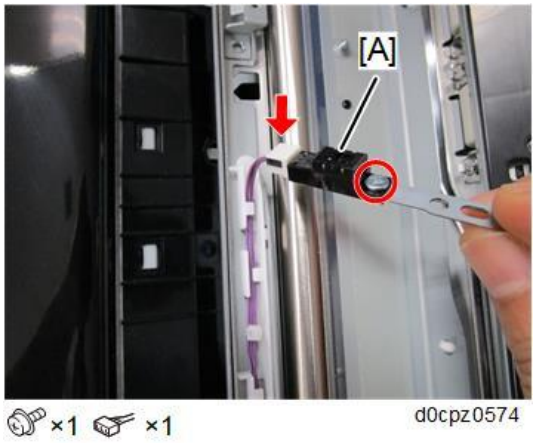
2. Remove the registration cover [A].



3. Remove the transfer timing sensor (S129) [A] with bracket.

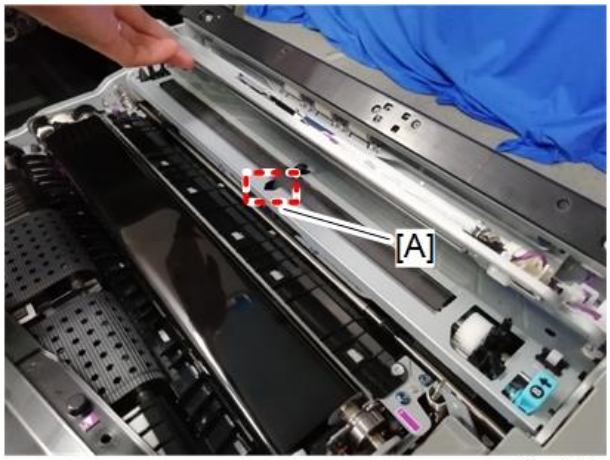


4. Remove the transfer timing sensor (S129) [A].



5. Remove the dusts attached on the opposite area [A] of the transfer timing sensor with a blow

brush.



d0cpz4180

Paper Transport Belt Unit

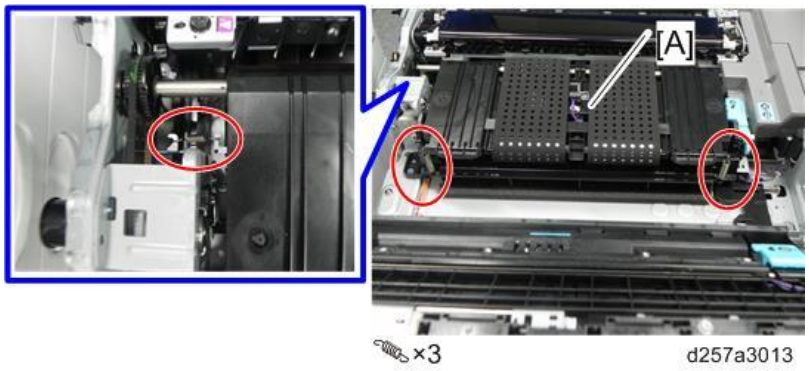
To replace the paper transport belt unit, first remove the fusing unit. (Removing the Fusing Unit)

Separation Lever

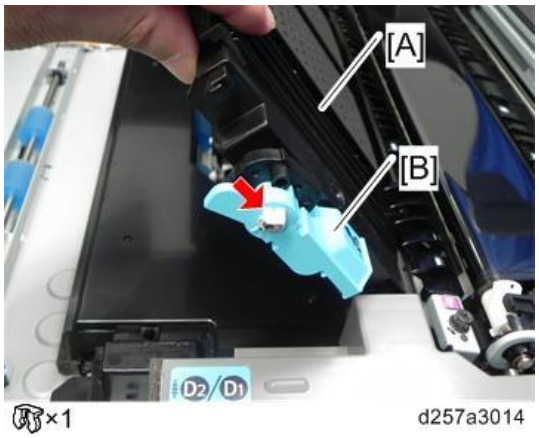
1. Remove the springs of the paper transport belt unit [A].

Important

- When removing the springs, be sure not to overextend the springs, because they are extended easily.
- When reinstalling the paper transport belt unit, be sure to insert the connector fully.



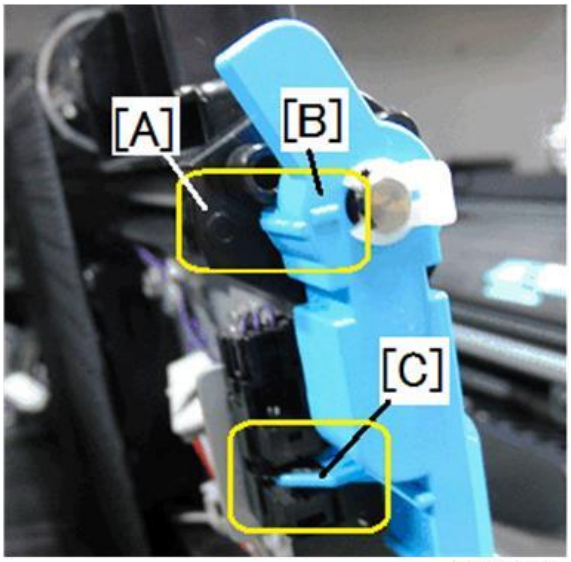
2. Open the paper transport belt unit [A], and remove the separation lever [B].



Important

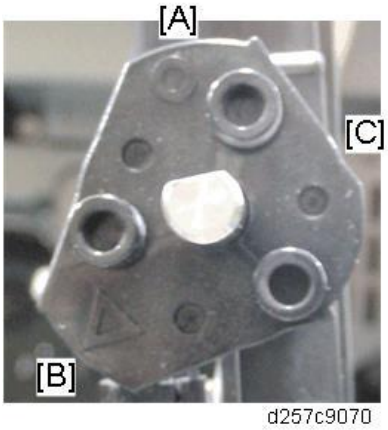
- When attaching the separation lever, pay attention to the following.
- Align the '-' marking [B] on the separation lever with the center of the marking [A] on the paper transport belt unit.

- Ensure that the actuator [C] on the separation lever enters the sensor.



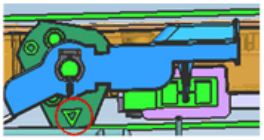
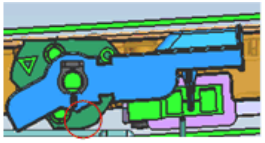
Note

- A circle mark [A] and a triangle mark [B] are engraved on the cam of the separation lever mount on the paper transport belt unit.



- The cam can rotate, which enables to install in 3 ways.
- The height of the paper transport unit varies depending on the cam position. Normally, align the mark [A] with '-' marking on the separation lever.
- If aligning with [B], the height of the exit of the paper transport unit is approx. 2 mm higher. This may resolve JAM24/JAM72.
- If aligning with [C] (no-marking), the height of the exit of the paper transport unit is approx. 2 mm lower. This may resolve toner scatter.

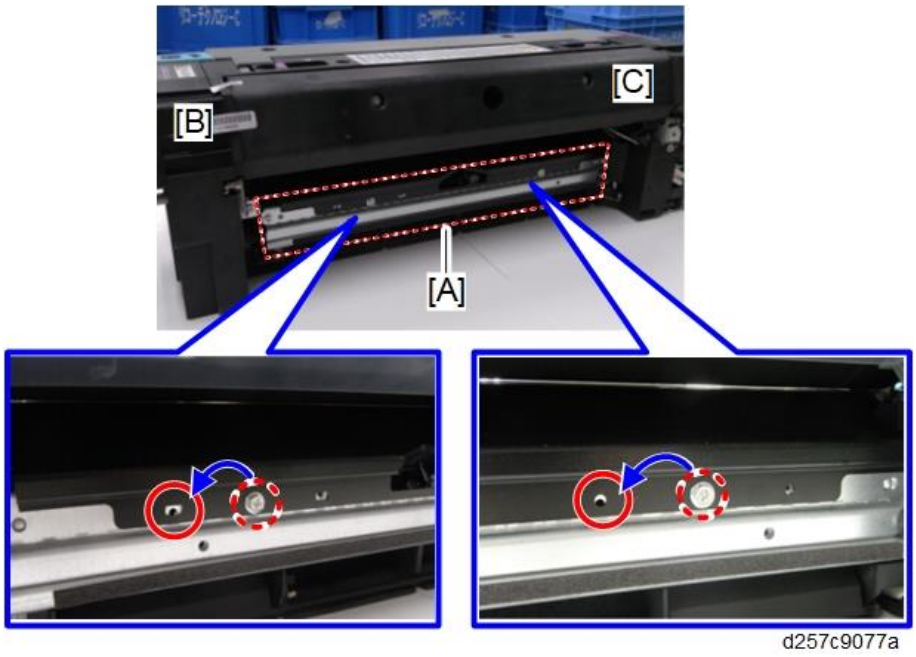
	Marking	Layout	Effect and Side effect
A	Circle mark	Normal d257c9074	Optimal configuration for paper transportability (thin-thick paper) and margin for abnormal images.

	Marking	Layout	Effect and Side effect
	d257c9071		
B	Triangle mark  d257c9072	Exit of the paper transport unit 2 mm higher d257c9075	**Effect:** • Better margin for paper lag jam of thick/small paper among [paper transfer unit] - [paper transport unit] - [fusing unit] • Paper transportability may be improved by increasing the contact area between the belt and the paper • JAM codes: JAM24 (Fusing Paper Feed Sensor: Late Jam) JAM72 (Paper Transport Belt Unit Set Sensor) **Side Effect:** • Paper transportability to fusing unit becomes worse: Folded edges or JAM may occur.
C	Nothing  d257c9073	Exit of the paper transport unit 2 mm lower d257c9076	**Effect:** • Better margin for toner scatter in low temp, low humid by rubbing paper with the exit rib of paper transport belt unit. • Less friction between the exit rib and paper; may improve toner scatter. • To ensure the paper transportability, lowering the fusing entrance guide plate is required*. **Side Effect:** • Margin for bridge jam become worse. • Paper transportability to fusing unit becomes worse: wrinkles/earthworm shape/shock

	Marking	Layout	Effect and Side effect
			jitter

***How to lower the fusing guide plate:**

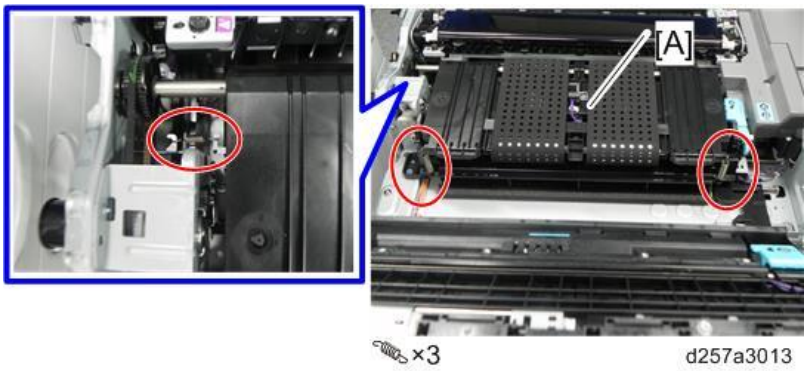
Changing the fastening position of fusing entrance plate [A] to the screw holes in red circle lowers 1 mm.



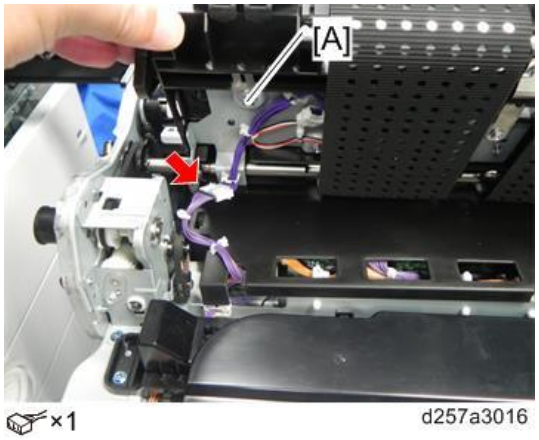
[B]: Front side, [C]: Rear side

Paper Transport Belt Unit

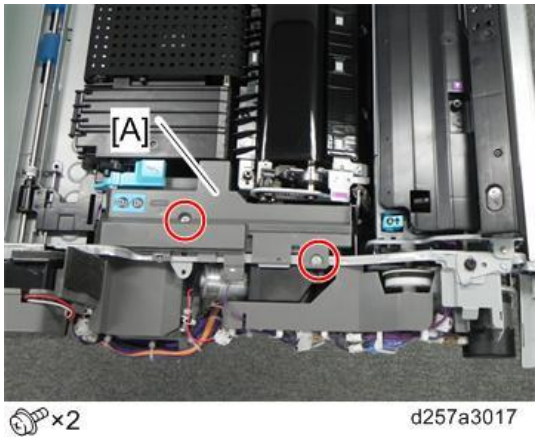
1. Remove the drawer unit cover. (Drawer Unit Cover)
2. Remove the springs from the paper transport belt unit [A].



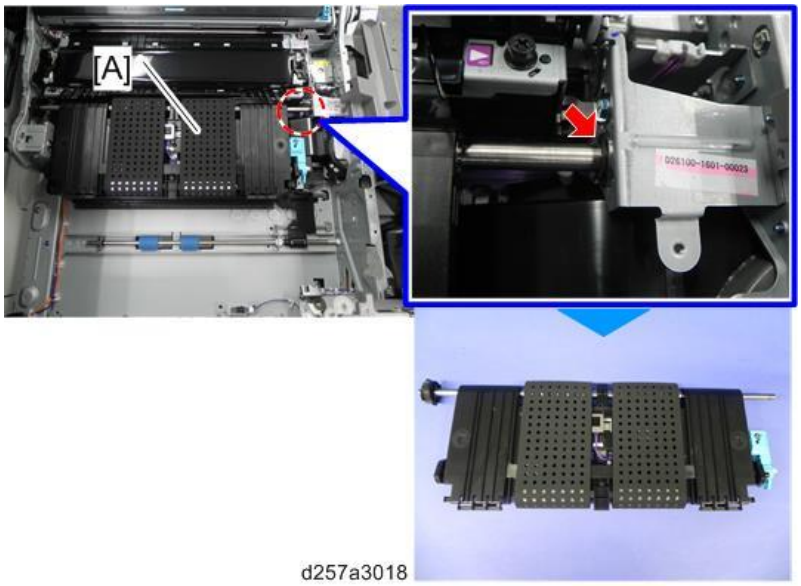
3. Open the paper transport belt unit. Remove the connector [A].



4. Remove the inner cover [A].



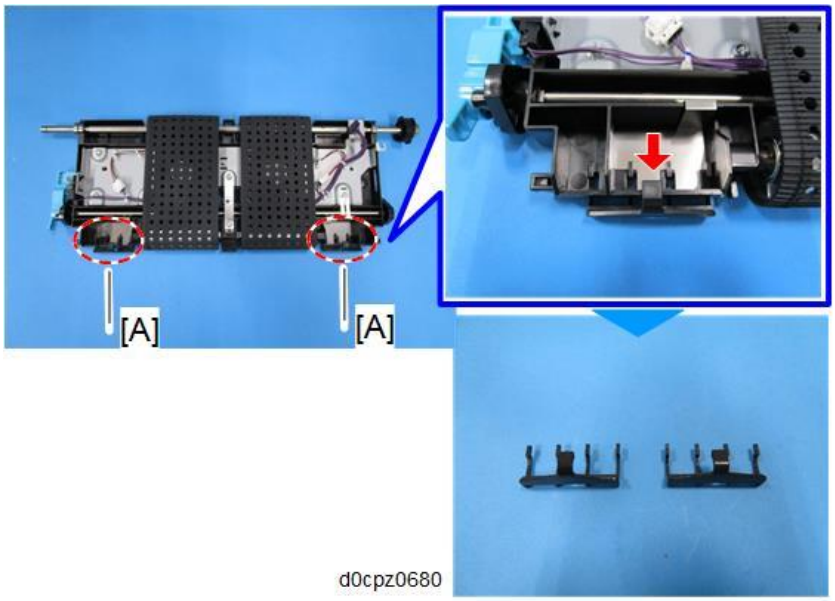
5. Remove the paper transport belt unit [A].



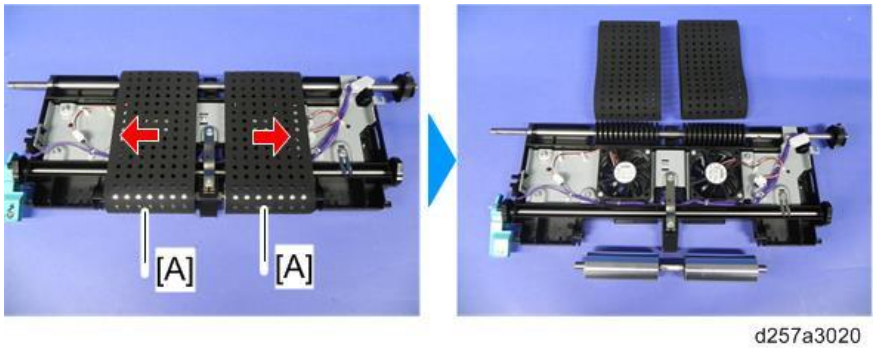
Paper Transport Belts

1. Remove the paper transport belt unit. (Paper Transport Belt Unit)

2. Remove the guides [A].

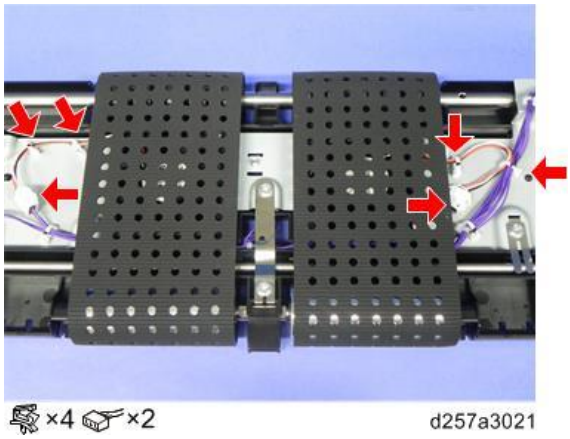


3. Slide the paper transport belts [A] (x 2) to the left or right.



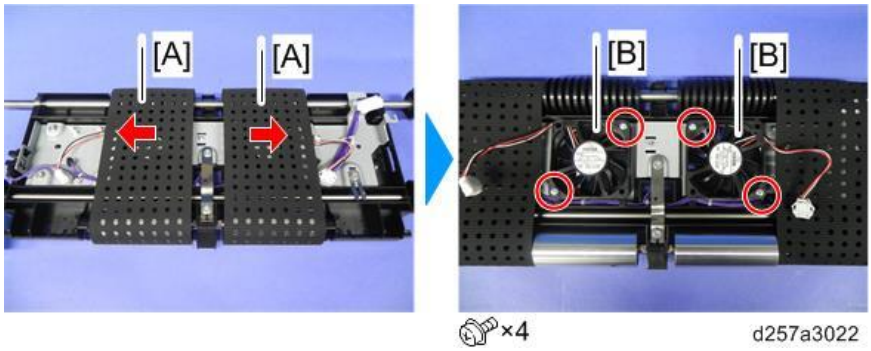
Paper Transport Belt Fan (FAN28)

1. Remove the paper transport belt unit. (Paper Transport Belt Unit)
2. Remove the clamps and connectors of the paper transport belt fans.



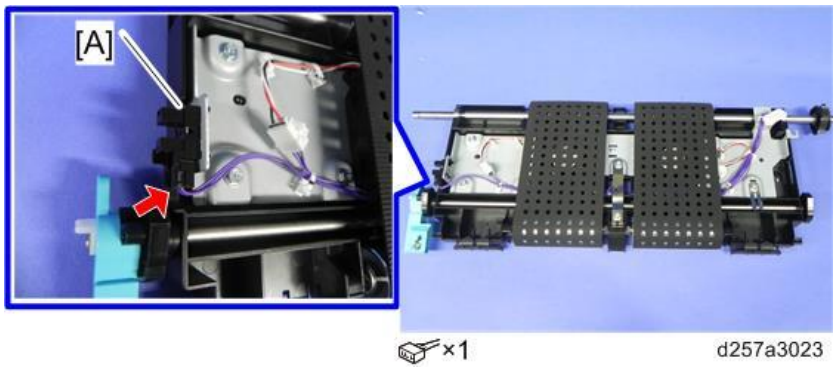
3. After sliding the paper transport belts [A] to the left or right, remove the paper transport belt

fans (FAN28) [B].



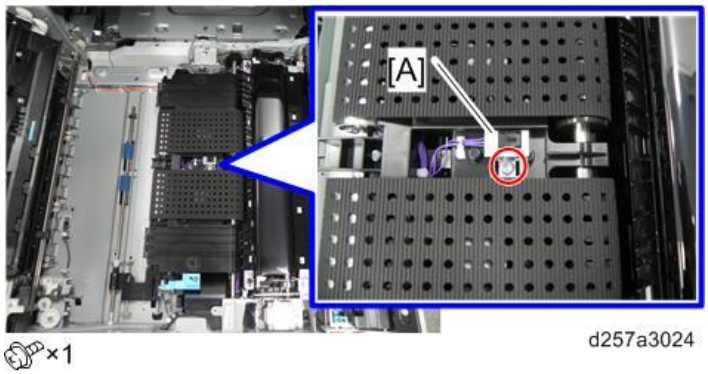
Paper Transport Belt Sensor (S63)

1. Remove the paper transport belt unit. (Paper Transport Belt Unit)
2. Remove the paper transport belt sensor (S63) [A].

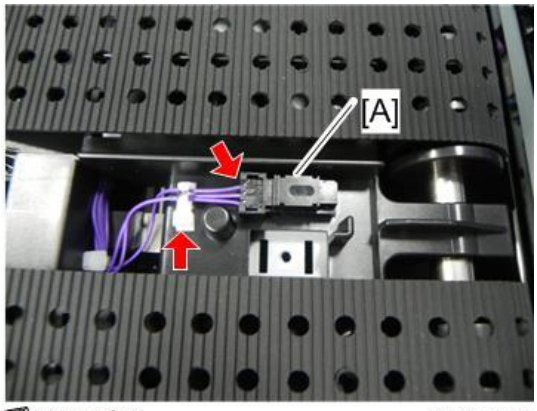


Paper Transport Belt Unit Set Sensor (S62)

1. Remove the paper transport belt unit. (Paper Transport Belt Unit)
2. Remove the bracket [A].



3. Remove the paper transport belt unit set sensor (S62) [A].



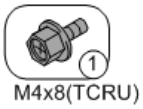
Fusing Unit

⚠CAUTION

- Make sure not to touch the fusing unit when it is still hot. Do not start working on the fusing unit until it has cooled down and is safe to touch.

Screw List

The following table shows the screws used in the fusing unit.

No.	Name	Picture	Notation used in Illustrations
1	FLANGED HEXAGONAL HEAD BOLT: M4×8 (TCRU)	m205z5300	 M4x8(TCRU)
2	SCREW: FIX: POLISH (TCRU)	m205z5304	Polish(TCRU)
3	SHOULDER SCREW: M3: Black (TCRS)	d0cpz4037	M3(TCRU)
4	SHOULDER SCREW: M3	m205z5309	M3(Stepped)
5	SCREW: M3×6	m205z5305	M3x6
6	HEXAGONAL BOLT: W/WASHER: M3×8	m205z5319	M3x8(Double)
7	HEXAGONAL BOLT: W/WASHER: M3×10	d257a3402	M3x10(Double)

Removing the Fusing Unit

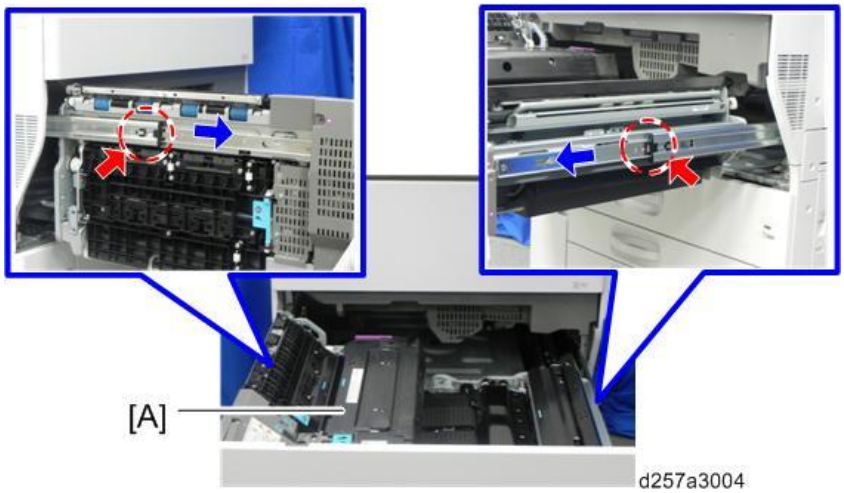
⚠CAUTION

Because the fusing unit is heavy, when removing/installing it, hold the area described in the following procedure to avoid dropping it and causing damage or an injury.

Fusing unit for IM C6500/C8000 series: 13 kg (28.6 lb.)

Fusing unit for Pro C5310S/C5300S series: 16 kg (35.2 lb.)

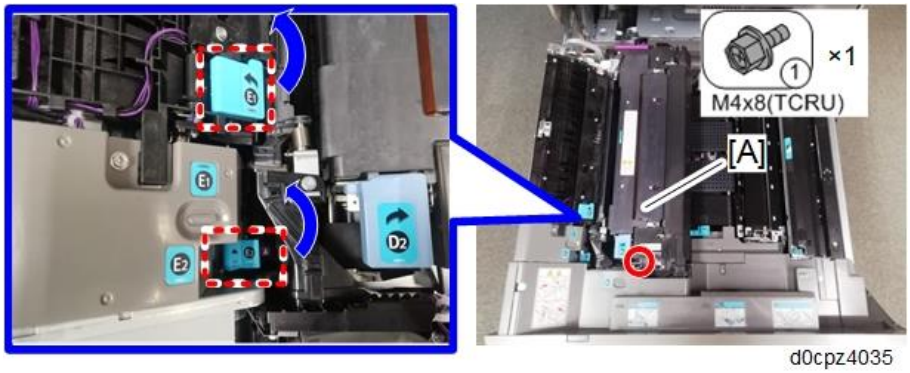
1. Remove the drawer unit cover. (Drawer Unit Cover)
2. In order to facilitate the work, pull the drawer unit out halfway, then press the release levers (one on the left side and one on the right side, shown by the red arrows) and pull the drawer unit [A] out fully.



Note

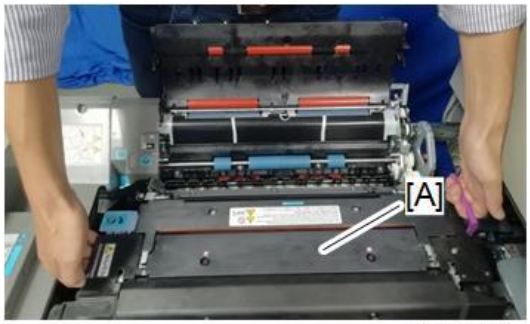
- In a low-temperature environment (below 15°C), the tension of the curled cord may be reduced. Do not keep the drawer unit pulled out for an extended period of time, or the curled cord will be deformed and will not curl up again when you try to slide the drawer unit back in. As a guide, every 30 minutes, push the drawer unit back to the halfway position. The tension of the curled cord will not decrease in a low-temperature environment if the drawer unit is open halfway.

3. Remove the screw securing the fusing unit [A] and open the guide plate E1 and E2.



d0cpz4035

4. Hold the handgrips to detach the fusing unit [A].



d0cpz4036

Note

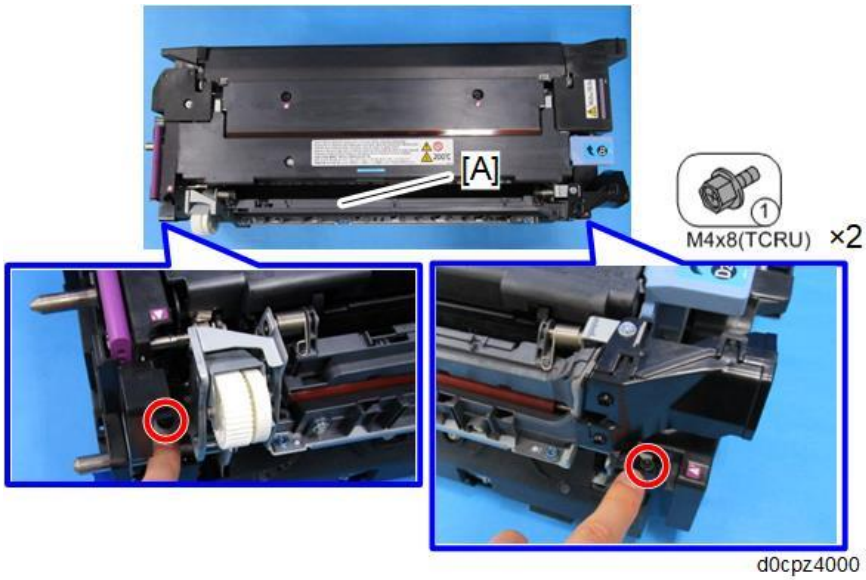
In case installing the brand new fusing unit (service part or TCRU):

After installing the brand new fusing unit and close the drawer unit, pull the drawer unit again to check the drawer unit can open and close smoothly.

Paper Exit Entrance Unit

1. Remove the fusing unit. (Removing the Fusing Unit)

2. Remove the paper exit entrance unit [A].

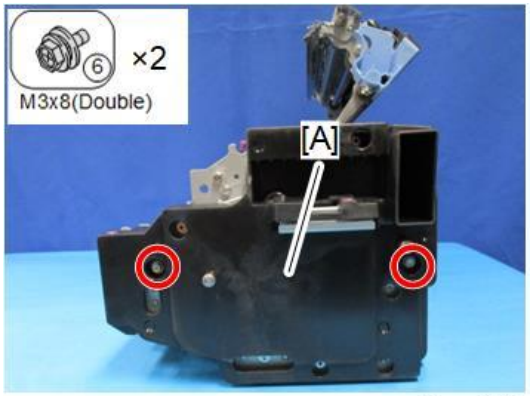


d0cpz4000

Fusing Unit Cover

Fusing Front Cover

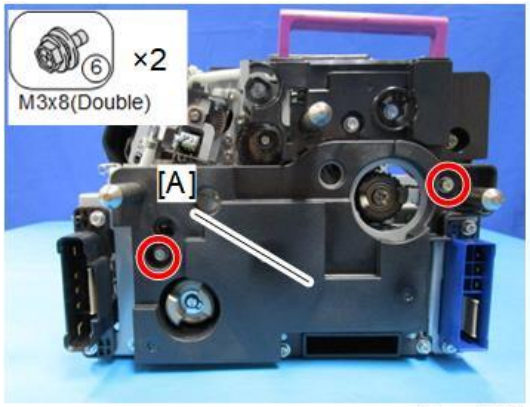
1. Remove the fusing unit. (Removing the Fusing Unit)
2. Remove the fusing front cover [A].



d0cpz4001

Fusing Rear Cover

1. Remove the fusing unit. (Removing the Fusing Unit)
2. Remove the fusing rear cover.

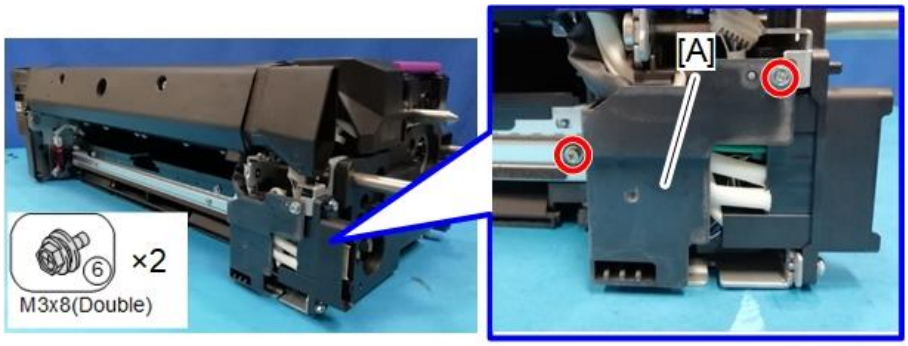


d0cpz4002

Entrance Drawer Cover

1. Remove the fusing unit. (Removing the Fusing Unit)

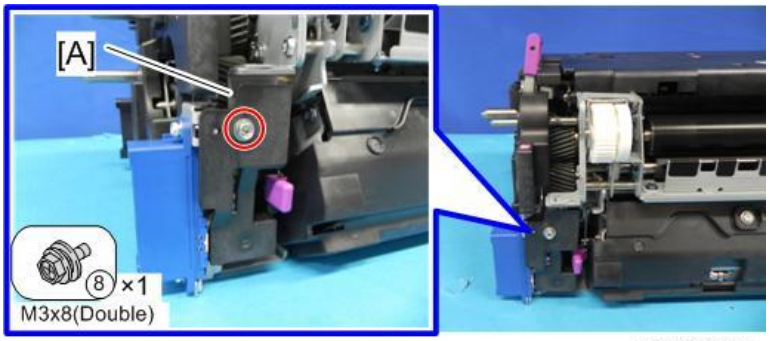
2. Remove the entrance drawer cover [A].



d0cpz4009

Exit Drawer Cover

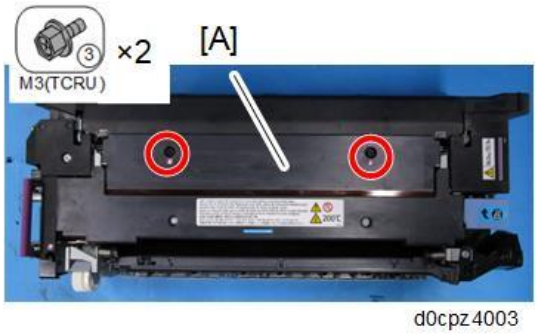
1. Remove the fusing unit. (Removing the Fusing Unit)
2. Remove the exit drawer cover [A].



d257a3305a

Fusing Upper Cover

1. Remove the fusing unit. (Removing the Fusing Unit)
2. Remove the fusing upper cover [A].



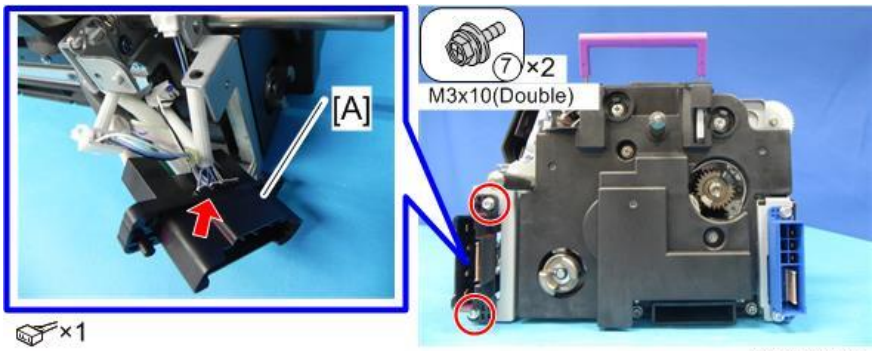
d0cpz4003

IH Coil Unit

1. Remove the cover [A].

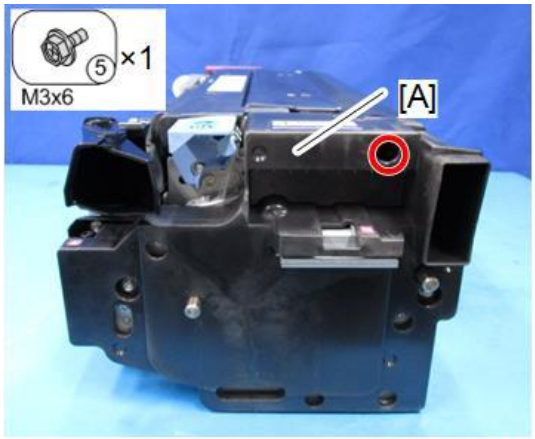
d0cpz4004

2. Remove the entrance drawer cover [A]. (Entrance Drawer Cover)
3. Disconnect the drawer connector [A].



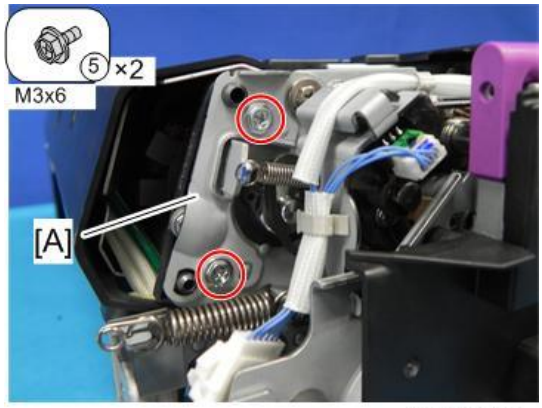
d257a3151a

4. Remove the fixing screw [A] on the front side.



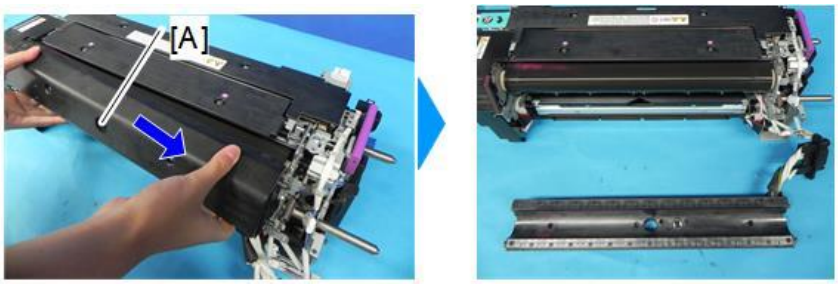
d0cpz4011

5. Remove the plate [A].



d257a3152a

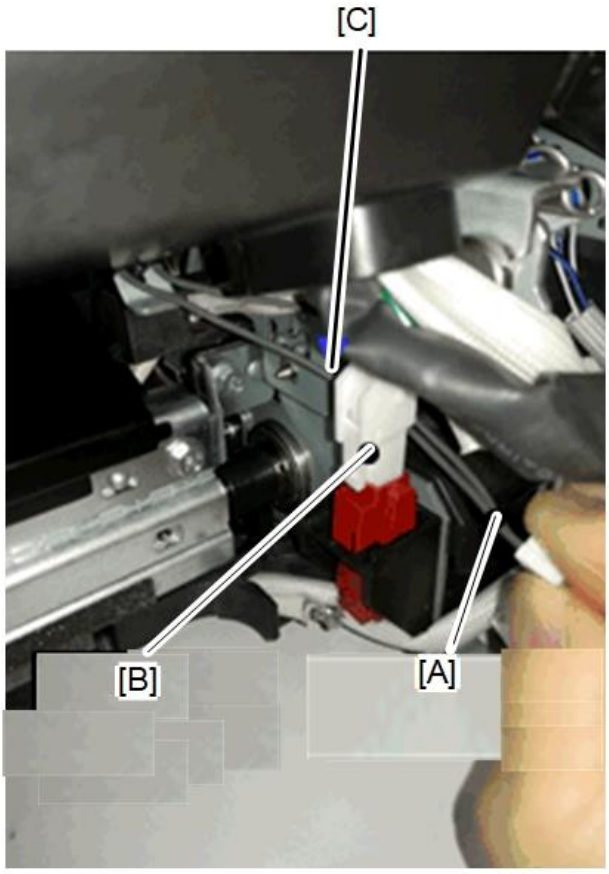
6. Remove the IH coil unit [A].



d0cpz4012

Thermistor Harness

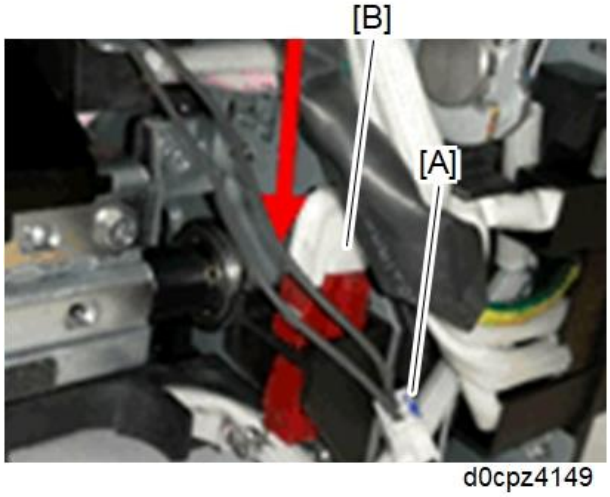
1. Route the thermistor harness [A] inside the connector [C] and connect the connector [B].



d0cpz4147

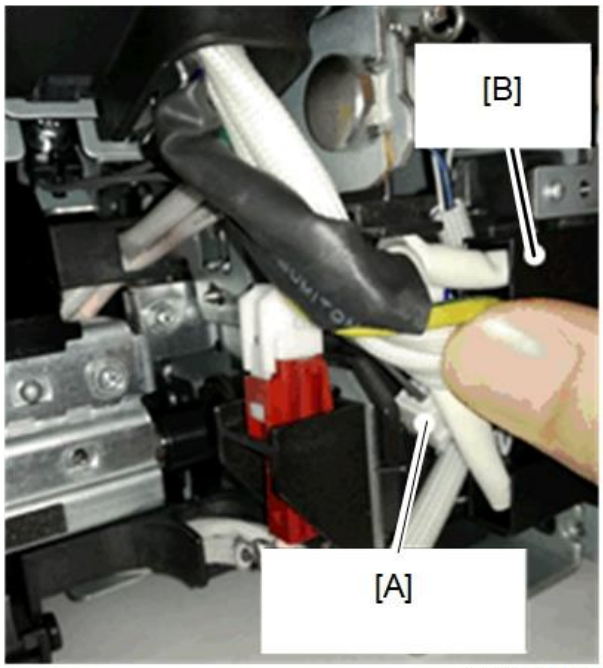
Note

Incorrect: Thermistor harness passes outside the connector [B].



d0cpz4149

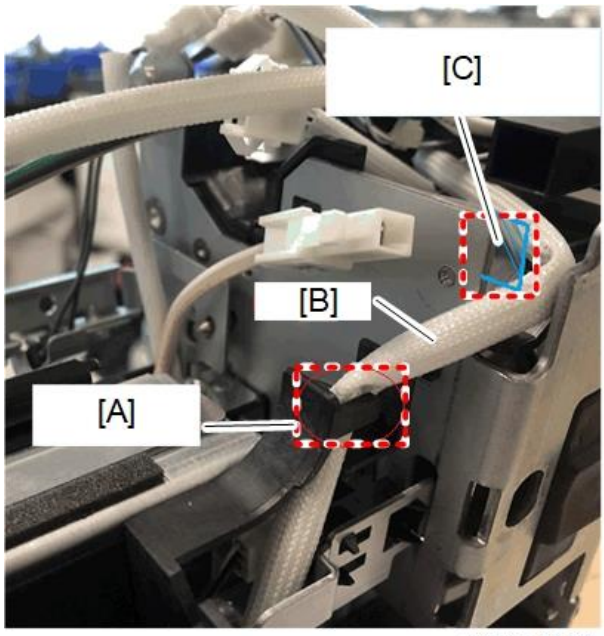
2. Connect the thermistor harness and relay connector [A] and connect the drawer [B].



d0cpz4148

Drawer Harness

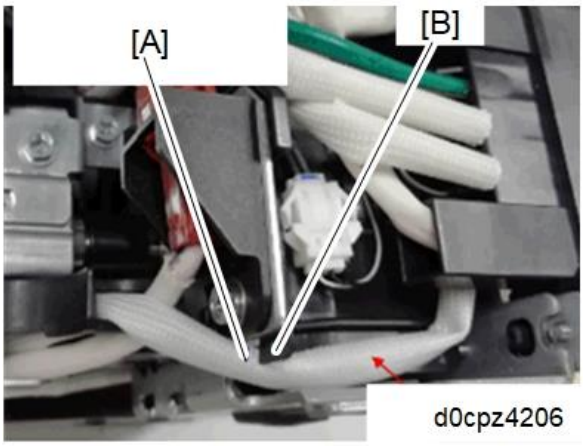
Route the drawer harness [B] along with the harness guide on the duct [A], and then route the harness along the polyester film [C] attached on the side plate.



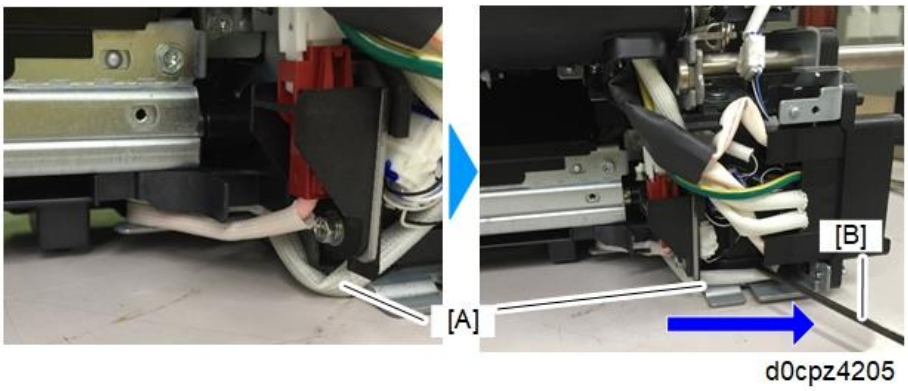
d0cpz4150

IH Harness

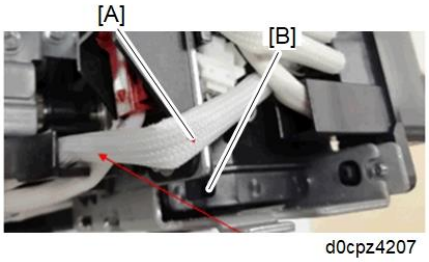
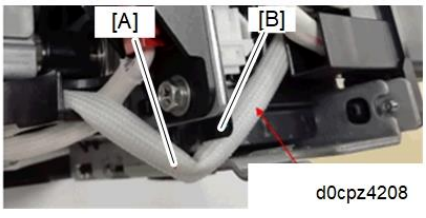
The IH harness [A] must be routed along the wiring guide [B].



To route the harness correctly, pull the IH harness [A] in the direction of the arrow using a jeweler's screwdriver [B].



The following table shows incorrect samples:

No.	Description	Picture
1	IH harness [A] is not along the wiring guide [B].	
2	IH harness [A] is loosely hooked on the wiring guide [B].	

Separating the Fusing Unit

1. Remove the fusing unit. (Removing the Fusing Unit)

2. Remove the fusing unit upper cover [A].

d0cpz4004

3. Remove the paper exit entrance unit. (Paper Exit Entrance Unit)

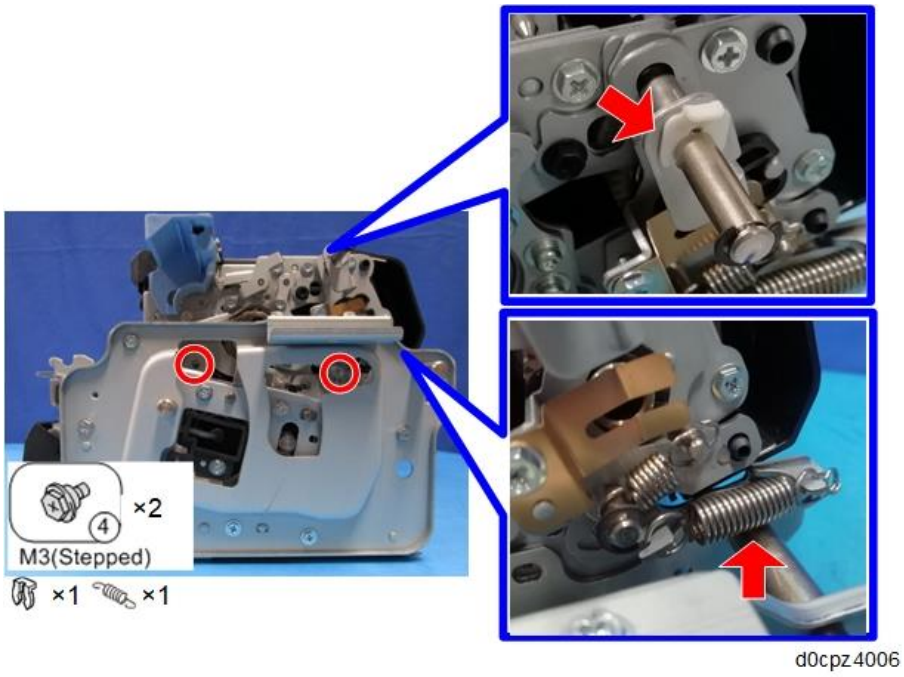
4. Remove the fusing front cover. (Fusing Front Cover)

5. Remove the connecters.

d0cpz4005

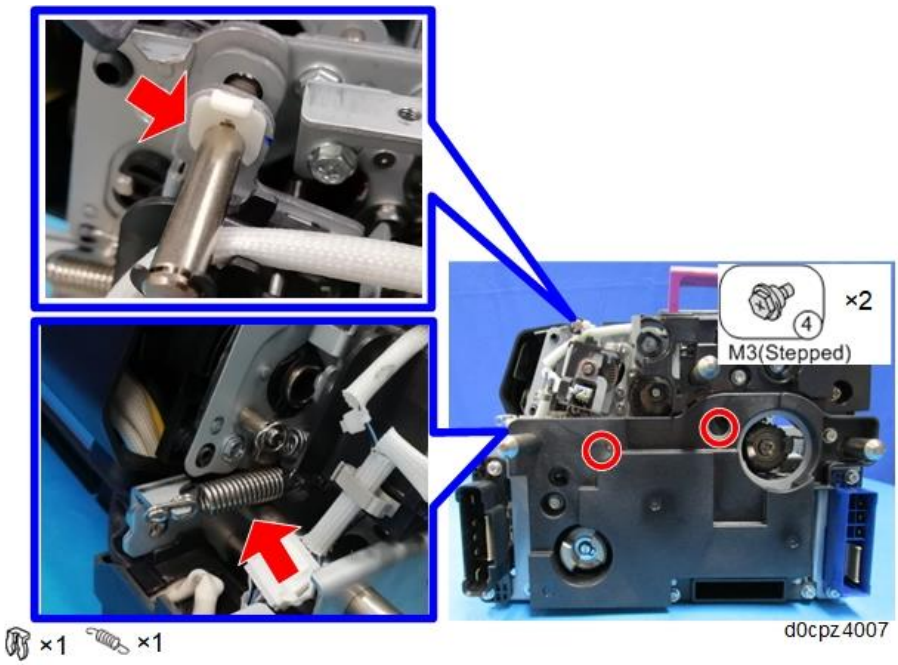
6. Remove the screws, clip and spring.

Front side:

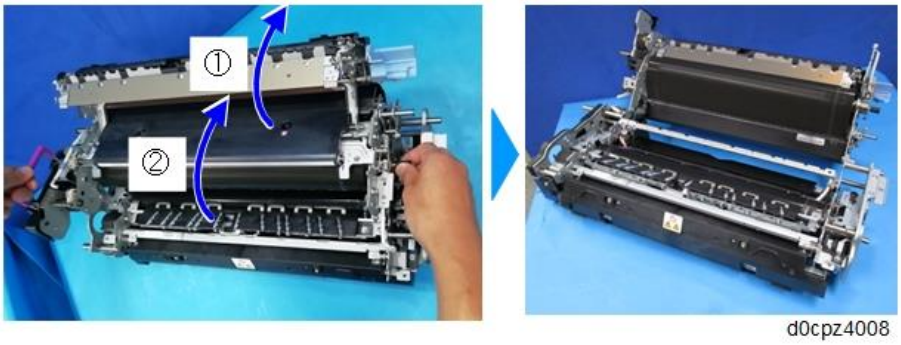


d0cpz4006

Rear side:



7. ①Open the fusing separation unit first, and then ②open the fusing unit by lifting up the fusing belt unit (upper side of the fusing unit).

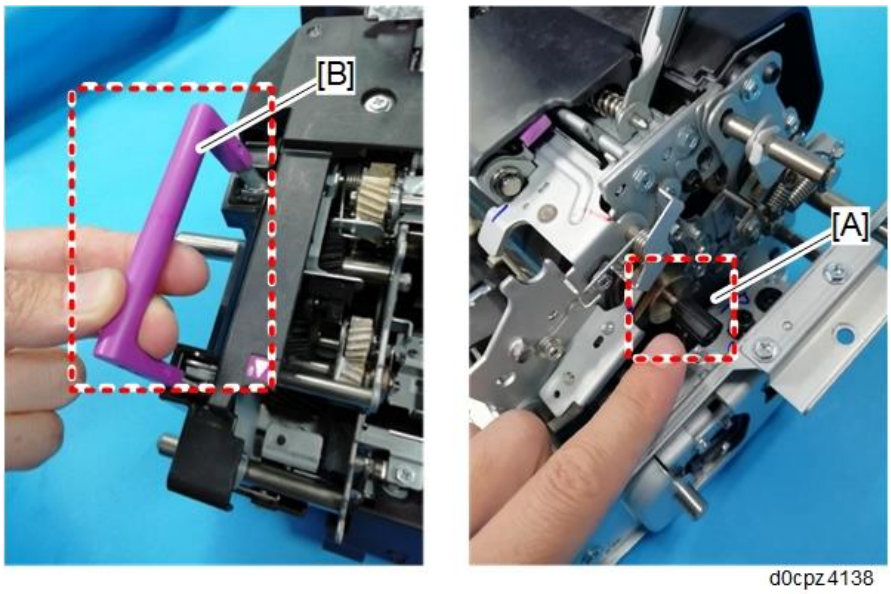


Note

When opening the unit, hold the following positions:

Right: The black resin part (the edge of the fusing roller) [A]

Left: The purple handle [B]

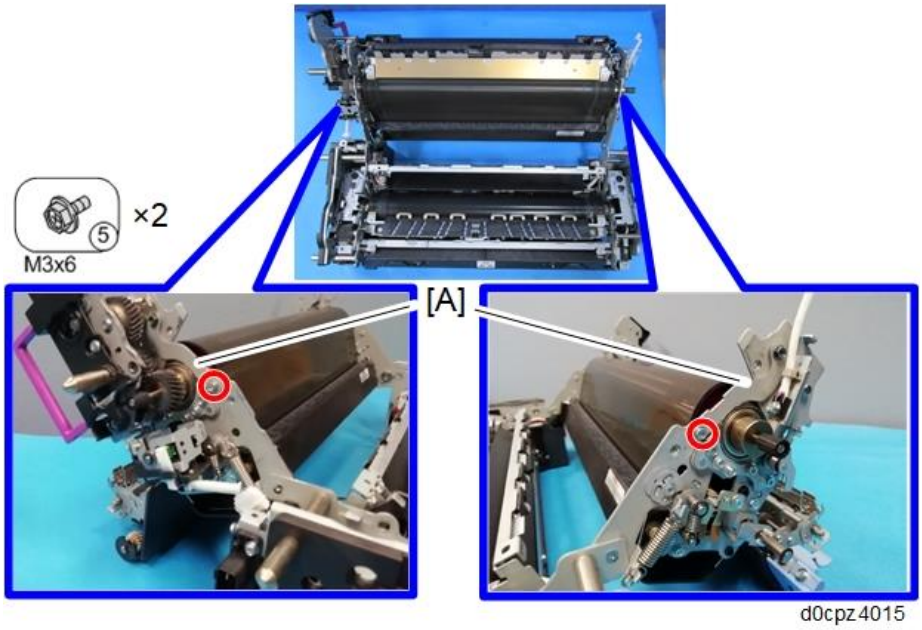


⚠CAUTION

When touching the black resin part (right side), be careful not to burn your hand because the surrounding fusing roller may be hot.

Fusing Belt Unit

1. Separate the fusing unit. (Separating the Fusing Unit)
2. Release the bracket [A] of the fusing belt unit.

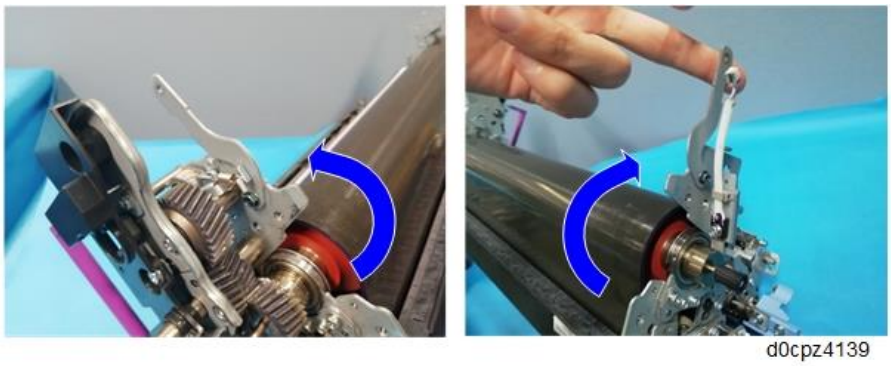


Note

Two screws are used to secure each bracket, but only remove one screw on each bracket, as

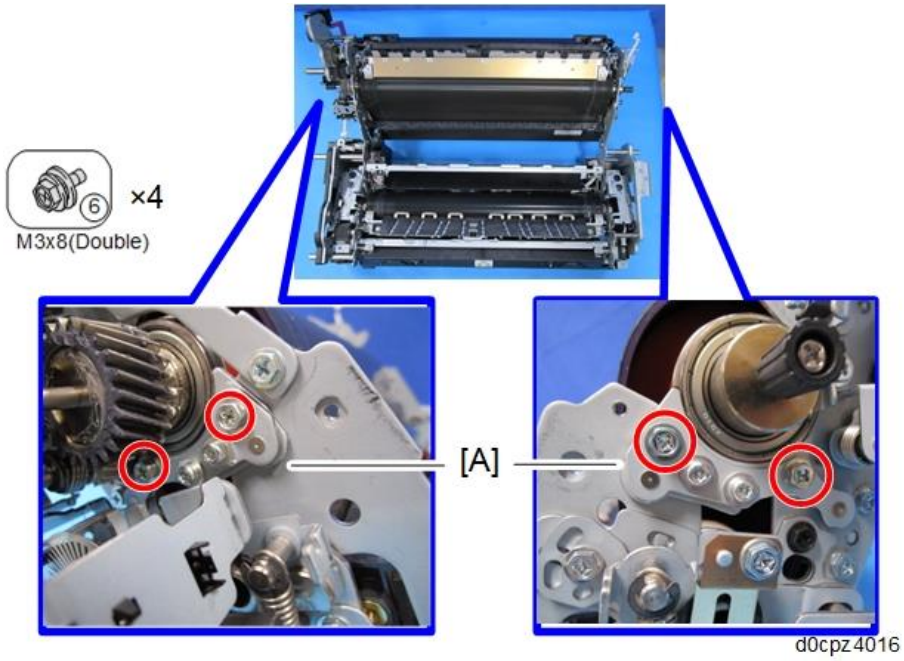
shown above.

After removing the screw, rotate the brackets as shown below.



d0cpz4139

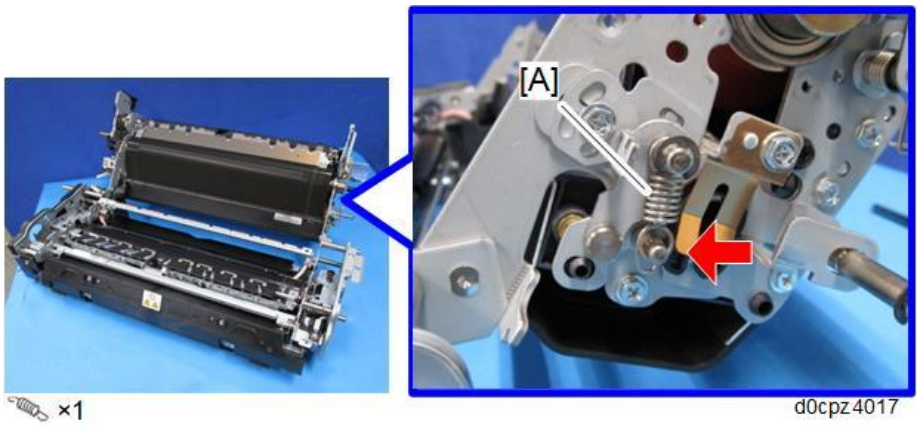
3. Remove the brackets [A] of the fusing belt unit.



d0cpz4016

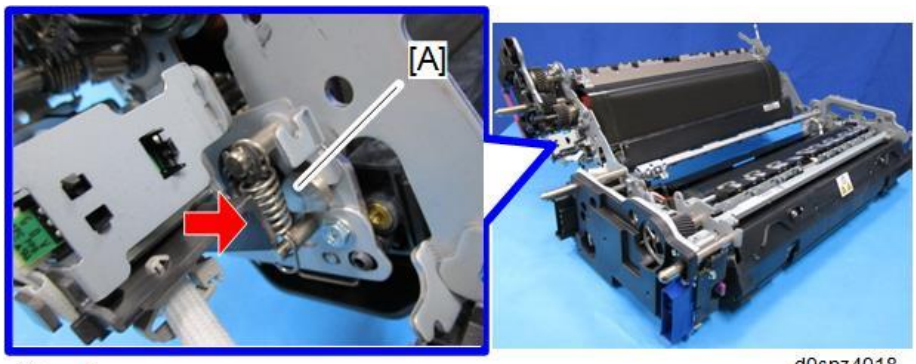
4. Remove the springs [A].

Front side:



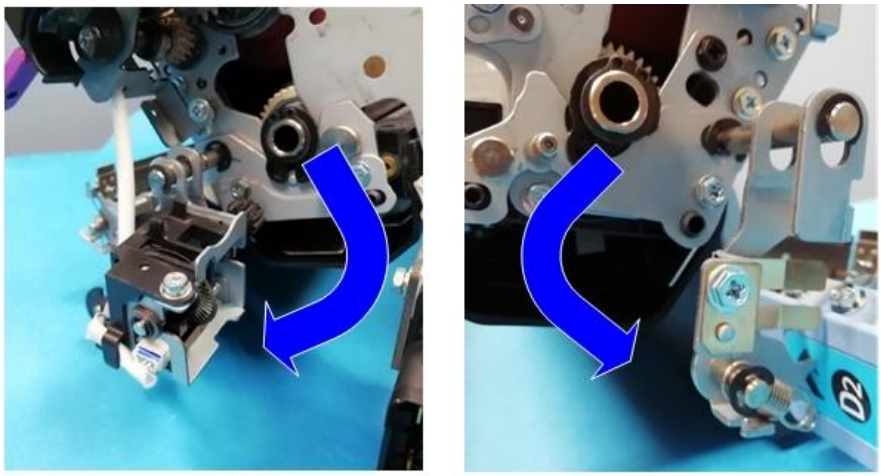
d0cpz4017

Rear side:

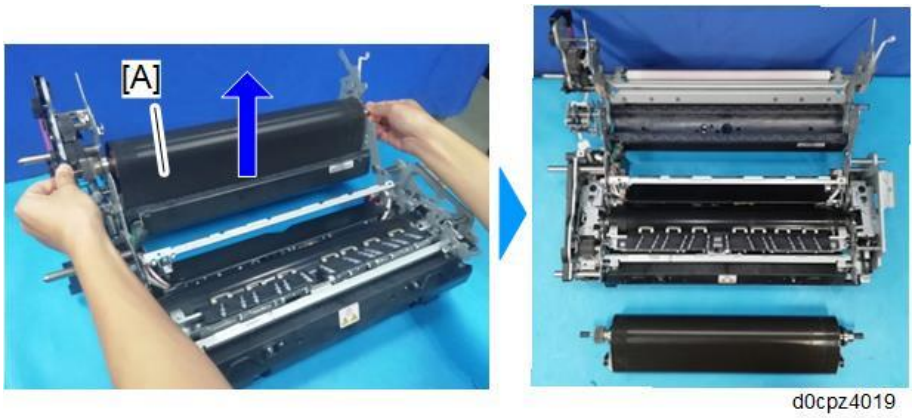


Note

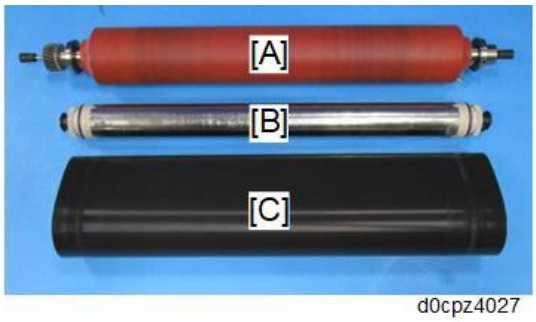
Rotate the heating roller rotation sensor unit and set it to outer side of the shaft.



5. Remove the fusing belt unit [A].



6. Divide the fusing belt unit into fusing roller [A], heating roller [B], and fusing belt [C].

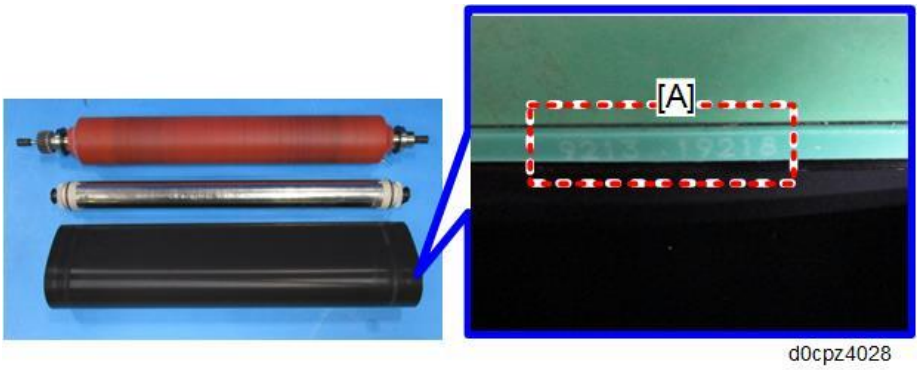


d0cpz4027

Notes When Assembling the Unit

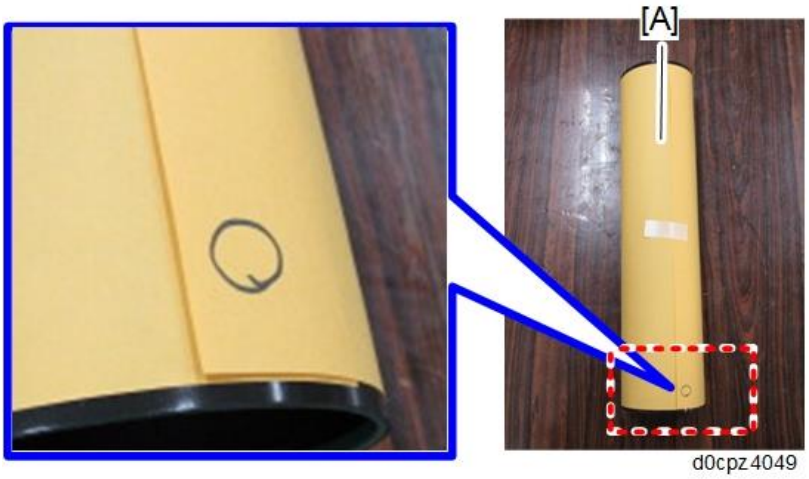
Point 1

The fusing belt has a front and rear direction designation.
When assembling the fusing belt unit, set it so that the side having marking [A] inside the belt edge comes front side of the main machine.



d0cpz4028

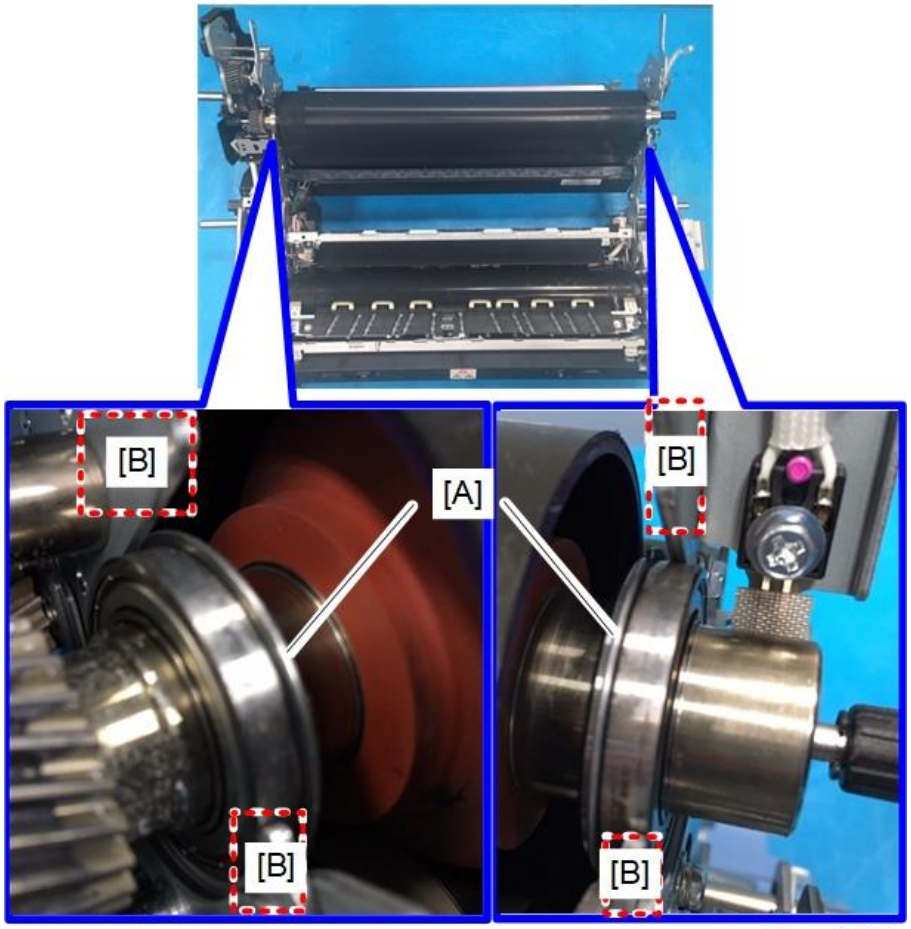
Also note that the fusing belt as service parts has a mark (circle) on the protection sheet [A]. Attach the belt so the marked side is at the front in the main machine.



d0cpz4049

Point 2

When setting the fusing roller, set the roller so that the bearing flanges [A] come inside the frame [B] of the fusing unit.



d0cpz4165

Heating Roller Flanges

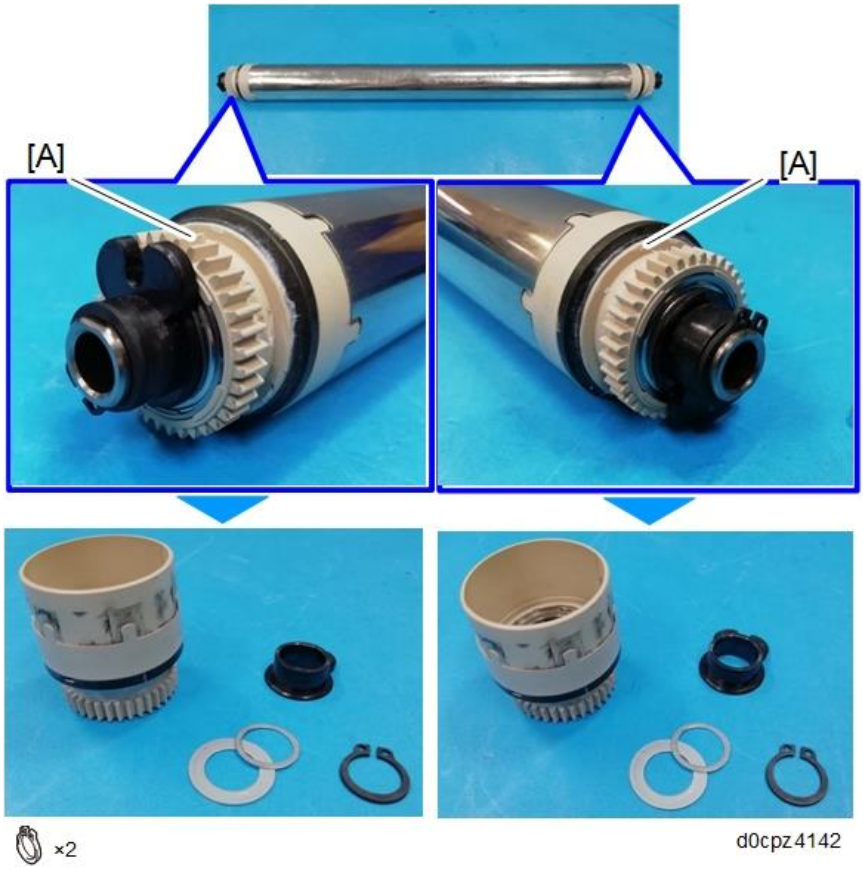
Important

When lubricating the heating roller, be sure to assemble the fusing roller and heating roller and fusing belt in advance.

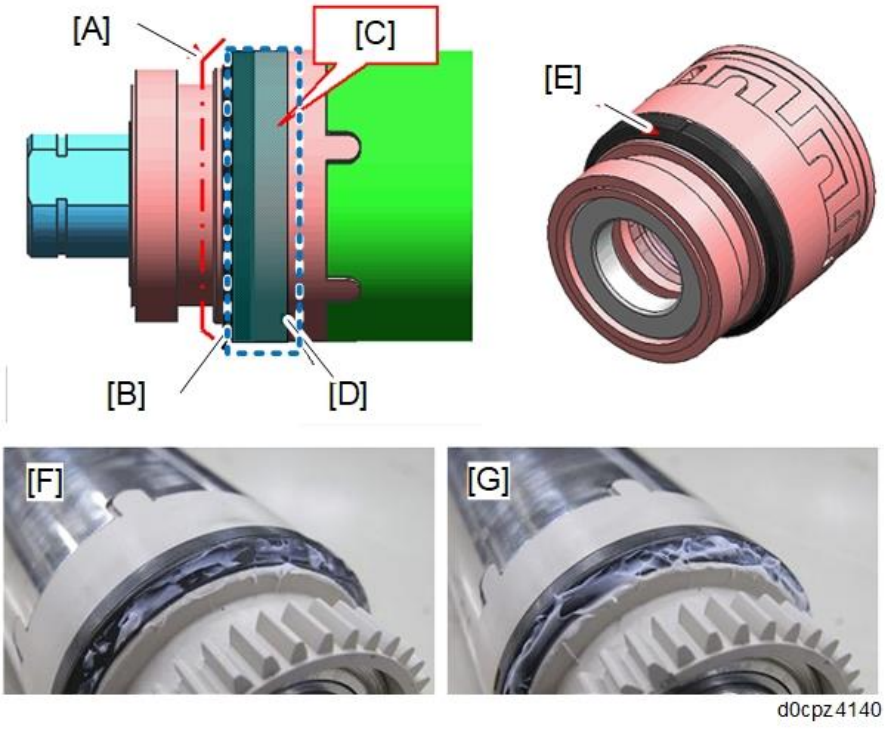
If lubricating the disassembled heating roller alone, grease may adhere in the belt during assembling and the dirt or moisture can cause image failure.

1. Remove the heating roller from the fusing belt. (Fusing Belt Unit)

2. Remove the flanges [A] on both sides.



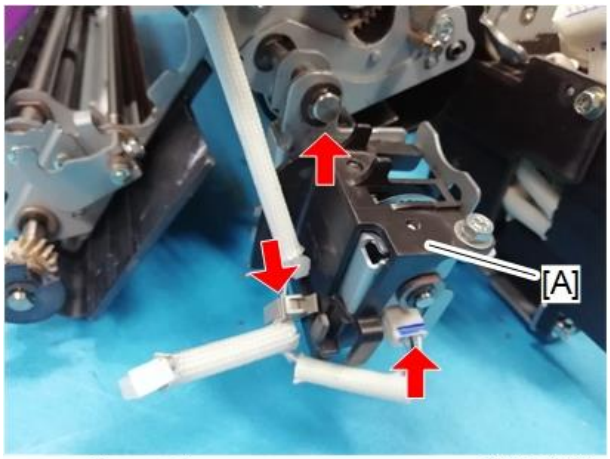
Lubricating the Slipring



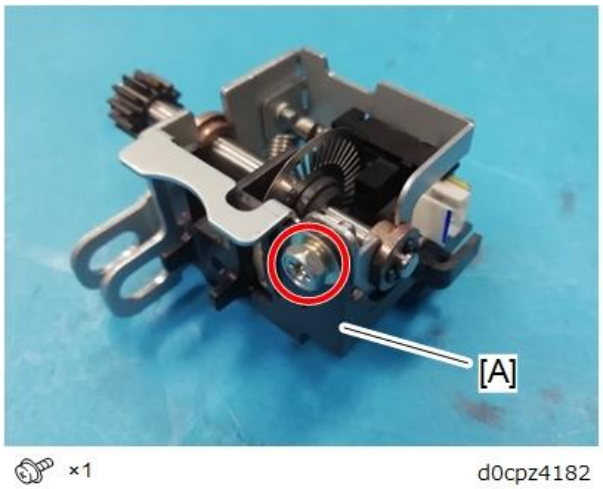
Callout	Description
[A]	Lubricating area
[B]	Slipring
[C]	Remove the grease from this area
[D]	Flange
[E]	Lubricate this side
[F]	Lower limit
[G]	Upper limit

Heating Roller Rotation Sensor (S55)

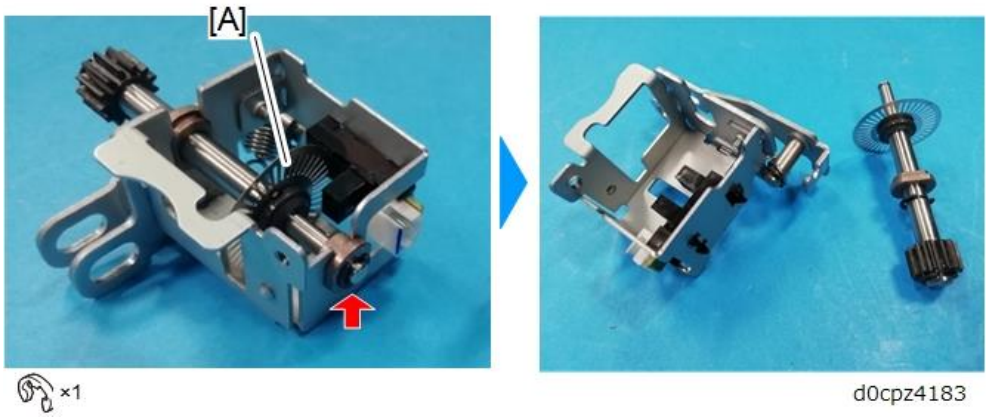
1. Separate the fusing unit. (Separating the Fusing Unit)
2. Do until the step 5 in the following link. (Fusing Belt Unit)
3. Remove the heating roller rotation sensor unit [A].



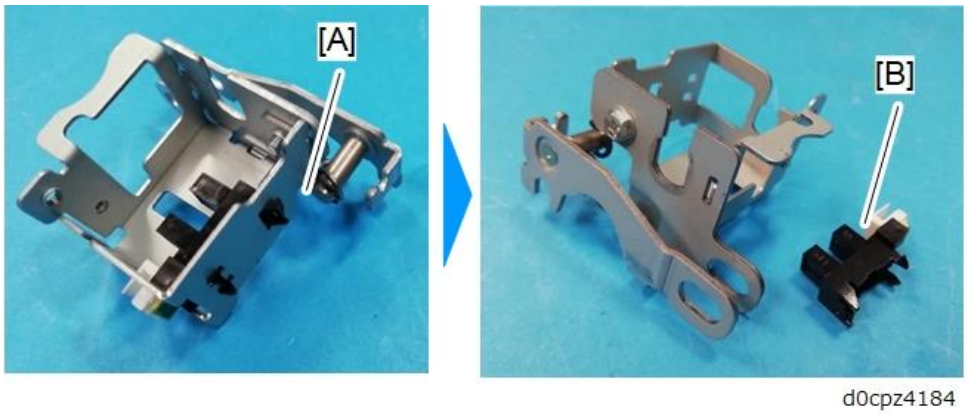
4. Remove the resin cover [A].



5. Remove the encoder [A].



6. Remove the heating roller rotation sensor (S55) [B] from the bracket [A].

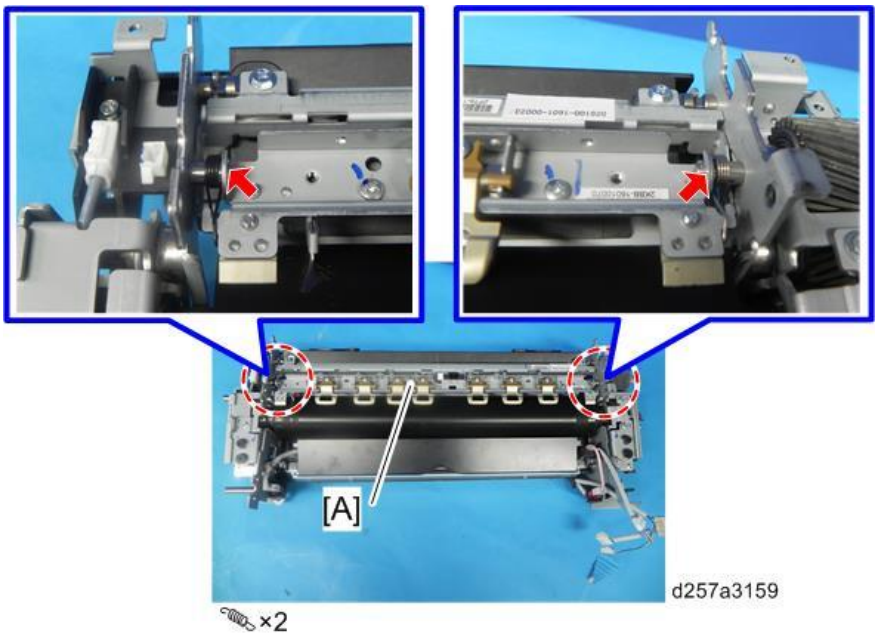


Pressure Roller Stripper Plate

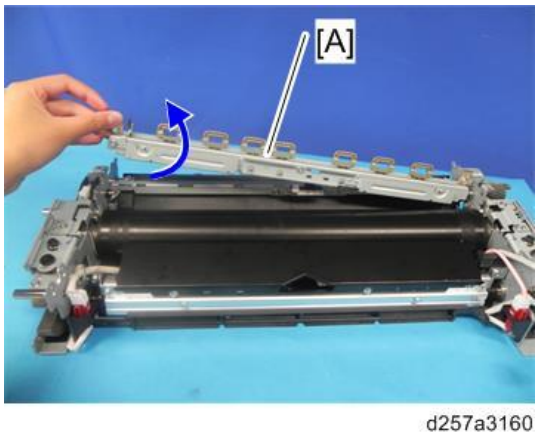
1. Separate the fusing unit into the upper part and the lower part. (Separating the Fusing Unit)

2. Remove the pressure roller stripper guide plate [A].

3. Release the springs on both sides of the pressure roller stripper plate [A].



4. Rotate the pressure roller stripper plate [A] clockwise (direction away from the pressure roller), and lift it to remove.



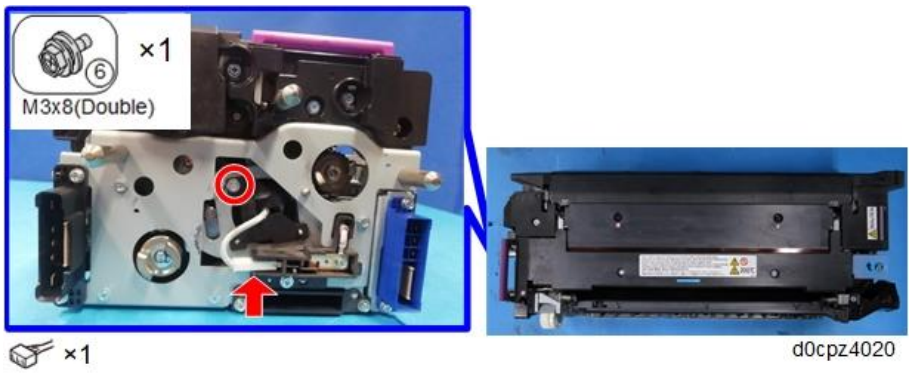
Note

- The frame of the pressure roller stripper plate has C-cut holes.

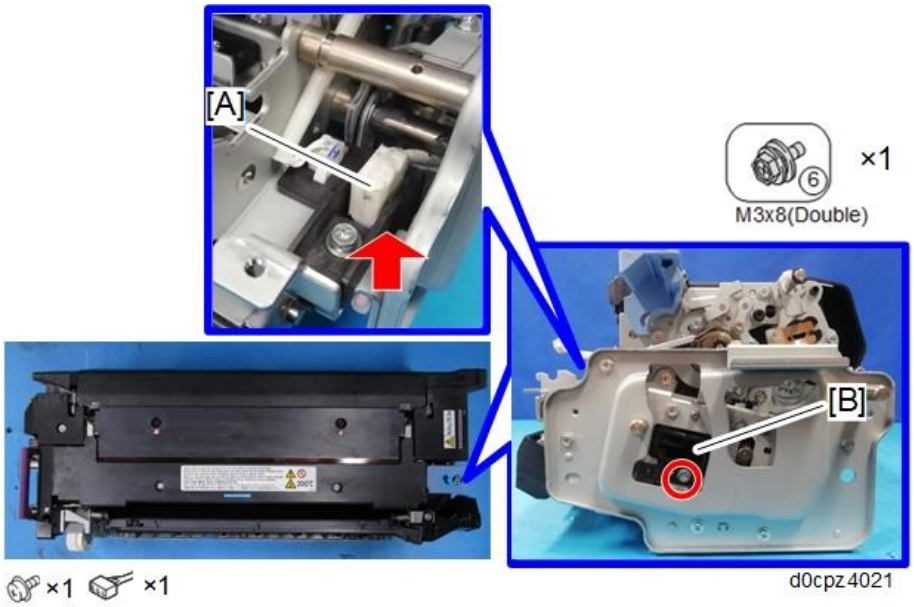
Pressure Roller Fusing Lamp (L5)

1. Remove the fusing rear cover. (Fusing Rear Cover)

2. Remove the connector and screw.



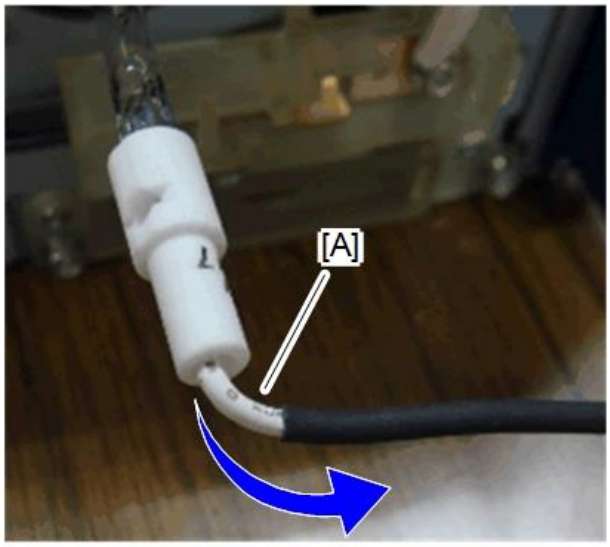
3. Remove the connector [A] first and then remove the holder [B].



4. Remove the pressure roller fusing lamp (L5).

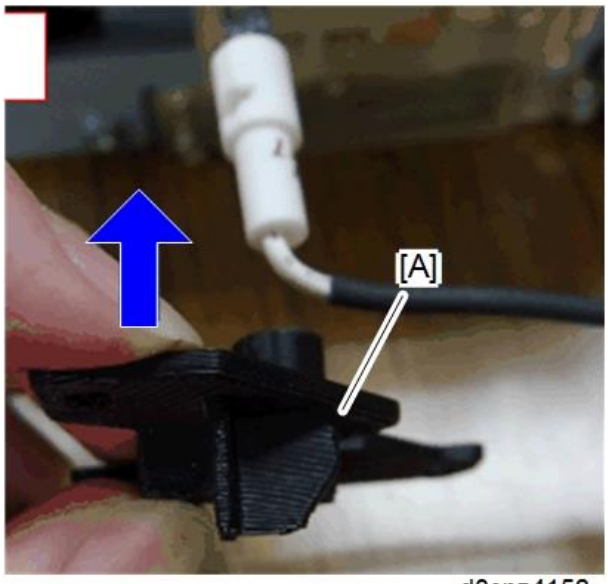
Notes When Installing the Fusing Lamp

1. Bend the lead wire [A] approx. 90°.



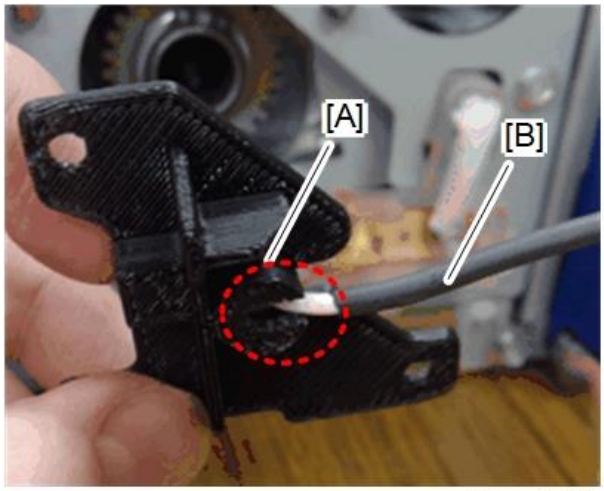
d0cpz4151

2. Insert the holder [A] in the direction of the arrow.



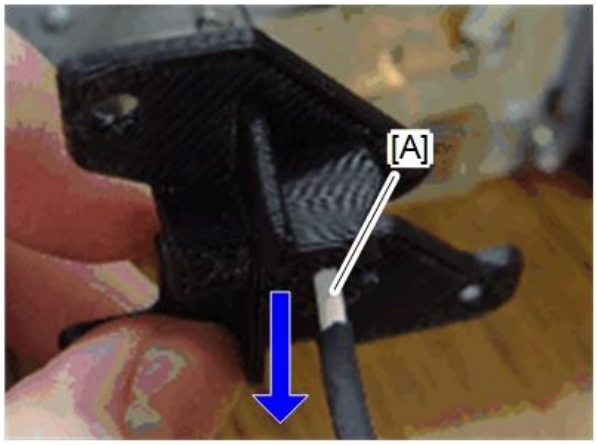
d0cpz4152

3. Insert the lead wire [B] into the opening [A] of the holder.



d0cpz4153

4. Straighten the lead wire [A].



d0cpz4154

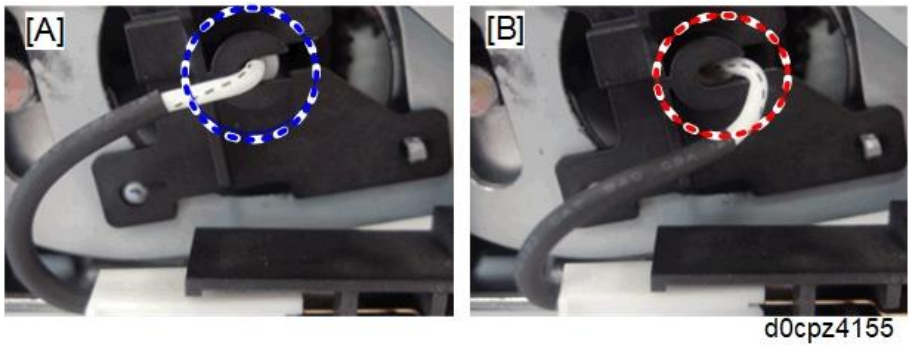
5. Tighten the holder with a screw, and connect the heater connecter to the electrode plate.

6. Make sure that the lead wire is firmly in the opening of the holder.

Note

[A]: Correct (The lead wire is firmly set in the opening of the holder)

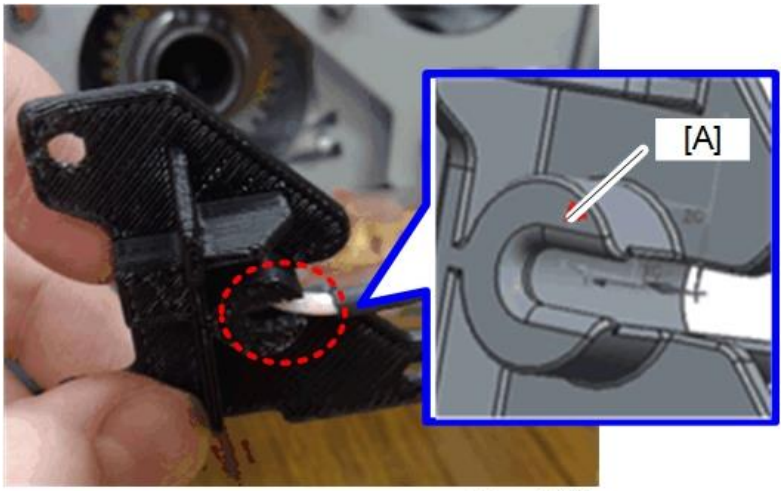
[B]: Incorrect (The lead wire is loosely set in the opening of the holder)



d0cpz4155

Lubrication

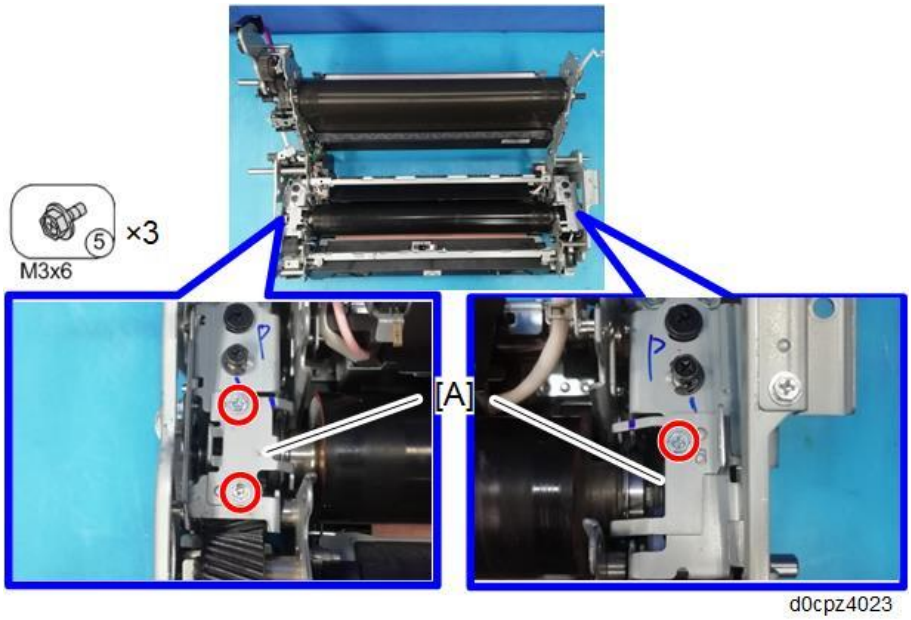
Lubricate on the designated point [A].



d0cpz4193

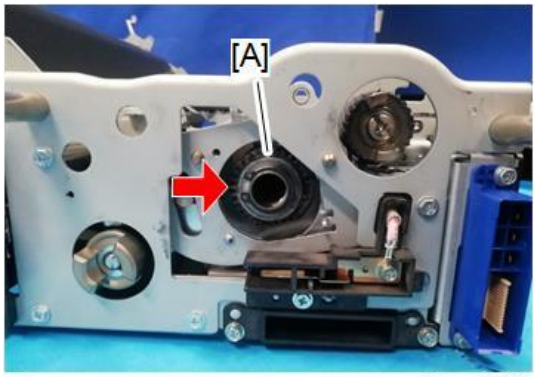
Pressure Roller

1. Remove the pressure roller fusing lamp. (Pressure Roller Fusing Lamp (L5))
2. Separate the fusing unit. (Separating the Fusing Unit)
3. Remove the pressure roller stripper plate. (Pressure Roller Stripper Plate)
4. Remove the pressure roller securing bracket [A].



d0cpz4023

5. Remove the pressure roller gear [A].

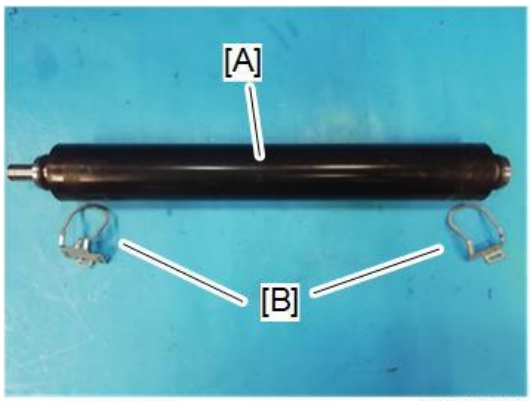


×1 d0cpz4024

6. Remove the pressure roller [A].

d0cpz4025

7. Remove the bracket [B] from the pressure roller [A].

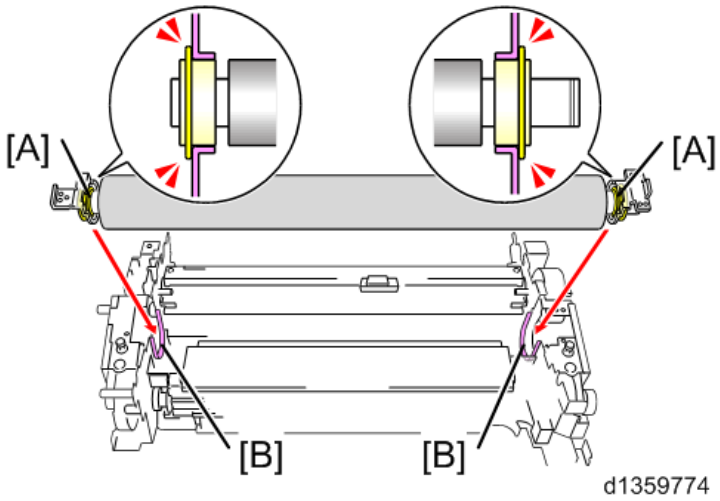


d0cpz4026

Notes on Installing the Pressure Roller

- When reinstalling the pressure roller on the fusing unit frame, be sure to make the brimmed parts

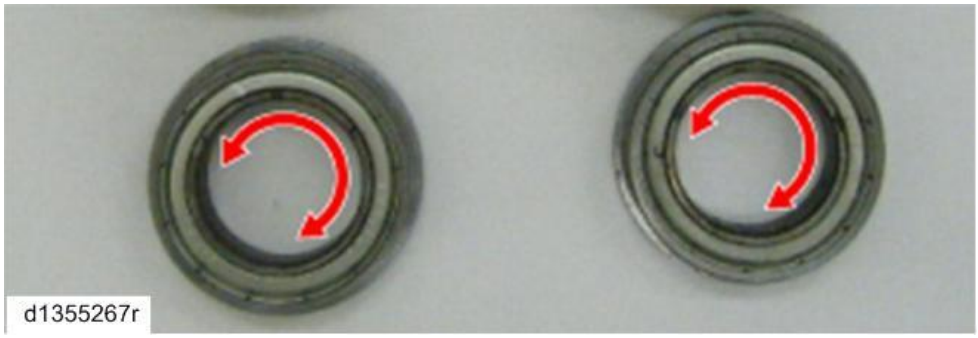
[A] of the bearings come to the outside of the frame [B] as shown below.



Applying Grease: Bearings (Fusing Roller, Pressure Roller)

When replacing a bearing individually or at the 600K PM, apply grease to reduce the wear of the bearings and to prevent abnormal noise (Grease: Barrierta-S552R).

1. Remove the bearing (fusing roller). (Fusing Belt Unit)
   Remove the bearing (pressure roller). (Pressure Roller)
2. Apply the grease to the inner surface of the bearings.
3. Rotate the ball bearing to check that the ball bearing and the inner surface move smoothly without touching each other.

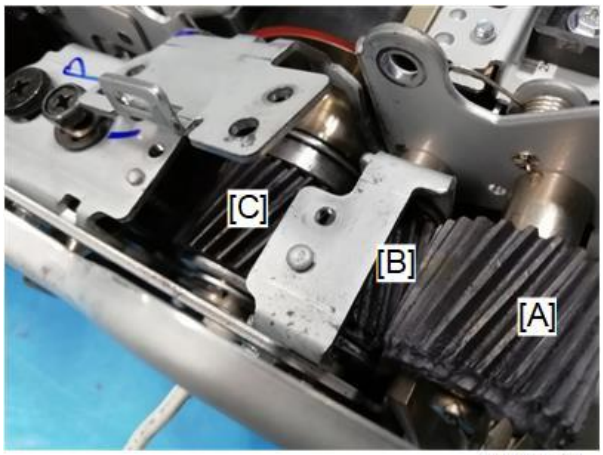


Applying Grease: Gears

When replacing a gear individually or at the 300K PM, apply grease to reduce the wearing of the gears

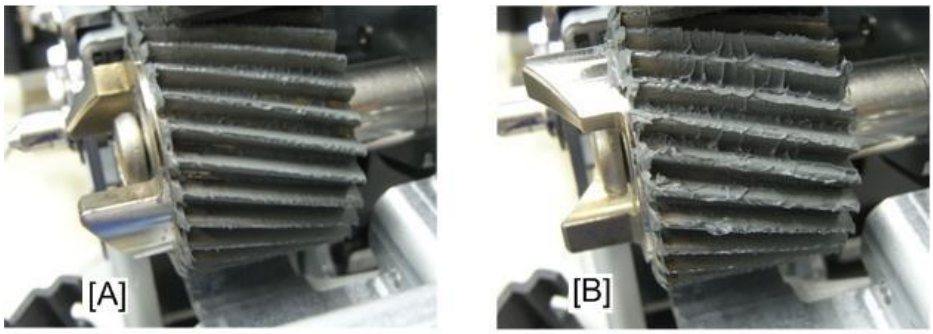
in the fusing drive gear train and to prevent abnormal noise (Grease: Fluotribo MG).

1. Apply the grease to the pressure roller gear [A] while rotating the roller gear.
2. Check that the grease is applied to all the gears in the gear train (whole circumference and full width).



d0cpz4143

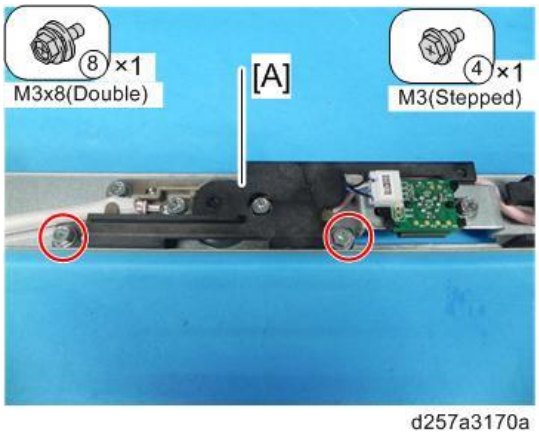
Amount of Grease ([A]: Lower limit, [B]: Upper limit)



d1355207

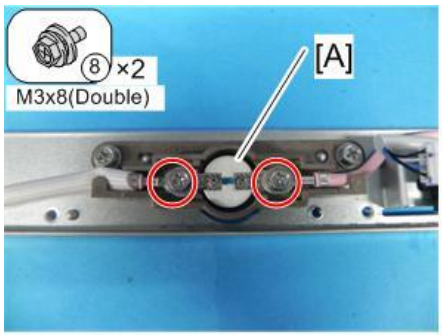
Pressure Roller Thermostat (TS1)

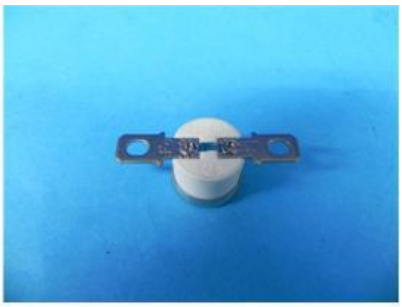
1. Separate the fusing unit into the upper part and the lower part. (Separating the Fusing Unit)
2. See “Thermopile (Pressure Roller) Steps 1 to 6”. (Pressure Roller Thermopile (S53))
3. Remove the harness guide [A].



d257a3170a

4. Remove the pressure roller thermostat (TS1) [A].

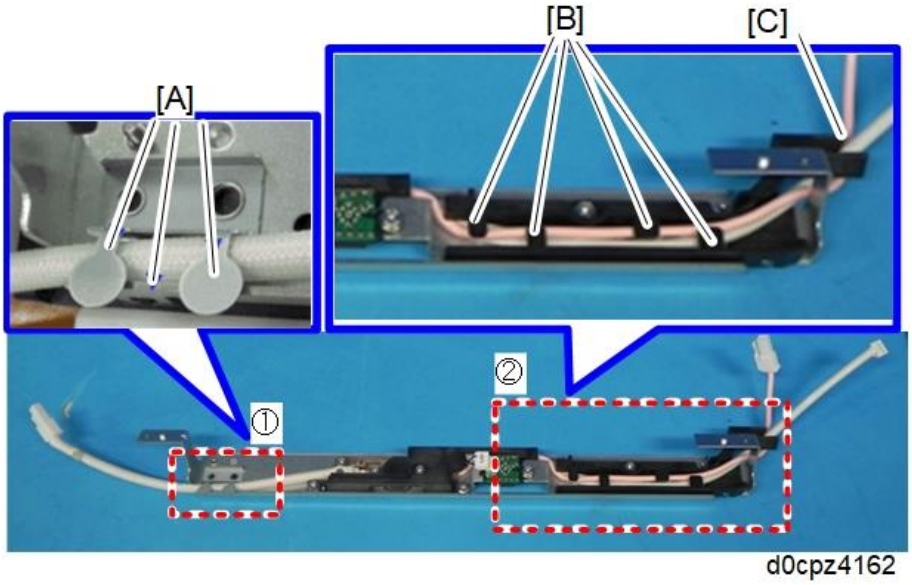




Notes When Routing the Harnesses

Check the following points when routing the harnesses.

Point 1

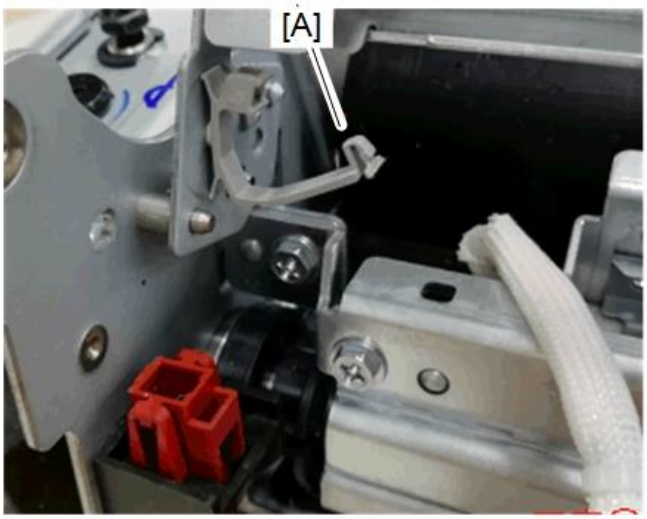


Callout	Description
[A]	Bend the metal plate after routing the harness
[B]	Route under the resin bosses
[C]	Pass the harness through the hole of the resin part

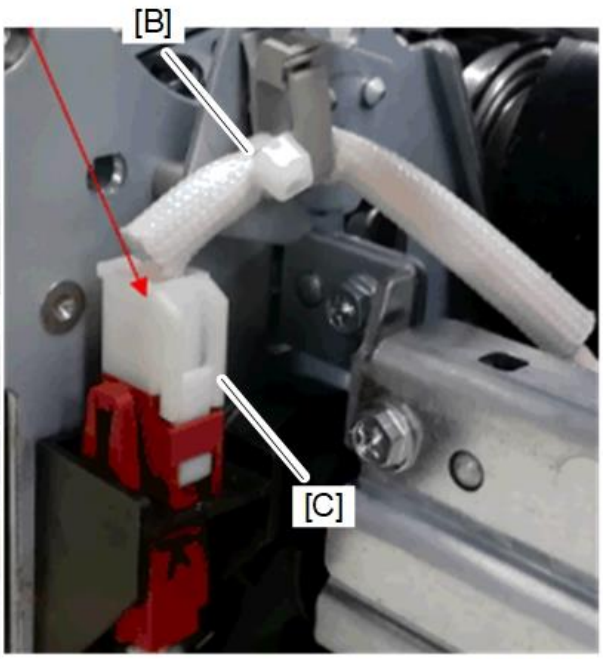
Point 2: Thermistor harness

Routing the Harnesses

Point 3: Connection on Fusing Entrance



d0cpz4163

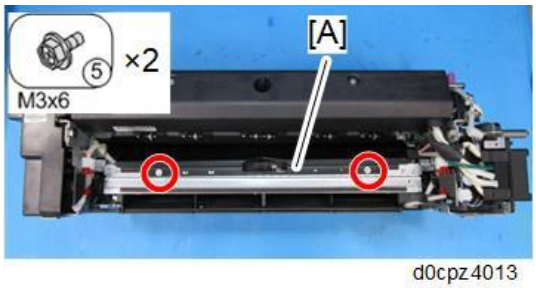


d0cpz4164

Callout	Description
[A]	Make sure that the clamp is attached in this orientation
[B]	Set the binder to be closer to connector than clamp
[C]	Connect the connecter after the harness is clamped

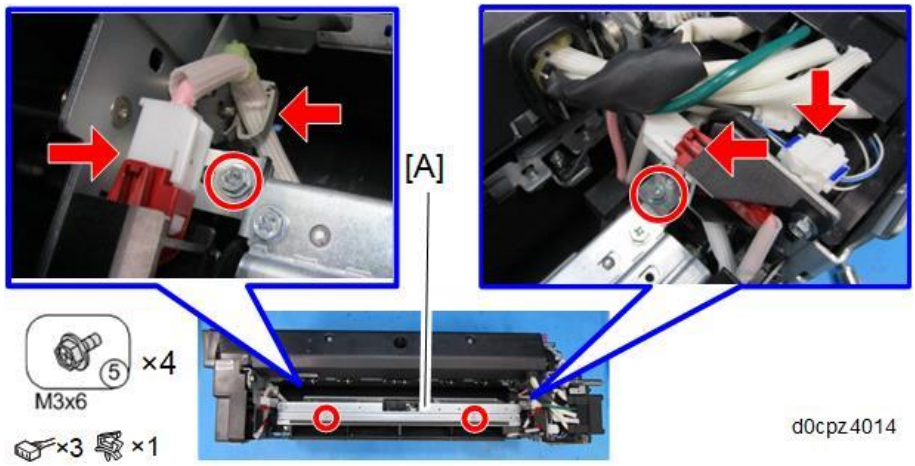
Pressure Roller Thermopile (S53)

1. Remove the entrance drawer cover. (Entrance Drawer Cover)
2. Remove the bracket [A].



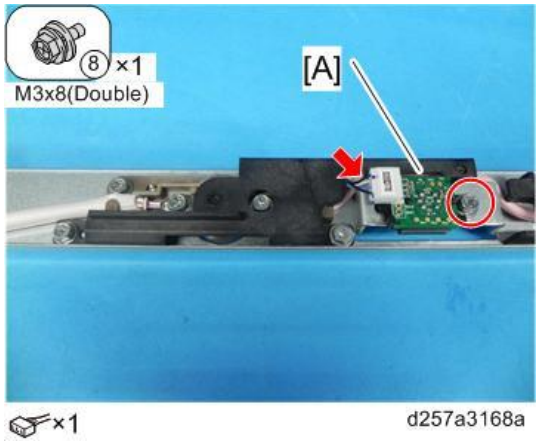
d0cpz4013

3. Remove the assembly [A].

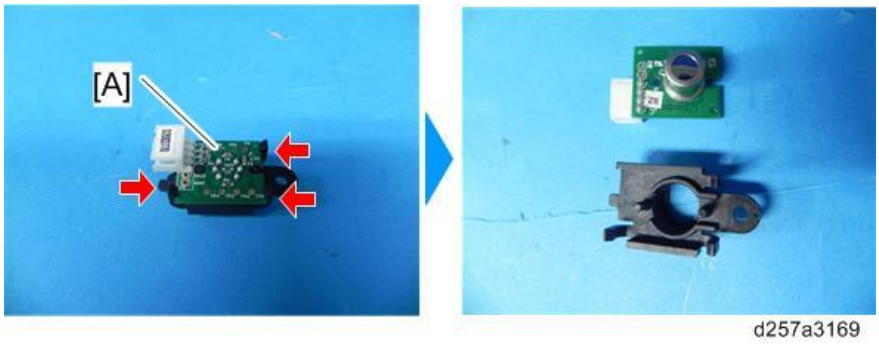


4. Remove the stay [A].

5. Remove the pressure roller thermopile (S53) [A] along with the bracket.



6. Release the pawls, and remove the pressure roller thermopile (S53) [A].

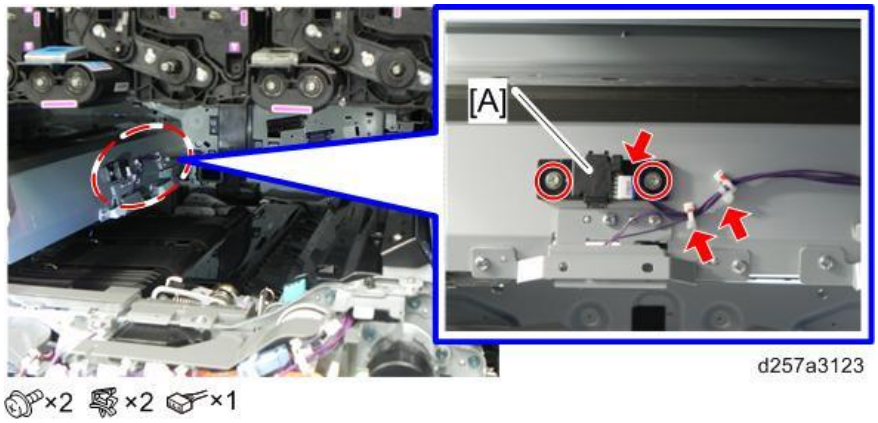


Notes When Routing the Harness

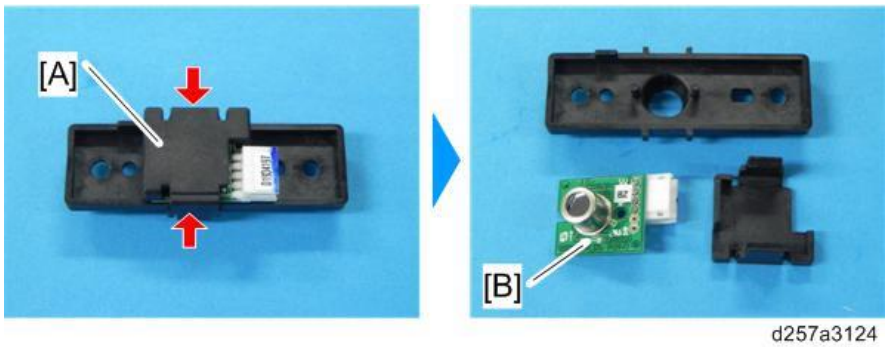
Refer to Pressure Roller Thermopile (S53)

Heating Roller Thermopile (S23)

1. Remove the ITB cleaning unit. (ITB Cleaning Unit)
2. Remove the ITB unit. (ITB Unit Removal)
3. Remove the heating roller thermopile (S23) [A] along with the resin cover.



4. Release the two pawls to remove the resin cover, and remove the heating roller thermopile (S23).

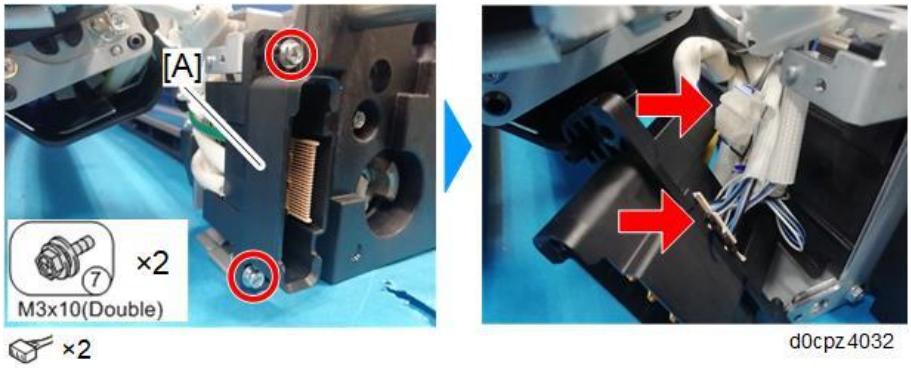


Fusing Belt Thermistor (TH5) (Pro C5310S/C5300S Only)

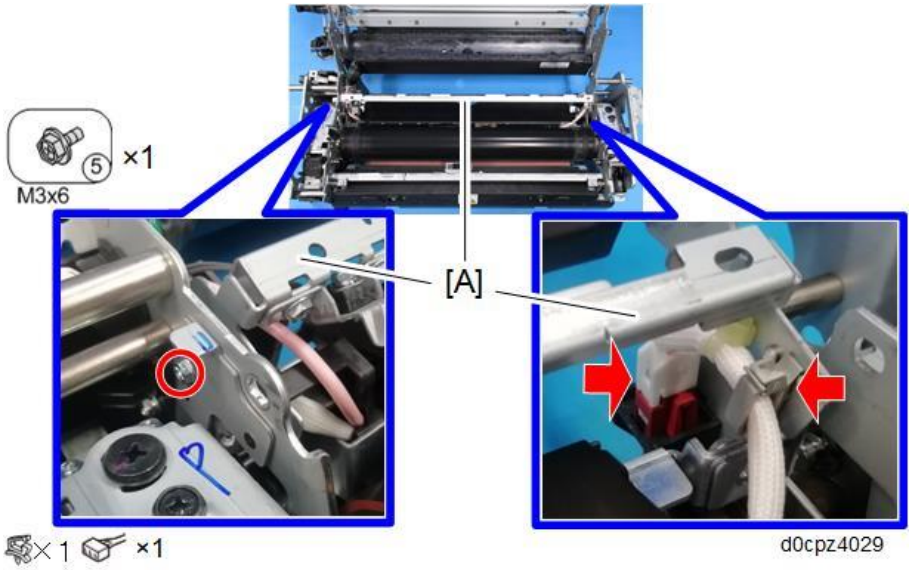
1. Separate the fusing unit. (Separating the Fusing Unit)

2. Remove the entrance drawer cover. (Entrance Drawer Cover)

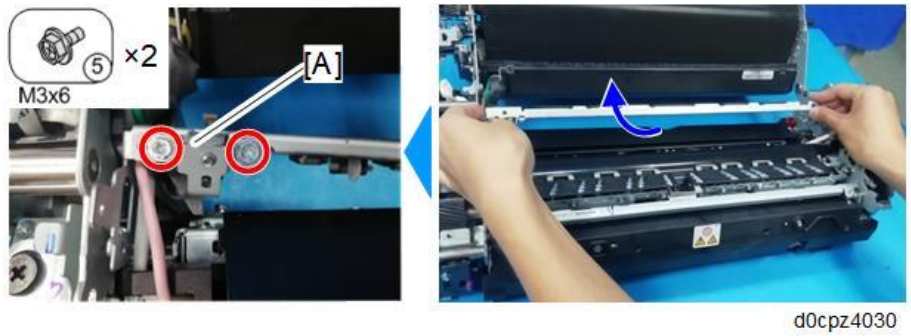
3. Remove the entrance drawer connector [A].



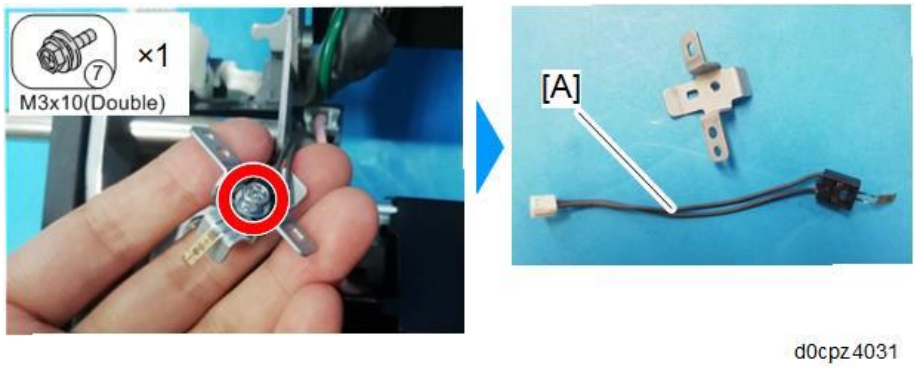
4. Remove the bracket [A].



5. Rotate the bracket [A] 180 degrees and remove the bracket [A].



6. Remove the fusing belt thermistor (TH5) [A].



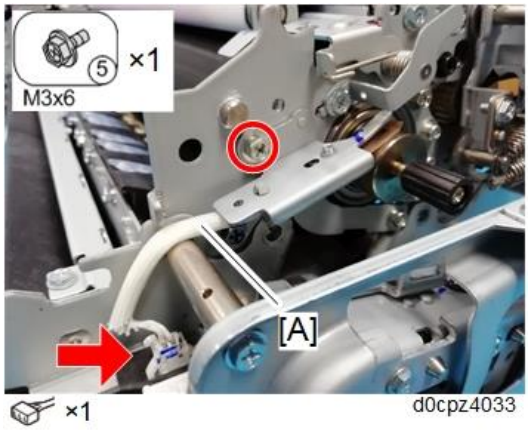
Notes When Routing the Harness

Refer to the following description to route the harness correctly.

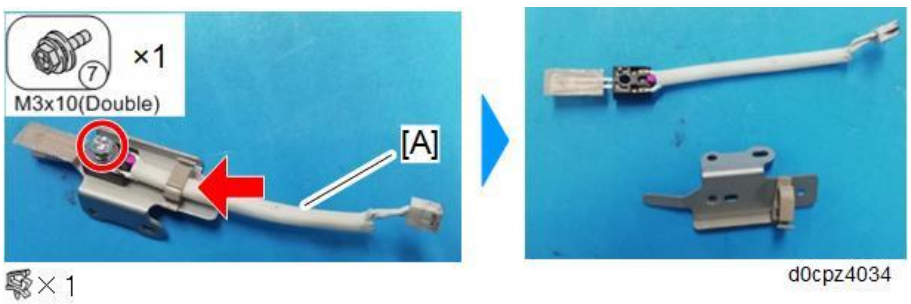
Routing the Harnesses

Hot Roller Shaft Thermistor (TH4)

1. Remove the paper exit entrance unit. (Paper Exit Entrance Unit)
2. Remove the fusing front cover. (Fusing Front Cover)
3. Remove the hot roller shaft thermistor (TH4) [A] with bracket.



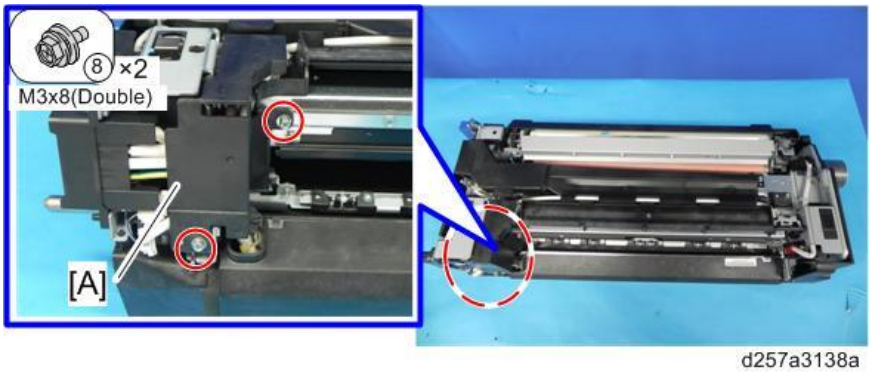
4. Remove the hot roller shaft thermistor (TH4) [A].



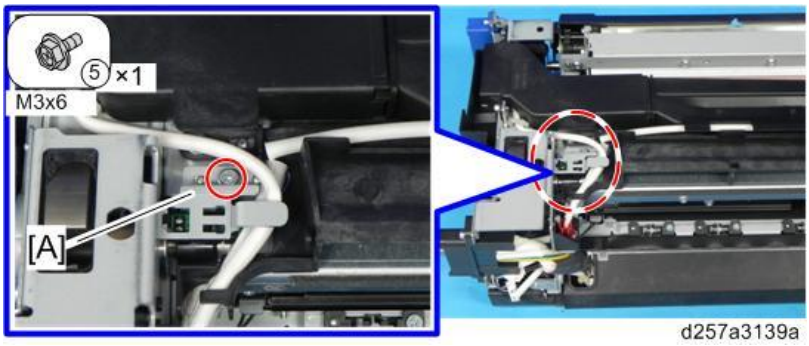
Pressure Roller Sensor: Rear (S51)

1. Remove the fusing unit. (Removing the Fusing Unit)

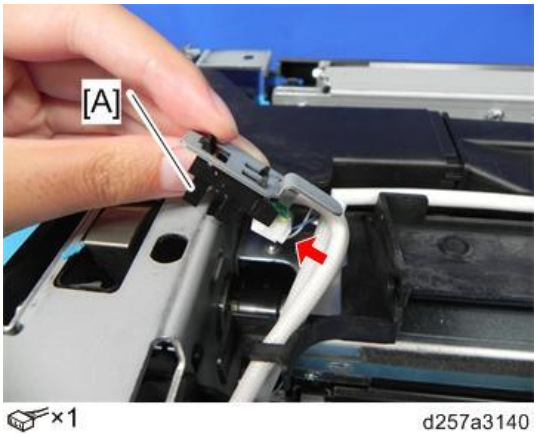
2. Turn the lower part of the fusing unit upward, and remove the cover [A].



3. Remove the pressure roller sensor: rear (S51) [A] along with the bracket.



4. Detach the pressure roller sensor: rear (S51) [A].

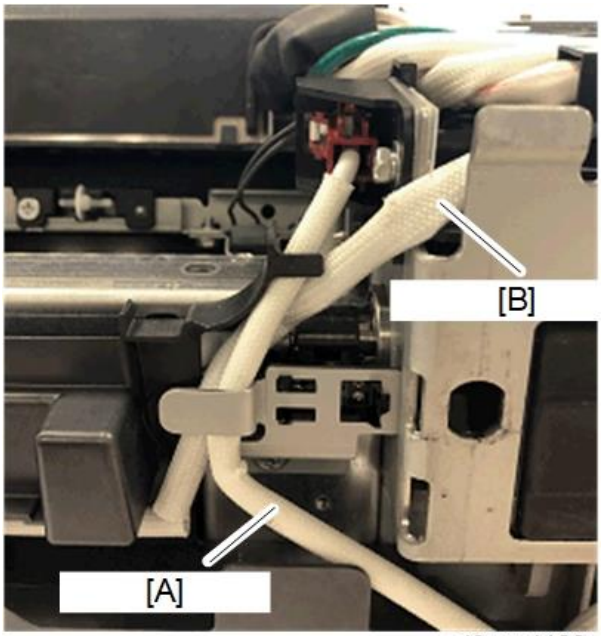


Notes When Routing the Harness

Check the following 2 points when routing the harness.

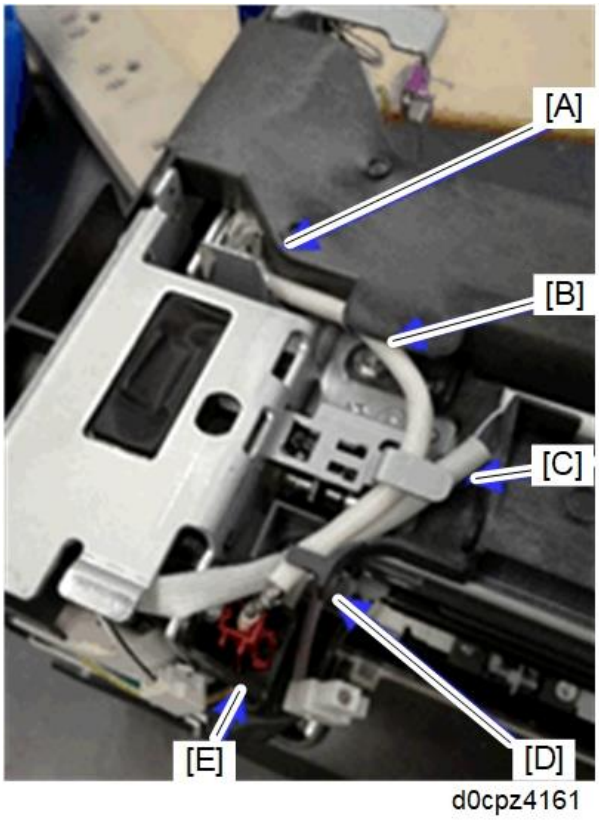
Point 1

Route the harness [B] so that it comes under the harness [A].



d0cpz4160

Point 2



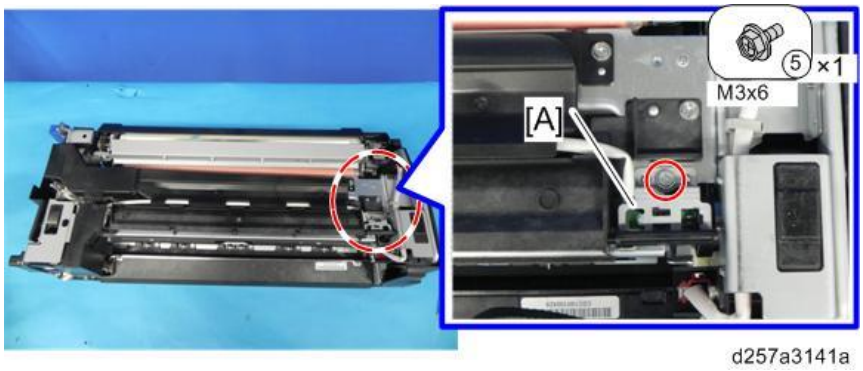
d0cpz4161

	Description
[A]	Route between the resin guide and metal plate
[B]	Route under the resin guide
[C]	Route between the metal plate
[D]	Route between the resin guide

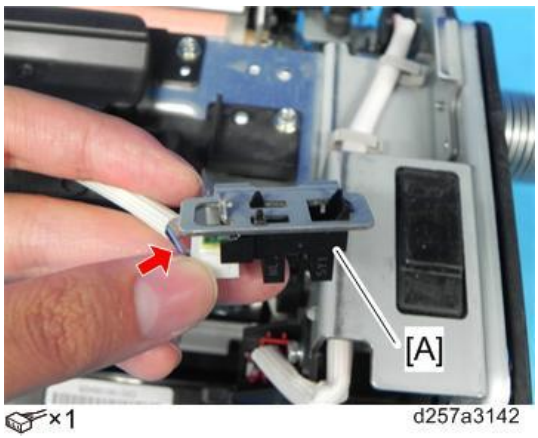
	Description
[E]	Connect it

Pressure Roller Sensor: Front (S52)

1. Remove the fusing unit. (Removing the Fusing Unit)
2. Turn the lower part of the fusing unit upward, and remove the pressure roller sensor: front (S52) [A] along with the bracket.



3. Detach the pressure roller sensor: front (S52) [A].



Notes When Routing the Harness

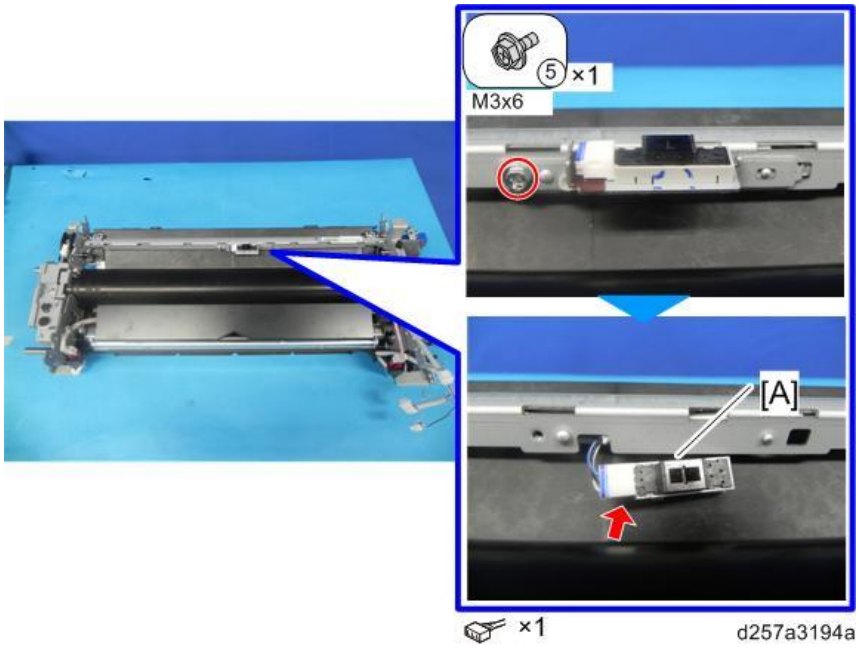
Refer to the following description to route the harness correctly.

Notes When Routing the Harness

Fusing Paper Exit Sensor (S50)

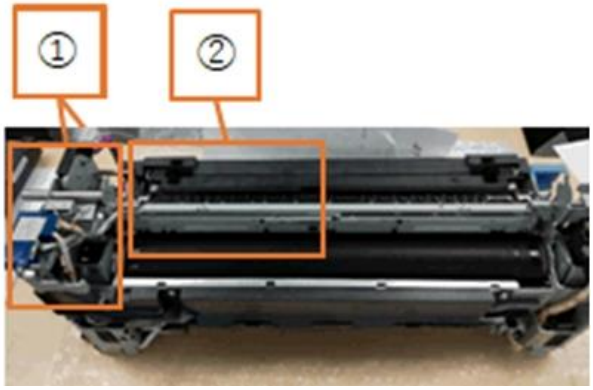
1. Separate the fusing unit into the upper part and the lower part. (Separating the Fusing Unit).
2. Remove the pressure roller stripper plate. (Pressure Roller Stripper Plate)

3. Remove the fusing paper exit sensor (S50) [A].

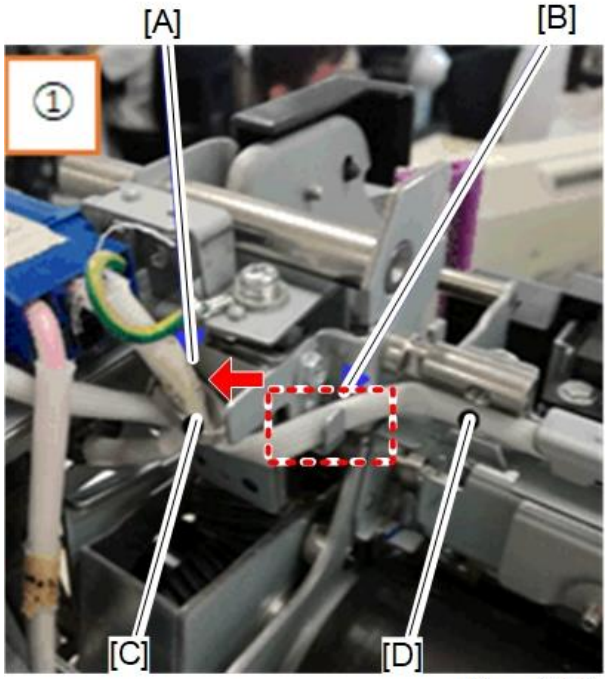


Notes When Routing the Harness

Check the following 2 points when routing the harness.



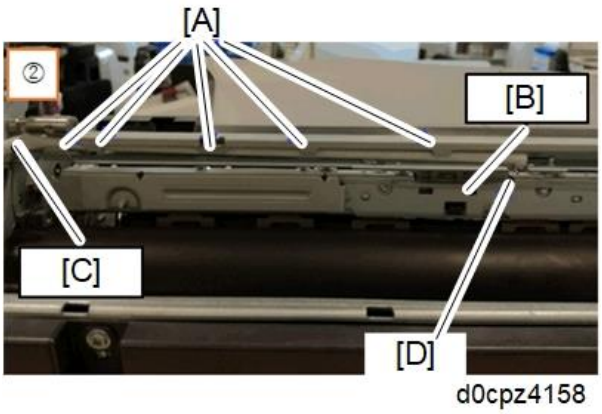
Point 1



d0cpz4157

	Description
[A]	Clamp here
[B]	Route the harness between the harness guides
[C]	Harness
[D]	Harness

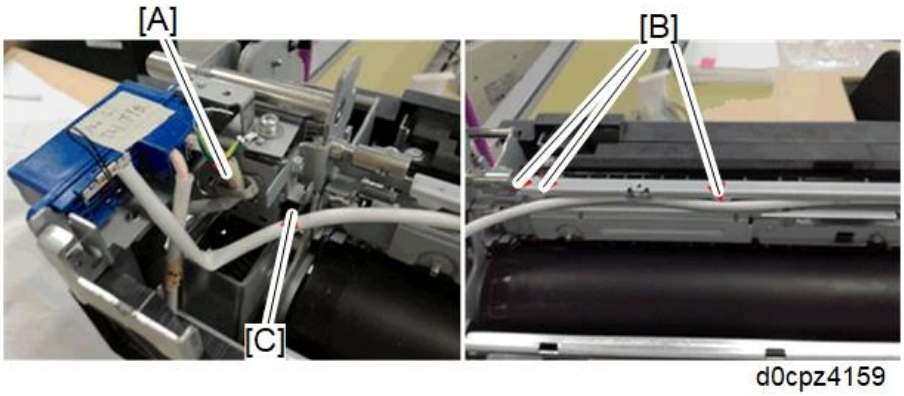
Point 2



d0cpz4158

	Description
[A]	Route the harness between the harness guides
[B]	Paper Transport Sensor
[C]	Harness
[D]	Connect the sensor and route the harness between the cutout

Incorrect Example

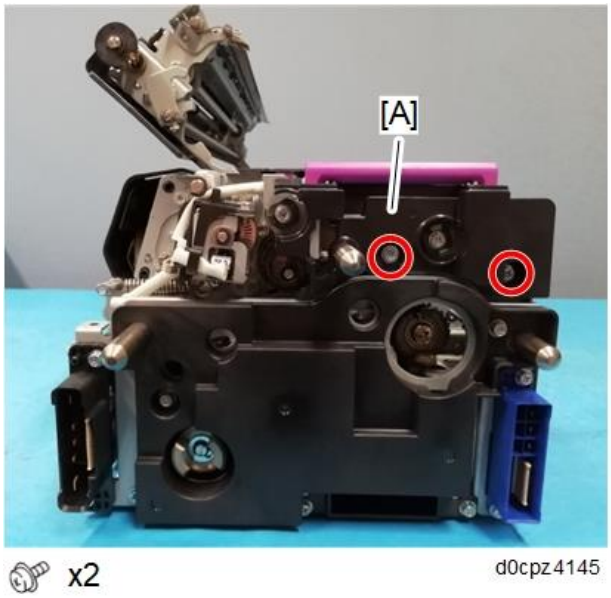


	Description
[A]	Not clamped
[B] [C]	Not routed between the harness guides

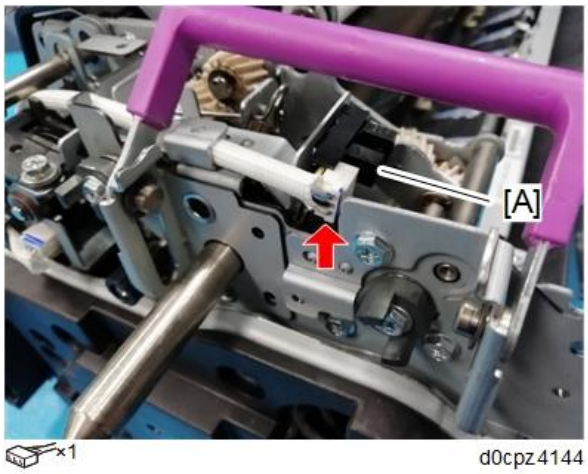
Fusing Belt Smoothing Roller Contact Sensor (S54) (Pro C5300S/C5310S)

1. Remove the fusing rear cover. (Fusing Front Cover)
2. Remove the cover [A].

3. Open the D2 lever, and remove the cover [A].

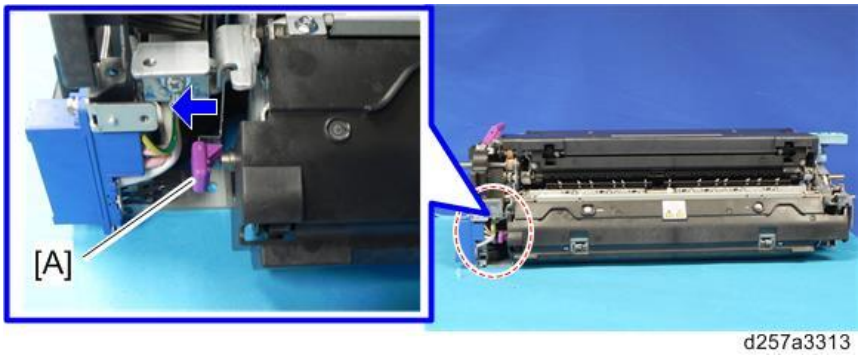


4. Remove the fusing belt smoothing roller contact sensor (S54) [A].

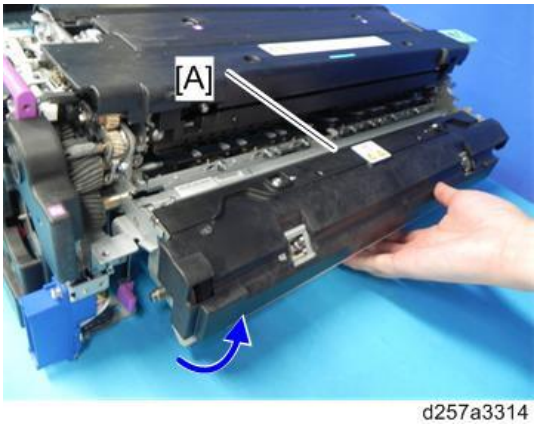


Fusing Cleaning Web Unit (Pro C5300S/C5310S Only)

1. Remove the fusing cleaning unit. (Paper Exit Entrance Unit)
2. Push the stopper [A] on the left side of the fusing cleaning web unit in the arrow direction as shown below.



3. Raise the fusing cleaning web unit [A] as shown below to make it upright, and then remove it.

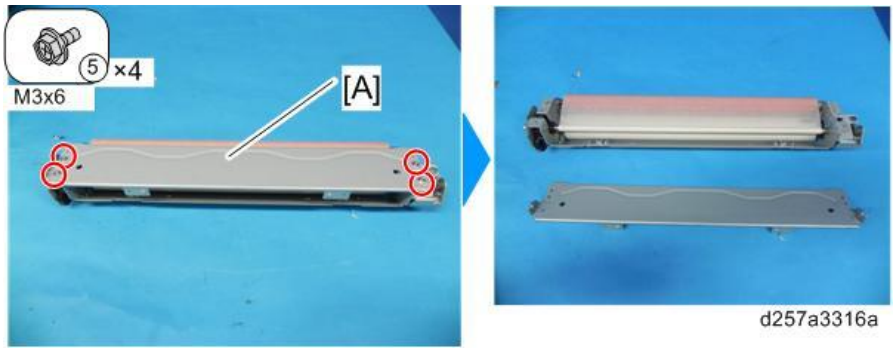


Fusing Cleaning Web (Pro C5300S/C5310S Only)

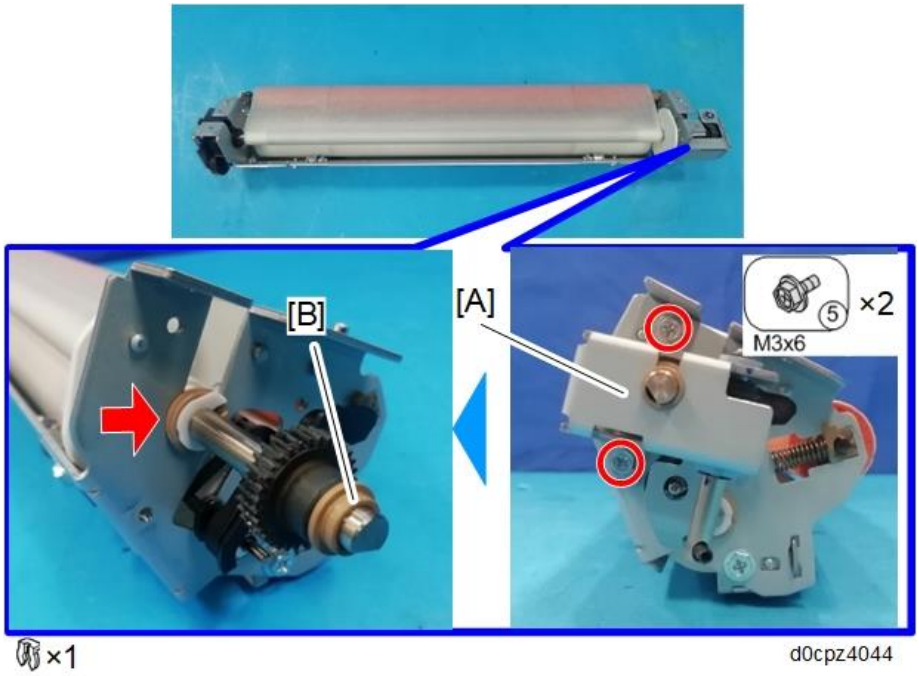
1. Remove the fusing cleaning web unit. (Fusing Cleaning Web Unit (Pro C5300S/C5310S Only))

2. Remove the cover [A] of the fusing cleaning web unit.

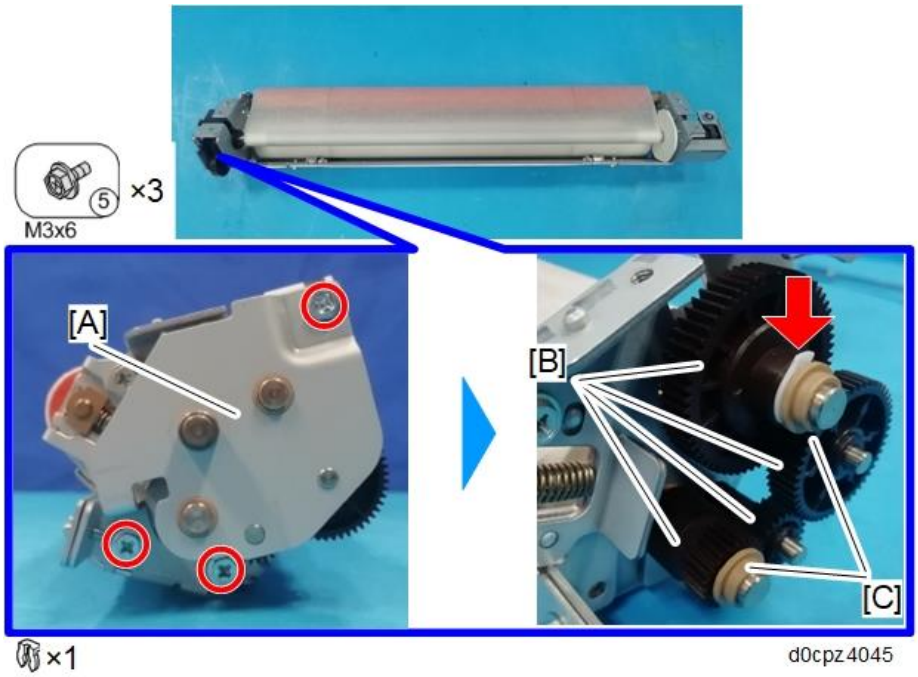
3. Remove the bracket [A].



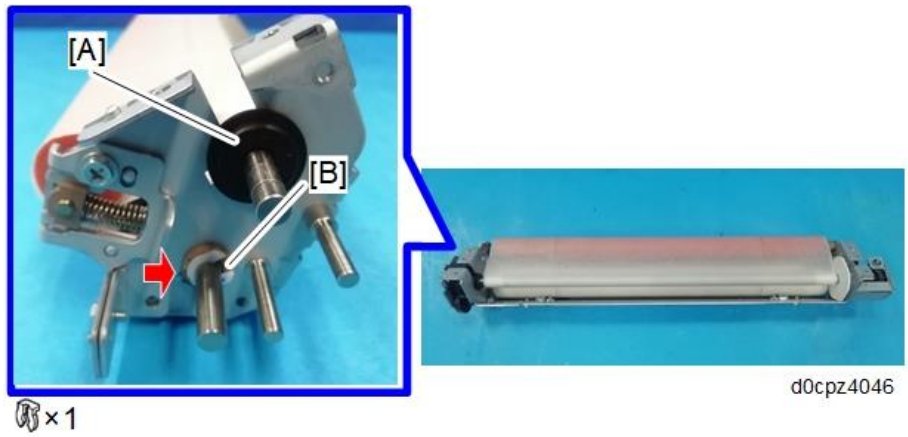
4. Remove the bracket [A] and bearing [B].



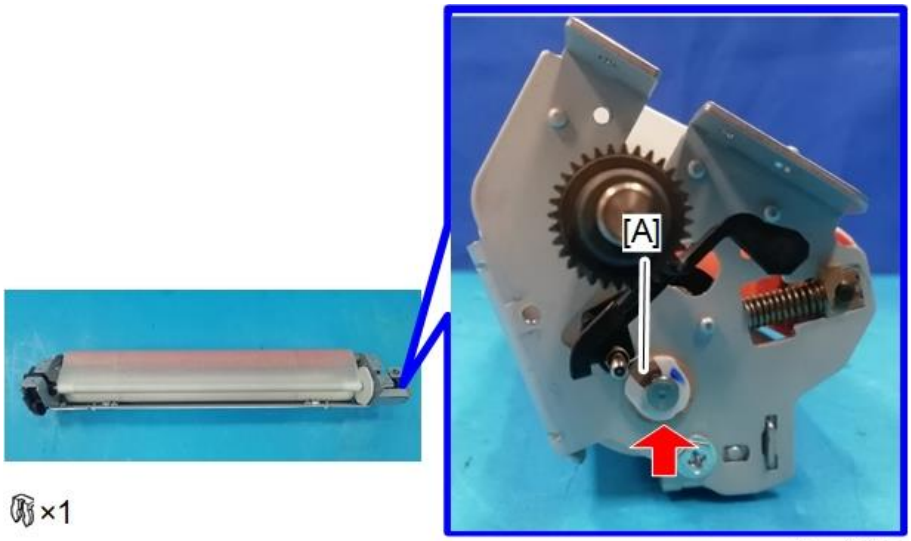
5. Remove the bracket [A] and then remove the gears [B] bearings [C].



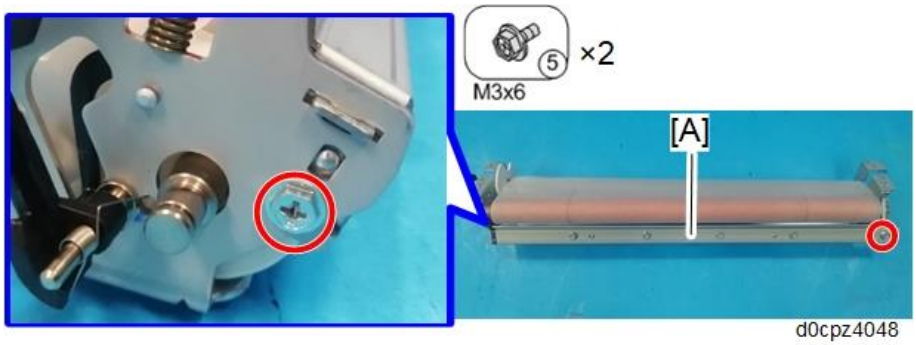
6. Remove the clutch [A] and bearing [B].



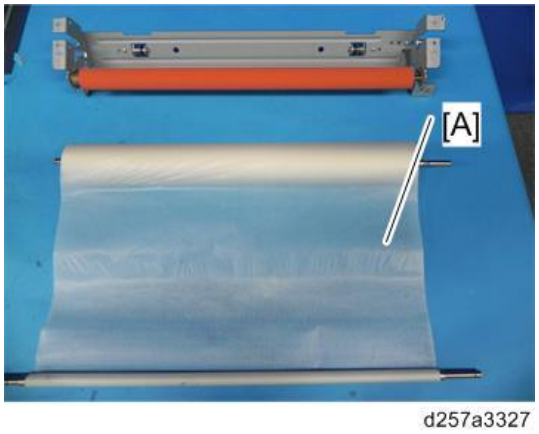
7. Remove the bearing [A].



8. Remove the brake [A].



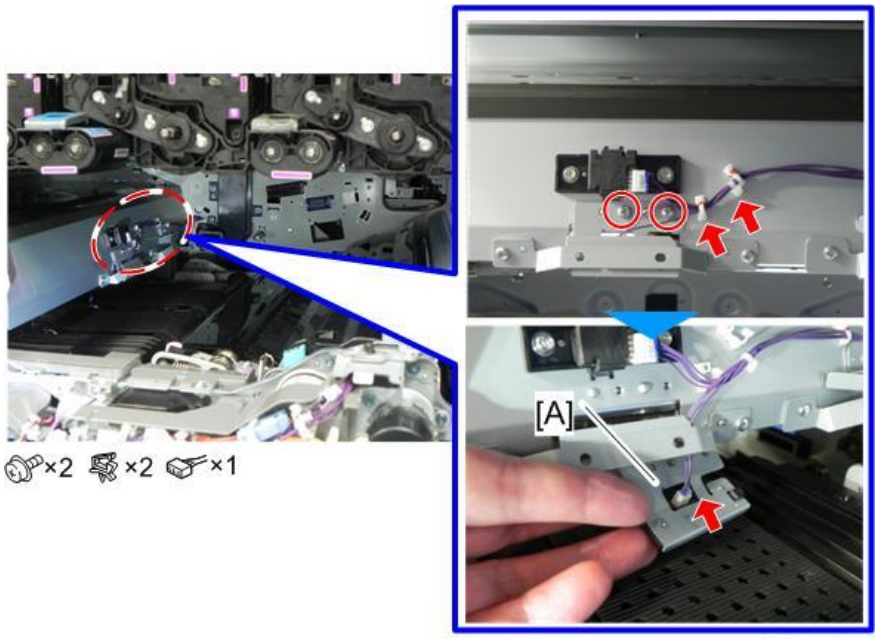
9. Remove the fusing cleaning web [A].



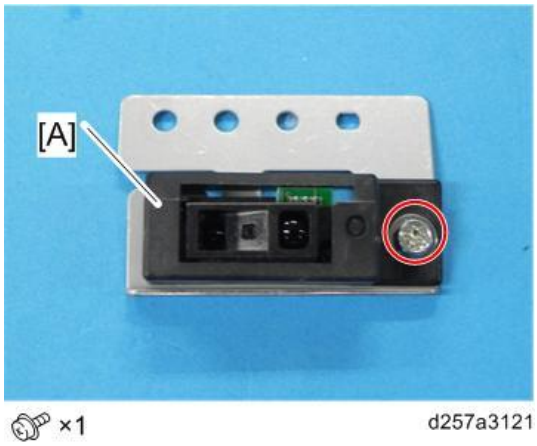
Fusing Entrance Sensor (S22)

1. Remove the ITB cleaning unit. (ITB Cleaning Unit)
2. Remove the ITB unit. (ITB Unit Removal)

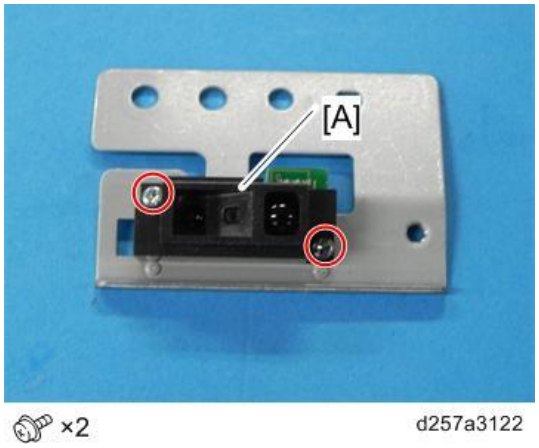
3. Remove the fusing entrance sensor (S22) [A] along with the bracket.



4. Remove the cover [A].



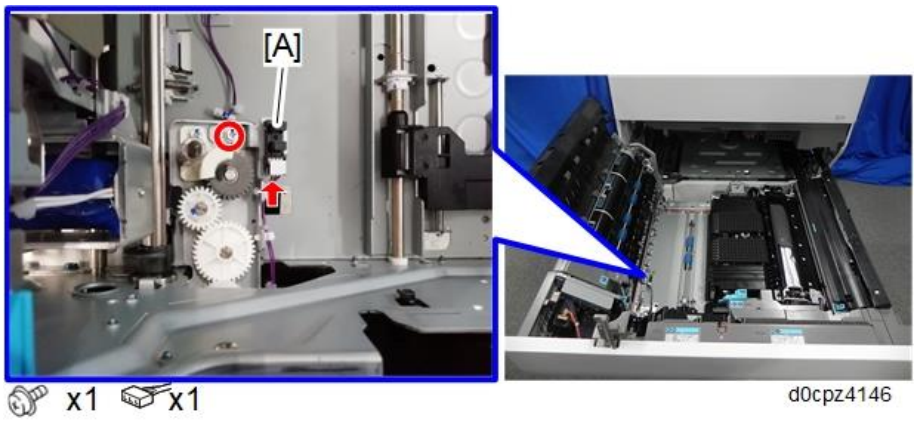
5. Remove the fusing entrance sensor (S22) [A].



6. After replacing the fusing entrance sensor (S22), execute SP1-134-001 (Fusing Enter Sensor Setting Fusing Enter Sensor：No Paper Check).

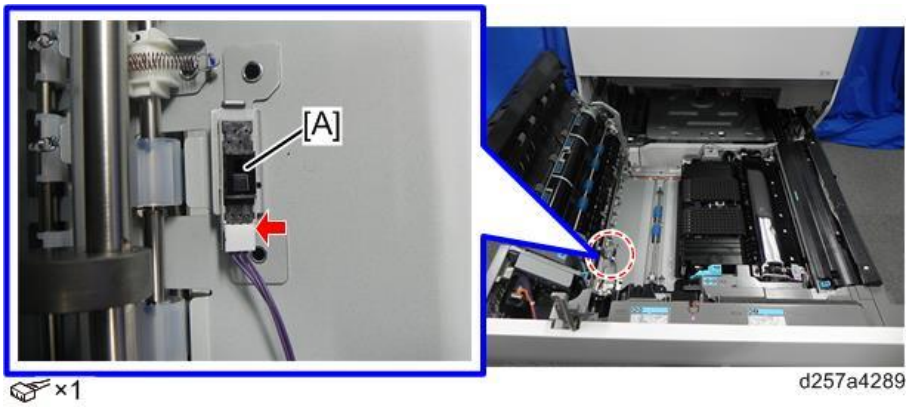
Cleaning Web End Sensor (S85) (Pro C5300S/C5310S Only)

1. Remove the fusing unit. (Removing the Fusing Unit)
2. Remove the cleaning web end sensor (S85) [A].



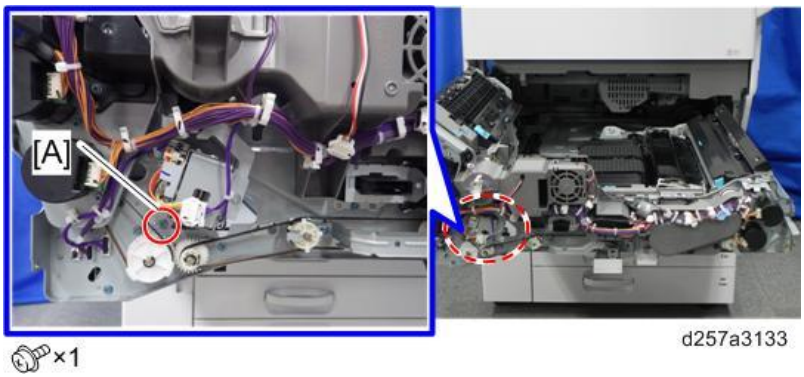
Cleaning Web Set Sensor (S86)　(Pro C5300S/C5310S Only)

1. Remove the fusing unit. (Removing the Fusing Unit)
2. Remove the cleaning web set sensor (S86) [A].

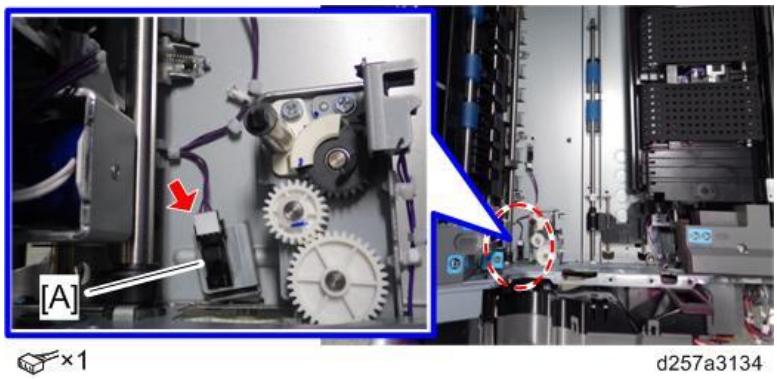


Cleaning Web Contact Sensor (S87) (Pro C5300S/C5310S Only)

1. Remove the drawer unit cover. (Drawer Unit Cover)
2. Remove the fusing unit. (Removing the Fusing Unit)
3. Remove the bracket [A] of the cleaning web contact sensor (S87).

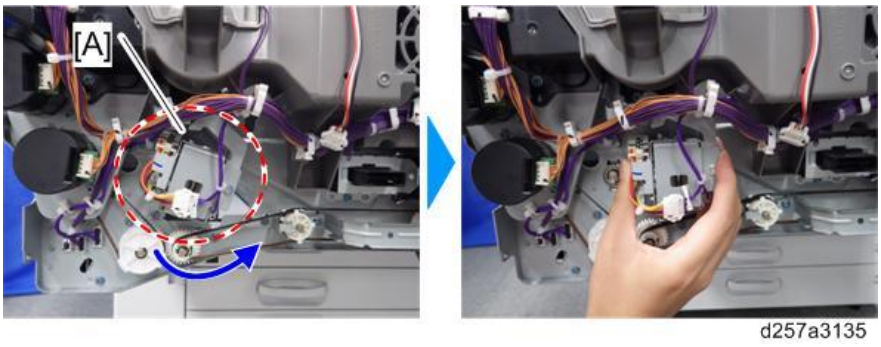


4. Remove the cleaning web contact sensor (S87) [A].



Note

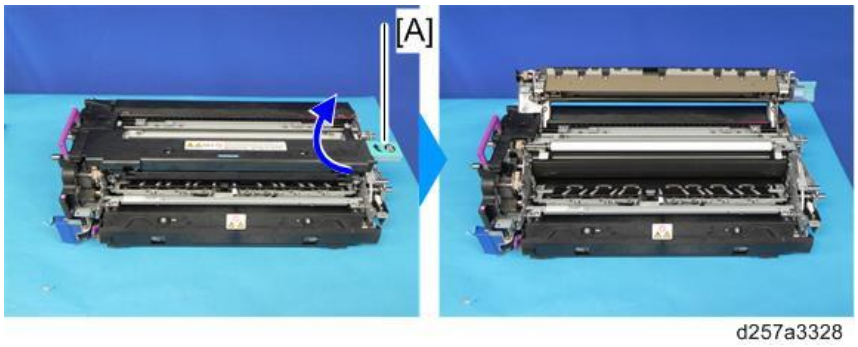
- Rotate the cleaning web motor [A] counterclockwise, to make a space in the drawer unit to remove the cleaning web contact sensor.



Fusing Belt Smoothing Roller (Pro C5300S/C5310S Only)

1. Remove the fusing upper cover. (Fusing Upper Cover)

2. Lift the open/close lever [A].

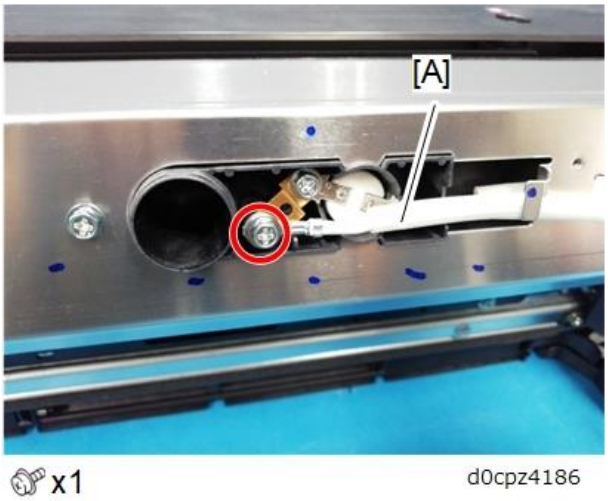


3. Hold the handgrips of the fusing belt smoothing roller [A]. Slide and remove the roller.

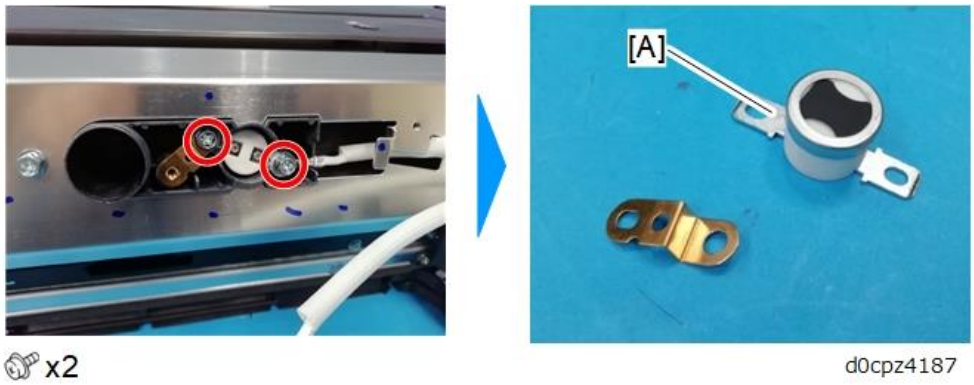
Heating Roller Thermostat (TS2)

1. Remove the cover [A].

2. Remove the harness [A].



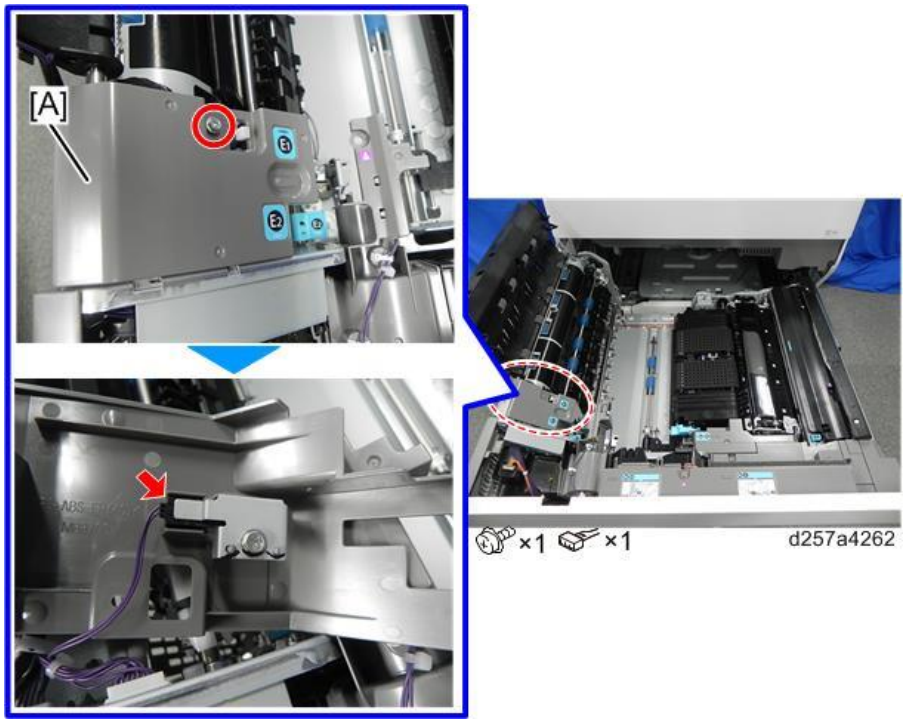
3. Remove the heating roller thermostat (TS2) [A].



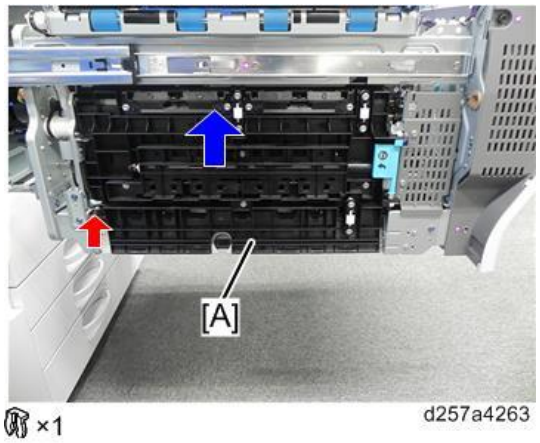
Paper Exit and Duplex Unit

Paper Exit Unit

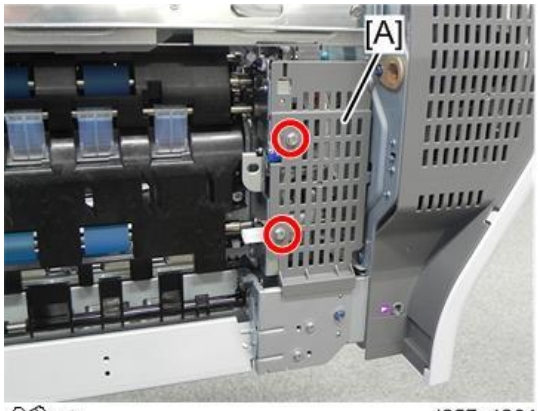
1. Remove the fusing unit. (Removing the Fusing Unit)
2. Remove the paper exit inner cover [A].
3. Turn over the paper exit inner cover [A] and disconnect the connector.



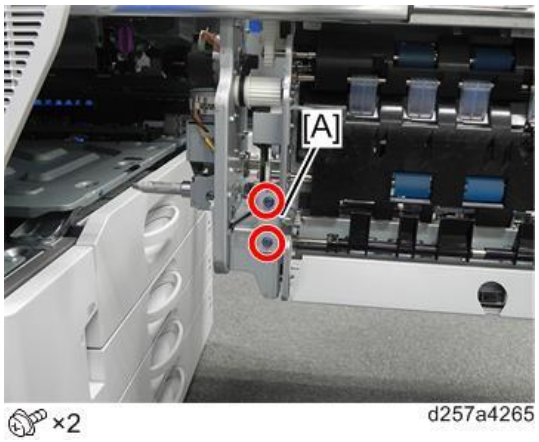
4. Lift the exit guide plate [A] to remove it.



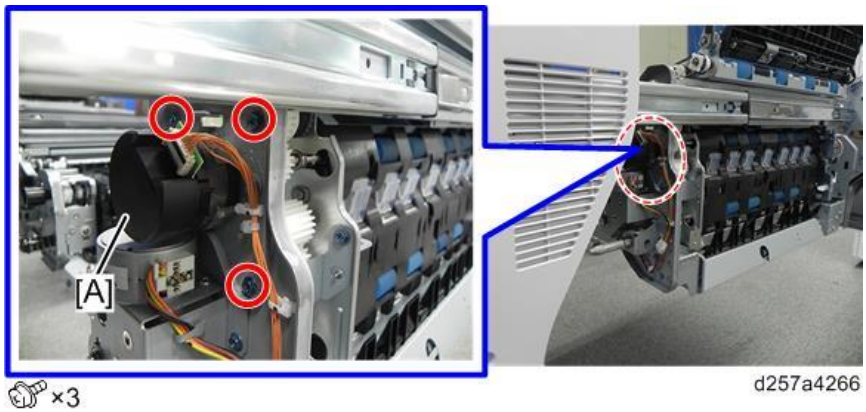
5. Remove the cover [A].



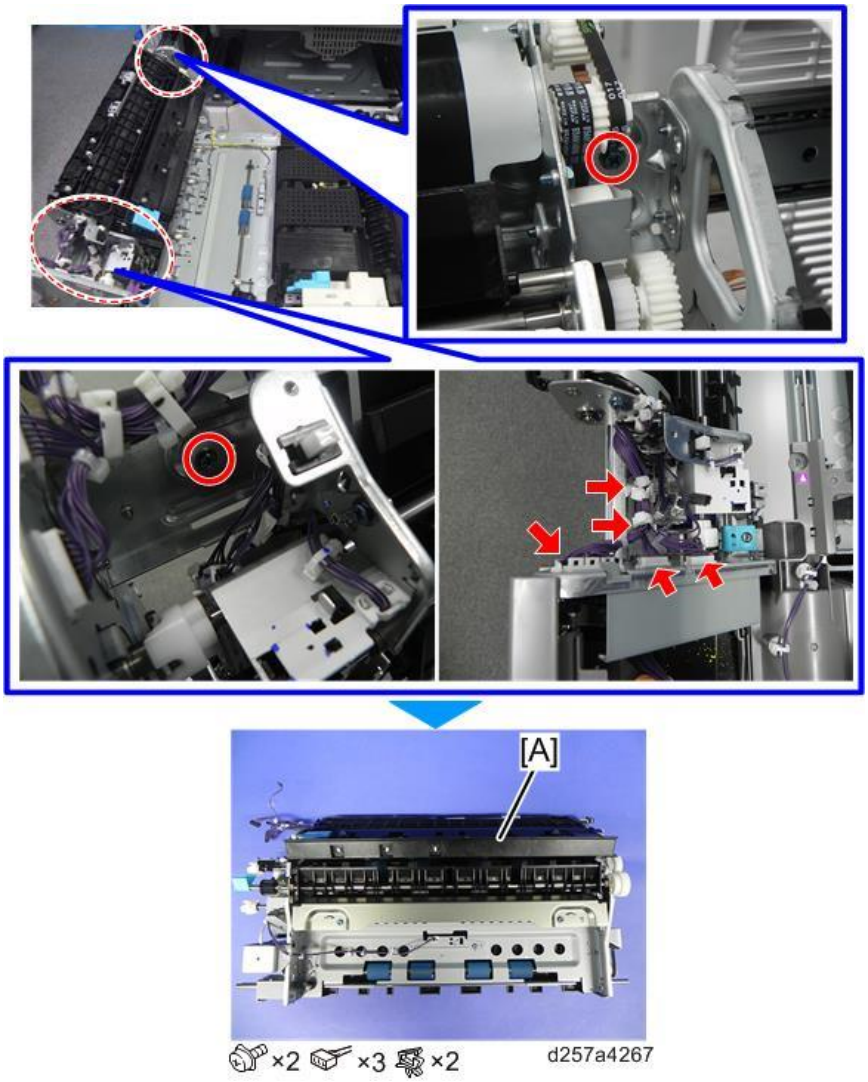
6. Remove the connector bracket [A].



7. Remove the inverter exit motor [A] along with the bracket.



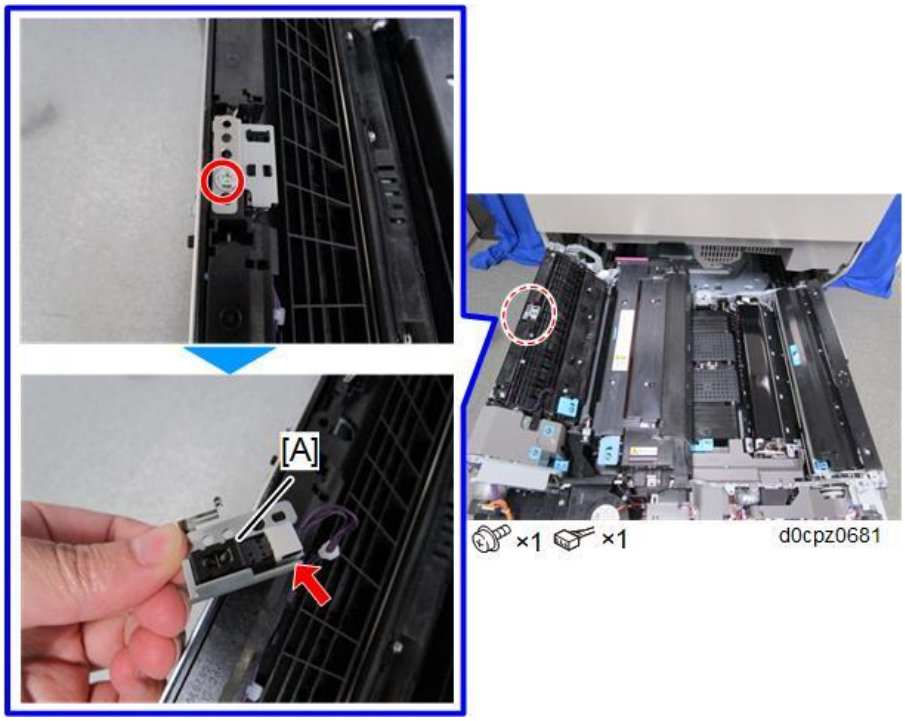
8. Remove the paper exit unit [A].



Paper Exit Sensor (S74)

1. Open the drawer unit.

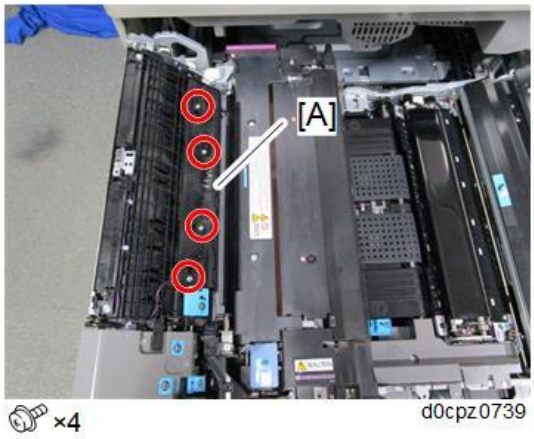
2. Remove the paper exit sensor (S74) [A].



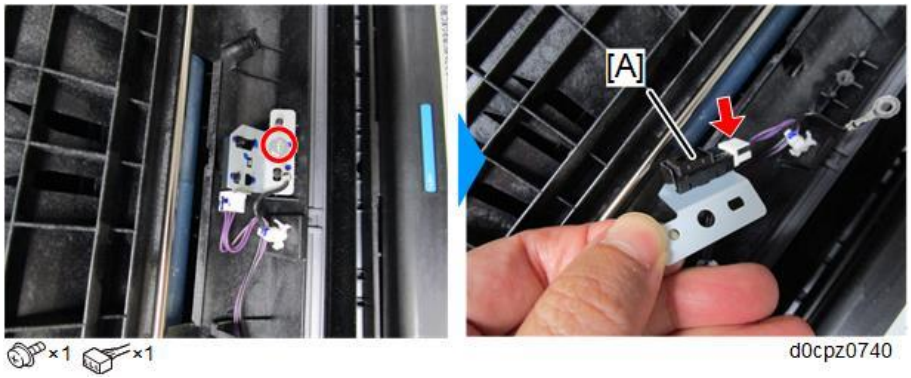
Paper Exit Relay Sensor (S73)

1. Open the drawer unit.

2. Remove the guide plate [A].

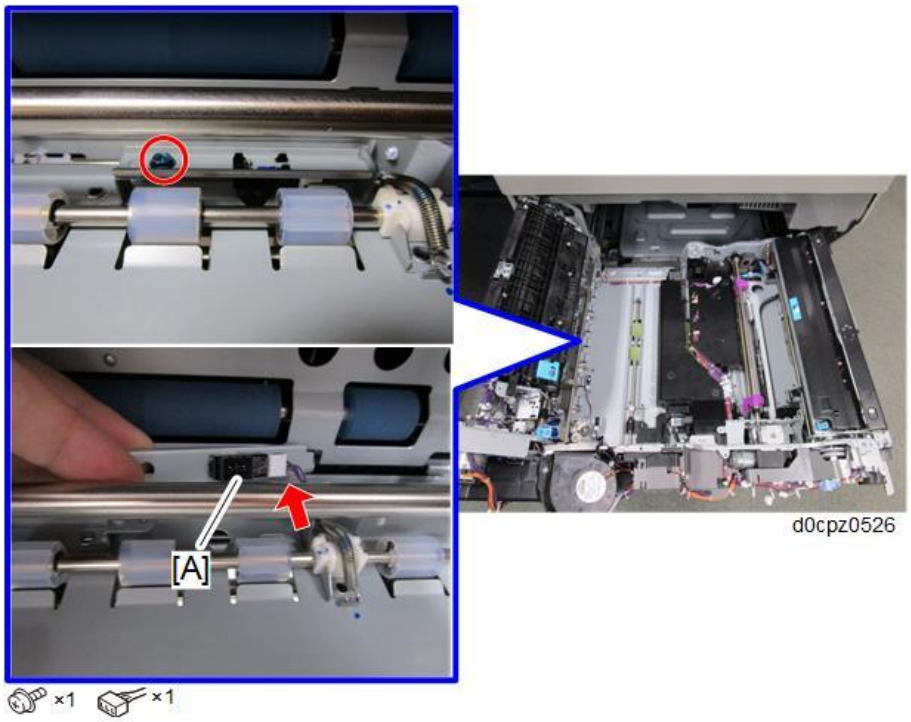


3. Remove the paper exit relay sensor (S73) [A].



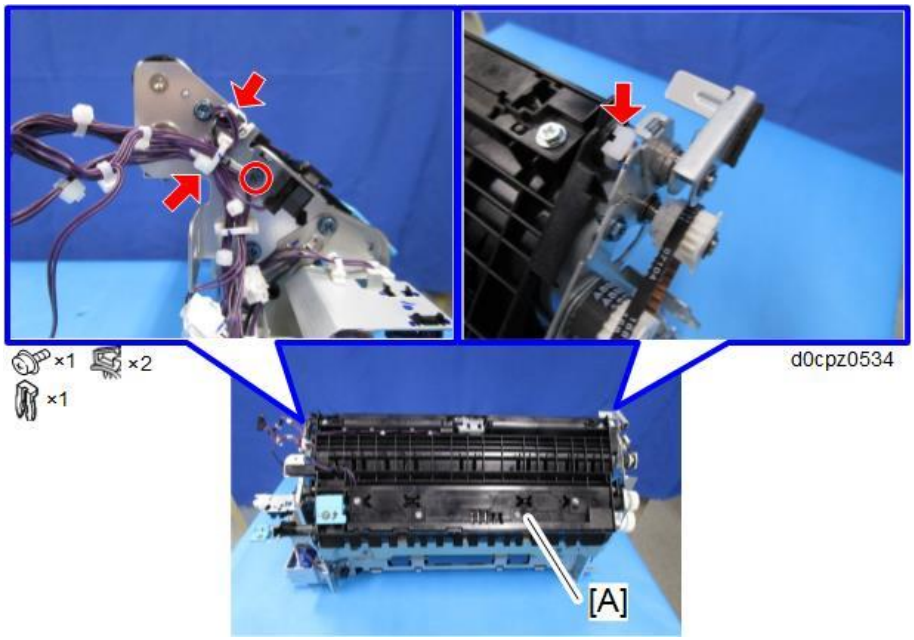
Inverter Exit Sensor (S75)

1. Remove the fusing unit. (Removing the Fusing Unit)
2. Remove the inverter exit sensor (S75) [A].

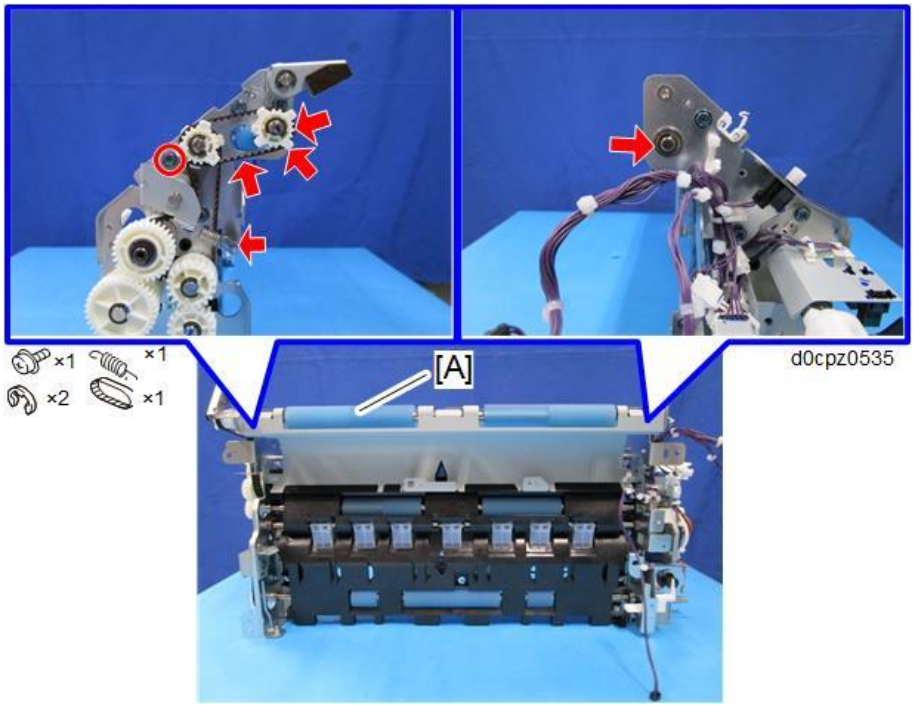


Inverter Feed-in Sensor (S80)

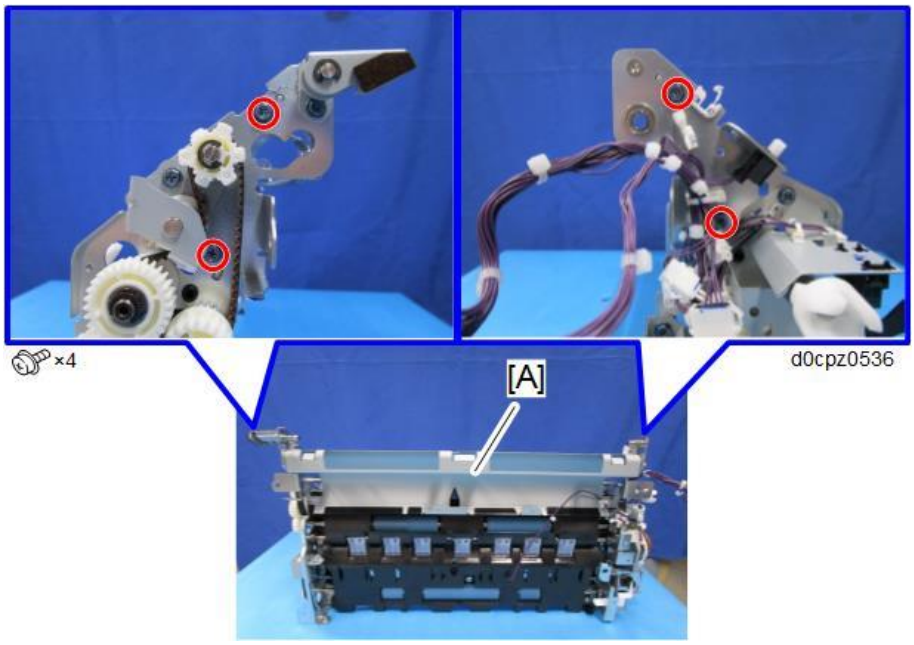
1. Remove the paper exit unit. (Paper Exit Unit)
2. Remove the inverter exit sensor. (Inverter Feed-out Sensor (S76))
3. Remove the guide plate [A].



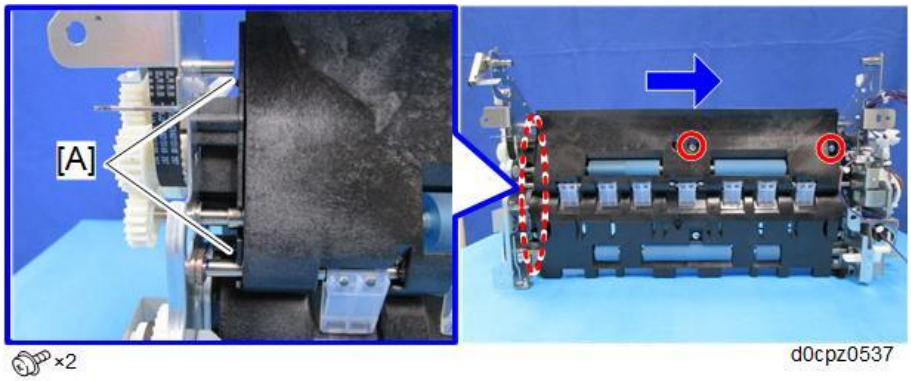
4. Remove the roller [A].



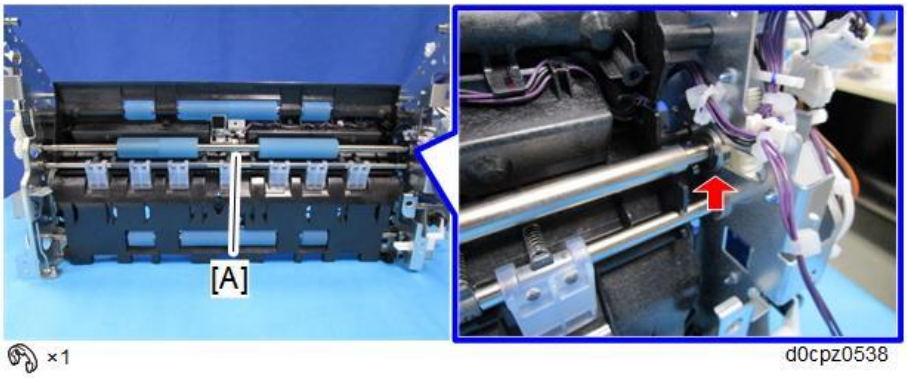
5. Remove the guide plate [A].



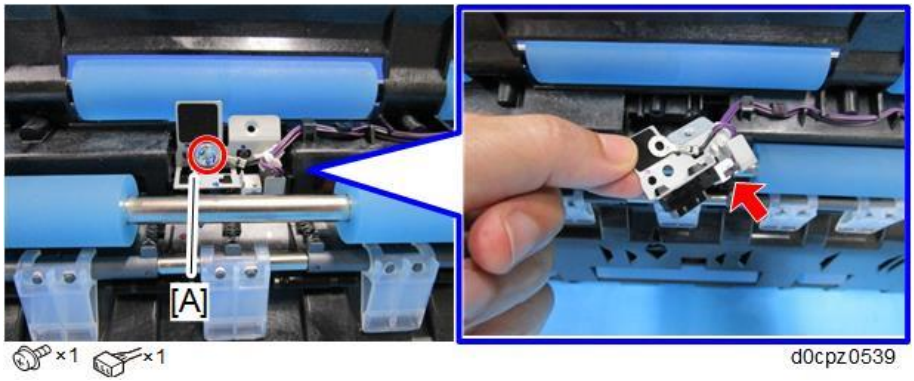
6. Remove the guide [A] by sliding it to the right.



7. Disconnect the right side of the roller [A].



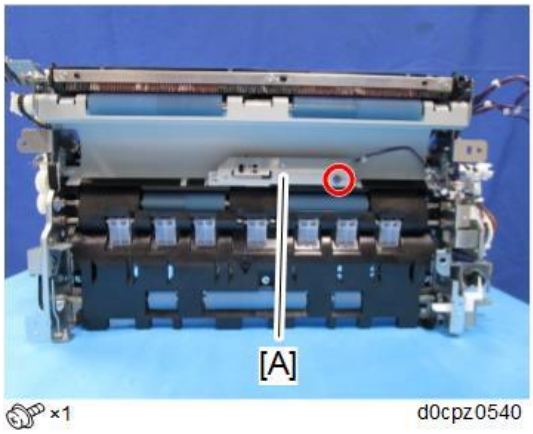
8. Remove the inverter feed-in sensor (S80) [A] along with the bracket.



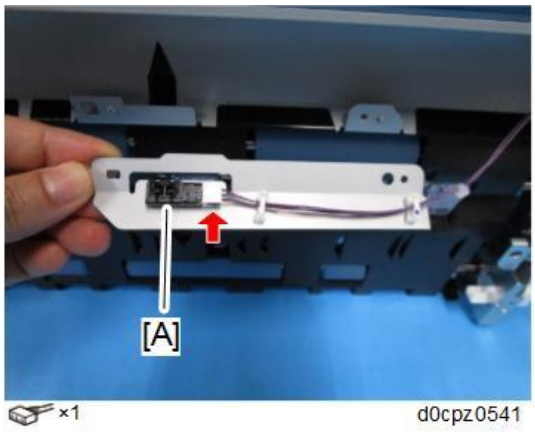
Inverter Feed-out Sensor (S76)

1. Remove the paper exit unit. (Paper Exit Unit)

2. Remove the inverter feed-out sensor [A] with bracket.

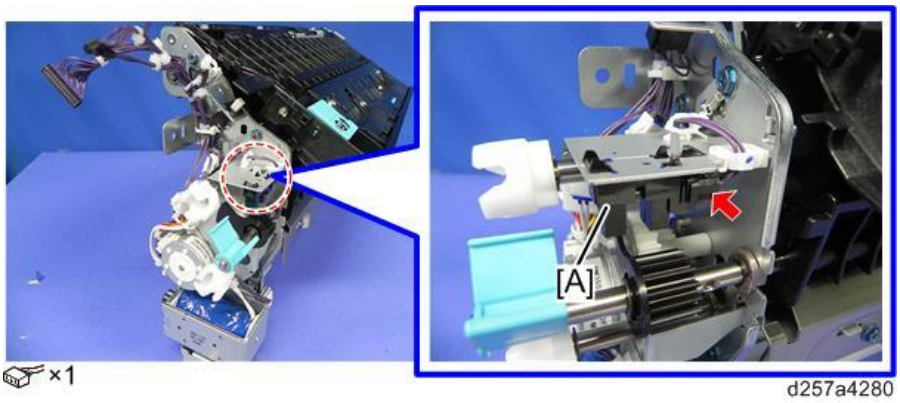


3. Remove the inverter feed-out sensor (S76) [A].



Inverter Junction Gate HP Sensor (S77)

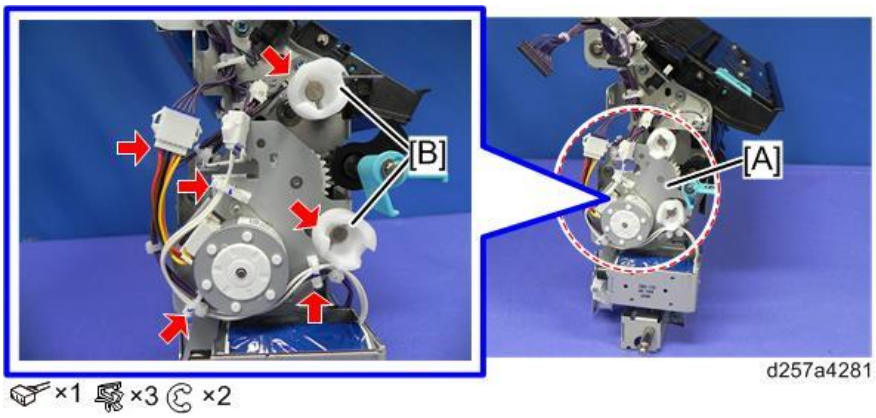
1. Remove the paper exit unit. (Paper Exit Unit)
2. Remove the inverter junction gate HP sensor (S77) [A].



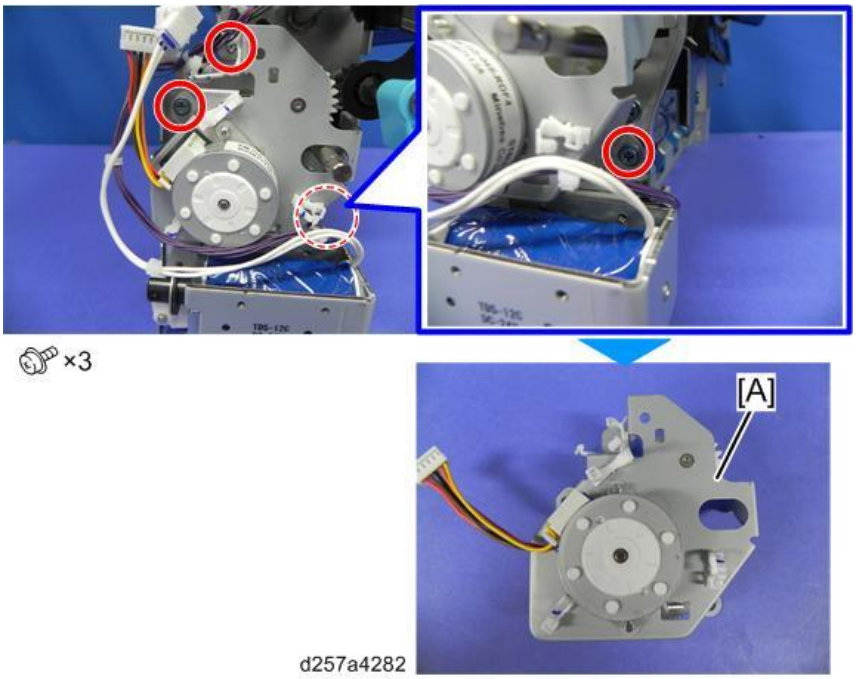
Inverter Junction Gate Motor (M41)

1. Remove the paper exit unit. (Paper Exit Unit)
2. Before removing the inverter junction gate motor (M41) [A] along with the bracket, remove the joint

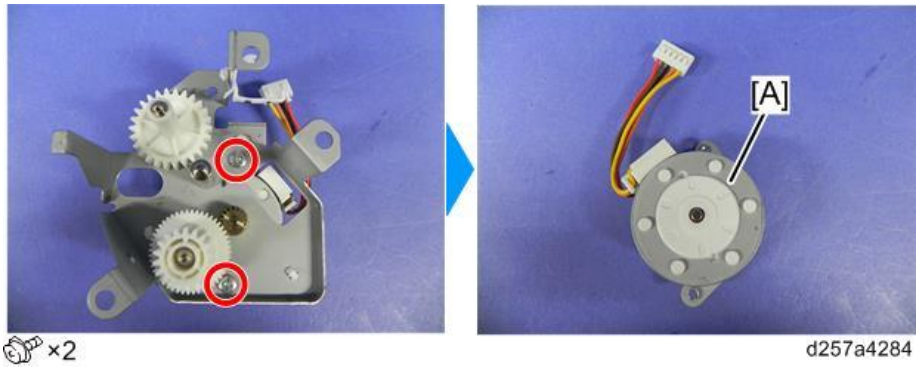
[B] and connectors.



3. Remove the inverter junction gate motor (M41) [A] along with the bracket.



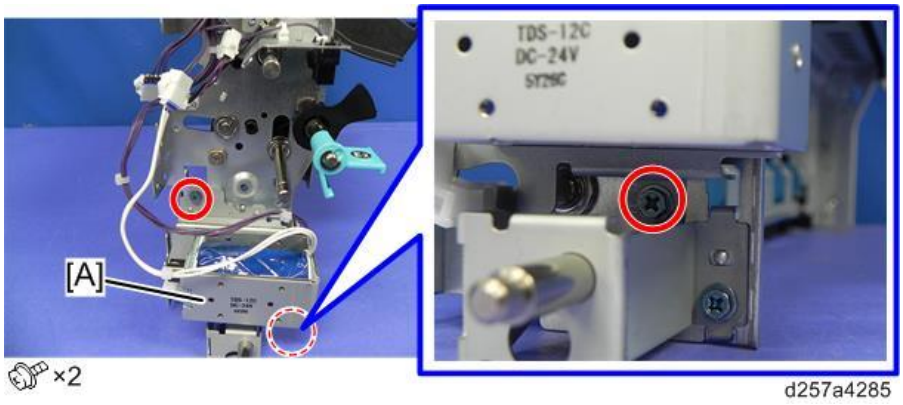
4. Remove the gear [A].
5. Remove the inverter junction gate motor (M41) [A] from the bracket.



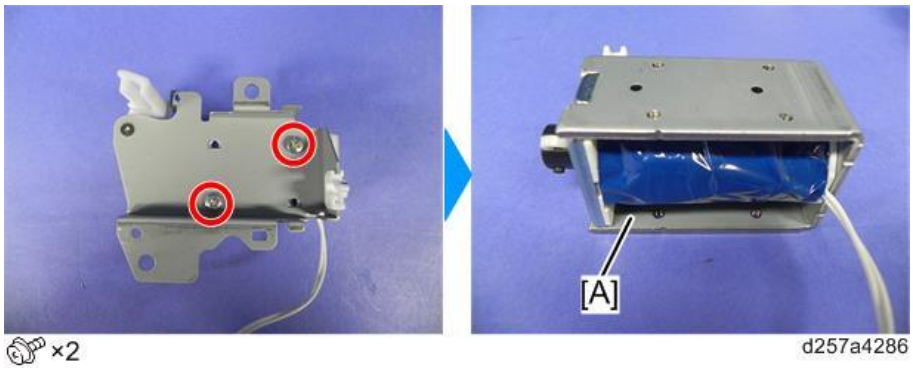
Exit Inverter Solenoid (SOL6)

1. Remove the inverter junction gate motor. (Inverter Junction Gate Motor (M41))

2. Remove the exit inverter solenoid (SOL6) [A] along with the bracket.

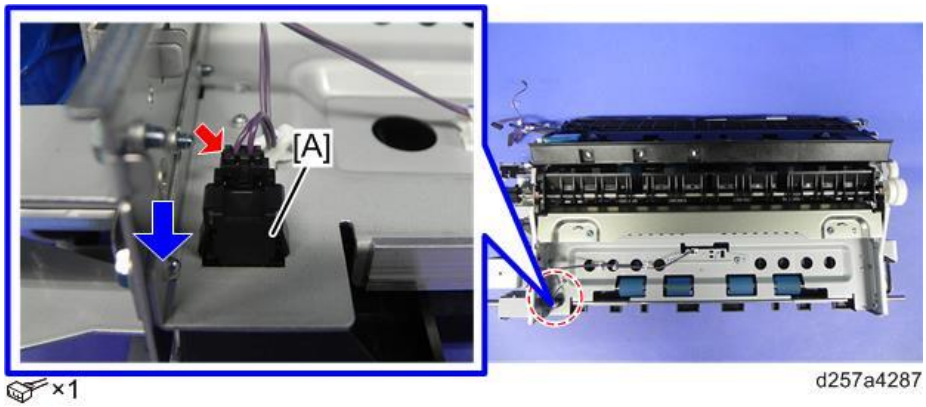


3. Remove the exit inverter solenoid (SOL6) [A] from the bracket.



Paper Exit Left Guide Plate Sensor (S78)

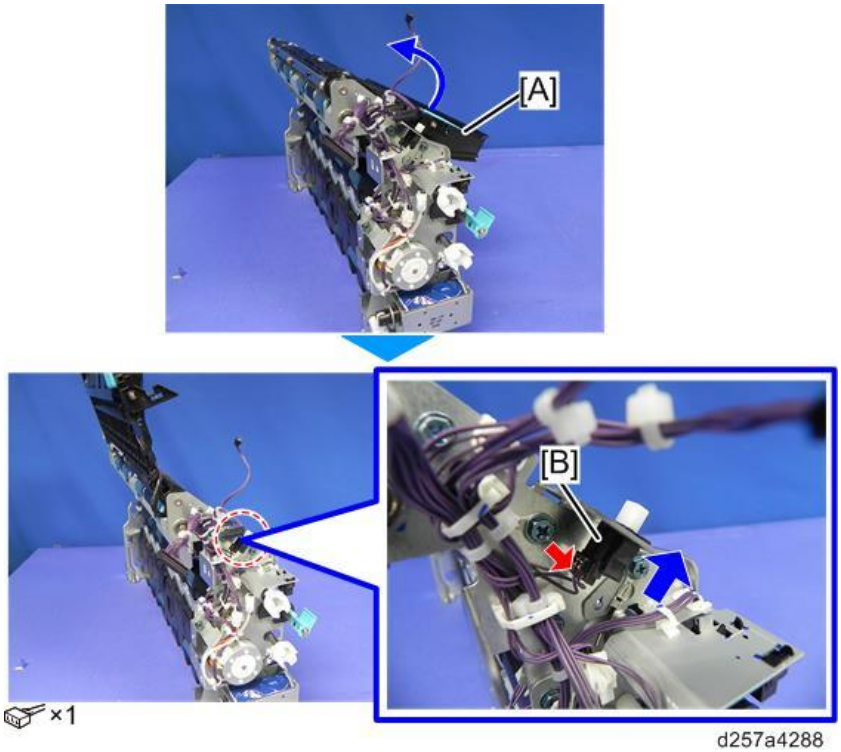
1. Remove the paper exit unit. (Paper Exit Unit)
2. Remove the paper exit left guide plate sensor (S78) [A].



Paper Exit Upper Guide Plate Sensor (S79)

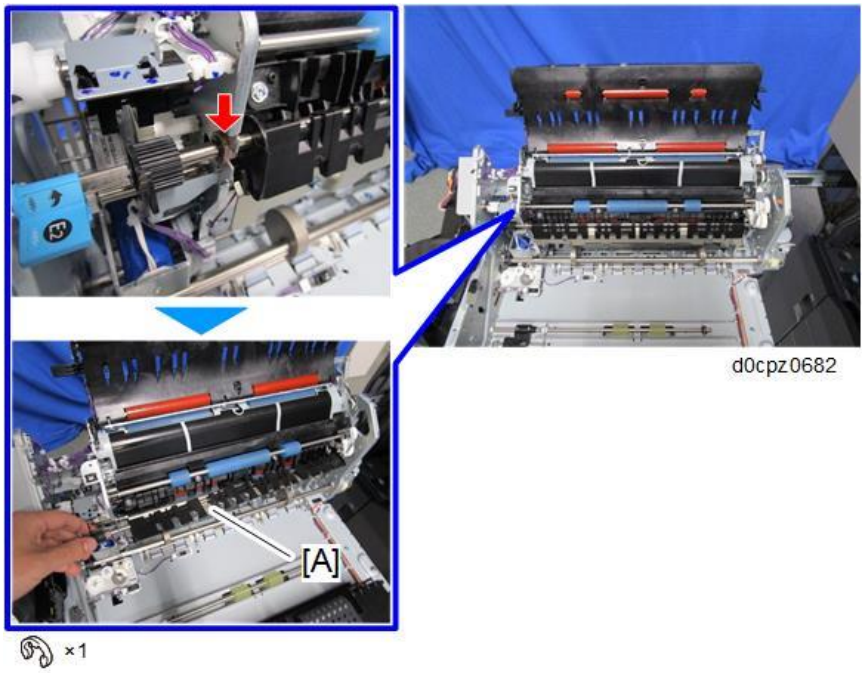
1. Remove the paper exit unit. (Paper Exit Unit)
2. Open the paper exit upper guide plate [A] and remove the paper exit upper guide plate

sensor (S79) [B].

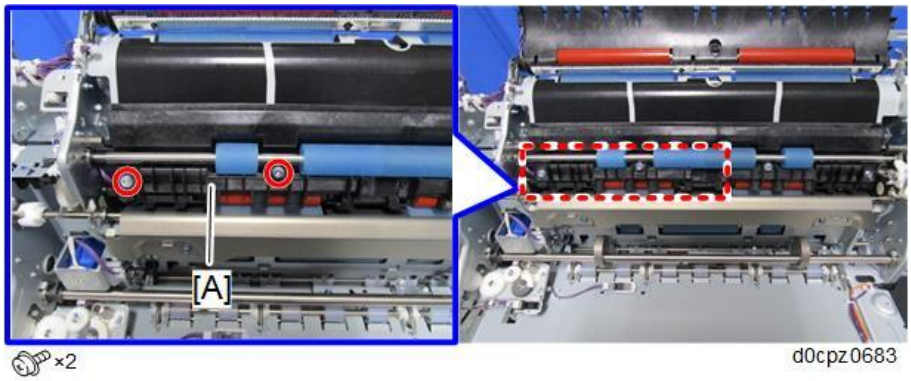


Inverter Entrance Driven Holder

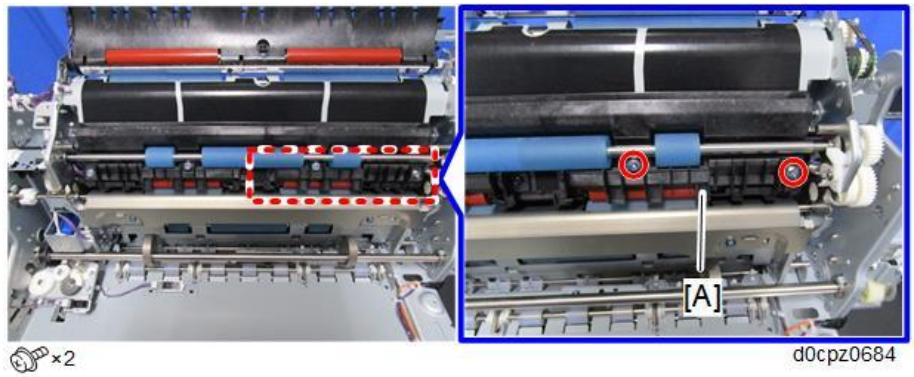
1. Remove the fusing unit. (Removing the Fusing Unit)
2. Remove the paper exit junction gate [A].



3. Remove the inverter entrance driven holder (front) [A].



4. Remove the inverter entrance driven holder (rear) [A].

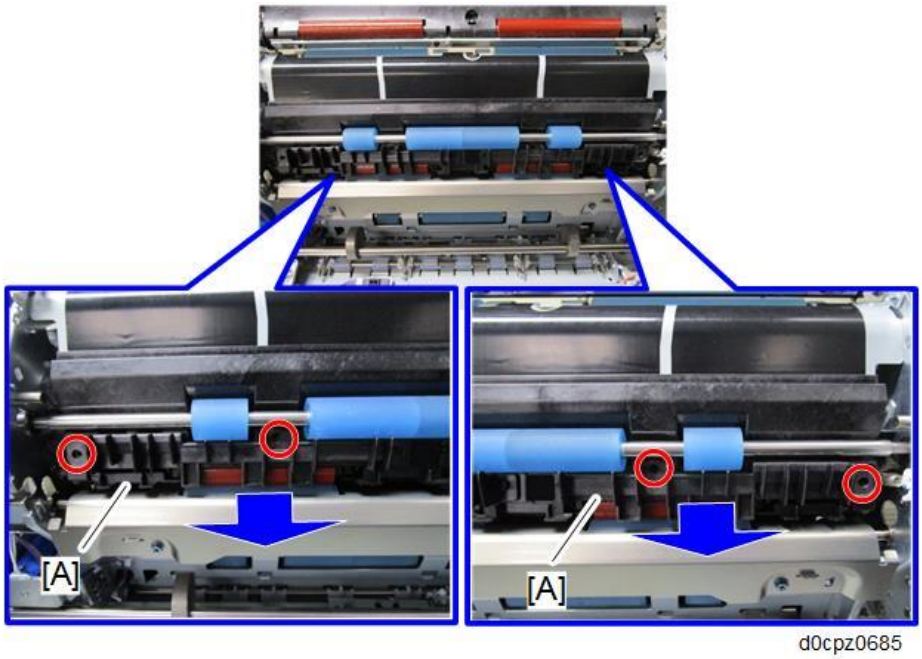


Important

If holder replacement is NOT required:

Fasten the screw as the holders moves downward.

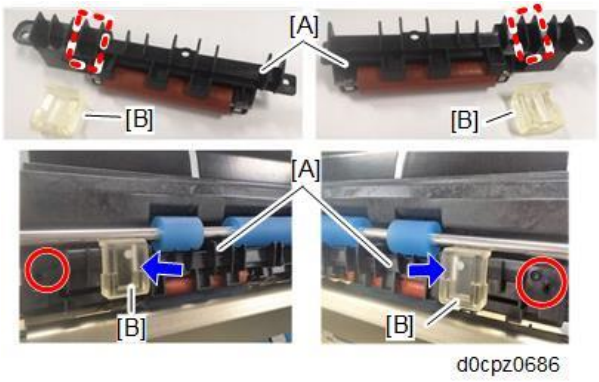
If the holder is not installed correctly, the roller nip decreases which may cause a jam during paper transporting.



Important

If holder replacement is required:

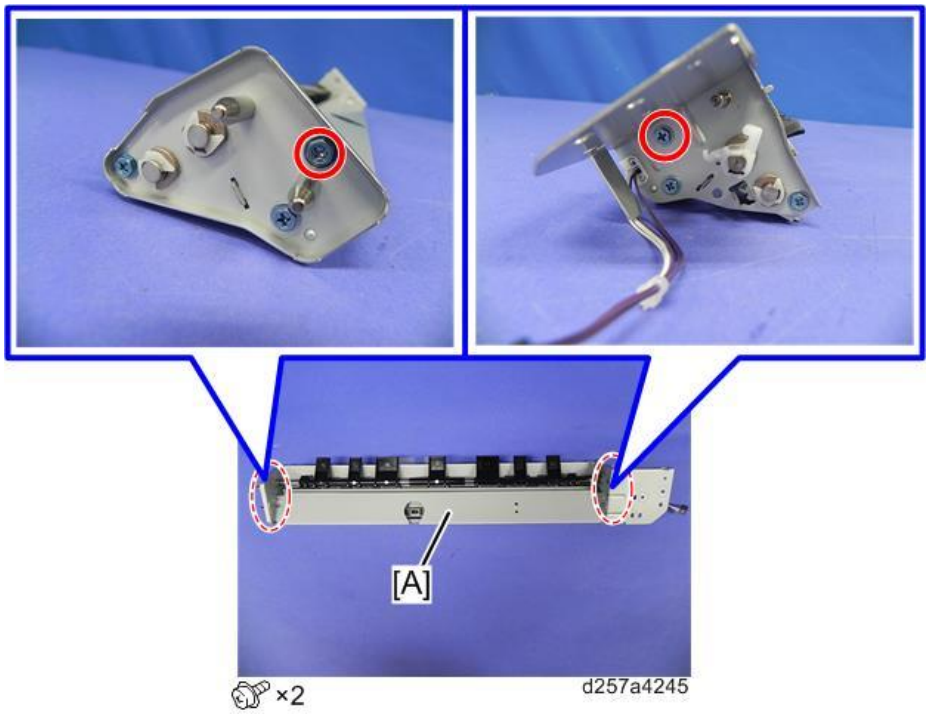
If the holders [A] are to be replaced because of the roller deterioration or spring breakage, use the jig [B] provided with the new holders.
Each holder [A] must be replaced in the unit shown in the photo below.
Attach the holder to the boss, set the jig [B] at the specified location, and attach the screw while holding the back of the jig. After attaching holder [A], remove the jig.



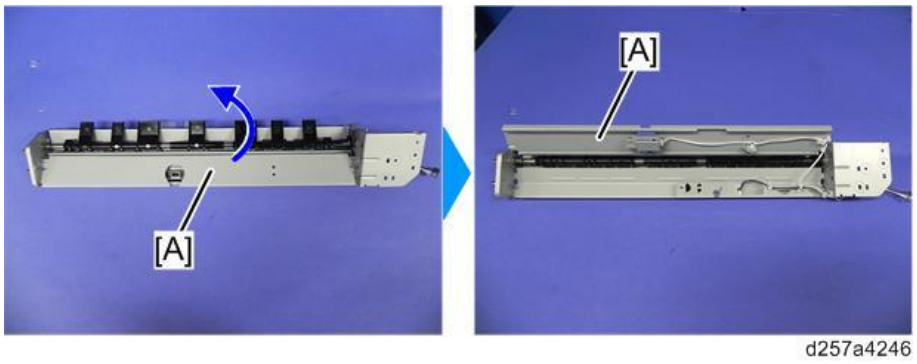
Duplex Unit

Purge Relay Sensor (S71), Duplex Invert Sensor (S70)

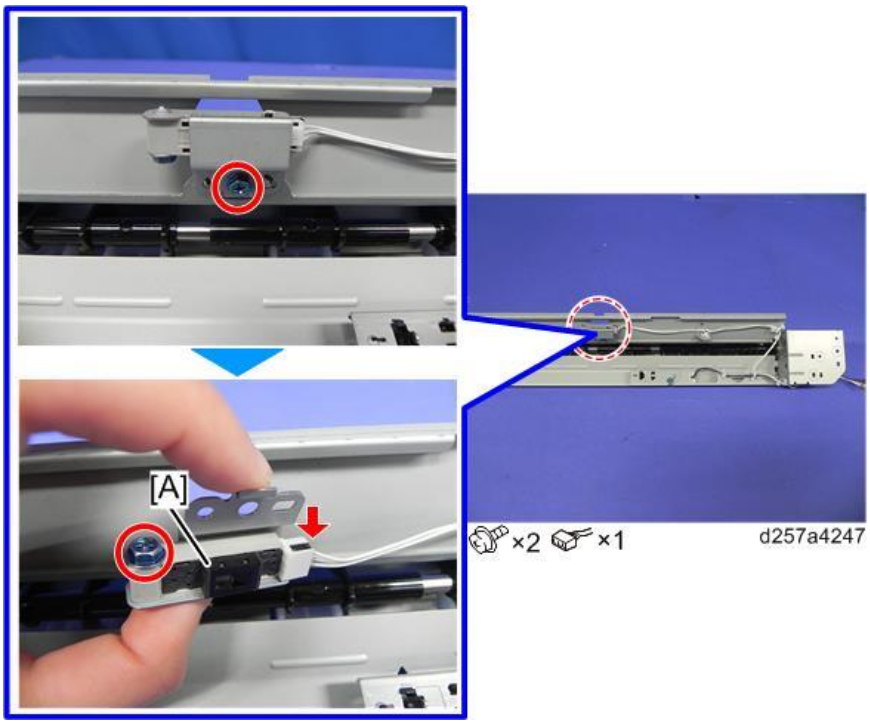
1. Remove the paper purge unit. (Paper Purge Unit)
2. Remove the duplex invert solenoid. (Duplex Invert Solenoid (SOL5))
3. Remove the fixing screws of the guide plate [A].



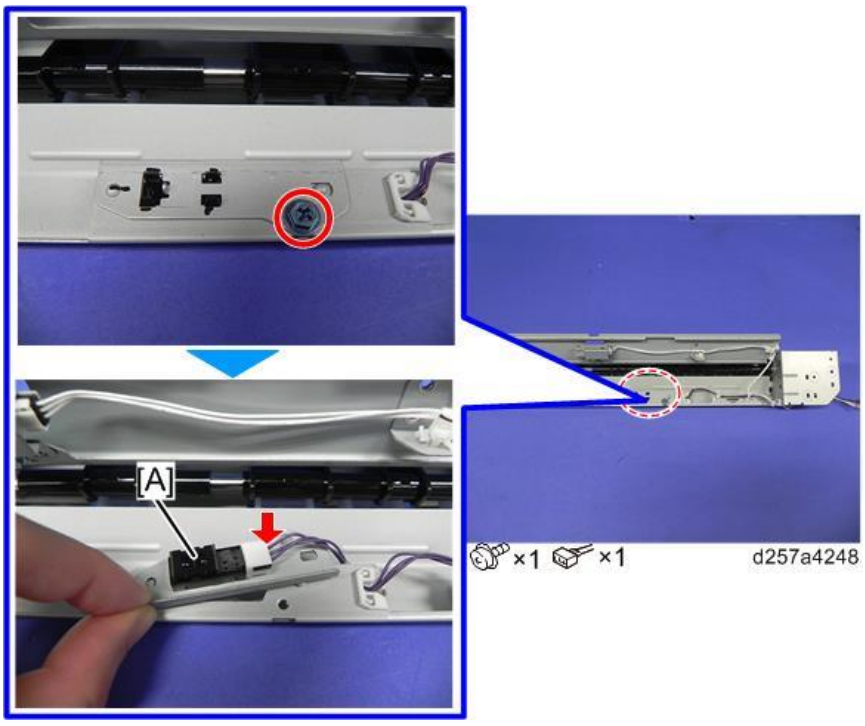
4. Open the guide plate [A].



5. Remove the purge relay sensor (S71) [A] along with the bracket.



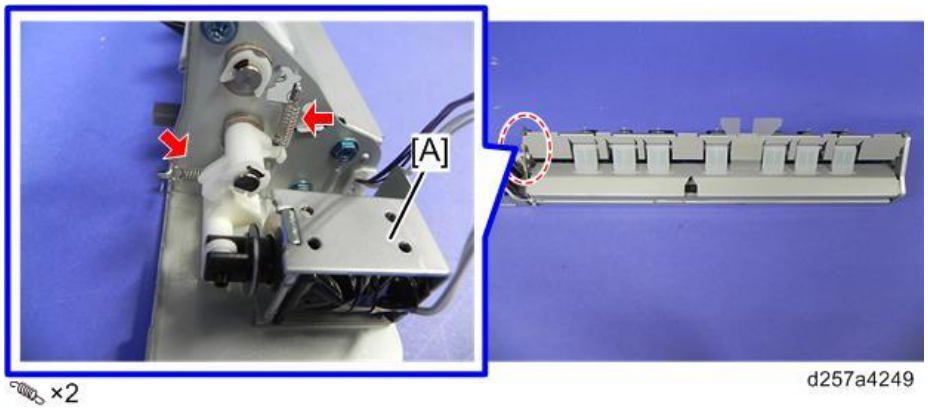
6. Remove the duplex invert sensor (S70) [A] along with the bracket.



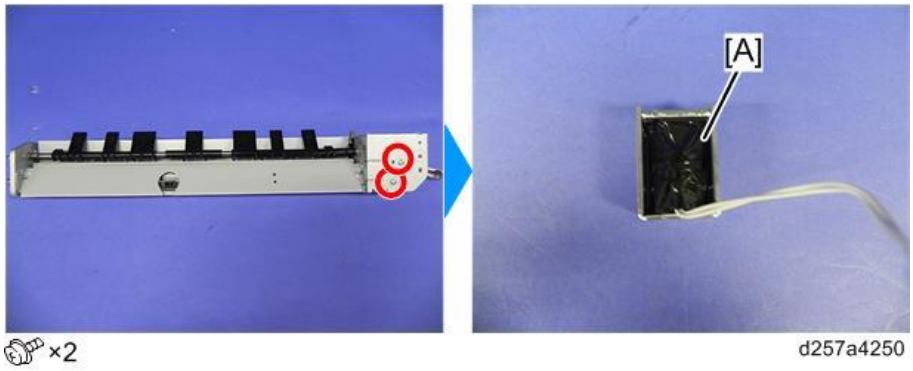
Duplex Invert Solenoid (SOL5)

1. Remove the paper purge unit. (Paper Purge Unit)

2. Remove the springs of the duplex invert solenoid (SOL5) [A].

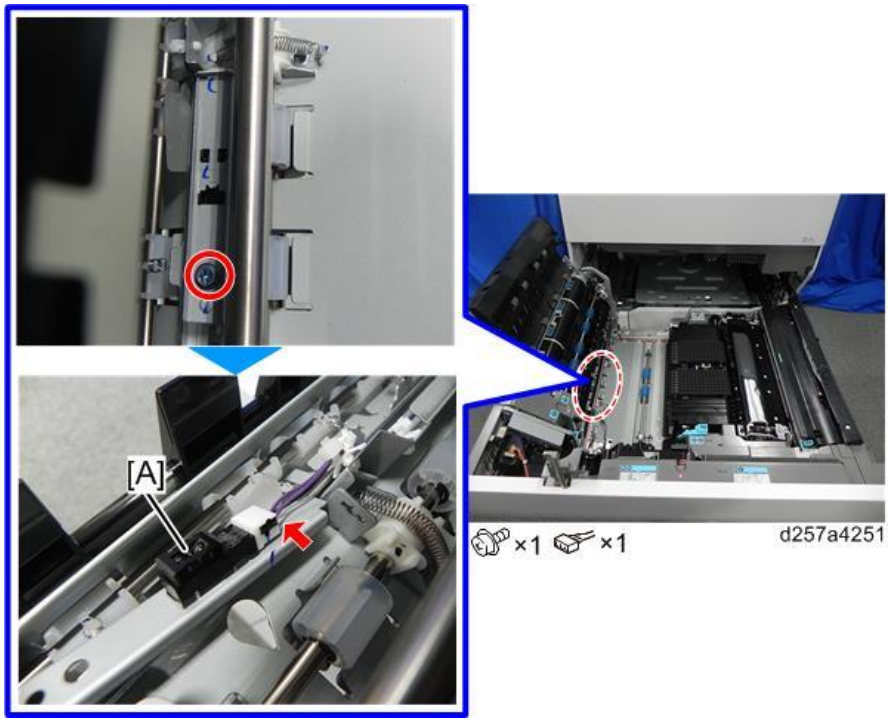


3. Remove the duplex invert solenoid (SOL5) [A].



Duplex Unit Entrance Sensor (S65)

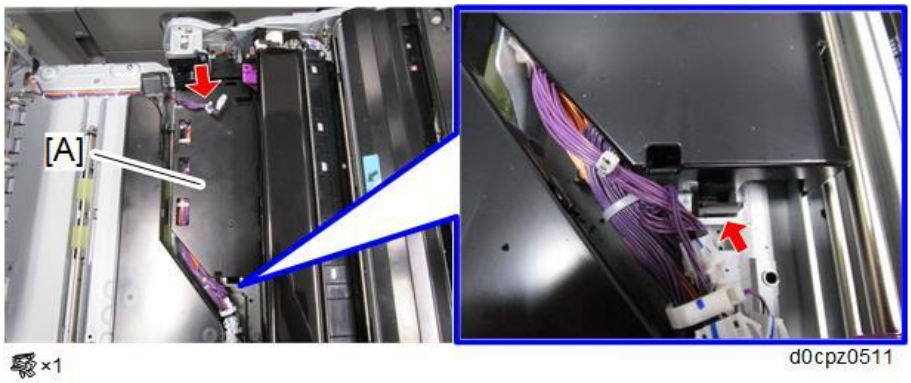
1. Remove the paper exit unit. (Paper Exit Unit)
2. Remove the duplex unit entrance sensor (S65) [A].



Duplex Unit Sensor 3 (S64)

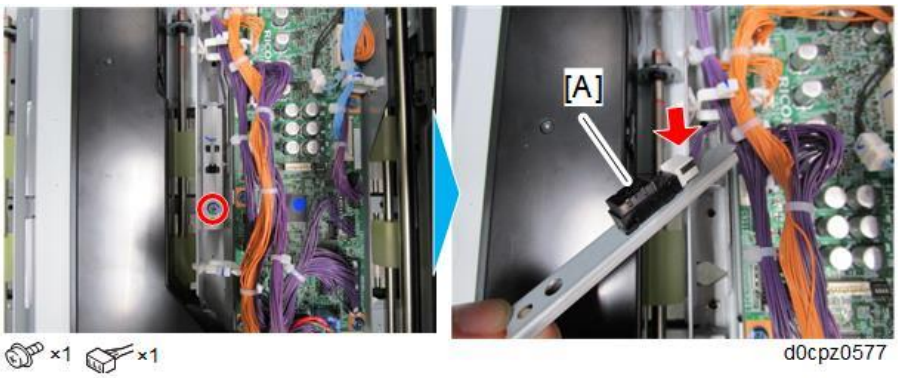
1. Remove the fusing unit. (Removing the Fusing Unit)
2. Remove the paper transport belt unit. (Paper Transport Belt Unit)
3. Remove the exit guide plate [A].

4. Release the tab and remove the DUB cover [A].



5. Remove the harness clamps [A] from the plate.

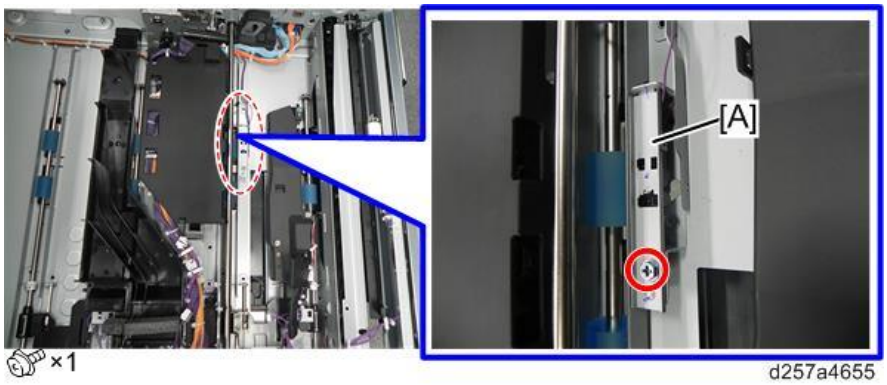
6. Remove the duplex unit sensor 3 (S64) [A].



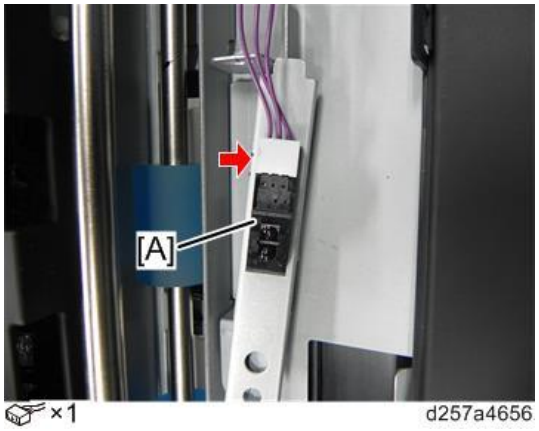
Duplex Unit Sensor 4 (S59)

1. Remove the edge detection unit. (Edge Detection Unit)

2. Remove the bracket [A].



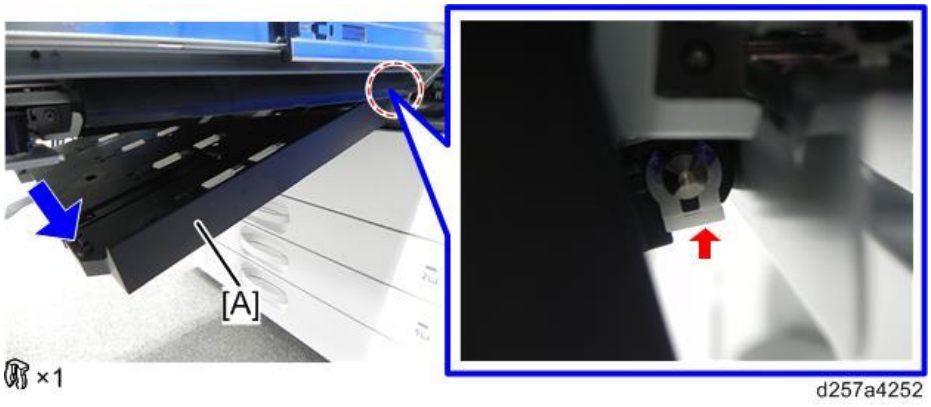
3. Remove the duplex unit sensor 4 (S59) [A].



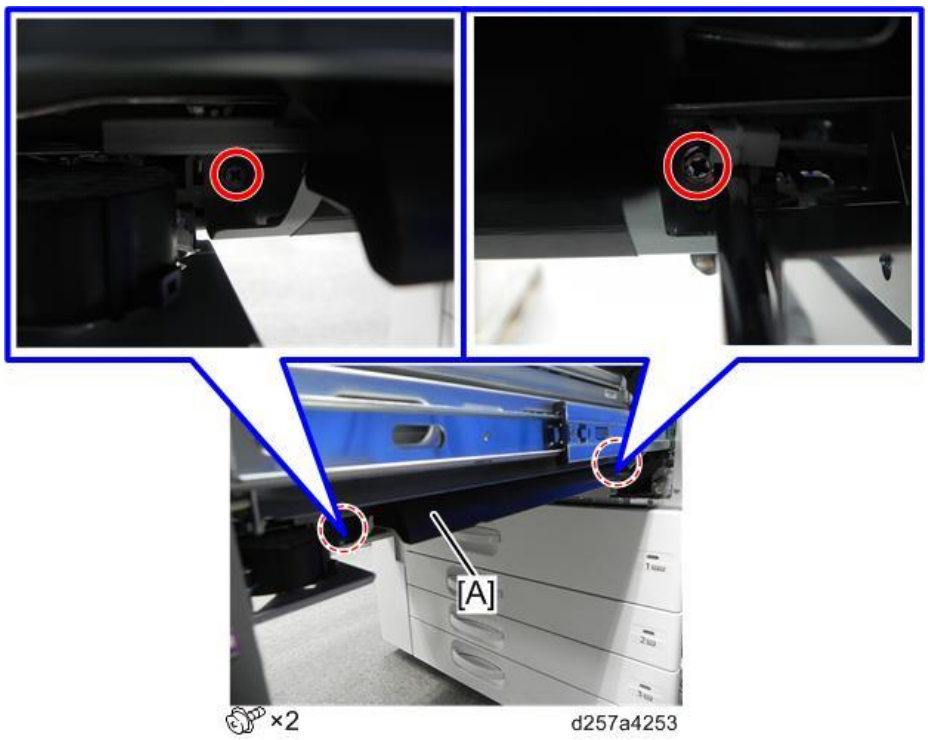
Duplex Exit Sensor (S60)

1. Open the drawer unit.

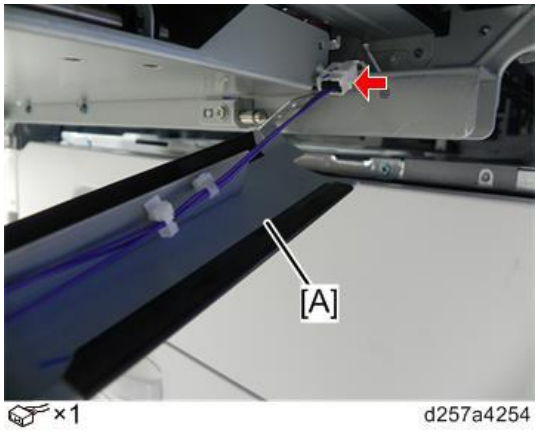
2. Remove the horizontal feed guide plate [A].



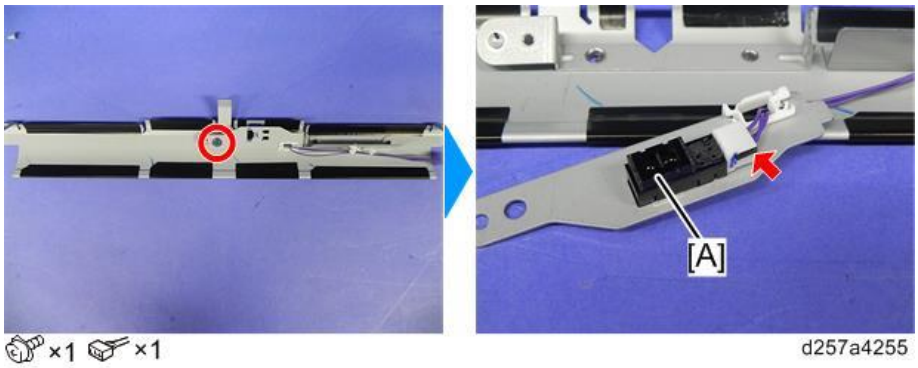
3. Remove the fixing screws of the bracket [A].



4. Remove the bracket [A].



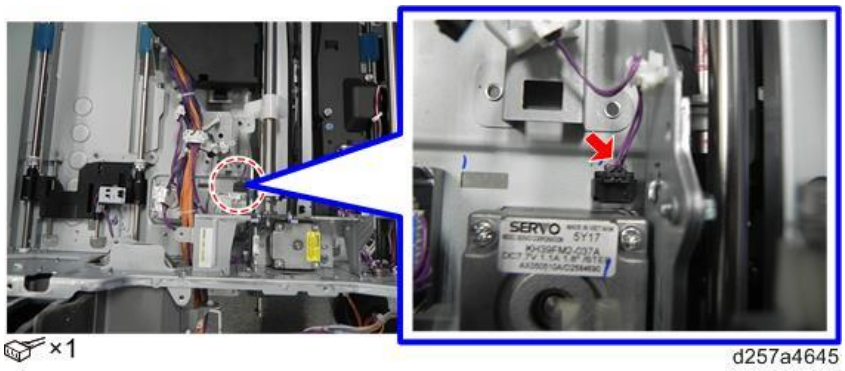
5. Remove the duplex exit sensor (S60) [A].



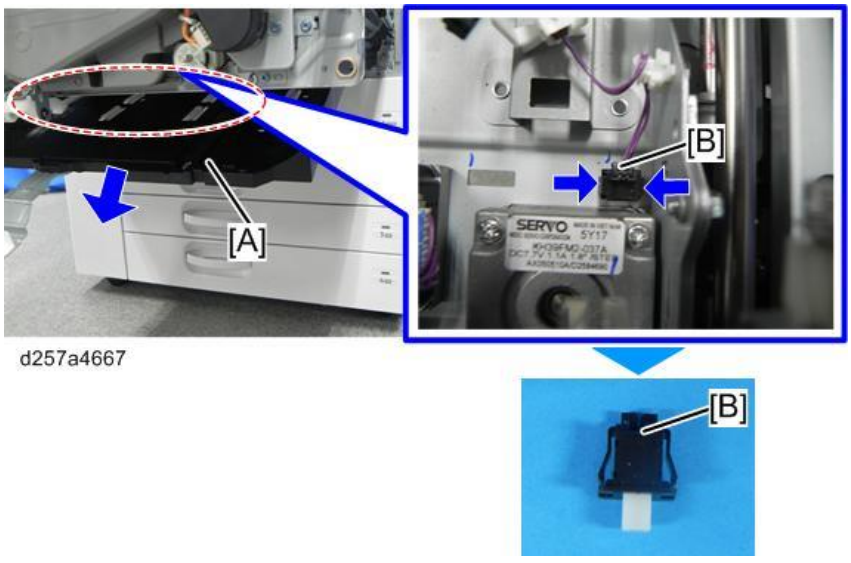
Horizontal Feed Guide Plate Open Sensor (S83)

1. Remove the cover of the duplex transport shift motor 2. (Duplex Transport Shift Motor 1 (M40))

2. Disconnect the connector of the horizontal feed guide plate open sensor (S83).



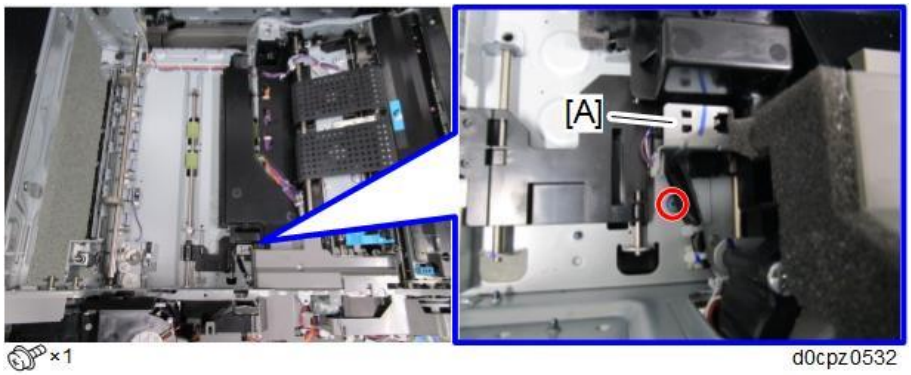
3. Open the horizontal feed guide plate [A], press the positions in the photo below, and remove the horizontal feed guide plate open sensor (S83) [B].



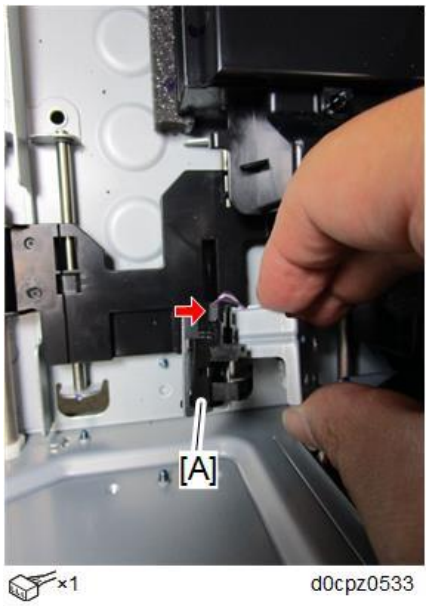
Duplex Transport HP Sensor 1 (S82)

1. Remove the paper transport belt unit. (Paper Transport Belt Unit)

2. Remove the duplex transport HP sensor 1 [A] with its bracket.



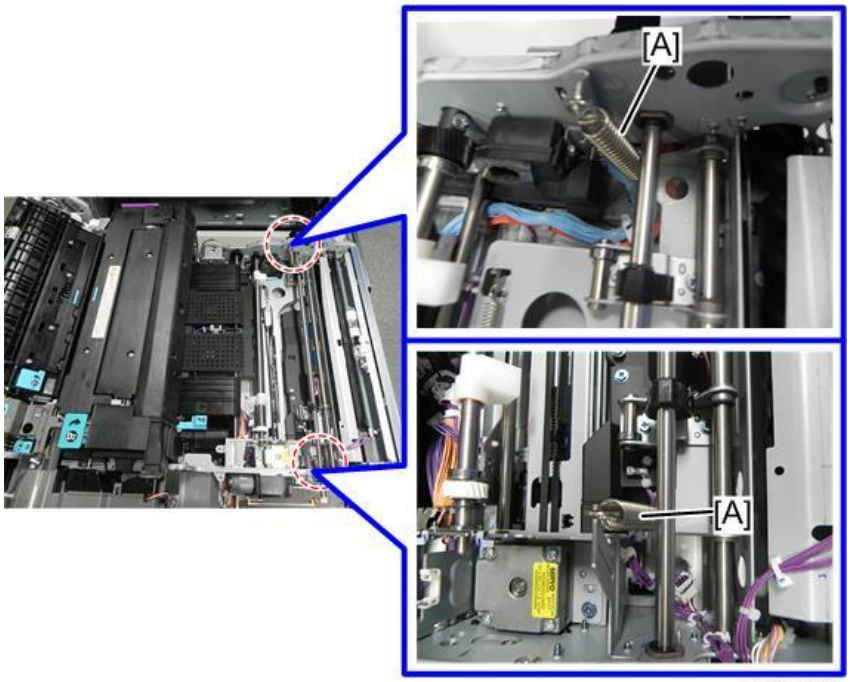
3. Remove the duplex transport HP sensor 1 (S82) [A].



Duplex Transport HP Sensor 2 (S84)

1. Remove the registration unit. (Registration Unit)
2. Remove the paper transfer belt unit. (Paper Transfer Belt Unit)

3. Remove the spring [A].



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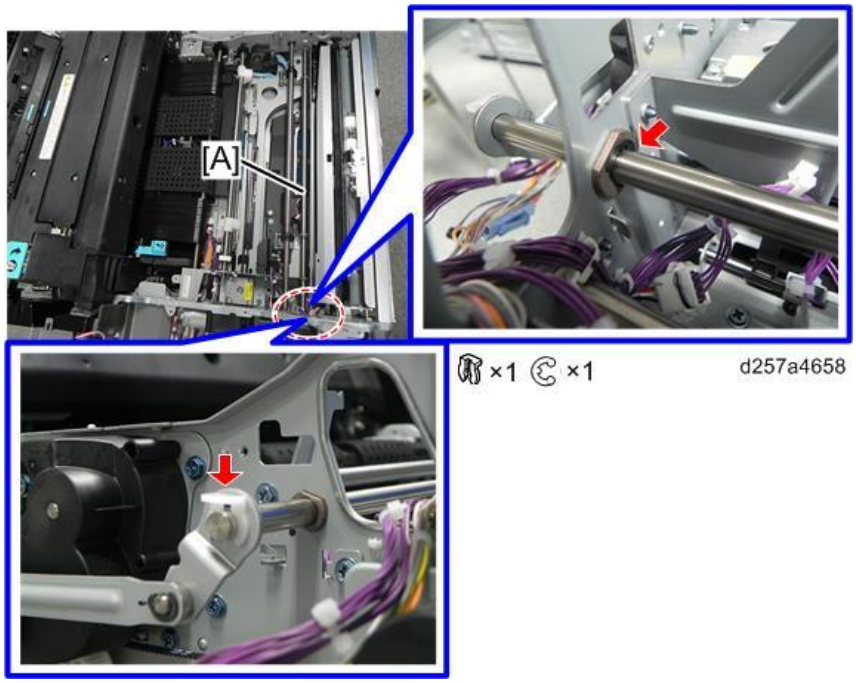
4. Remove the shaft [A].



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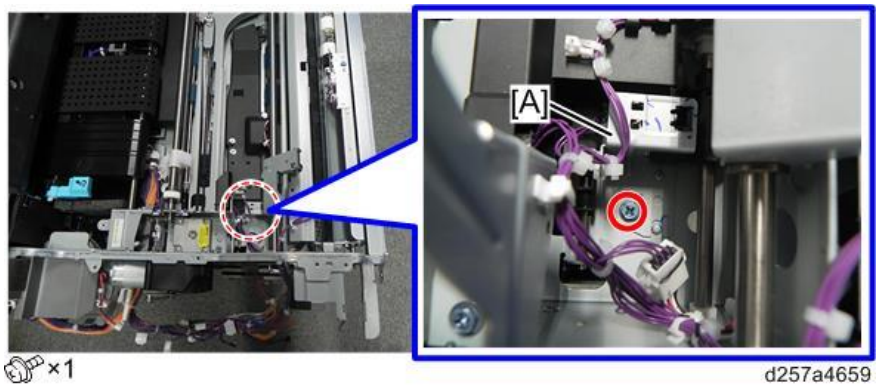
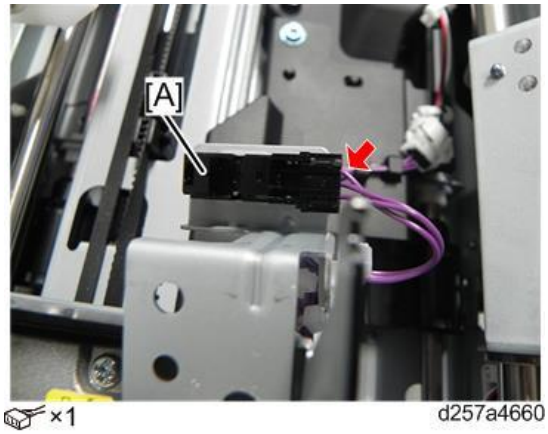
5. Remove the bracket [A].



6. Remove the duplex transport HP sensor 2 (S84) [A].



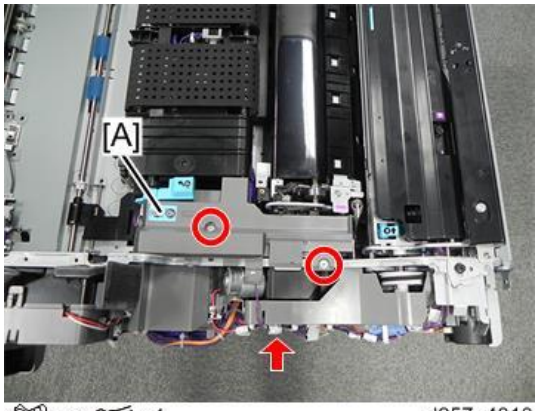
Note

- Duplex transport HP sensor 2 (S84) and sensor shift HP switch (SW8) are in close proximity. When you connect a harness to the duplex transport HP sensor 2 (S84) or sensor shift HP switch (SW8) after the replacement, be careful not to connect the harness to the incorrect sensor. If you connect the harness to the incorrect sensor, SC515-02 occurs when duplex copying. The SC does not occur when turning on the machine or when making one-sided copies.

Edge Sensor Shift Motor (M38)

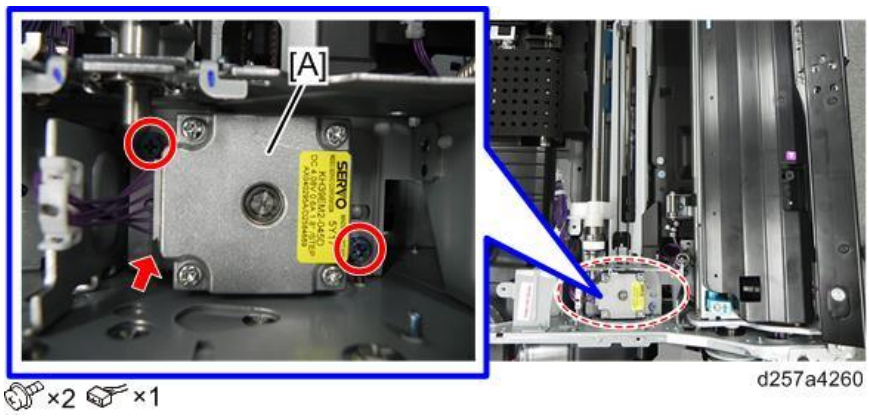
1. Remove the drawer unit cover. (Drawer Unit Cover)

2. Remove the cover [A].

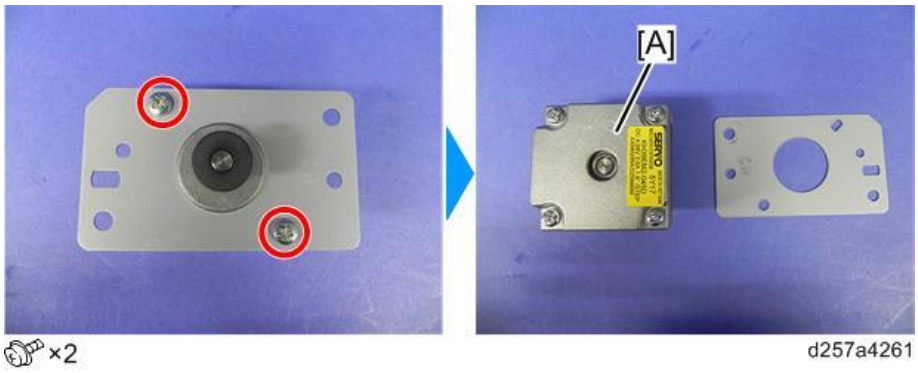


3. Remove the paper transfer belt unit. (Paper Transfer Belt Unit)

4. Remove the edge sensor shift motor (M38) [A] along with the bracket.



5. Remove the edge sensor shift motor (M38) [A].

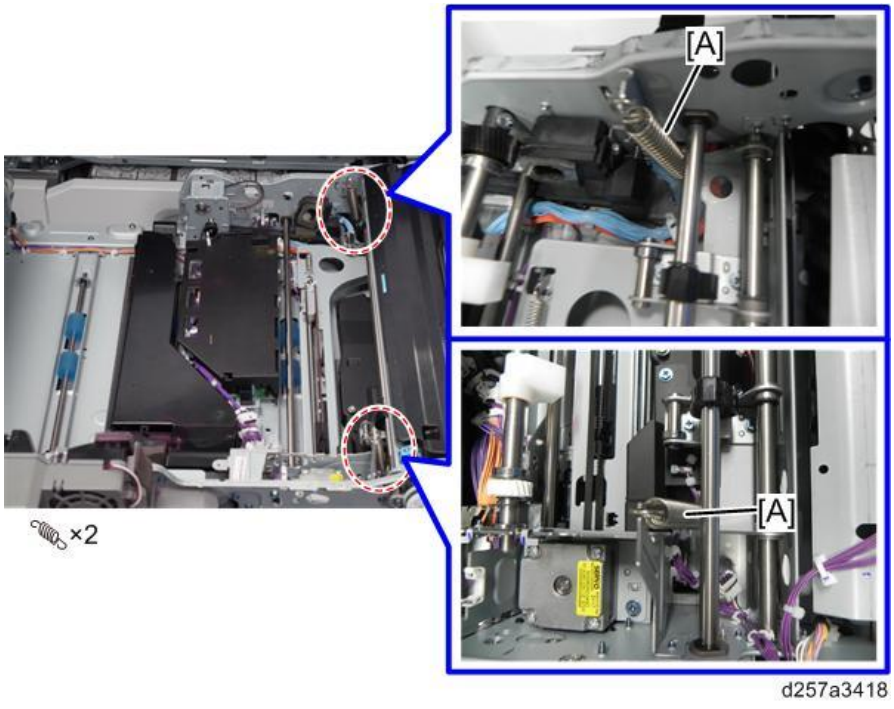


Note

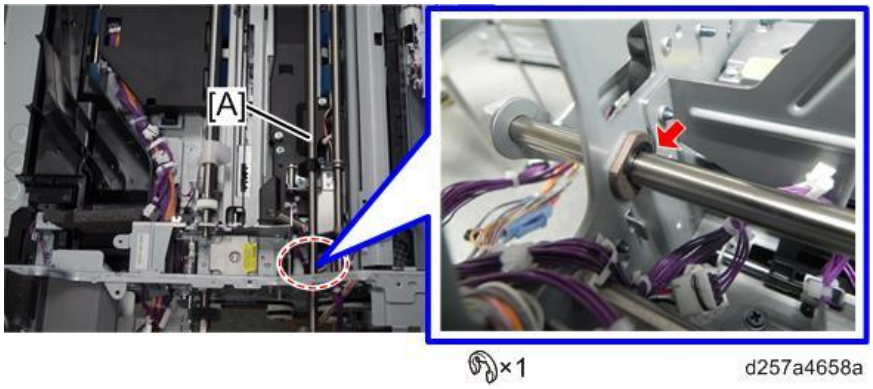
- When installing the motor, attach the timing belt [A] at the edge detection unit.

Edge Detection Unit

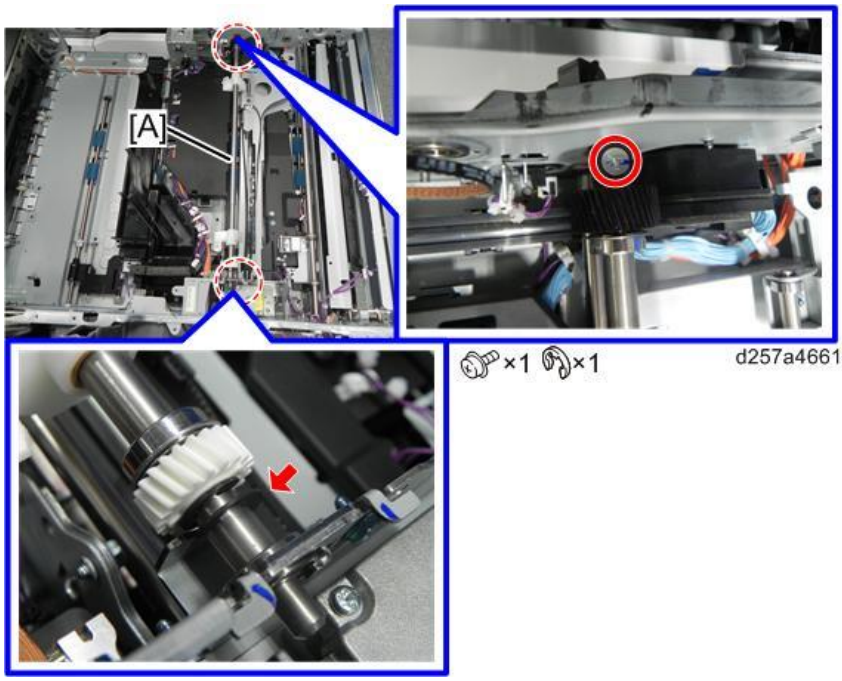
1. Remove the paper transport belt unit. (Paper Transport Belt Unit)
2. Remove the paper transfer belt unit. (Paper Transfer Belt Unit)
3. Remove the registration unit. (Registration Unit)
4. Remove the drawer unit lock motor (M44). (Drawer Unit Lock Motor (M44))
5. Remove the springs [A].



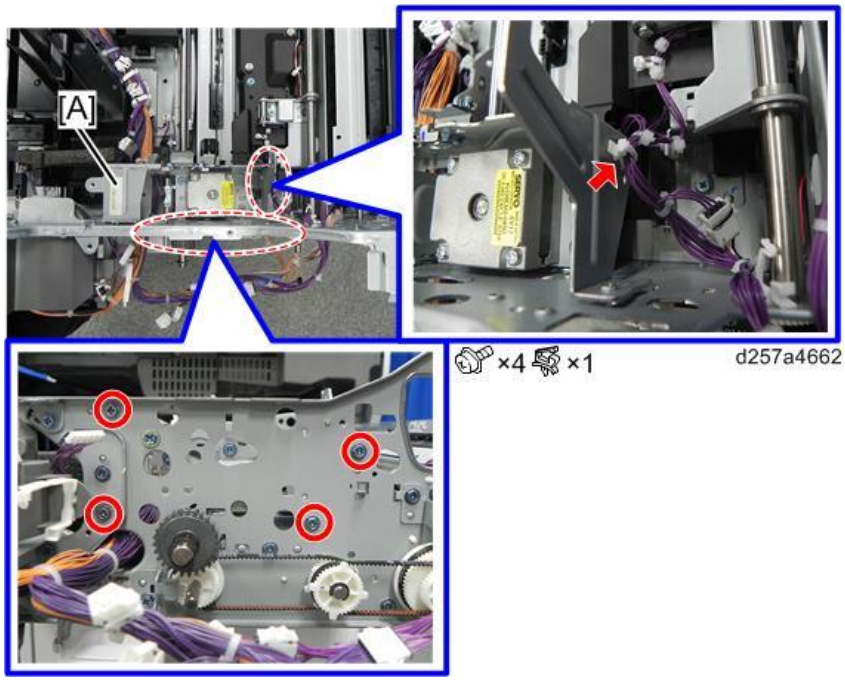
6. Remove the shaft [A].



7. Remove the paper transfer belt motor shaft [A].



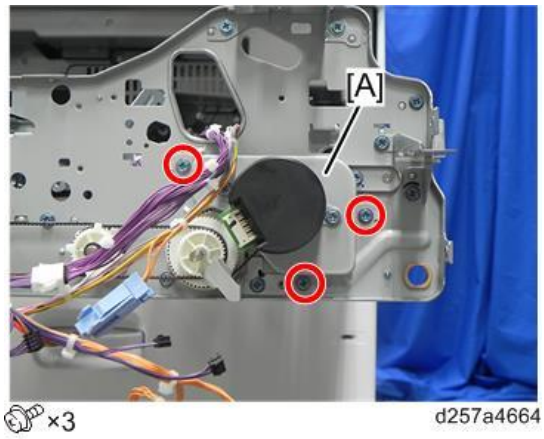
8. Remove the paper transfer belt bracket [A].



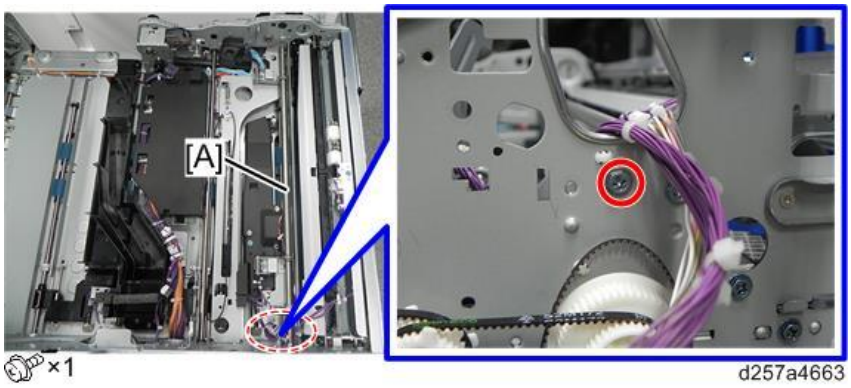
Important

- After replacing the paper transfer belt bracket, be sure to adjust the paper transfer belt unit. (Adjustment of the Paper Transfer Belt Unit)

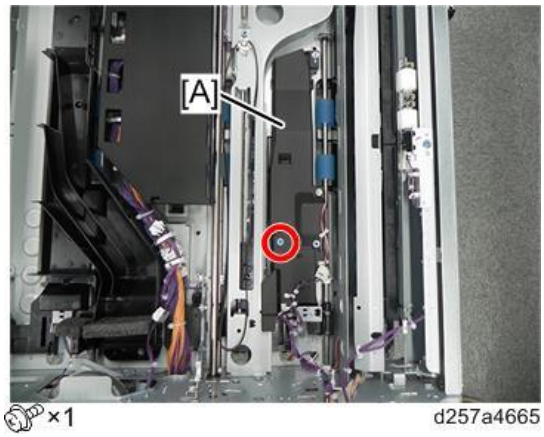
9. Remove the duplex exit motor (M47) along with the bracket [A].



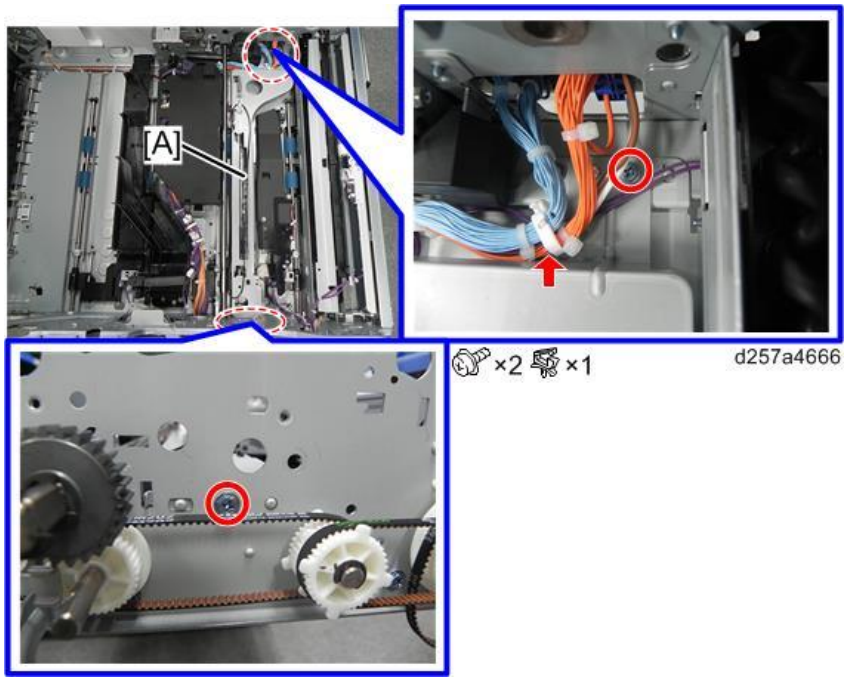
10. Remove the shaft [A].



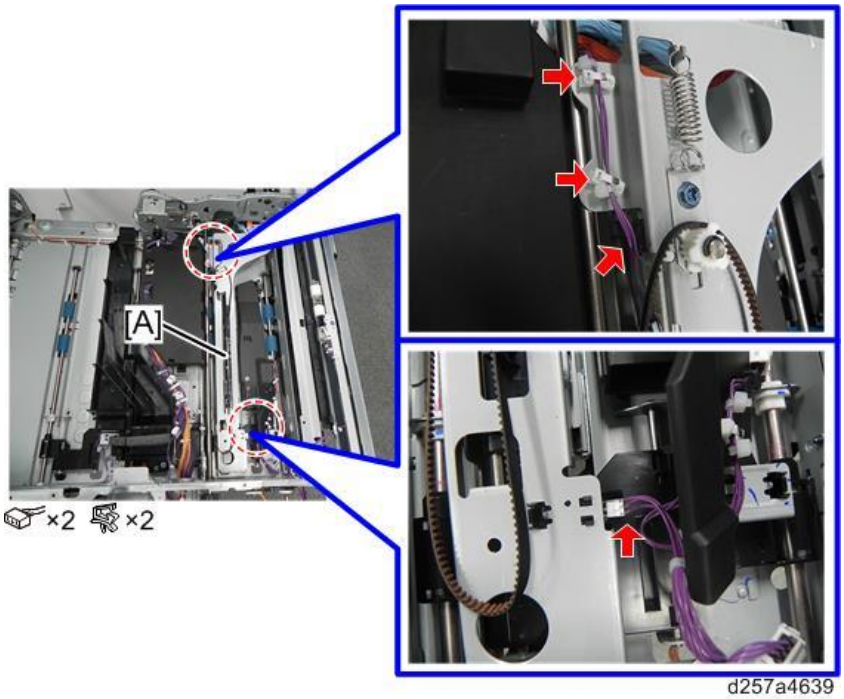
11. Remove the paper transfer belt cooling duct cover [A].



12. Release the edge detection unit [A].



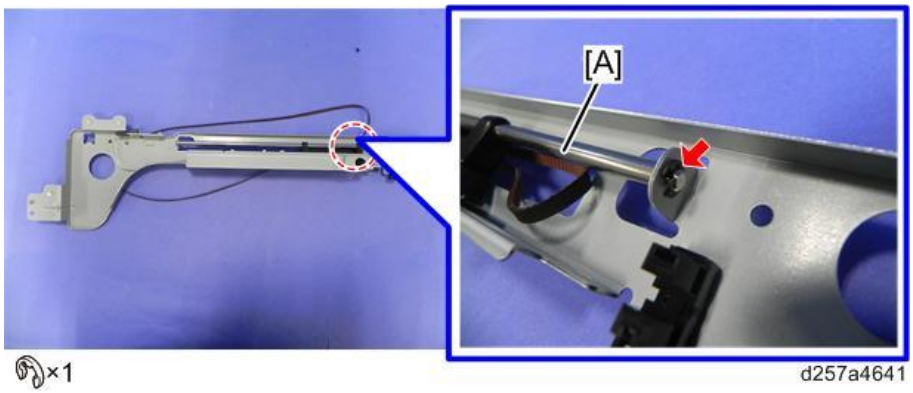
13. Remove the edge detection unit [A].



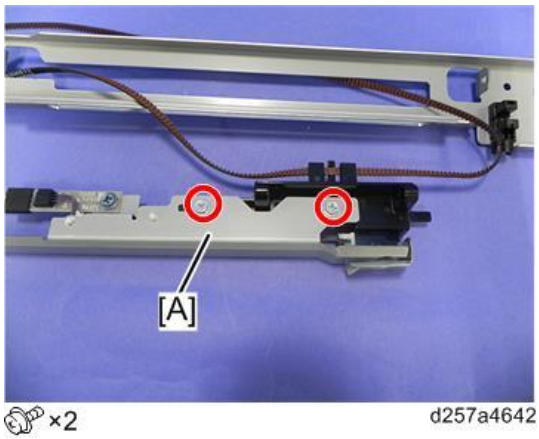
Edge Sensor (S58)

1. Remove the edge detection unit. (Edge Detection Unit)

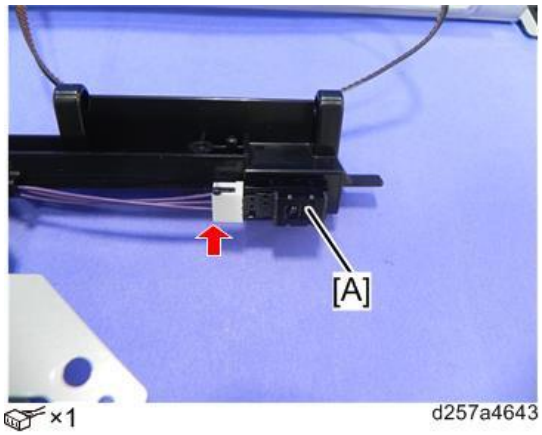
2. Remove the shaft [A].



3. Remove the bracket [A].



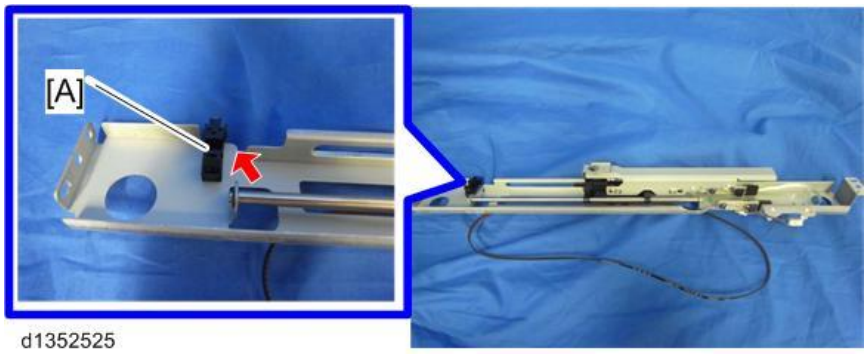
4. Remove the edge sensor (S58) [A].



Sensor Shift HP Switch (SW8)

1. Remove the edge detection unit. (Edge Detection Unit)

2. Remove the sensor shift HP switch (SW8) [A].



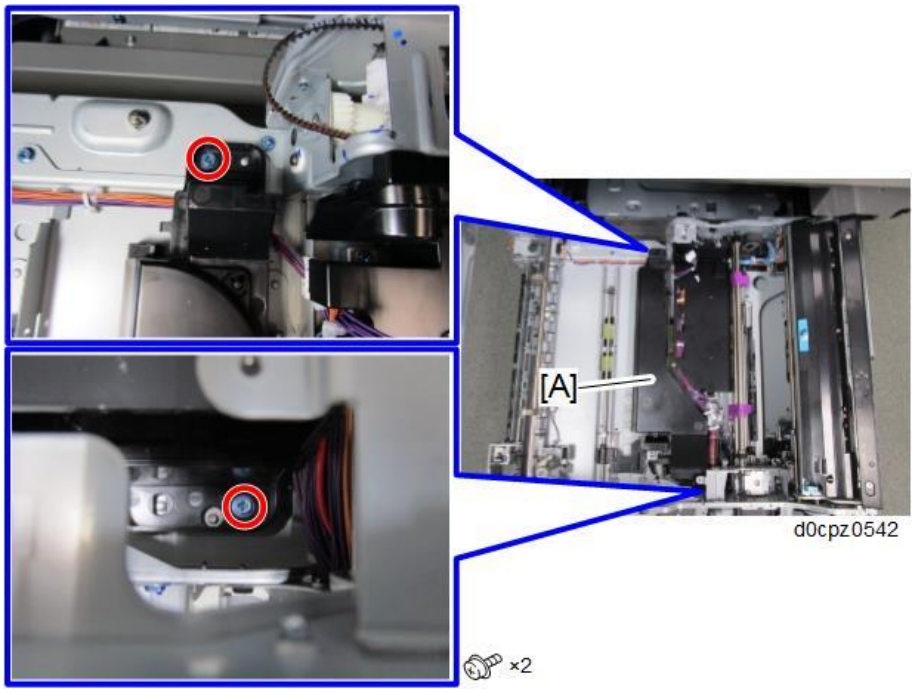
Note

- Duplex transport HP sensor 2 (S84) and sensor shift HP switch (SW8) are in close proximity. When you connect a harness to the duplex transport HP sensor 2 (S84) or sensor shift HP switch (SW8) after the replacement, be careful not to connect the harness to the incorrect sensor. If you connect the harness to the incorrect sensor, SC515-02 occurs when duplex copying. The SC does not occur when turning on the machine or when making one-sided copies.

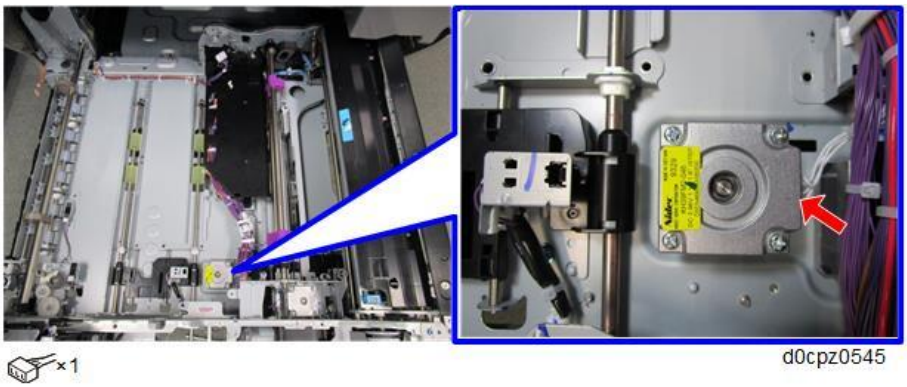
Duplex Transport Shift Motor 1 (M40)

1. Remove the paper transport belt unit. (Paper Transport Belt Unit)

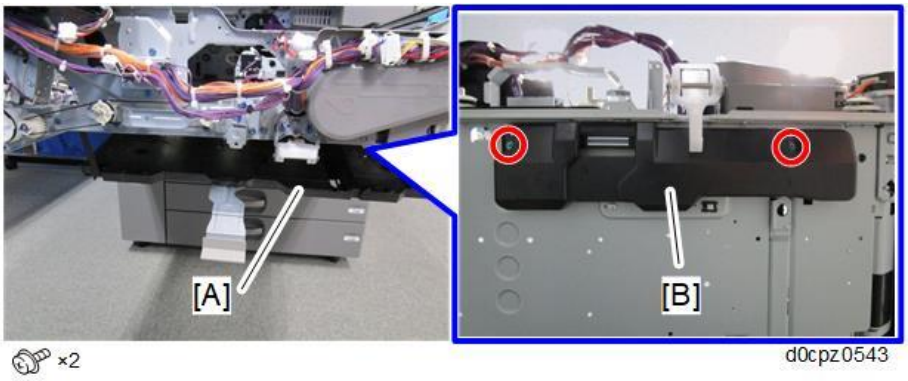
2. Remove the pressure roller duct [A].



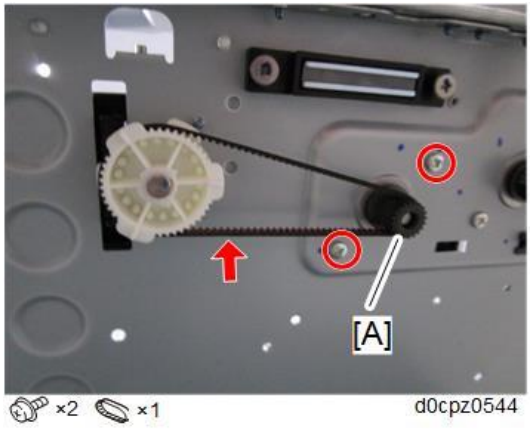
3. Disconnect the connector.



4. Open the horizontal feed guide plate [A] and remove the cover [B].



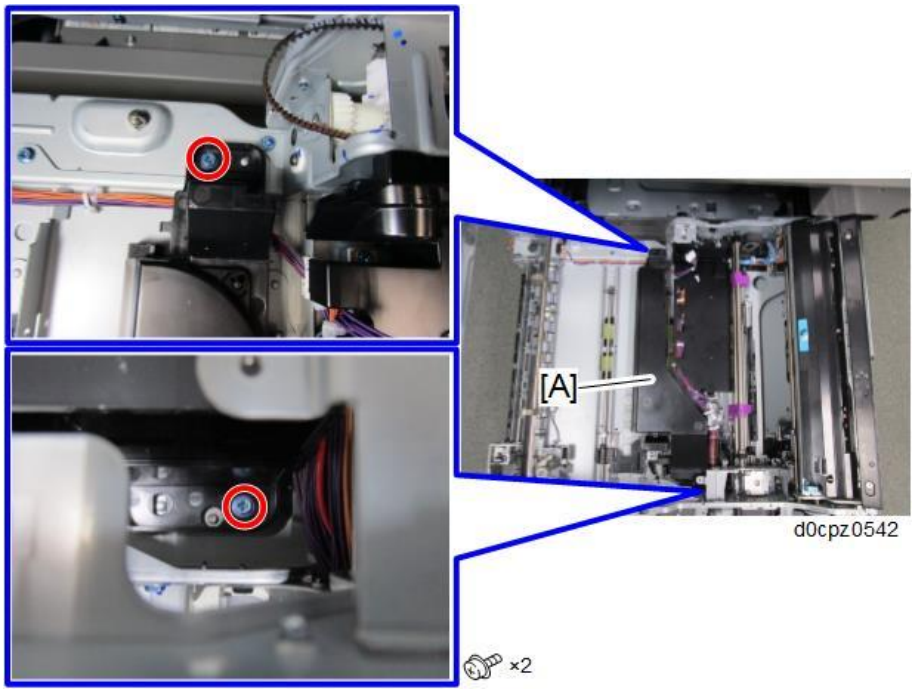
5. Remove the duplex transport shift motor 1 (M40) [A].



Duplex Transport Shift Motor 2 (M39)

1. Remove the paper transport belt unit. (Paper Transport Belt Unit)

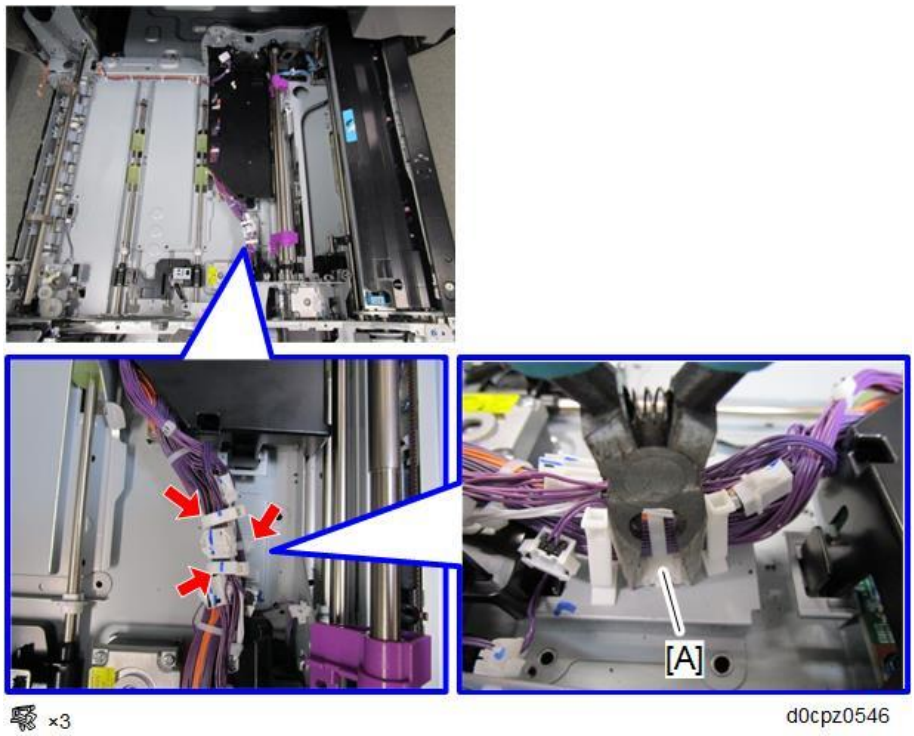
2. Remove the pressure roller duct [A].



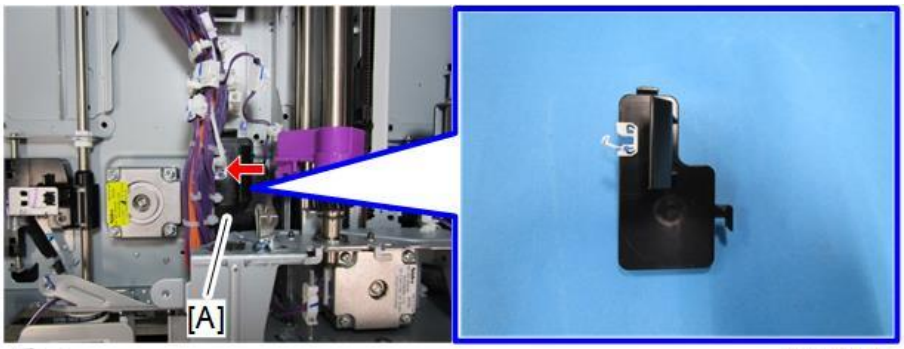
3. Remove the harness with clamp.

Note

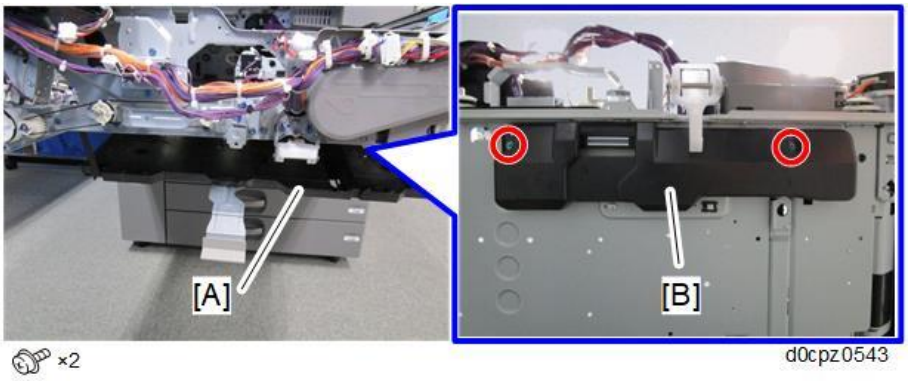
Use pliers to release the tab of the clamp.



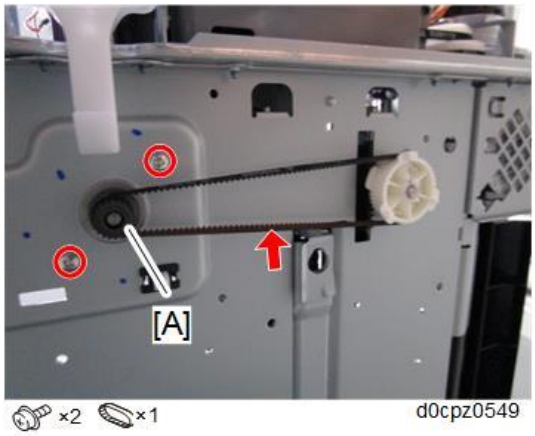
4. Release the tab and remove the motor cover [A].



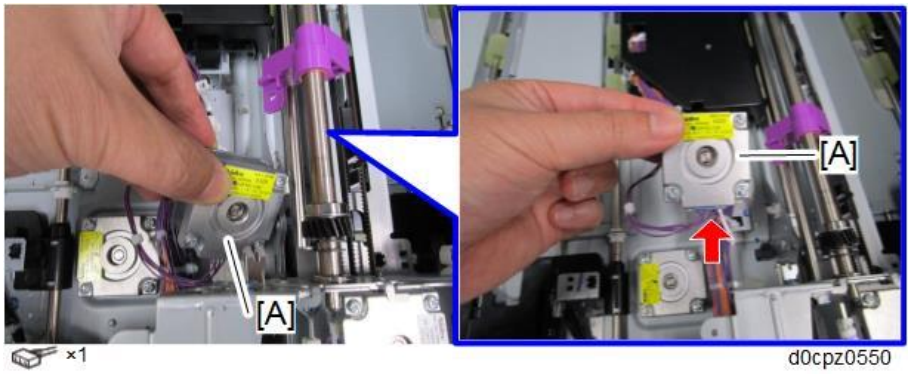
5. Open the horizontal feed guide plate [A] and remove the cover [B].



6. Remove the duplex transport shift motor 2 (M39) [A] from the drawer unit.



7. Remove the duplex transport shift motor 2 (M39) [A].



Paper Purge Unit

Paper Purge Unit

1. Open the drawer unit [A].

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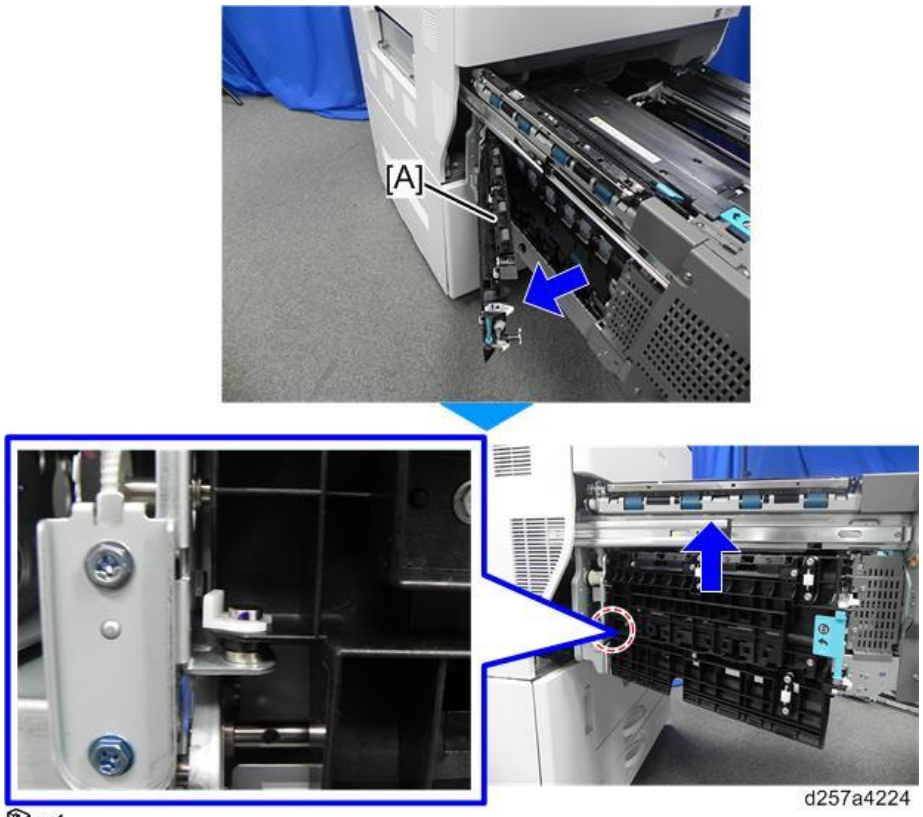
2. Open the guide plate [A] and remove it upward.



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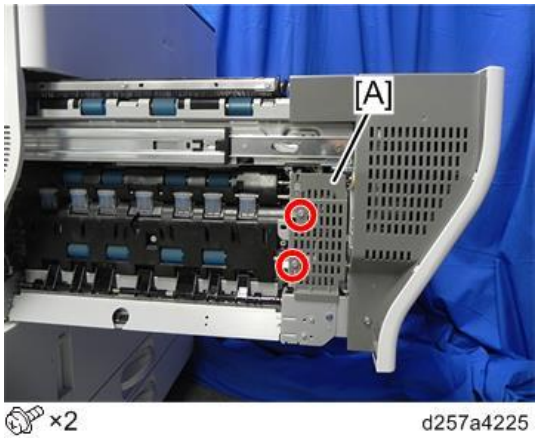
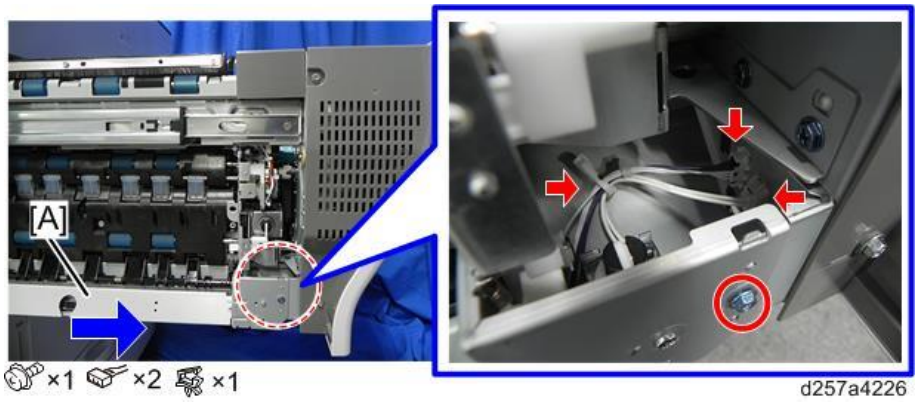
×1

3. Remove the cover [A].

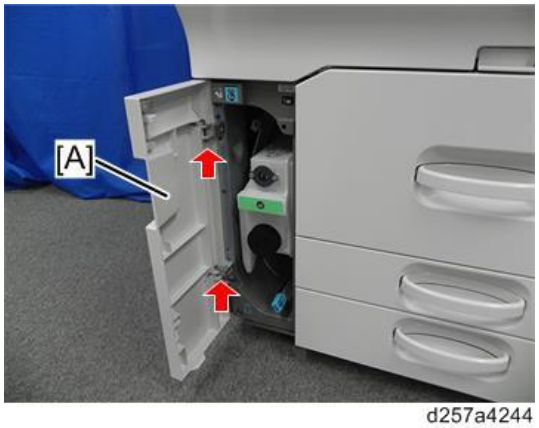


4. Remove the paper purge unit [A].

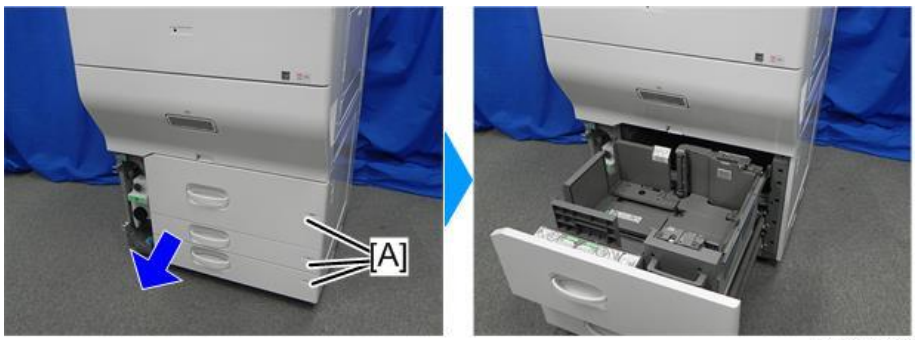


LSB (PCB39)

1. Remove the left lower cover of the machine exterior. (Left Lower Cover)
2. Remove the purge door [A].



3. Pull out the paper trays [A].



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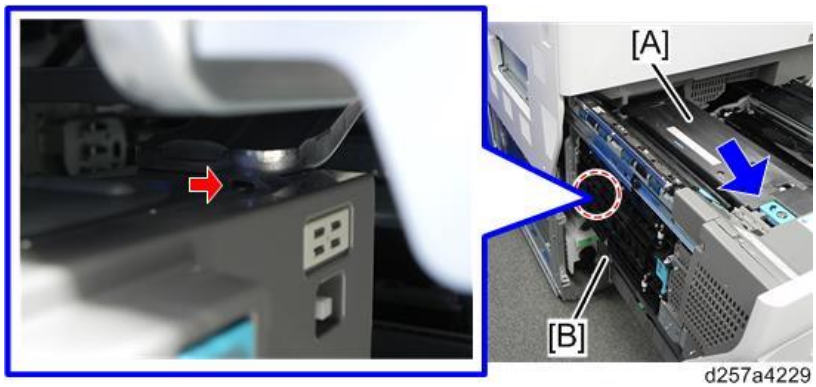
4. Remove the fixing screws of the upper inner cover [A].

d257a4228

×3

5. Pull out the drawer unit [A] and remove the upper inner cover [B].



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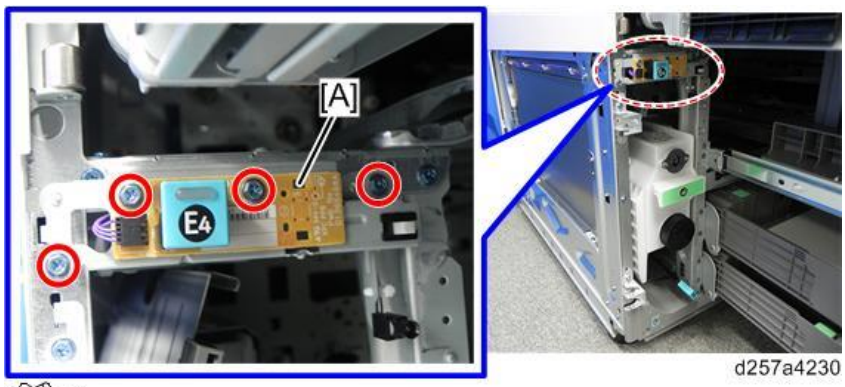
6. Remove the LSB (PCB39) [A] along with the bracket.



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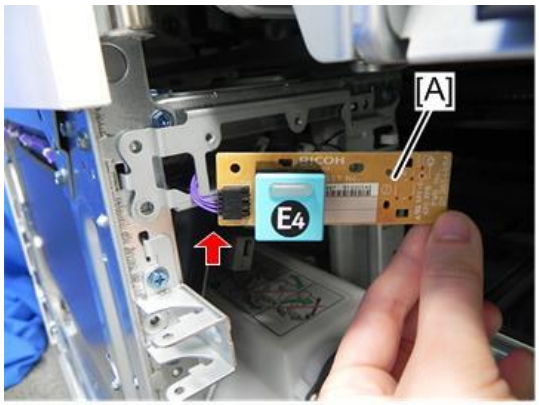
×4

7. Remove the LSB (PCB39) [A].



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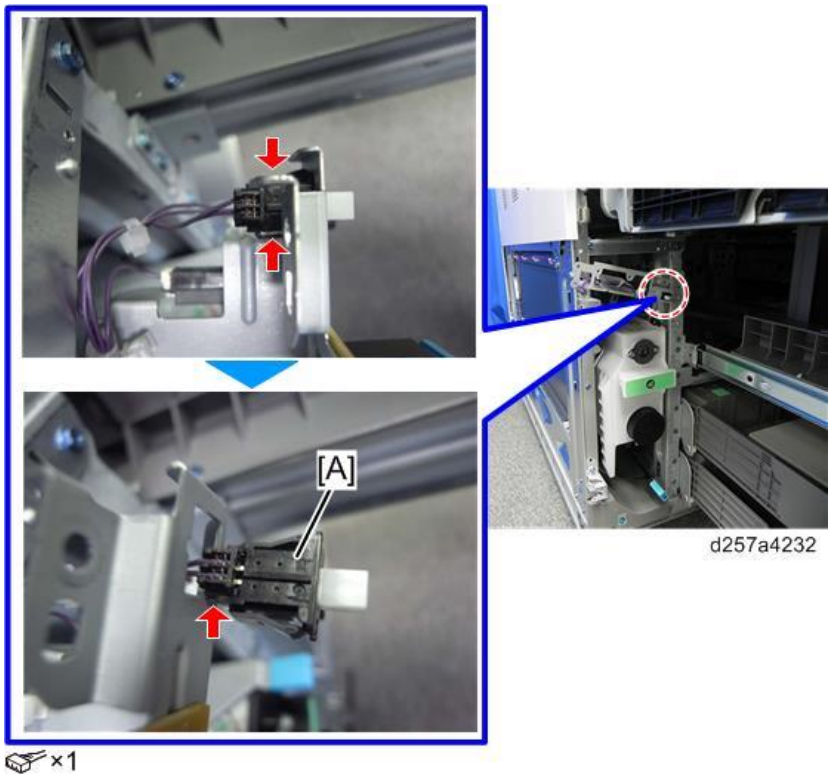
Front Lower Cover Switch (SW12)

1. Remove the LSB along with the bracket. (LSB (PCB39))
2. Hold the sides of the front lower cover switch (SW12) [A], and remove it by pulling.



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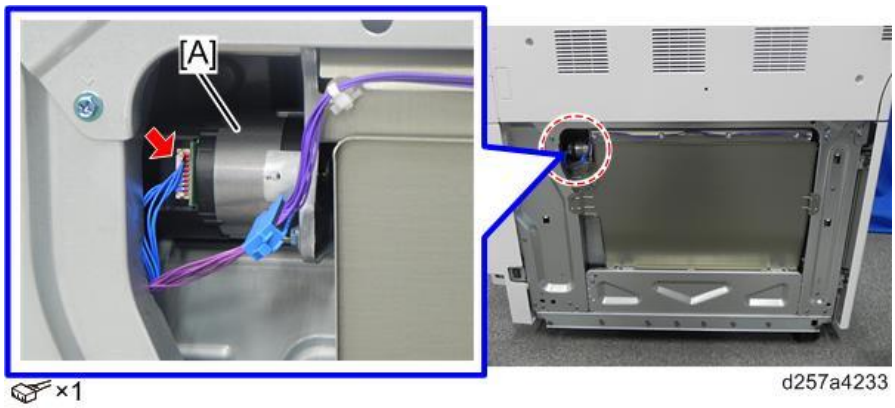
Duplex Inverter Motor (M51)

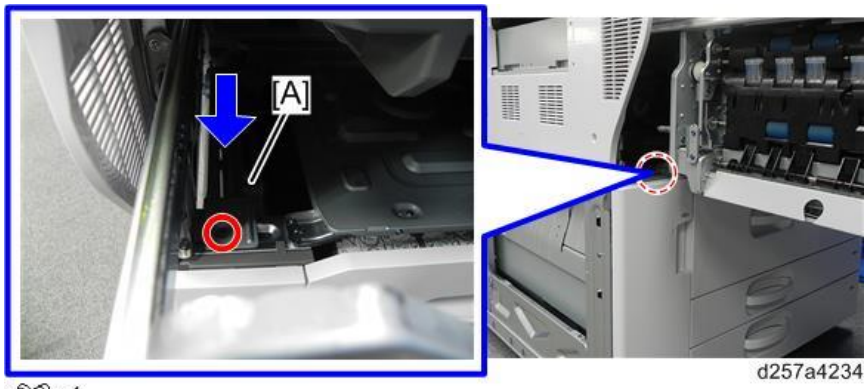
1. Remove the left lower cover of the machine exterior. (Left Lower Cover)

2. Disconnect the connector of the duplex inverter motor (M51) [A].



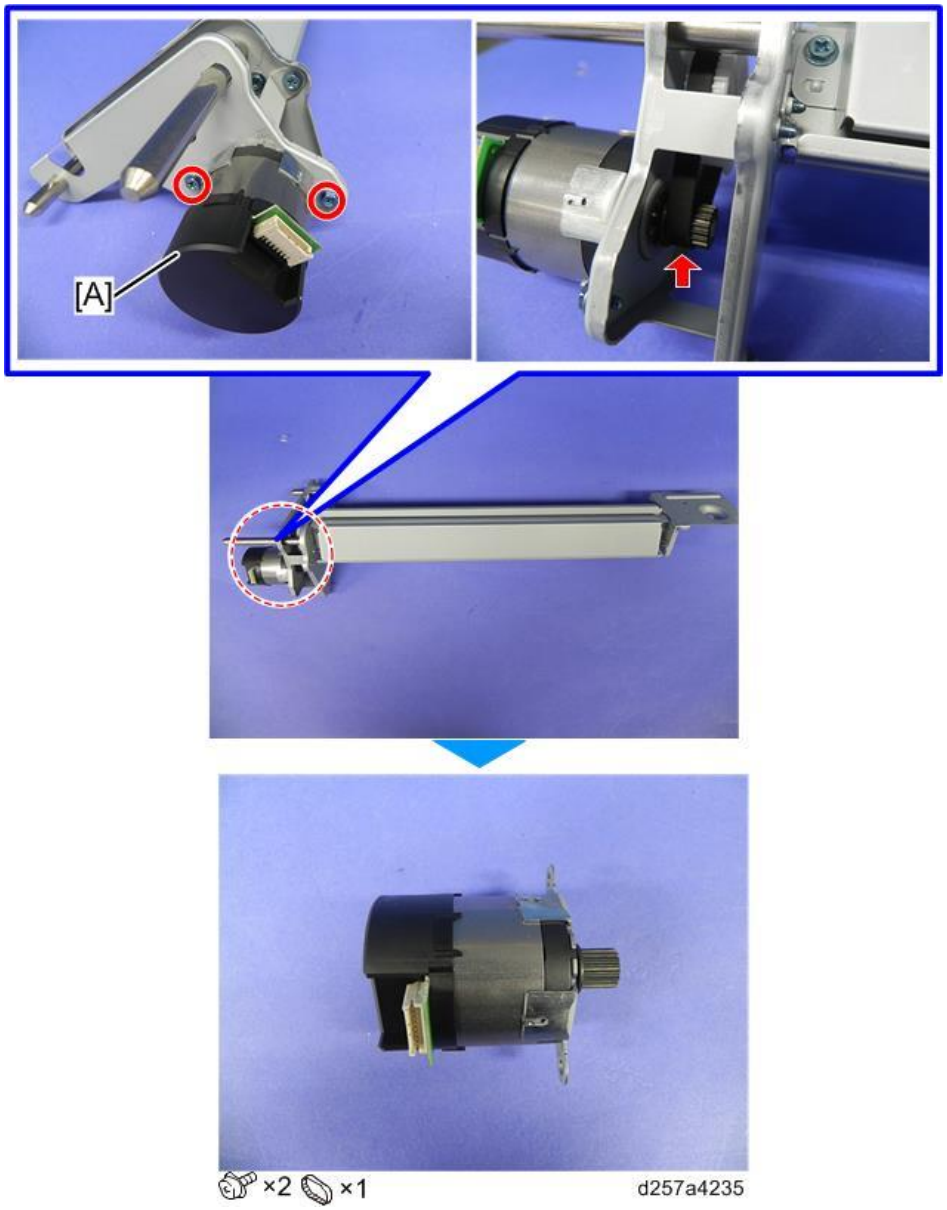
×1

3. Pull out the drawer unit and remove the duplex inverter motor unit [A].



×1

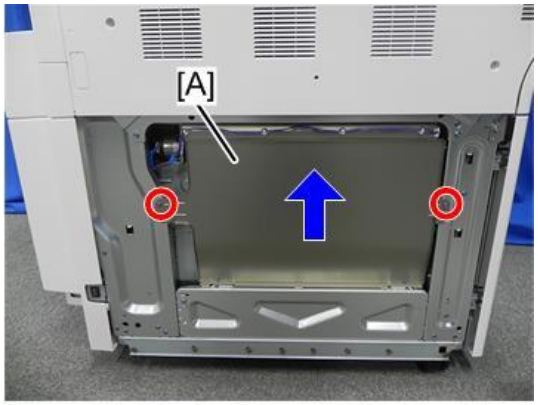
4. Remove the duplex inverter motor (M51) [A].



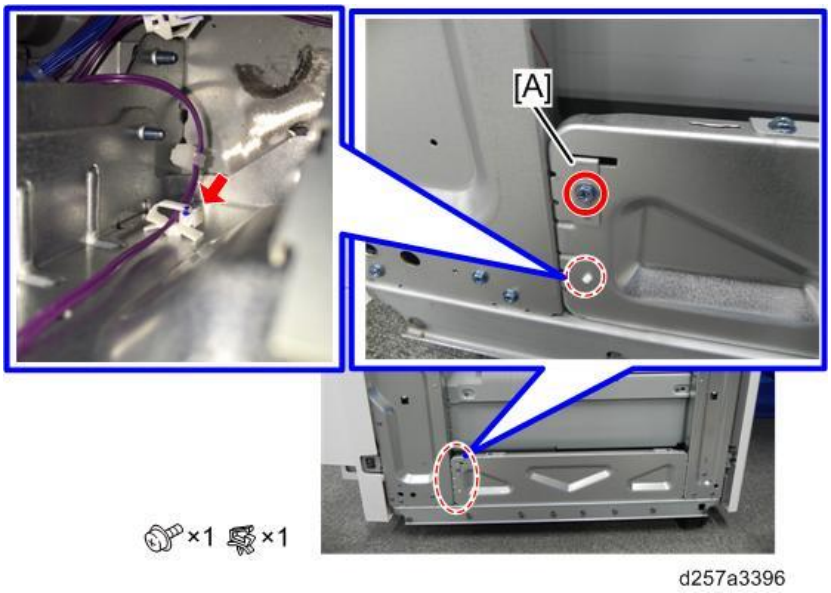
Purge Tray LED (LED15)

1. Remove the left lower cover of the machine exterior. (Left Lower Cover)

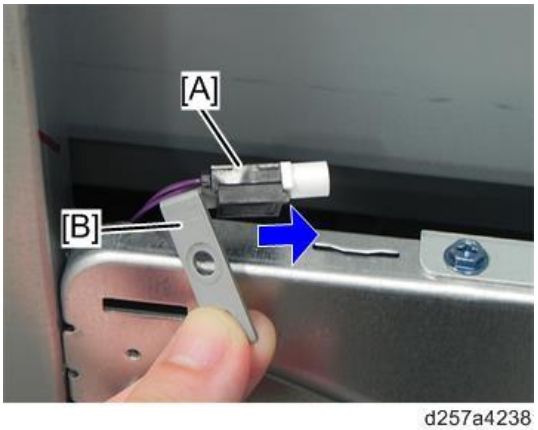
2. Remove the guide plate [A].



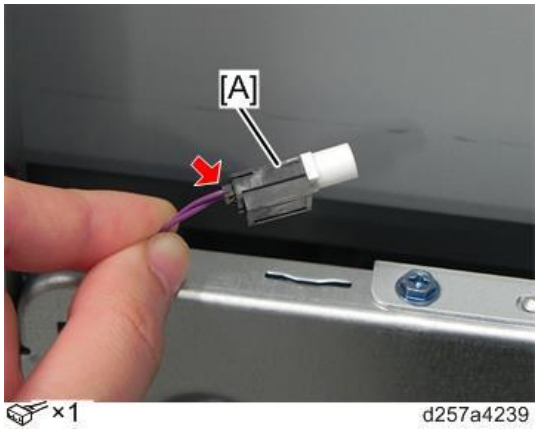
3. Remove the bracket [A].



4. Remove the purge tray LED [A] from the bracket [B].



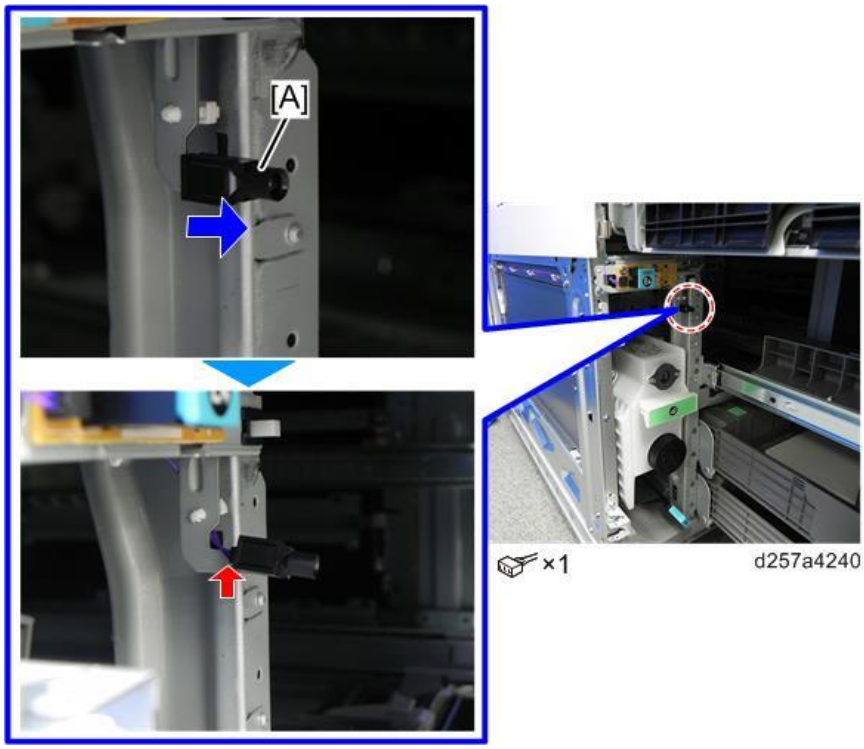
5. Remove the purge tray LED (LED15) [A].



Left Lower Door LED (LED17)

1. Remove the upper inner cover. (LSB (PCB39))

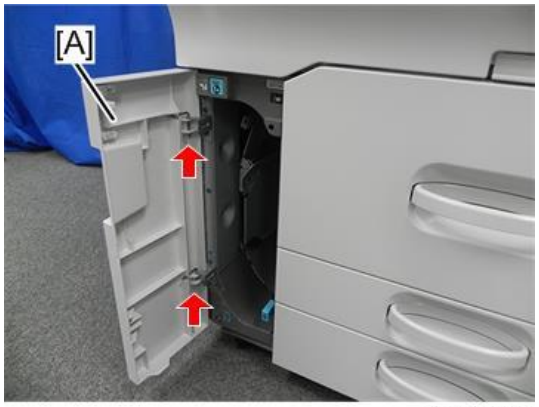
2. Remove the left lower door LED (LED17) [A] by pulling it.



Lower Guide Plate LED (LED16)

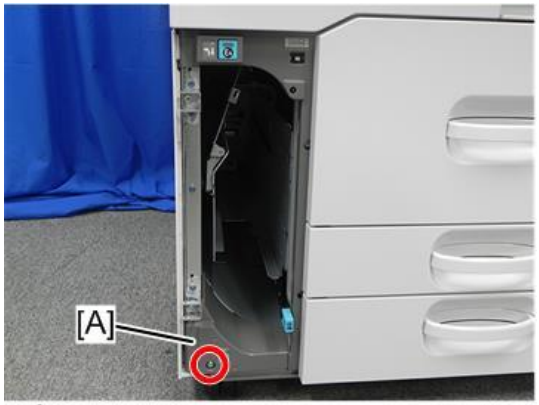
1. Remove the waste toner bottle. (Waste Toner Bottle)

2. Remove the purge door [A].



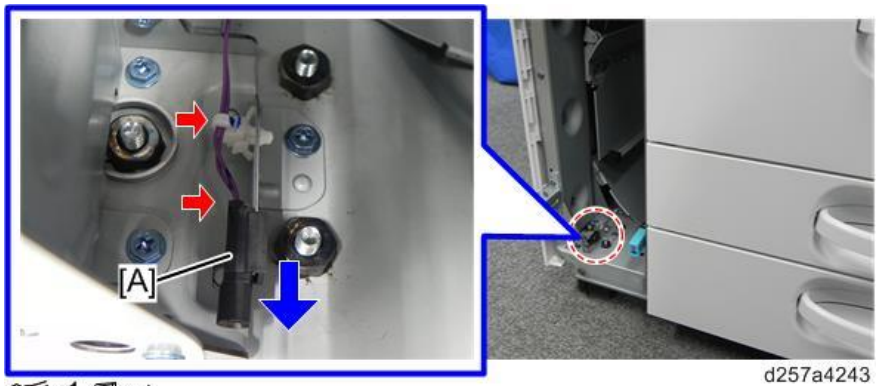
d257a4241

3. Remove the lower inner cover [A].



×1 d257a4242

4. Remove the lower guide plate LED (LED16) [A] by pulling it.



d257a4243

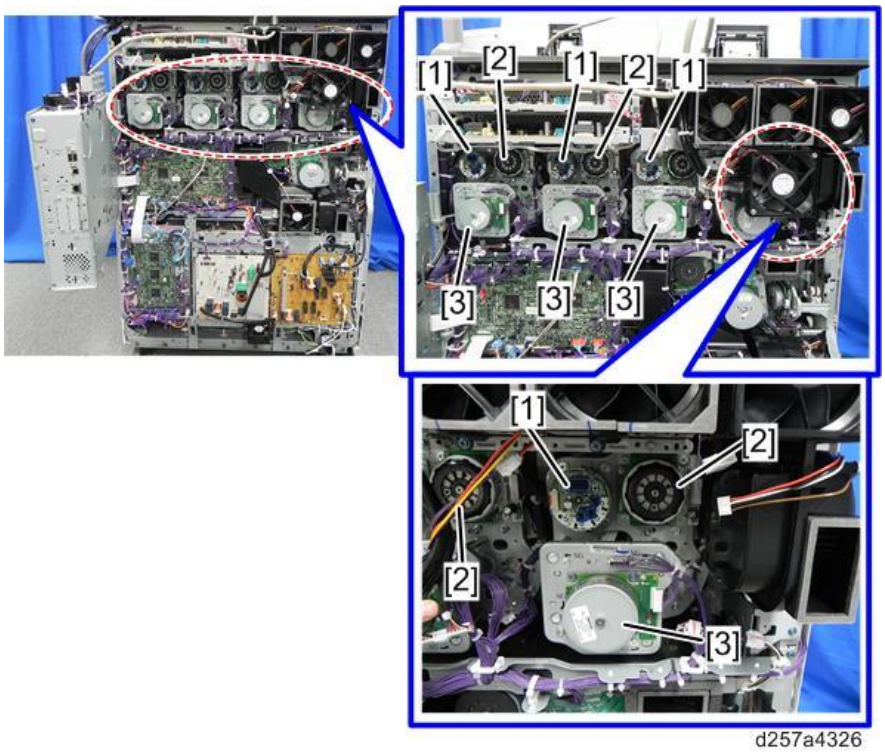
×1 ×1

Drive Unit

Layout (Motors)

Rear of the Machine (Top)

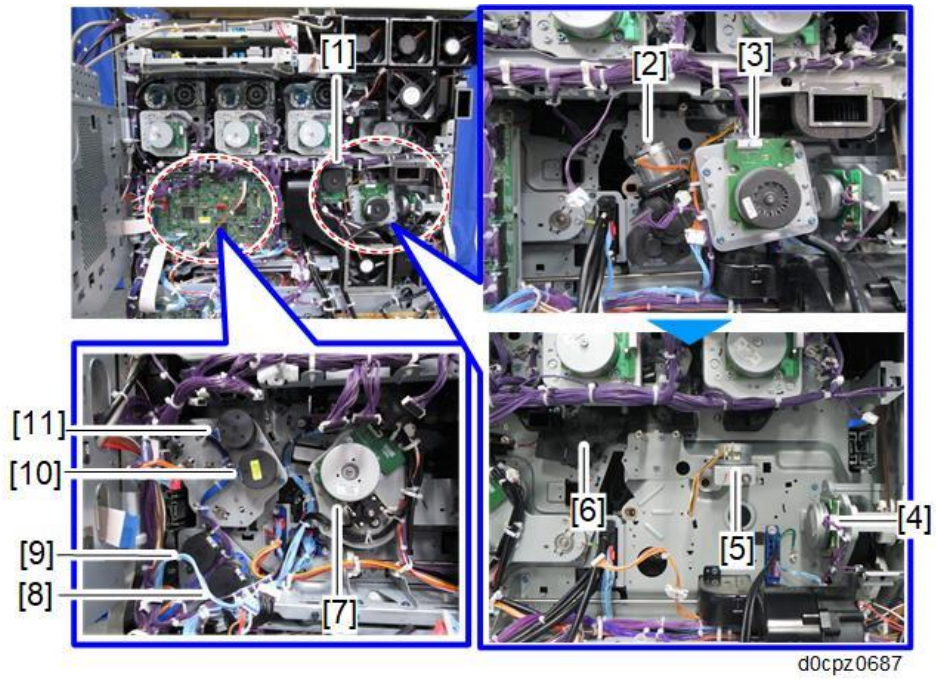
To replace the motors and sensors on the back of the machine, first remove the outer cover. (Rear Cover)



No.	Part Name	Replacement procedure	Remarks
1	Drum Cleaning Motor (M30) (KCMY)	Drum Cleaning Motor (M30) (KCMY)	K, C, M, Y from the left Y is located behind the potential sensor board.
2	Development Motor (M18) (KCMY)	Development Motor (M18) (KCMY)	K, C, M, Y from the left M and Y are located behind the potential sensor board.
3	Drum Motor (M34) (KCMY)	Drum Motor (M34) (KCMY) / Drum Encoder Sensor (S30) (KCMY)	K, C, M, Y from the left Y is located behind the potential sensor board.

Rear of the Machine (Middle)

To replace the motors and sensors on the rear of the machine, first remove the outer cover. (Rear Cover)

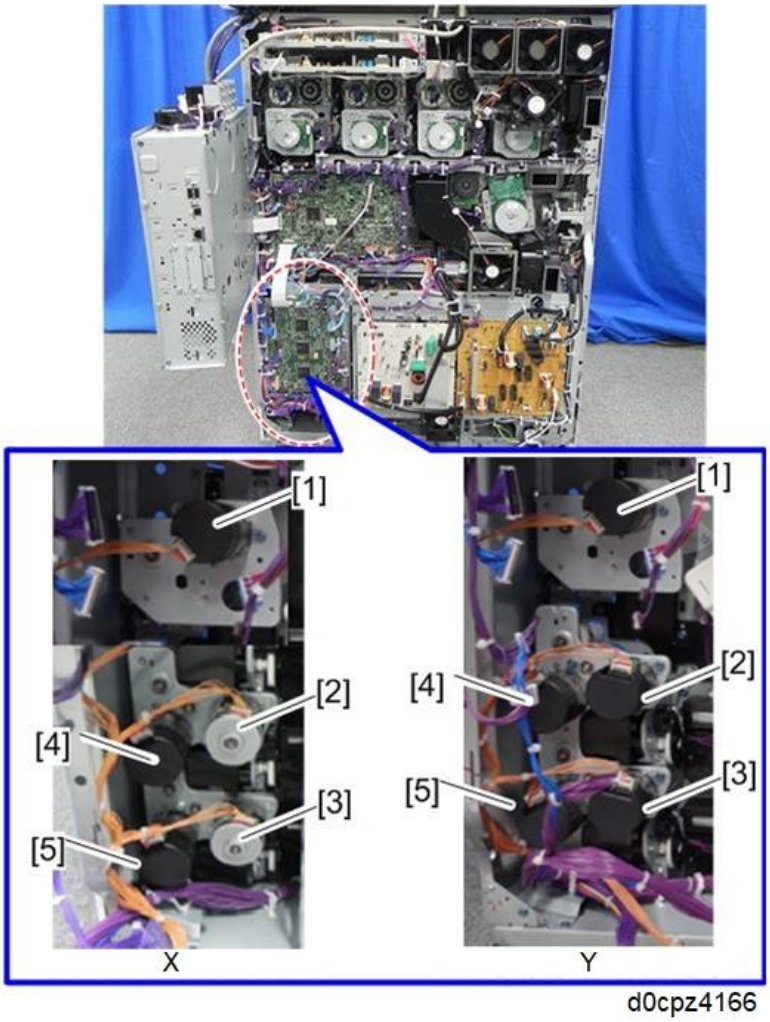


No.	Part Name	Replacement procedure	Remarks
1	Fusing Belt Smoothing Roller Drive Motor (M11)	Fusing Belt Smoothing Roller Drive Motor (M11) and the Motor Bracket (Pro C5300S/C5310S)	Pro C5300S/C5310S only
2	Fusing Release Motor (M13)	Fusing Release Motor (M13)	Located behind the duct of the paper transfer belt fusing exhaust fan
3	Fusing Drive Motor (M22)	Fusing Drive Motor (M22)	
4	Waste Toner Collection Motor (M15)	Waste Toner Collection Motor (M15)	
5	Fusing Belt Smoothing Roller Contact Motor (M12)	Fusing Belt Smoothing Roller Contact Motor (M12) (Pro C5300S/C5310S)	Pro C5300S/C5310S only Located behind the fusing drive motor
6	ITB Lift Motor (M17)	ITB Lift Motor (M17)	Located behind the ozone exhaust fan
7	Paper Transfer Belt Motor (M16)	Paper Transfer Belt Motor (M16), Paper Transfer Belt Encoder Sensors (S16)	Located behind the IOB
8	1st Paper Feed Motor (M55)	1st Paper Feed Motor (M55), 1st Transport Motor (M56)	Located behind the IOB
9	1st Transport Motor (M56)	1st Paper Feed Motor (M55), 1st Transport Motor (M56)	Located behind the IOB

No.	Part Name	Replacement procedure	Remarks
10	Relay Motor (M53)	Bypass Feed Motor (M54), Relay Motor (M53)	Located behind the IOB
11	Bypass Feed Motor (M54)	Bypass Feed Motor (M54), Relay Motor (M53)	Located behind the IOB

Rear of the Machine (Bottom)

To replace the motors and sensors on the back of the machine, first remove the outer cover. (Rear Cover)



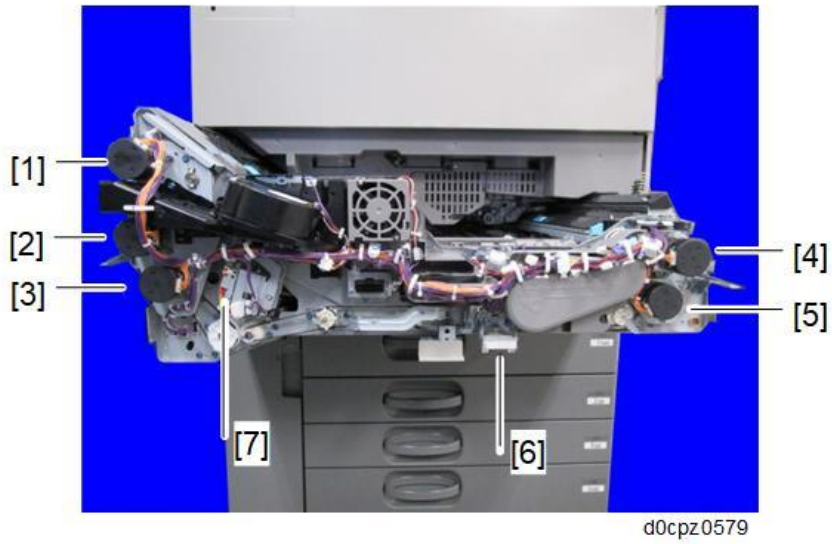
***X: Pro C5310S/C5300S, Y: IM C8000/C6500**

No.	Part Name	Replacement procedure	Remarks
1	Vertical Transport Motor	Vertical Transport Motor (M63)	Located behind the PFB
2	2nd Paper Feed Motor	2nd Paper Feed Motor (M64), 2nd Transport Motor (M65), 3rd Paper Feed Motor (M66), 3rd Transport Motor (M67)	Located behind the PFB
3	3rd Paper Feed Motor	2nd Paper Feed Motor (M64), 2nd Transport Motor (M65), 3rd Paper Feed Motor (M66), 3rd Transport Motor (M67)	Located behind the PFB

No.	Part Name	Replacement procedure	Remarks
4	2nd Transport Motor	2nd Paper Feed Motor (M64), 2nd Transport Motor (M65), 3rd Paper Feed Motor (M66), 3rd Transport Motor (M67)	Located behind the PFB
5	3rd Transport Motor	2nd Paper Feed Motor (M64), 2nd Transport Motor (M65), 3rd Paper Feed Motor (M66), 3rd Transport Motor (M67)	Located behind the PFB

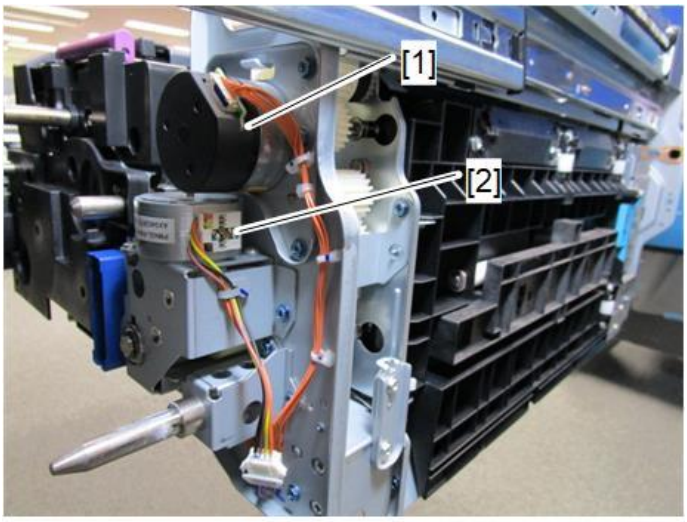
Drawer Unit (Front)

To replace the motors on the front of the drawer unit, first remove the drawer unit cover. (Drawer Unit Cover)



No.	Part Name	Replacement procedure	Remarks
1	Exit Motor (M45)	Exit Motor (M45)	
2	Duplex Inverter Entrance Motor (M46)	Duplex Inverter Entrance Motor (M46)	
3	Duplex Transport Motor (M48)	Duplex Transport Motor (M48)	
4	Registration Motor (M43)	Registration Motor (M43)	
5	Duplex Exit Motor (M47)	Duplex Exit Motor (M47)	
6	Drawer Unit Lock Motor (M44)	Drawer Unit Lock Motor (M44)	
7	Cleaning Web Motor (M49)	Cleaning Web Motor (M49) (Pro C5300S/C5310S only)	Pro C5300S/C5310S only

Drawer Unit (Rear)



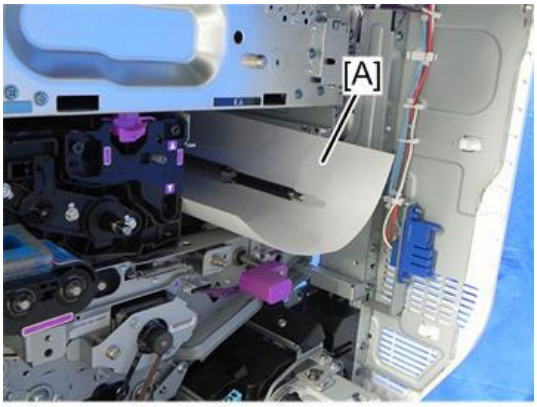
d0cpz0580

No.	Part Name	Replacement procedure	Remarks
1	Exit Inverter Motor (M42)	Exit Inverter Motor (M42)	
2	Cleaning Web Contact Motor (M50)	Cleaning Web Contact Motor (M50) (Pro C5300S/C5310S only)	Pro C5300S/C5310S only

Drum Motor (M34) (KCMY) / Drum Encoder Sensor (S30) (KCMY)

⚠CAUTION

- Insert a sheet of paper [A] as shown below when removing the drum motor (M34).

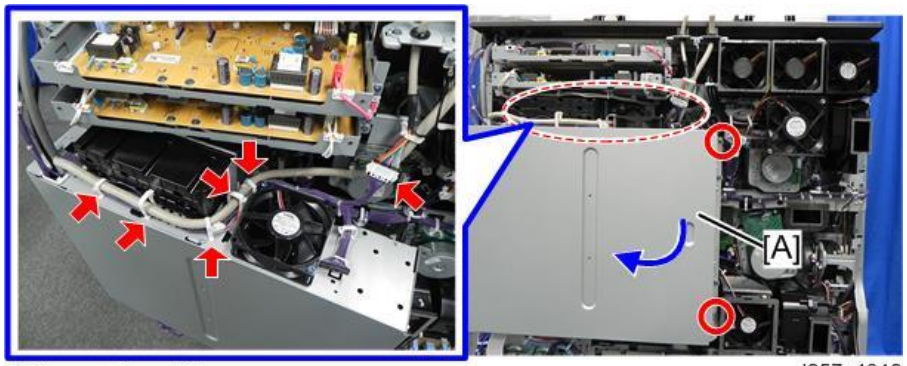


d257a4540

- This will prevent the grease coated on the tip of the drum shaft from contacting the ITB unit.

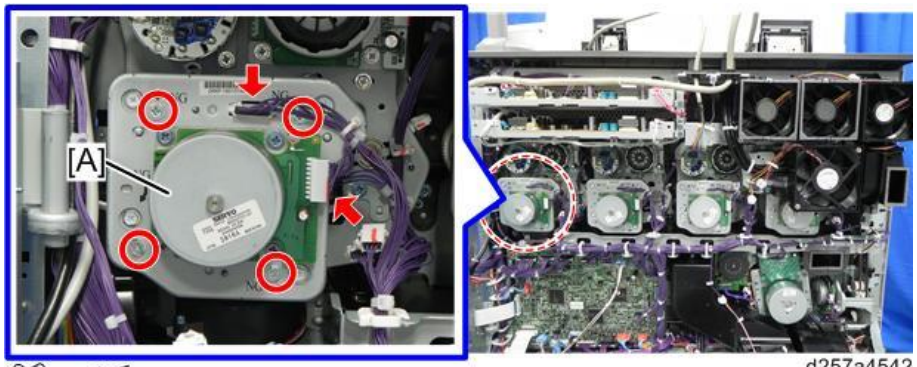
d257a4541

1. Remove the toner supply unit. (Toner Supply Unit)
2. Remove the faceplate. (Faceplate)
3. Remove the PCDU. (PCDU)
4. Open the controller box [A].



×2 ×1 ×5
d257a4318

5. Remove the drum motor (M34) as a unit [A].
e.g.: K



×4 ×2
d257a4542

Note

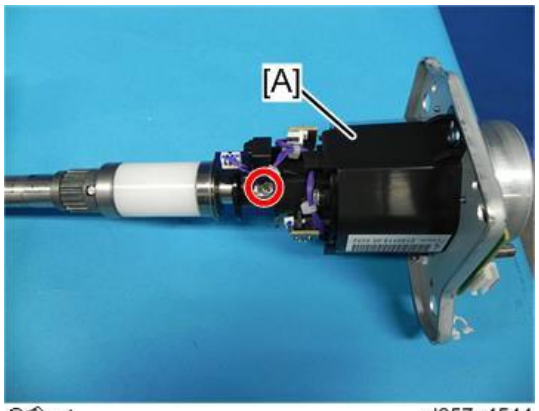
- The following four screws located on the outside of the bracket were positioned on the bracket with a special jig. Do not loosen or remove these screws. If their position is

shifted, the drum shaft will become eccentric, and this may cause abnormal images.

d257a4543

- The procedures for C and M are the same as for K.
- For Y, it is necessary to remove the drive exhaust fan and potential sensor board before you can do the step above. (Removing the Drive Exhaust Fan (FAN19) and the Potential Sensor Board (PCB31))

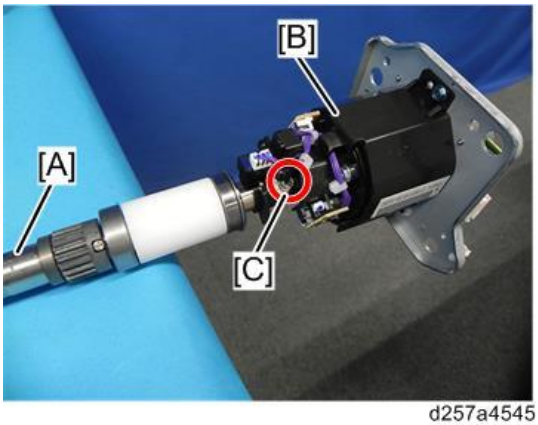
6. Remove the drum motor (M34) [A].



×1 d257a4544

Note

- When removing or installing the drum shaft [A] and motor [B], the parts where the drum shaft [A] connects to the motor [B] must be kept horizontal so that excessive load is not put on the drum shaft. In order to avoid deformation of the fixing screw [C], use a box-type driver.

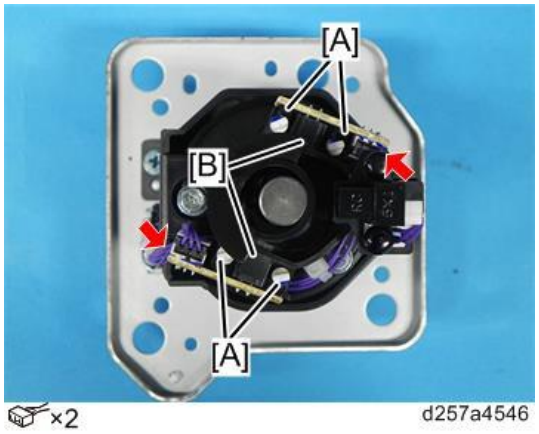


d257a4545

- For Pro C5300S/C5310S, there is a sensor and an actuator on the drum motor for

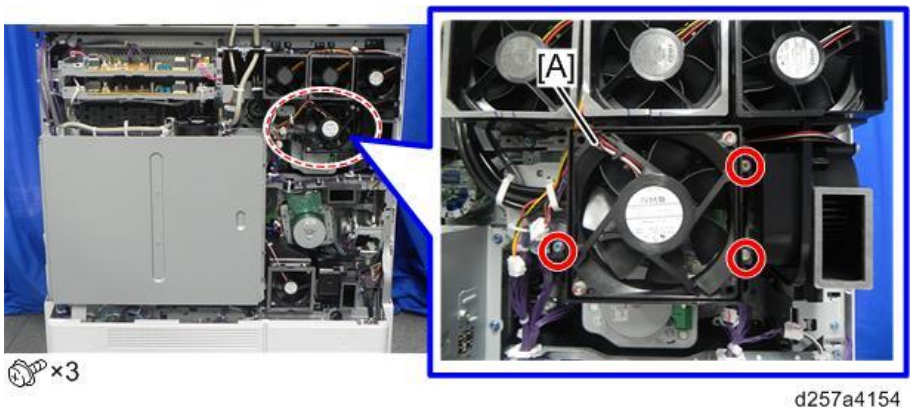
detecting the drum home position. If the actuator is not installed, DEMS goes out of control and uneven density appears at 190 mm intervals on the output. Therefore, check the DEMS execution results with SP3-041-001 (DEMS Exe OK?) after replacing the drum motor. The DEMS execution results are displayed with 8 digits and they indicate the result of each color from left to right (YYMMCCKK). If "11111111" is displayed, DEMS has executed successfully for all color drums and development rollers. If "4" is displayed, there is a possibility that the actuator is not installed.

7. Remove the rivets [A] (×4), and remove the drum encoder sensor (S30) [B] (×2).



Removing the Drive Exhaust Fan (FAN19) and the Potential Sensor Board (PCB31)

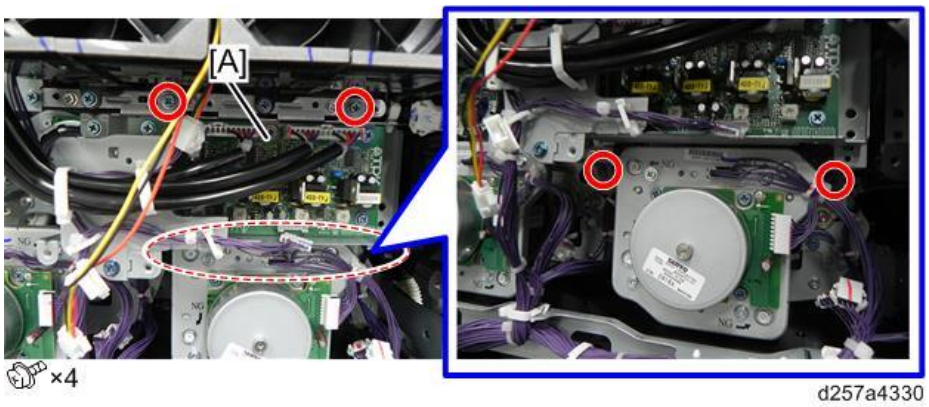
1. Slide the drive exhaust fan (FAN19) [A] upward along with the duct.



2. Remove the potential sensor board (PCB31) [A] along with the bracket.

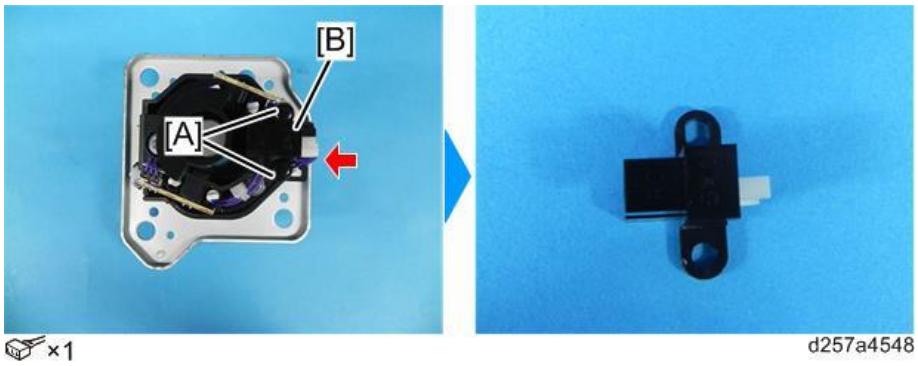
Note

There is no potential sensor installed for IM C6500/C8000. However, the sensor bracket is installed and it must be removed.



Drum HP Sensor (S32) (Pro C5300S/C5310S Only)

1. Remove the drum motor (M34). (Drum Motor (M34) (KCMY) / Drum Encoder Sensor (S30) (KCMY))
2. Remove the rivets [A] (×2), and remove the drum HP sensor (S32) [B].

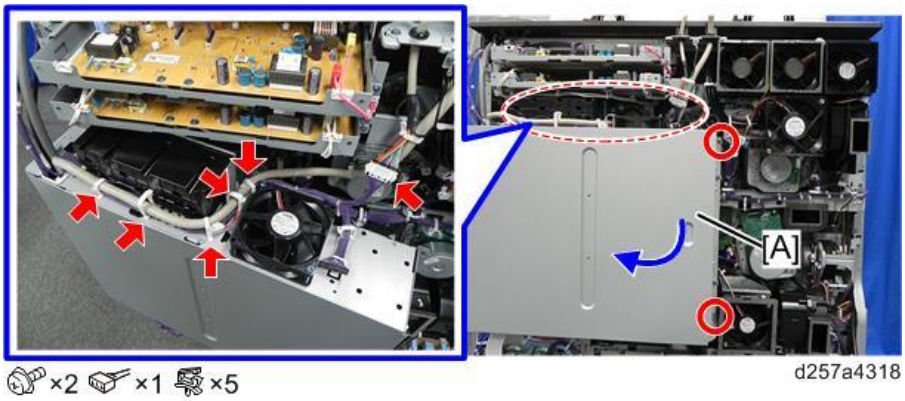


Drum Cleaning Motor (M30) (KCMY)

Note

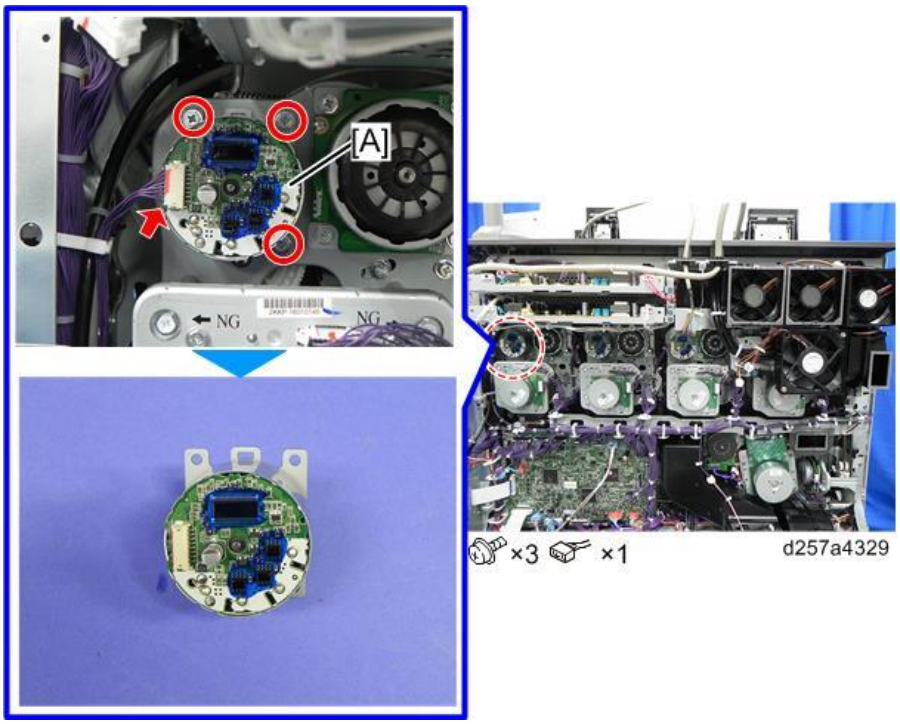
- The procedures for C and M are the same as for K.
- For Y, removal of the drum exhaust fan and potential sensor board is required before doing the following steps. (Removing the Drive Exhaust Fan (FAN19) and the Potential Sensor Board (PCB31))

1. Open the controller box [A].



2. Remove the drum cleaning motor (M30) [A] along with the bracket.

e.g.: K



Applying Grease after Replacing the Drum Cleaning Motor

After replacing the drum cleaning motor, apply grease to the motor shaft gear to reduce motor noise (Grease: G-1077).

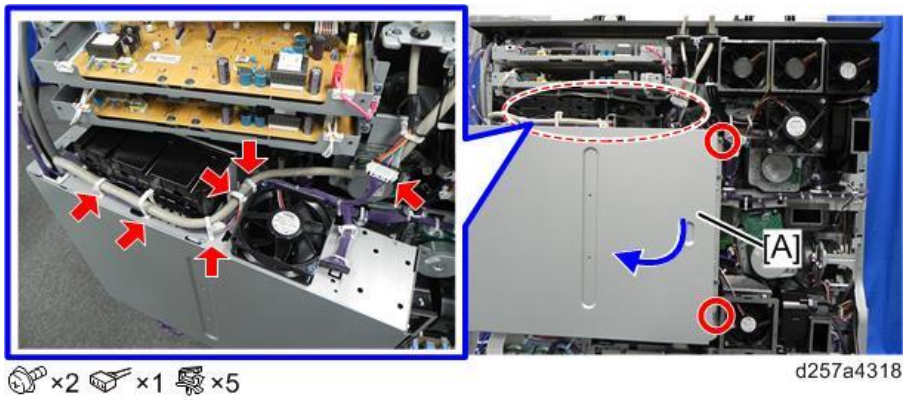
Lower Limit	Upper Limit
d257a3365	d257a3366

Development Motor (M18) (KCMY)

Note

- The procedure for C is the same as for K.
- For M and Y, removal of the drive exhaust fan and potential sensor board is required before doing the following steps. (Removing the Drive Exhaust Fan (FAN19) and the Potential Sensor Board (PCB31))
- There is no potential sensor installed for IM C6500/C8000. However, the sensor bracket is installed and it must be removed.

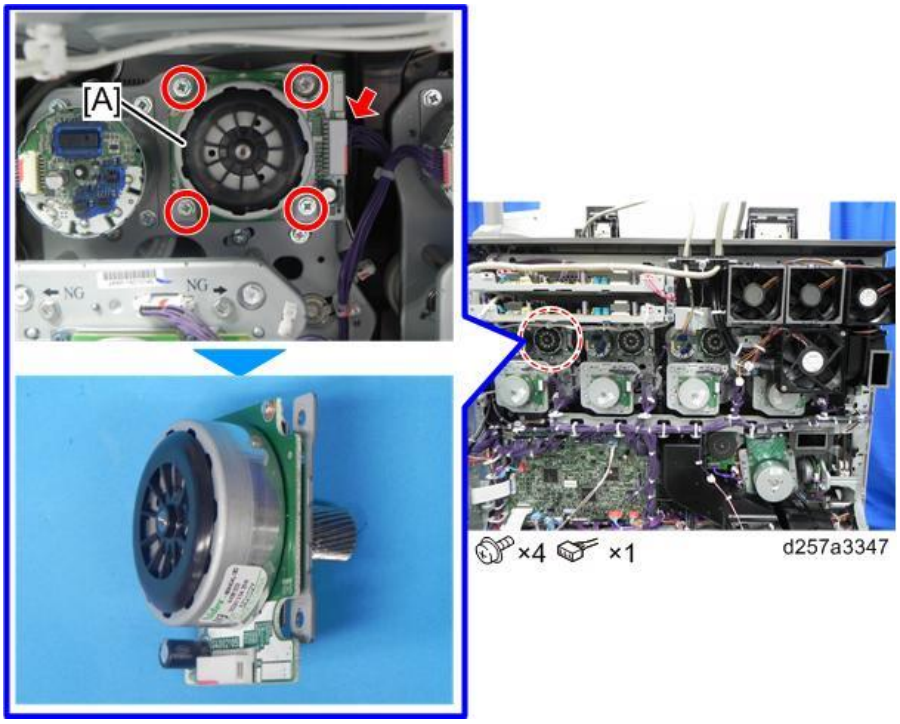
1. Open the controller box [A].



d257a4318

2. Remove the development motor (M18) [A].

e.g.: K



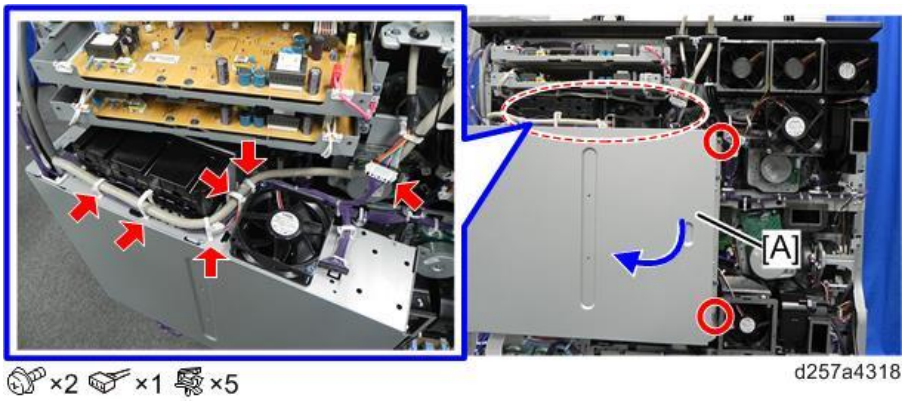
Applying Grease after Replacing the Development Motor

After replacing the development motor, apply grease to the motor shaft gear to reduce motor noise (Grease: G-1077).

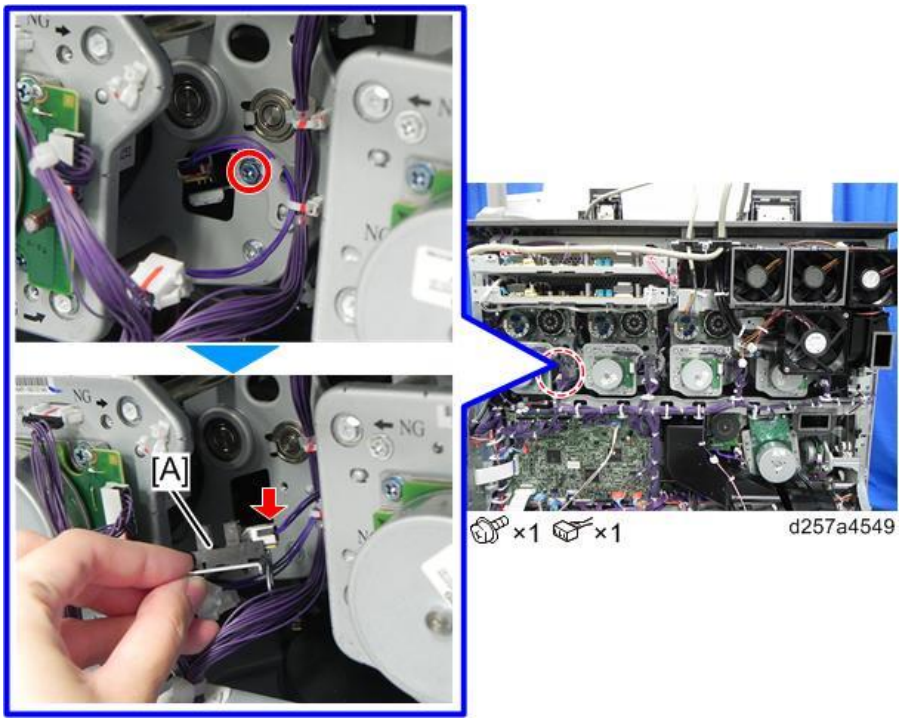
Lower Limit	Upper Limit
d257a3363	d257a3364

Development Roller HP Sensor (S18) (KCMY)

1. Open the controller box [A].



2. Remove the development roller HP sensor (S18) [A].



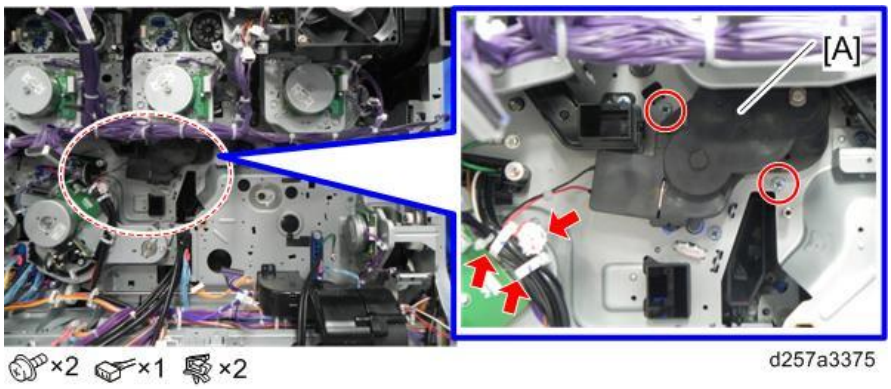
ITB Lift Motor (M17)

1. Remove the ozone exhaust fan (FAN17) along with the duct. (Ozone Exhaust Fan (FAN17))

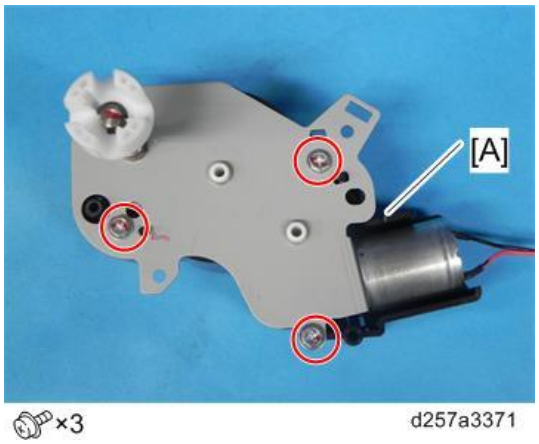
Note

For Pro C5300S/C5310S, in order to remove the ITB lift unit, you must remove the fusing belt smoothing roller contact motor (M12). (Fusing Belt Smoothing Roller Contact Motor (M12) (Pro C5300S/C5310S))

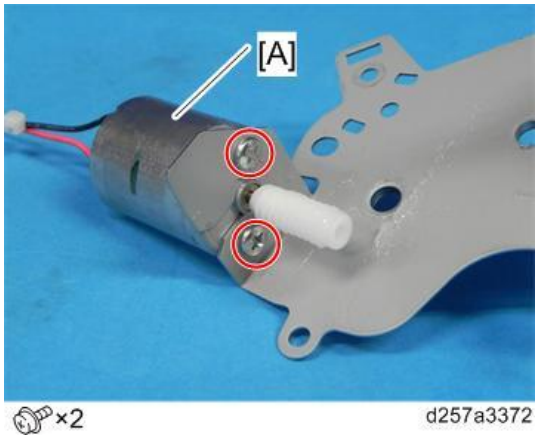
2. Remove the ITB lift motor (M17) [A] along with the bracket.



3. Remove the cover [A].



4. Remove the ITB lift motor (M17) [A].



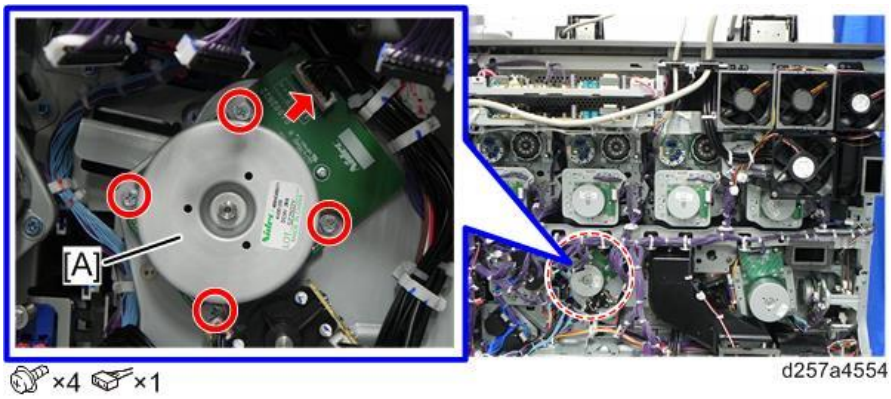
Applying Grease after Replacing the ITB Lift Motor

After replacing the ITB lift motor, apply grease to the motor shaft gear to reduce motor noise (Grease: G-1077).

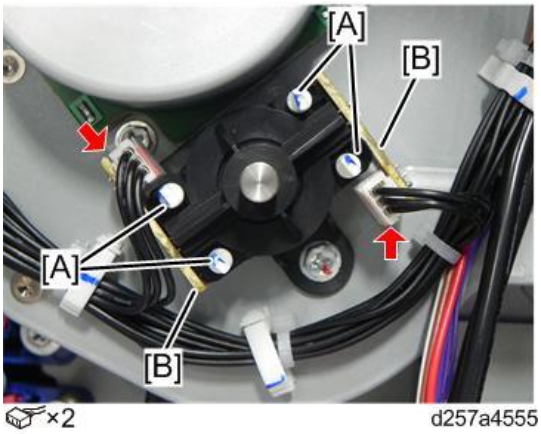
Lower Limit	Upper Limit
d257a3373	d257a3374

Paper Transfer Belt Motor (M16), Paper Transfer Belt Encoder Sensors (S16)

1. Remove the IOB along with the bracket, located on the back side of the machine. (When removing the motors that are behind the IOB)
2. Remove the paper transfer belt motor (M16) [A].



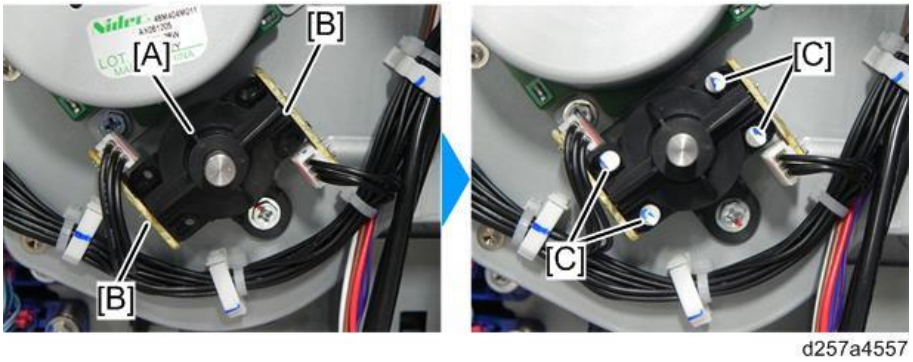
3. Remove the rivets [A] (×4), and remove the paper transfer belt encoder sensors (S16) [B] (x 2).



4. Remove the paper transfer belt encoder sensor cover [A].

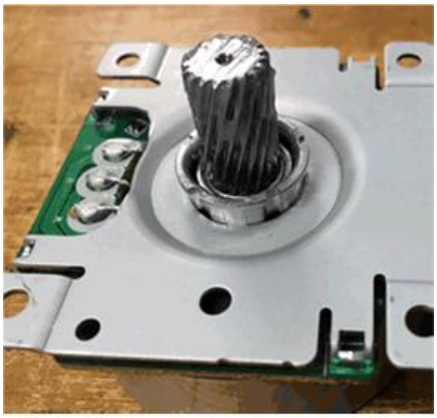
Note

- When installing the paper transfer belt encoder sensors, put the sensors [B] on the encoder cover [A] and fasten the sensors with rivets [C].



Applying Grease after Replacing the Paper Transfer Belt Motor

After replacing the paper transfer belt motor, apply grease to the motor shaft gear to reduce motor noise (Grease: G-1077).

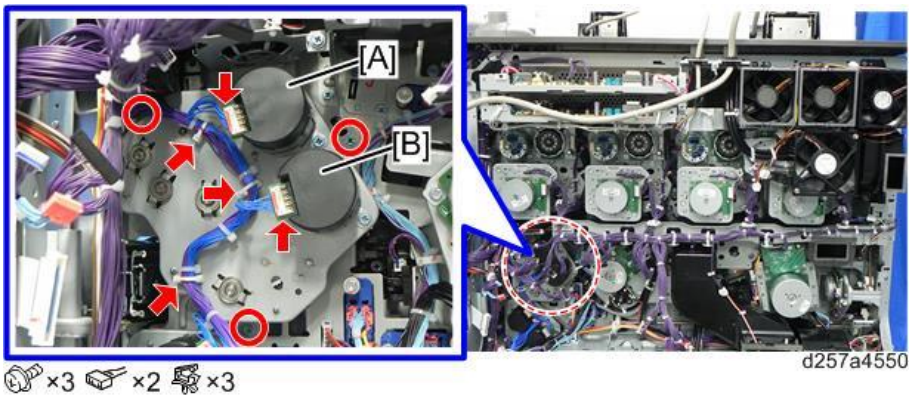
Lower Limit	Upper Limit
 d257a3367	d257a3368

Bypass Feed Motor (M54), Relay Motor (M53)

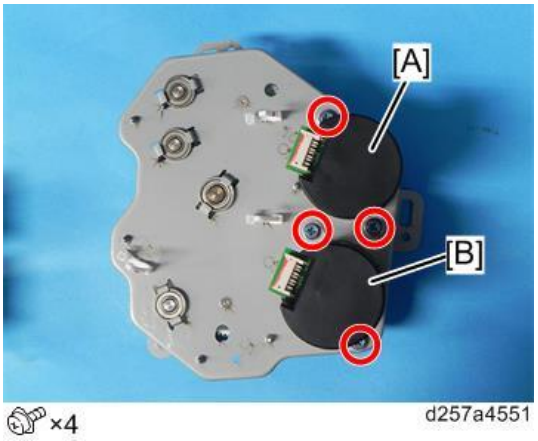
1. Remove the IOB along with the bracket, located on the back side of the machine. (When removing

the motors that are behind the IOB)

2. Remove the bypass feed motor (M54) [A] and relay motor (M53) [B] along with the bracket.

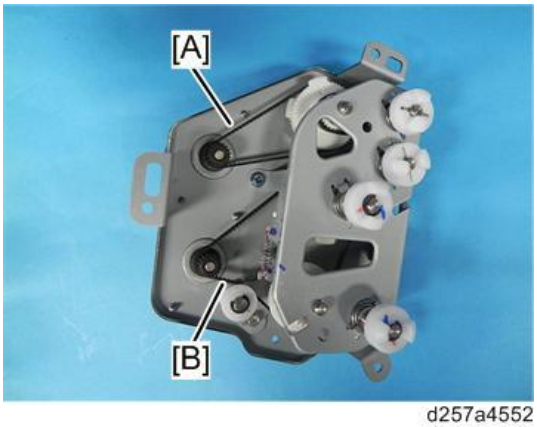


3. Remove the bypass feed motor (M54) [A] and relay motor (M53) [B] from the bracket.



Note

- When installing motors, attach the timing belts [A], [B].

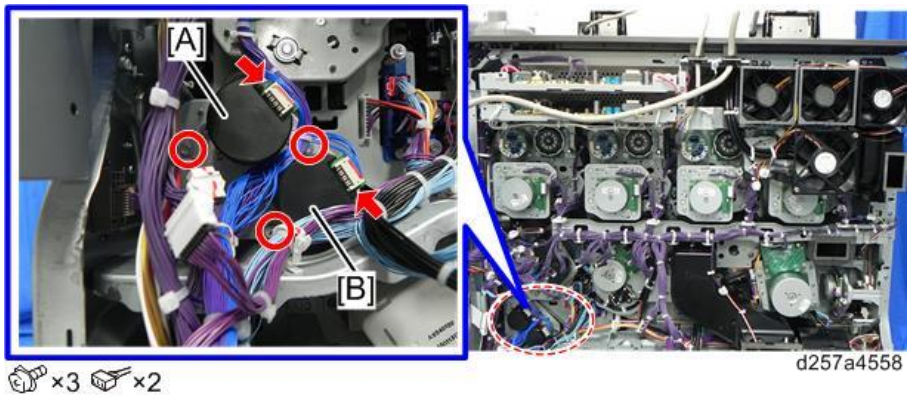


Paper Feed Motors, Transport Motors

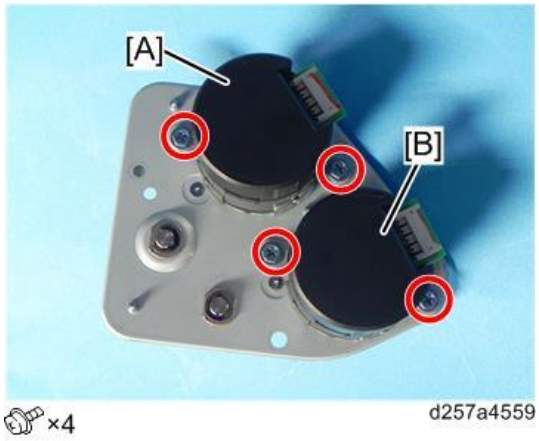
1st Paper Feed Motor (M55), 1st Transport Motor (M56)

1. Remove the IOB along with the bracket, located on the back side of the machine. (When removing the motors that are behind the IOB)

2. Remove the 1st paper feed motor (M55) [A] and 1st transport motor (M56) [B] along with the bracket.

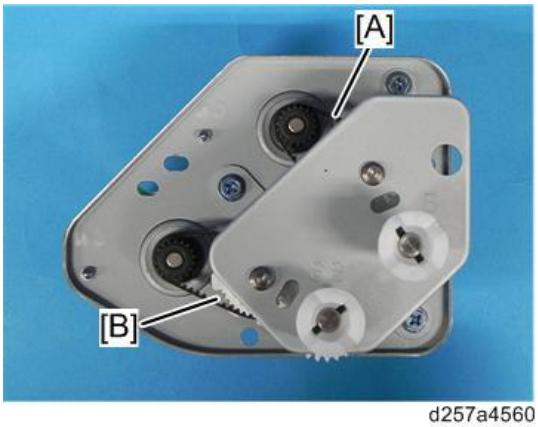


3. Remove the 1st paper feed motor (M55) [A] and 1st transport motor (M56) [B] from the bracket.



Note

- When installing motors, attach the timing belts [A], [B].

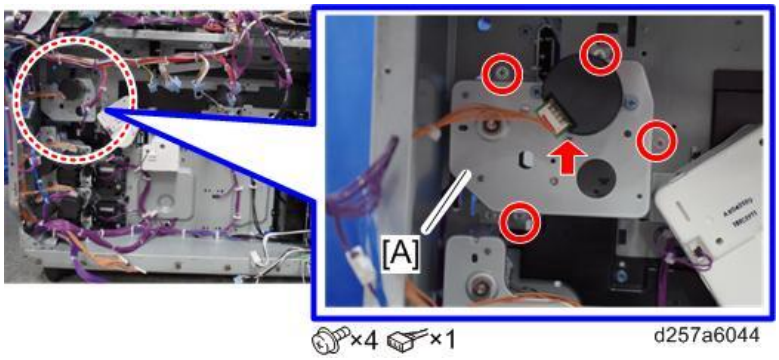


Vertical Transport Motor (M63)

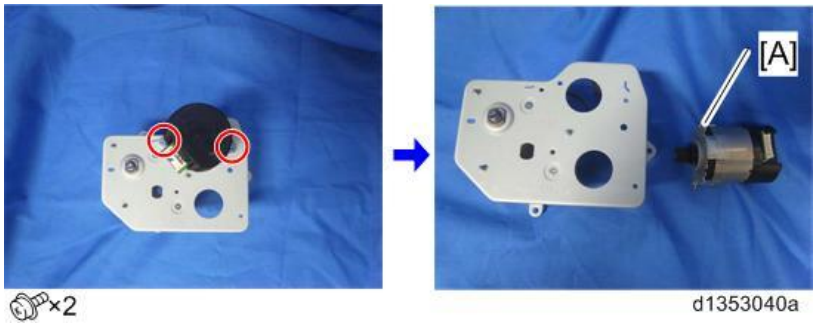
1. Remove the PFB along with the bracket, located on the back side of the machine. (When removing the motors that are behind the PFB)
2. Remove the right lower cover. (Right Lower Cover)
3. Remove the paper transfer belt waste toner cooling fan (FAN6) with its bracket. (Paper Transfer

Belt Waste Toner Cooling Fan (FAN6))

4. Remove the vertical transport motor (M63) [A] along with the bracket.



5. Remove the vertical transport motor (M63) [A].



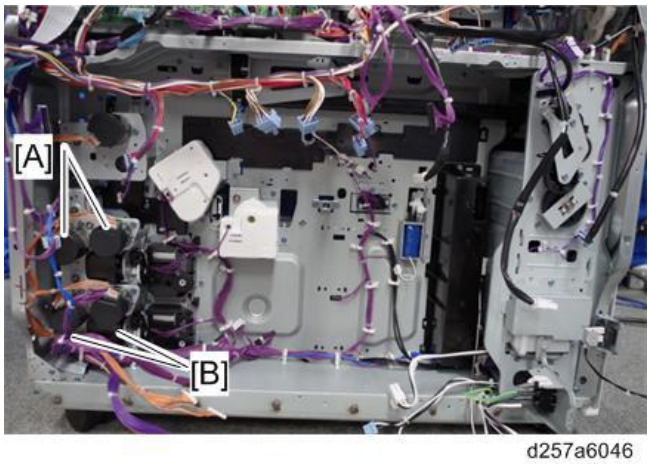
Note

- When installing the motor, attach the timing belt.

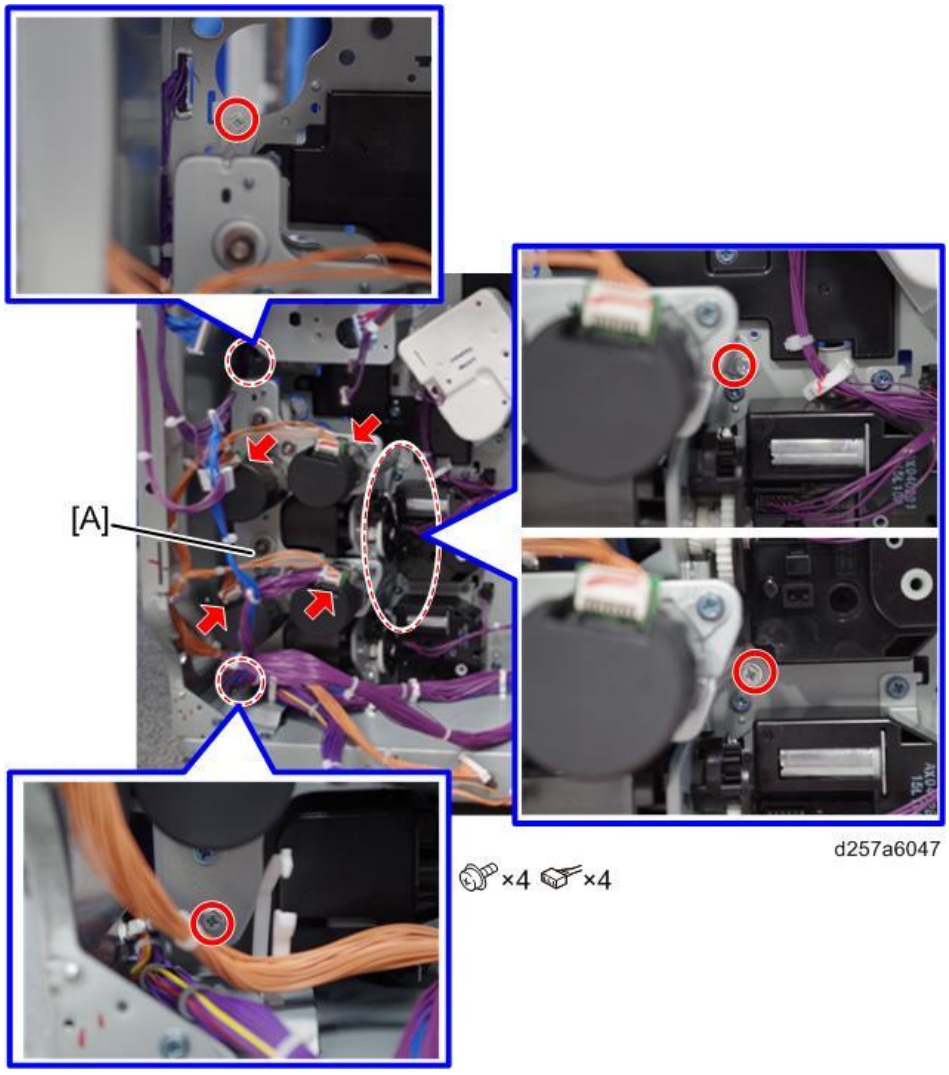
2nd Paper Feed Motor (M64), 2nd Transport Motor (M65), 3rd Paper Feed Motor (M66), 3rd Transport Motor (M67)

1. Remove the PFB along with the bracket, located on the back side of the machine. (When removing the motors that are behind the PFB)

The 2nd paper feed motor (M64), 2nd transport motor (M65) [A], 3rd paper feed motor (M66), and 3rd transport motor (M67) [B] are attached to one bracket.

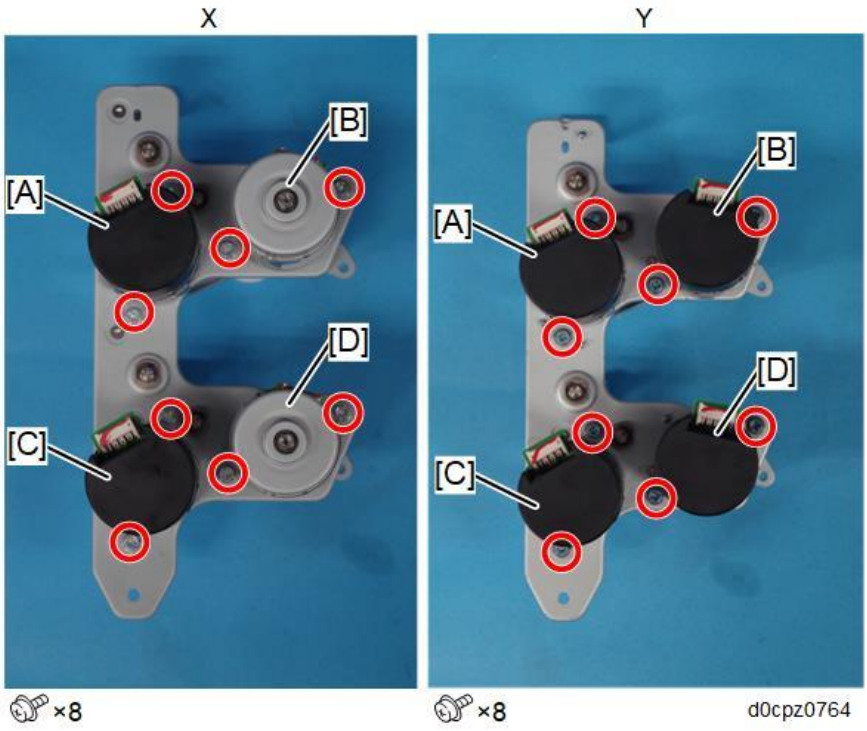


2. Remove the paper feed motors and transport motors (x 4) [A] along with the bracket.



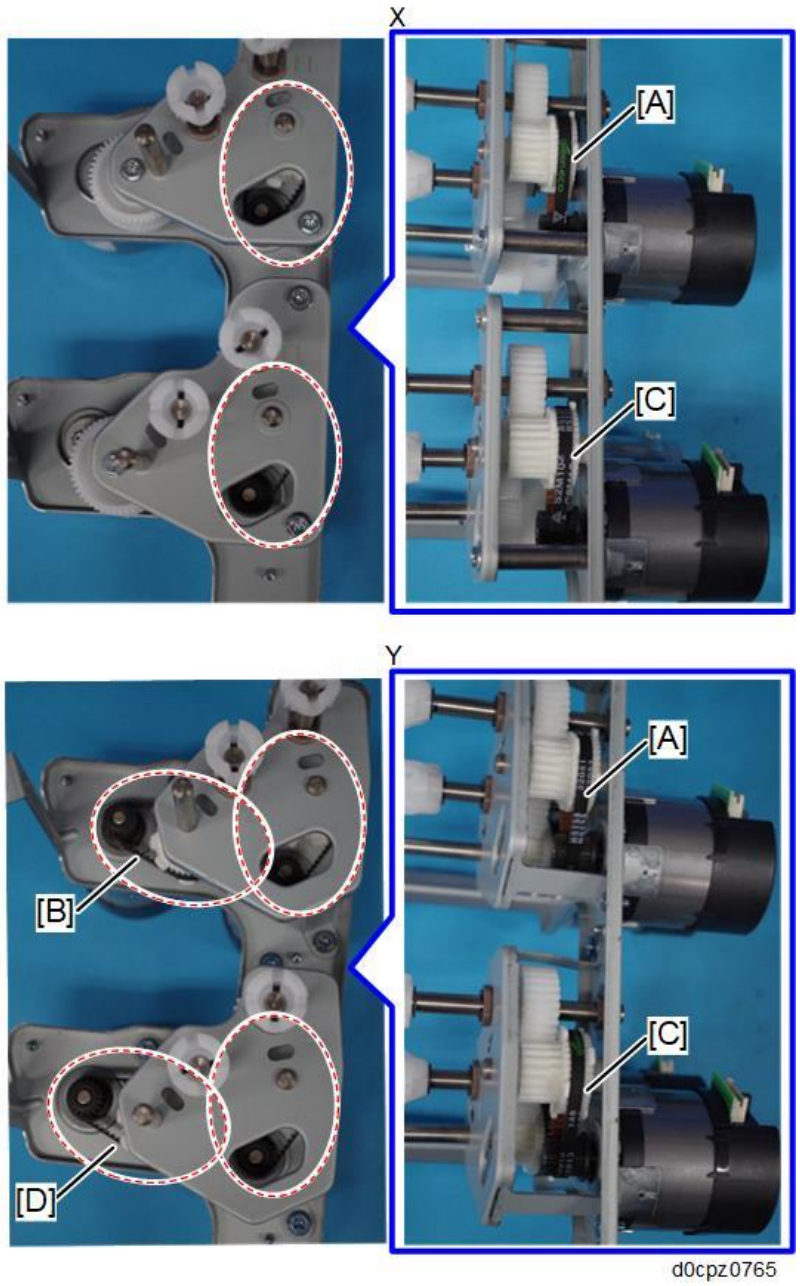
3. 2nd transport motor (M65) [A], 2nd paper feed motor (M64) [B], 3rd transport motor (M67) [C] and

3rd paper feed motor (M66) [D]. (X: Pro C5310S/C5300S, Y: IM C6500/C8000)



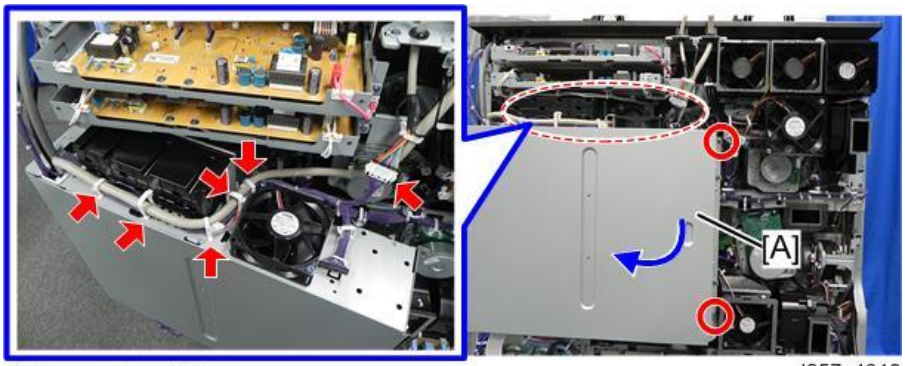
Note

- When installing motors, attach the timing belts.



Fusing Drive Motor (M22)

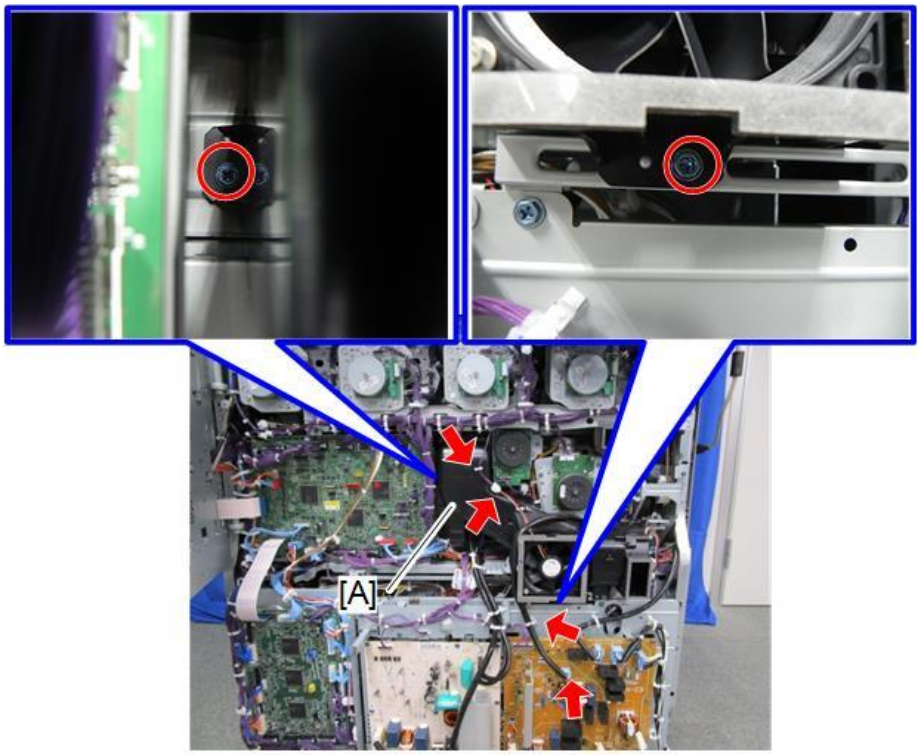
1. Open the controller box [A].



×2 ×1 ×5

d257a4318

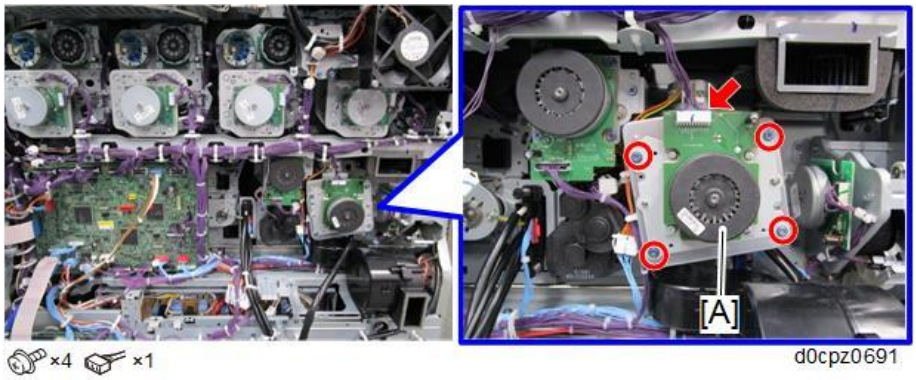
2. Remove the paper transfer belt fusing exhaust fan (FAN16) [A] along with the duct.



×2 ×2 ×2

d0cpz0690

3. Remove the fusing drive motor (M22) [A].

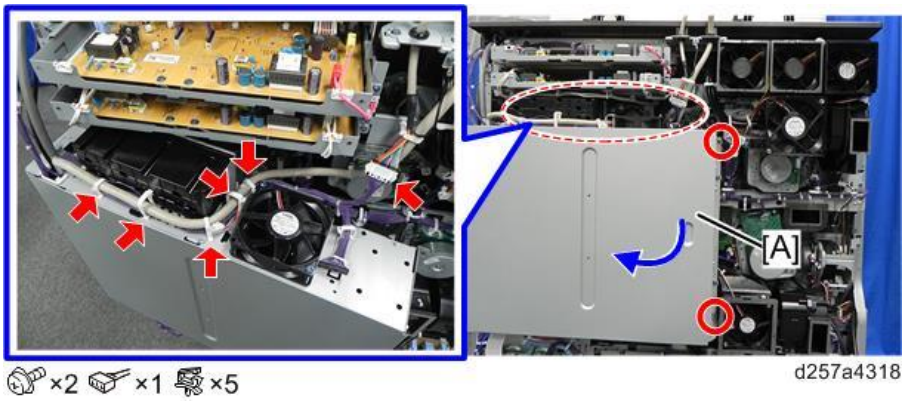


×4 ×1

d0cpz0691

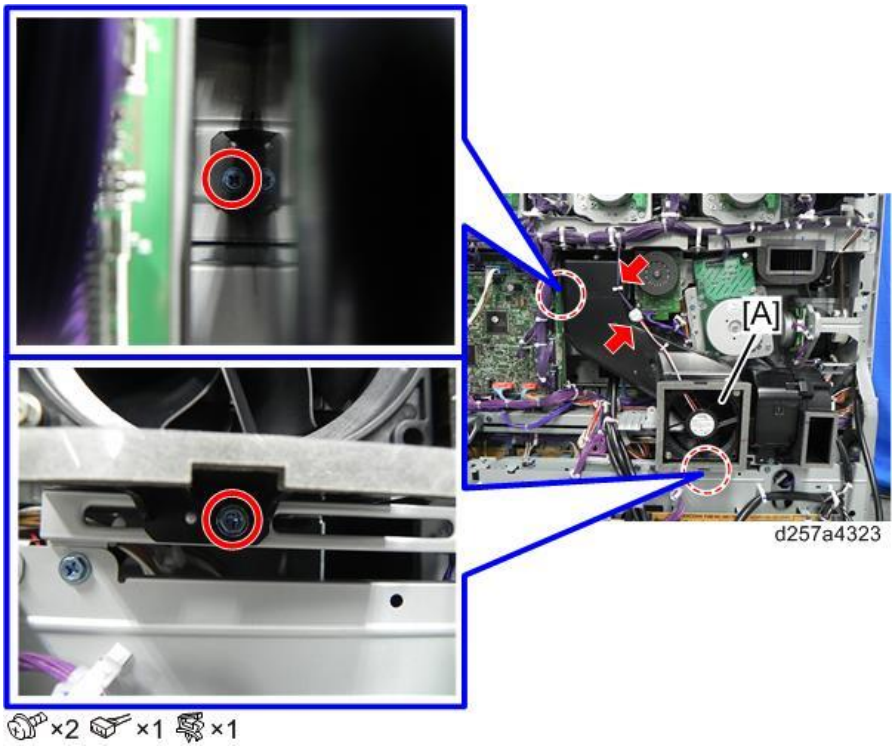
Fusing Release Motor (M13)

1. (Pro C5300S/C5310S only) Remove the bracket of the fusing belt smoothing roller drive motor. (Fusing Belt Smoothing Roller Drive Motor (M11) and the Motor Bracket (Pro C5300S/C5310S))
2. Open the controller box [A].



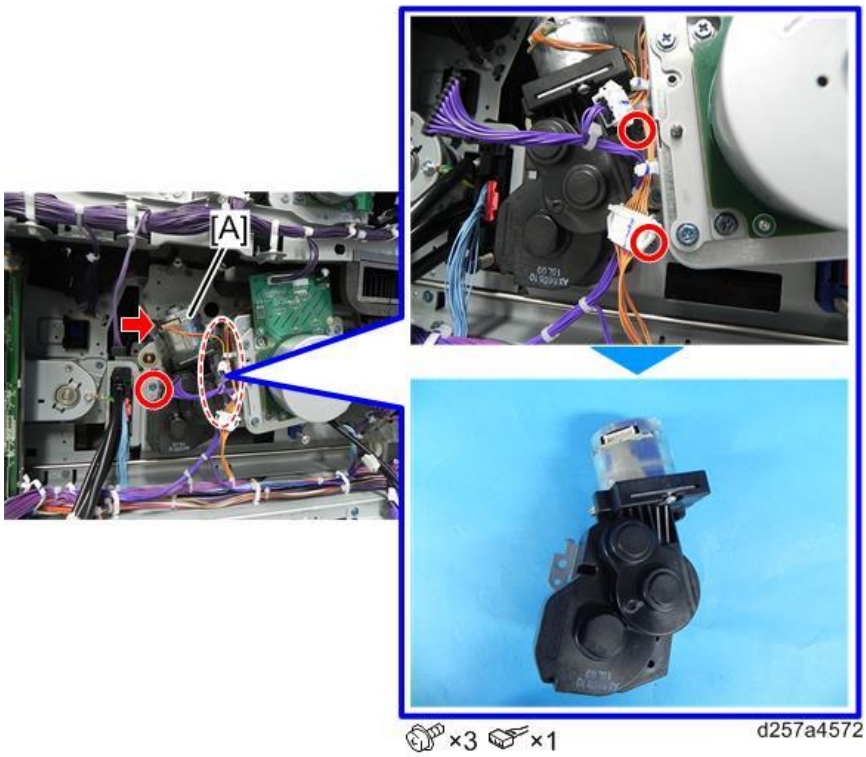
×2 ×1 ×5

3. Remove the paper transfer belt fusing exhaust fan (FAN16) [A] along with the duct.



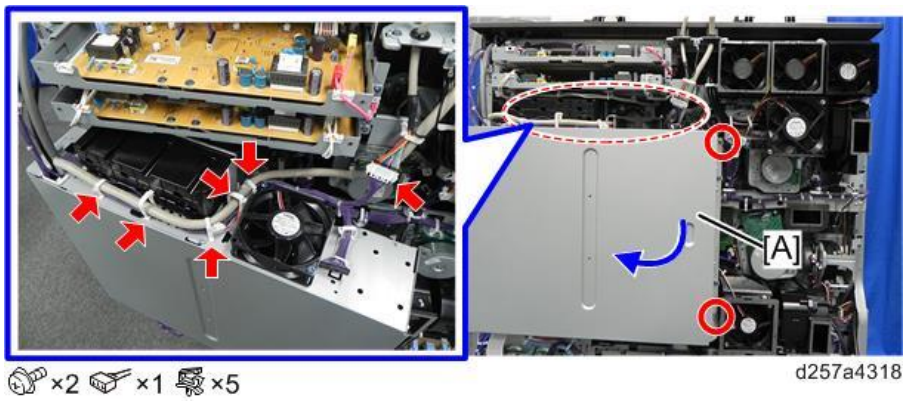
×2 ×1 ×1

4. Remove the fusing release motor (M13) [A].

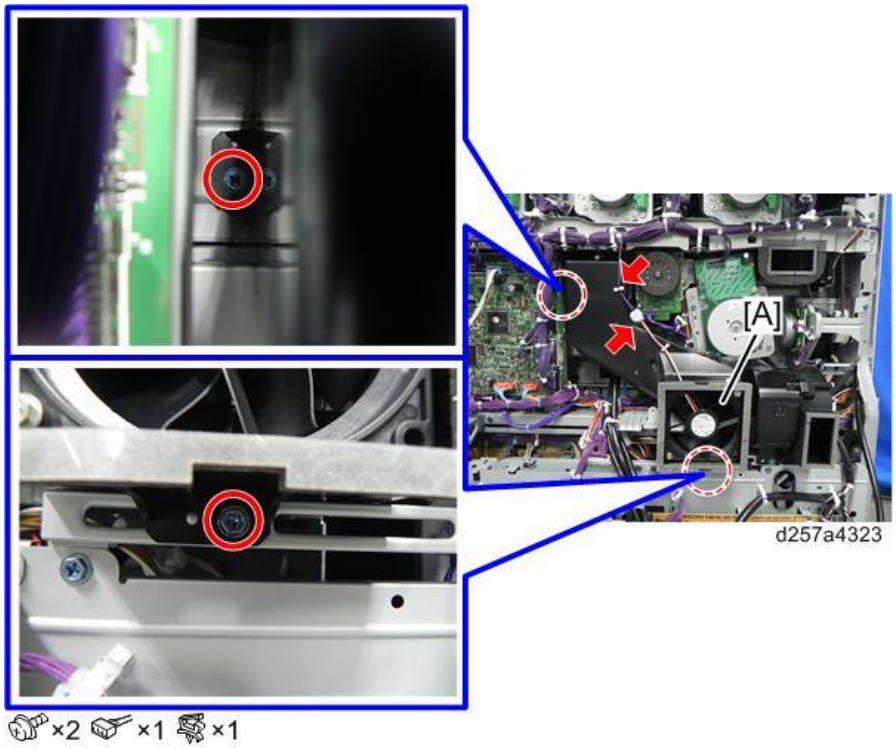


Waste Toner Collection Motor (M15)

1. Open the controller box [A].

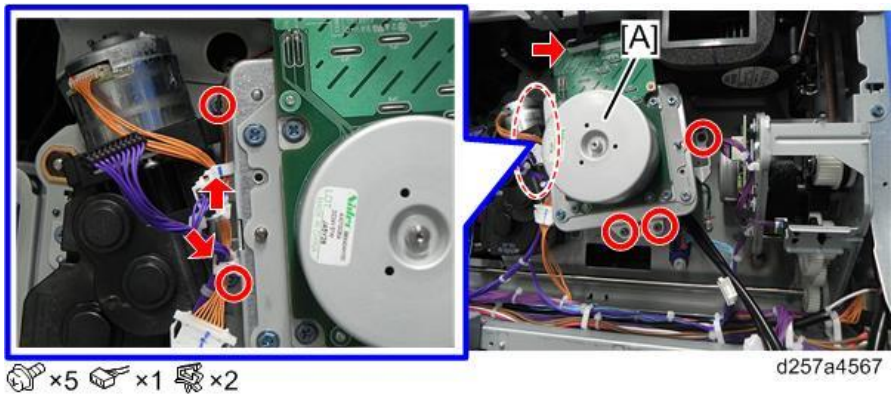


2. Remove the paper transfer belt fusing exhaust fan [A] along with the duct.

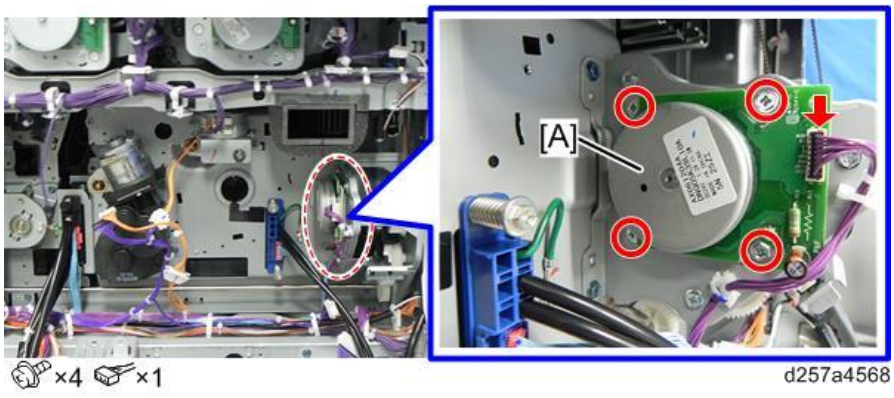


3. (Pro C5300S/C5310S only) remove the bracket of the fusing belt smoothing roller drive motor. (Fusing Belt Smoothing Roller Drive Motor (M11) and the Motor Bracket (Pro C5300S/C5310S))

4. Remove the fusing drive motor (M15) [A] along with the bracket.



5. Remove the waste toner collection motor (M15) [A].



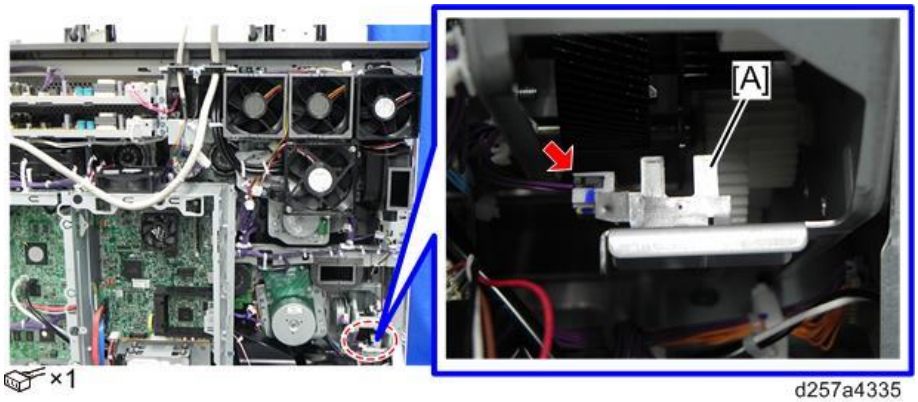
Applying Grease after Replacing the Waste Toner Collection Motor

After replacing the waste toner collection motor, apply grease to the motor shaft gear (Grease: G-1077).

Lower Limit	Upper Limit
d257a3369	d257a3370

Waste Toner Lock Sensor (S15)

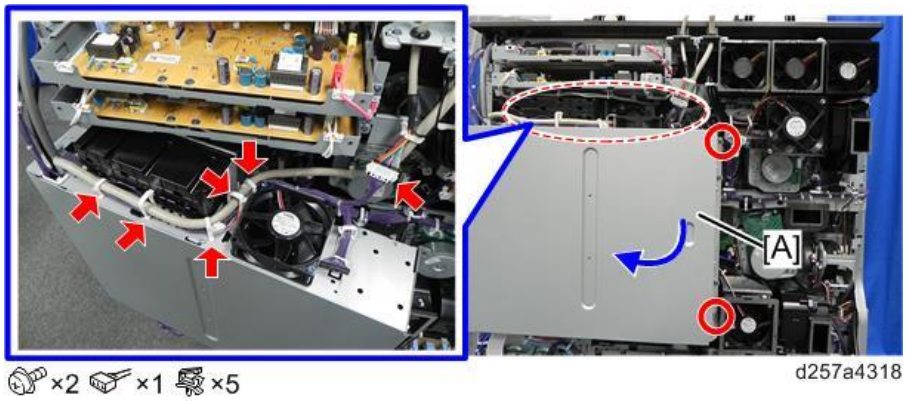
1. Remove the waste toner lock sensor (S15) [A].



d257a4335

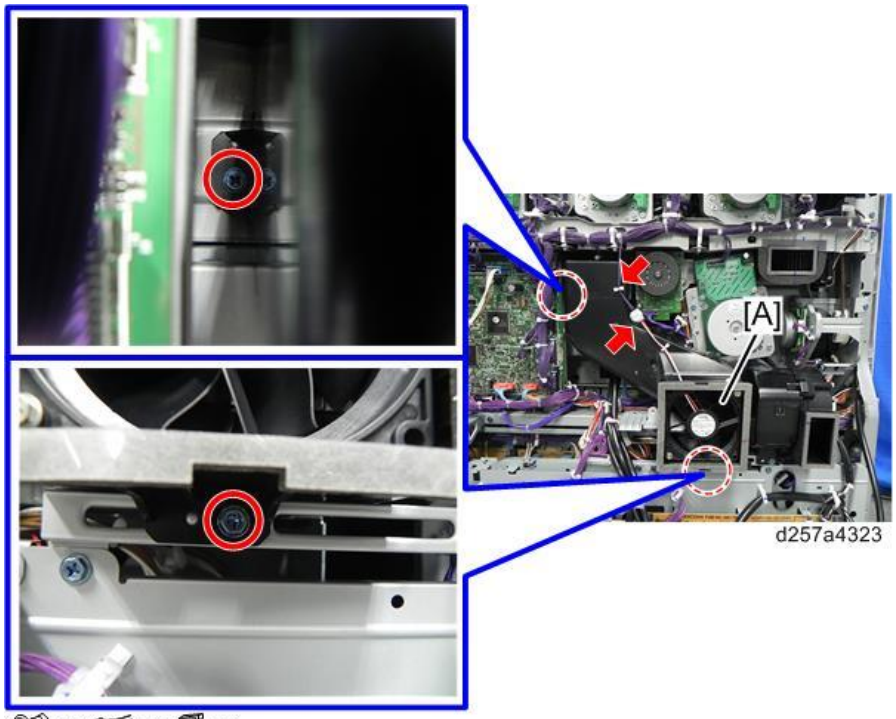
Fusing Belt Smoothing Roller Drive Motor (M11) and the Motor Bracket (Pro C5300S/C5310S)

1. Open the controller box [A].

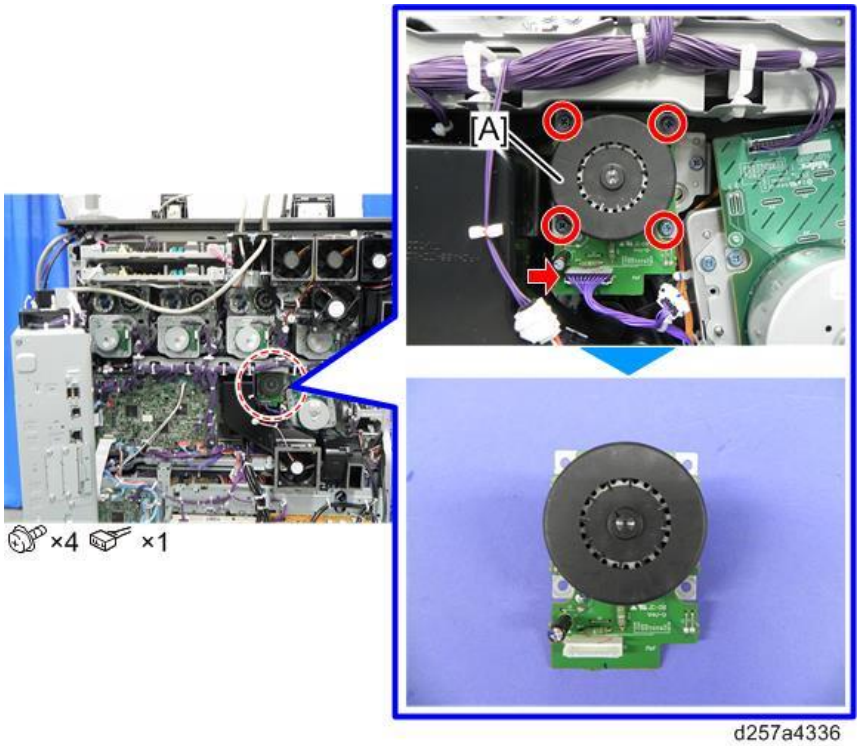


d257a4318

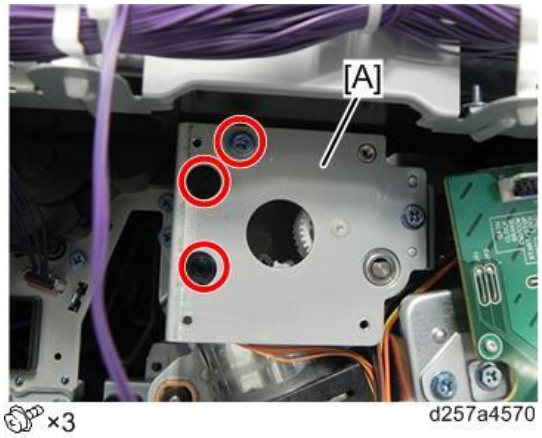
2. Remove the paper transfer belt fusing exhaust fan [A] along with the duct.



3. Remove the fusing belt smoothing roller drive motor (M11) [A].

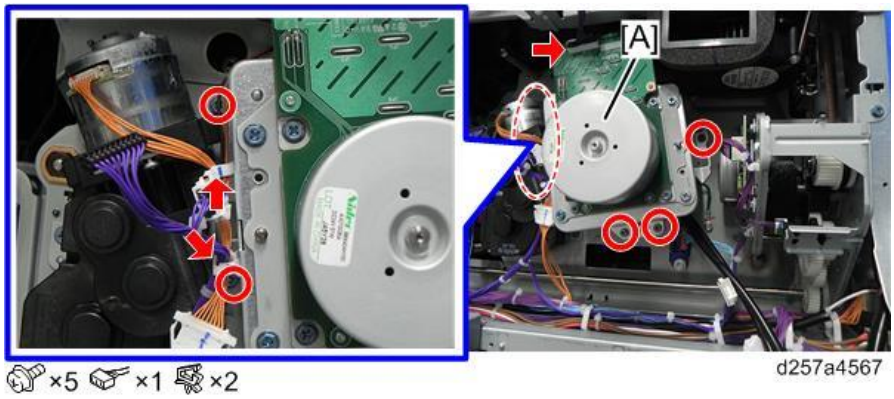


4. Remove the bracket [A] of the fusing belt smoothing roller drive motor (M11).

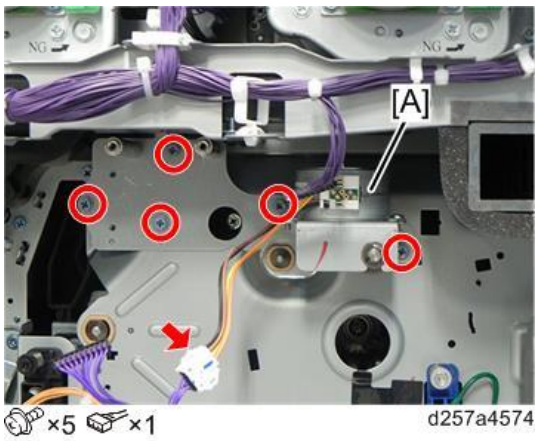


Fusing Belt Smoothing Roller Contact Motor (M12) (Pro C5300S/C5310S)

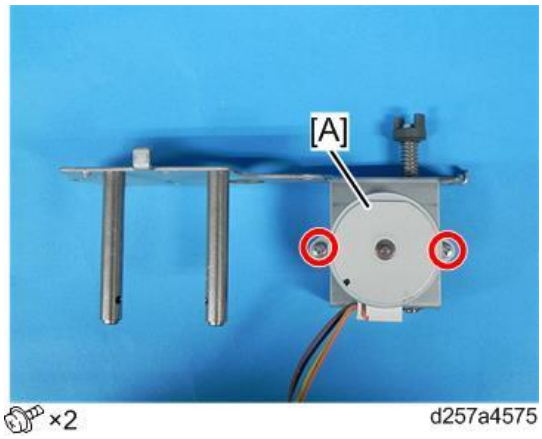
1. Remove the fusing release motor (M13). (Fusing Release Motor (M13))
2. Remove the fusing drive motor (M22) [A] along with the bracket.



3. Remove the fusing belt release roller contact motor (M12) [A] along with the bracket.



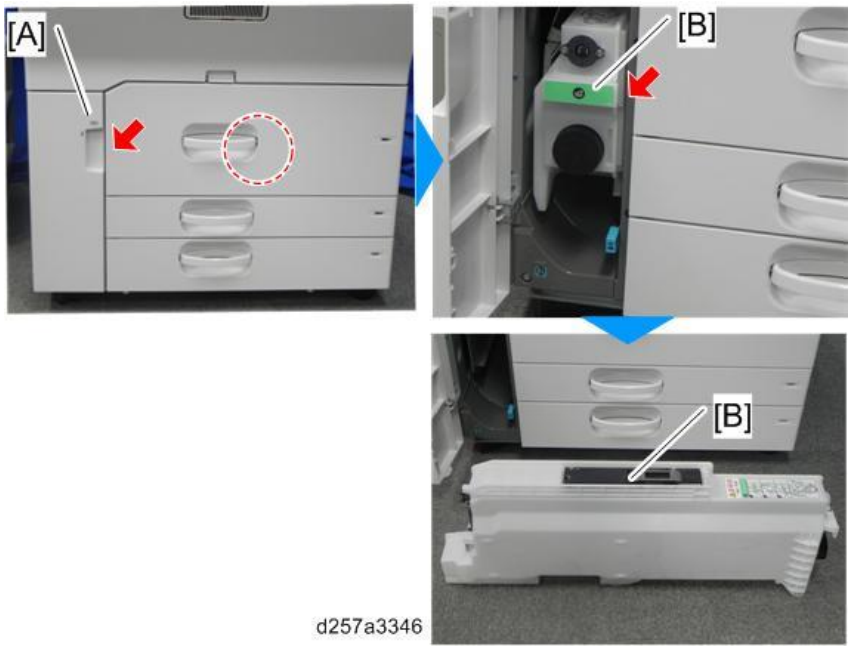
4. Remove the fusing belt release roller contact motor (M12) [A] from the bracket.



Waste Toner Collection

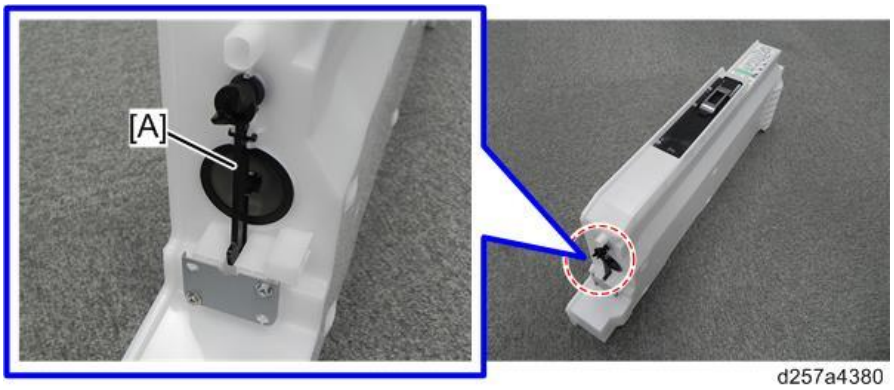
Waste Toner Bottle

1. Open the waste toner bottle door [A] and take out the waste toner bottle [B], holding the bottle at the decal location.



⚠CAUTION

- To prevent the waste toner from spilling from the rear side [A], do not tilt the bottle towards the rear when replacing the waste toner bottle.



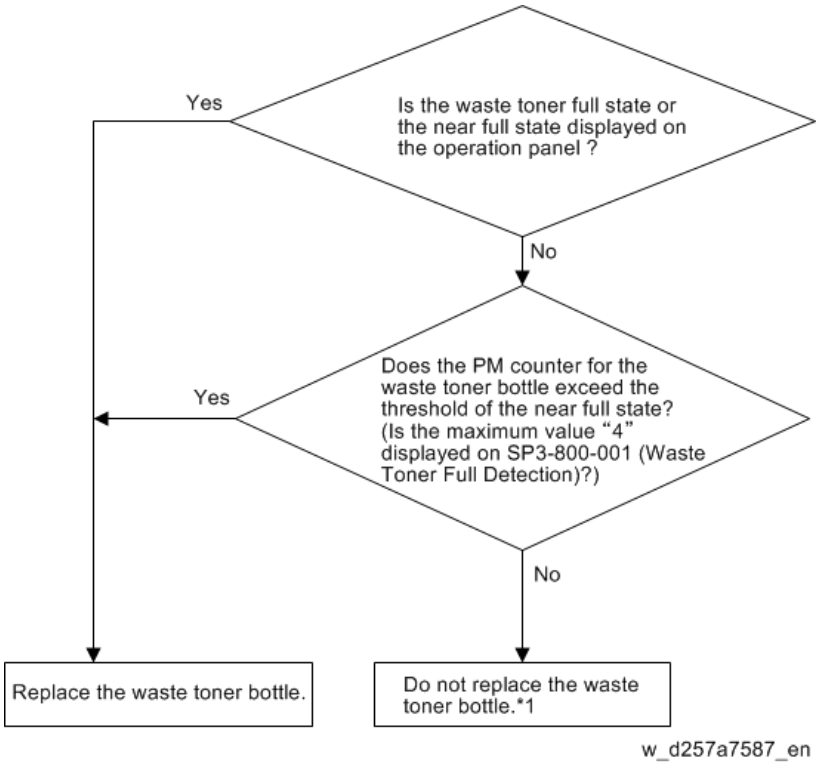
Important

- Replace the waste toner bottle while the main power is ON.
- If the waste toner bottle is replaced while the main power is OFF, the main machine cannot recognize that the waste toner bottle is replaced. In this case, the waste toner full state or near full state, which has been displayed on the operation panel, may not disappear after the replacement. If the waste toner full state or near full state displayed on the operation panel does not disappear after the replacement, remove and install the waste toner bottle again while the main power is ON.

Note

- The PM counter for the waste toner bottle is not reset even when [New Unit Set] is set to [Yes] in the [PM Counter/New Unit Set] Menu.
- When the new waste toner bottle is set while the waste toner full is detected, the PM counter for the waste toner bottle is automatically reset. Therefore, there is no need to set to [Yes] on the [PM Counter/New Unit Set] Menu after the replacement.

Flow Chart for the Machine Which Supports @Remote Service



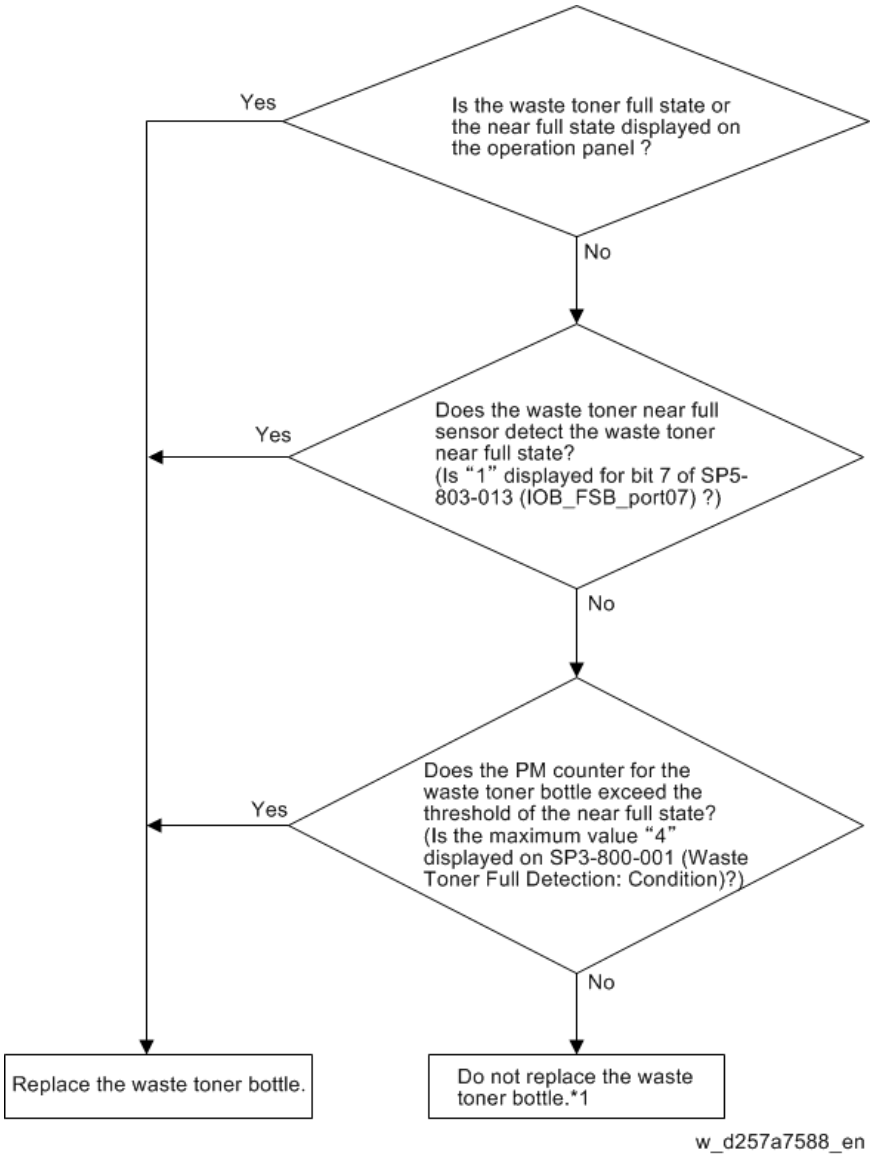
Important

- If the waste toner bottle is replaced when the waste toner bottle does not need to be replaced (*1 in the flow chart above), the main machine cannot recognize that the waste toner bottle is replaced. Then the PM counter keeps counting after the replacement. In this case, the waste toner near full state may be reported soon after the replacement.

Note

- When the machine recognizes the waste toner bottle replacement, the values of SP3-800-004 (Waste Toner Full Detection: Volume Count 1 After Replacement) and SP3-800-005 (Waste Toner Full Detection: Volume Count 2 After Replacement) are reset to "0". After that, the value of SP3-800-004 or SP3-800-005 starts counting up by using the OPC drum rotation as a trigger when an image is printed.
- If neither SP3-800-004 nor SP3-800-005 are counted up after printing, this means that the main machine does not recognize the waste toner bottle replacement. In this case, remove and install the waste toner bottle while the main power is ON. Then check the SP values of SP3-800-004 or SP3-800-005.

Flow Chart for the Machine Which Does Not Support @Remote Service



Important

- If the waste toner bottle is replaced when the waste toner bottle does not need to be replaced (*1 in the flow chart above), the main machine cannot recognize that the waste toner bottle is replaced. The PM counter will keep counting after the replacement, and the waste toner near full state might soon be reported after the replacement.

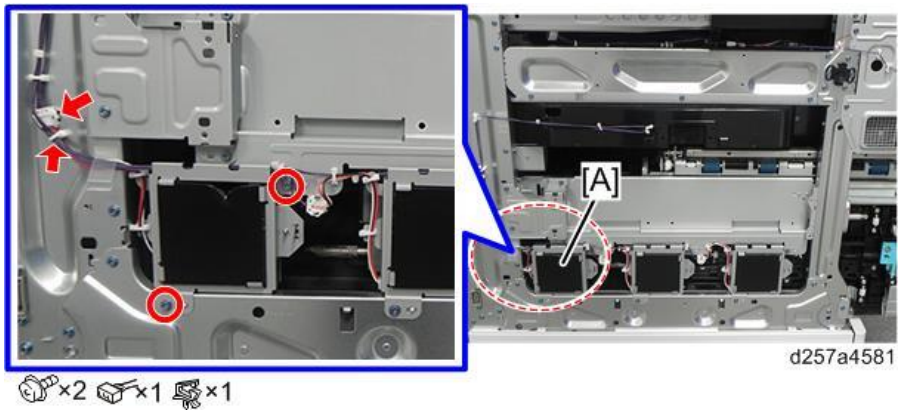
Note

- When the machine recognizes the waste toner bottle replacement, the values of SP3-800-004 (Waste Toner Full Detection: Volume Count 1 After Replacement) and SP3-800-005 (Waste Toner Full Detection: Volume Count 2 After Replacement) are reset to "0". After that, the value of SP3-800-004 or SP3-800-005 start counting up by using the OPC drum rotation as a trigger when an image is printed.
- If neither SP3-800-004 nor SP3-800-005 are counted up after printing, this means that the main machine does not recognize the waste toner bottle replacement. In this case, remove and install the waste toner bottle while the main power is ON. Then check the SP values of

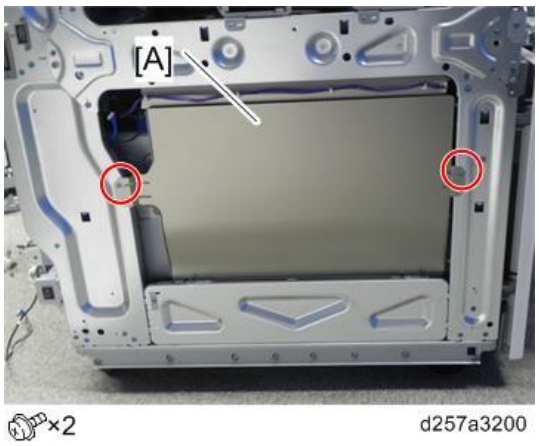
SP3-800-004 or SP3-800-005.

Waste Toner Bottle Unit

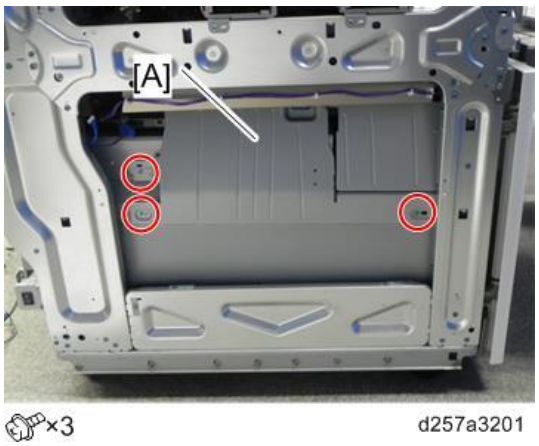
1. Remove the left cover. (Left Cover)
2. Remove the rear cover. (Rear Cover)
3. Remove the duplex inverter motor. (Duplex Inverter Motor (M51))
4. Remove the duplex exhaust fan (rear) [A].



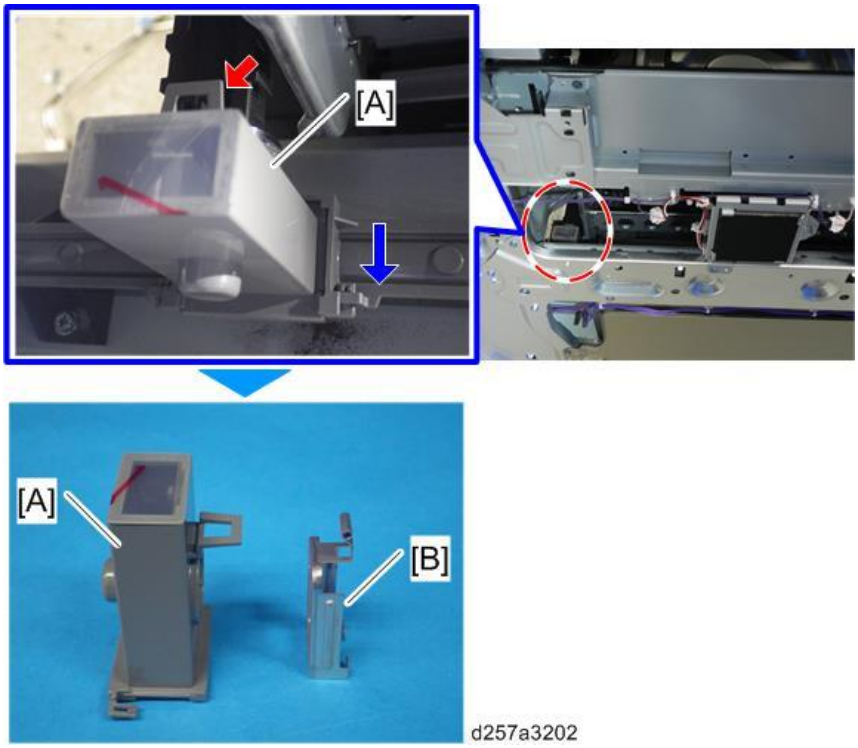
5. Remove the guide plate [A].



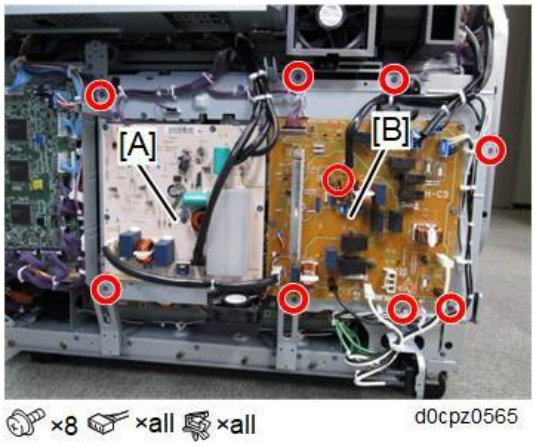
6. Remove the bracket [A].



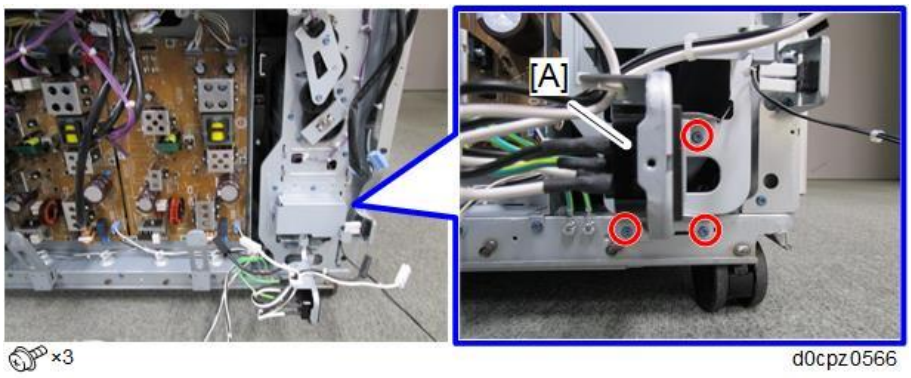
7. Release the pawls, and pull the relay duct [A] and the swinging plate [B] to remove them.



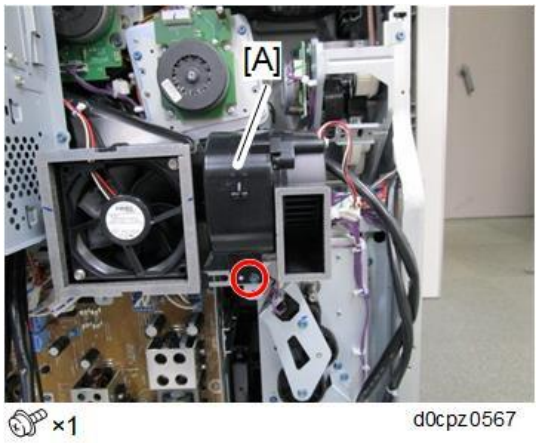
8. Remove the IH inverter [A] and AC drive board [B] along with the bracket.



9. Remove the bracket [A].

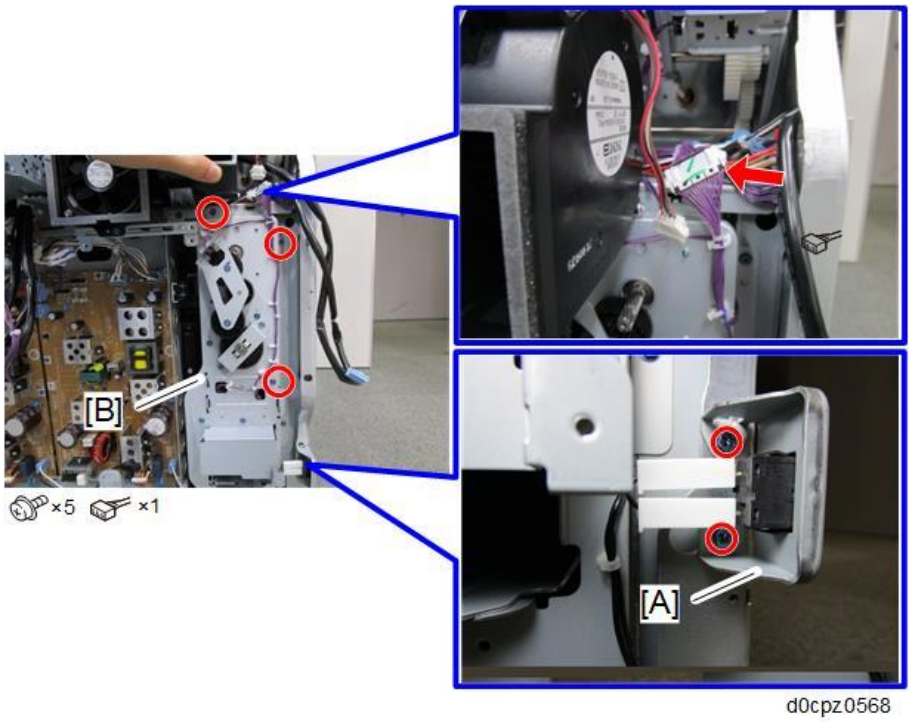


10. Remove the screw of the fan [A].



11. Remove the switch [A] with bracket.

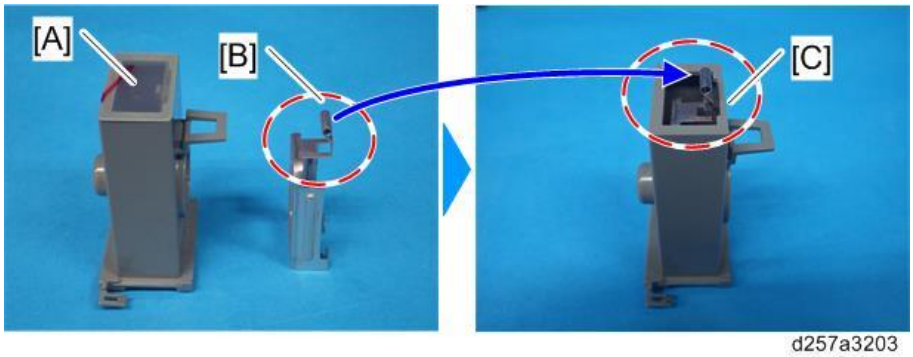
12. Remove the waste toner bottle unit [B].



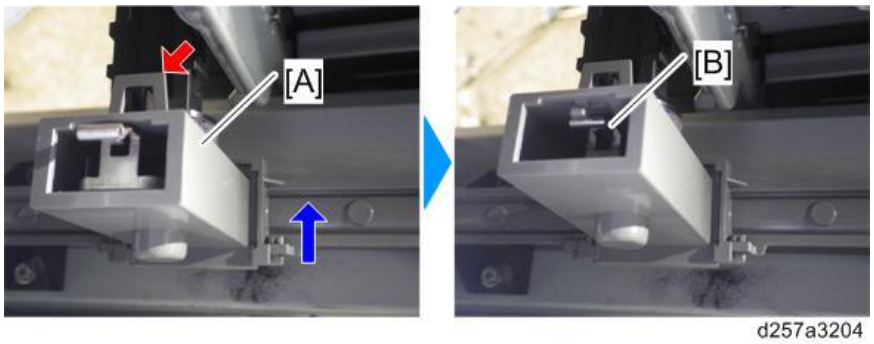
Installing the Relay Duct

Install the relay duct and swinging plate using the following procedure.

1. Remove the relay duct seal [A] and hook the cutout [B] onto the relay duct [C].



2. Attach the relay duct [A] to the waste toner bottle unit, and drop the swinging plate [B] into the unit.

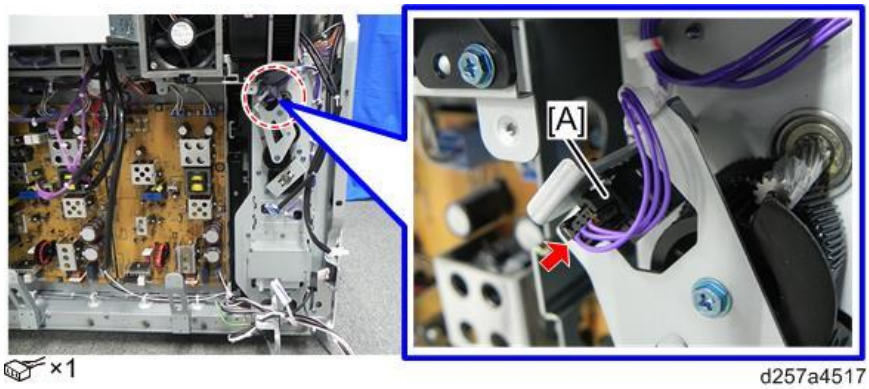


3. Clean the attachment surface with alcohol and attach a seal [A].

Waste Toner Bottle Motor Sensor (S13)

1. Remove the IH inverter (PCB35) [A] and AC drive board (PCB12) [B] along with the bracket. (PSU1 (PCB34), PSU2 (PCB33))

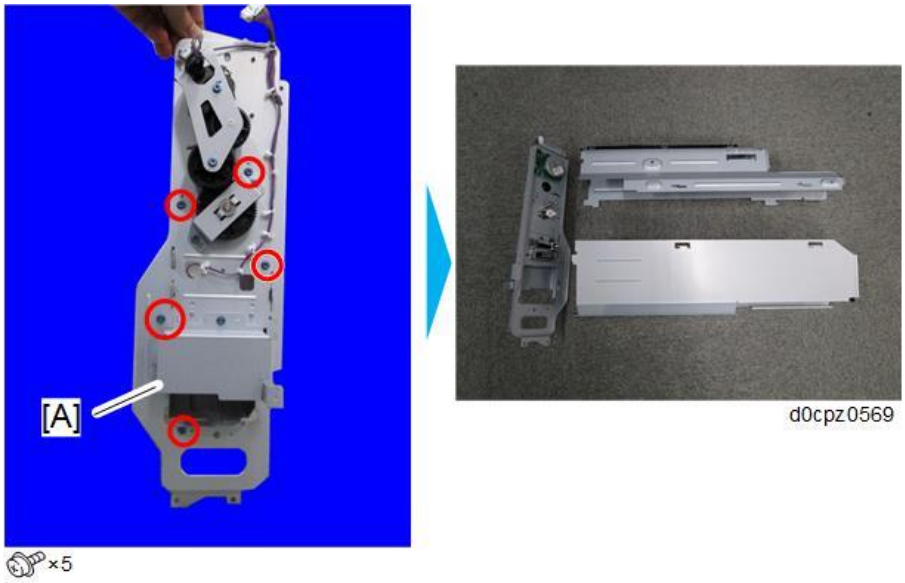
2. Remove the waste toner bottle motor sensor (S13) [A].



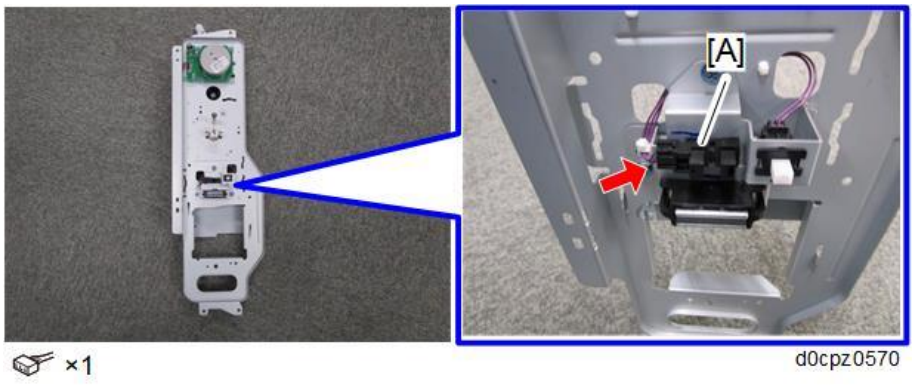
Waste Toner Near Full Sensor (S14)

1. Remove the waste toner bottle unit. (Waste Toner Bottle Unit)

2. Divide the waste toner bottle unit into 3 pieces.

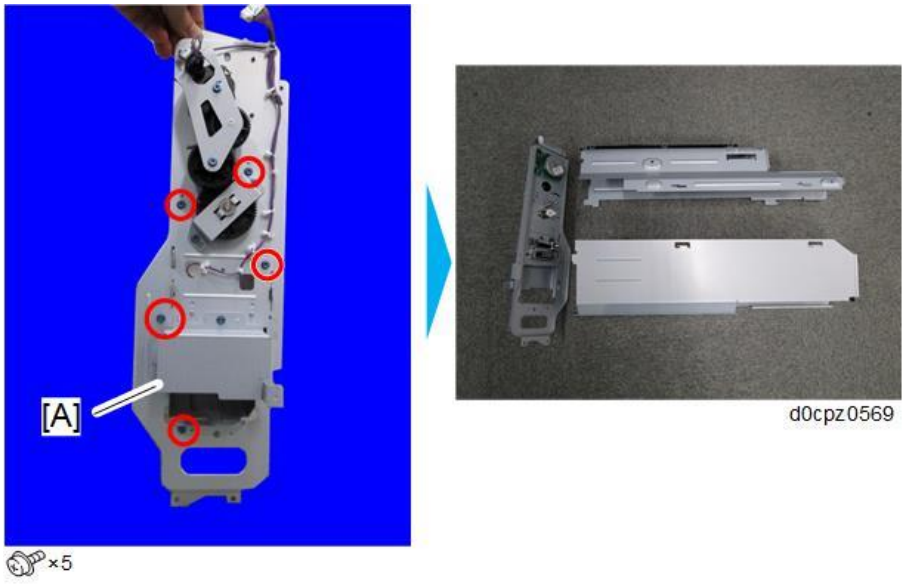


3. Remove the waste toner near full sensor (S14) [A].



Waste Toner Bottle Set Sensor (S12)

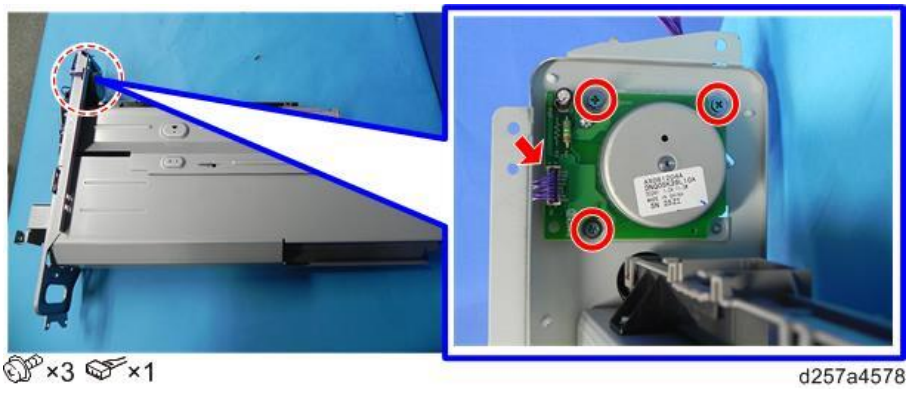
1. Remove the waste toner bottle unit. (Waste Toner Bottle Unit)
2. Divide the waste toner bottle unit [A] into 3 pieces.



3. Remove the waste toner bottle set sensor (S12) [A].

Waste Toner Bottle Motor (M14)

1. Remove the waste toner bottle unit. (Waste Toner Bottle Unit)
2. Remove the waste toner bottle motor (M14) [A].



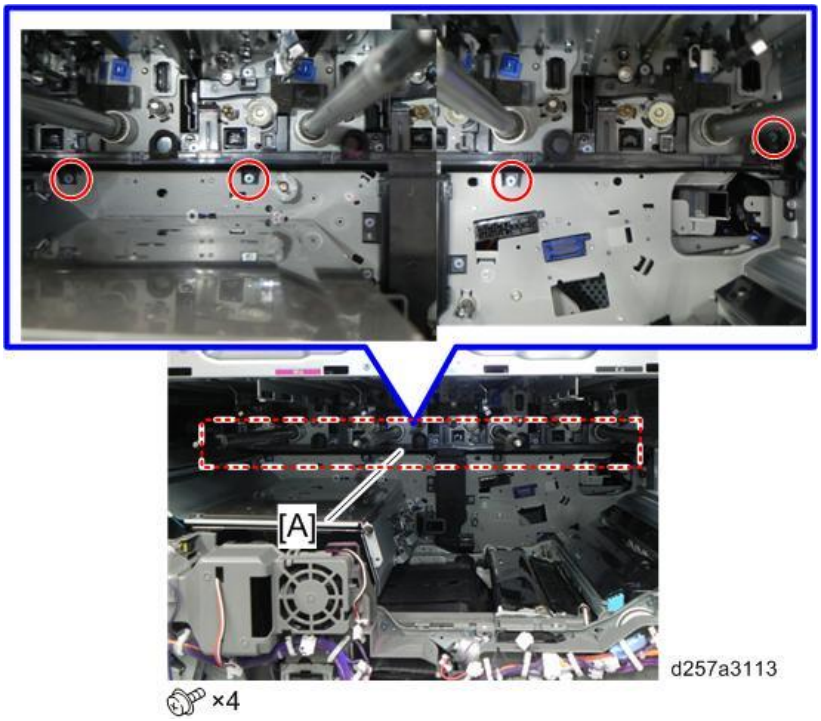
Applying Grease after Replacing the Waste Toner Bottle Motor

After replacing the waste toner bottle motor, apply grease to the motor shaft gear (Grease: G-1077).

Lower Limit	Upper Limit
d257a3369	d257a3370

Waste Toner Upper Transporting Section

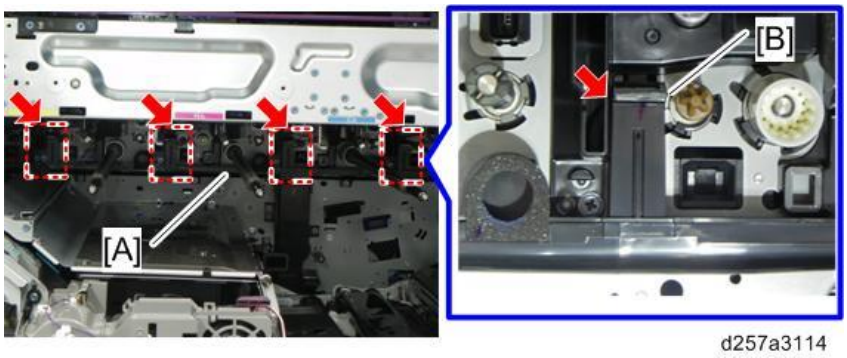
1. Remove the PCDU (four colors). (PCDU)
2. Remove the ITB unit. (ITB Unit Removal)
3. Close the drawer unit.
4. Remove the fixing screws (×4) of the waste toner upper transporting section [A].



d257a3113

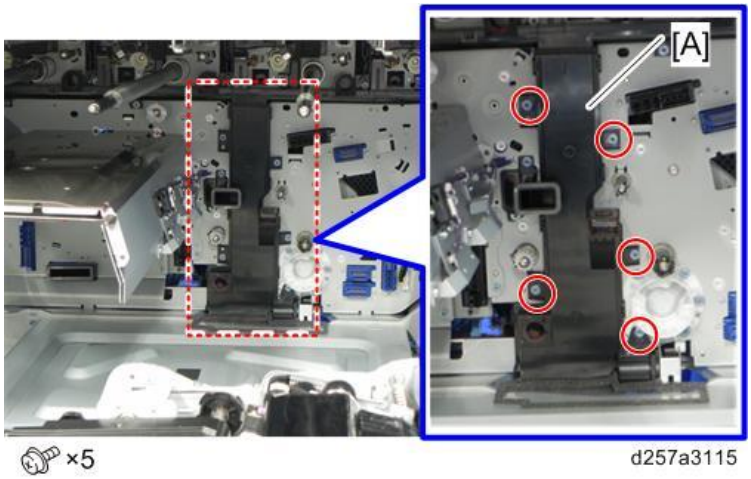
5. Remove the hooks of K [B], M, C and Y in that order, then remove the waste toner upper

transporting section [A].

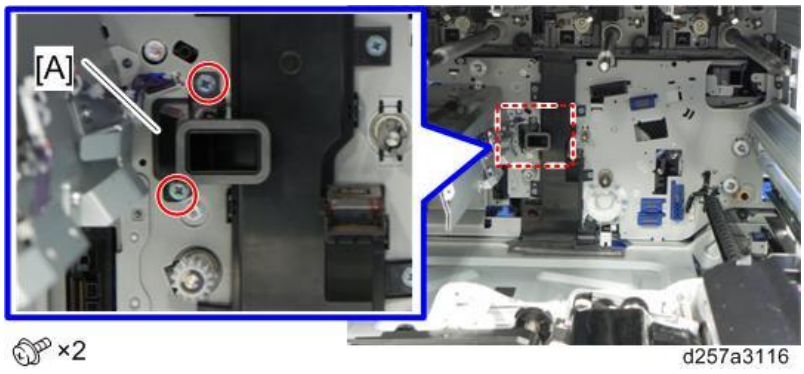


Waste Toner Vertical Transporting Section

1. Remove the PCDU (four colors). (PCDU)
2. Remove the ITB unit. (ITB Unit Removal)
3. Remove the fixing screws of the waste toner vertical transporting section [A].

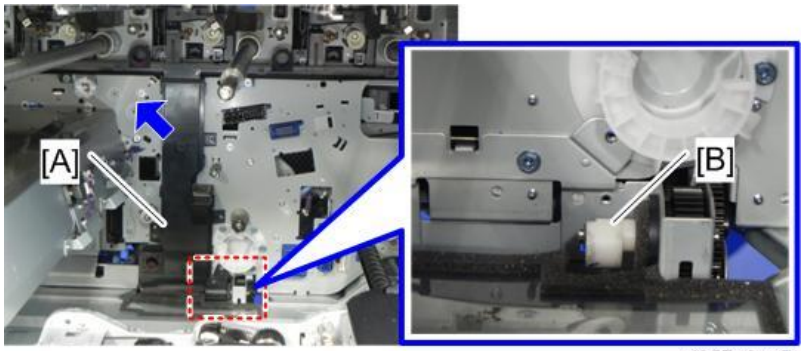


4. Remove the duct [A].



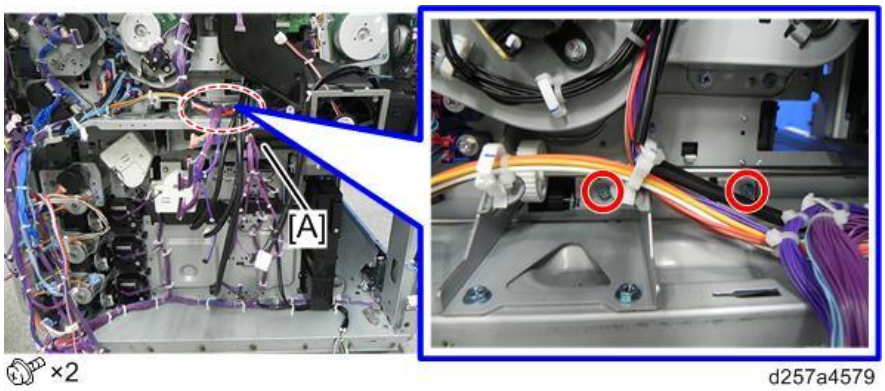
5. Because of the cam [B] at the bottom, remove the waste toner vertical transporting section [A] in

the upper-left direction.



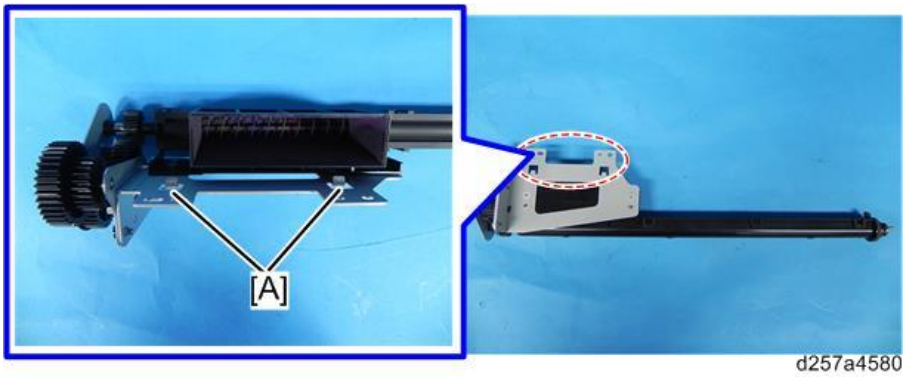
Waste Toner Lower Transporting Section

1. Remove the PSU1/PSU2 along with the bracket. (When removing the motors and sensors that are behind the PSU1 and PSU2)
2. Remove the relay duct with swinging plate. (Waste Toner Bottle Unit)
3. Remove the waste toner lower transporting section [A].



Note

- Check the position of the hooks [A] in the photo below before removing.

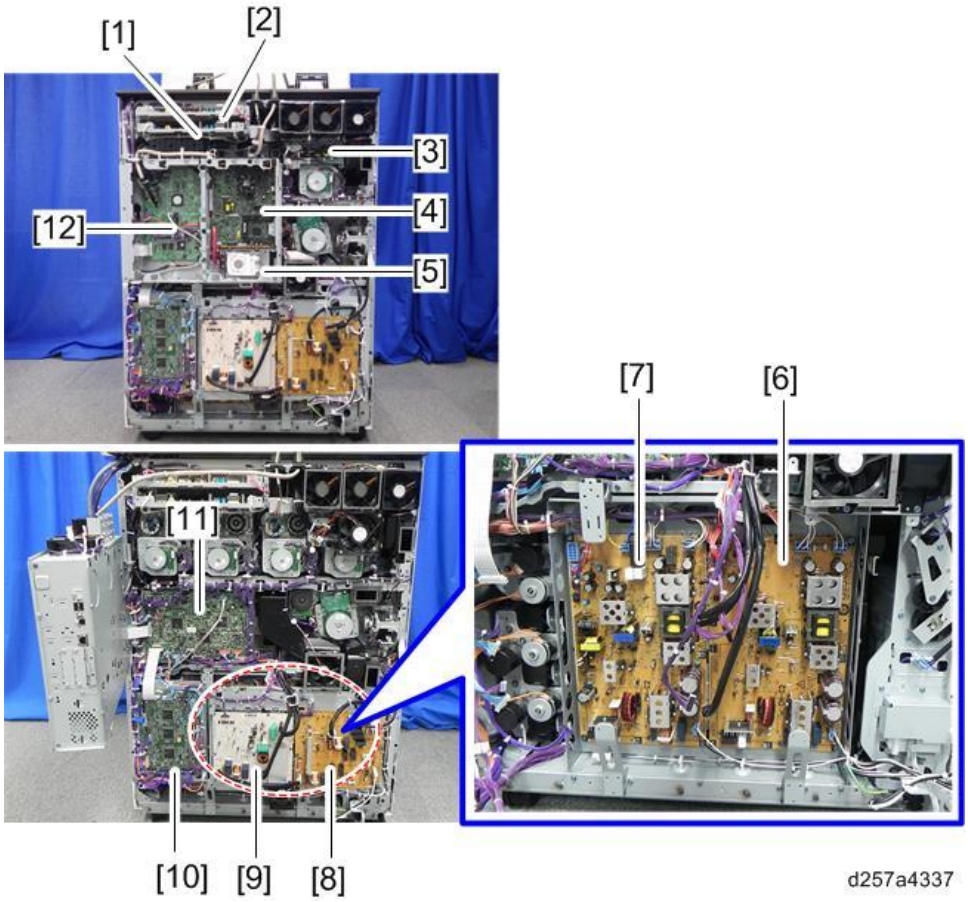


- When installing, first install the waste toner lower transporting section, then install the relay duct with swinging plate. (Installing the Relay Duct)

Main Boards, and HDD Unit

Layout (Boards)

To replace the electrical components on the back of the machine, first remove the outer cover. (Rear Cover)

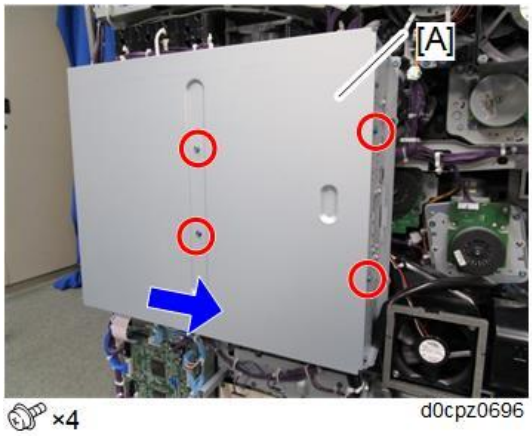


No.	Part Name	Replacement procedure	Remarks
1	Combined High-Voltage Power Supply Board:KC (PCB11)	Combined High-Voltage Power Supply Board:KC (PCB11)	
2	Combined High-Voltage Power Supply Board:MY (PCB10)	Combined High-Voltage Power Supply Board:MY (PCB10)	
3	Potential Sensor Board (PCB31)	Potential Sensor Board (PCB31)	Located behind the drive exhaust fan
4	Controller Board (PCB30)	Controller Board (PCB30)	
5	HDD Unit (HDD1)	HDD Unit (HDD1)	
6	PSU2 (PCB33)	PSU1 (PCB34), PSU2 (PCB33)	Located behind the AC drive board/IH inverter
7	PSU1 (PCB34)	PSU1 (PCB34), PSU2 (PCB33)	Located behind the AC drive board/IH inverter
8	AC Drive Board (PCB32)	AC Drive Board (PCB32)	

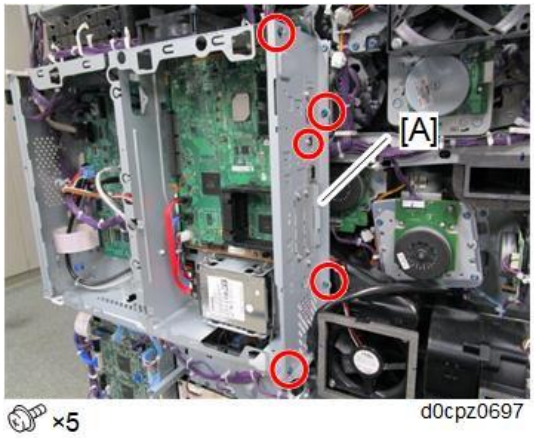
No.	Part Name	Replacement procedure	Remarks
9	IH Inverter (PCB35)	IH Inverter (PCB35)	
10	PFB (PCB36)	PFB (PCB36)	
11	IOB (PCB1)	IOB (PCB1)	Located behind the controller box
12	BICU (PCB14)	BICU (PCB14)	

Controller Board (PCB30)

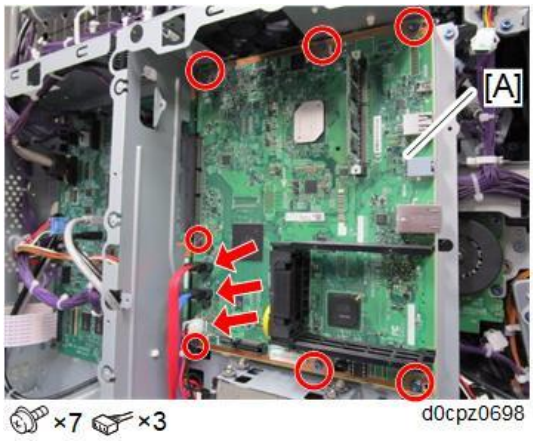
1. Remove the controller box cover [A].



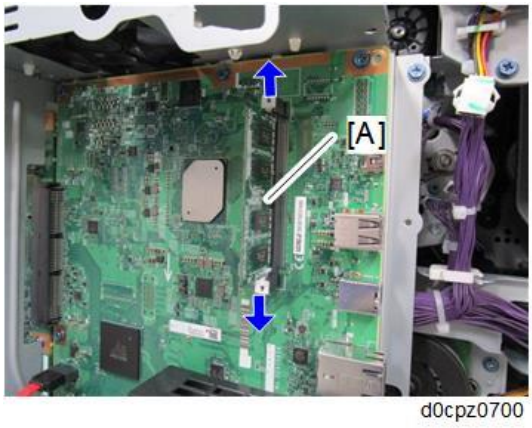
2. Remove the controller panel plate [A].



3. Remove the controller board (PCB30) [A].



4. Remove the DIMM [A] by releasing the locks.

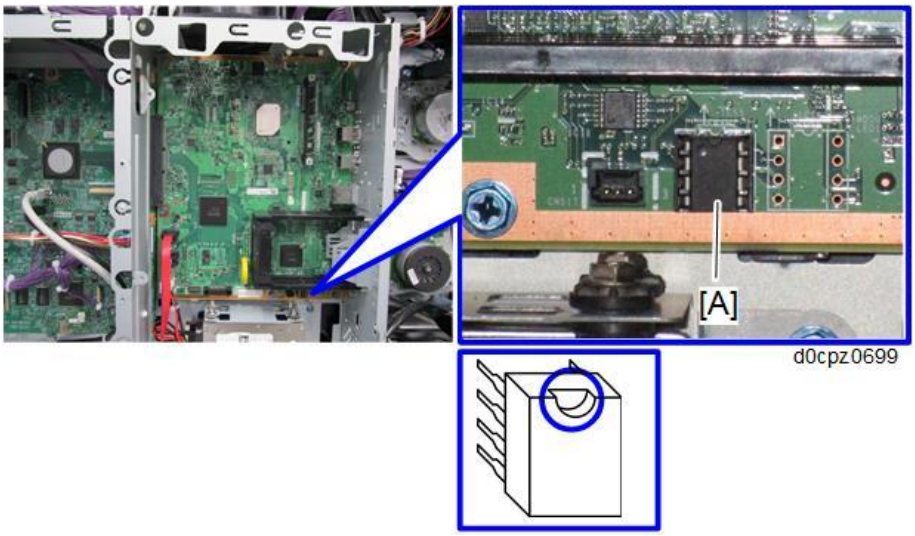


Important

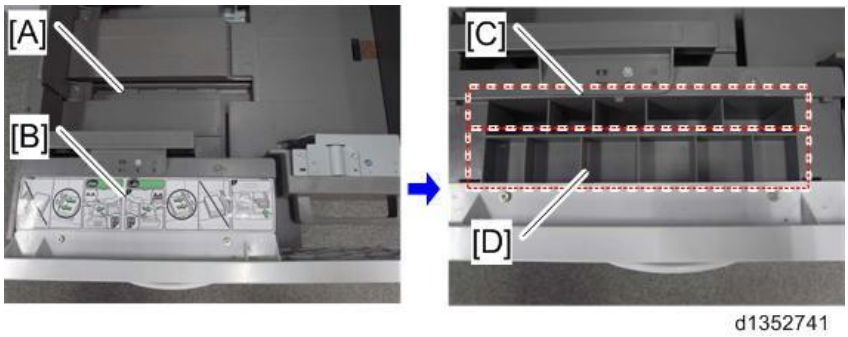
- There are two types of controller boards, one for Pro C5310S/IM C8000 and one for Pro C5300S/IM C6500.
- The two controller boards have different part numbers, so check the part number in the parts catalog to make sure you are installing the correct type. If you install the wrong board, the machine will not work.

When Installing the New Controller Board

The machine has an NVRAM [A] on the controller board.
When replacing the controller board, remove the NVRAM from the old controller board. Then install it on the new controller board. If this is not done, SC195-00 occurs.



- When replacing the controller board, first, check which ESA applications have been installed. After replacing the controller board, re-install the ESA applications by following the installation instructions for each application.
- After reinstalling the ESA applications, print the SMC (SP-5-990-024/025 (SMC: SDK/Application Info)). Then open the tandem tray [A] and remove the paper set sheet [B]. Store the SMC sheet [C] and the SD card(s) [D] that were used to install the ESA application(s).



HDD Unit (HDD1)

The HDD contains two separate hard disks.

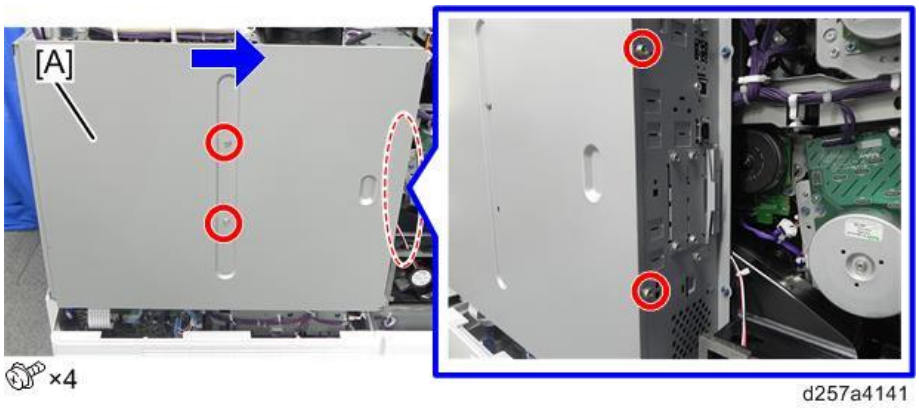
Before replacing the HDD unit, copy the address book data to an SD card from the HDD with SP5846-051 if possible.

Important

- Never remove an HDD unit from the work site without the consent of the client.
- The two disks are always replaced together as a unit. Never attempt to replace a single disk.

1. Remove the rear middle cover. (Rear Middle Cover)

2. Remove the controller box cover [A].



3. Remove the HDD unit (HDD1) [A].

After Installing the New HDD Unit

1. Do SP5-832-001 to format the hard disk.
2. Do SP5-853-001 to copy the preset stamp data from the firmware to the hard disk.
3. Do SP5-846-052 to copy back the address book to the hard disk from the SD card to which you have already copied the address book data if possible.
4. Do SP5-801-018 to clear the paper related settings.
5. Turn the main power switch off/on.

Important

- Make sure the cables are correctly connected on the controller board.
  Red cable: Upper socket
  Blue cable: Lower socket
- If the connections are reversed, the machine will issue an error at startup. If it occurs just reconnect the HDD correctly and start again. This incorrect startup does not damage the HDD.

Disposal of HDD Units

- If the customer has any concerns about the security of any information on the HDD, the HDD must remain with the customer for disposal or safe keeping.

- The HDD may contain proprietary or classified (Confidential, Secret) information. Specifically, the HDD contains document server documents and data stored in temporary files created automatically during copy job sorting and jam recovery. Such data is stored on the HDD in a special format so it cannot normally be read but can be recovered with illegal methods.

Reinstallation

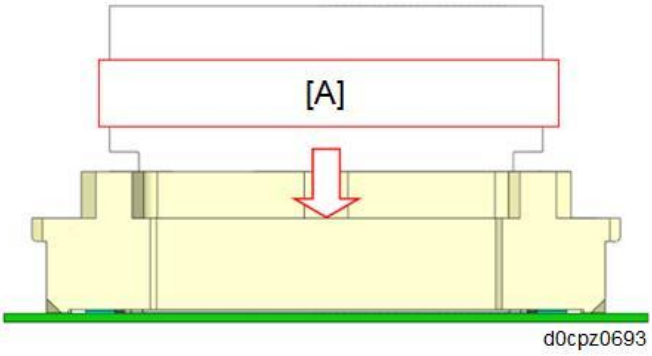
- Explain to the customer that the following information stored on the HDD is lost when the HDD is replaced: document server documents, fixed stamps, document server address book
- The address book and document server documents (if needed) must be input again.
- If the customer is using the Data Overwrite Security, the Data Encryption feature or OCR Scanned PDF, these applications must be installed again.

BICU (PCB14)

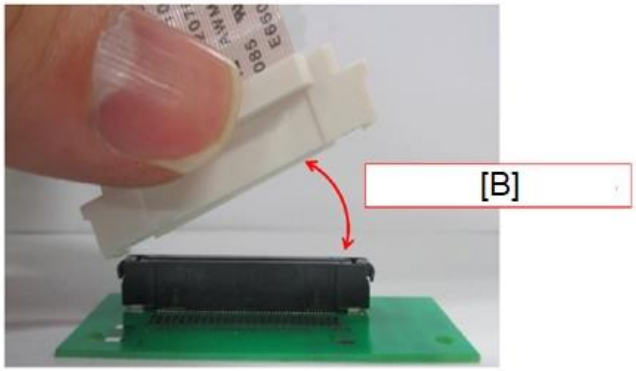
Note

When Connecting the FFC:

- **Insert the connector vertically [A], within the angle of 25° [B].**

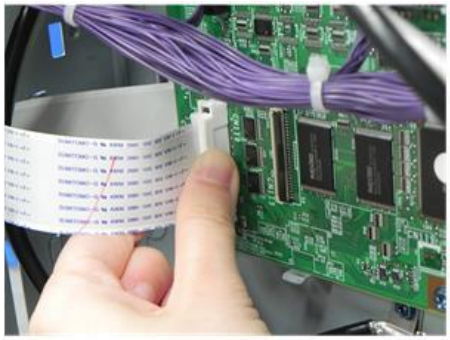


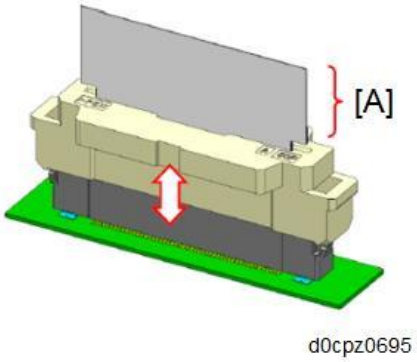
d0cpz0693



d0cpz0694

- **Hold the plastic part** (Do not hold the FFC [A]).





d0cpz0695

1. Remove the rear middle cover. (Rear Middle Cover)
2. Remove the controller box cover [A].

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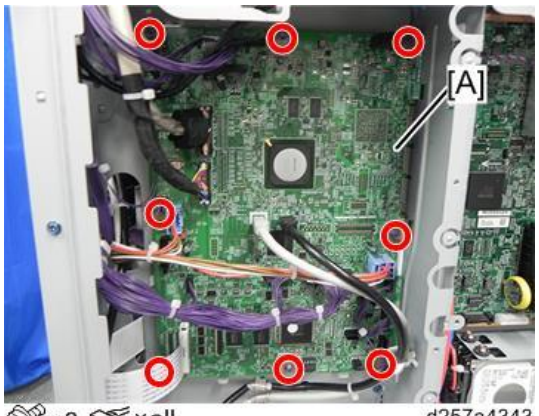
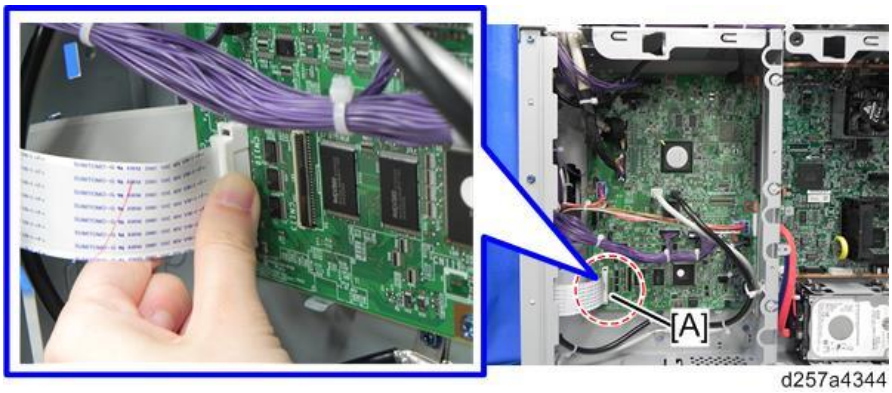
3. Remove the BICU (PCB14) [A].



d257a4343

Note

- When disconnecting the connector [A], hold it as shown below.



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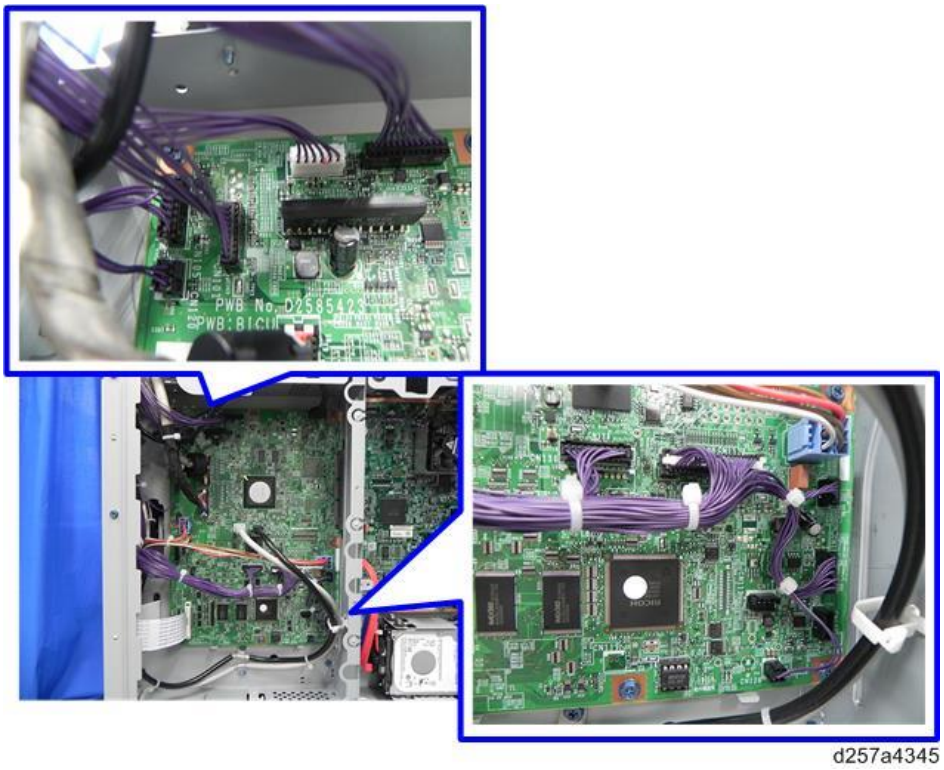
Wiring path



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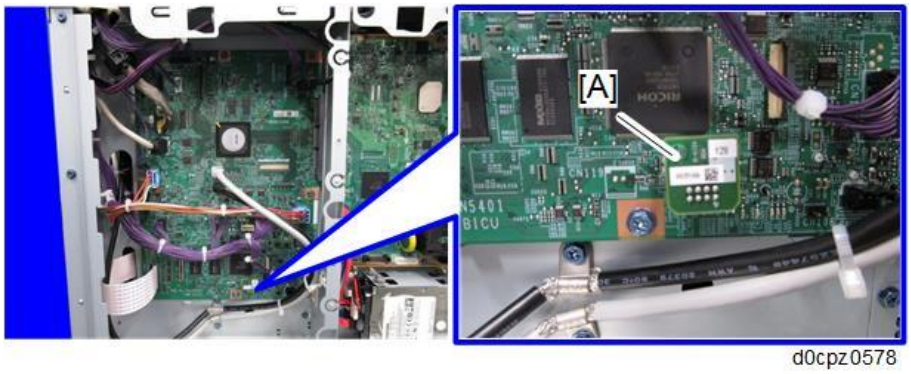
Installing the new BICU

1. After replacing the BICU, attach the SMB [A] from the removed BICU to the new BICU.



d0cpz0578

Note

If turning ON the main power without SMB, the machine cannot start.

2. Input the machine serial number to BICU using SP5-811-004.

Note

If the serial number is incorrect, SC995-01 may occur.

3. Turn OFF then ON the main power.

NVRAM/SMB Replacement Procedure

⚠CAUTION

- When removing the NVRAM/SMB, do not put the NVRAM/SMB near a static charge. The data stored in the NVRAM/SMB might be damaged by the static charges.

There is a single pair of NVRAM/SMB in the machine: NVRAM on the controller board and SMB on the BICU.

Important

DO NOT replace the NVRAM on the controller board and the SMB on the BICU simultaneously.

Doing so will cause the following symptoms when turning ON the machine:

- Status light red
- SC195 and SC995-1
- Toner cartridge set error
- Fusing unit set error

NEVER lose either the original NVRAM on the controller board or the original SMB on the BICU. If they are lost, the machine will not recover even if they are replaced with a new set of NVRAM/SMB.

NVRAM on the Controller Board

1. Make sure that you have the SMC report (factory settings). This report comes with the machine.
2. Print out the SMC data (“ALL”) in SP5-990-001.
3. Turn OFF the main power switch.
4. Insert a blank SD card into slot #2, and then turn on the main power switch.
5. Upload the Address Book Data to the blank SD card in SP5-846-051 (UCS Setting / Back Up All Addr Book).

Note

- **Procedure for IM C6500/C8000 only**

  If the Fax Option is installed on the machine, do the following:

  - Print out the "Box Setting List". (Settings > Fax Setting > Reception Settings > Box Setting: Print List
  - Print out the "Program Special Sender List". (Settings > Fax Setting > Reception

Settings > Register Special Sender > Register Special Sender: Print List

- Take note of the settings in "Settings > Fax Setting > Reception Settings".
- Take note of the settings in "Settings > Fax Setting > Send Settings".

6. Turn OFF the main power switch, and then unplug the AC power cord.
7. Remove the SD card containing the Address Book Data from slot #2.
8. Insert another blank SD card into slot #2, plug in the AC power cord, and then turn on the main power switch.
9. Upload the NVRAM data to the blank SD card in SP5-824-001 (NVRAM Data Upload).

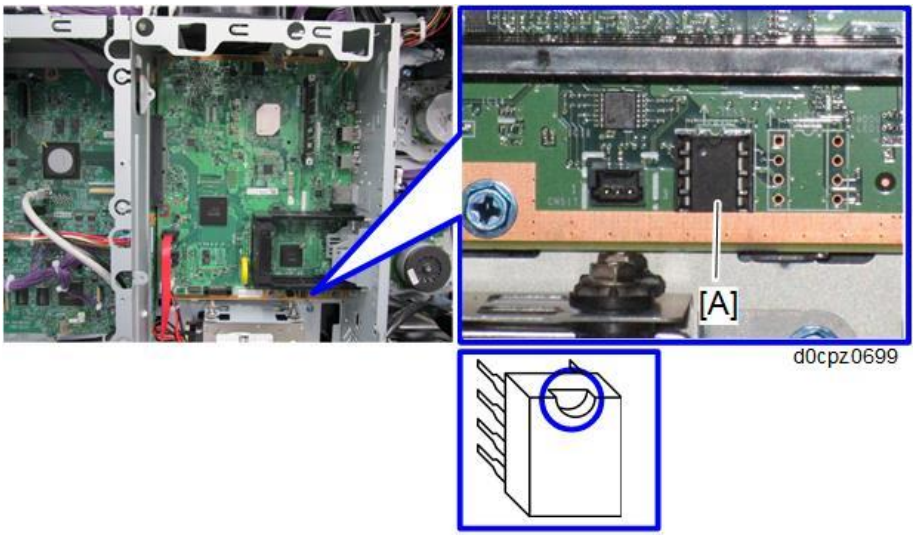
Important

- Make sure to note the following SP settings as they will not be automatically uploaded to the SD card. These settings will be input manually in Step 16.
  - SP5-193-001 (External Controller Info. Setting)
    0: No external controller, 1: EFI controller
  - SP5-895-001 (Application invalidation / Printer)
    0: Valid, 1: Invalid
  - SP5-895-002 (Application invalidation / Scanner)
    0: Valid, 1: Invalid
  - SP5-985-001 (Device Setting / On Board NIC)
    0: Invalid, 1: Valid
  - SP5-985-002 (Device Setting / On Board USB)
    0: Invalid, 1: Valid

10. Turn OFF the main power switch, and then unplug the AC power cord.
11. Remove the SD card containing the NVRAM data from slot #2.
12. Replace the NVRAM on the Controller Board with the new one.

Note

- There is one NVRAM on the controller board as mentioned in When Installing the New Controller Board.



- Work carefully to avoid mistakes when installing the NVRAM. Incorrect installation will damage both the NVRAM and controller board.

13. Plug in the AC power cord, and then turn ON the main power switch.

Important

- **DO NOT** insert the SD card containing the NVRAM data that you removed in Step 7 before turning on the main switch.
- SC995-02 (Defective NVRAM) will appear when powering on the main power switch, but ignore this SC. DO NOT turn off the main power switch. Continue with this procedure.

14. Re-insert the SD card containing the NVRAM data that you removed in Step 5 back into slot #2.

15. Download the old NVRAM data from the SD card onto the new NVRAM in SP5-825-001 (NVRAM Data Download).

Note

- This will take about 2 or 3 minutes.

Important

- After the download completes, "Completed. You have to reboot." will appear, but ignore this message and press the “Exit” button. DO NOT reboot at this moment.
- SC870-11 (Address Book Data Error) will appear in the banner, but DO NOT turn off the main power switch. Continue with this procedure.

16. Input the following SP settings according to the notes took in Step 5.

- SP5-193-001 (External Controller Info. Setting)
- SP5-895-001 (Application invalidation / Printer)
- SP5-895-002 (Application invalidation / Scanner)
- SP5-985-001 (Device Setting / On Board NIC)
- SP5-985-002 (Device Setting / On Board USB)

Important

- "Completed. You have to reboot." will appear after inputting each of the above SP settings, but ignore this message and press the “Exit” button. DO NOT reboot at this moment.

17. Turn OFF the main power switch. This will take about 3 minutes. Wait until the machine power is turned off completely, and then remove the SD card from slot #2.

18. Turn ON the main power switch.

19. Insert the SD card containing the Address Book Data removed in Step 11 into slot #2.

20. Execute SP5-846-052 (UCS Setting / Restore All Addr Book) to download the Address Book Data on to the new NVRAM.

Note

- SP5-846-052 will fail, if the settings in SP5-193-001, SP5-985-001 and SP5-985-002 input in Step 16 are incorrect.
- "Completed. You have to reboot." will appear if SP5-846-052 results in success.

21. Turn OFF the main power switch and remove the SD card from slot #2.

22. Turn ON the main power switch.

Note

- **Procedure for IM C6500/C8000 only**
  Make sure that the “Reception Settings” and “Send Settings” correspond with the notes took in Step 9. Correct the settings if they are wrong.

23. Print out the SMC data (“ALL”) in SP5-990-001, and make sure that it matches the SMC data printed out in Step 2 (except for the total counter value).

Note

- The total counter value is reset to “0” when the NVRAM is replaced.

24. Do the self-check Process Control.
25. Do ACC for the copier application program.
26. Do ACC for the printer application program.

Important

- If you cannot execute SP5-824-001 (NVRAM Data Upload) and SP5-825-001 (NVRAM Data Download) for some reason, try the following.
  - Restore the settings manually with all the data on the SMC report (factory default setting) provided with the machine.
  - Reinstall the Data Overwrite Security function and HDD Encryption feature.

Note

- If the message “SD card for restoration is required.” appears after the NVRAM replacement, restore the encryption key.

SMB on the BICU

Before performing the following procedure, contact your supervisor to obtain information on how to input the machine serial number in the new SMB.

1. Make sure that you have the SMC report (factory settings). This report comes with the machine.
2. Print out the SMC data (SP5-990-001).
3. Turn OFF the main power switch.
4. Install an SD card into SD card slot #2 and then, turn on the main power switch.
5. Copy the SMB data to an SD card (SP5-824-001).
6. Turn OFF the main power switch, and then unplug the power cord.
7. Replace the SMB on the BICU and put back the covers.
8. Plug in the power cord, and then turn on the main power switch.
9. Select the paper-size system in SP5-131-001 (Paper Size Type Selection).
   0: DOM (JAPAN)
   1: NA
   2: EU
10. Specify the area code in SP5-807-001.
    1: DOM (JAPAN)

2: NA

3: EU

4: TWN

5: AA

6: CHN

Note

- Setting the wrong area code will cause the system to display SC995-04(CPM Set Error).

11. Input the machine serial number according to the procedure instructed by your supervisor.

Note

- Inputting an incorrect serial number will cause the system to display SC195-00 (Serial Number Set Error).

12. Turn the main power switch off and on.

13. Copy the data from the SD card to the SMB (SP5-825-001).

14. Turn OFF the main power switch, and then remove the SD card from SD card slot #2.

15. Turn ON the main power switch.

16. Specify the SP and UP mode settings, if necessary.

17. Do the self-check Process Control.

18. Do ACC for the copier application program.

19. Do ACC for the printer application program.

Note

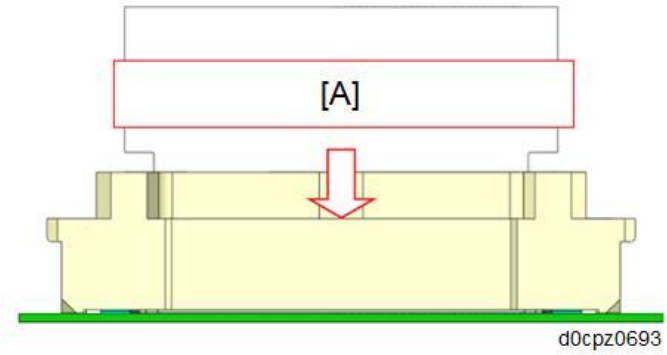
- If the message “SD card for restoration is required.” appears after the SMB replacement, restore the encryption key.

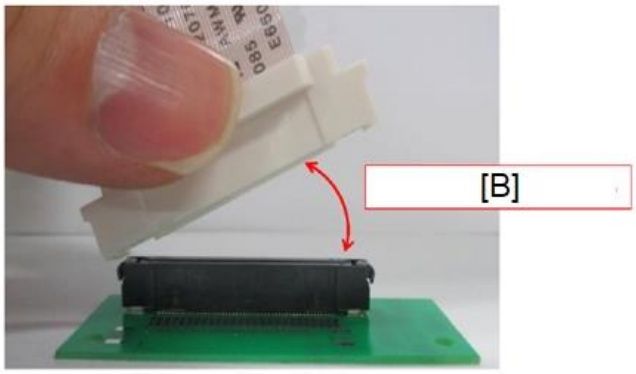
IOB (PCB1)

Note

When Connecting the FFC:

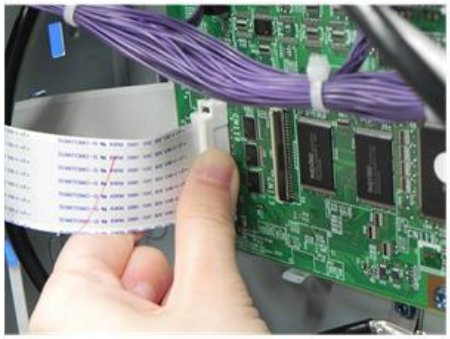
- **Insert the connector vertically [A], within the angle of 25° [B].**

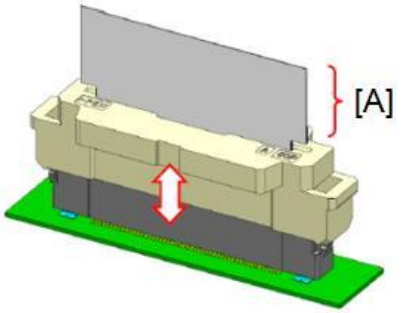




d0cpz0694

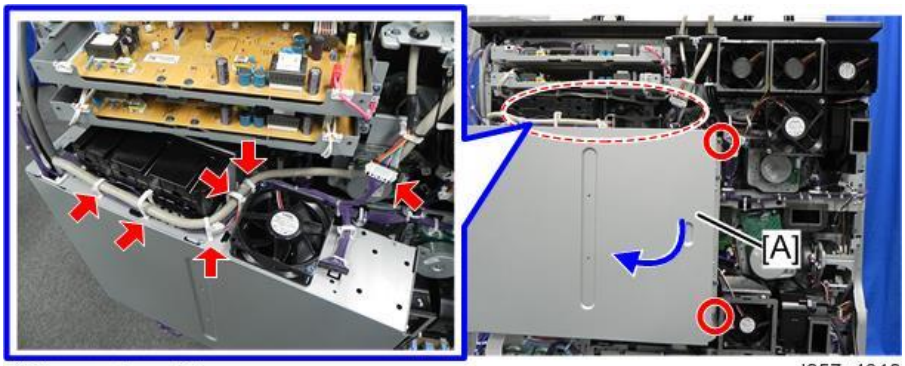
- **Hold the plastic part** (Do not hold the FFC [A]).





d0cpz0695

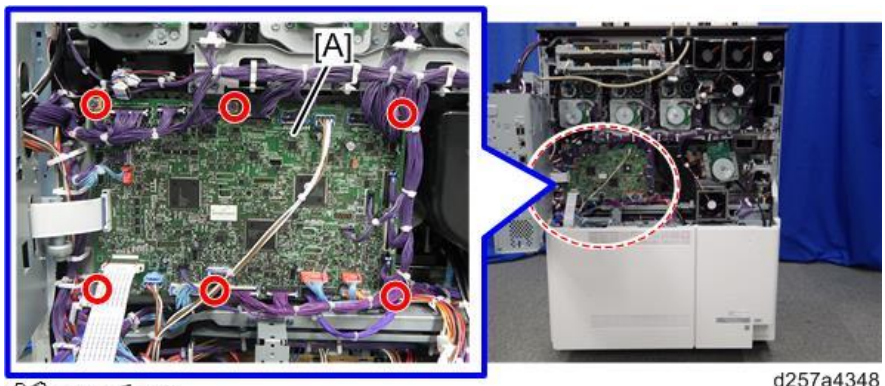
1. Remove the rear middle cover. (Rear Middle Cover)
2. Open the controller box [A].



×2 ×1 ×5

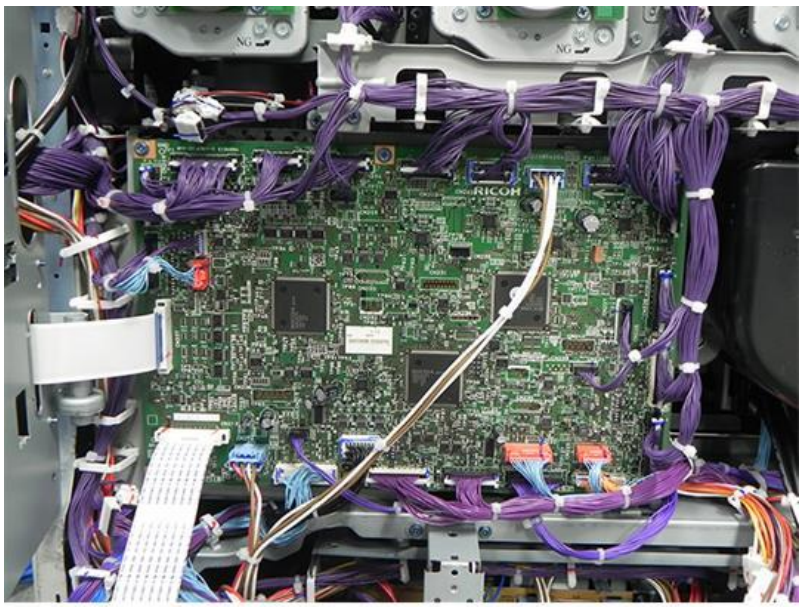
d257a4318

3. Remove the IOB (PCB1) [A].



×6 ×all d257a4348

Wiring path

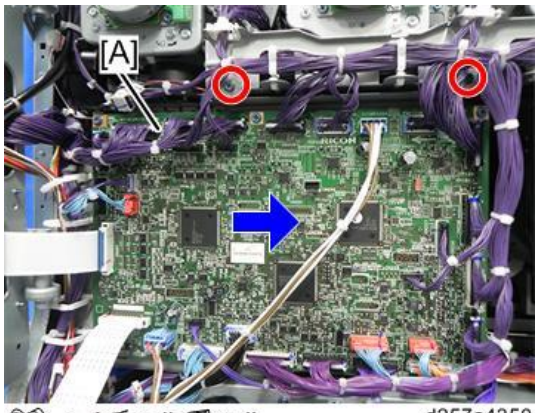


d257a4349

When removing the motors that are behind the IOB

1. Disconnect all connectors on the IOB.

2. Remove the IOB [A] along with the bracket by sliding it to the right.



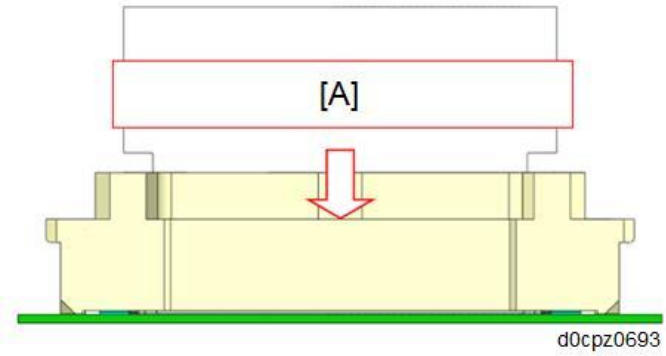
×2 ×all ×all d257a4350

PFB (PCB36)

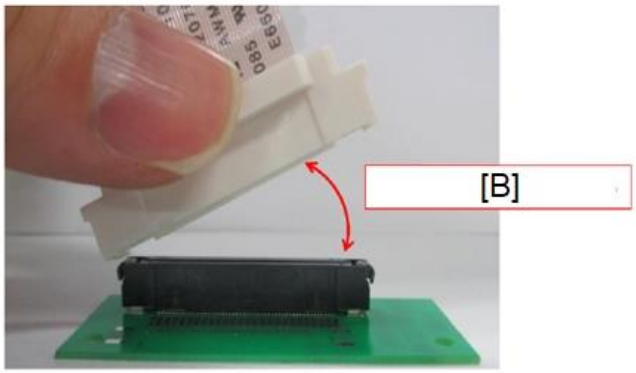
Note

When Connecting the FFC:

- **Insert the connector vertically [A], within the angle of 25° [B].**

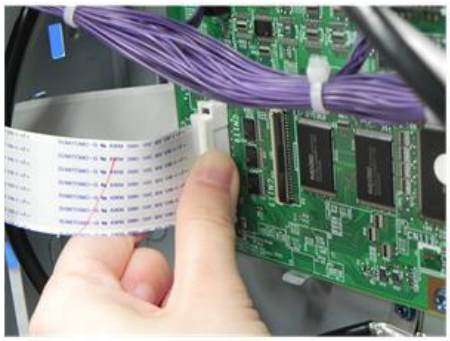


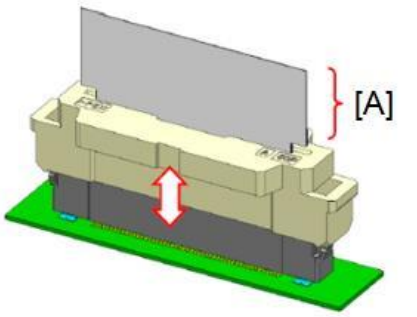
d0cpz0693



d0cpz0694

- **Hold the plastic part** (Do not hold the FFC [A]).

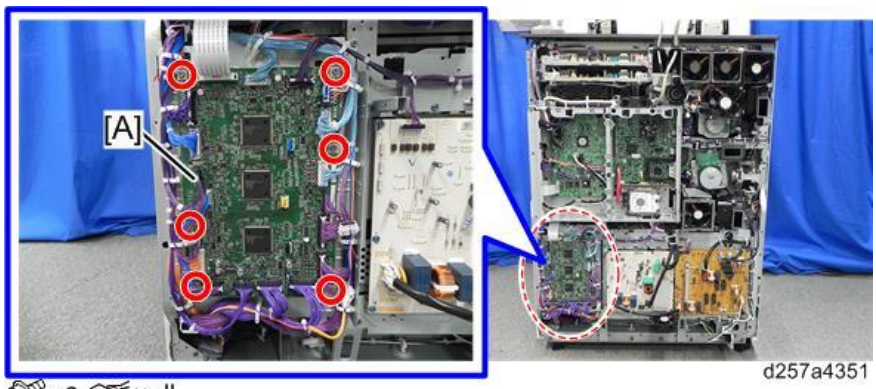




d0cpz0695

1. Remove the rear lower cover. (Rear Lower Cover)

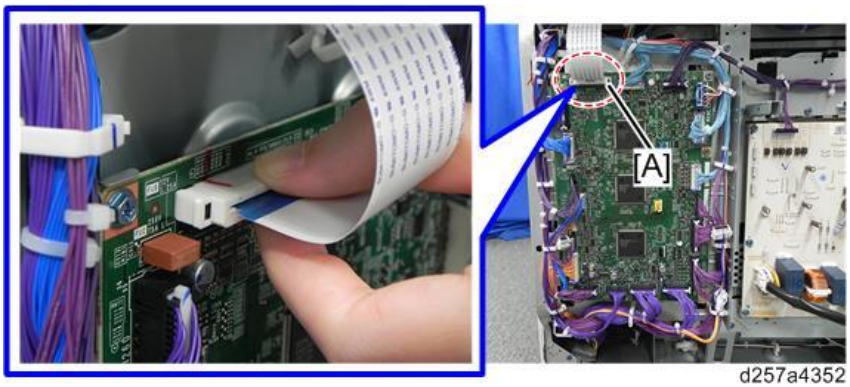
2. Remove the PFB (PCB36) [A].



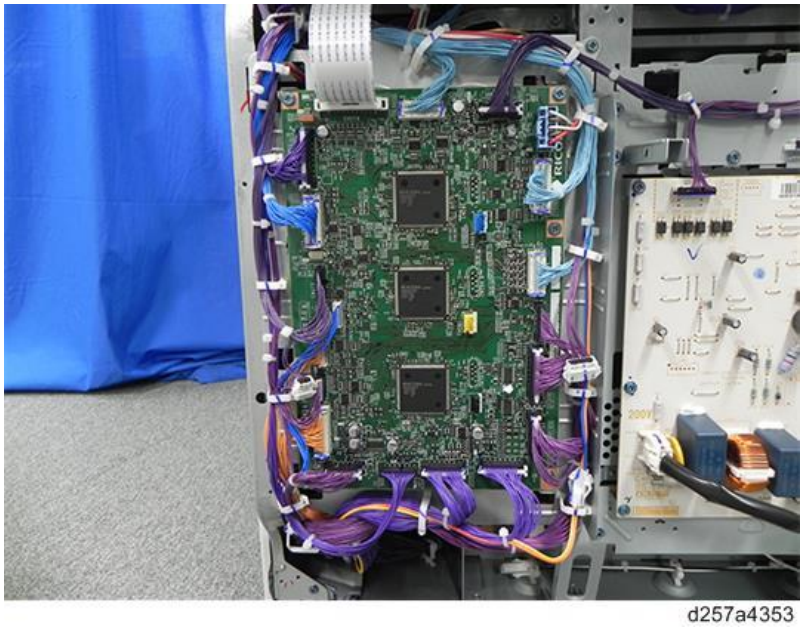
×6 ×all

Note

- When disconnecting the connector [A], hold it as shown below.

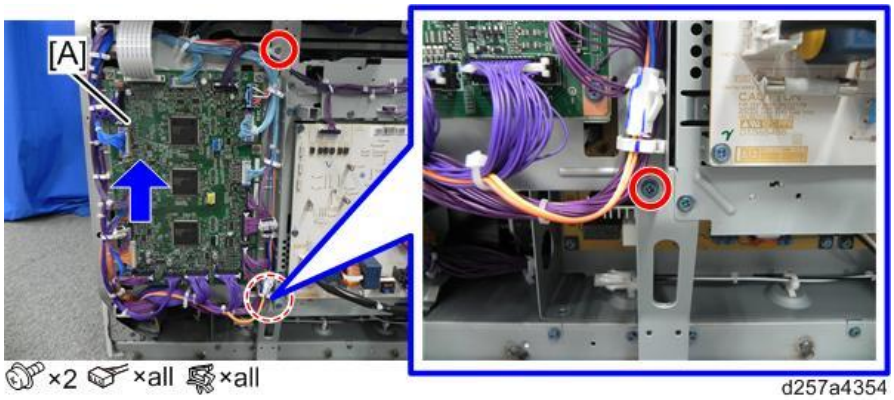


Wiring Path



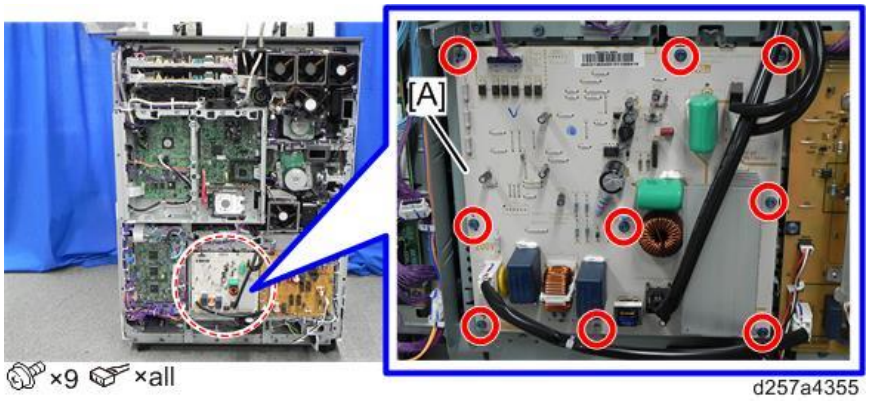
When removing the motors that are behind the PFB

1. Remove the PFB [A] along with the bracket by sliding it upwards.



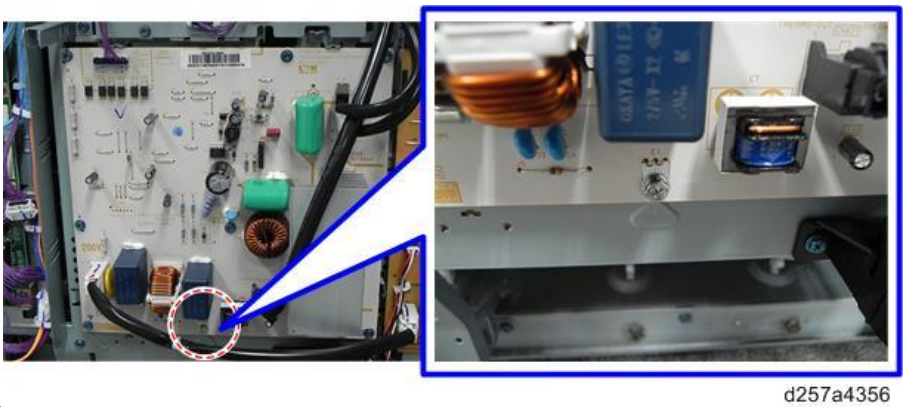
IH Inverter (PCB35)

1. Remove the rear lower cover. (Rear Lower Cover)
2. Remove the IH inverter (PCB35) [A].



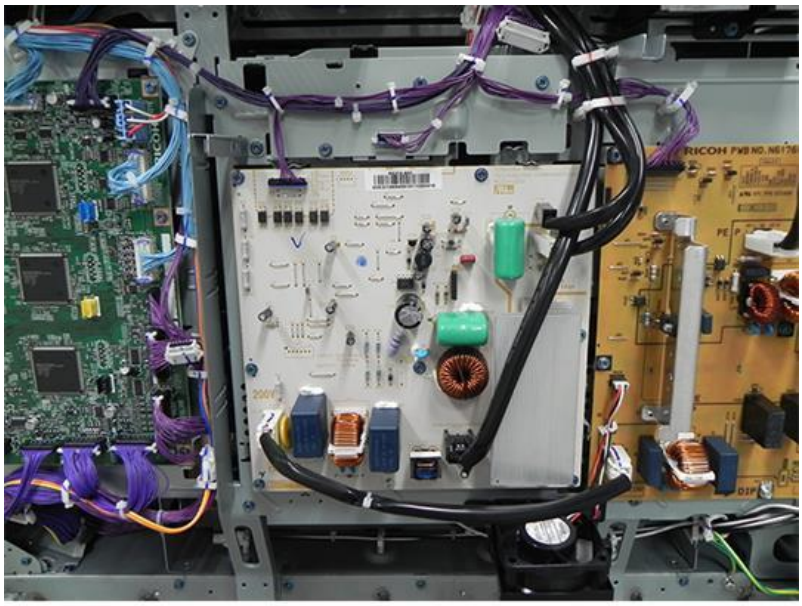
Note

- A washer is used with the screw in the picture below, so it is different from the other



screws.

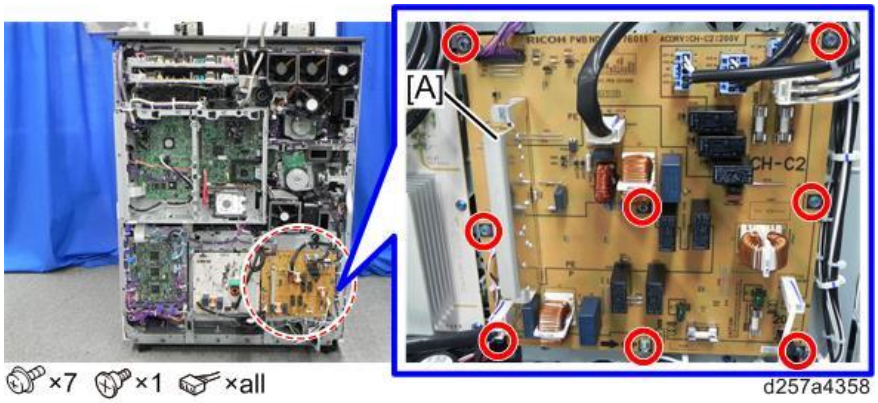
Wiring path



d257a4357

AC Drive Board (PCB32)

1. Remove the rear lower cover. (Rear Lower Cover)
2. Remove the AC drive board (PCB32) [A].

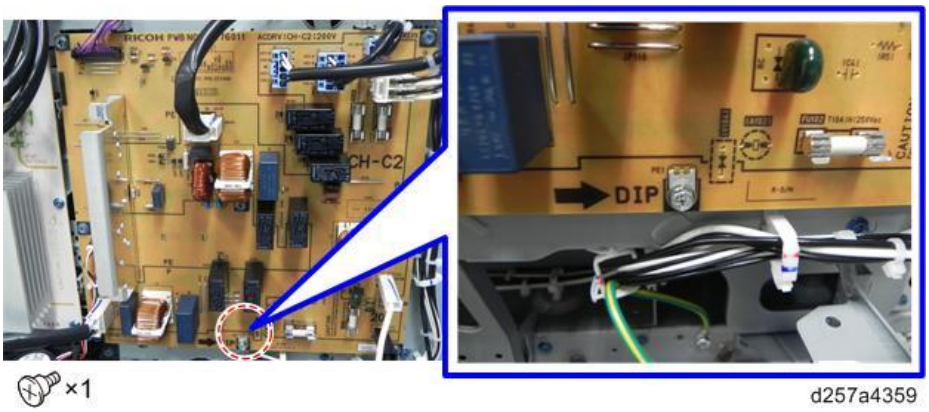


d257a4358

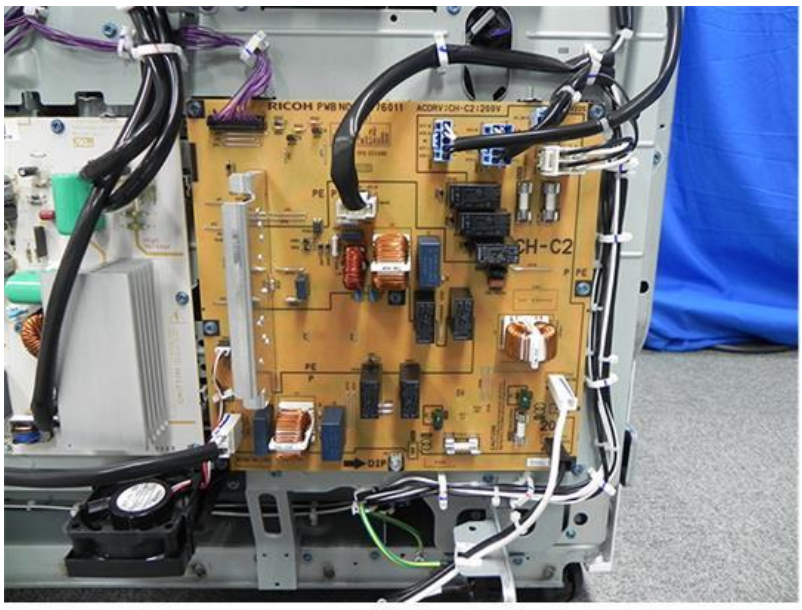
Note

- A shoulder screw is used at the location highlighted in the picture below, which is a

different type from the others.



Wiring path



PSU1 (PCB34), PSU2 (PCB33)

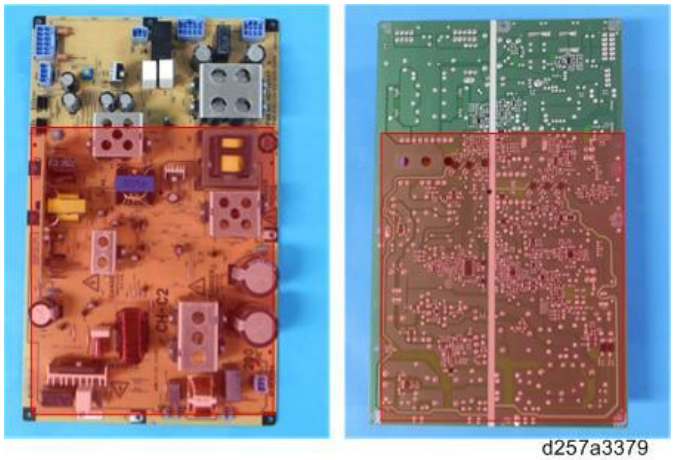
⚠CAUTION

NEVER touch the areas outlined in red in the photos below. This is to prevent electric shock caused by residual charge.

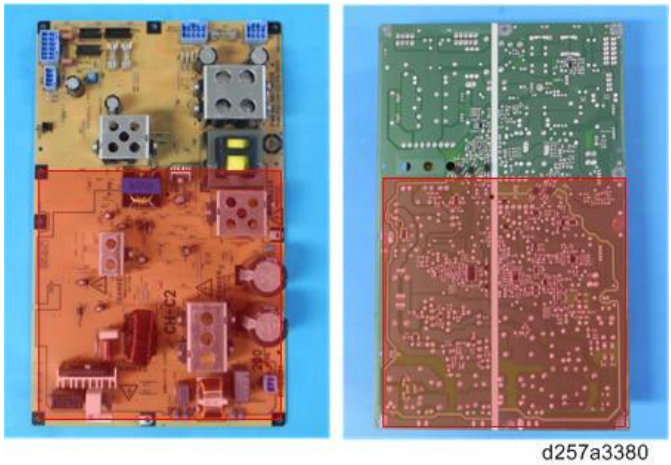
A residual charge of about 100V-400V remains in the AC circuits on the PSU board for several months, even when the board has been removed from the machine after turning off the machine power and unplugging the power cord.

The procedure to discharge residual charge from the machine by unplugging the power cord from the AC wall outlet and pressing the main power switch works only for the DC circuits on this board. Residual charge remains in the AC circuits.

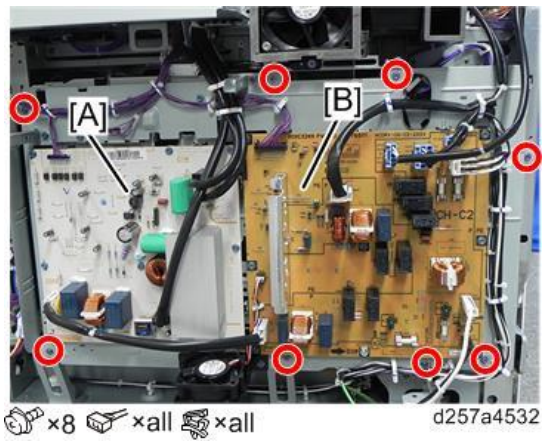
PSU1



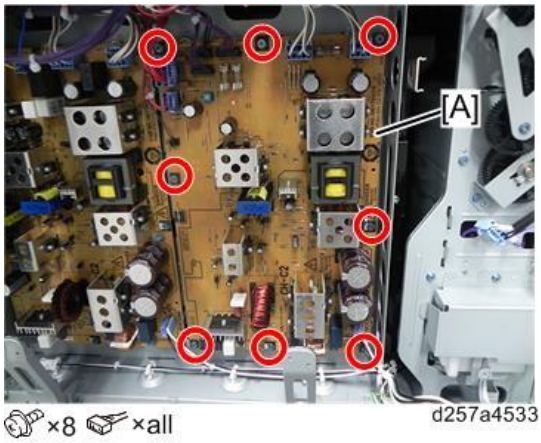
PSU2



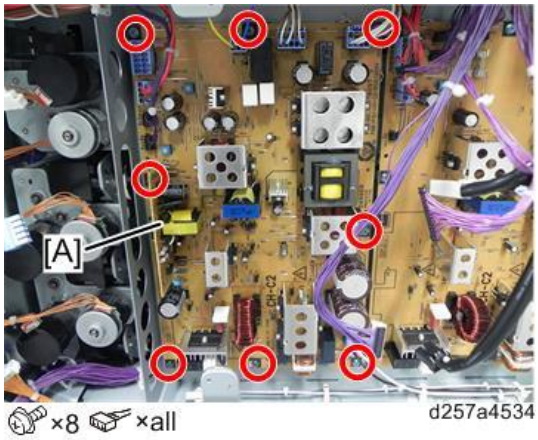
1. Remove the IH Inverter (PCB35) [A] and AC drive board (PCB32) [B] along with the bracket.



2. Remove the PSU2 (PCB33) [A].

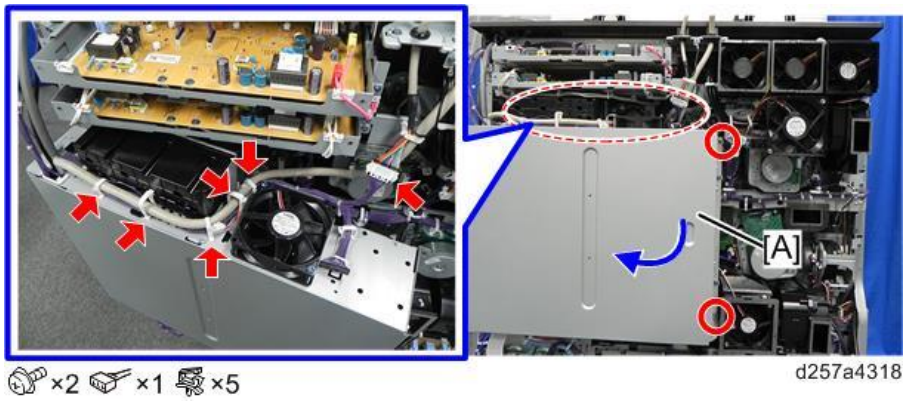


3. Remove the PFB along with the bracket. (When removing the motors that are behind the PFB)
4. Remove the PSU1 (PCB34) [A].

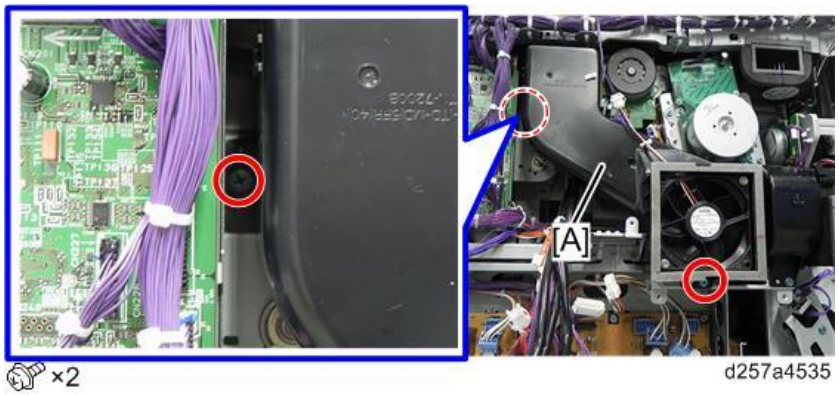


When removing the motors and sensors that are behind the PSU1 and PSU2

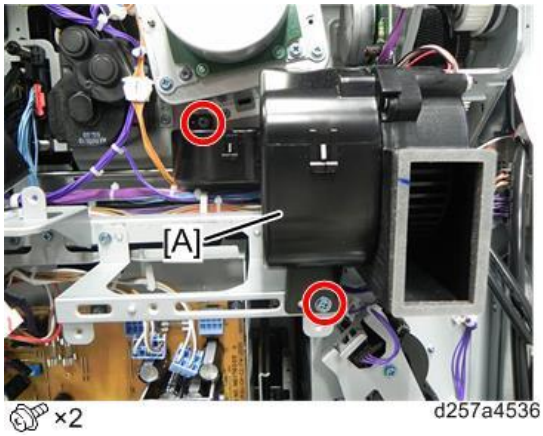
1. Remove the rear lower cover. (Rear Lower Cover)
2. Open the controller box [A].



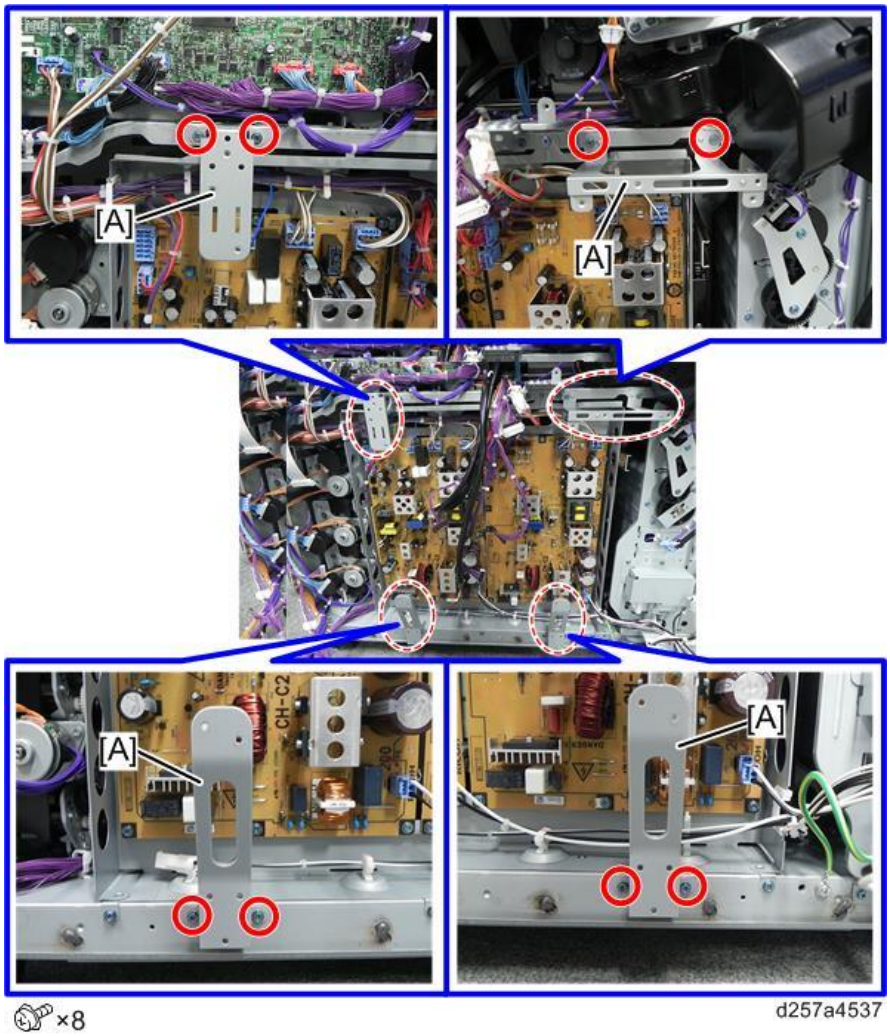
3. Remove the fixing screws of the paper transfer belt fusing exhaust fan [A].



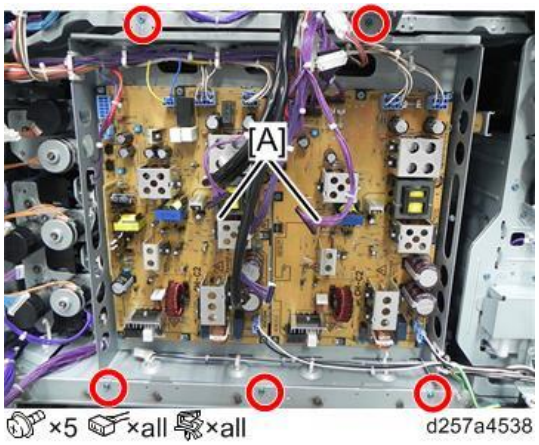
4. Remove the fixing screws of the fusing pressure roller exhaust fan [A]. (Pro C5300S/C5310S only)



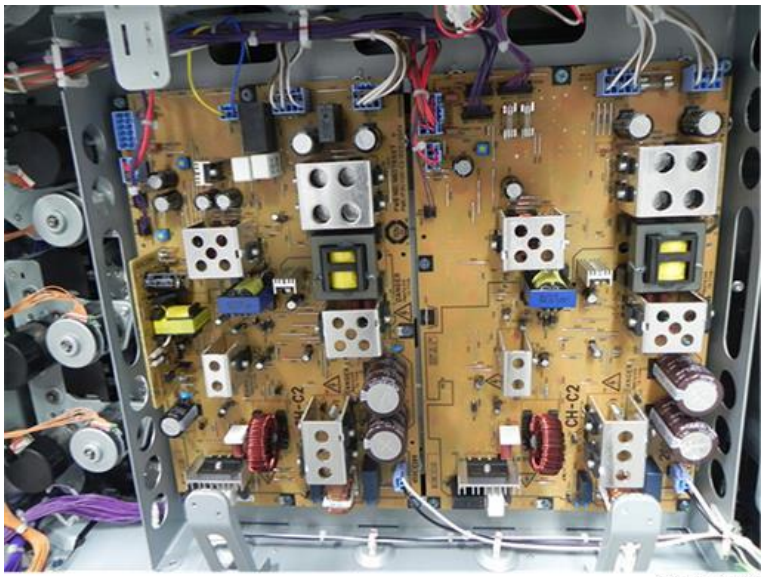
5. Remove the stays [A].



6. Remove the PSU1 and PSU2 [A] along with the bracket.



Wiring path



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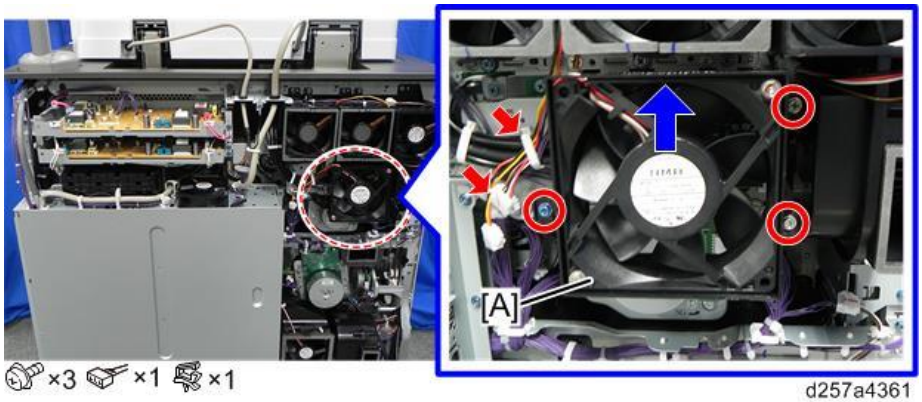
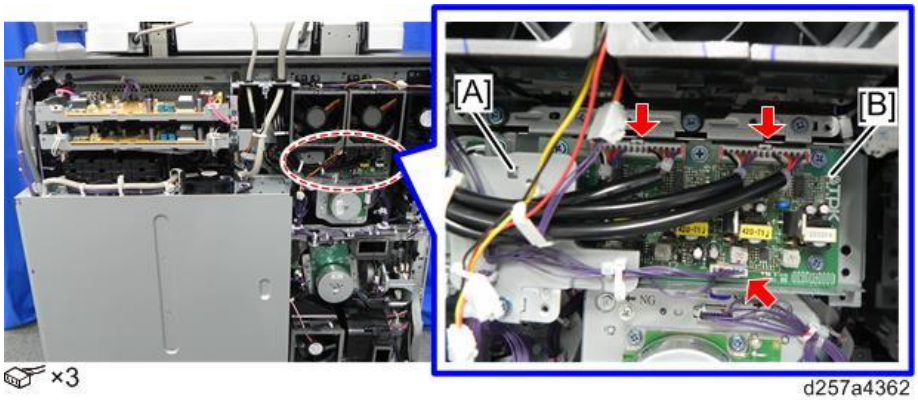
Potential Sensor Board (PCB31)

1. Remove the rear middle cover. (Rear Middle Cover)
2. Slide the drive exhaust fan [A] upward along with the duct.



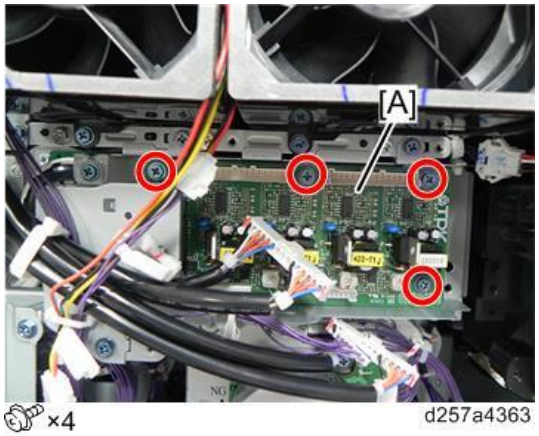
d257a4361

3. Remove the connectors of the harness guide [A] and the potential sensor board (PCB31) [B].



d257a4362

4. Remove the potential sensor board (PCB31) [A].

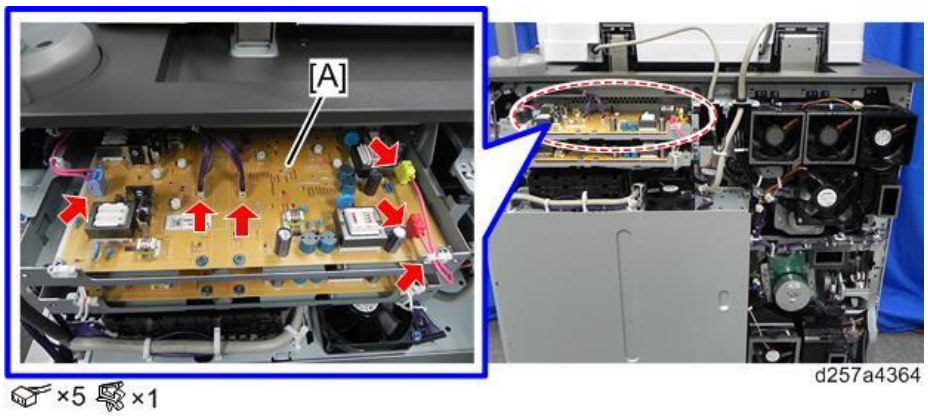


Combined High-Voltage Power Supply Board (Charge/Development) (KCMY)

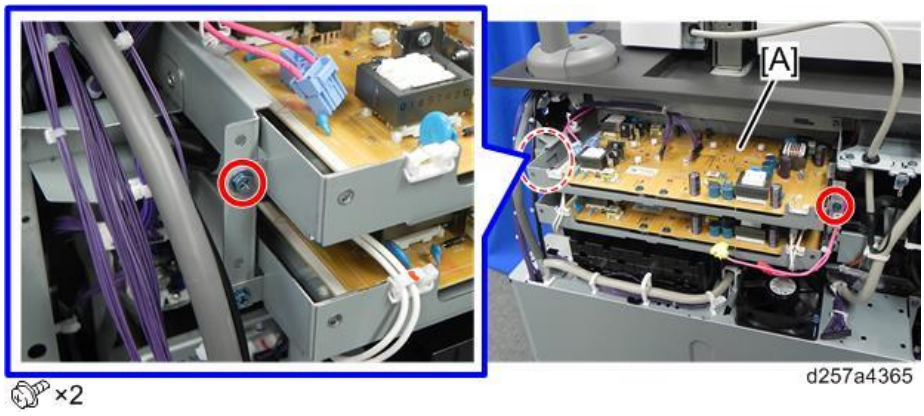
Combined High-Voltage Power Supply Board:MY (PCB10)

1. Remove the rear middle cover. (Rear Middle Cover)

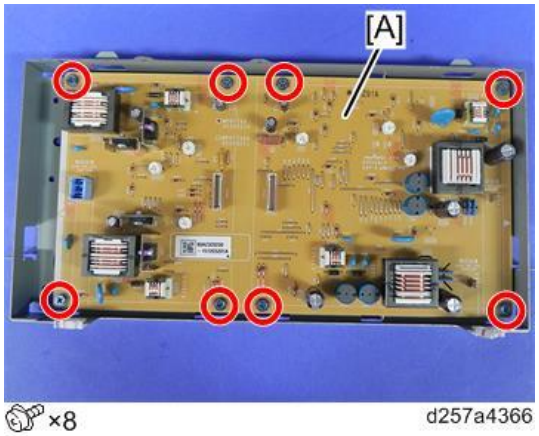
2. Disconnect the connectors of the combined high-voltage power supply board:MY (PCB10) [A].



3. Remove the combined high-voltage power supply board:MY (PCB10) [A] along with the bracket.

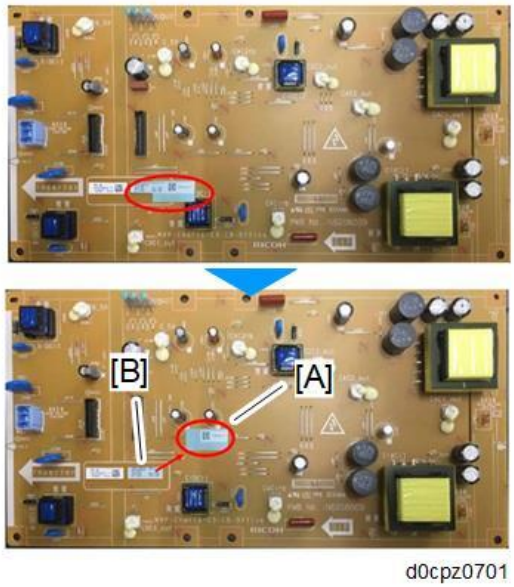


4. Remove the combined high-voltage power supply board:MY (PCB10) [A].



Additional Steps for IM C6500/C8000

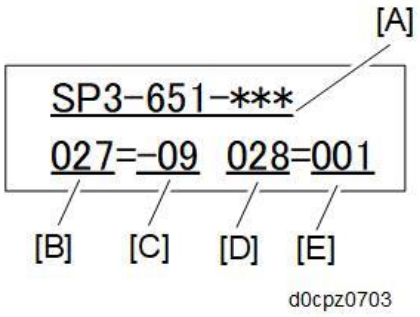
1. Peel off the layer of the label [A] where a QR code is printed on the new combined high-voltage power supply board:MY (PCB10).
Attach the side where there is no QR code printed to the board.
The side with the printed QR code will be used in Step 4.



2. Install the combined high-voltage power supply board:MY (PCB10).

3. Turn ON the main power.

4. Refer to the value in the label and put the value into SP3-651-027 and SP3-651-028.



[A]: SP Number

[B][D]: SP branch number (***)

[C][E]: SP setting value

Example: Set the value of SP3-651-027 to "-09". Set the value of SP3-651-028 to "001".

5. Set the value of SP3-651-003 to "2".

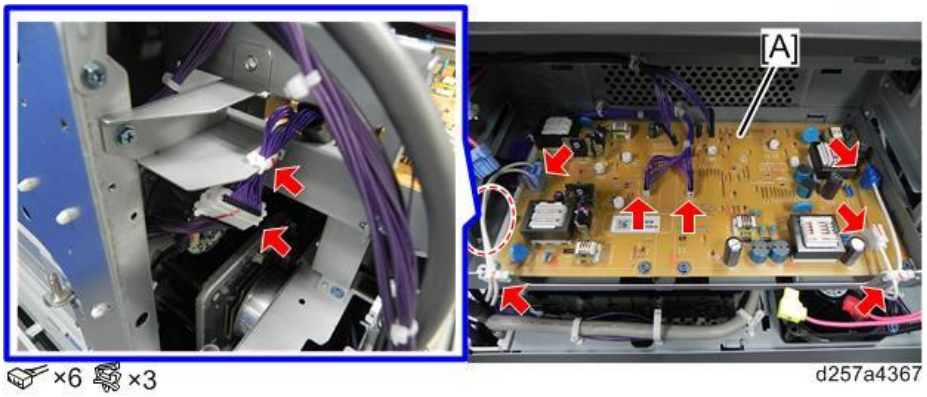
6. Execute SP3-011-001 (Process Control).

If the incorrect value is set or steps 4 to 6 are skipped, there might be an image error such as carrier adhesion or dirt in the background. Be sure to execute steps 1 to 6 completely.

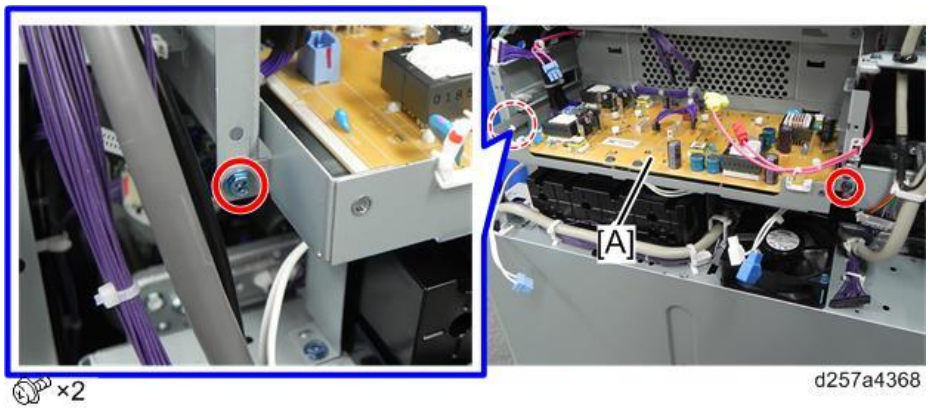
Combined High-Voltage Power Supply Board:KC (PCB11)

1. Remove the combined high-voltage power supply board (MY) [A] along with the bracket. (Combined High-Voltage Power Supply Board:MY (PCB10))

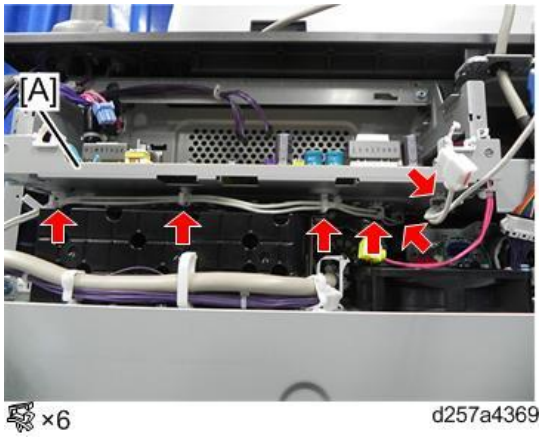
2. Disconnect the connectors of the combined high-voltage power supply board:KC (PCB11) [A].



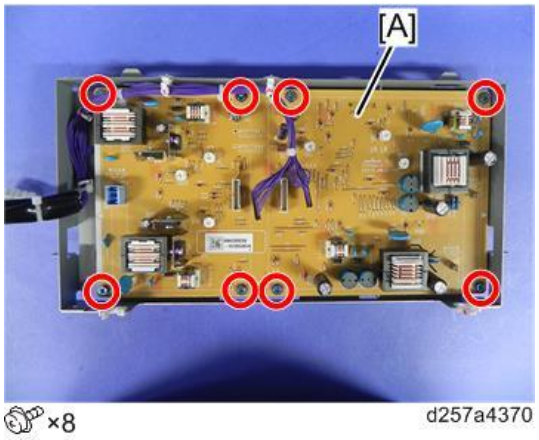
3. Remove the screws from the combined high-voltage power supply board:KC (PCB11) [A].



4. Open the clamps, and remove the combined high-voltage power supply board:KC (PCB11) [A] along with the bracket.

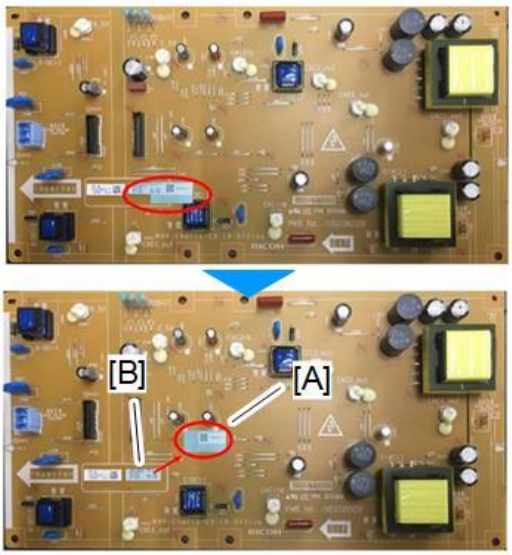


5. Remove the combined high-voltage power supply board:KC (PCB11) [A].



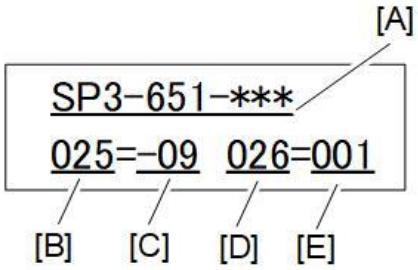
Additional Steps for IM C6500/C8000

1. Peel off the layer of the label [A] where a QR code is printed on the new combined high-voltage power supply board:KC (PCB11).
Attach the side where there is no QR code printed to the board.
The side where a QR code is printed is to be used in the step 4.



d0cpz0701

2. Install the combined high-voltage power supply board:KC (PCB11).
3. Turn ON the main power.
4. Refer to the value in the label and put the value into SP3-651-025 and SP3-651-026.



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[A]: SP Number

[B][D]: SP branch number (***)

[C][E]: SP setting value

Example: Set the value of SP3-651-025 to "-09". Set the value of SP3-651-026 to "001".

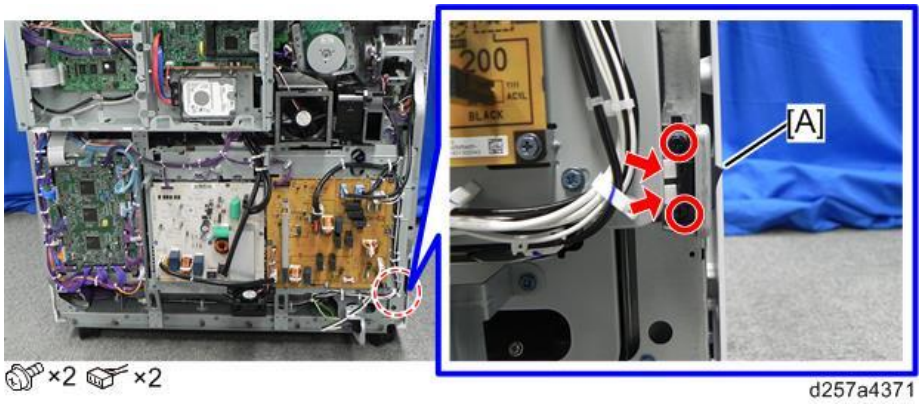
5. Set the value of SP3-651-003 to "2".
6. Execute SP3-011-001 (Process Control).

If the incorrect value is set or steps 4 to 6 are skipped, there might be an image error such as carrier adhesion or dirt in the background. Be sure to execute steps 1 to 6 completely.

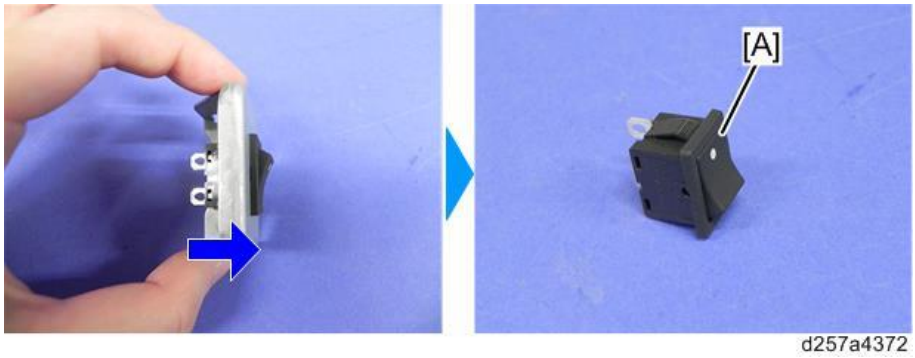
Anti-Condensation Heater Switch (SW4)

1. Remove the rear lower cover. (Rear Lower Cover)

2. Remove the anti-condensation heater switch (SW4) [A] along with the bracket.



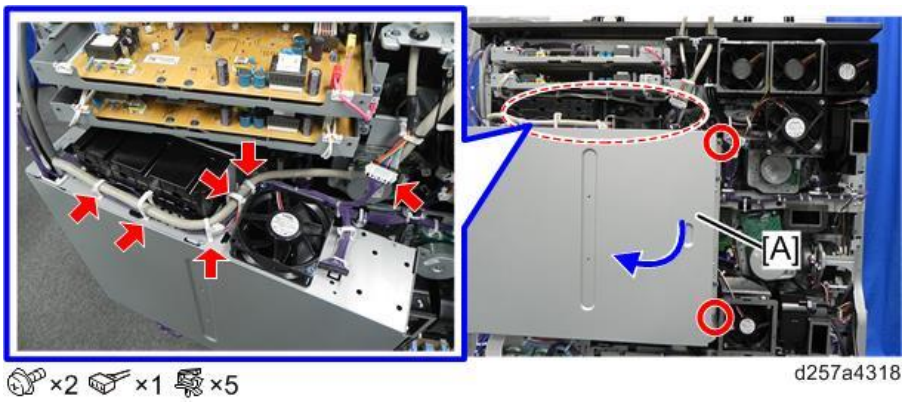
3. Remove the anti-condensation heater switch (SW4) [A].



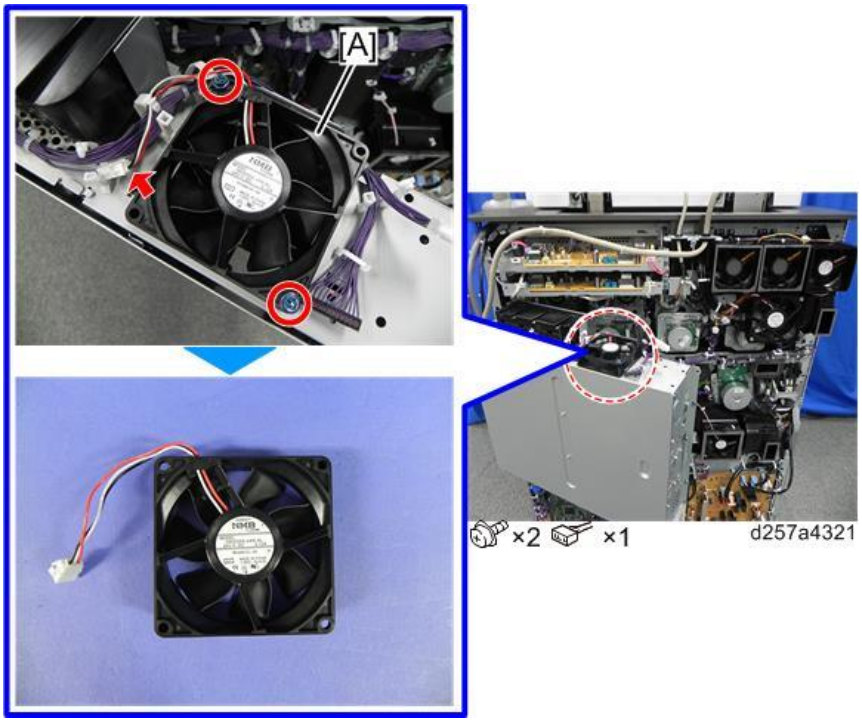
Fans and Filters

Controller Exhaust Fan (FAN9)

1. Remove the rear middle cover. (Rear Middle Cover)
2. Open the controller box [A].



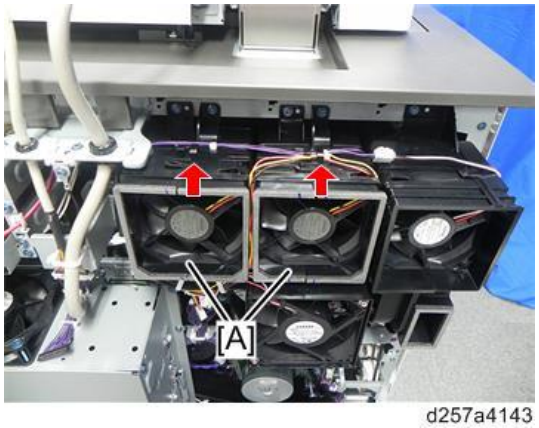
3. Remove the controller exhaust fan (FAN9) [A].



Development Exhaust Fans (FAN20) (Right/Left)

1. Remove the rear middle cover. (Rear Middle Cover)

2. Disconnect the harness to remove the development exhaust fans (FAN20) [A] along with the duct.



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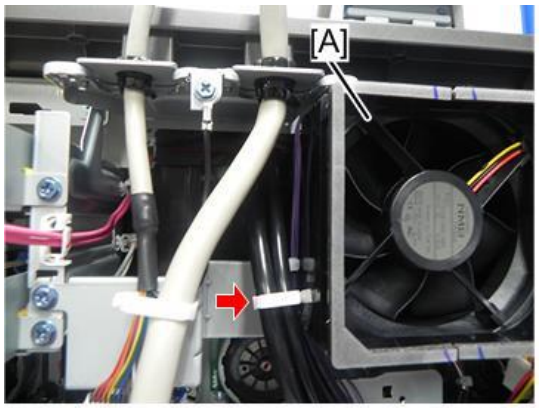
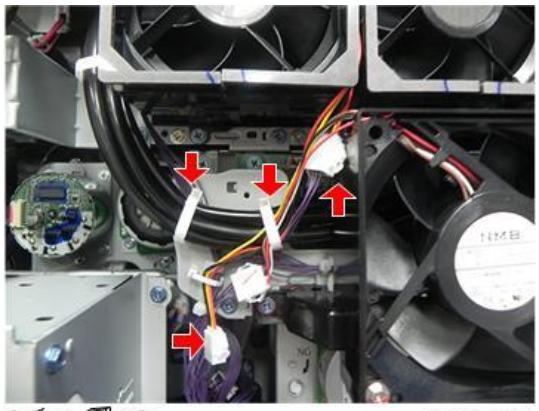
3. Disconnect the left clamp to remove the development exhaust fan (FAN20) (right) [A].



×1 d257a4144

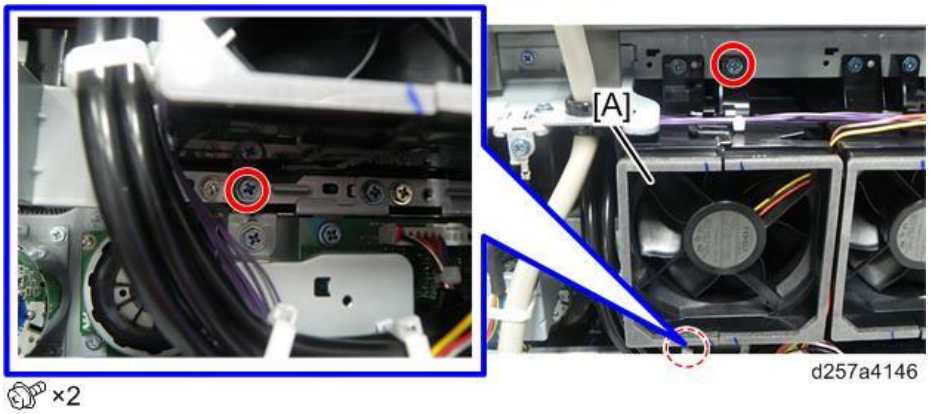
4. Disconnect the connectors. Remove the harnesses from the guide.



×2 ×2 d257a4145

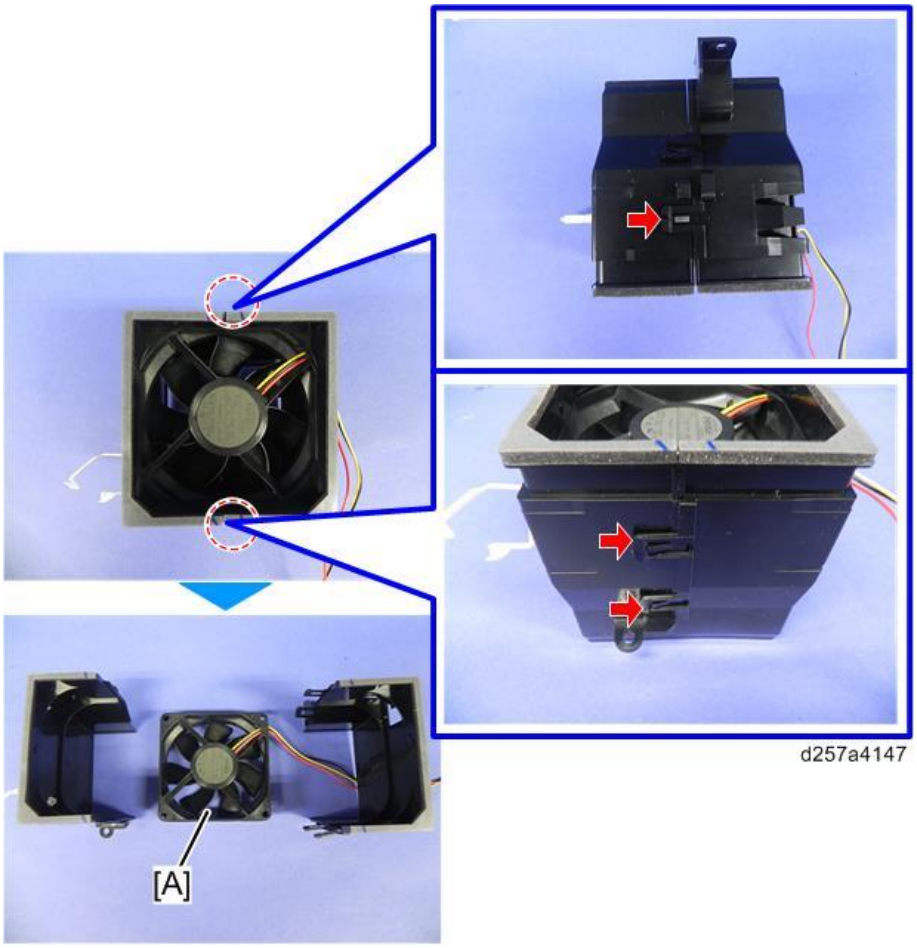
5. Remove the development exhaust fans (FAN20) (Right / Left) [A] along with the duct.

e.g.: Development exhaust fan (right)



6. Remove the hooks and take out the development exhaust fans (FAN20) (right / left) [A].

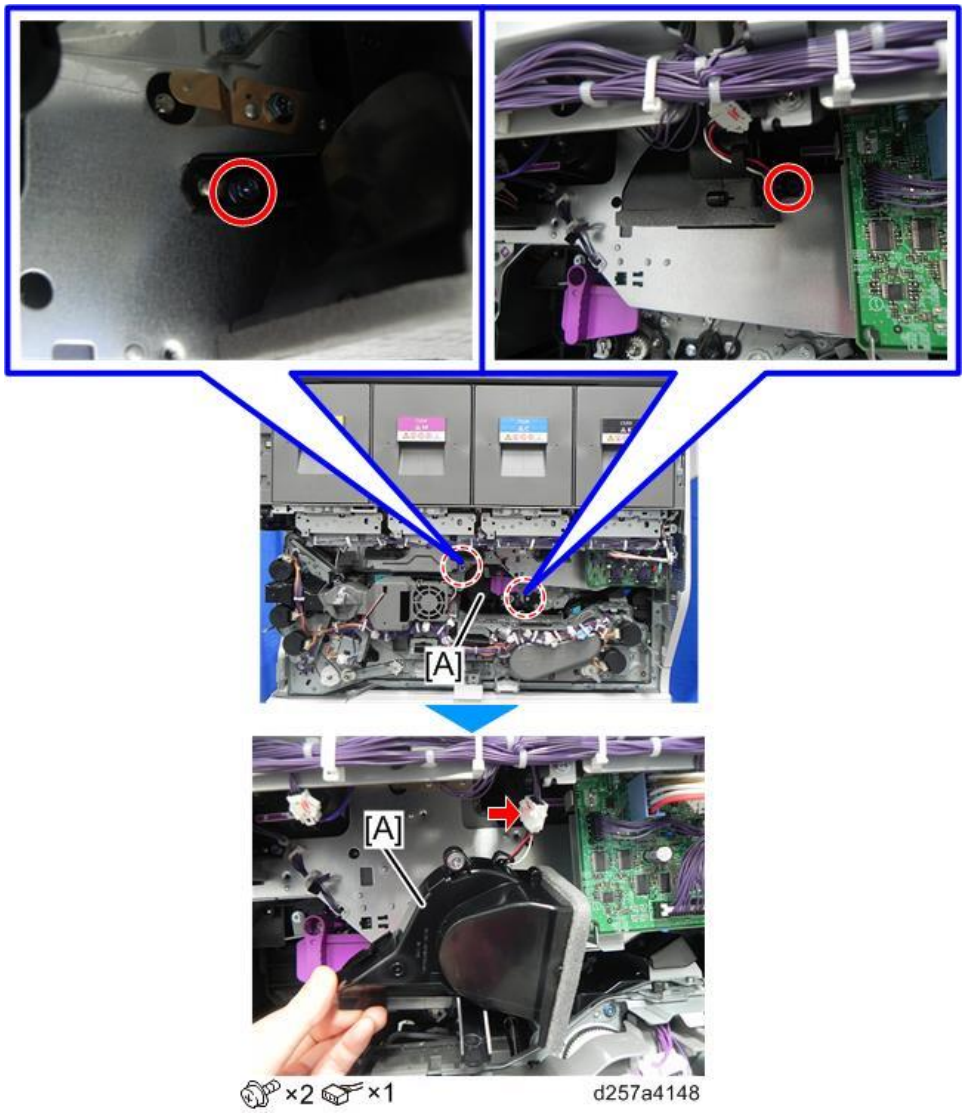
e.g.: Development exhaust fan (right)



Development Intake Fans (FAN2) (KCMY)

1. Remove the toner supply unit inner cover. (Toner Supply Unit Inner Cover)

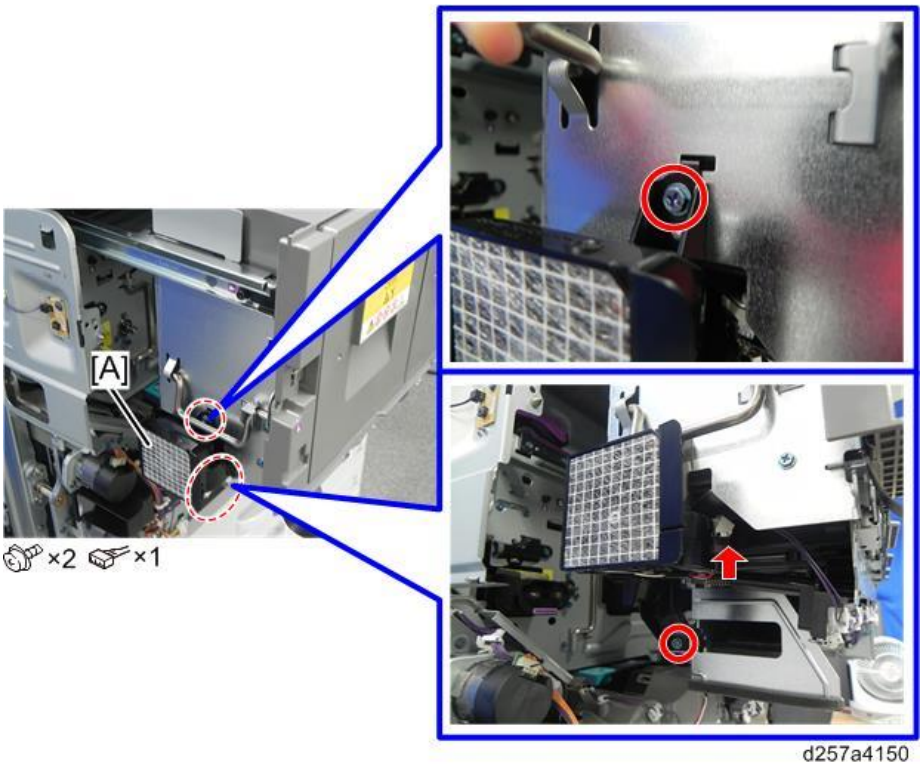
2. Remove the development intake fans (FAN2) (KCM) [A].



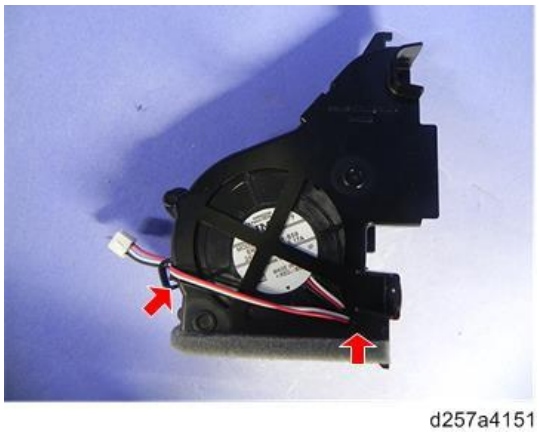
Note

- For development intake fan (FAN2) (Y) [A], pull the toner supply unit (Toner Supply Unit)

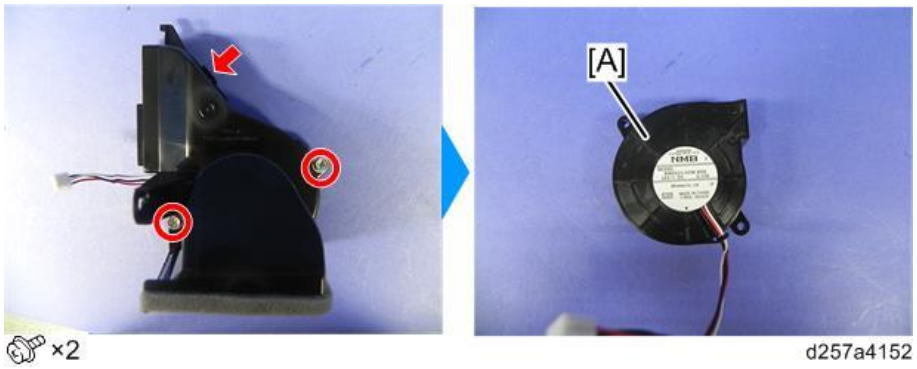
and remove the development intake fan (Y) [A] from the right side.



3. Remove the harness from the guide.



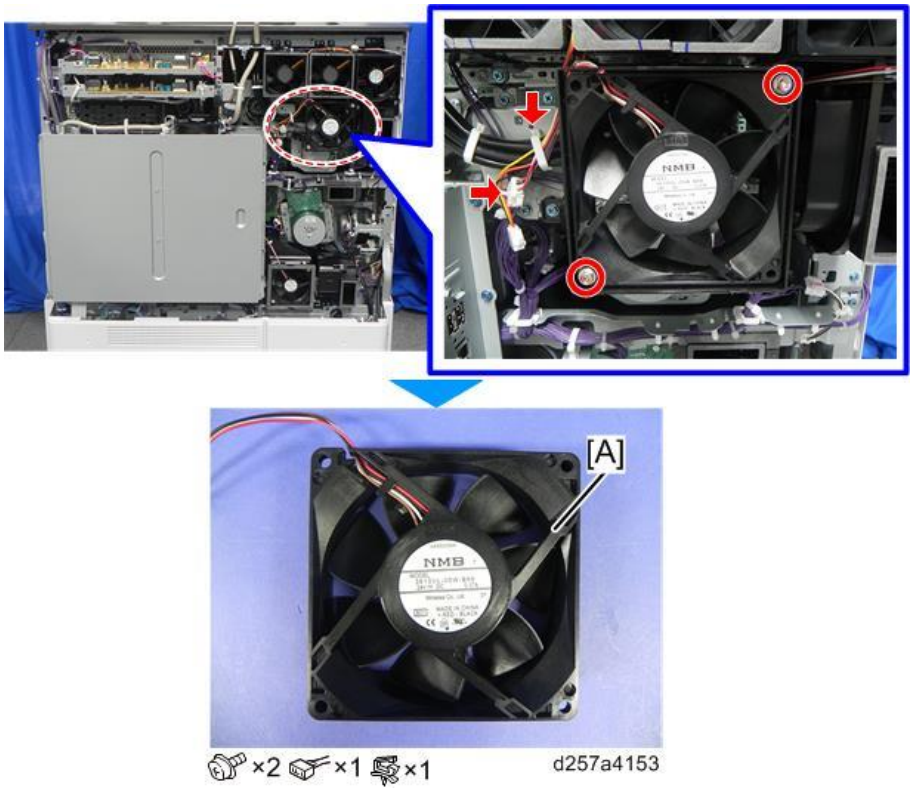
4. Remove the development intake fan (FAN2) [A] from the duct.



Drive Exhaust Fan (FAN19)

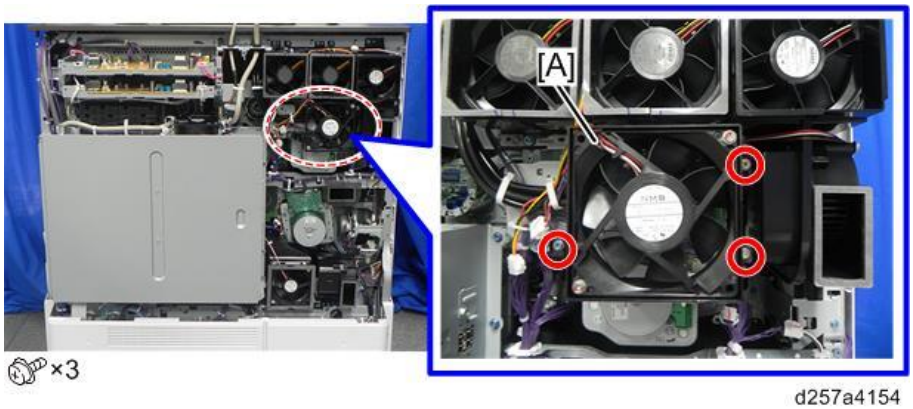
1. Remove the rear middle cover. (Rear Middle Cover)

2. Remove the drive exhaust fan (FAN19) [A].

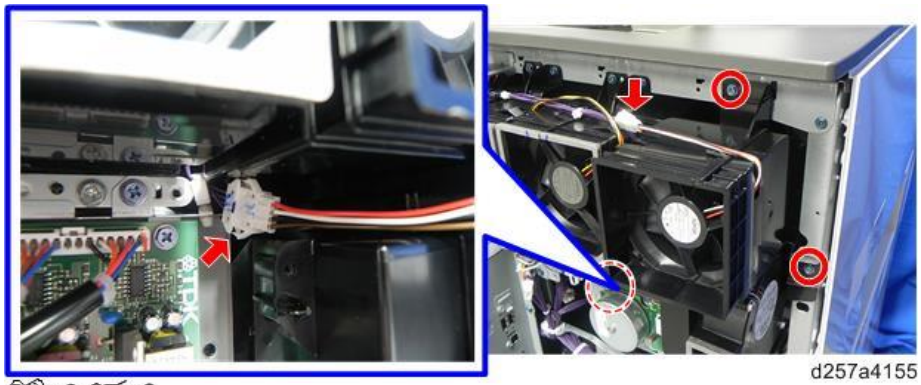


Fusing Exit Exhaust Fan (FAN18)

1. Remove the rear middle cover. (Rear Middle Cover)
2. Remove the drive exhaust fan (FAN19) [A] along with the duct connected to the machine.



3. Remove the bracket [A].



×2 ×2

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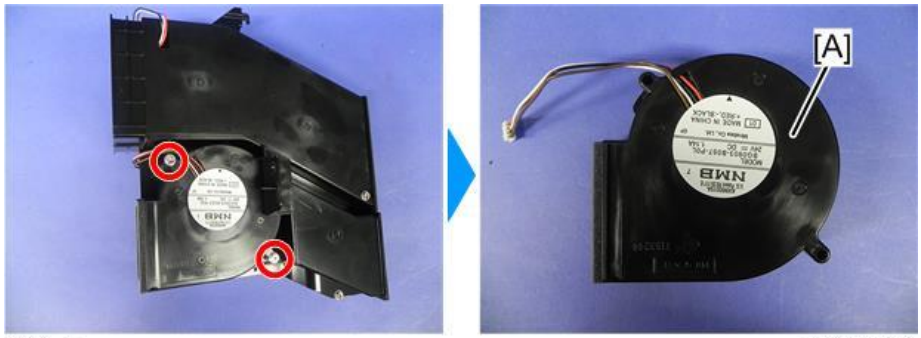
4. Remove the fusing exit exhaust fan (FAN18) [A].



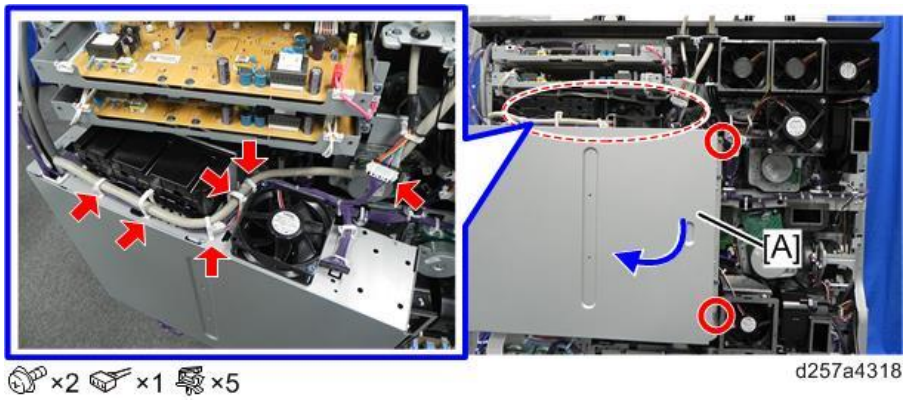
×2

d257a4156

Fusing Pressure Roller Exhaust Fan (FAN31) (Pro C5300S/C5310S)

1. Remove the rear middle cover. (Rear Middle Cover)

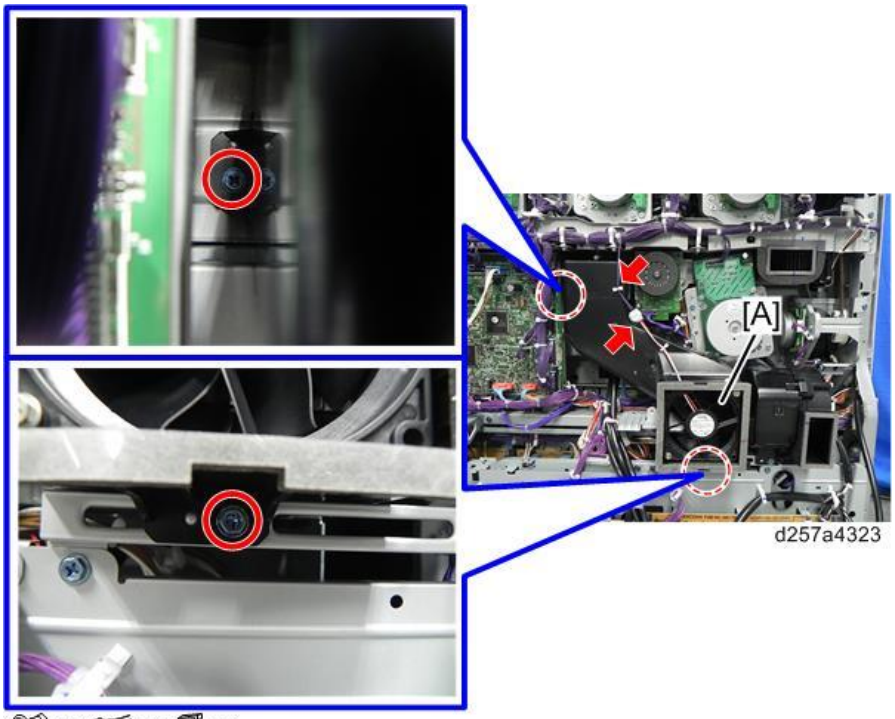
2. Open the controller box [A].



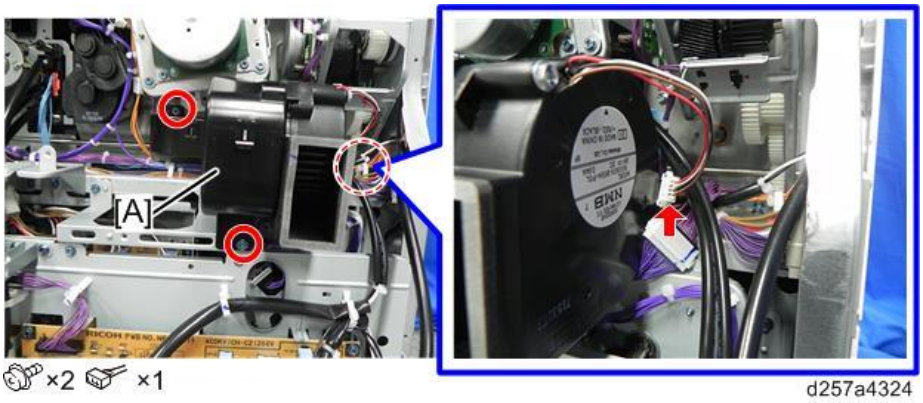
×2 ×1 ×5

d257a4318

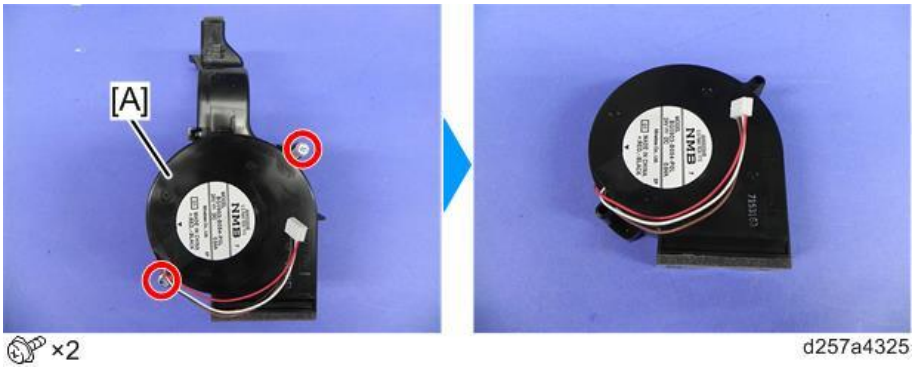
3. Remove the paper transfer belt fusing exhaust fan (FAN16) [A] along with the duct.



4. Remove the fusing pressure roller exhaust fan (FAN31) [A] along with the duct.



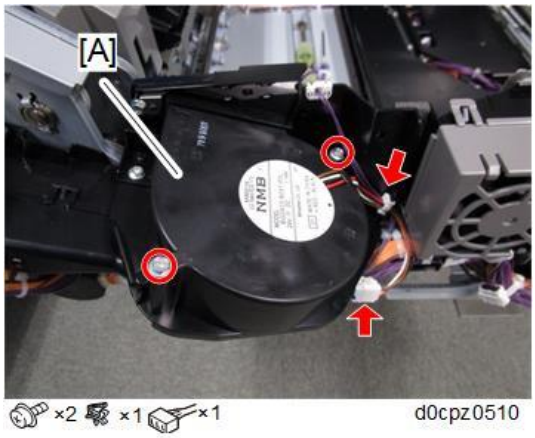
5. Remove the fusing pressure roller exhaust fan (FAN31) [A] from the duct.



Paper Cooling Fan (FAN26)

1. Remove the drawer unit cover. (Drawer Unit Cover)

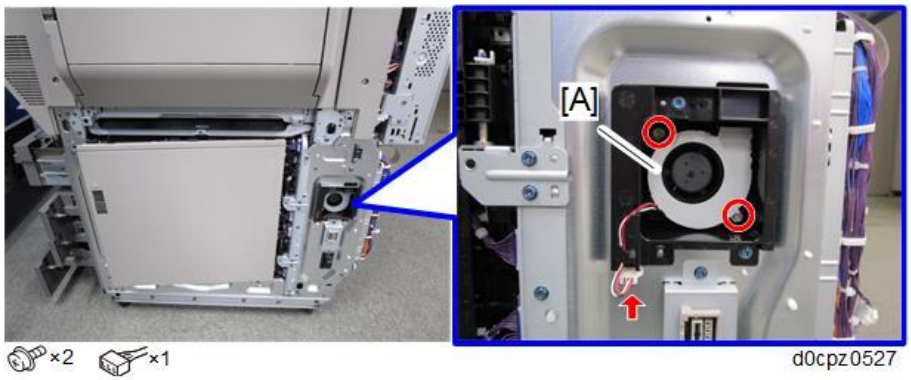
2. Remove the paper cooling fan (FAN26) [A].



Paper Transfer Belt Waste Toner Cooling Fan (FAN6)

1. Remove the right lower cover. (Right Lower Cover)

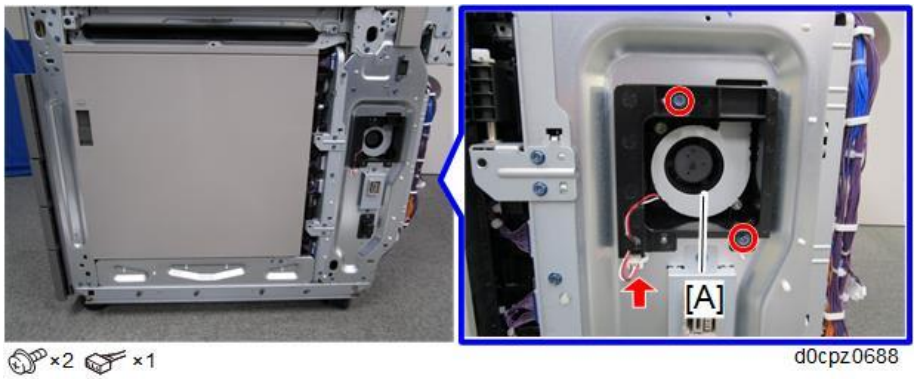
2. Remove the paper transfer belt waste toner cooling fan (FAN6) [A].



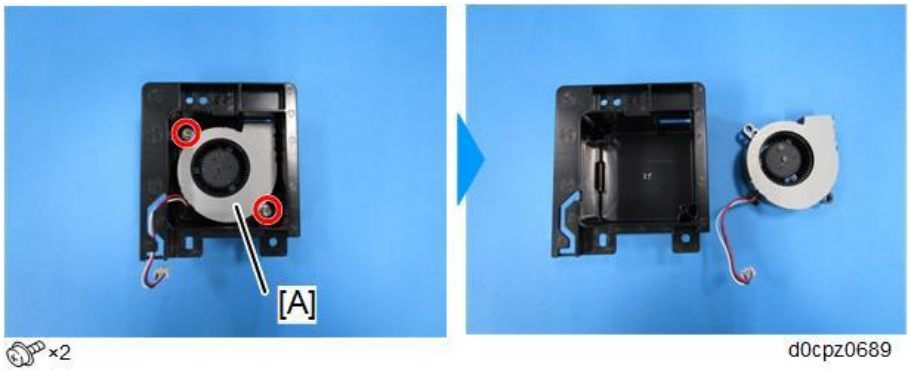
Note

To remove the fan with its bracket:

1. Remove the paper transfer belt waste toner cooling fan (FAN6) with its bracket [A].

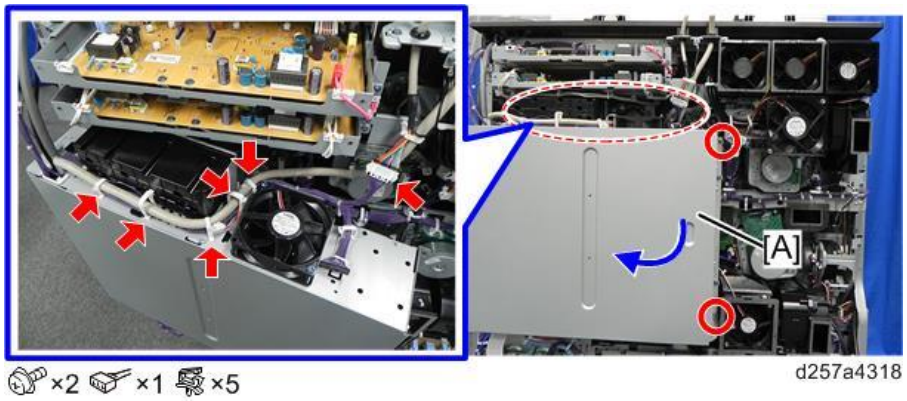


2. Remove the paper transfer belt waste toner cooling fan (FAN6) [A].

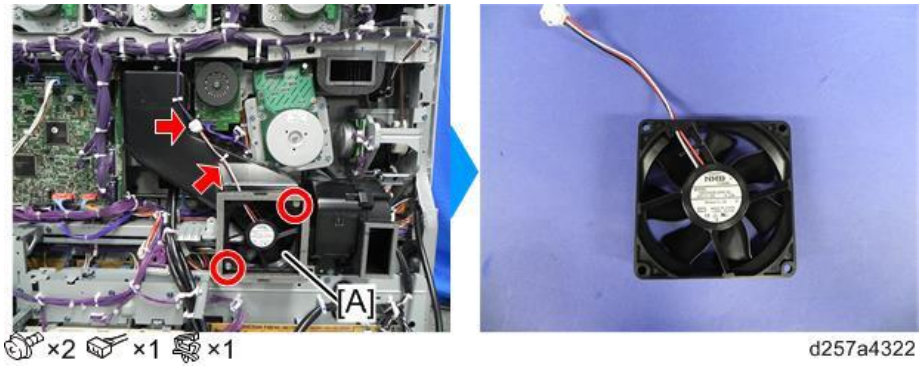


Paper Transfer Belt Fusing Exhaust Fan (FAN16)

1. Remove the rear middle cover. (Rear Middle Cover)
2. Open the controller box [A].



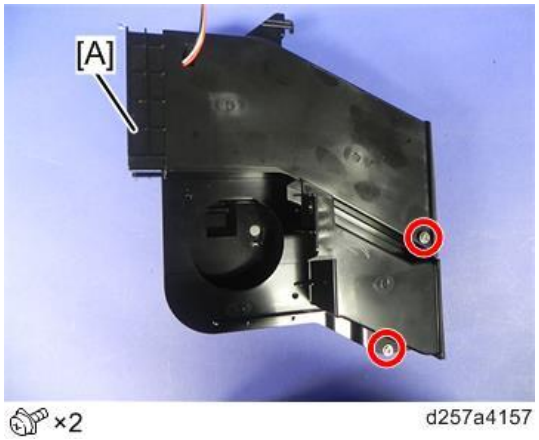
3. Remove the paper transfer belt fusing exhaust fan (FAN16) [A].



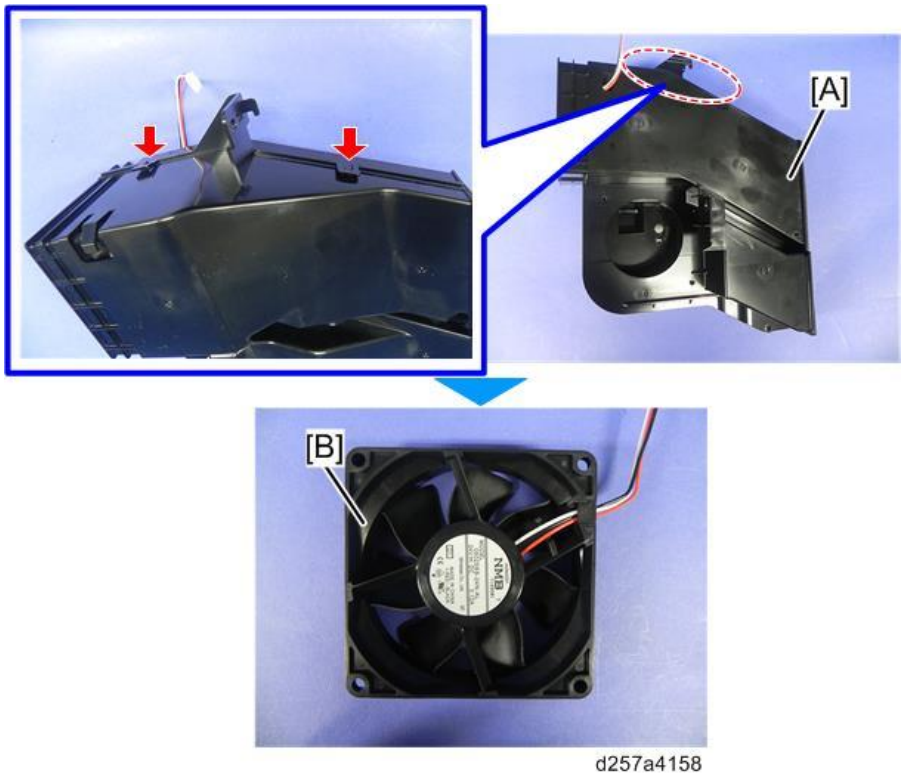
Heat Pipe Panel Exhaust Fan (FAN15)

1. Remove the fusing exit exhaust fan. (Fusing Exit Exhaust Fan (FAN18))

2. Remove the screws of the duct [A].



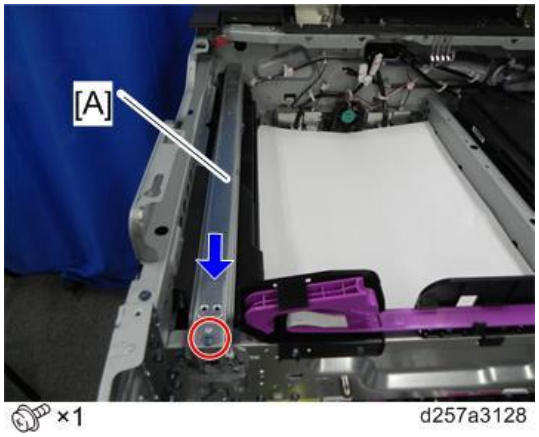
3. Remove the hooks of the duct [A], and take out the heat pipe panel exhaust fan (FAN15) [B].



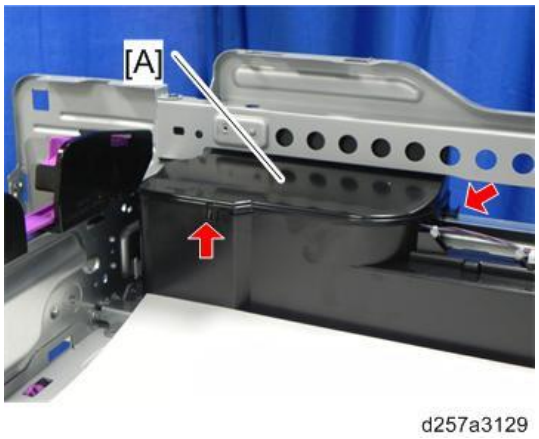
Heat Pipe Panel Intake Fan (FAN22)

1. Remove the left middle cover. (Left Middle Cover)
2. Remove the toner supply unit. (Toner Supply Unit)

3. Remove the stay [A].



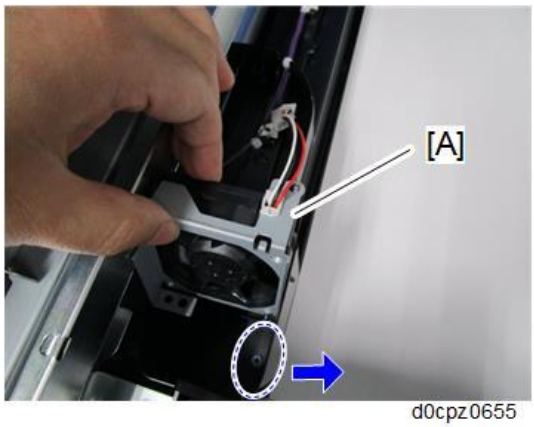
4. Release the tabs and remove the duct cover [A].



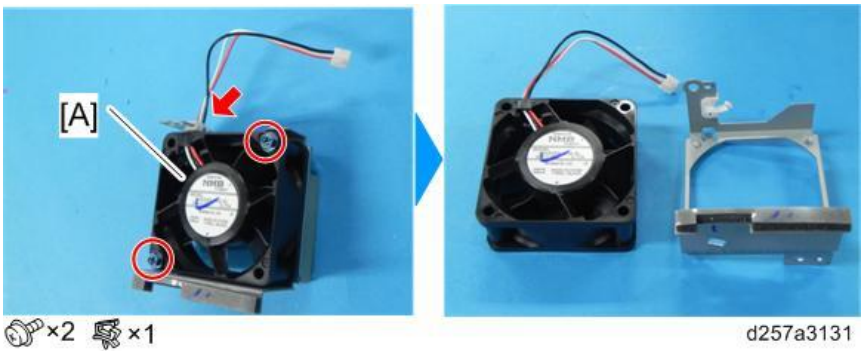
5. Remove the heat pipe panel intake fan (FAN22) [A] with bracket.

Note

When removing the fan [A], slightly widen the blue circled area as shown below.



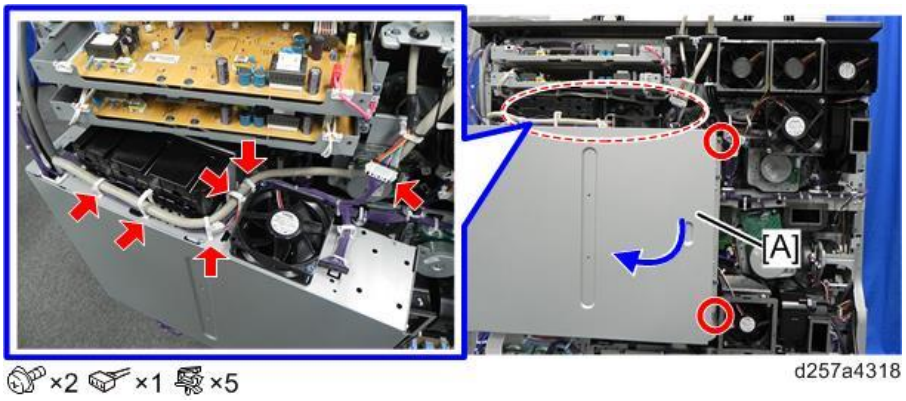
6. Remove the heat pipe panel intake fan (FAN22) [A] from the bracket.



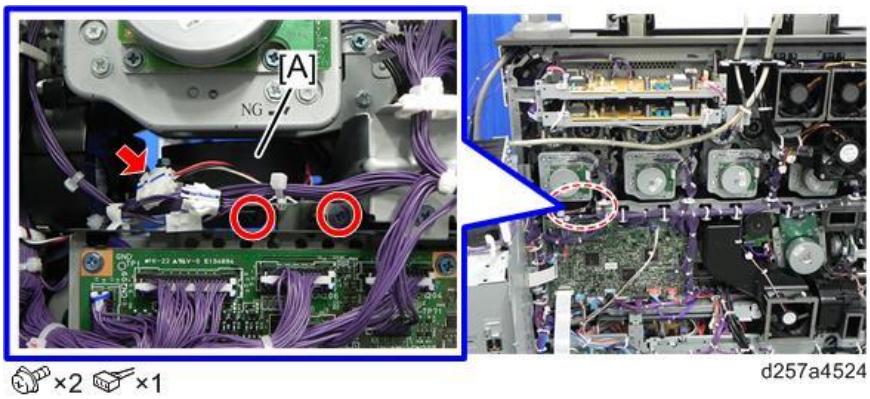
ITB Motor Cooling Fan (FAN8)

1. Remove the rear middle cover. (Rear Middle Cover)

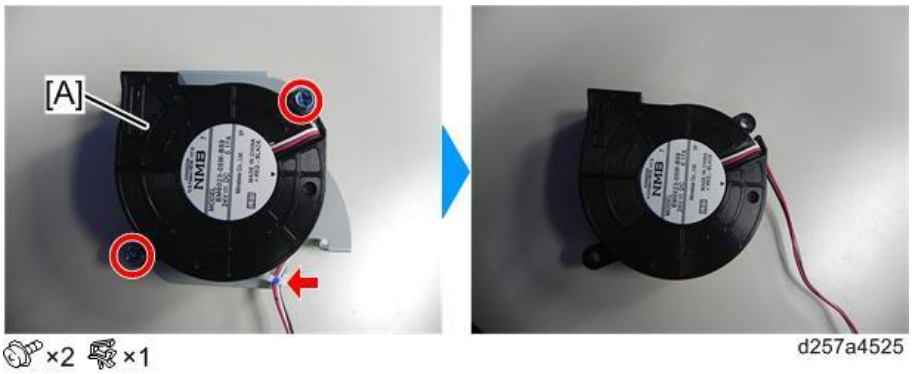
2. Open the controller box [A].



3. Remove the ITB motor cooling fan (FAN8) [A] with its bracket.

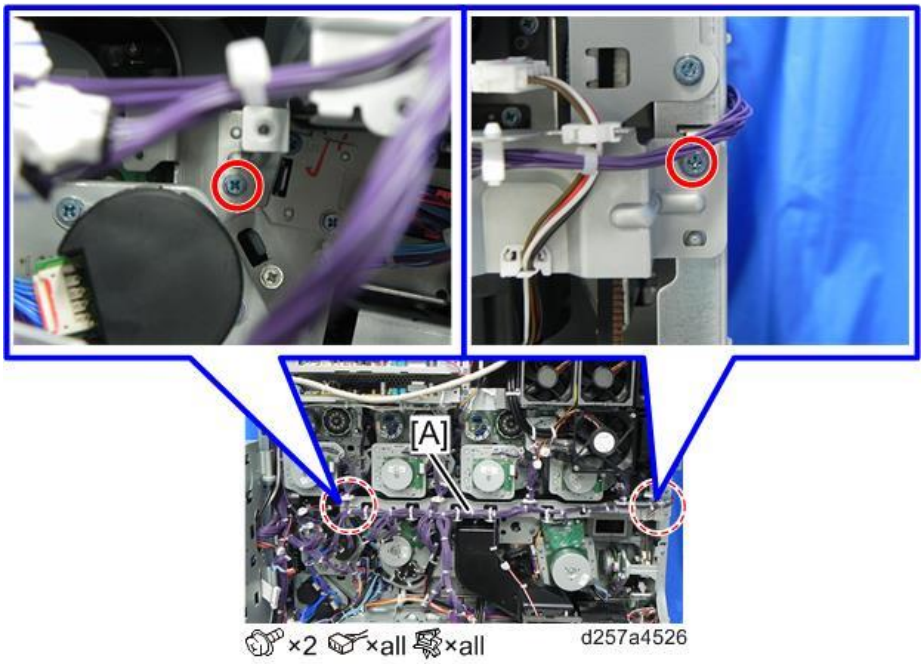


4. Remove the ITB motor cooling fan (FAN8) [A] from the bracket.

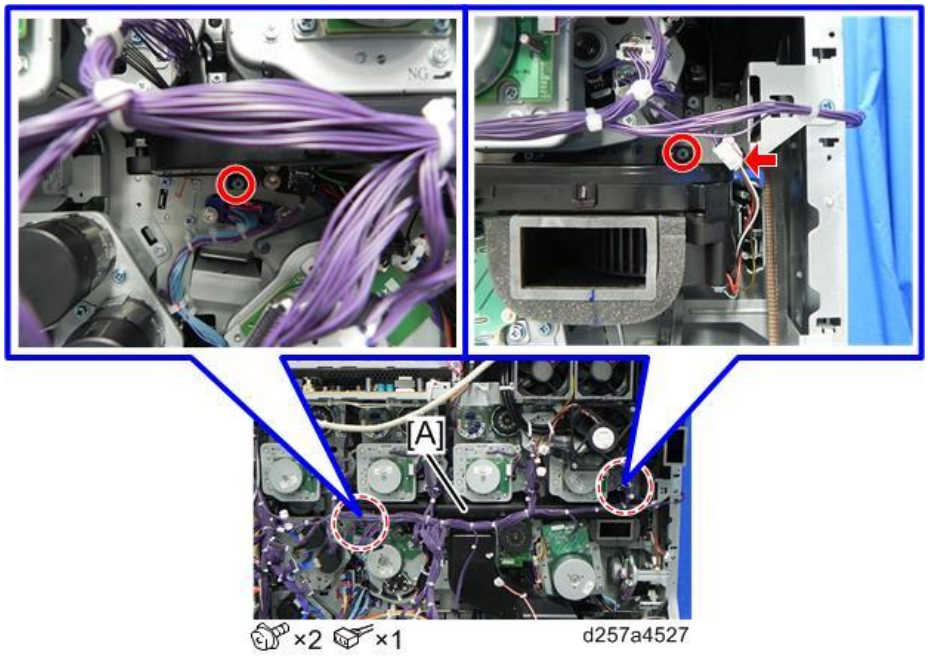


Ozone Exhaust Fan (FAN17)

1. Remove the IOB along with the bracket. (When removing the motors that are behind the IOB)
2. Remove the ITB motor cooling fan (FAN8). (ITB Motor Cooling Fan (FAN8))
3. Remove the frame [A].



4. Remove the ozone exhaust fan (FAN17) [A] along with the duct.

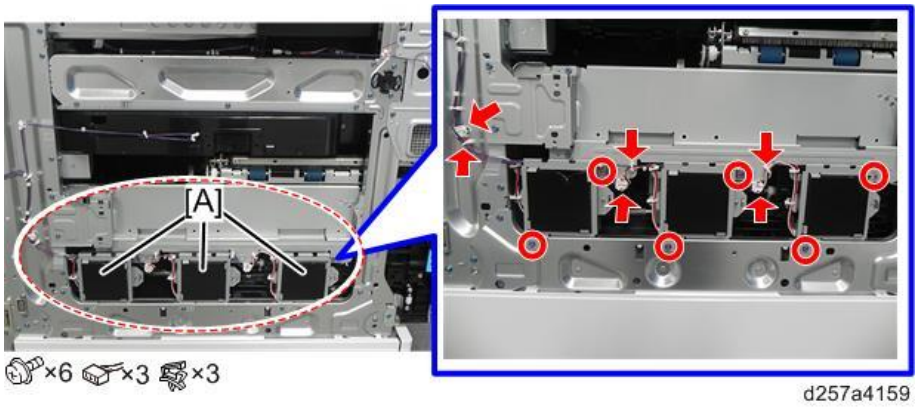


5. Remove the ozone exhaust fan (FAN17) [A] from the duct.

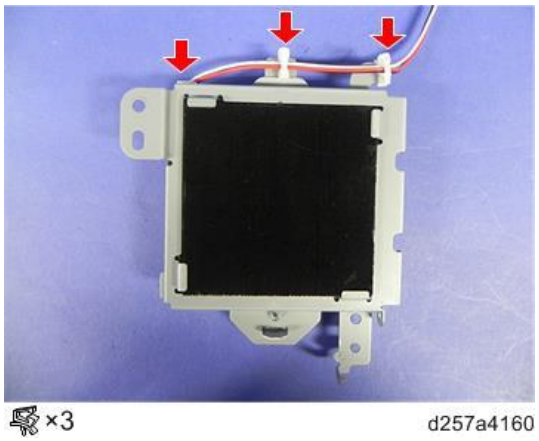
Duplex Exhaust Fans (FAN12) (Front/Middle/Rear)

1. Remove the left middle cover. (Left Middle Cover)

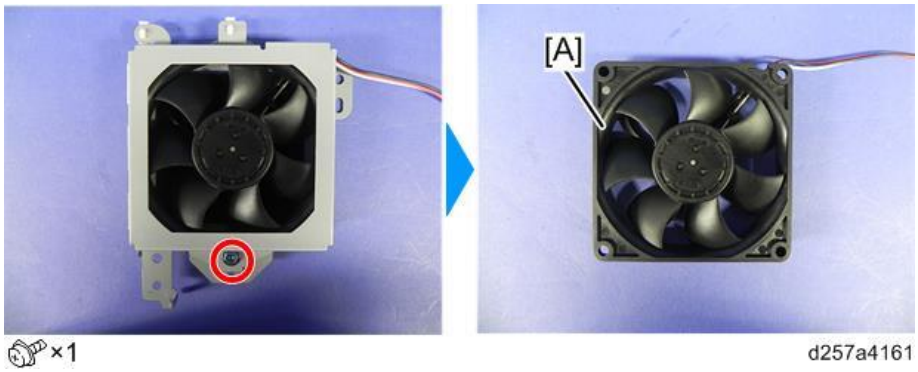
2. Duplex exhaust fans (FAN12) [A] along with the duct.



3. Remove the harness clamps.



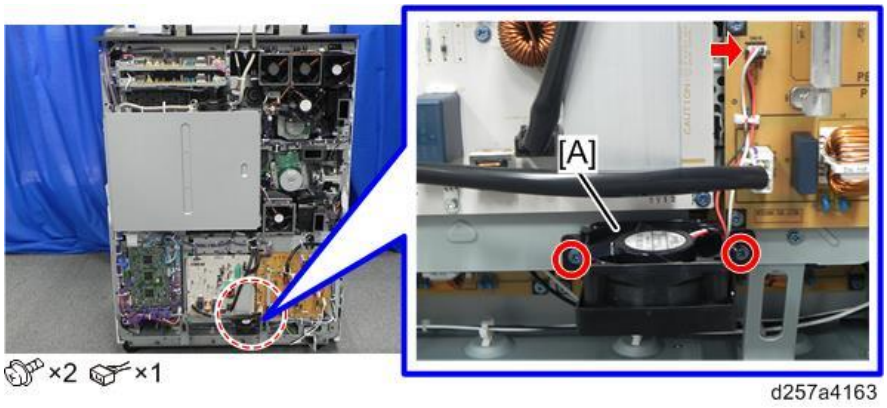
4. Remove the duplex exhaust fans (FAN12) [A] from the bracket.



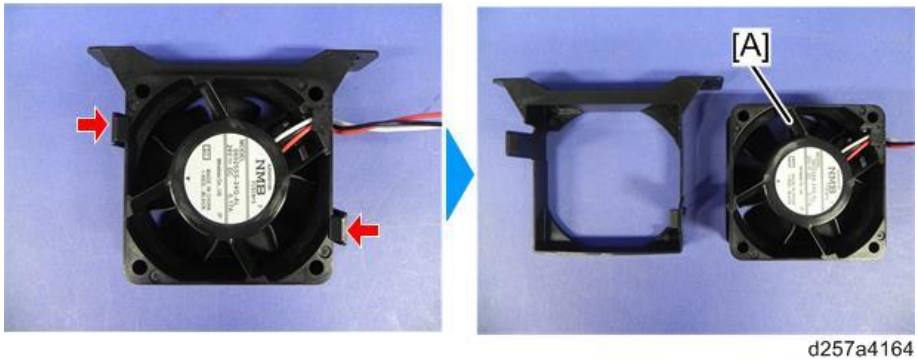
IH Coil Power Cooling Fan (FAN25)

1. Remove the rear middle cover. (Rear Middle Cover)
2. Remove the rear lower cover. (Rear Lower Cover)

3. Remove the IH coil power cooling fan (FAN25) [A] along with the bracket.

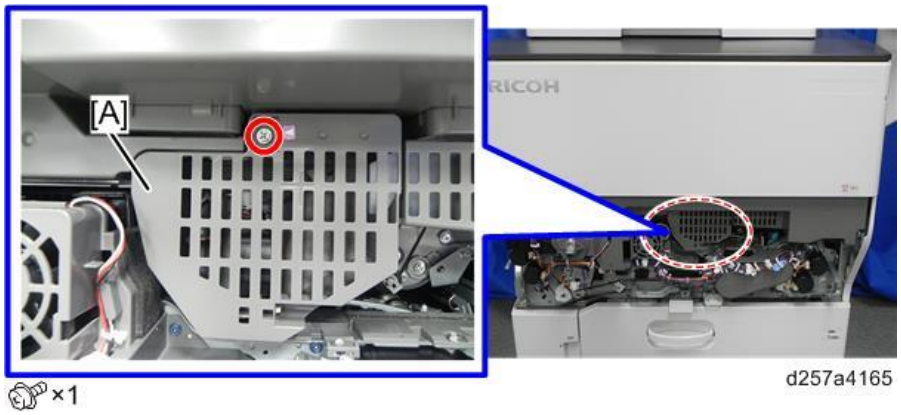


4. Remove the hooks, and remove the IH coil power cooling fan (FAN25) [A].

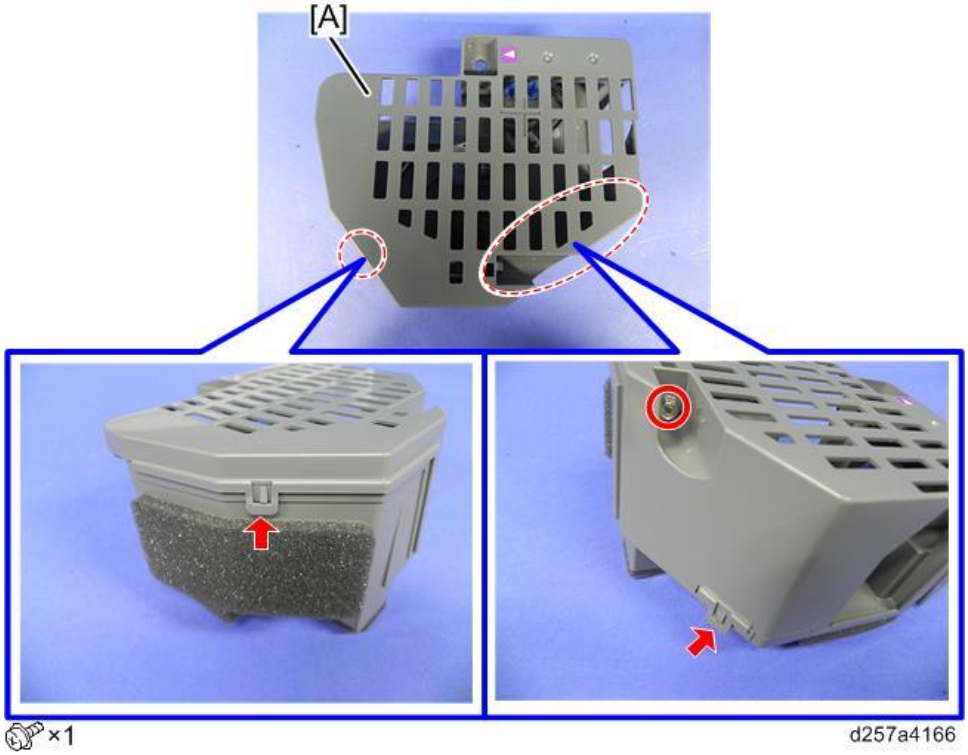


ITB Cleaning Intake Fan (FAN1)

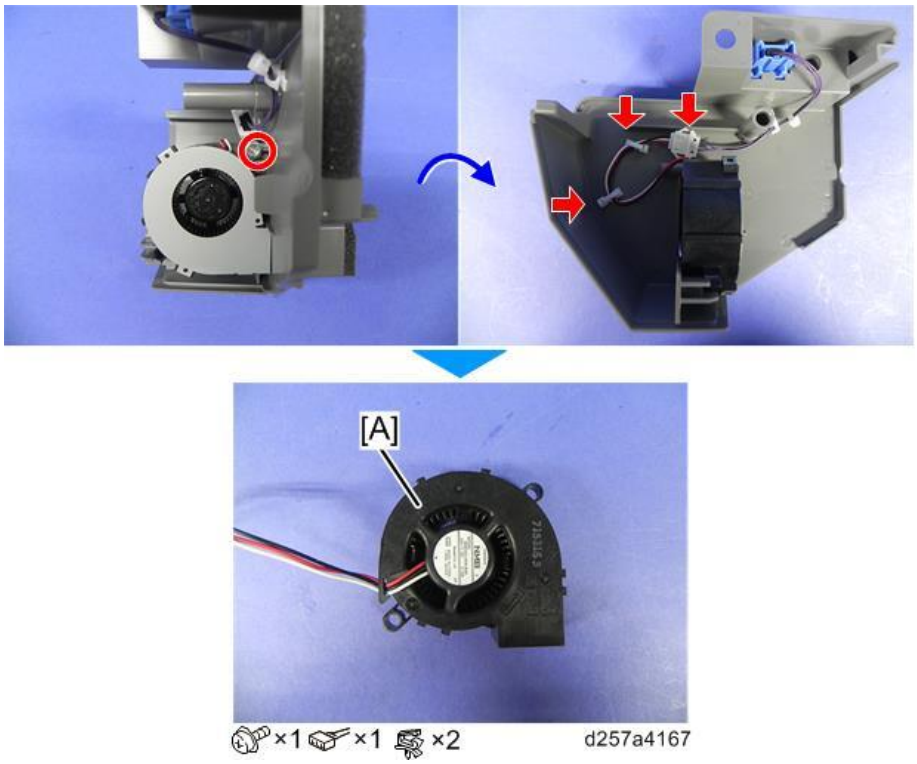
1. Remove the drawer unit cover. (Drawer Unit Cover)
2. Remove the ITB cleaning intake fan (FAN1) [A] along with the duct.



3. Remove the cover [A].



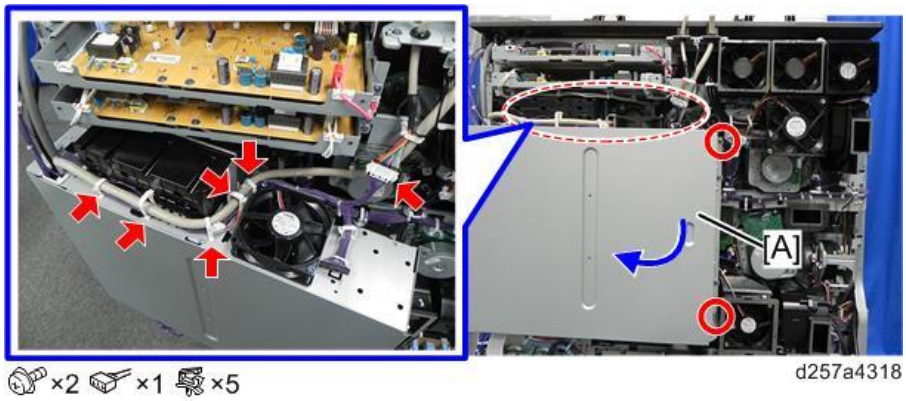
4. Remove the ITB cleaning intake fan (FAN1) [A].



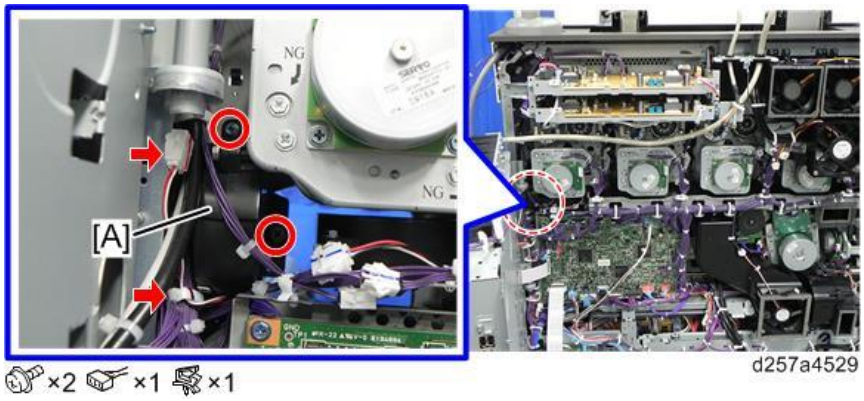
ID Sensor Cleaning Fan (FAN7)

1. Remove the rear middle cover. (Rear Middle Cover)

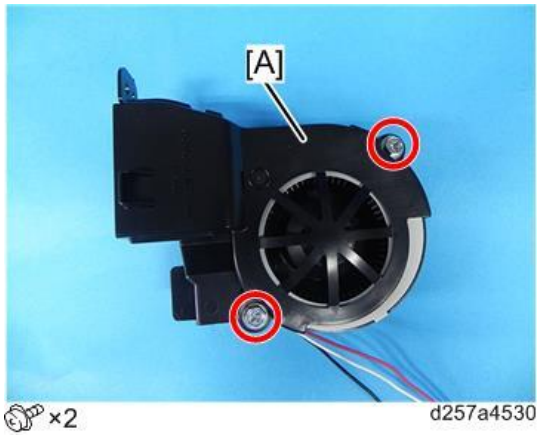
2. Open the controller box [A].



3. Remove the ID sensor cleaning fan (FAN7) [A] along with the bracket.



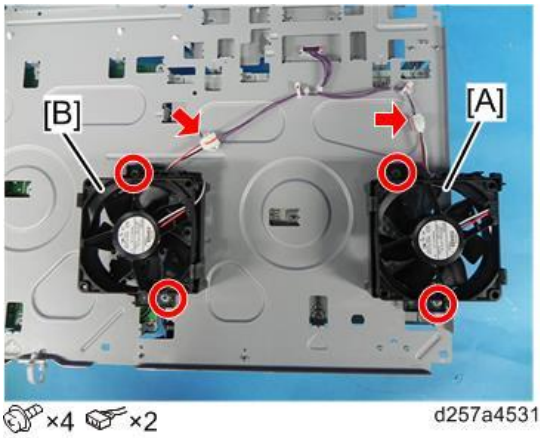
4. Remove the ID sensor cleaning fan (FAN7) [A] from the bracket.



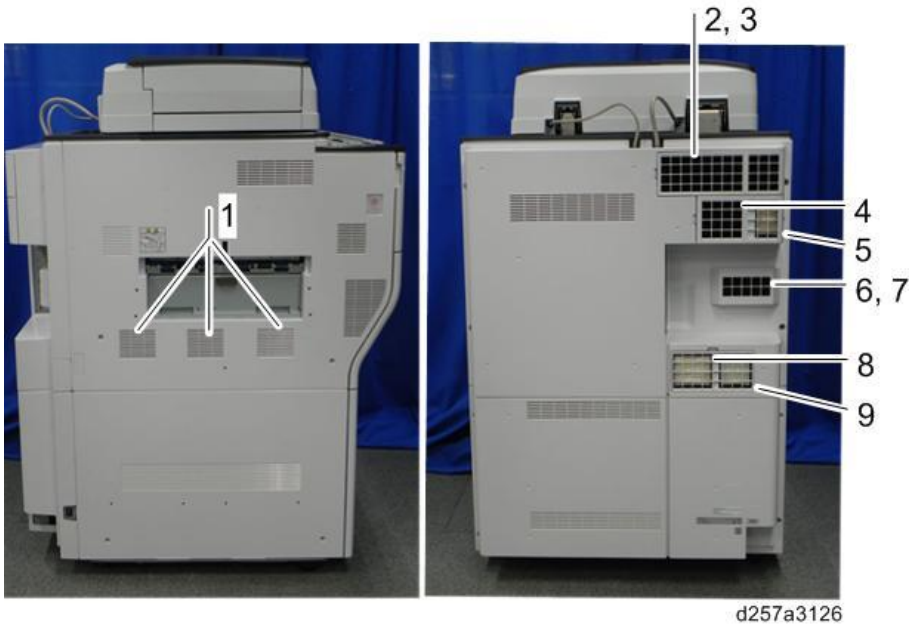
PSU Fans (FAN23) (Right/Left)

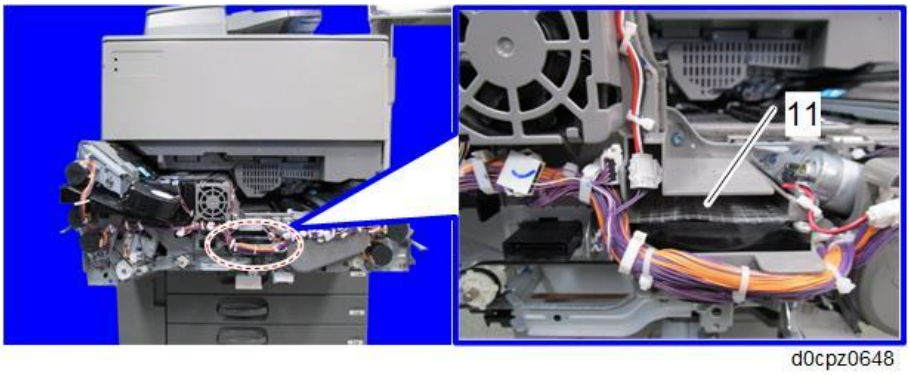
1. Remove the IH inverter and AC drive board along with the bracket. (PSU1 (PCB34), PSU2 (PCB33))

2. Remove the PSU fan (right) (FAN23) [A] and PSU fan (left) (FAN23) [B].



Layout (Filters)





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d0cpz0650

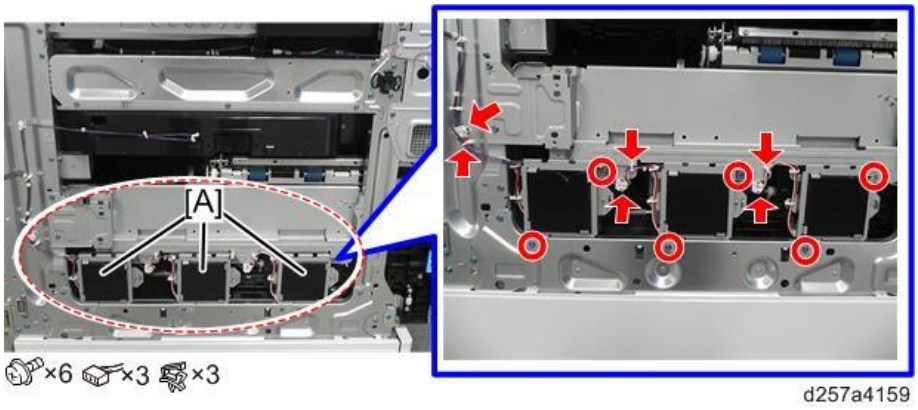
d0cpz0649

No.	Part Name	Replacement procedure
1	Duplex Exhaust Ozone Filters	Duplex Exhaust Ozone Filters
2	Dust Filters (Large)	Dust Filters (Large/Small)
3	Ozone Filters (Large)	Ozone Filters (Large/Small)
4	Deodorizing Filters	Deodorizing Filters
5	Particulate Filters (Fusing/Paper Exit)	Particulate Filters
6	Ozone Filters (Small)	Ozone Filters (Large/Small)
7	Dust Filters (Small)	Dust Filters (Large/Small)
8	Particulate Filters (Transfer/Fusing)	Particulate Filters
9	Particulate Filters (Fusing Pressure Roller)	Particulate Filters
10	Development Intake Filter	Development Intake Filter
11	Pressure Roller Intake Filter (Pro	Pressure Roller Intake Filter (Pro

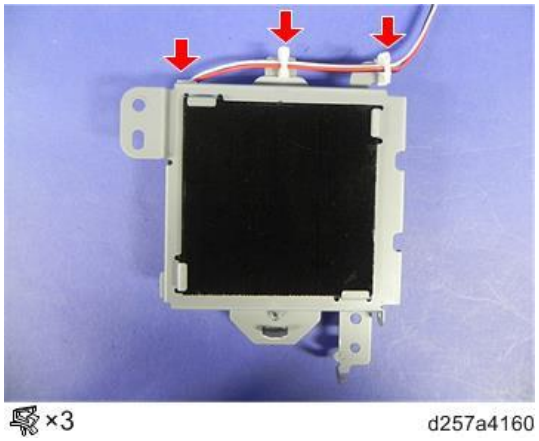
No.	Part Name	Replacement procedure
	C5310S/C5300S)	C5310S/C5300S)
12	Paper Transfer Belt Cooling Filter	Paper Transfer Belt Cooling Filter (Upper/Lower)
13	Right Lower Intake Filter	Right Lower Intake Filter

Duplex Exhaust Ozone Filters

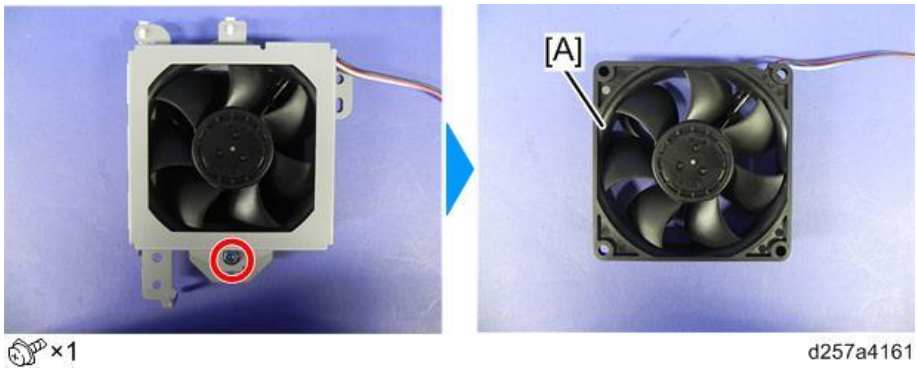
1. Remove the left middle cover. (Left Middle Cover)
2. Remove the duplex exhaust fans [A] along with the bracket.



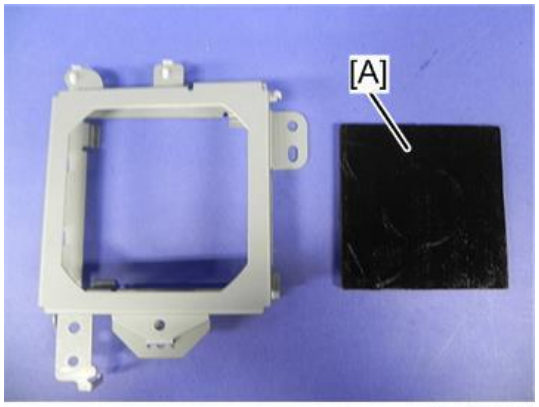
3. Remove the harness clamps.



4. Remove the duplex exhaust fans [A] along with the bracket.



5. Remove the duplex exhaust ozone filters [A].



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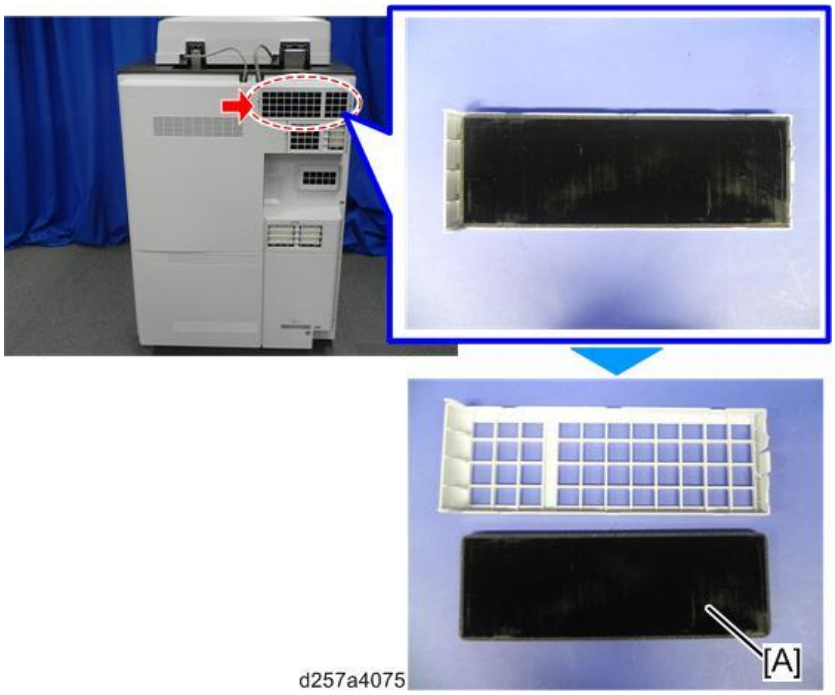
Ozone Filters (Large/Small)

1. Remove the ozone filter (large) [A].



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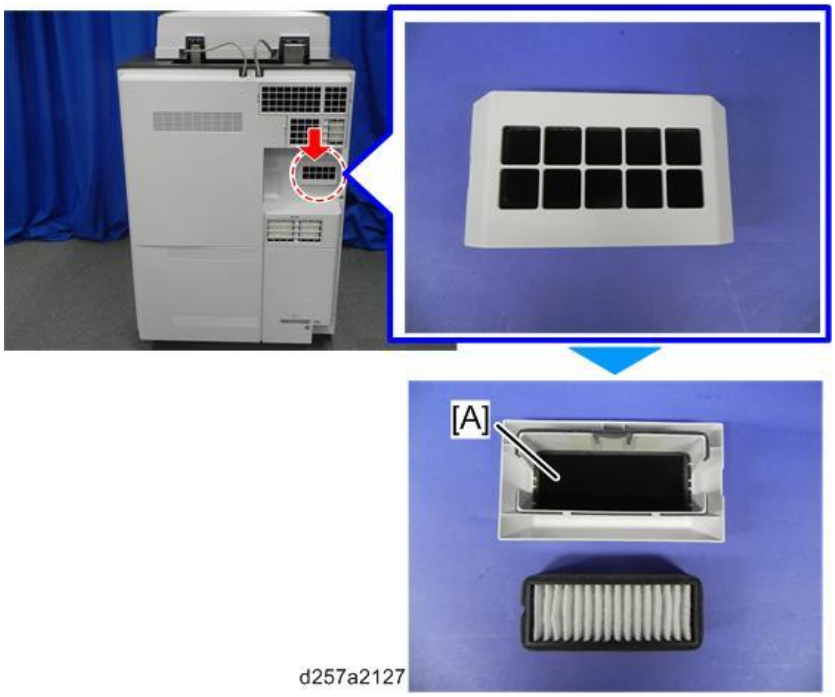
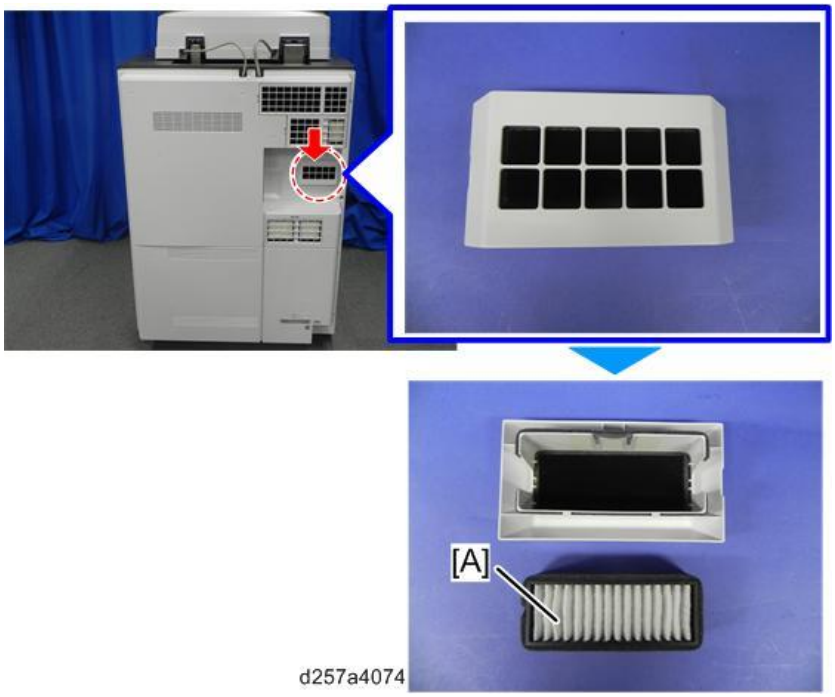
2. Remove the ozone filter (small) [A].



Dust Filters (Large/Small)

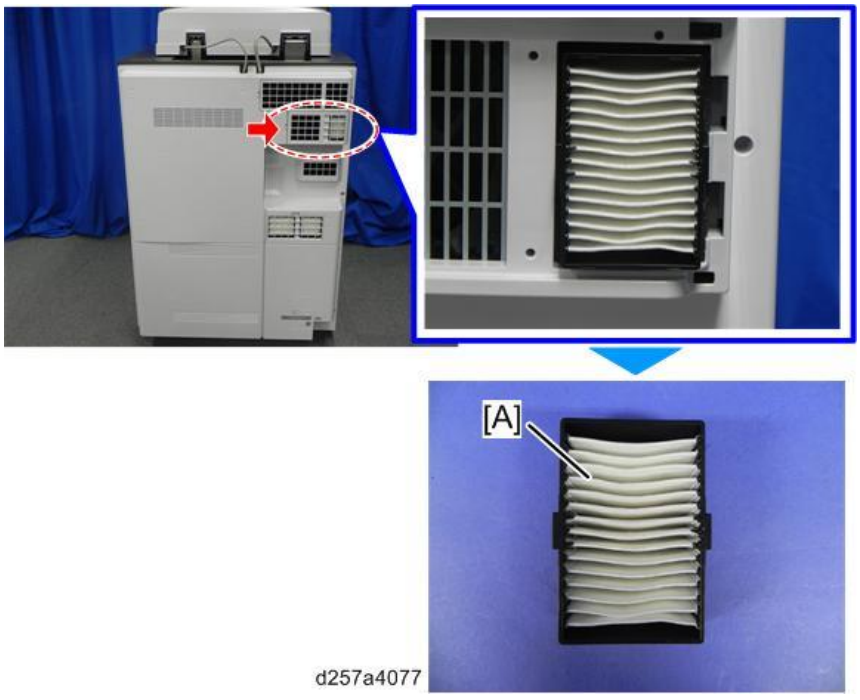
1. Remove the dust filter (large) [A].

2. Remove the dust filter (small) [A].

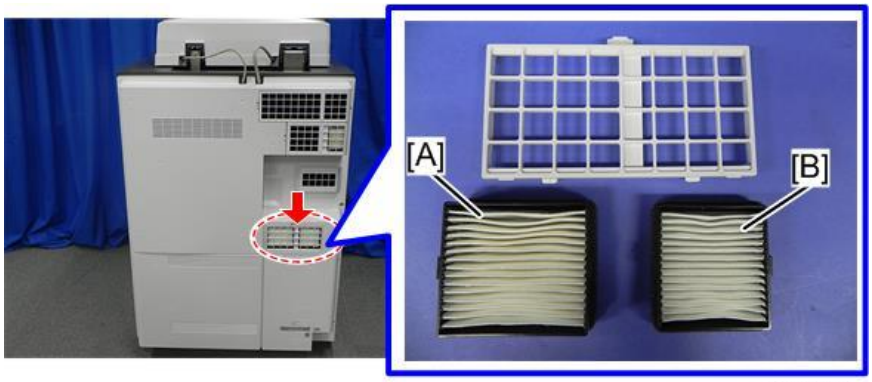


Particulate Filters

1. Remove the particulate filters (fusing/paper exit) [A].



2. Remove the particulate filters (transfer/fusing) [A] and particulate filters (fusing pressure roller) [B].



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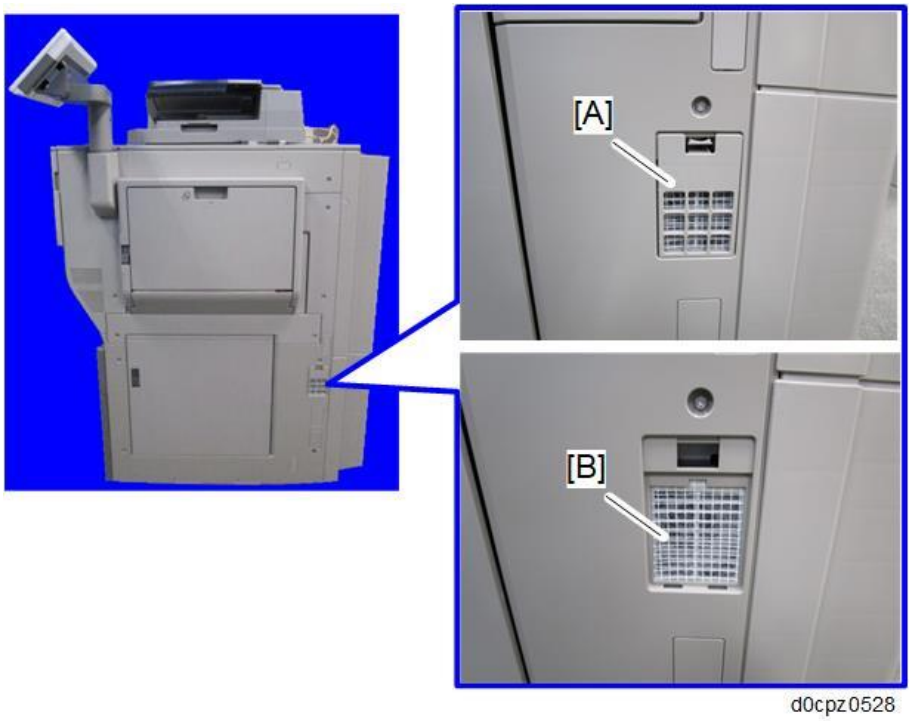
Right Lower Intake Filter

Note

If Bridge Unit BU5030 is connected to the main machine, the access procedure to this filter is different. Refer to "How to Access Right Lower Intake Filter on the Main Machine Where This Option Installed" in BU5030 FSM.

1. Remove the filter cover [A] and then, remove the right lower intake filter [B].



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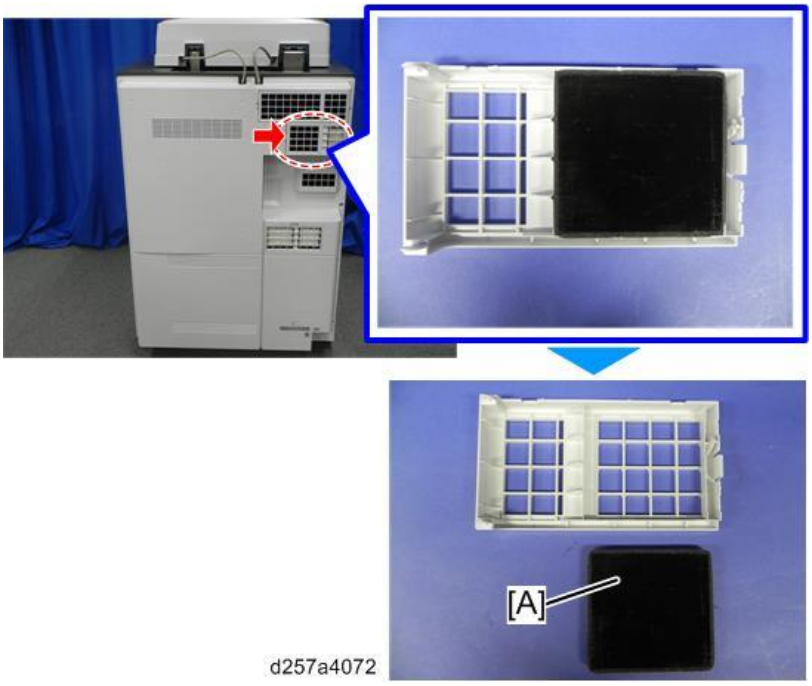
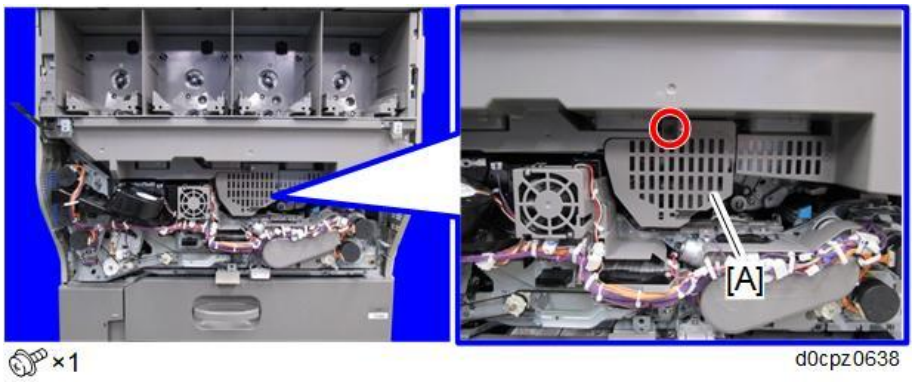
Deodorizing Filters

1. Remove the deodorizing filter [A].

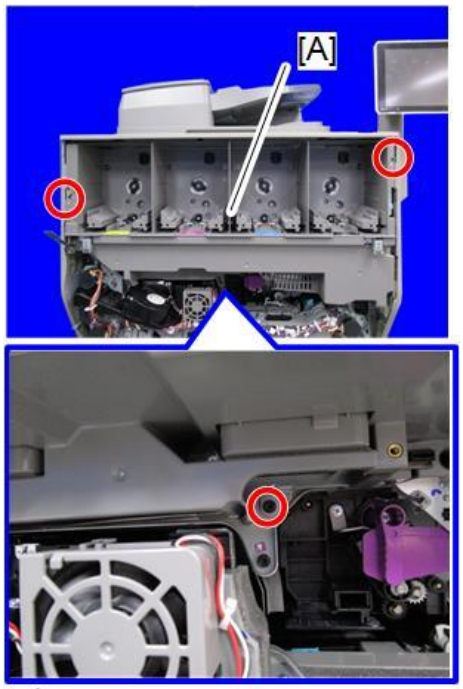


Development Intake Filter

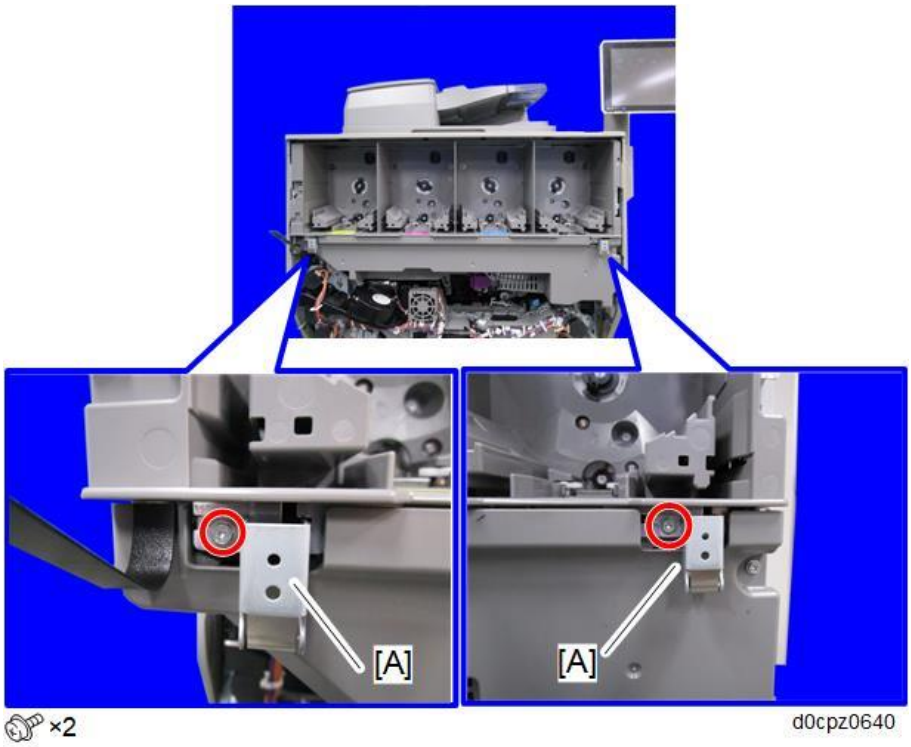
1. Remove the toner supply unit front cover. (Toner Supply Unit Front Cover)
2. Remove the ITB cleaning fan [A] with duct.



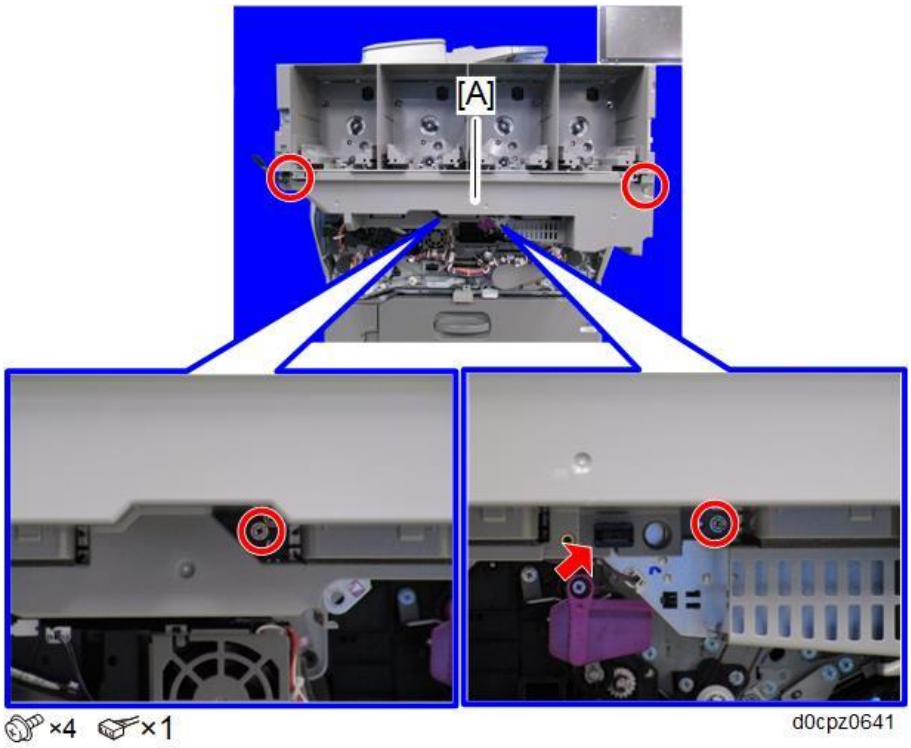
3. Slide the toner supply unit [A] to the front side.



4. Remove the bracket [A] of the toner supply unit front cover.



5. Remove the toner supply unit inner cover [A].



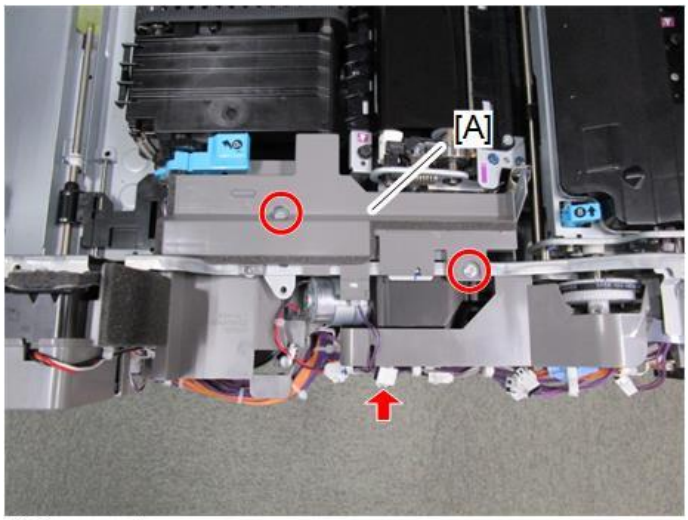
6. Remove the development intake filter [A].

Pressure Roller Intake Filter (Pro C5310S/C5300S)

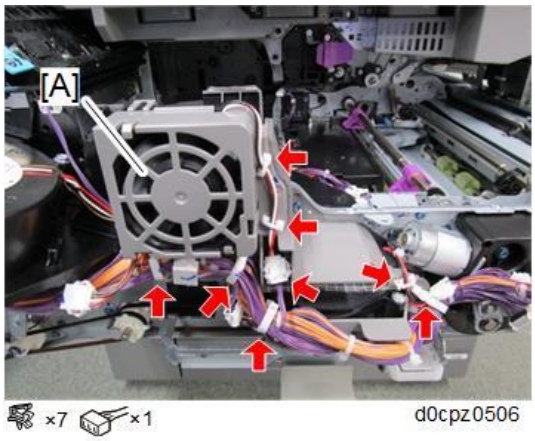
1. Remove the drawer unit cover. (Drawer Unit Cover)

2. Remove the fusing unit. (Removing the Fusing Unit)

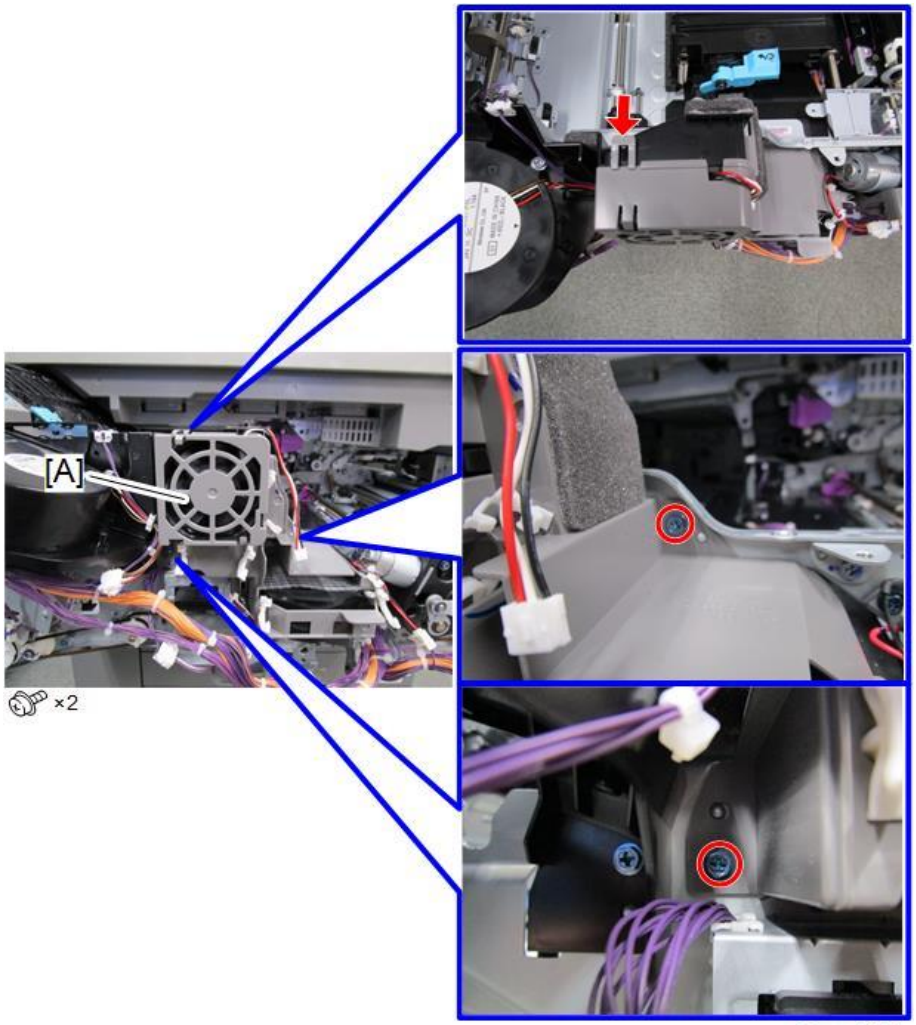
3. Remove the inner cover [A].



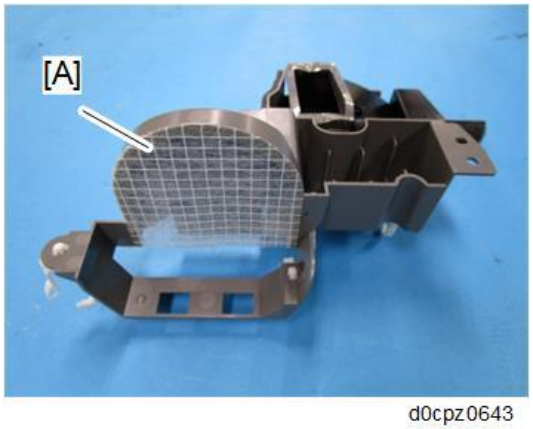
4. Remove the connecter and clamps of the duct [A] of the IH coil power cooling fan.



5. Remove the duct [A] of the IH coil power cooling fan.



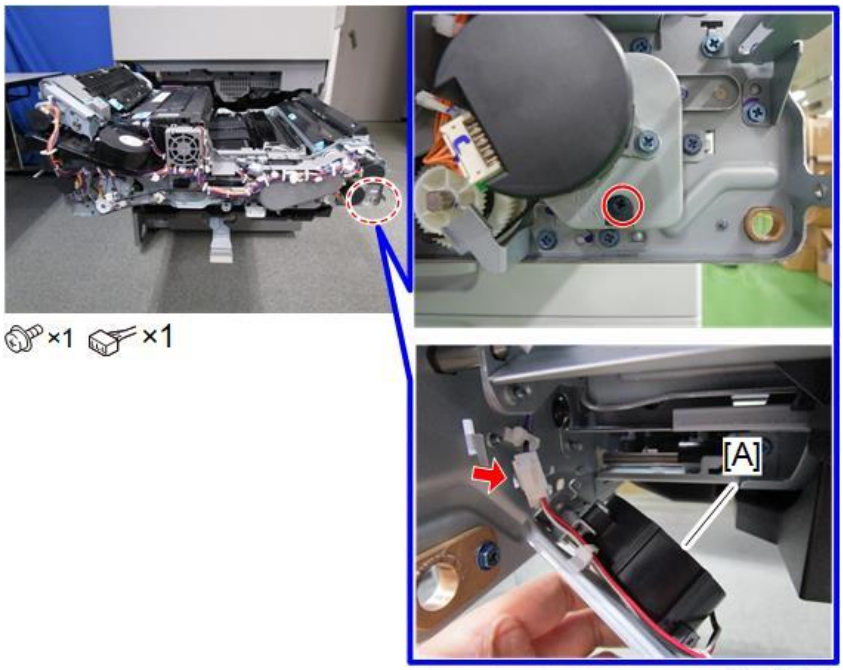
6. Remove the pressure roller intake filter [A].



Paper Transfer Belt Cooling Filter (Upper/Lower)

1. Remove the drawer unit cover. (Drawer Unit Cover)

2. Remove the paper transfer belt cooling fan [A] with duct.



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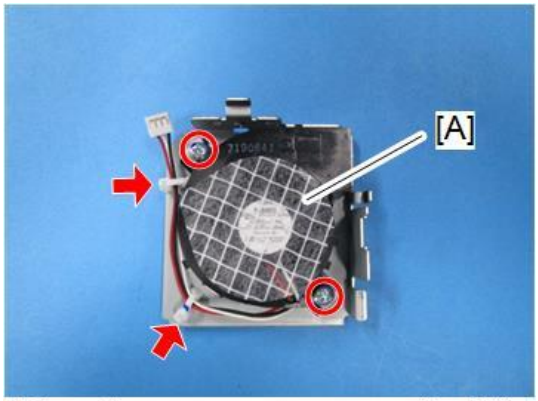
3. Remove the paper transfer belt cooling fan [A] with bracket.



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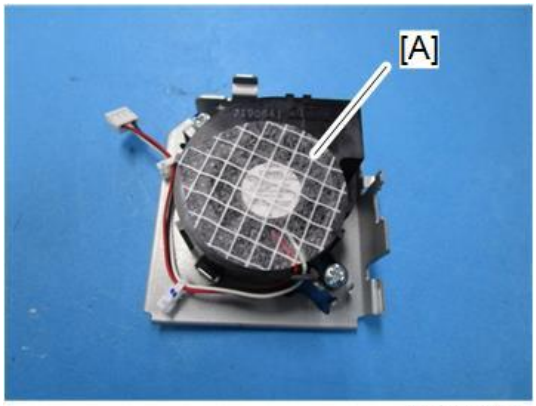
4. Remove the paper transfer belt cooling filter [A].



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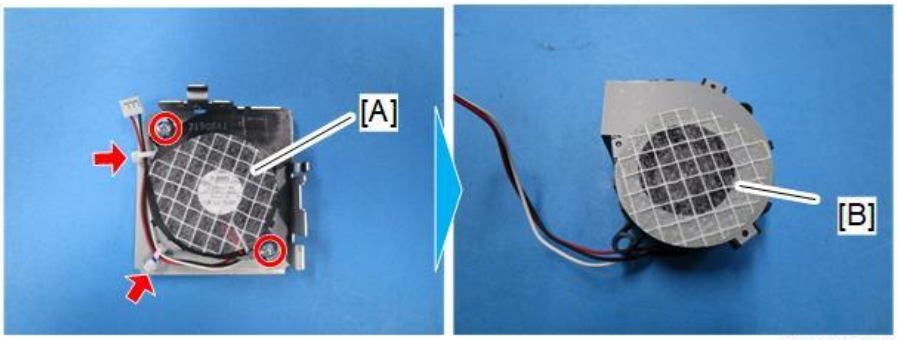
5. Remove the paper transfer belt cooling fan [A] from the bracket.

6. Remove the paper transfer belt cooling filter [B] (lower).



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Adjustment after Replacement

The following items need to be adjusted after replacement of parts.

Part	Implementation items	References
ADF	• CIS RGB Adjustment (SP4-712/713/714) • ADF Adjustment Side-to-Side Registration (SP6-006-001/002) • ADF Adjustment L-Edge Regist (1-Pass) (SP6-006-010/011) • DF Magnification Adj.(SP6-017) • Platen adjustment • CIS adjustment	Adjustment after Replacing the ADF
Lens Block	• Main Scan Registration Adjustment (SP4-011-001) • Sub Scan Registration Adjustment (SP4-010-001) • Sub Scan Magnification Adjustment (SP4-008-001)	Magnification and Registration Adjustment
Scanner Drive Motor	• Sub Scan Magnification Adjustment (SP4-008-001)	Magnification and Registration Adjustment
Scanner Wire	• Make a test copy. Make sure there is no deviation in registration and magnification. If there is a deviation, adjust the SPs for registration and magnification.	Magnification and Registration Adjustment
Laser Unit	• Image Parameters (SP2-108-001/002) • Color Registration (User Tools)	Adjustment after Laser Unit Replacement
PCDU Drum Unit Development Unit Development Filter Drum Cleaning Unit Lubricant Blade Drum Cleaning Blade Lubrication Roller Charge Roller Unit	• DEMS: Execute (SP3-040-001/002/003/004/005)	
Image Transfer Belt Unit	• Force Apply Lubricant Execute (SP2-	Lubrication after

Part	Implementation items	References
Transfer Belt	696-001)	replacement
ITB Cleaning Unit ITB Cleaning Blade ITB Lubricant Bar ITB Lubricant Blade	• Force Apply Lubricant Execute (SP2-696-001)	Lubrication after Replacement
Paper Transfer Unit Paper Transfer Belt Unit Paper Transfer Cleaning Blade	Force Apply Lubricant Execute	Lubrication after Replacement
Paper Transfer Lubricant Bar Paper Transfer Lubrication Roller	Force Apply Lubricant Execute	Lubrication after Replacement Pro C5310S/C5300S only
Combined High-Voltage Power Supply Board (Charge/Development) (KCMY)	SP entry with QR code	IM C6500/C8000 only

5. System Maintenance

Service Program Mode

⚠CAUTION

- Make sure that the data-in LED (⇨) is not on before you go into the SP mode. This LED indicates that the machine is receiving data. When the LED is on, wait for the copier to process the data.

Note

- The Service Program Mode is for use by service representatives only. If this mode is used by anyone other than service representatives for any reason, data might be deleted or settings might be changed. If that happens, product quality can no longer be guaranteed.

Entering SP Mode

Pro C5300S/C5310S

- When using the standard operation panel: For details, ask your supervisor.
- When using the smart operation panel: If there are no Classic Application (copy/printer/scanner/fax) icons on the HOME screen, see When using the smart operation panel.

IM C6500/C8000

If there are no Classic Application (copy/printer/scanner/fax) icons on the HOME screen, see When using the smart operation panel.

When using the smart operation panel

If there are no Classic Application (copy/printer/scanner/fax) icons on the Home screen, follow the procedure below to display the number keyboard.

1. Press and hold the button [A] located at the left side of the operation panel and "Check Status [B]"

at the same time, until the number keyboard is displayed.

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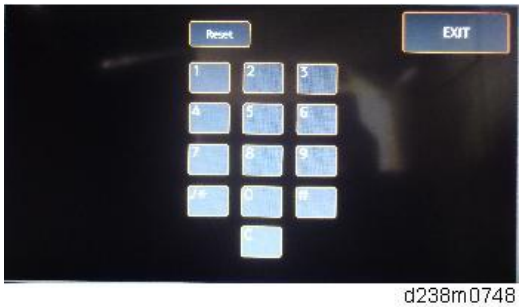
2. Enter the key code for SP mode.



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For details of the key code to enter the SP mode, ask your supervisor.

Exiting SP Mode

Press "Exit" on the LCD twice to return to the copy window.

Types of SP Modes

- System SP: SP modes related to the engine functions
- Printer SP: SP modes related to the controller functions
- Scanner SP: SP modes related to the scanner functions
- Fax SP: SP modes related to the fax functions

Select one of the Service Program modes (System, Printer, Scanner, or Fax) from the touch panel as shown in the diagram below after you access the SP mode. This section explains the functions of the System/Printer/Scanner SP modes. Refer to the Fax service manual for the Fax SP modes.

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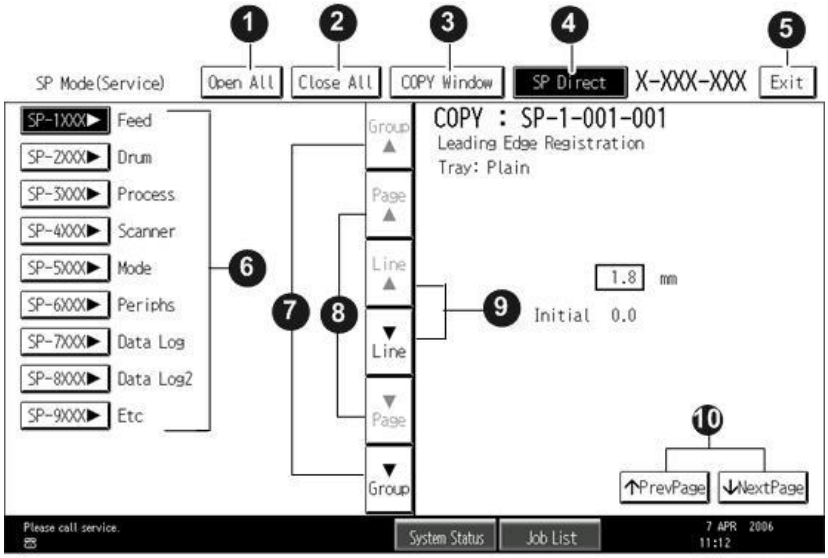
SP Mode Button Summary

Here is a short summary of the touch-panel buttons.



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1	Opens all SP groups and sublevels.
2	Closes all open groups and sublevels and restores the initial SP mode display.
3	Opens the copy window (copy mode) so you can make test copies. Press SP Mode (highlighted) in the copy window to return to the SP mode screen,
4	Enter the SP code directly with the number keys if you know the SP number. Then press [#]. The required SP Mode number will be highlighted when pressing [#]. If not, just press the required SP Mode number.)
5	Press two times to leave the SP mode and return to the copy window to resume normal operation.
6	Press any Class 1 number to open a list of Class 2 SP modes.
7	Press to scroll to the previous or next group.

8	Press to scroll to the previous or next display in segments the size of the screen display (page).
9	Press to scroll to the previous or next line (line by line).
10	Press to move the highlight on the left to the previous or next selection in the list.

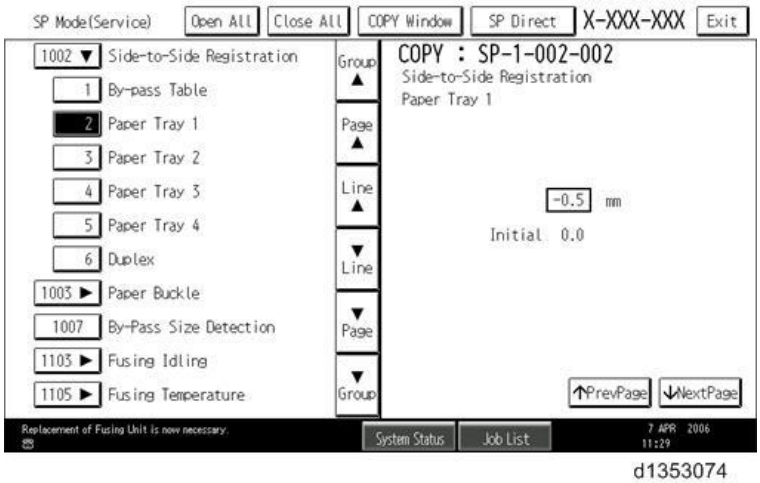
Switching Between SP Mode and Copy Mode for Test Printing

1. In the SP mode, select the test print. Then press "Copy Window".
2. Use the copy window (copier mode) to select the appropriate settings (paper size, etc.) for the test print.
3. Press "Start" to start the test print.
4. Press SP Mode (highlighted) to return to the SP mode screen and repeat from step 1.

Selecting the Program Number

Program numbers have two or three levels.

1. Refer to the Service Tables to find the SP that you want to adjust before you begin.
2. Press the Group number on the left side SP Mode window that contains the SP that you want to adjust.
3. Use the scrolling buttons in the center of the SP mode window to show the SP number that you want to open. Then press that number to expand the list.
4. Use the center touch-panel buttons to scroll to the number and title of the item that you want to set and press it. The small entry box on the right activates and shows the default or the current settings.



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Note

- Refer to the Service Tables for the range of allowed settings.

5. Do this procedure to enter a setting:
   - Press ⁺⁄₋ to toggle between plus and minus and use the keypad to enter the appropriate number. The number you enter writes over the previous setting.
   - Press "#" to enter the setting. (The value is not registered if you enter a number that is out of range.)

- Press "Yes" when you are prompted to complete the selection.

6. If you need to perform a test print, press Copy Window to open the copy window and select the settings for the test print. Press "Start" and then press SP Mode (highlighted) in the copy window to return to the SP mode display.
7. Press Exit two times to return to the copy window when you are finished.

Service Mode Lock/Unlock

When the machine contains sensitive data, the customer engineer cannot operate the machine until the Administrator turns the service mode lock off. This function makes sure that work on the machine is always done with the permission of the Administrator.

1. If you cannot go into the SP mode, ask the Administrator to log in with the User Tools and then set "Service Mode Lock" to OFF after he or she logs in:
   "Machine Features" screen > "System Settings" > "Administrator Tools" > "Service Mode Lock" > OFF
   - You can access the "Machine Features" screen with the following procedure.
     - Pro C5300S/C5310S:
       - When using the standard operation panel: Press the "User Tools" key.
       - When using the smart operation panel: Press the "User Tools" icon, and then press "Machine Features".
     - IM C6500/C8000: Press the "User Tools" icon, and then press "Machine Features".
   - This unlocks the machine and lets you access all the SP codes.
   - The CE can service the machine and turn the machine power OFF then ON. It is not necessary to ask the Administrator to log in again each time the main power is turned ON.
2. Go into the SP mode and set SP5-169 to "1" if you must use the printer bit switches.
3. After machine servicing is completed:
   - Change SP5-169 from "1" to "0".
   - Turn the machine power OFF then ON. Tell the administrator that you have completed servicing the machine.
   - The Administrator will then set the "Service Mode Lock" to ON.

Remarks

The maximum number of characters that can be displayed on the control panel is 30. For this reason, some of the SP modes shown on the screen need to be abbreviated.
The abbreviations for the SP modes with descriptions longer than 20 characters are shown below.

Item	Description
Paper Weight	**Pro C5300S/C5310S** • Paper Weight 1: 52.3-65.9 g/m^2, 14.0-17.9lb. Bond • Paper Weight 2: 66.0-80.9 g/m^2, 18.0-21.9lb. Bond • Paper Weight 3: 81.0-100.9 g/m^2, 22.0-27.0lb. Bond

Item	Description
	• Paper Weight 4: 101.0-127.4 g/m^2, 27.1-34.0lb. Bond • Paper Weight 5: 127.5-150.0 g/m^2, 34.1-40.0lb. Bond • Paper Weight 6: 150.1-216.0 g/m^2, 40.1-57.9lb. Bond • Paper Weight 7: 216.1-256.0 g/m^2, 58.0-68.0lb. Bond • Paper Weight 8: 256.1-300.0 g/m^2, 68.1-80.0lb. Bond • Paper Weight 9: 300.1-360.0 g/m^2, 80.1-96.0lb. Bond **IM C6500/C8000** • Thin Paper: 52.3-65.9 g/m^2, 14.0-17.9lb. Bond • Plain Paper 1: 66.0-80.9 g/m^2, 18.0-21.9lb. Bond • Plain Paper 2: 81.0-100.9 g/m^2, 22.0-27.0lb. Bond • Middle Thick: 101.0-127.4 g/m^2, 27.1lb.Bond-46.9lb. Cover • Thick Paper 1: 127.5-150.0 g/m^2, 47.0-55.0lb. Cover • Thick Paper 2: 150.1-216.0 g/m^2, 55.1-79.9lb. Cover • Thick Paper 3: 216.1-256.0 g/m^2, 80.0lb. Cover-141.0lb.Index • Thick Paper 4: 256.1-300.0 g/m^2, 141.1-165.0lb. Index
Paper Type	N: Normal paper MTH: Middle thick paper TH: Thick paper
Paper Feed Station	P: Paper tray B: Bypass table
Print Mode	S: Simplex D: Duplex

Others

The settings of each SP mode are explained in the right-hand column of the SP table in the following way.

[Adjustable range / **Default setting** / Step] Alphanumeric

Note

- If "Alphanumeric" is written to the right of the bracket as shown above, the setting of the SP mode shows on the screen using alphanumeric characters instead of only numbers. However, the settings in the bracket in the SP mode table are explained by using only numbers.

The following symbols are used in the SP mode tables.

Notation	What it means
ENG	Engine SP
CTL	Controller SP
FA	Factory setting: Data may be adjusted from the default setting at the factory. Refer to the factory setting sheets enclosed. You can find it in the front cover.

Notation	What it means
DFU	Design/Factory Use only: Do not touch these SP modes in the field.
*	An asterisk (*) to the left side of ENG/CTL column means that this mode is stored in the NVRAM. If you do a RAM clear, this SP mode will be reset to the default value. "ENG" and "CTL" show which NVRAM contains the data. • *ENG: NVRAM on the BICU board • *CTL: NVRAM on the controller board
SSP	This denotes a "Special Service Program" mode setting.

SP Tables

Engine and controller SP tables are provided in PDF format. Refer to the separate PDF.

- SP Group 1000
- SP Group 2000
- SP Group 3000
- SP Group 4000
- SP Group 5000
- SP Group 6000
- SP Group 7000
- SP Group 8000

See "Appendices" for the following information:

- Input and Output Check
- Printer SP Mode
- Scanner SP Mode

Firmware Update (SD Card)

Overview

In order to update the firmware of this machine, it is necessary to download the latest version of firmware to an SD card.
Insert the SD card into SD card slot 2 beside the rear left of the controller box.

Types of firmware update files, supported update methods:

	SFU	SD Card	RFU	ARFU
Individual firmware	N/A	Available	Available	N/A
Package firmware	Available	Available	Available	Available

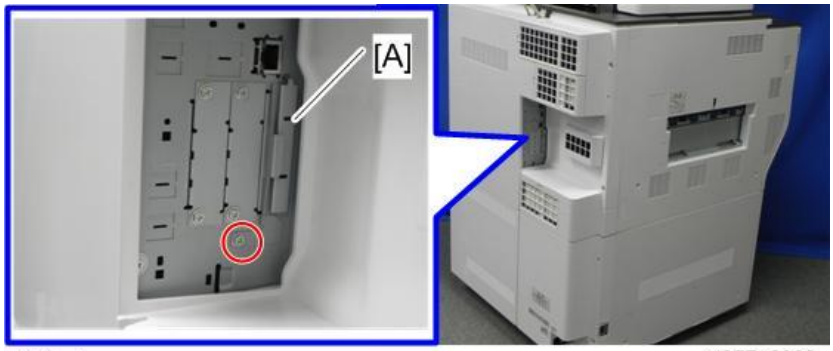
Update Procedure

Important

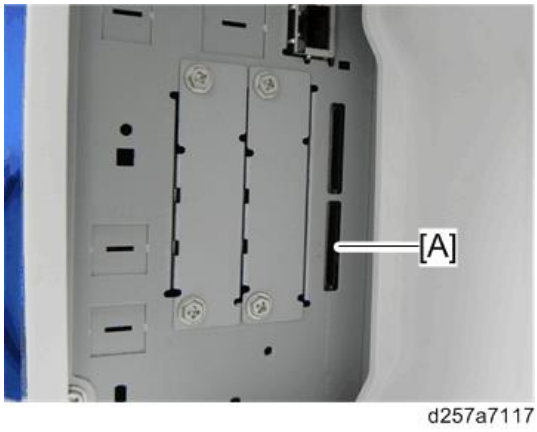
- SD cards are precision devices, so when handling them, keep in mind the following guidelines:
- When the power is switched ON, do not insert or remove a card.
- During installation, do not switch the power OFF.
- Since the card is manufactured to high precision, do not store it in a hot or humid location, or in direct sunlight.
- Do not bend the card, scratch it, or give it a strong shock.
- Before downloading firmware to an SD card, check whether write-protection of the SD card is canceled. If write-protection is enabled, an error code (error code 44, etc.) will be displayed, and the download will fail.
- Before updating firmware, remove the network cable from this machine.
- If SC818 is generated during software update, switch the power OFF -> ON, and complete the update which was interrupted.
- During software update, disconnect network cables and interface cables, remove wireless boards, etc., (so that they are not accessed during the update).

1. First download the new firmware to the SD card.
2. Turn OFF the main power.

3. Remove the SD card slot cover [A].



4. Insert the SD card into SD card slot 1 [A: Lower Slot].



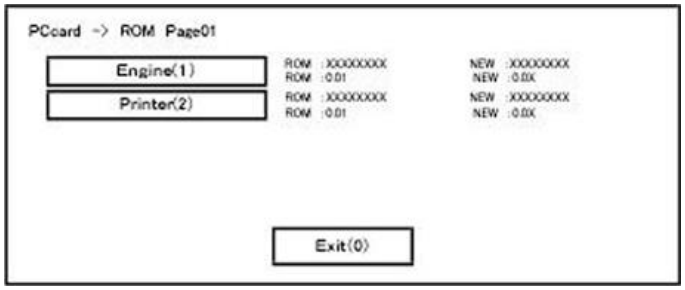
Note

- Check whether the card is properly in the SD card slot. Insert the SD card until you hear it click into place.
- To remove the card, release by pressing once.

5. Turn ON the main power.

6. Wait until the update screen starts (about 45 seconds).
When it appears, "Please Wait" is displayed.

7. Check whether a program installation screen is displayed. (English display) When the SD card contains two or more software modules, they are displayed as follows.



<<When two or more software names are displayed>>

1. Press the module selection button or [1] - [5] on the 10-key pad.
2. Choose the appropriate module. (If already selected, cancel the selection)

Operation of keys or buttons

Keys or buttons to press	Contents
[Exit] or 10-key pad [0]	Returns to normal screen.
[Start] Key	Select all modules.
[Clear/Stop] key	Cancel all selections.

Display contents

On the above screen, two programs, i.e., engine firmware and printer application are displayed. (The screen may change depending on the firmware or application).

The display contents are as follows:

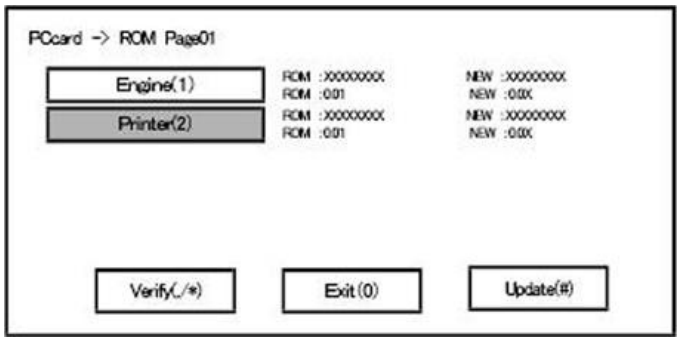
Display	Contents
ROM:	Display installed module number / version information.
NEW:	Display module number / version information in the card.

The upper row corresponds to the module name, the lower row corresponds to the version number.

8. Select the module with the module selection button or 10 key pad operation. The selected module is highlighted, and [Verify] and [Update] are displayed.

Note

- Depending on the combination of modules to update, it may not be possible to select all of them simultaneously.

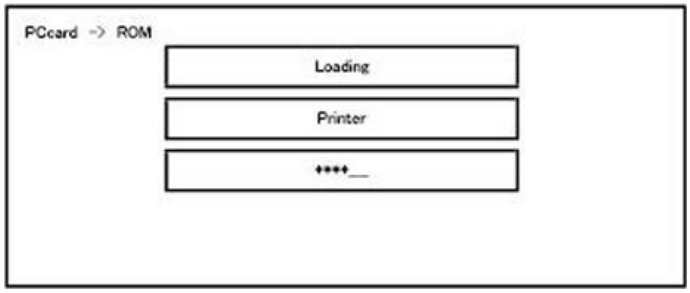


<<Key or button operations>>

Keys or buttons to press	Contents
[Update] or [#] key	Update the ROM of the selected module.
[Verify] button or [./*] key	Perform verification of the selected module.

9. Press the [Update] or [#] key, and perform software update.

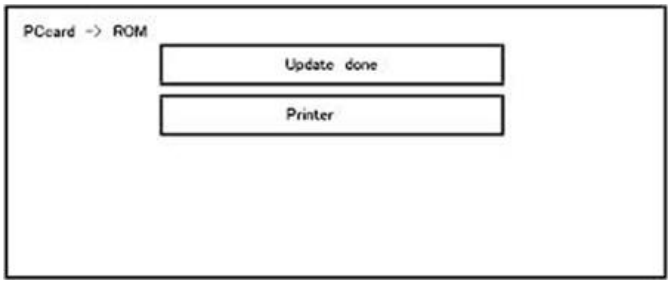
10. During firmware update, a "firmware update/ verification progress screen" is displayed. When firmware update is complete, a "firmware update end screen" is displayed.



- In the middle row, the name of the module currently being updated is displayed. (in this case, the printer module is being updated)

- In the lower row, a progress bar is displayed in ten steps. (The more *, the more the progress.)

<<Firmware update end screen>>



- This screen is displayed when all selected firmware modules are to be updated. "Printer" in the second row shows that the module updated last is the printer. (When more than one were updated simultaneously, only the module that was updated last is displayed.)
- When Verify has completed normally, the Update done display of the above screen is "Verify done." If "Verify Error" is displayed, reinstall the software of the application displayed in the lower row.

11. After turning the main power OFF, remove the SD card.

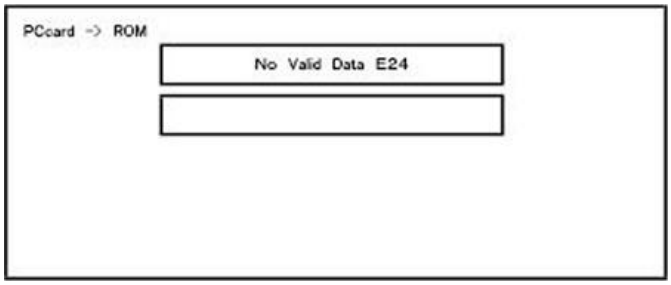
12. Turn the main power ON again, and check whether the machine is operating normally.

13. Return the SD card slot cover to the original position.

Note

- When the power supply is switched OFF during firmware update, update is interrupted, and the power is switched ON again, normal operation cannot be guaranteed.
- To guarantee operation, an update error continues to be displayed until update is successful.
- In this case, insert the SD card again, switch the power ON, and continue download of firmware from the SD card automatically.
- The PS3 firmware program is included in the preinstalled PDF firmware. In the default state, although the PS3 firmware program is hidden in the disabled state, the function is enabled by installing the PS3 card. (The program installed in the PS3 card is a dongle (key) for enabling the PS3 function).
- Due to the above specification, the self-diagnosis result report shows the ROM module number / software version of the PDF firmware at the PS location.

Error Screens During Updating



EXX shows an error code.

For error codes, refer to the following table:

Error Code List

Code	Contents	Solutions
20	Physical address mapping cannot be performed.	• Switch the main power supply off and on to try again. • Re-insert the SD card to reboot it. • Replace the controller board if the above solutions do not solve the problem.
21	Insufficient memory for the download	• Switch the main power supply off and on to try again. • Replace the controller board if the updating cannot be done by switching the power off and on.
22	Decompression of compressed data failed.	• Switch the main power supply off and on to try again. • Replace the SD card used for the update. • Replace the controller board if the above solutions do not solve the problem.
24	SD card access error	• Re-insert the SD card. • Switch the main power supply off and on to try again. • Replace the SD card used for the update. • Replace the controller board if the above solutions do not solve the problem.
32	The SD card used after download suspension is incorrect. The SD card inserted before the power interruption is not the same as the one inserted after the power interruption.	• Insert the SD card containing the same program as when the firmware update was suspended, and then switch the main power supply off and on to try again. • There is a possibility that the SD card is damaged if the update cannot be done after the correct SD card has been inserted. In this case, try again with a different SD card. • Replace the controller board if the above solutions do not solve the problem. Replace all relevant boards if the update is done for the BICU and FCU. Replace the operation panel unit if the update is done for the operation panel.
33	Card version error. The wrong card version is	• Install the correct ROM update data for each version in the SD card.

Code	Contents	Solutions
	downloaded.	
34	Destination error. A card for the wrong destination is inserted.	• Install the correct ROM update data for each destination (JPN/ EXP/ OEM) in the SD card.
35	Model error. A card for the wrong model is inserted.	• Install the correct ROM update data for each model in the SD card.
36	Module error. The program to be downloaded does not exist on the main unit. The download destination specified by the card does not match the destination for the main unit's program.	• Install the program to be updated in advance. • There is a possibility that the SD card containing the program to be updated has not been mounted. Check to confirm that the SD card has been correctly mounted. • The SD card is incorrect if the program to be updated has been correctly installed. In this case, insert the correct SC card.
38	The version of the downloaded program has not been authorized for the update.	• Make sure that the program to be overwritten is the specified version.
40	Engine download fails.	• Switch the main power supply off and on to try again. • If the download fails again, replace the controller board and the BICU.
41	Fax download fails.	• Switch the main power supply off and on to try again. • If the download fails again, replace the controller board and the FCU board.
42	Control panel / language download fails.	• Switch the main power supply off and on to try again. • If the download fails again, replace the controller board and the operation panel unit.
43	Printing download fails.	• Switch the main power supply off and on to try again. • The SD card is damaged if the update fails again. Replace the SD card.
44	The data to be overwritten cannot be accessed when controller-related programs are downloaded.	• Switch the main power supply off and on to try again. • Install the correct ROM update data in the SD card. • Replace the controller board if the data to be

Code	Contents	Solutions
		overwritten is contained on the controller board.
49	Firmware updates are currently prohibited.	• The setting of Update Firmware in the Administrator Tools has been set to [Prohibit] by an administrator. Amend the setting to [Do not Prohibit] and try again.
50	The results of the electronic authorization check have rejected the update data.	• Install the correct ROM update data in the SD card.
57	@Remote is not connected at the date/time reserved for receiving the package firmware update from the network.	• Check the @Remote connection.
58	Update cannot be done due to a reception route problem.	• Check the @Remote connection.
59	HDD is not mounted.	• Check the HDD connection.
60	HDD could not be used during the package firmware update.	• Try again. • Replace the HDD if the download fails again.
61	The module ID for the package firmware update is incorrect.	• Prepare the correct package files.
62	The configuration of the package firmware update files is incorrect.	• Prepare the correct package files.
63	Reception fails due to the power off at the reserved date/time of the remote firmware update from the network.	• Update is to be done automatically when the next reception time has elapsed.
64	Reception fails due to the power off at the reserved date/time of the package firmware update from the network.	• Reset the reservation date/time for the remote update.
65	Reception fails due to the status error of the machine at the reserved date/time of the remote firmware update from the network.	• Update is to be done automatically when the next reception time has elapsed.
66	Reception failed due to the status error of the machine at the reserved date/time of the package firmware update from the network.	• Reset the reservation date/time for the remote update.
67	Acquisition of the latest version information from the Gateway fails at	• Check that the network is connected correctly.

Code	Contents	Solutions
	the reserved date/time of the remote firmware update from the network.	
68	Acquisition of the latest version information from the Gateway fails.	• Check that the network is connected correctly.
69	Download fails at the reserved date/time of the remote firmware update from the network.	• Check that the network is connected correctly.
70	Package firmware download from the network fails.	• Check that the network is connected correctly.
71	Network communication error occurs at the reserved date/time of the package firmware update from the network.	• Check that the network is connected correctly.
72	The setting of @Remote is invalid at the reserved date/time of the package firmware update from the network.	• Set the setting of @Remote Service in System Settings > Settings for Administrator > Security > Extended Security Settings to [Do not Prohibit].
74	Package file decompression has failed.	• If this occurred during the update by the removable media, check that the removable media is not defective, download the package again, and retry the update. • If this occurred during the remote firmware update (WIM and utility) in the local environment, replace the package file in the local environment with the correct one and retry the update. • If this has occurred on other occasions or keeps occurring even on the abovementioned occasions, replace the DIMM of the controller board. If it persists, replace the hard disk.
75	The amount of update data has exceeded the limit. There is too much data in the removable media.	• Move “fwu” in the “/romdata” directory out of that directory so that the same modules are not located in the same directory.
83	Package RFU reception has been canceled by the user.	• Package RFU reception has been canceled by the user.
84	Package RFU reception timeout. The reception time has exceeded the limit	• Check the network connection.

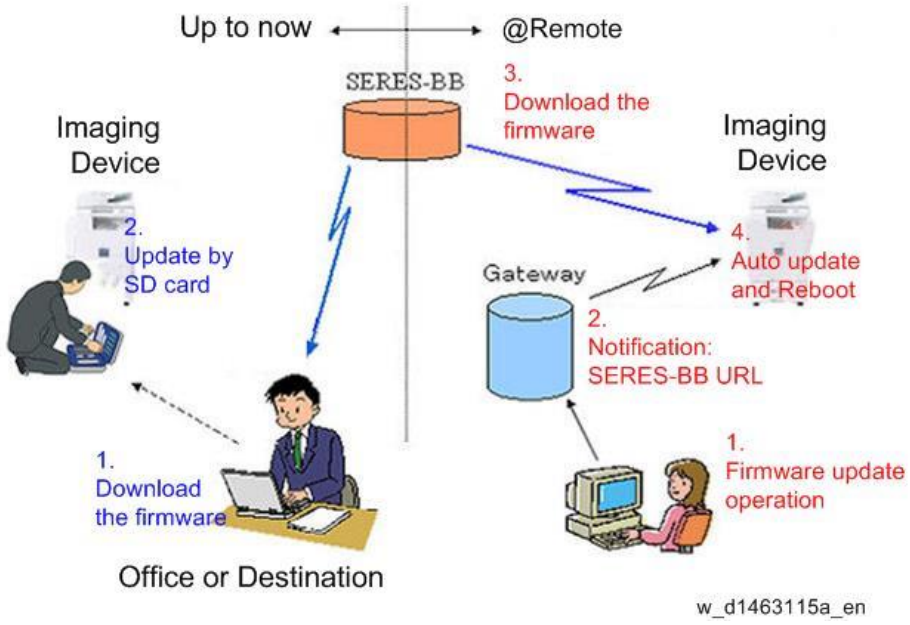
Code	Contents	Solutions
	(100 minutes).	

Note

- The PDF firmware installed as standard contains the program required to print PS3 data by default. However, this PS3 program is normally disabled.
- The PS3 firmware is a dongle (key) which enables PS3 data printing functions. When the PS3 firmware is installed, the PS3 program in the PDF firmware is enabled. Due to this specification, the self-diagnosis result report shows the ROM part number/software version of the PDF firmware contained in the PS3 program.

Firmware Update (Remote Firmware Update)

In this machine, software can be updated by remote control using @Remote.



Types of firmware update files, supported update methods:

	SFU	SD	RFU	ARFU
Individual firmware	N/A	Available	Available	N/A
Package firmware	Available	Available	Available	Available

RFU Performable Condition

RFU can be performed for devices that meet the following conditions:

1. The customer consents to the use of RFU.
2. The device is connected to a network via TCP/IP for @Remote.

Firmware Update (Smart Firmware Update)

⚠CAUTION

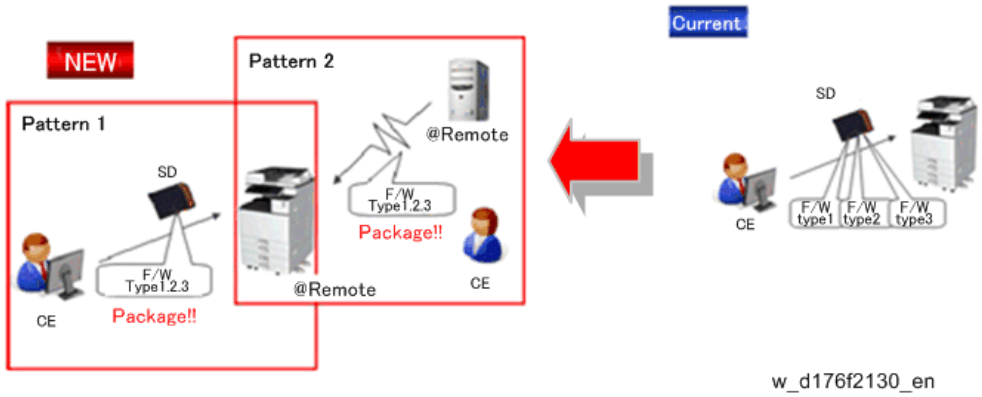
- A HDD unit must be installed on the machine to enable the SFU or the package firmware update via SD card.

Overview

Each firmware module (such as System/Copy, Engine, etc.) used to be updated individually. However, an all-inclusive firmware package (package_ALL) is now available.

There are two ways to update using the firmware package.

- Package Firmware Update via a network: SFU (Smart Firmware Update)
- Package Firmware Update with an SD card



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Package Firmware Update via a network: SFU (Smart Firmware Update)

- There are two methods for SFU.
  - Immediate Update: To update the firmware when visiting
  - Update at the next visit: To set the date and time for downloading. The firmware will be automatically downloaded beforehand and updated at the following visit.
- "Update at the next visit" is recommended since firmware download may take some minutes due to the network condition.

Note

- SFU requires the connection to @Remote via a device which has the embedded @Remote communicating function. When a machine is connected to @Remote via an intermediate device (RC Gate), the SFU function is disabled.

Package Firmware Update via an SD Card

Package firmware update can also be performed using the conventional SD card method by writing the package firmware directly to the SD card.

Types of firmware update files, supported update methods:

	SFU	SD Card	RFU	ARFU
Individual firmware	N/A	Available	Available	N/A
Package firmware	Available	Available	Available	Available

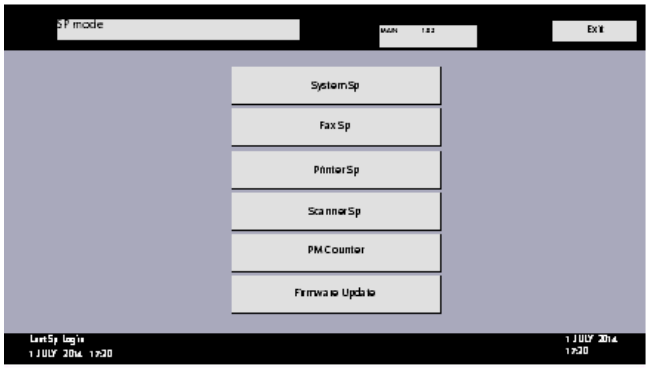
Immediate Update

Enter the [Firmware Update] menu in the SP mode and update the package firmware.

Note

- The [Firmware Update] button will appear even when a machine is connected to @Remote with a device which does not have an embedded @Remote communicating function.
- If an error code is displayed, refer to Error Screens During Updating.

1. Enter the SP mode.
2. Touch [Firmware Update].



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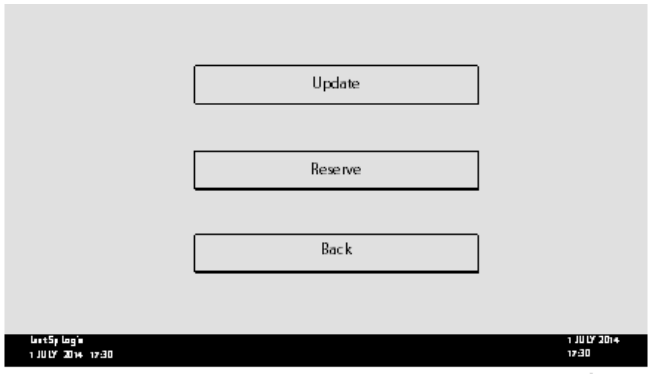
3. Touch [Update].



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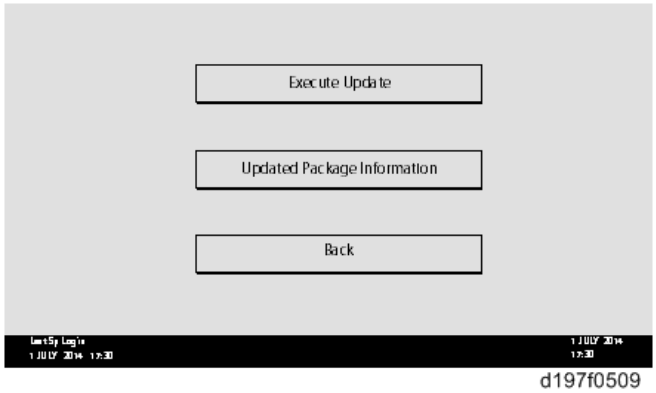
4. Touch [Execute Update].



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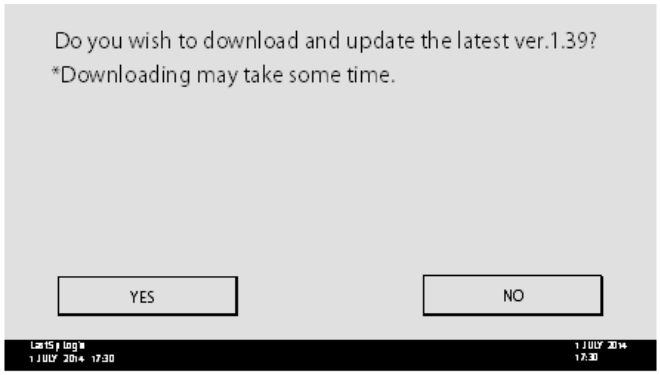
5. Touch [YES].



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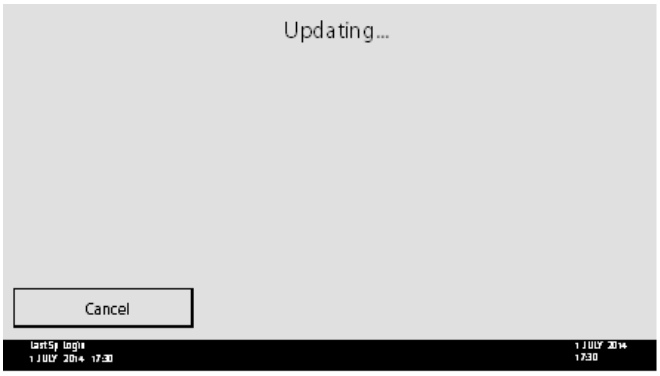
6. The following will be displayed.



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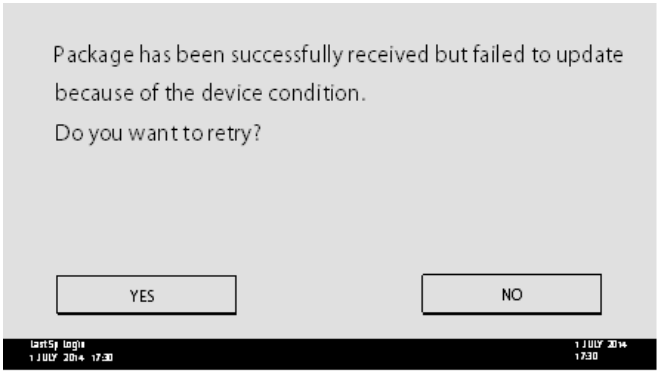
Note

- If the error code E66, which indicates that the download of the firmware has failed, is displayed, go back to step 1.
- Update will be started automatically after the download is finished.
- When the machine is in the update mode, the automatic update is suspended if a print job is started. After the print job is finished, touch [YES] on the display shown below to restart

updating.



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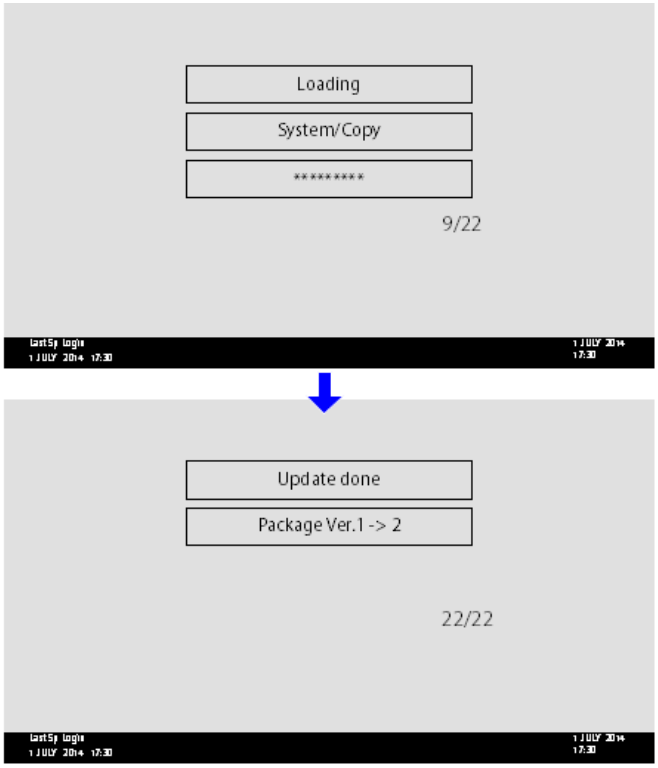
7. [Update done] is displayed.

- The machine will automatically reboot itself.



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Note

- The figures at the lower right of the display indicate "Number of updated items/ All items to be updated".

Update at the Next Visit (Reserve)

It is possible to set the machine to download the package firmware required for SFU in advance, and then perform the actual installation at the next service visit. This saves waiting time for the firmware to download at the service visit.

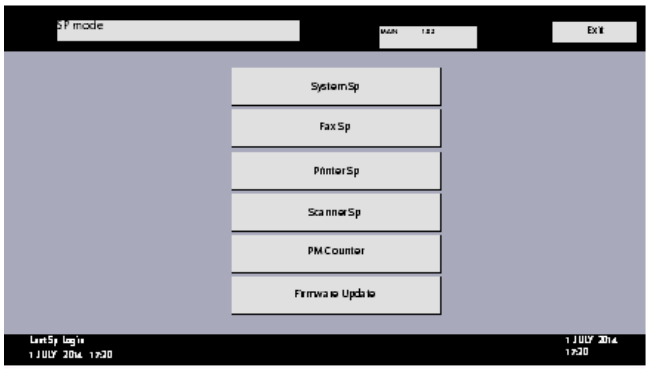
How to Set the Machine to Download Firmware Later (Reserve)

Enter the [Firmware Update] menu in the SP mode and update the package firmware.

Note

- The [Firmware Update] button will appear even when a machine is connected to @Remote with a device which does not have an embedded @Remote communicating function. If an error code is displayed, refer to Error Screens During Updating.

1. Enter the SP mode.
2. Touch [Firmware Update].



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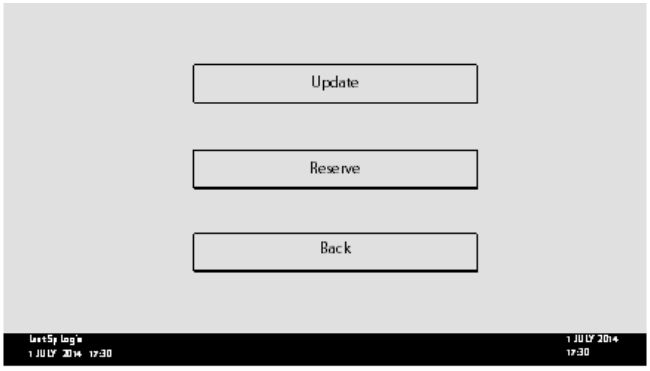
3. Touch [Reserve].



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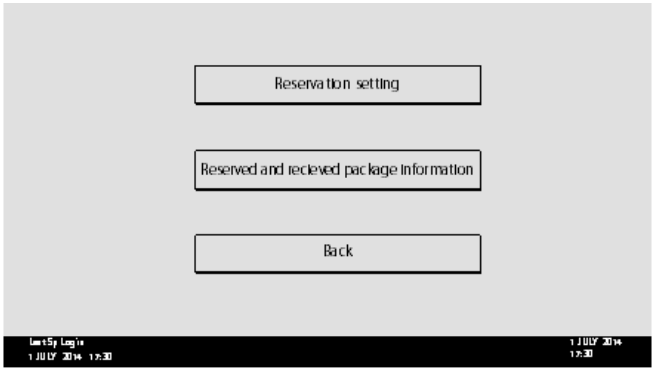
4. Touch [Reservation setting].

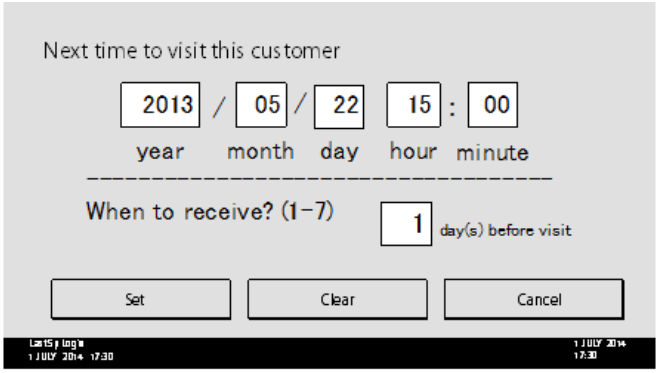


d197f0510

5. Enter the date and time of the next visit and the start of receiving data.
   - "Next time to visit this customer": The package firmware will be automatically downloaded by

this time/date.

- "When to receive? (1-7)": The download of the package firmware will begin this number of days before the next visit.



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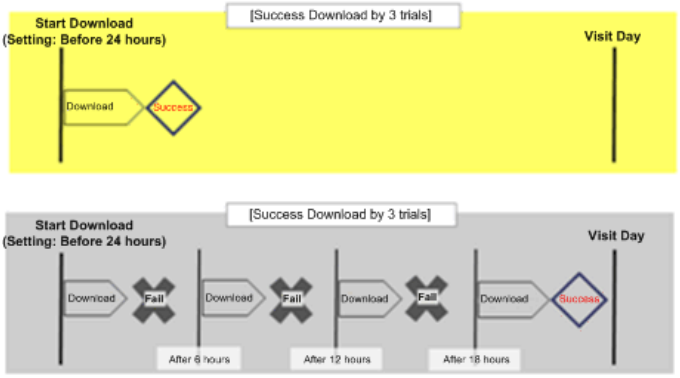
Successful Download

In the two diagrams below, the firmware is set to be downloaded by the day before the next scheduled visit. In the first diagram, the download is successful on the first try. In the second diagram, the download fails three times and is successful on the fourth try.



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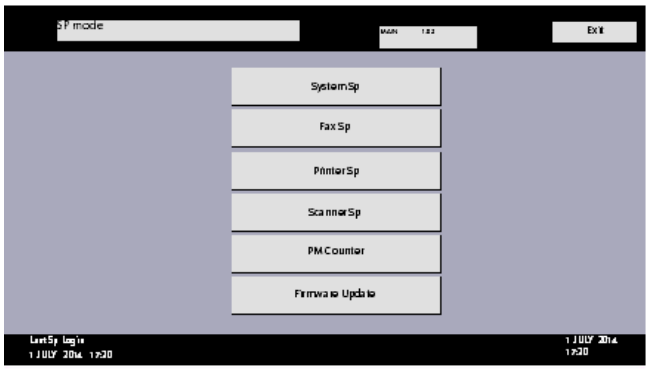
- If the firmware download fails or cannot be completed due to the network settings/condition, no power to the machine, or other reason, the machine will continue retrying every six hours until the scheduled deadline (up to a maximum of four tries). For example, if the download is set for the day before the next visit, the machine will attempt the download at 24 hours before the visit, and then continue trying every six hours (max. four tries total).
- The retry is only performed in cases when the firmware download has failed.
- If the machine is in Energy Saver mode when the download is scheduled to begin, the download will be performed in the background and the machine/panel will stay in Energy Saver mode.
- The download will continue uninterrupted even if the customer initiates a print job, copy job, fax receiving or other operation while the download is in progress.
- The download will be terminated if the customer turns the power off while the download is in progress.
- If the download cannot be completed successfully by the time of the next scheduled visit, the

machine will stop trying to download the firmware.

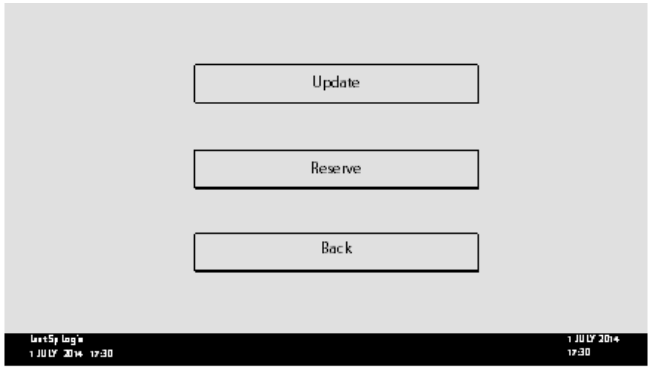
How to Check if the Firmware Downloaded with Reserve

1. Enter the SP mode.
2. Touch [Firmware Update].



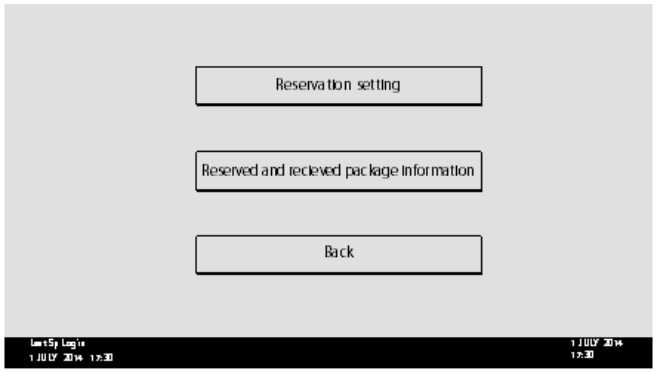
d197f0507

3. Touch [Reserve].



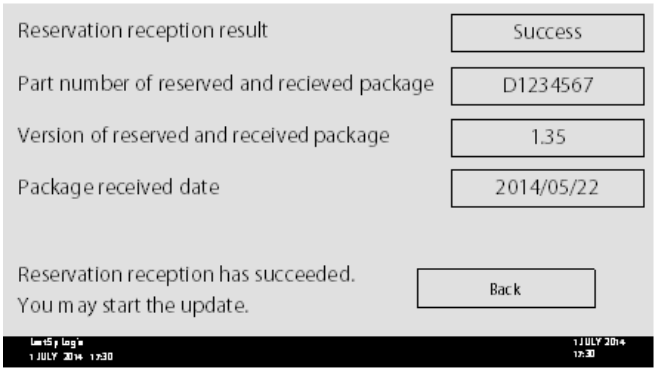
d197f0508

4. Touch [Reserve and received package information].



d197f0510

5. Check the information displayed.
   When the package firmware was downloaded successfully, the details of the download result are displayed as the following picture shows.



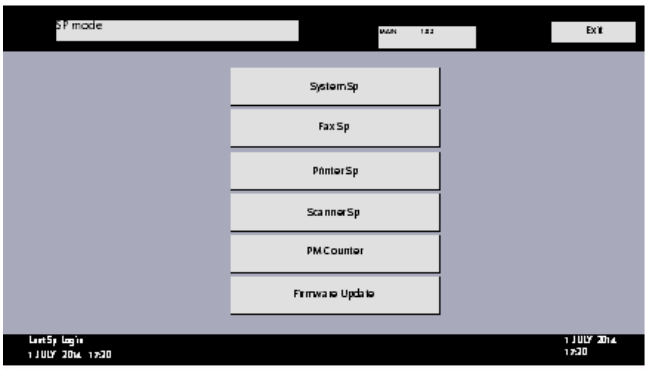
d197f0511

Note

- This information will only be displayed if the reserved firmware has already been downloaded. If not, all the data items are indicated with "-".

How to Install Firmware Downloaded with Reserve

1. Enter the SP mode.
2. Touch [Firmware Update].



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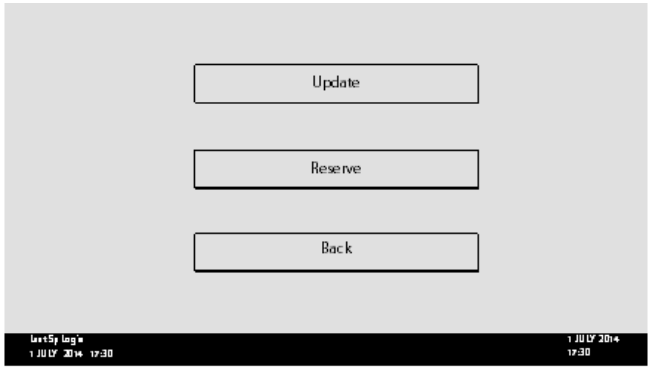
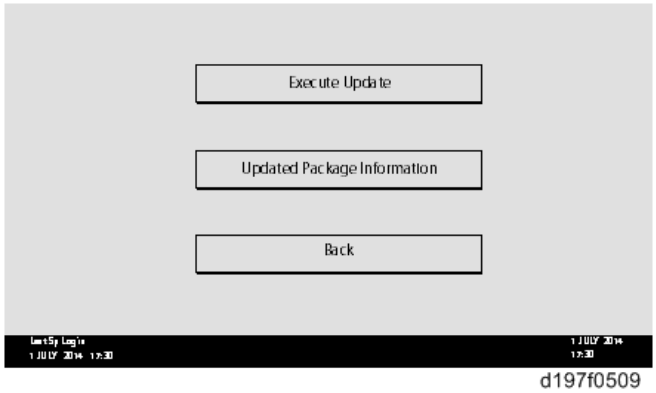
3. Touch [Update].



d197f0508

4. Touch [Execute Update].



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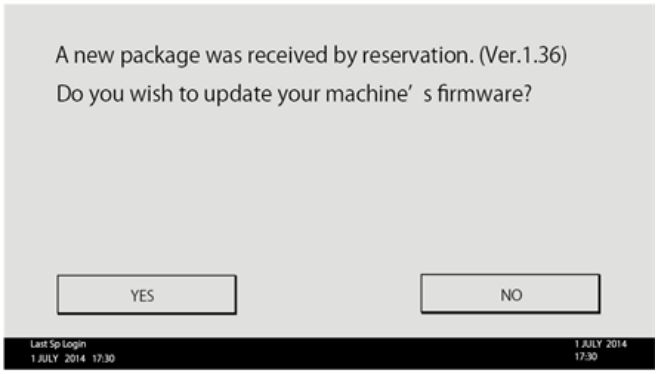
5. Check the version of the received package firmware, and then touch [YES].

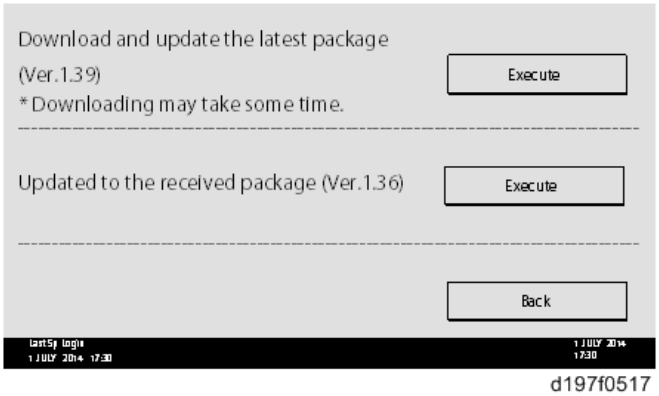
- Update is started.



d197f0516

Note

- If the version of the reserved package in the HDD is older than the latest version, the messages shown in the following picture are displayed.

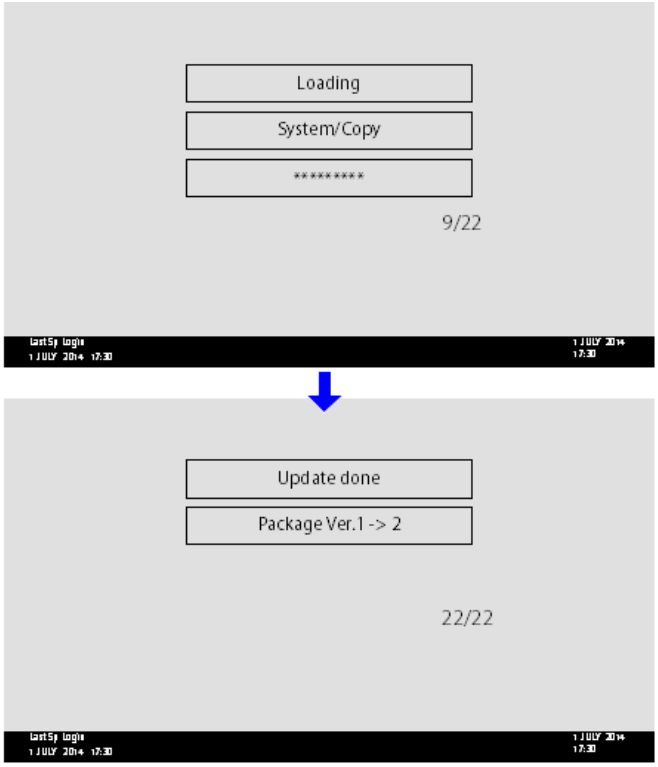


d197f0517

- If you wish to download the latest version, touch [Execute] beside the message "Download and update the latest package." Then update of the package firmware will be started.
- If you wish to update using the firmware in the HDD (old version), touch [Execute] beside the message "Update to the received package."

6. [Update done] is displayed.

- The machine will automatically reboot itself.



d197f0518

Note

- The figures at the lower right of the display indicate "Number of updated items/ All items to be updated".

Update via SD card

Update with an SD card, which is the conventional method, is available if you write the package firmware to the SD card.

Note

- If an error code is displayed, refer to Error Screens During Updating.

1. Create a new folder in the SD card, and then name it "package".
2. Copy the package firmware (xxxxxxxx.pkg) to this folder.

d197f0504

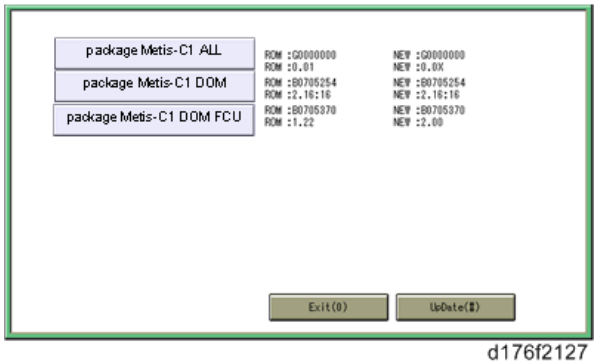
Important

- If you copy the package firmware into the conventional "romdata" folder, the update will

not work.

- Only one version of the package firmware should be copied into the folder. If you copy multiple versions of package firmware to the SD card, the machine will select only one version of the firmware randomly.

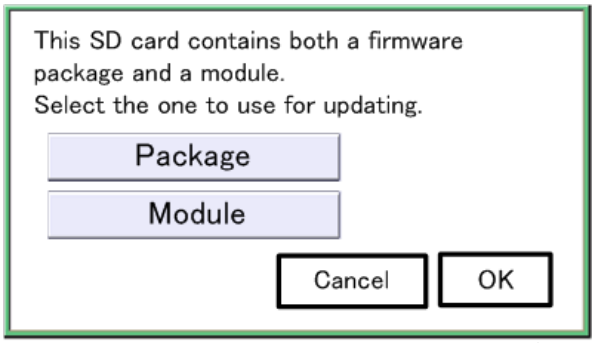
3. Turn the power OFF.
4. Insert the SD card which contains the package into SD card slot 2 (for service).
5. Turn the power ON and touch [Update].



d176f2127

Note

- When the SD card contains both a firmware package and one or more modules, the following display may show up. Select [Package] and touch [OK] to move to step 5 above.



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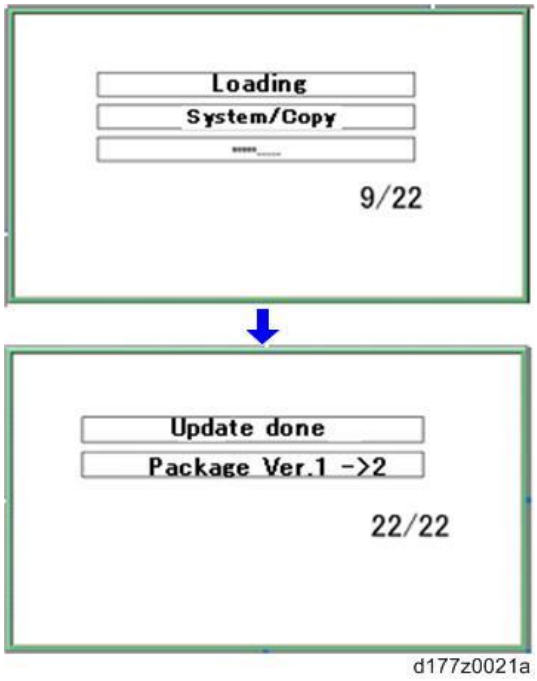
6. Update is started automatically after the package firmware download to the HDD has been completed.

7. When update is completed, "Update done" is displayed.



Note

- The figures at the lower right of the display indicate "Number of updated items/ All items to be updated".

8. Turn the main power switch OFF, and then pull out the SD card from SD card slot 2.

9. Turn the power ON.

Firmware Update (Auto Remote Firmware Update)

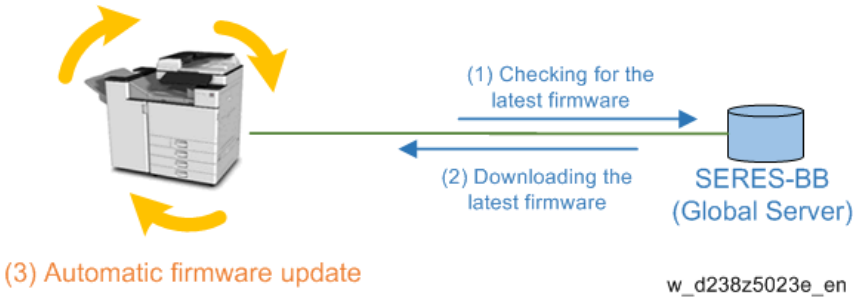
Note

- Auto remote firmware update (ARFU) requires connection to the Internet. Be sure to get permission from the customer before setting up this feature.

Overview

By Auto Remote Firmware Update (ARFU), the firmware is updated by checking the global server every 76 hours and downloading the latest package if it is newer than the one installed on the machine.

Function Overview



Types of firmware update files, supported update methods:

	SFU	SD Card	RFU	ARFU
Individual firmware	N/A	Available	Available	N/A
Package firmware	Available	Available	Available	Available

What is Included in the Firmware Package

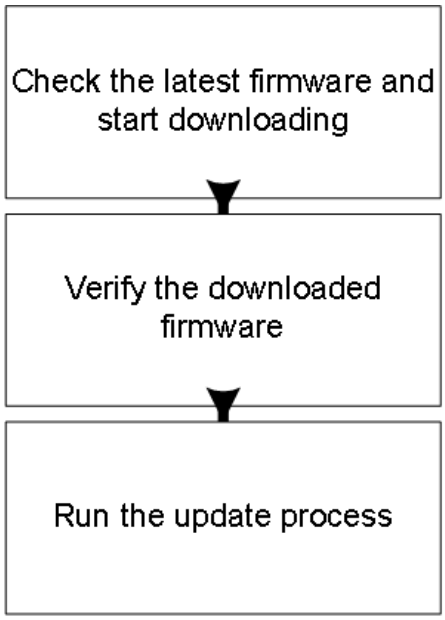
Modules included in the firmware package are indicated by checkmarks (✓) in the firmware download web site.

Firmware not included in the package require updating by SD cards, etc.

Included	Firmware
-	aics
✓	animation
✓	Application Site
✓	BluetoothService
✓	CheetahSystem
-	CSPF
-	Data Erase Onb
-	EcoInfoWidget
✓	Engine
-	External Auth
✓	Fax

Included	Firmware
-	FaxInfoWidget
✓	GWFCU3.8-9(WW)

Downloading and Updating Process



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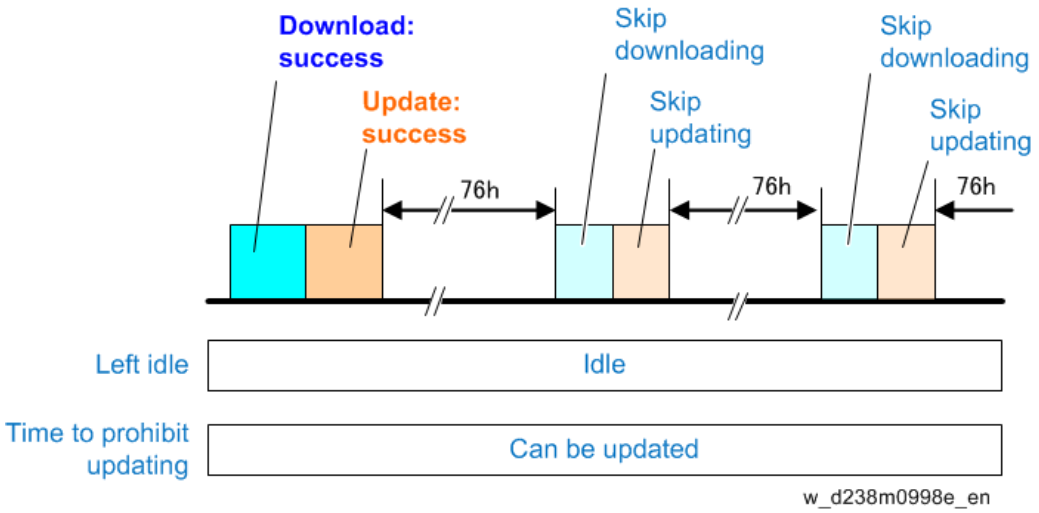
Downloads the latest package

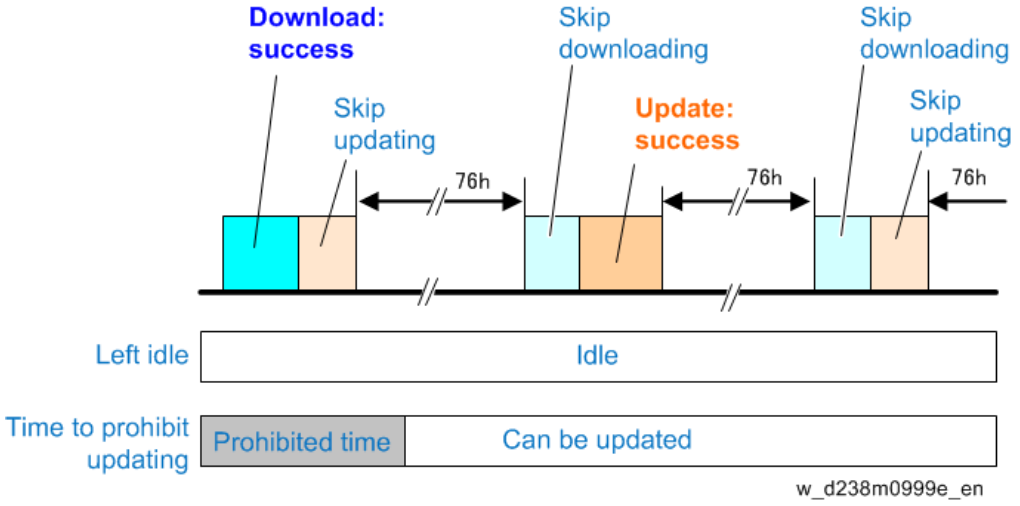
The machine accesses the server to check for latest package version.
If the version of the package on the global server is later than that of the package installed on the machine, or if the machine has not downloaded the firmware package, the machine downloads the latest package in the background even when the customer is using the machine.
If the download fails, the machine will retry downloading 76 hours later.
The downloaded package can also be used with SFU (Smart Firmware Update). A package downloaded with SFU (Smart Firmware Update) can be used with ARFU (Auto Remote Firmware Update) and vice versa.
When replacing the hard disk, information concerning the current firmware package becomes lost from the hard disk. So, even if the latest firmware is on the new hard disk, be sure to download the latest package data.
When the machine connects to the server where the package files are stored, the DNS settings and the name solution by DNS is needed. The machine will still try to download the package even if the name cannot be resolved, but will fail as the name is not resolved.
The time and date to send the next inquiry to the global server can be checked with SP5-886-116 (Firm Update Setting: Auto Update Next Date).
The auto remote firmware update is executed every 76 hours.

ARFU Update Determination

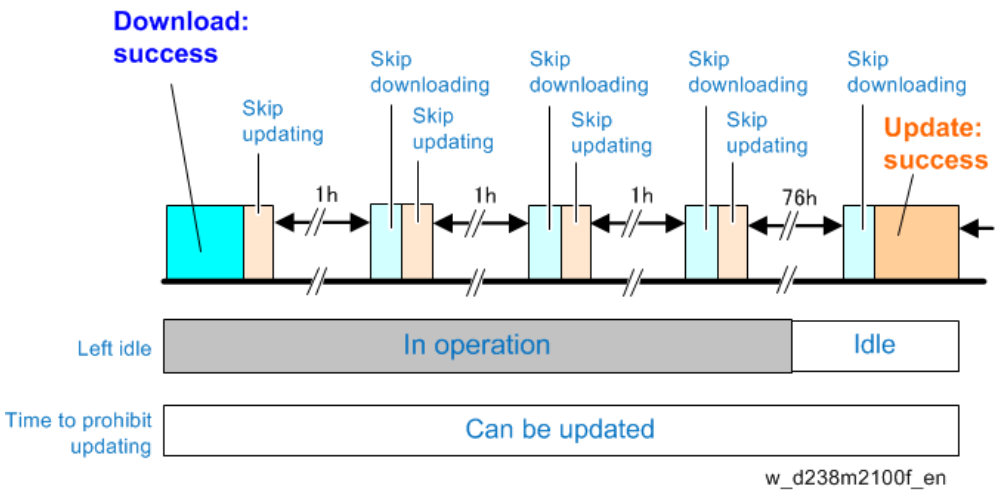
When the machine has successfully downloaded the latest package firmware file, or if the file has already been downloaded, the machine verifies whether a firmware update is necessary.



If the update timing falls within the prohibited period set in the SP configuration or Web Image Monitor, the machine will retry the firmware update 76 hours later.



If the machine is in use at the time of firmware update, the machine will retry the update. The machine retries update up to three times at one-hour intervals (which can be changed in the SP configuration). If the machine is in use on all three retries, the machine will retry the update 76 hours later.

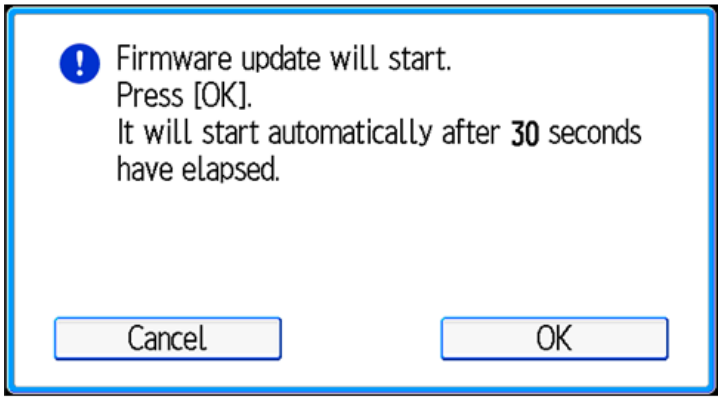


Situations in which the machine is determined to be in use

No.	Situations judged as machine in use
1	Within 30 seconds of the operation panel being used
2	During firmware update
3	While firmware update is disabled
4	While printing (copy, printer, fax, re-printing via network)
5	While scanning (copy, scanner, fax)
6	Retrieving image data via network
7	While initial setting (User Tools settings) or SP is being set
8	While fax is transferring data
9	During on hook / on handset
10	During the PC-FAX process (from PC to machine data transfer to the end of the job)
11	While shifting to/from the energy server mode
12	When not being able to run firmware update due to the modules that are running e.g.) Waiting for DCS transfer (refer to appendix), accessing devices such as HDD/SD card, etc.
13	While displaying a preview
14	While the document server function is in use
15	Connecting to TWAIN
16	During the interrupt copy process
17	While displaying the printer menu
18	While updating the display for the document server function via WIM or for stored fax documents
19	While writing log information
20	While accessing the address book
21	During SC

Update Process

When the machine updates the firmware by Auto Remote Firmware Update (ARFU), a message dialog box opens to indicate the start of update.



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“Cancel” and “OK” buttons appear in the dialog box. Update can be manually started by pressing “OK” or starts automatically if the button is not pressed for 30 seconds.

If “Cancel” is pressed, the machine will perform the same retry process as when the machine is in use at the time of update.

If the firmware update and three retries fail, the SC of the defective module during update will be displayed as the update error. If the following SC occurs, replacing the corresponding device restores the machine. The SC will not be reported to the call center.

Device and corresponding SC number.

Device name	SC number
Engine board	SC845-01
Controller board	SC845-02
Operation panel (normal panel)*	SC845-03
Operation panel (smart panel)	SC845-04
FCU	SC845-05

*1 Not available for this machine

Installing the downloaded package firmware when the device is turned off

When the following conditions are met, the firmware package can be installed when the device is being turned off:

- If the ARFU is enabled. SP 5-886-111 (Auto Firmware Setting) is set to 1.
- If the firmware package downloaded before turned off.
- The firmware update is not restricted in the settings.

A confirmation dialog box displayed for continue to the update process or cancel. If confirmed the device starts upgrading the firmware. The user can choose to cancel the process when this dialog

displayed.

Note

A 15 seconds countdown timer will be displayed on the dialog box. After the 15 seconds the machine will follow the newly added SP setting.

- SP 5-886-126 (Auto Update Power OFF Update Setting):

0 (Default): The device will try update after 15 seconds and shut down.

1: The device will shut down after 15 seconds.

2: Feature is disabled. No dialog box displayed.

If the shutdown time is between SP 5-886-113 (Auto Update Prohibit Start hour) and SP 5-886-114 (Auto Update Prohibit End hour), above message will be displayed.

When the following situations occur at the time of upgrade in progress, the device will cancel it:

The device status not switched to offline. (i.e. print/fax data is transferred.)

If there is a newer version of firmware available for ARFU on the server when the device checked, the downloaded package firmware will not be updated.

The result of the package firmware update is logged on SP 7-520-051 (Update Result: Auto).

The date and time on SP5-886-116 (Auto Update Next Date) is not changed after the completion of package firmware update with this feature.

Related SP

SP Number	Selection **Def.**	Overview
SP5-886-111	0: OFF **1: ON**	Sets auto update by ARFU ON/OFF .
SP5-886-112	0: OFF **1: ON**	Will not run the update when update prohibited time setting is ON and the current time is in the range of the time set. • Start time < End time: Prohibited time is from the start time to the end time on the same day. • Start time > End time: Prohibited time is from the start time to the end time on the next day. • Start time == End time: Prohibited time setting is disabled. (Update will not be prohibited.)
SP5-886-113	0 to 23 **9**	
SP5-886-114	0 to 23 **17**	
SP5-886-115	**0: OFF** 1: ON	Even when the update function is disabled, downloading the package is allowed. The downloaded package can be used with SFU.
SP5-886-116	Display only	Displays when the latest package check will run.
SP5-886-117	1 to 24 **1**	Set time for the next version check after retry.

SP Number	Selection **Def.**	Overview
SP5-886-120	**0x00**	Update will not run if the corresponding bit for each day below is set to 1. • Prohibited at all times: bit 7 • Monday: bit 6 • Tuesday: bit 5 • Wednesday: bit 4 • Thursday: bit 3 • Friday: bit 2 • Saturday: bit 1 • Sunday: bit 0 This setting is not changed by the prohibited time setting. e.g.) Prohibited on Mon., Fri., Sat., and Sun. : 0x47 (01000111)
SP5-886-121	Execution	Performs the connection test with the SERES server.
SP5-886-122	Display only	Displays the result of SP5-886-121. Refer to the following table for details.
SP5-886-126	0 to 3 **0**	Determines the update setting when the main power is turned off. 0: A confirmation screen appears. If 15 seconds have passed without being operated on the confirmation screen, the machine will shut down with updating. 1: A confirmation screen appears. If 15 seconds have passed without being operated on the confirmation screen, the machine will shut down without updating. 2: No confirmation screen appears.
SP5-886-127	0: Disabled **1: Enabled**	Allow customers to enable/disable the auto update for ARFU. 0: Disabled (customers cannot enable/disable the auto update setting) 1: Enabled (customers can enable/disable the auto update setting)
SP7-520-011 to 015	Display only	History of dates and times when update has started. The five most recent are recorded, the lowest number being most recent. If the last update failed, this is not recorded.
SP7-520-021 to 025	Display only	History of dates and times when update has finished. The five most recent are recorded, the lowest number being most recent. The record is created when the update has successfully finished. When the update is cancelled, no record is created.
SP7-520-031 to 035	Display only	History of the package numbers (including suffix) for which update has completed.

SP Number	Selection **Def.**	Overview
		The five most recent are recorded, the lowest number being most recent. The record is created when the update has successfully finished. When the update is cancelled, no record is created.
SP7-520- 041 to 045	Display only	History of the package versions for which update has completed. The five most recent are recorded, the lowest number being most recent. The record is created when the update has successfully finished. When the update is cancelled, no record is created.
SP7-520- 051 to 060	Display only	History of the results of the download and the update. Refer below for the numbers set.

Numbers set for the result history for SP7-520-051 to 060, and SP5-886-122

No.	Result	Description
255	Now connecting to the server.	Only shows up on SP5-886-122. Wait until the result is to be returned.
0	ARFU: Initial value Connection Check: Success	SP-7520: Initial value SP5-886: Successfully connected to the SERES server
1	Downloading with SFU	Cannot download or update because the machine is now downloading the package for SFU.
2	HDD not installed	Cannot download or update because the machine has no HDD.
3	Updating with SFU	Cannot download or update because the machine is being updated with SFU.
4	HDD error	Cannot download or update because the HDD cannot be used.
5	Version information obtain error	Cannot download or update because the version information cannot be obtained.
6	Update download error	Cannot download or update because the update download failed. In the non @Remote method, this shows that the download failed because there was no proxy set.
7	Name resolution error	Cannot download or update because the name cannot be resolved upon downloading the update.
8	Auto update setting disabled	The package has been downloaded but will not run the update because SP5-886-111 (auto update setting) is disabled and SP5-886-115 (auto download setting for SFU) is enabled.
9	Update prohibited time	Cannot start to update because the auto update

No.	Result	Description
		prohibited time setting (SP5-886-112) is enabled and the time update initiated was in the range of prohibited time (SP5-886-113 to 114). Or the day which update was initiated was a day for which update was prohibited (SP5-886-120).
10	Update postponed due to machine in use	Cannot start update due to the following conditions when update was initiated. • The machine is in use by a user (the panel was used within 30 seconds) • Machine offline for other reasons • Operation prohibited • Displaying SP/UP menu • Firmware update is running with another method • Configuration change prohibited • Verifying the operation panel (smart panel)
11	Update cancelled by user	Update was cancelled because a user selected "Cancel" in the popup shown before starting the update.
12	Offline failed	Cannot start to update because the machine is offline for other reasons.
13	Update successful	Update was started and successfully completed.
14	Update failed	Update was started but failed.
15	Update deemed completed	Update was cancelled after the process was initiated because a user selected “Cancel”. There is no need to resume the update due to one of the following reasons: • A newer update has been released and received. • When retrying ARFU, the update has already been completed by another method.
16	Update cancelled by user after update initiated	Update was cancelled after the process initiated because a user selected "Cancel" during the update.
17	Version information obtain error (communication error occurred for hostname)	Cannot download or update because the name cannot be resolved when obtaining version information.
18	Version information obtain error (proxy verification failure)	Cannot download or update because the proxy verification failed with proxy settings when obtaining version information.
19	Version information obtain error (other than proxy verification failure when proxy is set)	Cannot download or update because an error other than proxy verification with proxy settings occurred when obtaining version information.

No.	Result	Description
20	Update download error (proxy verification failure)	Cannot download or update because the proxy verification failed with proxy settings when downloading the package.
21	Update download error (other than proxy verification failure when proxy is set)	Cannot download or update because an error other than proxy verification with proxy settings occurred when downloading the package.
22	Update by retry successful	After power failure, unsuccessful update, or rebooting, update by retry is executed successfully. However, this does not apply to the case where the update was cancelled after the process was initiated because a user selected “Cancel”. In this case, the update is “successful” if the retry is not executed between the start and completion of the next update (76 hours after the cancellation).
23	Update data decompression has failed	Receiving the update data successfully completed but failed to update because update data decompression failed. Data in the package file may be corrupted, or data may be garbled due to a defect in the DIMM or the HDD.
24	No version information	Successfully accessed to the server, but cannot download or update because the releaseList.dat or indexHistory.xml does not exist.
25	"releaseList.dat" parse error	Cannot download or update because the releaseList.dat is incorrect.
26	"indexHistory.xml" parse error	Cannot download or update because the indexHistory.xml is incorrect.
27	"fwu" files download error	Failed to download the "fwu" files.
28	Download abort (Incorrect data configuration)	Cannot download because it does not meet the specification.
29	Download abort (Specialized firmware)	Cannot download because it is not allowed to update.

Updating JavaVM

Overview

Updating Java VM is performed with a PC using the update tool.

Prepare the following items in advance.

- SD memory card reader/writer
- PC

The updating procedure is as follows.

1. Deactivate the SDK applications.
2. Remove the VM Card from the main machine.
3. Update Java VM with the PC using the update tool.
4. Insert the VM Card in the main machine.
5. Activate the SDK applications.

Deactivating SDK Applications and Removing the VM Card

Operation from Operation Panel

1. Enable [Machine Management] of the administrator authentication, and log in as the machine administrator.
Select the [Settings] icon > [System Settings] > [Settings for Administrator] > [Authentication/Charge] > [Administrator Authentication/User Authentication/App Auth.] > [Administrator Authentication Management Register/Change Administrator]. Enable [Machine Management] and login as the machine administrator.

2. Press the [Settings] icon on Home screen.

3. Press [System Settings].

4. Press [Extended Feature Information] twice.

5. Press [Heap/Stack Size Information].

6. Make a note of the current heap size settings in order to check them after version update.

7. Return to the [Extended Feature Settings] screen, and press the [Startup Setting] tab.

8. Disable all SDK applications except Java TM Platform.

9. Press the SDK applications until the status changes from "Starting Up"/"Suspend"/"Ending" to "Stop".

10. Press the [Extended Feature Info] tab.

11. Press the stopped SDK applications to set "Auto Start" to "Off"

Note

"Auto Start" settings can be enabled on this screen if Type-J SDK applications are enabled.

12. Select [OK] > [Exit].

13. Turn the main power OFF.

14. Remove the SD card slot cover [A] (coin screw x 1).
15. Remove VM Card from SD Card Slot 2.
16. Remove VM Card from SD Card Slot 2 [A: Lower Slot].

Operation from Web Image Monitor

1. Log in as the administrator from Web Image Monitor.
2. Make a note of the current heap size setting in [Heap / Stack Size Settings].
   [Device Management] -> [Configuration] -> [Extended Feature Settings] -> [Administrator Tools] -> [Heap / Stack Size Settings]
3. Stop all SDK applications except for Java TM Platform.
   1. Display the [Startup Setting] menu.
      [Device Management] -> [Configuration] -> [Extended Feature Settings] -> [Startup Setting]
   2. Check the radio button of the SDK application which status is "Starting Up".
   3. Click [Start Up/Stop] to stop the application.
   4. "Stop" is displayed in the status column.

   Note

   Do not change the status of Java TM Platform to "Stop".
4. Make sure that "Auto Start" is set to "Off" for each SDK application.
   1. Click the [Details] icon ( ) for each SDK application in [Startup Setting].
   2. Make sure that "Auto Start" is set to "Off". (Default: On)
5. Turn the main power OFF.
6. Remove the SD card slot cover [A].
7. Remove VM Card from SD Card Slot 2.

Updating JavaVM and Inserting the VM Card

1. Insert VM Card into the SD memory card reader/writer of your PC.
2. Check that the SD memory card reader/writer is detected on your PC, and then write down the drive letter. (If the SD memory card reader/writer is detected as (F:), the drive letter is "f")
3. Download the update modules from the Firmware Download Center.
4. Unzip the downloaded file, and then execute the .exe file.
5. The folder is generated.
6. Execute the .bat file in the folder.
7. Input the drive letter following the message "Please input drive letter of SD card [a - x]: ". (If the SD

memory card reader/writer is detected as (F:), input "f")

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8. Press the [Enter] key to start updating Java VM.
   It takes 3 minutes to update Java VM.
9. After completing the update, remove VM Card from the SD memory card reader/writer of your PC.
10. Insert VM Card into SD Card Slot 2 (Lower slot) of the machine.

Activating SDK Applications

1. Make sure that the VM card is fully inserted, and then turn the main power ON.
2. Log in as the machine administrator from Operation panel / Web Image Monitor.
3. Set "Auto Start" whose status is "OFF" to "On".
4. Compare the current heap size settings and the values recorded before update.
   If the settings are not the same as the recorded values, correct the settings to the recorded values.
5. Enable the disabled SDK application.

NVRAM Data Upload/Download

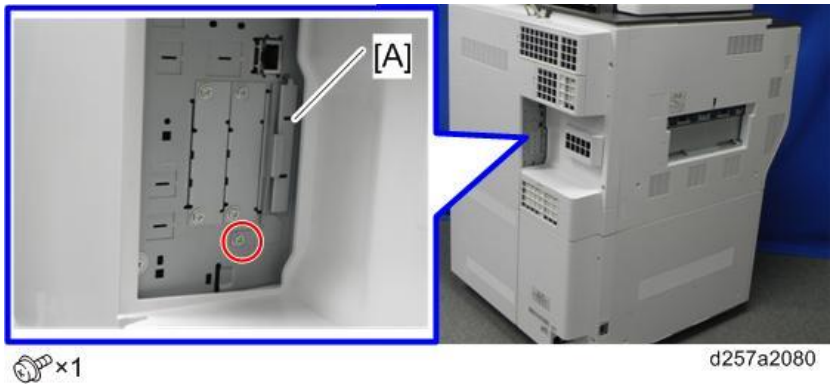
Uploading Content of NVRAM to an SD card

Do the following procedure to upload SP code settings from NVRAM to an SD card.

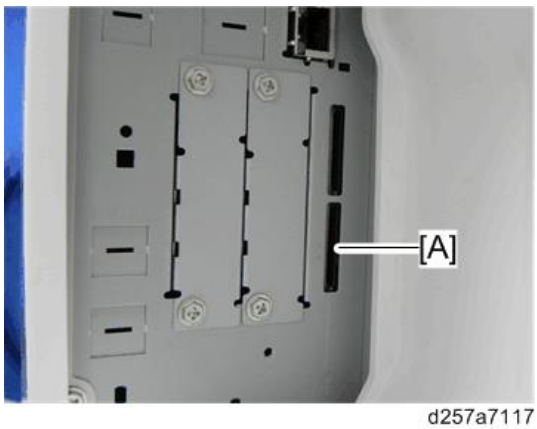
Note

- This data should always be uploaded to an SD card before the NVRAM is replaced.
- Make sure that the write protection of an SD card is unlocked.

1. Do SP5-990-001 (SP Print Mode: All(Data List)) before you switch the machine off. You will need a record of the NVRAM settings if the upload fails.
   Make sure to shut down and reboot the machine once before printing the SMC. Otherwise, the latest settings may not be collected when the SMC is printed.
2. Turn OFF the main power.
3. Remove the SD card slot cover [A].



4. Insert the SD card in Service Slot [A: Lower Slot].



5. Turn ON the main power.
6. Execute SP5-824-001 (NVRAM Data Upload) and then press the "Execute" key.
7. The following files are coped to an NVRAM folder on the SD card when the upload procedure is finished. The file is saved to the path and the following filename:
   NVRAM\<serial number>.NV
   Here is an example with Serial Number "K5000017114":
   NVRAM\K5000017114.NV
8. In order to prevent an error during the download, be sure to mark the SD card that holds the

uploaded data with the number of the machine from which the data was uploaded.

Note

- You can upload NVRAM data from more than one machine to the same SD card.

Downloading an SD Card to NVRAM

Do the following procedure to download SP data from an SD card to the NVRAM in the machine.

- The NVRAM data download may fail if the SD card with the NVRAM data is damaged, or if the connection between the controller and BICU is defective.
- Do the download procedure again if the download fails.
- Do the following procedure if the second attempt fails:
- Enter the NVRAM data manually using the SMC print you created before uploading the NVRAM data.

1. Turn OFF the main power.
2. Remove the SD slot cover.
3. Insert the SD card with the NVRAM data into SD Card Slot 2 (lower).
4. Switch ON the main power.
5. Do SP5-825-001 (NVRAM Data Download) and press the "Execute" key.

Note

- The serial number of the file on the SD card must match the serial number of the machine for the NVRAM data to download successfully. The download fails if the serial numbers do not match.

This procedure does not download the following data to the NVRAM:

- Total Count
- C/O, P/O Count

Address Book Upload/Download

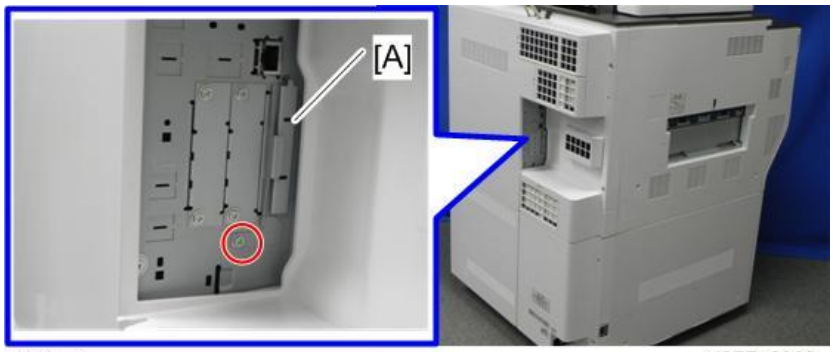
Information List

The following information can be uploaded and downloaded.

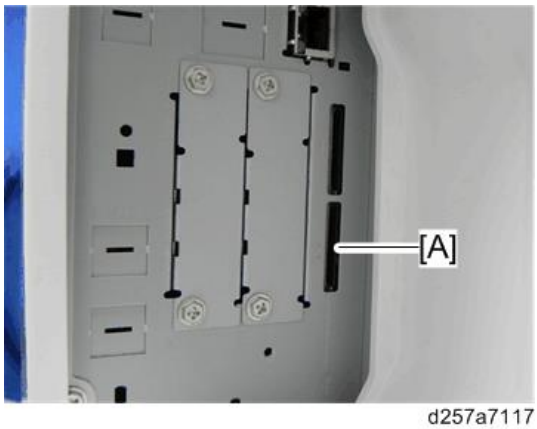
Information	
• Registration No. • User Code • E-mail • Protection Code • Fax Destination • Fax Option • Group Name • Key Display	• Select Title • Folder • Local Authentication • Folder Authentication • Account ACL • New Document Initial ACL • LDAP Authentication

Download

1. Prepare a formatted SD card.
2. Make sure that the write-protection on the SD card is off.
3. Turn OFF the main power.
4. Remove the SD card slot cover [A].



5. Insert the SD card in Service Slot [A: Lower Slot].



6. Enter the SP mode.

7. Do SP5-846-051 (Backup All Addr Book).
8. Exit the SP mode, and then turn OFF the main power switch.
9. Remove the SD card form the SD card slot 2 (lower).
10. Install the SD slot cover.

Note

- An error message is displayed if there is not enough space on the SD card to store the local user information.
- Carefully handle the SD card containing user information. Do not take it away with you.

Carefully handle the SD card containing user information. Do not take it away with you.

Auto Backup Setting

This machine is equipped with a function to automatically acquire an address book backup at the date and time set by the administrator.
To enable the auto backup function, do the following procedure.

1. Insert the SD card into the service slot.
2. Enter SP mode.
3. Set the value of SP5-846-030 to "1" (enable).

This allows the administrator to use auto backup function.

Upload

1. Turn OFF the main power.
2. Remove the SD slot cover at the left rear side of the machine.
3. Install the SD card with the uploaded information into SD card slot 2 (lower).
4. Turn ON the main power.
5. Enter the SP mode.
6. Do SP5-846-052 (Restore All Addr Book).
7. Exit the SP mode, and then turn OFF the main power switch.
8. Remove the SD card form the SD card slot 2 (lower).
9. Install the SD slot cover.

Note

- The counter in the user code information is initialized after uploading.
- The information of an administrator and supervisor cannot be downloaded nor uploaded.
- An error message is displayed if there is no address book data on the SD card.

SMC List Card Save Function

Overview

SMC List Card Save

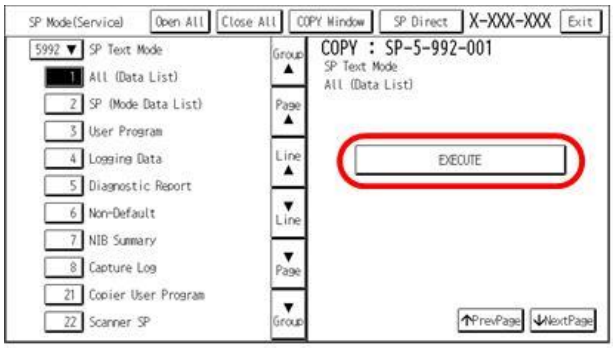
The SMC List Card Save (SP Text Mode) function is used to save the SMC list as CSV files to the SD card inserted into the operation panel SD card slot.

Important

- Make sure to shut down and reboot the machine once before exporting the SMC sheet data. Otherwise, the latest settings may not be collected when the SMC is exported.

Procedure

1. Turn OFF the main power.
2. Insert the SD card into the operation panel SD card slot, and then turn ON the main power.
3. Enter SP mode.
4. Select [System SP].
5. Select SP5-992-001 (SP Text Mode).



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6. Select a third level SP number (Detail No.) from the table below to select what data to save on the SD card.

SP5-992-xxx (SP Text Mode)

Detail No.	SMC Categories to Save	Note
001	All (Data List)	
002	SP (Mode Data List)	
003	User Program	
004	Logging Data	
005	Diagnostic Report	
006	Non-Default	
007	NIB Summary	
008	Capture Log	
021	Copier User Program	

Detail No.	SMC Categories to Save	Note
022	Scanner SP	
023	Scanner User Program	
024	SDK/J Summary	
025	SDK/J Application Info	
026	Printer SP	
027	Smart Operation Panel SP	Pro C5300S/C5310S and IM C6500/C8000 only
028	Smart Operation Panel UP	Pro C5300S/C5310S and IM C6500/C8000 only
029	Smart UP Print	

7. Press [EXECUTE].

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8. "It is executing it" is shown on the screen while executing.

Press [CANCEL] to cancel the saving.

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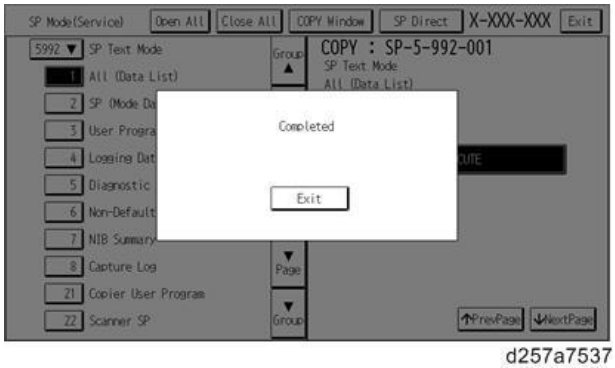
9. Wait for 2 to 3 minutes until "Completed" is shown.



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Note

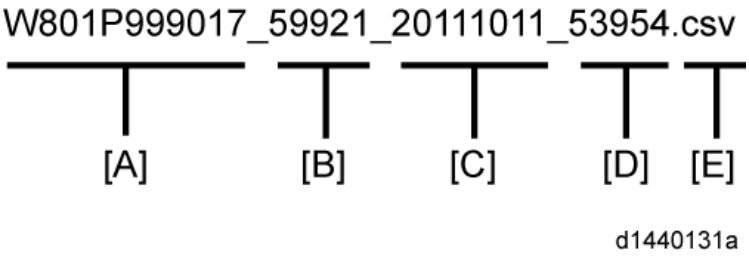
- The SMC list saving may take from 2 to 3 minutes to complete.
- Press [CANCEL] to abort executing.

10. Press [Exit] to exit from SP mode.

File Names of the Saved SMC Lists

The SMC list data saved on the SD card will be named automatically. The file naming rules are as follows.

Example:



A:

Machine serial number (fixed for each machine)

B:

SP number saved in this file.

First four digits (5992) in this part are fixed. The other one or two digits are the detail SP number(s). In this case, it is one digit. Therefore, this file is of SP5-992-001 (All data list). See the upper SP table for the correspondence between SP detail numbers and the contents.

C:

File creation date

Year/Month/Day ("Zero" will be omitted if each is one digit.)

D:

File creation time

Hour/Minute/Second ("Zero" will be omitted if each is one digit.)

E:

File Extension CSV (Comma Separated Value)

This part is fixed.

Note

- A folder named by the machine serial number will be created on the SD card when this function is executed.
- This function can save the SMC list data only to an SD card inserted into the operation panel SD card slot.

Error Messages

SMC List Card Save error message:

- **Failed:**

  FACTOR: Read-only file system, No space left on device.

If an error occurs, pressing "Exit" will cause the device to discard the job and return to the ready state.

UP/SP Data Import/Export

Overview

The machine can backup and restore the UP/SP settings by SD card, and the data can be imported to the same model regardless of peripheral configurations.

UP Data Import/Export

Data that can be imported and exported

- Copier / Document Server Features
- Printer Features
- Scanner Features
- Facsimile Features
- Program (Document Server)
- Program (Copier)
- Program (Scanner)
- Web Image Monitor Setting
- Web Service Settings
- System Settings

Data that cannot be imported or exported

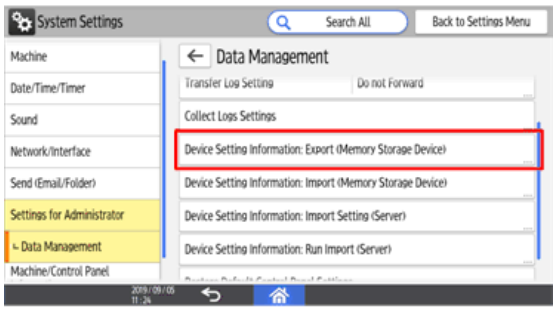
- Some System Settings *1 *2
  *1 The setting for the date, settings that require the device certificate, and settings that need to be adjusted for each machine (for example, image adjustment settings) cannot be imported or exported.
  *2 Settings only for executing functions and settings only for viewing cannot be imported or exported.
- Extended Feature Settings
- Address book
- Programs (fax function)
- Programs (printer function)
- User stamp in Copier / Document Server Features
- Settings that can be specified via telnet
- @Remote-related data
- Counters
- Extended feature settings
- EFI printer unit settings
- Settings that can only be specified via Web Image Monitor or Web Service (for example, Bonjour, SSDP setting)

Exporting Device Information

This can be exported / imported by an administrator with all privileges.

When exporting SP device information from the control panel, the data is saved on an SD card.

1. Insert an SD card into the media slot on the side of the control panel.
2. Log in from the control panel as an administrator with all privileges.
3. Press [Settings].
4. Press [System Settings].
5. Press [Settings for Administrator]
6. Press [Data Management].
7. Press [Device Setting Information: Export (Memory Storage Device)].



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8. Set the export conditions.

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- Specify whether to [Include] or [Exclude] the "Device Unique Information". "Device Unique Information" includes the IP address, host name, fax number, etc.
- Specify an encryption key.

9. Press [Run Export].
10. Press [OK].
11. Press [Exit].
12. Log out.

Note

- If data export fails, the details of the error can be viewed in the log.
- When device Information is periodically imported, it is necessary to create the device setting information file with special software and store it on the web server.

Importing Device Information

This can be exported / imported by an administrator with all privileges.

Import device information saved on an SD card.

1. Insert an SD card into the media slot on the side of the control panel.
2. Log in from the control panel as an administrator with all privileges.
3. Press [Settings].
4. Press [System Settings].
5. Press [Settings for Administrator]
6. Press [Data Management]
7. Press [Device Setting Information: Import (Memory Storage Device)].
8. Configure the import conditions.

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- Press [Select] of the "Device Setting Info. File" to select the file(s) to import.
- When inserting a file into a home screen, press [Select] for the Image for Home screen and select the file. You cannot use this setting when using the Smart Operation Panel.
- Specify whether to [Include] or [Exclude] the "Device Unique Information". "Device Unique Information" includes the IP address, host name, fax number, etc.
- Enter the encryption key that was specified when the file was exported.

9. Press [Run Import].
10. Press [OK].
11. Press [Exit].

    The machine restarts.

Note

- If data export fails, the details of the error can be viewed in the log.

SP Data Import/Export

Data that can be imported and exported

- System SP
- Printer SP
- Fax SP
- Scanner SP

Exporting Device Information

When exporting SP device information from the control panel, the data is saved on an SD card.

1. Insert an SD card into the media slot on the side of the control panel.
2. Enter SP mode.
3. Press SP5-749-001 (Import/Export: Export)
4. Select "Target" SP settings (System/Printer/Fax/Scanner/Smart Operation Panel) to be exported.
5. Select "Option" settings (Unique/Secret).

Item	Specification	Note
Unique	Unique information of the machine is included in the exported file if you select "Unique" setting.	**Unique information that can be updated** #1. Items used to identify the machine. Example: Network Information/ Host name / Information related to fax number /Mail address assigned to the machine #2. Items for specifying the options equipped on the machine. Example: Lot number for developer **Unique information that cannot be updated** #1. Items that may cause a problem if imported Example: Serial number / Information related to @Remote #2. Items for managing the history of the machine Example: Time and date / Counter information / Installation date #3. Setting values for the Engine
Secret	Secret information is exported if you select "Secret" setting.	**Secret information** #1. Data that cannot be exported without being encrypted. (Exported data is encrypted.) Example: Password / Encryption key / PIN code #2. Confidential information for the customer Example: User name / User ID / Department code / Mail address / **Phone number** #3. Personal information Example: Document name / Image data #4. Sensitive information for the customer

Item	Specification	Note
		Example: MAC address / Network parameters

* The IP address is exported when both 'Unique' and 'Secret' are selected.

6. Select "Crpt config" setting (Encryption).

Encryption	Select whether to encrypt or not when exporting. If you push the "Encryption" key, you can export secret information.	If the encryption function is used, setting of an encryption key is required by direct input. • Type the arbitrary password using the soft keyboard • Can enter up to 32 characters

7. Press [Execute].
8. Press [OK].

Note

- If data export fails, the details of the error can be viewed in the log.

Importing Device Information

Import device information saved on an SD card.

1. Insert an SD card into the media slot on the side of the control panel.
2. Enter SP mode.
3. Press SP5-749-101(Import/Export: Import)
4. Select a unique setting.
5. Press [Encryption Key], if the encryption key was created when the file was exported.
6. Select an encryption setting.

Unique	If you want to apply the unique information to the target machine, select the "Unique" key.	Refer to the above information.
Encryption	If an encrypted file is selected as the import file, this setting is required.	

7. Press [Execute].
8. Press [OK].

Note

- If data export fails, the details of the error can be viewed in the log.

Possible solutions for import/export problems

The access log file is created when export/import is executed. The file is stored in the same location as the exported device setting information file.

If an error occurs, check the log's result code in the access log file first. Values other than "0" indicate that an error occurred.

The result code will appear in the circled area illustrated below.

- Example of a log file

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If you cannot solve the problem or do not know how to solve it after checking the code, note down the error log entry, then contact your supervisor.

Result Code	Cause	Solutions
2 (INVALID REQUEST)	A file import was attempted between different models or machines with different device configurations.	Import files exported from the same model with the same device configurations.
4 (INVALID OUTPUT DIR)	Failed to write the device information to the destination device.	Check whether the destination device is operating normally.
7(MODULE ERROR)	An unexpected error occurred during import or export.	Switch the power off and then back on, and then try the operation again. If the error persists, contact your supervisor.
8 (DISK FULL)	The available storage space on the external medium is insufficient.	Execute the operation again after making sure there is enough storage space.
9 (DEVICE ERROR)	Failed to write or read the log file.	Check whether the path to the folder for storing the file or the folder in which the file is stored is missing.
10 (LOG ERROR)	The hard disk is faulty.	Contact your supervisor.
20 (PART FAILED)	Failed to import some settings.	The reason for the failure is logged in "NgCode". Check the code. **Reason for the Error (Ng-Name)** 2. INVALID VALUE The specified value exceeds the allowable range. 3. PERMISSION ERROR The permission to edit the setting is missing.

Result Code	Cause	Solutions
		4. NOT EXIST The setting does not exist in the system. 5. INTERLOCK ERROR The setting cannot be changed because of the system status or interlocking with other specified settings. 6. OTHER ERROR The setting cannot be changed for some other reason.
21 (INVALID FILE)	Failed to import the file because it is in the wrong format in the external medium.	Check whether the file format is correct. The import file should be a CSV file.
22 (INVALID KEY)	The encryption key is not valid.	Use the correct encryption key.

Note

- When exporting device information from the control panel, the data can be saved only on an SD card.
- The file format for exports is CSV.

Capturing the Device Logs

Overview

With this feature, you can save device logs that are stored in the machine (HDD or operation panel) on an SD card. It allows the Customer Engineer to save and retrieve error information for analysis.
The Log Capture feature saves the following four device logs.

- Controller device log including operation log
- Engine device log
- FCU device log
- Operation panel log

Important

- In older models, a technician enabled the logging tool after a problem occurred. After that, when the problem had been reproduced, the technician was able to retrieve the device log.
- However, this new feature saves the device logs at the time that problems occur. Then you can copy the logs to an SD card.
- You can retrieve the device logs using a SD card without a network.
- Analysis of the device log is effective for problems caused by the software. Analysis of the device log is not valid for the selection of defective parts or problems caused by hardware.
- Make sure to open the right lower cover of the main machine before retrieving the Debug Logs. Otherwise, the latest settings may not be collected when the debug logs are retrieved.

Types of device logs that can be saved

Type	Storage Timing	Destination (maximum storage capacity)
Controller device log including operation log	• Saved at all times	HDD (4 GB) or SD card connected to the service slot. When the data gets over 4.0 GB, the older data is deleted.
Engine device log	• Engine SC occurs • A JAM on main machine, or ADF occurs • Error due to the door open occurs (except for peripherals, or scanner open) • Stored engine device log reaches the max file size (400kb). • Engine power off which includes moving to energy saver mode.	HDD or SD card connected to the service slot (Up to 1300 times) If 1300 times or more, the log will be discarded in the order of old time stamp.
FCU device log	• When a specified amount of FCU device log is	HDD or SD card

Type	Storage Timing	Destination (maximum storage capacity)
	stored in the FCU. If fax application is unavailable (e.g. not installed), the machine does not transfer the log.	connected to the service slot
Operation panel log	• When an error related to the operation panel occurs.	Memory in the operation panel.

Note

- **Device logs are not saved in the following conditions:**
- While erasing all memory
- While data encryption equipment is installed
- While changing the firmware configuration
- Forced power OFF (accidentally disconnecting the outlet)
- Engine device log while the machine is shutting down
- When the power supply to the HDD is off because of energy saving (engine OFF mode/STR mode)
- When one of the following SCs occurs: SC672, SC816, SC819, SC878, SC899, SC859, SC860, SC861, SC863, or SC864

Note

- **The following logs are not saved:**
- Logs related to the energy saver mode (Engine-off, suspend-mode, or other cases)
  Network communication log
  Logs related to NRS
  IP-FAX log
  Access log for unauthorized users (guests)
- HTTP session timeout log
- Auto log-out log
- IC card related log
- Authorization for Fax

Security of the Operation Log

The following operation logs related to security are not saved.

- User ID
- Password
- IP address
- Telephone number
- Encryption key
- Transition to SP mode

Retrieving the Device Logs via Operation Panel

Important

- Retrieve device logs to identify the date of occurrence of the problems and to find details of the problems
- e.g.: At around 8:00 am on March 10, an engine stall occurred. The operation panel does not respond. Turn the main power supply off / on.
- Analysis of the device log is effective for problems caused by the software. Analysis of the device log is not valid for the selection of defective parts or problems caused by hardware.

Procedure for Retrieving the Device Log with SD Card

1. Insert the SD card into the slot on the side of the operation panel or the service slot.

   Important

   - It is recommended to use the SD card (2 GBs* or 8 GBs**) provided as a service part. This is because the log data can be acquired much faster than when using commercially available SD cards.
   - Format the SD card by using SD Formatter from Panasonic before copying the logs: https://www.sdcard.org/downloads/formatter_3/ (free software)
   - Insert the SD card into the machine's service slot instead of the SD slot on the side of the operation panel.

   * The part number of the SD card with 2 GBs that is registered as a service part is "B6455030".

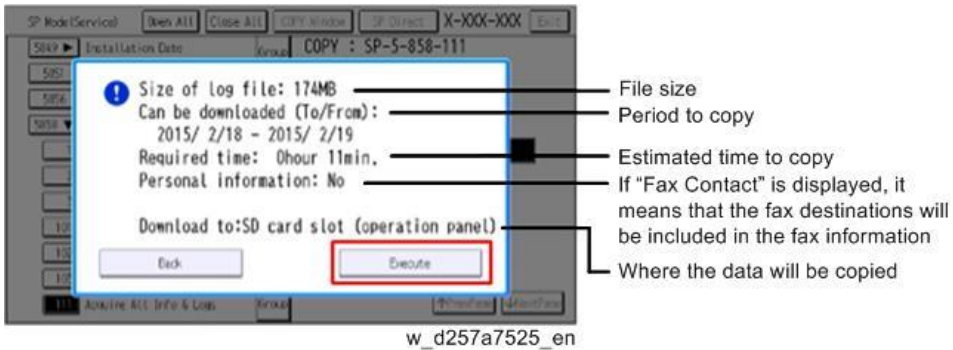
   ** The part number of the SD card with 8 GBs that is registered as a service part is "B6455040".
2. Turn ON the main power.
3. Enter SP mode.
4. Specify the date that the problem occurred in SP5-858-101 (Start Date) by setting it to the year-month-day calendar format.
   - For example, if a problem occurred on February 1, 2015, the date should be set to "20150201", as shown above.
   - Be sure to confirm the date when the problem occurred before obtaining the logs.
5. Specify the number of days to collect the logs in SP5-858-102 (Days of Tracing).
   - "**2**" is set by default, which is the minimum needed for investigating the problem.
   - A value of "1" to "180" can be set.
6. Execute SP5-858-111 (Acquire All Info & Logs) to copy all of the log types to an SD card.

   It is possible to obtain the logs separately by the following SPs.

SP	Collectable Information and/or Logs
SP5-858-111	All of the information and logs that are collected by executing the SPs from SP5-858-121 to SP5-858-145, and SMC.
SP5-858-121	Configuration page

SP	Collectable Information and/or Logs
SP5-858-122	Font page
SP5-858-123	Print settings list
SP5-858-124	Error log
SP5-858-131	Fax information (whether the fax destinations are included or not depends on the setting of SP5-858-103.)
SP5-858-141	Controller log, engine log, operation panel log, FCU, and SMC.
SP5-858-142	Controller log
SP5-858-143	Engine log
SP5-858-144	Operation panel log
SP5-858-145	FCU log
SP5-992-001	SMC

7. After executing the SP for copying the information and/or logs, a confirmation screen will appear. To proceed with obtaining the information and/or logs, tap "Execute"

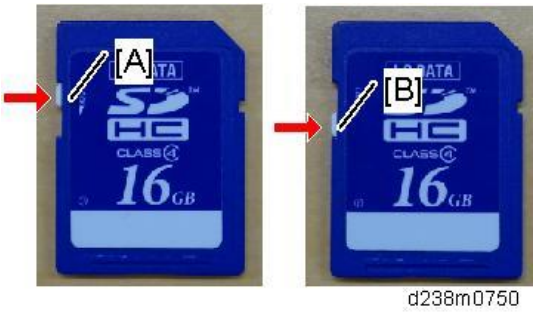


w_d257a7525_en

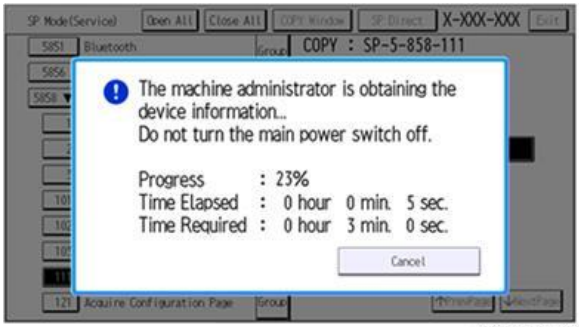
Note

- The approximate time it takes to transfer the debug log is as follows. Transfer time may be affected by the type or format of the SD card.
  Controller device log (GW device log): 2 - 20 minutes
  Engine device log: 2 minutes
  Operation panel device log: 2 - 20 minutes

If the estimated time is not calculated due to an error, an error code will be displayed.

Error Code	Description
-1	Other.
-2	No SD card is inserted in the service slot or in the SD slot on the side of the operation panel. In this case, insert an SD card into either of the SD slots.
-3	The SD card is locked. In this case, unlock the SD card, as shown below.  d238m0750 [A]: Unlocked, [B]: Locked

8. Wait for the information and/or logs to be copied to the SD card.



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9. After a message stating that the process has completed appears on the operation panel, confirm that the LED light next to the SD card slot is not flashing and then remove the SD card.

Note

- The process of obtaining logs fails in the following cases:
  - When the size of the logs to obtain exceeds the amount of space available on the SD card.
  - When the SD card is removed while the logs are being copied to it.
  - When the SD card is not formatted.
- If 'failed' appears on the touch panel display, turn the power off, and then recover from step 1 again.

Note When Retrieving the Logs

SP5-858-002 is an SP that changes where debug logs are stored.

The value is set to "0" (HDD) in the factory, and should not be changed unless the hard drive is disabled

or not.
Only when using an SD card as a permanent log storage medium instead of an HDD, change the value to "1" (SD).
Even if the value is set to "1" (SD) at the time of log acquisition, log acquisition from HDD to SD is not possible.

Problems that can be caused by changing the storage location setting

- SC672-12 (Controller does not start up) may occur when setting of SP5-858-002 is changed and the power supply is not turned OFF/ON.
- After changing SP5-858-002 to "1", if a log is obtained by the log obtaining procedure described above, a log obtaining error occurs.
- "LogTrace Directory Is Not Found" message is displayed on the banner on the operation panel.
- The execution ends in the empty folder. (Message display completed successfully)

*When executing SP5-858-003, "LogTraceServiceSlotSd" folder is generated directly under the root of the SD card.
However, no operation is required if you do not change to SD card in SP5-858-002.

Retrieving the Device Logs via Web Image Monitor

The device logs can be retrieved via the Web Image Monitor.

1. Access the following URL and log in as an administrator:
   http://[IP address or host name]/web/entry/df/websys/direct/getSysInfo.cgi

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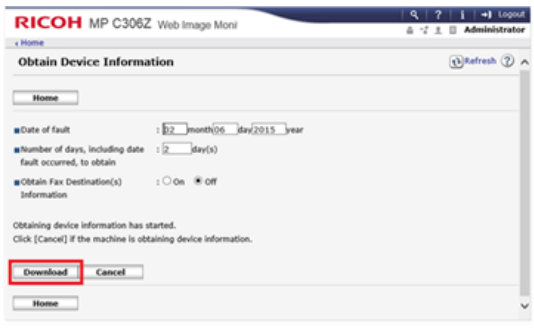
2. Specify the date that the problem occurred and the number of days to download the logs. If the fax destinations need to be included in the fax information, set "On" as "Obtain Fax Destination(s) Information". Then click "Download".

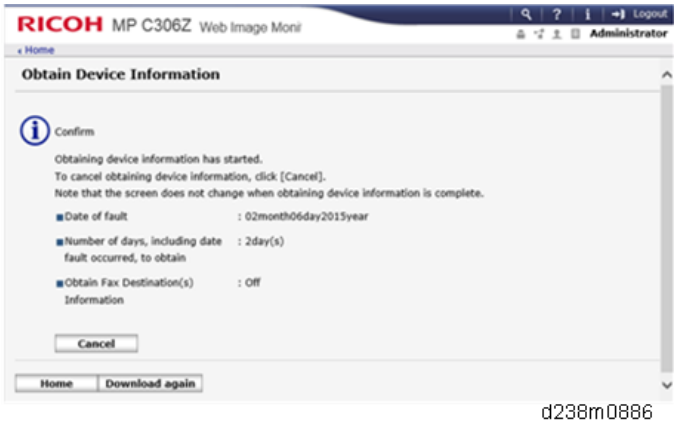


d238m0885

Note

- "3" is set by default for "Number of days, including date fault occurred, to obtain". However "2", which is the minimum needed for investigating the problems, is recommended for reducing the downloading time.
- "Obtain Fax Destination(s) Information" is set to "Off" by default.

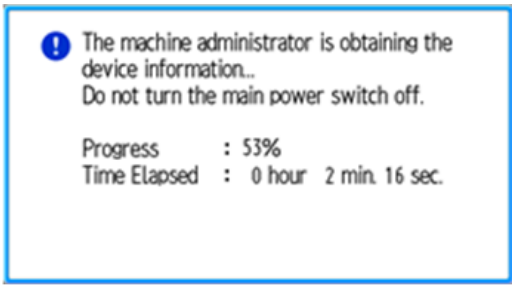
3. The confirmation screen will appear and the information and/or logs will start downloading. To proceed with downloading the information and/or logs, wait for the open-or-save dialog to appear.



d238m0886

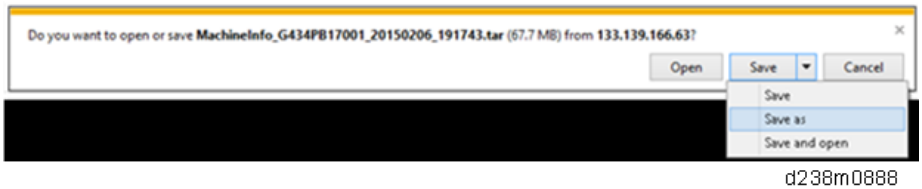
Note

- To cancel downloading, click "Cancel".
- To reconfigure some settings, click "Download again".
- Operation panel when downloading the logs:



d238m0887

4. After a while, the open-or-save dialog will appear. Specify where to download and save the file.



d238m0888

Note

- The debug logs are saved with the following file names. These names are the same as the files downloaded with SD card.

The device logs are saved with the following file names.

Controller log (mmesg)	/LogTrace/[the model number]/watching/[yyyymmdd_hhmmss]_[a unique value].gz

Engine device log	/LogTrace/[Machine Serial]/engine/[yyyymmdd_hhmmss]_as_dbg.gz, /LogTrace/[Machine Serial]/engine/[yyyymmdd_hhmmss]_as_unf.gz
Operation panel log	/LogTrace/[the model number]/opepanel/[yyyymmdd_hhmmss].tar.gz
SMC	/LogTrace/[the model number]/smc/[the model number]_[5992XXX]_[yyyymmdd]_[hhmmss].csv
Configuration page	/LogTrace/[the model number]/gps/ConfigrationPage/ConfigrationPage_[yyyymmdd_hhmmss].csv
Font page	• /LogTrace/[the model number]/gps/FontPage/FontPage_PCL_[the page number]_[yyyymmdd_hhmmss].jpg • /LogTrace/[the model number]/gps/FontPage/FontPage_PDF_[the page number]_[yyyymmdd_hhmmss].jpg • /LogTrace/[the model number]/gps/FontPage/FontPage_PS_[the page number]_[yyyymmdd_hhmmss].jpg
Print settings list	• /LogTrace/[the model number]/gps/PrintSettingList/PrintSettingList_RPGL_[yyyymmdd_hhmmss].txt • /LogTrace/[the model number]/gps/PrintSettingList/PrintSettingList_RTIFF_[yyyymmdd_hhmmss].csv
Error log	/LogTrace/[the model number]/gps/ErrorLog/[yyyymmdd_hhmmss].csv
Fax information	/LogTrace/[the model number]/faxreport/[yyyymmdd_hhmmss].csv
FCU debug log	/LogTrace/[Machine Serial]/fculog/[yyyymmdd_hhmmss].gz

Card Save Function

Overview

Card Save:

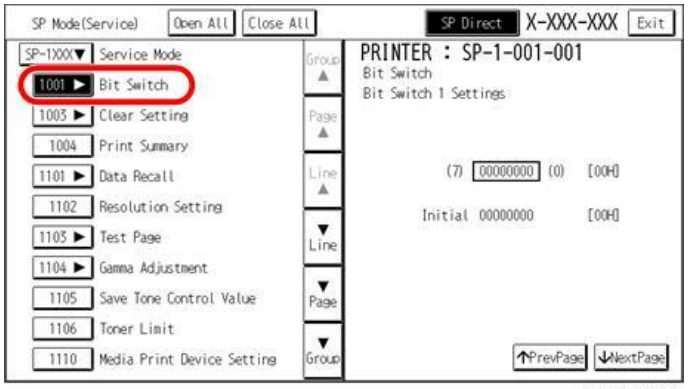
- The Card Save function is used to save print jobs received by the printer on an SD card with no print output. Card Save mode is toggled using printer Bit Switch #1 bit number 4. Card Save will remain enabled until the SD card becomes full, or until all file names have been used.
- Captures are stored on the SD card in the folder /prt/cardsave. File names are assigned sequentially from PRT00000.prn to PRT99999.prn. An additional file PRT.CTL will be created. This file contains a list of all files created on the card by the card save function.
- Previously stored files on the SD card can be overwritten or left intact. Card Save SD has "Add" and "New" menu items.
  - **Card Save (Add):** Appends files to the SD Card. Does not overwrite existing files. If the card becomes full or if all file names are used, an error will be displayed on the operation panel. Subsequent jobs will not be stored.
  - **Card Save (New):** Overwrites files in the card's /prt/cardsave directory.

Limitation:

- Card Save cannot be used with PJL Status Readback commands. PJL Status Readback will not work and will cause the Card Save to fail.

Procedure

1. Turn OFF the power.
2. Insert the SD card into slot 2 (lower), and then turn ON the power.
3. Enter SP mode.
4. Select the [Printer SP].
5. Select SP1-001 (Bit Switch).



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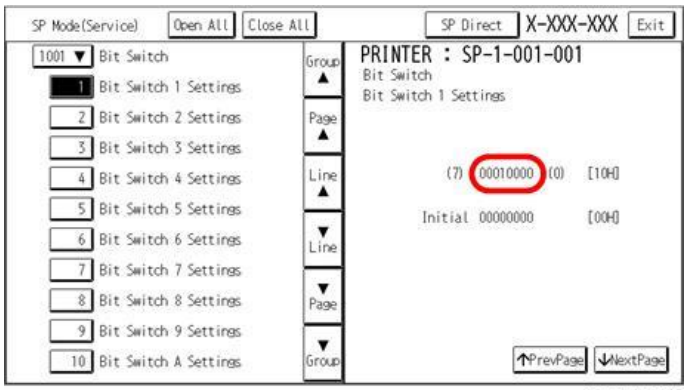
6. Select "Bit Switch 1 Settings" and use the numeric keypad to turn bit 4 ON and then press the "#" button to register the change. The result should look like: 00010000. By doing this, Card Save

option will appear in the "List/Test Print" menu.



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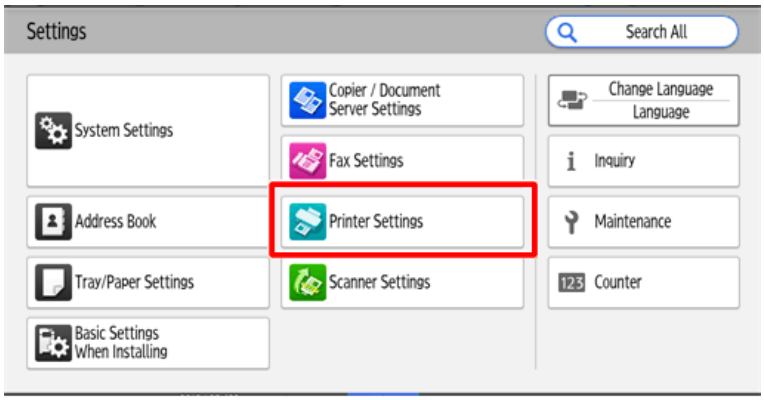
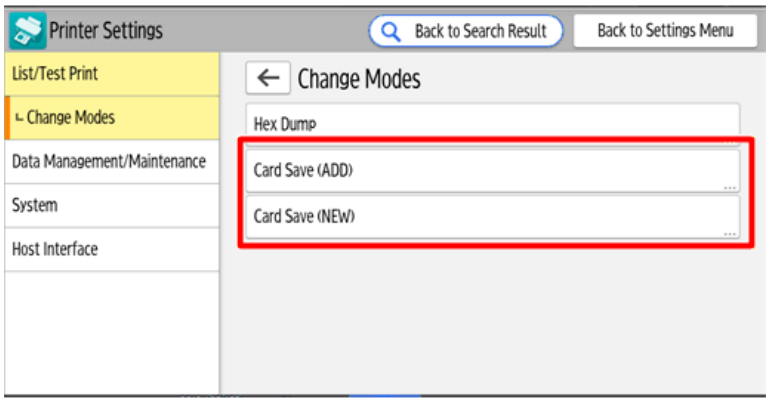
7. Press [Exit] to exit SP Mode.
8. Press [Settings] icon.
9. Press [Printer Settings].



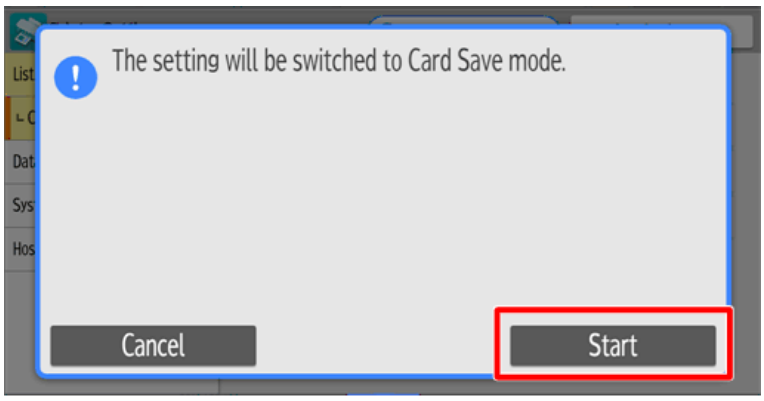
d0cam1064

10. Press [List/Test Print] > [Change Modes].
11. [Card Save (Add)] and [Card Save (New)] should be displayed on the screen. Select [Card Save (Add)] or [Card Save (New)].



d0cam1065

12. Press [Start] and then exit the "Settings" menu.



d0cam1066

13. Press [Printer] icon.

14. "Card Save" is be displayed in the top left of the display panel.

d0cam1067

15. Send a job to the printer. The Communicating light should start blinking.

16. As soon as the printer receives the data, it will be stored on the SD card automatically with no print output. Nothing is displayed on the screen, indicating that a Card Save operation was successful.

17. Press [Cancel the Mode] to exit Card Save mode.

18. Change the Bit Switch Settings back to the default 00000000. Press [#] in the numeric keypad to register the changes.

19. Remove the SD card after the power is turned OFF.

Error Messages

Card Save error messages:

- **Init error:** A card save process (e.g. card detection, change to kernel mode) failed to initialize.
- **Card not found:** Card cannot be detected in the slot.
- **No memory:** Insufficient working memory to process the job.
- **Write error:** Failed to write to the card.
- **Other error:** An unknown error occurred.

If an error occurs, pressing [OK] will cause the device to discard the job and return to the ready state.

Test Pattern Printing

Note

- Do not operate the machine until the test pattern is printed out completely. Otherwise, SC will occur.

1. Enter the SP mode, and then select **SP2-109-003**.
2. Select the test pattern to print from the list, and then press [OK].

No.	Pattern	No.	Pattern
0	Copy image	15	Hound's Tooth Check1 Vertical
1	Vertical Line 1dot	16	Hound's Tooth Check2 Horizontal
2	Vertical Line 2dot	17	Band (Horizontal)
3	Horizontal Line 1dot	18	Band (Vertical)
4	Horizontal Line 2dot	19	Checker Flag Pattern
5	Grid Vertical Line	20	Grayscale Vertical Margin
6	Grid Horizontal Line	21	Grayscale Horizontal Margin
7	Grid Pattern Small	22	4800dpi Step Pattern 1(1dot)
8	Grid Pattern Large	23	4800dpi Step Pattern 1(2dot)
9	Argyle Pattern Small	24	4800dpi Step Pattern 2(1dot)
10	Argyle Pattern Large	25	4800dpi Step Pattern 2(2dot)
11	Independent Pattern (1dot)	26	Wormy Pattern
12	Independent Pattern (2dot)	27	Full Dot Pattern
13	Independent Pattern (4dot)	28	None
14	Trimming Area	29	L Pattern

3. Select **SP2-109-005** (1: Full Color, 2: Black, 3: Cyan, 4: Magenta, 5: Yellow) to select the printing color.
4. To change the density of test pattern, select density with **SP2-109-006** to **009** for each color.

Note

- If selecting "0" with **SP2-109-006** through 009, the adjusted color will not show up in the test pattern.

5. To print out the test pattern, press "Copy Window", then specify the settings on the copier application for test print (paper size etc…).
6. Press "Start" to start the test print.
7. After checking the test pattern, press "SP Mode" on the LCD to return to SP mode display.
8. Restore all settings to their original values.
9. Exit the SP mode.

6. Troubleshooting

Self-Diagnostic Mode

Service Call Conditions

The ‘SC Table’ section shows the SC codes for controller errors and other errors. The latter are put into four types. The type is determined by their reset procedures. The table shows the classification of the SC codes.

Type	Display	How to reset	SC call or SC alarm in customer support system
A	The SC is immediately displayed on the operation panel when SC occurs. The error involves the fusing unit. The machine operation is disabled. The user cannot reset the error.	Reset the SC (set SP5-810-1) and then cycle the main power off and on.	Occurrence & alarm count ↓ Immediate alarm
B	When a function is selected, the SC is displayed on the operation panel. The machine cannot be used (down-time mitigation).	Turn the operation switch off and on.	Occurrence & alarm count ↓ Power OFF and ON ↓ Alarm count and alarm only if recurrence
C	No display on the operation panel. The machine operates as usual.	Only the SC history is updated.	Occurrence ↓ Logging count & alarm count
D	The SC is displayed on the operation panel. The machine cannot be used (machine-error SC).	Turn the main power switch off and on.	Occurrence & alarm count ↓ Power OFF and ON ↓ Alarm count and alarm only if recurrence

Note

- When an ordinary SC (type D) is generated, an automatic reboot is performed. When an event is reported by the customer support system, even in the event of an ordinary SC, reboot is not performed. During automatic reboot, a confirmation screen is displayed after the reboot.
- When automatic reboot occurs twice continuously, an SC is displayed without rebooting, and logging count is performed. Also, when an SMC print is output, an * mark is added alongside the SC number for clarity.
- Automatic reboot can be enabled or disabled with SP5-875-001 (SC automatic reboot setting) (default value: OFF).

SP descriptions

- **SP5-875-001 (SC automatic reboot: Reboot Setting)**
  Enables or disables the automatic reboot function when an SC error occurs.
  0: The machine reboots automatically when the machine issues an SC error and logs the SC error code. If the same SC occurs again, the machine does not reboot.
  1: The machine does not reboot when an SC error occurs.
  The reboot is not executed for the pattern A or C.

SC Logging

When an SC is generated, the "total count value when the SC is generated" and the "SC code" are logged. However, if the total count value during the SC is the same as last time, logging is not performed.
Logged data can be checked by outputting an administrative report (SMC print). The SC history is logged up to the last 10 entries, and if there are more than 10 entries, data are progressively deleted starting from the oldest.

SC Automatic Reboot

When an ordinary SC (pattern D) is generated, automatically reboot is performed. Automatic reboot or reboot by user operation can be set by SP5-875-001 (SC automatic reboot setting out) (default value: 1 "OFF").
When a type D occurs, automatic reboot is done or the machine display asks the customer if it can reboot. However, when the SC occurs twice in a short time, the machine sends a report to the @Remote server without rebooting. This is because just rebooting may not be a good solution if an SC occurs twice.
When an automatic reboot is performed, a confirmation screen is displayed after reboot. The confirmation screen can be cancelled by pressing the [OK] key (display is not cancelled only when the main power switch is switched OFF to ON).

Screen display during reboot

- Status display on the current screen

- Post-processing ..... Post-processing during printing, etc.
- Automatic reboot .... After operation end

  Post-processing

  ■■□□□□□□□□

  Until automatic reboot

  □□□□□□□□□□

- Reset key (Reboot key)

  Key to perform reboot

  # Cancel key is not displayed.
- Turn ON spanner LED (same as when an SC is generated).

Operation during SC reboot

- Timing of SC reboot

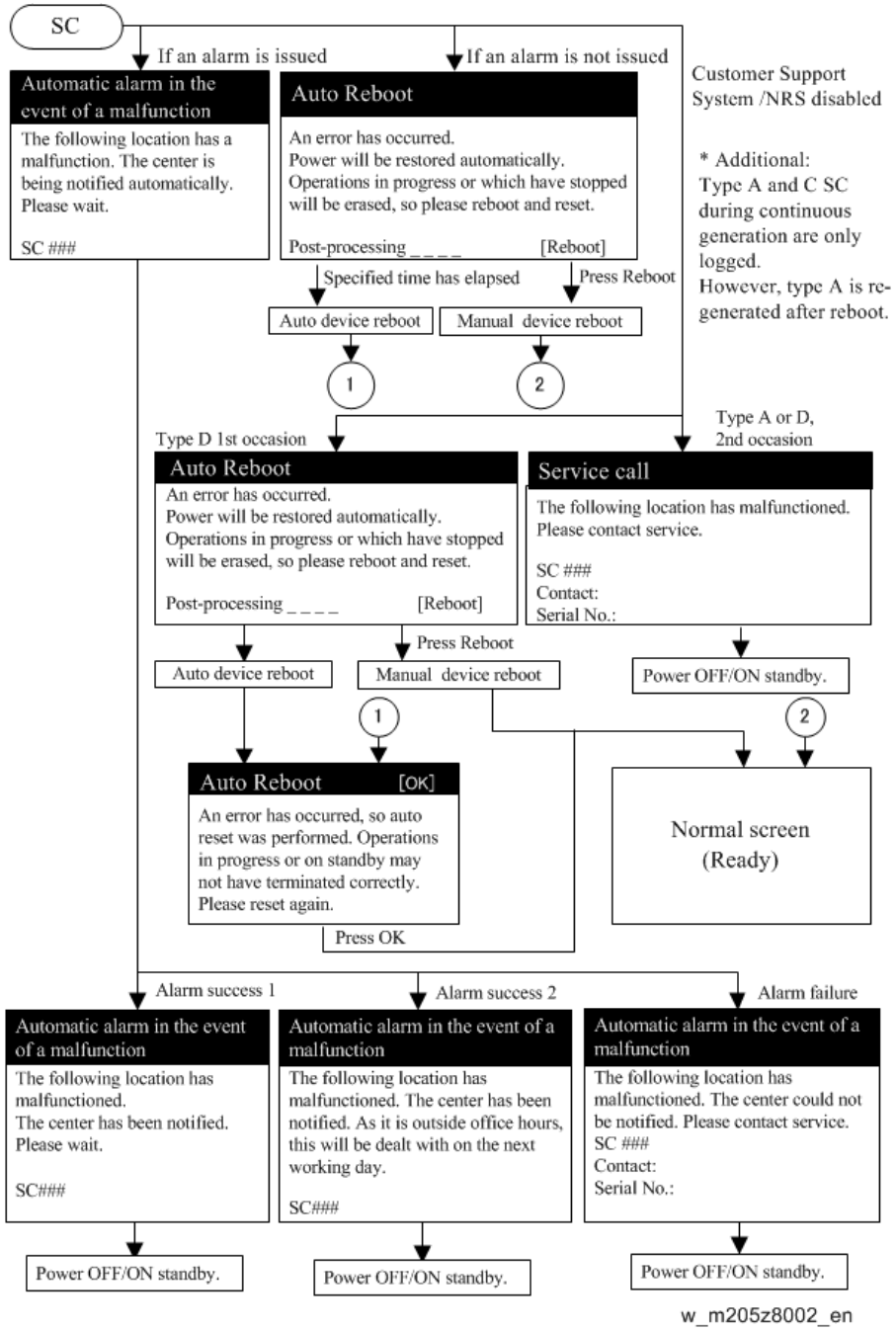
  When @Remote is enabled, and when a NRS alarm*1 is not generated, the corresponding SC is the object of an automatic reboot.

  *1 NRS alarm: Issued when an ordinary SC (type D) is generated twice while the total counter counts 10 times.
- Time to automatic reboot

  Reboot is performed 30 seconds after an engine reboot is possible, after the end of post-processing during printing, etc.

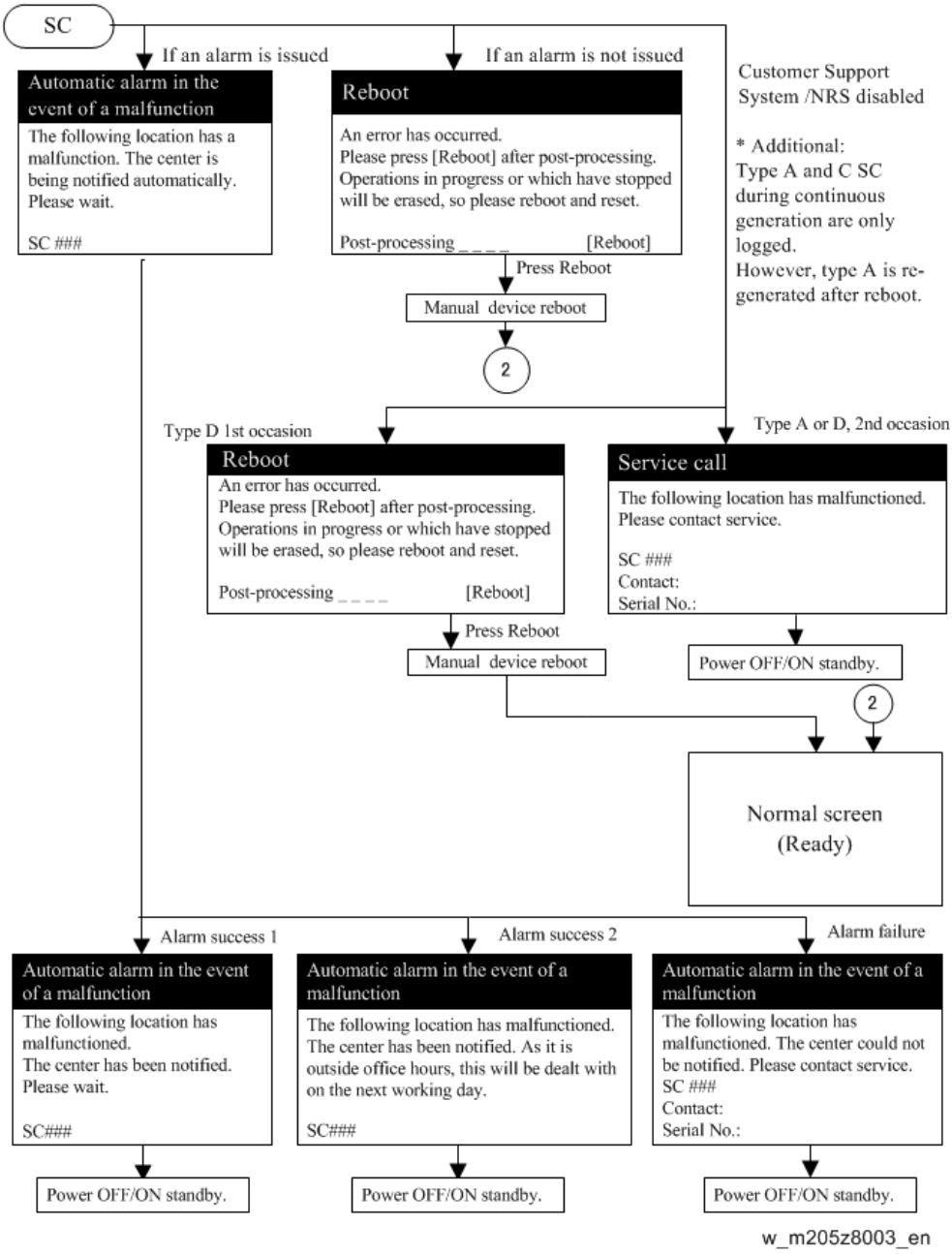
  At that time, a reboot is performed even if the MFP is operating. The engine does not start process control when a reboot is possible.
- Automatic reboot

  See the flowchart below.



SC Manual Reboot

When the automatic reboot is disabled in SP5-875-001 (SC automatic reboot setting), the user reboots the machine manually. See the flowchart below.


SC
If an alarm is issued
If an alarm is not issued
Automatic alarm in the event of a malfunction
The following location has a malfunction. The center is being notified automatically. Please wait.
SC ###
Reboot
An error has occurred.
Please press [Reboot] after post-processing.
Operations in progress or which have stopped will be erased, so please reboot and reset.
Post-processing _ _ _ _ [Reboot]
Press Reboot
Manual device reboot
2
Customer Support System /NRS disabled
* Additional:
Type A and C SC during continuous generation are only logged.
However, type A is re-generated after reboot.
Type D 1st occasion
Type A or D, 2nd occasion
Reboot
An error has occurred.
Please press [Reboot] after post-processing.
Operations in progress or which have stopped will be erased, so please reboot and reset.
Post-processing _ _ _ _ [Reboot]
Service call
The following location has malfunctioned.
Please contact service.
SC ###
Contact:
Serial No.:
Press Reboot
Manual device reboot
Power OFF/ON standby.
2
Normal screen
(Ready)
Alarm success 1
Alarm success 2
Alarm failure
Automatic alarm in the event of a malfunction
The following location has malfunctioned.
The center has been notified.
Please wait.
SC###
Automatic alarm in the event of a malfunction
The following location has malfunctioned.
The center has been notified. As it is outside office hours, this will be dealt with on the next working day.
SC###
Automatic alarm in the event of a malfunction
The following location has malfunctioned. The center could not be notified. Please contact service.
SC ###
Contact:
Serial No.:
Power OFF/ON standby.
Power OFF/ON standby.
Power OFF/ON standby.
w_m205z8003_en

SC100 (Engine: Scanning)

To recover from the error, check if the SC occurs (feed paper, open/close the doors, Input or Output check). If the SC occurs again, do the follow steps. After each step, turn the power OFF then ON to check if the SC occurs again.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC101-01	D	Exposure lamp abnormal: Front side: SBU
		The peak detection level reading on the reference white plate is too low.
		• SBU (PCB15) defective
		• Reconnect the power/signal harness. • Reconnect the exposure lamp FFC. • Replace the lens block. • For more procedures go to SC101-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC101-03	D	Exposure lamp abnormal: Front side: BICU
		The peak detection level reading on the reference white plate is too low.
		• BICU (PCB14) defective
		• Replace the BICU (PCB14) • For more procedures go to SC101-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC101-08	D	Exposure lamp abnormal: Front side: Drive
		The peak detection level reading on the reference white plate is too low.
		• Scanner drive system or motor operation abnormal
		1. Check the motor driver assembly (timing belt, wire, pulleys) for problems, and then reassemble and replace defective parts. - Any slack or buckle? - Any pulleys or gears out of alignment, separated from wire? - Any nicks, cuts, or other damage? 2. Check the following for loose or broken connections. - Scanner motor harness - Signal harness 3. Check the following parts and replace if required: - Timing belt - Scanner wire - Pulleys

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		- Scanner drive motor (M23) - Signal harness - Scanner drive motor harness - BICU (PCB14)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC101-09	D	Exposure lamp error: Front side
		The peak detection level reading on the reference white plate is too low.
		• LED defective • SBU/BICU (LED drive) defective • SBU/BICU defective • BICU (PCB14) defective • Power source, signal harness loose, broken, defective • Condensation in scanner unit • Scanner mirror or lens out of position or dirty • Reference white plate out of position or dirty
		1. Check the white plate for dirt or damage. Clean the white plate if dirty or replace if damaged. 2. Check the following for loose or broken connections. - Signal harness - exposure lamp FFC 3. Check the exposure lamps to confirm that they operate correctly (go off and on). If an LED does not go on, replace it. If only one of the exposure lamp pair does not light, replace that exposure lamp. 4. Replace the lens block. 5. Replace the BICU (PCB14). 6. Replace 1st, 2nd, 3rd mirrors. 7. Replace power/signal cable harnesses. 8. Replace the white plate seal or exposure glass. 9. Check the following parts and replace if required: - Timing belt - Pulleys - Scanner drive motor (M23) - Signal harness - Scanner drive motor harness - BICU (PCB14)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC101-12	D	Exposure lamp abnormal: Front side: SBU/Cable
		The peak detection level reading on the reference white plate is too low.
		• SBU (PCB15) defective
		1. Check the following for loose or broken connections. - Power/signal harness 2. Replace the lens block. 3. Replace the harnesses. 4. For more procedures go to SC101-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC101-13	D	Exposure lamp abnormal: Front side: SBU (PCB15)/BICU (PCB14)
		The peak detection level reading on the reference white plate is too low.
		• SBU (PCB15) defective • BICU (PCB14) defective
		1. Check the following for loose or broken connections. - Power/signal harness 2. Replace the lens block. 3. Replace the BICU (PCB14). 4. For more procedures go to SC101-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC101-14	D	Exposure unit abnormal: Front side: SBU/LED unit
		The peak detection level reading on the reference white plate is too low.
		• SBU (PCB15) defective • LED unit defective
		1. Check the following for loose or broken connections. - exposure lamp FFC 2. Check the exposure lamps to confirm that they operate correctly (go off and on). If an LED does not go on, replace it. If only one of the exposure lamp pair does not light, replace that exposure lamp. 3. Replace the lens block. 4. Replace the exposure lamp FFC.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		5. For more procedures go to SC101-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC101-15	D	Exposure unit abnormal: Front side: SBU/Scanner optics
		The peak detection level reading on the reference white plate is too low.
		• SBU (PCB15) defective • Mirror defective • White plate defective • DF white guide defective
		1. Check each component (check harnesses for dirty, broken, or loose connections), and then clean or replace as needed. - Harnesses - 1st, 2nd, 3rd mirrors - White plate seal - DF white guide plate (if SC appears during DF scanning) 2. Replace the lens block. 3. Replace 1st, 2nd, 3rd mirrors. 4. For more procedures go to SC101-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC102-01	D	Exposure adjustment error: Front side: SBU (PCB15)
		The white plate reading (peak detection level) exceeded the preset value after the prescribed number of adjustments.
		• SBU (PCB15) defective
		• Reconnect the power/signal harness. • Reconnect the exposure lamp FFC. • Replace the lens block. • For more procedures go to SC102-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC102-03	D	Exposure adjustment error: Front side: BICU (PCB14)
		The white plate reading (peak detection level) exceeded the preset value after the prescribed number of adjustments.
		• BICU (PCB14) defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Replace the BICU (PCB14) • For more procedures go to SC102-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC102-08	D	Exposure adjustment error: Front side: Drive
		The white plate reading (peak detection level) exceeded the preset value after the prescribed number of adjustments.
		• Scanner drive system or motor operation abnormal
		1. Check the motor driver assembly (timing belt, wire, pulleys) for problems, and then reassemble and replace defective parts. - Any slack or buckle? - Any pulleys or gears out of alignment, separated from wire? - Any nicks, cuts, or other damage? 2. Check the following for loose or broken connections. - Scanner drive motor harness - Signal harness 3. Check the following parts and replace if required: - Timing belt - Scanner wire - Pulleys - Scanner drive motor (M23) - Signal harness - Scanner drive motor harness - BICU (PCB14)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC102-09	D	Exposure adjustment error: Front side
		The white plate reading (peak detection level) exceeded the preset value after the prescribed number of adjustments.
		• LED defective • SBU/BICU (LED drive) defective • SBU/BICU defective • BICU (PCB14) defective • Power source, signal harness loose, broken, defective
		1. Check the following for loose or broken connections.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		- Signal harness - exposure lamp FFC 2. Replace the lens block. 3. Replace the BICU (PCB14). 4. Check the exposure lamps to confirm that they operate correctly (go off and on). If an LED does not go on, replace it. If only one of the exposure lamp pair does not light, replace that exposure lamp. 5. Replace 1st, 2nd, 3rd mirrors. 6. Replace power/signal cable harnesses. 7. Replace the white plate seal or exposure glass. 8. Check the following parts and replace if required: - Timing belt - Pulleys - Scanner drive motor (M23) - Signal harness - Scanner drive motor harness - BICU (PCB14)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC102-12	D	Exposure adjustment error: Front side: SBU/Cable
		The white plate reading (peak detection level) exceeded the preset value after the prescribed number of adjustments.
		• SBU (PCB15) defective
		1. Check the following for loose or broken connections. - Power/signal harness 2. Replace the lens block. 3. Replace the harnesses. 4. For more procedures go to SC102-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC102-13	D	Exposure adjustment error: Front side: SBU (PCB15)/BICU (PCB14)
		The white plate reading (peak detection level) exceeded the preset value after the prescribed number of adjustments.
		• SBU (PCB15) defective • BICU (PCB14) defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		1. Check the following for loose or broken connections. - Power/signal harness 2. Replace the lens block. 3. Replace the BICU (PCB14). 4. For more procedures go to SC102-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC102-14	D	Exposure adjustment error: Front side: SBU/LED unit
		The white plate reading (peak detection level) exceeded the preset value after the prescribed number of adjustments.
		• SBU (PCB15) defective • LED unit defective
		1. Check the following for loose or broken connections. - exposure lamp FFC 2. Check the exposure lamps to confirm that they operate correctly (go off and on). If an LED does not go on, replace it. If only one of the exposure lamp pair does not light, replace that exposure lamp. 3. Replace the lens block. 4. Replace the exposure lamp FFC. 5. For more procedures go to SC102-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC102-15	D	Exposure adjustment error: Front side: SBU/Scanner optics
		The white plate reading (peak detection level) exceeded the preset value after the prescribed number of adjustments.
		• SBU (PCB15) defective • Mirror defective • White plate defective • DF white guide defective
		1. Check each component (check harnesses for dirty, broken, or loose connections), and then clean or replace as needed. - Harnesses - 1st, 2nd, 3rd mirrors - White plate seal

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		- DF white guide plate (if SC appears during DF scanning) 2. Replace the lens block. 3. Replace 1st, 2nd, 3rd mirrors. 4. For more procedures go to SC102-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC111-01	D	Exposure defective (scanner): Front side
		During duplex scanning, after the black reduction reading from the CIS device the value of the shading peak value reading was abnormal.
		• CIS (PCB41) defective • CIS white roller defective • ADF controller board (PCB40) defective • Harness defective • USB cable (CIS to BICU) defective • BICU (PCB14) defective
		1. Check the following for loose or broken connections. - Harness between the ADF controller board and the CIS 2. Replace the CIS (PCB41). 3. Replace the power/signal cable and USB cable. 4. Replace the BICU (PCB14).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC120-00	D	Scanner home position error 1
		The Scanner HP sensor (S24) does not go OFF. Error detection timing • During homing (when the machine is turned ON or when it returns from energy save mode) • During an automatic adjustment (when the machine is turned ON or when it returns from energy save mode) • During a scan from the ADF or exposure glass. After an error occurs • Stop process, Operation panel display, LED indication, Logging • Scanner is not usable (Copier/Scanner/Document Server applications) • Printer is usable.
		• Scanner drive motor driver defective • Scanner drive motor (M23) defective • Scanner HP sensor (S24) defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Harness defective • Timing belt, pulley, wire, or carriage not installed correctly
		• Cycle the machine off/on. • Replace the parts.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC121-00	D	Scanner home position error 2
		The Scanner HP sensor (S24) does not go ON. Error detection timing • During homing • During an automatic adjustment • During a scan from the ADF or exposure glass. After an error occurs • Stop process, Operation panel display, LED indication, Logging • Scanner is not usable (Copier/Scanner/Document Server applications). • Printer is usable.
		• Scanner drive motor driver defective • Scanner drive motor (M23) defective • Scanner HP sensor (S24) defective • Harness defective • Timing belt, pulley, wire, or carriage not installed correctly
		• Cycle the machine off/on. • Replace the part.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC141-01	D	Black level error: Front side: SBU (PCB15)
		The black level did not conform to the specified value.
		• SBU (PCB15) defective
		• Reconnect the power/signal harness. • Reconnect the exposure lamp FFC. • Replace the lens block. • For more procedures go to SC141-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC141-03	D	Black level error: Front side: BICU (PCB14)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		The black level did not conform to the specified value.
		• BICU (PCB14) defective
		• Replace the BICU (PCB14) • For more procedures go to SC141-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC141-08	D	Black level error: Front side: Drive
		The black level did not conform to the specified value.
		• Scanner drive system or motor operation abnormal
		1. Check the motor driver assembly (timing belt, wire, pulleys) for problems, and then reassemble and replace defective parts. - Any slack or buckle? - Any pulleys or gears out of alignment, separated from wire? - Any nicks, cuts, or other damage? 2. Check the following for loose or broken connections. - Scanner drive motor harness - Signal harness 3. Check the following parts and replace if required: - Timing belt - Scanner wire - Pulleys - Scanner drive motor (M23) - Signal harness - Scanner drive motor harness - BICU (PCB14)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC141-09	D	Black level error: Front side
		The black level did not conform to the specified value.
		• SBU/BICU defective • BICU (PCB14) defective • Power source, signal harness loose, broken, defective
		1. Check the following for loose or broken connections. - Power/signal harness 2. Replace the lens block.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		3. Replace the BICU (PCB14). 4. Replace power/signal cable harnesses.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC141-12	D	Black level error: Front side: SBU/Cable
		The black level did not conform to the specified value.
		• SBU (PCB15) defective
		1. Check the following for loose or broken connections. - Power/signal harness 2. Replace the lens block. 3. Replace the harnesses. 4. For more procedures go to SC141-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC141-13	D	Black level error: Front side: SBU (PCB15)/BICU (PCB14)
		The black level did not conform to the specified value.
		• SBU (PCB15) defective • BICU (PCB14) defective
		1. Check the following for loose or broken connections. - Power/signal harness 2. Replace the lens block. 3. Replace the BICU (PCB14). 4. For more procedures go to SC141-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC142-01	D	White level error: Front side: SBU (PCB15)
		The white level did not conform to the specified value.
		• SBU (PCB15) defective
		• Reconnect the power/signal harness. • Reconnect the exposure lamp FFC. • Replace the lens block. • For more procedures go to SC142-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC142-03	D	White level error: Front side: BICU (PCB14)
		The white level did not conform to the specified value.
		• BICU (PCB14) defective
		• Replace the BICU (PCB14) • For more procedures go to SC142-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC142-08	D	White level error: Front side: Drive
		The white level did not conform to the specified value.
		• Scanner drive system or motor operation abnormal
		1. Check the motor driver assembly (timing belt, wire, pulleys) for problems, and then reassemble and replace defective parts. - Any slack or buckle? - Any pulleys or gears out of alignment, separated from wire? - Any nicks, cuts, or other damage? 2. Check the following for loose or broken connections. - Scanner drive motor harness - Signal harness 3. Check the following parts and replace if required: - Timing belt - Scanner wire - Pulleys - Scanner drive motor (M23) - Signal harness - Scanner drive motor harness - BICU (PCB14)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC142-09	D	White level error: Front side
		The white level did not conform to the specified value.
		• SBU/BICU defective • LED defective • SBU/BICU (LED drive) defective • BICU (PCB14) defective • Power source, signal harness loose, broken, defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Scanner drive mechanism defective • Condensation in scanner unit • Scanner mirror or lens out of position or dirty • Reference white plate out of position or dirty
		1. Check the following for loose or broken connections. - Signal harness - Exposure lamp harness 2. Check the exposure lamps to confirm that they operate correctly (go off and on). If an LED does not go on, replace it. If only one of the exposure lamp pair does not light, replace that exposure lamp. 3. Replace the lens block. 4. Replace the BICU (PCB14). 5. Replace 1st, 2nd, 3rd mirrors. 6. Replace power/signal cable harnesses. 7. Replace the white plate seal or exposure glass. 8. Check the following parts and replace if required: - Timing belt - Pulleys - Scanner drive motor (M23) - Signal harness - Scanner drive motor harness - BICU (PCB14)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC142-12	D	White level error: Front side: SBU/Cable
		The white level did not conform to the specified value.
		• SBU (PCB15) defective
		1. Check the following for loose or broken connections. - Power/signal harness 2. Replace the lens block. 3. Replace the harnesses. 4. For more procedures go to SC142-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC142-13	D	White level error: Front side: SBU (PCB15)/BICU (PCB14)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		The white level did not conform to the specified value.
		• SBU (PCB15) defective • BICU (PCB14) defective
		1. Check the following for loose or broken connections. - Power/signal harness 2. Replace the lens block. 3. Replace the BICU (PCB14). 4. For more procedures go to SC142-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC142-14	D	White level error: Front side: SBU/LED unit
		The white level did not conform to the specified value.
		• SBU (PCB15) defective • LED unit defective
		1. Check the following for loose or broken connections. - Exposure lamp FFC 2. Check the exposure lamps to confirm that they operate correctly (go off and on). If an LED does not go on, replace it. If only one of the exposure lamp pair does not light, replace that exposure lamp. 3. Replace the lens block. 4. Replace the exposure lamp FFC. 5. For more procedures go to SC142-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC142-15	D	White level error: Front side: SBU/Scanner optics
		The white level did not conform to the specified value.
		• SBU (PCB15) defective • Mirror defective • White plate defective • DF white guide defective
		1. Check each component (check harnesses for dirty, broken, or loose connections), and then clean or replace as needed. - Harnesses - 1st, 2nd, 3rd mirrors

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		- White plate seal - DF white guide plate (if SC appears during DF scanning) 2. Replace the lens block. 3. Replace 1st, 2nd, 3rd mirrors. 4. For more procedures go to SC142-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC144-01	D	Scanner communication error: Front side: SBU (PCB15)
		• Cannot confirm SBU/BICU connection (abnormal connection detected). • Cannot confirm SBU/BICU connection, or communication error.
		• SBU (PCB15) defective
		• Reconnect the power/signal harness. • Reconnect the exposure lamp FFC. • Replace the lens block. • For more procedures go to SC144-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC144-03	D	Scanner communication error: Front side: BICU (PCB14)
		Cannot confirm BICU connection, or communication error.
		• BICU (PCB14) defective
		• Replace the BICU (PCB14) • For more procedures go to SC144-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC144-09	D	Scanner communication error: Front side
		• Cannot confirm SBU/BICU connection (abnormal connection detected). • Cannot confirm SBU/BICU connection, or communication error.
		• SBU/BICU defective • Power source, signal harness loose, broken, defective
		1. Check the following for loose or broken connections. - Power/signal harness 2. Replace the lens block. 3. Replace the BICU (PCB14). 4. Replace power/signal cable harnesses.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC144-12	D	Scanner communication error: Front side: SBU/Cable
		• Cannot confirm SBU/BICU connection (abnormal connection detected). • Cannot confirm SBU/BICU connection, or communication error.
		• SBU (PCB15) defective
		1. Check the following for loose or broken connections. - Power/signal harness 2. Replace the lens block. 3. Replace the harnesses. 4. For more procedures go to SC144-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC144-13	D	Scanner communication error: Front side: SBU (PCB15)/BICU (PCB14)
		• Cannot confirm SBU/BICU connection (abnormal connection detected). • Cannot confirm SBU/BICU connection, or communication error.
		• SBU (PCB15) defective • BICU (PCB14) defective
		1. Check the following for loose or broken connections. - Power/signal harness 2. Replace the lens block. 3. Replace the BICU (PCB14). 4. For more procedures go to SC144-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC144-17	D	Scanner communication error: Front side
		• Cannot confirm SBU/BICU connection (abnormal connection detected). • Cannot confirm SBU/BICU connection, or communication error.
		• SBU/BICU defective • Communication destination (BICU etc.) defective • Power source harness loose, broken, defective
		1. Check the following for loose or broken connections. - Power/signal harness 2. Replace the lens block. 3. Replace the power harness 4. For more procedures go to SC144-09.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC151-00	D	Black level detection error: Back side
		The black level detection error of the back side scanning sensor (CIS unit). This error is detected if even one pixel of the black level of the CIS unit did not coverage within prescribed threshold. Detection Timing: • At the start of a duplex scanning job (front/back sides scanned together) • Executing SP4-721-001 (executed after CIS replacement)
		• CIS unit (PCB41) defective • ADF controller board (PCB40) defective • Harness loose, broken, defective • USB cable loose, broken, defective • BICU (PCB14) defective
		1. Check the following for loose or broken connections. - Harness between the ADF controller board and the CIS 2. Replace the CIS (PCB41). 3. Replace the power/signal cable and USB cable. 4. Replace the BICU (PCB14).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC152-00	D	White level detection error: Back side
		The white level detection error of the back side scanning sensor (CIS unit). This error is detected if there were no shading data of the CIS unit in prescribed threshold. Detection Timing: • At the start of a duplex scanning job (front/back sides scanned together) • Executing SP4-721-001 (executed after CIS replacement)
		• CIS unit (PCB41) defective • CIS background white roller/white plate dirty, positioned incorrectly • ADF controller board (PCB40) defective • Harness loose, broken, defective • USB cable loose, broken, defective • BICU (PCB14) defective
		1. Check the following for loose or broken connections. - Harness between the ADF controller board and the CIS 2. Replace the CIS (PCB41). 3. Replace the power/signal cable and USB cable. 4. Replace the BICU (PCB14).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC154-00	D	Scanner communication error: Back side
		Serial communication error between the CIS unit and the SDF control board. This error is detected when the value scanned in the ASIC on the CIS was differ from the expectation, or when the FROM data in CIS unit did not scanned normally. Detection Timing: • At the start of a duplex scanning job (front/back sides scanned together)
		• CIS unit (PCB41) defective • ADF controller board (PCB40) defective • Harness loose, broken, defective
		1. Check the following for loose or broken connections. - Harness between the ADF controller board and the CIS 2. Replace the CIS (PCB41). 3. Replace the harness between the BICU and the CIS. 4. Replace the ADF controller board (PCB40) .

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC161-02	D	BICU error (LSYNC abnormal): Back side
		This error is detected in the BICU self-diagnostic test before the back side scanning. Detection Timing: • At the start of a duplex scanning job (front/back sides scanned together)
		• CIS and BICU not connected correctly or defective • CIS unit (PCB41) defective • BICU (PCB14) defective
		1. Check the following for loose or broken connections. - Harness between the BICU and the CIS 2. Replace the CIS (PCB41). 3. Replace the harness between the BICU and the CIS. 4. Replace the BICU (PCB14).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC161-20	D	BICU error (DRAM initial error)
		This error is detected in the DDR-PHY initialization and Training status confirming when the machine is turned on, or returns to full operation from energy save mode.
		• BICU (PCB14) defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• DRAM devise defective
		• Reconnect the connectors. • Replace the BICU (PCB14).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC195-00	D	Machine serial number error
		Comparison of the product identification code in the machine serial number (11 digits).
		The product identification code in the machine serial number (11 digits) does not match.
		Re-enter the machine serial number.

SC200 (Engine: Image Writing)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC202-01	D	Polygon motor (M26): ON error: Bk
SC202-03	D	Polygon motor (M27): ON error: Ma
		Error Condition: • The motor did not rotate normally when the polygon motor turned ON, or when the rpm had changed. Error Detection: • Turned ON the polygon motor (started printing) • Changed the rpm (changed the speed of printing) Details: • The SC occurs when the motor did not detect polygon stable state (lock) within 10 sec after the polygon motor turned ON.
		• Polygon motor or polygon motor driver defective • Polygon harness defective • BICU (PCB14) defective • PSU defective (Polygon power supply, fuse defective) • AC power supply/voltage abnormal
		1. Turn the main power off/on. **2.** Check if the 24V power for polygon motor of the BICU is normal by reading the value from SP2-120-002. 0: Normal 1: Abnormal **3.** Check the 24V of PSU. **4.** Replace the PSU (PCB33/PCB34). **5.** Remove/Install the connectors (the laser unit relay and BICU). **6.** Replace the BICU (PCB14). **7.** Replace the harness between the BICU and laser unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC203-01	D	Polygon motor (M26): OFF error: Bk
SC203-03	D	Polygon motor (M27): OFF error: Ma
		Error Condition: • The motor did not stop in a specified time after the polygon motor went OFF.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Error Detection: • Turned OFF the polygon motor (stopped printing) Details: • The SC occurs when the polygon stable signal does not unlock within 3 seconds of turning OFF the polygon motor.
		• Polygon motor or polygon motor driver defective • Polygon harness defective • BICU (PCB14) defective • PSU defective (Polygon power supply, fuse defective) • AC power supply/voltage abnormal
		1. Turn the main power off/on. **2.** Check if the 24V power for polygon motor of the BICU is normal by reading the value from SP2-120-002. 0: Normal 1: Abnormal **3.** Check the 24V of PSU. **4.** Replace the PSU (PCB33/PCB34). **5.** Remove/Install the connectors (the laser unit relay and BICU). **6.** Replace the BICU (PCB14). **7.** Replace the harness between the BICU and laser unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC204-01	D	Polygon motor (M26): Rotation error: Bk
SC204-03	D	Polygon motor (M27): Rotation error: Ma
		Error Condition: • The polygon motor did not rotate normally while printing. Error Detection: • Pre-rotating before printing • Printing Details: • Detection starts when the printing start signal is issued. The monitoring continues until the polygon motor stops.
		• Polygon motor or polygon motor driver defective • Polygon harness defective • BICU (PCB14) defective • PSU defective (Polygon power supply, fuse defective)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• AC power supply/voltage abnormal (nonstandard)
		1. Turn the main power off/on. **2.** Check if the 24V power for polygon motor of the BICU is normal by reading the value from SP2-120-002. 0: Normal 1: Abnormal **3.** Check the 24V of PSU. **4.** Replace the PSU (PCB33/PCB34). **5.** Remove/Install the connectors (the laser unit relay and BICU). **6.** Replace the BICU (PCB14). **7.** Replace the harness between the BICU and laser unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC220-01	D	Leading edge: LD1 synchronization detection error: Bk
SC220-02	D	Leading edge: LD1 synchronization detection error: Cy
SC220-03	D	Leading edge: LD1 synchronization detection error: Ma
SC220-04	D	Leading edge: LD1 synchronization detection error: Ye
		Error Condition: • The synchronization detection signal (writing scan period signal) did not output. Error Detection: • Starting the machine after turned ON the main power • Printing Details: • Detection starts when the LD stops lighting. The monitoring continues until the LD turns off. The SC occurs when synchronization detection signal was not outputted for a period.
		• Main scan magnification rate abnormal • Laser unit defective (Synchronization detection board defective) • LD board (PCB17/PCB22) defective • Synchronization/LD board harness defective
		1. Turn the main power off/on. **2.** Correct the SP for main magnification rate.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Execute SP2-102-012. (main magnification rate clear) Perform MUSIC in UP mode. If SC 220 occurs again, replace parts. **3.** Check if the synchronization optical system machinery gets cool and wet. **4.** Replace the laser unit of the applicable color.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC230-01	D	FGATE ON error: Bk
SC230-02	D	FGATE ON error: Cy
SC230-03	D	FGATE ON error: Ma
SC230-04	D	FGATE ON error: Ye
		Error Condition: • The FGATE signal did not turn ON after the writing process started. Error Detection: • Printing Details: • The SC occurs when the FGATE signal did not assert up to 3.5 sec after the printing start signal.
		• Connection between BICU and controllers defective • BICU (PCB14) defective • LD board (PCB17/PCB22) defective • LD board harness defective
		1. Turn the main power off/on. **2.** Check the connection between the BICU and controller board. **3.** Disconnect/reconnect the harnesses between the BICU and the laser unit. **4.** Replace the BICU (PCB14). **5.** Replace the laser unit of the applicable color. **6.** Replace the harness between the BICU and the laser unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC230-11	D	FGATE ON error: Image transfer error: Bk
SC230-12	D	FGATE ON error: Image transfer error: Cy
SC230-13	D	FGATE ON error: Image transfer error: Ma
SC230-14	D	FGATE ON error: Image transfer error: Ye

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Error Condition: • The IPFGATE signal is not generated after the writing process starts. Error Detection: • Printing Details: • The SC occurs when the internal signal of FGATE signal is not generated.
		• Connection between the BICU and controller board defective • BICU (PCB14) defective • Controllers defective
		1. Turn the main power off/on. **2.** Check the connection between the BICU and controller board. **3.** Replace the BICU (PCB14). **4.** Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC231-01	D	FGATE OFF error: Bk
SC231-02	D	FGATE OFF error: Cy
SC231-03	D	FGATE OFF error: Ma
SC231-04	D	FGATE OFF error: Ye
		Error Condition: • The FGATE signal did not turn OFF after the writing process ended. Error Detection: • Printing Details: • The SC occurs when the FGATE signal did not negate up to 8.3 sec after the FGATE signal had asserted.
		• Connection between the BICU and controller board defective • BICU (PCB14) defective • LD board (PCB17/PCB22) defective
		1. Turn the main power off/on. **2.** Check the connection between the BICU and controller board. **3.** Disconnect/reconnect the harnesses between the BICU and the laser unit. **4.** Replace the BICU (PCB14). **5.** Replace the laser unit of the applicable color.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		6. Replace the harness between the BICU and the laser unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC240-01	D	LD error: Bk
SC240-03	D	LD error: Ma
		Error Condition: • When LD is turned on and it is abnormal, the VTEC detects the SC error. Error Detection: • Starting the machine after turned ON the main power • Printing Details: • The SC occurs when the VTEC LD error flag was detected while LD driver initialization, and it was detected again after re-initialization. • The SC occurs when the VTEC LD error flag was detected twice consecutively while lighting the LD.
		• Main scan magnification rate error • LD degradation (LD board broken) • Laser unit defective
		1. Turn the main power off/on. **2.** Correct the SP for main magnification rate. Execute SP2-102-012. (main magnification rate clear) Perform MUSIC in UP mode. **3.** Replace the laser unit of the applicable color.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC270-01	D	LD ASIC communication error: Bk
SC270-03	D	LD ASIC communication error: Ma
		Error Condition: • The CPU and the VTEC did not communicate normally. Error Detection: • Turned ON the machine • Returned from energy save mode • Printing

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Details: • On startup: Data access to a predetermined register determines if the communication is normal. • After startup: If the parity in the data access is found abnormal through monitoring, data access is retried up to three times. The SC occurs when the error is detected three times consecutively.
		• BICU (PCB14) defective • LD board (PCB17/PCB22) defective • Harness between the LD board and BICU defective
		1. Turn the main power off/on. **2.** Disconnect/reconnect the harness between the BICU and the laser unit. **3.** Replace the BICU (PCB14). **4.** Replace the laser unit of the applicable color. **5.** Replace the harness between the BICU and the laser unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC270-10	D	LD ASIC communication error: Others
		Error Condition: • LD ASIC power supply was abnormal. Error Detection: • Turned ON the machine • Returned from energy save mode • Opened/Closed the door Details: The SC occurs when the doors of main machine are closed but 5VS is off. (It is determined by monitoring power monitor signal of LD board by the LD ASIC.)
		• BICU (PCB14) defective (LD5VS power supply defective) • LD board (PCB17/PCB22) defective • Harness between the LD board and BICU defective • Interlock defective
		1. Turn the main power off/on. **2.** Disconnect/reconnect the harness between the BICU and the laser unit. **3.** Replace the BICU (PCB14). **4.** Replace the laser unit of the applicable color. **5.** Replace the harness between the BICU and the laser unit. **6.** Replace the interlock switches: Toner supply unit safety switch (SW5), Drawer safety switch (SW9), Vertical transport door set switch (SW11)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC274-01	D	Image transfer error: Bk
SC274-03	D	Image transfer error: Ma
		Error Condition: • The image transfer cable between the BICU and the LD board is disconnected. • The image transfer from the BICU to the LD board did not work normally. Error Detection • Turned ON the machine • Returned from energy mode • Opened/Closed the door • Printing Details: The error status of LD ASIC is monitored. (interruption signal) The SC occurs once the error is detected.
		• Laser USB cable defective • BICU (PCB14) defective • LD board (PCB17/PCB22) defective
		1. Turn the main power off/on. **2.** Disconnect/reconnect the USB cable between the laser unit and the BICU. **3.** Replace the USB cable. **4.** Replace the BICU (PCB14). **5.** Replace the laser unit of the applicable color.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC276-01	D	Microcomputer communication error: Bk
SC276-03	D	Microcomputer communication error: Ma
		Error Condition: • Writing microcomputer did not work normally. Error Detection: • All the time (Turned ON to OFF the machine) Details: • The VTEC error status is monitored (interruption signal).
		• LD board (PCB17/PCB22) defective (VTEC defective, writing microcomputer defective)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Turn the main power off/on. • Replace the laser unit of the applicable color.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC285-00	D	MUSIC error
		MUSIC fails 4 times while the machine is turned ON. The failure is determined when color shift amount is over the prescribed value. The following values are shown in the MUSIC error history (SP2-194-010) in SP mode. • Lack of patch number (-11:Front, -12:Center, -13:Rear) • Belt having several scratches or dirt (normal) (-21:Front, -22:Center, -23:Rear, -30:More than one ch) • Sub registration error (-41:Cy, -42:Ma, -43:Ye) • Main registration error (-51:Cy, -52:Ma, -53:Ye) • Main scan magnification ratio error (-61:Cy, -62:Ma, -63:Ye) • Main left/right scan magnification ratio error (-71:Cy, -72:Ma, -73:Ye) • Curve error (-81:Cy, -82:Ma, -83:Ye)
		• Image transfer belt and OPC drum speed abnormal • LD board (PCB17/PCB22) defective • Belt flawed or smudged • ID/MUSIC sensor (S2) smudged or defective • Image skew correction motor (M24/M25) operation abnormal or defective • The MUSIC pattern conflicts with the results of TM/P sensor reading.
		1. Check the SC496-XXXX which occurred before. • Branch numbers 11 to 13: execute step 2. • Branch numbers 21 to 30: execute step 3. • Branch numbers 41 and more: execute steps 2, 3, and 4. **2.** Check the image density. (Execute Density Adjustment) **3.** Check the ITB. (Cleaning and replacement) **4.** Check the ID/MUSIC sensor (S2). (Cleaning and replacement) **5.** Replace the laser unit of the applicable color.

SC300 (Engine: Charge, Development)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC300-01	D	Combined high-voltage power supply board (PCB11) (charge) output error (K)
SC300-02	D	Combined high-voltage power supply board (PCB11) (charge) output error (C)
SC300-03	D	Combined high-voltage power supply board (PCB10) (charge) output error (M)
SC300-04	D	Combined high-voltage power supply board (PCB10) (charge) output error (Y)
		The interrupt that checks the status of the combined high-voltage power supply board (charge) power pack every 10 ms detected SC signals 15 times consecutively.
		• High voltage harness shorted. • Leakage around the charge roller caused by a conductive object.
		• Remove the cause of leakage.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC300-05	D	Combined high-voltage power supply board (PCB11) (charge) output error (K)
SC300-06	D	Combined high-voltage power supply board (PCB11) (charge) output error (C)
SC300-07	D	Combined high-voltage power supply board (PCB10) (charge) output error (M)
SC300-08	D	Combined high-voltage power supply board (PCB10) (charge) output error (Y)
		After 80 ms from charge AC ON, the FB voltage of the charge AC continuously detected over the specified value 15 times at 10 ms intervals.
		• High voltage harness shorted. • Leakage around the charge roller caused by a conductive object.
		• Remove the cause of leakage.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC312-01	D	Charge FB voltage error (K)
SC312-02	D	Charge FB voltage error (C)
SC312-	D	Charge FB voltage error (M)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
03		
SC312-04	D	Charge FB voltage error (Y)
		On plotter startup, the charge FB (feed-back) voltage was 0.3V or less for 15 consecutive readings. Details: SC issued when electric current does not pass after charge bias is applied, which can be caused when a harness is disconnected or damaged, or when the charge roller or the drum is not installed.
		• High-voltage harness damaged or not connected correctly. • Charge roller or OPC drum not installed
		• Fix the problem.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC316-01	D	Charge DC current FB voltage low limit error (K)
SC316-02	D	Charge DC current FB voltage low limit error (C)
SC316-03	D	Charge DC current FB voltage low limit error (M)
SC316-04	D	Charge DC current FB voltage low limit error (Y)
		Charge DC current FB voltage detected lower than 0.1V.
		• Harness short circuit or disconnected • High voltage power supply defective
		• Check the harnesses. • Replace the combined high-voltage power supply board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC320-01	D	Combined high-voltage power supply board (PCB11) (development) output error (K)
SC320-02	D	Combined high-voltage power supply board (PCB11) (development) output error (C)
SC320-03	D	Combined high-voltage power supply board (PCB10) (development) output error (M)
SC320-04	D	Combined high-voltage power supply board (PCB10) (development) output error (Y)
		When SC signals are detected 25 times consecutively in 20 ms intervals (500 msec). Details:

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		When the combined high-voltage power supply board (development) is shorted, the combined high-voltage power supply board (development) detects it by means of an SC signal (HIGH level). The IOB monitors the SC signals as explained above.
		• Development power pack shorted
		Disconnect the high voltage cable from the output terminal of the combined high-voltage power supply board (development) of the corresponding color, and check the following points. • PWM: Check the signal of the corresponding color. • If the signal is fixed to HIGH during photocopying process, replace the harness or the IOB. • Check the output of the combined high-voltage power supply board (development) of the corresponding color. If the output is fixed to HIGH during photocopying process, replace the combined high-voltage power supply board (charge/development). If the output is normal during photocopying process, test the resistance between the high-voltage cable and the ground. If resistance is “0” or nearly “0”, replace the high-voltage harness or PCDU.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC325-00	D	Development motor (M18): Bk: Lock
		When the unlocked status is detected 20 times in total by referring the status register of the development motor in 100 ms intervals while the development motor is on, the machine recognizes that the development motor does not rotate correctly. When turning OFF the machine or locking the development motor, the total count will be cleared. Details: When the development motor is on, each lock signal is checked every 100 milliseconds. If the High status is detected 20 times in total, the machine determines that the development motor is not running correctly. The machine issues an SC and stops the development motor.
		• Development motor (M18) defective • Connector disconnected • Harness broken • IOB defective • Unit torque increased.
		• Replace the development motor (M18). • Reconnect the connector.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Replace the harness. • Replace the IOB (PCB1). • Replace the development unit. • Replace the driven unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC326-00	D	Development motor (M18): C: Lock
		When the unlocked status is detected 20 times in total by referring the status register of the development motor in 100 ms intervals while the development motor is on, the machine recognizes that the development motor does not rotate correctly. When turning OFF the machine or locking the development motor, the total count will be cleared. Details: When the development motor is on, each lock signal is checked every 100 milliseconds. If the High status is detected 20 times in total, the machine determines that the development motor is not running correctly. The machine issues an SC and stops the development motor.
		• Development motor (M18) defective • Connector disconnected • Harness broken • IOB defective • Unit torque increased.
		• Replace the development motor (M18). • Reconnect the connector. • Replace the harness. • Replace the IOB (PCB1). • Replace the development unit. • Replace the driven unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC327-00	D	Development motor (M18): M: Lock
		When the unlocked status is detected 20 times in total by referring the status register of the development motor in 100 ms intervals while the development motor is on, the machine recognizes that the development motor does not rotate correctly. When turning OFF the machine or locking the development motor, the total count will be cleared. Details: When the development motor is on, each lock signal is checked every 100

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		milliseconds. If the High status is detected 20 times in total, the machine determines that the development motor is not running correctly. The machine issues an SC and stops the development motor.
		• Development motor (M18) defective • Connector disconnected • Harness broken • IOB defective • Unit torque increased.
		• Replace the development motor (M18). • Reconnect the connector. • Replace the harness. • Replace the IOB (PCB1). • Replace the development unit. • Replace the driven unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC328-00	D	Development motor (M18): Y: Lock
		When the unlocked status is detected 20 times in total by referring the status register of the development motor in 100 ms intervals while the development motor is on, the machine recognizes that the development motor does not rotate correctly. When turning OFF the machine or locking the development motor, the total count will be cleared. Details: When the development motor is on, each lock signal is checked every 100 milliseconds. If the High status is detected 20 times in total, the machine determines that the development motor is not running correctly. The machine issues an SC and stops the development motor.
		• Development motor (M18) defective • Connector disconnected • Harness broken • IOB defective • Unit torque increased.
		• Replace the development motor (M18). • Reconnect the connector. • Replace the harness. • Replace the IOB (PCB1). • Replace the development unit. • Replace the driven unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC332-01	D	Toner supply motor (M3) error (K): bottle
SC332-02	D	Toner supply motor (M3) error (C): bottle
SC332-03	D	Toner supply motor (M3) error (M):bottle
SC332-04	D	Toner supply motor (M3) error (Y): bottle
		Detected a lock signal which indicates overcurrent in the toner supply motor.
		• Toner bottle not set correctly or the torque is large. • Toner bottle broken or defective • Toner supply motor (M3) defective • Toner clogging in the toner bottle
		• Toner bottle not set correctly, toner bottle broken, or large torque: After the machine stops, ask the user to remove the toner bottle, shake it and set it again. Then cycle the machine off/on to return from SC status. • Toner bottle broken or defective: Ask the user to remove the toner bottle and set a normal bottle. Then cycle the machine off/on to return from SC status. • Toner supply motor (M3) defective: Turn OFF the machine and replace the toner supply motor (M3). Then cycle the machine off/on to return from SC status.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC336-01	D	Developer set error (K)
SC336-02	D	Developer set error (C)
SC336-03	D	Developer set error (M)
SC336-04	D	Developer set error (Y)
		When the TD sensor control voltage (Vtcnt) is 4.3V, the TD sensor output (Vt) is less than 0.7V. Details: When executing TD sensor initialization (SP3-030), the machine checks the development unit for the presence of developer. If the error condition is detected at

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		this point, the machine determines that there is no developer and issues the SC.
		• There is an extremely low amount of developer.
		• Check the developer.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC348-01	D	Toner supply error (K)
SC348-02	D	Toner supply error (C)
SC348-03	D	Toner supply error (M)
SC348-04	D	Toner supply error (Y)
		K: Amount of toner on the ID sensor pattern printed and read between sheets (SP3-300-001) is less than the lower threshold (SP3-301-023) and accumulated toner clutch ON time (SP3-301-041) is greater than the upper threshold (SP3-301-031). CMY: Amount of toner on the ID sensor pattern printed and read between sheets (SP3-300-002 to 004) is less than the lower threshold (SP3-301-024) and accumulated toner clutch ON time (SP3-301-042 to 044) is greater than the upper threshold (SP3-301-031). Details: This SC is issued when the toner end sensor continues detecting the presence of toner falsely.
		• Toner end sensor cleaner spring broken • Toner end sensor cleaner spring not set correctly • Toner end sensor (S3) defective • Toner supply motor (M3) defective • Sub hopper motor (M7) defective • Connector loose • Toner supply board (PCB9) defective
		• Replace the toner supply unit. • Replace the toner supply motor (M3). • Replace the sub hopper motor (M7). • Reconnect the connectors. • Replace the toner supply board (PCB9).

SC300 (Engine: Around the Drum)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC360-01	D	TD sensor (S46) calibration error (K)
SC360-02	D	TD sensor (S46) calibration error (C)
SC360-03	D	TD sensor (S46) calibration error (M)
SC360-04	D	TD sensor (S46) calibration error (Y)
		1. If the µ count value is more than the threshold of the no developer detection. 2. If the µ count value cannot reach to the following target range for three times consecutively. • Upper threshold • Lower threshold Adjustment flow: 1. Developer presence detection 2. Developer not detected. OK: Proceed to µ count measurement. NG: Save the result and exit -> SC360-01. 3. The µ count measurement 4. The µ count measurement result judgment OK: TD sensor initial setting succeeded. NG: Proceed to the error processing. Error processing: 1. Judge after increase the error count by one. Error count is less than 3: Execute the µ count measurement again Error count is 3 and over: SC360-01
		• TD sensor (S46) defective • Loose connection • Harness broken • Development unit defective (Developer is not new)
		• Replace the development unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC361-01	D	TD sensor (S46) output error: Upper Limit (K)
SC361-	D	TD sensor (S46) output error: Upper Limit (C)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
02		
SC361-03	D	TD sensor (S46) output error: Upper Limit (M)
SC361-04	D	TD sensor (S46) output error: Upper Limit (Y)
		The TD sensor output (Vt) (SP3-210-001 to 004) exceeded 4.7 V 20 times consecutively.
		• Toner density extremely low • Toner supply motor (M3) defective • Sub hopper motor (M7) defective • Loose connection • Toner supply board (PCB9) defective
		• Check the sub hopper connection. When the connectors are disconnected, supply toner forcibly and execute manual process control. • Reinstall the PCDU and then execute manual process control. • Replace the development unit. • Replace the toner supply motor (M3). • Replace the sub hopper motor (M7). • Reconnect the connectors. • Replace the toner supply board (PCB9).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC362-01	D	TD sensor (S46) output error: Lower limit (K)
SC362-02	D	TD sensor (S46) output error: Lower limit (C)
SC362-03	D	TD sensor (S46) output error: Lower limit (M)
SC362-04	D	TD sensor (S46) output error: Lower limit (Y)
		The TD sensor output (Vt) (SP3-210-001 to 004) fell below 0.5 V 10 times consecutively.
		• TD sensor not connected correctly • TD sensor defective
		• Reinstall the PCDU and then execute the manual process control. • Replace the development unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC370-01	D	ID sensor calibration error (F)
SC370-02	D	ID sensor calibration error (C)
SC370-03	D	ID sensor calibration error (R)
		The voltage reading during process control for Vsg_reg was not within the correct range (4.0 ± 0.5 V). Details: Vsg_reg is the voltage reading of the light reflected directly from the bare surface of the ITB. ID sensor calibration adjusts the LED current so that Vsg_reg becomes 4.0 ± 0.5 V. Adjustment flow: 1. Vsg_reg confirmation If Vsg_reg is smaller than 0.5V, SC371-0X is issued and process control ends. 2. ID sensor calibration Fluctuates the LED current and measures Vsg_reg. 3. LED current upper limit check OK: Proceeds to Vsg upper/lower limit check NG: SC372-0X is issued; proceeds to Vsg upper/lower limit check 4. Vsg upper/lower limit check OK: Process control continued NG: SC370-0X is issued and process control ends.
		• ITB deformed, out of position or damaged

		• Wipe the ID/MUSIC sensor window with a damp cloth if dirty (never use a dry cloth).
		• Replace the ID/MUSIC sensor (S2).
		• If the values of the following SP settings are too low (lower than 1.0), set them to "20".
		  • SP3-322-001 (Adjusted Ifsg: Ifsg)
		  • SP3-322-021 (Adjusted Ifsg: Ifsg：TM(Front))
		  • SP3-322-022 (Adjusted Ifsg: Ifsg：TM(Center))
		  • SP3-322-023 (Adjusted Ifsg: Ifsg：TM(Rear))

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC371-01	D	ID sensor output error (F)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC371-02	D	ID sensor output error (C)
SC371-03	D	ID sensor output error (R)
		The ID sensor voltage reading of the light reflected directly (Vsg_reg) is below 0.5 V.
		• ID sensor connector disconnected/loose connection • ID sensor defective

		• Check if the ID/MUSIC sensor connector is connected.
		• Replace the ID/MUSIC sensor (S2).
		• If the values of the following SP settings are too low (lower than 1.0), set them to "20".
		  • SP3-322-001 (Adjusted lfsg: lfsg)
		  • SP3-322-021 (Adjusted lfsg: lfsg：TM(Front))
		  • SP3-322-022 (Adjusted lfsg: lfsg：TM(Center))
		  • SP3-322-023 (Adjusted lfsg: lfsg：TM(Rear))

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC373-01	D	ID Sensor Pattern Density High Error (K)
SC373-02	D	ID Sensor Pattern Density High Error (C)
SC373-03	D	ID Sensor Pattern Density High Error (M)
SC373-04	D	ID Sensor Pattern Density High Error (Y)
		K: The density of the Black reading in the ID sensor patterns created between pages (SP3-300-001) is greater than the threshold value set by SP3-301-021. CMY: The density of the Cyan/Magenta/Yellow reading in the ID sensor patterns created between pages (SP3-300-002 to o004) is greater than the threshold value set by SP3-301-022.
		• Excessive toner supply
		• Replace the toner supply unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC374-01	D	ID Sensor Pattern Density Low Error (K)
SC374-02	D	ID Sensor Pattern Density Low Error (C)
SC374-03	D	ID Sensor Pattern Density Low Error (M)
SC374-04	D	ID Sensor Pattern Density Low Error (Y)
		K: The density of the Black reading in the ID sensor patterns created between pages (SP3-300-001) was less than the threshold value set by SP3-301-023 three times consecutively. CMY: The density of the Cyan reading in the ID sensor patterns created between pages (SP3-300-002 to 004) is less than the threshold value set by SP3301-24 three times consecutively.
		• Abnormal development bias (Continuity fault) • Image transfer error
		• Check development bias continuity. • Check the ITB unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC381-01	D	Potential sensor (S42) output high error (K)
SC381-02	D	Potential sensor (S42) output high error (C)
SC381-03	D	Potential sensor (S42) output high error (M)
SC381-04	D	Potential sensor (S42) output high error (Y)
		Vd(700) greater than 950[-V] Details: In Vd detection, which is done at the beginning of process control, the measured potential (Vd) is converted to the potential when -700 V is applied to the drum (Vd700) and used to check the potential sensor.
		• Potential sensor (S42) dirty (foreign object, such as toner, entering the probe window)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Disconnect and reconnect the connector on the sensor side of the potential sensor board. • Use a blower brush to clean the potential sensor if dirty. • Replace the potential sensor board (PCB31).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC382-01	D	Potential sensor (S42) output low error (K)
SC382-02	D	Potential sensor (S42) output low error (C)
SC382-03	D	Potential sensor (S42) output low error (M)
SC382-04	D	Potential sensor (S42) output low error (Y)
		Vd(700) lesser than 50[-V] Details: In Vd detection, which is done at the beginning of process control, the measured potential (Vd) is converted to the potential when -700 V is applied to the drum (Vd700) and used to check the potential sensor.
		• Potential sensor (S42) defective (probe, board, or connector pins disconnected)
		• Disconnect and reconnect the connectors on the machine side/IOB side of the potential sensor board. • Replace the potential sensor board (PCB31).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC395-01	D	Drum motor (M34) (K) Lock: Encoder 1 error
SC396-01	D	Drum motor (M34) (C) Lock: Encoder 1 error
SC397-01	D	Drum motor (M34) (M) Lock: Encoder 1 error
SC398-01	D	Drum motor (M34) (Y) Lock: Encoder 1 error
		Error detected by the TDCU. If a command sent from the TDCU indicates an error, the engine issues an SC.
		• Drum motor (M34) defective • Connectors disconnected • Harness broken • IOB defective • Drum encoder sensor (S30) smudged

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Drum encoder sensor (S30) defective • Drum encoder sensor connector not set correctly
		• Check the harness connection and re-connect the harness. • Replace the drum encoder sensor (S30) (lower). • Replace the harnesses. • Replace the drive unit. • Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC395-02	D	Drum motor (M34) (K) Lock: Encoder 2 error
SC396-02	D	Drum motor (M34) (C) Lock: Encoder 2 error
SC397-02	D	Drum motor (M34) (M) Lock: Encoder 2 error
SC398-02	D	Drum motor (M34) (Y) Lock: Encoder 2 error
		Error detected by the TDCU. If a command sent from the TDCU indicates an error, the engine issues an SC.
		• Drum motor (M34) defective • Connectors disconnected • Harness broken • IOB defective • Drum encoder sensor (S30) smudged • Drum encoder sensor (S30) defective • Drum encoder sensor connector not set correctly
		• Check the harness connection and re-connect the harness. • Replace the drum encoder sensor (S30) (upper). • Replace the harnesses. • Replace the drive unit. • Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC395-03	D	Drum motor (M34) (K) Lock: Encoder 1/2 error
SC396-03	D	Drum motor (M34) (C) Lock: Encoder 1/2 error
SC397-03	D	Drum motor (M34) (M) Lock: Encoder 1/2 error
SC398-03	D	Drum motor (M34) (Y) Lock: Encoder 1/2 error
		Error detected by the TDCU. If a command sent from the TDCU indicates an error, the engine issues an SC.
		• PCDU torque defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Drum motor (M34) defective • Connectors disconnected • Harness broken • IOB defective • Drum encoder sensor (S30) smudged • Drum encoder sensor (S30) defective • Drum encoder sensor connector not set correctly
		• Check the PCDU and replace the PCDU if needed. • Check the harness connection and re-connect the harness. • Replace the drum encoder sensor (S30) (upper/lower). • Replace the harnesses. • Replace the drum drive unit. • Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC395-04	D	Drum motor (M34) (K) Lock: Hole error
SC396-04	D	Drum motor (M34) (C) Lock: Hole error
SC397-04	D	Drum motor (M34) (M) Lock: Hole error
SC398-04	D	Drum motor (M34) (Y) Lock: Hole error
		Error detected by the TDCU. If a command sent from the TDCU indicates an error, the engine issues an SC.
		• Drum motor (M34) defective • Connectors disconnected • Harness broken • IOB defective
		• Check the harness connection and re-connect the harness. • Replace the harnesses. • Replace the drive unit. • Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC395-05	D	Drum motor (M34) (K) Lock: Overload error
SC396-05	D	Drum motor (M34) (C) Lock: Overload error
SC397-05	D	Drum motor (M34) (M) Lock: Overload error
SC398-05	D	Drum motor (M34) (Y) Lock: Overload error
		Error detected by the TDCU. If a command sent from the TDCU indicates an error, the engine issues an SC.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Black PCDU torque defective • Drum motor (M34) defective • Connectors disconnected • Harness broken • IOB defective
		• Check the PCDU and replace the PCDU if needed. • Check the harness connection and re-connect the harness. • Replace the drive unit. • Replace the IOB (PCB1).

SC300 (Engine: Transfer/Separation, Cleaning, etc.)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC390-00	C	Drum (K) drive FF control error.
SC391-00	C	Drum (C) drive FF control error.
SC392-00	C	Drum (M) drive FF control error.
SC393-00	C	Drum (Y) drive FF control error.
		Error detected by the TDCU.
		• Drum motor (M34) defective • Drum encoder sensor connector disconnected or harness broken • Drum encoder sensor (S30) defective • Drum encoder sensor smudged or defective
		• Replace the drum encoder sensor (S30). • Replace the drum drive unit. • Replace the drum motor (M34). • Reconnect the connector or replace the harness.

SC400 (Engine: Transfer/Separation, Cleaning etc.)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC440-01	D	Transfer power pack (PCB2): Voltage leak (K)
SC440-02	D	Transfer power pack (PCB2): Voltage leak (C)
SC440-03	D	Transfer power pack (PCB2): Voltage leak (M)
SC440-04	D	Transfer power pack (PCB2): Voltage leak (Y)
		An interrupt checks the status of the power pack every 10 ms. This SC is issued if a problem exists with 50 consecutive samplings (500 ms). Details: SC issued when the transfer power pack (PCB2) output current is leaking. The IOB checks for SC signals as described above.
		Transfer power pack output current is leaking.
		Remove the high voltage cable from the output terminal of the Transfer power pack (PCB2) and check the following items. • PWM signal check If signal is fixed during image transfer, replace the cable or the IOB. • Transfer power pack (PCB2) output check If output is fixed during image transfer, replace the transfer power pack/separation power pack (PCB2). If output is normal during image transfer, replace the high voltage cable, ITB or the transfer roller.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC440-11	D	Transfer power pack (PCB2) error (low output) (K)
SC440-12	D	Transfer power pack (PCB2) error (low output) (C)
SC440-13	D	Transfer power pack (PCB2) error (low output) (M)
SC440-14	D	Transfer power pack (PCB2) error (low output) (Y)
		The resistance level of the image transfer roller was "R-3" during image transfer voltage detection, when the image transfer roller resistance FB control was running.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Transfer power pack defective • Problem with input harness to the transfer power pack (loose connection, harness broken, or connector disconnected).
		• Replace the transfer power pack/separation power pack (PCB2). • Check the input harness and connector of the transfer power pack.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC442-00	D	Image transfer belt unit lift control error
		Even though the ITB lift motor rotates, the ITB lift sensor did not detect the actuator within specified time. Details: • **During home-positioning (operation for fixing the separated status)** During the ITB separation movement: The ITB lift sensor status does not change from "interrupted" to "not interrupted" status within 2000 msec from the start of ITB lift motor rotation. • **During normal contact/separation movement (printing/process control/MUSIC/forced toner consumption)** During the ITB contact movement: The ITB lift sensor status does not change from "not interrupted" to "interrupted" status within 2000 msec from the start of ITB lift motor rotation. During the ITB separation movement: The ITB lift sensor status does not change from "interrupted" to "not interrupted" status within 2000 msec from the start of ITB lift motor rotation. • **During contact/separation movement under special conditions (paper jam, paper end etc.)** During the ITB separation movement: The ITB lift sensor status does not change from "interrupted" to "not interrupted" status within 2000 msec from the start of ITB lift motor rotation. Detection timing: During the ITB contact/separation movement Detection interval: 2 msec or more
		• ITB lift (YMC) sensor (S10) smudged • ITB Lift Motor (M17), ITB Lift (YMC) Sensor (S10) defective • Harness broken or problem with connection (such as a disconnected connector)
		• If smudged: cleaning • If defective or broken: replacement • Problem with connection: reconnection

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC445-01	C	ITB unit control error: driven shaft FB
		• Error detected by the TDCU.
		• ITB motor (M2) defective • ITB unit set error • Connector disconnected or harness broken • ITB driven shaft encoder sensor (S9) defective • ITB driven shaft encoder smudged or damaged
		1. Reconnect the connectors. 2. Clean the ITB driven shaft encoder and encoder sensor. 3. Replace the ITB driven shaft encoder and ITB driven shaft encoder sensor (S9). 4. Replace the harness. 5. Replace the TDRB (PCB4). 6. Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC445-02	C	ITB unit control error: driven shaft eccentricity correction control
		• Error detected by the TDCU.
		• ITB motor (M2) defective • ITB unit set error • Connector disconnected or harness broken • ITB driven shaft encoder sensor (S9) defective • ITB driven shaft encoder smudged or damaged • ITB drive shaft encoder sensor (S8) defective • ITB drive shaft encoder smudged or damaged
		1. Check the ITB and belt cleaning unit for defects by rotating the motor shaft by hand and checking for problems or defects around the cleaning blade. 2. Reconnect the connectors. 3. Check the gear train of the ITB drive. 4. Replace the ITB motor (M2). 5. Clean or replace the ITB driven shaft encoder and ITB driven shaft encoder sensor (S9). 6. Clean or replace the ITB drive shaft encoder and ITB drive shaft encoder sensor (S8). 7. Replace the harness. 8. Replace the TDRB (PCB4). 9. Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC445-03	C	ITB unit control error: dancing control
		• Error detected by the TDCU.
		• ITB motor (M2) defective • ITB unit set error • Connector disconnected or harness broken • ITB driven shaft encoder sensor (S9) defective • ITB driven shaft encoder smudged or damaged • ITB drive shaft encoder sensor (S8) defective • ITB drive shaft encoder smudged or damaged
		1. Check the ITB and belt cleaning unit for defects by rotating the motor shaft by hand and checking for problems or defects around the cleaning blade. 2. Reconnect the connectors. 3. Check the gear train of the ITB drive. 4. Replace the ITB motor (M2). 5. Clean or replace the ITB driven shaft encoder and ITB driven shaft encoder sensor (S9). 6. Clean or replace the ITB drive shaft encoder and ITB drive shaft encoder sensor (S8). 7. Replace the harness. 8. Replace the TDRB (PCB4). 9. Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC446-01	D	ITB motor (M2): Lock: ITB drive shaft encoder sensor error
		• Error detected by the TDCU.
		• ITB motor (M2) defective • Connector disconnected • Harness broken • IOB (PCB1) or TDRB (PCB4) defective • Unit torque increased • ITB drive shaft encoder sensor (S8) smudged • ITB drive shaft encoder sensor (S8) defective • ITB drive shaft encoder sensor connector not set correctly
		1. Check the harness connection, and re-connect the harness. 2. Clean the ITB drive shaft encoder and ITB drive shaft encoder sensor (S8). 3. Replace the ITB drive shaft encoder and ITB drive shaft encoder sensor (S8) (including the drive gear). 4. Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		5. Replace the ITB motor (M2). 6. Replace the TDRB (PCB4). 7. Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC446-02	D	ITB motor (M2) : Lock: ITB driven shaft encoder sensor error
		• Error detected by the TDCU.
		• Connector disconnected • Harness broken • IOB (PCB1) or TDRB (PCB4) defective • ITB driven shaft encoder sensor (S9) smudged • ITB driven shaft encoder sensor (S9) defective • ITB driven shaft encoder sensor connector not set correctly
		1. Check the harness connection, and re-connect the harness. 2. Clean the ITB driven shaft encoder and ITB driven shaft encoder sensor (S9). 3. Replace the ITB driven shaft encoder and ITB driven shaft encoder sensor (S9). 4. Replace the harness. 5. Replace the TDRB (PCB4). 6. Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC446-03	D	ITB motor (M2): Lock: ITB drive/driven shaft encoder sensor error
		• Error detected by the TDCU.
		• ITB motor defective • Connector disconnected • Harness broken • IOB (PCB1) or TDRB (PCB4) defective • Unit torque increased • ITB drive shaft encoder sensor (S8) smudged • ITB driven shaft encoder sensor (S9) smudged • ITB drive shaft encoder sensor (S8) defective • ITB driven shaft encoder sensor (S9) defective • ITB drive shaft encoder sensor connector not set correctly • ITB driven shaft encoder sensor connector not set correctly
		1. Check the ITB unit and ITB cleaning unit (such as blade rolled-in). Check the

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		motor by rotating with your hand. 2. Check the harness connection, and re-connect the harness. 3. Check the gear of the ITB drive unit. (Replace the gear and encoder if needed.) 4. Replace the ITB motor (M2). 5. Replace or clean the ITB drive/drive shaft encoder sensor and encoders. 6. Replace the harness. 7. Replace the TDRB (PCB4). 8. Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC446-04	D	ITB motor (M2): Lock: Hole error
		• Error detected by the TDCU.
		• ITB Motor (M2) defective • Connector disconnected • Harness broken • IOB defective
		1. Check the harness connection, and re-connect the harness. 2. Replace the ITB motor (M2). 3. Replace the harness. 4. Replace the TDRB (PCB4). 5. Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC446-05	D	ITB motor (M2): Lock: Overload error
		• Error detected by the TDCU.
		• ITB motor (M2) defective • Connector disconnected • Harness broken • IOB (PCB1) defective • Unit torque increased
		1. Check the ITB unit and ITB cleaning unit (such as blade rolled-in). Check the motor by rotating with your hand. 2. Check the harness connection, and re-connect the harness. 3. Replace the harness. 4. Replace the ITB drive unit. 5. Replace the TDRB (PCB4).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		6. Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC450-01	D	Separation power pack (DC): Error detection (leak)
SC450-02	D	AC transfer power pack (PCB3) (AC): Error detection (leak)
		Condition 1 • When operate the samplings every 10 ms during the transfer/separation power pack (AC), the SC is issued if an error is detected 50 times (500 ms) consecutively. • When operate the samplings every 10 ms during the AC transfer power pack (DC), the SC is issued if an error is detected 100 times (1000 ms) consecutively. IM C6500/C8000 • The SC signal (SC450-02) of the AC output is masked all the time. Pro C5300S/C5310S • The SC signal (SC450-01) of the DC output is masked when the AC output is ON. • The SC signal (SC450-02) of the AC output is masked when the AC output is OFF. **Condition 2** • Detection starts when 24V power is turned on or PWM is turned off. The monitoring continues until 24V power is turned off or PWM is turned on. The SC occurs when the PWM is off and the machine detects 2.9V or lower FB voltage 500msec consecutively. (20 msec×25 times) *The SC is masked when the inter lock is released.
		• The power pack output current is leaking. • The power pack is broken.
		Remove the high voltage cable from the output terminal of the paper transfer power pack or the AC transfer power pack, and then check the following items. • PWM signal check • If signal is fixed during image transfer, replace the cable or the IOB. • Check the output of the transfer/separation power pack (PCB2) or the AC transfer power pack (PCB3) • If output is fixed during image transfer, replace the power pack. • If output is normal during image transfer, replace the high voltage cable, ITB or the paper transfer belt.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC450-03	A	Separation power pack error (Damaged)
		When image area bias was applied (apart from bias for non-image areas, FB voltage = 3.13 V or more (0 KV) was detected longer than 300 msec (20 ms×15 time)
		• Transfer power pack defective
		• Replace the transfer/separation power pack (PCB2).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC450-11	D	Paper transfer power pack error (Low output)
		Condition 1 The resistance level of the ITB roller was "R-3" during ITB roller voltage detection, when the ITB roller resistance FB control was running. **Condition 2** Detection starts when 24V power is turned on or PWM is turned off. The monitoring continues until 24V power is turned off or PWM is turned on. The SC occurs when the PWM is off and the machine detects 2.9V or lower FB voltage 500msec consecutively. (20 msec×25 times)
		• Paper transfer power pack defective • Problem with input harness to the paper transfer power pack (loose connection, harness broken, or connector disconnected). • The power pack broken.
		• Fix or replace the transfer/separation power pack (PCB2). • Check the input harness and connector of the transfer/separation power pack (PCB2).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC452-00	D	Paper transfer belt lift error
		Even though the paper transfer belt separation motor (M1) rotates, the paper transfer belt separation sensor (S11) status does not change to the specified status within specified time. Details: • **During home-positioning (operation for fixing the separated status)** During the paper transfer belt separation movement: The paper transfer belt separation sensor (S11) status does not change from "interrupted" to "not interrupted" status within 2000 msec from the start of paper transfer belt separation motor rotation.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• **During normal contact/separation movement (printing/process control/MUSIC/forced toner consumption)** During the paper transfer belt contact movement: The paper transfer belt separation sensor (S11) status does not change from "not interrupted" to "interrupted" status within 2000 msec from the start of paper transfer belt separation motor rotation. During the paper transfer belt separation movement: The paper transfer belt separation sensor (S11) status does not change from "interrupted" to "not interrupted" status within 2000 msec from the start of paper transfer belt lift motor rotation. • **During contact/separation movement under special conditions (paper jam, paper end etc.)** During the paper transfer belt separation movement: The paper transfer belt separation sensor (S11) status does not change from "interrupted" to "not interrupted" status within 2000 msec from the start of paper transfer belt lift motor rotation. Detection timing: During contact/separation movement Detection interval: 2 msec or less
		• Paper transfer belt separation sensor (S11) smudged • Paper transfer belt separation motor (M1) defective • Paper transfer belt separation sensor (S11) defective • Harness broken or problem with connection (such as a disconnected connector)
		• If smudged: cleaning • If defective or broken: replacement • If defective or broken: replacement • Problem with connection: reconnection

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC465-01	D	Paper transfer belt motor (M16): Lock: Encoder 1 error
		• Error detected by the TDCU.
		• Paper transfer belt motor (M16) defective • Connector disconnected • Harness broken • IOB (PCB1) defective • Paper transfer belt encoder sensor (S11) smudged • Paper transfer belt encoder sensor (S11) defective • Paper transfer belt encoder sensor connector not set correctly

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		1. Check the harness connection, and re-connect the harness. 2. Replace the paper transfer belt encoder sensor (S11) (lower). 3. Replace the harness. 4. Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC465-02	D	Paper transfer belt motor (M16) (K) Lock: Encoder 2 error
		• Error detected by the TDCU.
		• Paper transfer belt motor (M16) defective • Connector disconnected • Harness broken • IOB (PCB1) defective • Paper transfer belt encoder sensor (S11) smudged • Paper transfer belt encoder sensor (S11) defective • Paper transfer belt encoder sensor connector not set correctly
		1. Check the harness connection, and re-connect the harness. 2. Replace the paper transfer belt encoder sensor (S11) (upper). 3. Replace the harness. 4. Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC465-03	D	Paper transfer belt motor (M16) (K) Lock: Encoder 1/2 error
		• Error detected by the TDCU.
		• Paper transfer belt motor (M16) defective • Connector disconnected • Harness broken • IOB (PCB1) defective • Unit torque increase (double-feed or unit has failed) • Paper transfer belt encoder sensor (S16) smudged or defective • Paper transfer belt encoder sensor connector not set correctly
		1. If you experience double feeds, remove the paper and paper scraps, and then clean the rollers. 2. Check the paper transfer belt unit. (If any defect is found, refer to the replacement procedures of the paper transfer belt unit.) 3. Check the ITB cleaning unit. (If any defect is found, refer to the replacement procedures of the ITB cleaning unit.) 4. Check the paper transport belt unit. (If any defect is found, refer to the

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		replacement procedures of the paper transport belt unit.) 5. Check the waste toner collection path. (If any defect is found, refer to the replacement procedures of the waste toner collection path.) 6. Check the paper transfer belt drive parts. (Replace the parts if needed, such as a broken gear.) 7. Check the harness connection, and re-connect the harness. 8. Replace the paper transfer belt encoder sensor (S16) (upper/lower). 9. Replace the harness. 10. Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC465-04	D	Paper transfer belt motor (M16) (K) Lock: Hole error
		• Error detected by the TDCU.
		• Paper transfer belt motor (M16) defective • Connector disconnected • Harness broken • IOB (PCB1) defective
		1. Check the harness connection, and re-connect the harness. 2. Replace the harness. 3. Replace the paper transfer belt motor (M16). 4. Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC465-05	D	Paper transfer belt motor (M16) (K) Lock: Overload error
		• Error detected by the TDCU.
		• Paper transfer belt motor (M16) defective • Connector disconnected • Harness broken • IOB (PCB1) defective • Unit torque increase (double-feed or unit has failed)
		1. If you experience double feeds, remove the paper and paper scraps, and then clean the rollers. 2. Check the paper transfer belt unit. (If any defect is found, refer to the replacement procedures of the paper transfer belt unit.) 3. Check the ITB cleaning unit. (If any defect is found, refer to the replacement procedures of the ITB cleaning unit.) 4. Check the paper transport belt unit. (If any defect is found, refer to the

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		replacement procedures of the paper transport belt unit.) 5. Check the waste toner collection path. (If any defect is found, refer to the replacement procedures of the waste toner collection path.) 6. Check the paper transfer belt drive parts. (Replace the parts if needed, such as a broken gear.) 7. Check the harness connection, and re-connect the harness. 8. Replace the harness. 9. Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC480-00	D	Drum cleaning motor (M30): K: Lock
SC481-00	D	Drum cleaning motor (M30): C: Lock
SC482-00	D	Drum cleaning motor (M30): M: Lock
SC483-00	D	Drum cleaning motor (M30): Y: Lock
		Error detected by the TDCU. When the drum cleaning motor (M30) is on, each lock signal is checked every 100 milliseconds. If the High status is detected 20 times consecutively, the machine determines that the motor is not running correctly. The machine issues an SC and stops the drum cleaning motor (M30).
		• Drum cleaning motor (M30) defective • Connector disconnected • Harness broken • IOB (PCB1) defective • Unit torque increased.
		• Replace the drum cleaning motor (M30). • Reconnect the connector. • Replace the harness. • Replace the IOB (PCB1). • Replace the drum cleaning unit. • Replace the PCDU.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC486-	D	Waste toner bottle motor sensor (S13) detection error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
00		For the waste toner control, the waste toner full processing runs when all of the following conditions are fulfilled. • The waste toner bottle is "no toner" or "not nearly full". • Signals sent from the waste toner bottle motor sensor (S13) were either ON or OFF 50 times consecutively. The SC is issued when all of the above conditions are fulfilled after the waste toner bottle is removed/installed.
		• Physical obstruction is blocking waste toner transport path • Waste toner bottle motor (M14) defective • Waste toner bottle motor sensor (S13) defective • Harness broken • Connection fault
		• Replace or clean the waste toner transport section. • Replace the waste toner bottle motor (M14). • Replace the waste toner bottle motor sensor (S13). • Replace the harness. • Reconnect the connectors.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC488-00	D	Waste toner lock sensor (S15) detection error
		The intervals of signals sent from the machine waste toner lock sensor (normally 64.68 msec) became either less than 30 msec or more than 81 msec.
		• Physical obstruction is blocking waste toner transport path • Waste toner collection motor defective • Waste toner lock sensor (S15) defective • Harness broken • Connection fault
		• Replace or clean the waste toner transport section. • Replace the waste toner lock sensor (S15) or harness. • Reconnect the connectors.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC498-00	C	ITB temperature/humidity sensor (S97) error
		One of the following occurred. • The temperature sensor output was less than 0.5V or more than 2.8V for three seconds (one second x 3), indicating a problem with the temperature sensor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• The humidity sensor output was more than 2.4V for three seconds (one second x 3), indicating a problem with the humidity sensor. Details: Detection is repeated after power off/on. If either of ITB temperature/humidity sensors works correctly, the working sensor will be used even after the SC is issued. The machine continues working with the assumption that the temperature is 23 degrees centigrade (if there is a problem with the temperature sensor) and/or the humidity is 50% (if there is a problem with the humidity sensor)
		• Connector disconnected or harness broken • ITB temperature/humidity sensor (S97) defective
		• Reconnect the connector or replace the harness. • Replace the ITB temperature/humidity sensor (S97).

SC500 (Engine: Paper transport 1: Paper Feed, Duplex, Transport)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC501-01	B	Tray 1 lift error (A3 extended tray)
		1st tray lift motor (M58) lift error was detected. If detected for the first or second time: User is instructed to set paper again. If detected for the third time: SC displayed (only the corresponding tray) The detection count is reset after a successful operation or when the power is turned off/on.
		• 1st tray lift motor (M58) disconnected/harness broken/defective • Paper tray upper limit sensor (1st tray) disconnected/defective/smudged • Foreign object (such as a piece of paper) is stuck between the paper tray and the tray lift motor. • Paper set incorrectly.
		• Load paper again. • Check the harness of the paper tray upper limit sensor (S89), reconnect the tray upper limit sensor connector, clean the paper tray upper limit sensor (S89), replace the paper tray upper limit sensor (S89), or replace the 1st tray. • Replace the 1st tray lift motor (M58), reconnect the connector, replace the harness, replace the PFB (PCB36), replace the A3 extended tray, or replace the driven unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC501-02	B	Tray 1 lowering error (A3 extended tray)
		1st tray lift motor (M58) lower error was detected. If detected for the first to fourth time: User is instructed to set paper again. If detected for the fifth time: SC displayed (only the corresponding tray) The detection count is reset after a successful operation or when the power is turned off/on.
		• 1st tray lift motor (M58) disconnected/harness broken/defective • Paper tray upper limit sensor (S89) disconnected/defective/smudged • Paper overloaded • Foreign object (such as a piece of paper) is stuck between the paper tray and the tray lift motor. • Paper set incorrectly.
		• Load paper again. • Check the harness of the tray lift sensor, reconnect the tray upper limit sensor connector, clean the paper tray upper limit sensor (S89), replace the paper

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		tray upper limit sensor (S89), or replace the 1st tray. • Replace the 1st tray lift motor, reconnect the connector, replace the harness, replace the PFB (PCB36), replace the A3 extended tray, or replace the driven unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC501-11	B	Tray 1 lift error (tandem tray/tandem LCIT)
		1st tray lift motor (M58) lift error was detected. If detected for the first or second time: User is instructed to set paper again. If detected for the third time: SC displayed (only the corresponding tray) The detection count is reset after a successful operation or when the power is turned off/on.
		• 1st tray lift motor (M58) disconnected/harness broken/defective • Paper tray upper limit sensor (S89) disconnected/defective/smudged • Foreign object (such as a piece of paper) is stuck between the paper tray and the tray lift motor. • Paper set incorrectly.
		• Load paper again. • Check the harness of the tray lift sensor, reconnect the tray upper limit sensor connector, clean the paper tray upper limit sensor (S89), replace the paper tray upper limit sensor (S89), or replace the 1st tray. • Replace the 1st tray lift motor, reconnect the connector, replace the harness, replace the PFB (PCB36), replace the right tray (of the tandem tray), or replace the driven unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC501-12	B	Tray 1 lowering error (tandem tray/tandem LCIT)
		1st tray lift motor (M58) lower error was detected. If detected for the first to fourth time: User is instructed to set paper again. If detected for the fifth time: SC displayed (only the corresponding tray) The detection count is reset after a successful operation or when the power is turned off/on.
		• 1st tray lift motor (M58) disconnected/harness broken/defective • Paper tray upper limit sensor (S89) disconnected/defective/smudged • Paper overloaded • Foreign object (such as a piece of paper) is stuck between the paper tray and the tray lift motor. • Paper set incorrectly.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Load paper again. • Check the harness of the paper tray lift sensor, reconnect the tray upper limit sensor connector, clean the paper tray upper limit sensor (S89), replace the paper tray upper limit sensor (S89), or replace the 1st tray. • Replace the 1st tray lift motor, reconnect the connector, replace the harness, replace the PFB (PCB36), replace the right tray (of the tandem tray), or replace the driven unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC501-13	B	Tray 1 lower limit error (tandem tray/tandem LCIT)
		1st tray lift motor (M58) lower limit error was detected. If detected for the first or second time: User is instructed to set paper again. If detected for the third time: SC displayed (only the corresponding tray) The detection count is reset after a successful operation or when the power is turned off/on.
		• 1st tray lift motor (M58) disconnected/harness broken/defective • Tray lower limit sensor (S117) disconnected/defective/smudged • Foreign object (such as a piece of paper) is stuck between the paper tray and the tray lift motor. • Paper set incorrectly.
		• Load paper again. • Check the harness of the tray lower limit sensor (S117), reconnect the tray lower limit sensor connector, clean the tray lower limit sensor (S117), or replace the tray lower limit sensor (S117). • Replace the 1st tray lift motor (M58) , reconnect the connector, replace the harness, replace the PFB (PCB36), replace the right tray (of the tandem tray), or replace the driven unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC501-14	C	Tandem transport fence error
		Rear fence drive motor (M61) return error detected. Rear fence return motor home position error detected. If detected for the first or second time: User is instructed to set paper again. If detected for the third time: User is instructed to set paper again and SC is recorded but not displayed. The detection count is reset after a successful operation or when the power is turned off/on.
		• Rear fence drive motor (M61) disconnected/defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Rear fence return sensor (S103) disconnected/defective/smudged • Rear fence HP sensor (S102) disconnected/defective/smudged • Paper overloaded • Foreign object (such as a piece of paper) is stuck between the paper tray and the rear fence return motor. • Paper set incorrectly.
		• Replace the rear fence drive motor (M61), reconnect the connector, replace the harness, replace the PFB (PCB36), replace the left tray, or replace the driven unit. • Check the harness of the rear fence return sensor (S103), reconnect the rear fence return sensor connector, clean the rear fence return sensor (S103), replace the rear fence return sensor (S103). • Check the harness of the rear fence HP sensor (S102), reconnect the rear fence HP sensor connector, clean the rear fence HP sensor (S102), or replace the rear fence HP sensor (S102). • Load paper again.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC502-01	B	Tray 2 lift error
		Tray lift motor (M57) lift error was detected. If detected for the first or second time: User is instructed to set paper again. If detected for the third time: SC displayed (only the corresponding tray) The detection count is reset after a successful operation or when the power is turned off/on.
		• Tray lift motor (M57) disconnected/harness broken/defective • Paper tray upper limit sensor (S89) (2nd tray) disconnected/defective/smudged • Paper overloaded • Foreign object (such as a piece of paper) is stuck between the paper tray and the tray lift motor. • Paper set incorrectly.
		• Load paper again. • Check the harness of the paper tray upper limit sensor (S89), reconnect the tray upper limit sensor connector, clean the paper tray upper limit sensor (S89), or replace the 2nd tray. • Replace the tray lift motor (M57), reconnect the connector, replace the harness, replace the PFB (PCB36), replace the 2nd tray, or replace the driven unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC502-02	B	Tray 2 lowering error
		Tray lift motor lower (M57) error was detected. If detected for the first to fourth time: User is instructed to set paper again. If detected for the fifth time: SC displayed (only the corresponding tray) The detection count is reset after a successful operation or when the power is turned off/on.
		• Tray lift motor (M57) disconnected/harness broken/defective • Paper tray upper limit sensor (S89) (2nd tray) disconnected/defective/smudged • Paper overloaded • Foreign object (such as a piece of paper) is stuck between the paper tray and the tray lift motor. • Paper set incorrectly.
		• Load paper again. • Check the harness of the paper tray upper limit sensor (S89), reconnect the paper tray upper limit sensor connector, clean the paper tray upper limit sensor (S89), or replace the 2nd tray. • Replace the tray lift motor (M57), reconnect the connector, replace the harness, replace the PFB (PCB36), replace the 2nd tray, or replace the driven unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC503-01	B	Tray 3 lift error
		Tray lift motor (M57) lift error was detected. If detected for the first or second time: User is instructed to set paper again. If detected for the third time: SC displayed (only the corresponding tray) The detection count is reset after a successful operation or when the power is turned off/on.
		• Tray lift motor (M57) disconnected/harness broken/defective • Paper tray upper limit sensor (S89) (3rd tray) disconnected/defective/smudged • Paper overloaded • Foreign object (such as a piece of paper) is stuck between the paper tray and the tray lift motor. • Paper set incorrectly.
		• Load paper again. • Check the harness of the paper tray upper limit sensor (S89), reconnect the

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		paper tray upper limit sensor connector, clean the paper tray upper limit sensor (S89), or replace the 3rd tray. • Replace the tray lift motor (M57), reconnect the connector, replace the harness, replace the PFB (PCB36), replace the 3rd tray, or replace the driven unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC503-02	B	Tray 3 lowering error
		Tray lift motor (M57) lower error was detected. If detected for the first to fourth time: User is instructed to set paper again. If detected for the fifth time: SC displayed (only the corresponding tray) The detection count is reset after a successful operation or when the power is turned off/on.
		• Tray lift motor (M57) disconnected/harness broken/defective • Paper tray upper limit sensor (S89) (3rd tray) disconnected/defective/smudged • Paper overloaded • Foreign object (such as a piece of paper) is stuck between the paper tray and the tray lift motor. • Paper set incorrectly.
		• Load paper again. • Check the harness of the paper tray upper limit sensor (S89), reconnect the paper tray upper limit sensor connector, clean the paper tray upper limit sensor (S89), or replace the 3rd tray. • Replace the tray lift motor (M57), reconnect the connector, replace the harness, replace the PFB (PCB36), replace the 3rd tray, or replace the driven unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-01	B	LCIT tray error (upper limit sensor error)
		The following status was detected 5 times consecutively: The paper tray upper limit sensor did not become on before pick-up solenoid is on at the start of tray initialization.
		• Pick-up solenoid (SOL1) defective/connector disconnected • Upper limit sensor ([SN10] for RT5140/RT4070, [S2] for RT4060) defective/connector disconnected • Related harness broken • PCB defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		1. Reconnect the connectors. 2. Check or replace the harness. 3. Check or replace the pick-up solenoid (SOL1). 4. Check or replace the lift sensor. 5. Replace the main controller board (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-02	B	LCIT tray error (lift timeout)
		During Tray initialization, the tray bottom plate was lifted but the upper limit sensor did not detect it after a specified time (30 seconds).
		• Lift motor (*[M1] for RT5140/RT4070, [M3] for RT4060) defective/connector disconnected • Upper limit sensor (*[SN10] for RT5140/RT4070, [S2] for RT4060) defective/connector disconnected • Related harness broken • PCB defective
		1. Reconnect the connectors. 2. Check or replace the harness. 3. Check or replace the lift motor (*). 4. Check or replace the upper limit sensor (*). 5. Replace the main controller board (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-03	B	LCIT tray error (lowering timeout)
		• During Tray initialization, the tray bottom plate was lowered for position check but the upper limit sensor was still on or none of lower limit sensor and paper sensors 1 to 4 became on after a specified time (30 seconds). • When paper has run out or when the down switch was pressed, the tray bottom plate was lowered but neither the stack sensor nor the lower limit sensor became on after a specified time (30 seconds).
		• Lift motor (*[M1] for RT5140/RT4070, [M3] for RT4060) defective/connector disconnected • Upper limit sensor (*[SN10] for RT5140/RT4070, [S2] for RT4060) defective/connector disconnected • Paper height sensor or paper remaining sensor (SN7 for RT5140/RT4070, [S7/S8/S9/S10] for RT4060) defective/connector disconnected • Lower limit sensor (*[S11] for RT4060) defective/connector disconnected • Either of paper remaining sensors 1 to 4 defective/connector disconnected

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Related harness broken • PCB defective
		1. Reconnect the connectors. 2. Check or replace the harness. 3. Check or replace the lift motor (*). 4. Check or replace the upper limit sensor (*), lower limit sensor (*), or/and paper remaining sensors 1 to 4. 5. Replace the main controller board (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-04	B	LCIT tray error (paper overload error)
		During tray initialization, the upper limit sensor and the lower limit sensor were both on for 5 times consecutively.
		• Paper overloaded. • Pick-up solenoid (SOL1) defective/connector disconnected • Upper limit sensor (*[SN10] for RT5140/RT4070, [S2] for RT4060) defective/connector disconnected • Lower limit sensor (*[S11] for RT4060) defective/connector disconnected • Related harness broken • PCB defective
		1. Reduce the amount of loaded paper. 2. Reconnect the connectors. 3. Check or replace the harness. 4. Check or replace the lift motor(*). 5. Check or replace the upper limit sensor (*) or/and lower limit sensor (*). 6. Replace the main controller board (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-11	B	LCIT tray error (upper limit detection error)
		At the start of tray initialization, the upper limit sensor was detected as being off for 5 times before the pick-up solenoid was on.
		• Pick-up solenoid (SOL1) defective/connector disconnected • Upper limit sensor (*[SN10] for RT5140/RT4070, [S2] for RT4060) defective/connector disconnected • Related harness broken • PCB defective
		1. Reconnect the connectors.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		2. Check or replace the harness. 3. Check or replace the pick-up solenoid (SOL1). 4. Check or replace the upper limit sensor (*). 5. Replace the main controller board (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-12	B	LCIT tray error (lift timeout)
		During Tray initialization, the tray bottom plate was lifted but the upper limit sensor did not detect it after a specified time (27 seconds).
		• Lift motor (*[M1] for RT5140/RT4070, [M3] for RT4060) defective/connector disconnected • Upper limit sensor (*[SN10] for RT5140/RT4070, [S2] for RT4060) defective/connector disconnected • Related harness broken • Main controller board (PCB1) defective
		1. Reconnect the connectors. 2. Check or replace the harness. 3. Check or replace the lift motor (*). 4. Check or replace the upper limit sensor (*). 5. Replace the main controller board (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-16	B	LCIT Tray Error (Air assist fan error)
		Started LD signal check one second after LCIT front blower fan became on and detected H level (abnormal) for 700 ms consecutively.
		• Air assist fan (front) (FAN2) defective/connector disconnected • Related harness broken • Main controller board (PCB1) defective
		1. Reconnect the connectors. 2. Check or replace the harness. 3. Check or replace the air assist fan (front) (FAN2) . 4. Replace the main controller board (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-17	B	LCIT Tray Error (Air assist fan error)
		Started LD signal check one second after LCIT rear blower fan became on and detected H level (abnormal) for 700 ms consecutively.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Air assist fan (rear) (FAN1) defective/connector disconnected • Related harness broken • Main controller board (PCB1) defective
		1. Reconnect the connectors. 2. Check or replace the harness. 3. Check or replace the air assist fan (rear) (FAN1) . 4. Replace the main controller board (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-21	B	Vacuum Feed LCIT Tray 1 cassette error (lift timeout)
SC506-21	B	Vacuum Feed LCIT Tray 2 cassette error (lift timeout)
		With Vacuum Feed Banner Sheet Tray not attached • At tray initialization the paper upper limit sensor 2 did not detect the raising of the bottom plate within the prescribed time after 5 attempts. With Vacuum Feed Banner Sheet Tray attached • At tray initialization the paper upper limit sensor 2 did not detect the raising of the bottom plate within the prescribed time after 5 attempts.
		With Vacuum Feed Banner Sheet Tray not attached • Lift motor defective, or harness connector loose, broken, defective • Middle paper height sensor defective, or harness connector loose, broken, defective • Lower limit sensor defective, or harness connector loose, broken, defective • Above harnesses broken • Main controller board (PCB1) defective • Paper upper limit sensor 1 defective damaged, or harness connector loose, broken, defective • Paper upper limit sensor 2 defective damaged, or harness connector loose, broken, defective With Vacuum Feed Banner Sheet Tray attached • Lift motor defective, or harness connector loose, broken, defective • Middle paper height sensor defective, or harness connector loose, broken, defective • PCB defective • Paper upper limit sensor 1 defective damaged, or harness connector loose, broken, defective • Paper upper limit sensor 2 defective damaged, or harness connector loose,

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		broken, defective • Above harnesses broken
		1. Connector disconnected, damaged Check the tray lift motor, lower limit sensor, middle paper height sensor, and paper upper limit sensors1 and 2 to make sure each is connected correctly (connectors not loose, damaged), and then connect them again if nothing is wrong. 2. Harness defective Inspect the harnesses of the tray lift motor, lower limit sensor, middle paper height sensor, and paper upper limit sensors1 and 2, and then replace them if you see any damage. 3. Motor or sensor defective Inspect the tray lift motor, lower limit sensor, middle paper height sensor, and paper upper limit sensors1 and 2, and then replace them if you see any damage. 4. Tray lift mechanism defective Check the tray bottom plate, pulley cable, feelers, and other parts for defects, and them replace them if you see any problems. 5. Vacuum Feed LCIT board defective Check the condition of the Vacuum Feed LCIT main board, and then replace it if you see any damage.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-22	B	Vacuum Feed LCIT Tray 1 cassette error (lowering timeout)
SC506-22	B	Vacuum Feed LCIT Tray 2 cassette error (lowering timeout)
		With Vacuum Feed Banner Sheet Tray not attached • At tray initialization the paper upper limit sensor 2 did not detect the lowering of the bottom plate within the prescribed time after 5 attempts. • If paper upper limit sensor 2, lower limit sensor, middle paper height sensor did not detect the lowering tray within the prescribed time after 5 attempts then the bottom tray has not lowered. With Vacuum Feed Banner Sheet Tray attached • At tray initialization the paper upper limit sensor 2 did not detect the lowering of the bottom plate within the prescribed time after 5 attempts. • If paper upper limit sensor 2 and middle paper height sensor do not detect the lowering tray within the prescribed time after 5 attempts then the bottom tray

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		has not lowered.
		With Vacuum Feed Banner Sheet Tray not attached • Lift motor defective, or harness connector loose, broken, defective • Middle paper height sensor defective, or harness connector loose, broken, defective • Lower limit sensor defective, or harness connector loose, broken, defective • Above harnesses broken • PCB defective • Paper upper limit sensor 2 defective damaged, or harness connector loose, broken, defective With Vacuum Feed Banner Sheet Tray attached • Lift motor defective, or harness connector loose, broken, defective • Middle paper height sensor defective, or harness connector loose, broken, defective • PCB defective • Paper upper limit sensor 2 defective damaged, or harness connector loose, broken, defective • Above harnesses broken
		1. Harness defective Inspect the harnesses of the tray lift motor, lower limit sensor, middle paper height sensor, and paper upper limit sensors1 and 2, and then replace them if you see any damage. 2. Motor or sensor defective Inspect the tray lift motor, lower limit sensor, middle paper height sensor, and paper upper limit sensors1 and 2, and then replace them if you see any damage. 3. Tray lift mechanism defective Check the tray bottom plate, pulley cable, feelers, and other parts for defects, and them replace them if you see any problems. 4. Vacuum Feed LCIT board defective Check the condition of the Vacuum Feed LCIT main board, and then replace it if you see any damage.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-23	B	Vacuum Feed LCIT Tray 1 cassette error (paper overload error)
SC506-23	B	Vacuum Feed LCIT Tray 2 cassette error (paper overload error)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		With Vacuum Feed Banner Sheet Tray not attached • During tray initialization upper limit sensor 2 and lower limit sensor were detected ON 5 times within the prescribed time. With Vacuum Feed Banner Sheet Tray attached • During tray initialization, upper limit sensor 2 and middle paper height sensor were both detected ON, the lift motor started to lower the tray, but the sensors remained ON 5 times within the described time. • The time elapsed for the raising of the bottom plate and detecting the upper limit of the tray after 5 attempts triggered this error.
		With Vacuum Feed Banner Sheet Tray not attached • Paper overload • Lower limit sensor defective, or harness connector loose, broken, defective • Above harnesses broken • PCB defective • Paper upper limit sensor 2 defective, or harness connector loose, broken, defective With Vacuum Feed Banner Sheet Tray attached • Paper overload • PCB defective • Paper upper limit sensor 2 defective, or harness connector loose, broken, defective • Middle paper height sensor defective, or harness connector loose, broken, defective • Above harnesses broken
		1. Check the status of the tray, remove some paper if it is overloaded, and then reload the stack. 2. Connector disconnected, damaged Check the lower limit sensor, middle paper remains sensor, and paper upper limit sensor 2, to make sure each is connected correctly (connectors not loose, damaged), and then connect them again if nothing is wrong. 3. Harness defective Inspect the harnesses of the tray lift motor, lower limit sensor, middle paper height sensor, and paper upper limit sensors1 and 2, and then replace them if you see any damage. 4. Sensor(s) defective Inspect the lower limit sensor, middle paper remains sensor, and paper upper limit sensor 2, and then replace them if you see any damage. 5. Vacuum Feed LCIT board defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Check the condition of the Vacuum Feed LCIT main board, and then replace it if you see any damage.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-24	B	Vacuum Feed LCIT Tray 1 cassette error (bottom plate over-lift error)
SC506-24	B	Vacuum Feed LCIT Tray 2 cassette error (bottom plate over-lift error)
		Upper limit sensor detected excessive height of tray when it was set.
		• Paper overload • Feed belt unit not set or set incorrectly • Upper limit sensor damaged or connector disconnected • Above harnesses broken • PCB defective • Paper upper limit sensor 1 defective damaged, or harness connector loose, broken, defective • Paper upper limit sensor 2 defective damaged, or harness connector loose, broken, defective
		1. Check the status of the paper in the tray, remove some paper if it is overloaded, and then reload the stack. 2. Connector disconnected, damaged Check the lower limit sensor, middle paper height sensor, and paper upper limit sensor 2, to make sure each is connected correctly (connectors not loose, damaged), and then connect them again if nothing is wrong. 3. Harness defective Inspect the harnesses of the tray lift motor, lower limit sensor, middle paper height sensor, and paper upper limit sensors1 and 2, and then replace them if you see any damage. 4. Sensor(s) defective Inspect the lower limit sensor, middle paper height sensor, and paper upper limit sensor 2, and then replace them if you see any damage. 5. Vacuum Feed LCIT board defective Check the condition of the Vacuum Feed LCIT main board, and then replace it if you see any damage.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-25	B	Vacuum Feed LCIT Tray 1 cassette error (side fence: front)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-26	B	Vacuum Feed LCIT Tray 1 cassette error (side fence: rear)
SC505-27	B	Vacuum Feed LCIT Tray 1 cassette error (float fan)
SC505-28	B	Vacuum Feed LCIT Tray 1 cassette error (separation fan)
SC505-29	B	Vacuum Feed LCIT Tray 1 cassette error (intake fan 1)
SC505-30	B	Vacuum Feed LCIT Tray 1 cassette error (intake fan 2)
SC505-33	B	Vacuum Feed LCIT Tray 1 cassette error (return fan)
SC506-25	B	Vacuum Feed LCIT Tray 2 cassette error (side fan: front)
SC506-26	B	Vacuum Feed LCIT Tray 2 cassette error (side fan: rear)
SC506-27	B	Vacuum Feed LCIT Tray 2 cassette error (float fan)
SC506-28	B	Vacuum Feed LCIT Tray 2 cassette error (separation fan)
SC506-29	B	Vacuum Feed LCIT Tray 2 cassette error (intake fan 1)
SC506-30	B	Vacuum Feed LCIT Tray 2 cassette error (intake fan 2)
SC506-33	B	Vacuum Feed LCIT Tray 1 cassette error (return fan)
		The rotation signal from the fan during fan operation was not correct.
		• Fan defective or connector loose, broken, defective • Above harnesses broken • PCB defective
		1. Connector disconnected, damaged Check the harness and make sure that is connected correctly (disconnected or only half-inserted), and then reconnect it. 2. Check the condition of the fan. Check the status of the fan, and then clean it. 3. Harness defective Check the relay harness and replace the harness if it is damaged.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		4. Fan defective Check the fan and replace damaged or defective. 5. Vacuum Feed LCIT board defective Check the condition of the Vacuum Feed LCIT main board, and then replace it if you see any damage.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-31	B	Vacuum Feed LCIT Tray 1 cassette error (middle paper height sensor or lower limit sensor)
SC506-31	B	Vacuum Feed LCIT Tray 2 cassette error (middle paper height sensor or lower limit sensor)
		During tray initialization the lower limits sensor and the middle paper height sensor remained ON longer that the prescribed time.
		• Lower limit sensor defective, or harness connector loose, broken, defective • Middle paper height sensor defective, or harness connector loose, broken, defective • Above harnesses broken • PCB defective
		1. Connector disconnected, damaged Make sure the lower limit sensor connector and middle paper height sensor are connected correctly (not disconnected or only half connected), and then connect them again. 2. Harness defective Inspect the harnesses of the tray lift motor, lower limit sensor, middle paper height sensor, and paper upper limit sensor 2, and then replace them if you see any damage. 3. Sensor(s) defective Inspect the lower limit sensor, middle paper height sensor, and paper upper limit sensor 2, and then replace them if you see any damage. 4. Tray lift track defective Check the tray bottom plate, pulley cable, feelers, and other parts for defects, and them replace them if you see any problems. 5. Vacuum Feed LCIT board defective Check the condition of the Vacuum Feed LCIT main board, and then replace it if you see any damage.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC505-	B	Vacuum Feed LCIT Tray 1 cassette error (belt unit)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
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SC506-32	B	Vacuum Feed LCIT Tray 2 cassette error (belt unit)
		Belt unit is not detected when the tray is set.
		• Feed belt unit not set or is set incorrectly • Feed belt unit is defective, or harness connector loose, broken, defective • Above harnesses broken • PCB defective
		1. Set the belt unit again. 2. Belt unit connector connected incorrectly Check the harness connector and make sure that is connected correctly (disconnected or only half-inserted), and then reconnect it. 3. Harness defective Check the relay harness and replace the harness if it is damaged. 4. Vacuum Feed LCIT board defective Check the condition of the Vacuum Feed LCIT main board, and then replace it if you see any damage.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC509-01	B	Bypass tray lift error
		The bottom plate started CW but the paper tray upper limit sensor did not become blocked within 3 seconds. If detected for the first or second time: User is instructed to set paper again. If detected for the third time: SC displayed The detection count is reset after a successful operation or when the power is turned off/on.
		• Bypass tray upper limit sensor (S113) defective/disconnected/harness broken • Bypass tray lift motor (M52) defective/disconnected/harness broken • Circuit board (PFB) error • Bypass tray bottom plate/bottom plate drive unit does not move e.g. because physical obstacle (broken piece of the unit, etc.) is blocking operation.
		• Bypass tray lift motor (M52) and bypass tray upper limit sensor (S113) check/cleaning/replacement/harness reconnection/harness replacement • Check or replace the circuit board (PFB). • Check and/or replace the bypass tray bottom plate and bypass tray bottom plate lift drive unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC509-03	B	Bypass tray lower limit error
		The bottom plate started CCW but the bypass tray lower limit sensor did not become blocked within 3 seconds. If detected for the first or second time: User is instructed to set paper again. If detected for the third time: SC displayed The detection count is reset after a successful operation or when the power is turned off/on.
		• Bypass tray lower limit sensor (S107) defective/disconnected/harness broken • Bypass tray lift motor (M52) defective/disconnected/harness broken • Circuit board (PFB) error • Bypass tray bottom plate/bypass tray bottom plate drive unit does not move e.g. because physical obstacle (broken piece of the unit, etc.) is blocking operation.
		• Bypass tray lift motor (M52) and bypass tray lower limit sensor (S107) check/cleaning/replacement/harness reconnection/harness replacement • Check or replace the circuit board (PFB). • Check and/or replace the bypass tray bottom plate and bottom plate lift drive unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC509-05	B	Bypass tray size detection error
		The paper size detected on the bypass tray is different from any of the pattern of automatic size detection.
		• Bypass paper length sensor (S109), or bypass paper width sensor (S110) malfunction • Bypass paper length sensor (S109), or bypass paper width sensor (S110) harness disconnected
		• Replace the bypass paper length sensor (S109), and/or bypass paper width sensor (S110). • Replace the harness for bypass paper length sensor (S109), and/or bypass paper width sensor (S110).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC509-11	B	Multi Bypass Tray: upper limit detection error (Vacuum Feed LCIT bypass tray)
		The upper limit sensor was not operating after 3 consecutive checks just before tray initialization for lifting (while the pickup solenoid was OFF).
		• Paper overload

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Tray unit not detected • Pickup solenoid defective or connector loose, broken, defective • Tray upper limit sensor 1 defective, or harness connector loose, broken, defective • Tray upper limit sensor 2 defective, or harness connector loose, broken, defective • Above harnesses broken • PCB defective
		1. Tray reset 2. Connector disconnected, damaged Check the paper tray upper limit sensor (S89), pickup solenoid, and relay harness between the LCIT and main machine, and make sure that they are connected correctly (disconnected or only half-inserted), and then reconnect them. 3. Connector harness broken Check the paper tray upper limit sensor (S89), pickup solenoid, and relay harnesses, and replace them if you see any damage. 4. Sensor(s) defective Make sure that the paper tray upper limit sensor (S89) and pickup solenoid are switching ON/OFF and replace them if they are faulty. 5. Bypass tray main board defective Check the condition of the bypass tray main board, and then replace it if you see any damage. 6. Relay harness damaged Check the relay harness between the LCIT and the main unit, and replace the harness if you see any damage. 7. Vacuum Feed LCIT main board damaged Check the condition of the LCIT main board and replace the board if damaged.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC509-12	B	Multi Bypass Tray: lift timeout (Vacuum Feed LCIT bypass tray)
		During bypass tray initialization, the upper limit sensor did not detect the tray bottom plate within the prescribed time.
		• Tray not detected • Tray lift motor defective, or harness connector loose, broken, defective • Tray upper limit sensor 1 defective, or harness connector loose, broken, defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Tray upper limit sensor 2 defective, or harness connector loose, broken, defective • Above harnesses broken • PCB defective
		1. Check the stack in the tray, remove the stack, and then load the cassette again. 2. Tray reset 3. Connector disconnected, damaged Check the tray lift motor, tray upper limit sensor and relay harness between the LCIT and main machine, and make sure that they are connected correctly (disconnected or only half-inserted), and then reconnect them. 4. Connector harness broken Check the tray lift motor, tray upper limit sensor, and relay harnesses, and replace them if you see any damage. 5. Motor or motor sensor damaged Make sure that the tray lift motor and tray upper limit sensor switch ON/OFF and replace them if they are faulty. 6. Mechanical part defective Check the tray bottom plate sensor and paper height sensors for anything interfering with their operation and remove, or if you see no obstacles replace the component. 7. Bypass tray main board defective Check the condition of the bypass tray main board, and then replace it if you see any damage. 8. Relay harness damaged Check the relay harness between the LCIT and the main unit, and replace the harness if you see any damage. 9. Vacuum Feed LCIT main board damaged Check the condition of the LCIT main board and replace the board if damaged.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC509-13	B	Multi Bypass Tray: lowering timeout (Vacuum Feed LCIT bypass tray)
		At paper end, or after the lowering switch is pressed, the lower limit sensor does not detect the bottom tray within the prescribed time.
		• Tray not detected • Tray lift motor defective, or harness connector loose, broken, defective • Tray lower limit sensor defective, or harness connector loose, broken,

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		defective • Above harnesses broken • Sensor feeler defective • PCB defective
		1. Tray reset 2. Connector disconnected, damaged Check the tray lift motor, tray lower limit sensor and relay harness between the LCIT and main machine, and make sure that they are connected correctly (disconnected or only half-inserted), and then reconnect them. 3. Connector harness broken Check the tray lift motor, tray lower limit sensor, and relay harnesses, and replace them if you see any damage. 4. Motor or motor sensor damaged Make sure that the tray lift motor and tray lower limit sensor are switching ON/OFF and replace them if they are faulty. 5. Mechanical part defective Check the tray bottom plate sensor and paper height sensors for anything interfering with their operation and remove it, or if you see no obstacles replace the component. 6. Bypass tray main board defective Check the condition of the bypass tray main board, and then replace it if you see any damage. 7. Relay harness damaged Check the relay harness between the LCIT and the main unit, and replace the harness if you see any damage. 8. Vacuum Feed LCIT main board damaged Check the condition of the LCIT main board and replace the board if damaged.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC512-00	B	Rotary gate HP detection abnormal (Bridge Unit)
		After the HP was detected within 2 cycles, the HP sensor did not go off.
		• Rotary gate motor defective or connector loose, broken, defective • Rotary gate HP sensor defective or connector loose, broken, defective • Operation defective due to overload • Operation defective due to motor drive board malfunction • Sensor actuator bent, broken, or installed incorrectly
		1. Inspect the rotary gate motor harness and rotary gate HP sensor harness for

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		damage, and then replace if required. 2. Inspect for overload, obstacles blocking operation, or damaged sensor feeler. 3. Replace the control board of the connected unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC512-01	B	LCIT exit separation motor (Vacuum Feed LCIT)
SC512-02	B	1st vertical transport separation motor (Vacuum Feed LCIT)
SC512-03	B	1st vertical transport exit separation motor (Vacuum Feed LCIT)
SC512-05	B	2nd vertical transport exit separation motor (Vacuum Feed LCIT)
		Separation motor operation, separation sensor faulty
		• Separation motor, or harness connector loose, broken, defective • Separation sensor, or harness connector loose, broken, defective • Above harnesses broken • PCB defective
		1. Check the harness connections of the separation sensors and separation motors. 2. Replace the harness if required. 3. Check the condition of the sensors and replace if damaged. 4. Check the condition and operation of the motors and replace if damaged. 5. Check the condition of the PCB and replace if damaged.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC519-00	B	Shift position abnormal (Bridge Unit)
		• At initialization after power on or closing the door, the HP sensor does not switch (OFF/ON or ON/OFF) within 1068 ms after the camshaft starts through two rotations counterclockwise. • The HP sensor was not detected operating within 40 ms during a print job. • The HP sensor was detected ON before counter-clockwise rotation began during a print job.
		• Unit shift motor or connector loose, broken, defective • Shift unit HP sensor defective or connector loose, broken, defective • Operation defective due to overload • Operation defective due to motor drive board malfunction

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Sensor actuator bent, broken, or installed incorrectly
		1. Inspect the rotary gate motor harness and rotary gate HP sensor harness for damage, and then replace if required. 2. Inspect for overload, obstacles blocking operation, or damaged sensor feeler. 3. Replace the control board of the connected unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC520-02	C	Exit motor (M45): Lock
SC520-03	C	Duplex inverter entrance motor (M46): Lock
SC520-04	C	Exit inverter motor (M42): Lock
		While the exit motor is ON, the motor error notification register is monitored at 500 ms intervals. When a register indicates an error five times consecutively, the exit motor is assumed to be malfunctioning.
		• Exit motor (M45) defective/connector disconnected • Harness broken/PFB defective • Unit torque increased • Remained paper in the unit
		• Remove the remaining paper. • Check the output. • Check the connections of the connector. • Replace the motor. • Replace the paper exit unit. • replace the PFB (PCB36). • Replace the harness between the PFB and the exit motor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC521-01	C	Duplex inverter motor (M51): Lock
SC521-02	C	Duplex transport motor (M48): Lock
SC521-03	C	Duplex exit motor (M47): Lock
		During the duplex inverter motor is ON, the motor error notification register is monitored at 500 ms intervals. When a register indicates an error five times

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		consecutively, the duplex inverter motor is assumed to be malfunctioning.
		• Duplex inverter motor (M51) defective/connector disconnected • Harness broken/PFB defective • Unit torque increased • Remained paper in the unit
		• Remove the remaining paper. • Check the output. • Check the connections of the connector. • Replace the motor. • Replace the paper exit unit. • replace the PFB (PCB36). • Replace the harness between the PFB and the duplex inverter motor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC522-01	C	1st paper feed motor (M55): Lock
SC522-03	C	2nd paper feed motor (M64): Lock
SC522-04	C	3rd paper feed motor (M66): Lock
		During the paper feed motor is ON, the motor error notification register is monitored at 500 ms intervals. When a register indicates an error five times consecutively, the paper feed motor is assumed to be malfunctioning.
		• Paper feed motor defective/connector disconnected • Harness broken/PFB defective • Unit torque increased • Remained paper in the unit
		• Remove the remaining paper. • Check the output. • Check the connections of the connector. • Replace the paper feed motor. • Replace the paper feed unit. • replace the PFB (PCB36). • Replace the harness between the PFB and the paper feed motor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC523-	C	1st transport motor (M56): Lock

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
01		
SC523-02	C	Vertical transport motor (M63): Lock
SC523-03	C	2nd transport motor (M65): Lock
SC523-04	C	3rd transport motor (M67): Lock
		During the transport motor is ON, the motor error notification register is monitored at 500 ms intervals. When a register indicates an error five times consecutively, the transport motor is assumed to be malfunctioning.
		• Transport motor defective/connector disconnected • Harness broken/PFB defective • Unit torque increased • Remained paper in the unit
		• Remove the remaining paper. • Check the output. • Check the connections of the connector. • Replace the transport motor. • Replace the vertical transport unit. • replace the PFB (PCB36). • Replace the harness between the PFB and the transport motor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC524-01	C	Relay motor (M53): Lock
SC524-02	C	Registration motor (M43): Lock
SC524-03	C	Bypass feed motor (M54): Lock
		During the motor is ON, the motor error notification register is monitored at 500 ms intervals. When a register indicates an error five times consecutively, the motor is assumed to be malfunctioning.
		• Motor defective/connector disconnected • Harness broken/PFB defective • Unit torque increased • Remained paper in the unit
		• Remove the remaining paper.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Check the output. • Check the connections of the connector. • Replace the motor. • Replace the registration unit. • replace the PFB (PCB36). • Replace the harness between the PFB and the motor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC525-01	D	Drawer unit lock motor (M44) error
		Lock sensor signal did not change for 1000 msec while the drawer unit lock motor was running.
		• Drawer unit lock motor (M44) defective • Drawer unit lock sensor (S61) defective • connector disconnected • Harness broken • Circuit board defective • Paper transfer belt release mechanism defective
		• Replace the defective parts. • Reconnect the connector. • Replace the harness if broken.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC526-01	D	Transport motor 1 rotation error (Buffer Pass Unit)
SC526-02	D	Transport motor 2 rotation error (Buffer Pass Unit)
		2 seconds after the transport motor startup, the motor lock error signal (LOCK signal) was detected for 1200 msec or more.
		• Transport motor defective • Harness broken • Circuit board defective
		• Replace the transport motor. • Reconnect the connector.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC527-01	D	Cooling fan alarm 1 (Buffer Pass Unit)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC527-02	D	Cooling fan alarm 2 (Buffer Pass Unit)
SC527-03	D	Cooling fan alarm 3 (Buffer Pass Unit)
SC527-04	D	Cooling fan alarm 4 (Buffer Pass Unit)
SC527-05	D	Exhaust fan alarm 1 (Buffer Pass Unit)
SC527-06	D	Exhaust fan alarm 2 (Buffer Pass Unit)
SC527-07	D	Exhaust fan alarm 3 (Buffer Pass Unit)
SC527-08	D	Exhaust fan alarm 4 (Buffer Pass Unit)
		If lock signal is missing 10 sec (10 times) consecutively, the machine determines that the motor is not running correctly.
		• Fan defective • Harness broken • Connector disconnected
		• Replace the fan. • Reconnect the connector.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC528-01	B	24V power supply voltage abnormal (Bridge Unit)
		The software detected a 24V signal error (no 24V power supply) after the front door SW was detected open.
		• Check the connection of the harness running between the main machine and the RCU board. • The harness of main machine I/F connector to the RCU board is disconnected or is incorrectly grounded. • No 24V power supplied from main unit
		1. Check the power supply signal LED on the RCU to see if it is ON (this LED confirms power is being supplied). - If the LED is ON, got to Step 3. - If the LED is OFF, got to Step 2. 2. Confirm that both pins of CN660-1 are engaged. Check the harness running from the main unit to the RCU board (CN660). If

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		you see a ground fault due to pinching, replace the harness. 3. Replace the RCU (PCB2).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC528-02	B	24V power supply voltage abnormal (Bridge Unit)
		A fuse on the RCU (PCB2) blew after power ON and the closed door check.
		• Fuse below due to incorrect ground at the harness. • Abnormal load
		1. Check the harness running from the RCU board (24VS1) to the motor. - If you see a ground fault due to pinching, replace the harness. - From CN671 to the rotary motor, relay entrance motor - From CN670 to the unit shift motor - From CN662 to the relay exit motor - From CN666 to the CRB 2. Replace the RCU (PCB2). 3. Replace rotary gate motor (M2), relay entrance motor (M1), shift unit motor (M4), bridge exit motor (M3), and CRB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC530-01	D	Fusing pressure roller intake fan (FAN32) lock (Pro C5300S/C5310S only)
SC530-02	D	Fusing pressure roller exhaust fan (FAN31) lock (Pro C5300S/C5310S only)
SC530-03	D	Heat pipe panel intake fan (FAN22) lock
SC530-04	D	Heat pipe panel exhaust fan (FAN15) lock
SC530-05	D	Fusing exit exhaust fan (FAN18) lock
SC530-06	D	ITB cleaning intake fan (FAN1) lock
SC530-07	D	IH coil cooling fan (FAN27) lock
SC530-08	D	Paper transfer belt fusing exhaust fan (FAN16) lock
SC530-09	D	IH coil power cooling fan (FAN25) lock

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		When a fan is on, the lock sensor is checked. If lock signal is missing consecutively, the machine determines that the motor is not running correctly.
		• Fan defective • Connector disconnected • Harness broken • IOB defective
		• Replace the fan. • Reconnect the connector. • Replace the harness. • Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC530-10	D	Cooling fan lock (Optional Copy Tray)
		When a motor is on, the lock sensor is checked. If lock signal is missing consecutively, the machine determines that the motor is not running correctly.
		• Fan defective • Connector disconnected • Harness broken • IOB defective • Incorrect setting in SP1-907-001
		• Replace the fan. • Reconnect the connector. • Replace the harness. • Replace the IOB (PCB1). • Set SP1-907-001 correctly.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC530-11	D	Paper transfer belt cooling fan (FAN30) lock
SC530-13	D	Paper transfer belt waste toner cooling fan (FAN6) lock
		When a motor is on, the lock sensor is checked. If lock signal is missing consecutively, the machine determines that the motor is not running correctly.
		• Fan defective • Connector disconnected • Harness broken • IOB defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Replace the fan. • Reconnect the connector. • Replace the harness. • Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC531-01	D	Development intake fan (FAN2) (Y) lock
SC531-02	D	Development intake fan (FAN2) (M) lock
SC531-03	D	Development intake fan (FAN2) (C) lock
SC531-04	D	Development intake fan (FAN2) (K) lock
SC531-05	D	Development exhaust fan (FAN20) (right) lock
SC531-06	D	Development exhaust fan (FAN20) (left) lock
SC532-02	D	Controller exhaust fan (FAN9) lock
SC532-03	D	PSU fan (FAN23) (right) lock
SC532-04	D	PSU fan (FAN23) (left) lock
SC533-01	D	Laser unit cooling fan (FAN10) (right) lock
SC533-02	D	Laser unit cooling fan (FAN11) (left) lock
SC534-01	D	Duplex exhaust fan (FAN12) (front) lock
SC534-02	D	Duplex exhaust fan (FAN12) (rear) lock
SC534-03	D	Duplex exhaust fan (FAN12) (middle) lock
SC535-02	D	Drive exhaust fan (FAN19) lock
SC536-	D	Paper cooling fan (FAN26) lock

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
01		
SC537-01	D	Ozone exhaust fan (FAN17) lock
SC538-01	D	ID sensor cleaning fan (FAN7) lock
SC538-02	D	ITB motor cooling fan (FAN8) lock
SC539-01	D	Paper transport belt fan (FAN28) (front) lock
SC539-02	D	Paper transport belt fan (FAN28) (rear) lock
		When a fan is on, the lock sensor is checked. If lock signal is missing consecutively, the machine determines that the motor is not running correctly.
		• Fan defective • connector disconnected • Harness broken • IOB defective
		• Replace the fan. • Reconnect the connector. • Replace the harness. • Replace the IOB (PCB1). • Replace the toner supply board (PCB9).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC583-01	D	Upper guide plate open switch (SW7) error
SC583-02	D	Horizontal feed guide plate open sensor (S83) error
SC583-03	D	Paper exit upper guide plate sensor (S79) error
SC583-04	D	Paper exit left guide plate sensor (S78) error
		The error is detected when the sensor/switch is OFF after 200 msec from the drawer lock completion. The error is not detected while the drawer set sensor is ON.
		• Sensor/switch defective • Connector disconnected

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Harness broken • Circuit board (DUB) error • Sensor does not work because of the guide plate broken.
		• Check/clean/replace the sensor/switch. • Reconnect the harness. • Replace the harness. • Check and replace the DUB. • Check and replace the guide plate actuator. (SC583-05: Check and replace the guide plate D2 lever.)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC587-01	D	Paper transfer belt unit temperature detection error
		If the machine temperature thermistor (TH1) output error occurs, 0.35V or lower (100 degrees centigrade or higher) or 3.07V or higher (-30 degrees centigrade or lower), the machine determines the thermistor is malfunctioning and assumes that the temperature is 100 degrees centigrade. If the machine temperature thermistor is determined as malfunctioning 3 times consecutively (3 outputs, each of which is an average of 6 readings), the machine issues the SC and no longer use the thermistor, using the assumed temperature "100 degrees centigrade" instead. However, the machine temperature thermistor is used again after power off/on.
		• Connector disconnected or harness broken • Machine temperature thermistor (TH1) defective
		• Connector disconnected or harness broken: Revert connection. • Machine temperature thermistor defective: Replace the thermistor.

SC500 (Engine: Paper Transport 2: Fusing, etc.)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC540-00	A	Fusing drive motor (M22): Lock
		The IOB detects the fusing drive motor lock error (rotation speed out of specification). Details: When the fusing drive motor is on, each lock signal is checked every 100 milliseconds. If the High status is detected 20 times consecutively, the machine determines that the fusing drive motor is not running correctly. The machine issues an SC and stops the fusing drive motor.
		• Fusing drive motor (M22) defective • Connector disconnected • Harness broken • IOB (PCB1) defective • Unit torque increased.
		• Replace the fusing drive motor (M22). • Reconnect the connector. • Replace the harness. • Replace the IOB (PCB1). • Replace the fusing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC541-00	A	Heating roller thermopile (S23): Heating roller center: Disconnection
		0 degrees or lower was detected for (t11) seconds consecutively. Only IM C6500 (NA): t11= 30 Other: t11= 20 Number of times: 10 or more Monitored at: All times, though SC is not issued when temperature is not controlled (when in off mode/sleep mode, when a door, excluding the toner supply door, is open, or when the heater relay is off).
		• Heating roller thermopile (S23) disconnection • Connector contact failure
		• Replace the heating roller thermopile (S23). • Reconnect the connector. • Replace the connector. • Replace the fusing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC542-02	A	Heating roller thermopile (S23): Heating roller center: Reload failure: Timeout 1
		Failed to reach (T2) degrees centigrade after (t22) seconds from the start of heater control. IM C6500 (NA): T2= 136, t22= 59 IM C6500 (EU/AP/CHN): T2= 142, t22= 59 IM C8000 (NA): T2= 144, t22= 59 IM C8000 (EU/AP/CHN): T2= 142, t22= 59 Pro C5300S/C5310S: T2= 85, t22 = 17 Monitored at: Startup (Power-on, when a cover is closed, when fusing heater is under control)
		• Heating roller thermopile (S23) lens smudged • Input voltage out of specification
		• Replace the heating roller thermopile (S23). • Use with supported input voltage • Replace the IH coil unit/IH inverter (PCB35). • Replace the fusing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC542-03	A	Heating roller thermopile (S23): Heating roller center: Reload failure: Timeout 2
		Failed to reach reload temperature after (t23) seconds from reaching (T2) degrees of SC542-02. IM C6500 (NA): T2= 136, t22= 64 IM C6500 (EU/AP/CHN): T2= 142, t22= 54 IM C8000 (NA): T2= 144, t22= 48 IM C8000 (EU/AP/CHN): T2= 142, t22= 54 Pro C5300S/C5310S: T2= 85, t22 = 29 Monitored at: Startup (Power-on, when a cover is closed, when fusing heater is under control)
		• IH malfunctioning • Overheating prevention device worked.
		• Replace the heating roller thermopile (S23). • Use with supported input voltage • Replace the IH coil unit/IH inverter (PCB35). • Replace the fusing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC543-	A	Heating roller thermopile (S23): Heating roller center: Overheat detection

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
00		(software)
		250 degrees centigrade or higher was detected for 1 second consecutively. Number of times: 10 or more Monitored at: All times, though SC is not issued when temperature is not controlled (when in off mode/sleep mode, when a door, excluding the toner supply door, is open, or when the heater relay is off).
		• TRIAC shorted. • IOB (PCB1) defective.
		• Replace the IOB (PCB1). • Replace the fusing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC544- 00	A	Heating roller thermopile (S23): Heating roller center: Overheat detection (hardware)
		Hardware detection of overheat condition. The heating roller thermopile was detected as the cause.
		• IOB (PCB1) defective • Fusing control software running out of control • Heating roller thermopile (S23) defective • IH inverter supplied continuously (software error or heating roller thermopile malfunctioning)
		1. Check the SC history (SP: 7-403-xxx), and check whether multiple SCs occurred at the same time. • SCs occurred at the same time: Refer to the other SCs solution procedures. • SC did not occur at the same time: Go to step 2. 2. Check heating roller thermopile value (SP: 1-106-001) to check the heater temperature. • 250 degrees and more: Go to step 3. • Less than 250 degrees: Go to step 5. 3. Replace the heating roller thermopile (S23). 4. Replace the fusing unit. 5. Replace the IOB (PCB1). 6. Replace the IH inverter (PCB35).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC547-	D	Zero cross 1 error (relay contact welded)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
01		After interlock switch was confirmed closed, zero cross signal 1 was detected when it was generated on the AC drive board before fusing relay ON.
		• Fusing relay defective (contact welded) • Fusing relay drive circuit defective
		• Turn the main power off/on. • If the fusing relay is damaged, replace the AC drive board (PCB32). • Check the connection between the AC drive board and the IOB, and then replace the harness and/or circuit board if necessary.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC547-02	D	Zero cross 1 error (relay contact defective)
		After fusing relay switched on, zero cross signal 1 was not generated on the AC control board.
		• Fusing relay defective (contact welded) • Fusing relay drive circuit defective
		• Turn the main power off/on. • If the fusing relay is damaged, replace the AC control board (PCB32). • Check the connection between the AC drive board and the IOB, and then replace the harness and/or circuit board if necessary.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC547-03	D	Zero cross 1 error (low frequency error)
		Zero cross count processing is executed at 0.5 sec. intervals. • When the zero cross count is 45 to 54, frequency is set to 50 Hz. • When the zero cross count is 55 to 65, frequency is set to 60 Hz. • If the zero cross signal count is below 44, low frequency detection frequency is increased. • If the low frequency count is below 44 or above 66, the zero cross count is executed again. **Note**: Zero cross count processing is done 20 times, and low frequency counts occur twice
		• Unstable commercial power supply frequency
		• Turn the main power off/on. • If the fusing relay is damaged, replace the AC control board (PCB32). • Check the connection between the AC drive board and the IOB, and then replace the harness and/or circuit board if necessary.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC547-04	D	AC drive board: Not connected
		After the interlock door is fixed to close, AC drive board: connection detecting signal (CNCON) is not detected.
		• Poor connection of the AC drive board connector • Poor connection of the IOB connector • Harness broken between the AC drive board and the IOB • Poor connection detecting circuit of the AC drive board on the IOB
		• Turn the main power off/on. • Reconnect the harness (check the connection of CN403 on the AC drive board to CN218 on the IOB). • replace the AC drive board (PCB32). • Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC547-11	D	Zero Cross 2 error (relay contact welded)
		After interlock switch was confirmed closed, zero cross signal 2 was detected when it was generated on the IH inverter before fusing relay ON.
		• Fusing relay defective (contact welded) • Fusing relay drive circuit defective
		• Turn the main power off/on. • Reconnect the harness (check the connection of CN403 on the AC drive board to CN218 on the IOB). • Replace the IOB (PCB1). • Replace the PSU2.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC547-12	D	Zero Cross 2 error (relay contact defective)
		After fusing relay switched on, zero cross signal 2 was not generated on the IH inverter.
		• Fusing relay broken (contact open) • Fusing relay drive circuit defective • Harness broken between the AC drive board and the IOB • Fuse (FU102) on the AC drive board broken
		• Turn the main power off/on. • Reconnect the harness (check the connection of CN403 on the AC drive board to CN218 on the IOB). • replace the AC drive board (PCB32).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC548-00	A	Fusing rotation detection
		Blocking/non-blocking signal of the heating roller rotation sensor was not received within specified time.
		• The feeler for heating roller rotation detection deformed or broken. • Fusing drive motor defective • Heating roller rotation sensor (S55) defective • IOB (PCB1) defective
		• Check the SC history (SP7-403-xxx). • Check Input (SP5-803-024) • Check the coupling. • Replace the feeler for heating roller rotation detection. • Replace the heating roller rotation sensor (S55). • Replace the IOB (PCB1). • Replace the fusing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC549-01	A	Low temperature detected
		Nine seconds after monitoring triggered, a temperature 40C below the target temperature after correction was detected continuously by the thermopile above the heating roller.
		• IH inverter damaged • Heating roller thermopile (S23) dirty, damaged, or out of position • Heating roller thermopile harness grounded incorrectly • IOB (PCB1) defective
		• Replace the heating roller thermopile (S23). • Replace the heating roller thermopile harness. • Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC550-01	D	Fusing belt smoothing roller drive motor (M11): Lock
		The IOB detects the fusing belt smoothing drive motor lock error (rotation speed out of specification). Details: When the fusing belt smoothing drive motor is on, each lock signal is checked

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		every 100 milliseconds. If the High status is detected 20 times consecutively, the machine determines that the motor is not running correctly. The machine issues an SC and stops the motor.
		• Fusing belt smoothing drive motor (M11) defective • Connector disconnected • Harness broken • IOB (PCB1) defective • Unit torque increased.
		• Replace the fusing belt smoothing drive motor (M11). • Reconnect the connector. • Replace the harness. • Replace the IOB (PCB1). • Replace the fusing drive motor (M22). • Replace the fusing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC551-00	A	Pressure roller thermopile (S53): Pressure roller center: Disconnection
		0 degrees or lower was detected for (t14) seconds consecutively. IM C6500 (NA): t14= 45 IM C6500 (EU/AP/CHN): t14= 35 IM C8000: t14= 35 Pro C5300S/C5310S: t14 = 80 Number of times: 10 or more Monitored at: All times, though SC is not issued when temperature is not controlled (when in off mode/sleep mode, when a door, excluding the toner supply door, is open, or when the heater relay is off).
		• Pressure roller thermopile (S53) disconnection • Connector contact failure
		• Replace the pressure roller thermopile (S53). • Reconnect the connector. • Replace the connector. • Replace the fusing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC552-02	A	Pressure roller thermopile (S53): Pressure roller center: Reload Failure: Timeout 1
		Failed to reach (T24) degrees centigrade after (t25) seconds from the start of

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		heater control. IM C6500 (NA): T24= 81, t25= 48 IM C6500 (EU/AP/CHN): T24= 96, t25= 48 IM C8000 (NA): T24= 98, t25= 48 IM C8000 SP (EU/AP/CHN): T24= 96, t25= 48 Pro C5300S/C5310S: T24= 46, t25= 63 Monitored at: Startup (Power-on, when a cover is closed, when fusing heater is under control)
		• Pressure roller thermopile (S53) deformed or floating • Input voltage out of specification
		• Replace the pressure roller thermopile (S53). • Use with supported input voltage. • Replace the pressure roller fusing lamp (L5). • Replace the fusing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC552-03	A	Pressure roller thermopile: Pressure roller center: Reload Failure: Timeout 2
		Failed to reach reload temperature after (t26) seconds from reaching (T24) degrees of SC552-02. IM C6500 (NA): T24= 81, t26= 16 IM C6500 (EU/AP/CHN): T24= 96, t26= 10 IM C8000 (NA): T24= 98, t26= 10 IM C8000 SP (EU/AP/CHN): T24= 96, t26= 10 Pro C5300S/C5310S: T24= 46, t26= 80 Monitored at: Startup (Power-on, when a cover is closed, when fusing heater is under control)
		• Pressure roller fusing lamp malfunctioning • Overheating prevention device worked.
		• Replace the pressure roller thermopile (S53). • Use with supported input voltage. • Replace the pressure roller fusing lamp (L5). • Replace the fusing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC553-00	A	Pressure roller thermopile: Pressure roller center: Overheat detection (software)
		220 degrees centigrade or higher was detected for 1 second consecutively. Number of times: 10 or more

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Monitored at: All times, though SC is not issued when temperature is not controlled (when in off mode/sleep mode, when a door, excluding the toner supply door, is open, or when the heater relay is off).
		• TRIAC shorted. • IOB (PCB1) defective.
		• Replace the IOB (PCB1). • Replace the fusing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC554-00	A	Pressure roller thermopile (S53): Pressure roller center: Overheat detection (hardware)
		Hardware detection of overheat condition. The pressure roller center thermopile was detected as the cause.
		• IOB (PCB1) defective • Fusing control software running out of control • TRIAC damaged (shorted). • Pressure roller thermopile defective
		1. Check the SC history (SP7-403-xxx), and check whether multiple SCs occurred at the same time. • SCs occurred at the same time: Refer to the other SCs solution procedures. • SC did not occur at the same time: Go to step 2. 2. Check the thermostat (heating roller) value (SP1-106-004) to check the heater temperature. • 230 degrees and more: Go to step 3. • Less than 230 degrees: Go to step 5. 3. Replace the pressure roller thermopile (S53). 4. Replace the fusing unit. 5. Replace the IOB (PCB1). 6. replace the AC drive board (PCB32).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC555-00	A	Heater 2: Heater Continuously On (Pressure roller thermopile)
		The machine waits 25 seconds after the conditions ([A] and [B]) are satisfied, and then the machine repeats the following steps: 1. Wait for 20 seconds (detection time). 2. If the temperature difference between when the machine start waiting detection

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		time and when the detection time is passed is 6 degree or lower, SC is issued. However, If [C] is satisfied, the SC is not issued until the condition ([A] and [B]) is satisfied again. Monitor interval [A]: Standby/Low power mode Monitor start trigger[B]: When the pressure roller fusing lamp is ON and the fusing drive is stop rotating Monitor end trigger [C]: When the pressure roller fusing lamp is OFF and the fusing drive is rotating
		• Thermopile detection error • Pressure roller fusing lamp (L5) disconnection • Overheating prevention device worked.
		• Replace the pressure roller thermopile (S53). • Replace the pressure roller fusing lamp (L5). • Replace the fusing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC557-00	C	Zero cross frequency too high
		Zero cross count processing is executed at 0.5 sec. intervals. • When the zero cross count is 45 to 54, frequency is set to 50 Hz. • When the zero cross count is 55 to 65, frequency is set to 60 Hz. • If the zero cross signal count is below 44, low frequency detection frequency is increased. • If the low frequency count is below 44 or above 66, the zero cross count is executed again. **Note**: Zero cross count processing is done 20 times, and low frequency counts occur twice
		Commercial power supply unstable or there is noise on the line.
		-

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC559-00	A	Fusing jam: 3 counts
		Fusing jam (fusing paper exit sensor late jam) was detected 3 times consecutively. Details: This SC can be switched ON/OFF. The factory setting is OFF; set it ON when requested by the customer. SP1-142-001:

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		0: ON (set by service personnel at the request of customer) 1: OFF (factory setting) Conditions of the fusing jam counter reset: • When paper is output successfully during consecutive fusing jam, the jam counter is reset. • When SP1-142-001 is changed to "0" from "1", the jam counter is reset. • When SC559 is issued and release the SC, the jam counter is reset.
		• Paper jam in the fusing unit • Fusing paper exit sensor (S50) defective
		-

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC561-00	A	Fusing belt thermistor (TH5): Heating roller: Disconnection
		0 degrees or lower was detected for 50 seconds consecutively. Number of times: 10 or more Monitored at: All times, though SC is not issued when temperature is not controlled (when in off mode/sleep mode, when a door, excluding the toner supply door, is open, or when the heater relay is off).
		• Thermistor disconnection • Connector contact failure
		• Replace the fusing belt thermistor (TH5). • Reconnect the connector. • Replace the connector. • Replace the fusing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC562-02	A	Fusing belt thermistor (TH5): Heating roller: Reload failure: Timeout 1
		Failed to reach 45 degrees centigrade after 80 seconds from the start of heater control. Monitored at: Startup (Power-on, when a cover is closed, when fuser heater is under control)
		• Thermistor deformed or floating • Input voltage out of specification
		• Replace the fusing belt thermistor (TH5). • Use with supported input voltage • Replace the IH coil unit/IH inverter (PCB35).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Replace the fusing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC562-03	A	Fusing belt thermistor (TH5): Heating roller: Reload failure: Timeout 2
		Failed to reach reload temperature after (t28) seconds from the start of heater control. IM C6500 (NA): t28= 107 IM C6500 (EU/PA/CHN): t28= 93 IM C8000 (NA): t28= 87 IM C8000 (EU/PA/CHN): t28= 93 Pro C5300S/C5310S: t28= 114 Monitored at: Startup (Power-on, when a cover is closed, when fuser heater is under control)
		• IH malfunctioning • Overheating prevention device worked
		• Replace the fusing belt thermistor (TH5). • Use with supported input voltage • Replace the IH coil unit/IH inverter (PCB35). • Replace the fusing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC563-00	A	Fusing belt thermistor (TH5): Heating roller: Overheat detection (software)
		250 degrees centigrade or higher was detected for 1 second consecutively. Number of times: 10 or more Monitored at: All times, though SC is not issued when temperature is not controlled (when in off mode/sleep mode, when a door, excluding the toner supply door, is open, or when the heater relay is off).
		• TRIAC shorted • IOB (PCB1) defective
		• Replace the IOB (PCB1). • Replace the fusing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC564-00	A	Fusing belt thermistor (TH5): Heating roller: Overheat detection (hardware)
		Hardware detection of overheating. The fusing belt thermistor (TH5): was detected as the cause.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• TRIAC shorted • IOB (PCB1) defective • Fusing control software running out of control • Fusing belt thermistor (TH5) defective • IH inverter supplied continuously (software error or thermistor (heating roller) malfunctioning)
		• After removing the cause of the SC, Set "Fusing SC Clear" in the SP mode. • If necessary, replace: IOB (PCB1), using belt thermistor (TH5), IH coil unit, or IH inverter (PCB35).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC579-00	A	Hot roller shaft thermistor (TH4): Disconnection
		0 degrees or lower was detected for 1100 seconds consecutively. Number of times: 10 or more Monitored at: All times, though SC is not issued when temperature is not controlled (when in off mode/sleep mode, when a door, excluding the toner supply door, is open, or when the heater relay is off). Monitored only when SP1-107-024 is set to ON. SP1-107-024: 0: OFF (default) 1: ON
		• Hot roller shaft thermistor disconnection • Connector contact failure
		• Replace the hot roller shaft thermistor (TH4). • Reconnect the connector. • Replace the connector. • Replace the fusing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC580-03	A	Hot roller shaft thermistor (TH4): Reload failure: Timeout 2
		Failed to reach reload temperature after 2700 seconds from the start of heater control. Monitored at: Startup (Power-on, when a cover is closed, when pressure roller fusing lamp is under control)
		• Thermistor deformed or floating • Input voltage out of specification • Overheating prevention device worked

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Replace the hot roller shaft thermistor (TH4). • Use with supported input voltage • Replace the IH coil unit/IH inverter (PCB35). • Replace the fusing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC582-01	A	IGBT over voltage error
		Error notification from the IH inverter with a command (command: 0x64, response value: Bit 0 is "1" and bit 1 is "0".)
		• Input voltage abnormal • IH inverter (PCB35) malfunctioning • IOB (PCB1) defective • Fusing unit defective
		• Check the SC history. • Check the connection of the connector and harness. • Check the IH coil power cooling fan (FAN25). • Replace the IH inverter (PCB35). • Replace the fusing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC582-02	D	• IH input voltage error
		• Error notification from the IH inverter with a command (command: 0x64, response value: Bit 0 is "0" and bit 1 is "1".)
		• Input voltage abnormal • Harness broken • IH inverter (PCB35) defective • IOB (PCB1) defective
		• Check the SC history. • Check what the power voltage value was when the SC occurred. • Check the power voltage supply to the machine. • Replace the IH inverter (PCB35). • Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC583-05	D	Fusing exit guide plate open sensor error
		The error is detected when the fusing exit guide plate open sensor is OFF after 200 msec from the drawer lock completion.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		The error is not detected while the drawer set sensor is ON.
		• Fusing exit guide plate open sensor (S72) defective • Connector disconnected • Harness broken • DUB (PCB37) error • Fusing exit guide plate open sensor does not work because of the guide plate broken.
		• Check/clean/replace the fusing exit guide plate open sensor. • Reconnect the harness. • Replace the harness. • Check and replace the DUB (PCB37). • Check and replace the guide plate D2 lever.

SC500 (Engine: Paper Transport 3: Feed, Duplex, Transport, Fusing)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC511-01	C	Paper type sensor (S69) error
		During initial calibration of the paper type sensor, the number of times the sensor failed to output an appropriate value reached 3. The counter is reset at the start of initial calibration.
		• Paper type sensor harness broken/connector disconnected • Paper type sensor dirty with paper dust, etc. • Foreign object on the section of the roller which is used for paper thickness detection.
		• Check the harness and connector of the paper type sensor. • Clean or replace the paper type sensor (S69). • Clean or replace the section of the roller which is used for paper thickness detection.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC511-02	C	Bypass tray paper type sensor (S67) error
		During initial calibration of the bypass tray paper type sensor, the number of times the sensor failed to output an appropriate value reached 3. The counter is reset at the start of initial calibration.
		• Paper type sensor harness broken/connector disconnected • Paper type sensor dirty with paper dust, etc. • Foreign object on the section of the roller which is used for paper thickness detection.
		• Check the harness and connector of the paper type sensor. • Clean or replace the paper type sensor (S67). • Clean or replace the section of the roller which is used for paper thickness detection.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC511-03	C	Bridge paper-thick encoder (S5) error (Bridge unit)
		During initial calibration of the encoder, the number of times the sensor failed to output an appropriate value reached 3. The counter is reset at the start of initial calibration.
		• Bridge paper-thick encoder (S5) harness broken/connector disconnected • Bridge paper-thick encoder (S5) dirty with paper dust, etc. • Foreign object on the section of the roller which is used for paper thickness

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		detection.
		• Check the harness and connector of the bridge paper-thick encoder (S5) . • Clean or replace the Bridge paper-thick encoder (S5). • Clean or replace the section of the roller which is used for paper thickness detection. • Check or replace the PCB in the bridge unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC514-00	D	Inverter junction gate motor (M41) error
		Inverter junction gate HP sensor (S77) did not turn on or off within 150 msec from the start of home position detection operation (motor drive start). Details: If detected for the first or second time: • During paper transport, this is not handled as a jam/SC; paper is fed normally and the error counter increases. • Otherwise (during initialization), a jam alert is displayed to instruct the user to remove jammed paper, and the error counter increases. If detected for the third time: • Displays the SC No. on the operation panel.
		• Inverter junction gate motor (M41) defective/connector disconnected/harness broken • Inverter junction gate HP sensor (S77) defective/connector disconnected/harness broken • Circuit board (PFB, DUB) defective • Junction gate/junction gate drive unit does not move e.g. because physical obstacle (piece of paper, etc.) is blocking operation.
		• Inverter junction gate motor (M41) and inverter junction gate HP sensor (S77) check/cleaning/replacement/harness reconnection/harness replacement • Check or replace the circuit board (PFB, DUB). • Check and/or replace the inverter junction gate and inverter junction gate drive unit. 1. Turn the machine OFF\ON to see the SC. After turning the machine OFF\ON, feed 10 sheets of the duplex paper three times. Check whether SC514-00 occurs (JAM001 or JAM 029 occurs up to two times). 2. Check the driven parts. • Rotate the inverter junction gate motor by hand and check the load. • If the load is too high due to foreign objects or jams, remove the foreign

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		object or replace the part. 3. Check and reconnect the connector and harness. • Inverter junction gate motor connector • DUB board CN293, CN295, CN296, and CN305 • Inverter junction gate HP sensor connector 4. Clean the inverter junction gate HP sensor (S77). 5. Execute Input check and Output check. • Rotate the inverter junction gate motor (M41) by hand and check whether the value of SP5-803-162 (INPUT Check: Inverter Entra Junc Solenoid Home Sensor) changes to 0 or 1. If the value does not change, replace the inverter junction gate HP sensor (S77). • Reinstall the drawer, and execute SP5-806-190 (Output Check: Exit/Inverter JG SOL) to check if the inverter junction gate motor (M41) moves. • If the inverter junction gate motor does not move, replace the following motor and harness. Inverter junction gate motor (M41) Inverter junction gate motor connector 6. Replace the DUB (PCB37) and PFB (PCB36).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC515-01	B	Duplex transport shift motor 1 (M40) error
		When an error occurs during duplex transport shift motor 1 home position detection, the machine handles it as a jam (JAM097) and stops operation, and displays the SC No. on the control panel on the third consecutive occurrence.
		• Duplex transport shift motor 1 (M40) connector disconnected or defective • Motor driver defective • Duplex transport HP sensor 1 (S82) connector disconnected or defective • Duplex transport shift motor 1 (M40) does not move because of overload which may be due to foreign objects, etc. • Duplex transport HP sensor 1 (S82) deformed, damaged or connected incorrectly
		1. Turn the machine OFF\ON to see the SC. After turning the machine OFF\ON, feed 10 sheets of the duplex paper three times. Check whether SC515-01 occurs (JAM097 occurs up to two times). 2. Check the driven parts. • Rotate the Duplex transport shift motor 1 (M40) by hand and check the load.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• If the load is too high due to foreign objects or jams, remove the foreign object or replace the part. 3. Check and reconnect the connector and harness. • Duplex transport shift motor 1 (M40) connector • DUB board CN296 and CN303 • Duplex transport HP sensor 1 (S82) connector 4. Clean the duplex transport HP sensor 1 (S82). 5. Execute Input check and Output check. • Rotate the Duplex transport shift motor 1 (M40) by hand and check whether the value of SP5-803-164 (INPUT Check: Roller HP Detect Sensor 1) changes to 0 or 1. If the value does not change, replace the duplex transport home position sensor. • Reinstall the drawer, and execute SP5-806-195 (Output Check: Shift Roller Motor1:Homing) to check if the Duplex transport shift motor 1 (M40) moves. • If the duplex transport motor 1 does not move, replace the following motor and harness. Duplex transport shift motor 1 (M40) Duplex transport shift motor 1 connector 6. Replace the DUB (PCB37) and PFB (PCB36).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC515-02	B	Duplex transport shift motor 2 (M39) error
		When an error occurs during duplex transport shift motor 2 home position detection, the machine handles it as a jam (JAM097) and stops operation, and displays the SC No. on the control panel on the third consecutive occurrence.
		• Duplex transport shift motor 2 (M39) connector disconnected or defective • Motor driver defective • Duplex transport HP sensor 2 (S84) connector disconnected or defective • Duplex transport shift motor 2 (M39) does not move because of overload which may be due to foreign objects, etc. • Duplex transport home position sensor 2 deformed, damaged or connected incorrectly
		1. Turn the machine OFF\ON to see the SC. After turning the machine OFF/ON, feed 10 sheets of the duplex paper three times. Check whether SC515-02 occurs (JAM097 occurs up to two times). 2. Check the driven parts. • Rotate the Duplex transport shift motor 2 (M39) by hand and check the

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		load. • If the load is too high due to foreign objects or jams, remove the foreign object or replace the part. 3. Check and reconnect the connector and harness. • Duplex transport shift motor 2 (M39) connector • DUB board CN296 and CN303 • Duplex transport HP sensor 2 (S84) connector 4. Clean the duplex transport HP sensor 2 (S84). 5. Execute Input check and Output check. • Rotate the Duplex transport shift motor 2 (M39) by hand and check whether the value of SP5-803-165 (INPUT Check: Roller HP Detect Sensor 2) changes to 0 or 1. If the value does not change, replace the duplex transport home position sensor. • Reinstall the drawer, and execute SP5-806-200 (Output Check: Shift Roller Motor2:Homing) to check if the Duplex transport shift motor 2 (M39) moves. • If the Duplex transport shift motor 2 (M39) does not move, replace the following motor and harness. Duplex transport shift motor 2 (M39) Duplex transport shift motor 2 connector 6. Replace the DUB (PCB37) and PFB (PCB36).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC516-01	B	Edge sensor shift motor (M38) home position error
		When an error occurs during edge detection sensor shift motor home position detection, the machine handles it as a jam (JAM097) and stops operation, and displays the SC No. on the control panel.
		• Edge sensor shift motor (M38) connector disconnected or defective • Motor driver defective • Sensor shift HP switch (SW8) connector disconnected or defective • Edge sensor shift motor (M38) does not move because of overload which may be due to foreign objects, etc. • Sensor shift HP switch (SW8) deformed, damaged or connected incorrectly
		1. Turn the machine OFF\ON to see the SC. After turning the machine OFF/ON, feed 10 sheets of the duplex paper to see the SC. 2. Check the driven parts. • Open the lower guide plate, and check the load by moving the edge

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		detection sensor bracket. • If the load is too high due to foreign objects or jams, remove the foreign object or replace the part. 3. Check and reconnect the connector and harness. • Edge sensor shift motor (M38) connector • DUB board CN296 and CN303 • Sensor shift home position switch connector 4. Clean the Sensor shift HP switch (SW8). 5. Execute Input check and Output check. • Open the guide plate and move the sensor shift HP switch bracket by hand, and check whether the value of SP5-803-166 (INPUT Check: Sensor Shift Home Detect Sn) changes to 0 or 1. If the value does not change, replace the Sensor shift HP switch (SW8). • Reinstall the drawer, and execute SP5-806-204 (Output Check: Sensor Shift Motor:Low Speed) to check if the Edge sensor shift motor (M38) moves. • If the Edge sensor shift motor (M38) does not move, replace the following motor and harness. Edge sensor shift motor (M38) Edge detection sensor shift motor connector 6. Replace the DUB (PCB37) and PFB (PCB36).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC518-00	C	Bridge exit motor (M3): Lock (Bridge Unit)
		Within 500 ms after the motor turned on, an error was detected in the motor register, or the error was detected in the register 5 successive times, and the machine determined that the motor was not rotating correctly.
		• Motor defective or connector defective • Harness disconnected, RCU (PCB2) defective • Unit torque has increased, paper remains in the unit
		1. Check for paper jams. 2. Output Check 3. Check the connector connection. 4. Replace the Bridge exit motor (M3). 5. Replace the drive unit 6. Replace the driven unit. 7. Replace the harness running from the RCU to the bridge exit motor. 8. Replace the RCU (PCB2).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC560-00	D	Cleaning web unit contact error
		Contact/separation control failed 3 times consecutively. Monitored when contact/separation mechanism is operating.
		• Cleaning web contact motor (M50) defective/cleaning web contact sensor (S87) defective • Feeler deformed or damaged • Contact/separation mechanism defective
		• Replace the cleaning web contact motor (M50). • Replace the cleaning web contact sensor (S87). • Replace the feeler. • Replace the cleaning web unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC569-02	D	Pressure release error: HP failed 3 times
		Pressure release/Home position/control failed 3 times consecutively. Monitored when the pressure release mechanism is operating. Pressure Change: SP1-151-001 1:On/0: Off When this SP is set to OFF, SC detection is disabled.
		• Fusing release motor (M13), pressure roller sensor:rear (S51) defective • Feeler deformed or damaged • Pressure release mechanism defective
		• Replace the fusing release motor (M13). • Replace the pressure roller sensor:rear (S51). • Replace the feeler. • Replace the fusing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC569-03	D	Pressure release error: Overrun
		When the pressure roller sensor:rear shows Low and the pressure roller sensor:front shows High. Except when home position is detected. Monitored when the pressure release mechanism is operating. Pressure Change: SP1-151-001 1:On/0: Off When this SP is set to OFF, SC detection is disabled.
		• Fusing release motor (M13), pressure roller sensor:rear (M51), and pressure roller sensor:front (S52) defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Feeler deformed or damaged • Pressure release mechanism defective
		• Replace the fusing release motor (M13). • Replace the pressure roller sensor:front (S52). • Replace the feeler. • Replace the fusing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC569-04	D	Pressure release error: Failed to pressure
		When "pressure roller sensor:front: Low" is not detected within 1000 msec from the start of pressure application. Monitored when the pressure release mechanism is operating. Pressure Change: SP1-151-001 1:On/0: Off When this SP is set to OFF, SC detection is disabled.
		• Fusing release motor (M13), pressure roller sensor:front (S52) defective • Feeler deformed or damaged • Pressure release mechanism defective
		• Replace the fusing release motor (M13). • Replace the pressure roller sensor:front (S52). • Replace the feeler. • Replace the fusing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC570-00	D	Fusing belt smoothing roller contact error
		Contact/separation/control failed 3 times consecutively. Monitored when the contact/separation mechanism is operating.
		• Fusing belt smoothing roller contact motor (M12) defective, fusing belt smoothing roller contact sensor (S54) defective • Feeler deformed or damaged • Contact/separation mechanism defective
		• Replace the fusing belt smoothing roller contact motor (M12). • Replace the fusing belt smoothing roller contact sensor (S54). • Replace the feeler. • Replace the fusing unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC595-00	D	TDCU hardware defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Abnormal command from TDCU detected
		• Motor defective • Brush motor defective • Harness disconnected
		• Replace the TDCU • Replace the harness. • Replace the motor.

SC500 (Engine: Others)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC581-00	D	Secondary power cord not connected
		The main power cord is connected but the secondary power cord is not connected.
		The secondary power cord is not connected.
		• Turn the machine off and plug in the secondary power cord again. • Replace the harness. • Replace the AC drive board (PCB32) or IOB (PCB1).

SC600 (Engine: Communication and Others)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC620-01	D	ADF communication error
		A BREAK was detected after a successful connection.
		• ADF connection fault • ADF controller board (PCB40) defective • BICU (PCB14) defective • Electrical noise on the line
		1. Check ADF cable connection. 2. Replace the ADF controller board (PCB40). 3. Replace the BICU (PCB14). 4. SC620-02: Replace the ADF to the correct model.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC620-02	D	ADF communication error
		Communication timeout after a successful connection. A non-compliant ADF is connected (ADF model code is different from the specification).
		• ADF connection fault • ADF controller board (PCB40) defective • BICU (PCB14) defective • Electrical noise on the line • Connection of a non-compliant ADF (ADF model code is different from the specification.)
		1. Replace the ADF to the correct model. 2. For more procedures go to SC620-01.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC620-03	D	ADF communication error
		The CIS initialization completion command is not received after waiting for the prescribed time.
		• ADF connection fault • ADF controller board (PCB40) defective • BICU (PCB14) defective • Electrical noise on the line
		1. Check the ADF cable connection. 2. Replace the harness and ADF cable. 3. Replace the ADF controller board (PCB40).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		4. Replace the BICU (PCB14).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC620-04	D	ADF communication error
		Error signal detected during double-feed detection
		• Harness connector loose, broken, defective, or harness defective • Double-feed detection abnormal • ADF controller board (PCB40) defective
		1. Check all the connectors to see if any are disconnected or only inserted halfway. If you see any loose reconnect them. 2. Check the harnesses for damage and replace them if you see any problems. 3. Check the ADF main control board for damage and replace it if you see any problems.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC621-00	D	Finisher/mail box communication error
		Detected an error when connecting the communication line. Received a communication error notification from the URAT.
		• Finisher control board defective. • BICU (PCB14) or IOB (PCB1) defective • Connection fault between finisher and main machine.
		• Reconnect the Finisher/mail box interface cable. • Replace the BICU (PCB14) or replace the finisher/mail box • Turn the main power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC622-00	D	Paper bank communication error.
		Communication error between main machine and paper bank/LCIT.
		• Paper bank control board defective. • BICU (PCB14) or IOB (PCB1) defective • Paper bank-main machine connection fault.
		• Reconnect the paper bank connection cable. /Replace the BICU (PCB14)./Replace the paper bank. • Turn the main power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC624-01	D	Relay signal abnormal (Bridge unit)
		• Problem occurred when circuit connected • When communication notification was received
		• RCU board defective • IOB (PCB1) defective • Main machine to relay unit connection defective
		1. Reset the cable connecting the main machine and relay unit. 2. Reconnect the connector of the harness connecting the IOB and exit of the main machine. 3. Reconnect the connector of the harness connecting the relay unit entrance and RCU board. 4. Replace the RCU board. 5. Replace IOB (PCB1). 6. Replace harnesses in Steps 1, 2, 3 above.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC624-02	D	Vacuum Feed LCIT signal defective
		• Problem occurred when circuit connected • When communication notification was received
		• RCU board defective • IOB (PCB1) defective • Main machine to Bridge unit connection defective • Bridge Unit to Vacuum Feed LCIT connection defective
		1. Reset the cable connecting the main machine and relay unit. 2. Reset the connection cable between the relay unit and Vacuum Feed LCIT. 3. Reconnect the connector of the harness connecting the IOB and exit of the main machine. 4. Reconnect the connector of the harness connecting the relay unit entrance and RCU board. 5. Reconnect the connector of the harness connecting the relay unit exit and RCU board. 6. Reconnect the connector of the harness between Vacuum Feed LCIT entrance and Vacuum Feed LCIT main board. 7. Replace Vacuum Feed LCIT main board. 8. Replace the RCU board. 9. Replace IOB (PCB1). 10. Replace harnesses in Steps 1 to 6 above.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC625-00	D	TDCU communication error
		ASAP communication protocol error • A BREAK signal was detected at power-on. • Non-response (100 ms) was detected 3 times consecutively during normal operation. • NAK was received 3 times before ACK was received during normal operation. • A BREAK signal was detected during normal operation.
		• IOB (PCB1) defective
		• Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC626-01	D	DUB communication error at power-on
SC626-02	D	DUB communication error during normal operation
SC626-03	D	DUB BREAK detection during normal operation
		ASAP communication protocol error • A BREAK signal was detected at power-on. • Non-response (100 ms) was detected 3 times consecutively during normal operation. • NAK was received 3 times before ACK was received during normal operation. • A BREAK signal was detected during normal operation.
		• DUB (PCB37) defective • PFB (PCB36) defective • Harness between DUB and PFB broken • Connecter between DUB and PFB disconnected • Unintended electrical noise
		• Replace the DUB (PCB37). • Replace the PFB (PCB36). • Replace the harness between DUB and PFB. • Replace the connector between DUB and PFB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC626-	D	Toner supply board (PCB9)　communication error at power-on

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
04		
SC626-05	D	Toner supply board (PCB9) communication error during normal operation
SC626-06	D	Toner supply board (PCB9) BREAK detection during normal operation
		ASAP communication protocol error • A BREAK signal was detected at power-on. • Non-response (100 ms) was detected 3 times consecutively during normal operation. • NAK was received 3 times before ACK was received during normal operation. • A BREAK signal was detected during normal operation.
		• Toner supply board (PCB9) defective • IOB (PCB1) defective • Harness between TSB and IOB broken • Connecter between TSB and IOB disconnected • Unintended electrical noise
		• Replace the toner supply board (PCB9). • Replace the IOB (PCB1). • Replace the harness between TSB and IOB. • Replace the connector between TSB and IOB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC645-01	C	Toner Supply: ID Chip Communication Error (K)
SC645-02	C	Toner Supply: ID Chip Communication Error (M)
SC645-03	C	Toner Supply: ID Chip Communication Error (C)
SC645-04	C	Toner Supply: ID Chip Communication Error (Y)
		Errors defined in I2C communication. Details: • SC is issued when the I2C communication cannot be done between the BICU and ID chip. • SC is issued when the communication bus is opened, closed, read, and written.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Toner supply unit set error • ID chip defective • Harness broken • BICU (PCB14) damaged • IOB (PCB1) damaged • Toner supply board (PCB9) damaged • ID chip connector board (PCB5) damaged • Unintended noise
		• Set the toner supply unit again. • Replace the ID chip. • Fix the harness. • Replace the BICU (PCB14). • Replace the IOB (PCB1). • Replace the TSB. • Replace the ID chip connector board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC664-01	D	VODKA SRAM program expansion error
SC664-02	D	
SC664-03	D	
		VODKA1 SC664-01: VODKA SRAM access permission error (Write permission denied) SC664-02: VODKA SRAM write error (write result abnormal) SC664-03: VODKA program startup error
		• Electric noises and hardware defect
		• IOB (PCB1) replacement, harness check

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC664-11	D	VODKA SRAM program expansion error
SC664-12	D	
SC664-13	D	
		VODKA2 SC664-11: VODKA SRAM access permission error (Write permission denied) SC664-12: VODKA SRAM write error (write result abnormal) SC664-13: VODKA program startup error
		• Electric noises and hardware defect
		• IOB (PCB1) replacement, harness check

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC664-21	D	VODKA SRAM program expansion error
SC664-22	D	
SC664-23	D	
		VODKA3 SC664-21: VODKA SRAM access permission error (Write permission denied) SC664-22: VODKA SRAM write error (write result abnormal) SC664-23: VODKA program startup error
		• Electric noises and hardware defect
		• IOB (PCB1) replacement, harness check

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC664-31	D	VODKA SRAM program expansion error
SC664-32	D	
SC664-33	D	
		VODKA4 SC664-31: VODKA SRAM access permission error (Write permission denied) SC664-32: VODKA SRAM write error (write result abnormal) SC664-33: VODKA program startup error
		• Electric noises and hardware defect
		• IOB (PCB1) replacement, harness check

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC664-41	D	VODKA SRAM program expansion error
SC664-42	D	
SC664-43	D	
		VODKA5 SC664-41: VODKA SRAM access permission error (Write permission denied) SC664-42: VODKA SRAM write error (write result abnormal) SC664-33: VODKA program startup error
		• Electric noises and hardware defect
		• IOB (PCB1) replacement, harness check

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC665-02	D	FFC set detection (Error between BICU and IOB)
		The HORUS port on the BICU is used for FFC connection detection to detect FFC (harness) disconnection and loose connection between BICU and IOB. By checking the voltage level of the AD terminal, the connection status can be

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		checked. Details: • When the harness between BICU and IOB becomes disconnected, the number of parallelly connected resistors changes and therefore the voltage input to the AD terminal changes.
		• FFC harness between BICU and IOB broken • FFC harness between BICU and IOB not connected fully • BICU (PCB14) damaged • IOB (PCB1) damaged
		• Replace the FFC harness between BICU and IOB. • Reconnect the FFC harness between BICU and IOB. • Replace the BICU (PCB14). • Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC665-03	D	FFC set detection (Error between IOB and PFB)
		The HORUS port on the BICU is used for FFC connection detection to detect FFC (harness) disconnection and loose connection between IOB and PFB. By checking the voltage level of the AD terminal, the connection status can be checked. Details: • When the harness between IOB and PFB becomes disconnected, the number of parallelly connected resistors changes and therefore the voltage input to the AD terminal changes.
		• FFC harness between IOB and PFB broken • FFC harness between IOB and PFB not connected fully • BICU (PCB14) damaged • IOB (PCB14) damaged • PFB (PCB36) damaged
		• Replace the FFC harness between IOB and PFB. • Reconnect the FFC harness between IOB and PFB. • Replace the BICU (PCB14). • Replace the IOB (PCB14). • Replace the PFB (PCB36).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC665-04	D	IOB does not start
		The IOB_WAKE signal of the IOB and the PFB is not "WAKE".

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		(Occurs when either 2 Vodkas in the IOB or 3 Vodkas in the PFB are in the reset status. Details: • Detected when IOB_WAKE signal from the 2 Vodkas on the IOB (PIB function, FSB function) and 3 Vodkas on the FSB stay in the WAKE status. • IOB_WAKE signal is output from 5 Vodkas as explained above and if at least one of them is "WAKE", IOB_WAKE is not canceled.
		• IOB (PCB1) damaged • PFB (PCB36) damaged • BICU (PCB14) defective • Harness between BICU and IOB: Ground fault • Harness between IOB and PFB: Ground fault • PSU5V not output
		• Replace the harness between IOB and PFB. • Replace the harness between BICU and IOB. • Replace the IOB (PCB1). • Replace the PFB (PCB36). • Replace the BICU (PCB14). • Replace the PSU (PCB33/PCB34).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC669		EEPROM communication error
SC669-01	D	EEPROM OPEN: ID error
SC669-02	D	EEPROM OPEN: Channel error
SC669-03	D	EEPROM OPEN: Device error
SC669-04	D	EEPROM OPEN: Communication abort error
SC669-05	D	EEPROM OPEN: Communication timeout error
SC669-06	D	EEPROM OPEN: Operation stopped error
SC669-07	D	EEPROM OPEN: Buffer full
SC669-	D	EEPROM OPEN: No error code

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
08		
SC669-09	D	EEPROM CLOSE: ID error
SC669-10	D	EEPROM CLOSE: No error code
SC669-11	D	EEPROM Data write: ID error
SC669-12	D	EEPROM Data write: Channel error
SC669-13	D	EEPROM Data write: Device error
SC669-14	D	EEPROM Data write: Communication abort error
SC669-15	D	EEPROM Data write: Communication timeout error
SC669-16	D	EEPROM Data write: Operation stopped error
SC669-17	D	EEPROM Data write: Buffer full
SC669-18	D	EEPROM Data write: No error code
SC669-19	D	EEPROM Data read: ID error
SC669-20	D	EEPROM Data read: Channel error
SC669-21	D	EEPROM Data read: Device error
SC669-22	D	EEPROM Data read: Communication abort error
SC669-23	D	EEPROM Data read: Communication timeout error
SC669-24	D	EEPROM Data read: Operation stopped error
SC669-25	D	EEPROM Data read: Buffer full
SC669-26	D	EEPROM Data read: No error code

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC669-27	D	EEPROM Device detection: ID error
SC669-28	D	EEPROM Device detection: Channel error
SC669-29	D	EEPROM Device detection: Device error
SC669-30	D	EEPROM Device detection: Communication abort error
SC669-31	D	EEPROM Device detection: Communication timeout error
SC669-32	D	EEPROM Device detection: Operation stopped error
SC669-33	D	EEPROM Device detection: Buffer full
SC669-34	D	EEPROM Device detection: No error code
SC669-36	D	SRAM expansion verify error
SC669-37	D	Malfunction detection error
		Received an error notification during EEPROM communication and does not resume after 3 retries.
		• Electrical noise • EEPROM not connected fully • EEPROM not installed • EEPROM damaged • BICU (PCB14) damaged
		• Cycle the machine off/on. • Reconnect the EEPROM. • Replace the EEPROM. • Replace the BICU (PCB14).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC681		Toner supply: ID chip communication error
SC681-01	D	Toner Supply: ID Chip Communication Error (K_Invalid Device ID)
SC681-	D	Toner Supply: ID Chip Communication Error (M_Invalid Device ID)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
02		
SC681-03	D	Toner Supply: ID Chip Communication Error (C_Invalid Device ID)
SC681-04	D	Toner Supply: ID Chip Communication Error (Y_Invalid Device ID)
SC681-05	D	Toner Supply: ID Chip Communication Error (K_Channel error (e.g. communication disconnection))
SC681-06	D	Toner Supply: ID Chip Communication Error (M_Channel error (e.g. communication disconnection))
SC681-07	D	Toner Supply: ID Chip Communication Error (C_Channel error (e.g. communication disconnection))
SC681-08	D	Toner Supply: ID Chip Communication Error (Y_Channel error (e.g. communication disconnection))
SC681-09	D	Toner Supply: ID Chip Communication Error (K_Device Error (No ID chip))
SC681-11	D	Toner Supply: ID Chip Communication Error (M_Device Error (No ID chip))
SC681-12	D	Toner Supply: ID Chip Communication Error (C_Device Error (No ID chip))
SC681-13	D	Toner Supply: ID Chip Communication Error (Y_Device Error (No ID chip))
SC681-14	D	Toner Supply: ID Chip Communication Error (K_Communication aborted (error during communication))
SC681-16	D	Toner Supply: ID Chip Communication Error (M_Communication aborted (error during communication))
SC681-17	D	Toner Supply: ID Chip Communication Error (C_Communication aborted (error during communication))
SC681-18	D	Toner Supply: ID Chip Communication Error (Y_Communication aborted (error during communication))
SC681-19	D	Toner Supply: ID Chip Communication Error (K_Communication timeout)
SC681-21	D	Toner Supply: ID Chip Communication Error (M_Communication timeout)
SC681-22	D	Toner Supply: ID Chip Communication Error (C_Communication timeout)
SC681-23	D	Toner Supply: ID Chip Communication Error (Y_Communication timeout)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC681-24	D	Toner Supply: ID Chip Communication Error (K_Device stopped (logically stopped))
SC681-26	D	Toner Supply: ID Chip Communication Error (M_Device stopped (logically stopped))
SC681-27	D	Toner Supply: ID Chip Communication Error (C_Device stopped (logically stopped))
SC681-28	D	Toner Supply: ID Chip Communication Error (Y_Device stopped (logically stopped))
SC681-29	D	Toner Supply: ID Chip Communication Error (K_Requested buffer full)
SC681-31	D	Toner Supply: ID Chip Communication Error (M_Requested buffer full)
SC681-32	D	Toner Supply: ID Chip Communication Error (C_Requested buffer full)
SC681-33	D	Toner Supply: ID Chip Communication Error (Y_Requested buffer full)
SC681-34	D	Toner Supply: ID Chip Communication Error (K_Verify error)
SC681-35	D	Toner Supply: ID Chip Communication Error (M_Verify error)
SC681-36	D	Toner Supply: ID Chip Communication Error (C_Verify error)
SC681-37	D	Toner Supply: ID Chip Communication Error (Y_Verify error)
SC681-38	D	Toner Supply: ID Chip Communication Error (K_Invalid Device ID)
SC681-39	D	Toner Supply: ID Chip Communication Error (M_Invalid Device ID)
		Errors defined in I2C communication • When abnormality occurs at cable connection • When error notification was received during communication with the tag and operation is not resumed after 3 retries.
		There was an error during (wired) communication with the ID chip on the toner bottle. SC681-01 to 04: Device ID data corrupted. SC681-06 to 09: Contact fault (e.g. Bus disconnection) SC681-11 to 14: No ID chip

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		SC681-16 to 19/21 to 24/26 to 39: Noise SC681-31 to 34/36 to 39: Software problem • Toner supply unit set error • ID chip defective • Harness broken • BICU (PCB14) damaged • IOB (PCB1) damaged • Toner supply board (PCB9) damaged • ID chip connector board (PCB5) damaged • Unintended noise
		• Cycle the machine off/on. • Set the toner supply unit again. • Replace the ID chip (OT1/OT2/OT3/OT4). • Fix the harness. • Replace the BICU (PCB14). • Replace the IOB (PCB1). • Replace the toner supply board (PCB9). • Replace the ID chip connector board (PCB5).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC682		PCU: ID Chip Communication Error
SC682-01	D	PCU: ID Chip Communication Error(K_Invalid Device ID)
SC682-02	D	PCU: ID Chip Communication Error(M_Invalid Device ID)
SC682-03	D	PCU: ID Chip Communication Error(C_Invalid Device ID)
SC682-04	D	PCU: ID Chip Communication Error(Y_Invalid Device ID)
SC682-05	D	PCU: ID Chip Communication Error(K_Channel error (e.g. communication disconnection))
SC682-06	D	PCU: ID Chip Communication Error(M_Channel error (e.g. communication disconnection))
SC682-07	D	PCU: ID Chip Communication Error(C_Channel error (e.g. communication disconnection))
SC682-08	D	PCU: ID Chip Communication Error(Y_Channel error (e.g. communication disconnection))

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC682-09	D	PCU: ID Chip Communication Error(K_Device Error (No ID chip))
SC682-11	D	PCU: ID Chip Communication Error(M_Device Error (No ID chip))
SC682-12	D	PCU: ID Chip Communication Error(C_Device Error (No ID chip))
SC682-13	D	PCU: ID Chip Communication Error(Y_Device Error (No ID chip))
SC682-14	D	PCU: ID Chip Communication Error(K_Communication aborted (error during communication))
SC682-16	D	PCU: ID Chip Communication Error(M_Communication aborted (error during communication))
SC682-17	D	PCU: ID Chip Communication Error(C_Communication aborted (error during communication))
SC682-18	D	PCU: ID Chip Communication Error(Y_Communication aborted (error during communication))
SC682-19	D	PCU: ID Chip Communication Error(K_Communication timeout)
SC682-21	D	PCU: ID Chip Communication Error(M_Communication timeout)
SC682-22	D	PCU: ID Chip Communication Error(C_Communication timeout)
SC682-23	D	PCU: ID Chip Communication Error(Y_Communication timeout)
SC682-24	D	PCU: ID Chip Communication Error(K_Device stopped (logically stopped))
SC682-26	D	PCU: ID Chip Communication Error(M_Device stopped (logically stopped))
SC682-27	D	PCU: ID Chip Communication Error(C_Device stopped (logically stopped))
SC682-28	D	PCU: ID Chip Communication Error(Y_Device stopped (logically stopped))
SC682-29	D	PCU: ID Chip Communication Error(K_Requested buffer full)
SC682-31	D	PCU: ID Chip Communication Error(M_Requested buffer full)
SC682-	D	PCU: ID Chip Communication Error(C_Requested buffer full)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
32		
SC682-33	D	PCU: ID Chip Communication Error(Y_Requested buffer full)
SC682-34	D	PCU: ID Chip Communication Error(K_No error code)
SC682-35	D	PCU: ID Chip Communication Error(M_No error code)
SC682-36	D	PCU: ID Chip Communication Error(C_No error code)
SC682-37	D	PCU: ID Chip Communication Error(Y_No error code)
SC682-38	D	PCU: ID Chip Communication Error(K_Invalid device ID)
SC682-39	D	PCU: ID Chip Communication Error(M_Invalid device ID)
		Errors defined in I2C communication • When abnormality occurs at cable connection • When error notification was received during communication with the tag and operation is not resumed after 3 retries.
		There was an error during (wired) communication with the ID chip on the toner bottle. • PCDU set error • TD sensor (S46) defective • Harness broken • BICU (PCB14) damaged • IOB (PCB1) damaged • Unintended noise
		• Set the PCDU again. • Replace the PCDU. • Fix the harness. • Replace the BICU (PCB14). • Replace the IOB (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC687-00	D	PER not received error
		• Unable to receive the PER command of the I/F commands from the controller.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Unable to prepare the image data with the controller.
		• Communication error • Inside of the controller defective
		• Cycle the machine off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC689-00	D	IH inverter communication error
		• IH inverter not responding to request • IH inverter communication error (ASAP IV compliant) • IH inverter response information unavailable
		• Harness broken • IH inverter (PCB35) defective • IOB (PCB1) defective
		• Remove the cause of the SC and then turn off/on the power or main power. • Replace the harness, IH inverter (PCB35), or IOB (PCB1) as required.

SC600 (Engine: System)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC685-01	D	24VS power supply voltage error
		Tracks for 2.5 second (timeout) from the time the +24VS1 converter ON/OFF turns ON.
		• PSU malfunctioning • IOB (PCB1) malfunctioning • Connector disconnected • Harness broken or ground fault • Load fault
		1. Check whether the power supply LED (LED4) on the IOB is lit to orange. • LED4 is lit: execute step 2. • LED4 is not lit: execute step 2 and then step 3. 2. Check and replace the harnesses of the IOB and PSU1 if they are broken or have defective grounding. Then, turn the machine OFF/ON to check the SC occurrence. • The SC occurred: execute step 4 (or 3). 3. Reconnect the cables of the IOB and PSU1. Then, turn the machine OFF/ON to check the SC occurrence. • The SC occurred: execute step 5. 4. Replace the IOB (PCB1). Then, turn the machine OFF/ON to check the SC occurrence. • The SC occurred: execute step 5. 5. Replace the PSU1 (PCB34). Then, turn the machine OFF/ON to check the SC occurrence.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC685-02	B	ADF 24V power supply voltage error
		Tracks for 2.5 second (timeout) from the time the machine turns ON or returns from energy save mode.
		• PSU malfunctioning • Connector disconnected • Harness broken or ground fault
		1. Check whether the power supply LED (LED3) on the IOB is lit to yellow. • LED3 is lit: no treatment is necessary. • LED3 is not lit: execute step 2. 2. Check and replace the harness of the PSU2 if it is broken or has defective grounding. Then, turn the machine OFF/ON to check the SC occurrence.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• The SC occurred: execute step 3. 3. Replace the PSU2 (PCB33). Then, turn the machine OFF/ON to check the SC occurrence.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC685-03	B	DUB 24VS power supply voltage error
		Tracks for 1 second (timeout) from the time the cleaning web motor is turned ON on the software.
		• PSU malfunctioning • Connector disconnected • Harness broken or ground fault • Cleaning web motor malfunctioning • DUB (PCB37) malfunctioning
		1. Check whether the power supply LED (LED5) on the DUB is lit to orange. • LED5 is lit: execute step 2. • LED5 is not lit: execute step 2 and then step 3. 2. Check and replace the harnesses of the DUB and PSU1 if they are broken or have defective grounding. Then, turn the machine OFF/ON to check the SC occurrence. • The SC occurred: execute step 4 (or 3). 3. Reconnect the cables of the DUB and PSU1. Then, turn the machine OFF/ON to check the SC occurrence. • The SC occurred: execute step 5. 4. Replace the DUB (PCB37). Then, turn the machine OFF/ON to check the SC occurrence. • The SC occurred: execute step 5. 5. Replace the PSU1 (PCB34). Then, turn the machine OFF/ON to check the SC occurrence. • The SC did not occur: check the cleaning web motor with the OUTPUT command in SP mode.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC685-04	B	IOB 24V power supply voltage error
		Tracks for 2.5 second (timeout) from the time the image skew correction motor Y/M/C/K are turned ON on the software.
		• PSU malfunctioning • Connector disconnected • Harness broken or ground fault

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Cleaning motor malfunctioning • Image skew correction motor (Y/M/C/K) malfunctioning
		1. Check whether the power supply LED (LED3) on the IOB is lit to yellow. • LED3 is lit: execute step 2. • LED3 is not lit: execute step 2 and then step 3. 2. Check and replace the harnesses of the IOB and PSU1 if they are broken or have defective grounding. Then, turn the machine OFF/ON to check the SC occurrence. • The SC occurred: execute step 4 (or 3). 3. Reconnect the cables of the IOB and PSU1. Then, turn the machine OFF/ON to check the SC occurrence. • The SC occurred: execute step 5. 4. Replace the IOB (PCB1). Then, turn the machine OFF/ON to check the SC occurrence. • The SC occurred: execute step 5. 5. Replace the PSU2 (PCB33). Then, turn the machine OFF/ON to check the SC occurrence. • The SC did not occur: check the image skew correction motor with the OUTPUT command in SP mode.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC685-05	B	PFB 24V power supply voltage error 1
		Tracks for 2.5 second (timeout) from the time the cooling fans are turns ON on the software.
		• PSU malfunctioning • Connector disconnected • Harness broken or ground fault • Fans for Booklet Finisher SR4160/Finisher SR4150 (Cooling Fan Unit Type M26) malfunctioning • PFB (PCB36) malfunctioning
		1. Check whether the power supply LED (LED4) on the PFB is lit to yellow. • LED4 is lit: execute step 2. • LED4 is not lit: execute step 2 and then step 3. 2. Check and replace the harnesses of the PFB and PSU1 if they are broken or have defective grounding. Then, turn the machine OFF/ON to check the SC occurrence. • The SC occurred: execute step 4 (or 3). 3. Reconnect the cables of the PFB and PSU2. Then, turn the machine OFF/ON

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		to check the SC occurrence. • The SC occurred: execute step 5. 4. Replace the PFB (PCB36). Then, turn the machine OFF/ON to check the SC occurrence. • The SC occurred: execute step 5. 5. Replace the PSU2 (PCB33). Then, turn the machine OFF/ON to check the SC occurrence. • The SC did not occur: check the fans for Booklet Finisher SR4160/Finisher SR4150 (Cooling Fan Unit Type M26) with the OUTPUT command in SP mode.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC685-06	B	PFB 24V power supply voltage error 2
		Tracks for 2.5 second (timeout) from the time the left tray lock solenoid is turns ON on the software.
		• PSU malfunctioning • Connector disconnected • Harness broken or ground fault • Left tray lock solenoid malfunctioning • PFB (PCB36) malfunctioning
		1. Check whether the power supply LED (LED4) on the PFB is lit to yellow. • LED4 is lit: execute step 2. • LED4 is not lit: execute step 2 and then step 3. 2. Check and replace the harnesses of the PFB and PSU1 if they are broken or have defective grounding. Then, turn the machine OFF/ON to check the SC occurrence. • The SC occurred: execute step 4 (or 3). 3. Reconnect the cables of the PFB and PSU2. Then, turn the machine OFF/ON to check the SC occurrence. • The SC occurred: execute step 5. 4. Replace the PFB (PCB36). Then, turn the machine OFF/ON to check the SC occurrence. • The SC occurred: execute step 5. 5. Replace the PSU2 (PCB33). Then, turn the machine OFF/ON to check the SC occurrence. • The SC did not occur: check the left tray lock solenoid with the OUTPUT command in SP mode.

SC600 (Controller)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC632-00	D	Counter device error 1
		After 3 attempts to send a data frame to the optional counter device via the serial communication line, no signal was received within 100 ms.
		Serial line between the optional counter device, the relay board and copier control board is disconnected or damaged.
		• Turn the main power off/on. • Check the serial communication line.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC633-00	D	Counter device error 2
		After communication was established, the controller received the brake signal from the accounting device.
		Serial line between the optional counter device, the relay board and copier control board is disconnected or damaged.
		• Turn the main power off/on. • Check the serial communication line.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC634-00	D	Counter device error 3
		A backup RAM error was returned by the counter device.
		Counter device control board or the backup battery of counter device defective
		• Replace the counter device control board. • Replace the backup battery.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC635-00	D	Counter device error 4
		A backup battery error was returned by the counter device.
		Counter device control board or the backup battery of counter device defective
		• Replace the counter device control board. • Replace the backup battery.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC636-01	D	IC card error (Expanded authentication module error)
		Issued when expanded authentication management is set to "ON" but either of the following occur. • There is no expanded authentication module in the machine.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• The SD card or the file of the expanded authentication module is broken. • There is no DESS module in the machine.
		• There is no DESS module in the machine (models on which the function is optional). • There is no expanded authentication module in the machine. • The SD card or the file of the expanded authentication module is broken.
		• Set a working SD card/expanded authentication module file. • Install the DESS module. • In the SSP mode set SP5-401-160 to 0. • In the SSP mode, set SP5-401-161 to 0. • Replace the NVRAM.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC636-02	D	IC card error (Version error)
		The version of the expanded authentication module is not correct.
		Incorrect module version
		Install the correct file of the expanded authentication module.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC637-01	D	Tracking information notification error (Tracking application error)
		Tracking information was lost.
		• Tracking SDK application error • Internal notification error
		Turn the main power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC637-02	D	Tracking information notification error (Management server error)
		Tracking information was lost.
		Communication with tracking management server failed. • Network error • Tracking management server error • Tracking SDK application error
		Turn the main power off/on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC641-00	D	Communication error between BICU and controller board.
		Controller board does not respond after BICU tries to communicate three times.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Controller board software error • Connect error between BICU and Controller board • Engine board software error
		• Check connections between Controller board and BICU. • Turn the main switch off and on.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC650-01	C	Remote service modem communication error (dialup authentication failure)
		• An error related to communication (dialup connection, modem board etc.) using the RC Gate Type M was detected or an error that prevents RC Gate operation was detected at power on. • Displayed only when an error is detected while RC Gate is operating. • SC is not issued if an error occurs during RC Gate installation (because it can be referenced using SP).
		Dialup authentication failure
		Check the following SPs. • SP5-816-156 • SP5-816-157

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC650-04	C	Remote service modem communication error (dialup failing because of incorrect modem configuration)
		• An error related to communication (dialup connection, modem board etc.) using the RC Gate Type M was detected or an error that prevents RC Gate operation was detected at power on. • Displayed only when an error is detected while RC Gate is operating. • SC is not issued if an error occurs during RC Gate installation (because it can be referenced using SP).
		Dialup failing because of incorrect modem configuration
		Check if the setting of SP5-816-160 is correct. If it is correct, then there is a software bug.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC650-05	C	Remote service modem communication error (insufficient current or connection fault)
		• An error related to communication (dialup connection, modem board etc.) using the RC Gate Type M was detected or an error that prevents RC Gate

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		operation was detected at power on. • Displayed only when an error is detected while RC Gate is operating. • SC is not issued if an error occurs during RC Gate installation (because it can be referenced using SP).
		Insufficient current or connection fault
		The line is not supported and nothing can be done.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC650-13	C	Remote service modem communication error (RC Gate Type M was installed but modem is not present (detected during operation))
		• An error related to communication (dialup connection, modem board etc.) using the RC Gate Type M was detected or an error that prevents RC Gate operation was detected at power on. • Displayed only when an error is detected while RC Gate is operating. • SC is not issued if an error occurs during RC Gate installation (because it can be referenced using SP).
		RC Gate Type M was installed but modem is not present (detected during operation)
		• If a modem board is not installed, install it. • Check again if the modem driver configurations (SP5-816-160, SP5-816-165 to 171) are correct. • If the problem is not solved, replace the modem.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC650-14	C	Remote service modem communication error (RC Gate Type N was installed but modem is present or wired/wireless LAN is not working correctly)
		• An error related to communication (dialup connection, modem board etc.) using the RC Gate was detected or an error that prevents RC Gate operation was detected at power on. • Displayed only when an error is detected while RC Gate is operating. • SC is not issued if an error occurs during RC Gate installation (because it can be referenced using SP).
		RC Gate Type N was installed but modem is present or wired/wireless LAN is not working correctly
		• If a modem board is attached, remove it. • Check if wired/wireless LAN works.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC651-01	C	Illegal remote service dial-up (chat program parameter error)
		An unexpected error occurred when RC Gate Type M dialed up the NRS Center.
		Software bug
		Logging only.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC651-02	C	Illegal remote service dial-up (Chat program execution error)
		An unexpected error occurred when RC Gate dialed up the NRS Center.
		Software bug
		Logging only.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC652-00	A	Remote service ID2 mismatching
		There was an authentication mismatch between ID2 for @Remote, the controller board, and NVRAM.
		• Used controller board installed • Used NVRAM installed (such action is not allowed.)
		• If this occurs during RC Gate installation: Check the validity of the certificate and the NVRAM, check the machine serial number, write the common certificate, and then begin installation again. • If this occurs after RC Gate installation: Clear the RC Gate install status, check the validity of the certificate and the NVRAM, check the machine serial number, write the common certificate, and then begin installation again.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC653-00	A	Incorrect remote service ID2
		ID2 stored in the NVRAM has either of the following problems. • Number of characters is not 17. • Includes a character that cannot be printed. • All spaces • NULL
		Replace the NVRAM.
		Clear the RC Gate install status, write the common certificate, and then begin installation again.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC670-01	D	Engine start up error when the machine boots up
		• /ENGRDY signal was not asserted when the machine was turned on. • PCI I/F is not linked up when the machine returns from energy saver mode. • /IPURDY signal was not asserted when the machine was turned on or returned from energy saver mode. • EC/PC/SC response was not received within specified time from power on. • Writing to Rapi driver failed (the other party not found through PCI). • Connection defect between controller board and BICU. • BICU is down / unstable
		• BICU defective • PSU defective • Controller board defective
		• Replace the BICU. • Replace the PSU. • Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC670-02	D	Engine start up error when the machine is in operation
		• CPU reset by software • CPU reset by anomaly CPU • CPU reset by hardware defect / noise • Hardware defect
		Engine board reset unexpectedly.
		• Ask the customer to demonstrate the procedure that was used when the SC occurred. Try the same steps 10 times to check if the SC occurs more than one time. • Software bug. Update the firmware. • Check the connection of the engine board and the controller board. • Replace the BICU. • Replace the PSU. • Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC670-03	D	BICU start up error when the machine boots up
		VDET_EPCI signal was not asserted when the machine was turned on.
		• BICU, PSU, and/or controller board defective • Incorrect connection between controller board and BICU

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Harness of BICU disconnected
		• Turn the main power off/on 10 times, and check if the SC occurs more than one time. • Check the connection of the engine board and the controller board. • Disconnect/connect the harness between the engine board and the controller board. • Replace the BICU. • Replace the PSU. • Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC670-04	D	Communication error between the engine and controller
		Communication could not linked up.
		• BICU and/or controller board defective • Incorrect connection between controller board and BICU
		• Turn the main power off/on 10 times, and check if the SC occurs more than one time. • Check the connection of the engine board and the controller board. • Disconnect/connect the harness between the engine board and the controller board. • Replace the BICU. • Replace the controller board.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC670-05	C	Link up error
		Communication could not link up.
		• CTL board defective • BICU defective • Incorrect connection between CTL and BICU.
		Logging only.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC672-00	D	Controller start up error
		After the machine was powered on, communication between the controller and the operation panel was not established, or communication with controller was interrupted after a normal startup.
		• Controller stalled

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Board installed incorrectly • Controller board defective • Operation panel connector loose, broken, or defective • Controller late
		• Turn the main power off/on. • Check the connection of the controller board. • Replace the controller board. • Check the operation panel harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC672-10	D	Controller start up error
		After the machine was powered on, communication between the controller and the operation panel was not established.
SC672-11	D	Controller start up error
		After the machine was powered on, communication between the controller and the operation panel was not established, or communication with controller was interrupted after a normal startup.
SC672-12	D	Controller start up error
		Communication with controller was interrupted after a normal startup.
SC672-13	D	Controller start up error
		The operation panel detected that the controller is down.
SC672-14	D	Controller start up error
		Communication with the controller is lost due to USB disconnection.
SC672-99	D	Controller start up error
		The operation panel software ended abnormally.
		• Board installed incorrectly • Connector loose, broken, or defective • Controller board defective • Memory (DIMM) on the controller board defective • Harness defective • Operation panel defective • BICU defective • Controller stalled
		• Turn the main power off/on. • Check the connection of the operation panel and the BICU. • Check the connection of the controller board. When LED8 (red) on the controller board does not flicker:

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Check the connection of the memory (DIMM) on the controller board. • Replace the memory (DIMM). • Replace the controller board. When LED8 (red) on the controller board flickers: • Replace the harness between the operation panel and the BICU. • Replace the operation panel. • Replace the BICU.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC673-01	D	Operation panel system application not responding (Smart Operation Panel)
		This occurs only when the Smart Operation Panel is mounted. The Smart Operation Panel system application (MonitorService) malfunctioned. SC logging cannot be performed because the detection is performed by the operation panel.
		The Smart Operation Panel system application (MonitorService) ended abnormally.
		Press the Reboot button on the SC screen and then turn the main power OFF and then ON.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC673-10	D	Operation panel Flair communication error (Smart Operation Panel)
		This occurs only when the Smart Operation Panel is mounted. Communication between the operation panel and main machine (Flair communication) is not sent. SP setting (SP5-748-201) for Smart Operation Panel is not enabled.
		The controller cannot notify a response to a notification from the monitoring service module (operation panel).
		Turn the main power OFF and then ON. Set SP5-748-201 (OpePanel Setting: Cheetah Panel Connect Setting) to "1: Connect" if the value is "0: Not connect".

SC700 (Engine: Peripherals)

SC700 to 703: ADF

To recover from the error, check if the SC occurs (feed paper, open/close the doors, Input or Output check). If the SC occurs again, do the follow steps. After each step, turn the power OFF then ON to check if the SC occurs again.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC700-01	D	ADF bottom plate lift motor (M70) error (1-Pass ADF)
		The bottom plate HP sensor (S148) does not detect the home position of the bottom plate after the ADF bottom plate lift motor (M70) switches on and lowers the bottom plate. Or, the bottom plate HP sensor (S148) does not detect the position of the plate after the ADF bottom plate lift motor (M70) switches on and raises the bottom plate. Details: The ADF notifies the main machine of the error. The first two occurrences are displayed as jams.
		• Bottom plate position sensor (S149) output error • bottom plate HP sensor (S148) output error • ADF bottom plate lift motor (M70) error (does not rotate) • ADF controller board (PCB40) defective
		• Check the connections of the sensor harnesses and motor harnesses. • Replace the sensor harnesses and motor harnesses. • Replace the sensor or motor. • Replace the ADF controller board (PCB40).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC700-02	D	Original pick up error (1-Pass ADF)
		The ADF pick-up roller lift motor (M71) is turned on but the pick-up roller HP sensor (S147) is not detecting it. Details: The SC is detected when the output of the pick-up roller HP sensor (S147) was not changed during the ADF pick-up roller lift motor driving. The first two occurrences are displayed as jams.
		• pick-up roller HP sensor (S147) output error • ADF pick-up roller lift motor (M71) error (does not rotate) • ADF controller board (PCB40) defective
		• Check the connections of the sensor harnesses and motor harnesses. • Replace the sensor harnesses and motor harnesses.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Replace the sensor or motor. • Replace the ADF controller board (PCB40).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC700-04	D	ADF feed motor (M72) error (1-Pass ADF)
		Error signal detected while the ADF feed motor (M72) is driven. Details: When encoder channel A (B) error or overload error is detected among the ADF feed motor (M72) error notification registers. The first two occurrences, however, are displayed as jams.
		• ADF feed motor (M72) defective • Connecter disconnected • Harness broken • Overload
		• Check the harness connection. • Replace the encoder harness. • Replace the ADF feed motor (M72). • Replace the ADF controller board (PCB40). • Remove torn paper from the paper path, remove foreign objects from the drive area, and check for motor/motor bracket deformation.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC700-05	D	Pull-out motor (M73) error (1-Pass ADF)
		Error signal detected while the Pull-out motor (M73) is driven. Details: When encoder channel A (B) error or overload error is detected among the Pull-out motor (M73) error notification registers. The first two occurrences, however, are displayed as jams.
		• Pull-out motor (M73) defective • Connecter disconnected • Harness broken • Overload
		• Check the harness connection. • Replace the encoder harness. • Replace the Pull-out motor (M73). • Replace the ADF controller board (PCB40). • Remove torn paper from the paper path, remove foreign objects from the

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		drive area, and check for motor/motor bracket deformation.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC700-06	D	ADF transport motor (M76) error (1-Pass ADF)
		Error signal detected while the ADF transport motor (M76) is driven. Details: When encoder channel A (B) error or overload error is detected among the pull-out motor error notification registers. The first two occurrences, however, are displayed as jams.
		• Pull-out motor (M73) defective • Connecter disconnected • Harness broken • Overload
		• Check the harness connection. • Replace the encoder harness. • Replace the Pull-out motor (M73). • Replace the ADF controller board (PCB40). • Remove torn paper from the paper path, remove foreign objects from the drive area, and check for motor/motor bracket deformation.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC700-07	D	ADF scanning motor (M75) error (1-Pass ADF)
		Error signal detected while the ADF scanning motor (M75) is driven. Details: When encoder channel A (B) error or overload error is detected among the ADF scanning motor error notification registers. The first two occurrences, however, are displayed as jams.
		• ADF scanning motor (M75) defective • Connecter disconnected • Harness broken • Overload
		• Check the harness connection. • Replace the encoder harness. • Replace the ADF scanning motor (M75). • Replace the ADF controller board (PCB40). • Remove torn paper from the paper path, remove foreign objects from the drive area, and check for motor/motor bracket deformation.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC700-09	D	ADF Exit motor error (1-Pass ADF)
		Error signal detected while the ADF exit motor is driven. Details: When encoder channel A (B) error or overload error is detected among the ADF exit motor error notification registers. The first two occurrences, however, are displayed as jams.
		• ADF exit motor defective • Connecter disconnected • Harness broken • Overload
		• Check the harness connection. • Replace the encoder harness. • Replace the ADF exit motor. • Replace the ADF controller board (PCB40). • Remove torn paper from the paper path, remove foreign objects from the drive area, and check for motor/motor bracket deformation.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC702-04	D	Protection device break error 4 (1-Pass ADF)
		The protection device of PSU2 broke the circuit with the 24V power supply on. Details: A motor defect or a short circuit occurred in either the ADF pick-up roller lift motor (M71), transmission stamp, or ADF bottom plate lift motor (M70). Then the protection device of PSU2 broke the circuit.
		• Motors controlled by PSU2 are defective. • Harnesses connected to PSU2 are broken.
		• Replace the broken parts. • Replace the board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC702-05	D	Protection device break error 5 (1-Pass ADF)
		The protection device of PSU1 broke the circuit with the 24V power supply on. Details: A motor defect or a short circuit occurred in either the ADF feed motor (M72), Pull-out motor (M73), ADF transport motor (M76), ADF scanning motor (M75), or ADF exit motor. Then the protection device of PSU1 broke the circuit.
		• Motors controlled by PSU1 (PCB34) are defective.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Harnesses connected to PSU1 (PCB34) are broken.
		• Replace the broken parts. • Replace the board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC703-01	B	Double Feed Detection Error (1-Pass ADF)
		A error signal was detected during double feed detection.
		• Power of downstream unit is not turned on. • Connector between the ADF controller board and the URB is not connected properly. • Harness between the ADF controller board and the URB is damaged. • Double feed detect sensor (emitter) is defective. • URB is defective.
		1. Connector between ADF controller board and URB not connected properly Check all the connectors are properly connected. (connectors not disconnected or half-inserted) Reconnect the connectors. 2. Harness between ADF controller board and URB damaged Check if the harness is damaged or exposed. Replace the harness if it is not in good condition. 3. URB defective Check if there are any traces of short circuit on the URB. If so, replace it.

SC719: Buffer Pass Unit

To recover from the error, check if the SC occurs (feed paper, open/close the doors, Input or Output check). If the SC occurs again, do the follow steps. After each step, turn the power OFF then ON to check if the SC occurs again.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC719-07	D	Buffer Pass Unit: Downstream device communication error
		• Communication with the downstream device has established, but the device is not responding to the command sent out, even after being sent three times. • The port level of the downstream device does not become H level (break cancel) within specified time.
		• Interface cable (downstream device side) connector disconnected or broken • Board defective (Buffer pass unit or downstream device)
		• Replace the interface cable between buffer pass unit and downstream device or reconnect the connectors.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Replace the board (of the buffer pass unit or downstream device).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC719-08	D	Buffer pass unit: CTB_+24V: Power supply error
		Detected +24V power OFF of the buffer pass unit PCB: CTB.
		• Buffer pass unit PSU defect • Connecter disconnected • Harness ground fault/broken • 24V load (motor/fan) layer short • PCB defective • Fuse tripped (PSU, PCB)
		• Replace the buffer pass unit PSU. • Reconnect the connector. • Replace the harness. • Replace the motor/fan. • Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC719-09	D	Buffer pass unit: CTB_+24VINT: Power supply error
		Detected +24VINT power OFF of the buffer pass unit PCB: CTB.
		• Buffer pass unit PSU defect • Connecter disconnected • Harness ground fault/broken • 24V load (motor/fan) layer short • PCB defective • Fuse tripped (PSU, PCB) • PCB relay defect
		• Replace the buffer pass unit PSU. • Reconnect the connector. • Replace the harness. • Replace the motor/fan. • Replace the PCB.

SC720: Finisher/ Booklet Finisher

Note

- Pro C5300/C5310S: Finisher SR5090/ Booklet finisher SR5100
- IM C6500/C8000: Finisher SR4150/ Booklet finisher SR4160

To recover from the error, check if the SC occurs (feed paper, open/close the doors, Input or Output check). If the SC occurs again, do the follow steps. After each step, turn the power OFF then ON to check if the SC occurs again.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-01	D	Downstream device communication error
		Communication with the downstream device has established, but the device is not responding to the command sent out, even after being sent three times.
		For details about cause and solution, refer to "Troubleshooting for SC720-XX".

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-03	D	Protection device break error 1
		Protection device break error (fuse tripped)
		For details about cause and solution, refer to "Troubleshooting for SC720-XX".

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-04	D	Protection device break error 1 (Finisher with mailbox)
		Protection device break error (fuse tripped)
		For details about cause and solution, refer to "Troubleshooting for SC720-XX".

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-10	D	Entrance transport motor error
SC720-11	D	Horizontal transport motor error
SC720-13	B	Transport motor error
SC720-15	D	Pre-stack Transport motor error
SC720-17	B	Exit motor error
		Motor driver detected an error (DC motor control error). (The first time: jam display, the second time: SC)
		For details about cause and solution, refer to "Troubleshooting for SC720-XX".

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-20	B	Lower junction gate motor error
SC720-24	B	Paper exit guide plate motor error
		• Motor driver detected an error (short-circuit or overheat). (SC from the first time) • When moving to the home position, home position was not detected within

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		specified number of pulses (p0 pulses). (The first time: jam display, the second time: SC) • When moving from the home position, home position was still detected after specified number of pulses (p1 pulses). (The first time: jam display, the second time: SC)
		For details about cause and solution, refer to "Troubleshooting for SC720-XX".

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-25	D	Punch motor error
SC720-27	D	Punch movement motor error
SC720-28	D	Punch registration motor error
		• When moving to the home position, home position was not detected within specified number of pulses (p0 pulse). (The first time: jam display, the second time: SC) • When moving from the home position, home position was still detected after specified number of pulses (p1 pulses). (The first time: jam display, the second time: SC)
		For details about cause and solution, refer to "Troubleshooting for SC720-XX".

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-30	B	Jogger motor error
SC720-33	B	Positioning roller motor error
		• When moving to the home position, home position was not detected within specified number of pulses (p0 pulse). (The first time: jam display, the second time: SC) • When moving from the home position, home position was still detected after specified number of pulses (p1 pulses). (The first time: jam display, the second time: SC)
		For details about cause and solution, refer to "Troubleshooting for SC720-XX".

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-	B	Positioning roller motor error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
34		• Motor driver detected an error (DC motor control error). (The first time: jam display, the second time: SC)
		For details about cause and solution, refer to "Troubleshooting for SC720-XX".

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-35	B	Paper stacking holder motor error
		• Motor driver detected an error (DC motor control error). (The first time: jam display, the second time: SC) • When moving to the home position, home position was not detected within specified time (t0 sec). (The first time: jam display, the second time: SC) • When moving from the home position, home position was still detected after specified time (t1 sec). (The first time: jam display, the second time: SC)
		For details about cause and solution, refer to "Troubleshooting for SC720-XX".

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-41	B	Feed-out belt motor error
		• Motor driver detected an error (DC motor control error). (The first time: jam display, the second time: SC) • When moving to the home position, home position was not detected within specified number of pulses (p0 pulses). (The first time: jam display, the second time: SC) • When moving from the home position, home position was still detected after specified number of pulses (p1 pulses). (The first time: jam display, the second time: SC)
		For details about cause and solution, refer to "Troubleshooting for SC720-XX".

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-42	B	Corner stapler movement motor error
		• When moving to the home position, home position was not detected within specified number of pulses (p0 pulses). (The first time: jam display, the second time: SC) • When moving from the home position, home position was still detected after specified number of pulses (p1 pulses). (The first time: jam display, the second time: SC)
		For details about cause and solution, refer to "Troubleshooting for SC720-XX".

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-44	B	Corner stapler motor error
		• When moving to the home position, home position was not detected within specified time (t0 sec). (The first time: jam display, the second time: SC) • When moving from the home position, home position was still detected after specified time (t1 sec). (The first time: jam display, the second time: SC)
		For details about cause and solution, refer to "Troubleshooting for SC720-XX".

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-50	B	Booklet jogger motor error
SC720-51	B	Booklet jogging pawl movement motor error
SC720-52	B	Press fold motor error
SC720-53	B	Booklet bottom fence motor error
		• Motor driver detected an error (short-circuit or overheat). (SC from the first time) • When moving to the home position, home position was not detected within specified number of pulses (p0 pulses). (The first time: jam display, the second time: SC) • When moving from the home position, home position was still detected after specified number of pulses (p1 pulses). (The first time: jam display, the second time: SC)
		For details about cause and solution, refer to "Troubleshooting for SC720-XX".

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-54	B	Fold transport motor error
		• Motor driver detected an error (short-circuit or overheat). (The first time: jam display, the second time: SC)
		For details about cause and solution, refer to "Troubleshooting for SC720-XX".

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-60	B	Booklet stapler motor error
		• When moving to the home position, home position was not detected within specified time (t0 sec). (The first time: jam display, the second time: SC) • When moving from the home position, home position was still detected after

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		specified time (t1 sec). (The first time: jam display, the second time: SC)
		For details about cause and solution, refer to "Troubleshooting for SC720-XX".

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-70	B	Tray lift motor error
		• Motor controller detected an error (overload). (The first time: jam display, the second time: SC) • When descending, paper sensor is still detecting paper after the specified time (t0 sec). (The first time: jam display, the second time: SC) • When ascending, paper sensor did not detect paper within specified time (t1 sec). (The first time: jam display, the second time: SC)
		For details about cause and solution, refer to "Troubleshooting for SC720-XX".

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-71	B	Shift motor error
SC720-72	B	Front fence motor error
SC720-73	B	Rear fence motor error
SC720-74	B	Fence lift motor error
		• Motor driver detected an error (short-circuit or overheat). (SC from the first time) • When moving to the home position, home position was not detected within specified number of pulses (p0 pulses). (The first time: jam display, the second time: SC) • When moving from the home position, home position was still detected after specified number of pulses (p1 pulses). (The first time: jam display, the second time: SC)
		For details about cause and solution, refer to "Troubleshooting for SC720-XX".

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-75	B	Return roller motor error
		• Motor driver detected an error (DC motor control error). (The first time: jam display, the second time: SC) • When moving to the home position, home position was not detected within

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		specified time (t0 sec). (The first time: jam display, the second time: SC) • When moving from the home position, home position was still detected after specified time (t1 sec). (The first time: jam display, the second time: SC)
		For details about cause and solution, refer to "Troubleshooting for SC720-XX".

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-80	B	Protection device break error 3
		Protection device break error (fuse tripped)
		For details about cause and solution, refer to "Troubleshooting for SC720-XX".

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-81	B	Dynamic roller transport motor error
		• Motor driver detected an error (DC motor control error). (The first time: jam display, the second time: SC)
		For details about cause and solution, refer to "Troubleshooting for SC720-XX".

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-82	B	Leading edge guide motor error
		• When moving to the home position, home position was not detected within specified number of pulses (p0 pulses). (The first time: jam display, the second time: SC) • When moving from the home position, home position was still detected after specified number of pulses (p1 pulses). (The first time: jam display, the second time: SC)
		For details about cause and solution, refer to "Troubleshooting for SC720-XX".

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-83	B	Paper guide motor error
		• When moving to the home position, home position was not detected within specified number of pulses (p0 pulses). (The first time: jam display, the second time: SC) • When moving from the home position, home position was still detected after specified number of pulses (p1 pulses). (The first time: jam display, the second time: SC)
		For details about cause and solution, refer to "Troubleshooting for SC720-XX".

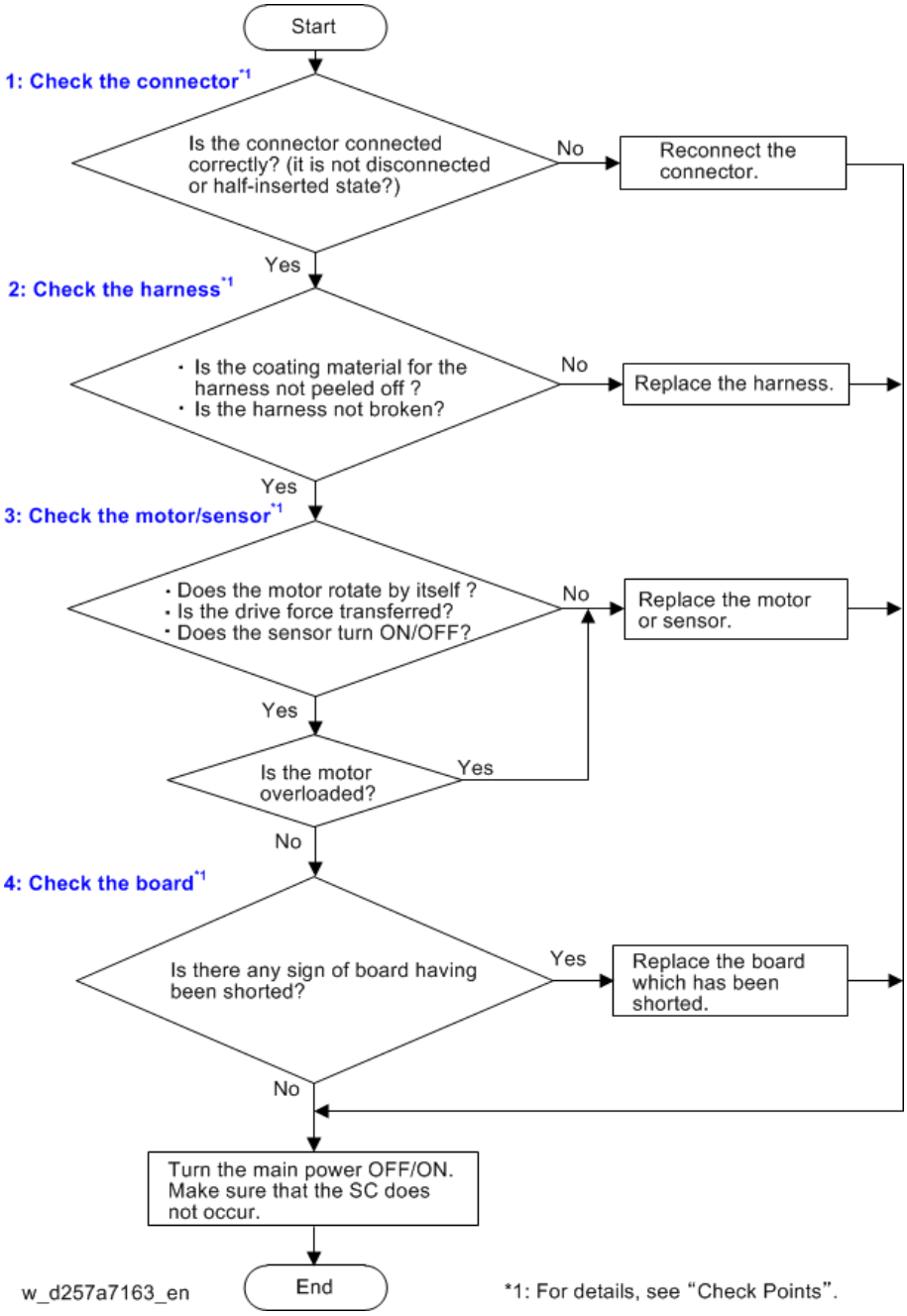
SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC720-84	D	Protection device break error 2 (Finisher without Mailbox)
		• Protection device break error (fuse tripped)
		For details about cause and solution, refer to "Troubleshooting for SC720-XX".

Troubleshooting for SC720-XX

Cause

Interface cable (downstream device side) connector disconnected or broken, PCB of downstream device defective, Controller PCB defective, Connecter disconnected, Short-circuit, Overload, Motor defective, Solenoid defective, Home position sensor defective

Solution



Check Points

1. Check the connector

SC No.	Check Points
SC720-01	Connector which is connected to CN100 to CN101 of the main board
SC720-03	No need to check the connector
SC720-	No need to check the connector

SC No.	Check Points
04	
SC720-10	Connector between CN133 of the main board and the entrance transport motor (DCM1)
SC720-11	Connector between CN133 of the main board and the horizontal transport motor (DCM2)
SC720-13	Connector between CN118 of the main board and the transport motor (DCM3)
SC720-15	Connector between CN131 of the main board and the pre-stack transport motor (DCM5)
SC720-17	Connector between CN118 of the main board and the exit motor (DCM4)
SC720-20	Connector between CN128 of the main board and the lower junction gate motor (STM2)
SC720-24	• Connector between CN128 of the main board and the paper exit guide plate motor (STM4) • Connector between CN116 of the main board and the exit guide plate HP sensor (S34)
SC720-25	• Connector between CN130/CN132 of the main board and the punch unit controller board (PCB2) • Connector between CN605 of the Punch unit controller board (PCB2) and the punch unit movement motor (STM13) • Connector between CN604 of the Punch unit controller board (PCB2) and the punch motor rotation sensor (S39) • Connector between CN604 of the Punch unit controller board (PCB2) and the punch HP sensor (S38)
SC720-27	• Connector between CN130/CN132 of the Punch unit controller board (PCB2) and the punch unit controller board (PCB2) • Connector between CN606 of the Punch unit controller board (PCB2) and the punch unit movement motor (STM13) • Connector between CN606 of the Punch unit controller board (PCB2) and the punch unit HP sensor (S40)
SC720-28	• Connector between CN130/CN132 of the main board and the Punch unit controller board (PCB2) • Connector between CN607 of the Punch unit controller board (PCB2) and the punch registration motor (STM14) • Connector between CN607 of the Punch unit controller board (PCB2) and the punch registration HP sensor (S41)
SC720-	• Connector between CN127 of the main board and the jogger motor (STM1)

SC No.	Check Points
30	• Connector between CN117 of the main board and the jogger fence HP sensor (S25)
SC720-33	• Connector between CN128 of the main board and the positioning roller motor (DCM14) • Connector between CN116 of the main board and the positioning roller HP sensor (S28)
SC720-34	Connector between CN138 of the main board and the corner stapler movement motor (STM7)
SC720-35	• Connector between CN122 of the main board and the paper stacking holder motor (DCM8) • Connector between CN115 of the main board and the paper stacking holder HP sensor (S24)
SC720-41	• Connector between CN121 of the main board and the feed-out belt motor (DCM7) • Connector between CN117 of the main board and the feed-out belt HP sensor (S12)
SC720-42	• Connector between CN121 of the main board and the corner stapler movement motor (STM7) • Connector between CN117 of the main board and the corner stapler move HP sensor
SC720-44	Connector between CN125 of the main board and the corner stapler motor
SC720-50	• Connector between CN113 of the main board and the booklet jogger motor (STM11) • Connector between CN109 of the main board and the booklet jogging HP sensor (S10)
SC720-51	• Connector between CN113 of the main board and the booklet jogging pawl movement motor (STM8) • Connector between CN108 of the main board and the booklet jogging pawl HP sensor (S3)
SC720-52	• Connector between CN112 of the main board and the press fold motor (STM10) • Connector between CN118 of the main board and the fold plate HP sensor (S1) • Connector between CN109 of the main board and the fold plate cam HP sensor (S9)
SC720-53	• Connector between CN113 of the main board and the booklet bottom fence motor (STM12) • Connector between CN109 of the main board and the booklet lower transport path paper sensor (S15)
SC720-54	Connector between CN112 of the main board and the fold transport motor (STM9)
SC720-60	Connector between CN111 of the main board and the booklet stapler motor

SC No.	Check Points
SC720-70	• Connector between CN123 of the main board and the tray lift motor (DCM9) • Connector between CN115 of the main board and the shift tray paper height sensor (S35)
SC720-71	• Connector between CN127 of the main board and the shift motor (STM3) • Connector between CN119 of the main board and the shift roller HP sensor (S19)
SC720-72	• Connector between CN102/CN137 of the main board and the output jogger unit • Connector between CN11 of the output jogger unit and the front fence motor (STM15) • Connector between CN10 of the output jogger unit and the front fence sensor (S47)
SC720-73	• Connector between CN102/CN137 of the main board and the output jogger unit • Connector between CN4 of the output jogger unit and the rear fence motor (STM16) • Connector between CN10 of the output jogger unit and the rear fence sensor (S48)
SC720-74	• Connector between CN102/CN137 of the main board and the output jogger unit • Connector between CN7 of the output jogger unit and the fence lift motor (STM17) • Connector between CN5 of the output jogger unit and the lift sensor 2 (S46)
SC720-75	• Connector between CN122 of the main board and the stacking sponge roller lift motor (DCM6) • Connector between CN115 of the main board and the stacking sponge roller HP sensor (S32)
SC720-80	Connector between CN102/CN137 of the main board and the output jogger unit
SC720-81	Connector between CN110 of the main board and the dynamic roller transport motor
SC720-82	• Connector between CN127 of the main board and the leading edge guide motor (STM6) • Connector between CN115 of the main board and the leading edge guide HP sensor (S33)
SC720-83	• Connector between CN182 of the main board and the paper guide motor (STM18) • Connector between CN139 of the main board and the paper guide HP sensor (S50)
SC720-84	No need to check the connector

2. Check the harness

SC No.	Check Points
SC720-01	All the harnesses
SC720-03	All the harnesses

SC No.	Check Points
SC720-04	The harness which is connected to CN105 of the main board.
SC720-10	Harness between CN133 of the main board and the entrance transport motor (DCM1)
SC720-11	Harness between CN133 of the main board and the horizontal transport motor (DCM2)
SC720-13	Harness between CN118 of the main board and the transport motor
SC720-15	Harness between CN131 of the main board and the pre-stack transport motor (DCM5)
SC720-17	Harness between CN131 of the main board and the pre-stack transport motor (DCM5)
SC720-20	Harness between CN128 of the main board and the lower junction gate motor (STM2)
SC720-24	• Harness between CN128 of the main board and the paper exit guide plate motor (STM4) • Harness between CN116 of the main board and the exit guide plate HP sensor (S34)
SC720-25	• Harness between CN130/CN132 of the main board and the punch unit controller board (PCB2) • Harness between CN605 of the Punch unit controller board (PCB2) and the punch unit movement motor (STM13) • Harness between CN604 of the Punch unit controller board (PCB2) and the punch motor rotation sensor (S39) • Harness between CN604 of the Punch unit controller board (PCB2) and the punch HP sensor (S38)
SC720-27	• Harness between CN130/CN132 of the Punch unit controller board (PCB2) and the punch unit controller board (PCB2) • Harness between CN606 of the Punch unit controller board (PCB2) and the punch unit movement motor (STM13) • Harness between CN606 of the Punch unit controller board (PCB2) and the punch unit HP sensor (S40)
SC720-28	• Harness between CN130/CN132 of the main board and the Punch unit controller board (PCB2) • Harness between CN607 of the Punch unit controller board (PCB2) and the punch registration motor (STM14) • Harness between CN607 of the Punch unit controller board (PCB2) and the punch registration HP sensor (S41)
SC720-	• Harness between CN127 of the main board and the jogger motor (STM1)

SC No.	Check Points
30	• Harness between CN117 of the main board and the jogger fence HP sensor (S25)
SC720-33	• Harness between CN128 of the main board and the positioning roller motor (DCM14) • Harness between CN116 of the main board and the positioning roller HP sensor (S28)
SC720-34	Harness between CN138 of the main board and the corner stapler movement motor (STM7)
SC720-35	• Harness between CN122 of the main board and the paper stacking holder motor (DCM8) • Harness between CN115 of the main board and the paper stacking holder HP sensor (S24)
SC720-41	• Harness between CN121 of the main board and the feed-out belt motor (DCM7) • Harness between CN117 of the main board and the feed-out belt HP sensor (S12)
SC720-42	• Harness between CN121 of the main board and the corner stapler movement motor (STM7) • Harness between CN117 of the main board and the corner stapler move HP sensor
SC720-44	Harness between CN125 of the main board and the corner stapler motor
SC720-50	• Harness between CN113 of the main board and the booklet jogger motor (STM11) • Harness between CN109 of the main board and the booklet jogging HP sensor (S10)
SC720-51	• Harness between CN113 of the main board and the booklet jogging pawl movement motor (STM8) • Harness between CN108 of the main board and the booklet jogging pawl HP sensor (S3)
SC720-52	• Harness between CN112 of the main board and the press fold motor (STM10) • Harness between CN118 of the main board and the fold plate HP sensor (S1) • Harness between CN109 of the main board and the fold plate cam HP sensor (S9)
SC720-53	• Harness between CN127 of the main board and the jogger motor (STM1) • Harness between CN117 of the main board and the jogger fence HP sensor (S25)
SC720-54	Harness between CN112 of the main board and the fold transport motor (STM9)
SC720-60	Harness between CN111 of the main board and the booklet stapler motor
SC720-70	• Harness between CN123 of the main board and the tray lift motor (DCM9) • Harness between CN115 of the main board and the shift tray paper height sensor (S35)
SC720-71	• Harness between CN127 of the main board and the shift motor (STM3) • Harness between CN119 of the main board and the shift roller HP sensor (S19)

SC No.	Check Points
SC720-72	• Harness between CN102/CN137 of the main board and the output jogger unit • Harness between CN11 of the output jogger unit and the front fence motor (STM15) • Harness between CN10 of the output jogger unit and the front fence sensor (S47)
SC720-73	• Harness between CN102/CN137 of the main board and the output jogger unit • Harness between CN4 of the output jogger unit and the rear fence motor (STM16) • Harness between CN10 of the output jogger unit and the rear fence sensor (S48)
SC720-74	• Harness between CN102/CN137 of the main board and the output jogger unit • Harness between CN7 of the output jogger unit and the fence lift motor (STM17) • Harness between CN5 of the output jogger unit and the lift sensor 2 (S46)
SC720-75	• Harness between CN122 of the main board and the stacking sponge roller lift motor (DCM6) • Harness between CN115 of the main board and the stacking sponge roller HP sensor (S32)
SC720-80	• Harness between CN102/CN137 of the main board and the output jogger unit • All the harnesses in the output jogger unit
SC720-81	Harness between CN110 of the main board and the shift roller drive motor (DCM11)
SC720-82	• Harness between CN127 of the main board and the leading edge guide motor (STM6) • Harness between CN115 of the main board and the leading edge guide HP sensor (S33)
SC720-83	• Harness between CN182 of the main board and the paper guide motor (STM18) • Harness between CN139 of the main board and the paper guide HP sensor (S50)
SC720-84	Harness which is connected to CN105 of the main board

3. Check the motor/sensor

SC No.	Check Points
SC720-01	No need to check the motors or sensors.
SC720-03	No need to check the motors or sensors.
SC720-04	No need to check the motors or sensors.
SC720-10	Entrance transport motor (DCM1)
SC720-	Horizontal transport motor (DCM2)

SC No.	Check Points
11	
SC720-13	Transport motor (DCM3)
SC720-15	Pre-stack transport motor (DCM5)
SC720-17	Pre-stack transport motor (DCM5)
SC720-20	Lower junction gate motor (STM2)
SC720-24	Paper exit guide plate motor (STM4), Exit guide plate HP sensor (S34)
SC720-25	Punch unit controller board (PCB2), Punch unit movement motor (STM13), Punch motor rotation sensor (S39), Punch HP sensor (S38)
SC720-27	Punch unit controller board (PCB2), Punch unit movement motor (STM13), Punch unit HP sensor (S40)
SC720-28	Punch unit controller board (PCB2), Punch registration motor (STM14), Punch registration HP sensor (S41)
SC720-30	Jogger motor (STM1), Jogger fence HP sensor (S25)
SC720-33	Positioning roller motor (DCM14), Positioning roller HP sensor (S28)
SC720-34	Corner stapler movement motor (STM7)
SC720-35	Paper stacking holder motor (DCM8), Paper stacking holder HP sensor (S24)
SC720-41	Feed-out belt motor (DCM7), Feed-out belt HP sensor (S12)
SC720-42	Corner stapler movement motor (STM7), Corner stapler move HP sensor
SC720-44	Corner stapler motor
SC720-50	Booklet jogger motor (STM11), Booklet jogging HP sensor (S10)
SC720-51	Booklet jogging pawl movement motor (STM8), Booklet jogging pawl HP sensor (S3)
SC720-52	Press fold motor (STM10), Fold plate HP sensor (S1), Fold plate cam HP sensor (S9)

SC No.	Check Points
SC720-53	Jogger motor (STM1), Jogger fence HP sensor (S25)
SC720-54	Fold transport motor (STM9)
SC720-60	Booklet stapler motor
SC720-70	Tray lift motor (DCM9), Shift tray paper height sensor (S35)
SC720-71	Shift motor (STM3), Shift roller HP sensor (S19)
SC720-72	Front fence motor (STM15) and Front fence sensor (S47) of the output jogger unit
SC720-73	Rear fence motor (STM16) and Rear fence sensor (S48) of the output jogger unit
SC720-74	Fence lift motor (STM17) and lift sensor 2 (S46) of the output jogger unit
SC720-75	Stacking sponge roller lift motor (DCM6), Stacking sponge roller HP sensor (S32)
SC720-80	No need to check the motors or sensors.
SC720-81	Harness between CN110 of the main board and the shift roller drive motor (DCM11)
SC720-82	Leading edge guide motor (STM6), Leading edge guide HP sensor (S33)
SC720-83	Paper guide motor, Paper guide HP sensor (S50)
SC720-84	No need to check the motors or sensors.

4. Check the board

SC No.	Check Points	SC No.	Check Points
SC720-01	All the boards	SC720-44	Main board
SC720-03	All the boards	SC720-50	Main board
SC720-04	Main board	SC720-51	Main board
SC720-	Main board	SC720-	Main board

SC No.	Check Points	SC No.	Check Points
10		52	
SC720-11	Main board	SC720-53	Main board
SC720-13	Main board	SC720-54	Main board
SC720-15	Main board	SC720-60	Main board
SC720-17	Main board	SC720-70	Main board
SC720-20	Main board	SC720-71	Main board
SC720-24	Main board	SC720-72	Main board, Main board of the output jogger unit
SC720-25	Main board, Punch unit controller board (PCB2)	SC720-73	Main board, Main board of the output jogger unit
SC720-27	Main board, Punch unit controller board (PCB2)	SC720-74	Main board, Main board of the output jogger unit
SC720-28	Main board, Punch unit controller board (PCB2)	SC720-75	Main board
SC720-30	Main board	SC720-80	Main board of the output jogger unit
SC720-33	Main board	SC720-81	Main board
SC720-34	Main board	SC720-82	Main board
SC720-35	Main board	SC720-83	Main board
SC720-41	Main board	SC720-84	Main board
SC720-42	Main board		

SC721: Finisher/ Booklet Finisher

Note

- Only Pro C5300S/C5310S: Finisher SR5110/ Booklet finisher SR5120

SC721-01

Error Name

Downstream Device Communication Error

Pattern

D

Error Condition

- After successful communication between the finisher and the downstream device, the downstream device failed to respond three times consecutively.
- After successful communication between the finisher and the upstream device, the finisher failed to communicate with the downstream device within the prescribed period of time.

Major Cause

- The downstream device is not turned on.
- The power cord of the downstream device is disconnected.
- The interface cable of the downstream device is disconnected or defective
- The finisher controller board defective
- A PCB of the downstream device is defective.

* Part causing the error: Interface cable of the downstream device

Solution

1. Disconnected or incorrectly connected power cord of the downstream device
   Check if it is connected correctly.
   Connect the power cord if it is not connected correctly.
2. Check if the power of the downstream device is turned to on.
3. Check for disconnected/incorrectly connected interface cable between the finisher and the downstream device.
   Check if it is connected correctly.
   Reconnect it if it is not connected correctly.
4. Disconnected or incorrectly connected connector of the finisher
   Check if there is a disconnected or incorrectly connected connector between the downstream device interface connector and the main board of the finisher.
   Reconnect the connector if it is not connected correctly.
5. Damaged harness in the finisher
   Check if the harness between the downstream device interface connector and the main board of the finisher is damaged or exposed.
   Replace the harness if it is damaged.
6. Replace the main board of the finisher.
   * Before replacing the board, check if the SC occurs in the same way.

7. Disconnected or incorrectly connected connector of the downstream device
   Check if the interface cable of the downstream device is correctly connected (no disconnected or incorrectly connected connector) to the main board of the downstream device.
   Reconnect the connector if it is not connected correctly.
8. Damaged harness in the downstream device
   Check if the downstream device harness is damaged or exposed.
   Replace the harness if it is damaged.
9. Replace the main board of the downstream device
   * Before replacing the board, check if the SC occurs in the same way.

SC721-03

Error Name

Overcurrent protection device error 1

Pattern

D

Error Condition

An error is detected at voltage level of 24V_INT_1 (this SC is issued when the error was detected for the first time).

Major Cause

- Power of the downstream device is not turned on.
- Motor is defective.
- Harness is damaged.
- Board is damaged.

* Protection Device: <FU5>

* Related Components:

- Entrance motor <DCSM01>
- Registration motor <DCSM02>
- JG transport motor <DCSM03>,
- Horizontal transport motor <DCSM04>
- Pre-stack motor <DCSM05>
- Punch movement motor <STM30>
- Punch motor <DCM05>
- Stapler entrance motor <DCSM06>
- Vibrating plate vertical movement motor <DCSM07>
- Vibrating plate horizontal movement motor <DCSM08>
- Stapler rotation motor <STM04>, Stapler movement motor <DCSM09>
- Staple motor <DCM01>

- Base fence lift motor <DCSM10>
- Base fence movement motor <DCSM11>
- Jogger motor (front) <STM05>, Jogger motor (rear) <STM06>
- Positioning roller rotation motor <STM07>
- Positioning roller lift motor <STM08>
- Feed-out belt motor <DCSM12>
- Leading edge stopper motor <DCSM13>
- Stack transport unit motor <STM09>
- Turn guide motor <DCSM14>
- Stack transport motor <DCSM15>
- Booklet pressure release motor <STM10>
- Flat fold unit motor <DCSM16>
- Flat fold unit pressure release motor <STM11>
- Booklet stapler top fence motor <STM12>
- Booklet stapler side fence motor <STM13>
- Booklet stapler motor <DCM02>
- Booklet stapler bottom fence motor <STM14>
- Booklet stack transport motor <DCSM17>
- Fold roller motor <STM15>
- Fold plate motor <STM16>
- PSU fan motor <FAN06>

Solution

1. Identifying the defective area
   Disconnect each connector of the protection device from the main board of the finisher one by one, turning ON the power each time.
2. Identifying the defective component
   Disconnect the connector of the component. Connect the connector of the main board of the finisher, and then turn ON the power of the finisher (keep the harness on the main board side connected).
3. Controller board error
   Replace the controller board of the finisher.
   * Before replacing the board, check that the SC occurs in the same way.

SC721-04

Error Name

Protective device error 2

Pattern

D

Error Condition

An error is detected at voltage level of 24V_INT_1 (this SC is issued when the error was detected for the first time).

Major Cause

- The downstream device is not turned on.
- Motor defective
- Broken harness
- Broken controller board
  * Protective Device: <FU2>
  * Related Component:
  Shift tray 1 transport motor <DCSM21>

Solution

1. Identifying the defective area
   Disconnect each connector of the protection device from the main board of the finisher one by one, turning ON the power each time.
2. Identifying the defective component
   Disconnect the connector of the component. Connect the connector of the main board of the finisher, and then turn ON the power of the finisher (keep the harness on the main board side connected).
3. Controller board error
   Replace the controller board of the finisher.
   * Before replacing the board, check that the SC occurs in the same way.

SC721-05

Error Name

PSU fan error

Pattern

D

Error Condition

A lock signal is detected from the fan motor (this SC is issued when the error was detected for the first time).

Major Cause

- Power of the downstream device is not turned on.
- Motor is defective
- Connector is not connected properly.

- Harness is damaged
- Board is damaged.

  *Motor: PSU fan motor <FAN06>

Solution

1. Connector not connected properly

   Check if the connectors between the main board of the finisher and the fan are connected correctly (whether they are disconnected or incorrectly connected).

   Reconnect it if it is not connected correctly.
2. Damaged harness

   Check if the harness between the main board of the finisher and the fan is damaged or exposed.

   Replace the harness if it is damaged.
3. Fan motor defective

   Check if the corresponding fan is damaged or there are missing parts.

   Replace the fan.
4. Board defective

   Replace the main board of the finisher

   * Before replacing the board, check if the SC occurs in the same way.

SC721-06

Error Name

Overcurrent protection device error 3

Pattern

D

Error Condition

When the detected voltage level of 24V_POW is abnormal. The SC is issued as soon as it is detected once.

Error Condition

An error is detected at voltage level of 24V_INT_1 (this SC is issued when the error was detected for the first time).

Major Cause

- The downstream device is not turned on.
- Motor defective
- Broken harness
- Broken controller board

* Protective Device: <FU3>

* Related Components:

- Booklet stack tray motor <DCSM18>
- Shift tray 2 lift motor <DCM03>
- Shift tray 2 shift motor <STM17>
- Shift tray 2 drag roller movement motor <STM18>
- Shift tray 2 drag roller motor <STM19>
- Shift tray 2 press lever motor <STM20>
- Shift tray 2 jogger motor <STM26>
- Shift tray 2 jogger fence retract motor <STM27>
- Shift tray 2 paper exit fan motor (front) <FAN01>
- Shift tray 2 paper exit fan motor (rear) <FAN02>
- Exit guide motor <STM21>
- Shift tray 1 exit motor <DCSM20>
- Shift tray 1 lift motor <DCM04>
- Shift tray 1 shift motor <STM22>
- Shift tray 1 drag roller movement motor <STM23>
- Shift tray 1 drag roller motor <STM24>
- Shift tray 1 press lever motor <STM25>
- Shift tray 1 jogger motor <STM28>
- Shift tray 1 jogger fence retract motor <STM29>
- Shift tray 1 paper exit fan motor (front) <FAN03>
- Shift tray 1 paper exit fan motor (rear) <FAN04>
- Shift tray 1 fan motor <FAN05>

Solution

1. Identifying the defective area
   Disconnect each connector of the protection device from the main board of the finisher one by one, turning ON the power each time.
2. Identifying the defective component
   Disconnect the connector of the component. Connect the connector of the main board of the finisher, and then turn ON the power of the finisher (keep the harness on the main board side connected).
3. Controller board error
   Replace the controller board of the finisher.
   * Before replacing the board, check that the SC occurs in the same way.

SC721-10

Error Name

Transport motor 1 error (Entrance/upper transport)

1520

Pattern

D

Error Condition

DCM drive software detects a motor drive error.
(The first four times are reported as jams. An SC is issued when it is repeated five times.)

Major Cause

- Power of the downstream device is not turned on.
- Motor is defective
- Connector is not connected properly.
- Harness is damaged
- Encoder is defective.
- Board is damaged.

*Motor: Entrance motor <DCSM01>

Solution

1. Connector not connected properly
   Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
   Reconnect it if it is not connected correctly.
2. Damaged harness
   Check if the harness between the main board of the finisher and the motor is damaged or exposed.
   Replace the harness if it is damaged.
3. Motor defective
   Check if the motor is damaged or there are missing parts, whether the motor rotates on its own, and whether it is overloaded.
   Replace the motor.
4. Board defective
   Replace the main board of the finisher
   * Before replacing the board, check if the SC occurs in the same way.

SC721-11 to 18

Error Name

- 721-11: Transport motor 2 error (Junction gate transport)
- 721-12: Transport motor 3 error (Horizontal transport)
- 721-13: Transport motor 4 error (Registration)
- 721-14: Transport motor 5 error (Shift tray 1 transport)
- 721-15: Transport motor 6 error (Pre-stack)
- 721-16: Exit motor 1 error (Shift tray 1 exit)

- 721-17: Exit motor 2 error (Shift tray 2 exit)
- 721-18: Exit motor 3 error (Staple tray 1 exit)

Pattern

- 721-11: D
- 721-12: D
- 721-13: D
- 721-14: B
- 721-15: B
- 721-16: B
- 721-17: B
- 721-18: B

Error Condition

DCM drive software detects a motor drive error. (The first four times are reported as jams. An SC is issued when it is repeated five times.)

Major Cause

- Power of the downstream device is not turned on.
- Motor is defective
- Connector is not connected properly.
- Harness is damaged
- Motor is overloaded.
- Encoder is defective.
- Board is damaged.

*Corresponding motors:

- 721-11: JG transport motor <DCSM03>
- 721-12: Horizontal transport motor <DCSM04>
- 721-13: Registration motor <DCSM02>
- 721-14: Shift tray 1 transport motor <DCSM21>
- 721-15: Pre-stack motor <DCSM05>
- 721-16: Shift tray 1 exit motor <DCSM20>
- 721-17: Shift tray 2 exit motor<DCSM19>
- 721-18: Stapler entrance motor <DCSM06>

Solution

1. Connector not connected properly
   Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
   Reconnect it if it is not connected correctly.

2. Damaged harness
   Check if the harness between the main board of the finisher and the motor is damaged or exposed.
   Replace the harness if it is damaged.
3. Motor defective
   Check if the motor is damaged or there are missing parts, whether the motor rotates on its own, and whether it is overloaded.
   Replace the motor.
4. Board defective
   Replace the main board of the finisher
   * Before replacing the board, check if the SC occurs in the same way.

SC721-20 to 33

Error Name

- 721-20: Junction gate motor 1 error (shift tray 1 junction gate)
- 721-21: Junction gate motor 2 error (staple tray junction gate)
- 721-23: Pre-stack release motor error (pressure release/ junction gate release)
- 721-24: Exit guide motor error
- 721-25: Punch motor error
- 721-27: Punch movement motor error
- 721-31: Jogger motor 2 error (front)
- 721-32: Jogger motor 2 error (rear)
- 721-33: Positioning roller motor error

Pattern

- 721-20: D
- 721-21: D
- 721-23: B
- 721-24: B
- 721-25: D
- 721-27: B
- 721-31: B
- 721-32: B
- 721-33: B

Error Condition

- Home position is not detected within the specified time when moving to the home position. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- Home position remains detected after a specified time after leaving the home position. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- The motor driver detected an error. (An SC is issued as soon as it is detected once.)

Major Cause

- Power of downstream device is not turned on.
- Motor is defective
- Connector is not connected properly
- Harness is damaged
- There is overload.
- HP sensor is defective.
- Board is defective.

Corresponding Motor/Sensor/Unit

- 721-20:
  Junction gate motor (shift tray 1/shift tray 2) <STM02>
  Junction gate HP sensor (shift tray 1/shift tray 2) <SN04>
- 721-21:
  Junction gate motor (shift tray 2/staple tray) <STM03>
  Junction gate HP sensor (shift tray 2/staple tray) <SN05>
- 721-23:
  Pre-stack release motor <STM01>
  Pre-stack release HP sensor <SN03>
- 721-24:
  Exit guide motor <STM21>
  Exit guide HP sensor <SN40>
- 721-25:
  Punch motor <DCM05>
  Punch HP sensor 1/2 <SN71/SN72>
  Punch unit
- 721-27:
  Punch movement motor <STM30>
  Punch unit HP sensor <SN73>
- 721-31:
  Jogger motor (front) <STM05>
  Jogger HP sensor (front) <SN13>
- 721-32:
  Jogger motor (rear) <STM06>
  Jogger HP sensor (rear) <SN14>
- 721-33:
  Positioning roller rotation motor <STM07>
  Positioning roller HP sensor (rear) <SN15>

Solution

1. Connector not connected properly
   Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
   Reconnect it if it is not connected correctly.
2. Damaged harness
   Check if the harness between the main board of the finisher and the motor is damaged or exposed.
   Replace the harness if it is damaged.
3. Motor/sensor defective
   Check if the motor or sensor is damaged or there are missing parts, whether the HP sensor turns off and on, whether the motor rotates on its own, whether it is overloaded, and whether the drive is transmitted.
   Replace the motor or sensor.
4. Board defective
   Replace the main board of the finisher
   * Before replacing the board, check if the SC occurs in the same way.

SC721-34

Error Name

Positioning roller lift motor error

Pattern

B

Error Condition

The motor driver detected an error. (The SC is issued when the error is detected once.)

Major Cause

- Power of the downstream device is not turned on.
- Motor is defective
- Connector is not connected properly.
- Harness is damaged
- Board is damaged.

*Motor: Positioning roller lift motor <STM08>

Solution

1. Connector not connected properly
   Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
   Reconnect it if it is not connected correctly.

2. Damaged harness
   Check if the harness between the main board of the finisher and the motor is damaged or exposed.
   Replace the harness if it is damaged.
3. Motor defective
   Check if the motor is damaged or there are missing parts, whether the motor rotates on its own, whether it is overloaded, and whether the drive is transmitted.
   Replace the motor.
4. Board defective
   Replace the main board of the finisher
   * Before replacing the board, check if the SC occurs in the same way.

SC721-35 to 42

Error Name

- 721-35: Vibrating plate vertical movement motor error
- 721-36: Base fence movement motor error
- 721-37: Vibrating plate horizontal movement motor error
- 721-39: Leading edge stopper motor error
- 721-40: Base fence lift motor error
- 721-41: Feed-out belt motor error
- 721-42: Stapler movement motor error

Level

B

Error Condition

- Home position is not detected within the specified time when moving to the home position. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- Home position remains detected after a specified time after leaving the home position. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- The DCM drive software detected a motor drive error. (The first four times are reported as jams. An SC is issued when it is repeated five times.)

Major Cause

- Power of downstream device is not turned on.
- Motor is defective
- Connector is not connected properly
- Harness is damaged
- There is overload.
- Encoder is defective.
- HP sensor is defective.

- Board is defective.

Corresponding Motor/Sensor/Unit

- 721-35:
  Vibrating plate vertical movement motor <DCSM07>
  Vibrating plate vertical movement HP sensor (rear) <SN06>
- 721-36:
  Base fence movement motor <DCSM11>
  Base fence front-back HP sensor (rear) <SN11>
- 721-37:
  Vibrating plate horizontal movement motor <DCSM08>
  Vibrating plate horizontal movement HP sensor <SN07>
- 721-39:
  Leading edge stopper motor <DCSM13>
  Leading edge stopper HP sensor <SN16>
- 721-40:
  Base fence lift motor <DCSM10>
  Base fence up-down HP sensor <SN12>
- 721-41:
  Feed-out belt motor <DCSM12>
  Stack feed-out belt HP sensor <SN17>
- 721-42:
  Stapler movement motor <DCSM09>
  Stapler movement HP sensor <SN08>

Solution

1. Connector not connected properly
   Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
   Reconnect it if it is not connected correctly.
2. Damaged harness
   Check if the harness between the main board of the finisher and the motor is damaged or exposed.
   Replace the harness if it is damaged.
3. Motor/sensor defective
   Check if the motor or sensor is damaged or there are missing parts, whether the HP sensor turns off and on, whether the motor rotates on its own, whether it is overloaded, and whether the drive is transmitted.
   Replace the motor or sensor.
4. Board defective
   Replace the main board of the finisher

* Before replacing the board, check if the SC occurs in the same way.

SC721-43

Error Name

Stapler rotation motor error

Pattern

B

Error Condition

- Home position is not detected within the specified time when moving to the home position. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- Home position remains detected after a specified time after leaving the home position. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- The motor driver detected an error. (An SC is issued as soon as it is detected once.)

Major Cause

- Power of downstream device is not turned on.
- Motor is defective
- Connector is not connected properly
- Harness is damaged
- There is overload.
- Encoder is defective.
- HP sensor is defective.
- Board is defective.

Corresponding Motor/Sensor

- Stapler rotation motor <STM04>
- Stapler rotation HP sensor (front) <SN09>
- Stapler rotation HP sensor (rear) <SN10>

Solution

1. Connector not connected properly
   Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
   Reconnect it if it is not connected correctly.
2. Damaged harness
   Check if the harness between the main board of the finisher and the motor is damaged or exposed.
   Replace the harness if it is damaged.
3. Motor/sensor defective
   Check if the motor or sensor is damaged or there are missing parts, whether the HP sensor turns

off and on, whether the motor rotates on its own, whether it is overloaded, and whether the drive is transmitted.

Replace the motor or sensor.

4. Board defective

   Replace the main board of the finisher

   * Before replacing the board, check if the SC occurs in the same way.

SC721-44

Error Name

Corner stapler motor error

Pattern

B

Error Condition

- Stapler motor did not complete operation within the specified time. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- Home position is not detected within the specified time when moving to the home position. (The first four times are reported as jams. An SC is issued when it is repeated five times.)

Major Cause

- Power of downstream device is not turned on.
- Staple jam occurred.
- Overload due to stapling more than the maximum number of sheets.
- Motor is defective
- Connector is not connected properly
- Harness is damaged
- HP sensor is defective.
- Board is defective.

*Motor: Corner stapler motor <DCM01>

*Unit: Corner stapler unit

Solution

In the case of staple jam or overload caused by stapling more sheets than allowed

1. Removing the staple jam

   Check the stapling area of the stapler for jammed staples.

   Remove the jammed staples in order to resume connection.

2. Checking the number of sheets to be stapled

   Check if more than the maximum number has been specified.

   If the number of sheets to be stapled exceeded the limit, re-specify and try printing again.

Motor defective, disconnected connector, HP sensor error

1. Connector not connected properly
   Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
   Reconnect it if it is not connected correctly.
2. Damaged harness
   Check if the harness between the main board of the finisher and the motor is damaged or exposed.
   Replace the harness if it is damaged.
3. Motor/sensor defective
   Check if the motor or sensor is damaged or there are missing parts, whether the HP sensor turns off and on, whether the motor rotates on its own, whether it is overloaded, and whether the drive is transmitted.
   Replace the motor or sensor.
4. Board defective
   Replace the main board of the finisher
   * Before replacing the board, check if the SC occurs in the same way.

SC721-45

Error Name

Stack transport motor error

Pattern

B

Error Condition

DCM drive software detects a motor drive error.
(The first four times are reported as jams. An SC is issued when it is repeated five times.)

Major Cause

- Power of the downstream device is not turned on.
- Motor is defective
- Connector is not connected properly.
- Motor is overloaded.
- Harness is damaged
- Encoder is defective.
- Board is damaged.

*Motor: Stack transport motor <DCSM15>

Solution

1. Connector not connected properly

Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
Reconnect it if it is not connected correctly.

2. Damaged harness
   Check if the harness between the main board of the finisher and the motor is damaged or exposed.
   Replace the harness if it is damaged.
3. Motor defective
   Check if the motor is damaged or there are missing parts, whether it rotates on its own, and whether it is overloaded.
   If there are problems, replace the motor.
4. Board defective
   Replace the main board of the finisher
   * Before replacing the board, check if the SC occurs in the same way.

SC721-50, 51

Error Name

- 721-50: Booklet stapler side fence motor error
- 721-51: Booklet stapler top fence motor error

Pattern

B

Error Condition

- Home position is not detected within the specified time when moving to the home position. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- Home position remains detected after a specified time after leaving the home position. (The first four times are reported as jams. An SC is issued when it is repeated five times.)

Major Cause

- Power of downstream device is not turned on.
- Motor is defective
- Connector is not connected properly
- Harness is damaged
- There is overload.
- HP sensor is defective.
- Board is defective.

Corresponding Motor/Sensor

- 720-50:
  Booklet stapler side fence motor <STM13>
  Booklet stapler side fence HP sensor (front) <SN28>

Booklet stapler side fence HP sensor (rear) <SN29>

- 720-51:
  Booklet stapler top fence motor <STM12>
  Booklet top fence HP sensor <SN22>

Solution

1. Connector not connected properly
   Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
   Reconnect it if it is not connected correctly.
2. Damaged harness
   Check if the harness between the main board of the finisher and the motor is damaged or exposed.
   Replace the harness if it is damaged.
3. Motor/sensor defective
   Check if the motor or sensor is damaged or there are missing parts, whether the HP sensor turns off and on, whether the motor rotates on its own, whether it is overloaded, and whether the drive is transmitted.
   Replace the motor or sensor.
4. Board defective
   Replace the main board of the finisher
   * Before replacing the board, check if the SC occurs in the same way.

SC721-52 to 55

Error Name

- 721-52: Fold plate motor error
- 721-53: Bottom fence motor error
- 721-54: Stack transport unit motor error
- 721-55: Booklet pressure release motor error

Pattern

B

Error Condition

- Home position is not detected within the specified time when moving to the home position. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- Home position remains detected after a specified time after leaving the home position. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- The motor driver detected an error. (The SC is issued as soon as it is detected once.)

Major Cause

- Power of downstream device is not turned on.
- Motor is defective
- Connector is not connected properly
- Harness is damaged
- There is overload.
- HP sensor is defective.
- Board is defective.

Corresponding Motor/Sensor

- 721-52:
  Fold plate motor <STM13>
  Fold plate HP sensor <SN27>
- 721-53:
  Booklet stapler bottom fence motor <STM14>
  Booklet stapler bottom fence HP sensor <SN30>
- 721-54:
  Stack transport unit motor <STM09>
  Stack transport unit HP sensor <SN20>
- 721-55:
  Booklet pressure release motor <STM10>
  Booklet pressure release HP sensor <SN23>

Solution

1. Connector not connected properly
   Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
   Reconnect it if it is not connected correctly.
2. Damaged harness
   Check if the harness between the main board of the finisher and the motor is damaged or exposed.
   Replace the harness if it is damaged.
3. Motor/sensor defective
   Check if the motor or sensor is damaged or there are missing parts, whether the HP sensor turns off and on, whether the motor rotates on its own, whether it is overloaded, and whether the drive is transmitted.
   Replace the motor or sensor.
4. Board defective
   Replace the main board of the finisher
   * Before replacing the board, check if the SC occurs in the same way.

SC721-56

Error Name

Turn guide motor error

Pattern

B

Error Condition

- Home position is not detected within the specified time when moving to the home position. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- Home position remains detected after a specified time after leaving the home position. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- The DCM drive software detected a motor drive error. (The first four times are reported as jams. An SC is issued when it is repeated five times.)

Major Cause

- Power of downstream device is not turned on.
- Motor is defective
- Connector is not connected properly
- There is overload.
- Encoder is defective.
- HP sensor is defective.
- Board is defective.

*Motor: Turn guide motor <DCSM14>

*Sensor: Stack JG HP sensor <SN21>

Solution

1. Connector not connected properly
   Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
   Reconnect it if it is not connected correctly.
2. Damaged harness
   Check if the harness between the main board of the finisher and the motor is damaged or exposed.
   Replace the harness if it is damaged.
3. Motor/sensor defective
   Check if the motor or sensor is damaged or there are missing parts, whether the HP sensor turns off and on, whether the motor rotates on its own, whether it is overloaded, and whether the drive is transmitted.
   Replace the motor or sensor.
4. Board defective

Replace the main board of the finisher

* Before replacing the board, check if the SC occurs in the same way.

SC721-57

Error Name

Booklet stack transport motor error

Pattern

B

Error Condition

DCM drive software detects a motor drive error.

(The first four times are reported as jams. An SC is issued when it is repeated five times.)

Major Cause

- Power of the downstream device is not turned on.
- Motor is defective
- Connector is not connected properly.
- Harness is damaged
- Motor is overloaded.
- Encoder is defective.
- Board is damaged.

*Motor: Booklet stack transport motor <DCSM17>

Solution

1. Connector not connected properly
   Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
   Reconnect it if it is not connected correctly.
2. Damaged harness
   Check if the harness between the main board of the finisher and the motor is damaged or exposed.
   Replace the harness if it is damaged.
3. Motor defective
   Check if the motor is damaged or there are missing parts, whether it rotates on its own, and whether it is overloaded.
   If there are problems, replace the motor.
4. Board defective
   Replace the main board of the finisher
   * Before replacing the board, check if the SC occurs in the same way.

SC721-58

Error Name

Fold roller motor error

Pattern

B

Error Condition

The motor driver detected an error. (The SC is issued when the error is detected once.)

Major Cause

- Power of the downstream device is not turned on.
- Motor is defective
- Connector is not connected properly.
- Harness is damaged
- Board is damaged.

*Motor: Fold roller motor <STM15>

Solution

1. Connector not connected properly
   Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
   Reconnect it if it is not connected correctly.
2. Damaged harness
   Check if the harness between the main board of the finisher and the motor is damaged or exposed.
   Replace the harness if it is damaged.
3. Motor defective
   Check if the motor is damaged or there are missing parts, whether the motor rotates on its own, whether it is overloaded, and whether the drive is transmitted.
   If there are problems, replace the motor.
4. Board defective
   Replace the main board of the finisher
   * Before replacing the board, check if the SC occurs in the same way.

SC721-59

Error Name

Booklet stack tray motor error

Pattern

B

Error Condition

DCM drive software detects a motor drive error.
(The first four times are reported as jams. An SC is issued when it is repeated five times.)

Major Cause

- Power of the downstream device is not turned on.
- Motor is defective
- Connector is not connected properly.
- Harness is damaged
- Motor is overloaded.
- Encoder is defective.
- Board is damaged.

*Motor: Booklet stack tray motor <DCSM18>

Solution

1. Connector not connected properly
   Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
   Reconnect it if it is not connected correctly.
2. Damaged harness
   Check if the harness between the main board of the finisher and the motor is damaged or exposed.
   Replace the harness if it is damaged.
3. Motor defective
   Check if the motor is damaged or there are missing parts, whether it rotates on its own, and whether it is overloaded.
   If there are problems, replace the motor.
4. Board defective
   Replace the main board of the finisher
   * Before replacing the board, check if the SC occurs in the same way.

SC721-60

Error Name

Booklet stapler motor error

Pattern

B

Error Condition

- Stapler motor did not complete operation within the specified time. (The first four times are reported as jams. An SC is issued when it is repeated five times.)

- Home position is not detected within the specified time when moving to the home position. (The first four times are reported as jams. An SC is issued when it is repeated five times.)

Major Cause

- Power of downstream device is not turned on.
- Staple jam occurred.
- Overload due to stapling more than the maximum number of sheets.
- Motor is defective
- Connector is not connected properly
- Harness is damaged
- HP sensor is defective.
- Board is defective.

*Motor: Booklet stapler motor <DCM02>

*Unit: Booklet stapler unit

Solution

In the case of staple jam or overload caused by stapling more sheets than allowed

1. Removing the staple jam
   Check the stapling area of the stapler for jammed staples.
   Remove the jammed staples in order to resume connection.
2. Checking the number of sheets to be stapled
   Check if more than the maximum number has been specified.
   If the number of sheets to be stapled exceeded the limit, re-specify and try printing again.

Motor defective, disconnected connector, HP sensor error

1. Connector not connected properly
   Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
   Reconnect it if it is not connected correctly.
2. Damaged harness
   Check if the harness between the main board of the finisher and the motor is damaged or exposed.
   Replace the harness if it is damaged.
3. Motor/sensor defective
   Check if the motor or sensor is damaged or there are missing parts, whether the HP sensor turns off and on, whether the motor rotates on its own, whether it is overloaded, and whether the drive is transmitted.
   Replace the motor or sensor.
4. Board defective
   Replace the main board of the finisher
   * Before replacing the board, check if the SC occurs in the same way.

SC721-61

Error Name

Flat fold unit motor error

Pattern

B

Error Condition

- Home position is not detected within the specified time when moving to the home position. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- Home position remains detected after a specified time after leaving the home position. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- The DCM drive software detected a motor drive error. (The first four times are reported as jams. An SC is issued when it is repeated five times.)

Major Cause

- Power of downstream device is not turned on.
- Motor is defective
- Connector is not connected properly
- There is overload.
- Encoder is defective.
- HP sensor is defective.
- Board is defective.

*Motor: Flat fold unit motor <DCSM16>

*Sensor: Flat fold unit HP sensor <SN24>

Solution

1. Connector not connected properly
   Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
   Reconnect it if it is not connected correctly.
2. Damaged harness
   Check if the harness between the main board of the finisher and the motor is damaged or exposed.
   Replace the harness if it is damaged.
3. Motor/sensor defective
   Check if the motor or sensor is damaged or there are missing parts, whether the HP sensor turns off and on, whether the motor rotates on its own, whether it is overloaded, and whether the drive is transmitted.
   Replace the motor or sensor.
4. Board defective

Replace the main board of the finisher

* Before replacing the board, check if the SC occurs in the same way.

SC721-62

Error Name

Flat fold unit pressure release motor error

Pattern

B

Error Condition

- Home position is not detected within the specified time when moving to the home position. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- Home position remains detected after a specified time after leaving the home position. (The first four times are reported as jams. An SC is issued when it is repeated five times.)

Major Cause

- Power of downstream device is not turned on.
- Motor is defective
- Connector is not connected properly.
- Harness is damaged.
- There is overload.
- HP sensor is defective.
- Board is defective.

*Motor: Flat fold unit pressure release motor <STM11>

*Sensor: Flat fold unit pressure release HP sensor <SN25>

Solution

1. Connector not connected properly
   Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
   Reconnect it if it is not connected correctly.
2. Damaged harness
   Check if the harness between the main board of the finisher and the motor is damaged or exposed.
   Replace the harness if it is damaged.
3. Motor/sensor defective
   Check if the motor or sensor is damaged or there are missing parts, whether the HP sensor turns off and on, whether the motor rotates on its own, whether it is overloaded, and whether the drive is transmitted.
   Replace the motor or sensor.

4. Board defective
   Replace the main board of the finisher
   * Before replacing the board, check if the SC occurs in the same way.

SC721-70

Error Name

Shift tray 2 lift motor error

Pattern

B

Error Condition

- When lowering the tray, the paper height sensor still detects paper after a specified time. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- When lifting the tray, the paper height sensor does not detect paper after a specified time. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- A lift motor error is detected.(The first four times are reported as jams. An SC is issued when it is repeated five times.)

Major Cause

- Power of downstream device is not turned on.
- Motor is defective
- Connector is not connected properly
- Harness is damaged
- There is overload.
- Paper height sensor is defective.
- Board is defective.

*Motor: Shift tray 2 lift motor <DCM03>
*Sensors: Shift tray 2 paper height sensor (trailing edge) <SN57>, Shift tray 2 paper height sensor (stack) (Emitter/Receptor) <SN62/SN63>

Solution

1. Connector not connected properly
   Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
   Reconnect it if it is not connected correctly.
2. Damaged harness
   Check if the harness between the main board of the finisher and the motor is damaged or exposed.
   Replace the harness if it is damaged.
3. Motor/sensor defective

Check if the motor or sensor is damaged or there are missing parts, whether the HP sensor turns off and on, whether the motor rotates on its own, whether it is overloaded, and whether the drive is transmitted.
Replace the motor or sensor.

4. Board defective
   Replace the main board of the finisher
   * Before replacing the board, check if the SC occurs in the same way.

SC721-71 to 75

Error Name

- 721-71: Shift tray 2 shift motor error
- 721-72: Shift tray 2 jogger motor error
- 721-74: Shift tray 2 jogger fence retract motor error
- 721-75: Shift tray 2 drag roller movement motor error

Pattern

B

Error Condition

- Home position is not detected within the specified time when moving to the home position. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- Home position remains detected after a specified time after leaving the home position. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- The motor driver detected an error. (The SC is issued as soon as it is detected once.)

Major Cause

- Power of downstream device is not turned on.
- Motor is defective
- Connector is not connected properly
- Harness is damaged
- There is overload.
- HP sensor is defective.
- Board is defective.

Corresponding Motor/Sensor

- 721-71:
  Shift tray 2 shift motor <STM17>
  Shift tray 2 HP sensor (front) <SN52>
  Shift tray 2 HP sensor (rear) <SN53>
- 721-72:
  Shift tray 2 jogger motor <STM26>

Shift tray 2 jogger HP sensor <SN66>

- 721-74:
  Shift tray 2 jogger fence retract motor <STM27>
  Shift tray 2 jogger retract HP sensor <SN67>
- 721-75:
  Shift tray 2 drag roller movement motor <STM18>
  Shift tray 2 drag roller HP sensor <SN41>

Solution

1. Connector not connected properly
   Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
   Reconnect it if it is not connected correctly.
2. Damaged harness
   Check if the harness between the main board of the finisher and the motor is damaged or exposed.
   Replace the harness if it is damaged.
3. Motor/sensor defective
   Check if the motor or sensor is damaged or there are missing parts, whether the HP sensor turns off and on, whether the motor rotates on its own, whether it is overloaded, and whether the drive is transmitted.
   Replace the motor or sensor.
4. Board defective
   Replace the main board of the finisher
   * Before replacing the board, check if the SC occurs in the same way.

SC721-76

Error Name

Shift tray 2 drag roller motor error

Pattern

B

Error Condition

<During initialization>

- Shift tray 2 paper height sensor (trailing edge) does not change from OFF to ON after the shift tray 2 drag roller motor rotated for a specified period of time. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- Shift tray 2 paper height sensor (trailing edge) remains ON after the shift tray 2 drag roller motor rotated for a specified period of time. (The first four times are reported as jams. An SC is issued when it is repeated five times.)

- The motor driver detected an error. (The SC is issued as soon as it is detected once.)

<Not during initialization>

- The motor driver detected an error. (The SC is issued as soon as it is detected once.)

Major Cause

- Power of downstream device is not turned on.
- Motor is defective
- Connector is not connected properly
- Harness is damaged
- There is overload.
- Sensor is defective.
- Board is defective.

*Motor: Shift tray 2 drag roller motor <STM19>

*Sensor: Shift tray 2 paper height sensor (trailing edge) <SN57>

Solution

1. Connector not connected properly
   Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
   Reconnect it if it is not connected correctly.
2. Damaged harness
   Check if the harness between the main board of the finisher and the motor is damaged or exposed.
   Replace the harness if it is damaged.
3. Motor/sensor defective
   Check if the motor or sensor is damaged or there are missing parts, whether the motor rotates on its own, whether it is overloaded, and whether the drive is transmitted.
   Replace the motor or sensor.
4. Board defective
   Replace the main board of the finisher

SC721-77

Error Name

Shift tray 2 paper exit fan motor error

Pattern

B

Error Condition

A lock signal is detected from the fan motor.
(The SC is issued as soon as it is detected once.)

Major Cause

- Power of downstream device is not turned on.
- Motor is defective
- Connector is not connected properly
- Harness is damaged
- Board is defective.

*Motors:

Shift tray 2 paper exit fan motor (front) <FAN01>

Shift tray 2 paper exit fan motor (rear) <FAN02>

Solution

1. Connector not connected properly
   Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
   Reconnect it if it is not connected correctly.
2. Damaged harness
   Check if the harness between the main board of the finisher and the motor is damaged or exposed.
   Replace the harness if it is damaged.
3. Motor defective
   Check if the motor is damaged or there are missing parts, whether the motor rotates on its own, whether it is overloaded, and whether the drive is transmitted.
   Replace the motor.
4. Board defective
   Replace the main board of the finisher

SC721-78

Error Name

Shift tray 2 press lever motor error

Pattern

B

Error Condition

- Home position is not detected within the specified time when moving to the home position.(The first four times are reported as jams. An SC is issued when it is repeated five times.)
- Home position remains detected after a specified time after leaving the home position.(The first four times are reported as jams. An SC is issued when it is repeated five times.)
- The motor driver detected an error. (The SC is issued as soon as it is detected once.)

Major Cause

- Power of downstream device is not turned on.
- Motor is defective
- Connector is not connected properly
- Harness is damaged
- There is overload.
- Sensor is defective.
- Board is defective.

*Motor: Shift tray 2 press lever motor <STM20>

*Sensor: Shift tray 2 press lever HP sensor <SN42>

Solution

1. Connector not connected properly
   Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
   Reconnect it if it is not connected correctly.
2. Damaged harness
   Check if the harness between the main board of the finisher and the motor is damaged or exposed.
   Replace the harness if it is damaged.
3. Motor/sensor defective
   Check if the motor or sensor is damaged or there are missing parts, whether the HP sensor turns off and on, whether the motor rotates on its own, whether it is overloaded, and whether the drive is transmitted.
   Replace the motor or sensor.
4. Board defective
   Replace the main board of the finisher

SC721-79

Error Name

Shift tray 1 lift motor error

Pattern

B

Error Condition

- When lowering the tray, the paper height sensor still detects paper after a specified time. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- When lifting the tray, the paper height sensor does not detect paper after a specified time. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- A lift motor error is detected.(The first four times are reported as jams. An SC is issued when it is

repeated five times.)

Major Cause

- Power of downstream device is not turned on.
- Motor is defective
- Connector is not connected properly
- Harness is damaged
- There is overload.
- Paper height sensor is defective.
- Board is defective.

*Motor: Shift tray 1 lift motor <DCM04>

*Sensor: Shift tray 1 paper height sensor (trailing edge) <SN48>

Solution

1. Connector not connected properly
   Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
   Reconnect it if it is not connected correctly.
2. Damaged harness
   Check if the harness between the main board of the finisher and the motor is damaged or exposed.
   Replace the harness if it is damaged.
3. Motor/sensor defective
   Check if the motor or sensor is damaged or there are missing parts, whether the HP sensor turns off and on, whether the motor rotates on its own, whether it is overloaded, and whether the drive is transmitted.
   Replace the motor or sensor.
4. Board defective
   Replace the main board of the finisher
   * Before replacing the board, check if the SC occurs in the same way.

SC721-80 to 83, 85

Error Name

- 721-80: Shift tray 1 shift motor error
- 721-81: Shift tray 1 jogger motor error
- 721-82: Shift tray 1 jogger fence retract motor error
- 721-83: Shift tray 1 drag roller movement motor error
- 721-85: Shift tray 1 press lever motor error

Pattern

B

Error Condition

- Home position is not detected within the specified time when moving to the home position. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- Home position remains detected after a specified time after leaving the home position. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- The motor driver detected an error. (The SC is issued as soon as it is detected once.)

Major Cause

- Power of downstream device is not turned on.
- Motor is defective
- Connector is not connected properly
- Harness is damaged
- There is overload.
- HP sensor is defective.
- Board is defective.

Corresponding Motor/Sensor

- 721-80:
  Shift tray 1 shift motor <STM22>
  Shift tray 1 HP sensor (front) <SN43>
  Shift tray 1 HP sensor (rear) <SN44>
- 721-81:
  Shift tray 1 jogger motor <STM28>
  Shift tray 1 jogger HP sensor <SN64>
- 721-82:
  Shift tray 1 jogger fence retract motor <STM29>
  Shift tray 1 jogger retract HP sensor <SN65>
- 721-83:
  Shift tray 1 drag roller movement motor <STM23>
  Shift tray 1 drag roller HP sensor <SN36>
- 721-85:
  Shift tray 1 press lever motor <STM25>
  Shift tray 1 press lever HP sensor <SN37>

Solution

1. Connector not connected properly
   Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
   Reconnect it if it is not connected correctly.
2. Damaged harness

Check if the harness between the main board of the finisher and the motor is damaged or exposed.
Replace the harness if it is damaged.

3. Motor/sensor defective
   Check if the motor or sensor is damaged or there are missing parts, whether the HP sensor turns off and on, whether the motor rotates on its own, whether it is overloaded, and whether the drive is transmitted.
   Replace the motor or sensor.
4. Board defective
   Replace the main board of the finisher
   * Before replacing the board, check if the SC occurs in the same way.

SC721-84

Error Name

Shift tray 1 drag roller motor error

Pattern

B

Error Condition

<During initialization>

- Shift tray 1 paper height sensor (trailing edge) does not change from OFF to ON after the shift tray 1 drag roller motor rotated for a specified period of time. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- Shift tray 1 paper height sensor (trailing edge) remains ON after the shift tray 1 drag roller motor rotated for a specified period of time. (The first four times are reported as jams. An SC is issued when it is repeated five times.)
- The motor driver detected an error. (The SC is issued as soon as it is detected once.)

<Not during initialization>

- The motor driver detected an error. (The SC is issued as soon as it is detected once.)

Major Cause

- Power of downstream device is not turned on.
- Motor is defective
- Connector is not connected properly
- Harness is damaged
- There is overload.
- Sensor is defective.
- Board is defective.

*Motor: Shift tray 1 drag roller motor <STM24>

*Sensor: Shift tray 1 paper height sensor (trailing edge) <SN48>

Solution

1. Connector not connected properly
   Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
   Reconnect it if it is not connected correctly.
2. Damaged harness
   Check if the harness between the main board of the finisher and the motor is damaged or exposed.
   Replace the harness if it is damaged.
3. Motor defective
   Check if the motor is damaged or there are missing parts, whether the motor rotates on its own, whether it is overloaded, and whether the drive is transmitted.
   Replace the motor.
4. Board defective
   Replace the main board of the finisher

SC721-86, 88

Error Name

721-86: Shift Tray 1 Paper Exit Fan Motor Error
721-88: Shift Tray 1 Fan Motor Error

Pattern

B

Error Condition

A lock signal is detected from the fan motor.
(The SC is issued as soon as it is detected once.)

Major Cause

- Power of downstream device is not turned on.
- Motor is defective
- Connector is not connected properly
- Harness is damaged
- Board is defective.

*Motors:

- 721-86:
  Shift tray 1 paper exit fan motor (front) <FAN03>
  Shift tray 1 paper exit fan motor (rear) <FAN04>
- 721-88:
  Shift tray 1 fan motor <FAN05>

Solution

1. Connector not connected properly
   Check if the connectors between the main board of the finisher and the motor are connected correctly (whether they are disconnected or incorrectly connected).
   Reconnect it if it is not connected correctly.
2. Damaged harness
   Check if the harness between the main board of the finisher and the motor is damaged or exposed.
   Replace the harness if it is damaged.
3. Motor defective
   Check if the motor is damaged or there are missing parts.
   Replace the motor.
4. Board defective
   Replace the main board of the finisher.

SC721-87

Error Name

NV memory error 1

Pattern

C

Error Condition

Writing to the memory inside the finisher failed.

Major Cause

- Power of downstream device is not turned on.
- NV memory connection failure or defective NV memory

*Component: Memory on the controller board of the finisher

Solution

1. Turn the main power to OFF, and check if the NV memory is correctly installed in the IC socket.
   Check by removing and reinstalling it.
2. Replace the NV memory.
3. Replace the board of the finisher.
   * Before replacing the board, check if the SC occurs in the same way.

SC722: Finisher

Note

- Only IM C6500/C8000: Finisher SR4140

To recover from the error, check if the SC occurs (feed paper, open/close the doors, Input or

Output check). If the SC occurs again, do the follow steps. After each step, turn the power OFF then ON to check if the SC occurs again.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC722-03	D	Overcurrent protection device error 1
		The protective fuse is blown.
		• Overcurrent (PCB defective, harness short circuit, or solenoid defective)
		1. Check the harness connection. 2. Check or replace the harnesses. 3. Check or replace the motors. 4. Replace the main controller board (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC722-04	D	Overcurrent protection device error 2
		Sensor power supply error detected.
		Overcurrent (PCB defective, harness short circuit, sensor defective, or connector disconnected)
		1. Check the harness connection. 2. Check or replace the harness. 3. Check or replace the sensors. 4. Replace the main controller board (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC722-06	C	NV memory error
		Error detected when accessing NV memory.
		• NV memory connection failure • NV memory defective
		1. Reinstall the NV memory. 2. Replace the main controller board (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC722-10	D	Upper transport motor (M27) error
SC722-11	D	Entrance transport motor (M24) error
SC722-	B	Lower transport motor (M28) error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
14		
		Motor driver detects an abnormal DC motor control condition. (The first four times: jam display, the fifth time: SC)
		• Motor defective • Connector disconnected • Overload • Encoder defective
		1. Check the harness connection. 2. Check or replace the harness. 3. Check or replace the motor/HP sensor. 4. Replace the main controller board (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC722-16	D	Proof tray exit motor (M26) error
SC722-17	B	Shift exit motor (M23) error
SC722-18	B	Stapler exit motor (M21) error
		Motor driver detects an abnormal DC motor control condition. (The first four times: jam display, the fifth time: SC)
		• Motor defective • Connector disconnected • Overload • Encoder defective
		1. Check the harness connection. 2. Check or replace the harness. 3. Check or replace the motor/HP sensor. 4. Replace the main controller board (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC722-20	D	Proof tray junction gate motor (M7) error
SC722-21	D	Stapler junction gate motor (M8) error
SC722-22	B	Pre-stack junction gate motor (M9) error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC722-23	B	Pre-stack stopper motor (M20) error
SC722-24	B	Exit open/close motor (M22) error
SC722-25	D	Punching motor (M62) error
		• When moving to the home position, home position was not detected within specified time or specified number of pulses. (The first four times: jam display, the fifth time: SC) • When moving from the home position, home position was still detected after specified time or specified number of pulses. (The first four times: jam display, the fifth time: SC) • Motor driver detects an abnormal condition.
		• Motor defective • Connector disconnected • Overload • Home position sensor defective
		1. Check the harness connection. 2. Check or replace the harness. 3. Check or replace the motor/HP sensor. 4. Replace the main controller board (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC722-27	B	Punch unit motor (M31) error
		• No change to the punch home position sensor after a specified time from punch operation. (The first four times: jam display, the fifth time: SC) • No change to the punch home position sensor within a specified number of pulses from punch operation. (The first four times: jam display, the fifth time: SC)
		• Motor defective • Connector disconnected • Overload • Home position sensor defective
		1. Check the harness connection. 2. Check or replace the harness. 3. Check or replace the motor/HP sensor. 4. Replace the main controller board (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC722-30	B	Jogger motor (M17) error
SC722-33	B	Drag-in motor (M11) Error
		• When moving to the home position, home position was not detected within specified time or specified number of pulses. (The first four times: jam display, the fifth time: SC) • When moving from the home position, home position was still detected after specified time or specified number of pulses. (The first four times: jam display, the fifth time: SC)
		• Motor defective • Connector disconnected • Overload • Home position sensor defective
		1. Check the harness connection. 2. Check or replace the harness. 3. Check or replace the motor/HP sensor. 4. Replace the main controller board (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC722-34	B	Positioning roller motor (M13) error
		• Motor driver detects an abnormal DC motor control condition. (The first four times: jam display, the fifth time: SC) • When moving to the home position, home position was not detected within specified number of pulses. (The first four times: jam display, the fifth time: SC) • When moving from the home position, home position was still detected after specified number of pulses. (The first four times: jam display, the fifth time: SC)
		• Motor defective • Connector disconnected • Overload • Encoder defective
		1. Check the harness connection. 2. Check or replace the harness. 3. Check or replace the motor. 4. Replace the main controller board (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC722-35	B	Paper hold center motor (M14) error
SC722-36	B	Paper hold front motor (M15) error
SC722-37	B	Paper hold rear motor (M16) error
		• When moving to the home position, home position was not detected within specified time or specified number of pulses. (The first four times: jam display, the fifth time: SC) • When moving from the home position, home position was still detected after specified time or specified number of pulses. (The first four times: jam display, the fifth time: SC)
		• Motor defective • Connector disconnected • Overload • Home position sensor defective
		1. Check the harness connection. 2. Check or replace the harness. 3. Check or replace the motor/HP sensor. 4. Replace the main controller board (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC722-39	B	Leading edge stopper motor (M12) error
		• Motor driver detects an abnormal DC motor control condition. (The first four times: jam display, the fifth time: SC) • When moving to the home position, home position was not detected within specified time or specified number of pulses. (The first four times: jam display, the fifth time: SC) • When moving from the home position, home position was still detected after specified time or specified number of pulses. (The first four times: jam display, the fifth time: SC)
		• Motor defective • Connector disconnected • Overload • Encoder defective
		1. Check the harness connection. 2. Check or replace the harness. 3. Check or replace the motor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		4. Replace the main controller board (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC722-40	B	Jogger bottom fence motor (M19) error
SC722-41	B	Feed out belt motor (M18) error
SC722-42	B	Stapler front/rear motor (M1) error
SC722-43	B	Stapler rotation motor (M2) error
		• When moving to the home position, home position was not detected within specified time or specified number of pulses. (The first four times: jam display, the fifth time: SC) • When moving from the home position, home position was still detected after specified time or specified number of pulses. (The first four times: jam display, the fifth time: SC)
		• Motor defective • Connector disconnected • Overload • Home position sensor defective
		1. Check the harness connection. 2. Check or replace the harness. 3. Check or replace the motor/HP sensor. 4. Replace the main controller board (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC722-44	B	Staple motor (M3) error
		• When moving to the home position, home position was not detected within specified time or specified number of pulses. (The first four times: jam display, the fifth time: SC) • When moving from the home position, home position was still detected after specified time or specified number of pulses. (The first four times: jam display, the fifth time: SC) • Motor driver detects an abnormal condition.
		• Motor defective • Connector disconnected

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Overload • Home position sensor defective
		1. Check the harness connection. 2. Check or replace the harness. 3. Check or replace the motor/HP sensor. 4. Replace the main controller board (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC722-70	B	Tray upper/lower motor (M24) error
		• When ascending, paper sensor did not detect paper within specified time. (The first four times: jam display, the fifth time: SC) • When descending, paper sensor is still detecting paper after the specified time. (The first four times: jam display, the fifth time: SC) • Motor driver detects an abnormal condition.
		• Overload due to staple jam or number of sheets exceeding the limit, etc. • Motor defective • Connector disconnected • Overload • Paper sensor defective
		1. Check the harness connection. 2. Check or replace the harness. 3. Check or replace the motor/HP sensor. 4. Replace the main controller board (PCB1).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC722-71	B	Shift motor (M4) error
SC722-72	B	Jogger motor (M29) error
SC722-74	B	Jogger top fence motor (M30) error
SC722-75	B	Drag-in drive motor (M5) error
SC722-76	B	Drag-in transport motor (M6) error
		• When moving to the home position, home position was not detected within specified time or specified number of pulses. (The first four times: jam display,

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		the fifth time: SC) • When moving from the home position, home position was still detected after specified time or specified number of pulses. (The first four times: jam display, the fifth time: SC)
		• Motor defective • Connector disconnected • Overload • Paper sensor defective
		1. Check the harness connection. 2. Check or replace the harness. 3. Check or replace the motor/HP sensor. 4. Replace the main controller board (PCB1).

SC725: Multi-Folding Unit

Note

- Pro C5300S/C5310S: Multi-Folding Unit FD5020
- IM C6500/C8000:Multi-Folding Unit FD4020

To recover from the error, check if the SC occurs (feed paper, open/close the doors, Input or Output check). If the SC occurs again, do the follow steps. After each step, turn the power OFF then ON to check if the SC occurs again.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC725-01	D	Downstream device communication error
		• Communication with the downstream device has established, but the device is not responding to the command sent out, even after being sent three times. • The port level of the downstream device does not become H level (break cancel) within specified time.
		• Interface cable (downstream device side) connector disconnected or broken • PCB of downstream device defective • Controller PCB defective
		1. Connector not connected properly Check if the connectors between the interface cable and the PCB are connected correctly (whether they are disconnected or incorrectly connected). Reconnect it if it is not connected correctly. 2. Damaged harness Check if the harness between the interface cable and the PCB is damaged or

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		exposed. Replace the harness if it is damaged. 3. Motor defective Check if the corresponding motor is damaged or there are missing parts. Replace the motor. 4. Board defective Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC725-03	D	Overcurrent protection device error 1
		The fuse on the PCB blew.
		The fuse on the PCB blew. * Related Components: • Horizontal transport exit motor • Top tray exit motor • Top tray transport motor • Entrance JG (Junction gate) motor • 1st stopper motor • Jogger fence motor • Fold plate motor • 1st fold motor • Registration roller release motor • Dynamic roller lift motor • Horizontal transport motor • Entrance JG (junction gate) motor • Top tray JG solenoid • Exit JG pawl solenoid • Reverse JG pawl solenoid
		1. Damaged harness Check if the harnesses between the PCB and the motors/solenoids are damaged or exposed. Replace the harness if it is damaged. 2. Board defective Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC725-1560	D	Overcurrent protection device error 2

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
04		The fuse on the PCB blew.
		The fuse on the PCB blew. * Related Components: • Dynamic roller transport motor • Registration roller transport motor • 2nd fold motor • 2nd stopper motor • Direct send JG motor • Crease motor • 3rd stopper motor • FM6 pawl motor • Leading edge stopper pawl motor • Bypass junction gate solenoid
		1. Damaged harness Check if the harnesses between the PCB and the motors/solenoids are damaged or exposed. Replace the harness if it is damaged. 2. Board defective Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC725-12	B	Registration roller transport motor (M14) error
SC725-13	B	Dynamic roller transport motor (M13) error
SC725-14	B	Top tray exit motor (M4) error
		Motor driver detected an error. (SC from the first time)
		• Overcurrent to the motor. • Motor drive overheat
		1. Connector not connected properly Check if the connectors between the motor and the PCB are connected correctly (whether they are disconnected or incorrectly connected). Reconnect it if it is not connected correctly. 2. Damaged harness Check if the harness between the motor and the PCB is damaged or exposed.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Replace the harness if it is damaged. 3. Motor defective Check if the corresponding motor is damaged or there are missing parts. Replace the motor. 4. Board defective Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC725-30	B	1st stopper motor (M8) error
SC725-31	B	2nd stopper motor (M12) error
SC725-32	B	3rd stopper motor (M17) error
SC725-33	B	Jogger fence motor (M6) error
SC725-34	B	Dynamic roller lift motor (M11) error
SC725-35	B	Registration roller release motor (M10) error
SC725-36	B	Direct send JG HP motor (M15) error
SC725-37	B	FM6 pawl motor (M16) error
SC725-38	B	Fold plate motor (M9)
		• When moving to the home position, home position was not detected within specified number of pulses (p0 pulses). (The first time: jam display, the second time: SC) • When moving from the home position, home position was still detected after specified number of pulses (p1 pulses). (The first time: jam display, the second time: SC) • Motor driver detected an error. (SC from the first time)
		• Overcurrent to the motor. • Motor drive overheat • Connector disconnected
		1. Connector not connected properly

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Check if the connectors between the motor and the PCB are connected correctly (whether they are disconnected or incorrectly connected). Reconnect it if it is not connected correctly. 2. Damaged harness Check if the harness between the motor and the PCB is damaged or exposed. Replace the harness if it is damaged. 3. HP sensor defective Check if the corresponding HP sensor is damaged or there are missing parts. Replace the HP sensor. 4. Motor defective Check if the corresponding motor is damaged or there are missing parts. Replace the motor. 5. Board defective Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC725-39	B	1st fold motor (M5) error
SC725-40	B	2nd fold motor (M18) error
SC725-41	B	Crease motor (M19) error
		Motor driver detected an error. (SC from the first time)
		• Overcurrent to the motor. • Motor drive overheat
		1. Connector not connected properly Check if the connectors between the motor and the PCB are connected correctly (whether they are disconnected or incorrectly connected). Reconnect it if it is not connected correctly. 2. Damaged harness Check if the harness between the motor and the PCB is damaged or exposed. Replace the harness if it is damaged. 3. Motor defective Check if the corresponding motor is damaged or there are missing parts. Replace the motor.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		4. Board defective Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC725-71	B	Horizontal transport motor (M3) error
SC725-72	B	Horizontal transport exit motor (M7) error
SC725-73	B	Top tray transport motor (M2) error
		Motor driver detected an error. (SC from the first time)
		• Overcurrent to the motor. • Motor drive overheat
		1. Connector not connected properly Check if the connectors between the motor and the PCB are connected correctly (whether they are disconnected or incorrectly connected). Reconnect it if it is not connected correctly. 2. Damaged harness Check if the harness between the motor and the PCB is damaged or exposed. Replace the harness if it is damaged. 3. Motor defective Check if the corresponding motor is damaged or there are missing parts. Replace the motor. 4. Board defective Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC725-74	D	Entrance JG motor (M1) error
		• When moving to the home position, home position was not detected within specified number of pulses (p0 pulses). (The first time: jam display, the second time: SC) • When moving from the home position, home position was still detected after specified number of pulses (p1 pulses). (The first time: jam display, the second time: SC) • Motor driver detected an error. (SC from the first time)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Overcurrent to the motor. • Motor drive overheat • Connector disconnected
		1. Connector not connected properly Check if the connectors between the motor and the PCB are connected correctly (whether they are disconnected or incorrectly connected). Reconnect it if it is not connected correctly. 2. Damaged harness Check if the harness between the motor and the PCB is damaged or exposed. Replace the harness if it is damaged. 3. HP sensor defective Check if the corresponding HP sensor is damaged or there are missing parts. Replace the HP sensor. 4. Motor defective Check if the corresponding motor is damaged or there are missing parts. Replace the motor. 5. Board defective Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC725-75	D	Overcurrent protection device error 3 (+5V line)
		An error is detected when the power is turned ON.
		The 5V line fuse on the PCB blew.
		1. Damaged harness Check if the harnesses between the PCB and the PSU/interlock switch are damaged or exposed. Replace the harness if it is damaged. 2. Board defective Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC725-76	D	Overcurrent protection device error 4 (+5V sensor line)
		A sensor power protection device error signal is detected when the power is turned ON.
		• Sensor defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Connector disconnected
		1. Connector not connected properly Check if the connectors between the sensor and the PCB are connected correctly (whether they are disconnected or incorrectly connected). Reconnect it if it is not connected correctly. 2. Damaged harness Check if the harness between the sensor and the PCB is damaged or exposed. Replace the harness if it is damaged. 3. Sensor defective Check if the all sensors for damage or missing parts. Replace the sensor. 4. Board defective Replace the PCB.

SC726: Multi-Folding Unit

Note

- Only IM C6500/C8000: Multi-Folding Unit FD4010

To recover from the error, check if the SC occurs (feed paper, open/close the doors, Input or Output check). If the SC occurs again, do the follow steps. After each step, turn the power OFF then ON to check if the SC occurs again.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC726-01	D	Downstream device communication error
		Communication error between the multi-folding unit and downstream device is detected.
		• Interface cable (downstream device side) connector disconnected or broken • PCB of downstream device defective • Controller PCB defective
		1. Downstream device error Connect the interface cable of the downstream device to the main machine and check if it operates normally. If it does not operate normally, there is a problem with the downstream device. 2. Connector not connected properly Check if the connectors between the interface cable and the PCB are connected correctly.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Reconnect it if it is not connected correctly. 3. Damaged harness Check if the harness between the interface cable and the PCB is damaged or exposed. Replace the harness if it is damaged. 4. Board defective Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC726-03	D	Overcurrent protection device error 1
		Protection device break error (FU1 tripped), 24V power supply line error.
		• Fuse tripped • PCB defective • 24V power supply line harness damaged
		1. Damaged harness Check if the harness between the PCB and each motor is damaged or exposed. Replace the harness if it is damaged. 2. Motor defective Check if the each motor is damaged or there are missing parts. Replace the motor. 3. Board defective Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC726-10	D	Paper entrance motor (M8) error
SC726-12	B	Pre-registration motor (M6) error
SC726-13	B	Registration motor (M4) error
SC726-14	B	Paper exit tray motor (M12) error
SC726-16	B	Paper stack motor (M1) error
SC726-17	B	Paper transport motor 1 (M7) error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC726-18	B	Paper transport motor 2 (M11) error
SC726-39	B	Folding motor (M13) error
SC726-40	B	FWD/RVS motor 2 (M14) error
		Detecting motor error or encoder error (The first four time: jam display, the fifth time: SC)
		• Motor defective • Harness short-circuit, broken • Connector disconnected • PCB defective
		1. Connector not connected properly Check if the connectors between the motor and the PCB are connected correctly. Reconnect it if it is not connected correctly. 2. Damaged harness Check if the harness between the motor and the PCB is damaged or exposed. Replace the harness if it is damaged. 3. Motor defective Check if the corresponding motor is damaged or there are missing parts. Replace the motor. 4. Board defective Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC726-20	D	Entrance JG motor (M10) error
SC726-21	D	Paper exit JG motor (M9) error
SC726-36	B	Folding JG motor (M2) error
SC726-37	B	Anti-winding motor (M3) error
SC726-41	B	Crease motor (M5) error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Detecting motor error or encoder error (The first four time: jam display, the fifth time: SC)
		• Motor defective • Harness short-circuit, broken • Connector disconnected • HP sensor defective • PCB defective
		1. Connector not connected properly Check if the connectors between the motor and the PCB are connected correctly. Reconnect it if it is not connected correctly. 2. Damaged harness Check if the harness between the motor and the PCB is damaged or exposed. Replace the harness if it is damaged. 3. HP sensor defective Check if the corresponding HP sensor is damaged or there are missing parts. Replace the HP sensor. 4. Motor defective Check if the corresponding motor is damaged or there are missing parts. Replace the motor. 5. Board defective Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC726-71	D	Sensor power supply error
		Detecting sensor power supply (5V_SN) error
		• Harness short-circuit, broken • Sensor defective • PCB defective
		1. Connector not connected properly Check if the connectors between the sensor and the PCB are connected correctly. Reconnect it if it is not connected correctly. 2. Damaged harness Check if the harness between the sensor/motor and the PCB is damaged or exposed.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Replace the harness if it is damaged. 3. Board defective Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC726-72	D	Serial expansion I/O board (IOEX0) error
SC726-73	D	Serial expansion I/O board (IOEX1) error
		An error occurred when accessing the serial expansion I/O board and an error was detected after retrying.
		• Serial expansion I/O board defective, connection failure • Harness short-circuit, broken • Connector disconnected
		1. Damaged harness Check if the harness between the motor and the PCB is damaged or exposed. Replace the harness if it is damaged. 2. Connector not connected properly Check if the connectors between the motor and the PCB are connected correctly. Reconnect it if it is not connected correctly. 3. Board defective Replace the IOEX.

SC730: High Capacity Stacker

Note

- Only Pro C5300S/C5310S: High Capacity Stacker SK5040

To recover from the error, check if the SC occurs (feed paper, open/close the doors, Input or Output check). If the SC occurs again, do the follow steps. After each step, turn the power OFF then ON to check if the SC occurs again.

SC730-01

Error Name

Downstream Device Communication Error

Pattern

D
1570

Error Condition

Communication error between stacker and downstream device is detected.

Major Cause

- Power of downstream unit is not turned on.
- Power cord is disconnected, or damaged.
- Interface cable (downstream device) is disconnected, or damaged.
- Downstream device board is defective.
- Control board is defective.

Solution

1. Turn the power off and on to check the SC occurs again.
2. Reconnect the downstream power cord.
3. Reconnect the interface cable (downstream device).
4. Replace the downstream device power cord.
5. Replace the interface cable (downstream device).
6. Replace the downstream device board.
7. Replace the controller board.

SC730-03

Error Name

Top Door Power Supply Error

Pattern

D

Error Condition

Protection fuse blown when the power was being turned ON

Major Cause

- Power of downstream unit is not turned on.
- Top door related motors are defective.
- Top door related motors harness is defective.

Corresponding motors:

- Entrance Motor (M1)
- Shift Tray JG Motor (M2)
- Transport Motor (M3)
- Proof Tray Exit Motor (M6)
- Proof Tray JG Motor (M7)
- Main Jogger Fence Retraction Motor (M10)

- Sub Jogger Motor (M13)

Solution

1. Reconnect or replace the harnesses of the top door switch and the motors. (Short circuit due to harness being exposed)
2. Replace the controller board.

SC730-04

Error Name

Front Door Power Supply Error

Pattern

D

Error Condition

Protection fuse blown when the power was being turned ON

Major Cause

- Power of downstream unit is not turned on.
- Front door related motors are defective.
- Front door related motors harness is defective.

Corresponding motors:

- Shift Exit Motor (M4)
- Shift Motor (M5)
- Main Jogger Front Fence Motor (M8)
- Main Jogger Rear Fence Motor (M9)
- LE Stopper Motor (M12)
- Shutter Motor (M24)

Solution

1. Reconnect or replace the harnesses to the front door switch and the motors. (Short circuit due to harness being exposed)
2. Replace the controller board.

SC730-10 to 13

Error Name

- 730-10: Entrance Motor Error
- 730-11: Proof Tray Exit Motor Error
- 730-12: Transport Motor Error
- 730-13: Shift Exit Motor Error

Pattern

- 730-10: D
- 730-11: D
- 730-12: D
- 730-13: B

Error Condition

Motor driver detected an error. (This SC is issued when the error was detected for the first time).

Major Cause

- Power of downstream unit is not turned on.
- Motor is defective.
- Overcurrent to the motor
- Motor driver overheat detected

Corresponding components:

- 730-10: Entrance Motor (M1)
- 730-11: Proof Tray Exit Motor (M6)
- 730-12: Transport Motor (M3)
- 730-13: Shift Exit Motor (M4)

Solution

1. Turn the power off and on to check the SC occurs again.
2. Check the motor connections.
3. Replace the motors.
4. Replace the controller board.

SC730-20, 21, 30 to 35

Error Name

- 730-20: Proof Tray JG Motor Error
- 730-21: Shift Tray JG Motor Error
- 730-30: Shift Motor Error
- 730-31: Main Jogger Front Fence Motor Error
- 730-32: Main Jogger Rear Fence Motor Error
- 730-33: Main Jogger Fence Retraction Motor Error
- 730-34: Sub Jogger Motor Error
- 730-35: LE Stopper Motor Error

Pattern

- 730-20: D
- 730-21: D

- 730-30: B
- 730-31: B
- 730-32: B
- 730-33: B
- 730-34: B
- 730-35: B

Error Condition

- When moving to the home position, home position was not detected within the specified number of pulses. (The first time it is reported as jam. An SC is issued the second time this occurs.)
- When moving from the home position, home position was still detected after specified number of pulses. (The first time it is reported as jam. An SC is issued the second time this occurs.)
- Motor driver detected an error. (This SC is issued when the error was detected for the first time).

Major Cause

- Power of downstream unit is not turned on.
- Motor is defective.
- Connector is disconnected.
- There is overload.
- Home position sensor is defective.
- Motor driver overcurrent
- Motor driver overheat detected.

Corresponding components:

- 730-20: Proof Tray JG Motor (M7)
- 730-21: Shift Tray JG Motor (M2)
- 730-30: Shift Motor (M5)
- 730-31: Main Jogger Front Fence Motor (M8)
- 730-32: Main Jogger Rear Fence Motor (M9)
- 730-33: Main Jogger Fence Retraction Motor (M10)
- 730-34: Sub Jogger Motor (M13)
- 730-35: LE Stopper Motor (M12)

Solution

1. Turn the power off and on to check the SC occurs again.
2. Check the HP sensor connections.
3. Check the motor connections.
4. Replace the HP sensors.
5. Replace the motors.
6. Replace the controller board.

SC730-40

Error Name

Tray Lift Motor Error

Pattern

B

Error Condition

- When lowering, the paper height sensor continues to detect paper after the specified time. (The first time, it is reported as jam. An SC is issued the second time this occurs.)
- When rising, the paper height sensor does not detect the upper surface of paper even after the specified time. (The first time, it is reported as jam. An SC is issued the second time this occurs.)
- The tray high limit SW, tray low limit SW and door safety SW turn on. (This SC is issued when the error was detected for the first time).

Major Cause

- Power of downstream unit is not turned on.
- Motor is defective.
- Connector is disconnected.
- There is overload.
- Paper Height Sensor is defective.

Solution

1. Turn the power off and on to check the SC occurs again.
2. Check the HP sensor connections.
3. Check the motor connections.
4. Replace the .HP sensors.
5. Replace the Tray Lift Motor (M14).
6. Replace the controller board.

SC730-50

Error Name

Shutter Motor Error

Pattern

B

Error Condition

- When the shutter moves to the home position, the home position was not detected within the specified number of pulses (p0 pulse). (The first time, it is reported as jam. An SC is issued the

second time this occurs.)

- When the shutter moves from the home position, the home position was still detected after the specified number of pulses (p1 pulse). (The first time, it is reported as jam. An SC is issued the second time this occurs.)
- Motor driver detected an error. (This SC is issued when the error was detected for the first time).

Major Cause

- Power of downstream unit is not turned on.
- Shutter motor (M24) is defective.
- Connector is disconnected.
- There is overload.
- Home position sensor is defective.
- Motor driver overcurrent
- Motor driver overheat detected.

Solution

1. Open and close the door of the stacker. Check whether or not the SC occurs again.
2. Replace the controller board.
3. Replace the motor harness.
4. Replace the shutter motor (M24).
5. Reconnect the connectors CN520 and 560 (sensor and motor) on the controller board again. (Be careful not to bend the pins of the connectors when you set them.)
6. Replace the harness of the home position sensor.
7. Replace the home position sensor and the shutter motor (M24).

SC730-51

Error Name

Shift Tray Exit Fan Motor Error

Pattern

B

Error Condition

A lock signal is detected (This SC is issued when the error was detected for the first time).

Major Cause

- Power of downstream unit is not turned on.
- Shift tray exit fan motor is defective.
- Shift tray exit fan motor is disconnected.
- Shift tray exit fan motor is overloaded.

Solution

1. Reconnect the connector CN502 on the controller board again, and then turn the main power OFF then ON to check if the SC occurs. (Be careful not to bend the pins of the connector when you set it.)
2. Replace the harness of the shift tray exit fan.
3. Replace the controller board.
4. Replace the shift tray exit fans (M19, M20, M21, M22).

SC736: Trimmer Unit

Note

- Only Pro C5300S/C5310S: Trimmer Unit TR5050

To recover from the error, check if the SC occurs (feed paper, open/close the doors, Input or Output check). If the SC occurs again, do the follow steps. After each step, turn the power OFF then ON to check if the SC occurs again.

SC736-10

Error Name

Cutter motor error

Pattern

B

Error Condition

- After start of trimming operation, the home position is not detected within the specified time. (This SC is issued when the error was detected for the first time).
- When a JAM signal is sent due to overload during the trimming operation, the home position is not detected within the specified time after reverse rotation operation starts. (Regardless of whether recovery was successful or not, the first time: an SC is issued when the error was detected for the first time)
- Time taken to return to home position during normal operation: approximately 3 sec (measurement value)
  Time-out: 5 sec
- Time taken to return to home position by reverse rotation when a JAM signal is generated due to an overload: approximately 3 sec (reference value)
  Time-out: 5 sec

Major Cause

- Power of downstream unit is not turned on.
- Cutter motor is defective.

- Connector is disconnected.
- There is overload.
- Cut HP sensor is defective.
- Main board is defective.

Solution

1. Check all the connectors between the motor and the main board are completely connected. (not disconnected or half-inserted)
   Reconnect the connector if it is not connected correctly.
2. Check if the harness between the motor and the main board is damaged or exposed.
   If so, replace the harness.
3. Check if there are any traces of short circuit on the main board. if so, replace the main board.

SC736-11

Error Name

Press roller motor error

Pattern

B

Error Condition

- When moving to the home position, home position was not detected within the specified time. (The first time, it is reported as jam. An SC is issued the second time this occurs.)
- When moving from the home position, home position was still detected after the specified time. (The first time, it is reported as jam. An SC is issued the second time this occurs.)
- Time taken to return to home position during normal operation: approximately 0.2 sec (measurement value)
  Time-out: 1 sec
- Time taken to leave to home position during normal operation: Approximately 0.1 sec (measurement value)
  Time-out: 0.5 sec

Major Cause

- Power of downstream unit is not turned on.
- Press roller motor is defective.
- Connector is disconnected.
- Press roller HP sensor is defective.
- Main board is defective.

Solution

1. Check all the connectors between the motor and the main board are completely connected. (not

disconnected or half-inserted)
Reconnect the connector if it is not connected correctly.
2. Check if the harness between the motor and the main board is damaged or exposed.
If so, replace the harness.
3. Check and replace the press roller HP sensor. (Input Check: SP6-650-009)
4. Check if the motor is overloaded, by rotating it by hand.
If so, replace the motor.
5. Check if there are any traces of short circuit on the main board. if so, replace the main board.

SC736-12

Error Name

Cut position motor error

Pattern

B

Error Condition

- When moving to the home position, home position was not detected within the specified time. (The first time, it is reported as jam. An SC is issued the second time this occurs.)
- When moving from the home position, home position was still detected after the specified time. (The first time, it is reported as jam. An SC is issued the second time this occurs.)
- Time taken to return to home position during normal operation (paper size:A3) : approximately 1.5 sec (measurement value)
Time-out: 3 sec
- Time taken to leave to home position during normal operation: Approximately 0.1 sec (measurement value)
Time-out: 0.5 sec

Major Cause

- Power of downstream unit is not turned on.
- Cut position motor is defective.
- Connector is disconnected.
- Stopper assembly HP sensor is defective.
- Main board is defective.

Solution

1. Check all the connectors between the motor and the main board are completely connected. (not disconnected or half-inserted)
Reconnect the connector if it is not connected correctly.
2. Check if the harness between the motor and the main board is damaged or exposed.

If so, replace the harness.

3. Check and replace the stopper assembly HP sensor. (Input Check: SP6-650-008)
4. Check if the motor is overloaded, by rotating it by hand.
   If so, replace the motor.
5. Check if there are any traces of short circuit on the main board. if so, replace the main board.

SC736-13

Error Name

Press stopper motor error

Pattern

B

Error Condition

- When moving to the home position, home position was not detected within the specified time. (The first time, it is reported as jam. An SC is issued the second time this occurs.)
- When moving from the home position, home position was still detected after the specified time. (The first time, it is reported as jam. An SC is issued the second time this occurs.)

Major Cause

- Power of downstream unit is not turned on.
- Motor is defective.
- Connector is disconnected.
- There is overload.
- Encoder is defective.

Solution

1. Check all the connectors between the motor and the main board are completely connected. (not disconnected or half-inserted)
   Reconnect the connector if it is not connected correctly.
2. Check if the harness between the motor and the main board is damaged or exposed.
   If so, replace the harness.
3. Check and replace the press stopper HP sensor. (Input Check: SP6-650-010)
4. Check if the motor is overloaded, by rotating it by hand.
   If so, replace the motor.
5. Check if there are any traces of short circuit on the main board. if so, replace the main board.

SC740: Cover Interposer Tray

Note

- Pro C5300S/C5310S: Cover Interposer Tray CI5050

- IM C6500/C8000: Cover Interposer Tray CI4040, Cover Interposer Tray CI4050

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC740-01	D	Downstream device communication error (Cover Interposer Tray CI4050)
		• Communication with the downstream device has established, but the device is not responding to the command sent out, even after being sent three times. • The port level of the downstream device does not become H level (break cancel) within specified time.
		• Interface cable (between inserter and downstream device) connector disconnected or broken • PCB (of inserter or downstream device) defective
		• Reconnect or replace the interface cable (between cover inserter and downstream device) connector disconnected or broken. • Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC740-03	D	Protection Device Break Error 1 (Cover Interposer Tray CI4040/ CI5050)
		Protection device break error (fuse tripped, 24V tripped)
		• Short-circuit • Overload • Motor defective • Connector disconnected • Connector broken
		• Check the connections of all the connectors. • Check if the coating material for the harnesses has peeled off. Replace any broken harness. • Check all the motors to see whether the drive force is transferred or the motor is overloaded. Replace any defective motor. • Check if there is any sign of boards having been shorted. Replace any shorted board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC740-10	B	Bottom Plate Lift Motor Error (Cover Interposer Tray CI4040/ CI5050)
		• The lift motor rotates in the ascending direction but the upper limit sensor does not detect within specified time (t0sec). (The first time: jam display, the second time: SC) • The lift motor rotates in the descending direction but the lower limit sensor does not detect within specified time (t0sec). (The first time: jam display, the second time: SC)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Motor defective • Connecter disconnected • Overload • Upper limit sensor defective • Lower limit sensor defective
		• Check the connections of the connector. • Check the defective sensor. • Replace the board. • Replace the motor. • Replace the harness.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC740-10	B	1st Lift Motor Error (Cover Interposer Tray CI4050)
		• The lift motor rotates in the ascending direction but the upper limit sensor does not detect within specified time (t0sec). (The first time: jam display, the second time: SC) • The lift motor rotates in the descending direction but the lower limit sensor does not detect within specified time (t0sec). (The first time: jam display, the second time: SC)
		• Lift motor defective/Connecter disconnected • Upper limit sensor defective/Connecter disconnected • Lower limit sensor defective/Connecter disconnected • Harness broken • PCB defective • Mechanical defect of the tray lift mechanism
		• Replace or reconnect the lift motor. • Replace or reconnect the upper limit sensor. • Replace or reconnect the lower limit sensor. • Replace the harness. • Replace the PCB. • Repair the tray lift mechanism

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC740-11	B	1st Pick-Up Motor Error (Cover Interposer Tray CI4050)
		• Home position is not detected within a specified number of pulses after the pick-up motor is driven. (The first time: jam display, the second time: SC) • Home position is still detected after the pick-up motor has been driven for a specified number of pulses. (The first time: jam display, the second time: SC)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Pick-up motor defective/connector disconnected • Home position sensor defective/connecter disconnected • Harness broken • PCB defective • Mechanical defect of the pick-up mechanism
		• Replace or reconnect the pick-up motor. • Replace or reconnect the home position sensor. • Replace the harness. • Replace the PCB. • Repair the pick-up mechanism

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC740-20	B	2nd Lift Motor Error (Cover Interposer Tray CI4050)
		• The lift motor rotates in the ascending direction but the upper limit sensor does not detect within specified time (t0sec). (The first time: jam display, the second time: SC) • The lift motor rotates in the descending direction but the lower limit sensor does not detect within specified time (t0sec). (The first time: jam display, the second time: SC)
		• Lift motor defective/Connecter disconnected • Upper limit sensor defective/Connecter disconnected • Lower limit sensor defective/Connecter disconnected • Harness broken • PCB defective • Mechanical defect of the tray lift mechanism
		• Replace or reconnect the lift motor. • Replace or reconnect the upper limit sensor. • Replace or reconnect the lower limit sensor. • Replace the harness. • Replace the PCB. • Repair the tray lift mechanism

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC740-21	B	2nd Pick-Up Motor Error (Cover Interposer Tray CI4050)
		• Home position is not detected within a specified number of pulses after the pick-up motor is driven. (The first time: jam display, the second time: SC) • Home position is still detected after the pick-up motor has been driven for a specified number of pulses. (The first time: jam display, the second time: SC)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Pick-up motor defective/connecter disconnected • Home position sensor defective/connecter disconnected • Harness broken • PCB defective • Mechanical defect of the pick-up mechanism
		• Replace or reconnect the pick-up motor. • Replace or reconnect the home position sensor. • Replace the harness. • Replace the PCB. • Repair the pick-up mechanism

SC741: Cover Interposer Tray

Note

- Only Pro C5300S/5310S: Cover interposer tray CI5040

SC741-01

Error Name

Downstream device communication error

Pattern

D

Error Condition

The cover interposer tray cannot communicate with the downstream device.

Major Cause

- Power of downstream unit is not turned on
- Interface cable (between the cover interposer tray and downstream device) is disconnected or damaged/
- Cover interposer tray PCB is defective.
- Downstream device PCB is defective.

Solution

1. Check that the downstream device is turned ON.
2. Check that the downstream device power cord is connected.
3. Check that the interface cable between the downstream unit and the cover interposer tray is connected correctly.
4. Replace the interface cable.
5. Replace the downstream device PCB.

6. Replace the cover interposer tray PCB.

SC741-03

Error Name

Overcurrent protection device error 1

Pattern

D

Error Condition

The fuse on the PCB blew,

Major Cause

- Power of downstream unit is not turned on.
- Harness is damaged.
- Actuator is defective.
- Main controller board is defective,

Solution

1. Replace the actuator.
2. Replace the harness.
3. Replace the main controller board.

SC741-10

Error Name

Tray 1 lift error

Pattern

B

Error Condition

The lift motor rotates to lift the tray, but the upper limit sensor does not turn on (it remains blocked) within the specified time, for five times consecutively. (From the first to fourth times, message is displayed asking to set the paper again. An SC is issued the fifth time this occurs.)

Major Cause

- Power of downstream unit is not turned on.
- Paper is not set properly (the paper does not reach the pick-up roller)
- 1st lift motor is defective or disconnected.
- 1st upper limit sensor is defective or disconnected.
- Harness is damaged.

- Main controller board is defective.

Solution

1. Remove all paper from the cover interposer tray. Turn the power off and on, and then check if other SCs occur.
2. Set a sheet on the tray generating the SC, and check tray operation.
   From the first to fourth times, operator will be prompted to set the paper again.
   A: The 1st lift motor does not rotate and the bottom plate is not lifted.
   B: The 1st lift motor rotates but the bottom plate is not lifted.
   C: The 1st lift motor rotates and the bottom plate is lifted, but the bottom plate does not stop at the upper limit position.
   Cause: A
   - 1st lift motor connector is disconnected/half-inserted, or defective.
   - 1st lift motor harness with the relay connectors is disconnected/half-inserted, or damaged.
   - 1st upper limit sensor connector is disconnected/half-inserted, or defective.
   - 1st upper limit sensor harness with the relay connectors is disconnected/half-inserted, or damaged.

   Cause: B
   - Gear and coupling of the 1st lift motor is defective.
   - Bottom plate rise mechanism parts in the paper feed tray are defective.

   Cause: C
   - Paper is not set properly (the paper does not reach the pick-up roller)
   - 1st upper limit sensor and the sensor bracket is defective.
   - Main controller board is defective.
3. Check that the 1st lift motor connector is connected correctly.
4. Replace the 1st lift motor.
5. Check that the 1st lift motor harness with the relay connectors is connected correctly.
6. Replace the relay harness of the 1st lift motor.
7. Check that the 1st upper limit sensor connector is connected correctly.
8. Replace the 1st upper limit sensor.
9. Check that the 1st upper limit sensor harness is connected correctly.
10. Replace the 1st upper limit sensor harness.
11. Replace the gear and coupling of the 1st lift motor.
12. Check the bottom plate rise mechanism parts in the paper feed tray, and replace them as necessary.
13. If the pick-up roller does not change to the upper limit status due to paper not set correctly, set the paper again, and then check the operation.
14. Replace the 1st upper limit sensor and the sensor bracket.
15. Replace the main controller board.

SC741-11

Error Name

Tray 1 lowering error

Pattern

B

Error Condition

The lift motor rotates to lower the tray, but the lower limit sensor does not turn on (it remains blocked) within the specified time, for five times consecutively. (From the first to fourth times, an error is counted inside the cover interposer tray and it is processed as a normal termination)

Major Cause

- Power of downstream unit is not turned on.
- 1st lift motor is defective or connector is disconnected.
- 1st lower limit sensor is defective or connector is disconnected.
- Harness is damaged.
- Main controller board is defective.

Solution

1. Remove all paper from the cover interposer tray. Turn the power off and on, and then check if other SCs occur.
2. Check the bottom plate position when the power of the machine is turned on.
   Check if there is a clicking sound from inserting and withdrawing the coupling of the 1st lift motor.
   The SC only occurs at the 5th time.
   A: The bottom plate is not at the lower limit position. The 1st lift motor does not rotate and the bottom plate does not move after the machine is turned off and on.
   B: The bottom plate is not at the lower limit position. The 1st lift motor rotates but the bottom plate is not lowered.
   C: The bottom plate is shifted to the lower limit position but the 1st lift motor does not stop.
   Cause: A
   - 1st lift motor connector is disconnected/half-inserted, or defective.
   - 1st lift motor harness with the relay connectors is disconnected/half-inserted, or the harness is damaged.
   - 1st lower limit sensor is defective.

   Cause: B
   - Gear and coupling of the 1st lift motor are defective.
   - Bottom plate rise mechanism parts in the paper feed tray are defective.

   Cause: C
   - 1st lower limit sensor is disconnected/half-inserted, or the harness is damaged.

- 1st lower limit sensor, sensor bracket is defective.
- Main controller board is defective.

3. Check that the 1st lift motor connector is connected correctly.
4. Replace the 1st lift motor.
5. Check that the 1st lift motor harness with the relay connectors is connected correctly.
6. Replace the relay harness of the 1st lift motor.
7. Replace the 1st lower limit sensor.
8. Replace the gear and coupling of the 1st lift motor.
9. Check the bottom plate rise mechanism parts in the paper feed tray, and replace them as necessary.
10. Check if the 1st lower limit sensor connector is disconnected or half-inserted, and if the harness is damaged.
11. Replace the 1st lower limit sensor and the sensor bracket.
12. Replace the main controller board.

SC741-12

Error Name

Tray 1 upper limit error

Pattern

B

Error Condition

During tray initialization or paper feed operation, before the 1st pickup solenoid is turned on, the 1st upper limit sensor detects that the 1st tray is not at the upper limit position, for five times consecutively.(From the first to fourth times, message is displayed asking to set the paper again. An SC is issued the fifth time this occurs.)

Major Cause

- Power of downstream unit is not turned on.
- Paper overload
- The pick-up roller was pushed down physically.
- The spring of the pick-up roller solenoid is released.
- 1st upper limit sensor / connector is disconnected.
- Harness is damaged.
- Main controller board is defective.

Solution

1. Remove all paper from the cover interposer tray. Turn the power off and on, and then check if other SCs occur.

2. Set a sheet on the tray generating the SC, and check tray operation.
   From the first to fourth times, operator will be prompted to set the paper again.
   A: The bottom plate is not lifted. When the corresponding cover interposer tray is selected, operator will be prompted to set the paper again.
   B: The pick-up solenoid operates but the bottom plate is not lifted. The operator will be prompted to set the paper again.
   Cause: A
   - Pick-up solenoid was pushed down physically.
   - The spring of the pick-up solenoid released (pick-up roller lowered) or defective.
   - 1st upper limit sensor connector is disconnected/half-inserted, defective.
   - 1st upper limit sensor harness with the relay connectors is disconnected/half-inserted, or damaged.

   Cause: B
   - Too much paper is loaded on the tray (overloaded)
   - Pick-up solenoid harness with the relay connectors is disconnected/half-inserted, or damaged.
   - 1st upper limit sensor is defective.
   - Main controller board is defective.
3. Check if the pick-up solenoid has been pushed down by the loaded paper or other objects. If so, remove the obstacle.
4. Check if the spring of the pick-up solenoid is released or defective. (pick-up roller lowered)
5. Check that the 1st upper limit sensor connector is connected correctly.
6. Replace the 1st upper limit sensor.
7. Check that 1st upper limit sensor harness with the relay connectors is connected correctly.
8. Replace the 1st upper limit sensor harness.
9. Check if an appropriate amount of paper is loaded.
10. Check that the pick-up solenoid harness with the relay connectors is connected correctly.
11. Replace the pick-up solenoid harness.
12. Replace the 1st upper limit sensor.
13. Replace the main controller board.

SC741-13

Error Name

1st blower fan error

Pattern

B

Error Condition

An error is detected from the 1st blower fan of the cover interposer tray.

Major Cause

- Power of downstream unit is not turned on.
- 1st blower fan is defective / connector is disconnected.
- Harness is damaged.
- Main controller board is defective.

Solution

For checking the sensor or actuator error, not only visually confirmation but also Input/Output Check are needed.

1. Check if the relay connector of the I/F cable between the main controller board and the 1st blower fan is connected correctly.
2. Check if the 1st blower fan connector is connected correctly.
3. Replace the 1st blower fan harness.
4. If the 1st blower fan is defective or damaged, replace the fan.
5. Replace the main controller board.

SC741-20

Error Name

Tray 2 lift error

Pattern

B

Error Condition

The lift motor rotates to lift the tray, but the upper limit sensor does not turn on (it remains blocked) within the specified time, for five times consecutively. (From the first to fourth times, message is displayed asking to set the paper again. An SC is issued the fifth time this occurs.)

Major Cause

- Power of downstream unit is not turned on.
- Paper is not set properly (the paper does not reach the pick-up roller)
- 2nd lift motor is defective or disconnected.
- 2nd upper limit sensor is defective or disconnected.
- Harness is damaged.
- Main controller board is defective.

Solution

1. Remove all paper from the cover interposer tray. Turn the power off and on, and then check if other SCs occur.
2. Set a sheet on the tray generating the SC, and check tray operation.

From the first to fourth times, operator will be prompted to set the paper again.

A: The 2nd lift motor does not rotate and the bottom plate is not lifted.

B: The 2nd lift motor rotates but the bottom plate is not lifted.

C: The 2nd lift motor rotates and the bottom plate is lifted, but the bottom plate does not stop at the upper limit position.

Cause: A

- 2nd lift motor connector is disconnected/half-inserted, or defective.
- 2nd lift motor harness with the relay connectors is disconnected/half-inserted, or damaged.
- 2nd upper limit sensor connector is disconnected/half-inserted, or defective.
- 2nd upper limit sensor harness with the relay connectors is disconnected/half-inserted, or damaged.

Cause: B

- Gear and coupling of the 2nd lift motor is defective.
- Bottom plate rise mechanism parts in the paper feed tray are defective.

Cause: C

- Paper is not set properly (the paper does not reach the pick-up roller)
- 2nd upper limit sensor and the sensor bracket is defective.
- Main controller board is defective.

3. Check that the 2nd lift motor connector is connected correctly.
4. Replace the 2nd lift motor.
5. Check that the 2nd lift motor harness with the relay connectors is connected correctly.
6. Replace the relay harness of the 2nd lift motor.
7. Check that the 2nd upper limit sensor connector is connected correctly.
8. Replace the 2nd upper limit sensor.
9. Check that the 2nd upper limit sensor harness is connected correctly.
10. Replace the 2nd upper limit sensor harness.
11. Replace the gear and coupling of the 2nd lift motor.
12. Check the bottom plate rise mechanism parts in the paper feed tray, and replace them as necessary.
13. If the pick-up roller does not change to the upper limit status due to paper not set correctly, set the paper again, and then check the operation.
14. Replace the 2nd upper limit sensor and the sensor bracket.
15. Replace the main controller board.

SC741-21

Error Name

Tray 2 lowering error

Pattern

B

Error Condition

The lift motor rotates to lower the tray, but the lower limit sensor does not turn on (it remains blocked) within the specified time, for five times consecutively. (From the first to fourth times, an error is counted inside the cover interposer tray and it is processed as a normal termination)

Major Cause

- Power of downstream unit is not turned on.
- 2nd lift motor is defective or connector is disconnected.
- 2nd lower limit sensor is defective or connector is disconnected.
- Harness is damaged.
- Main controller board is defective.

Solution

1. Remove all paper from the cover interposer tray. Turn the power off and on, and then check if other SCs occur.
2. Check the bottom plate position when the power of the machine is turned on.
   Check if there is a clicking sound from inserting and withdrawing the coupling of the 2nd lift motor.
   The SC only occurs at the 5th time.
   A: The bottom plate is not at the lower limit position. The 2nd lift motor does not rotate and the bottom plate does not move after the machine is turned off and on.
   B: The bottom plate is not at the lower limit position. The 2nd lift motor rotates but the bottom plate is not lowered.
   C: The bottom plate is shifted to the lower limit position but the 2nd lift motor does not stop.
   Cause: A
   - 2nd lift motor connector is disconnected/half-inserted, or defective.
   - 2nd lift motor harness with the relay connectors is disconnected/half-inserted, or the harness is damaged.
   - 2nd lower limit sensor is defective.

   Cause: B
   - Gear and coupling of the 2nd lift motor are defective.
   - Bottom plate rise mechanism parts in the paper feed tray are defective.

   Cause: C
   - 2nd lower limit sensor is disconnected/half-inserted, or the harness is damaged.
   - 2nd lower limit sensor, sensor bracket is defective.
   - Main controller board is defective.
3. Check that the 2nd lift motor connector is connected correctly.
4. Replace the 2nd lift motor.

5. Check that the 2nd lift motor harness with the relay connectors is connected correctly.
6. Replace the relay harness of the 2nd lift motor.
7. Replace the 2nd lower limit sensor.
8. Replace the gear and coupling of the 2nd lift motor.
9. Check the bottom plate rise mechanism parts in the paper feed tray, and replace them as necessary.
10. Check if the 2nd lower limit sensor connector is disconnected or half-inserted, and if the harness is damaged.
11. Replace the 2nd lower limit sensor and the sensor bracket.
12. Replace the main controller board.

SC741-22

Error Name

Tray 2 upper limit error

Pattern

B

Error Condition

During tray initialization or paper feed operation, before the pickup solenoid is turned on, the upper limit sensor detects that the 2nd tray is not at the upper limit position, for five times consecutively.(From the first to fourth times, message is displayed asking to set the paper again. An SC is issued the fifth time this occurs.)

Major Cause

- Power of downstream unit is not turned on.
- Paper overload
- The pick-up roller was pushed down physically.
- The spring of the pick-up roller solenoid is released.
- 2nd upper limit sensor / connector is disconnected.
- Harness is damaged.
- Main controller board is defective.

Solution

1. Remove all paper from the cover interposer tray. Turn the power off and on, and then check if other SCs occur.
2. Set a sheet on the tray generating the SC, and check tray operation.
   From the first to fourth times, operator will be prompted to set the paper again.
   A: The bottom plate is not lifted. When the corresponding cover interposer tray is selected, operator will be prompted to set the paper again.

B: The pick-up solenoid operates but the bottom plate is not lifted. The operator will be prompted to set the paper again.

Cause: A

- Pick-up solenoid was pushed down physically.
- The spring of the pick-up solenoid released (pick-up roller lowered) or defective.
- 2nd upper limit sensor connector is disconnected/half-inserted, defective.
- 2nd upper limit sensor harness with the relay connectors is disconnected/half-inserted, or damaged.

Cause: B

- Too much paper is loaded on the tray (overloaded)
- Pick-up solenoid harness with the relay connectors is disconnected/half-inserted, or damaged.
- 2nd upper limit sensor is defective.
- Main controller board is defective.

3. Check if the pick-up solenoid has been pushed down by the loaded paper or other objects. If so, remove the obstacle.
4. Check if the spring of the pick-up solenoid is released or defective. (pick-up roller lowered)
5. Check that the 1st upper limit sensor connector is connected correctly.
6. Replace the 2nd upper limit sensor.
7. Check that 2nd upper limit sensor harness with the relay connectors is connected correctly.
8. Replace the 2nd upper limit sensor harness.
9. Check if an appropriate amount of paper is loaded.
10. Check that the pick-up solenoid harness with the relay connectors is connected correctly.
11. Replace the pick-up solenoid harness.
12. Replace the 2nd upper limit sensor.
13. Replace the main controller board.

SC741-23

Error Name

2nd blower fan error

Pattern

B

Error Condition

An error is detected from the 2nd blower fan of the cover interposer tray.

Major Cause

- Power of downstream unit is not turned on.
- 2nd blower fan is defective / connector is disconnected.
- Harness is damaged.

- Main controller board is defective.

Solution

Not only check the sensor/actuator by eye, but also perform Input/Output Check.

1. Check if the relay connector of the I/F cable between the main controller board and the 2nd blower fan is connected correctly.
2. Check if the 2nd blower fan connector is connected correctly.
3. Replace the 2nd blower fan harness.
4. If the 2nd blower fan is defective or damaged, replace the fan.
5. Replace the main controller board.

SC741-50

Error Name

Double feed detection error

Pattern

B

Error Condition

An error signal was detected during double feed detection.

Major Cause

- Power of downstream unit is not turned on.
- Double-feed detection board connector is disconnected or damaged.
- Main controller board is defective.
- Double-feed detection board is defective.

Solution

1. Check if the I/F cable connector between the main controller board and the URB is connected correctly.
2. Check if the I/F cable connector between the double-feed detection boards is connected correctly. (URB/URTB/URRB)
3. Replace the I/F cable connector between the main board and the URB.
4. Replace the I/F cable between the double-feed detection boards. (URB/URTB/URRB)
5. Replace the URTB/URRB.
6. Replace the URB.
7. Replace the main controller board.

SC741-60 to 67, 69 to 71

Error Name

- 741-60: Protection device error 1
- 741-61: Protection device error 2
- 741-62: Protection device error 3
- 741-63: Protection device error 4
- 741-64: Protection device error 5
- 741-65: Protection device error 6
- 741-66: Protection device error 7
- 741-67: Protection device error 8
- 741-69: Protection device error 10
- 741-70: Protection device error 11
- 741-71: Protection device error 12

Pattern

D

Error Condition

A blown fuse is detected on the main controller board.

Major Cause

- Power of downstream unit is off.
- Main controller board is defective.
- Harness is damaged.
- Components are defective

Corresponding components:

- 741-60:
  1st transport motor
  1st vertical transport motor
  2nd vertical transport motor
- 741-61:
  3rd vertical transport sensor
  Horizontal transport motor
- 741-62:
  1st blower fan
  1st lift motor
  2nd lift motor
  URB/URTB
- 741-63:
  1st paper feed motor

- 741-64:
  2nd paper feed motor
- 741-65:
  2nd transport motor
- 741-66:
  URB/URTB/URRB
- 741-67:
  All sensors
- 741-69:
  2nd blower fan
  1st lift motor
  2nd lift motor
  URB/URTB
- 741-70:
  1st pickup solenoid
  1st lift motor
  2nd lift motor
  URB/URTB
- 741-71:
  2nd pickup solenoid
  1st lift motor
  2nd lift motor
  URB/URTB

Solution

1. If the fuse is damaged, replace the part.
2. If the harness for the fuse is damaged, replace the harness.
3. Replace the main controller board.

SC745: Mail Box

Note

- Only IM C6500/C8000: Mail Box CS4010

To recover from the error, check if the SC occurs (feed paper, open/close the doors, Input or Output check). If the SC occurs again, do the follow steps. After each step, turn the power OFF then ON to check if the SC occurs again.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC745-03	D	Protection device break error 1
		Protection device break error (fuse tripped)
		• Short-circuit

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Overload • Motor/solenoid defective
		1. Check the harness connection. 2. Check or replace the harness. 3. Check or replace the motor. 4. Replace the PCB.

SC761: Bridge Unit

Note

- Only Pro C5300S/C5310S: Bridge Unit BU5020

To recover from the error, check if the SC occurs (feed paper, open/close the doors, Input or Output check). If the SC occurs again, do the follow steps. After each step, turn the power OFF then ON to check if the SC occurs again.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC761-01	D	Downstream device communication error
		• Communication with the downstream device has established, but the device is not responding to the command sent out, even after being sent three times. • The port level of the downstream device does not become H level (break cancel) within specified time.
		• Interface cable (between bridge unit and downstream device) connector disconnected or broken • PCB (of bridge unit or downstream device) defective
		1. Reconnect the power cable. 2. Reconnect the interface cable. 3. Replace the interface cable. 4. Replace the PCB in the downstream device. 5. Replace the PCB in the bridge unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC761-61	D	Protection device break error 2
		A blown fuse is detected on the PCB.
		• PCB defective • Short circuit • Transport motor defective
		1. Replace the transport motor. 2. Replace the harnesses between the PCB and the transport motor. 3. Replace the PCB in the bridge unit.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC761-67	D	Protection device break error 8
		A blown fuse is detected on the PCB.
		• PCB defective • Short circuit • Sensor defective (Related Components: all sensors in the unit)
		1. Replace the sensors. 2. Replace the harnesses between the PCB and the sensors. 3. Replace the PCB in the bridge unit.

SC780: LCIT, Vacuum Feed LCIT

Note

- Pro C5300S/C5310S: Vacuum Feed LCIT RT5120, LCIT RT4060, LCIT RT5140
- IM C6500/C8000: LCIT RT4060, LCIT RT4070

To recover from the error, check if the SC occurs (feed paper, open/close the doors, Input or Output check). If the SC occurs again, do the follow steps. After each step, turn the power OFF then ON to check if the SC occurs again.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC780-03	B	Protection device break error (Vacuum Feed LCIT)
		The fuse blown signal “H (error)” of the fuse on the PSU/PCB in the LCIT is detected.
		• Connector on the harness between PSU and PCB on LCT1 disconnected • Harness broken • PSU defective • PCB defective • Poor grounding of the 24V line
		• Reconnect the connector on the harness between PSU and PCB on LCT1. • Replace the harness • Replace the PSU. • Replace the PCB. • Replace the harness/actuator.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC780-04	B	PSU cooling fan 1 error (Vacuum Feed LCIT)
		Cooling fan alarm “H (error)” is detected while the PSU cooling fan 1 on the LCIT is ON.
		• PSU Cooling Fan 1 on the LCT1 defective • Connector disconnected • Harness broken • PSU defective • PCB defective
		• Reconnect the connector. • Replace the PSU Cooling Fan 1 on the LCT1. • Replace the harness • Replace the PSU. • Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC780-05	B	PSU cooling fan 2 error (Vacuum Feed LCIT)
		Cooling fan alarm “H (error)” is detected while the PSU cooling fan 2 on the LCIT is ON.
		• PSU cooling fan 2 on the LCIT defective • Connector disconnected • Harness broken • PSU defective • PCB defective
		• Reconnect the connector. • Replace the PSU cooling fan 2 on the LCIT. • Replace the harness • Replace the PSU. • Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC780-06	B	Vertical transport unit cooling fan error (Vacuum Feed LCIT)
		Cooling fan alarm “H (error)” is detected while the cooling fan on the bridge unit of LCIT is ON.
		• Cooling fan defective • Connector disconnected • Harness broken

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• PCB on the LCT1 defective
		• Reconnect the connector. • Replace the cooling fan. • Replace the harness • Replace the PCB on the LCIT.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC780-07	B	Transport motor cooling fan error (Vacuum Feed LCIT)
		Cooling fan alarm “H (error)” is detected while the transport motor cooling fan on the LCIT is ON.
		• Transport Motor Cooling Fan on the LCIT defective • Connector disconnected • Harness broken • PCB defective
		• Reconnect the connector. • Replace the Transport Motor Cooling Fan on the LCIT. • Replace the harness • Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC780-60	B	Cooling fan error (Multi Bypass Tray on the Vacuum Feed LCIT)
		The cooling fan alarm detected an error when the LCIT cooling fan was turned ON.
		• Cooling fan for feed motor defective/disconnected • Harness for the cooling fan defective • PCB defective
		1. Check the connectivity of the harness of the cooling fan for feed motor, and replace it. 2. Replace the cooling fan for feed motor. 3. Replace the PCB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC780-50	B	LCIT high efficiency controller communication error (LCIT RT4060/RT4070/RT5140)
		An error was detected during read/write access in SPI communication between SPU and high-efficiency controller.
		• PCB defective

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• High-efficiency controller defective • High-efficiency controller system clock error
		• Replace the PCB.

SC788: Bridge Unit

Note

- Only Pro C5300S/C5310S: Bridge Unit BU5030

To recover from the error, check if the SC occurs (feed paper, open/close the doors, Input or Output check). If the SC occurs again, do the follow steps. After each step, turn the power OFF then ON to check if the SC occurs again.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC788-01	B	SMB: ID error at OPEN
SC788-02	B	SMB: Channel error at OPEN
SC788-03	B	SMB: Device error at OPEN
SC788-04	B	SMB: Communication interruption error at OPEN
SC788-05	B	SMB: Communication timeout error at OPEN
SC788-06	B	SMB: Error during operation stop at OPEN
SC788-07	B	SMB: Buffer full error at OPEN
SC788-08	B	SMB: Error without error code at OPEN
SC788-09	B	SMB: ID error at CLOSE
SC788-10	B	SMB: Error without error code at CLOSE
SC788-11	B	SMB: ID error when writing data
SC788-12	B	SMB: Channel error during data write
SC788-13	B	SMB: Device error during data write

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC788-14	B	SMB: Communication interrupt error during data write
SC788-15	B	SMB: Communication timeout error during data write
SC788-16	B	SMB: Operation stop error during data write
SC788-17	B	SMB: Buffer full error during data write
SC788-18	B	SMB: Error without error code during data write
SC788-19	B	SMB: ID error when reading data
SC788-20	B	SMB: Channel error when reading data
SC788-21	B	SMB: Device error when reading data
SC788-22	B	SMB: Communication interruption error when reading data
SC788-23	B	SMB: Communication timeout error when reading data
SC788-24	B	SMB: Operation stop error when reading data
SC788-25	B	SMB: Buffer full error when reading data
SC788-26	B	SMB: Error without error code when reading data
SC788-36	B	Verify error
SC788-37	B	SMB: Failure detection error
		Abnormality notification is received during SMB communication, and it is not recovered after 3 retries.
		• Data corruption due to noise • SMB mounting failure • SMB defective • RCU (PCB2) defective
		1. Re-installing the SMB on the RCU (PCB2)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		2. Replace the RCU (PCB2) 3. Replace the SMB on the RCU (PCB2) After recovery from SC, perform CIS adjustment.

SC790: RPIP Interface Box

To recover from the error, check if the SC occurs (feed paper, open/close the doors, Input or Output check). If the SC occurs again, do the follow steps. After each step, turn the power OFF then ON to check if the SC occurs again.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC790-10	D	EEPROM download error
		CRC error occurred 4 times when downloading data from EEPROM.
		• Last parameter writing was failed. • Board on the RPIP Interface Box defective
		1. Turn power off/on. 2. If the problem was not solved in Step 1, execute parameter writing again. 3. If the problem was not solved in Step 2, replace the board on the RPIP Interface Box.

SC800 (Controller)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC816	[0x0000]	Energy save I/O subsystem error
SC816-01	D	Subsystem error
SC816-02	D	Sysarch (LPUX_GET_PORT_INFO) error
SC816-03	D	Transition to STR was denied.
SC816-04	D	Interrupt in kernel communication driver
SC816-05	D	Preparation for transition to STR failed.
SC816-07	D	Sysarch (LPUX_GET_PORT_INFO) error
SC816-08	D	Sysarch (LPUX_ENGINE_TIMERCTRL) error
SC816-09	D	Sysarch (LPUX_RETURN_FACTOR_STR) error
SC816-10 to -12	D	Sysarch (LPUX_GET_PORT_INFO) error
SC816-13	D	open() error
SC816-14	D	Memory address error
SC816-15 to -18	D	open() error
SC816-19	D	Double open() error
SC816-20	D	open() error
SC816-22	D	Parameter error
SC816-23, -24	D	read() error
SC816-25	D	write () error
SC816-26 to -28	D	write() communication retry error
SC816-29, -30	D	read() communication retry error
SC816-35	D	read() error
SC816-36 to -96	D	Subsystem error
SC816-98, -99	D	Subsystem error
		Energy save I/O subsystem detected some abnormality.
		• Energy save I/O subsystem defective • Energy save I/O subsystem detected a controller board error (non-response). • Error was detected during preparation for transition to STR. • SC816-99 occurs as a subsystem error except any error from -06 to 96.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Check if the SC occurs by turning the power OFF then ON. If the SC occurs again, do the following steps. Check if the SC reoccurs by cycling the power after each step. 1. Update the "System/Copy" firmware and the other system firmware to the latest version. 2. Disable the STR shift function with SP5-191-001 (Power Str Set). 3. Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC817-00	D	Monitor error: File detection / Digital signature error
		• Boot loader cannot read any of diagnostic module, kernel, or root file system. • In a boot loader SD card, the digital signature checking for any of diagnostic module, kernel, or root file system is failed.
		• Any of the following items does not exist or is broken OS Flash ROM, Diagnostic module in SD card, Kernel, Root file system • Any of the following items is revised fraudulently: Diagnostic module in SD card, Kernel, Root file system
		• ROM update for controller system • Use another booting SD card having a valid digital signature

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC818-00	D	Watchdog timer error
		The system program fell into a bus-hold state or an endless loop of the program interruption occurred, causing other process to stop.
		• System program defective • Controller board defective • Optional board defective
		• Turn the main power OFF/ON. • Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC819-00	D	Kernel halt error [xxxx]: Detailed error code
		Due to a control error, a RAM overflow occurred during system processing. One of the following messages was displayed on the operation panel.
	[0x5032]	HAIC-P2 error
		HAIC-P2 decompression error (An error occurred in the ASIC

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		compression/decompression module.)
		• The code data saved in the HDD was broken for an unexpected reason. (HDD device defective) • The code data saved to memory was broken for an unexpected reason. (Memory device defective) • ASIC defective • Data other than code data was unzipped due to a software malfunction.
		• Turn the main power OFF/ON. • Replace the HDD. • Replace the memory • Replace the controller board. • Fix the software
	[0x5245]	Link up error
		Link up transaction between Engine ASIC and Veena was not completed within 100 ms.
		Either one of following message appears on console if Link up error occurs. RESUME:PCI-Express bus ROOT_DL status error RESUME:PCI-Express bus DETUP status error "0x53554D45" -> Link up error Also, error code "0x5245" and detail code ""0x53554D45" -> Link up error" appears on operation panel.
		• Turn the main power OFF/ON. • Replace the controller board or the engine board (BICU)
	[0x5355]	L2 status time out
		L2 status register between Engine ASIC and Veena was not reached the target value within 1 sec.
		Engine ASIC during operation was rebooted or shifted to energy saving mode. Machine reboots when SC23x, SC30x occurs. If Engine ASIC is working when rebooting (or shifting to the energy saving mode), L2 status value is not on target. The following message appears on console. SUSPEND:PCI-Express L2 Status Check Error SUSPEND:PCI-Express L2 Status Check Error Also, error code "0x5355" and detail code ""0x5350454E44" -> L2 status time out" appears on operation panel.
		• Turn the main power OFF/ON. • Replace the controller board or the engine board (BICU)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	[0x6261]	HDD defective
		Received file system data was broken even if the initialization succeeds and there was no error reply from the HDD.
		Power supply disconnection during data writing to the HDD.
		Replace the HDD. This SC may occur when turning on the machine for the first time with a new HDD. In this case, turn the main power off/on.
	[0x696e]	gwinit processing end
		If the SCS process is ended for some reason
		If an unexpected error occurs at SCS processing end, gwint processing also halts (this result is judged a kernel stop error, by gwinit specification) “0x69742064” -> “init died”
		Turn the main power OFF/ON.
	[0x766d]	VM full error
		Occurs when too much RAM is used during system processing
		"vm_pageout: VM is full"
		Turn the main power OFF/ON.
	Console string	Other error (characters on operation panel)
		System detected internal mismatch error
		• Software defective • Insufficient memory • Hardware driver defective (RAM, flash memory)
		• Replace with a larger capacity RAM, or flash memory. • Replace the controller board. • Replace the connected controller option with a new one.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC820-00	C	Self-diagnostics error: CPU [XXXX]: Detailed error code
	[0612]	ASIC interrupt error
		Interrupt occurs in an ASIC.
		• ASIC device error • Peripherals device error
		• Replace the controller board • Replace the connected controller option with a new one.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC821-00	D	Self-diagnostics error: ASIC [xxxx]: Detailed error code
	[0B00]	ASIC register check error
		The write-&-verify check has occurred in the ASIC.
		Defective ASIC device
		Replace the controller board.
	[0B06]	ASIC detection error
		Error in the I/O ASIC for system control detection
		• Defective ASIC • Defective North Bridge and PCII/F
		Replace the controller board.
	[0D05]	Comparison error of CPU and ASIC timer
		The CPU checks if the ASIC timer works correctly compared with the CPU timer. If the ASIC timer does not function in the specified range, this SC code is displayed.
		• Defective ASIC timer device • Defective CPU device
		Replace the controller board.
	[50A1]	Video bridge device detection error
		Video bridge device is not detected.
		• Video bridge device ASIC (HARP or KLAVIER) defective. • Connection error between PCI I / F of the controller ASIC and video bridge device ASIC.
		Replace the controller board
	[50A2]	Video bridge device (ASIC) register error
		The CPU detects the video bridge device, but detects error data from the video bridge device.
		Defective I/F between the video bridge device and the controller
		Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC822-00	D	Self-diagnostic error: HDD [xxxx]: Detailed error code
	[3003]	HDD timeout
		Check performed only when HDD is installed: • HDD device busy for over 31sec. • After a diagnostic command is set for the HDD, but the device remains busy

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		for over 6sec.
		• HDD defective • HDD harness disconnected, defective • Controller board defective
		• Replace the HDD. • Replace the HDD connector. • Replace the controller board.
	[3004]	Diagnostic command error
		No response to the self-diagnostic command from the ASIC to the HDD.
		HDD defective
		Replace the HDD.
	[3013]	HDD timeout (first machine)
		HDD device busy for over 31 seconds. A diagnostic command is set for the HDD, but the device remains busy for over 6 seconds.
		• Defective HDD device • Defective HDD connector • Defective ASIC device
		• Replace or remove the HDD device. • Replace the HDD connector • Replace the controller board
	[3014]	Diagnostics command error (First machine)
		Result of the issuance of diagnostic command is error.
		Defective HDD device
		Replace the HDD device.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC823-00	B	Self-diagnostics error: NIC [XXXX]: Detailed error code
	[6101]	MAC address check sum error
		The result of the MAC address check sum does not match the check sum stored in ROM.
		• Defective SEEP ROM • Defective I2C bus (connection)
		Replace the controller board.
	[6104]	PHY IC error
		The PHY IC on the controller cannot be correctly recognized.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Defective PHY chip • Defective ASIC MII I/F
		Replace the controller board.
	[6105]	PHY IC loop-back error
		An error occurred during the loop-back test for the PHY IC on the controller.
		• PHY chip • Defective MAC of ASIC (SIMAC/COMIC/CELLO) • Defective I/F with the PHY board • Defective solder on the PHY board
		Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC824-00	C	Self-diagnostics error: NVRAM (resident) [XXXX]: Detailed error code
	[1401]	NVRAM verify error
		NVRAM device is missing or NVRAM device is damaged.
		• The NVRAM device is missing. • The NVRAM device is damaged. • NVRAM backup battery exhausted • NVRAM socket damaged
		Replace the NVRAM device.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC833-00	D	Self-diagnostic error: Engine I/F ASIC [XXXX]: Detailed error code
	[0F30]	Engine I/F ASIC detection error
		ASIC (Mandolin) for engine control could not be detected.
		ASIC (Mandolin) error
		Replace the Engine I/F board (mother board).
	[50B1]	Video device: clock generator detection error
		Could not initialize or read the bus connection.
		• Defective connection bus • Defective SSCG
		Replace the Engine I/F board (mother board).
	[50B2]	Video device: clock generator verify error
		Value of the SSCG register is incorrect.
		• Defective connection bus

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Defective SSCG
		Replace the Engine I/F board (mother board).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC834-00	D	Self-diagnostic error: Optional memory
	[5101]	Engine I/F optional memory verify error
		An error occurs after write/verify check for optional RAM on the engine I/F board (mother board).
		Defective memory device
		Replace the Engine I/F board (mother board).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC835-00	B	Self-diagnostic error: Centronic device [xxxx]: Detailed error code
	[1102]	Verify error
		The loopback connector is connected but check results is an error.
		• IEEE1284 connector error • Centronic loopback connector defective
		Replace the controller board.
	[110C]	DMA verify error
		The loopback connector is connected but check results is an error.
		• ASIC device error • IEEE1284 connector error • Centronic loopback connector is defective
		Replace the controller board.
	[1120]	Loopback connector not detected
		Centronic loopback connector is not connected for detailed self-diagnostic test.
		• Centronic loopback connector not connected correctly • Centronic loopback connector is defective • ASIC device is defective
		• Connect the centronic loopback connector • Replace the centronic loopback connector • Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC838-00	C	Self-diagnostic Error: Clock Generator [xxxx]: Detailed error code

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
	[2701]	Verify error
		A verify error occurred when setting data was read from the clock generator via the I2C bus.
		• Defective clock generator • Defective I2C bus • Defective I2C port on the CPU
		Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC839-00	D	Self-diagnostic Error: Serial Flash access error
		USB NAND Flash ROM cannot be read.
		Defective controller board
		Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC840-00	D	EEPROM access error
		• During the I/O processing, a reading error occurred. The 3rd reading failure causes this SC code. • During the I/O processing, a writing error occurred.
		• Defective EEPROM
		-

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC841-00	D	EEPROM read data error
		Mirrored data of the EEPROM is different from the original data in EEPROM.
		Data in the EEPROM is overwritten for some reason.
		-

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC842-00	C	Nand-Flash updating verification error
		SCS write error (verify error) occurred at the Nand-Flash module when remote ROM or main ROM was updated.
		Nand-Flash defective
		Turn the main power OFF/ON.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC842-	C	Insufficient Nand-Flash blocks (threshold exceeded)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
01		At startup, or when machine returned from low power mode, the Nand-Flash status was read and judged that the number of unusable blocks had exceeded threshold, and then SCS generated the SC code.
		Number of unusable blocks exceeded threshold for Nand-Flash
		Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC842-02	C	Number of Nand-Flash block deletions exceeded
		At startup, or when the machined returned from low power mode, the Nand-Flash was read and judged that the number of deleted blocks had exceeded threshold, and then SCS generated this SC code.
		Number of blocks deleted exceeded threshold for Nand-Flash
		Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC843-02	B	eMMC rewrite frequency exceeded threshold
		At startup, or when the machined returned from energy saving mode, the eMMC was read and judged that the number of rewrote blocks had exceeded the threshold.
		Number of blocks rewrote exceeded the threshold for eMMC.
		Replace the operation panel.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC845		Hardware Error Detected when the automatic firmware update
SC845-01	D	Engine Board
SC845-02	D	Controller Board
SC845-03	D	Operation Panel (Normal)
SC845-04	D	Operation Panel (Smart Operation Panel)
SC845-05	D	FCU
		When updating the firmware automatically (ARFU), the firmware cannot be read or written normally, and the firmware update cannot be completed even by 3 retries.
		Hardware abnormality of the target board

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Replace the target board For SC852-02, HDD and memory may cause the problem. Replace the HDD or memory if the SC cannot be recovered by replacing the controller board.

No.	Type	Error Name/Error Condition/Major Cause/Solution
SC845-50	D	DIMM or hard disk failure
		This SC occurs if auto firmware decompression fails after downloading the package firmware during auto firmware update or receiving reservation setting in SFU. The machine operates normally if you turn the main power off and then back on, but the SC occurs again when firmware decompression fails again during the next auto firmware update.
		Hardware failure (DIMM or hard disk failure) or the package file released via the global server (SERES) is corrupt.
		Replace the DIMM on the controller board. If the problem persists after replacing the DIMM, replace the hard disk.

No.	Type	Error Name/Error Condition/Major Cause/Solution
SC845-51	D	Network, DIMM or hard disk failure
		This SC occurs if auto firmware decompression fails after downloading the package firmware during auto firmware update, update from the application site, or receiving reservation setting in SFU.
		Failure in the customer's network or hardware (DIMM or hard disk) failure.
		1. This may be recovered by retrying the firmware update. 2. If the problem persists, replace the DIMM on the controller board. 3. If the problem persists after replacing the DIMM, replace the hard disk.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC855-01	B	Wireless LAN board error (driver attachment failure)
		Wireless LAN board error (wireless LAN card: 802.11 is covered)
		• Defective wireless LAN board • Loose connection
		• Turn the main power OFF/ON. • Replace the wireless LAN board

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC855-02	B	Wireless LAN board error (driver initialization failure)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		Wireless LAN board error (wireless LAN card: 802.11 is covered)
		• Defective wireless LAN board • Loose connection
		• Turn the main power OFF/ON. • Replace the wireless LAN board

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC857-00	B	USB I/F Error
		The USB interface is unusable because of a driver error.
		USB driver error (There are three causes of USB error: RX error/CRC error/STALL. SC is issued only in the case of STALL.)
		• Check the USB connection. • Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC858-00	A	Data encryption conversion error (Key Setting Error)
		A serious error occurred during an attempt to update the encryption key.
		• USB Flash, other data, corrupted • Communication error caused by electrostatic noise • Controller board defective
		Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC858-01	A	Data encryption conversion error (HDD Key Setting Error)
		A serious error occurred during an attempt to update the encryption key.
		• USB Flash, other data, corrupted • Communication error caused by electrostatic noise • Controller board defective
		• Turn the main power OFF/ON. • If the error persists, replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC858-02	A	Data encryption conversion error (NVRAM Read/Write Error)
		A serious error occurred after data conversion during an attempt to update the encryption key.
		NVRAM defective
		• Replace the NVRAM.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC858-30	A	Data encryption conversion error (NVRAM Before Replace Error)
		A serious error occurred after data conversion during an attempt to update the encryption key.
		Software error such as conversion parameters being invalid.
		• Turn the main power OFF/ON. • If the error persists, replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC858-31	A	Data encryption conversion error (Other Error)
		A serious error occurred after data conversion during an attempt to update the encryption key.
		Controller board defective
		Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC859-00	B	Data encryption conversion HDD conversion error
		When the data encryption key was updated, HDD data was converted, but not correctly. Image displayed at conversion only (this SC is not displayed), but SC is displayed after machine is cycled off/on.
		• HDD conversion was set with the data encryption key update function, but the HDD was removed. • Machine lost power during data encryption key update • Electrostatic noise, or an HDD error occurred, during data encryption key update, and data was not encrypted.
		• Check the HDD connection. • Format the HDD (SP5-832: HDD formatting). • If there is a problem with the HDD, it has to be replaced.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC859-01	B	Data encryption conversion HDD conversion error (HDD check error)
		When the data encryption key was updated, HDD data was converted, but not correctly. Image displayed at conversion only (this SC is not displayed), but SC is displayed after machine is cycled off/on.
		• HDD conversion was set with the data encryption key update function, but the

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		HDD was removed. • Machine lost power during data encryption key update • Electrostatic noise, or an HDD error occurred, during data encryption key update, and data was not encrypted.
		• Check the HDD connection. • Format the HDD (SP5-832: HDD formatting). • If there is a problem with the HDD, it has to be replaced.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC859-02	B	Data encryption conversion HDD conversion error (Power failure during conversion)
		When the data encryption key was updated, HDD data was converted, but not correctly. Image displayed at conversion only (this SC is not displayed), but SC is displayed after machine is cycled off/on. Details: NVRAM/HDD conversion is incomplete.
		Power failure occurred during encryption key update.
		None The display after restart instructs the user to format the HDD.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC859-10	B	Data encryption conversion HDD conversion error (Data read/write command error)
		When the data encryption key was updated, HDD data was converted, but not correctly. Image displayed at conversion only (this SC is not displayed), but SC is displayed after machine is cycled off/on. Details: Abnormal DMAC return value has been received two or more times (DMAC timeout, serial communication error etc.)
		HDD was not successfully converted during encryption key update due to HDD errors or cable noises.
		• Check the HDD connection. • Format the HDD (SP5-832: HDD formatting). • If there is a problem with the HDD, it has to be replaced.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC860-	B	HDD startup error at main power on (HDD error)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution

00		• The HDD is connected but the driver detected the following errors.
		  • SS_NO.T_READY:/* (-2)HDD does not become READY*/
		  • SS_BAD_LABEL:/* (-4)Wrong partition type*/
		  • SS_READ_ERROR:/* (-5)Error occurred while reading or checking the label*/
		  • SS_WRITE_ERROR:/* (-6)Error occurred while writing or checking the label*/
		  • SS_FS_ERROR:/* (-7)Failed to repair the filesystem*/
		  • SS_MOUNT_ERROR:/* (-8)Failed to mount the filesystem*/
		  • SS_COMMAND_ERROR:/* (-9)Drive not responding to command*/
		  • SS_KERNEL_ERROR:/* (-10)Internal kernel error*/
		  • SS_SIZE_ERROR:/* (-11)Drive size too small*/
		  • SS_NO._PARTITION:/* (-12)The specified partition does not exist*/
		  • SS_NO._FILE:/* (-13)Device file does not exist*/
		• Attempted to acquire HDD status through the driver but there has been no response for 30 seconds or more.

		• Unformatted HDD • Label data corrupted • HDD defective
		Format the HDD (SP5-832: HDD formatting) through SP mode.

No.	Type	Error Name/Error Condition/Major Cause/Solution
SC860-01	B	HDD file system error at main power on (HDD error)
		Failed to mount any of the hard disk partitions.
		Power failed while writing files to the hard disk. The machine shut down while writing files to the hard disk.
		Be sure to back up the address book and retrieve the log before formatting the hard disk. 1. Turn the main power OFF/ON. It may take a while to shut down because of the hard disk failure. 2. Format the HDD (SP5-832: HDD formatting) through SP mode. 3. If there is a problem with the HDD, it has to be replaced.

No.	Type	Error Name/Error Condition/Major Cause/Solution
SC860-02	B	HDD label error at main power on (HDD error)
		Hard disk partition data abnormal.
		Power failed while writing files to the hard disk.

No.	Type	Error Name/Error Condition/Major Cause/Solution
		The machine shut down while writing files to the hard disk.
		Be sure to back up the address book and retrieve the log before formatting the hard disk. 1. Turn the main power OFF/ON. It may take a while to shut down because of the hard disk failure. 2. Format the HDD (SP5-832: HDD formatting) through SP mode. 3. If there is a problem with the HDD, it has to be replaced.

No.	Type	Error Name/Error Condition/Major Cause/Solution
SC860-03	B	HDD encryption key error at main power on (HDD error)
		The encryption key for reading the encrypted hard disk data has failed.
		The controller's ROM (NAND) and NVRAM are both damaged. (Rare)
		Be sure to back up the address book and retrieve the log before formatting the hard disk. 1. Turn the main power OFF/ON. It may take a while to shut down because of the hard disk failure. 2. Format the HDD (SP5-832: HDD formatting) through SP mode. 3. If there is a problem with the HDD, it has to be replaced.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC862-00	D	Number of the defective sector reaches the maximum count
		101 defective sectors are generated at the image storage area in the HDD.
		SC863 occurs during the HDD reading and defective sectors are registered up to 101.
		• Format the HDD with SP5-832. • Replace the HDD.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC863-01	D	HDD data read failure
		The data written to the HDD cannot be read normally.
		Bad sectors were generated during operation. (An error occurred in an area that does not belong to a partition, such as the disk label area.)
		Guide for when to replace the HDD 1. When SC863 has occurred ten times or more • The interval is short.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• Repeatedly occurs in the same situation (at power-on, etc.). • Startup takes a long time when the main power is turned on. 2. It takes a long time after main power on for the operation panel to become ready. HDD access may be consuming time. Normal HDD access time after main power on is about 5 seconds. If the machine is not waiting for the engine to be ready and it still takes 20 to 30 seconds or more, the HDD may be the cause. If there is a problem with the HDD, HDD-related SCs such as SC860 and SC863 will occur frequently. Print the SC log data and check them.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC863- 02 to 23	D	HDD data read failure
		The data written to the HDD cannot be read normally.
		Bad sectors were generated during operation. (An error occurred in partition **"a"** (SC863-02) to partition **“v”** (SC863-23)).
		Guide for when to replace the HDD 1. When SC863 has occurred ten times or more • The interval is short. • Repeatedly occurs in the same situation (at power-on, etc.). • Startup takes a long time when the main power is turned on. 2. It takes a long time after main power on for the operation panel to become ready. HDD access may be consuming time. Normal HDD access time after main power on is about 5 seconds. If the machine is not waiting for the engine to be ready and it still takes 20 to 30 seconds or more, the HDD may be the cause. If there is a problem with the HDD, HDD-related SCs such as SC860 and SC863 will occur frequently. Print the SC log data and check them.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC864- 00	D	HD data CRC error
		During HD operation, the HD cannot respond to a CRC error query. Data transfer did not execute normally while data was being written to the HD.
		HD defective
		-

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC864-	D	HDD data CRC error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
01		During HDD operation, the HDD cannot respond to a CRC error query. Data transfer did not execute normally while data was being written to the HDD.
		Bad sectors were generated during operation. (An error occurred in an area that does not belong to a partition, such as the disk label area.)
		• Format the HDD. • Replace the HDD.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC864-02 to 23	D	HDD data CRC error
		During HDD operation, the HDD cannot respond to a CRC error query. Data transfer did not execute normally while data was being written to the HDD.
		Bad sectors were generated during operation. (An error occurred in partition "a" (SC864-02) to partition “v” (SC864-23)).
		• Format the HDD. • Replace the HDD.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC865-00	D	HD access error
		During HDD operation, the HDD returned an error.
		The HDD returned an error that does not constitute SC863 (bad sector) or SC864 (CRC error).
		Replace the HDD.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC865-01	D	HDD access error
		During HDD operation, the HDD returned an error.
		The HDD returned an error that does not constitute SC863 (bad sector) or SC864 (CRC error). (An error occurred in an area that does not belong to a partition, such as the disk label area.)
		Replace the HDD.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC865-02 to 23	D	HDD access error
		During HDD operation, the HDD returned an error.
		The HDD returned an error that does not constitute SC863 (bad sector) or

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		SC864 (CRC error). (An error occurred in partition "a" (SC865-02) to partition “v” (SC865-23)).
		Replace the HDD.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC865-50 to 73	D	HDD time-out error
		The machine does not detect a reply from the HDD during the HDD operation.
		The HDD does not respond to the read/ write command from the machine.
		• Check the harness connections between the controller board and HDD. • Replace the HDD.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC866-00	B	SD card authentication error
		A license error of an application that is started from the SD card was detected.
		Invalid program data is stored on the SD card.
		Store a valid program data on the SD card.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC867-00	C	SD card removed
		The SD card was removed while the machine is on.
		An application SD card has been removed from the slot (mount point of /mnt/sd0).
		Turn the main power OFF/ON.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC867-01	C	SD card removed
		The SD card was removed while the machine is on.
		An application SD card has been removed from the slot (mount point of /mnt/sd1).
		Turn the main power OFF/ON.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC867-02	C	SD card removed
		The SD card was removed while the machine is on.
		An application SD card has been removed from the slot (mount point of

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		/mnt/sd2).
		Turn the main power OFF/ON.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC868-**		SD card access error
SC868-00	D	The SD controller returned an error during operation. (An error occurred at the mount point of /mnt/sd0)
SC868-01	D	The SD controller returned an error during operation. (An error occurred at the mount point of /mnt/sd1)
SC868-02	D	The SD controller returned an error during operation. (An error occurred at the mount point of /mnt/sd2)
		• SD card defective • SD controller defective
		Slot number is displayed on the sub code. See the detail code on the SMC print to check the details of the error. • -13 to -3: File system check error • Otherwise (no code, -2) : Device access error
		SD card that starts an application 1. Turn the main power off and check the SD card insertion status. 2. If no problem is found, insert the SD card and turn the main power on. 3. If an error occurs, replace the SD card. 4. If the error persists even after replacing the SD card, replace the controller board. **SD card for users** 1. In the case of a file system error, reformat the SD card (using the "SD Formatter" made by Panasonic).* **In case of a device access error** 1. Turn the main power off and check the SD card insertion status. 2. If no problem is found, insert the SD card and turn the main power on. 3. If an error occurs, use another SD card. 4. If the error persists even after replacing the SD card, replace the controller board.

* Do not format an SD card supplied with the main machine or sold as an option. You may only format SD cards used for Firmware Update by a Customer Engineer.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC869-01	C	Malfunction of the proximity sensor is detected: Continuously detecting malfunction
		The proximity sensor keeps in a detection state and accumulated time exceeds 24 hours.
		The proximity sensor is disabled and is in the detection state at all times.
		Go to SC869-02.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC869-02	C	Malfunction of the proximity sensor is detected: Continuously non-detecting malfunction
		In the non-detection state, the following operations are detected 20 times continuously. • Pressing "energy saver" key or touching the operation panel • Opening/closing the plate cover or ADF • Setting the original • Opening the front cover • Opening the paper feed tray
		The proximity sensor is disabled and is in the non-detection state at all times.
		1. Go to SP5-102-203 (input check SP for the proximity sensor). 2. Cover the proximity sensor with 10 sheets of plain paper, and then execute the SP to check if it becomes “0”. (Do not place your hand near the proximity sensor even over the paper when covering the sensor) 3. Remove the paper from the sensor and check if it becomes “1”. 4. If there is no issue after steps 2 and 3, check that there are no possible factors around the machine that may cause a temperature change such as a heater or fan. (Deal with the issue as necessary) 5. Replace the proximity sensors and proximity sensor board if the abnormal value is detected after steps 2 and 3. 6. Turn on the main power on and perform steps 1, 2, and 3 again. 7. If the SC is not resolved, turn the main power off and replace the harness which connects proximity sensors and proximity sensor board. 8. If the SC is still not resolved, there is a possibility that the other parts of the machine such as the connector at the controller side or the harness between proximity sensor board and BICU are broken.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC870-	B	Address Book data error (Anytime: Address Book Error.) (The other errors except

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
00		for the following branch numbers.)
SC870-01	B	Address Book data error (On startup: Media required for storing the Address Book is missing.)
SC870-02	B	Address Book data error (On startup: encryption is configured but the module required for encryption (DESS) is missing.)
SC870-03	B	Address Book data error (Initialization: Failed to generate a file to store internal Address Book.)
SC870-04	B	Address Book data error (Initialization: Failed to generate a file to store delivery sender.)
SC870-05	B	Address Book data error (Initialization: Failed to generate a file to store delivery destination.)
SC870-06	B	Address Book data error (Initialization: Failed to generate a file to store information required for LDAP search.)
SC870-07	B	Address Book data error (Initialization: Failed to initialize entries required for machine operation.)
SC870-08	B	Address Book data error (Machine configuration: HDD is present but the space for storing the Address Book is unusable.)
SC870-09	B	Address Book data error (Machine configuration: Inconsistency in the NVRAM area used for storing settings required for Address Book configuration.)
SC870-10	B	Address Book data error (Machine configuration: Cannot make a directory for storing the Address Book in the SD/USB Flash ROM.)
SC870-11	B	Address Book data error (On startup: Inconsistency in Address Book entry number.)
SC870-20	B	Address Book data error (File I/O: Failed to initialize file.)
SC870-21	B	Address Book data error (File I/O: Failed to generate file.)
SC870-22	B	Address Book data error (File I/O: Failed to open file.)
SC870-23	B	Address Book data error (File I/O: Failed to write to file.)
SC870-24	B	Address Book data error (File I/O: Failed to read file.)
SC870-25	B	Address Book data error (File I/O: Failed to check file size.)
SC870-26	B	Address Book data error (File I/O: Failed to delete data.)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC870-27	B	Address Book data error (File I/O: Failed to add data.)
SC870-30	B	Address Book data error (Search: Failed to obtain data from cache when searching in the machine Address Book. delivery destination/sender.)
SC870-31	B	Address Book data error (Search: Failed to obtain data from cache during LDAP search.)
SC870-32	B	Address Book data error (Search: Failed to obtain data from cache while searching the WS-Scanner Address Book.)
SC870-41	B	Address Book data error (Cache: failed to obtain data from cache.)
SC870-50	B	Address Book data error (On startup: Detected abnormality of the Address Book encryption status.)
SC870-51	B	Address Book data error (Encryption settings: Failed to create directory required for conversion between plaintext and encrypted text.)
SC870-52	B	Address Book data error (Encryption settings: Failed to convert from plaintext to encrypted text.)
SC870-53	B	Address Book data error (Encryption settings: Failed to convert from encrypted text to plaintext.)
SC870-54	B	Address Book data error (Encryption settings: Detected data inconsistency when reading the encrypted Address Book.)
SC870-55	B	Address Book data error (Encryption settings: Failed to delete file when changing encryption setting.)
SC870-56	B	Address Book data error (Encryption settings: Failed to erase the file that records the encryption key during an attempt to change the encryption setting.)
SC870-57	B	Address Book data error (Encryption settings: Failed to move a file during an attempt to change the encryption setting.)
SC870-58	B	Address Book data error (Encryption settings: Failed to delete a directory during an attempt to change the encryption setting.)
SC870-59	B	Address Book data error (Encryption settings: Detected a resource shortage during an attempt to change the encryption setting.)
SC870-60	B	Address Book data error (Unable to obtain the on/off setting for administrator authentication.)
		When an error related to the Address Book is detected during startup or operation.
		• Software bug • Inconsistency of Address Book source location (machine/delivery server/LDAP server) • Inconsistency of Address Book encryption setting or encryption key (NVRAM

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		or HDD was replaced individually without formatting the Address Book) • Address Book storage device (SD/HDD) was temporarily removed or hardware configuration does not match the application configuration. • Address Book data corruption was detected.
		Install the device that contains address book information properly, and turn the main power off/on. If SC occurs again, do the following steps. 1. After installing the HDD, or SD/USB ROM, execute SP5-846-046 (UCS Setting). Wait more than 3 seconds, then execute SP5-832 (HDD Formatting). 1. Turn the main power OFF/ON. **Procedure after SC870 is cleared** 1. If there is backup data in the SD card or Web Image Monitor, restore the address book data. (To restore from an SD card, enter the encryption password which is the same as when you enter to backup.)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC871-01	D	FCU error
		An error occurred when the controller detects FCU defective.
		• Time-out error • Abnormal Parameter
		1. Turn the main power OFF/ON. 2. Update the firmware if more recent firmware was released.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC872-00	B	HDD mail reception error
		An error was detected on the HDD immediately after the machine was turned on.
		• HDD defective • Power was turned off while the machine used the HDD.
		• Format the HDD (SP5-832-007: HDD Formatting: Mail RX Data).). • Replace the HDD. When you do the above, the following information will be initialized. • Partly received partial mail messages. • Already-read statuses of POP3-received messages (All messages on the mail server are handled as new messages).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC873-00	B	HDD mail sending error

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		An error was detected on the HDD immediately after the machine was turned on.
		• HDD defective • Power was turned off while the machine used the HDD.
		• Format the HDD (SP5-832-007: HDD Formatting: Mail RX Data). • Replace the HDD. When you do the above, the following information will be initialized. • Sender's mail text • Default sender name/password (SMB/FTP/NCP) • Administrator mail address • Scanner delivery history

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC874-05	D	Delete all error (Delete data area) : Read error
SC874-06	D	Delete all error (Delete data area) : Write error
SC874-09	D	Delete all error (Delete data area) : No response from HDD
SC874-10	D	Delete all error (Delete data area) : Error in Kernel
SC874-12	D	Delete all error (Delete data area) : No designated partition
SC874-13	D	Delete all error (Delete data area) : No device file
SC874-14	D	Delete all error (Delete data area) : Start option error
SC874-15	D	Delete all error (Delete data area) : No designated sector number
SC874-16	D	Delete all error (Delete data area) : failure in performing hdderase
SC874-41	D	Delete all error (Delete data area) : Other fatal errors
SC874-42	D	Delete all error (Delete data area) : End by cancellation
SC874-61 to -65	D	Delete all error (Delete data area) : library error
SC874-66	D	Delete all error (Delete data area) : Unavailable
SC874-67	D	Delete all error (Delete data area) : Erasing not finished
SC874-68	D	Delete all error (Delete data area) : HDD format failure (Normal)
SC874-69	D	Delete all error (Delete data area) : HDD format failure (Abnormal)
SC874-70	D	Delete all error (Delete data area) : Unauthorized library
SC874-99	D	Delete all error (Delete data area) : other errors
		An error occurred while data was being erased on HDD or NVRAM.
		• Error detected in the HDD data delete program • Error detected in the NVRAM data delete program • The "Delete All" option was not set
		• Turn the main power switch off and back on, and then execute "Erase All Memory" under UP mode again. (However, if there is a defective sector or

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		other problem with the hard disk, the error will persist even after trying the above.) • If the "Delete All" option is not installed when this error occurs, install the option.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC875-01	D	Delete all error (HDD erasure) (hddchack –i error)
SC875-02	D	Delete all error (HDD erasure) (Data deletion failure)
		An error was detected before HDD/data erasure starts. (Failed to erase data/failed to logically format HDD)
		• HDD logical formatting failed. • The modules failed to erase data.
		Turn the main power OFF/ON.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC876-00	D	Log Data Error
		An error was detected in the handling of the log data at power on or during machine operation.
		• Damaged log data file. • Log encryption is enabled but encryption module is not installed. • Inconsistency of encryption key between NV-RAM and HDD. • Software bug.
		Try the SC876-01 to -99 solutions listed below. If it is not solved, do the following steps (for when only an HDD is replaced): 1. Disconnect the HDD and turn ON the main power. 2. Execute SP5-801-019 (Memory Clear: LCS Memory Clr) to Initialize the LCS settings. 3. Turn OFF the main power. 4. Connect the HDD and turn ON the main power. 5. Execute SP5-832-004 (HDD Formatting (Job Log)). 6. Turn OFF the main power. The following step is to configure the logging/encryption setting again. 7. Turn ON the main power.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC877-00	B	Data Overwrite Security error
		Auto Erase Memory function of the Data Overwrite Security is enabled but it cannot be done.
		• Data Overwrite Security SD card is damaged. • Data Overwrite Security SD card has been removed.
		• If the SD card is damaged, prepare a new Data Overwrite Security SD card and replace the NVRAM. • If the SD card has been removed, turn the main power OFF, and reinstall the Data Overwrite Security.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC878-00	D	TPM authentication error
		TPM electronic recognition failure
		• Update of system module attempted without correct update path • USB flash memory not operating correctly
		Replace the controller board.

Trusted Platform Module

- In computing, Trusted Platform Module (TPM) is both the name of a published specification detailing a secure crypto processor that can store cryptographic keys that protect information, as well as the general name of implementations of that specification often called the "TPM chip" or "TPM Security Device" (as designated in certain Dell BIOS settings).

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC878-01	D	USB flash error
		There is a problem in the file system of the USB flash memory.
		USB Flash system files corrupted
		Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC878-02	D	TPM error
		An error occurred in either TPM or the TPM driver
		TPM not operating correctly
		Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC878-03	D	TCSD error
		An error occurred in the TPM software stack.
		• TPM, TPM software cannot start

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
		• A file required by TPM is missing
		Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC878-20	D	Random number test error
		An error was detected when a random number table was generated during a self-test.
		TPM is defective
		• Turn the main power OFF/ON. • Replace the controller board if the SC occurs again.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC878-21	D	DESS self-test error
		The power-on self-test for TPM failed at startup when the controller encryption software was tested.
		TPM firmware or CPU is defective
		• Turn the main power OFF/ON. • Replace the controller board.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC880-00	D	MLB error
		Reply to MLB access was not returned within a specified time.
		MLB defective
		• Replace the MLB. • Remove the MLB.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC881-01	D	Management area error
		• A problem was detected in the software • This error may even occur is an IC card option is not installed.
		• This is caused by accumulation of abnormal authentication information in the software. (User operation will not directly cause it.) • At login Example: When a job is sent to the printer/when logged on from the operation panel/when logged on from a Web browser
		Turn the main power OFF/ON.

No.	Type	Error Name/Error Condition/Major Cause/Solution
SC890-01	A	PaaS* function: Tampering detection
		PaaS data in NVRAM and on USB flash drive do not match at startup.
		-
		Activate PaaS => Install => After successful installation, reboot. Notes on application: Before attempting recovery, check whether the device is registered to PaaS-PF. If it is, cancel the registration. The SC is resolved by rebooting after successful installation.

No.	Type	Error Name/Error Condition/Major Cause/Solution
SC890-02	A	PaaS function: Suspended
		This SC occurs when the PaaS function is suspended because of an internal or external factor (receiving a request from PaaS-PF to suspend).
		-
		The warning dialog box displayed when this SC occurs contains instructions. Follow the instructions to solve the problem.

* PaaS stands for “Printer as a Service”. It is a remote service like the @remote service.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC899-00	D	Software performance error (signal reception end)
		Unknown software error occurred.
		Occurs when an internal program behaves abnormally.
		In the case of a hardware defect • Replace the hardware. In the case of a software error • Turn the main power OFF/ON. • Try updating the firmware.

SC900 (Engine: Others)

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC995-01	D	CPM setting error 1
		Comparison of machine serial number (11 digits) and machine identification code. Details: • Machine serial number cannot be identified because of BICU replacement or malfunctioning. • Machine serial number cannot be identified because of NV-RAM replacement
		The machine serial number (11 digits) or machine identification code does not match.
		• Enter the machine serial number using SP5-811, and then turn the power on/off. • Attach the NV-RAM that was installed previously.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC995-02	D	CPM setting error 2
		Comparison of machine serial number (11 digits) and machine identification code. Details: Machine serial number cannot be identified because of NV-RAM replacement or malfunctioning.
		The machine serial number (11 digits) or machine identification code does not match.
		• Attach the NV-RAM that was installed previously. • Download data on the NV-RAM using SP5-825.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC995-03	D	CPM setting error 3
		Comparison of machine serial number (11 digits) and machine identification code. Details: Unable to recognize machine identification code because the controller was replaced incorrectly or is malfunctioning.
		The machine serial number (11 digits) or machine identification code does not match.
		Replace it with a specified controller.

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
SC995-	D	CPM setting error 4

SC No.	Level	Error Name/Error Condition/Major Cause/Solution
04		Comparison of machine serial number (11 digits) and machine identification code.
		The machine serial number (11 digits) or machine identification code does not match.
		Return the parts to the original configuration, and then replace them according to the manual.

SC900 (Controller)

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC900-00	A	Electric counter error
		The electric total counter value is out of specification. Error is detected when increasing the total counter.
		• Unexpected NV-RAM is attached. • NV-RAM defective • NV-RAM data corrupted. • Data written to unexpected area because of external factor etc. • The count requested by the SRM on receiving PRT is not completed.
		Replace the NV-RAM.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC910-01	C	External controller error 1
SC910-02	C	External controller error 2
SC910-03	C	External controller error 3
		-01 The external controller receives the unexpected command from the engine side. **-02** The external controller wrongly receives the command from the engine side. **-03** The external controller receives the engine status out of specification.
		Refer to the instructions for the external controller
		Turn the main power OFF and ON.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC910-10	C	External controller error 10
		The external controller error is detected due to other reason shown in SC910-01 to -03.
		Refer to the instructions for the external controller
		Turn the main power OFF and ON.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC919-00	D	External controller down
		While EAC (External Application Converter), the conversion module, was operating normally, the receipt of a power line interrupt signal from the FLUTE serial driver was detected, of BREAK signal from the other station was detected.
		External controller and the machine had been operating correctly (*) but the

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		external controller was turned off or rebooted, or the video bus was disconnected. * Printing or scanning using the external controller.
		Turn the main power OFF and ON.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC920-02	B	Printer error 1 (WORK memory cannot be acquired)
SC920-04	B	Printer application error (filter process aborted)
		An error is detected in the application, and it cannot run.
		• Software bug • Unexpected hardware configuration (such as insufficient memory)
		• Turn the main power OFF and ON. • Increase the memory storage capacity.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC921-00	B	Printer application error (Resident font not found)
		Resident fonts cannot be found at printer startup.
		Preinstalled font files are absent.
		Turn the main power OFF and ON.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC925-00	B	NetFile function error
SC925-01	B	NetFile function error
		The NetFile file management on the HDD cannot be used, or a NetFile management file is corrupted and operation cannot continue.
		• HDD defective • HDD inconsistency caused by power failure during HDD access, etc. • Software bug
		If another SC related to HDD errors (SC860 to SC865) is issued at the same time, the HDD is the cause. Solve the other SC. • If SC860 to SC865 is not issued • Turn the main power OFF and ON. • If this does not work, initialize the HDD NetFile partition (SP5-832-011: HDD Formatting (Ridoc I/F)). Approval by the customer is required because received fax messages waiting to be delivered and documents waiting to be captured will be lost.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		Procedure: 1. Go into the User Tools mode and do "Delivery Settings" to print all received fax documents that are scheduled for delivery. Then erase them. 2. In the User Tools mode, do Document Management> Batch Delete Transfer Documents. 3. Do SP5-832-011, then turn the machine power off and on. • If this does not solve the problem, initialize all partitions of the HDD (SP5-832-001: HDD Formatting (ALL)), then turn the machine power off and on. Approval by the customer is required because documents and Address Book information in the HDD will be lost. Received fax messages stored are protected but the order may be changed. • If this does not solve the problem, replace the HDD.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC926-01	D	Log transfer function error
		The capture operation timeout occurred when the capture setting and log encryption setting are ON.
		• Continuously capture data transmission failure • Continuously capture data conversion failure • Software bug
		Automatic reboot is performed.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC990-00	D	Software operation error
		Software attempted an unexpected operation.
		• Parameter error • Internal parameter error • Insufficient work memory • Operation error caused by abnormalities that are normally undetectable.
		• Turn the main power OFF and ON. • Reinstall the software of the controller and BICU.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC991-00	C	Recoverable software operation error
		Software attempted an unexpected operation. SC991 covers recoverable errors as opposed toCS990.
		• Parameter error

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		• Internal parameter error • Insufficient work memory • Operation error caused by abnormalities that are normally undetectable.
		Logging only

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC992-00	D	Undefined SC issued.
		An SC, that is not controlled by the system, occurred.
		• An SC for the previous model was used mistakenly, etc. • Basically a software bug.
		Turn the main power OFF and ON.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC994-00	C	Operation error caused by abnormalities that are normally undetectable.
		An error occurred because the number of records exceeded the limit for images managed in the service layer of the firmware.
		This can occur if there are too many application screens open on the operation panel.
		Logging only.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC997-00	D	Application function selection error
		The application selected by the operation panel key operated abnormally (No response, abnormal ending).
		Software bug (mainly the application)
		• Check the optional RAM, DIMM, boards required by the application program. • Check if the combination of downloaded programs are correct.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC998-00	D	Application start error
		• No application was registered to system within a specified time after the main power was turned on. (No application starts/All applications have been terminated abnormally) • Application started but cannot be drawn now for some reason.
		• Software bug (mainly the application) • The optional RAM, DIMM, boards required by the application program. Are not installed correctly.

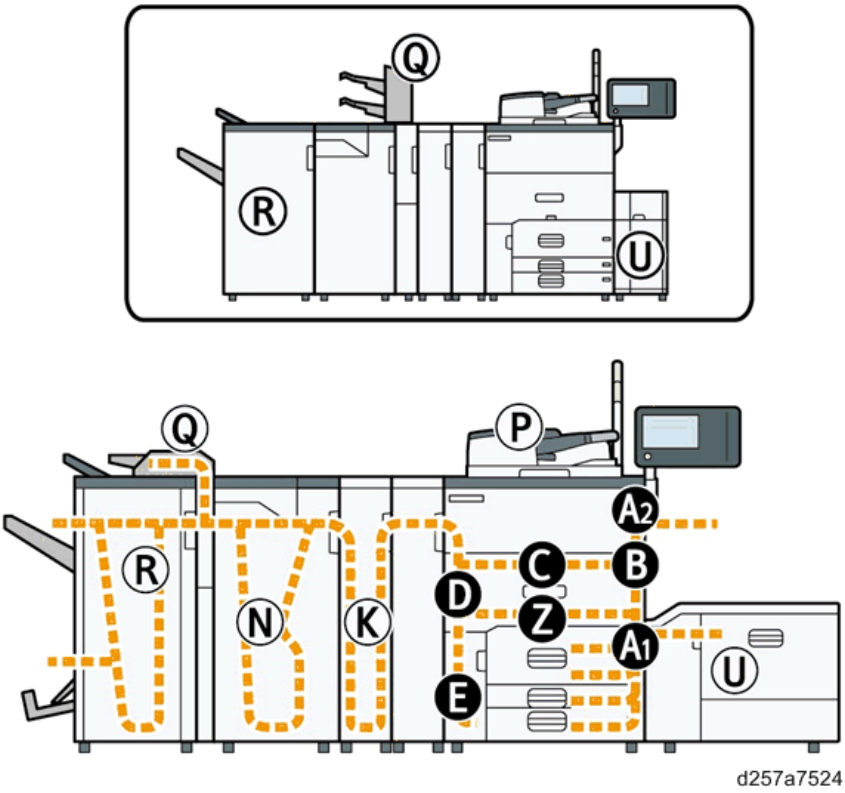
SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		• Turn the main power OFF and ON. • Check the optional RAM, DIMM, boards. • Check the combination of programs. • Replace the controller board.

Jam Detection

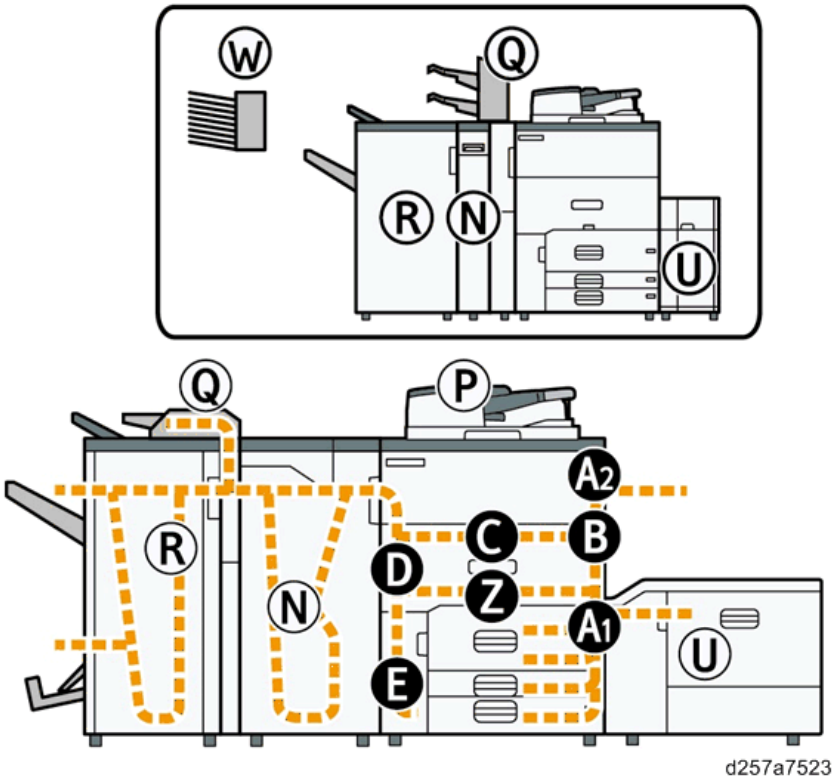
Jam Displays

When a jam occurs, the location is displayed on the operation panel.

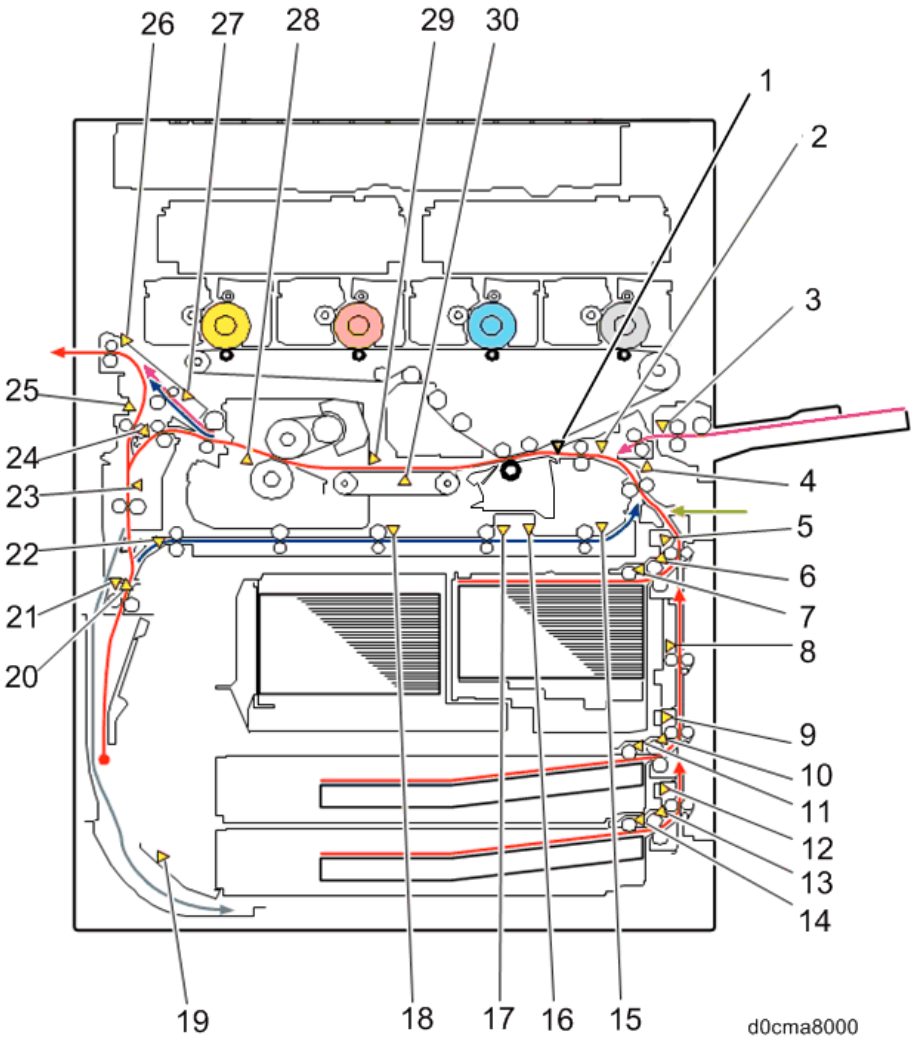
Pro C5300S/C5310S



IM C6500/C8000



Sensor Locations



No.	Description	No.	Description
1	Transfer Timing Sensor (S129)	16	Edge Sensor (S58)
2	Registration Sensor (S66)	17	Duplex Unit Sensor 3 (S64)
3	Bypass Paper Feed Sensor (S111)	18	Duplex Unit Sensor 4 (S59)
4	Relay Sensor (S68)	19	Purged Paper Sensor (S106)
5	Transport Sensor (Tray 1) (S91)	20	Purge Relay Sensor (S71)
6	Paper Feed Sensor (Tray 1) (S92)	21	Duplex Invert Sensor (S70)
7	Paper End Sensor (Tray 1) (S90)	22	Duplex Unit Entrance Sensor (S65)
8	Vertical Transport Sensor (S91)	23	Inverter Exit Sensor (S75)
9	Transport Sensor (Tray 2) (S91)	24	Inverter Feed-in Sensor (S80)
10	Paper Feed Sensor (Tray 2) (S92)	25	Inverter Feed-out Sensor (S86)
11	Paper End Sensor (Tray 2) (S90)	26	Paper Exit Sensor (S74)
12	Transport Sensor (Tray 3) (S91)	27	Paper Exit Relay Sensor (S73)
13	Paper Feed Sensor (Tray 3) (S92)	28	Fusing Paper Exit Sensor (S50)

No.	Description	No.	Description
14	Paper End Sensor (Tray 3) (S90)	29	Fusing Entrance Sensor (S22)
15	Duplex Exit Sensor (S60)	30	Paper Transport Belt Unit Set Sensor (S62)

Removing Jammed Paper

See the decals on the machine for how to remove jammed paper.

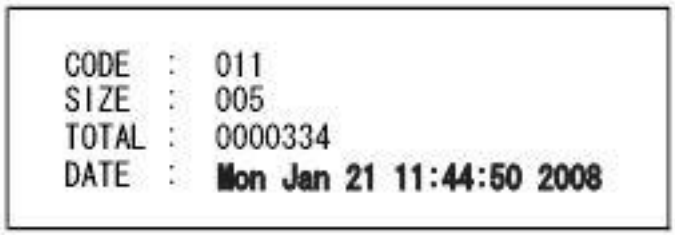
Printer Engine Jam History

How to check

Plotter Jam History can be displayed using SP7-507.

- SP7-507-001 Plotter Jam History Latest
- SP7-507-002 Plotter Jam History Latest 1
- SP7-507-003 Plotter Jam History Latest 2
- SP7-507-004 Plotter Jam History Latest 3
- SP7-507-005 Plotter Jam History Latest 4
- SP7-507-006 Plotter Jam History Latest 5
- SP7-507-007 Plotter Jam History Latest 6
- SP7-507-008 Plotter Jam History Latest 7
- SP7-507-009 Plotter Jam History Latest 8
- SP7-507-010 Plotter Jam History Latest 9

Display



- CODE: Displays the jam code.
- SIZE: Displays the paper size code.
- TOTAL: Displays the total number of printer jams (SP7-502-001).
- DATE: Displays the date and time the jam occurred.

Note

- The 10 latest printer jams are displayed.
- Initial jams are not recorded.

Jam Codes and Position Codes

Note

- The jam code shows the cause of the jam and appears in the log data.

- The position code shows the location of the jam and appears on the operation panel.

These are lists of jam codes for the main machine and peripheral devices. Please note:

- **Late jam.** The paper has failed to arrive within the prescribed time because a jam occurred upstream of the referenced sensor.
- **Lag jam.** The paper has failed to leave the location of the referenced sensor within the prescribed time because a jam occurred downstream of the referenced sensor.

ADF

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
13	Separation Sensor (S140): Late Jam	✓			P
63	Separation Sensor (S140): Lag Jam		✓		P
14	Skew Correction Sensor (S141): Late Jam	✓			P
64	Skew Correction Sensor (S141): Lag Jam		✓		P
15	Interval Sensor (S142): Late Jam	✓			P
65	Interval Sensor (S142):: Lag Jam		✓		P
16	Original Registration Sensor (S143): Late Jam	✓			P
66	Original Registration Sensor (S143): Lag Jam		✓		P
17	Original Exit Sensor (S144): Late Jam	✓			P
67	Original Exit Sensor (S144): Lag Jam		✓		P
239	Misfeed: Original Removed			✓	P
1	Initial jam	✓			P
1	Overload jam	✓			P
99	Double-feed Detection Jam		✓		P
1	Small Paper Feeding Unit Removal Jam	✓			P
1	Small Paper Feeding Unit Detection Error	✓			P

Main Machine

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
1	Bypass Paper Feed Sensor (S111)			✓	A2
1	Transport Sensor (1st Tray) (S91)			✓	A1
1	Vertical Transport Sensor (S91)			✓	A1
1	Transport Sensor (2nd Tray) (S91)			✓	A1

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
1	Transport Sensor (3rd Tray) (S91)			✓	A1
1	Transport Sensor (1st Tray) (S91)			✓	A1
1	Transport Sensor (2nd Tray) (S91)			✓	A1
1	Transport Sensor (3rd Tray) (S91)			✓	A1
1	Transport Sensor (1st Tray) (S91)			✓	A1
1	Transport Sensor (2nd Tray) (S91)			✓	A1
1	Transport Sensor (3rd Tray) (S91)			✓	A1
1	Relay Sensor (S68)			✓	B
1	Registration Sensor (S66)			✓	B
1	Paper Transport Belt Unit Set Sensor (S62)			✓	D1
1	Fusing Entrance Sensor (S22)			✓	D2
1	Fusing Paper Exit Sensor (S74) (S50)			✓	D2
1	Inverter Feed-in Sensor (S80)			✓	E
1	Inverter Exit Sensor (S75)			✓	E
1	Purge Relay Sensor (S68)			✓	E
1	Inverter Feed-out Sensor (S76)			✓	E
1	Paper Exit Relay Sensor (S68)			✓	E
1	Paper Exit Sensor (S74)			✓	E
1	Duplex Invert Sensor (S70)			✓	E
1	Duplex Unit Entrance Sensor (S65)			✓	Z
1	Duplex Unit Sensor 3 (S64)			✓	Z
1	Duplex Unit Sensor 4 (S59)			✓	Z
1	Duplex Exit Sensor (S60)			✓	Z
1	Purged Paper Sensor (S106)			✓	E
3	Tray 1 No Feed	✓			A1
4	Tray 2 No Feed	✓			A1
5	Tray 3 No Feed	✓			A1
8	Bypass Tray No Feed	✓			A2
9	Duplex No Feed	✓			Z
10	Transport Sensor (1st Tray) (S91): Late Jam	✓			A1
12	Vertical Transport Sensor (S91): Late Jam	✓			A1
13	Transport Sensor (2nd Tray) (S91): Late Jam	✓			A1

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
14	Transport Sensor (3rd Tray) (S91): Late Jam	✓			A1
10	Transport Sensor (1st Tray) (S91): Late Jam	✓			A1
12	Transport Sensor (2nd Tray) (S91): Late Jam	✓			A1
13	Transport Sensor (3rd Tray) (S91): Late Jam	✓			A1
10	Transport Sensor (1st Tray) (S91): Late Jam	✓			A1
12	Transport Sensor (2nd Tray) (S91): Late Jam	✓			A1
13	Transport Sensor (3rd Tray) (S91): Late Jam	✓			A1
58	Bypass Paper Feed Sensor (S111): Lag Jam		✓		A2
60	Transport Sensor (1st Tray) (S91): Lag Jam		✓		A1
62	Vertical Transport Sensor (S91): Lag Jam		✓		A1
63	Transport Sensor (2nd Tray) (S91): Lag Jam		✓		A1
64	Transport Sensor (3rd Tray) (S91): Lag Jam		✓		A1
18	Relay Sensor (S68): Late Jam	✓			B
62	Transport Sensor (2nd Tray) (S91): Lag Jam		✓		A1
63	Transport Sensor (3rd Tray) (S91): Lag Jam		✓		A1
18	Relay Sensor (S68): Late Jam	✓			B
62	Transport Sensor (2nd Tray) (S91): Lag Jam		✓		A1
63	Transport Sensor (3rd Tray) (S91): Lag Jam		✓		A1
19	Registration Sensor (S66): Late Jam	✓			B
68	Relay Sensor (S68): Lag Jam		✓		B
69	Registration Sensor (S66): Lag Jam		✓		B

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
22	Paper Transport Belt Unit Set Sensor (S62): Late Jam	✓			D1
24	Fusing Paper Exit Sensor (S74) (S50): Late Jam	✓			D2
72	Paper Transport Belt Unit Set Sensor (S62)		✓		D1
25	Inverter Feed-in Sensor (S80): Late Jam	✓			E
26	Inverter Exit Sensor (S75): Late Jam	✓			E
28	Inverter Feed-out Sensor (S76): Late Jam	✓			E
29	Paper Exit Relay Sensor (S68): Late Jam	✓			E
30	Paper Exit Sensor (S74): Late Jam	✓			E
75	Inverter Feed-in Sensor (S80): Lag Jam		✓		E
76	Inverter Exit Sensor (S75): Lag Jam		✓		E
78	Inverter Feed-out Sensor (S76): Lag Jam		✓		E
79	Paper Exit Relay Sensor (S68): Lag Jam		✓		E
80	Paper Exit Sensor (S74): Lag Jam		✓		E
31	Duplex Invert Sensor (S70): Late Jam	✓			E
33	Duplex Unit Entrance Sensor (S65): Late Jam	✓			Z
36	Duplex Unit Sensor 3 (S64): Late Jam	✓			Z
37	Duplex Unit Sensor 4 (S59): Late Jam	✓			Z
38	Duplex Exit Sensor (S60): Late Jam	✓			Z
81	Duplex Invert Sensor (S70): Lag Jam		✓		E
83	Duplex Unit Entrance Sensor (S65): Lag Jam		✓		Z
86	Duplex Unit Sensor 3 (S64): Lag Jam		✓		Z
87	Duplex Unit Sensor 4 (S59): Lag Jam		✓		Z
88	Duplex Exit Sensor (S60): Lag Jam		✓		Z
94	Sub registration timing lost				B
95	Multi feed (front) detected				B
96	Timing lost • The trigger required for control has not come. The paper did not reach the registration rollers when the request for registration was already received. • The machine detected inside the software that transport control was broken.				
97	Shift over				Z

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
	Paper determined as shift over by duplex horizontal registration correction control is determined as special jam.				
98	Paper thickness error				B
99	Multi feed (back) detected				B

Vacuum Feed LCIT RT5120 (Pro C5310S/C5300S)

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
1	LCT1 1st Paper Feed Sensor			✓	U*1,U2*2
1	LCT1 2nd Paper Feed Sensor			✓	U*1,U5
1	LCT1 1st Transport Sensor			✓	U
1	LCT1 2nd Transport Sensor			✓	U
1	LCT1 1st Vertical Transport Exit Sensor			✓	U
1	LCT1 2nd Vertical Transport Exit Sensor			✓	U
1	LCT1 Bypass Vertical Transport Sensor			✓	V,U8
1	LCT1 Exit Sensor			✓	U
1	LCT1 1st Vertical Transport Sensor			✓	U
341	LCT1 1st Paper Feed Sensor: Late Jam	✓			U*1,U2*2
361	LCT1 1st Paper Feed Sensor: Lag Jam		✓		U*1,U2*2
342	LCT1 2nd Paper Feed Sensor: Late Jam	✓			U*1,U5
362	LCT1 2nd Paper Feed Sensor: Lag Jam		✓		U*1,U5
343	LCT1 1st Transport Sensor: Late Jam	✓			U
363	LCT1 1st Transport Sensor: Lag Jam		✓		U
344	LCT1 2nd Transport Sensor: Late Jam	✓			U
364	LCT1 2nd Transport Sensor: Lag Jam		✓		U
345	LCT1 1st Vertical Transport Exit Sensor: Late Jam	✓			U
365	LCT1 1st Vertical Transport Exit Sensor: Lag Jam		✓		U
346	LCT1 2nd Vertical Transport Exit Sensor: Late Jam	✓			U
366	LCT1 2nd Vertical Transport Exit Sensor: Lag Jam		✓		U
347	LCT1 Bypass Vertical Transport Sensor: Late Jam	✓			V,U8
367	LCT1 Bypass Vertical Transport Sensor:		✓		V,U8

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
	Lag Jam				
348	LCT1 Exit Sensor: Late Jam	✓			U
368	LCT1 Exit Sensor: Lag Jam		✓		U
349	LCT1 1st Vertical Transport Sensor: Late Jam	✓			U
369	LCT1 1st Vertical Transport Sensor: Lag Jam		✓		U

*1: Non-mark jam is displayed.

*2: Not displayed when Vacuum Feed Banner Sheet Tray is not installed.

Multi Bypass Tray BY5020 (Pro C5310S/C5300S)

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
1	LCT F4 Paper Feed Sensor			✓	V
1	LCT F4 Transport Sensor			✓	V
395	LCT F4 Paper Feed Sensor: Late Jam	✓			V
396	LCT F4 Paper Feed Sensor: Lag Jam		✓		V
397	LCT F4 Transport Sensor: Late Jam	✓			V,U8
398	LCT F4 Transport Sensor: Lag Jam		✓		V,U8

Finisher SR5090/SR4150, Booklet Finisher SR5100/SR4160

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
1	Entrance Sensor (S17)			✓	R1-R5
1	Horizontal Transport Sensor (S13)			✓	R1-R5
1	Switchback Transport Sensor (S14)			✓	R1-R5
1	Proof Tray Exit Sensor (S20)			✓	R1-R5
1	Shift Tray Exit Sensor (S22)			✓	R1-R5
1	Booklet Exit Sensor (S6) *Booklet Finisher SR5100/SR4160 only			✓	R6-R11
150	Entrance Sensor (S17) late jam	✓			R1-R5
151	Entrance Sensor (S17) lag jam		✓		R1-R5
152	Horizontal Transport Sensor (S13) late jam	✓			R1-R5
153	Horizontal Transport Sensor (S13) lag		✓		R1-R5

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
	jam				
154	Switchback Transport Sensor (S14) late jam	✓			R1-R5
155	Switchback Transport Sensor (S14) lag jam		✓		R1-R5
156	Proof exit unit late jam	✓			R1-R5
157	Proof exit unit lag jam		✓		R1-R5
158	Shift exit unit late jam	✓			R1-R5
159	Shift exit unit lag jam		✓		R1-R5
160	Booklet Exit late jam *Booklet Finisher SR5100/SR4160 only	✓			R6-R11
161	Booklet Exit lag jam *Booklet Finisher SR5100/SR4160 only		✓		R6-R11
162	Entrance Transport Motor (DCM1) Jam	✓			R1-R5
163	Horizontal Transport Motor (DCM2) Jam	✓			R1-R5
164	Pre-stack Transport Motor (DCM5) Jam	✓			R1-R5
165	Transport Motor (DCM3) Jam	✓			R1-R5
166	Exit Motor (DCM4) Jam	✓			R1-R5
167	Paper Stacking Holder Motor (DCM8) Jam	✓			R1-R5
168	Paper Exit Guide Plate Motor (STM4) Jam	✓			R1-R5
169	Punch Drive Motor (DCM13) jam	✓			R1-R5
170	Punch Unit Movement Motor (STM13) Jam	✓			R1-R5
171	Punch Registration Motor (STM14) jam	✓			R1-R5
172	Lower Junction Gate Motor (STM2) Jam	✓			R1-R5
173	Jogger Motor (STM1) Jam	✓			R1-R5
174	Positioning Roller Motor (DCM14) Jam	✓			R1-R5
175	Feed-out Belt Motor (DCM7) Jam	✓			R1-R5
176	Corner Stapler Movement Motor (STM7) Jam	✓			R1-R5
177	Corner Stapler Drive Motor Jam	✓			R1-R5
178	Booklet Jogger Motor (STM11) Jam *Booklet Finisher SR5100/SR4160 only	✓			R6-R11
179	Booklet Jogging Pawl Movement Motor	✓			R6-R11

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
	(STM8) *Booklet Finisher SR5100/SR4160 only				
180	Booklet Bottom Fence Motor (STM12) *Booklet Finisher SR5100/SR4160 only	✓			R6-R11
181	Booklet Stapler Motor *Booklet Finisher SR5100/SR4160 only	✓			R6-R11
182	Shift Roller Drive Motor (DCM11) *Booklet Finisher SR5100/SR4160 only	✓			R6-R11
183	Fold Transport Motor (STM9) *Booklet Finisher SR5100/SR4160 only	✓			R6-R11
184	Press Fold Motor (STM10) *Booklet Finisher SR5100/SR4160 only	✓			R6-R11
185	Tray Lift Motor (DCM9) Jam	✓			R1-R5
186	Shift Motor (STM3) Jam	✓			R1-R5
187	Shift Jogger Motor (STM1) (Front) Jam	✓			R1-R5
188	Shift Jogger Motor (STM1) (Rear) Jam	✓			R1-R5
189	Fence Lift Motor (STM17) Jam	✓			R1-R5
190	Stacking Sponge Roller Lift Motor (DCM6) Jam	✓			R1-R5
191	Leading Edge Guide Motor (STM6) Jam	✓			R1-R5
192	Positioning Roller Motor (DCM14) Jam	✓			R1-R5
193	Paper Guide Motor (STM18) Jam	✓			R1-R5
194	Door open jam	✓			R1-R5
195	Display non-performing jam	✓			R1-R5
196	Disable paper stop jam	✓			R1-R5
197	Downstream device software internal error	✓			R1-R5

Booklet Finisher SR5120 (Pro C5310S/C5300S)

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
445	Door open jam			✓	Rb1 to Rb5
446	Display non-performing jam			✓	Rb1 to Rb5
447	Disable paper stop jam			✓	Rb1 to Rb5
448	Software internal error			✓	Rb1 to Rb5
449	Paper transport sensor late error	✓			Rb1 to Rb5

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
450	Paper transport sensor lag error		✓	✓	Rb1 to Rb5
451	Upper tray exit sensor late error	✓			Rb1 to Rb5
452	Upper tray exit sensor lag error		✓	✓	Rb1 to Rb5
453	Lower tray exit sensor (short) late error	✓			Rb1 to Rb5
454	Lower tray exit sensor (short) lag error		✓	✓	Rb1 to Rb5
455	Pre-stacker transport sensor late error	✓			Rb6 to Rb9
456	Pre stacker transport sensor lag error		✓	✓	Rb6 to Rb9
457	Staple entrance transport sensor late error	✓			Rb6 to Rb9
458	Staple entrance transport sensor lag error		✓	✓	Rb10 to Rb17
459	Lower tray exit sensor (long) late error	✓			Rb10 to Rb17
460	Lower tray exit sensor (long) lag error		✓	✓	Rb10 to Rb17
461	Booklet stapler late error	✓			Rb10 to Rb17
462	Booklet stapler lag error		✓	✓	Rb10 to Rb17
463	Booklet stapler exit late error	✓			Rb10 to Rb17
464	Booklet stapler exit lag error		✓	✓	Rb10 to Rb17
465	Branching pawl switching motor (upper tray-lower tray)			✓	Rb1 to Rb5
466	Branching pawl switching motor (lower tray-staple)			✓	Rb6 to Rb9
467	Pre-stack pressure release motor			✓	Rb6 to Rb9
468	Exit guide plate open motor			✓	Rb1 to Rb5
469	Punch unit drive motor			✓	Rb1 to Rb5
470	Punch unit movement motor			✓	Rb1 to Rb5
471	Jogger motor (front)			✓	Rb10 to Rb17
472	Jogger motor (rear)			✓	Rb10 to Rb17
473	Beat roller motor			✓	Rb10 to Rb17

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
474	Shaking plate up/down motor			✓	Rb10 to Rb17
475	Fence side movement motor			✓	Rb10 to Rb17
476	Shaking plate side movement motor			✓	Rb10 to Rb17
477	Tip stopper motor			✓	Rb10 to Rb17
478	Fence up/down motor			✓	Rb10 to Rb17
479	Release pawl motor			✓	Rb10 to Rb17
480	Staple movement motor			✓	Rb10 to Rb17
481	Staple tilt motor			✓	Rb10 to Rb17
482	Staple motor			✓	Rb10 to Rb17
483	Booklet jogger motor			✓	Rb10 to Rb17
484	Booklet pawl motor			✓	Rb10 to Rb17
485	Fold blade motor			✓	Rb10 to Rb17
486	Booklet rear edge fence movement motor			✓	Rb10 to Rb17
487	Stack transport unit open motor			✓	Rb10 to Rb17
488	Booklet pressure release motor			✓	Rb10 to Rb17
489	Turn guide plate motor			✓	Rb10 to Rb17
490	Booklet staple motor			✓	Rb10 to Rb17
491	Booklet additional folding movement motor			✓	Rb10 to Rb17

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
492	Booklet additional folding pressure release motor			✓	Rb10 to Rb17
493	Lower tray lift motor			✓	Rb1 to Rb5
494	Lower shift tray movement motor			✓	Rb1 to Rb5
495	Lower Jogger movement motor			✓	Rb1 to Rb5
496	Lower Jogger retraction motor			✓	Rb1 to Rb5
497	Lower reverse roller motor			✓	Rb1 to Rb5
498	Lower pressure lever motor			✓	Rb1 to Rb5
499	Upper tray lifting motor			✓	Rb1 to Rb5
500	Upper shift tray movement motor			✓	Rb1 to Rb5
501	Upper jogger movement motor			✓	Rb1 to Rb5
502	Upper jogger retraction motor			✓	Rb1 to Rb5
503	Upper reverse roller motor			✓	Rb1 to Rb5
504	Upper pressure lever motor			✓	Rb1 to Rb5
505	Downstream device communication error			✓	Rb1 to Rb5

Finisher SR4140 (IM C6500/C8000)

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
1	Entrance Sensor (S1)			✓	R1-3
1	Paper Transport Sensor (S8)			✓	R1-3
1	Shift Tray Exit Sensor (S10)			✓	R1-3
1	Proof Tray Exit Sensor (S5)			✓	R1-3
1	Staple Exit Sensor (S24)			✓	R4-8
1	Pre-stack Paper Sensor (S23)			✓	R4-8
111	Door open jam				R1-3
120	Display non-performing jam				R1-3
118	Disable paper stop jam				R1-3
119	Software internal error				R1-3
100	Entrance Sensor (S1) late jam	✓			R1-3
101	Entrance Sensor (S1) lag jam		✓		R1-3
121	Paper Transport Sensor (S8) late jam	✓			R1-3
122	Paper Transport Sensor (S8) lag jam		✓		R1-3
104	Shift exit unit late jam	✓			R1-3
105	Shift exit unit lag jam		✓		R1-3
102	Proof exit unit late jam	✓			R1-3

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
103	Proof exit unit lag jam		✓		R1-3
106	Staple Tray Exit late jam	✓			R4-8
107	Staple Tray Exit lag jam		✓		R4-8
108	Pre-stack late jam	✓			R4-8
109	Pre-stack lag jam		✓		R4-8
110	Release jam	✓			R4-8
123	Proof Tray Junction Gate Motor (M7) jam	✓			R1-3
124	Stapler Junction Gate Motor (M8) jam	✓			R1-3
125	Pre-stack Junction Gate Motor (M9) jam	✓			R4-8
126	Pre-stack Stopper Motor (M20) jam	✓			R4-8
127	Drag-in Motor (M11) jam	✓			R4-8
128	Paper Hold Center Motor (M14) jam	✓			R4-8
129	Paper Hold Front Motor (M15) jam	✓			R4-8
130	Paper Hold Rear Motor (M16) jam	✓			R4-8
113	Jogger Motor (M17) jam	✓			R4-8
116	Feed Out Belt Motor (M18) jam	✓			R4-8
131	Stapler Front/Rear Motor (M1) jam	✓			R4-8
132	Stapler Rotation Motor (M2) jam	✓			R4-8
133	Leading Edge Stopper Motor (M12) jam	✓			R4-8
134	Jogger Bottom Fence Motor (M19) jam	✓			R4-8
135	Exit Open/Close Motor (M22) jam	✓			R1-3
114	Shift Motor (M4) jam	✓			R1-3
136	Drag-in Drive Motor (M5) jam	✓			R1-3
112	Tray Upper/Lower Motor (M24) jam	✓			R1-3
115	Staple Motor (M3) jam	✓			R4-8
117	Punching Motor (M62) jam	✓			R1-3
137	Punch Unit Motor (M31) jam	✓			R1-3
138	Jogger Motor (M29) jam	✓			R1-3
139	Jogger Top Fence Motor (M30) jam	✓			R1-3

LCIT RT4060

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
1	Paper Feed Sensor (S4)			✓	U2 to U3
1	Paper Transport Sensor (S3)			✓	U2 to U3
7	LCIT No Feed	✓			U1
57	Paper Feed Sensor lag jam		✓		U2 to U3
17	Paper Transport Sensor (S3) late jam	✓			U1
67	Paper Transport Sensor (S3) lag jam		✓		U2 to U3

LCIT RT4070/RT5140

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
1	Paper Feed Sensor (SN6)			✓	U2 to U3
1	Transport Sensor (SN2)			✓	U4
1	Paper Exit Sensor (SN3)			✓	U4
1	LCT Relay Sensor (SN4)			✓	U4
7	LCIT No Feed	✓			U1
57	Paper Feed Sensor (SN6) lag jam		✓		U2 to U3
15	Paper Feed Sensor (SN6) late jam	✓			U4
65	Transport Sensor (SN2) lag jam		✓		U4
16	Transport Sensor (SN2) late jam	✓			U4
66	Paper Exit Sensor (SN3)		✓		U4
17	LCT Relay Sensor (SN4) late jam	✓			U4
67	LCT Relay Sensor (SN4) lag jam		✓		U4

Multi-Folding Unit FD5020/FD4020

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
1	Entrance Sensor (SEN18)			✓	N1 to N5
1	Horizontal Path Exit Sensor (S24)			✓	N1 to N5
1	Top Tray Exit Sensor (SEN17)			✓	N1 to N5
1	Top Tray Paper Path Sensor (SEN21)			✓	N1 to N5
1	Registration Sensor (SEN11)			✓	N6 to 22
1	1st Stopper Paper Sensor (SEN15)			✓	N6 to 22
1	2nd Stopper Paper Sensor (SEN6)			✓	N6 to 22
1	3rd Stopper Paper Sensor (SEN2)			✓	N6 to 22
1	Horizontal Transport Paper Path Sensor			✓	N1 to N5

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
	(SEN20)				
1	Horizontal Path Paper Sensor (SEN25)			✓	N1 to N5
1	Bypass Entrance Paper Sensor (SEN3)			✓	N6 to 22
1	Bypass Exit Paper Sensor (SEN4)			✓	N6 to 22
200	Entrance Sensor (SEN18) late jam	✓			N1 to N5
201	Entrance Sensor (SEN18) lag jam		✓	✓	N1 to N5
202	Top Tray Exit Sensor (SEN17) late jam	✓			N1 to N5
203	Top Tray Exit Sensor (SEN17) lag jam		✓	✓	N1 to N5
204	Straight-through exit late jam	✓			N1 to N5
205	Straight-through exit lag jam		✓	✓	N1 to N5
206	1st Stopper Paper Sensor (SEN15) late jam	✓			N6 to N22
207	1st Stopper Paper Sensor (SEN15) lag jam		✓	✓	N6 to N22
208	2nd Stopper Paper Sensor (SEN6) late jam	✓			N6 to N22
209	2nd Stopper Paper Sensor (SEN6) lag jam		✓	✓	N6 to N22
210	3rd Stopper Paper Sensor (SEN2) late jam	✓			N6 to N22
211	3rd Stopper Paper Sensor (SEN2) lag jam		✓	✓	N6 to N22
212	Registration correction jam	✓	✓	✓	N1 to N5
213	Top Tray Transport Motor (MT2) jam	✓	✓	✓	N1 to N5
214	Entrance JG motor (MT1) jam	✓			N1 to N5
215	1st Stopper Motor (MT8) jam	✓			N6 to N22
216	2nd Stopper Motor (MT12) jam	✓			N6 to N22
217	3rd Stopper Motor (MT17) jam	✓			N6 to N22
218	Dynamic Roller Lift Motor (MT11) jam	✓			N6 to N22
219	Registration Roller Release Motor (MT10) jam	✓			N6 to N22
220	Fold Plate Motor (MT9) jam	✓			N6 to N22
221	Jogger Fence Motor (MT6) jam	✓			N6 to N22
222	Direct Send JG HP Motor (MT15) jam	✓			N6 to N22
223	FM6 Pawl Motor (MT16) jam	✓			N6 to N22
224	Door open jam				N1 to 5

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
225	Display non-performing jam				N1 to 5
226	Disable paper stop jam				N1 to 5
227	Software internal error				N1 to 5

Mail Box CS4010 (IM C6500/C8000)

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
1	Transport Sensor 1			✓	W
1	Transport Sensor 2			✓	W
1	Transport Sensor 3			✓	W
1	Transport Sensor 4			✓	W
1	Transport Sensor 5			✓	W
350	Transport Sensor 1: Late Jam	✓			W
351	Transport Sensor 1: Lag Jam		✓		W
352	Transport Sensor 2: Late Jam	✓			W
353	Transport Sensor 2: Lag Jam		✓		W
354	Transport Sensor 3: Late Jam	✓			W
355	Transport Sensor 3: Lag Jam		✓		W
356	Transport Sensor 4: Late Jam	✓			W
357	Transport Sensor 4: Lag Jam		✓		W
358	Transport Sensor 5: Late Jam	✓			W
359	Transport Sensor 5: Lag Jam		✓		W
360	Main Machine Data Corrupt	✓			W

Cover Interposer Tray CI4040/CI5050

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
1	Feed Sensor			✓	Q
1	Exit Sensor			✓	Q
230	Feed Sensor: Late Jam or Lag Jam	✓	✓		Q
231	Exit Sensor: Late Jam or Lag Jam	✓	✓		Q
232	Bottom Plate Motor Jam	✓			Q

Decurl Unit DU5080 (Pro C5310S/C5300S)

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
1	Entrance Sensor (S1)			✓	K1 to K4
1	Exit Sensor (S3)			✓	K1 to K4
228	Entrance Sensor (S1): Late Jam	✓			K1 to K4

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
229	Exit Sensor (S3): Late Jam	✓			K1 to K4

Buffer Pass Unit Type S9 (Pro C5310S/C5300S)

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
1	Transport Sensor 1			✓	Kc1 to Kc9
1	Transport Sensor 2			✓	Kc1 to Kc9
1	Transport Sensor 3			✓	Kc1 to Kc9
1	Transport Sensor 4			✓	Kc1 to Kc9
1	Transport Sensor 5			✓	Kc1 to Kc9
1	Transport Sensor 6			✓	Kc1 to Kc9
1	Transport Sensor 7			✓	Kc1 to Kc9
1	Transport Sensor 8			✓	Kc1 to Kc9
400	Transport Sensor 1: Late Jam	✓			Kc1 to Kc9
401	Transport Sensor 1: Lag Jam		✓		Kc1 to Kc9
402	Transport Sensor 2: Late Jam	✓			Kc1 to Kc9
403	Transport Sensor 2: Lag Jam		✓		Kc1 to Kc9
404	Transport Sensor 3: Late Jam	✓			Kc1 to Kc9
405	Transport Sensor 3: Lag Jam		✓		Kc1 to Kc9
406	Transport Sensor 4: Late Jam	✓			Kc1 to Kc9
407	Transport Sensor 4: Lag Jam		✓		Kc1 to Kc9
408	Transport Sensor 5: Late Jam	✓			Kc1 to Kc9
409	Transport Sensor 5: Lag Jam		✓		Kc1 to Kc9
410	Transport Sensor 6: Late Jam	✓			Kc1 to Kc9
411	Transport Sensor 6: Lag Jam		✓		Kc1 to Kc9
412	Transport Sensor 7: Late Jam	✓			Kc1 to Kc9
413	Transport Sensor 7: Lag Jam		✓		Kc1 to Kc9
414	Transport Sensor 8: Late Jam	✓			Kc1 to Kc9
415	Transport Sensor 8: Lag Jam		✓		Kc1 to Kc9
416	Door open jam	✓			Kc1 to Kc9
417	Display non-performing jam	✓			Kc1 to Kc9
418	Disable paper stop jam	✓			Kc1 to Kc9
419	Software internal error	✓			Kc1 to Kc9

Multi-Folding Unit FD4010 (IM C6500/C8000)

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
1	Paper Entrance Sensor (S9)			✓	N1

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
1	Pre-registration Sensor (S3)			✓	N2 to N12
1	Registration Sensor (S1)			✓	N2 to N12
1	Paper Stack Sensor (S2)			✓	N2 to N12
1	FWD/RVS Sensor 1 (S13)			✓	N2 to N12
1	FWD/RVS Sensor 2 (S14)			✓	N2 to N12
1	Crease HP Sensor (S15)			✓	N2 to N12
1	Bridge Paper Exit Sensor (S6)			✓	N2 to N12
1	Paper Exit Tray Paper Sensor (S8)			✓	N2 to N12
1	Folded Paper Sensor (S18)			✓	N2 to N12
1	Purge Paper Sensor (S19)			✓	N2 to N12
240	Door open jam			✓	N1
241	Display non-performing jam			✓	N1
242	Disable paper stop jam			✓	N1
243	Software internal error			✓	N1
244	Paper Entrance Sensor (S9) Late Jam	✓			N1
245	Paper Entrance Sensor (S9) Lag Jam		✓		N1,N2 to N12
246	Pre-registration Sensor (S3) late jam	✓			N1
247	Pre-registration Sensor (S3) lag jam		✓		N2 to N12
248	Registration Sensor (S1) Late Jam	✓			N2 to N12
249	Registration Sensor (S1) Lag Jam		✓		N2 to N12
250	Paper Stack Sensor (S2) late jam	✓			N2 to N12
251	Paper Stack Sensor (S2) lag jam		✓		N2 to N12
252	FWD/RVS Sensor 1 (S13) late jam	✓			N2 to N12
253	FWD/RVS Sensor 1 (S13) lag jam		✓		N2 to N12
254	FWD/RVS Sensor 2 (S14) late jam	✓			N2 to N12
255	FWD/RVS Sensor 2 (S14) lag jam		✓		N2 to N12
256	Crease HP Sensor (S15) late jam	✓			N2 to N12
257	Crease HP Sensor (S15) lag jam		✓		N2 to N12
258	Bridge Paper Exit Sensor (S6) late jam	✓			N2 to N12
259	Bridge Paper Exit Sensor (S6) lag jam		✓		N2 to N12
260	Paper Exit Tray Paper Sensor (S8) late jam	✓			N2 to N12
261	Paper Exit Tray Paper Sensor (S8)		✓		N2 to N12
262	Paper Entrance Motor (M8) jam	✓			N1
263	Pre-registration Motor (M6) jam	✓			N2 to N12
264	Registration Motor (M4) jam	✓			N2 to N12

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
265	Paper Stack Motor (M1) jam	✓			N2 to N12
266	Folding Motor (M13) jam	✓			N2 to N12
267	FWD/RVS Motor 2 (M14) jam	✓			N2 to N12
268	Crease Motor (M5) jam	✓			N2 to N12
269	Paper Transport Motor 1 (M7) jam	✓			N2 to N12
270	Paper Transport Motor 1 (M11) jam	✓			N2 to N12
271	Paper Exit Tray Motor (M12) jam	✓			N2 to N12
272	Entrance JG Motor (M10) jam	✓			N1
273	Paper Exit JG Motor (M9) jam	✓			N2 to N12
274	Folding JG Motor (M2) jam	✓			N2 to N12
275	Anti-winding Motor (M3) jam	✓			N2 to N12

Bridge Unit BU5030 (Vacuum Feed LCIT RT5120 connected) (Pro C5310S/C5300S)

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
1	Bridge Timing Sensor (S3)			✓	U15
1	Rotary Gate Exit Sensor (S7)			✓	U13
1	Bridge Exit Sensor (S4)			✓	B
40	Bridge Timing Sensor (S3) late jam	✓			U15
42	Rotary Gate Exit Sensor (S7) late jam	✓			U15
44	Bridge Exit Sensor (S4) late jam	✓			U13
41	Bridge Timing Sensor (S3) lag jam		✓		U15
43	Rotary Gate Exit Sensor (S7) lag jam		✓		U13
45	Bridge Exit Sensor (S4) lag jam		✓		B
46	Gate front paper late jam				U15
47	Rotary Gate HP Sensor (S2) cannot be detected				U13
48	Shift over				U13
49	Over skew				U13
50	Data defective				U13

Handling JAM48, 49

Background

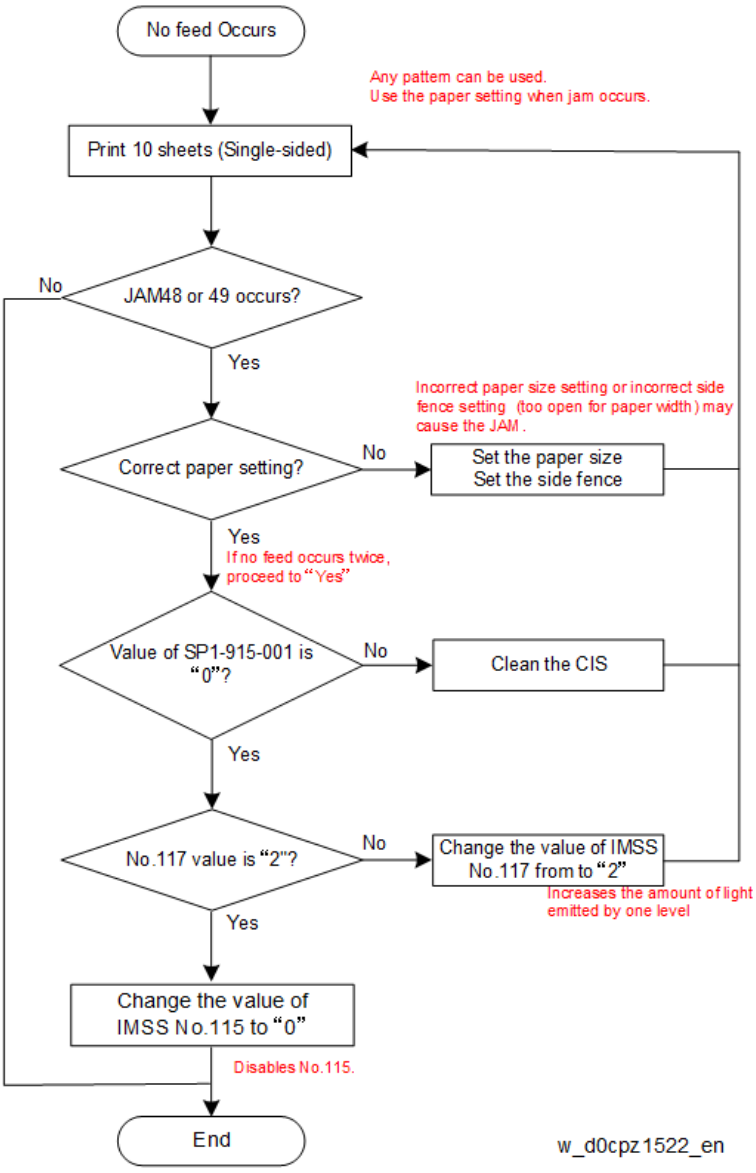
The edges of some paper cannot be detected by the CIS.

The following 2 values provide correct settings for such paper.

Target IMSS

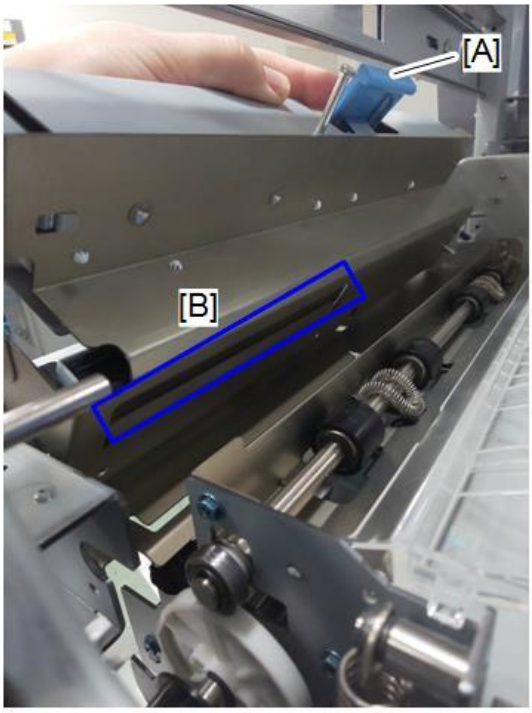
No.
115
117

Flowchart



CIS Cleaning

Clean the glass surface of the CIS and the metal plate facing the CIS with a blow brush .



[A]: D4 lever

[B]: CIS

How to Adjust CIS LED Power

Refer to "CIS Adjustment" in FSM for Bridge Unit BU5030.

Trimmer Unit TR5050 (Pro C5310S/C5300S)

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
1	Entrance sensor			✓	Rt1 to 2
1	Skew sensor			✓	Rt1 to 2
1	Exit sensor			✓	Rt1 to 2
326	Door open jam				Rt1 to 2
327	Display non-performing jam				Rt1 to 2
328	Disable paper stop jam				Rt1 to 2
329	Software internal error				Rt1 to 2
330	Entrance late jam	✓			Rt1 to 2
331	Entrance lag jam		✓		Rt1 to 2
332	Skew sensor late jam	✓			Rt1 to 2
333	Skew sensor lag jam		✓		Rt1 to 2
334	Exit sensor late jam	✓			Rt1 to 2
335	Exit sensor lag jam		✓		Rt1 to 2
336	Cutter motor lock	✓			Rt1 to 2
337	Cut position motor	✓			Rt1 to 2
338	Pressure roller	✓			Rt1 to 2

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
339	Stopper/pressure roller	✓			Rt1 to 2
340	Tray motor	✓			Rt1 to 2

Bridge Unit BU5020 (Pro C5310S/C5300S)

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
1	Entrance sensor			✓	Bridge Unit
1	Exit sensor			✓	Bridge Unit
290	Door open jam				Bridge Unit
291	Display non-performing jam				Bridge Unit
292	Disable paper stop jam				Bridge Unit
293	Software internal error				Bridge Unit
294	Entrance sensor late jam	✓			Bridge Unit
295	Entrance sensor lag jam		✓	✓	Bridge Unit
296	Exit sensor late jam	✓			Bridge Unit
297	Exit sensor lag jam		✓	✓	Bridge Unit

High Capacity Stacker SK5040 (Pro C5310S/C5300S)

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
1	Entrance sensor			✓	L1 to 5
1	Proof tray exit sensor			✓	L1 to 5
1	Shift tray exit sensor			✓	Non-mark jam display
1	Transport sensor			✓	L1 to 5
1	Exit sensor			✓	L1 to 5
370	Entrance path late jam	✓			L1 to 5
371	Entrance path lag jam		✓	✓	L1 to 5
372	Proof tray exit late jam	✓			L1 to 5
373	Proof tray exit lag jam		✓	✓	L1 to 5
374	Stacker tray exit late jam	✓			Non-mark jam display
375	Stacker tray exit lag jam		✓	✓	Non-mark jam display
376	Paper relay path late jam	✓			L1 to 5
377	Paper relay path lag jam		✓	✓	L1 to 5
378	Straight exit path late jam	✓			L1 to 5
379	Straight exit path lag jam		✓	✓	L1 to 5

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
380	Shift Tray JG Motor	✓			L1 to 5
381	Proof Tray JG Motor	✓			L1 to 5
382	Shift Motor	✓			Non-mark jam display
383	Main Jogger Front Fence Motor	✓			Non-mark jam display
384	Main Jogger Rear Fence Motor	✓			Non-mark jam display
385	Main Jogger Fence Retraction Motor	✓			Non-mark jam display
386	Sub Jogger Motor	✓			Non-mark jam display
387	LE Stopper Motor	✓			Non-mark jam display
388	Tray Lift Motor	✓			Non-mark jam display
389	Shutter drive motor	✓			Non-mark jam display
390	Door open jam				L1 to 5
391	Display non-performing jam				L1 to 5
392	Disable paper stop jam				L1 to 5
393	Software internal error				L1 to 5

Cover Interposer Tray CI5040 (Pro C5310S/C5300S)

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
1	1st Feed sensor			✓	Q1
1	2nd Feed sensor			✓	Q2 to Q3
1	1st Transport sensor			✓	Q1
1	2nd Transport sensor			✓	Q2 to Q3
1	1st Vertical transport sensor			✓	Q1
1	2nd Vertical transport sensor			✓	Q3 to Q6
1	3rd Vertical transport sensor			✓	Q3 to Q6
1	Entrance sensor			✓	Q4 to Q5
1	Exit sensor			✓	Q4 to Q5
420	1st Feed sensor late jam	✓			Q1

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
421	1st Feed sensor lag jam		✓	✓	Q1
422	2nd Feed sensor late jam	✓			Q2 to Q3
423	2nd Feed sensor lag jam		✓	✓	Q2 to Q3
424	1st Transport sensor late jam	✓			Q1
425	1st Transport sensor lag jam		✓	✓	Q1
426	2nd Transport sensor late jam	✓			Q2 to Q3
427	2nd Transport sensor lag jam		✓	✓	Q2 to Q3
428	1st Vertical transport sensor late jam	✓			Q1
429	1st Vertical transport sensor lag jam		✓	✓	Q1
430	2nd Vertical transport sensor late jam	✓			Q3 to Q6
431	2nd Vertical transport sensor lag jam		✓	✓	Q3 to Q6
432	3rd Vertical transport sensor late jam	✓			Q3 to Q6
433	3rd Vertical transport sensor lag jam		✓	✓	Q3 to Q6
434	Entrance sensor late jam	✓			Q4 to Q5
435	Entrance sensor lag jam		✓	✓	Q4 to Q5
436	Exit sensor late jam	✓			Q4 to Q5
437	Exit sensor lag jam		✓	✓	Q4 to Q5
438	Insert timing late jam	✓			Q3 to Q6
439	Door open jam				Q4 to Q5
440	Display non-performing jam				Q4 to Q5
441	Disable paper stop jam				Q4 to Q5
442	Software internal error				Q4 to Q5
443	1st feed double-feed detection jam	✓			Q3 to Q6
444	2nd feed double-feed detection jam	✓			Q3 to Q6

Cover Interposer Tray CI4050 (IM C6500/C8000)

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
1	1st Feed sensor			✓	Q1
1	2nd Feed sensor			✓	Q2
1	1st pull-out sensor			✓	Q1
1	2nd pull-out sensor			✓	Q2
1	1st Vertical transport sensor			✓	Q1
1	2nd Vertical transport sensor			✓	Q3 to Q4
1	Exit paper sensor			✓	Q3 to Q4

Jam code	Cause	Late Jam	Lag Jam	Stay Jam	Position display
1	Entrance sensor			✓	Q3 to Q4
1	Exit sensor			✓	Q3 to Q4
300	1st Feed sensor late jam	✓			Q1
301	1st Feed sensor lag jam		✓		Q1
302	2nd Feed sensor late jam	✓			Q2
303	2nd Feed sensor lag jam		✓		Q2
304	1st pull-out sensor late jam	✓			Q1
305	1st pull-out sensor lag jam		✓		Q1
306	2nd pull-out sensor late jam	✓			Q2
307	2nd pull-out sensor lag jam		✓		Q2
308	1st Vertical transport sensor late jam	✓			Q1
309	1st Vertical transport sensor lag jam		✓		Q1
310	2nd Vertical transport sensor late jam	✓			Q3 to Q4
311	2nd Vertical transport sensor lag jam		✓		Q3 to Q4
312	Exit paper sensor late jam	✓			Q3 to Q4
313	Exit paper sensor lag jam		✓		Q3 to Q4
314	Entrance sensor late jam	✓			Q3 to Q4
315	Entrance sensor lag jam		✓		Q3 to Q4
316	Exit sensor late jam	✓			Q3 to Q4
317	Exit sensor lag jam		✓		Q3 to Q4
318	Insert timing late jam	✓			Q3 to Q4
319	1st Lift Motor jam	✓			Q1
320	2nd Lift Motor jam	✓			Q2
321	1st pickup motor jam	✓			Q1
322	2nd pickup motor jam	✓			Q2
323	Door open jam				Q3 to Q4
324	Display non-performing jam				Q3 to Q4
325	Disable paper stop jam				Q3 to Q4
299	Software internal error				Q3 to Q4

Paper Size Codes

Paper size codes are as follows.

* The unit of Main Scan/Sub Scan Length is 0.1 mm.

Size Code	Paper Size Name	Orientation	Main Scan Length	Sub Scan Length
132(84H)	A3	SEF	2970	4200

Size Code	Paper Size Name	Orientation	Main Scan Length	Sub Scan Length
005(05H)	A4	LEF	2970	2100
133(85H)	A4	SEF	2100	2970
006(06H)	A5	LEF	2100	1480
134(86H)	A5	SEF	1480	2100
135(87H)	A6	SEF	1050	1480
141(8DH)	B4	SEF	2570	3640
014(0EH)	B5	LEF	2570	1820
142(8EH)	B5	SEF	1820	2570
143(8FH)	B6	SEF	1280	1820
154(9AH)	SRA3	SEF	3200	4500
027(1BH)	SRA4	LEF	3200	2250
155(9BH)	SRA4	SEF	2250	3200
160(A0H)	11”x17”(DLT)	SEF	2794	4318
161(A1H)	11"x14"	SEF	2794	3556
162(A2H)	10"x15"	SEF	2540	3810
163(A3H)	10"x14"	SEF	2540	3556
164(A4H)	8 1/2”x14”(LG)	SEF	2159	3556
165(A5H)	8 1/2"x13"(Foolscape)	SEF	2159	3302
038(26H)	8 1/2"x11"(LT)	LEF	2794	2159
166(A6H)	8 1/2”x11”(LT)	SEF	2159	2794
167(A7H)	8 1/4"x14"	SEF	2096	3556
168(A8H)	8 1/4"x13"(Folio)	SEF	2096	3302
169(A9H)	8"x13"(F/GL)	SEF	2032	3302
171(ABH)	8"x10"(UK)	SEF	2032	2540
044(2CH)	5 1/2"x8 1/2"(HLT)	LEF	2159	1397
172(ACH)	5 1/2”x8 1/2”(HLT)	SEF	1397	2159
045(2DH)	7 1/4"x10 1/2"(Exective)	LEF	2667	1842
173(ADH)	7 1/4"x10 1/2"(Exective)	SEF	1842	2667
175(AFH)	12” x 18”	SEF	3048	4572
177(B1H)	11"x15"	SEF	2794	3810
180(B4H)	13"x19"	SEF	3302	4826
181(B5H)	13"x19.2"	SEF	3302	4877
182(B6H)	13"x18"	SEF	3302	4572
194(C2H)	8K	SEF	2670	3900
067(43H)	16K	LEF	2670	1950
195(C3H)	16K	SEF	1950	2670
198(C6H)	12.6x18.5	SEF	3200	4699

Size Code	Paper Size Name	Orientation	Main Scan Length	Sub Scan Length
199(C7H)	12.6x19.2	SEF	3200	4877
200(C8H)	8.5"x13.4"(Oficio)	SEF	2159	3404
080(50H)	No.10 (Com10)	LEF	2413	1048
208(D0H)	No.10 (Com10)	SEF	1048	2413
081(51H)	No.7 (Monarch)	LEF	1905	984
209(D1H)	No.7 (Monarch)	SEF	984	1905
083(53H)	C5	LEF	2290	1620
211(D3H)	C5	SEF	1620	2290
212(D4H)	C6	SEF	1140	1620
085(55H)	DL	LEF	2200	1100
213(D5H)	DL	SEF	1100	2200
121(79H)	226x310	LEF	3100	2260
249(F9H)	226x310	SEF	2260	3100
250(FAH)	310x432	SEF	3100	4320
251(FBH)	PostCard: Standard	SEF	1067	1397

How to Distinguish the Jams Caused by Swollen Paper Exit Rollers

Swelling of the paper exit roller is a possible cause of jams.

The paper exit roller of the main machine swells with the toner wax, and the roller diameter becomes large. As a result, the rotating speed of the roller is increased, which generates a difference of the transporting speed between downstream devices. This makes the paper sags, and the paper comes into contact with the polyester film on the entrance section of the downstream devices. As a result, the carrying load increases and the paper may jam.

If the following jam codes appears, isolate the problem with the guide below:

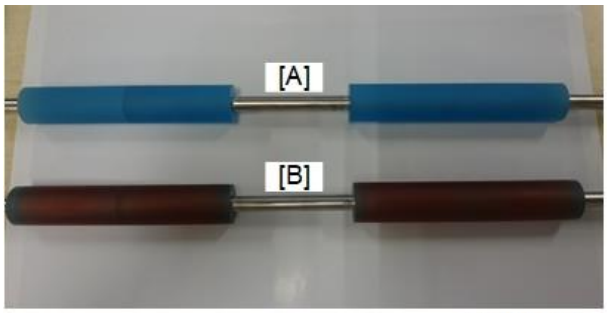
Peripheral	Jam code
Decurl Unit	J228, J229
Buffer Pass Unit	J400, J401, J402, J404
Cover Interposer Tray CI5040	J434, J435
Multi-Folding Unit FD5020	J200, J201
Finisher SR5090, Booklet Finisher SR5100	J150, J151
Booklet Finisher SR5120	J449, J450
Bridge Unit	J294, J295

Note

Conditions that are likely to occur:

- Mass printing with high coverage
- Long paper length

- Waves can be found on paper before the jam
- Paper exit rollers are discolored ([A]: New roller, [B]: Swollen roller *The color may differ depending on jobs)



d0cpz4204

How to Distinguish

All of the following items are applicable, the jams may be caused by the swollen paper exit roller. Replace the paper exit roller (drive) if applicable. (Paper Exit Roller (Drive/Idle))

1. Jammed paper: Coated or synthetic paper, with 130 gsm or less
2. The jam codes described above appear
3. The paper exit rollers are discolored (no toner adhesion)
4. The leading edge of jammed paper has no damage
5. If the paper exit speed is lowered at 1%, the jams does not occur.

If one or more items that do not apply are included, the jams are not caused by a swollen paper exit roller.

SC Jam Report

Overview

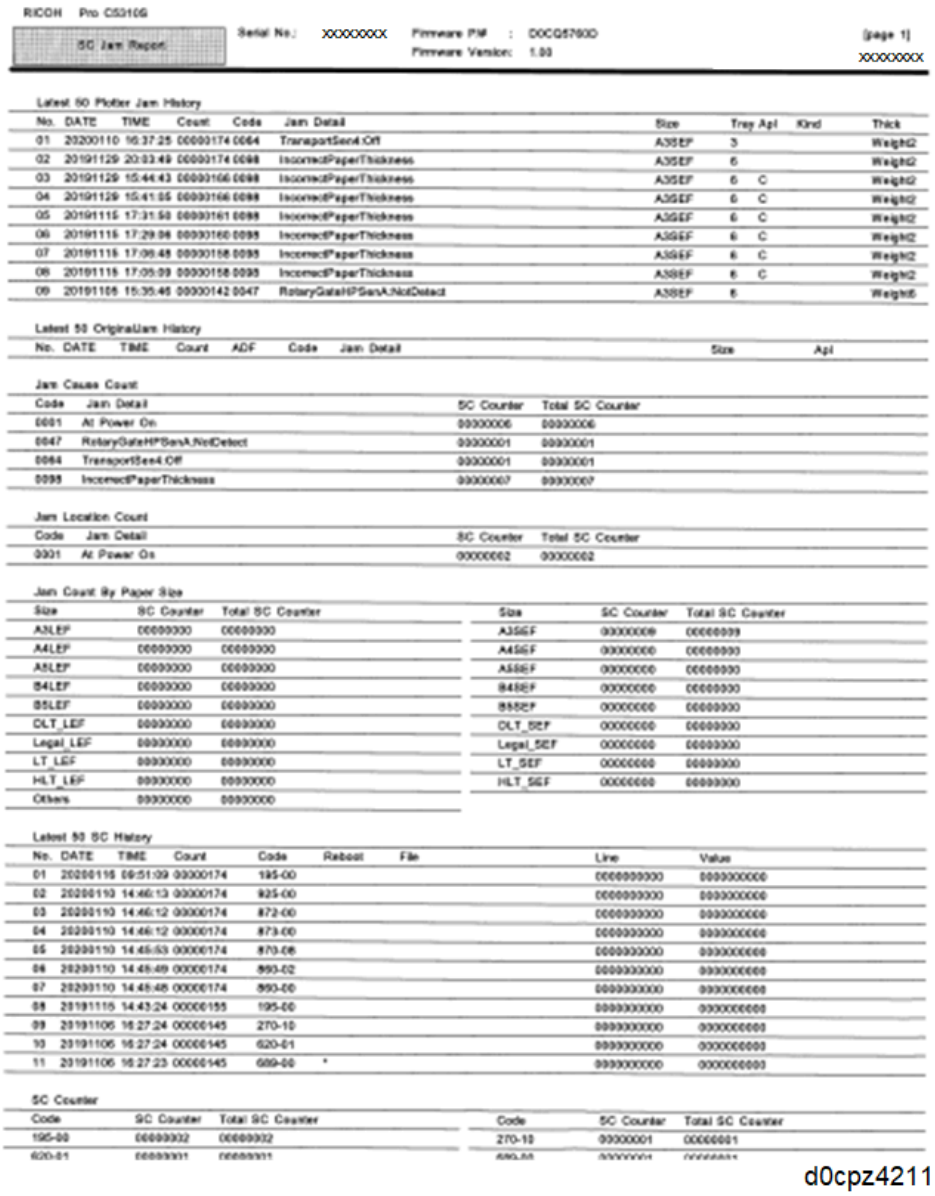
SC Jam Report is a report sheet that contains the history of SC and jam that have occurred in the machine.

The SC Jam Report includes the following items:

- Latest 50 Plotter Jam History
- Latest 50 Original Jam History
- Jam Cause Count
- Jam Location Count
- Jam Count by Paper Size
- Latest 50 SC History
- SC Counter

Executing the SP5-990-051 provides a SC Jam Report.

Sample



Description

The following tables explain the contents in Latest 50 Plotter Jam History [A] and Latest 50 Original Jam History [B].

Size column (*Common for [A] and [B])

Value	Description
A0LEF	A0 (LEF)
A1LEF	A1 (LEF)
A2LEF	A2 (LEF)
A3LEF	A3 (LEF)
A4LEF	A4 (LEF)
A5LEF	A5 (LEF)

Value	Description
A6LEF	A6 (LEF)
A7LEF	A7 (LEF)
B0LEF	B0 (LEF)
B1LEF	B1 (LEF)
B2LEF	B2 (LEF)
B3LEF	B3 (LEF)
B4LEF	B4 (LEF)
B5LEF	B5 (LEF)
B6LEF	B6 (LEF)
B7LEF	B7 (LEF)
Wpost_LEF	Post Card (LEF)
post_LEF	Post Card (LEF)
line1LEF	Line slider 1 (LEF)
line2LEF	Line slider 2 (LEF)
lib6LEF	Lib card 1 (LEF)
lib8LEF	Lib card 2 (LEF)
210x170LEF	170 x 210 mm (LEF)
210x182LEF	182 x 210 mm (LEF)
267x388LEF	Swiss Bank (LEF)
SRA3LEF	SRA3 (LEF)
SRA4LEF	SRA4 (LEF)
KIKU4LEF	318 x 469 mm (LEF)
A3nobi_LEF	329 x 483 mm (LEF)
custom	Custom size
DLT_LEF	11 x 17 inch (DLT) (LEF)
11x14LEF	11 x 14 inch (LEF)
10x15LEF	10 x 15 inch (LEF)
10x14LEF	10 x 14 inch (LEF)
Legal_LEF	8 1/2 x 14 inch (LG) (LEF)
8hx13LEF	8 1/2 x 13 inch (Foolscape) (LEF)
LT_LEF	8 1/2 x 11 inch (LT) (LEF)
8qx14LEF	8 1/4 x 14 inch (LEF)
8qx13LEF	8 1/4 x 13 inch (Folio) (LEF)
8x13LEF	8 x 13 inch (F/GL) (LEF)
8x10h_LEF	8 x 10 1/2 inch (GT) (LEF)
8x10LEF	8 x 10 inch (UK) (LEF)
HLT_LEF	5 1/2 x 8 1/2 inch (HLT) (LEF)

Value	Description
ExectiveL	7 1/4 x 10 1/2 inch (Exective) (LEF)
17x22LEF	17 x 22 inch (LEF)
12x18LEF	12 x 18 inch (LEF)
12x14h_LEF	12 x 14 1/2 inch (LEF)
11x15LEF	11 x 15 inch (LEF)
9hx11LEF	9 1/2 x 11 inch (LEF)
8hx12LEF	8 1/2 x 12 inch (LEF)
13x19LEF	13 x 19 inch (LEF)
13x19q_LEF	13 x 19.2 inch (LEF)
13x18LEF	13 x 18 inch (LEF)
36x48LEF	36 x 48 inch (LEF)
24x36LEF	24 x 36 inch (LEF)
18x24LEF	18 x 24 inch (LEF)
9x12LEF	9 x 12 inch (LEF)
34x44LEF	34 x 44 inch (LEF)
22x34LEF	22 x 34 inch (LEF)
30x42LEF	30 x 42 inch (LEF)
21x30LEF	21 x 30 inch (LEF)
8kai_LEF	8K (LEF)
16kai_LEF	16K (LEF)
12_6x18_5L	12.6 x 18.5 inch (LEF)
12_6x19_2L	12.6 x 19.2 inch (LEF)
mexoficioL	8.5 x 13.4 inch (LEF)
15x20LEF	15 x 20 inch (LEF)
F4a_LEF	8.5 x 13.5 inch (LEF)
B5_ISO_LEF	B5 (ISO) (LEF)
B6Half_LEF	B6 Half (LEF)
Com10LEF	No.10 (Com10) (LEF)
MonarchLEF	No.7 (Monarch) (LEF)
C5LEF	C5 (LEF)
C6LEF	C6 (LEF)
DL_LEF	DL (LEF)
841width	841 mm width (LEF)
594width	594 mm width (LEF)
420width	420 mm width (LEF)
297width	297 mm width (LEF)
210width	210 mm width (LEF)

Value	Description
660width	660 mm width (LEF)
440width	440 mm width (LEF)
880width	880 mm width (LEF)
800width	800 mm width (LEF)
728width	728 mm width (LEF)
515width	515 mm width (LEF)
364width	364 mm width (LEF)
257width	257 mm width (LEF)
182width	182 mm width (LEF)
625width	625 mm width (LEF)
yohchou3L	235 x 120 mm (LEF)
yoh4LEF	105 x 235 mm (LEF)
chou3LEF	120 x 235 mm (LEF)
chou4LEF	90 x 205 mm (LEF)
kaku2LEF	240 x 332 mm (LEF)
kaku3LEF	216 x 277 mm (LEF)
226x310LEF	226 x 310 mm (LEF)
310x432LEF	310 x 432 mm (LEF)
A0SEF	A0 (SEF)
A1SEF	A1 (SEF)
A2SEF	A2 (SEF)
A3SEF	A3 (SEF)
A4SEF	A4 (SEF)
A5SEF	A5 (SEF)
A6SEF	A6 (SEF)
A7SEF	A7 (SEF)
B0SEF	B0 (SEF)
B1SEF	B1 (SEF)
B2SEF	B2 (SEF)
B3SEF	B3 (SEF)
B4SEF	B4 (SEF)
B5SEF	B5 (SEF)
B6SEF	B6 (SEF)
B7SEF	B7 (SEF)
WpostcardS	Post Card (SEF)
postcardS	Post Card (SEF)
line1SEF	Line slider 1 (SEF)

Value	Description
line2SEF	Line slider 2 (SEF)
lib6SEF	Lib card 1 (SEF)
lib8SEF	Lib card 2 (SEF)
210x170SEF	170 x 210 mm (SEF)
210x182SEF	182 x 210 mm (SEF)
267x388SEF	Swiss Bank (SEF)
SRA3SEF	SRA3 (SEF)
SRA4SEF	SRA4 (SEF)
KIKU4SEF	318 x 469 mm(SEF)
A3nobi_SEF	329 x 483 mm (SEF)
custom	custom
DLT_SEF	11 x 17 inch (DLT) (SEF)
11x14SEF	11 x 14 inch (SEF)
10x15SEF	10 x 15 inch (SEF)
10x14SEF	10 x 14 inch (SEF)
Legal_SEF	8 1/2 x 14 inch (LG) (SEF)
8hx13SEF	8 1/2 x 13 inch (Foolscape) (SEF)
LT_SEF	8 1/2 x 11 inch (LT) (SEF)
8qx14SEF	8 1/4 x 14 inch (SEF)
8qx13SEF	8 1/4 x 13 inch (Folio) (SEF)
8x13SEF	8 x 13 inch (F/GL) (SEF)
8x10h_SEF	8 x 10 1/2 inch (GT) (SEF)
8x10SEF	8 x 10 inch (UK) (SEF)
HLT_SEF	5 1/2 x 8 1/2 inch (HLT) (SEF)
Exective	7 1/4 x 10 1/2 inch (Exective) (SEF)
17x22SEF	17 x 22 inch (SEF)
12x18SEF	12 x 18 inch (SEF)
12x14h_SEF	12 x 14 1/2 inch (SEF)
11x15SEF	11 x 15 inch (SEF)
9hx11SEF	9 1/2 x 11 inch (SEF)
8hx12SEF	8 1/2 x 12 inch (SEF)
13x19SEF	13 x 19 inch (SEF)
13x19q_SEF	13 x 19.2 inch (SEF)
13x18SEF	13 x 18 inch (SEF)
36x48SEF	36 x 48 inch (SEF)
24x36SEF	24 x 36 inch (SEF)
18x24SEF	18 x 24 inch (SEF)

Value	Description
9x12SEF	9 x 12 inch (SEF)
34x44SEF	34 x 44 inch (SEF)
22x34SEF	22 x 34 inch (SEF)
30x42SEF	30 x 42 inch (SEF)
21x30SEF	21 x 30 inch (SEF)
8kai_SEF	8K (SEF)
16kai_SEF	16K (SEF)
12_6x18_5S	12.6 x 18.5 inch (SEF)
12_6x19_2S	12.6 x 19.2 inch (SEF)
mexoficioS	8.5 x 13.4 inch (SEF)
15x20SEF	15 x 20 inch (SEF)
F4a_SEF	8.5 x 13.5 inch (SEF)
B5_ISO_SEF	B5 (ISO) (SEF)
B6Half_SEF	B6 Half (SEF)
Com10SEF	No.10 (Com10) (SEF)
MonarchSEF	No.7 (Monarch) (SEF)
C5SEF	C5 (SEF)
C6SEF	C6 (SEF)
DL_SEF	DL (SEF)
36inchwid	36 inch width (SEF)
24inchwid	24 inch width (SEF)
18inchwid	18 inch width (SEF)
12inchwid	12 inch width (SEF)
9inchwidth	9 inch width (SEF)
30inchwid	30 inch width (SEF)
707width	707 mm width (SEF)
409width	490 mm width (SEF)
680width	680 mm width (SEF)
34inchwid	34 inch width (SEF)
22inchwid	22 inch width (SEF)
17inchwid	17 inch width (SEF)
11inchwid	11 inch width (SEF)
8h_inchwid	8.5 inch width (SEF)
620width	620 mm width (SEF)
yohchou3S	235 x 120 mm (SEF)
yoh4SEF	105 x 235 mm (SEF)
chou3SEF	120 x 235 mm (SEF)

Value	Description
chou4SEF	90 x 205 mm (SEF)
kaku2SEF	240 x 332 mm (SEF)
kaku3SEF	216 x 277 mm (SEF)
226x310SEF	226 x 310 mm (SEF)
310x432SEF	310 x 432 mm (SEF)
14inchwid	14 inch width (SEF)
15inchwid	15 inch width (SEF)

Tray column (Common for [A] and [B])

Value	Tray
M	Main machine's bypass tray
1	Main machine's 1st tray
2	-
3	Main machine's 2nd tray
4	Main machine's 3rd tray
5	A3/A4 LCIT
6	Vacuum Feed LCIT Upper tray
7	Vacuum Feed LCIT Lower tray
8	Multi Bypass Tray
9	Cover Interposer Tray 1
10	Cover Interposer Tray 2
D	Duplex unit
(null)	No information

Apl column (Common for [A] and [B])

Value	Description
C	Copy
F	Fax
P	Printer
S	Scanner
D	Document box
E	External controller
(null)	No information

Kind column ([A] only)

1678

Value	Description
(null)	Plain paper
recycle	Recycle paper
special	Special paper
tracing	Tracing paper
ohp	OHP
label	Label paper
bond	Bond paper
cardstock	Card stock
glossy	Glossy paper
used	Used paper
film	Film paper
inkjetpost	Inkjet postcard
inkjet_hg	Inkjet high grade paper
envelope	Envelope
photo	Photo
coating	Coated paper
special2	Special paper 2
special3	Special paper 3
postcard	Post card
thick_glos	Thick glossy paper
special4	Special paper 4
special5	Special paper 5
special6	Special paper 6
coating2	Coated paper 2
coating3	Coated paper 3
coat_gloss	Coated paper (Glossy)
coat_matte	Coated paper (Matte)
waterproof	Waterproof paper
coat_hi_gl	Coated paper (High Glossy)
ink_normal	Inkjet normal
tracing_m	Tracing paper monochrome
tracing_c	Tracing paper color
matte_film	Matte film
coat_cad	Coated paper (CAD)
photo_glos	Photo Glossy
uneven	Uneven paper
magnet	Magnet paper

Value	Description
metalpearl	Metal/Perl
clearfile	Clearfile
synthetic	Synthetic
ncr	NCR
(null)	No information
other	Other

Thick column ([A] only)

IM C6500/C8000 Value	Pro C5300S/C5310S Value	Description
plain	Weight2	Plain
thick	Weight5	Thick 1
thick2	Weight6	Thick 2
thick3	Weight7	Thick 3
thick4	Weight8	Thick 4
thick5	Weight9	Thick 5
middle	Weight4	Mid-thick
plain2	Weight3	Plain 2
thin	Weight1	Thin 1
thin0	Weight0	Thin 0
(null)	(null)	No information

Voltage of the Input Power Source

An SC can be caused by the supply voltage environment. This machine acquires the voltage of the input power source, and then stores it in SP mode. Therefore, when an SC is generated, first check the voltage of the input power source (Checking the Voltage of the Input Power Source). If there is no abnormality in the voltage of the input power source, repair the problem by referring to the SC tables (SC100 (Engine: Scanning)).

Checking the Voltage of the Input Power Source

When an SC is generated, the voltages of the input power source and the SC code can be displayed with the following SPs. When the SC is generated, the maximum and minimum voltages of the input power source within a predetermined period of time (5 seconds before the generation of the SC) are also stored in SP mode.

SP No.	SP Name	Range	Description
SP7-995-001	Power Supply Voltage: Disp – Power Supply Voltage	0 to 300V	**The voltage during normal operation:** The machine acquires the voltage every 0.5 seconds, and stores it in SP mode.
SP7-996-001 to 010	SC Number (Error) – SC Number (Error)1 to 10	0 to 99999	**The SC code when the SC is generated:** For example, "54702" is displayed when SC547-02 is generated. The newest 10 SC codes are stored in SP mode.
SP7-997-001 to 010*1	Max Power Supply Voltage – Max Power Supply Voltage1 to 10	0 to 300V	**The maximum voltage when the SC is generated:** Displays the maximum voltage value within a predetermined period of time (5 seconds before the generation of the SC). The most recent 10 maximum voltage values are stored in SP mode.
SP7-998-001 to 010*1	Min Power Supply Voltage – Min Power Supply Voltage1	0 to 300V	**The minimum voltage value when the SC is generated:** Displays the minimum voltage value within a predetermined period of time (5 seconds before the generation of the SC). The most recent 10 minimum voltage values are stored in SP mode.

*1 If the SC is generated before the machine acquires the voltage of the input power source, "1" or "2" is displayed.

Note

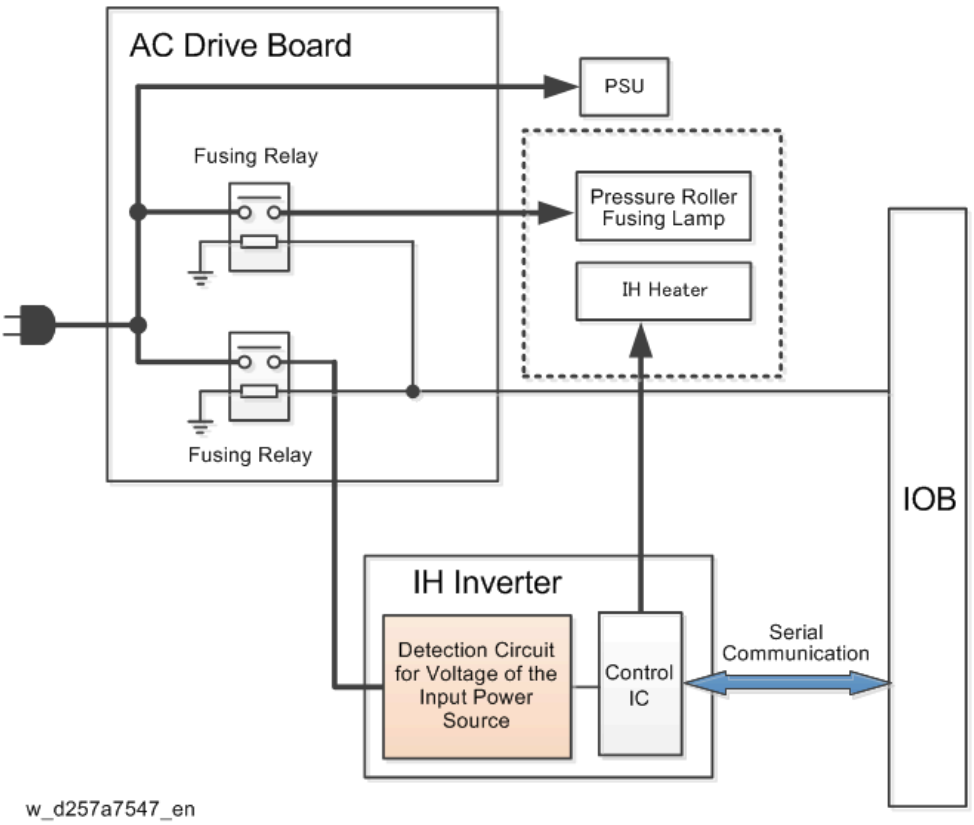
- The voltage of the input power source displayed in SP mode has a ±4% deviation from the actual value.
- If you need to check the voltage of the input power source with the SMC output, execute SP5-

990-002 (SP Print Mode – SP (Mode Data List)). The voltage of the input power source is not on the SMC output of SP5-990-004 (SP Print Mode – Logging Data).

Acquisition Control for Voltage of the Input Power Source

Components

Acquisition of the voltage of the input power source is controlled by the following components: AC drive board (PCB32), IH inverter (PCB35), and IOB (PCB1)



AC Drive Board

The AC drive board receives AC power from the power cord. It controls cutoff of the AC power source by the fusing relay. The machine cannot acquire the voltage of the input power source when the fusing relay is off because the power supply for the IH inverter is cut off.

IH Inverter

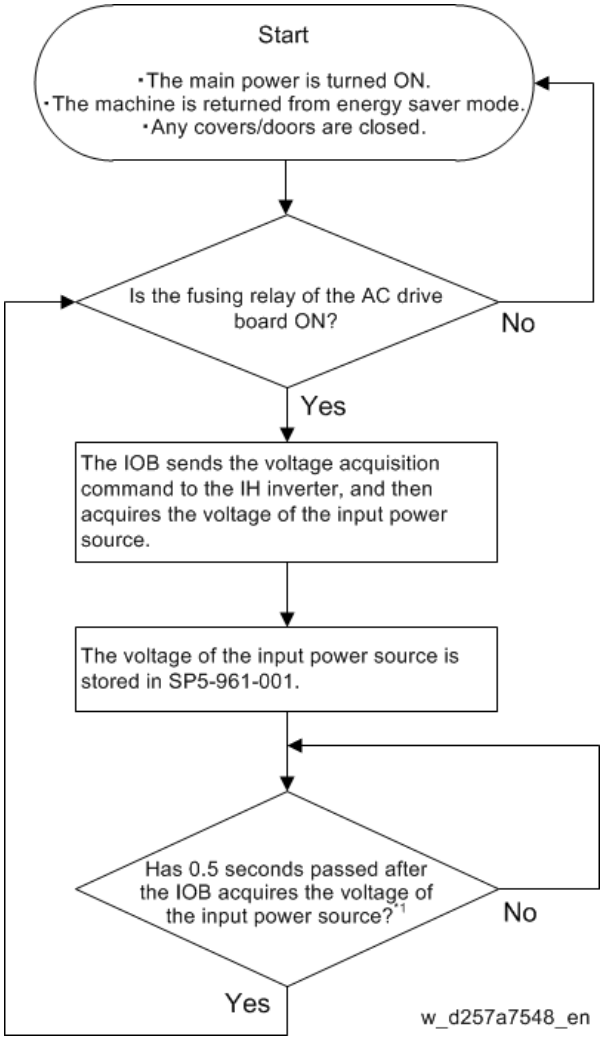
The IH inverter contains the detection circuit for the voltage of the input power source.
The Control IC performs serial communications (start-stop synchronization type full-duplex serial communication) with the IOB and controls the IH heater.

IOB

The IOB controls the fusing relay on the AC drive board.
It also controls the IH heater via the IH inverter.

Acquisition Control (During Normal Operation)

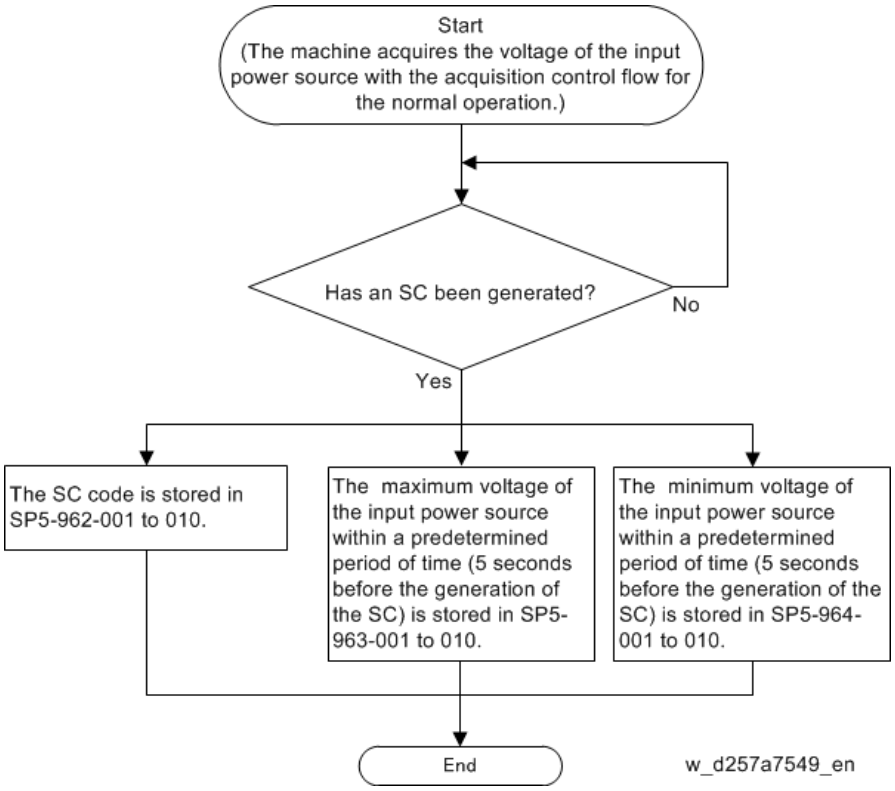
Acquisition of the voltage of the input power source is controlled by the following process.



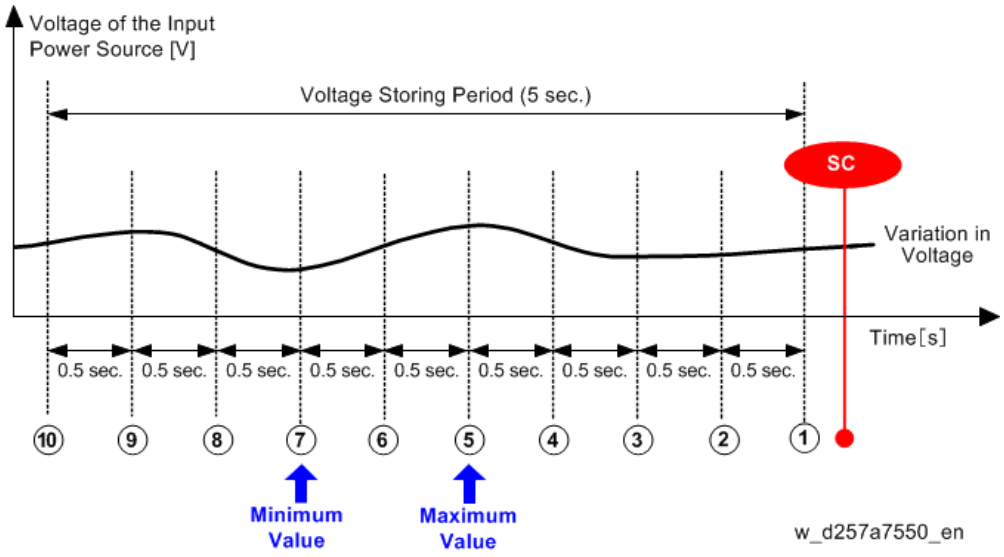
*1 A predetermined standby time (0.5 seconds) is provided after the voltage of the input power source is acquired. Therefore, the voltage of the input power source is acquired at 0.5 second intervals.

Acquisition Control (When an SC is Generated)

When an SC is generated, acquisition of the maximum and minimum voltages of the input power source is controlled by the following process.



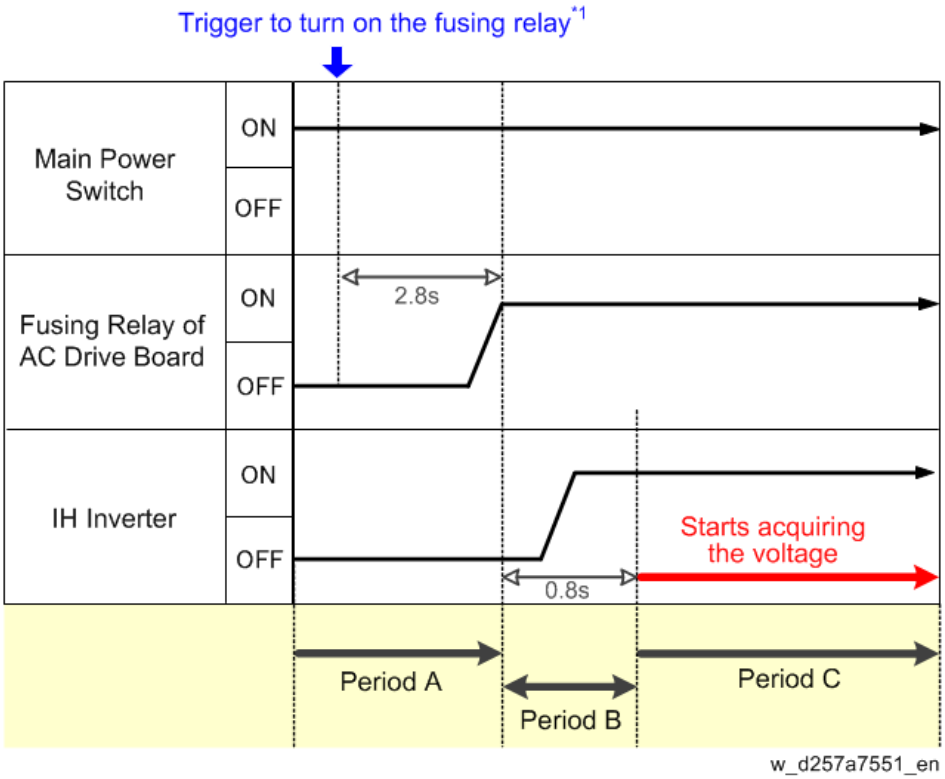
During normal operation, the voltage of the input power source is acquired at 0.5 second intervals. When an SC is generated, the maximum and minimum voltages of the input power source are obtained from the voltages which were acquired within a predetermined period of time (5 seconds before the generation of the SC).



The Period of Time when the Voltage cannot be Acquired

The voltage of the input power source cannot be acquired when the fusing relay on the AC drive board is OFF, because the power supply for the IH inverter is cut off. After the fusing relay turns ON and the power supply is provided to the IH inverter, the voltage acquisition is started. Therefore, when an SC is generated, the maximum and minimum voltages of the input power source can be acquired from Period

C as shown below.



*1 The fusing relay is turned on when one of the following operations is performed.

- The main power is turned ON.
- Any covers/doors are closed.
- The machine returns from the energy saver mode.

	Description
Period A	When the SC is generated before the fusing relay turns ON, "2" is displayed for the maximum voltage (SP7-997-001 to 010) and the minimum voltage (SP7-998-001 to 010).
Period B	When the SC is generated during a period after the fusing relay turns ON and before the IH inverter acquires the voltage, "1" is displayed for the maximum voltage (SP7-997-001 to 010) and the minimum voltage (SP7-998-001 to 010).
Period C	When the SC is generated after the IH inverter starts acquiring the voltage, the machine can display the correct maximum voltage (SP7-997-001 to 010) and the correct minimum voltage (SP7-998-001 to 010).

NICE Function (Pro C5300S/C5310S)

This section explains the image adjustment method using NICE (service tool).

NICE stands for “Numerical Image Consistency Evaluation” and is a software application for troubleshooting the following image quality issues shown below. NICE analyzes image problems by digitizing the image.

- Front and back registration misalignment
- FR (front to rear) density inconsistency
- Banding
- Shock-jitter

Required Items

The following items are required for NICE.

No.	Item	Function
1	NICE SD card (software application for engine)*1	• Prints out test charts • Drives the embedded scanner (copier models) • Reads, writes and executes the engine SP • Generates tiff formatted files from scanned images
2	NICE software application for PC	• Analyses the scanned image and visualizes the problem through numeric conversions • Calculates the correction values
3	Embedded scanner on copier models	• Scans the test charts
4	Spectrophotometer (EFI: ES-1000 X-rite i1 Pro, ES-2000 X-ritei1 Pro2)	• Measures the colors on the test charts (used only for FR density adjustment)
5	NICE Calibration Chart*1	• Used for generating the color shading calibration values. (used only for Banding Analysis)

*1 Provided as a service part.

The following NICE applications and PC applications are provided for NICE.

No.	NICE Application	PC Application	Installer file name
1	FR density adjustment (Scanner)	Image View FR	NICE ImageView FR V2.1 Installer.7z
2	FR density adjustment (Spectrophotometer)	i1Profiler (Ver.1.5.6)	i1ProfilerSetup.exe
3	Banding Analysis	IQ Evaluation	NICE IQ Evaluation V2.0.zip
		Banding Analyzer	Setup NEW_COLOR_BANDING_ANALYZERv2.3.0.zip

No.	NICE Application	PC Application	Installer file name
4	Shock-jitter Finder	SJ Finder	• NICE SJ Finder V2.1 installer. 7z • SupportData.zip

Note

PC applications can be downloaded from the GKM website. GKM Answer ID is "210634".

PC Requirement

- Operating System: Microsoft Windows 7, 8.1, 10
- RAM: 2GB or more
- C-drive disc space: 10GB or more (recommended)
- SD card slot
- Application Soft: Microsoft Excel 2010 or 2013

Common Procedure for Scanning Test Chart

When the test chart needs to be scanned, follow the procedure below.

1. Clean the exposure glass and place the test chart so that the bar-code printed on the chart positions to the left.

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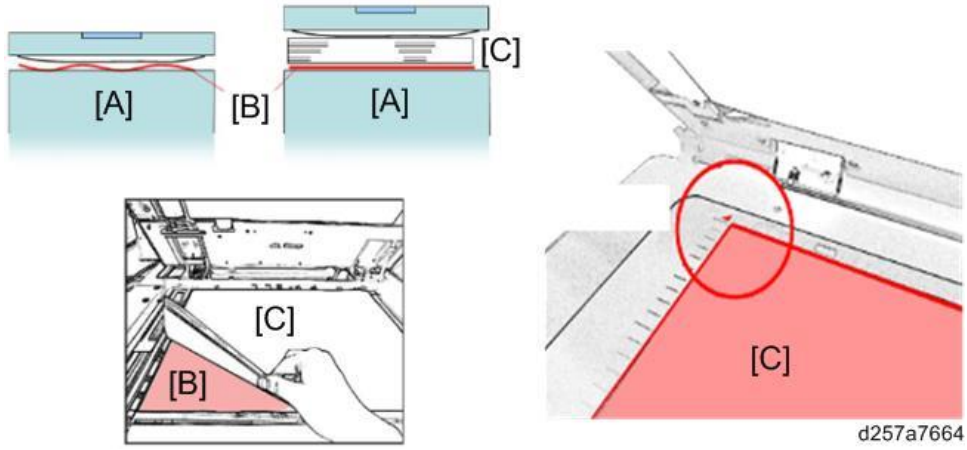
2. For secure contact between the exposure glass and chart, put approximately 20 sheets of paper on top of the chart. Make sure to match the corners of the paper and exposure glass.



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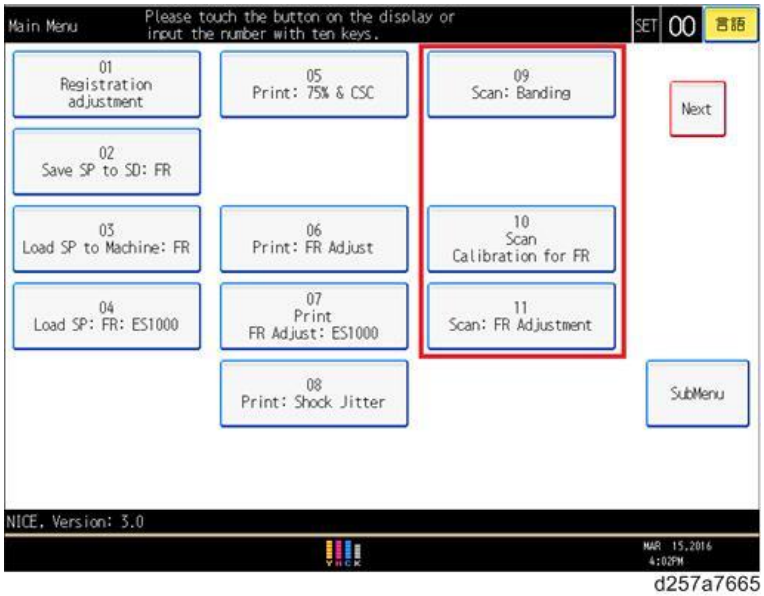
- [A]: Scanner
- [B]: Chart
- [C]: Paper

3. Press the Scan button for the adjustment required on the NICE main menu screen.



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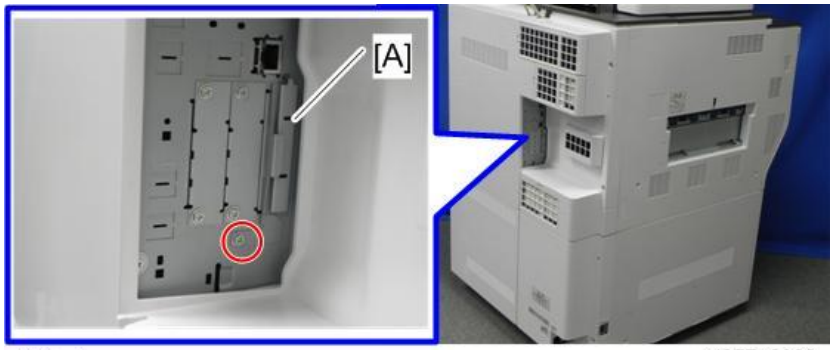
How to Activate NICE

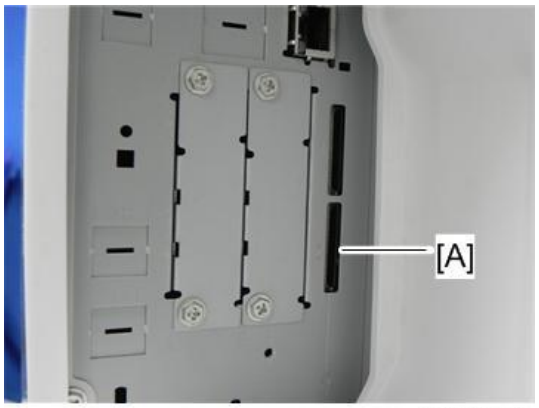
1. Turn off the main power.

2. Remove the SD card slot cover [A].



×1 d257a2080

3. Insert the NICE SD card into the service slot [A].



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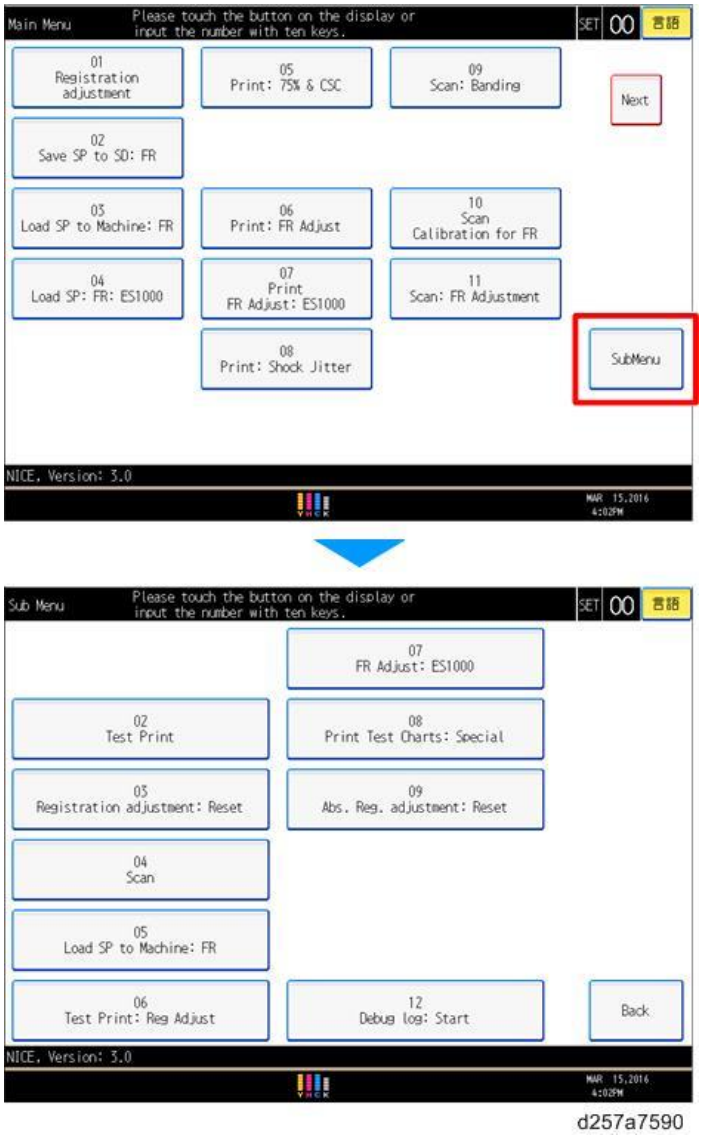
Note

- The NICE SD card must be inserted into the service slot on the controller box, NOT the slot on the operation panel.

- Make sure to turn off the power before removing the SD card from the card slot on the controller box.

4. Turn on the main power.

5. The NICE main menu is displayed. Press [SubMenu] to open the NICE sub menu.



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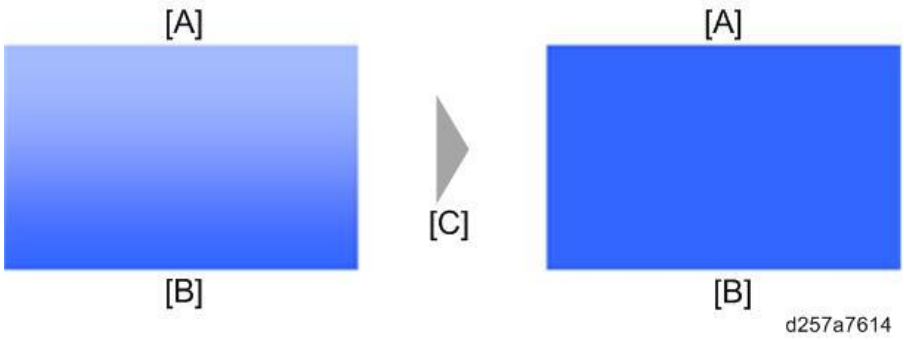
Note

If the NICE main menu screen does not appear after doing the above, press the [Program] key.

FR Density Adjustment

NICE calculates and corrects the shading value in the main scan direction and applies the corrections to the engine (SP) in order to decrease the density difference in the main scan direction.



- [A]: Rear side (non-operator side)
- [B]: Front side (operator side)
- [C]: Adjusting the shading SP

Preparation

Take note of the following points before you begin the adjustment.

- Check if the uneven density can be corrected with "Adjust Density Difference Across Feed Direction" in the Adjustment Settings for Skilled Operators menu. The adjustments made in this menu take effect only after power cycling the machine. If there is no improvement, set the value(s) back to "0" and turn the main power off/on.
- Replace parts that have exceeded their lifespan, if any.
- Clean the dust shield glass of the laser unit.
- Clean the doctor gap.
- For adjustments using the scanner, unzip the installer zip file: "NICE ImageView FR V2.1 Installer.7z" and run "set up .exe". DO NOT apply changes to the file directory.
- For adjustments using the spectrophotometer, run "i1ProfilerSetup.exe" and install "i1 Profiler."
- Prepare A3 or DLT size coated paper.

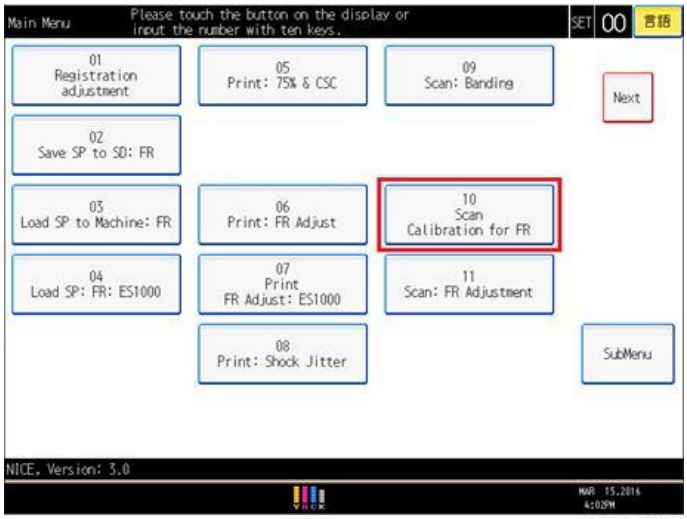
Adjustment Procedure Using the Scanner

1. Scanner Calibration

1. Place a blank piece of A3/DLT coated paper on the exposure glass.

   Note

   For the correct scanning procedure, see "Common Procedure for Scanning Test Chart" in NICE Function (Pro C5300S/C5310S).
2. Display the NICE main menu. (How to Activate NICE)
3. Press "Scan: Calibration for FR" on the NICE main menu screen.
   Calibration data will be stored in the SD card.



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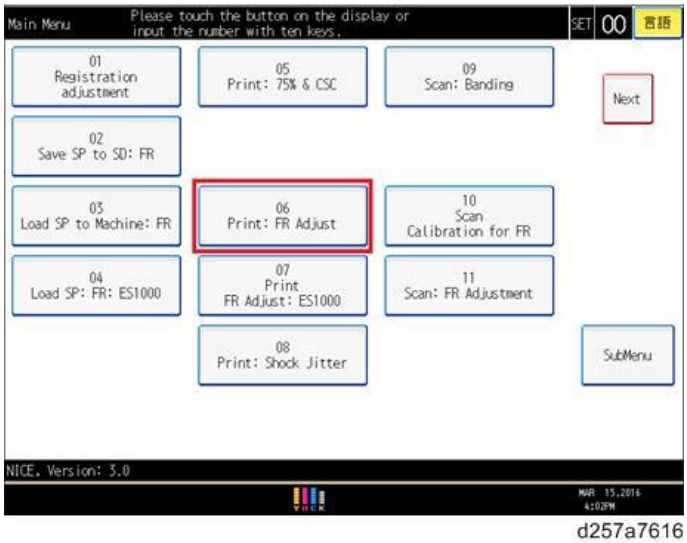
4. Remove the blank piece of paper from the exposure glass.

Note

- Calibration data will be stored in the SD card.
- Scanner calibration is required only once for multiple FR density adjustments performed on the same day on the same machine. However, if you want to change the calibration sheet, perform the scanner calibration again.
- The following paper types are not recommended: Colored paper, textured paper, cast coated paper (Adjustment precision may decrease).

2. Adjustment Procedure

1. Press " Print: FR Adjust " on the NICE main menu screen.



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2. 75%/60% (75U/60L) and 30%/15% (30U/15L) halftone charts will be printed in CMYK (total of 8 sheets).

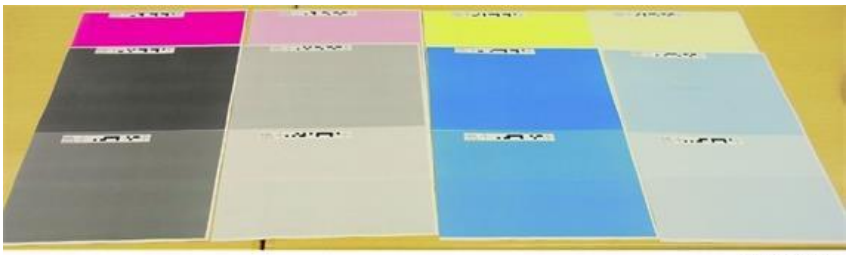
Important

Use the paper trays for A3 or DLT. Print the halftone chart with the same paper used for step 3 in

"1. Scanner Calibration".

Note

- 75%/60% (75U/60L) and 30%/15% (30U/15L) halftone charts will be printed in CMYK (total of 8 sheets).



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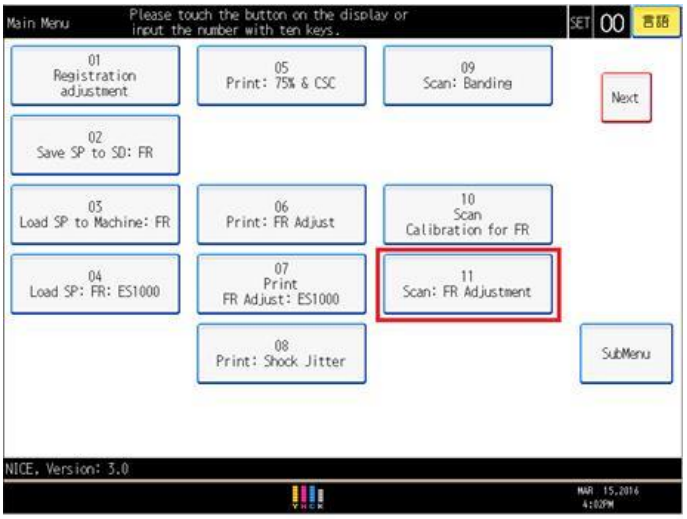
- This test chart can only be printed on A3 or DLT paper.

3. Place the 75U/60L and 30U/15L charts of the affected color on the exposure glass and press "Scan: FR Adjustment" to scan these charts.



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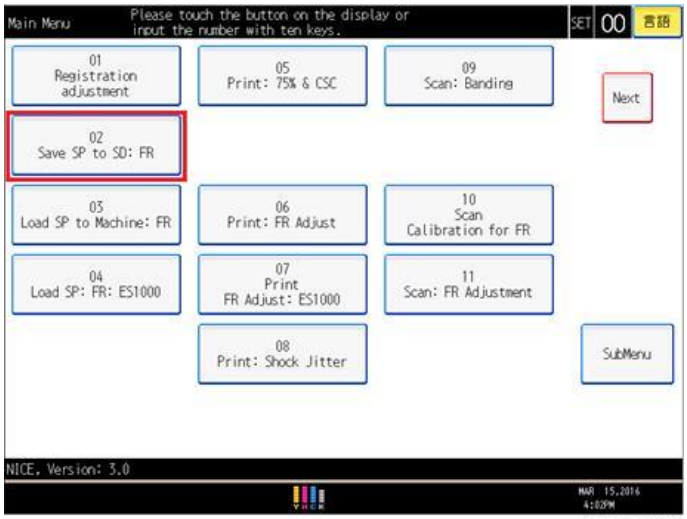
Note

For the correct scanning procedure, see "Common Procedure for Scanning Test Chart" in NICE Function (Pro C5300S/C5310S).

4. Press "Save SP to SD: FR" to copy the engine SP data onto the SD card.
SP data (SP2-16*-***) will be saved as a csv file on the SD card.



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5. Turn off the main power and remove the SD card from the service slot and insert the SD card into your PC.
6. Start up the "Image View FR" and click "START".

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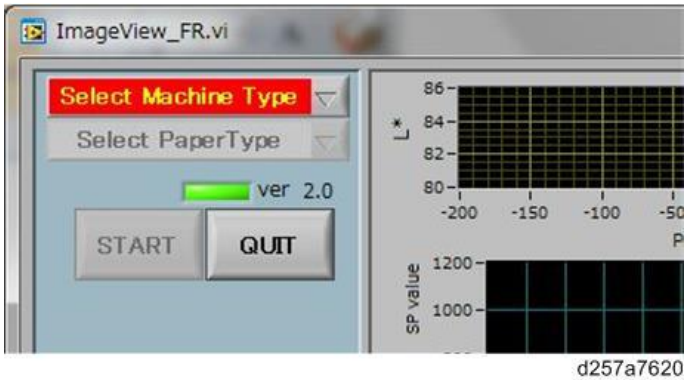
7. Select the machine type and paper size (A3 or DLT).



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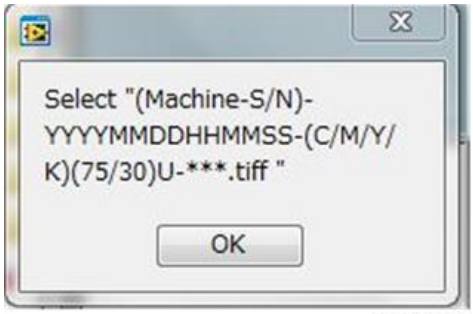
8. Click "START" and select the tiff files (75/30U tiff files) requiring the adjustment and csv file

(s/n_shading_before.csv) saved on the SD card in step 4.



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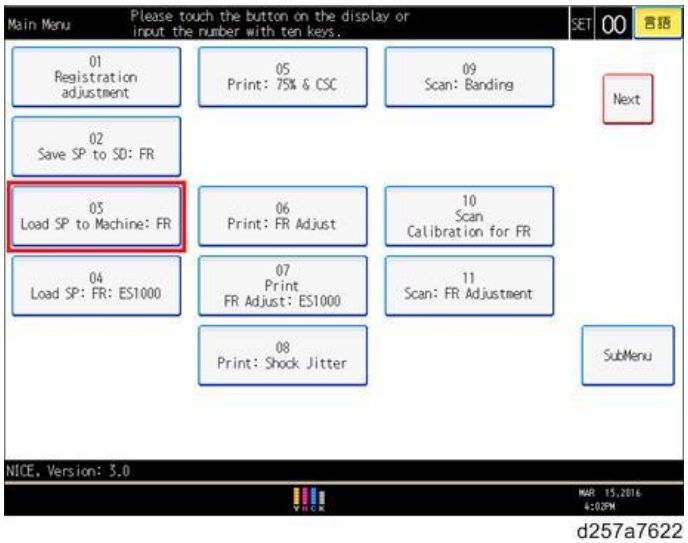
9. Wait until the calculation process completes.

- File "s/n_shading_after_75/60/30/15.csv" will be saved on the SD card, which contains the modified shading SP value.
  - (S/N)_shading_after_75.csv: The adjustment result for 75% halftone chart.
  - (S/N)_shading_after_60.csv: The adjustment result for 60% halftone chart.
  - (S/N)_shading_after_30.csv: The adjustment result for 30% halftone chart.
  - (S/N)_shading_after_15.csv: The adjustment result for 15% halftone chart.
- The original csv file will be renamed as "yyyymmdd_hhmm_s/n_shading_xbefore.csv".

10. Remove the SD card from the PC, and then insert it into the service slot of the main machine.

11. Turn on the main power and press "Upload SP to Machine: FR" on the NICE main menu screen. The file "(S/N)_shading_after_60.csv" is uploaded to the machine.



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12. Turn the machine power off/on for the modified SP values to take effect.

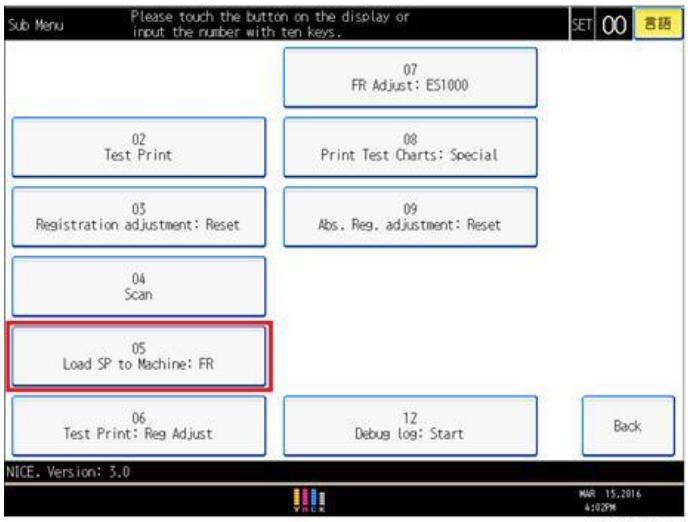
13. Repeat the above steps until the desired results are obtained.

How to Retrieve the Original SP Value

If you need to retrieve the previous setting, do the procedure below.

1. Select the " yyyymmdd_hhmm_s/n_shading_xbefore.csv " file you wish to retrieve the original SP value for.

2. Delete "yymmdd_hhmm_" from the file name.
3. Replace the portion "xbefore" with "origin" so that the file is renamed "(S/N)_shading_origin.csv".
4. Remove the SD card from the PC, and then insert it into the service slot of the main machine.
5. Display the NICE sub menu. (How to Activate NICE)
6. Press "Load SP to Machine: FR".



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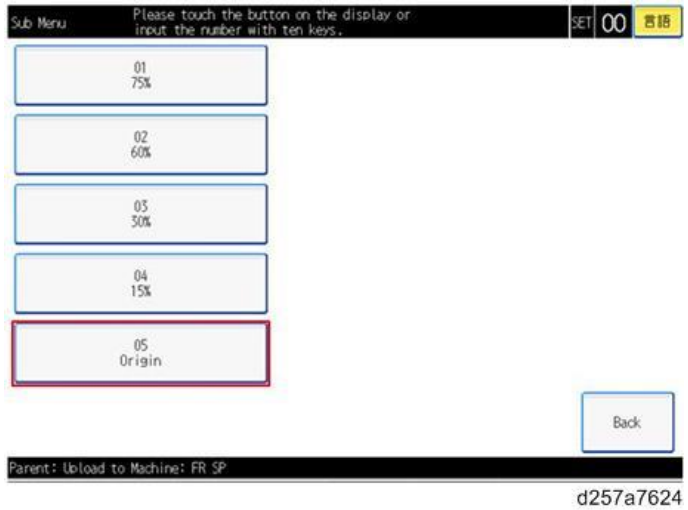
7. Press "Origin".



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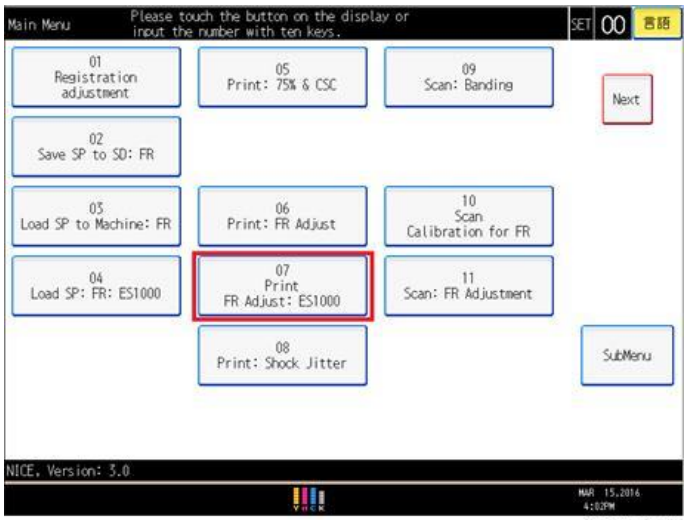
8. Turn off/on the main power for the original SP value to take effect.

Adjustment Procedure Using the Spectrophotometer

1. Printing the Test Chart

1. Display the NICE main menu screen. (How to Activate NICE)

2. Press "Print: FR Adjust: ES1000" to print out the test chart.



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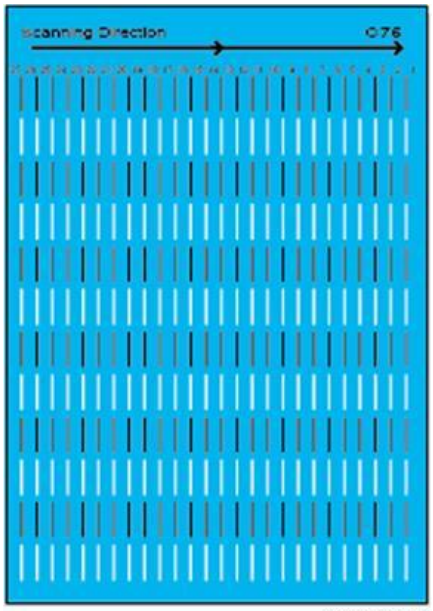
Note

- Use coated paper to print out the test chart.
- Press "Print: FR Adjust: ES1000" to print out the test chart, even when the spectrophotometer (ES-2000 X-ritei1 Pro2) is used for this adjustment.

3. Confirm that 4 copies of the test chart (K,C,M,Y) were printed out.



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4. Turn off the main machine and remove the NICE SD card from the service slot.

2. Measuring the Charts with the Spectrophotometer

Note

Install the "Profiler Ver.1.5.6". After installing the i1 profiler, be sure to uncheck the checkbox "Check version and license status at startup." as shown here below. After unchecking the check box, "Check for update:" becomes "OFF".

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1. Insert the NICE SD card into the SD card slot on your PC.
2. Open the i1 Profiler and change the user mode to "Advanced".

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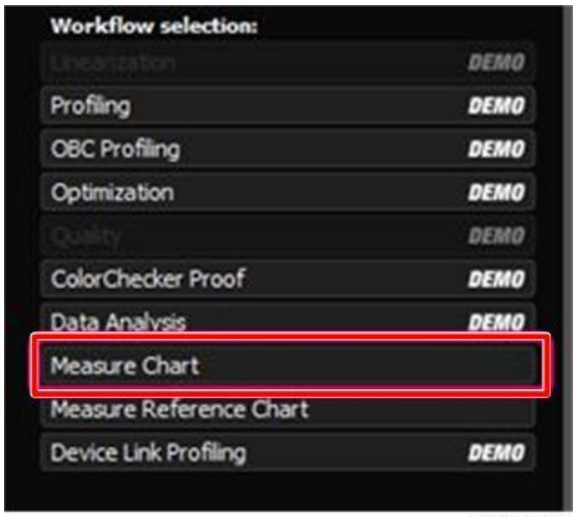
3. Select "Measure Chart" under "Workflow selection".



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4. Select the device, i1Pro (ES1000) or i1Pro2 (ES2000).

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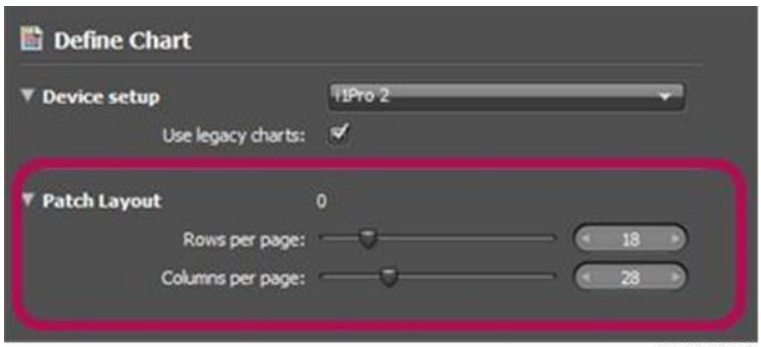
Note

If the device is i1 Pro2, specify "Use Legacy Charts".

5. Specify the "Patch Layout" settings by referring to the table below.



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	A3	SRA3	11x17 (DLT)	12x18	13x19
Rows per page	10	10	10	10	10
Columns per page	27	29	25	27	29

6. Connect the spectrophotometer to your PC.

7. Click the "Measurement" icon.

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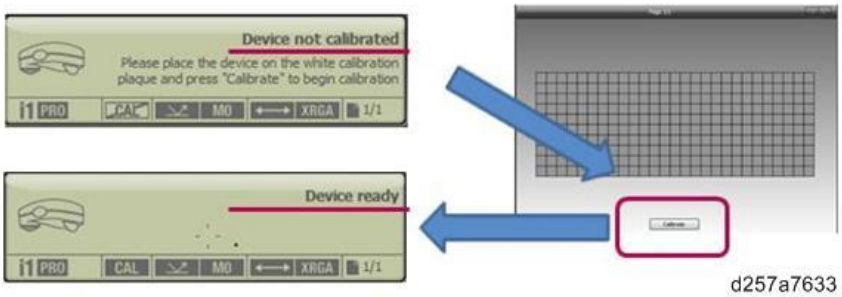
8. If the message "Device not calibrated" appears, click "Calibration" and wait for the spectrophotometer to reach ready status.



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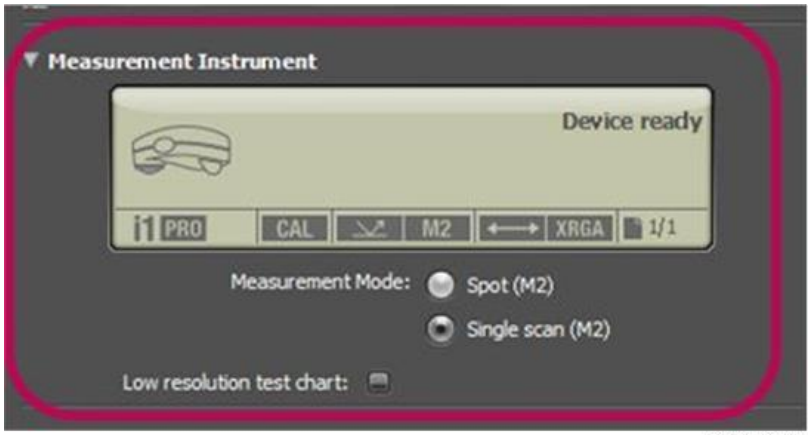
Note

- If the calibration fails as a result of insufficient power supply from the USB port, use a bus powered type USB hub.
- If the calibration fails due to deterioration of the light source, contact the vendor of the spectrophotometer.

9. Select "Single scan" for "Measurement Mode".



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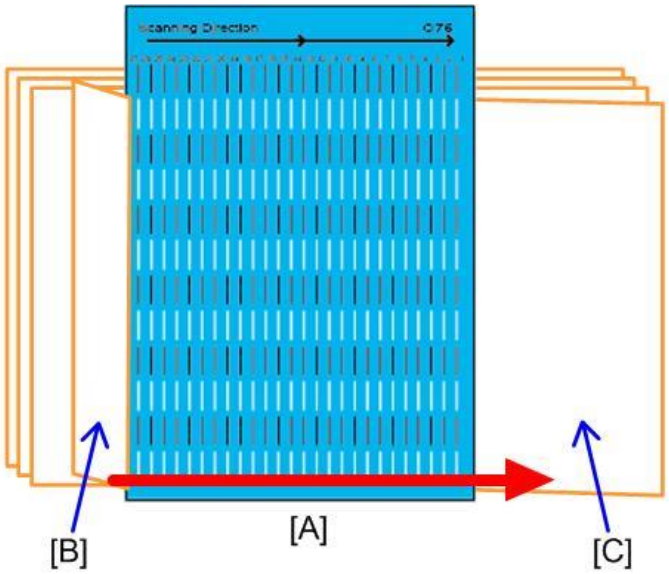
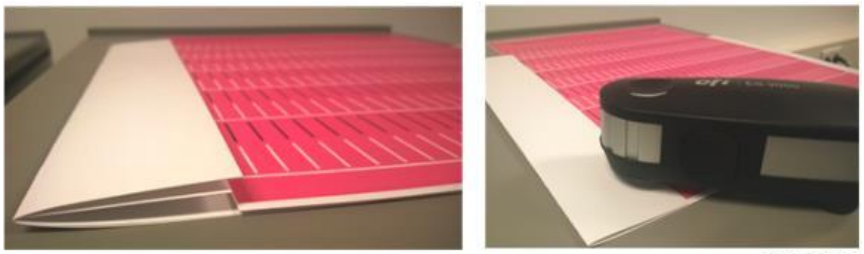
10. Scan the test chart for the color requiring the adjustment.

Note

- Place the test chart on top of a stack of approximately 10 sheets as shown below.





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[A]: Scan Direction

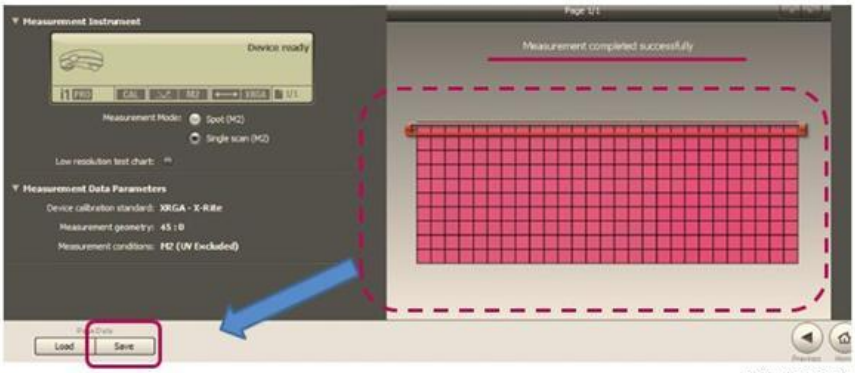
[B]: Fold along the margin

[C]: Set a stack of approximately 10 blank sheets from the same lot as the chart.

- Paper used for the chart and the stack should be from the same lot.
- Make sure to always scan 10 lines, no more or no less. However, if a band is observed in a line, avoid scanning that line.

- It is recommended to scan from the bottom line to avoid scratches caused by the cable of the spectrophotometer.
- Look at the PC screen and confirm that scanning has completed before scanning the next line.

11. After scanning 10 lines, click "Save".



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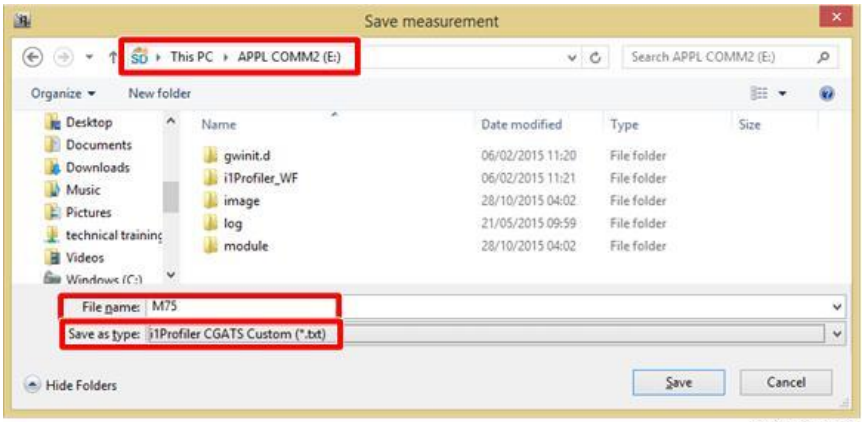
12. Specify the following on the "Save measurement" Screen.

- Save location: Specify the root directory of the NICE SD card.
- File Name: Specify the name same as the chart name (K75, M75, C75, or Y75). The chart name is indicated on the top right corner of the test chart. Naming is critical: do not use lower case, do not add anything. Specify only the chart name.
- File Type: Select i1 Profiler CGATS Custom (*.txt)



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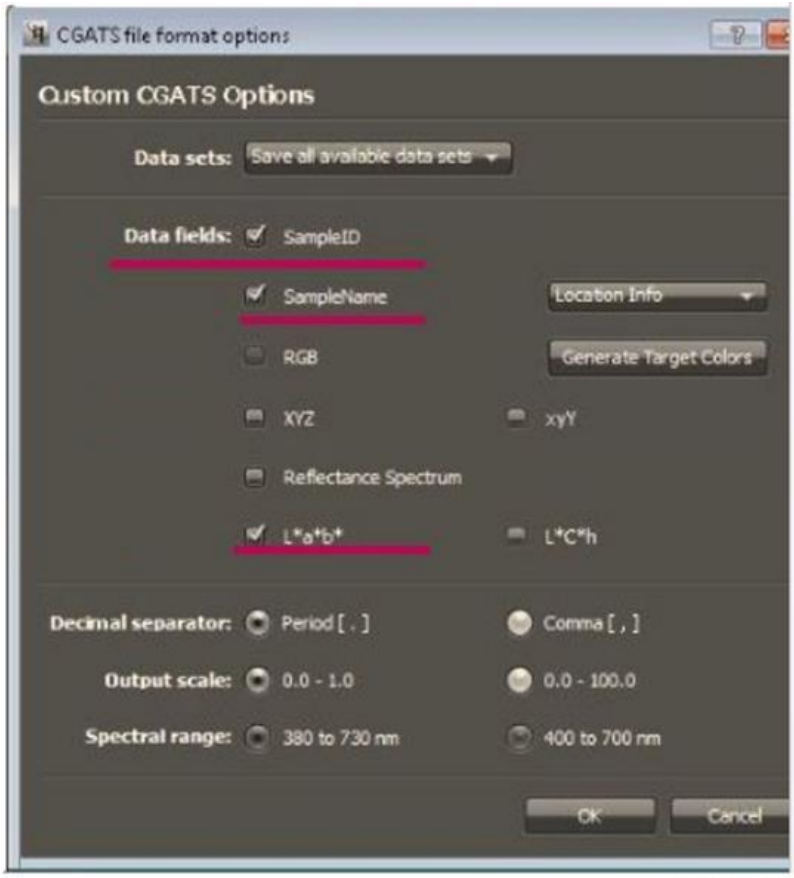
13. Select the following check box on the "CGATS file format options" screen.

- Sample ID
- Sample Name
- L*a*b*



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Important

Do not select the "Reflectance Spectrum" check box.

Note

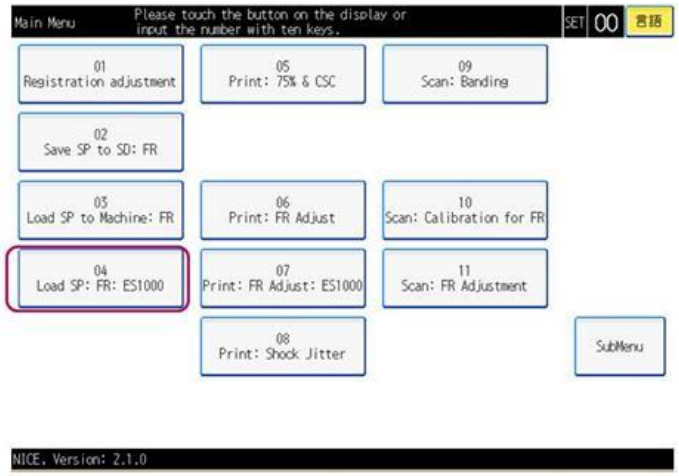
"Page Data" is saved in a text file format, for example, "M75_M*.txt". "_M*" is attached automatically when saving the file.

14. Go back to Step 7 to do the same for the remaining colors.
15. Remove the NICE SD card from the SD card slot on your PC, and then insert the NICE SD card into the service slot of the main machine.

3. Applying the Correction

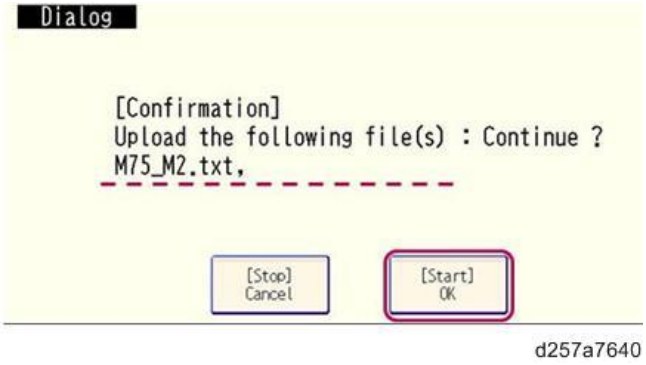
1. Display the NICE main menu. (How to Activate NICE)

2. Press "Load SP: FR: ES1000" to print out the test chart.



d257a7639

3. Confirm that the file which appears in the pop-up dialog matches the file saved in the NICE SD card, and press "[Start] OK".
   NICE calculates the shading adjustment values, and then SP values (SP2-152-xxx) will be overwritten in the engine.



d257a7640

4. Press "[Start] OK" on the following screen.

d257a7641

5. Turn the main power off and on for the modified SP values to take effect.
6. From the NICE sub menu screen, press "TestPrint" to print out the "75%'" test chart and check the image quality.

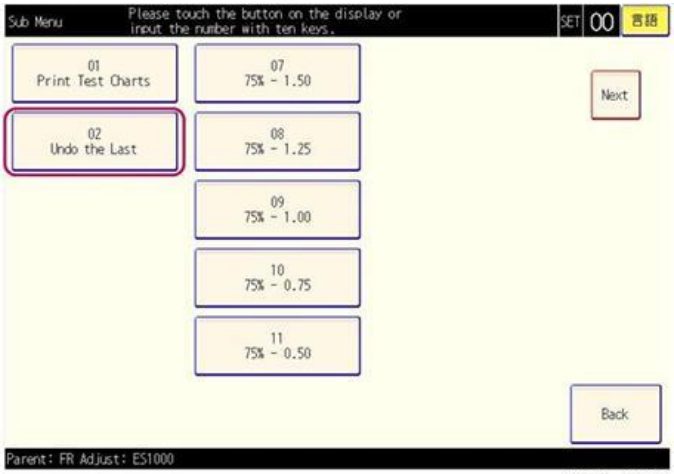
Note

- It is not recommended to check the image quality with "Print: FR Adjust: ES1000" because the pattern is segmented and it is difficult to examine the entire image.
- After completing the adjustment, remove the uploaded files from the SD card.

4. How to Retrieve the Original SP Value

If you need to retrieve the previous setting, do the procedure below.

1. Display the NICE sub menu screen. (How to Activate NICE)
2. Press "Print: FR Adjust: ES1000".
3. Press "Undo the Last". The previous SP values will be retrieved.



d257a7642

4. Press "[Start] OK" on the following screen.

d257a7643

5. Turn the main power off and on for the previous SP values to take effect.

Banding Analysis

Perform the banding analysis for the following purposes:

- Continuously monitor the color evenness to understand changes of the banding state under the same printing conditions (analyzing the color evenness).
- Identify and list the parts/units that could be causing the banding in the order of effectiveness (analyzing the cause).

Important

- Make sure the paper and print parameters applied are always the same when running the banding analysis.
- Do "Process Setup" or "Manual ProCon (Density Adjustment)" before running the banding analysis.
- If Banding analysis is performed in order to continuously monitor the color evenness, make sure to print out the 75% chart under the same conditions as follows.
  - Use the same paper and the same paper settings under the same installation

environment.

- Print out the 75% chart after executing the initialization (SP3-020-001).
- Troubleshoot the other abnormal images, such as vertical streaks and FR density difference.

Overview

Banding analysis is performed in the following procedure.

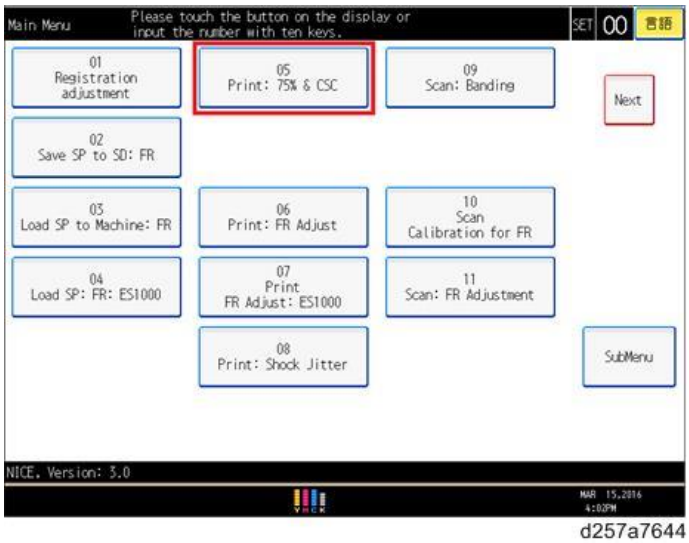
1. Print and scan the 75% chart contained on the NICE SD card.
2. Define the current condition of the machine from the scan results with the Banding Analyzer application.
3. Results of the scanned calibration chart are compared against the color measurement data of the calibration chart (color measurement data is contained in the Banding Analyzer application) to generate an XML file, which defines the color shading calibration values.
4. Banding Analyzer identifies the parts/units possibly causing the problem from the current machine condition defined from the scanned 78% chart and the XML file.
5. Banding Analyzer displays the parts/units that should be inspected in the order of effectiveness on the PC screen.

Procedure

1. Display the NICE main menu screen. (How to Activate NICE)
2. Place the NICE Calibration Chart (service part) on the exposure glass and press "Scan: Banding" to scan the calibration chart.

   Note

   - For the correct scanning procedure, see "Common Procedure for Scanning Test Chart" in NICE Function (Pro C5300S/C5310S).
   - The scanned data will be saved on the SD card as a tiff file ((S/N)-YYYYMMDDHHMMSS-CALB-2014-02-2.tiff).
3. Press "Test Print: 75% & CSC".



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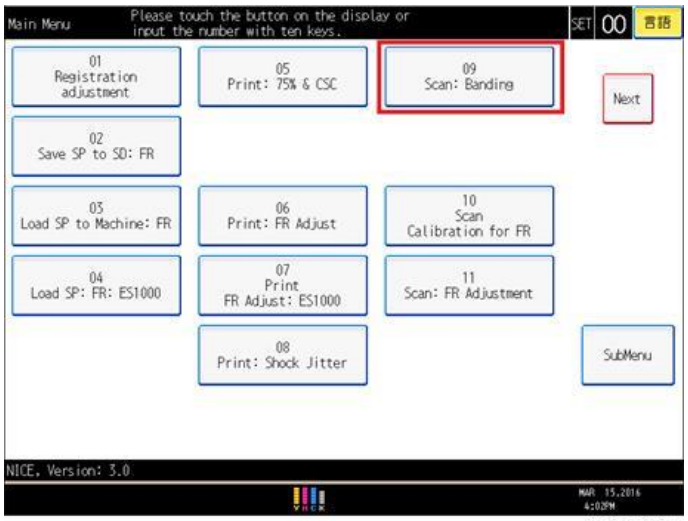
Note

The machine makes the following printouts.

- 75% charts (Bk, C, M, Y): Used for analysis.
- 75% charts (R, G, B) : Used for visual inspection.
- CSC chart: Used only for investigation by RCL Engineering.

4. Place the 75% chart for the color requiring analysis on the exposure glass and press "Scan: Banding" to scan the chart.



d257a7645

Note

- For the correct scanning procedure, see "Common Procedure for Scanning Test Chart" in NICE Function (Pro C5300S/C5310S).
- Scan the 75% charts one by one. You can scan only the color of the chart which you want to analyze.
- The scan data is saved on the SD card as five tiff files ((Machine S/N)-YYYYMMDDHHMMSS-(CMYK)75-yyyymm-0-(0)~(4).tiff) for each color.

5. Turn OFF the main power. Remove the SD card from the service slot and insert it into the SD card slot on your PC.

6. Launch the PC application "IQ Evaluation" and click "START".

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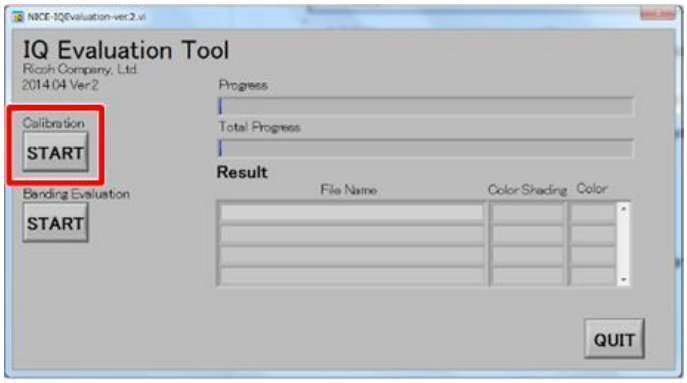
7. In the main window under "Calibration", click "START" to display the "Calibration" window.



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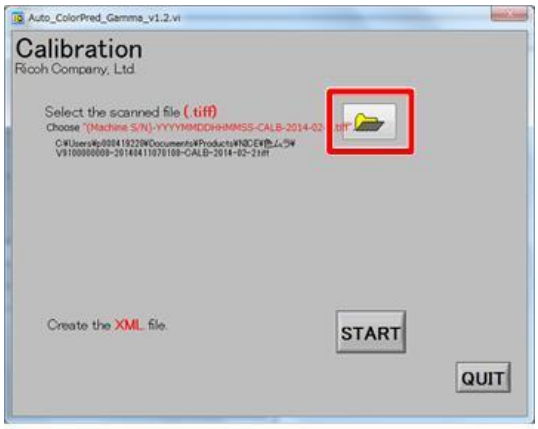
8. In the "Calibration" window, click the folder and select the Calibration Chart scanned and saved in step 2.

File name: (Machine S/N)-YYYYMMDDHHMMSS-CALB-2014-02-2.tiff



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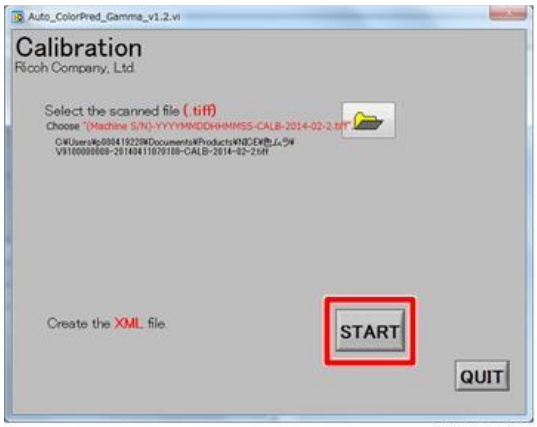
9. Click "START" to start the calibration.



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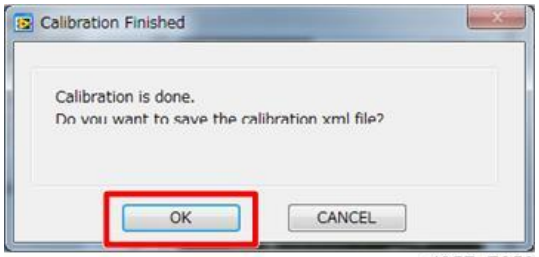
10. Several windows will appear during the calibration process. After the calibration completes, press "OK" in the following window and select the folder you wish to save the XML file, which contains the color shading correction values calculated from the calibration results.



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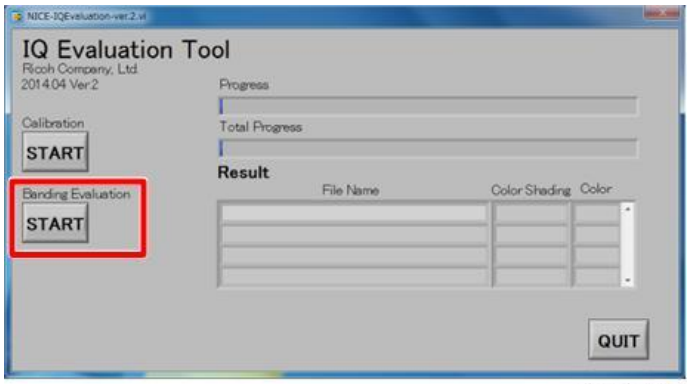
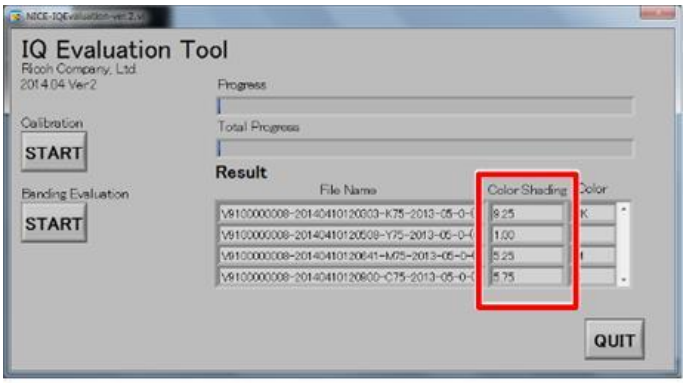
11. In the main window under Banding Evaluation, click "START".



d257a7651

12. Select the 75% chart scanned and saved in Step 4.
File name: (Machine S/N)-YYYYMMDDHHMMSS-(CMYK)75-yyyymm-0-(0)~(4).tiff

13. Select the XML file saved in step 10. Evaluation will start automatically.
When the evaluation completes, the color shading values of each color will appear as shown below.



d257a7652

Note

- The higher the color shading value, the worse the banding.
- DAT files are created in C:\jig\data (default) or a selected folder.

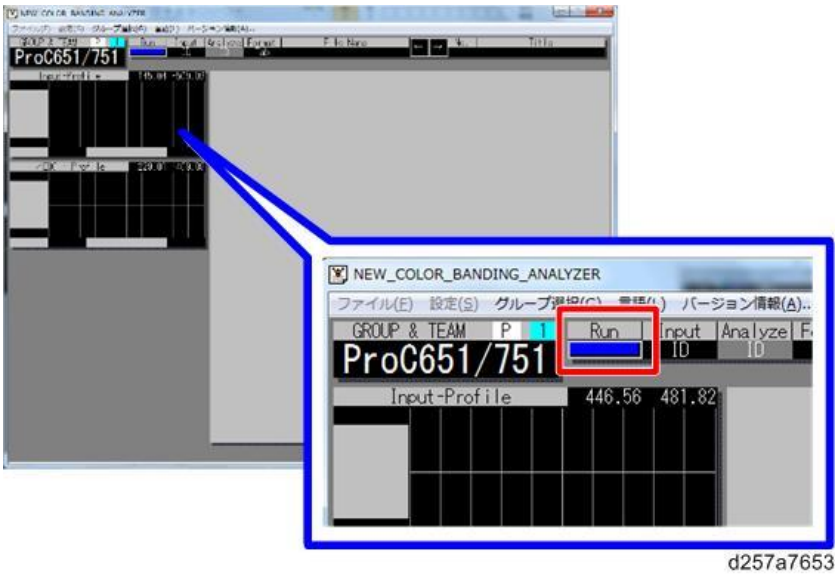
14. Wait for the Banding Analyzer window to appear.

Note

If the Banding Analyzer does not automatically start, start the Banding Analyzer manually.

15. Select the product model from "Menu" -> "Group" -> "Products".

16. Click "Run", then select and save the dat file created in Step 13.



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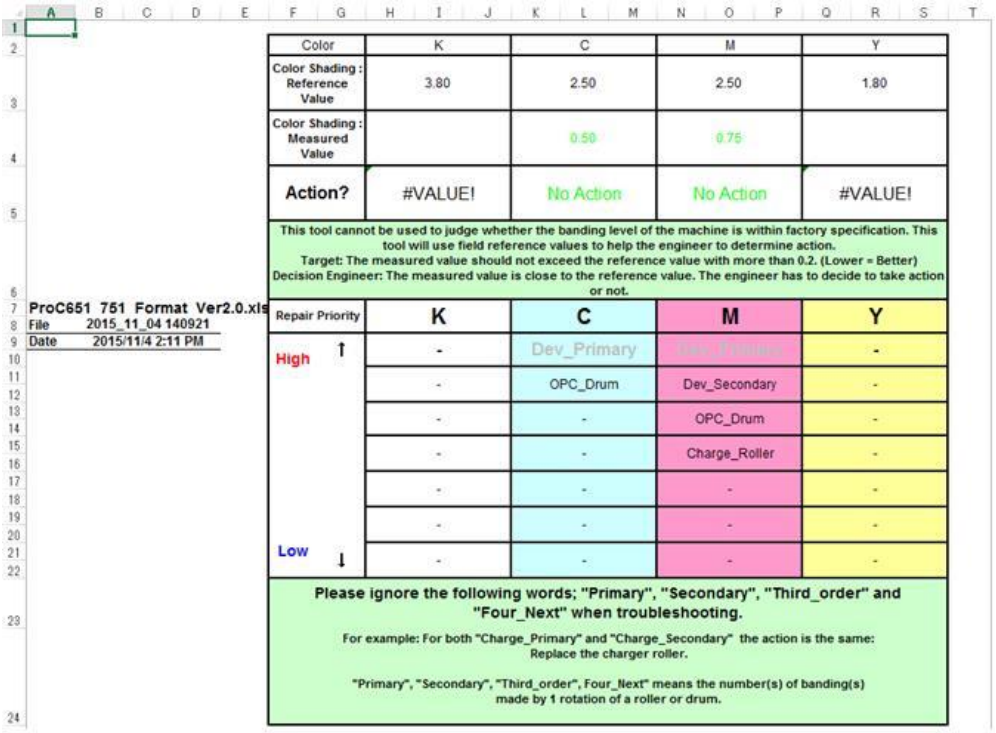
Note

- Microsoft Excel will launch automatically after the calculation completes to display the parts/units that should be inspected to resolve banding, in the order of effectiveness.

- The higher the bar, the higher the necessity of inspection.



ProC651 751 Format Ver2.0.xls
File 2015_11_04 140921
Date 2015/11/4 2:11 PM

Color	K	C	M	Y
Color Shading : Reference Value	3.80	2.50	2.50	1.80
Color Shading : Measured Value		0.50	0.75	
Action?	#VALUE!	No Action	No Action	#VALUE!

This tool cannot be used to judge whether the banding level of the machine is within factory specification. This tool will use field reference values to help the engineer to determine action.
Target: The measured value should not exceed the reference value with more than 0.2. (Lower = Better)
Decision Engineer: The measured value is close to the reference value. The engineer has to decide to take action or not.

Repair Priority	K	C	M	Y
High ↑	-	Dev_Primary	Dev_Primary	-
	-	OPC_Drum	Dev_Secondary	-
	-	-	OPC_Drum	-
	-	-	Charge_Roller	-
	-	-	-	-
	-	-	-	-
Low ↓	-	-	-	-

Please ignore the following words; "Primary", "Secondary", "Third_order" and "Four_Next" when troubleshooting.

For example: For both "Charge_Primary" and "Charge_Secondary" the action is the same: Replace the charger roller.

"Primary", "Secondary", "Third_order", Four_Next" means the number(s) of banding(s) made by 1 rotation of a roller or drum.

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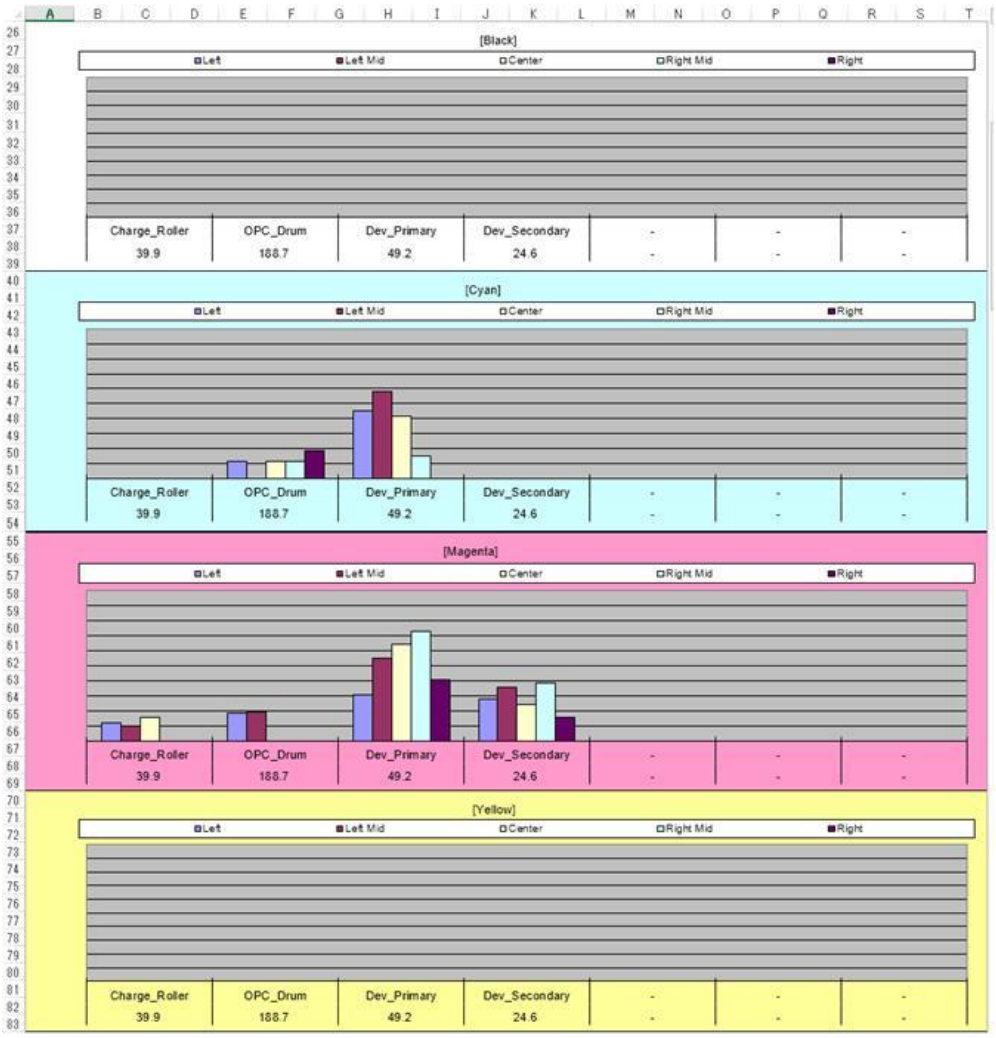

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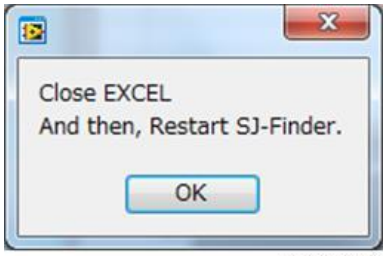
- If Microsoft Excel does not automatically start, start Microsoft Excel manually.

Shock-jitter Finder

Shock-jitter Finder is a PC application that helps identify the problem causing the shock-jitter.

Note

If Microsoft Excel is active when launching the SJ Finder, the error message shown below will appear. Make sure to close all Excel files in advance.



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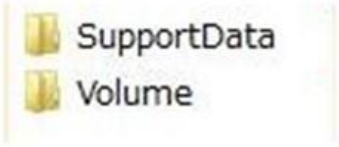
Installing the Shock-jitter Finder

1. Unzip the installer and check that the following 2 folders appear.



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2. Run the "Setup.exe" contained in the "Volume" folder.
3. After the installation completes, click "OK" in the window.

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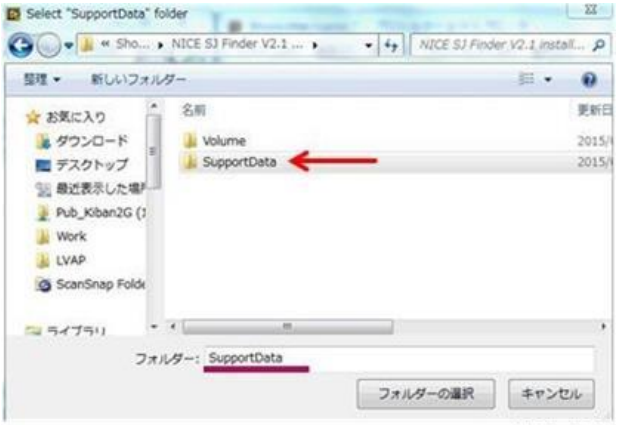
4. In the unzipped folder "NICE SJ Finder V2.1 installer", select "SupportData" and click "Select Folder".



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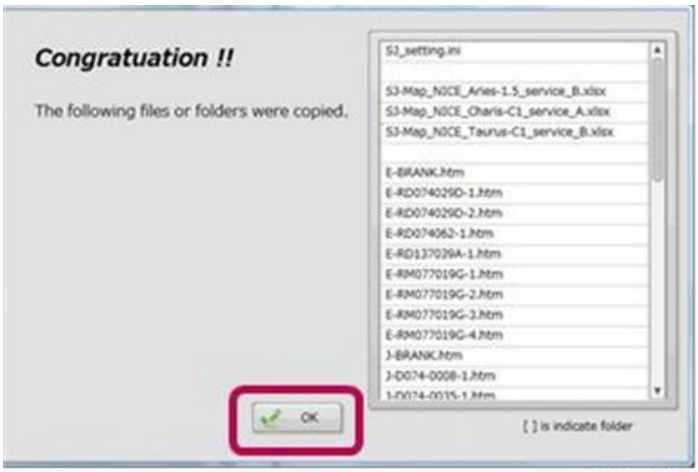
5. Wait for the message prompting to reboot your PC to appear. Then reboot your PC and activate the SJ Finder.

6. Click "OK" in the following window.



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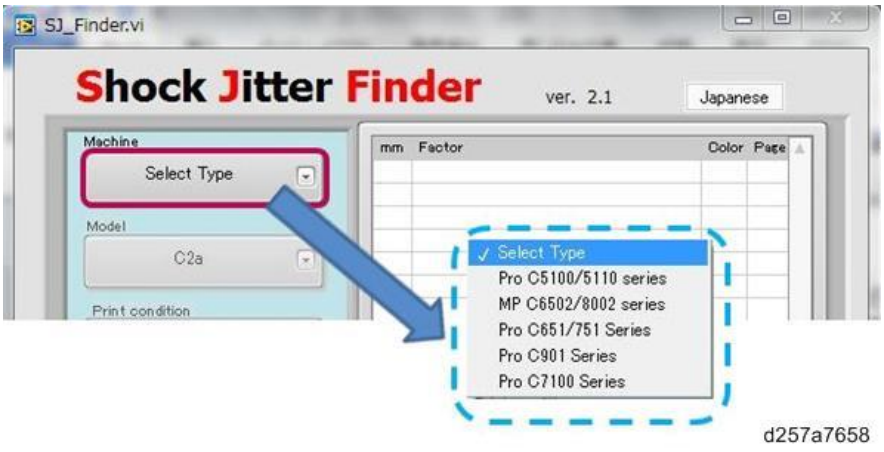
7. To confirm successful installation, start the SJ Finder and see if all the applicable models appear in the list under "Machine".

If any models are missing, perform Updating the Shock-jitter Finder.



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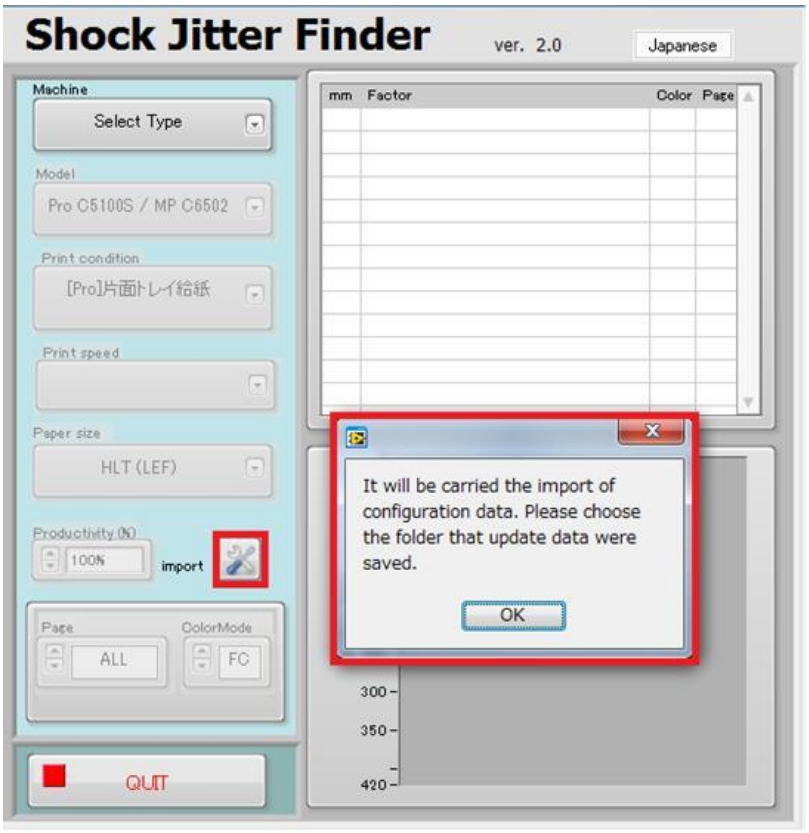
Updating the Shock-jitter Finder

1. Unzip the ‘SupportData.zip’ file obtained from the GKM.

Answer ID: 210634

2. Launch the SJ Finder.

3. Click the "Import" icon, and then click "OK".



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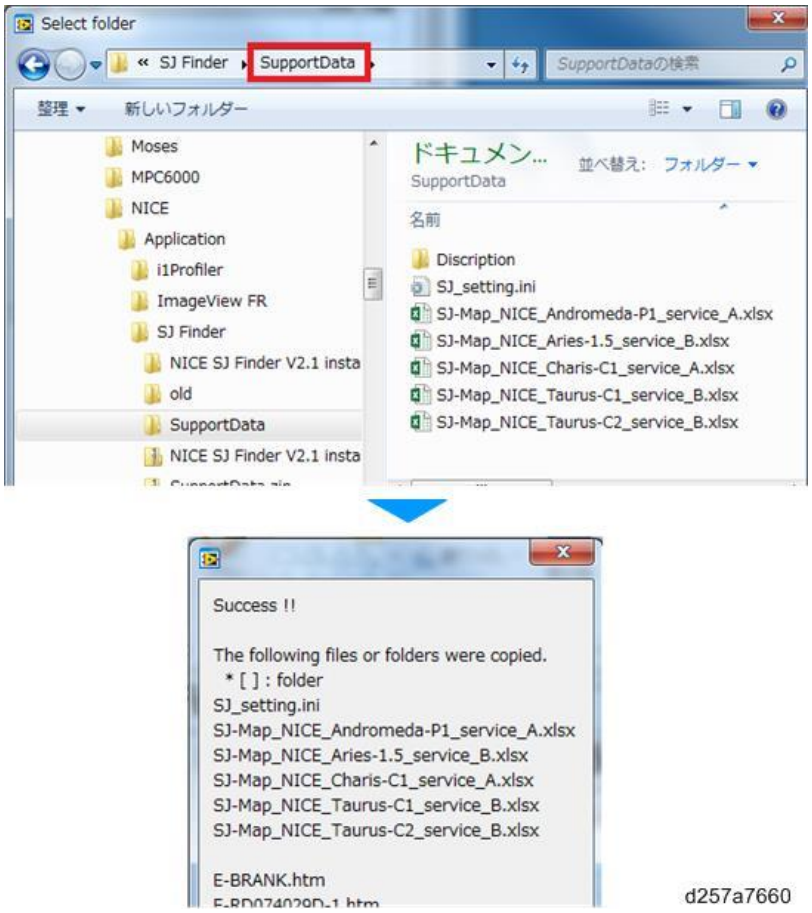
4. Navigate to the "SupportData" folder unzipped in Step 1, and then click "Current folder".
The following message will appear to indicate that the files/folders have been copied successfully.



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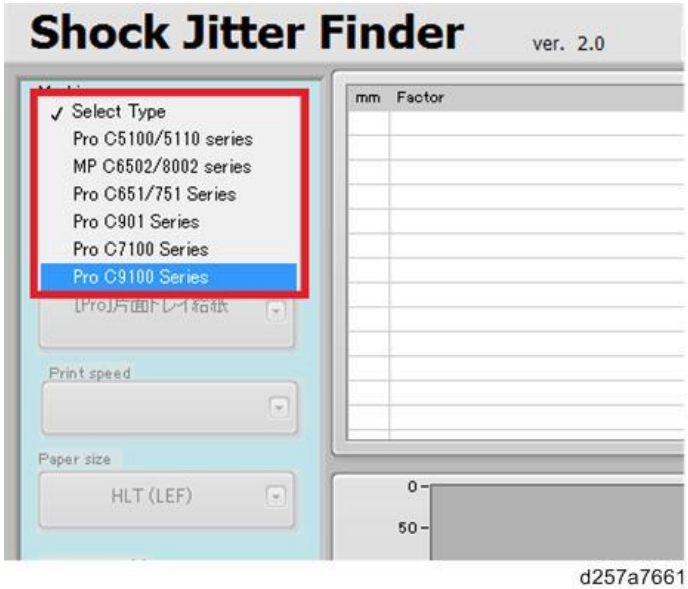
5. Select "Select Type" and make sure that all the applicable models appear in the list.



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Operation Procedure

1. Launch the Shock-jitter Finder on your PC and specify the following information:

- Product model
- Simplex or Duplex
- Print speed

- Paper size and feed direction (SEF or LEF)
- Productivity (Required only if CPM has been modified. Check the CPM in SP mode.)
- Color mode
- Page and position showing the symptom

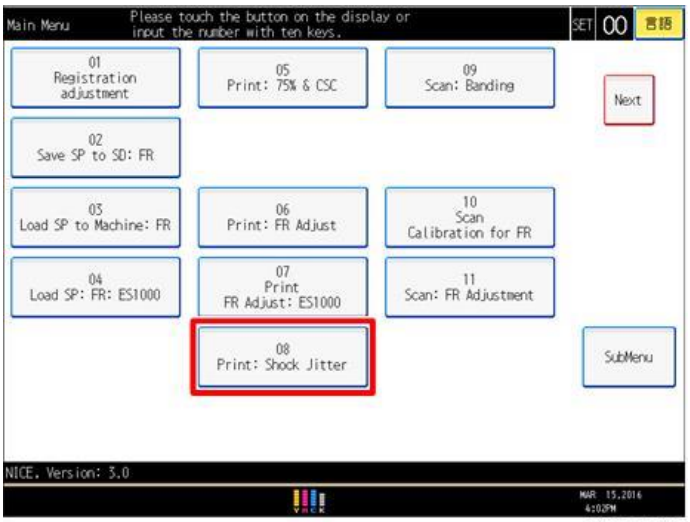
2. The location where the streaks may appear caused by shock-jitter and the factor will be displayed.

d257a7662

Note

- Troubleshooting instructions are available for items indicated with an asterisk "*".
- If a shock-jitter sample is not at hand and the location of the shock-jitter is unclear, press "Print: Shock Jitter" on the NICE main menu screen to print out a test chart. The number of

test charts printed differs based on the product.



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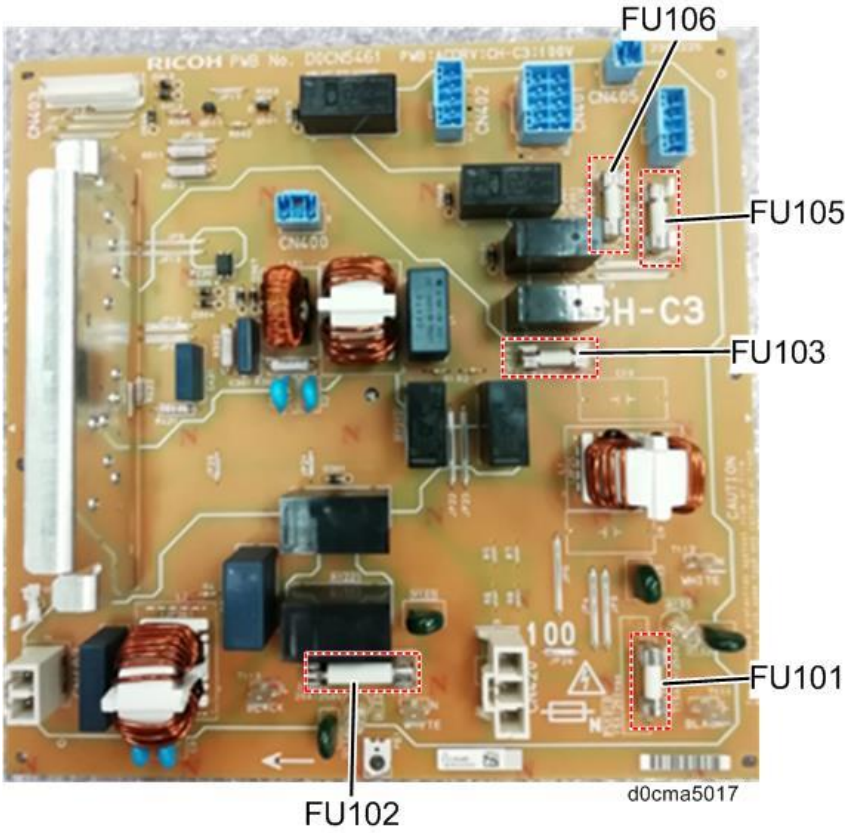
Blown Fuse Conditions

AC Drive Board (PCB32)

100V

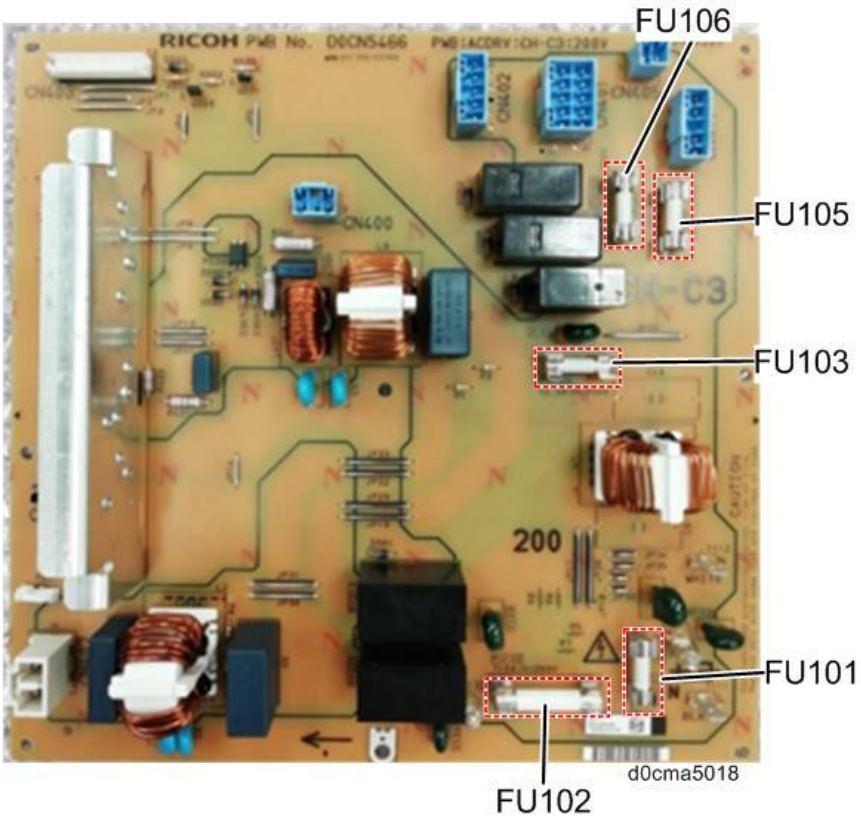
FUSE	Output	Reason for Overcurrent	Action
FU101	AC	• PSU1 • PSU2 • Pressure Roller Fusing Lamp (Input fuse)	Replace AC board or harnesses
FU102	AC	IH Inverter (Input fuse)	Replace AC board or harnesses
FU103	AC	• Tray Heater • Scanner Heater	Replace AC board or harnesses
FU105	AC	PSU1	Replace AC board or harnesses
FU106	AC	PSU2	Replace AC board or harnesses



200V

FUSE	Output	Reason for Overcurrent	Action
FU101	AC	• PSU1 • PSU2	Replace AC board or harnesses

FUSE	Output	Reason for Overcurrent	Action
		• Pressure Roller Fusing Lamp (Input fuse)	
FU102	AC	IH Inverter (Input fuse)	Replace AC board or harnesses
FU103	AC	• Tray Heater • Scanner Heater	Replace AC board or harnesses
FU105	AC	PSU1	Replace AC board or harnesses
FU106	AC	PSU2	Replace AC board or harnesses



PSU

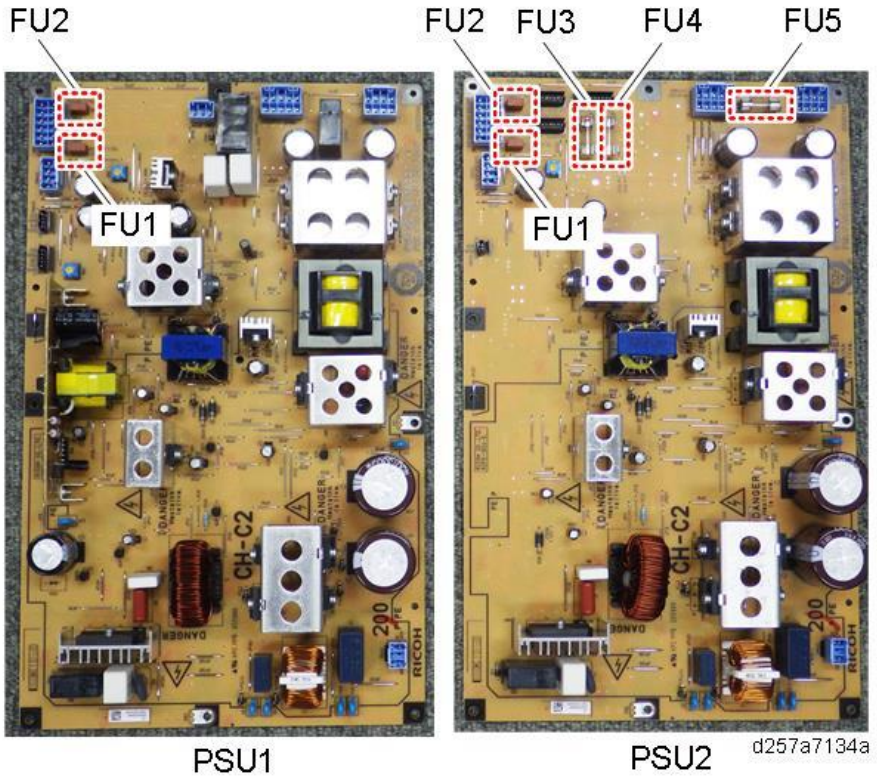
PSU1 (PCB34)

FUSE	Output	Reason for Overcurrent	Action
FU1	5V	Nothing	Replace PSU or Harnesses
FU2	5V	Nothing	Replace PSU or Harnesses

PSU2 (PCB33)

FUSE	Output	Reason for Overcurrent	Action
FU1	5V	• BICU • Peripheral devices	Replace PSU or Harnesses

FUSE	Output	Reason for Overcurrent	Action
FU2	5V	• DUB • TDRB • TSB	Replace PSU or Harnesses
FU3	24V	Peripheral devices	Replace PSU or Harnesses
FU4	24V	Peripheral devices	Replace PSU or Harnesses
FU5	24V	• TSB • PFB • IOB • BICU • Peripheral devices	Replace PSU or Harnesses



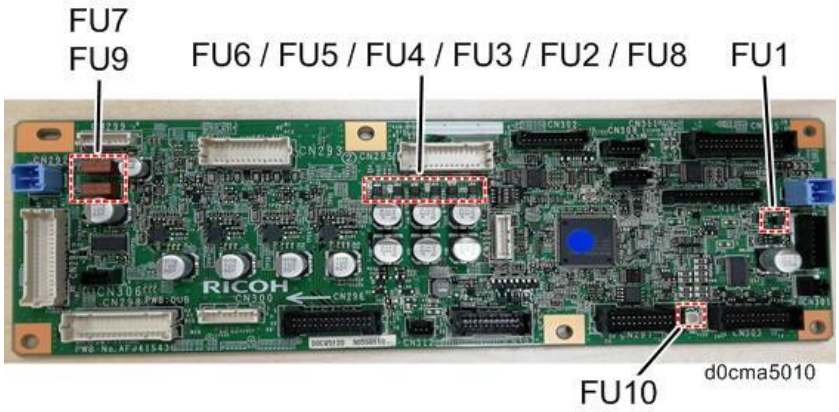
DUB (PCB37)

FUSE	Output	Reason for Overcurrent	Action
FU1	+5V	• Sensors Paper Transport Belt Sensor, Duplex Unit Sensor 3, Duplex Unit Entrance Sensor, Duplex Exit Sensor, Duplex Unit Sensor 4, Drawer Unit Lock Sensor, Edge Detect Sensor 1, Drawer Unit Flapper Sensor, Roller HP Detect Sensor 2, Sensor Shift Home Detect Sensor, Roller HP Detect Sensor 1, Registration Sensor, Relay Sensor, Duplex Invert Sensor,	Replace DUB or harnesses.

FUSE	Output	Reason for Overcurrent	Action
		Purge Relay Sensor, Fuser Exit Guide Plate Open Sensor, Paper Exit Relay Sensor, Paper Exit Sensor, Inverter Exit Sensor, Inverter Feed-in Sensor, Inverter Feed-out Sensor, Inverter Junction Gate HP Sensor, Cleaning Web End Sensor, Cleaning Web Contact Sensor, Cleaning Web Set Sensor, Transfer Timing Sensor, Bypass Tray Paper Type Sensor, Paper Type Sensor • Motors Exit Motor, Duplex Inverter Entrance Motor, Duplex Exit Motor, Duplex Transport Motor, Registration Motor, Exit Inverter Motor	
FU2	24VS_2	• Paper Transport Belt Fan (Front) • Paper Transport Belt Fan (Rear)	Replace DUB or harnesses.
FU3	24VS_3	• Paper Cooling Fan • Paper Transfer Belt Cooling Fan • Paper Transfer Belt Cooling Fan	Replace DUB or harnesses.
FU4	24VS_4	IH Coil Cooling Fan	Replace DUB or harnesses.
FU5	24VS_5	Exit Inverter Solenoid	Replace DUB or harnesses.
FU6	24VS_6	Duplex Invert Solenoid	Replace DUB or harnesses.
FU7	+24VS_1	Registration Motor Exit Inverter Motor Exit Motor Duplex Inverter Entrance Motor Duplex Exit Motor Duplex Transport Motor Edge Detection Sensor Shift Motor Duplex Transport Shift Motor 1	Replace DUB or harnesses.
FU8	+24VS_7	Web Cleaning Drive Motor	Replace DUB or harnesses.
FU9	+24VS_8	Cleaning Web Contact Motor	Replace

FUSE	Output	Reason for Overcurrent	Action
		Paper Cooling Fan Fusing Pressure Roller Intake Fan *1 Duplex Transport Shift Motor 2 Inverter Junction Gate Motor	DUB or harnesses.
FU10	+5V_CCT	Vacuum Paper Detection Sensor	Replace DUB or harnesses.

*1: Pro C5300S/C5310S only.

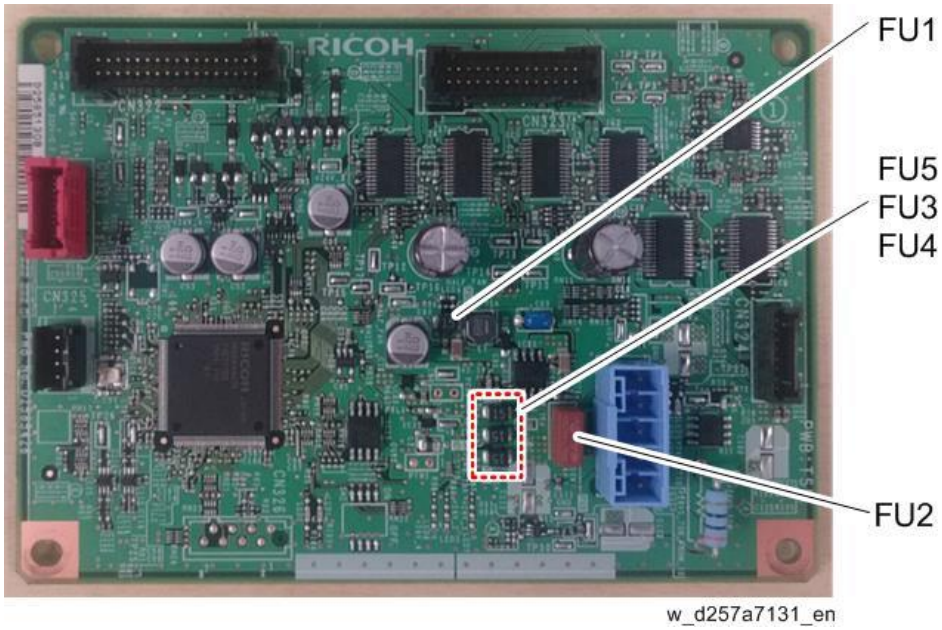


IH Inverter (PCB35)

FUSE	Output	Reason for Overcurrent	Action
FU1	AC	IH Inverter (fusing)	Replace IH inverter

Toner Supply Board (PCB9)

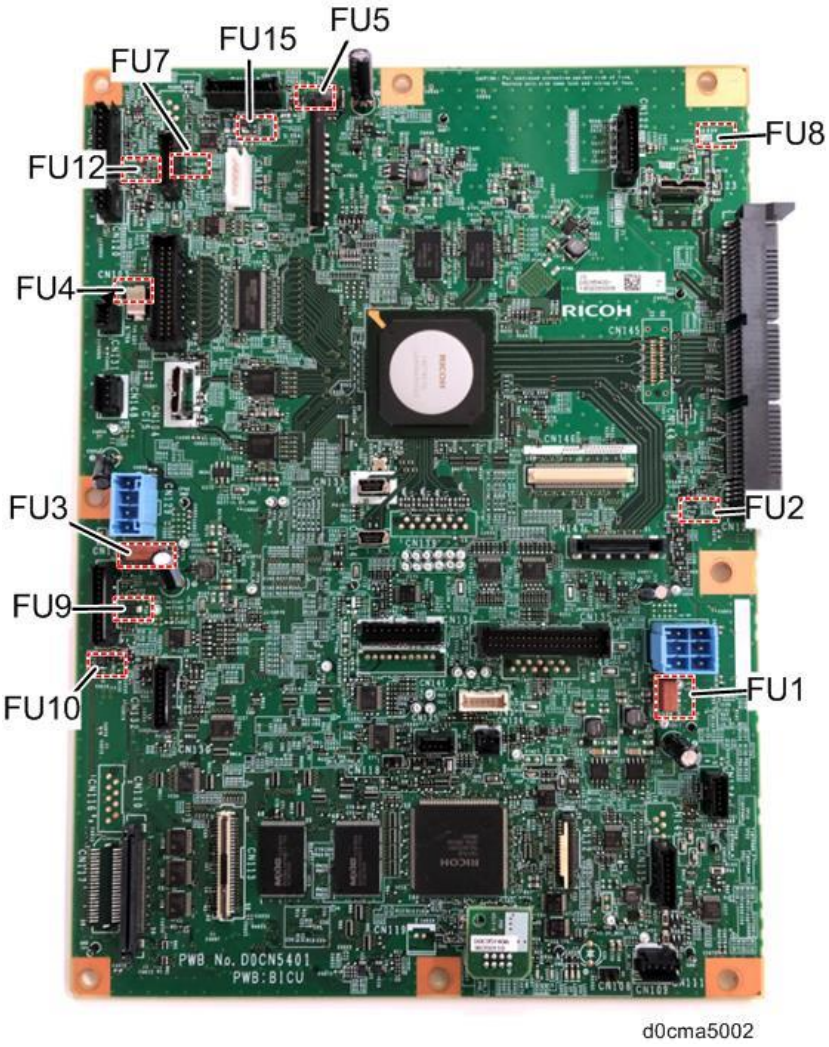
FUSE	Output	Reason for Overcurrent	Action
FU1	24V	• Development Intake Fan (Y/M/C/K) • ITB Cleaning Intake Fan	Replace PCB or harnesses
FU2		Toner Supply Motor (Y/M/C/K)	Replace PCB or harnesses
FU3	24V	Development Intake Fan (Y/M)	Replace PCB or harnesses
FU4	24V	Development Intake Fan (C/K)	Replace PCB or harnesses
FU5	24V	ITB Cleaning Intake Fan	Replace PCB or harnesses



BICU (PCB14)

FUSE	Output	Reason for Overcurrent	Action
FU1	+24VS	Internal circuit	If harnesses between power and ground is short-circuited, repair the short circuit and replace the PCB. If short is found inside the PCB, replace the PCB.
FU2	+5VX_FU	• AKS (Platen Cover Sensor) • DOC (ADF)	If harnesses between power and ground is short-circuited or overloaded, repair the short circuit and replace the PCB. If short is found inside the PCB, replace the PCB.
FU3	+24V1	• Polygon Motor • FCU board	If harnesses between power and ground is short-circuited or overloaded, repair the short circuit and replace the PCB. If short is found inside the PCB, replace the PCB.
FU4	+24V_LPS	Operator Call Light	If harnesses between power and ground is short-circuited or overloaded, repair the short circuit and replace the PCB. If short is found inside the PCB, replace the PCB.
FU5	+24V_SM	• Scanner Drive Motor • Internal circuit (driver)	If harnesses between power and ground is short-circuited or overloaded, repair the short circuit and replace the PCB. If short is found inside the PCB, replace the PCB.
FU7	+5VSBU	Home Position Sensor	If harnesses between power and ground is short-circuited or overloaded, repair the short circuit and

FUSE	Output	Reason for Overcurrent	Action
			replace the PCB. If short is found inside the PCB, replace the PCB.
FU8	5VX_LPS	Operation Panel	If harnesses between power and ground is short-circuited or overloaded, repair the short circuit and replace the PCB. If short is found inside the PCB, replace the PCB.
FU9	+5V_SDCU	SDCU	If harnesses between power and ground is short-circuited or overloaded, repair the short circuit and replace the PCB. If short is found inside the PCB, replace the PCB.
FU10	+5VX_SDCU	SDCU	If harnesses between power and ground is short-circuited or overloaded, repair the short circuit and replace the PCB. If short is found inside the PCB, replace the PCB.
FU12	+5VE_LPS	• AKS (Platen Cover Sensor) • DOC (ADF)	If harnesses between power and ground is short-circuited or overloaded, repair the short circuit and replace the PCB. If short is found inside the PCB, replace the PCB.
FU15	+24VSBU	SBU	If harnesses between power and ground is short-circuited or overloaded, repair the short circuit and replace the PCB. If short is found inside the PCB, replace the PCB.



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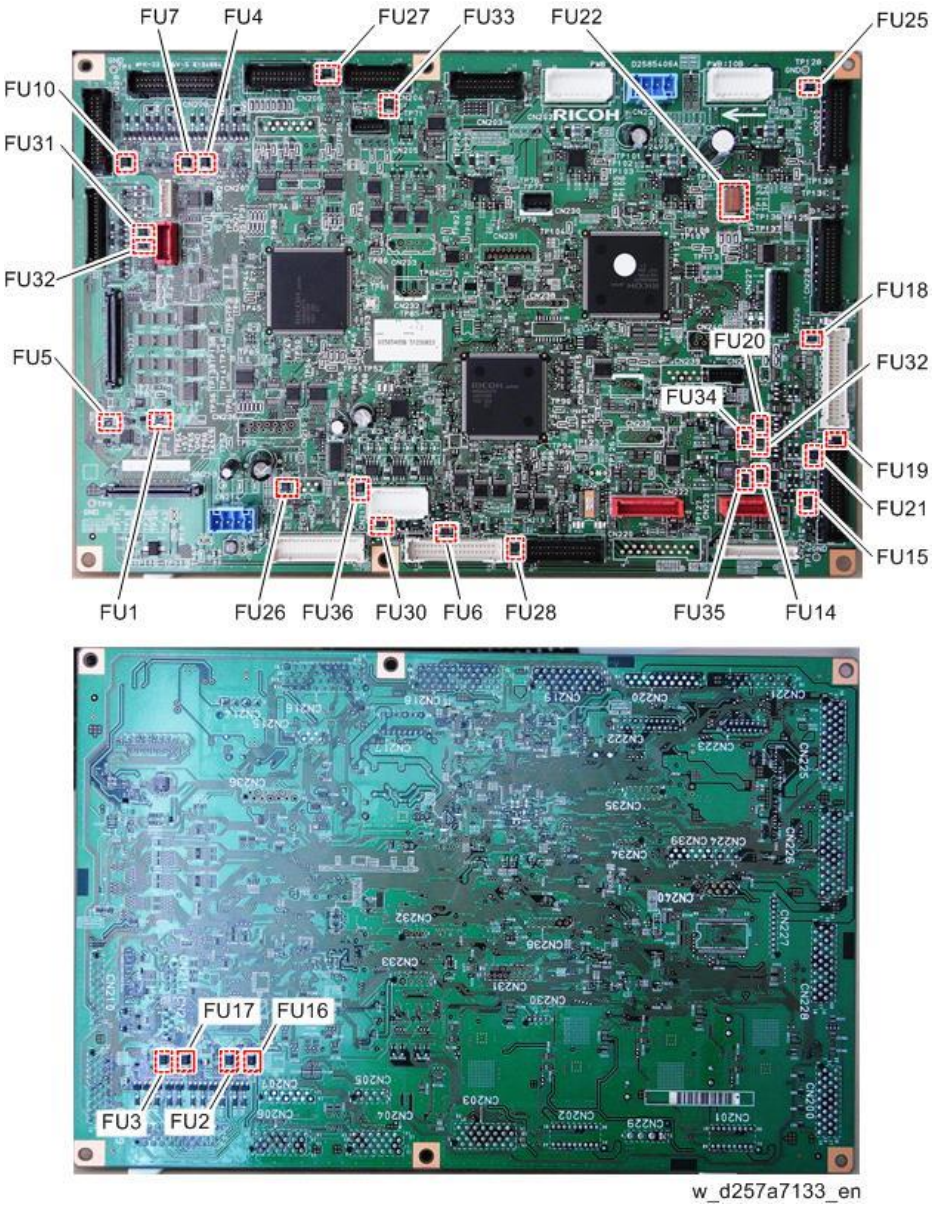
IOB (PCB1)

FUSE	Output	Reason for Overcurrent	Action
FU1	5V	• ID Chip Connector Board (Y/M/C/K) • Heating Roller Thermostat	Replace the PCB
FU2	24V	Image Skew Correction Motor (Y)	Replace the PCB
FU3	24V	Image Skew Correction Motor (C)	Replace the PCB
FU4	24V	• Laser Unit Cooling Fan (Left) • Charge Roller Cleaning Roller Lift Solenoids (M)	Replace the PCB
FU5	3.3V	TD Sensor (Y/M/C/K)	Replace the PCB
FU6	24V	• PSU Fans (Right) • PSU Fans (Left) • IH Coil Power Cooling Fan	Replace the PCB

FUSE	Output	Reason for Overcurrent	Action
		• Tray Heater Relay	
FU7	24V	• Laser Unit Cooling Fan (Right) • Charge Roller Cleaning Roller Lift Solenoids (Y)	Replace the PCB
FU10	24V	• ID Sensor Cleaning Fan • Charge Roller Cleaning Roller Lift Solenoids (C)	Replace the PCB
FU12	24V	• Controller Exhaust Fan • Drum PCL (Y/M/C/K)	Replace the PCB
FU14	24V	Development Exhaust Fans (Right)	Replace the PCB
FU15	24VS	Duplex Exhaust Fans (Front/Middle/Rear)	Replace the PCB
FU16	24V	Image Skew Correction Motor (M)	Replace the PCB
FU17	24V	Image Skew Correction Motor (K)	Replace the PCB
FU18	24V	Development Motor (Y/M)	Replace the PCB
FU19	24V	Development Motor (C/K)	Replace the PCB
FU20	24V	• Heat Pipe Panel Intake Fan • Heat Pipe Panel Exhaust Fan • Paper Transfer Belt Fusing Exhaust Fan	Replace the PCB
FU21	24V	• Ozone Exhaust Fan • Fusing Exit Exhaust Fan • Drive Exhaust Fan	Replace the PCB
FU22	24VS	• Fusing Pressure Roller Exhaust Fan (Pro C5300S/C5310S only) • Fusing Belt Smoothing Roller Drive Motor (Pro C5300S/C5310S only) • Fusing Release Motor • Fusing Drive Motor	Replace the PCB
FU25	24VS	Drum Cleaning Motor (Y/M/C/K)	Replace the PCB
FU26	24VS	• AC Transfer Power Pack (Pro C5300S/C5310S only) • Transfer Power Pack/Separation Power Pack	Replace the PCB
FU27	24VS	Combined High-Voltage Power Supply Board:MY	Replace the PCB

FUSE	Output	Reason for Overcurrent	Action
FU28	24V	• Waste Toner Bottle Motor • Waste Toner Collection Motor	Replace the PCB
FU30	24VS	AC Drive Board	Replace the PCB
FU31	24V	• ITB Motor Cooling Fan • Charge Roller Cleaning Roller Lift Solenoids (K)	Replace the PCB
FU32	24V	Development Exhaust Fans (Left)	Replace the PCB
FU33	24VS	Combined High-Voltage Power Supply Board:CK	Replace the PCB
FU34	11.5V	• Heat Pipe Panel Intake Fan • Heat Pipe Panel Exhaust Fan • Paper Transfer Belt Fusing Exhaust Fan • IH Coil Power Cooling Fan	Replace the PCB
FU35	15.5V	• Development Exhaust Fans (Right) • Development Exhaust Fans (Left)	Replace the PCB
FU36	24VS	Paper Transfer Belt Motor	Replace the PCB



PFB (PCB36)

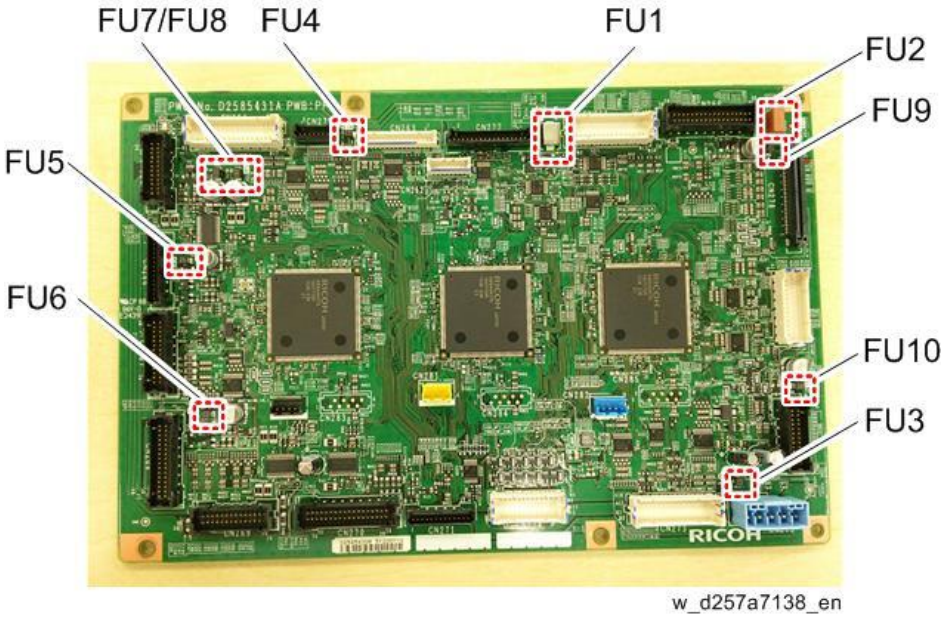
FUSE	Output	Reason for Overcurrent	Action
FU1	24V	Key Counter	• Restore harnesses • Replace PFB (Replace fuse)
FU2	24VS_SCT_A	• 1st/2nd/3rd Paper Feed Motor • 1st/2nd/3rd Transport Motor • Vertical Transport Motor	• Restore harnesses • Replace

FUSE	Output	Reason for Overcurrent	Action
		• Relay Motor • Bypass Feed Motor • Duplex Inverter Motor	PFB (Replace fuse)
FU3	5V	• Sensor Paper Feed Sensor (Tray 1 to 3), Transport Sensor (Tray 1 to 3), Transport Sensor, Rear Fence Return Sensor, Rear Fence HP Sensor, Duplex Invert Sensor, Vertical Transport Door Open Sensor, Front Lower Cover SW, Front Lower Cover SW, Drawer Set Sensor 1/2, Edge Detection Sensor, Duplex Unit Entrance Sensor, Paper Transport Belt Unit Set Sensor, Purged Paper Sensor, Duplex Transport HP Sensor 1/2	• Restore harnesses • Replace PFB (Replace fuse)
		• Sensor Bypass Tray Upper Limit Sensor[*1], Bypass Tray Lower Limit Sensor[*1], Cleaning Web Contact Sensor[*1], Paper Height Sensors 1/2/3, Bypass Paper Length Sensor, Paper End Sensor (Tray 1 to 3), Paper Tray Upper Limit Sensor (Tray 1 to 3), Tray Lower Limit Sensor, Bypass Tray Paper End Sensor, Bypass Paper Feed Sensor, ITB Temperature/Humidity Sensor, Thermistor (M), Thermistor (K)	• Restore harnesses • Replace PFB (Replace fuse)
		• Motor Relay Motor, Bypass Feed Motor, 1st Paper Feed Motor, 1st Transport Motor, Duplex Inverter Motor, 2nd Paper Feed Motor, 2nd Transport Motor, 3rd Paper Feed Motor, 3rd Transport Motor	• Restore harnesses • Replace PFB (Replace fuse)
		• Accounting Device Option Key Card, Mechanical Counter	• Restore harnesses • Replace PFB (Replace fuse)
FU4	24VS_CCP_G	Drawer Unit Lock Motor	• Restore harnesses • Replace

FUSE	Output	Reason for Overcurrent	Action
			PFB (Replace fuse)
FU5	24VS_CCP_A	• Pick-up Solenoid (Tray 1) • Pick-up Solenoid (Tray 2)	• Restore harnesses • Replace PFB (Replace fuse)
FU6	24VS_C	Pick-up Solenoid (Tray 3)	• Restore harnesses • Replace PFB (Replace fuse)
FU7	24V_CCP_C	End Fence Rear Solenoid	• Restore harnesses • Replace PFB (Replace fuse)
FU8	24V_CCP_D	Left Tray Lock Solenoid	• Restore harnesses • Replace PFB (Replace fuse)
FU9	24VS_CCP_F	Bypass Pick-up Solenoid	• Restore harnesses • Replace PFB (Replace fuse)
FU10	24V_CCP_E	Cooling Fan Unit	• Restore harnesses • Replace PFB (Replace

FUSE	Output	Reason for Overcurrent	Action
			fuse)

*1; Pro C5300S/C5310S only



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TDRB (PCB4)

FUSE	Output	Reason for Overcurrent	Action
FU1	24VS	• ITB Motor • Paper Transfer Belt Separation Motor	Replace PCB or harnesses

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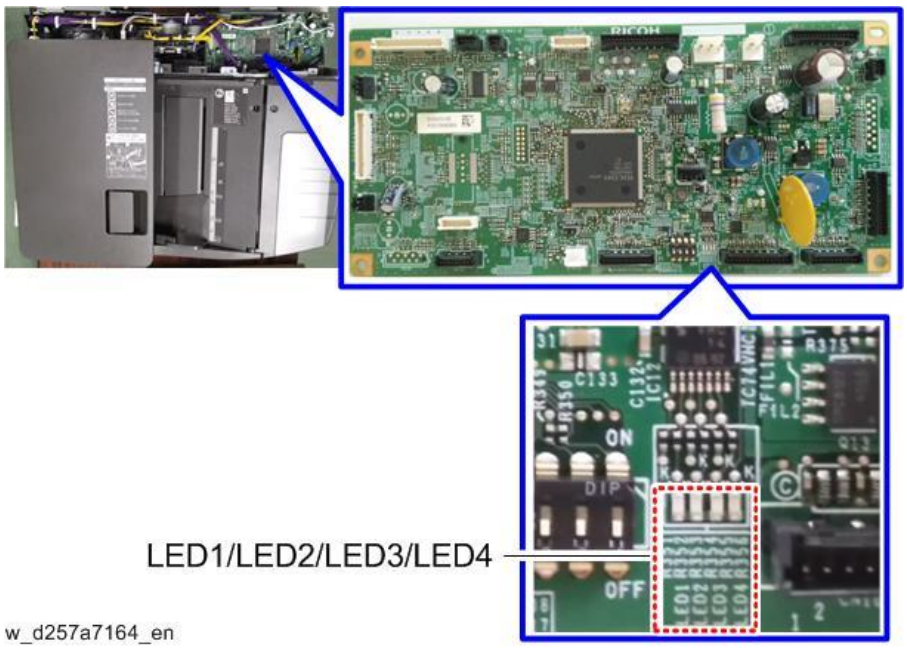
LED Conditions

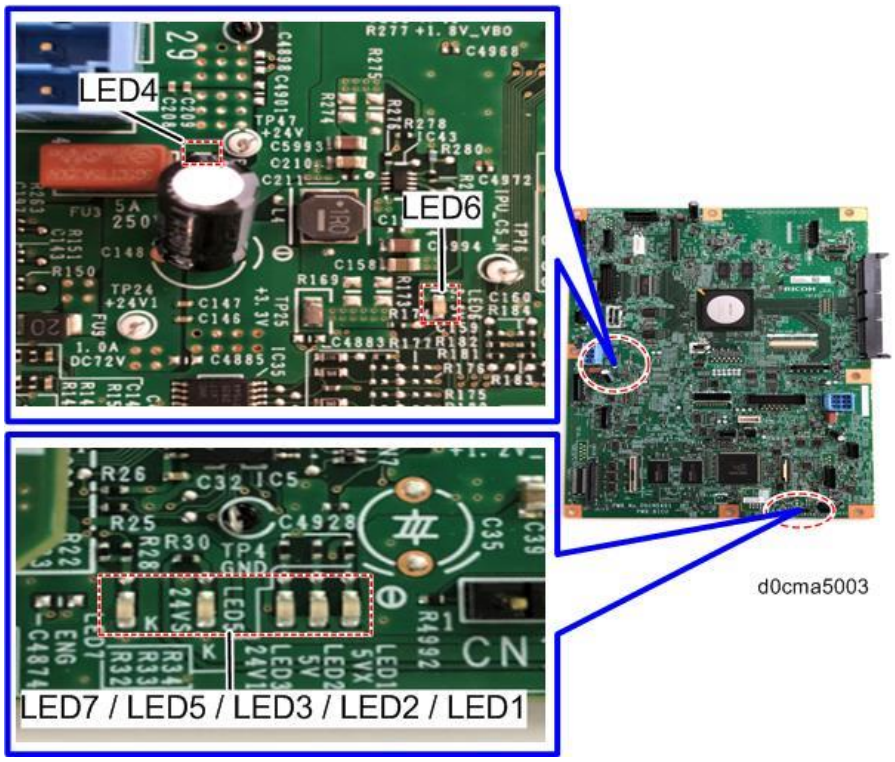
ADF Controller Board (PCB40)

LED					Function		
Address	Color	Power source voltage	Use	Fuse	Lighting	Off	Blinking
LED1	Green	3.3V	Confirming download status	-	One of the followings; • Downloading the data from SD • Writing the data via the download cable	Normal	-
LED2	Red	3.3V	Confirming machine status	-	One of the followings; • Downloading the data from SD • Writing the data via the download cable	-	Blinking in cycles of 1 second: Normal Blinking in cycles of 0.5 second: Abnormal
LED3	Green	3.3V	Confirming download status	-	Writing the data via the download cable	Normal	
LED4	Red	3.3V	Confirming download status	-	Writing the data via the download cable	Normal	-



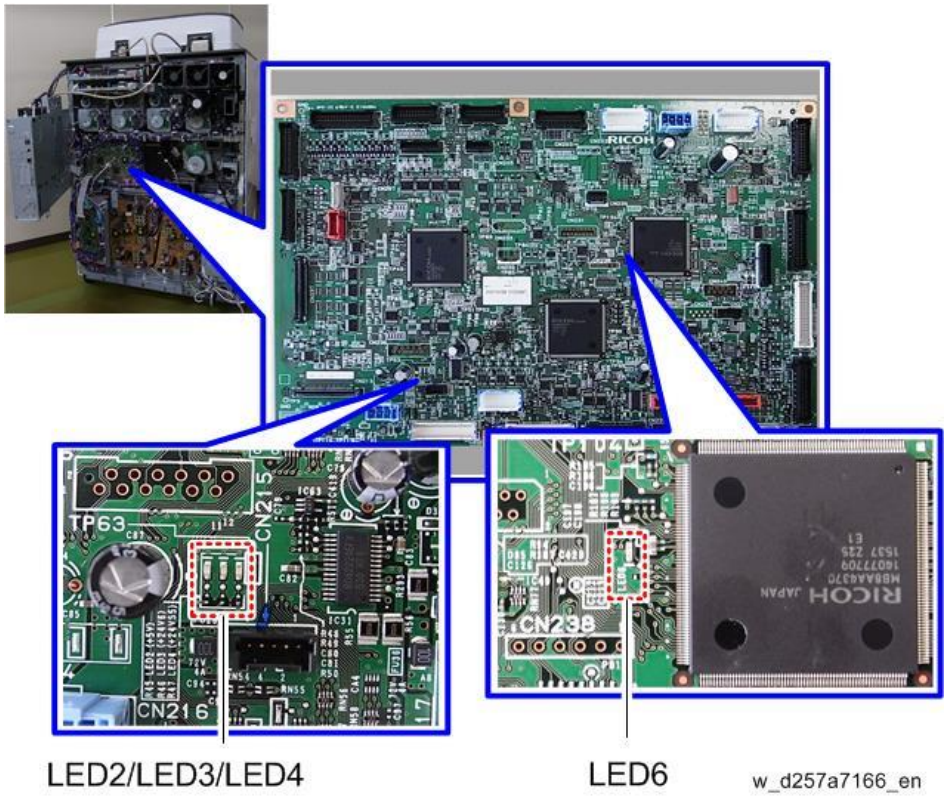
BICU (PCB14)

LED					Function		
Address	Color	Power source voltage	Use	Fuse	Lighting	Off	Blinking
LED1	Red	5VX	Power Confirmation	-	Normal	Abnormal	-
LED2	Yellow	5V	Power Confirmation	-	Normal	Abnormal	-
LED3	Orange	24V1	Power Confirmation	FU3	Normal	Abnormal	-
LED4	Orange	24V	Power Confirmation	-	Normal	Abnormal	-
LED5	Orange	24VS	Power Confirmation	-	Normal	Abnormal	-
LED6	Green	3.3V	Power Confirmation	-	Normal	Abnormal	-
LED7	Red	3.3V	Operation Check	-	Abnormal	Abnormal	Normal



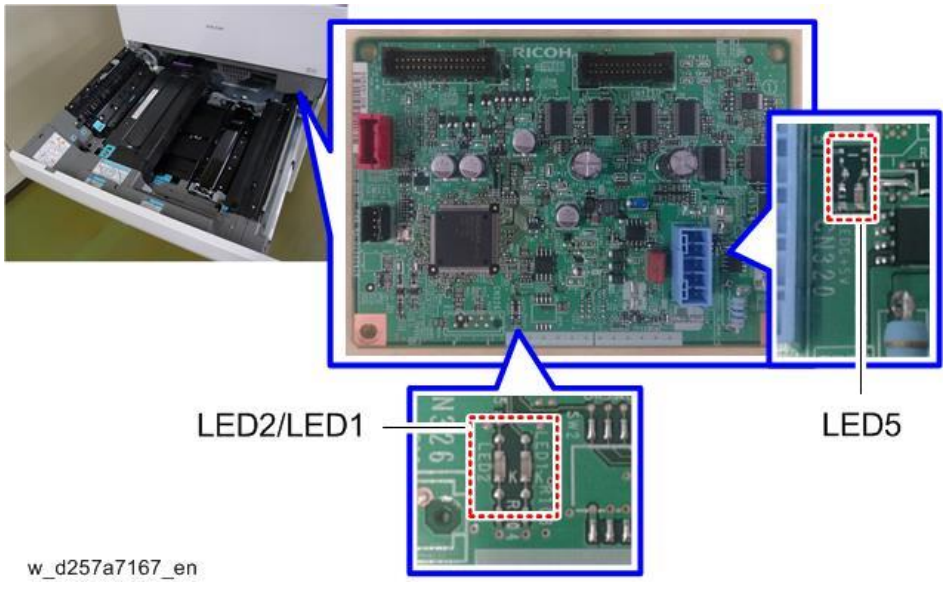
IOB (PCB1)

LED					Function		
Address	Color	Power source voltage	Use	Fuse	Lighting	Off	Blinking
LED2	Red	5V	Power Confirmation	-	Normal	Abnormal	-
LED3	Yellow	24V	Power Confirmation	-	Normal	Abnormal	-
LED4	Orange	24VS	Power Confirmation	-	Normal	Abnormal	-
LED6	Green	3.3V	Operation Check	-	Abnormal	Abnormal	Normal



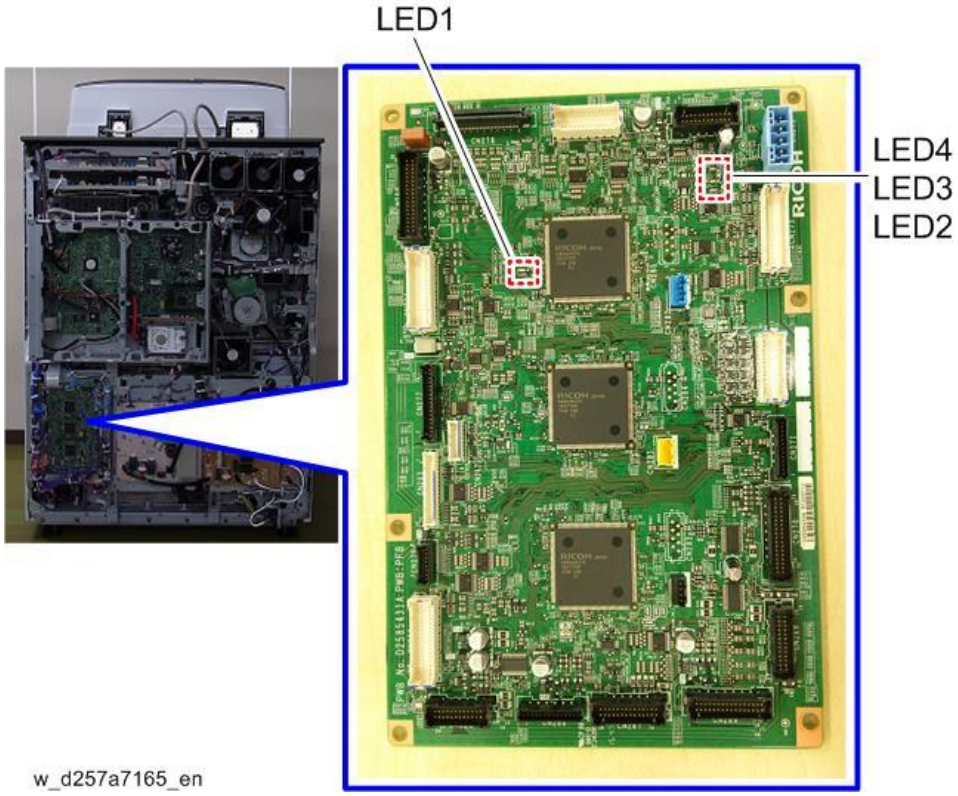
Toner Supply Board (PCB9)

LED					Function		
Address	Color	Power source voltage	Use	Fuse	Lighting	Off	Blinking
LED1	Green	3.3V	-	-	Abnormal	Normal	-
LED2	Orange	3.3V	Operation Check	-	Abnormal	Abnormal	Normal
LED5	Orange	24VS	Power Confirmation	FU2	Normal	Abnormal	-



PFB (PCB36)

LED					Function		
Address	Color	Power source voltage	Use	Fuse	Lighting	Off	Blinking
LED1	Green	3.3V	-	-	Abnormal	Normal	-
LED2	Red	5V	Power Confirmation	FU3	Normal	Abnormal	-
LED3	Yellow	24V	Power Confirmation	FU2	Normal	Abnormal	-
LED4	Orange	24VS	Power Confirmation	FU4	Normal	Abnormal	-



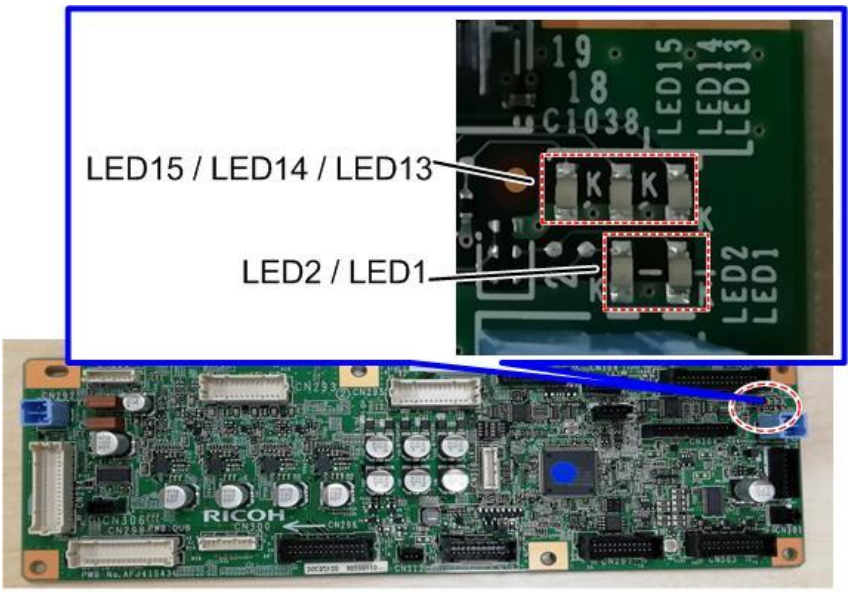
DUB (PCB37)

LED					Function		
Address	Color	Power source voltage	Use	Fuse	Lighting	Off	Blinking
LED1	Orange	3.3V	Operation Check	-	Abnormal	Abnormal	Normal
LED2	Green	3.3V	Operation Check	-	Normal	Abnormal	-
LED13	Green	5V	Power Confirmation	FU1	Normal	Abnormal	-

LED					Function		
Address	Color	Power source voltage	Use	Fuse	Lighting	Off	Blinking
LED14*1	Yellow	24V	Power Confirmation	-	Normal	Abnormal	-
LED15*2	Orange	24VS	Power Confirmation	-	Normal	Abnormal	-

*1 The fuse is installed on the PFB.

*2 When the doors are open, LED15 is off. The fuse is installed on the PSU.



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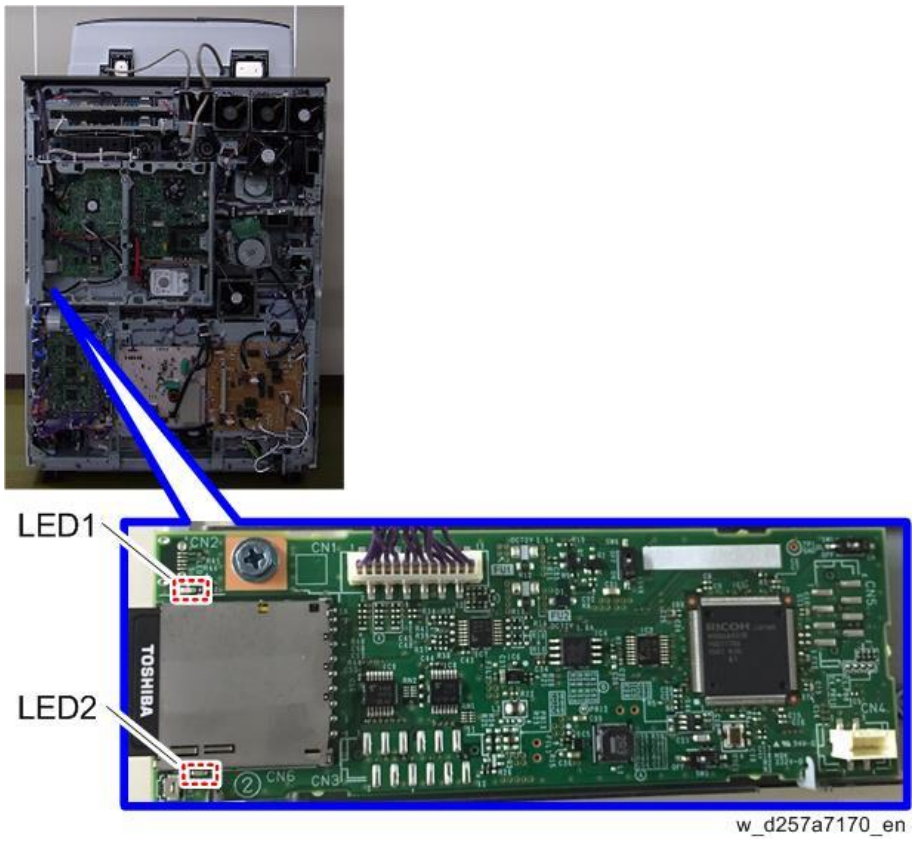
SDCU (PCB28)

LED					Function		
Address	Color	Power source voltage	Use	Fuse	Lighting	Off	Blinking
LED1	Red	3.3V	Operation Check	-	Normal	Abnormal	-
LED2	Green	3.3V	Access Check of SD	-	SD is present	SD is absent	-

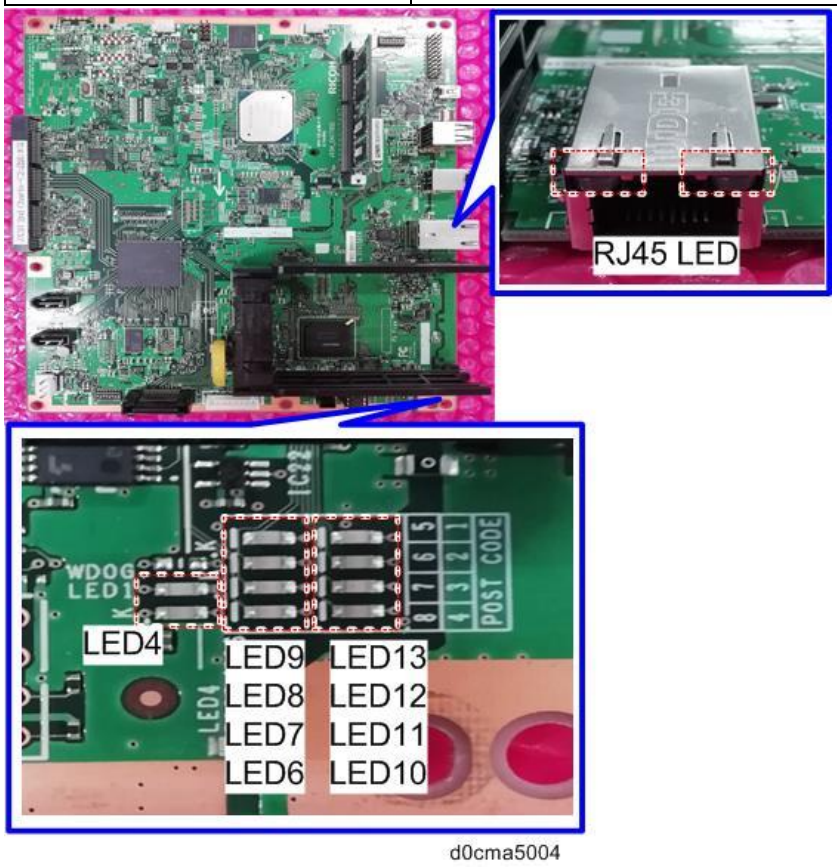


Controller Board (PCB30)

LED					Function		
Address	Color	Power source voltage	Use	Fuse	Lighting	Off	Blinking
LED4	Red	3.3VEP	Identify the BIOS/OS control	-	BIOS	OFF	OS
LED6	Red	3.3VEP	For POST code	-	Indicates the POST code • LED6: MSB bit7 • LED7: bit6 • LED8: bit5 • LED9: bit4 • LED10: bit3 • LED11: bit2 • LED12: bit1 • LED13: LSB bit0		
LED7	Red	3.3VEP	For POST code	-			
LED8	Red	3.3VEP	For POST code	-			
LED9	Red	3.3VEP	For POST code	-			
LED10	Red	3.3VEP	For POST code	-			
LED11	Red	3.3VEP	For POST code	-			
LED12	Red	3.3VEP	For POST code	-			
LED13	Red	3.3VEP	For POST code	-			
RJ45	Orange	3.3VE	Indicates Ethernet connecting status	-	See "LEDs of RJ45 (Ethernet Connector)".		
RJ45	Green	3.3VE	Indicates Ethernet connecting status	-			

LEDs of RJ45 (Ethernet Connector)

	LED1 (Orange)	LED2 (Green)
10BASE-T	OFF	ON
100BASE-TX	ON	OFF
1000BASE-T	ON	ON
STR	OFF	OFF



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Adjustment

Adjustment 001: ACC (Automatic Color Calibration)

Overview

Color Calibration can be performed by the Automatic Color Calibration (ACC) in "Maintenance" in "User Tools".

There are two types of ACC.

- Copier Function ACC
- Printer Function ACC

ACC for the Printer Function has 5 modes, for different printer resolutions.

Mode	Resolution		
Calibration 1	600 x 600 dpi	600dpi 1bit Photo/Text	
Calibration 2	1800 x 600 dpi	600dpi 2bit Photo/Text	Recommended Mode
Calibration 3	9000 x 600 dpi	600dpi 4bit Photo/Text	
Calibration 4	1200 x 1200 dpi	1200dpi 1bit Photo/Text	
Calibration 5	3600 x 1200 dpi	1200dpi 2bit Photo/Text	

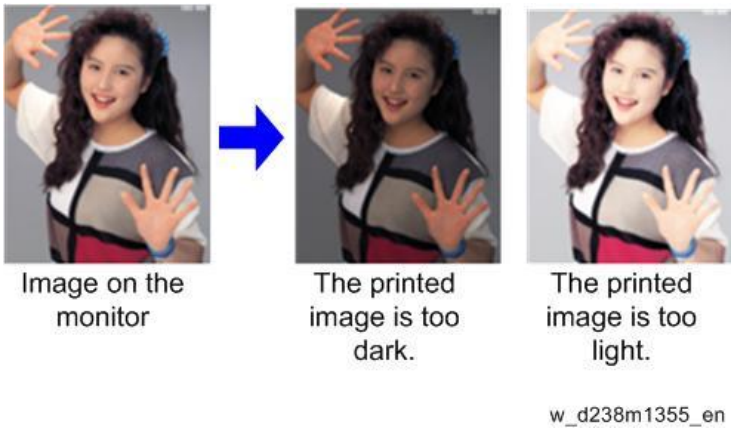
About the printer ACC

It is difficult to keep constant printing density due to the environment of the machine, individual differences between devices, and the passage of time. The printer ACC reads the current printing density using the scanner, compares it with the normal state, and makes the printing density close to the normal state.

Issues possibly solved by the printer ACC

- When the printed image looks strongly red, blue, or yellow because the density of the cyan, magenta, and yellow are not balanced.

- When the printed image looks too dark or light.



Issues cannot be solved by the printer ACC

The tone differences from other types of machine or machines of other manufacturers cannot be solved by the printer ACC. The tone differences from the machines of other manufactures occur due to the differences in color reproduction caused by the difference in the engine and color profile specifications so it may not be solved even after performing the printer ACC.

Procedure

1. Press [Settings].
2. To print a color pattern, select [Maintenance] > [Auto Color Calibration].
3. Touch [Start] for the selected function (Copier Function or Printer Function).
4. If "Printer Function" is selected, resolution ("1800 x 600 dpi" for example) should be selected next.
5. Touch "Start Printing". (The machine will print the Test Pattern after self-checking has been completed).
6. Place the color test pattern face-down with the arrow aligned with the rear left corner of the exposure glass.
7. Touch [Start Scanning] on the display. The machine scans the pattern one time.
8. Remove the pattern from the exposure glass.
9. Touch [Exit] three times to return to the Copy mode screen.

Note

- When scanning the color test pattern, place about 10 sheets of white paper over the test pattern, in order to prevent the test pattern from coming away from the exposure glass.
- Please instruct the customer to perform the ACC periodically to keep good image quality.
- Both "Copier Function ACC" and "Printer Function ACC" should be performed as a set.
- ACC can be cancelled by pressing "Previous Settings" if the customer is not satisfied with the ACC results.

Adjustment 002: Manual Gamma Adjustment

Overview

Printer Gamma can be adjusted with SP mode. Highlight (H), Shadow (S), Middle (M) and IDmax can be set independently from the range 0 through 30 (15 is the default).

Printer Mode Adjustment

Overview

There are 6 types of adjustment mode as shown in table

Mode	SP number	Mode	SP number
2,400×600dpi Photo	SP1-102	2,400×600dpi Text	SP1-102
1,800×600dpi Photo	SP1-102	1,800×600dpi Text	SP1-102
600×600dpi Photo	SP1-102	600×600dpi Text	SP1-102

Adjustment Procedure

1. Perform ACC in Printer Function.
2. Enter Printer SP mode.
3. Use SP1102 (Resolution Setting) to select the mode to be adjusted.

SP1102 setting	Mode to be adjusted	Note
0	1200dpi 2bit Photo Gamma	
1	1200dpi 1bit Photo Gamma	
2	600dpi 4bit Photo Gamma	
3	600dpi 2bit Photo Gamma	Default in Printer Mode
4	600dpi 1bit Photo Gamma	
5	1200dpi 2bit Text Gamma	
6	1200dpi 1bit Text Gamma	
7	600dpi 4bit Text Gamma	
8	600dpi 2bit Text Gamma	Default in Printer Mode
9	600dpi 1bit Text Gamma	

4. Print out the Color Gray Scale pattern with SP1103-001.
5. Compare the IDmax patch pattern on the C-4 test chart for each color and the corresponding patch pattern on the Color Gray Scale printed with SP1103-001. (If no adjustment is required, go step #8).
6. Adjust the IDmax for CMYK with SP1104 (Gamma Adjustment) and save the adjusted value with SP1105 (Save Toner Control Value).
7. Print out the Color Gray Scale pattern with SP1103-001 again.
8. Compare the Middle (M) patch pattern on the C-4 test chart for each color and the corresponding patch pattern on the Color Gray Scale printed with SP1103-001. (If no adjustment is required, go step #11).

9. Adjust the Middle (M) for CMYK with SP1104 (Gamma Adjustment) and save the adjusted value with SP1105 (Save Toner Control Value).
10. Print out the Color Gray Scale pattern with SP1103-001 again.
11. Compare the Shadow (S) patch pattern on the C-4 test chart for each color and the corresponding patch pattern on the Color Gray Scale printed with SP1103-001. (If no adjustment is required, go step #14).
12. Adjust the Shadow (S) for CMYK with SP1104 (Gamma Adjustment) and save the adjusted value with SP1105 (Save Toner Control Value).
13. Print out the Color Gray Scale pattern with SP1103-001 again.
14. Compare the Highlight (H) patch pattern on the C-4 test chart for each color and the corresponding patch pattern on the Color Gray Scale printed with SP1103-001. (If no adjustment is required, all adjustment is completed).
15. Adjust the Highlight (H) for CMYK with SP1104 (Gamma Adjustment) and save the adjusted value with SP1105 (Save Toner Control Value).
16. Turn the main power switch OFF and ON.

NOTE 1: Adjustment order should be IDmax -> Middle -> Shadow -> Highlight.

NOTE 2: SP1-104

Output ID	K	C	M
Highlight	SP1-104-001	SP1-104-021	SP1-104-041
Shadow	SP1-104-002	SP1-104-022	SP1-104-042
Middle	SP1-104-003	SP1-104-023	SP1-104-043
IDmax	SP1-104-004	SP1-104-024	SP1-104-044

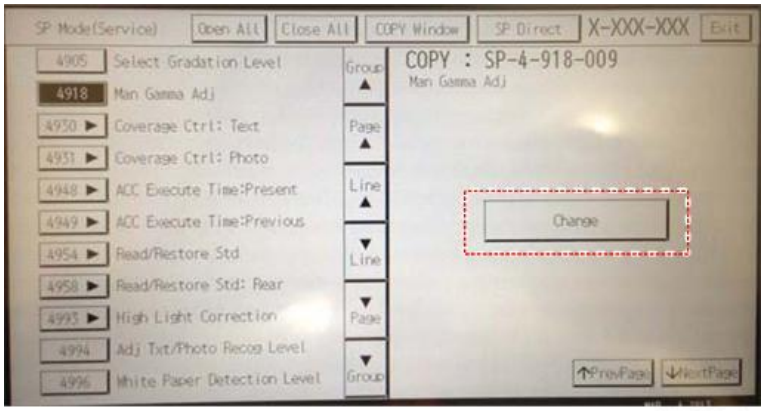
Copier Mode Adjustment

Overview

This procedure shows how to adjust the printer gamma by SP mode manually after the ACC (Automatic Color Calibration) has been performed. Adjustment should be performed only in the ‘Offset’ part of the screen, and not in the ‘Option’ part of the screen. Adjustable modes are "Text mode", "Photo mode", "B&W text mode" and "B&W photo mode".

1. Perform ACC in copier mode with User Tools.
2. Take a copy of a C-4 test chart in the mode which you need to adjust.
3. Enter Copier SP mode.

4. Select SP4918-009 (Man Gamma Adj) and press "CHANGE"



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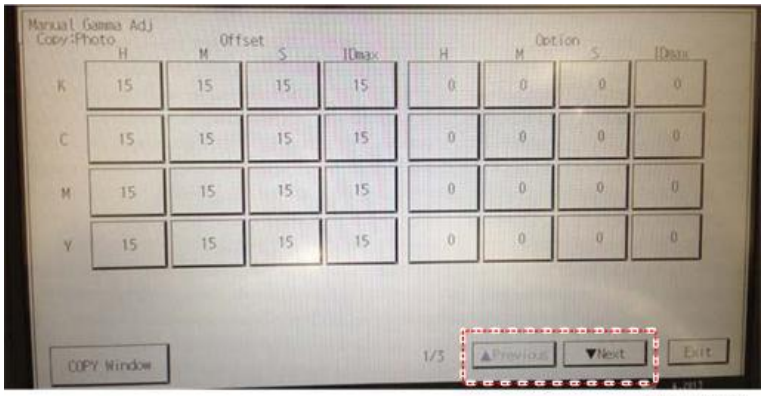
5. If you touch the "Change" button, the following 3 screens will be displayed. These screens can be changed by pressing the "Next" or "Previous" button.



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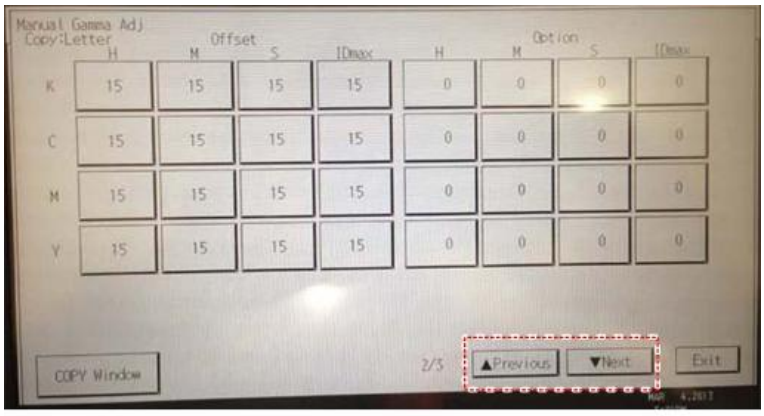

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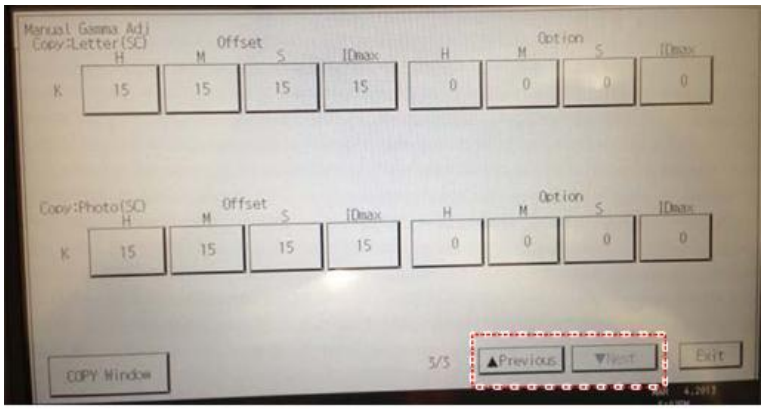

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6. Press the "Copy Window" button on the bottom left, then take a copy of the C-4 test chart. Then compare the gradation patch pattern on the copied image and the C-4 test chart.

Step	Output ID	C-4 chart level	Adjustment Reference
1	ID max (K/C/M/Y)	1 2 3 4 5 6 7 8 9 **10**	Adjust the 'Offset' value so that the density of level 10 in the gradation patch pattern on the copy becomes the same as level 10 on the C-4 chart.
2	Middle (K/C/M/Y)	1 2 3 4 5 **6** 7 8 9 10	Adjust the 'Offset' value so that the density of level 6 in the gradation patch pattern on the copy becomes the same as level 10 on the C-4 chart.
3	Shadow (K/C/M/Y)	1 2 3 4 5 6 7 **8** 9 10	Adjust the 'Offset' value so that the density of level 8 in the gradation patch pattern on the copy becomes the same as level 10 on the C-4 chart.
4	Highlight (K/C/M/Y)	1 2 **3** 4 5 6 7 8 9 10	Adjust the 'Offset' value so that dirty background is not visible on the copy and the density of level 3 is slightly lighter that of level 3 on the C-4 chart.
5	K Highlight (K/C/M/Y)	1 2 **3** **4** **5** 6 7 8 9 10	Adjust the 'Offset' value so that black scale levels 3 through 5 in the copy are seen as gray (no C, M, or Y should be visible). If the black scale contains C, M, or Y, redo step 1 to 4. - Only in Photo mode -

Adjustment 003: Scanner Registration

Overview

Scanning registration can be adjusted in the Main Scan and Sub Scan directions. Sub Scan Magnification can also be adjusted.

Adjustment Procedure

Adjustment can be performed by the following SPs.

- SP4-011-001 (Main Scan Reg.): Registration in the Main Scan direction.
- SP4-010-001 (Sub Scan Registration Adj): Registration in the Sub Scan direction.
- SP4-008-001 (Sub Scan Magnification Adj): Magnification in the Sub Scan direction.

Adjustment 004: ADF Registration

Overview

Adjusts the position and scaling applied to scanned images when using the ADF with the copier and scanner functions. By specifying this setting, you can correct image misalignment, expansion, and shrinkage due to non-uniform paper feeding.
This adjustment needs to be done before doing “Adjustment 005: Registration Adjustment”

Adjustment Procedure

Adjustment can be performed by the following SPs.

- ADF Adjustment Side-to-Side Regist: Front (SP6-006-001)
- ADF Adjustment Side-to-Side Regist: Rear (SP6-006-002)
- L-Edge Regist (1-pass): Front (SP6-006-010)
- L-Edge Regist (1-pass): Rear (SP6-006-011)
- DF Magnification Adj. (SP6-017-001)

Adjustment 005: Registration

Overview

This troubleshooting covers all the procedures involving registration adjustments: skew, image position, and front-back magnification adjustment except ADF and scanner registration. Note that these procedures should be done BEFORE making registration adjustments on the Fiery controller and scanner/ADF of the machine.

Cause

Skew

- Incorrect positioning of the side fence
- Something in the paper path
- Insufficient paper buckling at registration roller

Image Shift

- Incorrect positioning of the side fence
- Change during transport according to the paper characteristics, such as thickness and stickiness

Incorrect magnification between Front and Back

- Incorrect positioning of the side fence
- Paper Path Variation by Paper Specification (Thickness, stiffness etc)

Contents

Step 1. Side fence check
Step 2. Skew Adjustment for front and back.
Step 3. Image Adjustment for front.
Step 4. Image Adjustment for back.
Step 5. Adjustment of magnification for back.

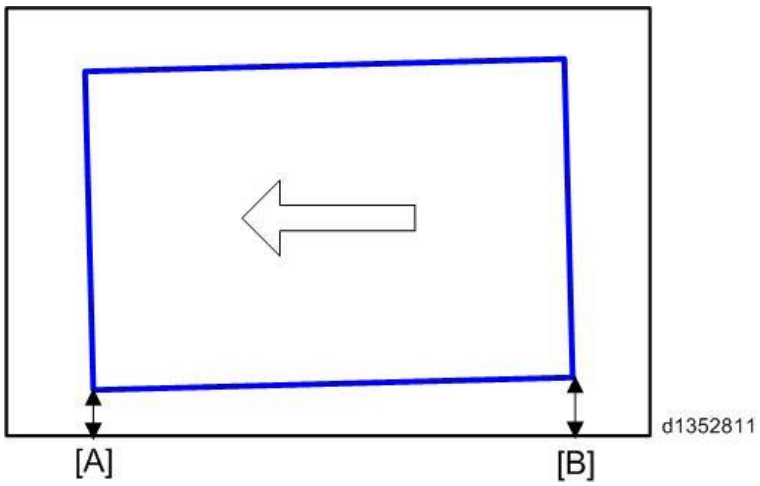
Step 1. Side fence check

Check the side fence status for each paper tray. If not correct, adjust the trays.

Step 2. Skew Adjustment for front and back.

Step 2-1 Set A3 or DLT plain paper (63.1-80.0 gsm) in Tray 2 and apply the paper tray settings.
Step 2-2 Print 5 copies of the test pattern Trimming Area (SP2109-003-14) in b/w and simplex.
Step 2-3 Measure the two locations [A] and [B] on all 5 copies.
Step 2-4 You need to make an adjustment with SP1-004-010 so that the average values of [A] and [B] are the same.

Front Side (1st Side)



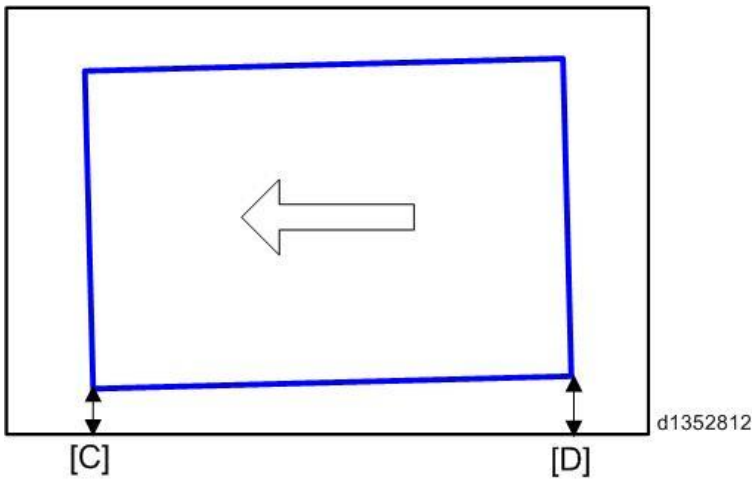
Note: The arrow indicates the paper feed direction

Step 2-5 Make another 5 copies, this time in duplex.

Step 2-6 Measure the locations [C] and [D] on the back side.

Step 2-7 You need to make an adjustment with SP1-004-003 so that the average values of [C] and [D] are the same.

Back Side (2nd Side)



Note: The arrow indicates the paper feed direction

Step 3. Image Adjustment for front

Step 3-1 Set A3 or DLT plain paper (63.1-80.0 gsm) in Tray 2 and apply the tray paper settings.

Step 3-2 Print 5 copies of the test pattern Trimming Area (SP2-109-003-14) in b/w, simplex.

Step 3-3 Measure the distance [A] and [B] on all 5 copies and calculate the average.

Step 3-4 Adjust with SP1-003-XXX so that the average values of [A] and [B] are the same. Refer to 'Reference Information-2' below.

(You can make an adjustment for each paper type with SP1-003-008 to 016 for IMSS setting in the Pro machine.)

Step 3-5 Adjust with SP1-001-XXX so that the average values of [A] and [B] are the same. Refer to

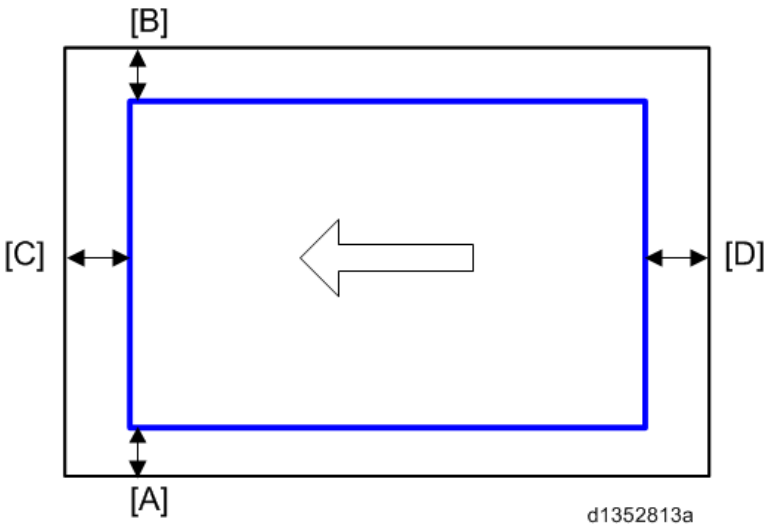
'Reference Information-2' below.

(You can make an adjustment for each paper type with SP1-001-005 to 011 for IMSS setting in the Pro machine.)

Step 3-6 If you finished the adjustment, check that the value of [C] is more than 4mm.

Note

- If the value of [C] is less than 4mm, a jam may occur because of the fusing stripper pawls.
- So adjust the value of [C] so that it is more than 4mm.



Note: The arrow indicates the paper feed direction

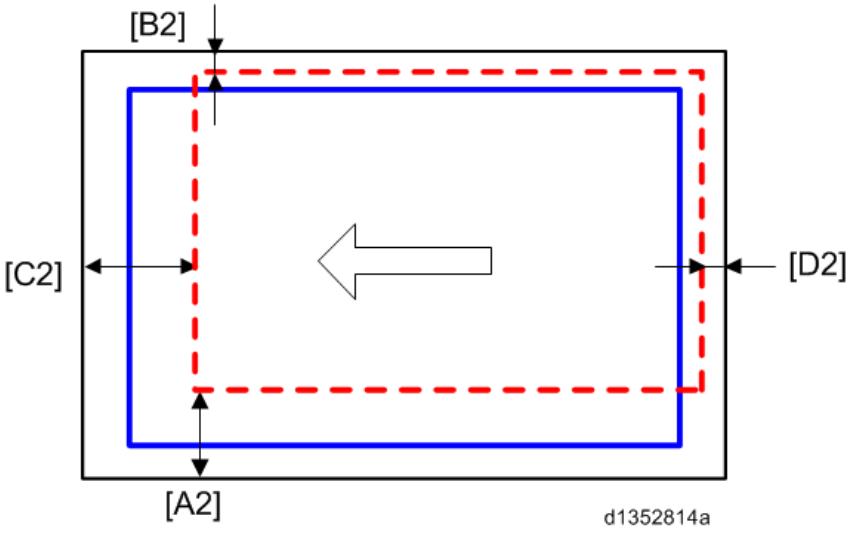
Step 4. Image Adjustment for back

Step 4-1 Print 11 copies of the test pattern Trimming Area (SP2-109-003-14) in b/w, duplex, and select 5 copies (from the 4th to the 8th copy) from among the 11.

Note

- The first 3 and the last 3 copies will not be used due to the higher possibility of image size variations.

Step 4-2 Measure the distances [A2], [B2], [C2] and [D2] on all 5 copies and calculate the average.



Note: The arrow indicates the paper feed direction

Solid line: Trimming area 1st side

Dashed line: Trimming area 2nd side

Step 4-3 You need to make an adjustment with SP1-003-006 so that the average values of [A2] and [B2] are the same. Refer to 'Reference Information-3' below.

(You can make an adjustment for each paper type with SP1-003-008 to 016 for IMSS setting in a Pro machine.)

Step 4-4 You need to make an adjustment with SP1-001-003 so that the average values of [C2] and [D2] are the same. Refer to 'Reference Information-3' below.

(You can make an adjustment for each paper type with SP1-001-004 to 016 for IMSS setting in a Pro machine.)

Step 5. Adjustment of magnification for back.

Step 5-1 Set A3 or DLT plain paper (63.1-80.0 gsm) in Tray 2 and apply the tray paper settings.

Step 5-2 Print 5 copies of the test pattern Trimming Area (SP2109-003-14) in b/w, Duplex.

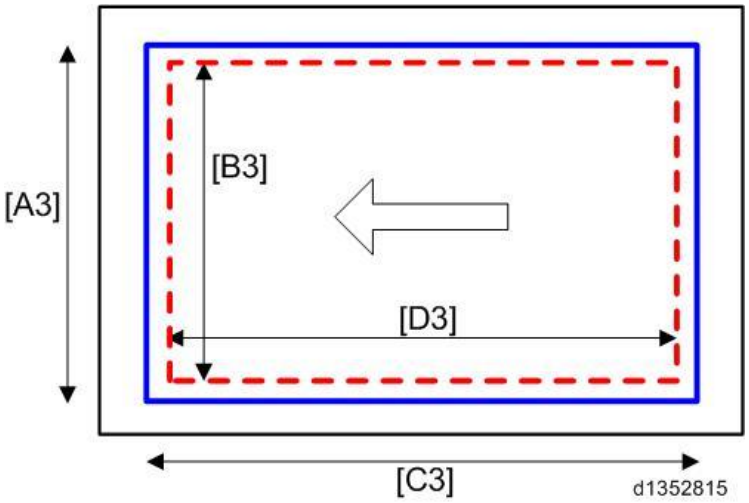
Step 5-3 Measure the distance [A] and [B] on all 5 copies and calculate the average.

Step 5-4 Adjust with SP2-102-043 so that the average values of [A3] and [B3] are the same. Refer to 'Reference Information-4' below.

(You can make an adjustment for each paper type with SP2-102-043 for IMSS setting in a Pro machine.)

Step 5-5 Adjust with SP2-102-006 to 069 so that the average values of [C3] and [D3] are the same. Refer to 'Reference Information-4' below.

(You can make an adjustment for each paper type with SP2-102-006 to 069 for IMSS setting in a Pro machine.)



Reference Information-1 (Step 2. Skew adjustment for front and back)

1. Check the SP value for the tray being used.
2. Increase the value of the SP by 1 mm.
    1. Example: If the current value is 1 mm, input 2 mm into the SP.

3. Print out.
   If you can't solve the skew, repeat steps 1 to 3.

Tray Type Buckle Adjustment

SP No.	Name	Adjustment Value	Notes
1-004-001	Reg Buckle Adj(Tray1)	±5.0mm	
1-004-002	Reg Buckle Adj(Bypass Tray)	±5.0mm	
1-004-003	Reg Buckle Adj(Duplex)	±5.0mm	
1-004-004	Reg Buckle Adj(LCT)	±5.0mm	Adjustment value when fed from LCIT RT5140/LCIT RT4060
1-004-010	Reg Buckle Adj(Tray2)	±5.0mm	
1-004-011	Reg Buckle Adj(Tray3)	±5.0mm	
1-004-012	Reg Buckle Adj(Tray4)	±5.0mm	
1-004-031	Reg Buckle Adj(2T LCT Bypass)	±5.0mm	Adjustment value when fed from Multi Bypass Tray BY5020
1-004-032	Reg Buckle Adj(2T LCT Tray1)	±5.0mm	Adjustment value when fed from the upper tray of Vacuum Feed LCIT RT5120
1-004-033	Reg Buckle Adj(2T LCT Tray2	±5.0mm	Adjustment value when fed from the lower tray of Vacuum Feed LCIT RT5120

Paper Thickness Type Buckle adjustment

SP Number	Name	Adjustment Value	Notes
1-004-005	Reg Buckle Adj(Thick1)	±5.0mm	Adjustment values of paper thickness, used for the first side when fed from Main machine trays/multi bypass
1-004-006	Reg Buckle Adj(Thick2)	±5.0mm	
1-004-007	Reg Buckle Adj(Thick3)	±5.0mm	
1-004-008	Reg Buckle Adj(Thick4)	±5.0mm	
1-004-	Reg Buckle	±5.0mm	

SP Number	Name	Adjustment Value	Notes
009	Adj(Thick5)		
1-004-013	Reg Buckle Adj(Thin)	±5.0mm	
1-004-014	Reg Buckle Adj(Plain1)	±5.0mm	
1-004-015	Reg Buckle Adj(Plain2)	±5.0mm	
1-004-016	Reg Buckle Adj(Mid-Thick)	±5.0mm	
1-004-017	Reg Buckle Adj(Dup:Thin)	±5.0mm	Adjustment values of paper thickness, used for the second side when double-fed
1-004-018	Reg Buckle Adj(Dup:Plain1)	±5.0mm	
1-004-019	Reg Buckle Adj(Dup:Plain2)	±5.0mm	
1-004-020	Reg Buckle Adj(Dup:Mid-Thick)	±5.0mm	
1-004-021	Reg Buckle Adj(Dup:Thick1)	±5.0mm	
1-004-022	Reg Buckle Adj(Dup:Thick2)	±5.0mm	
1-004-023	Reg Buckle Adj(Dup:Thick3)	±5.0mm	
1-004-024	Reg Buckle Adj(Dup:Thick4)	±5.0mm	
1-004-025	Reg Buckle Adj(Dup:Thick5)	±5.0mm	
1-004-034	Reg Buckle Adj(LCT:Thin)	±5.0mm	Adjustment values of paper thickness, used for the first side when fed from LCIT RT5140/LCIT RT4060/Multi Bypass Tray BY5020/Vacuum Feed LCIT RT5120
1-004-035	Reg Buckle Adj(LCT:Plain1)	±5.0mm	
1-004-036	Reg Buckle Adj(LCT:Plain2)	±5.0mm	
1-004-037	Reg Buckle Adj(LCT:Mid-Thick)	±5.0mm	
1-004-	Reg Buckle	±5.0mm	

SP Number	Name	Adjustment Value	Notes
038	Adj(LCT:Thick1)		
1-004-039	Reg Buckle Adj(LCT:Thick2)	±5.0mm	
1-004-040	Reg Buckle Adj(LCT:Thick3)	±5.0mm	
1-004-041	Reg Buckle Adj(LCT:Thick4)	±5.0mm	
1-004-042	Reg Buckle Adj(LCT:Thick5)	±5.0mm	

Reference Information-2 (Step 3. Image Adjustment for front)

Side-to-Side Registration

1. Do the following calculation: ((average [B] - (average [A])/2 = X
2. Add X to the current values in SP1003. (If you use IMSS, SP1003-008 to 016)

SP1003 Side-to-Side Reg	Current SP Value	X	Modified Value
Tray 1			
Tray 2			
Duplex Tray			
A3LCT Tray 3			
A3LCT Tray 4			
A3LCT Tray 5			
Bypass Tray			

Examples

SP1003 Side-to-Side Reg	Current SP Value	X	Modified Value
Example 1.	1.0	0.1	**1.1**
Example 2.	1.0	-0.2	**0.8**

Pro/Office	Number	Description	Adjustment Area
SP	SP1-003-XXX	Side-to-Side Reg	±3.0mm

[For IMSS]

Pro	Number	Description	Adjustment Area
IMSS	001	Image Position: Across Feed: Side 1	±3.0mm
SP	SP1-003-008 to 016	Side-to-Side Reg (for each paper thickness)	• SP1-003-008 to 015

Pro	Number	Description	Adjustment Area
			±4.0mm • SP1-003-016 ±9.0mm

Lead Edge Registration

1. Do the following calculation: ((average [C] - (average [D])/2 = Y
2. Add Y to the current values in SP1001. If you use IMSS, SP1-001-004 to 016

SP1001 Side-to-Side Reg	Current SP Value	X	Modified Value
Tray 1			
Tray 2			
Duplex Tray			
A3LCT Tray 3			
A3LCT Tray 4			
A3LCT Tray 5			
Bypass Tray			

Pro/Office	Number	Description	Adjustment Area
SP	SP1-001-XXX	Lead Edge Reg (Each trays)	±9.0mm

[For IMSS]

Pro	Number	Description	Adjustment Area
IMSS	003	Image Position: With Feed: Side 1 (for each Custom Papers)	±3.0mm
SP	SP1-001-004 to 016	Lead Edge Reg (for each paper thickness)	±9.0mm

Reference Information-3 (Step 4. Image Adjustment for back)

1. Do the following calculation:
   (average [B2] - (average [A2])/2 = x
   (average [C2]) - (average [D2])/2 = y
2. Make an adjustment in the same way as front image position adjustment.
3. Make a print out and check it.
   If you can't solve the magnification problem, repeat steps 1 to 3.

Pro/Office	Number	Description	Adjustment Area
SP	SP1-003-006	Side-to-Side Reg (Duplex)	±3.0mm
SP	SP1-001-003	Lead Edge Reg (Duplex)	±9.0mm

For IMSS

Pro	Number	Description	Adjustment Area
IMSS	002	Image Position: Across Feed: Side 2 (for each Custom Papers)	±3.0mm
IMSS	004	Image Position: With Feed: Side 2 (for each Custom Papers)	±3.0mm
SP	SP1-003-008 to 016	Side-to-Side Reg (for each paper thickness)	±3.0mm
SP	SP1-001-004 to 016	Lead Edge Reg (for each paper thickness)	±9.0mm

Reference Information-4 (Step 5. Adjustment of magnification for back)

1. Do the following calculation:
   average [A3]/average [B3]-1 = A
   average [C3]/average [D3]-1 = C
2. Add A to the current values in SP2102-043.
3. Add C to the current values in SP2102-061 to 069.
4. Make a print out and check it.
   If you can't solve the magnification problem, repeat steps 1 to 4.

Pro/Office	Number	Description	Adjustment Area
SP	SP2-102-043	Verso Main Meg set& Adj	-0.8 to 0.3%
SP	SP2-102-061 to 069	Verso Sub Mag T1-T9	±0.5%

For IMSS

Pro	Number	Description	Adjustment Area
IMSS	006	Magnification: Across Feed: Side 2 (for each Custom Papers)	-0.8 to 0.3%
IMSS	008	Magnification: With Feed: Side 2 (for each Custom Papers)	±0.5%
SP	SP2-102-043	Verso Main Meg set& Adj (for each paper type/thickness)	-0.8 to 0.3%
SP	SP2-102-061 to 069	Verso Sub Mag T1-T9 (for each paper type/thickness)	±0.5%

Note

- Adjustment step is 0.025%

Adjustment 006: Fusing Nip Width Adjustment for Envelopes

Overview

Adjusts the nip width between the fusing belt and pressure roller for envelope printing. Changing this setting may lead to insufficient fusing or cause the envelopes to wrinkle. When encountering such problems, do the following adjustment.

Adjustment Procedure

To correct insufficient fusing, increase the value in the following SP by 5msec and check the result.
To correct wrinkles, decrease the value in the following SP by 5msec and check the result.

Pro/Office	Number	Description	Adjustment Area
SP	SP1-996-109 to 254	Envelope Nip Width Setting	0 to 20000um

For IMSS

Pro	Number	Description	Adjustment Area
IMSS	058	Fusing Nip Width Adjustment: Envelope (for each Custom Papers)	0 to 20000um
SP	SP1-996-145 to 253	Envelope Nip Width Setting (for each paper type/thickness)	0 to 20000um

Adjustment 007: Adjustments Required for Improved Glossiness

Overview

If the customer is not satisfied with the glossiness of copies produced at the suggested temperature, perform the following adjustment procedures.

Note

- Note that the adjustment procedures for Pro C5300S/C5310S and IM C6500/C8000 differ.

Adjustments Required for Improved Glossiness (Pro C5300S/C5310S)

1. In the SP mode or IMSS, increase the fusing heat roller temperature until the desired glossiness is achieved.

SP1-984-XXX	Htg Roller Temp Setting	0 to 200 °C
IMSS setting #050	Fusing Temp	100 to 200 °C

Note

- Do not set the temperature higher than 180°C.
- Adjustments might result in the following side effects:
  - Paper curls and jams
  - Gloss streaks
  - Blisters on coated paper

- Reduced gloss

2. Make 50 copies in A4/LT SEF and check the results.
3. If the results are unsatisfactory, set the process speed to “Low” in the SP mode or IMSS.

SP1-986-XXX	“**3**” (default: 0 to 3)
IMSS setting #102: Process Speed Setting	Paper thickness 1 to 5: “**1**” (default: 0) → 55.8ppm Paper thickness 6: “**3**” (default: 1) → 35.7ppm

4. For the process speed adjustment to take effect, turn the machine power OFF and then ON.

Adjustments Required for Improved Glossiness (IM C6500/C8000)

1. In [Tray Paper Settings] – [Paper Type], select **[Coated Paper (Glossy)]**.

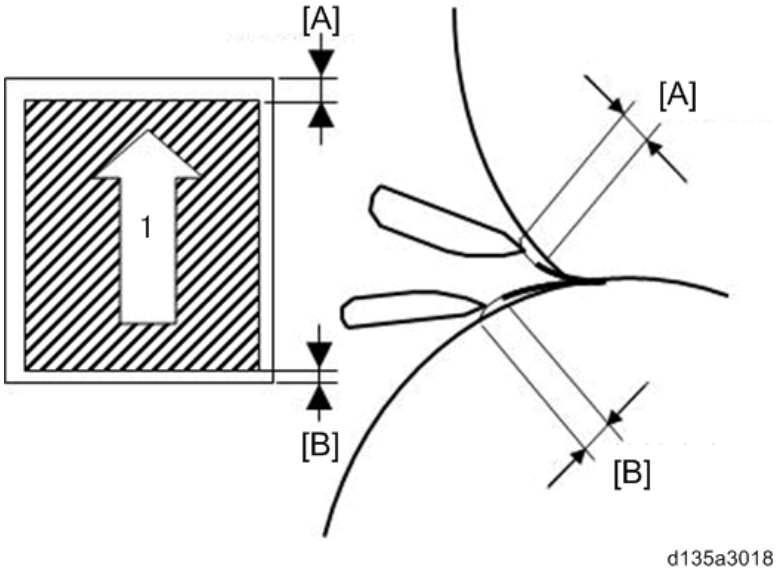
Note

- This will increase the temperature of fusing roller but will also slow down the processing speed.

Adjustment 008: Margin Adjustment

Overview

The procedure for adjusting the leading edge margin [A] and trailing edge margin [B] is described below.



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1: Paper feed direction

Note

- Narrowing the margin too much may cause the side edge of the paper to be dirty.
- Narrowing the margin too much might cause paper jams in the fusing unit stripper pawls and damage the fusing unit.

Margin adjustment

1. Adjust the margins using the following SPs.

Leading edge margin adjustment

Pro/Office	Number	SP Name	Value
SP	SP2-122-145 to 254	Erase Margin Adj Leading Edge (for each paper type/thickness)	-3 to 6mm

For IMSS

Pro	Number	IMSS setting	Value
IMSS	009	Erase Margin: Leading Edge (for each custom paper)	-3 to 6mm
IMSS	SP2-122-145 to 252	Erase Margin Adj Leading Edge (for each paper type/thickness)	-3 to 6mm

Trailing edge margin adjustment

Pro/Office	Number	SP Name	Value
SP	SP2-123-145 to 254	Erase Margin Adj Trailing Edge (for each paper type/thickness)	-3 to 6mm

For IMSS

Pro	Number	IMSS setting	Value
IMSS	010	Erase Margin: Trailing Edge (for each custom paper)	-3 to 6mm
IMSS	SP2-123-145 to 252	Erase Margin Adj Trailing Edge (for each paper type/thickness)	-3 to 6mm

Important

- Adjust this SP in increments of ±0.5mm. Higher values will increase the margin, while lower values will decrease the margin.

2. Make some test prints (simplex and duplex) and make sure that fusing jams and side edge smudges do not occur.

Adjustment 009: Adjustment of the Image Position of the Either Side of the Paper

To align the image position on the front with that on the back, perform [Registration to Align Front and Back Images].

Adjusted values are saved as custom paper settings.

Requirements for Aligning Front and Back Image Positions

- Custom paper with a paper type and thickness that supports duplex printing is allocated to the paper tray.
- The paper size is within the following range:
  - Vertical length: 182.0-330.2 mm (7.17–13.00 inches)
  - Horizontal length: 182.0-487.7 mm (7.17–19.20 inches)

1. Press [Home] at the bottom center of the screen.
2. Press [Tray Paper Settings] on the Home screen.
3. Press [Registration to Align Front and Back Images].

4. Press [Print Background Sheet].

5. Select the paper tray with the A3 or 11×17 paper tray setting.

6. Press [Print], and then print a background chart [A].

- The background chart is duplex, black, and solid.
- The background chart, once printed, can be used many times unless it deteriorates drastically.
- Select only A3 or DLT sheets for printing because the background chart is used as a standard for scanning.

  Use the sheet with a certain amount of thickness because it is used for many times.

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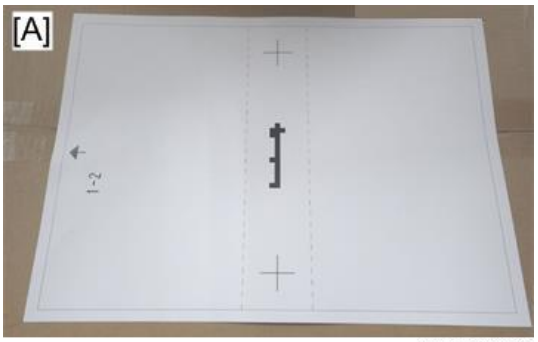
7. Select the paper tray with the custom paper to align the front and back.

8. Press [Quick Auto Adjustment] or [Auto Adjustment], and then print the adjustment sheet [A].

- Quick Auto Adjustment: 3 sheets (1 blank sheet, 1 adjustment sheet with images printed on both sides and 1 blank sheet) are printed.
- Auto Adjustment: 9 sheets (3 blank sheets, 3 adjustment sheets with images printed on both sides and 3 blank sheets) are printed.



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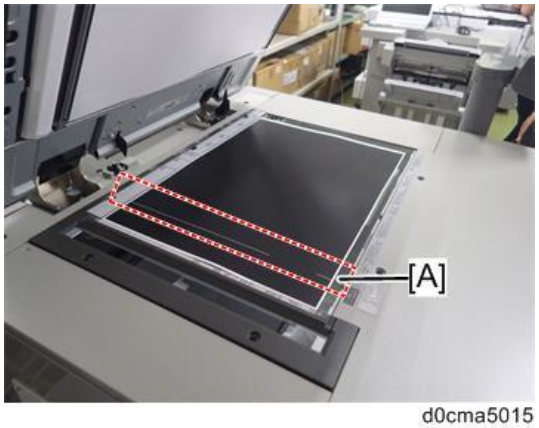
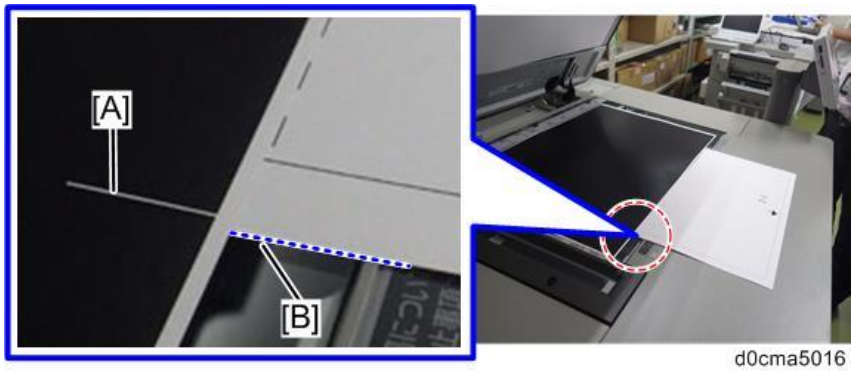
9. Set the background chart to the scanner with its side where a line is drawn [A] facing upward. (The

side without lines contacts the contact glass.)



10. Put the adjustment chart between the background chart and the contact glass, aligning the white line [A] of the background chart with the edge [B] of the adjustment chart.



11. Press [Start Scanning].

12. Following the instruction of an operation panel, turn over the adjustment chart, put it between the background chart and the contact glass again, and then press [Start Scanning].
Scanning should be done four times in total for every direction.

13. The adjustment results are displayed on the operation panel.

- Main scan registration
- Sub scan registration
- Main scan magnification
- Sub scan magnification

14. Press [Apply] to store the value of the adjustment results in step 13 in IMSS.

15. Press [Test Print] to check if the images on the front and back are aligned on the printed sheet.
In this action, 9 sheets are printed.

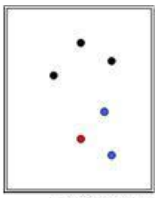
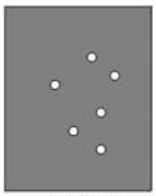
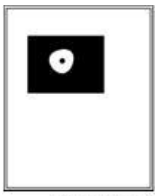
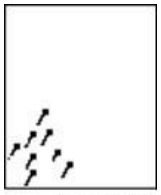
Image Quality

Definitions of Abnormal Images

Main classification: Points

Sub-classification 1: Spots

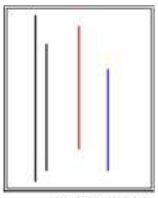
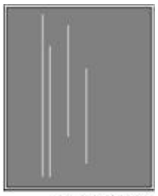
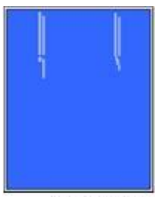
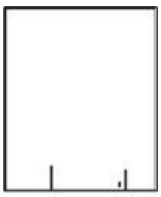
Definition: White spots seen in solid image areas or black/colored spots seen where there should be nothing printed. The description "white spots" excludes those with toner cores.

Sub-classification 2	Example	Definition
Black or colored spots	 d1352869	Stains are visible as crisp black or colored spots.
White spots	 d1352870	White spots are visible inside solid images or halftone image areas because of missing toner.
Spots with toner	d1352871	Toner aggregated inside the machine has been transferred to paper.
White spots with toner cores	 d1352872	White spots with pieces of aggregated toner in the center visible in solid color areas. Pieces of aggregated toner may be irremovable.
Fish-shape stains	 d1352873	Stains in the shape of small fish which appear to be swimming in the paper feed direction.

Main classification: Lines

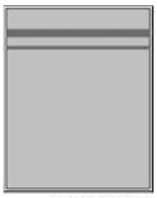
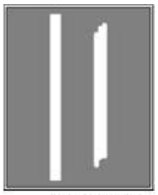
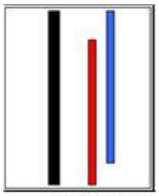
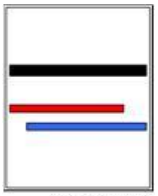
Sub-classification 1: Streaks

Definition: A smudge or a white area inside an image, in a linear shape with 1mm or smaller width.

Sub-classification 2	Example	Definition
Vertical black or colored streaks	 d1352874	Black or colored streaks in the paper feed direction.
Vertical white streaks	 d1352875	Parts of the image missing in the shape of streaks in the paper feed direction.
Horizontal black or colored streaks	d1352876	Black or colored streaks perpendicular to the paper feed direction.
Horizontal white streaks	d1352877	Parts of the image missing in the shape of streaks perpendicular to the paper feed direction.
Horizontal glossy streaks	 d1352878	Glossy streaks in the paper feed direction.
Horizontal white streaks	d1352879	Glossy streaks perpendicular to the paper feed direction.
Image scratches	 d1352880	Stains in the shape of vertical streaks which seem to be caused by scratches from the guide plate ribs or other parts.

Sub-classification 1: Bands

Definition: A smudge or a white area inside an image, in a linear shape with 1mm or larger width.

Sub-classification 2	Example	Definition
Jitter	 d1352881	Blurred area visible as bands perpendicular to the paper feed direction.
Banding	d1352882	Banding at regular intervals perpendicular to the paper feed direction. (Gear eyes: Color unevenness in the same interval as the distance between the teeth of the gear.)
Vertical white bands	 d1352883	White bands in the paper feed direction.
Horizontal white bands	d1352884	White bands perpendicular to the paper feed direction.
Vertical black or colored bands	 d1352885	Black or colored bands in the paper feed direction.
Horizontal black or colored bands	 d1352886	Black or colored bands perpendicular to the paper feed direction.
Fuzzy lines	d1352887	Blurred images in the shape of slightly winding bands in the paper feed direction.

Sub-classification 2	Example	Definition
Roller tracks	d1352888	Stains on the transport rollers transferred to paper.

Main classification: Plane

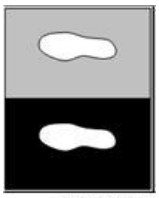
Sub-classification 1: Whole area

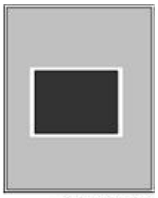
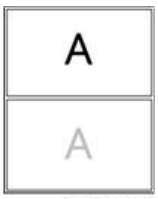
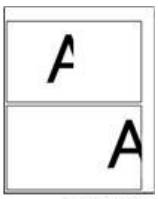
Definition: Images and text missing from the whole sheet.

Sub-classification 2	Example	Definition
All black	d1352889	Copied paper is all black.
Blank	d1352890	No image is reproduced.

Sub-classification 1: Non-reproduction

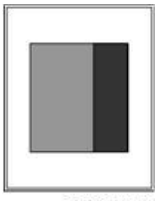
Definition: Parts of the developed images and text are not reproduced.

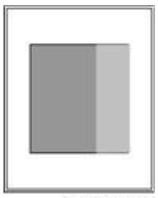
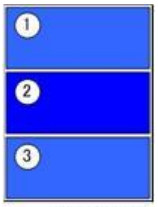
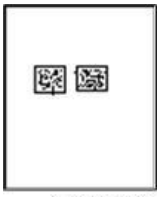
Sub-classification 2	Example	Definition
White zone	 d1352891	Part of a solid image or halftone is missing.
Wormholes	d1352892	The outline of a letter (or a line) is reproduced but the inside of it is missing.

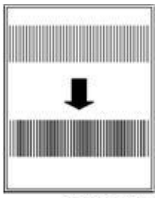
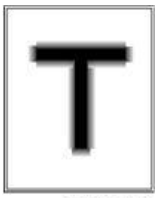
Sub-classification 2	Example	Definition
Halo	 d1352893	There is a white line around a solid object.
Negative residual image	d1352894	The previously copied image is reproduced with its black and white reversed on the same page or the next page.
Positive residual image	 d1352895	The previously copied image is reproduced on the same page or the next page.
Offset	d1352896	The same image is repeatedly transferred at the same interval.
Missing image	 d1352897	The developed image has slid in the subscan direction or is missing.

Sub-classification 1: Unevenness

Definition: The density of the developed image is uneven.

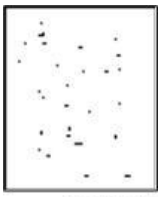
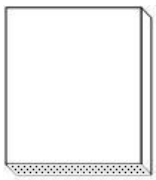
Sub-classification 2	Example	Definition
High density	 d1352898	Image density higher than the setting.

Sub-classification 2	Example	Definition
Low density	 d1352899	Image density lower than the setting.
Uneven density	d1352900	Image density is uneven within the same page.
Unevenness in indefinite shape	d1352901	Image density unevenness in indefinite shapes.
Uneven glossiness	d1352902	The glossiness is uneven inside a dark solid image. Check it by looking at the paper from different angles.
Color changes	 d1352903	During repeated printing, the color or the density changes from sheet to sheet.
Color difference	d1352904	The colors differ between the original and the copy.
Rough image	 d1352905	Color is uneven and small spots are visible inside a solid image.

Sub-classification 2	Example	Definition
Earthworm shape	d1352906	White area in a shape similar to an earthworm.
Moire	 d1352907	When regular patterns are superimposed, a striped interference pattern can appear. Halftones may become mosaics.
Blur	 d1352908	Image seemingly blurred in all directions.

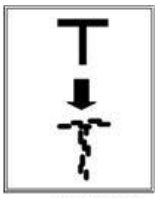
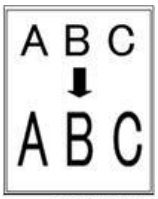
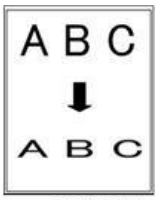
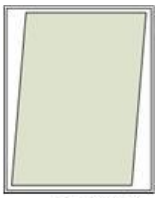
Sub-classification 1: Stains

Definition: Areas outside letters or images are stained.

Sub-classification 2	Example	Definition
Background stains	d1352909	Granular stains are visible in unprinted areas of the paper.
Stains on the back side	 d1352910	Granular stains are visible on the back side of the paper.
Toner scattered	d1352911	Toner scattered around a letter.
Edge stains	 d1352912	The side edges of paper are stained.

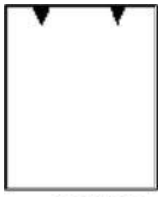
Sub-classification 1: Irregularity

Definition: Images or text becoming irregular in comparison with the original.

Sub-classification 2	Example	Definition
Irregularity	 d1352913	Image becoming irregular in comparison with the original.
Image expansion	 d1352914	Image expanded abnormally in comparison with the original.
Image contraction	 d1352915	Image contracted abnormally in comparison with the original.
Skew	 d1352916	The corners of an image copied from a rectangular original are not square.

Sub-classification 1: Scratches

Definition: Stains in the shape of vertical streaks which seem to be caused by scratches from the guide plate ribs or other parts.

Sub-classification 2	Example	Definition
Claw marks	 d1352917	Stains of toner that got on the paper when it came into contact with drum pick-off pawls or fusing unit stripper pawls.

Sub-classification 1: Image shift

Definition: Stains in the shape of vertical streaks which seem to be caused by scratches from the guide plate ribs or other parts.

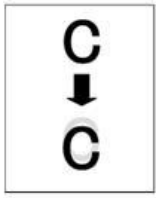
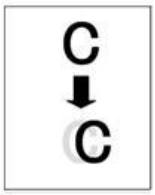
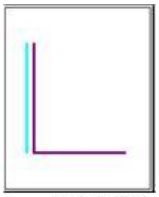
Sub-classification 2	Example	Definition
Vertical image shift	 d1352918	Images and lines shifted in the paper feed direction.
Horizontal image shift	 d1352919	Images and lines shifted in the direction perpendicular to the paper feed direction.
Vertical color registration error	d1352920	Color out of position in the paper feed direction where colors should be overlaid.
Horizontal color registration error	 d1352921	Color out of position perpendicular to the paper feed direction where colors should be overlaid.

Image Quality 001: Spots

Overview

This section covers white spots seen in solid colored areas or colored spots seen in areas without images. The description "white spots" excludes those with toner cores.

Item	Description
Colored spots (189mm or 40mm intervals)	Colored spots may appear at 189mm or 40 mm intervals in solid areas.
White spots in low-temperature, low-humidity environments	White spots may appear in low-temperature, low-humidity (10 °C/15 %) environments.
White spots	White spots or black spots may appear when printing halftone images in low-temperature, low-humidity environments immediately after replacing the developer.
White spots with toner cores	White spots with toner cores may appear inside solid images.
White, fish-shape stains	White points or short lines may appear in the feed direction at 189 mm intervals.

Item	Description
Random white spots on solid images, caused by paper dust	White spots may appear randomly on solid images.

Troubleshooting for colored spots (40mm or 189mm intervals)

Symptom

Colored spots appear at 40mm or 189mm intervals in solid image areas (black or white) or throughout the entire image on the single-color Independent Pattern (1-dot), when printing onto A3 or SRA3 sheets.

Cause

- Scratches or foreign particles on the OPC drum surface
- Scratches or foreign particles on the charge rollers

Solution

Do the following:

1. Load A3 or SRA3 paper in the tray.
2. In SP2-109-003, set the test pattern to solid white, solid black, and single color Independent Pattern 1-dot.
3. Print out the pattern and check the interval of the spots.

   If the symptom occurs at 189mm intervals:

   - If there are any scratches on the OPC drum, replace the OPC drum.
   - If there are no scratches, wipe the OPC drum surface with a damp cloth and then with a dry cloth.

   If the symptom occurs at 40mm intervals:

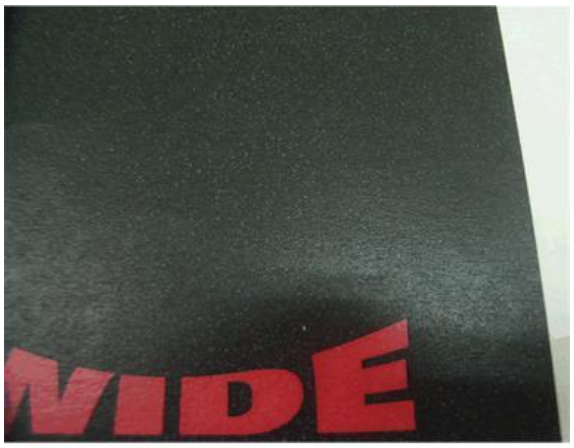
   - If there are scratches on the charge rollers, replace the affected roller(s).
   - If there are no scratches, wipe the surface of the roller with a damp cloth and then with a dry cloth.

Troubleshooting for White Spots in Low-Temperature, Low-Humidity Environments

Symptom

1. When using paper weighing 100.9 g/m2 (IM C6500/C8000: Plain Paper 2, Pro C5300S/C5310S: Paper Weight 3) or less: White spots may appear on the second page of duplex printing when using paper with a rough surface and high electrical resistance in an LL environment.
2. When using paper with a paper weight of 101.0 g/m^2 (IM C6500/C8000: Middle Thick, Pro C5300S/C5310S: Paper Weight 4) or heavier: White spots may appear on paper with a rough

surface and high electrical resistance. (See the example image below)



d1352971

Cause

1. The electrical resistance increases when the paper goes through the fusing unit and the moisture of the paper evaporates.
2. Due to high electrical resistance characteristics of the paper.

Action

Lower the transfer current by changing the following SP

Only change it for the paper type and thickness that the user needs.

IM C6500/C8000, Pro C5300S/C5310S

SP No.	SP Name
SP2-641-001 to 099	PTR Bias:BW
SP2-642-001 to 099	PTR Bias:BW
SP2-651-001 to 099	PTR Bias:FC
SP2-652-001 to 099	PTR Bias:FC

Pro C5300S/C5310S only

No.	IMSS setting
020	Paper Transfer Current: BW: Side 1
026	Paper Transfer Current: FC: Side 1
021	Paper Transfer Current: BW: Side 2
027	Paper Transfer Current: FC: Side 2

Note

- If the transfer current is too low, the image may not be solid enough.

Troubleshooting for White spots

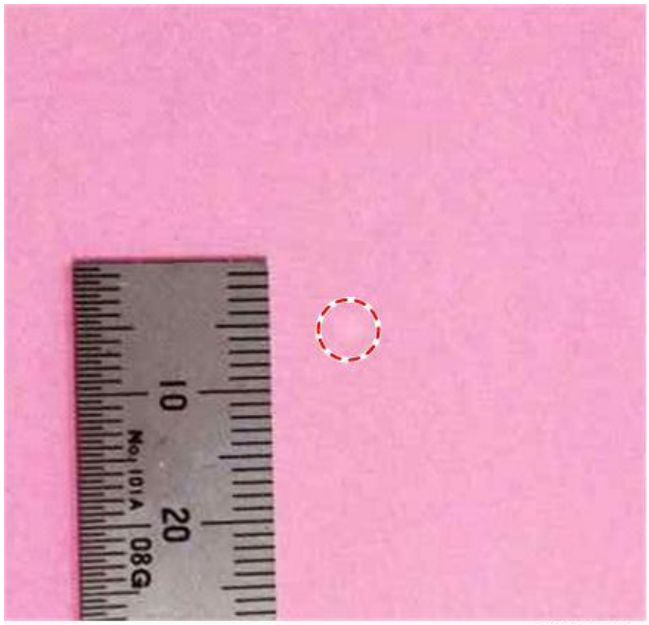
Symptom

White or black spots appear when printing halftone images in low-temperature, low-humidity

environments (10C/15%) immediately after the developer is replaced.

Note

- Black spots occur more frequently when printing onto coated paper.



d1352926

Cause

Some carrier particles inside newly-installed developer have a relatively high electrical potential. These particles may be transferred to the OPC in non-image areas as well, and then fall off before image transfer. As a result, a white spot is developed on the image.
If these carrier particles are transferred to the ITB, toner around the carrier drops off, forming a black spot.

Solution

Do the following.

- Execute “Adjust Image Density” (0201-01) inside the Skilled Operator Settings.

Note

- This is effective when the development gamma is low (about 0.8 or less) or the OPC electric potential is high, such as in low-temperature, low-humidity environments.

- Execute “Density Adjustment Process Control” by tapping the following buttons: [Settings] -> [Maintenance] – [Auto Color Calibration].

Note

- This is effective when the development gamma is low (about 0.8 or less) or the OPC electric potential is high, such as in low-temperature, low-humidity environments.
- After you do this, color calibration is optional.

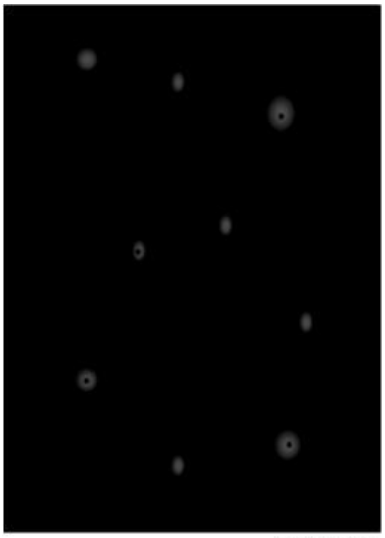
CE:

Execute SP3-011-002 ([Manual ProCon :Exe] - Density Adjustment).

Troubleshooting for White spots with toner cores

Symptom

White spots with “toner cores” appear inside solid images/patches when printing under high-temperature conditions.



Cause

- The machine is left unused for an extended time, and toner tends to clump inside the development unit. As a result, toner may not be transferred onto the paper correctly.
- The PCDU is subjected to strong vibration or shock. This may cause toner on the wall of the unit to fall inside the developer and form clumps.
- The toner is left outside the moisture bag too long. This may cause toner to form clumps.

Solution

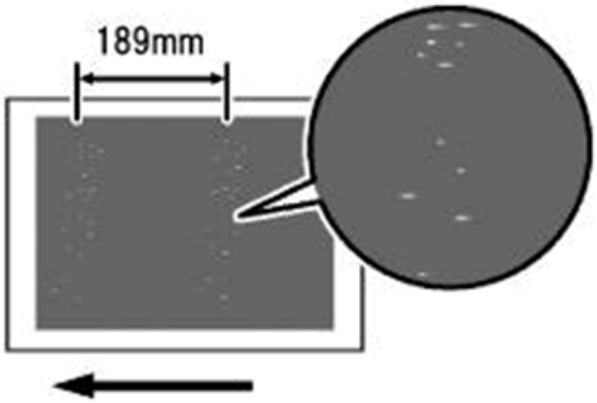
Do the following to clear the toner clumps out of the development unit:

1. Make a test print and determine the affected color(s).
2. Print out 30-200 A3 sheets with solid images of the affected color(s).
3. If the symptom still occurs, replace the toner cartridge of the affected color.
4. Repeat Step 2.
5. If the symptom still occurs, replace the development unit/developer of the affected color.

Troubleshooting for White, fish-shaped stains

Symptom

Rows of small, white specks appear in solid image areas along the paper feed direction at 189mm intervals when printing onto A3/SRA3 paper.



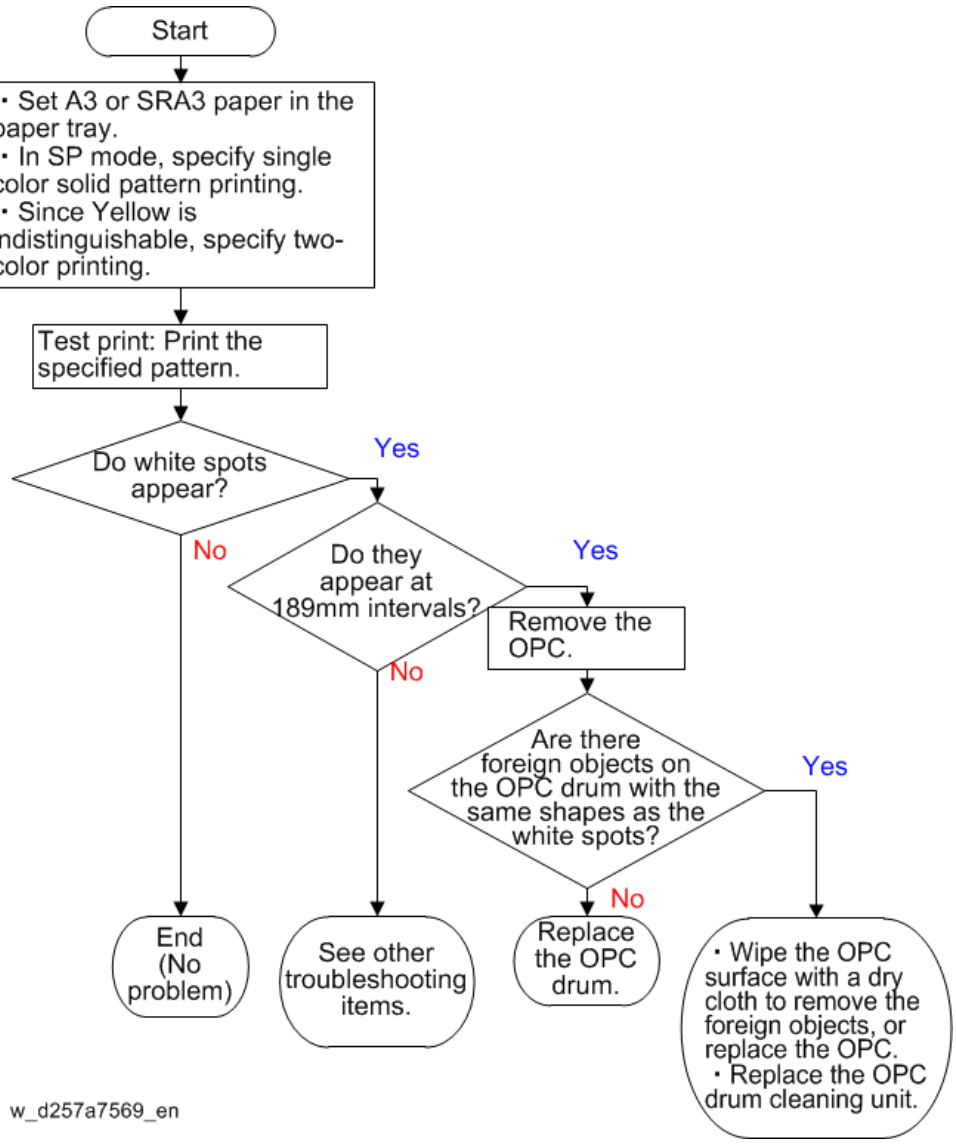
d135a3014

Cause

Small foreign objects or particles on the surface of the OPC drum

Solution

Follow the flowchart below.



w_d257a7569_en

Troubleshooting for random white spots on solid images caused by paper dust

Symptom

White spots appear randomly on solid images.

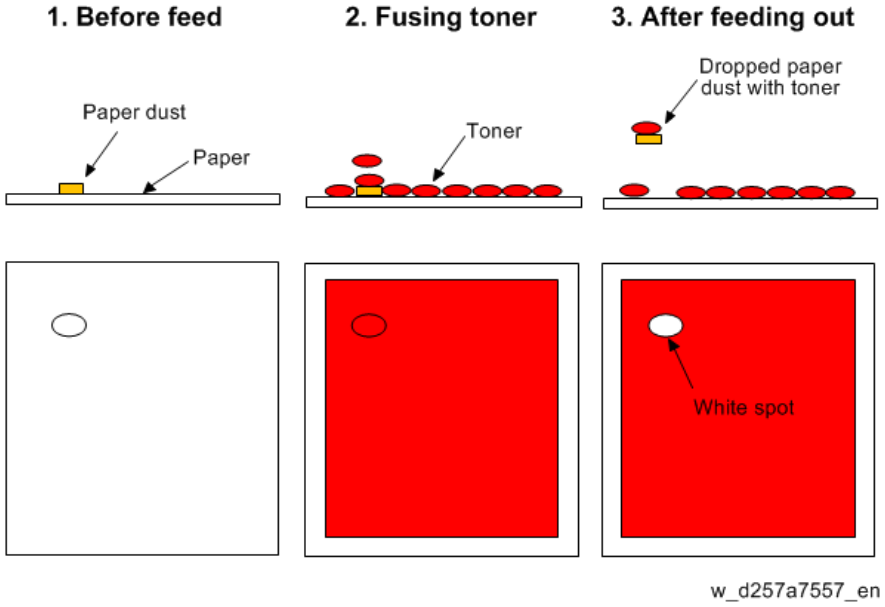
Condition

Paper containing a lot of paper dust

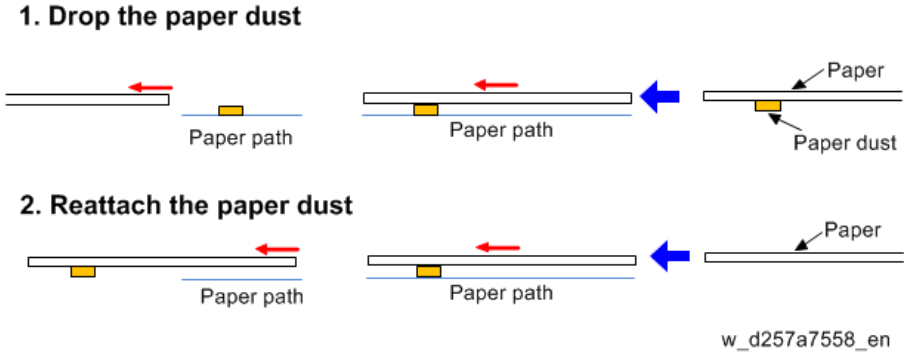
Cause

There are two possible causes of this symptom:

1. Toner adheres to the paper dust instead of the paper. After the printing process, the dust comes off with the toner and leaves an unprinted white spot.

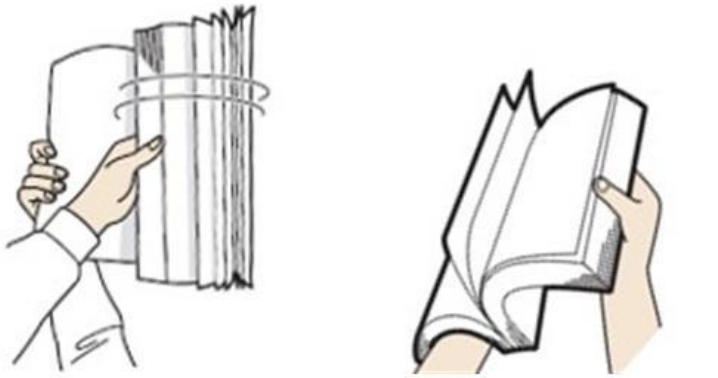


2. Paper dust falls on the paper path, causing succeeding sheets to catch the paper dust. Then, similarly to Cause 1, toner adheres to the dust instead of the paper.



Solution

1. Solution for paper containing a lot of paper dust:
   Fan the paper to remove paper dust before setting the paper in the tray.



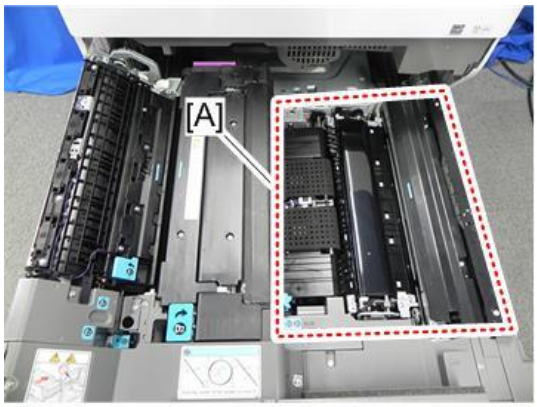
d257a7559

Note

- If the paper dust is clearly visible when fanning the paper, avoid using the paper.

2. Solution if there is paper dust on the paper path

   Wipe the paper path leading from the registration unit to the fusing unit [A] with a damp cloth.



d257a7560

Image Quality 002: Streaks

Overview

A smudge or a white area inside an image, in a linear shape with 1mm or smaller width.

Item	Description
Vertical streaks caused by contact with the toner adhering to the guide plate	Vertical streaks may appear.
Horizontal white streaks in small solid black areas	Horizontal white streaks may appear in small solid black areas when printing in an HH environment (27° C 80%).
Scratch marks on solid images in the paper feed direction	Scratch marks may appear randomly on solid images in the paper feed direction.
White line along the paper feed direction	One or more white lines may appear along the paper feed direction.

Troubleshooting for vertical streaks caused by contact with the toner adhering to the guide plate

Symptom

Vertical streaks appear.

Condition

Scratches tend to stand out when printing on relatively stiff thick coated paper.

Cause

After fusing, paper comes into contact with small convex scratches or adhering toner on the guide plate and vertical streaks appear.

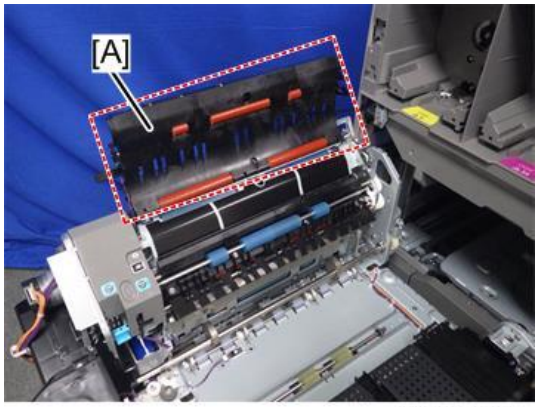
Action (overview)

1. Clean the paper transport path/duplex unit.
2. If cleaning does not improve the situation, lower the fusing temperature.

Action (detail 1): Clean the paper exit transport path/duplex unit.

- If streaks appear on straight-fed one-sided prints or the second side of two sided prints: (1) Clean the upper part of the Paper Exit transport path.
- If streaks appear on the first side of two-sided prints: (2) Clean the lower part of the Paper Exit transport path.
- If streaks appear on inverted one-sided prints: (3) Clean the lower left part of the Paper Exit transport path.
- If streaks appear on the second side of two-sided prints: (4) Clean the duplex unit.

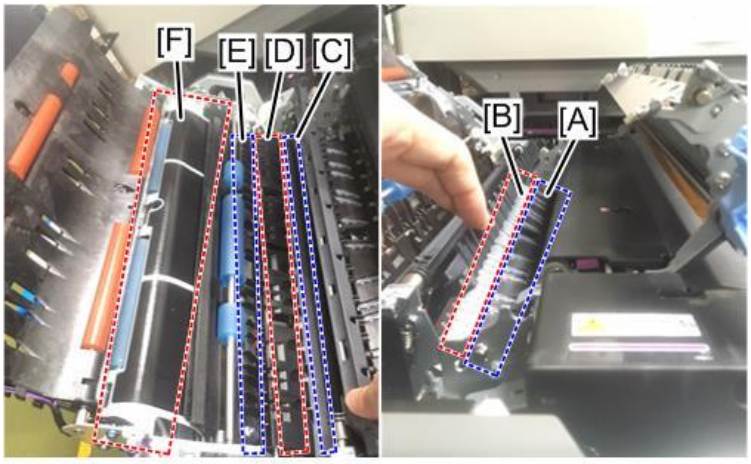
1. Upper part of the paper exit transport path



d0cma5005

[A]: Paper Exit Upper Guide Plate

2. Lower part of the paper exit transport path



d0cma5012

[A]: Fusing Guide Plate

[B]: Paper Exit Entrance Guide Plate

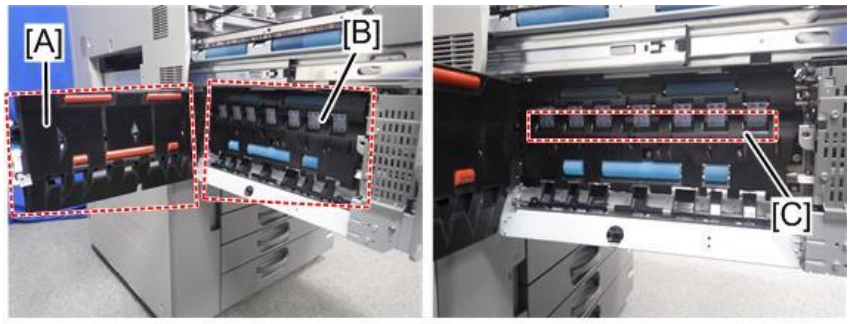
[C]: Paper Exit Entrance Lower Duct

[D]: Paper Exit Junction Gate

[E]: Transport Ribs (23 positions)

[F]: Paper Exit Guide Plate

3. Lower left part of the paper exit transport path



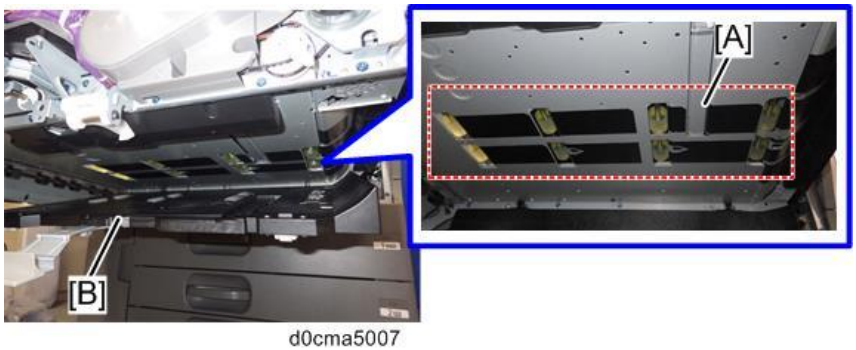
d0cma5006

[A]: Paper Exit Lower Left Guide Plate (Clean this area thoroughly.)

[B]: Paper Exit Lower Right Guide Plate

[C]: Junction Gate Ends

4. Duplex unit



d0cma5007

[A]: Duplex Transport guide plate (Upper) (Clean the turning point on the right thoroughly.)

[B]: Duplex Transport guide plate (Lower)

Action (detail 2): Lower the fusing temperature.

Enter SP mode and lower the fusing temperature with SP1-984. (Guideline: Lower it 10° C at a time.)

Note

- There is a risk of decreasing fusing ability. Be sure to check the printed results.

Pro/Office	SP No.	SP Name	Value
Pro/Office	SP1-984-109 to 254	Htg Roller Temp Setting	0 to 200

Pro/Office	No.	IMSS setting	Value
Pro	050	Fusing Temp	100 to 200

Reference

The following features are unique to this machine that contribute to the vertical streaks.

- There is a high change of foreign substances scratching the prints because the toner used for this series has a low melting point.
- Paper contacts the guide plate after fusing because of the tight curve in the switchback exit path.

	MPC7501/6501	Pro C5300S/C5310S	ProC751EX/651EX
Curvature	Average R35	Average R50	Average R70
Supported paper (gsm)	Straight: up to 300gsm Switchback: up to 163gsm Duplex: up to 163gsm	Straight: up to 300gsm Switchback: up to 256gsm Duplex: up to 256gsm	Straight: up to 300gsm Switchback: up to 256gsm Duplex: up to 256gsm
Toner	CER	SPR-F2 (Low melting point)	CER-gamma

Comparison with MPC7501/6501

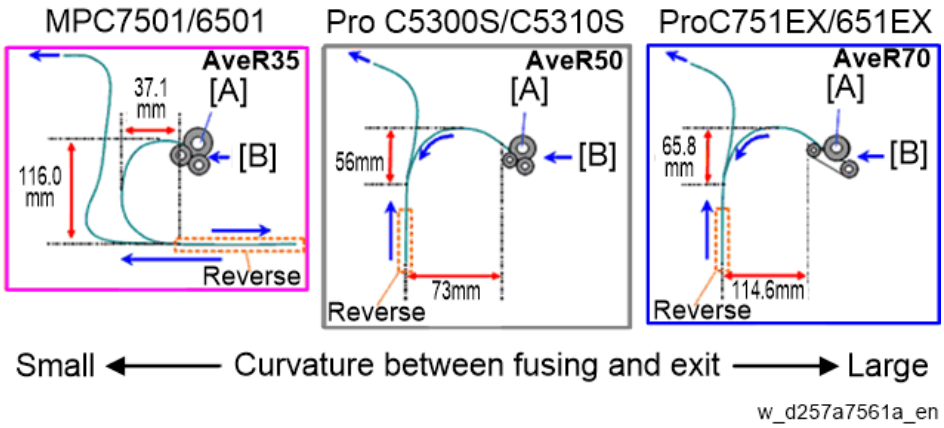
Advantage: Curvature

Disadvantage: Support for thicker paper, Toner

Comparison with ProC751EX/651EX

Disadvantage: Support for thicker paper, Toner

Layout of the fusing exit paper path



[A]: Cooling roller

[B]: Fusing

Troubleshooting for scratch marks

Symptom

Scratch marks appear randomly on solid images in the paper feed direction.

Condition

The problem is likely to occur under the following conditions:

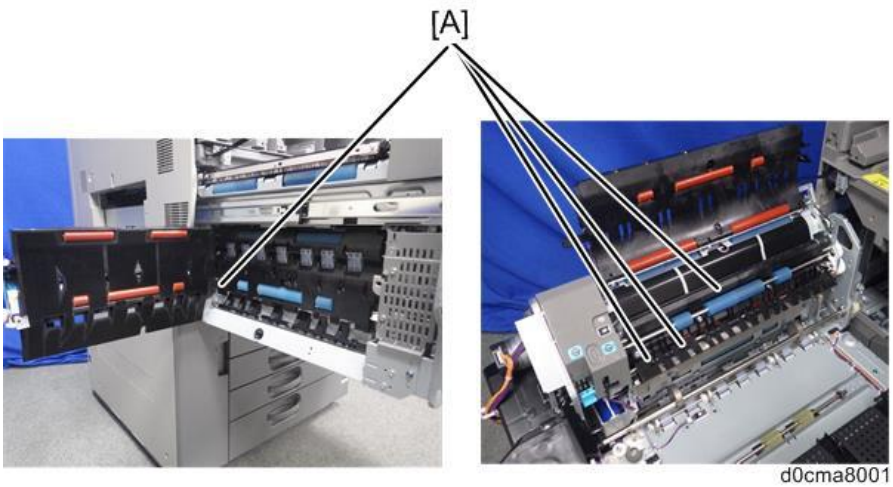
- Coated paper
- Paper containing a lot of paper dust
- More noticeable on solid images

Cause

1. Toner accumulates on the ribs on the transport guide plate adjacent to the cooling pipe.
2. Scratches, paper dust, contamination on the transport guide plate

Note

- Although the transport guide plates have PEFE sheets attached [A] to prevent foreign materials from adhering, the problem cannot be completely avoided.



Problem Mechanism

1. Due to the low melting point of the toner used for this series of machines, toner is easy to be scratched by extraneous materials
2. Tight curve of the switchback exit path causes the paper to contact the guide plate.

	MPC7501/6501	Pro C5300S/C5310S	ProC751EX/651EX
Curvature	Average R35	Average R50	Average R70
Supported paper (gsm)	Straight: up to 300gsm Switchback: up to 163gsm Duplex: up to 163gsm	Straight: up to 300gsm Switchback: up to 256gsm Duplex: up to 256gsm	Straight: up to 300gsm Switchback: up to 256gsm Duplex: up to 256gsm
Toner	CER	SPR-F2 (Low melting point)	CER-gamma

Comparison with MPC7501/6501

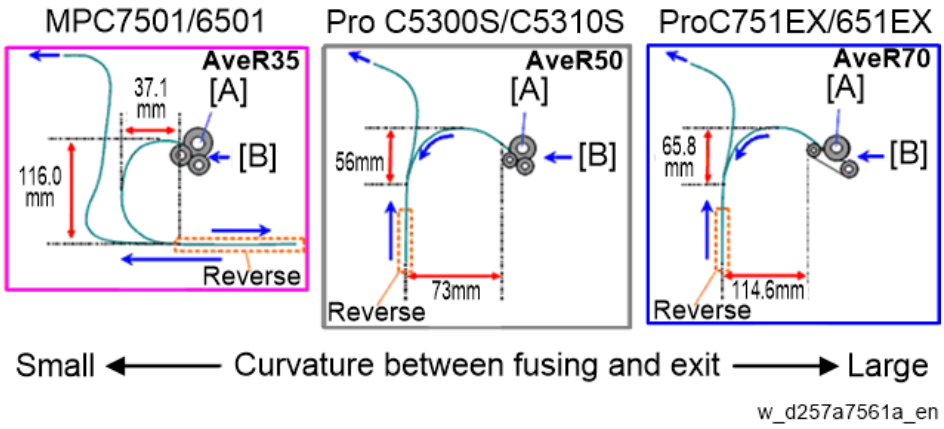
Advantage: Curvature

Disadvantage: Support for thicker paper, Toner

Comparison with ProC751EX/651EX

Disadvantage: Support for thicker paper, Toner

- Transport layout competition among 3 machines -



[A]: Cooling roller

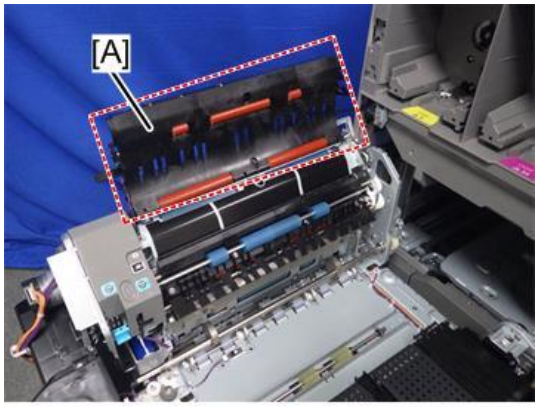
[B]: Fusing

Action (for random scratch marks originating in the guide plates)

The area that needs to be cleaned when scratches appear depends on the how the copies are delivered: face up/down or simplex/duplex.

- If scratches appear on straight-fed simplex, or the second side of duplex prints, clean the upper

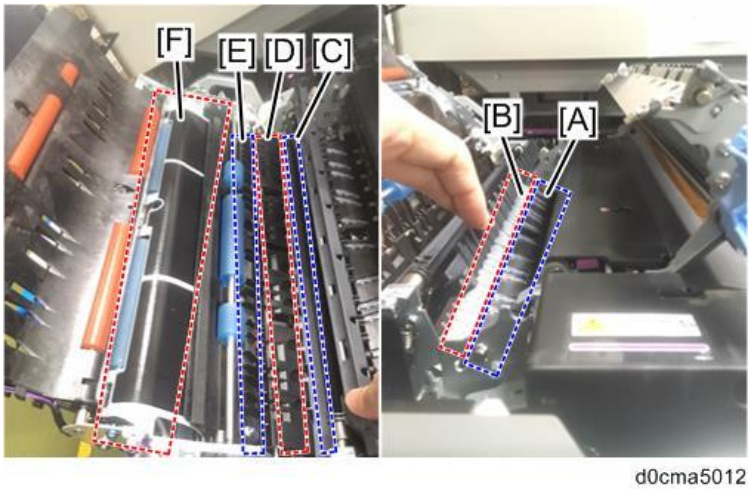
part of the paper exit transport path as shown below.



d0cma5005

[A]: Paper Exit Upper Guide Plate

- If scratches appear on the first side of duplex prints, clean the lower part of the paper exit transport path as shown below.



d0cma5012

[A]: Fusing Guide Plate

[B]: Paper Exit Entrance Guide Plate

[C]: Paper Exit Entrance Lower Duct

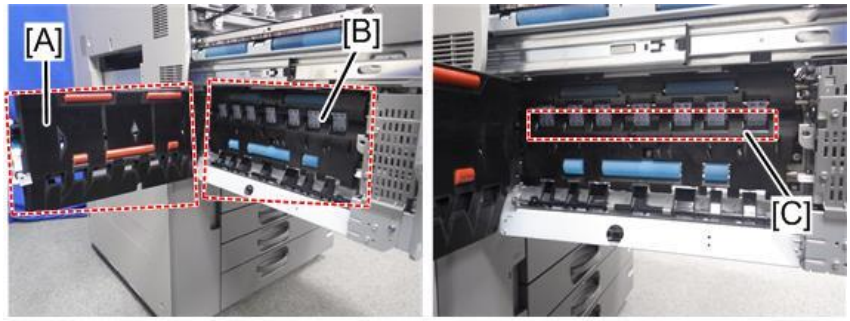
[D]: Paper Exit Junction Gate

[E]: Transport Ribs (23 positions)

[F]: Paper Exit Guide Plate

- If scratches appear on simplex prints made with face-up delivery, clean the lower left part of the

paper exit transport path as shown below.



d0cma5006

[A]: Paper Exit Lower Left Guide Plate (Clean this area thoroughly.)

[B]: Paper Exit Lower Right Guide Plate

[C]: Junction Gate Ends

- If scratches appear on the second side of duplex prints, clean the duplex unit as shown below.

d0cma5007

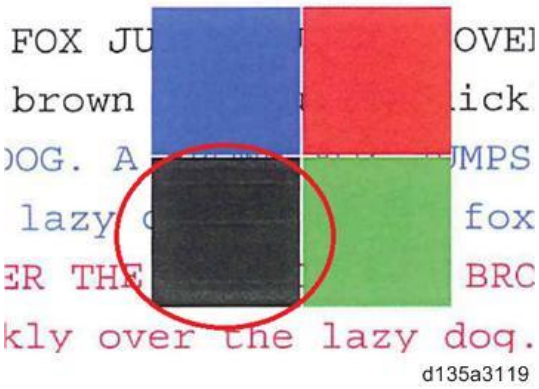
[A]: Duplex Transport Guide Plate (Upper): Clean the turning point on the right thoroughly.

[B]: Duplex Transport Guide Plate (Lower)

Troubleshooting for Horizontal White Streaks in Small Solid Black Areas

Symptom

Horizontal white streaks may appear in small solid black areas (smaller than 3cm x 3cm). (See the example below in the red circle)


d135a3119

Cause

The electrical charge of the Bk toner is lower than the other toners because the Bk station is the farthest downstream.
This prevents black toner from maintaining the optimum charge level, which may result in poor toner transfer.

Action

1. Print black in FC mode.

   PS driver and PCL driver

   - Select “Image Quality” tab.
   - Press “Details...” of “Advanced Settings”.
   - Select “Adjust Image Quality/Color” tab.
   - Select “CMY+K” or “Black by K (Black) – Text Only” for PS driver, and “CMY+K” for PCL driver as Gray Reproduction.

   Fiery driver

   - Select “Job Properties” of the affected image.
   - Select “Expert setting” from “Color” tab.
   - Select “Gray/Black Processing” Tab.
   - Specify “Normal” for Black text and graphics in order to print in CMYK mode.

2. Increase the image transfer current. (+5 to 10μA from the default)

   [#016: Image transfer current: FC: K].

   First increase the value by +5μA. Check the results and increase or decrease the value by 1μA as necessary.

   Do not increase by more than +10μA from the default.

   Note

   Risks:

   Image density may decrease in Bk solid images that have a high coverage ratio. (Density at the sides become low.)

   Ghosting of Bk halftone images

3. Adjust the paper transfer current. (-5μA to -15μA from the default)

   To ease the symptom, decrease the paper transfer current in [#026 & #027: Paper transfer current: FC: Side 1, 2].

   Decrease -5μA at a time as you check the results.

   Do not decrease by more than -15μA from the default.

   Note

   Risks:

   Low image density

   Toner scattering around solid images

4. Increase the maximum image density.
   To ease the symptom, increase the maximum image density of Bk in [#011: Maximum Image Density:K] by adjusting the notch to the [+].

   Note

   Side effect:

   Low toner yield

IM C6500/C8000, Pro C5300S/C5310S

SP No.	SP Name
SP2-451-001	ITB K:Standard:FC
SP2-451-002	ITB K:Standard:BW

Pro C5300S/C5310S only

No.	IMSS setting
015	Image Transfer Current: BW
016	Image Transfer Current: FC: K

Note

- Transfer capability and image density may become worse.
- Residual image may appear in black halftone areas.

Troubleshooting for White Line along the Paper Feed Direction

Symptom

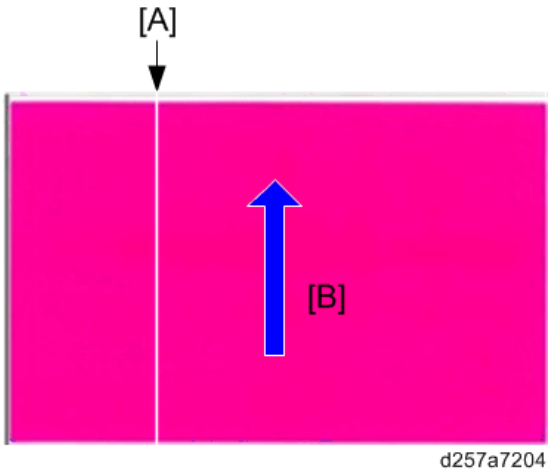
One or more white lines appear along the paper feed direction.

Cause 1

Dirty dust shield glass and/or clogged doctor gap.

	Dirty dust shield glass	**Clogged doctor gap**	**Toner adhesion on the doctor**
Symptom in detail	1 or more lines of 0.1 to 1 mm width appear along the feed direction across the entire page.		In the halftone image, bands of a few mm to tens of mm width, where image density is low, appear along the vertical direction.
Cause in detail	Toner, lubricant, etc. on the dust shield glass block the laser beam exposed on the drum.	Doctor gap is clogged with foreign substances/clumps of developer, disabling sufficient transport of developer to the development roller.	When the toner is attached on a part of the doctor of the development, the part prevents sufficient transport of developer to the development roller, resulting in white bands.

Solution	Clean the dust shield glass.	Clean the doctor blade / Replace the developer / Extend the fan operation time setting in the SP mode / Replace the development unit.	Clean the doctor (jig).



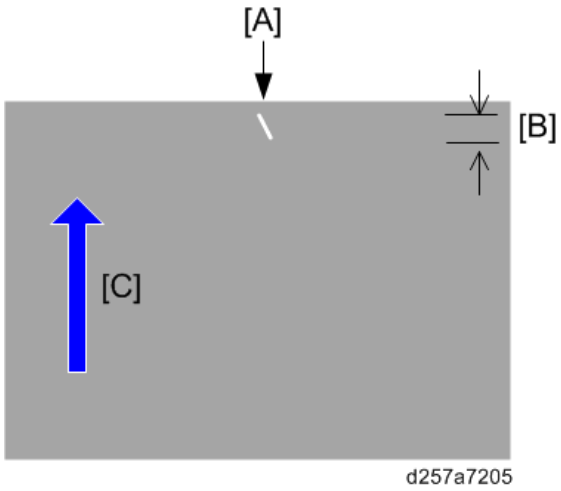
[A]: White line

[B]: Feed direction

Cause 2

Foreign substance in the development unit.

Symptom in detail	1 or 2 lines of 0.1 to 0.5 mm width appear at approximately 5 to 10 mm from the leading edge.
Cause in detail	Image developed on the drum is scraped off by a foreign substance stuck between the development roller and the drum.
Solution	Remove the foreign substance.



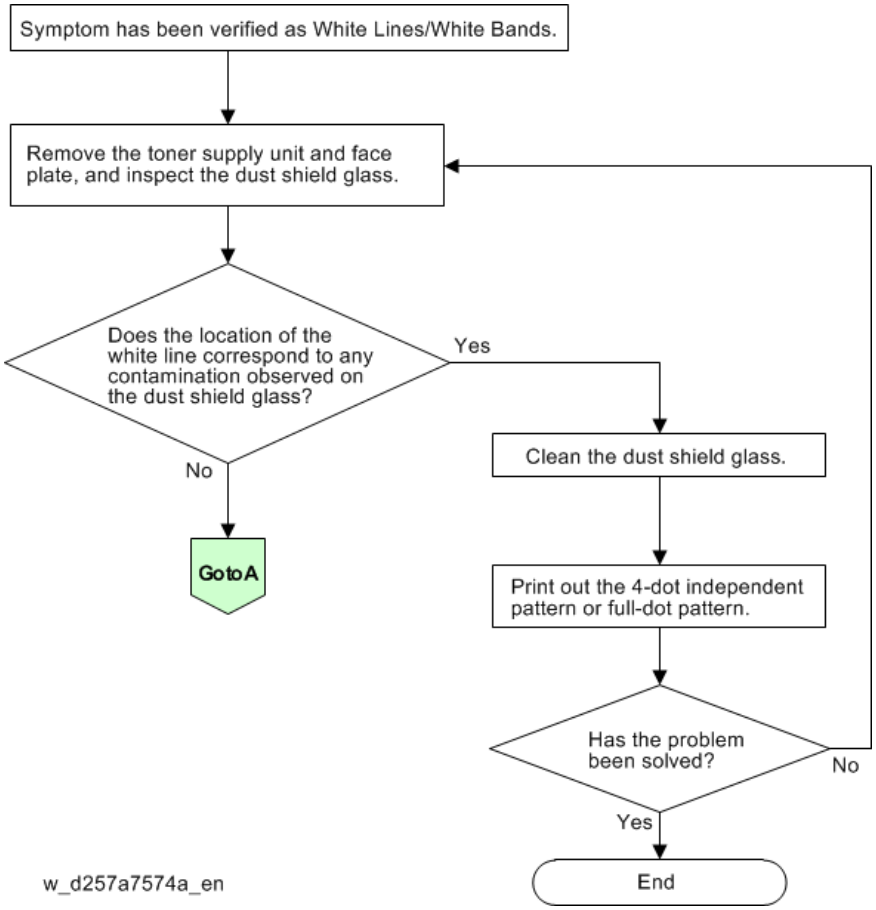
[A]: White line

[B]: Approximately 5 to 10 mm from leading edge

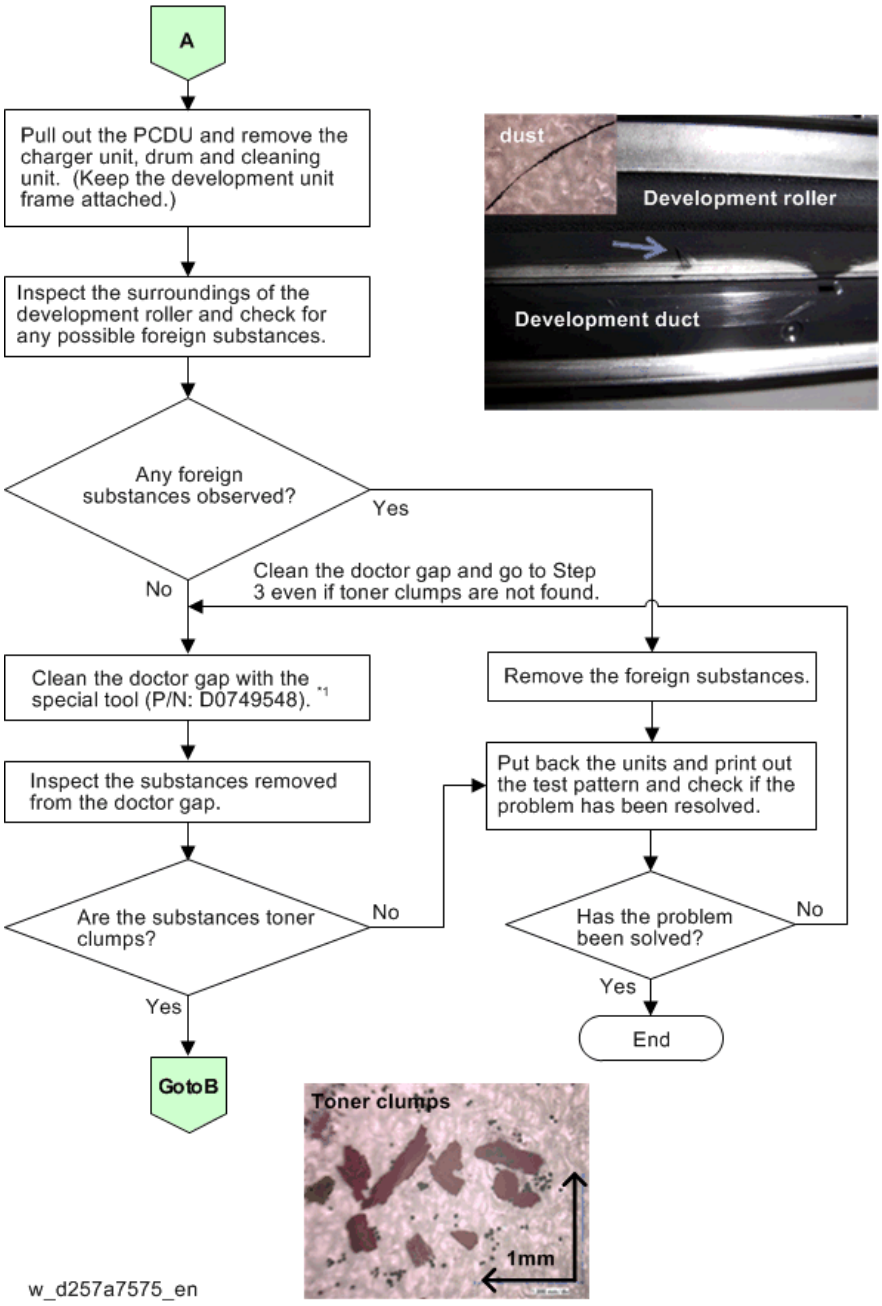
[B]: Feed direction

Flow Chart

Step 1

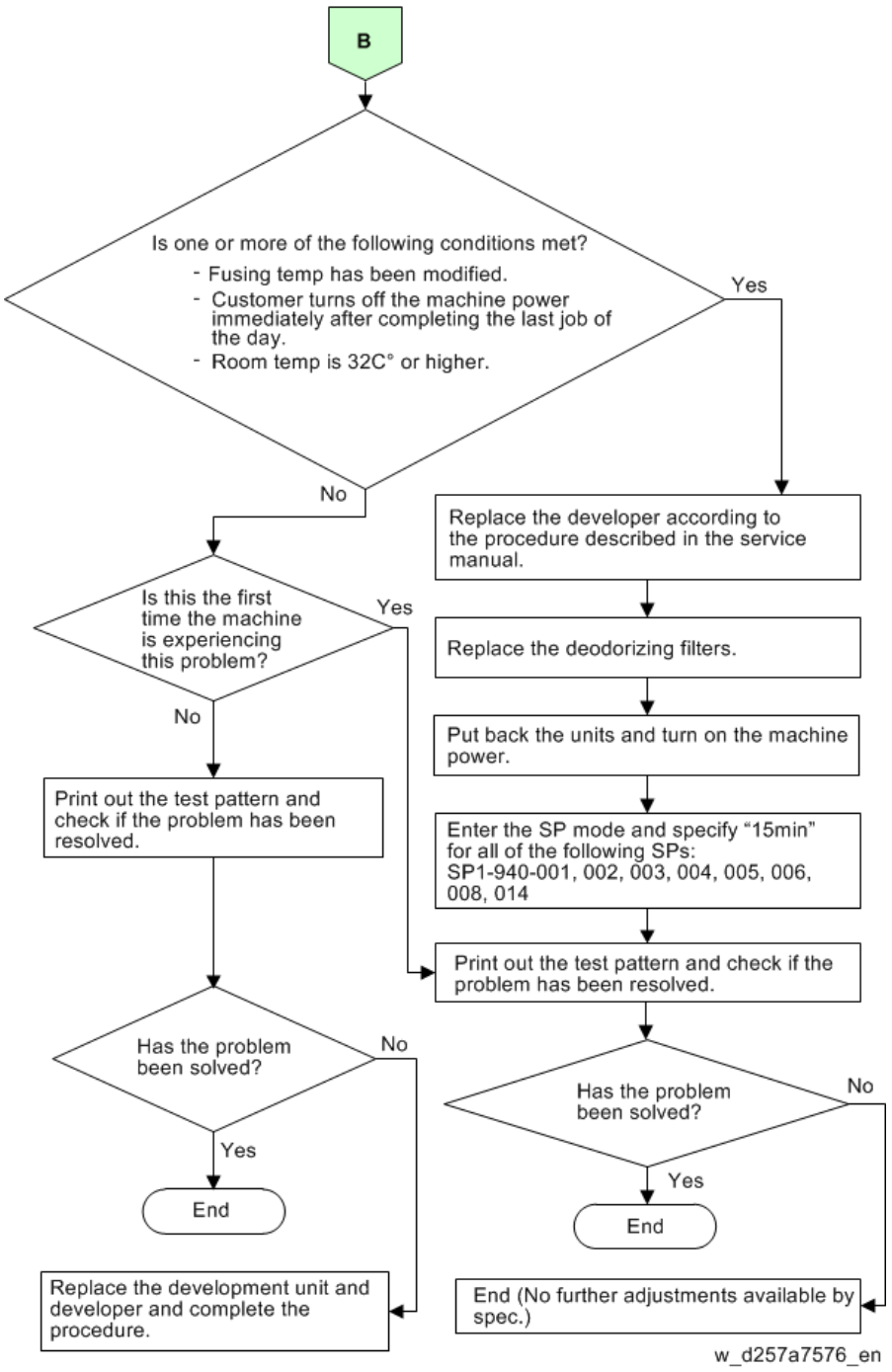


Step 2



1 See Doctor Gap for details about the cleaning procedure.

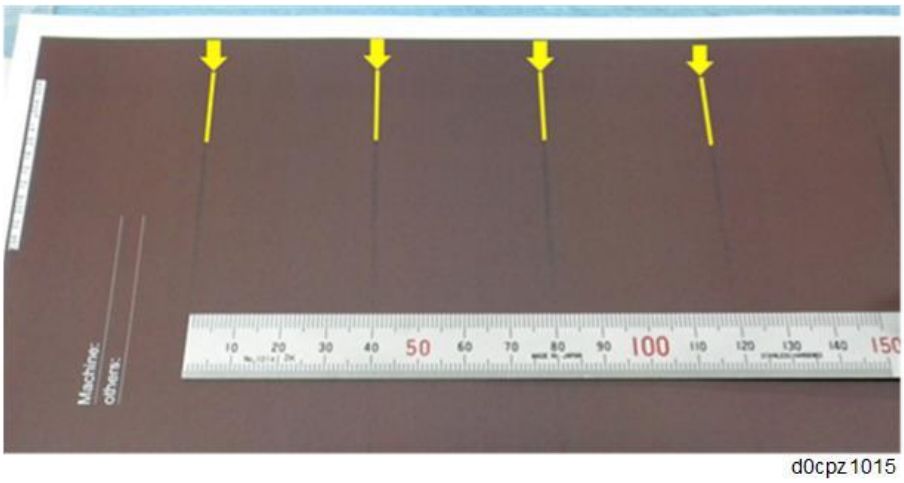
Step 3



Horizontal line on the charge roller pitch (40mm)

Symptom

Horizontal lines appear on the image at intervals equal to the charge roller (40mm) at machine installation.

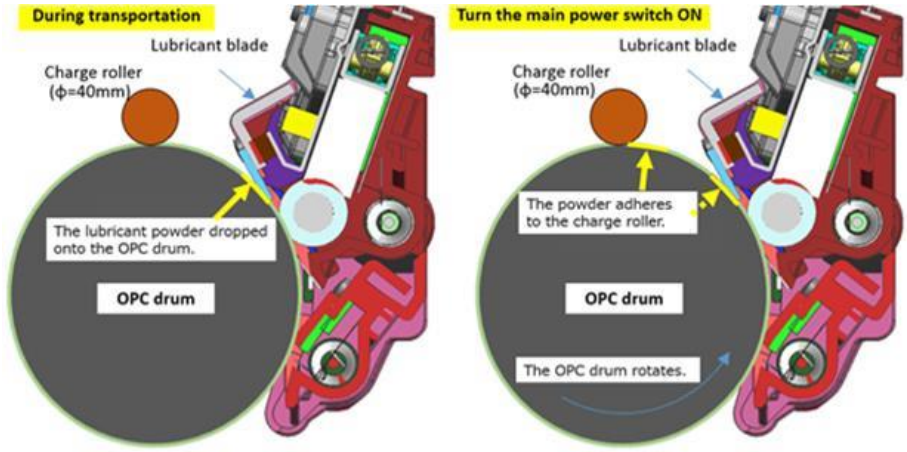


d0cpz1015

CAUSE

Factory operation error

Due to the error, lubricant powder is applied to the lubricant blade in a larger quantity than the defined amount. As a result, the powder drops onto the OPC drum during transport from the factory, and then moves to the charge roller when the machine power is turned on for the first time.



d0cpz1016

SOLUTION

If the symptom occurs,

- Execute **SP2-222-001** (Chg Roll Cleaning: Execute all) **twice.**
- If the symptom still occurs, execute this SP until the lines completely disappear.

Streaks in the Direction of Sub Scan only when the ADF is Used

Symptom

Streaks in the direction of sub scan only when the ADF is used

Cause

Dusts adhesion inside the scanner unit (inside of the exposure glass)

Action

Use the replacement exposure glass. D1369008

Vertical Color Line

Symptom

Vertical color line appears.

Cause

- Dirty charge roller
- Poor drum cleaning
- Scratch or dust adhesion on the drum

Condition

Image: White solid image, independent pattern (2dot)

Paper: A3, SRA3

Action

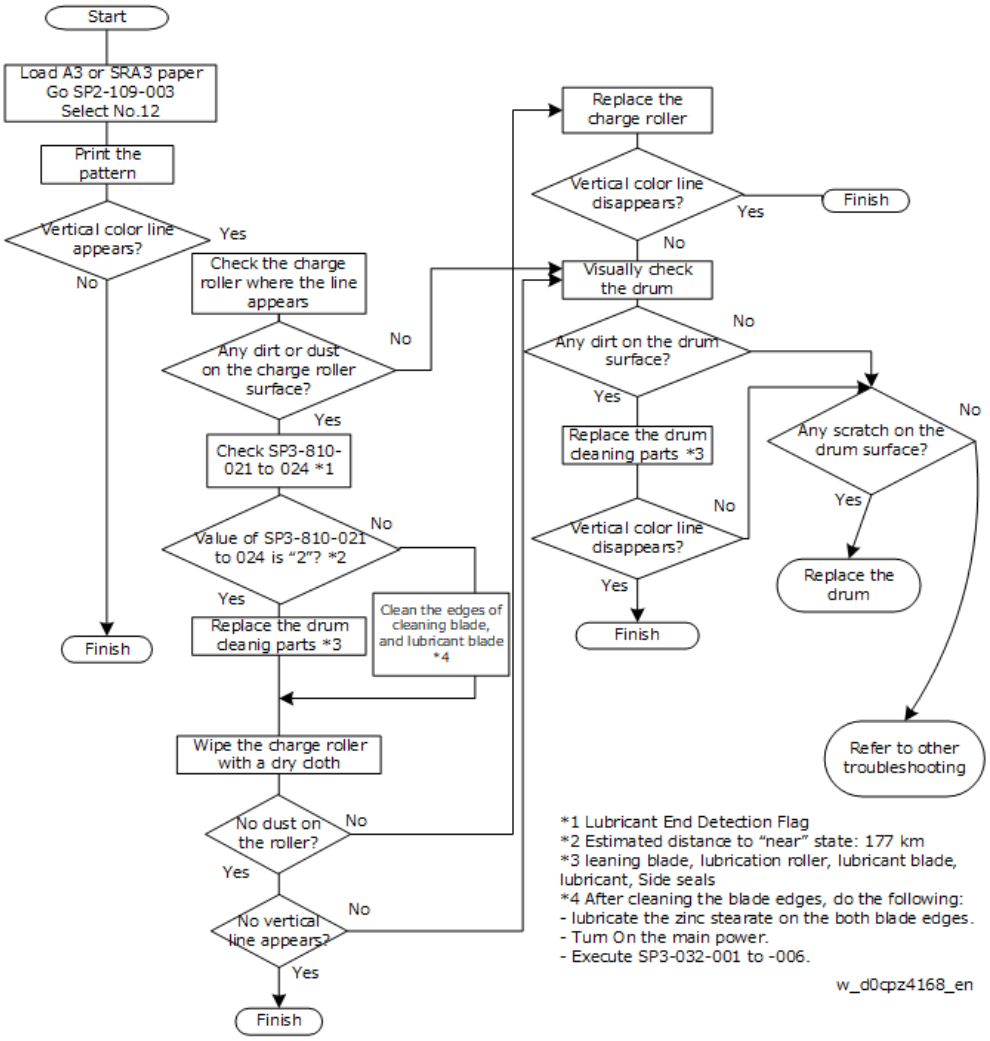


Image Quality 003: Bands

Overview

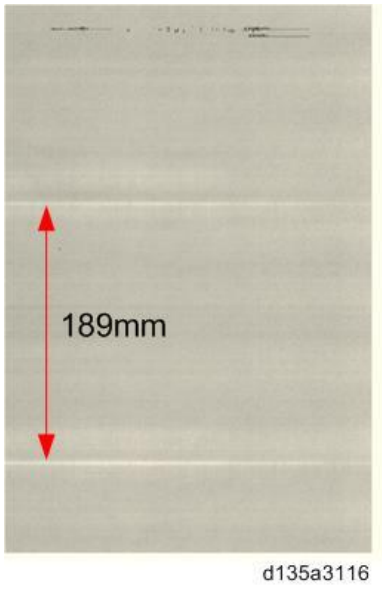
A smudge or a white area inside an image, in a linear shape with 1mm or larger width.

Item	Description
Blurred image at 189mm intervals (OPC drum circumference)	The first few printouts after turning on the machine may have a blurred image at 189-mm intervals (which corresponds to the OPC drum circumference) on halftone images in high humidity environments.
Banding at 2-3mm intervals	Banding (uneven density) at 2-3mm intervals may appear.
Banding at random intervals caused by lubricant falling from the drum cleaning unit	Banding may appear on the printouts at random intervals.

Troubleshooting for Blurred Image at 189mm Intervals (OPC Drum Circumference)

Symptom

The first few printouts after turning on the machine may have blurred image at 189mm intervals (which corresponds to the OPC drum circumference) on halftone images in high humidity environments. (See the example below)



Cause

Charge failure caused by “corona products” that form on the OPC drum
If the symptom occurs when all of conditions below are met:

- Operation after a long break (as in the initial operation of the day)
- Halftone image
- High humidity

Action

1. Execute “Color Registration” from “Maintenance” of the "Machine Features" screen.
2. Execute “Auto Color Calibration” from “Maintenance” of the "Machine Features" screen.

Note

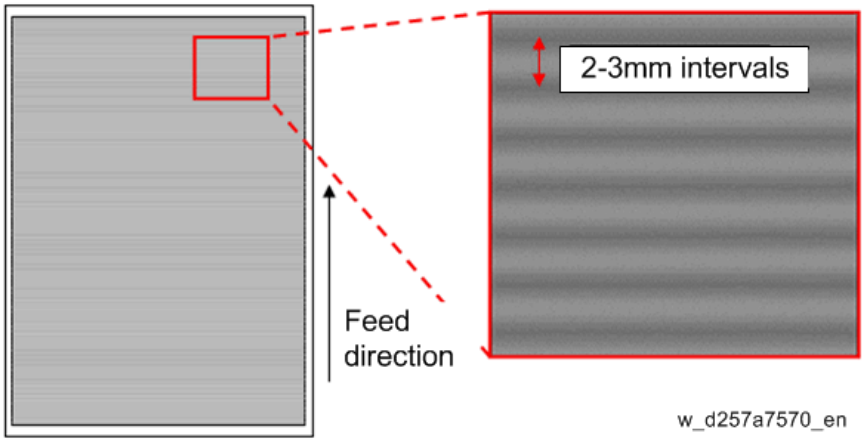
You can access the "Machine Features" screen with the following procedure below.

- Pro C5300S/C5310S:
  - When using the standard operation panel: Press the "User Tools" key.
  - When using the smart operation panel: Press the "User Tools" icon, and then press "Machine Features".
- IM C6500/C8000: Press the "User Tools" icon, and then press "Machine Features".

Troubleshooting for banding at 2-3mm intervals

Symptom

Banding (uneven density) at 2-3mm intervals



Cause

Vibration of the cleaning unit synchronizes with the vibration generated by the gears that rotate the Cleaning Brush Roller, creating a resonance.

This occurs specifically when the Cleaning Brush Roller rotates at the following 2 speeds, which are defined as “Environment Coefficient 7 & 8” based on the absolute humidity detected internally by the machine.

Operation mode	Absolute humidity	Cleaning brush roller rotation speed coefficient
Environment Coefficient 7	15-17.5 g/m^3	**1.63** (default)
Environment Coefficient 8	17.5-20 g/m^3	**1.76** (default)

Reference

Environment Coefficient 1-3: Low temperature and low humidity

Environment Coefficient 4-6: Optimum machine operational condition (laboratory)

Environment Coefficient 7-10: High temperature and high humidity

Solution

Enter the SP mode and modify the environment coefficient set for Environment Coefficient 7 and 8 as shown below.

SP2-225-038 Environment Coefficient 7	1.63 (default)	→ 1.90
SP2-225-039 Environment Coefficient 8	1.76 (default)	→ 1.90

Note: 1.90 is the default environment coefficient set for Environment Coefficient 9.

IMPORTANT

If you are not sure whether the uneven density problem you are trying to resolve is “Banding at 2-3mm intervals” or not, do the following procedure.

A) Set SP2-225-032 through 041 to “1.50”, and print the job showing the problem.
B) Set SP2-225-032 through 041 to “1.63”, and print the job showing the problem.
C) Set SP2-225-032 through 041 to “1.76”, and print the job showing the problem.
If the problem does not occur in condition A, but occurs either in conditions B or C, the problem is judged to be Banding at 2-3mm intervals.

Important

- DO NOT print more than 10 pages with the above modified SP setting. Make sure to set each SP back to the default after the test.

Environment Coefficient	SP number	Default
1	SP2-225-032	0.70
2	SP2-225-033	0.83
3	SP2-225-034	0.96
4	SP2-225-035	1.10
5	SP2-225-036	1.30
6	SP2-225-037	1.50
7	SP2-225-038	1.63
8	SP2-225-039	1.76
9	SP2-225-040	1.90
10	SP2-225-041	2.00

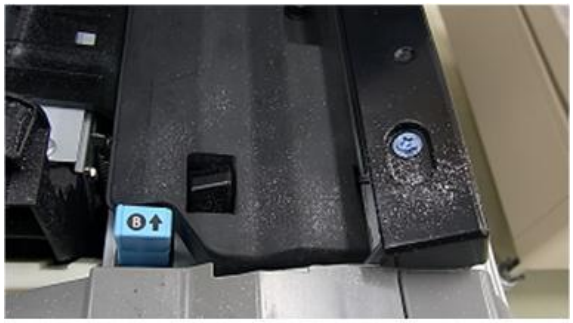
Side effect

Increased lubricant consumption

Troubleshooting for Banding at Random Intervals Caused by Lubricant Falling from the Drum Cleaning Unit

Symptom

Banding appears on the printouts at random intervals.



d135a0023

Cause

The lubricant in the drum cleaning unit falls into the registration unit and creates smudges on the ITB encoder sensor. As a result, the engine speed cannot be controlled correctly.

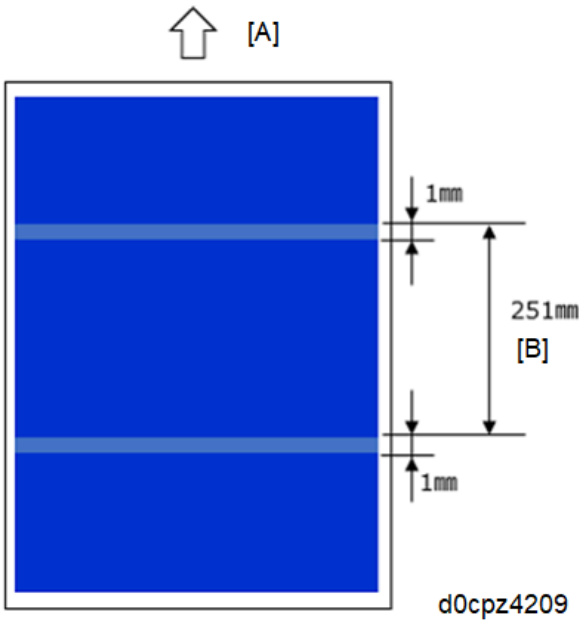
Solution

Clean the ITB encoder with a blower brush.

Troubleshooting for banding after Installation at 250 mm intervals

Symptom

Banding at 250mm intervals Immediately after installing the machine



[A]: Transporting direction

[B]: Fusing belt's circumference

Cause

The contact area between the fusing belt and fusing rollers dents during the transportation of the main machine.

Solution

Do SP1-133-110 to refresh.

Image Quality 004: Non-Reproduction

Overview

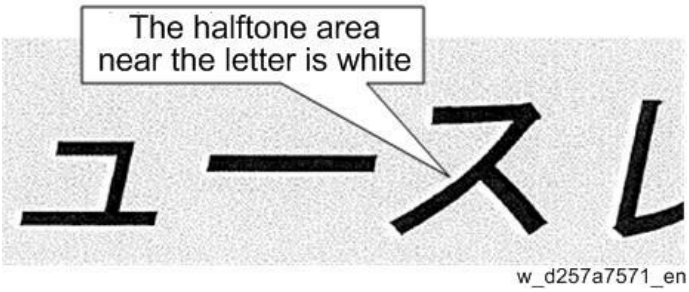
Parts of the developed images and text are not reproduced.

Item	Description
Halo image	A halo may appear especially in a low-temperature, low-humidity environment.

Troubleshooting for Halo image

Symptom

A halo may appear especially in low-temperature, low-humidity environments (See the example below)



Cause

Toner particles forming the edges of the halftone image are sucked up by the solid image due to the substantial difference in the strength of the electric field at the boundaries of the solid and halftone images.

Action

For a GW controller

Change the dpi from “2400 x 600dpi” (Default setting) to “600 x 600dpi”

For an EFI controller

Change the halftone mode from “200 Dot + Fine Text” to “175 Dot” in the “Image” tab.

Image Quality 005: Unevenness

Overview

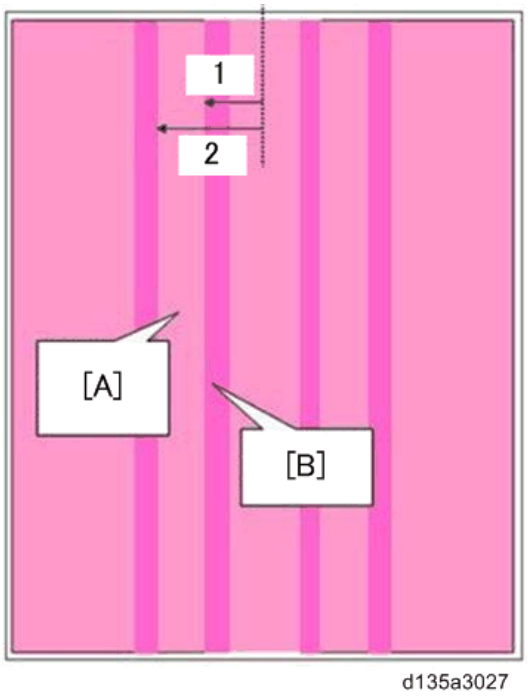
The density of images and text is uneven.

Item	Description
Vertical bands in halftone images	Vertical bands of uneven image density may appear in halftone images on the rear side of duplex copies/prints when printing onto coated paper in low-temperature, low-humidity environments (10°C, 15%).
Uneven density in the area 85mm from the trailing edge	Uneven density in halftone images may appear in an area 85mm from the trailing edge, which corresponds to the point where the paper leaves the registration rollers.
Grainy image	The image density is not uniform across image areas when printing onto paper that is not smooth in high-temperature, high-humidity environments (27°C, 80%).

Troubleshooting for Vertical bands in halftone images

Symptom

Vertical bands of uneven image density appear in halftone images on the rear side of duplex copies/prints when printing onto coated paper in low-temperature, low-humidity environments (10°C, 15%).



1: Approximately 30mm

2: Approximately 50mm

[A]: Bands of low density (at approx. 30-50mm from the center)

[B]: Density is relatively high at the ends of bands

Cause

Friction between the paper and the registration roller generates an electrical charge on some areas of the paper, after the paper has passed through the fusing unit to fuse the first side. The areas on the paper are charged differently, and these differences are visible as bands.

Solution

Lower the paper transfer bias for the second side.

Pro C5300S/C5310S:

- The user can use the IMSS settings to lower the bias.
- If the symptom occurs in full-color mode, use [027. Paper Transfer Current: FC: Side 2] in IMSS setting.
- If the symptom occurs in B/W mode, use [021. Paper Transfer Current: BW: Side 2] in IMSS setting.

Note

- When using plain paper, the setting can be changed using 2-652-001 to 009 (for each paper thickness and type) and 2-642-001 to 009 (for each paper thickness and type).

IM C6500/C8000:

A customer engineer must perform the following adjustment:

- If the symptom occurs in full-color mode, lower the value of **SP2-652-001** to **009** (for each paper thickness).
- If the symptom occurs in B/W mode, lower the value of **SP2-642-001** to **009** (for each paper thickness).
- The value must be between [default value] and [default value **- 20μA**].

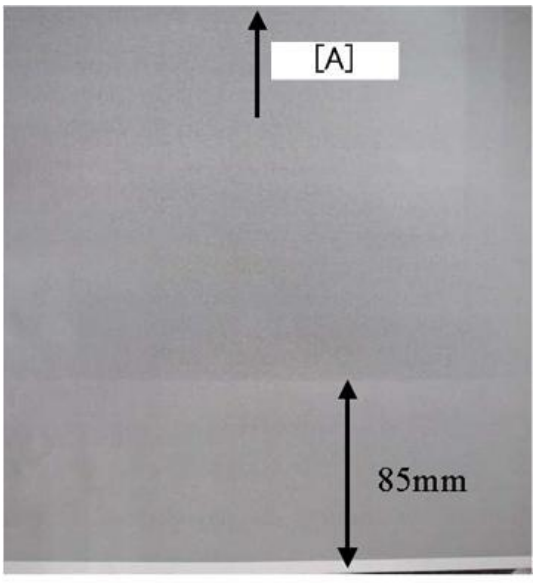
Note

- The density of solid images may be decreased if the bias is too low (especially for high-density solid image areas). In addition, other image problems may occur.

Troubleshooting for Uneven Density in the Area up to 85mm from the Trailing Edge

Symptom

Uneven density of halftone image may appear in the area up to 85mm from the trailing edge. (See the example below)



d135a3117

[A]: Paper feed direction

Cause

Uneven density may appear because of the difference in both the sticking level and the distance between the ITB and the paper immediately before the paper transfer process.

The following factors tend to change the sticking level and the distance:

- When the rotation speed of the transfer timing roller and paper transfer belt differ to a great degree
- Thin paper stocks

In low-temperature, low-humidity environments, an electric field is generated at the entrance of the paper transfer belt

Action

Do the one of the following workarounds.

1. Adjust the transfer timing roller speed. Change each value by 0.1%.

IM C6500/C8000, Pro C5300S/C5310S

SP No.	SP Name
SP2-661-001 to 099	PTR Spd Adjustment

Pro C5300S/C5310S only

No.	IMSS setting
069	Paper Transfer Belt Feed Speed

Note

- Only change the paper type and thickness that the user needs.

2. Change either registration motor speed or transport motor speed. If you use this workaround, reset the transfer roller speed to the default, then change each value by 0.1%.

IM C6500/C8000, Pro C5300S/C5310S

SP No.	SP Name
SP1-008-001 to 023	Fine Adj Transport Mtr 1 Spd
SP1-010-001 to 023	Fine Adj Transport Mtr 2 Spd
SP1-012-001 to 023	Fine Adj Transport Mtr 3 Spd
SP1-016-001 to 025	Fine Adj Relay Mtr CW Spd
SP1-019-001 to 025	Fine Adj Registration Mtr Spd
SP1-030-001 to 025	Fine Adj Duplx Invert CW Spd
SP1-033-001 to 025	Fine Adj Dup Transport Mtr Spd
SP1-034-001 to 025	Fine Adj Duplx Exit Mtr Spd

Pro C5300S/C5310S only

No.	IMSS setting
075	Registration Motor Feed Speed
076	First Transport Motor Feed Speed
077	Second Transport Motor Feed Speed
078	Third Transport Motor Feed Speed
080	Relay Transport Motor Feed Speed: CW
081	Relay Transport Motor Feed Speed: CCW
096	2 Sided Transport Motor Feed Speed
097	2 Sided Switchback Motor Feed Speed: CW

No.	IMSS setting
099	2 Sided Exit Motor Feed Speed

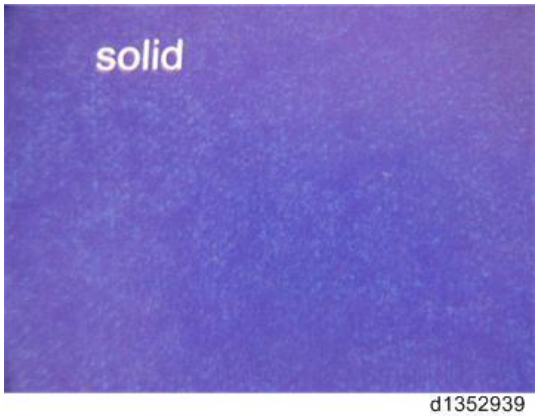
Note

- Only change to the paper type and thickness that the user needs.
- Change all the speeds by the same amount.

Troubleshooting for Grainy image

Symptom

The image density is not uniform across image areas when printing onto paper that is not smooth in a high-temperature high-humidity environment. (See the example below)



d1352939

Cause

When using paper that has a rough surface, the strength of the electrical field between the ITB and the indents in the paper weakens, causing low image density only in these areas.

Action

IM C6500/C8000:

Increase toner density with the following SPs.

1. Change the process control target (Ideal setting: +0.03 to 1.0 from the default)
   SP: 3-620-111 to 114 (Plain : Maximum M/ A : K, C, M, Y)
2. Execute manual process control.
   SP: 3-011-002 (Manual ProCon :Exe: Density Adjustment)

Pro C5300S/C5310S:

Increase the value of Toner Adhesion using the IMSS settings.

No.	IMSS setting
011	Maximum Image Density: K
012	Maximum Image Density: C
013	Maximum Image Density: M
014	Maximum Image Density: Y

Image Quality 006: Toner Flaking Off

Troubleshooting for Blocking on the Paper Output Tray

Symptom

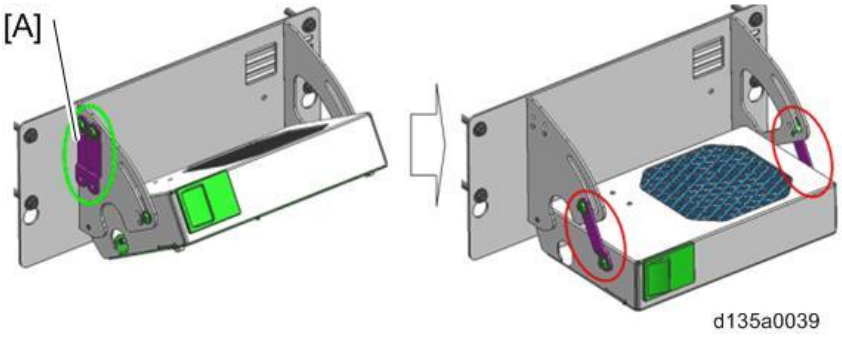
Paper printed and stacked on the output tray stick together (known as “toner blocking”) when printed in duplex.

Cause

Toner fused on the paper is not completely dry.

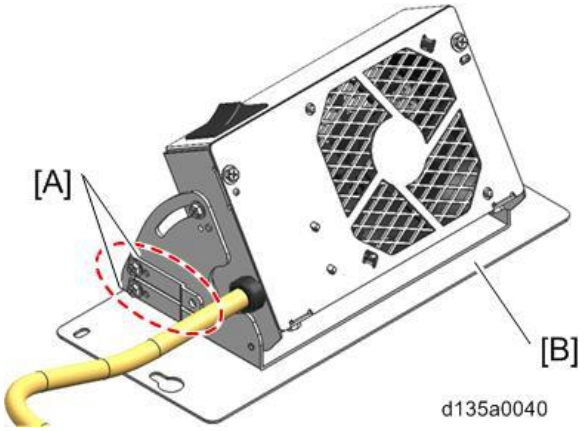
Solution

Activate the Cooling Fan included as an accessory to the Copy Tray Type M42.
If the above does not resolve the problem, set the cooling fan in the procedure described on the following pages so that it faces at a 90° angle.



Procedure

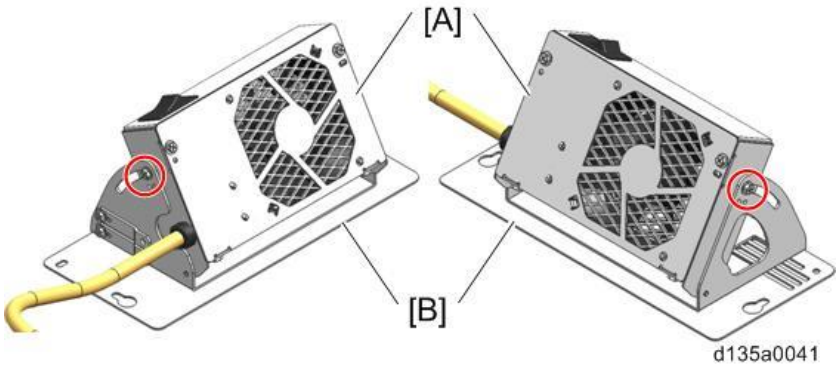
1. Remove bracket [A] from bracket [B]. (x 2)



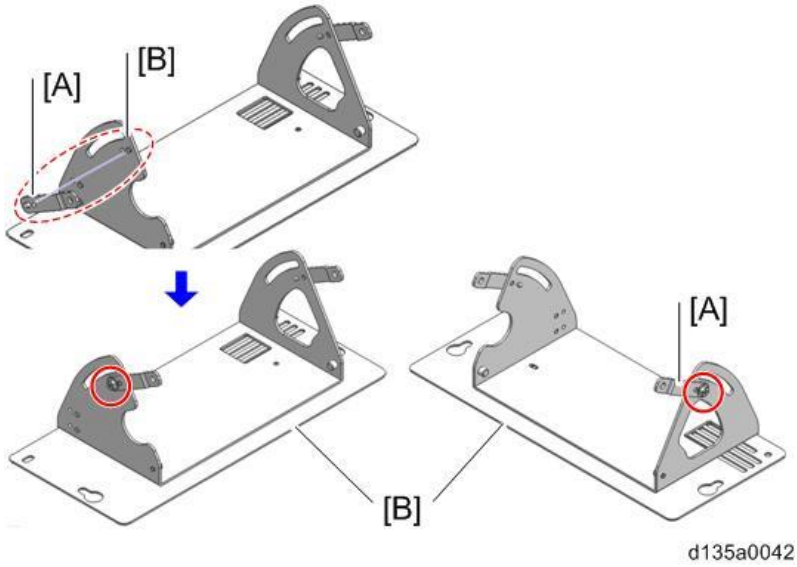
2. Do the same on the other side. (x 2)

Important

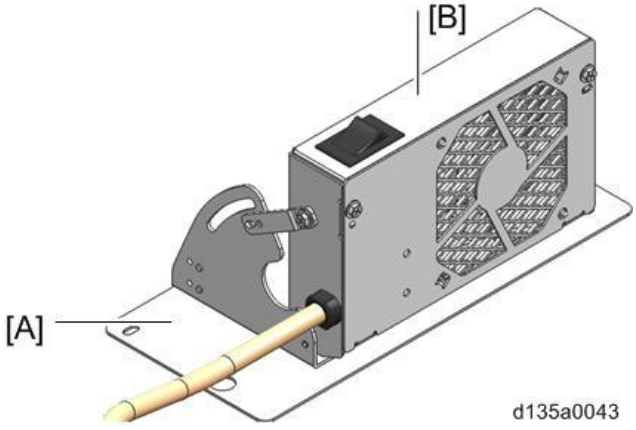
- Work carefully to avoid dropping the unit.



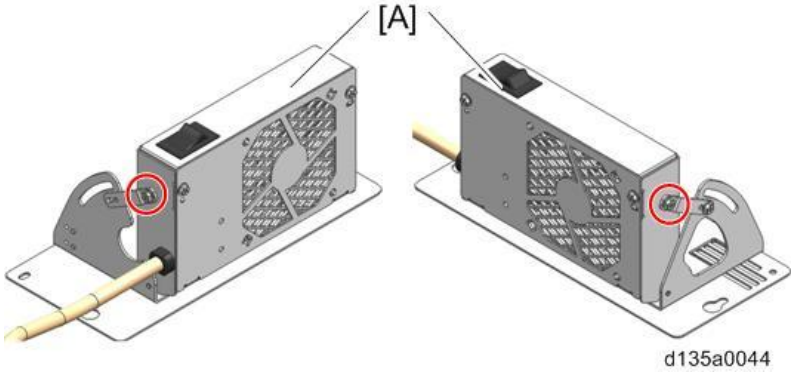
3. Fit the bosses on bracket [B] to the holes on bracket [A] and fix the brackets. (x 2)



4. Set the cooling unit [B] on the bracket [A] at a 90° angle.



5. Fix the cooling unit [A] with the bracket at a 90° angle. (x2)



Paper Transport

Paper Transport 001: Envelopes

Troubleshooting for Feed Direction Limitations Applied on Certain Types of Envelopes

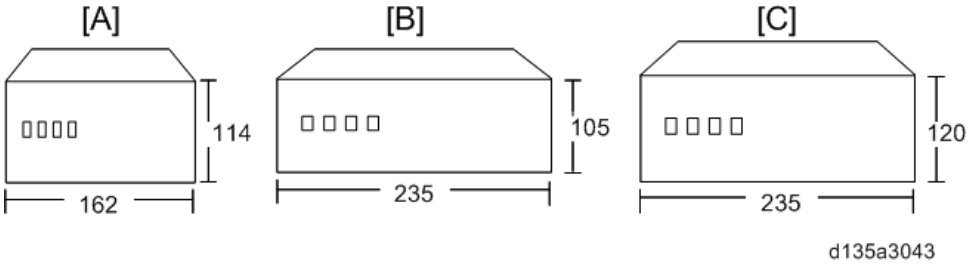
Symptom

The following may occur when printing onto the types of envelopes shown below:

- Wrinkles
- Paper transport issues
- Flaps stick (closed) to the body of the envelope

Note

- If the envelopes are fed in the SEF direction, they tend to warp in between the paper transfer belt unit and fusing unit.



[A]: C6, [B]: 105x235, [C]: DLX

Cause

The heat of the fusing process may cause wrinkles to form or the adhesive on the flaps to melt if the flaps are folded.

Solution

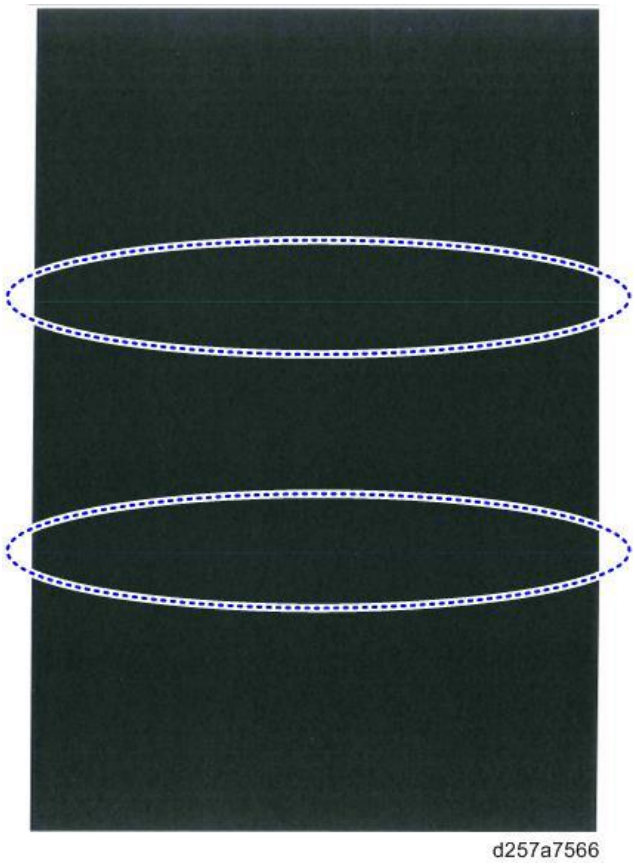
When feeding the types of envelopes described above, feed them from the bypass tray, in the LEF direction (from the trailing edge), with the flaps open.

Scanning

Scanning 001: Streaks

RGB Streaks with ADF Scan (IM C6500/C8000 only)

Symptom



d257a7566

Cause

Dust or paper dust

Note

- Pro C5300S/C5310S and IM C6500/C8000 use different original feeding methods. On IM C6500/C8000, the original does not contact the exposure glass (there is space between the paper and glass). However, on Pro C5300S/C5310S, the original contacts the exposure glass. As a result, the symptom does not occur on Pro C5300S/C5310S.

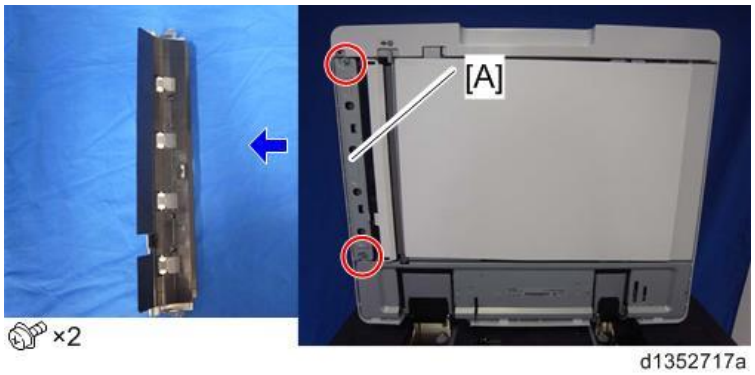
Action

Follow the procedure below to replace the following parts:

- D6833401: GUIDE:SCANNING:ENTRANCE:CONTACT:ASS'Y
- D6833350: GUIDE PLATE:SCANNING

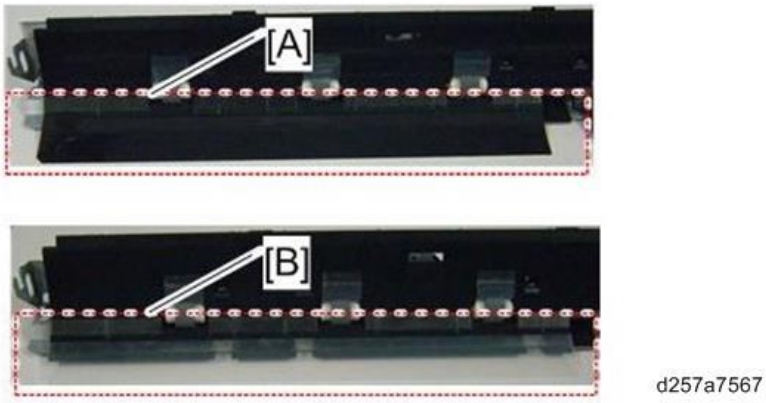
1. Open the ADF.

2. Remove the entrance guide [A].



Note

- Part [A] of the entrance guide on IM C6500/C8000 is black.
- Part [B] of the entrance guide on Pro C5300S/C5310S is colorless.



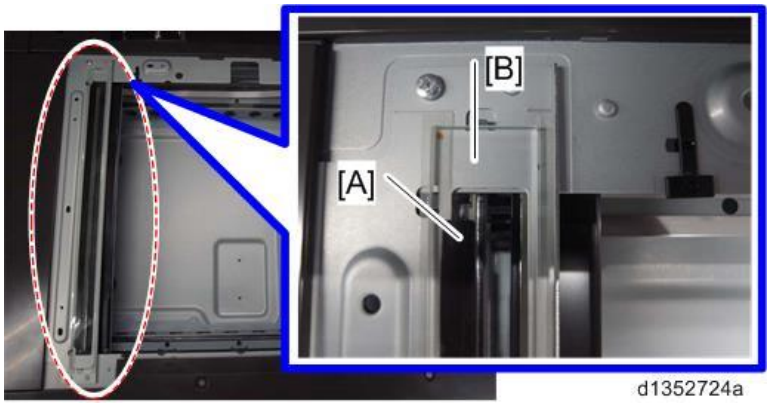
3. Remove the scanning guide plate [A].

Note

- Part [A] of the scanning guide plate on IM C6500/C8000 is black.

- Part [B] of the scanning guide plate on Pro C5300S/C5310S is white.

4. Attach the scanning guide plate for the Pro C5300S/C5310S (D6833350).
5. Attach the entrance guide plate for the Pro C5300S/C5310S (D6833401).
6. Set SP4-688-002 to a value of "98".
7. Remove the gap sheet (black) [A] from the exposure glass [B].



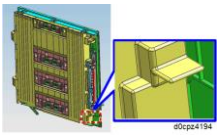
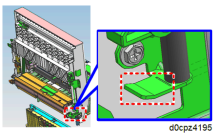
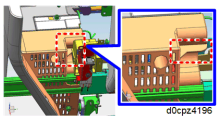
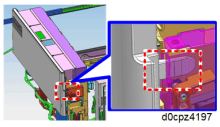
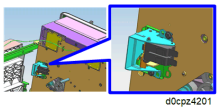
8. Clean the exposure glass with an alcohol-damp cloth.

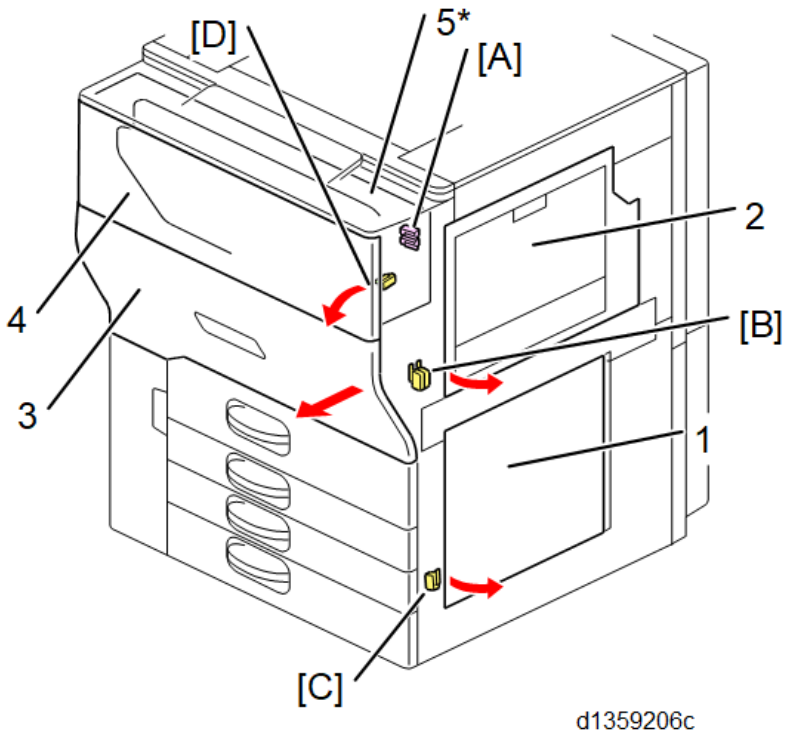
Other Problems

Cover Open Display: Interlock Mechanism Damaged

If the interlock mechanism is damaged, cover open (drawer unit, right lower cover, toner supply unit front cover) will be shown on the operation panel.

Check the strikers for the following covers and replace the new one if it is broken.
If the striker no.1 is broken, the cover open display for the right lower cover, right upper cover, and the drawer unit will be shown.
If the striker no.4 is broken, the cover open display for the tone supply unit cover will be shown.

No.	Cover	Cover Open	Switch	Striker	Replacement Procedure
1	Vertical transport inner cover	Right lower cover	[C]		Vertical Transport Inner Cover
2	Bypass lock bracket	Right upper cover	[B]		Bypass Lock Bracket
3	Right inner cover	Drawer	[B]		Drawer Unit LED (LED8)
4	Toner supply unit front cover	Toner supply unit front cover	[D]		Toner Supply Unit Front Cover
5	*Side plate for toner supply	-	[A] Pro C5310S/C5300S only		Toner Supply Unit



Other 001: Drawer Unit

Drawer Unit Lock Motor Emergency

Overview

If you cannot open the drawer, follow this troubleshooting procedure.

Cause

1. The drawer is in a “Not-withdrawable” state.
2. There is a paper jam between the Drawer Unit and another unit (this is called a ‘straddling jam’). In this case, the Drawer Unit is locked because if the user pulls out the drawer under that condition, it would tear the paper.
3. The pressure of the paper transfer belt unit is not released correctly.
4. The Drawer Unit Lock Sensor or Drawer Unit Lock Motor is defective.

Solution (Summary)

Step 1: Check the machine state.

Step 2: Check whether the pressure of the paper transfer belt unit is released correctly.

Step 3: Check whether the Drawer Unit Lock Sensor or Drawer Unit Lock Motor is defective.

Step 4: Check for the presence or absence of a straddling jam.

Step 5: Release the Drawer Unit lock by removing the parts related to the Drawer Unit lock.

Step 6: Check whether the Drawer Unit Lock Sensor and Drawer Unit Lock Motor work correctly.

Step 7: Check the connections of the Drawer Unit Lock Sensor and Drawer Unit Lock Motor.

Solution (Detailed)

Step 1: Check the machine state.

Drawer Unit State List: Not withdrawable

Machine State		Solution
Output		Wait until the output is finished.
Correcting /Adjusting Operation	Warming-up, Process Control, MUSIC, Toner Recovery, Web Cleaning	
Forced Power off	Forced shutdown due to blackout / disconnection, or pressing and holding the power button	Rebooting
SC Issued	SC670 / SC672 occurs	See the SC table and follow the solution.
DUB / TSB Abnormal	SC626 occurs	
Defective Drawer Lock-related Parts	Cannot release the drawer lock correctly. SC525 occurs due to a problem with the drawer unit lock motor.	Go to Step 3
Straddling Jam	If there is a jam (such as the listed jams below) that straddles the drawer unit and another unit, the jammed paper will be torn if you pull out the drawer unit, and torn paper may remain in the machine. Jam between: The bypass unit and the registration unit The relay unit and the vertical transport The paper exit and the purge unit So in this machine, the drawer unit is locked when a straddling jam occurs.	Go to Step 2

Step 2: Check whether the pressure of the paper transfer belt unit is released correctly.

1. Remove the Drawer Unit Lock Motor Cover.
2. Check whether the D-cut surface of the end of the shaft points down.
   If the D-cut surface direction is correct: Go to Step 4.
3. Release the pressure of the paper transfer belt unit by using the link plate. (If the Drawer is Locked)
   If the Drawer Unit can be withdrawn: Solution procedure is finished.
   If the Drawer Unit can't be withdrawn: Go to Step 3

Step 3: Check whether the Drawer Unit Lock Sensor or Drawer Unit Lock Motor is defective.

1. Do SP1-040-001(Drawer Lock Motor Unlocking Operation).
   If the Drawer Unit is unlocked: Go to Step 4.
   If the Drawer Unit is still locked: Go to Step 5.

Step 4: Check for the presence or absence of a straddling jam.

1. Check whether there is jammed paper at the vertical transport, bypass unit, or purge unit.
   If absent: Solution procedure is finished.
   If present: Remove jammed paper. (Go to the next step.)

Step 5: Release the Drawer Unit lock by removing the parts related to the Drawer Unit lock.

1. Turn the main switch OFF.
2. Follow the procedure 'If You Cannot Open the Drawer' in the service manual, and release the Drawer Unit lock. (If the Drawer is Locked)
   Turn the main switch ON.
   If successful: Go to Step 6.
   If an error occurs: Go to Step 7.

Step 6: Check whether the Drawer Unit Lock Sensor and Drawer Unit Lock Motor work correctly.

1. Do SP5-803-204: Input Check Drawer Lock Sensor
2. Do SP5-805-150: Output Check Drawer Lock Sensor
   If successful: Solution procedure is finished.
   If an error occurs: Go to Step 7.

Step 7: Check the connections of the Drawer Unit Lock Sensor and Drawer Unit Lock Motor

If the harness connection is correct: Replace the Drawer Unit Lock Sensor and/or Motor.

If the harness connection is poor: Connect it correctly. (Solution procedure is finished.)

Other 002: Paper Exit Section

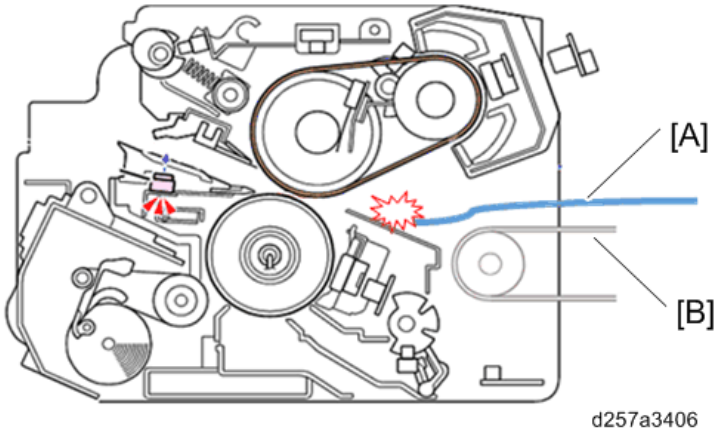
J024/J074 when Feeding Thick Paper

Symptom

J024/J074 occurred when feeding thick paper.

Cause

The leading edge of the paper [A] hits the fusing entrance guide plate and the paper floats away from the transport belt [B] due to the thickness of the paper.



Solution 1

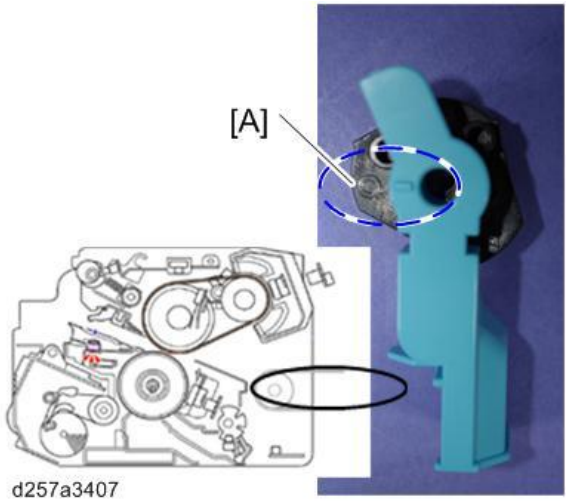
Set the paper in the trays neatly to prevent paper skew at the entrance of the fusing unit.

If this does not solve the problem, try Solution 2.

Solution 2

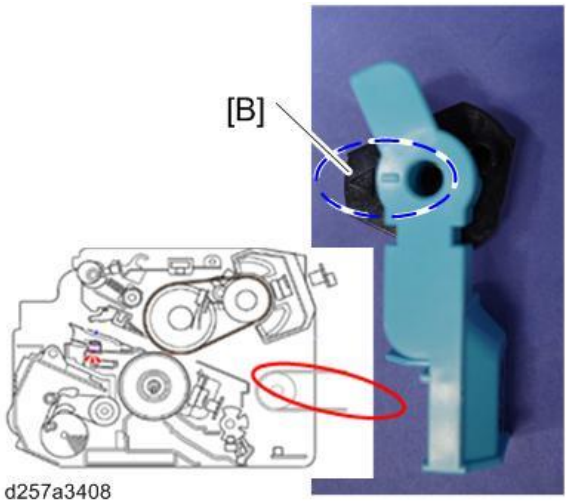
Adjust the angle of the transport belt against the fusing nip.

Mark on the black bracket: Circle (level) [A]

<table>
<tr><td> 
</td><td>Effect:
-

Side effect:
A jam may occur when feeding rough surfaced A4 paper in LEF.</td></tr>
</table>

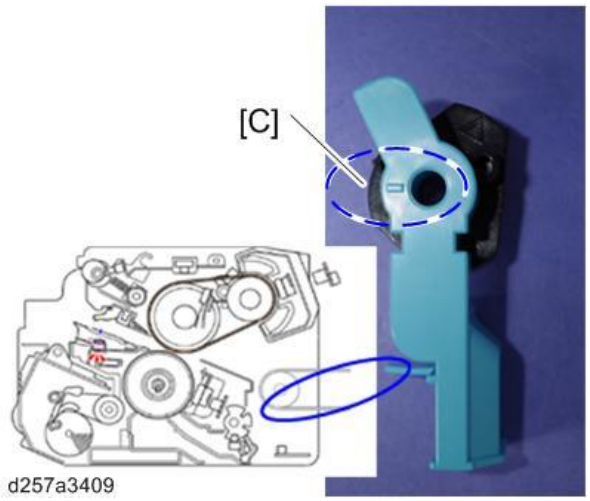
Mark on the black bracket: Triangle (high angle) [B]

<table>
<tr><td> 
</td><td>Effect:
Rough surfaced A4 paper is fed smoothly.

Side effect:
Worm tracks and wrinkles may be made on plain or thin paper.</td></tr>
</table>

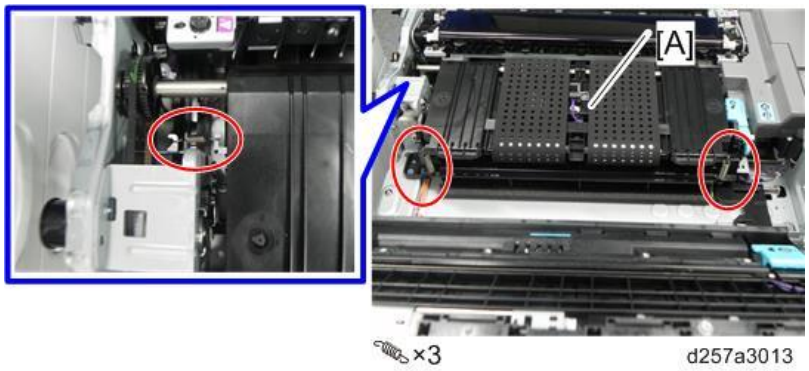
Mark on the black bracket: No mark (low angle) [C]

	Effect: Small size thick paper is fed smoothly.

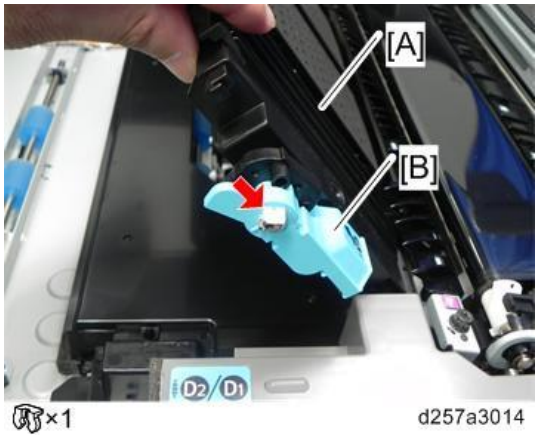
	Side effect: A jam may occur when feeding curled paper.

Adjustment Procedure of the Separation Lever

1. Remove the fusing unit. (Removing the Fusing Unit)
2. Remove the springs of the paper transport belt unit [A].



3. Open the paper transport belt unit [A], and remove the separation lever [B].

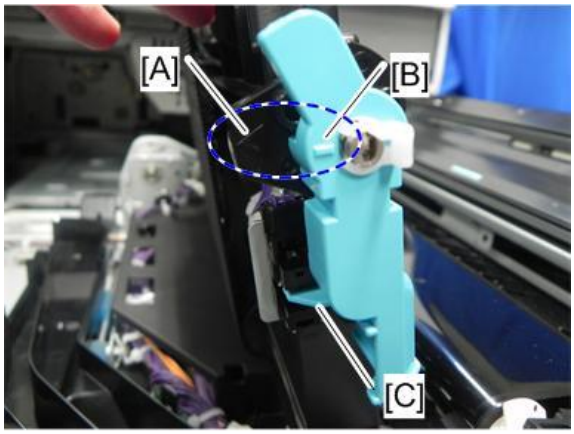


4. Adjust the position of the separation lever according to the paper type and paper size.

Important

- When attaching the separation lever, pay attention to the following points:
  - Align the '-' marking [B] on the separation lever with the center of the marking [A] on the paper transport belt unit.

- Ensure that the actuator [C] on the separation lever enters the sensor.



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Preventing Abnormal Sounds

Symptom

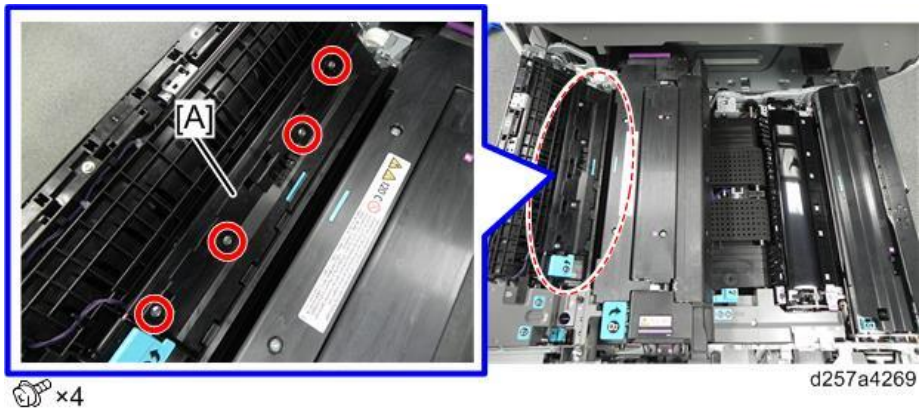
There is a roller sliding noise when the roller is not smoothly rotating in the paper exit section.

Cause

A shortage of lubricant on the idle roller shaft of the paper exit section causes the roller sliding noise.

Solution

1. Open the drawer unit.
2. Remove the guide plate [A].



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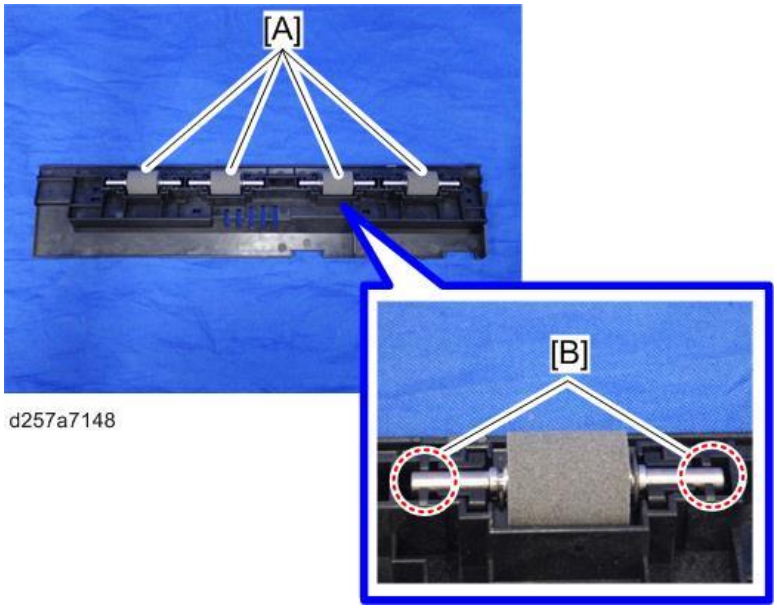
3. Apply the grease (Barrierta S552R or Drysurf MDF-2400E) to the edges [B] of the shaft for the idle rollers [A]. Apply the grease while rotating the rollers [A], so that the grease is spread over the whole circumference of the shaft.



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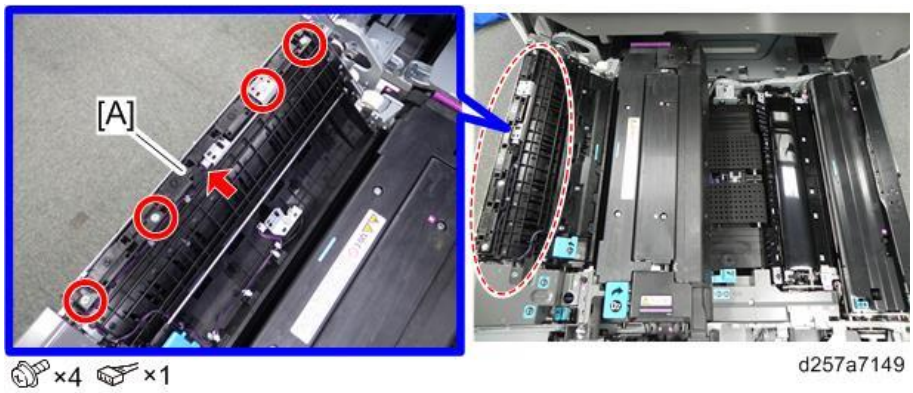
4. Remove the guide plate [A].



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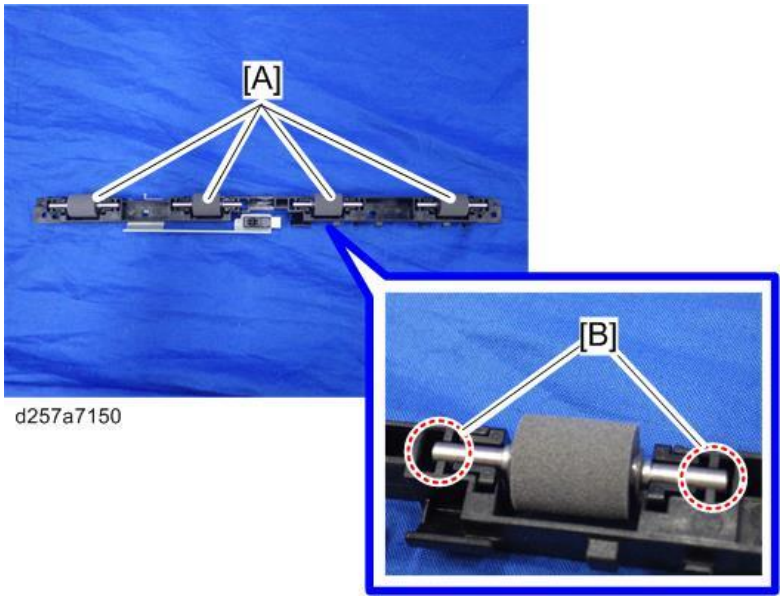
5. Apply the grease (Barrierta S552R or Drysurf MDF-2400E) to the edges [B] of the shaft for the idle rollers [A]. Apply the grease while rotating the rollers [A], so that the grease is spread over the whole circumference of the shaft.



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Other 003: Correspondence Table for Adjustment Settings (Pro C5300S/C5310S)

Correspondence Table for Adjustment Settings for Operators and SP Mode

The correspondence table for Adjustment Settings for Operators and SP settings is as follows.

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02 Machine: Image Quality

No.	Item	SP No.
0201	Adjust Image Density/DEMS: Image Density Adjustment: Manual Execute	SP3-011
0209	Photoconductor Special Mode	SP2-225
0210	Smooth Fusing Belt	SP1-133
0211	Fusing Ability by Feed Speed	SP1-135
0214	Fusing Belt Smoothing Setting: Uneven Gloss	SP1-133

03 Machine: Paper Feed/ Output

No.	Item	SP No.
0106	Criteria for Paper Weight	SP1-307

05 Machine: Maintenance

No.	Item	SP No.
0309	Execute Developer Refreshing	SP3-062
0702	Temperature / Humidity outside the Machine	SP3-261
0703	Back Up / Restore Custom Paper Data	-
0704	Switch Print Screen	SP5-070

07 Finishing: Finisher

No.	Item	SP No.
0401	Punch Position: With Feed	SP6-100
0402	Punch Position: Across Feed	SP6-101
0403	Staple Position	SP6-111
0404	Staple Position for Booklet	SP6-112
0405	Folding Position for Booklet	SP6-113
0406	Folding Speed for Booklet	SP6-114

No.	Item	SP No.
0801	Staple Position: Across Feed 1	SP6-210
0802	Staple Position: Across Feed 2	SP6-212
0803	Staple Position: With Feed	SP6-214
0807	Punch Position: Across Feed	SP6-728
0808	Punch Position: With Feed	SP6-727
0818	Staple Position for Booklet	SP6-721
0819	Folding Position for Booklet	SP6-722
0821	Set Number of Folds for Booklet	SP8-203

08 Finishing: Fold

No.	Item	SP No.
0608	Z-fold Position 1	SP6-312
0609	Z-fold Position 2	SP6-313

Correspondence Table for Adjustment Setting and SP Mode

The correspondence table for TCRU adjustment settings and SP settings is as follows.

01 Machine Image Position

No.	Item	SP No.
0101	Image Position: With Feed	SP1-001
0102	Image Position: Across Feed	SP1-003
0107	Erase Margin: Leading Edge/Trailing Edge	SP2-121

02 Machine: Image Quality

No.	Item	SP No.
0201	Adjust Image Density/DEMS: Image Density Adjustment: Manual Execute	SP3-011
	Adjust Image Density/DEMS: Execute DEMS	SP3-040
0202	Image Density Adjustment Execute Interval	SP3-533
0203	Maximum Image Density	SP3-620
0204	Line Width	SP3-623
0205	Density Difference: Across Feed	SP2-113
0207	Fusing Temperature on Standby	SP1-107
0208	Auto Color Selection Setting	SP2-907
0209	Photoconductor Special Mode	SP2-225
0210	Smooth Fusing Belt	SP1-133
0211	Fusing Ability by Feed Speed	SP1-135
0212	Slope for Envelope Nip Width	SP1-162
0213	PCU Potential	SP3-621
0214	Fusing Belt Smoothing Setting: Uneven Gloss	SP1-133

03 Machine: Paper Feed/ Output

No.	Item	SP No.
0103	Registration Gate: Paper Buckle Amount	SP1-004
0104	Registration Gate: Paper Buckle Amount: Thick Paper	SP1-004
0106	Criteria for Paper Weight	SP1-307
0130	Perpendicularity Adjustment	SP2-104
0140	Buffer Pass Unit Fan Activation Setting	SP1-932

05 Machine: Maintenance

No.	Item	SP No.
0301	Execute Cleaning Initial Setting	SP3-032
0302	Execute Process Initial Setting	SP3-020
0303	ITB Manual Lubrication	SP2-696
0304	Tighten Fuser Cleaning Unit at Replacement	SP1-161
0305	Reset Replaceable Parts Counter	SP3-701
0306	Replaceable Parts Counter	SP7-621
0307	Target Value for Replaceable Part	SP7-623
0308	Execute Charge Roller Cleaning	SP2-222
0309	Execute Developer Refreshing	SP3-062
0310	Counter Settings for Fuser Unit Replacement	SP1-133 SP1-210 SP1-621 SP1-903
0702	Temperature / Humidity outside the Machine	SP3-261
0703	Back Up / Restore Custom Paper Data	-
0704	Switch Print Screen	SP5-070

06 Preprocessing: LCT

No.	Item	SP No.
0108	Wide LCT: Fan Level	SP1-920
0109	Wide LCT: Fan Timer	SP1-921
0110	Pickup Assist	SP1-923

07 Finishing: Finisher

No.	Item	SP No.
0401	Punch Position: With Feed	SP6-100
0402	Punch Position: Across Feed	SP6-101
0403	Staple Position	SP6-111
0404	Staple Position for Booklet	SP6-112
0405	Folding Position for Booklet	SP6-113
0406	Folding Speed for Booklet	SP6-114
0407	Correct Punch Skew	SP6-102

No.	Item	SP No.
0408	Punch Skew Correction	SP6-103
0409	Paper Alignment in Shift Tray: Across Feed	SP6-104
0410	Paper Alignment for Stapling: Across Feed	SP6-107
0411	Paper Alignment for Booklet: Across Feed	SP6-108
0412	Paper Tapping for Extra Feed for Stapling	SP6-120
0413	Claw Shift for Center Folding	SP6-122
0801	Staple Position: Across Feed 1	SP6-210
0802	Staple Position: Across Feed 2	SP6-212
0803	Staple Position: With Feed	SP6-214
0804	Paper Alignment for Stapling: Across Feed	SP6-725
0805	Paper Alignment for Stapling: With Feed	SP6-726
0806	Number of Sheet Align for Stapling	SP6-225
0807	Punch Position: Across Feed	SP6-728
0808	Punch Position: With Feed	SP6-727
0809	Correct Punch Skew	SP6-226
0810	Punch Skew Correction	SP6-729
0811	Paper Alignment in Shift Tray Setting	SP6-243
0812	Paper Alignment in Shift Tray: Across Feed	SP6-730
0813	Output Tray Descending Position	SP6-236
0814	Exit Guide Close Timing: Booklet Fin	SP6-219
0815	Output Trail Edge Press Setting	SP6-244
0816	Output Fan Setting	SP6-245
0817	Output Fan Level	SP6-246
0818	Staple Position for Booklet	SP6-721
0819	Folding Position for Booklet	SP6-722
0820	Paper Alignment for Booklet: Across Feed	SP6-723
0821	Set Number of Folds for Booklet	SP8-203
0822	Paper Alignment for Booklet: With Feed	SP6-724
0823	Z-fold Skew Correction	SP6-229
0824	Correct Z-fold Skew	SP6-230
0825	Correct Z-fold Skew: Reverse	SP6-231
0826	Maximum No. Stacked Sheets in Output Tray	SP6-237 SP6-238 SP6-239

08 Finishing: Fold

No.	Item	SP No.
0601	Half Fold Position: Multisheet Fold	SP6-314

No.	Item	SP No.
0602	Letter Fold-out Position 1: Multi-sheet Fold	SP6-315
0603	Letter Fold-out Position 2: Multi-sheet Fold	SP6-316
0604	Letter Fold-in Position 1: Multi-sheet Fold	SP6-317
0605	Letter Fold-in Position 2: Multi-sheet Fold	SP6-318
0606	Folding Unit Tray Full Detection	SP6-762
0607	Number of Sheets Folded after Full Detection	SP6-763
0608	Z-fold Position 1	SP6-312
0609	Z-fold Position 2	SP6-313

Other 004: Correspondence Table for IMSS Settings (Pro C5300S/C5310S)

Correspondence Table for IMSS Settings and SP Mode

Category	No.	IMSS setting	SP No.		
Image Position/Scaling Adjustment	001	Image Position: Across Feed: Side 1	1	003	008 to 016
	002	Image Position: Across Feed: Side 2	1	003	008 to 016
	003	Image Position: With Feed: Side 1	1	001	004 to 016
	004	Image Position: With Feed: Side 2	1	001	004 to 016
	005	Magnification: Across Feed: Side 1	2	102	041
	006	Magnification: Across Feed: Side 2	2	102	043
	007	Magnification: With Feed: Side 1	2	102	051 to 059
	008	Magnification: With Feed: Side 2	2	102	061 to 069
	009	Erase Margin: Leading Edge	2	122	145 to 252
	010	Erase Margin: Trailing Edge	2	123	145 to 252
Toner Adhesion Adjustment	011	Maximum Image Density: K	-	-	-
	012	Maximum Image Density: C	-	-	-
	013	Maximum Image Density: M	-	-	-
	014	Maximum Image Density: Y	-	-	-

Category	No.	IMSS setting	SP No.		
Transfer Adjustment	015	Image Transfer Current: BW	2	451	002
	016	Image Transfer Current: FC: K	2	451	001
	017	Image Transfer Current: FC: C	2	461	001
	018	Image Transfer Current: FC: M	2	471	001
	019	Image Transfer Current: FC: Y	2	481	001
	020	Paper Transfer Current: BW: Side 1	2	641	001 to 078
	021	Paper Transfer Current: BW: Side 2	2	642	001 to 078
	022	Paper Transfer Current: LE: BW	2	643	001 to 078
	023	Paper Transfer Current: LE Length: BW	2	644	001 to 078
	024	Paper Transfer Current: TE: BW	2	645	001 to 078
	025	Paper Transfer Current: TE Length: BW	2	646	001 to 078
	026	Paper Transfer Current: FC: Side 1	2	651	001 to 078
	027	Paper Transfer Current: FC: Side 2	2	652	001 to 078
	028	Paper Transfer Current: LE: FC	2	653	001 to 078
	029	Paper Transfer Current: LE Length: FC	2	654	001 to 078
	030	Paper Transfer Current: TE: FC	2	655	001 to 078
	031	Paper Transfer Current: TE Length: FC	2	656	001 to 078
	032	Textured Paper Mode	2	850	101 to 111
	033	Textured Paper Mode Voltage: BW: Side 1	2	851	101 to 109
	034	Textured Paper Mode Voltage: BW: Side 2	2	852	101 to 109
	035	Textured Paper Mode Voltage: FC: Side 1	2	853	101 to 109

Category	No.	IMSS setting	SP No.		
	036	Textured Paper Mode Voltage: FC: Side 2	2	854	101 to 109
	037	Ppr Trns CV: Start Timing: BW: Side 1	2	681	001 to 099
	038	Ppr Trns CV: Start Timing: BW: Side 2	2	682	001 to 099
	039	Ppr Trns CV: Duration: BW: Side 1	2	683	001 to 099
	040	Ppr Trns CV: Duration: BW: Side 2	2	684	001 to 099
	041	Ppr Trns CV: Start Timing: FC: Side 1	2	686	001 to 099
	042	Ppr Trns CV: Start Timing: FC: Side 2	2	687	001 to 099
	043	Ppr Trns CV: Duration: FC: Side 1	2	688	001 to 099
	044	Ppr Trns CV: Duration: FC: Side 2	2	689	001 to 099
	045	Ppr Trns Contact Mode	1	023	001 to 099
	046	Ppr Trns Gap: On Timing	1	021	001 to 099
	047	Ppr Trns Gap: Off Timing	1	022	001 to 099
	048	Pre-contact Movement of Paper Transfer	1	024	001 to 099
	049	Contact Move of Ppr Trns in Low Pressr	1	025	001 to 099
Fuser Adjustment	050	Fusing Temp	1	984	145 to 253
	051	Fusing Pressure Roller Temp	-	-	-
	052	Fusing Nip Width Setting	1	989	145 to 253
	053	Fusing Temp to Feed Ppr	1	102	170 to 226
			1	103	201 to 224

Category	No.	IMSS setting	SP No.		
	054	Additional Fusing Temp 1	1	118	011 to 030
	055	Additional Fusing Temp 2	1	119	011 to 030
	056	Cleaning Web Rotation Interval	1	992	145 to 252
	057	Cleaning Web Contact Position	1	998	145 to 252
	058	Fusing Nip Width Adjustment: Envelope	1	996	145 to 253
	059	Fusing Nip Width: Envelope: Decompression	-	-	-
	060	Fusing Nip Width: Envelope: Decompression: L Temp	-	-	-
	061	Accumulate Heat Before Feeding Envelope	-	-	-
	062	Smoothing Roller Auto Execute Setting	1	133	001
	063	Smoothing Roller Paper Type Ratio	1	133	022
Paper Feed Adjustment, Delivery Adjustment, Line Speed Adjustment	064	Fusing Belt Feed Speed	-	-	-
	065	Wide LCT: Fan Setting	1	978	001 to 068
	066	Wide LCT: Fan Level	-	-	-
	067	Pickup Assist	1	979	001 to 068
	068	Paper Weight Detection	-	-	-
	069	Paper Transfer Belt Feed Speed	-	-	-
	070	First Paper Motor Feed Speed	1	007	001 to 023
	071	Second Paper Motor Feed Speed	1	009	001 to 023
	072	Third Paper Motor Feed Speed	1	011	001 to 023
	073	Registration Motor Feed Speed	1	013	001 to 023

Category	No.	IMSS setting	SP No.		
	074	Bypass Tray Motor Feed Speed	1	015	001 to 025
	075	Registration Motor Feed Speed	1	019	001 to 025
	076	First Transport Motor Feed Speed	1	008	001 to 023
	077	Second Transport Motor Feed Speed	1	010	001 to 023
	078	Third Transport Motor Feed Speed	1	012	001 to 023
	079	Fourth Transport Motor Feed Speed	1	014	001 to 023
	080	Relay Transport Motor Feed Speed: CW	1	016	001 to 025
	081	Relay Transport Motor Feed Speed: CCW	1	018	001 to 025
	082	Double Feed Detect	-	-	-
	083	Paper Transfer Belt Speed Env corr: Low Temp	-	-	-
	084	Paper Transfer Belt Speed Env corr: Normal Temp	-	-	-
	085	Paper Transfer Belt Speed Env corr: High Temp	-	-	-
	086	Paper Feed Motor Speed Env corr: Low Temp	-	-	-
	087	Paper Feed Motor Speed Env corr: Normal Temp	-	-	-
	088	Paper Feed Motor Speed Env corr: High Temp	-	-	-
	089	Paper Output Motor Feed Speed	1	035	001 to 031
	090	Switchback Entrance Motor Feed Speed	1	026	011 to 035
	091	Exit Switchback Motor Feed Speed: CW	1	027	001 to 025
	092	Exit Switchback Motor Feed Speed: CCW	1	029	001 to 025

Category	No.	IMSS setting	SP No.		
	093	2 Sided Transport Motor Feed Speed	1	033	001 to 025
	094	2 Sided Switchback Motor Feed Speed: CW	1	030	001 to 025
	095	2 Sided Switchback Motor Feed Speed: CCW	1	031	001 to 025
	096	2 Sided Exit Motor Speed	1	034	001 to 025
	097	2 Sided Transport Roller Shift 1	-	-	-
	098	2 Sided Transport Roller Shift 2	-	-	-
	099	2 Sided Transport Roller Shift Setting	-	-	-
	100	Paper Curl Correction Level	-	-	-
	101	Paper Curl Correction Level Adjustment	-	-	-
	102	Process Speed Setting	1	986	145 to 253
	103	Paper Feed Interval Setting	1	988	145 to 253
	104	Initial CPM Setting: Low Temp	1	990	101 to 199
	105	Initial CPM Setting	1	991	101 to 199
Decurler/Finishing Position Adjustment	106	Z-fold Position 1	-	-	-
	107	Z-fold Position 2	-	-	-
	108	Half Fold Position: 1 sheet Fold	-	-	-
	109	Letter Fold-out Position 1: 1 sheet Fold	-	-	-
	110	Letter Fold-out Position 2: 1 sheet Fold	-	-	-
	111	Letter Fold-in Position 1: 1 sheet Fold	6	764	001 to 004
	112	Letter Fold-in Position 2: 1 sheet Fold	-	-	-
	113	Double Parallel Fold Position 1	-	-	-
	114	Double Parallel Fold Position 2	-	-	-
	115	Gate Fold Position 1	-	-	-

Category	No.	IMSS setting	SP No.		
	116	Gate Fold Position 2	-	-	-
	117	Gate Fold Position 3	-	-	-

Other 005: SC

Troubleshooting for SC516 after Repeated J097

Symptom

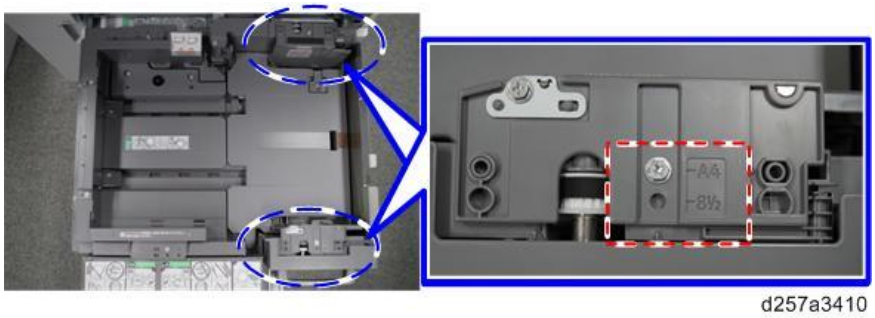
An unusual clattering noise is heard when a duplex job starts and the system starts to feed paper. Jam074 occurs, followed by Jam097, which occurs 3 times in succession. The system finally stops with an SC516-02 (sensor shift motor edge detection error).

Cause

The paper size (A4 or $8^1/_2$) fixed with the end fence on the tandem tray does not match with the size specified on the control panel.
The shift roller in the duplex unit operates according to the paper size specified on the control panel, resulting in the above jams and SC.

Solution

1. Check the paper size fixed with the end fence on the tandem tray.
   Photo below describes an example of the end fence fixed to A4 size.



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2. Check the paper size specified for the tandem tray on the control panel.

d135a3001

3. If the sizes do not match, enter SP5-959-001; Paper Size: 1st Tray (Tandem) and specify the size according to the paper in use.

0: A4 LEF

1: $8^1/_2$ × 11 LEF

4. Turn the main power off/on.

5. Confirm proper duplex printing to complete the procedure.

Troubleshooting SC 570-00 (fusing belt smoothing roller error)

Symptom

SC570-00 (fusing belt smoothing roller operation error)

How to isolate the cause of the problem

Execute a forced fusing belt smoothing operation (SP1-133-110).

If the SC occurs, do Procedure 1.

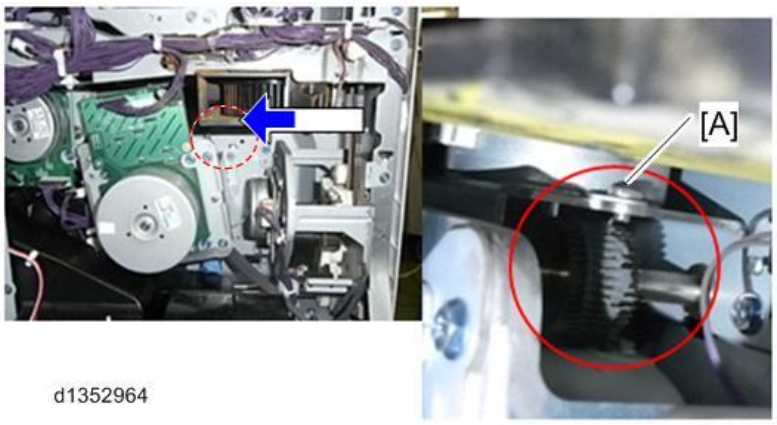
If the SC does not occur, do Procedure 2.

Solution

Procedure 1

The goal of this procedure is to verify the parts (gear, feeler, sensor, harness, motor) that may be damaged or not connected properly, causing the SC.

1. Set the value in SP1-133-120 (Fixed Operation Time: Manual) to “1”.
2. Execute SP1-133-110 (Manual Smoothing: Exe).
3. Set the value in SP1-133-120 (Fixed Operation Time: Manual) back to “180”.
4. Check if the gear [A] rotates.



If the gear rotates,

- Smoothing roller contact/separate Gear
- Smoothing roller contact/separate Feeler
- Smoothing roller contact/separate Sensor

may be damaged.

If the gear DOES NOT rotate,

- Harness
- Motor

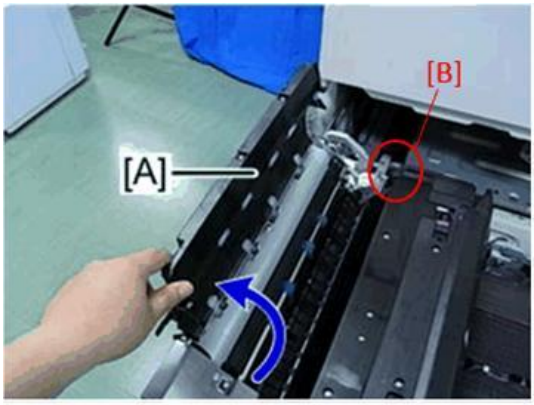
may be damaged or its connection is loose.

5. Replace or fix the affected part(s) accordingly to complete the procedure.

Procedure 2

The goal of this procedure is to verify if the SC is caused by an incorrectly positioned feeler, which may be caused by excess load put on the cam.

1. Open the upper guide plate [A] of the fusing unit and locate the belt smoothing roller contact/separate feeler [B]. If the cut-out on the feeler is not visible, do Procedure 3.



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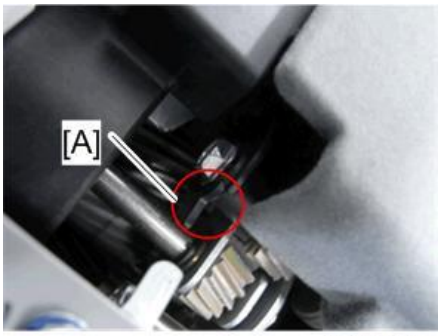
* The top part of the fusing unit shown in this photo is gray because the unit is of the prototype.

Incorrect	Correct
Cut-out [A] on the feeler is visible.	Cut-out on the feeler is not visible.
 d1352965	d1352966
Continue with the next step.	Do Procedure 3.

2. Check if the brackets [A] and/or [B] are deformed.
   If deformed, replace the fusing unit to complete the procedure.
   If the brackets are not deformed, excess load on the cam may be the problem. Do the next step.
3. Apply Fluotribo grease to the sliding surfaces [C] and [D] of the brackets [A] and [B]. Grease amount: 5 ± 1 mm in diameter (0.1 to 0.4 gm)

Procedure 3

The goal of this procedure is to reconfirm proper operation of the belt smoothing roller.

1. Set the value in SP1-133-120 (Fixed Operation Time: Manual) to “1”.
2. Execute SP1-133-110 (Manual Smoothing: Exe).
3. Set the value in SP1-133-120 (Fixed Operation Time: Manual) back to “180”.

4. Check if the SC occurs.
   If it does not occur, repeat the above steps 1 through 3 three times and check if the SC still does not occur to confirm the effect.
   If it does occur, excess load on the cam may be the problem. Do Procedure 2.

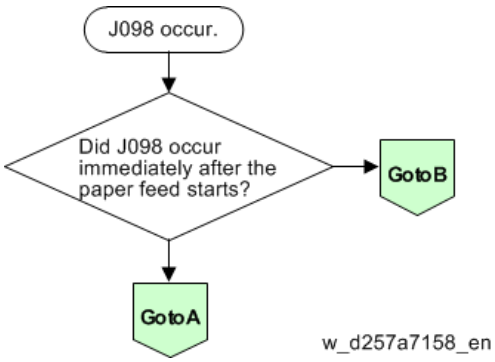
Other 006: Jam

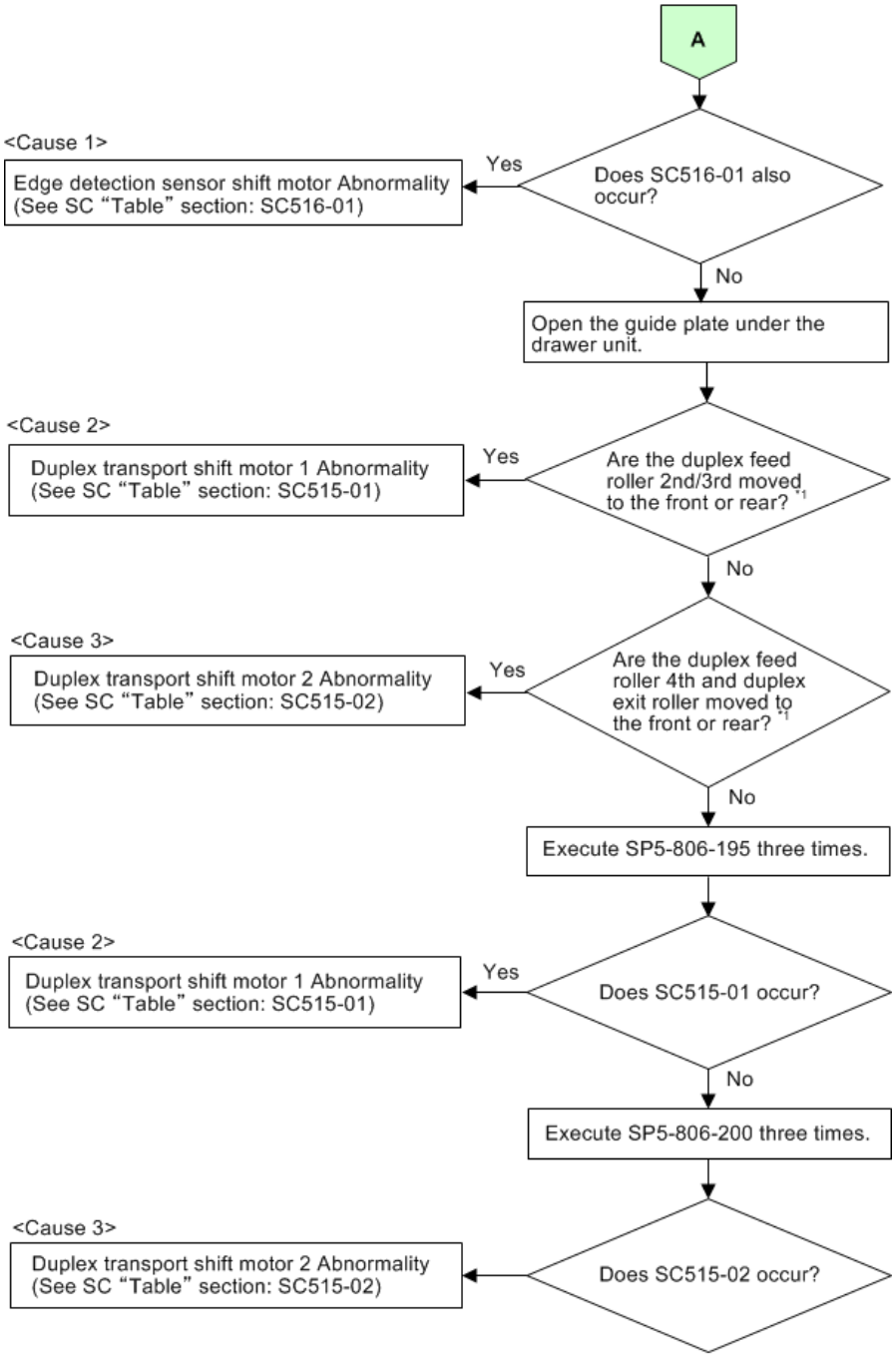
Troubleshooting for J098

Cause

- Cause 1
  - Edge detection sensor shift motor defective, Sensor shift HP switch defective
  - Sensors dirty
  - Foreign materials interfering with the sensor shift mechanism
- Cause 2
  - Duplex transport shift motor 1 defective, Duplex transport HP sensor 1 defective
  - Sensors dirty
  - Foreign materials interfering with the roller shift mechanism
- Cause 3
  - Duplex transport shift motor 1 defective, Duplex transport HP sensor 1 defective
  - Sensors dirty
- Cause 4
  - The paper settings on the operation panel are not correct.
  - The paper is not set in the paper feed tray correctly
  - Edge detection sensor shift motor defective, Edge detection sensor defective
  - Edge detection sensor dirty
  - Foreign materials interfering with the sensor shift mechanism
    Execute an input check for the edge detection sensor (SP5-803-166). Check whether the value changes in the presence or absence of paper.

Action





*1: See "Reference 1: Roller position status"

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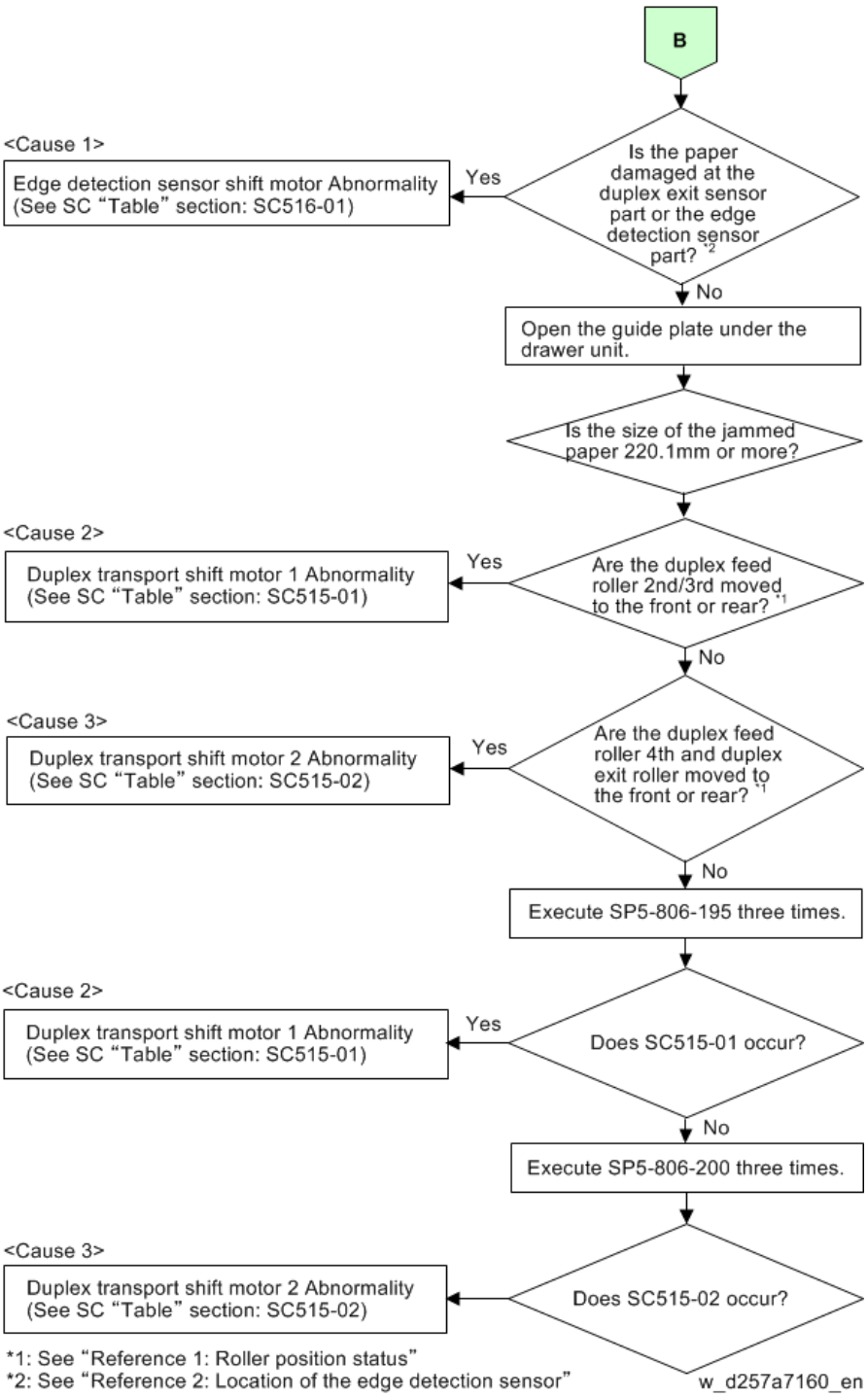
B
Is the paper damaged at the duplex exit sensor part or the edge detection sensor part? *2
Yes
<Cause 1>
Edge detection sensor shift motor Abnormality (See SC "Table" section: SC516-01)
No
Open the guide plate under the drawer unit.
Is the size of the jammed paper 220.1mm or more?
Are the duplex feed roller 2nd/3rd moved to the front or rear? *1
Yes
<Cause 2>
Duplex transport shift motor 1 Abnormality (See SC "Table" section: SC515-01)
No
Are the duplex feed roller 4th and duplex exit roller moved to the front or rear? *1
Yes
<Cause 3>
Duplex transport shift motor 2 Abnormality (See SC "Table" section: SC515-02)
No
Execute SP5-806-195 three times.
Does SC515-01 occur?
Yes
<Cause 2>
Duplex transport shift motor 1 Abnormality (See SC "Table" section: SC515-01)
No
Execute SP5-806-200 three times.
Does SC515-02 occur?
<Cause 3>
Duplex transport shift motor 2 Abnormality (See SC "Table" section: SC515-02)
*1: See "Reference 1: Roller position status"
*2: See "Reference 2: Location of the edge detection sensor"
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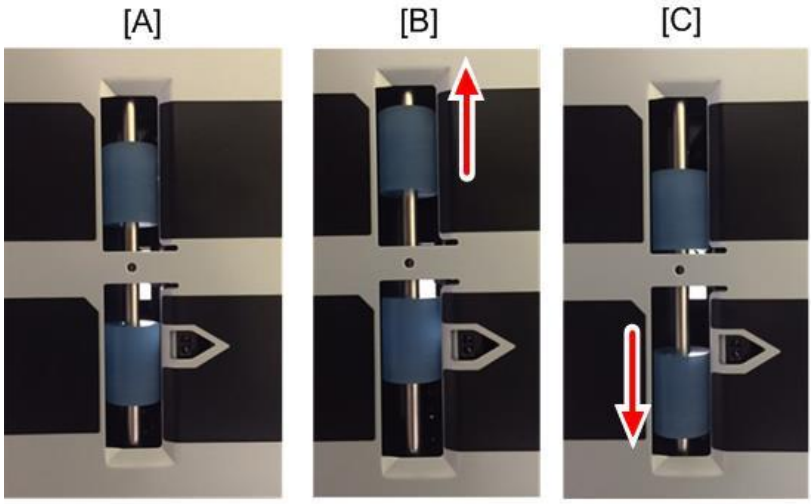
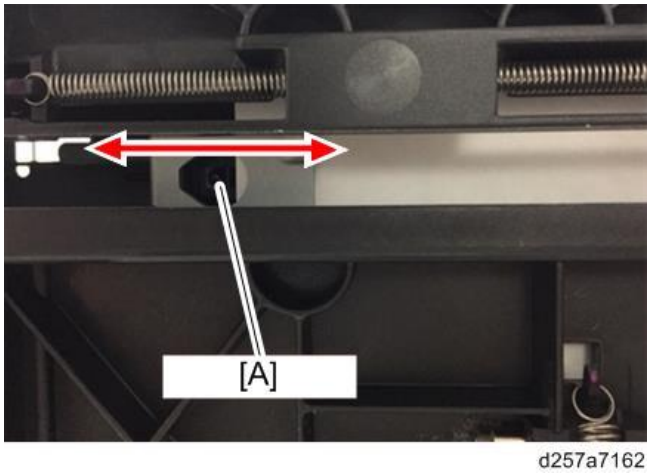
Reference 1: Roller position status



- [A]: Normal State
- [B]: Abnormal State (The roller are moved to the front side)
- [C]: Abnormal State (The rollers are move to the rear side)

Reference 2: Location of the edge detection sensor



[A]: Edge detection sensor

Problems Related to Peripheral Devices

Important

There is a gap between the external options and main machine. Sponges should be attached to the gap.

However some machines are installed without sponges and it causes paper to fall into the gap.

Be sure to attach the sponges to the machines according to the installation procedure.

Finisher SR4150, Booklet Finisher SR4160, Finisher SR5090, Booklet Finisher SR5100

Troubleshooting for Jam at Proof Guide Plate

Symptom

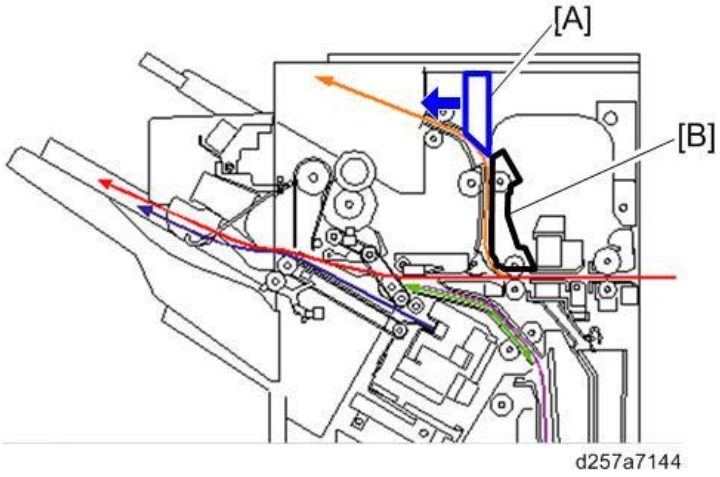
A J151 or J156 Jam occurs when printing out to the proof tray.

- J151: Entrance Sensor : Lag Jam
- J156: Proof Tray Exit Sensor: Late Jam

The paper jam occurs at the R3 guide plate. There is some damage at leading edge of the jammed paper, which seems to result from being scratched by the pawls.

Cause

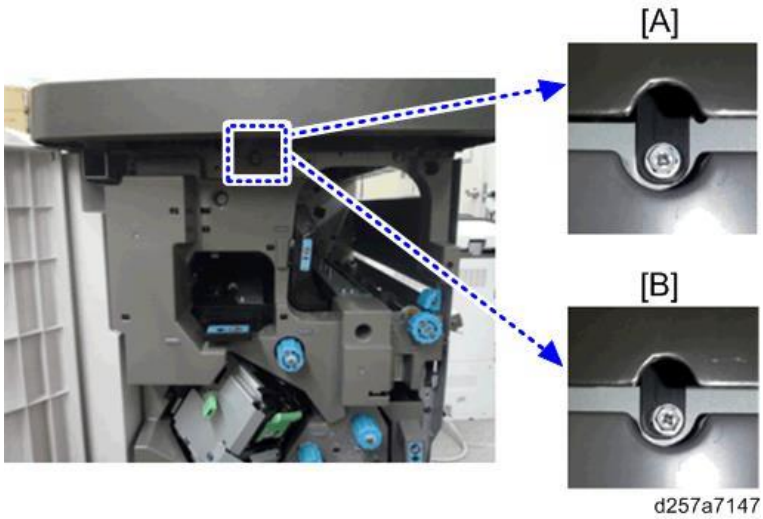
The J151/156 jam is caused by incorrect assembly of the proof guide plate. When the proof guide plate is not at the correct position, the leading edge of the paper is caught by a groove between the proof guide plate [A] and the R3 guide plate [B]. Then the paper jam occurs.



Solution

Check whether the proof guide plate, which is integrated with the upper cover, is at the correct position.

Check that the screw of the proof guide plate is fixed at the center of the slotted hole.



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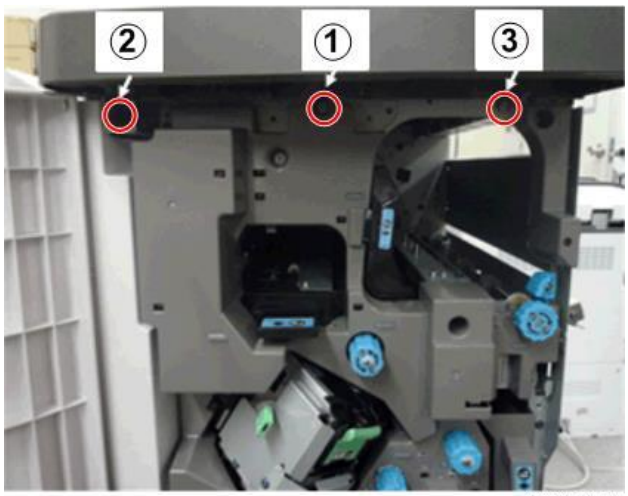
- [A]: OK
- [B]: NG

If the screw is not fixed at the center of the slotted hole, remove the three screws shown below. Then fasten the screws in the order of ①,②,③.



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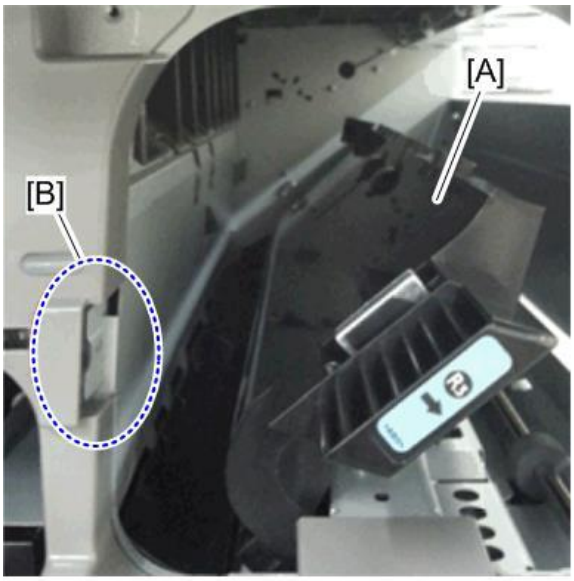
Note

- If you remove the proof guide plate for maintenance, make sure that the proof guide plate is at the correct position as described above after installing it.
- Do not modify the magnetic part [B] of the R3 guide plate [A]. If you modify the magnetic part

[B], the R3 guide plate cannot go back to the correct position. Then the paper jam could occur.



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How to Deal with Stapling Errors Caused by Curls

If stapling errors with face curls with a height greater than 15 mm occurs, take the following actions:

1. Turn the paper upside down, or feed from LCIT peripherals (RT5140, RT4060).
2. Turn ON the anti-humidification heater.
3. Perform a curl correction (if decurler unit is used)
4. Lower the fusing temperature by 5 °C (up to 10°C).

LCIT RT4060

Upper Limit Position Adjustment

Effect obtained by adjusting the upper limit position

1. Moving the upper limit position downwards (When there is a double feed or non-feed caused by a double feed)
   The paper is separated when feeding the paper.
2. Moving the upper limit position upwards (When a non-feed occurs)
   The resistance to paper feed can be decreased.

Adjustment Procedure

⚠CAUTION

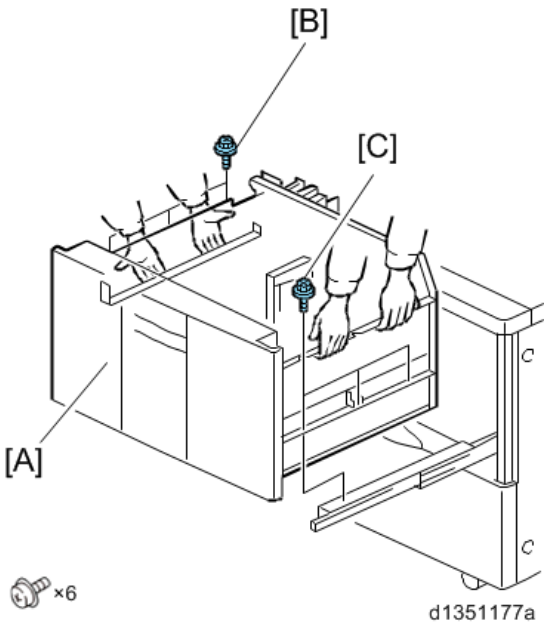
- The tray weighs 25 kg empty. To prevent damage to the tray and personal injury, never attempt to lift the tray alone. The tray must be lifted by two or more people.

1. Pull the tray [A] out of the LCT until it stops.

2. Remove the screws from the right rail [B].

3. Remove the screws from the left rail [C].

4. Lift and remove the tray [A].

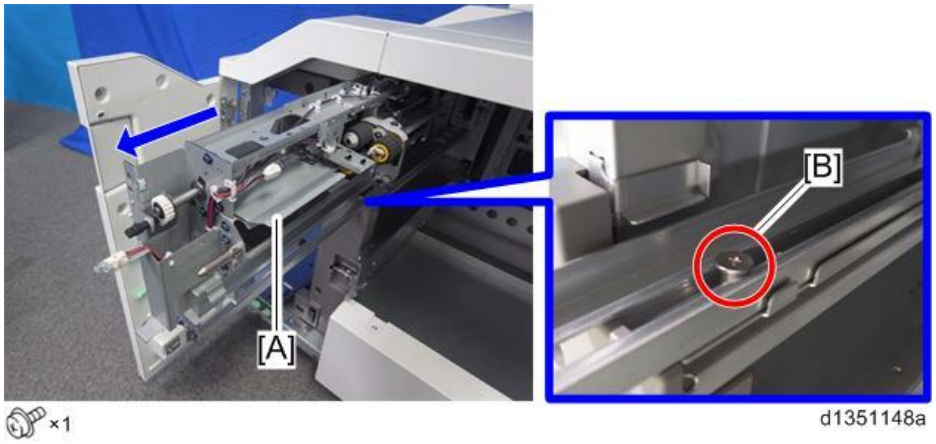


Note

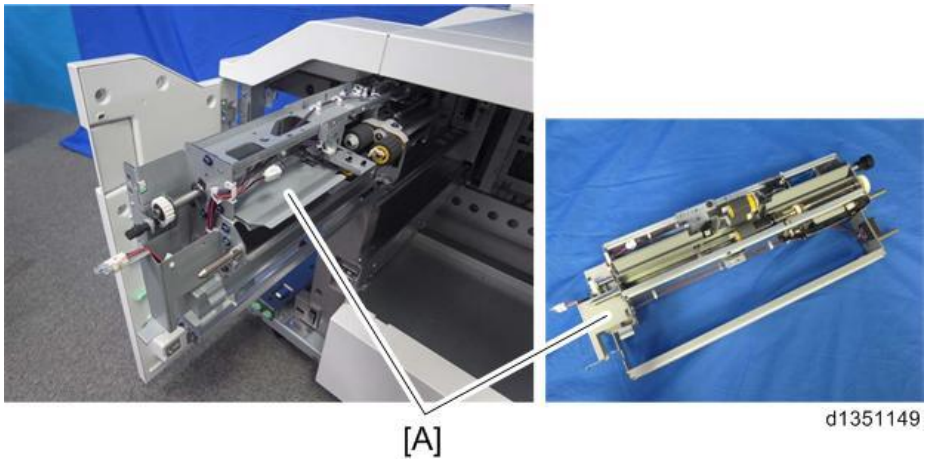
- You do not need to remove the screw for the stopper pin bracket at the back of the left rail.

5. Open the front door [A], and then remove the inner cover [B].

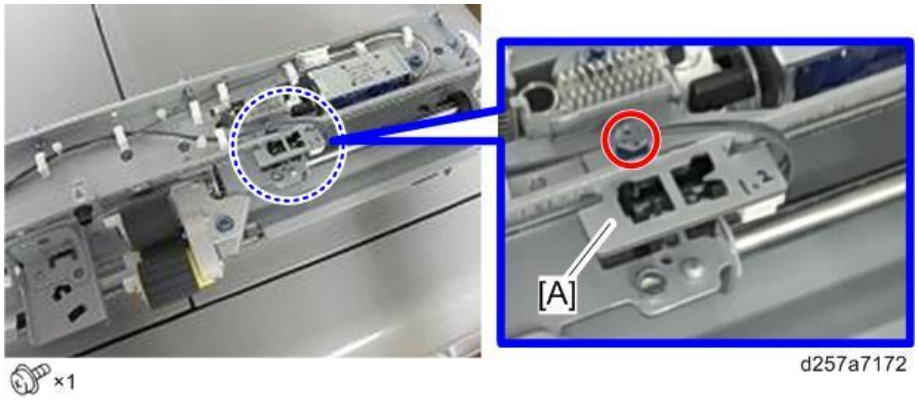
6. Pull out the paper feed unit [A], and then remove the screw [B].



7. Remove the paper feed unit [A].



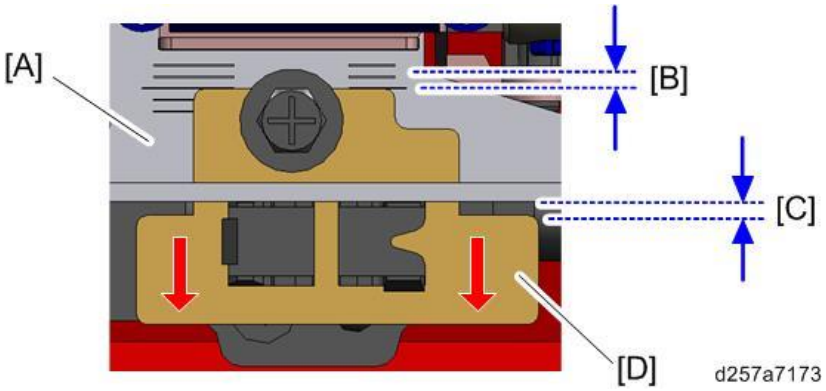
8. Remove the TCRU/ORU screw and adjust the upper limit sensor bracket [A].



Installing the Upper Limit Sensor Bracket

- When a double feed or non-feed caused by a double feed occurs.
  A scale is marked on the stay [A]. 1 division [B] is 1.0 mm.
  Install the upper limit sensor bracket [D] to increase the clearance [C] between the stay and the upper limit sensor bracket.
  If the upper limit sensor bracket is moved 0.5 mm away from the position where the upper limit

sensor was installed, the upper limit position moves 0.8 mm downwards.

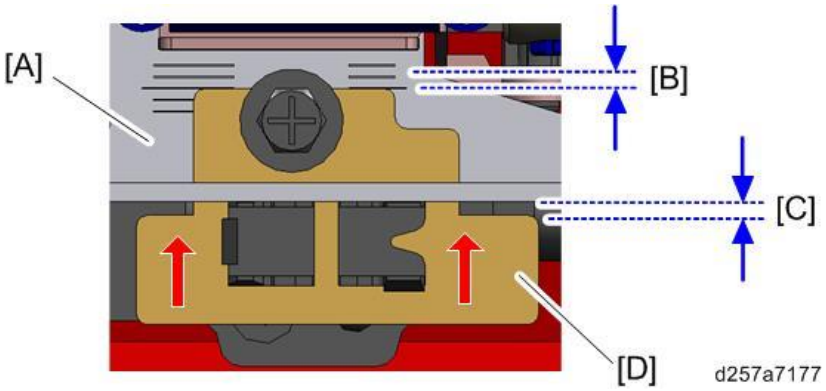


- When a non-feed occurs

  A scale is marked on the stay [A]. 1 division [B] is 1.0 mm.

  Install the upper limit sensor bracket [D] to decrease the clearance [C] between the stay and the upper limit sensor bracket.

  If the upper limit sensor bracket is moved 0.5 mm closer to the position where the upper limit sensor was installed, the upper limit position moves 0.8 mm upwards.

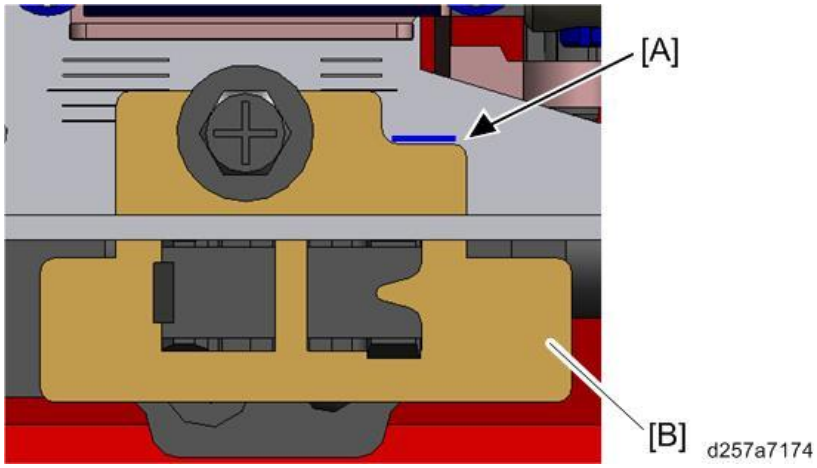


After the Adjustment

After adjusting the upper limit sensor bracket, a paper feed error can occur depending on the type of paper.

- When the upper limit sensor has been moved downwards: A non-feed can occur.
- When the upper limit sensor has been move upwards: A double feed can occur.

If a paper feed error occurs, install the upper limit sensor bracket [B] so that the bracket is positioned as shown below, with relation to the long graduation mark in the center of the scale, and the blue mark [A].



LCIT RT4070, LCIT RT5140

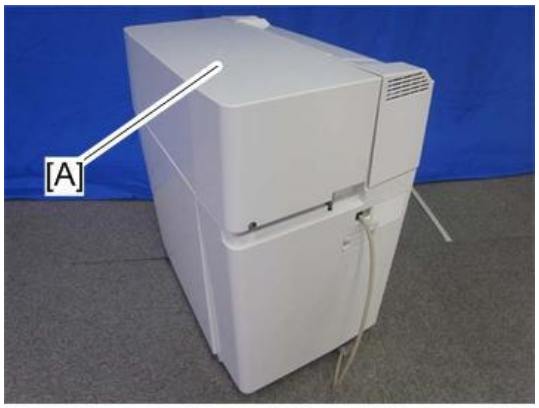
Upper Limit Position Adjustment

Effect obtained by adjusting the upper limit position

1. Moving the upper limit position downwards (When there is a double feed or non-feed caused by a double feed)
   The paper is separated when feeding the paper.
2. Moving the upper limit position upwards (When a non-feed occurs)
   The resistance to paper feed can be decreased.

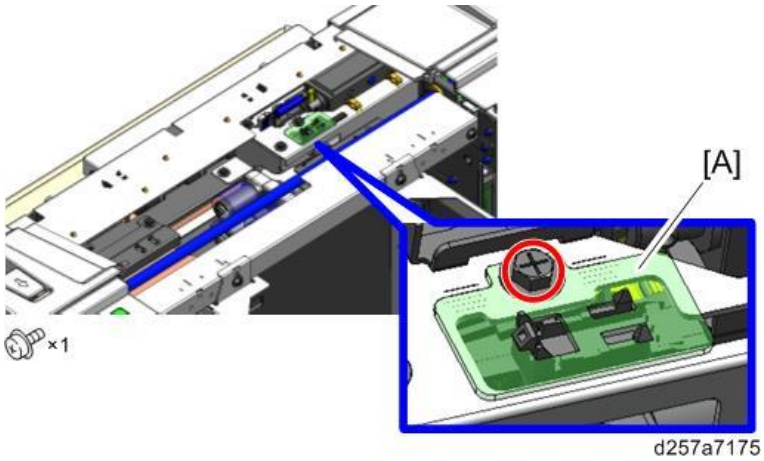
Adjustment Procedure

1. Open the top right cover [A].



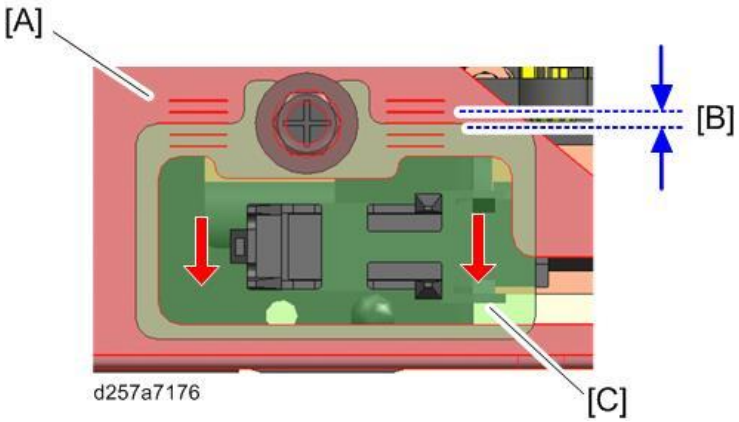
2. Remove the top left cover [A].

3. Remove the TCRU/ORU screw and adjust the upper limit sensor bracket [A].



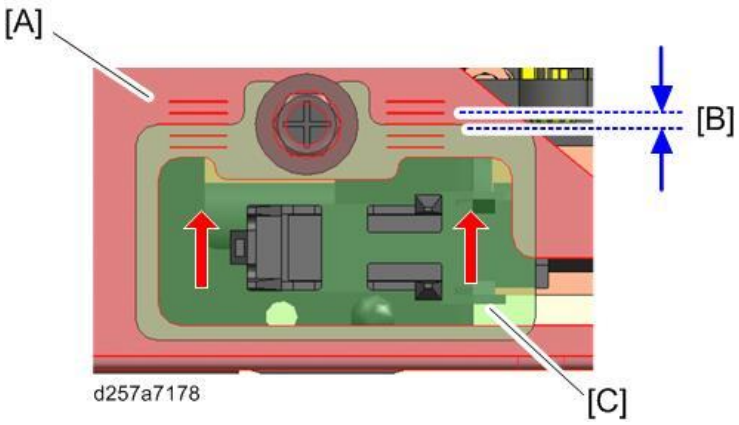
Installing the Upper Limit Sensor Bracket

- When a double feed or non-feed caused by a double feed occurs.
  A scale is marked on the stay [A]. 1 division [B] is 1.0 mm.
  When the upper limit sensor bracket [C] is moved 0.5 mm in the direction of the red arrow from the position where the upper limit sensor was installed, the upper limit position moves 0.8 mm downwards.



- When a non-feed occurs
  A scale is marked on the stay [A]. 1 division [B] is 1.0 mm.

When the upper limit sensor bracket [D] is moved 0.5 mm in the direction of the red arrow from the position where the upper limit sensor was installed, the upper limit position moves 0.8 mm upwards.

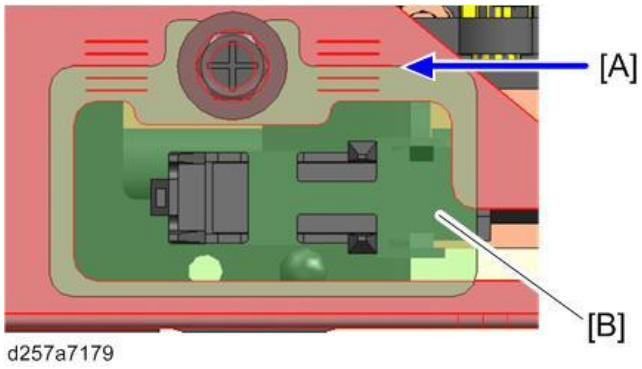


After the Adjustment

After adjusting the upper limit sensor bracket, a paper feed error can occur depending on the type of paper.

- When the upper limit sensor has been moved downwards: Non-feed can occur.
- When the upper limit sensor has been move upwards: Double feed can occur.

If a paper feed error occurs, install the upper limit sensor bracket [B] so that the top of the bracket is flush with the long graduation mark [A] as shown below.



Multi-Folding Unit

Poor Folding

Cause:

Depending on paper hardness, inaccurate folds may result. This is referred to as folding deviation.

Solution:

Change the folding position by adjusting the position of the paper edge stopper for folding.

For multi-sheet folding, change the folding position using the following settings:

- Half Fold Position (Multi-sheet Fold) (SP 6-314-001 to 040)
- Letter Fold-out Position 1 (Multi-sheet Fold) (SP 6-315-001 to 040)
- Letter Fold-out Position 2 (Multi-sheet Fold) (SP 6-316-001 to 040)

- Letter Fold-in Position 1 (Multi-sheet Fold) (SP 6-317-001 to 040)
- Letter Fold-in Position 2 (Multi-sheet Fold) (SP 6-318-001 to 040)

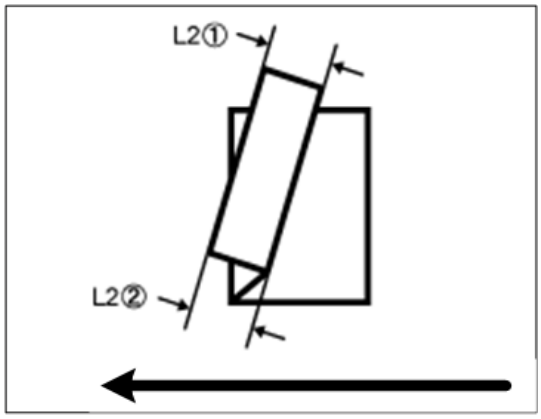
Folding Deviation

Cause:

Depending on paper hardness, folding deviations (skewed folding) may appear.

- A deviation may appear if the edge dimensions of the parts between folds are different.
- For example, in the following illustration, the dimensional difference between the top (L2[2]) and bottom (L2[1]) edges is a deviation.

Folding deviation example of L2 for Z-fold

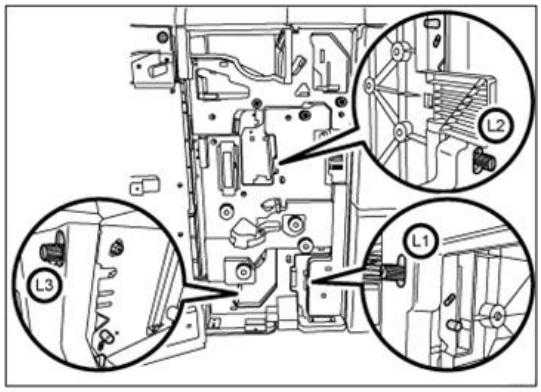


d1798116

Solution:

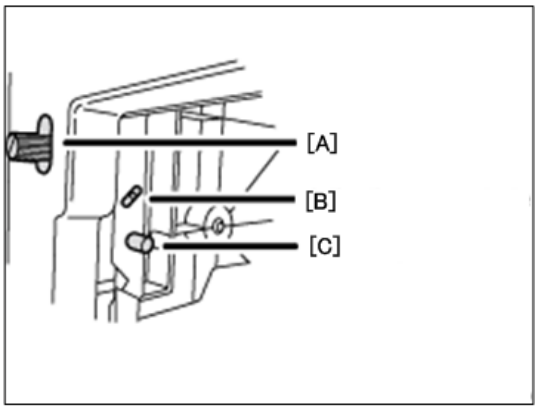
Adjust the deviation.

The multi-folding unit has three adjusting screws (L1, L2, and L3) to adjust deviation.



d1798117

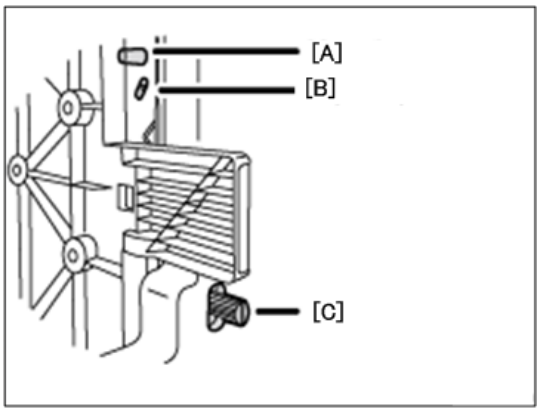
L1



d1798118

[A]	Adjusting Screw
[B]	Adjusting Screw Hole
[C]	Mounting Screw

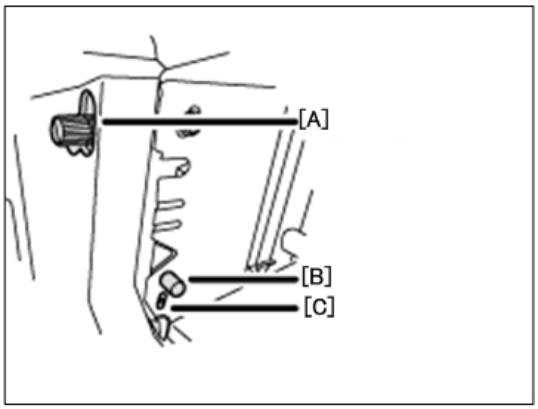
L2



d1798119

[A]	Mounting Screw
[B]	Adjusting Screw Hole
[C]	Adjusting Screw

L3

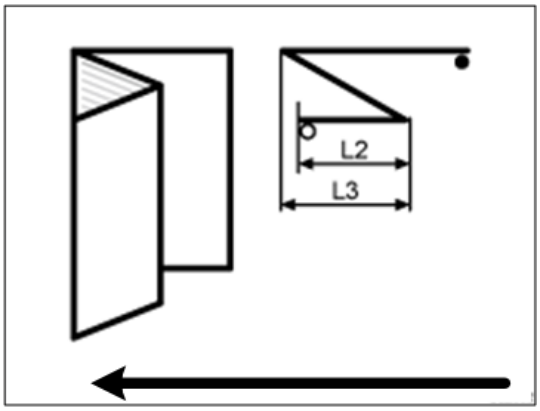


d1798120

[A]	Adjusting Screw
[B]	Mounting Screw
[C]	Adjusting Screw Hole

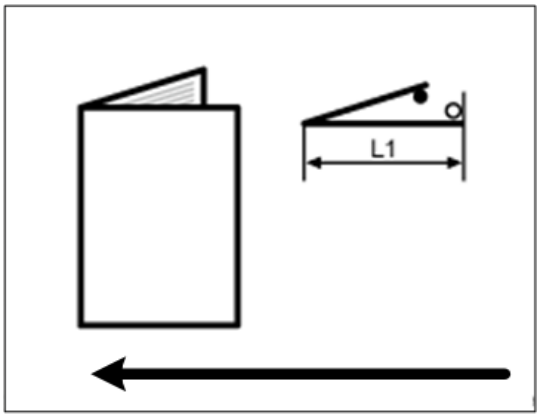
The screws can be used to do adjustments for the following fold methods:

- Z-fold



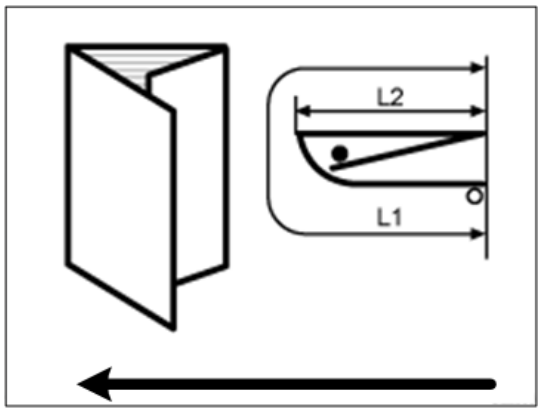
d1798121

- Half Fold



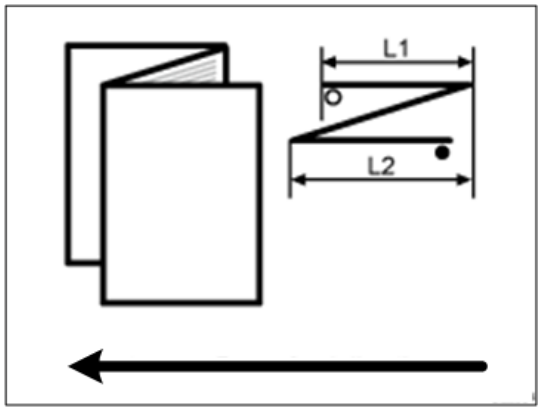
d1798122

- Letter Fold-in



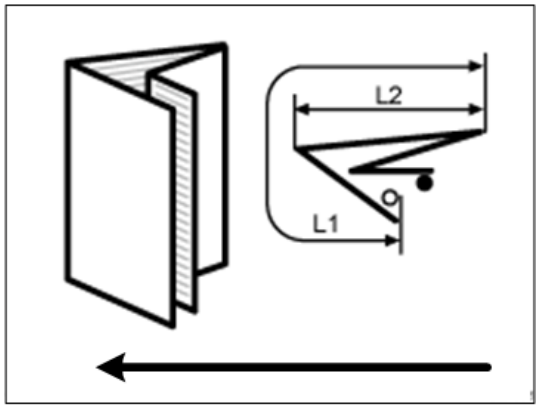
d1798123

- Letter Fold-out



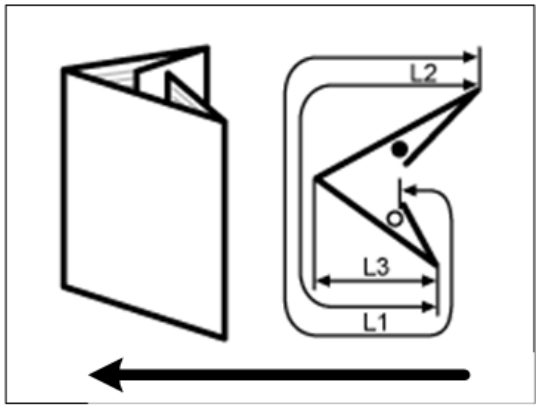
d1798124

- Double Parallel



d1798125

- Gate Fold



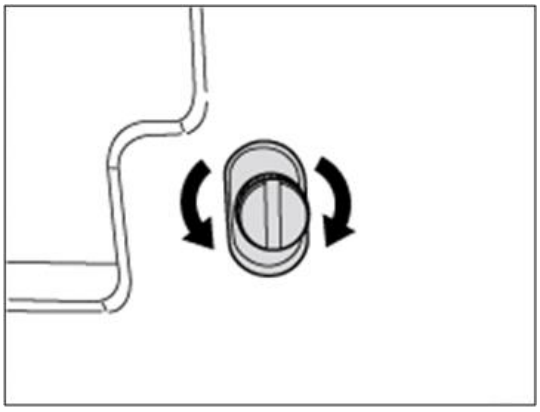
d1798126

The ○ mark indicates the leading edge (relative to the paper feed direction), and the ● mark indicates the trailing edge.

How to adjust the folding deviation

This procedure is the same for L1, L2, and L3.

1. Open the front cover of the multi-folding unit.
2. Remove the mounting screw.
   If the mounting screw is attached to the adjusting screw hole, unfasten it.
3. Turn the adjusting screw to adjust the deviation.
   - To increase the length at the bottom part of paper, turn the screw clockwise.
   - To decrease the length at the bottom part of paper, turn the screw counterclockwise.



d1798127

4. Attach the mounting screw to fasten the adjusting screw.
   If the mounting screw is attached to the adjusting screw hole, fasten it.
5. Close the front cover of the multi-folding unit.

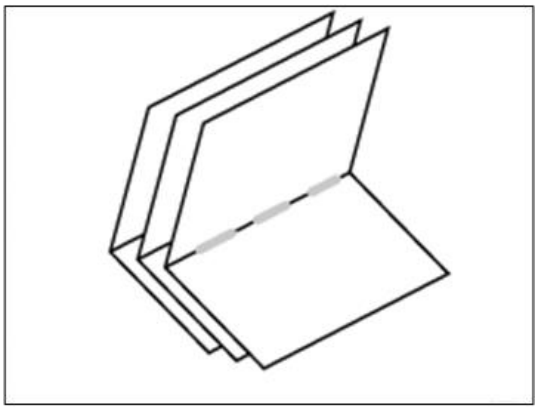
Note

- For multi-sheet folding, the folding deviation that appears in the center of paper will be adjusted.
- If the deviation is large, the paper may be skewed.

Folds Dirty by Multi-Sheet Folding

Cause:

If multi-sheet folding is performed after a large number of Z-folds have been performed, the tip of the blade used for the multi-sheet folding may be dirty, resulting in dirt on the paper.



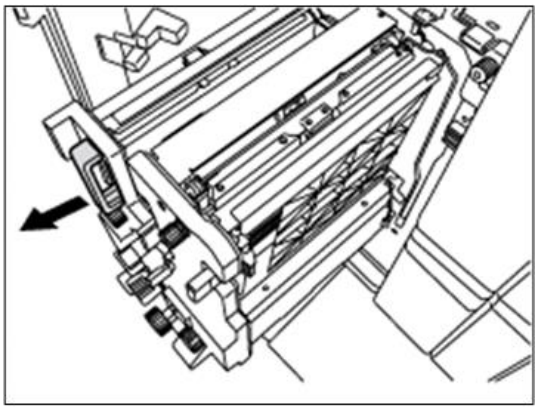
d1798128

This will produce dirt on the paper in an area of 1-3 cm (0.4-1.2 inches) in width (equal to the width of the blade) in the fold in the center of paper.

Solution:

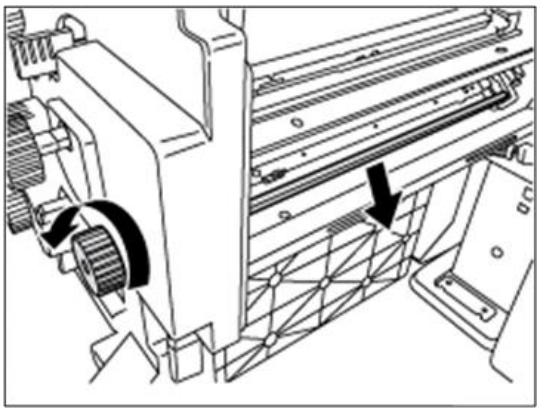
Clean the blade.

1. Open the front cover of the multi-folding unit.
2. Pull the multi-folding unit out.



d1798129

3. Turn the N11 dial counterclockwise until the blade appears.
   The blade is located in the right part of the multi-folding unit.

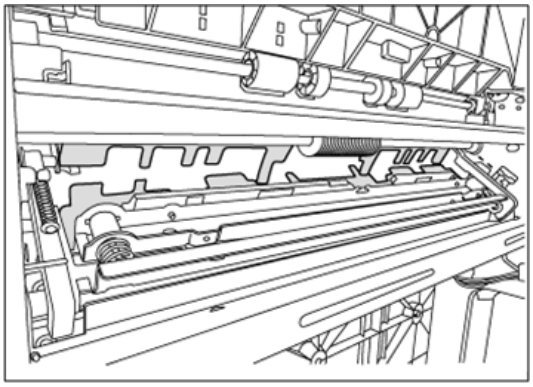


d1798130

4. Wipe the tip and top of the blade with a soft dry cloth.

Important

- Be careful not to damage the blade.

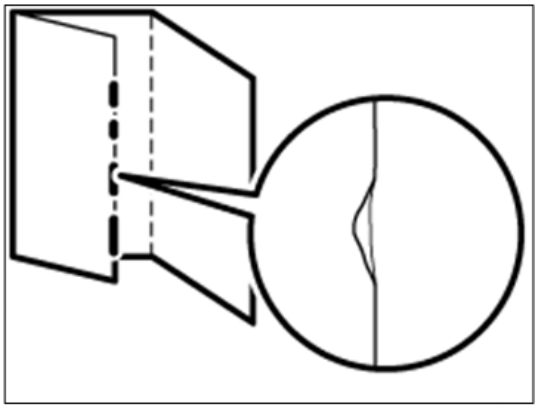


d1798131

5. After cleaning, restore the machine so that it resumes operation.
6. Apply multi-sheet folding and print 3-5 copies. The dirt on the paper will disappear.

Edges of Letter Fold Bent

When letter folding is applied, the edge of the inner flap may become bent.



d1798132

Solution:

The solution depends on whether letter folding is applied to multiple sheets or a single sheet.

When letter folding is applied to multiple sheets

1. Load the paper the other side up.
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

3. On the machine operation panel: [Adjustment Settings for Operators] > [09 Finishing: Fold] >[0910 Letter Fold-in Position 1: Multi-sheet fold] to "4.0 mm".
4. Print the image. Is the problem resolved?

Yes	Finished!
No	Consult the product specialist.

When letter folding is applied to a single sheet

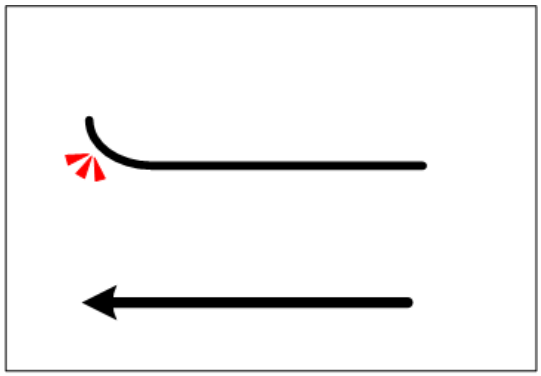
Note

- This procedure is applied especially to coated paper.
- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details see “3. Custom Paper Settings for Administrator” in the TCRU “Adjustment Item Menu Guide”.

1. In [Settings] > [System Settings] > [Machine] > [Fold/Booklet] > [Letter Fold-in Position], change the value of [Letter Fold-in Position: Single-Sheet Fold] to "7mm".
2. In [Adjustment Settings for Operators] > [Finishing Fold] group, select [Letter Fold-in Position 1: 1sheet Fold].
3. Increase the value by 0.2 mm.
4. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Step 2 to 4. If the problem persists even though the setting value is 4 mm larger than the maximum value, consult the product specialist.

Z-Folding Is Not Performed Correctly



d1798133

The delivered paper has an upward curl with a arc of 4 cm (1.6”) or less at the leading edge.

Solution:

1. Is the decurl unit installed?

Yes	Go to the next step.
No	Go to Step 4.

2. In [Settings] > [Tray/Paper Settings] > [Common Settings/Others] > [Paper Curl Correction Level], change the curl correction level to downward.
3. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

4. Load the paper the other way up.
5. Print the image. Is the problem resolved?

Yes	Finished!
No	Consult the product specialist.

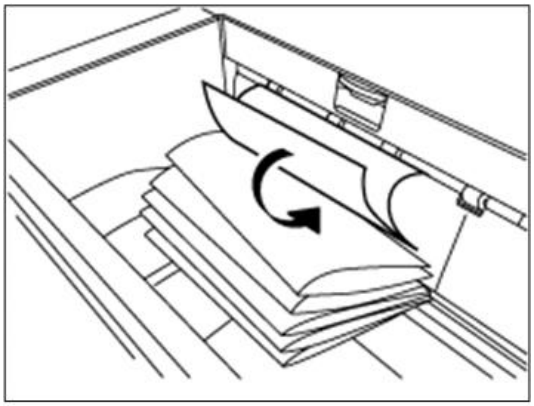
Note

- This folding error will not occur if uncurled or downward curling paper is used.

Folded Sheets Are Not Stacked Properly

Cause:

If a large number of half-folded multi-sheets are output, the edges of the sheets might bulge upwards. If this happens, other sheets loaded on the bulged paper may turn over in the output tray. This is likely to occur if thick, relatively stiff paper is used.



d1798134

As a bundle is delivered, its folded edge may droop and catch on the stacked bundles, causing the delivered bundle to flip over.

Solution:

Use the Z-fold support tray for multi-folding unit. This will reduce the angle of stacked bundles and prevent bundles flipping over as they are delivered.

d1798135

For details about attaching the Z-fold support tray for multi-folding unit, see "Copy/Document Server" supplied with the machine.

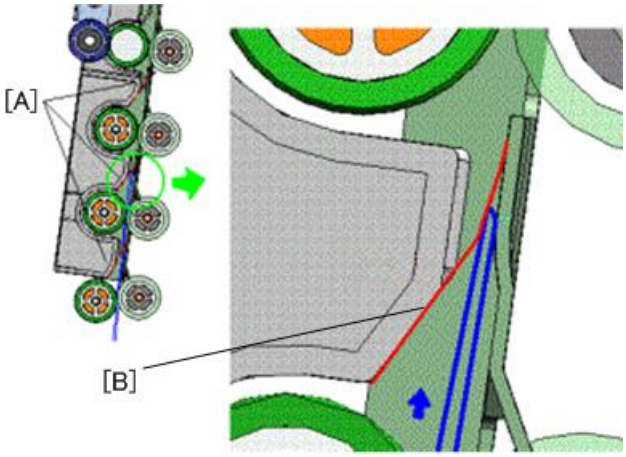
Note

- If the Z-fold support tray for the multi-folding unit is attached, folded paper such as letter-folded paper or gate-folded paper will not turn over in the output tray when delivered.

Matte Paper Scratched During Folding

The surface of matte finish paper shows scratches after folding.

Cause:



d1808020

When the folded paper is transported to the fold crease unit, the leading edge (creased edge) enters the fold nip prepared level for the press guide, and then is pressed by the press guide [B]. The press guide has three press rollers [A]. The friction between the press guide and press guide plate as the paper is fed can scratch or mark the matte finish of the paper.

Note

- The surface of the guide plate is rough and can cause marks on the surface of the paper. The surface of the plate becomes smoother after about 2,000 sheets have feed through the folding unit and these marks disappear.
- The surface of gloss coated paper is much smoother, so these marks do not appear on glossy

paper.

- The surface of Normal paper is untreated, so these marks do not appear with Normal paper.

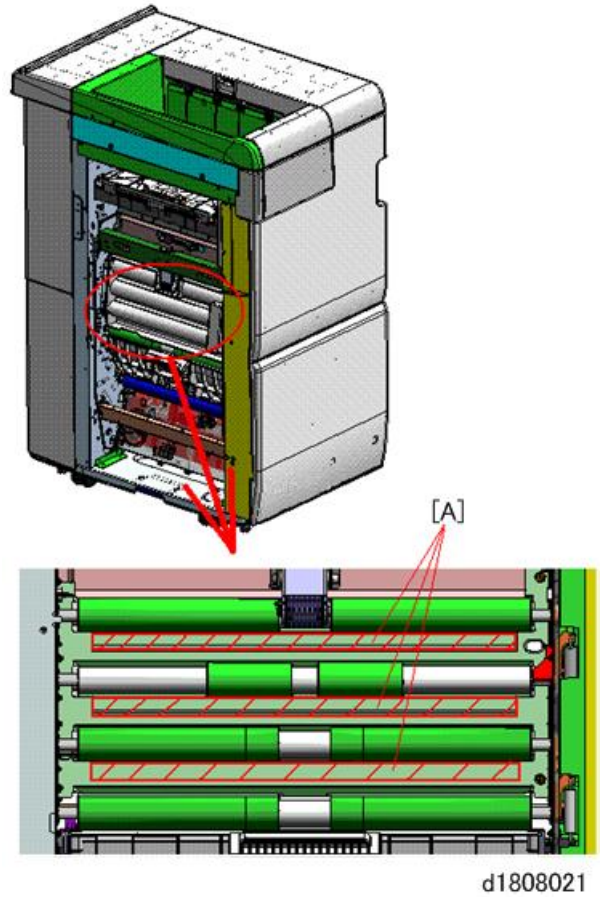
Solution:

1. Open the guide plate and clean the metal plate at [A] with an alcohol dampened cloth.
2. Print and fold a sample. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

3. Take a piece of paper and gently rub the surface of the metal plate to smooth it, and then do another test. Is the problem solved?

Yes	Finished!
No	Repeat Steps 1 and 2. If the problem persists, consult the product specialist.



Note

- Cleaning the surface of the metal guide plate and buffing it with a piece of paper reduces the occurrence of marks on the paper.
- The present condition of the guide plate at the affected area depends on the amount of usage of the folding unit, but buffing the surface of the plate with paper 20 to 50 times should reduce friction during paper feed.

Important

- After buffing it with paper, always clean the surface of the plate with a clean cloth dampened with alcohol to remove tiny bits of paper that could adhere to the plate after buffing.

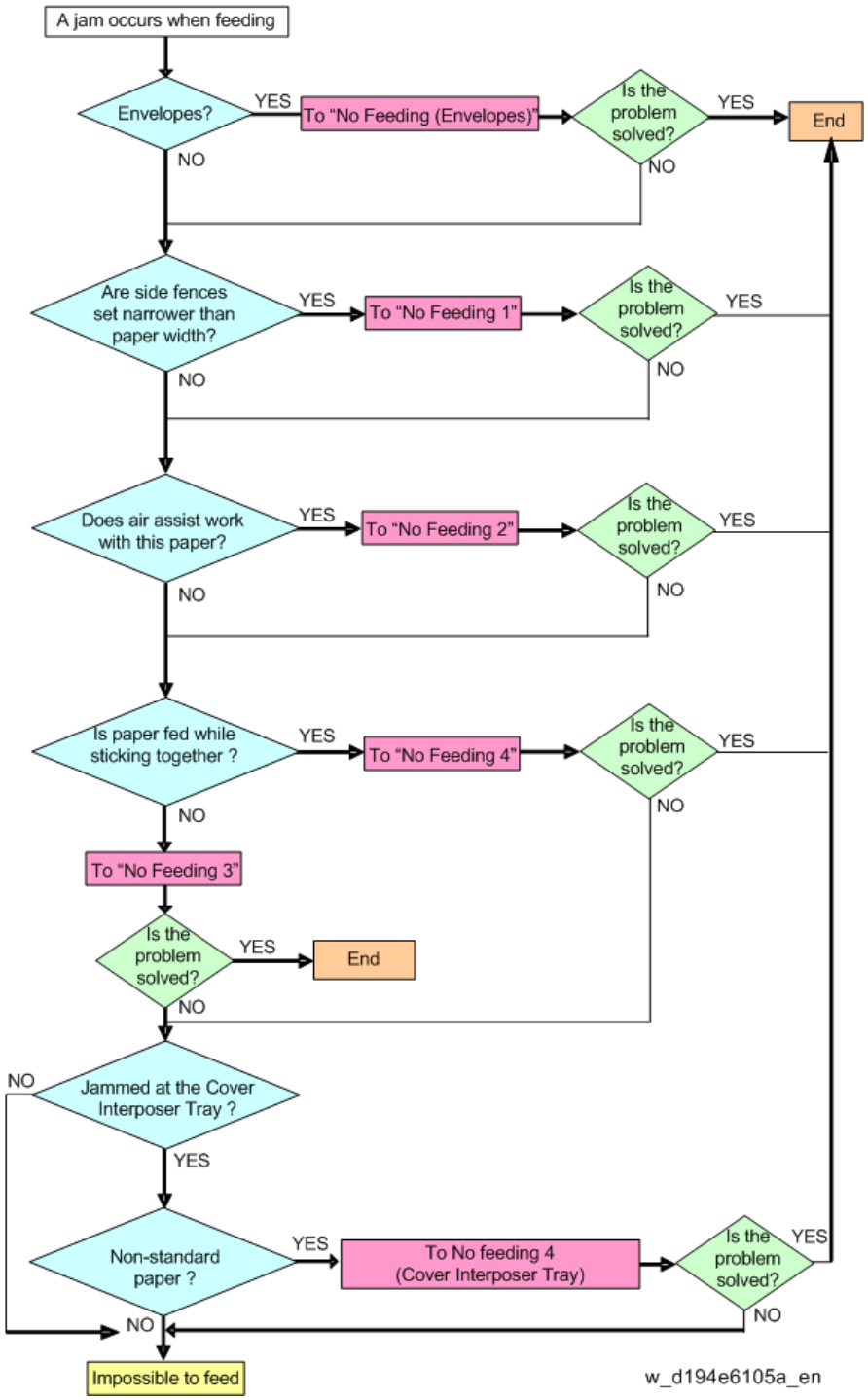
Paper Feed/Transport Problems on Other Peripherals

Common: Bypass Tray

Cause

See the causes that correspond to each procedure.

Solution



Note

- No Feeding (Envelope)

- No Feeding 1
- No Feeding 2
- No Feeding 3
- No Feeding 4

No Feeding (Envelope)

Cause

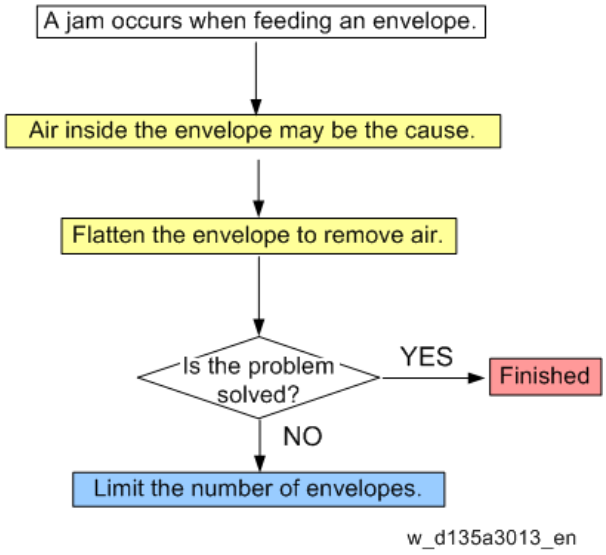
The envelopes have a layer of air in them, as it reduces the pressure between the pickup roller and the envelope.

This is likely to occur if:

- Many envelopes are loaded.
- Envelopes are puffed up and not pressed down enough.

Solution

Follow the flowchart below.



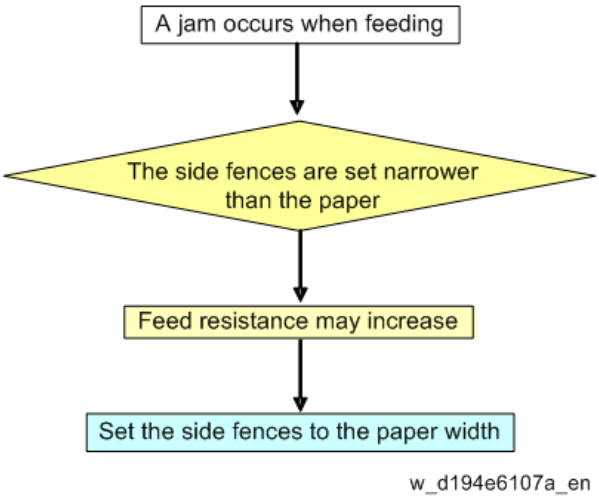
No Feeding 1

Cause

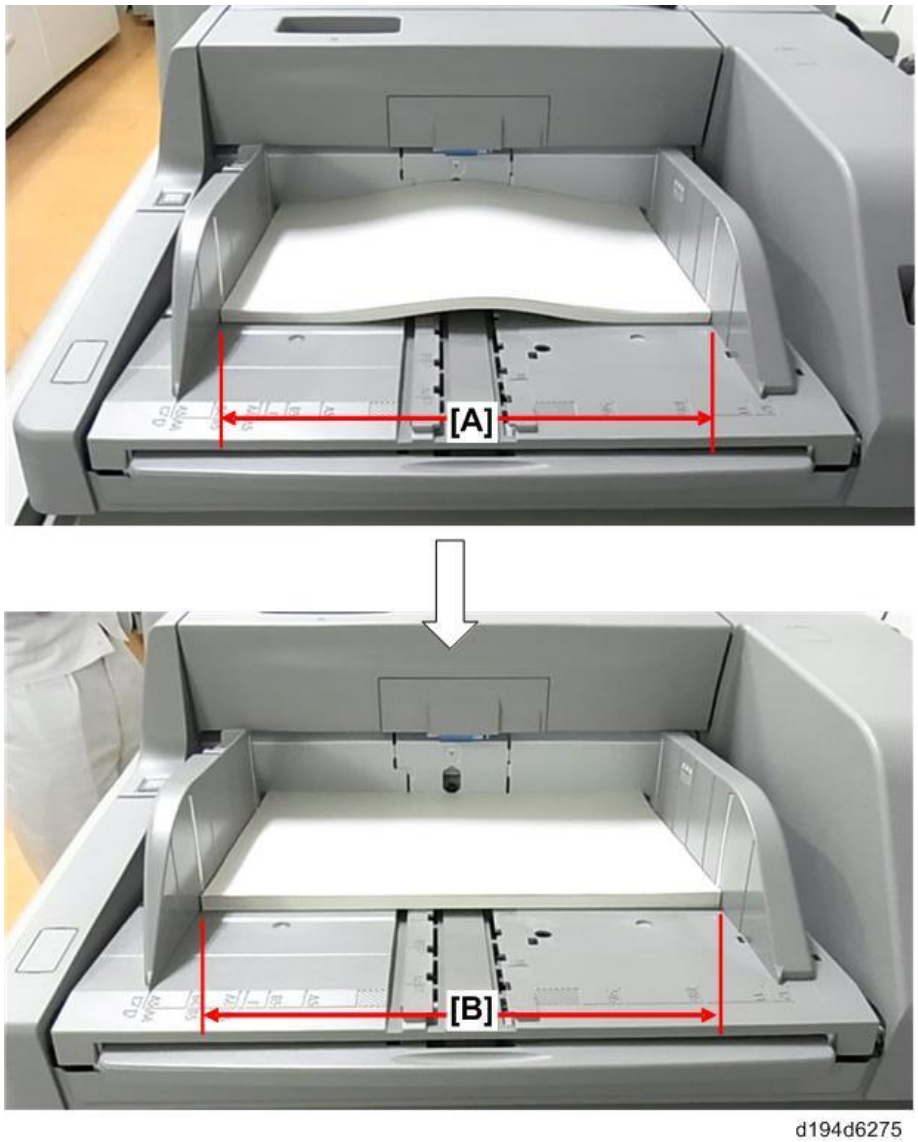
The side fences are set narrower than the paper.

Solution

Follow the flowchart below.



Bypass Feed Tray



No Feeding 2

Cause

Paper may fail to feed due to paper sticking together.

This is likely to occur if:

- When using paper that readily sticks together, such as special or coated papers.
- When using thick paper that lessens the effect of preparing paper via air assist.

Solution

1. Remove the loaded paper from the paper tray and fan it.
   If paper fails to feed again, go to step 2.
2. Clean the feed rollers (pickup roller, paper feed roller, separation roller).

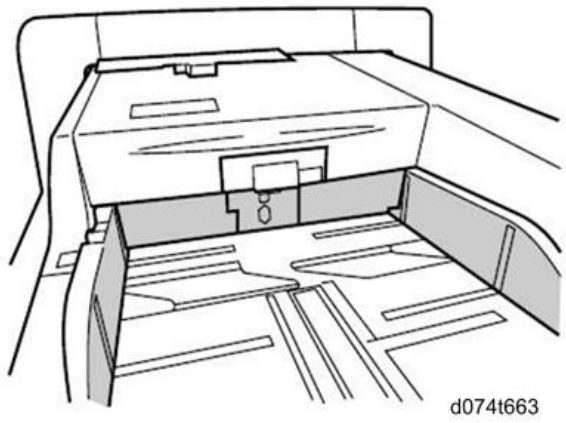
Note

- Measures 1 to 3 can be done at the same time (Guideline-confirm printing with 1 pack of paper)

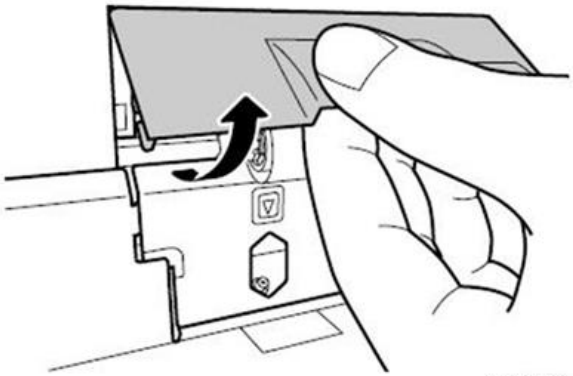
Cleaning the Paper Feed Path in the Multi Bypass Tray (Tray 6)

Clean the guide board and paper feed rollers in the multi bypass tray (Tray 6).
Wipe the guide board with a well wrung out damp cloth. To reach the inmost recesses, the cloth should be the size of your palm.

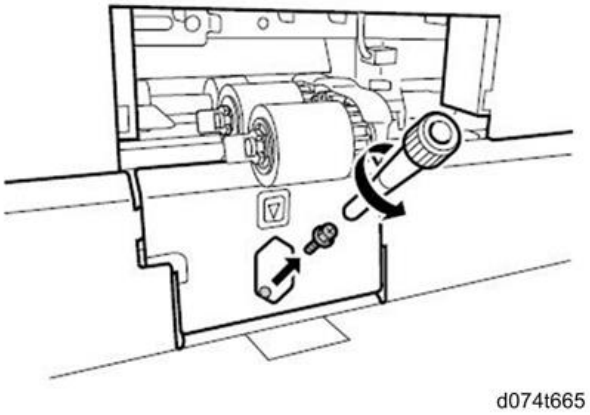
1. Remove the loaded paper.
2. Clean the side fences and front guide.



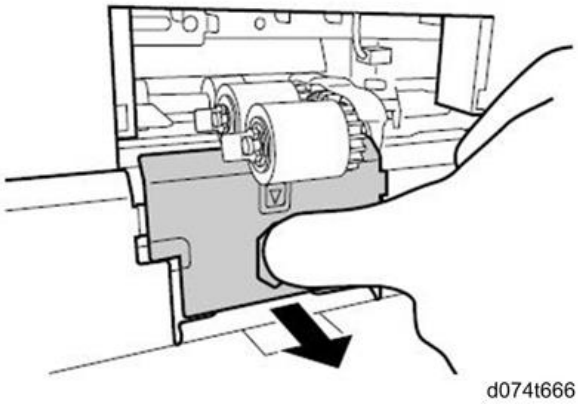
3. Pull off the snap-off cover.



4. Remove the black screw.



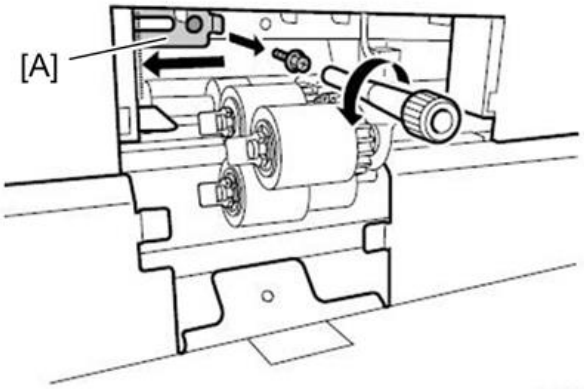
5. Remove the plate.



6. Remove the black screw on the sensor positioning plate [A].

7. Push the sensor positioning plate [A] to the left.

If this plate is not pushed to the left, you will not be able to remove the feed roller.

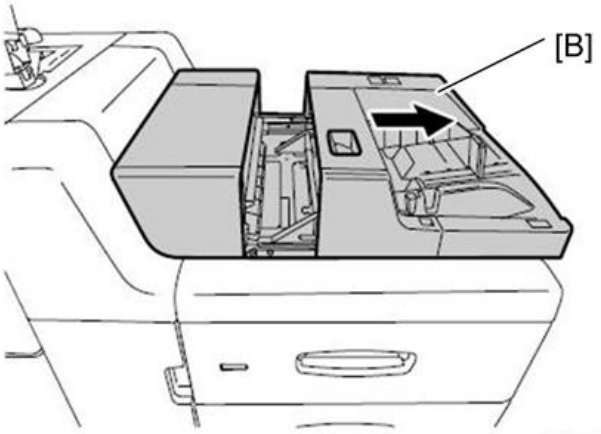


d074t667

8. Clean the paper feed rollers.

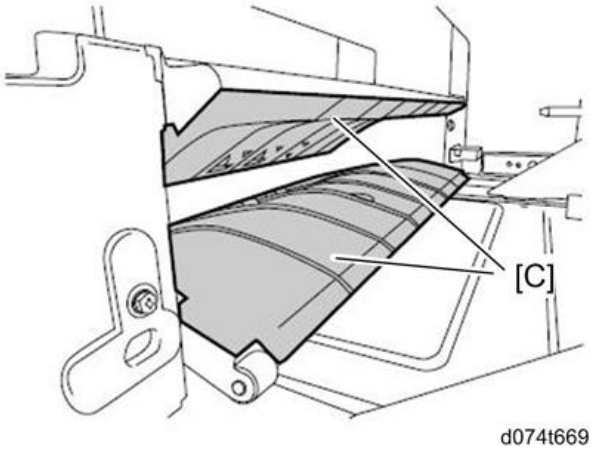
d194d6128

9. Slide the paper tray [B] to the right.



d074t668

10. Clean the guide board [C].



11. After cleaning, restore the machine to its operational state.

No Feeding 3

Cause

Paper may fail to feed due to paper being too stiff.

This is likely to occur if:

The paper is thick.

Solution

Raise the maximum position of paper trays bottom plate.

No Feeding 4

Cause

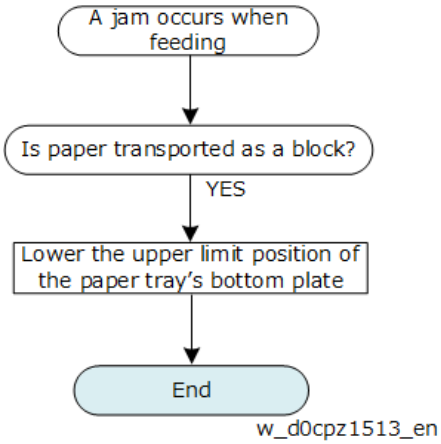
Paper may fail to feed due to paper sticking together.

This is likely to occur if:

- When using a very smooth paper, such as coated paper, in a hot and humid environment
- If double feeding of the paper as a bundle occurs due to the paper sticking together

Solution

Follow the flowchart below.



Adjusting the Upper Limit Position (Bypass Tray)

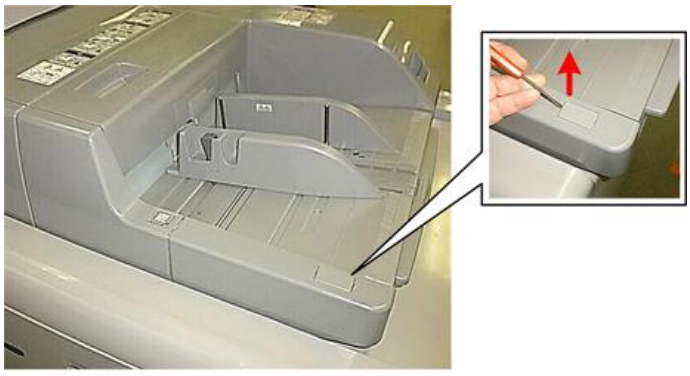
Effect of Adjusting the Upper Limit Position

Lowering the upper limit position: (For dealing with repeated feeding problems due to double feeding or double feeding as a bundle)
achieves the effect of fanning the paper by abutting it against the paper tray plate for pre-separation (bank).
Raising the upper limit position: (For dealing with repeated no-feeding problems)
achieves the effect of decreasing the paper friction during paper transporting.

Note

- Be careful because when there is enough pre-separation, lowering the upper limit position makes the unit prone to failure to feed.

1. Remove the cap cover.



2. Remove the right front cover (x1).

d517r803

3. Disconnect the right [1] and left side [2]

d517r804

4. Remove the left front cover (x2).

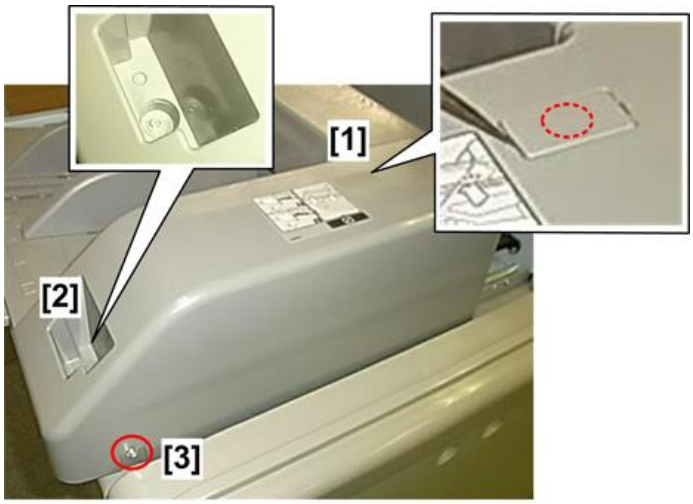
d517r805

5. Remove the screws.

[1] Covered screw (x1)

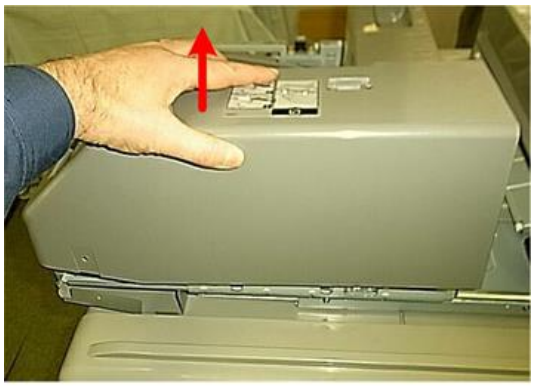
[2] Rear screw (x1)

[3] Well screw (x1)



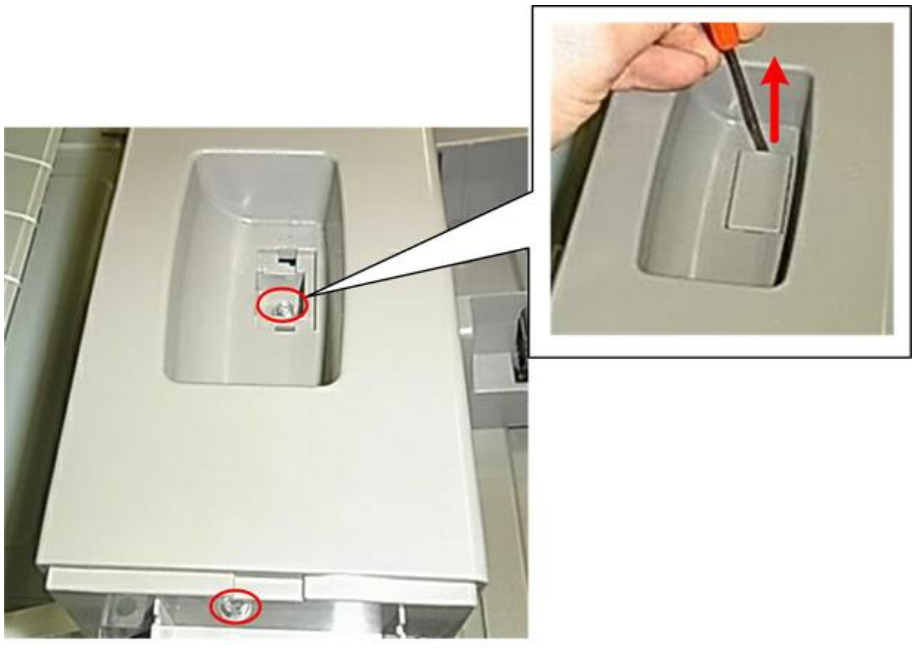
d517r806

6. Disconnect the cover.



d517r807

7. Remove the top cover (x3).



d517r808

d517r809

8. Adjust with the screw that holds the lift sensor bracket.

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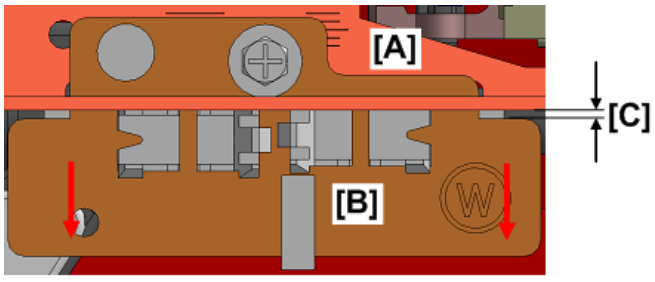
[For repeated feeding problems due to double feeding or double feeding as a bundle]

Position the paper lift sensor bracket so it increases the gap [C] between the stay [A] and the lift sensor bracket [B] while keeping an eye on the scale on the upper part of the stay (1mm between lines).

Note

- Positioning it at a point at a distance of 0.5mm from the position before adjustment lowers the upper limit position about 0.8mm below the current state.



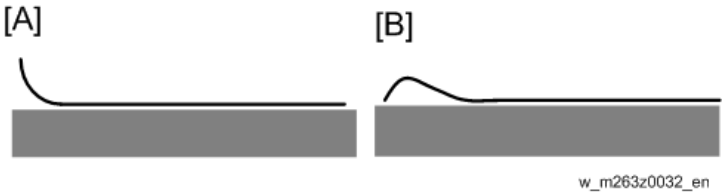
d194d6143

High Capacity Stacker

Delivered Sheets Are Severely Curled

Cause:

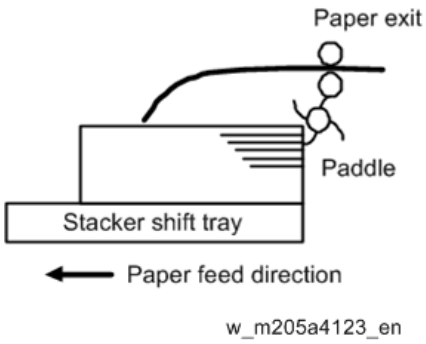
Curled sheets can cause strong friction at their leading edges. This may result in paper misfeeds. Sheets will not be ejected completely and the trailing edges will be left inside the paper exit. If this happens, other sheets may slip under the delivered sheets, causing the delivered sheets to be curled.



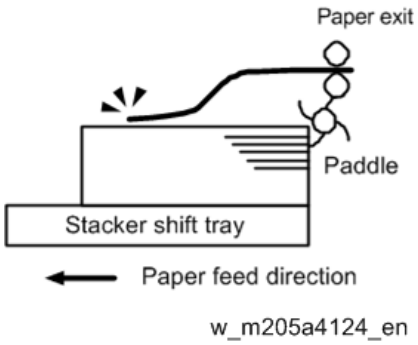
[A]	Concave curl. Paper exits with curve down.
[B]	Convex curl. Paper exits with curve up.

Here is a detailed description of how this problem can occur.

1. An uncurled sheet is delivered to the stacker shift tray.

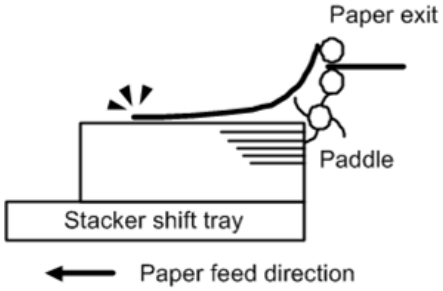


2. Strong friction occurs at the trailing edge so that the paddle cannot pull the sheet back and align the edges of the sheet with those of the stack.



3. The paper edge stopper fails to push back the protruding leading edge and align the sheet as

required.



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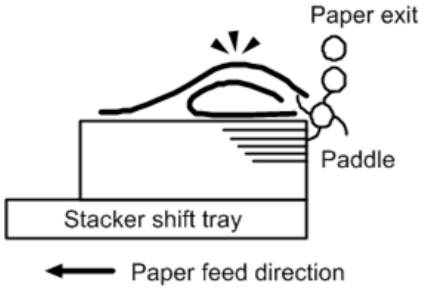
4. Stacked sheets are not aligned properly.



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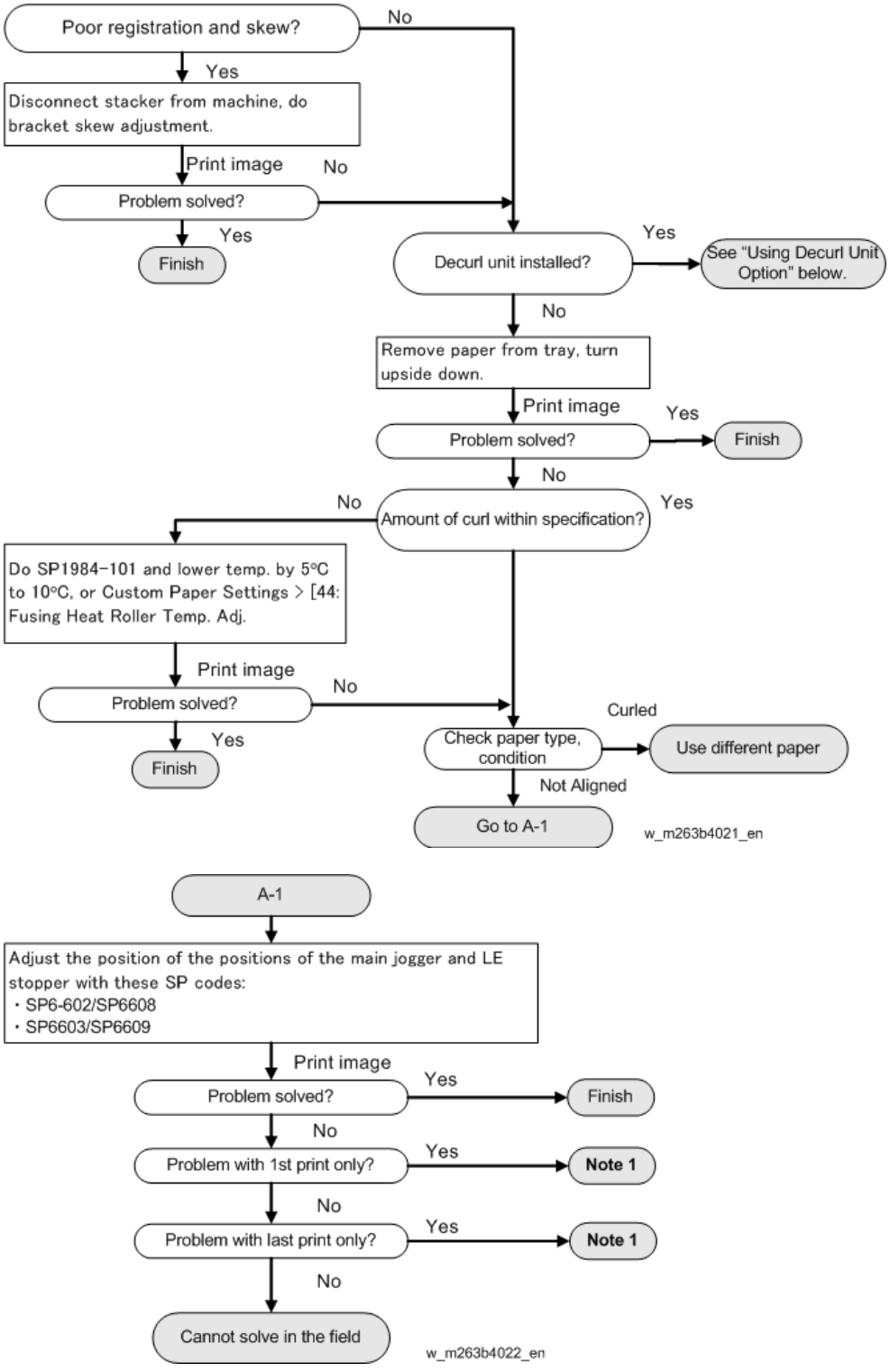
Not Using Decurl Unit

Remove the stack, turn it upside down, load it in the tray again, and then adjust the fusing temperature.



Note 1

- Problem cannot be resolved. If the problem occurs on only the first sheet, print a blank sheet as the first sheet, and if the problem occurs on the last sheet, print a blank sheet as the last sheet.

Using the Decurl Option

Follow this procedure to correct paper curl with the Decurl Unit.

1. Using coated paper?

Yes	In the Adjustment Settings for Skilled Operators menu, set 0310: [Adjust Paper Curl] to [Adjust ⌒ Curl: Weak]. Go to next step.
No	Go to next step **7.**

2. Print the image. Problem solved?

Yes	Finished.
No	Go to next step.

3. Print the image. Problem solved?

Yes	Finished.
No	Go to next step.

4. Convex curl within specification?

Yes	The problem cannot be corrected in the field.
No	Go to next step.

5. Turn the stack upside down, and go to step **3** again.
6. Convex curl with Plain Paper?

Yes	In the Adjustment Settings for Skilled Operators menu, set 0310: [Adjust Paper Curl] to [Adjust ⌣ Curl: Weak]. Go to next step.
No	The problem cannot be corrected in the field.

7. Print the image. Problem solved??

Yes	Finished.
No	Go to next step.

8. Change the curl correction level in [Settings] > [Tray/Paper Settings] > [Common Settings/Others] > [Paper Curl Correction Level] to downward.
9. Print the image. Problem solved??

Yes	Finished.
No	Go to next step.

10. Convex curl within specification?

Yes	The problem cannot be corrected in the field.
No	Go to next step.

11. Turn the stack upside down, and go to Step **9** again.

Delivered Sheets Are Not Aligned (Paper Thickness 1 or Less)

Cause

Despite the air assist system, when sheets (particularly paper that is relatively soft and has strong transport resistance, such as thin or coated paper) are delivered to the stacker tray, because of paper-to-paper friction, the paddle fails to pull the trailing edge back into the front guide, resulting in misalignment.

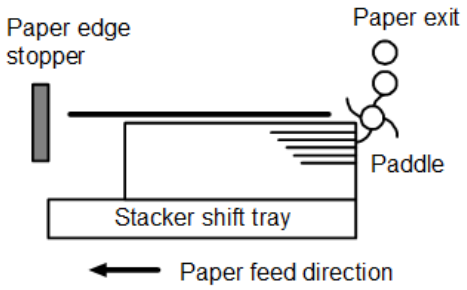
The paper edge stopper also fails to push back the protruding leading edge.

Note

Thin paper is paper with thickness 1 or less.

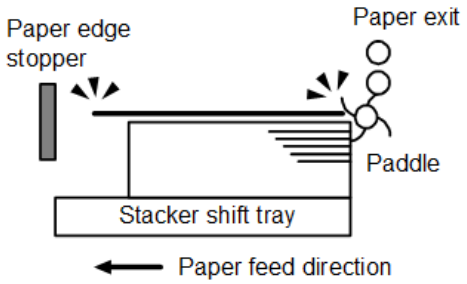
How the problem occurs

1. An uncurled sheet is delivered to the stacker shift tray.



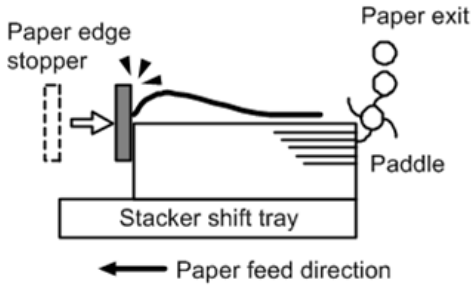
w_m205a4127_en

2. Strong friction occurs at the trailing edge so that the paddle cannot pull the sheet back and align the edges of the sheet with those of the stack.



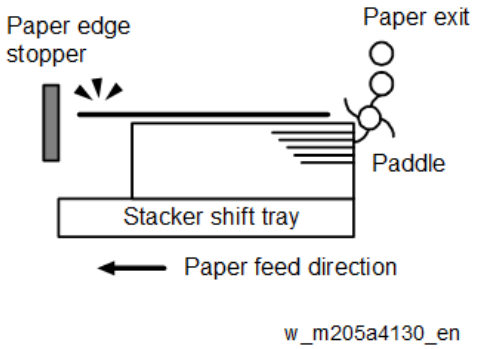
w_m205a4128_en

3. The paper edge stopper fails to push back the protruding leading edge and align the sheet as required.



w_m205a4129_en

4. Stacked sheets are not aligned properly.



w_m205a4130_en

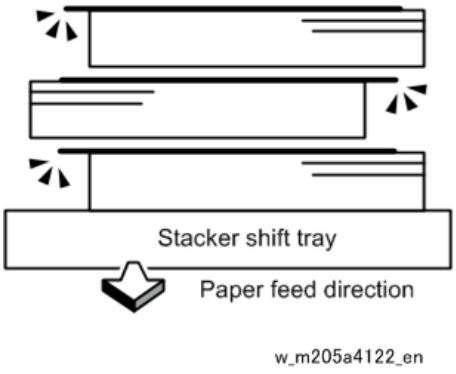
Action

1. Load the sheets the other way up.
2. Print the image. Was the problem resolved?
   Yes: Finish
   No: Go to next step.
3. In the [Settings] > [Tray/Paper Settings] > [Common Settings/Others], change the curl correction level in [Paper Curl Correction Level] to downward.
4. Print the image. Was the problem resolved?
   Yes: Finish
   No: Go to next step.
5. Turn the stack upside down, and go to step 3 again.
6. Print the image. Was the problem resolved?
   Yes: Finish
   No: Go to next step.
7. Is just the first sheet misaligned?
   Yes: Finish
   No: Go to next step.
8. Is it just some of the last sheets?
   Yes: Finish
   No: Contact your supervisor.

Note

- The top sheet of each offset bundle of delivered sheets may protrude above the rest of the

bundle by about 7 mm.



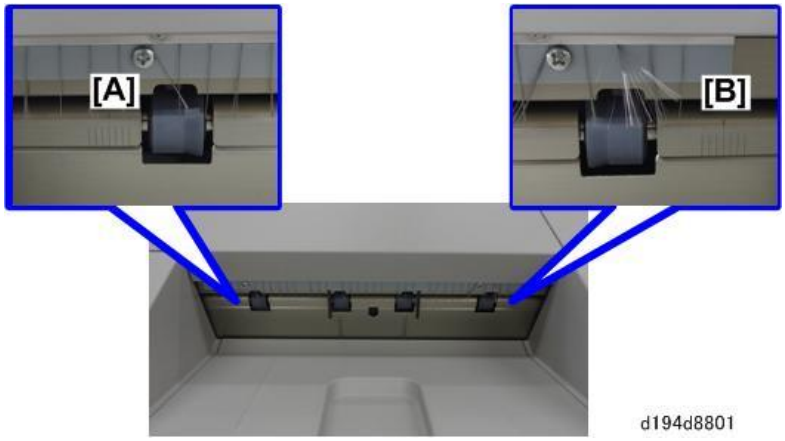
Registration, Skew Adjustment

Registration Adjustment

Important

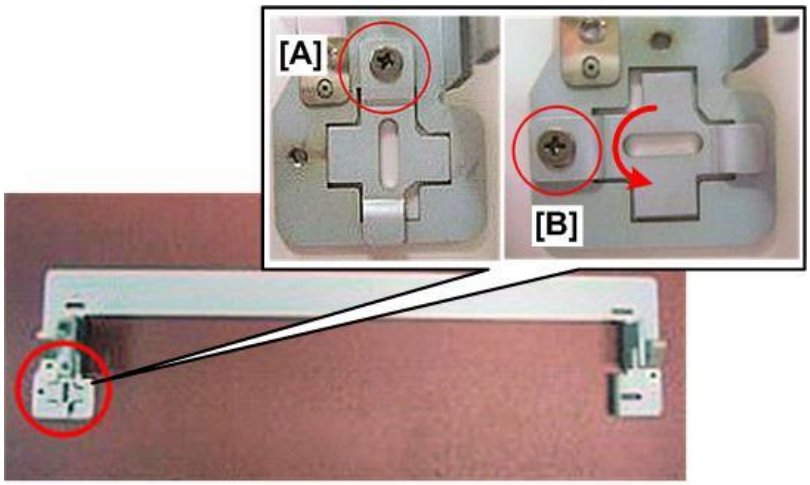
- Disconnect the stacker from the upstream unit and do this adjustment on the left side of the upstream unit connected to the main unit. To avoid damaging the cart set switch, be sure to remove the Roll-away cart from inside the stacker when you disconnect the upstream unit.
- If a Booklet (or Stapler) finisher is connected downstream, paper cannot be output to the proof tray of the stacker. With a downstream finisher connected, do the adjustment after disconnecting the I/F cable of the finisher and then turning the main machine on.

1. Load some A3 or 11”x17” paper in the 2nd tray of the main unit, and then output several sheets of single-side printing to the proof tray of the stacker.
2. Watch the edge of each sheet as it exits the unit.
   If the edge is within the first notch (2 mm) on the scale, there is no problem.
   If the edge goes beyond the first notch, adjustment is required.
   [A]: This is the rear scale for 11"×17" (DLT)
   [B]: This is the front scale for A3



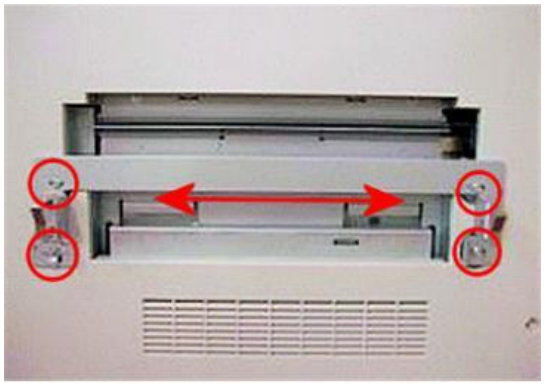
3. Disconnect the stacker from the upstream unit.
4. Remove the bracket [A] of the upstream unit and rotate it to [B] (x1). Changing the position of this bracket aligns the oval cut-out horizontally and frees the joint bracket so that it can slide from

side to side.



m263b4023

5. Loosen the screws of the bracket and slide it to the left or right to adjust the position.



m263b4024

6. Dock the stacker to the upstream unit again, print some more sheets, and then check registration and skew again to make sure that the edges of the sheet do not go beyond the first notch of the scale.
7. If there is no problem, connect the units and set the shoes.

Manual Skew Correction

1. Disconnect the stacker from the upstream unit.

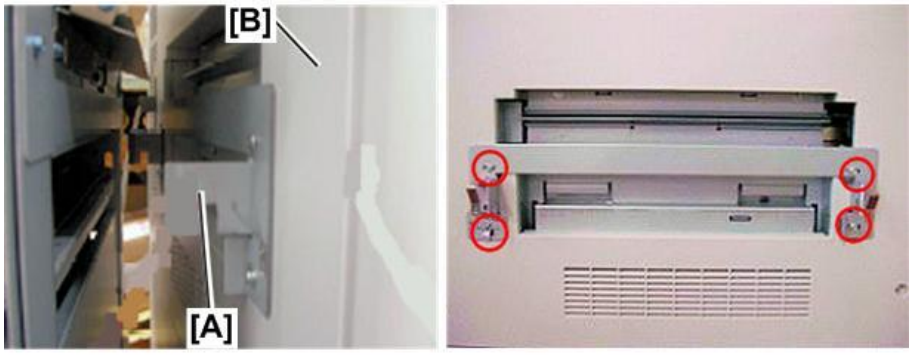
2. Remove the front right cover [A] (x3).

m263b4025

3. Remove the skew adjustment spacers (x1).

m263b4026

4. The adjustment bracket is [A] on the left side of the upstream unit [B]. Loosen the screws of the connection bracket, slide the bracket to the left or right to adjust the position, insert the spacer behind the bracket, and then tighten the screws.



m263b4027

Note

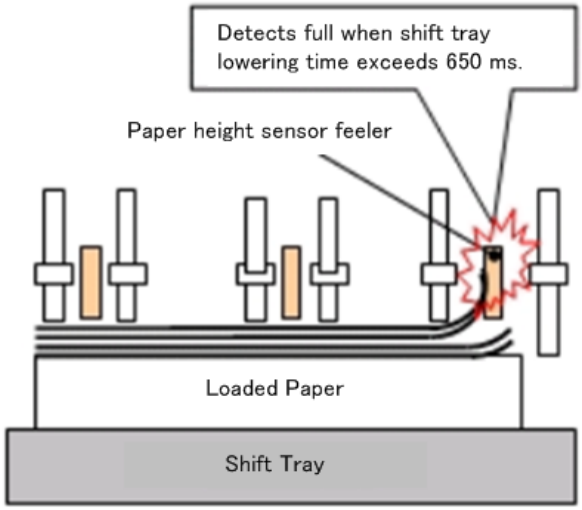
- A spacer is 2 mm thick. If the adjustment requires more than 2 mm, use another spacer.

5. Dock the stacker to the upstream unit, and then do some more test prints, and if the amount of skew is still beyond the first notch, do the procedure again and insert another spacer if required.
6. If no further adjustment is required, re-attach the right front cover of the stacker, and then connect the stacker to the upstream unit.

Premature Shift Tray Full Detection

Cause:

When paper that is about as wide as the paper height sensor feeler is discharged to the shift tray, if it has side face curl, the edge of the paper may fail to go under the paper height sensor feeler and ride up on the feeler. Alternatively, by coming in contact with the paper height sensor feeler, it may ride up and press against the feeler and the load from this may hinder the movement of the feeler. In this case, even if the shift tray moves down, the paper height sensor feeler fails to turn the sensor OFF, and the lowering time of the shift tray ends up exceeding 650 ms, and the unit ends up sensing it is full.



w_d270d6743_en

This is likely to occur if paper of a certain width is output to the shift tray, the unit may detect being full prematurely. (Paper between roughly 191 mm to 261 mm wide)

Solution:

1. Turn the stack upside down, and go to step 3 again.

2. Problem resolved?

Yes	Finished.
No	Go to the next step

Decurl Unit is required for the following steps.

3. In [Settings] > [Tray/Paper Settings] > [Common Settings/Others] > [Paper Curl Correction Level], change the curl correction level to downward.

4. Problem resolved?

Yes	Finished.
No	Go to the next step

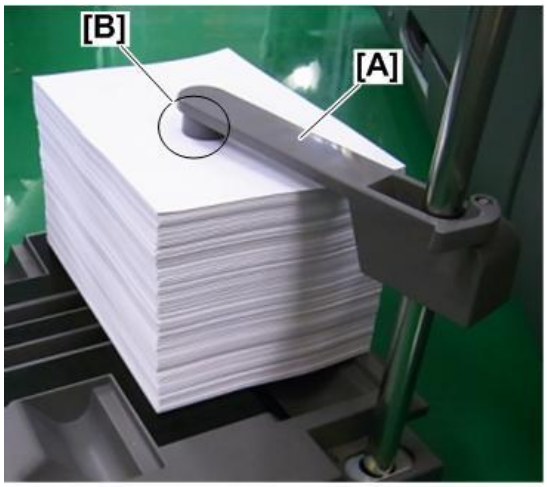
5. In [Settings] > [Tray/Paper Settings] > [Common Settings/Others] > [Paper Curl Correction Level], change the curl correction level to upward.

6. Problem resolved?

Yes	Finished.

Marks Left by the Paper Holder

Pressure from the paper holder [A] on the cart may leave marks where the holder pressed down [B].



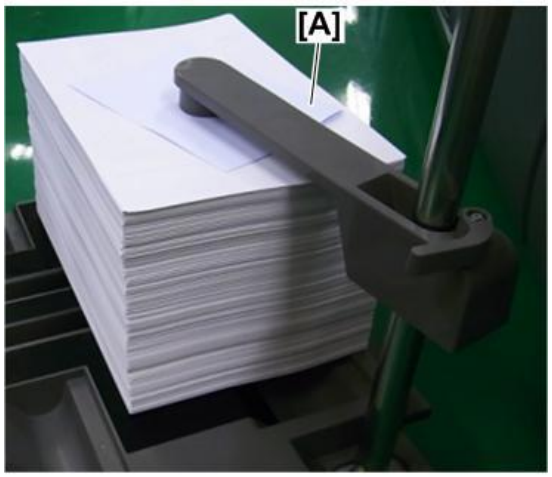
d194d6188

Cause:

The paper holder exerts more pressure than the previous cart model, and this can lead to marks on the top pages of the paper stack.

Solution:

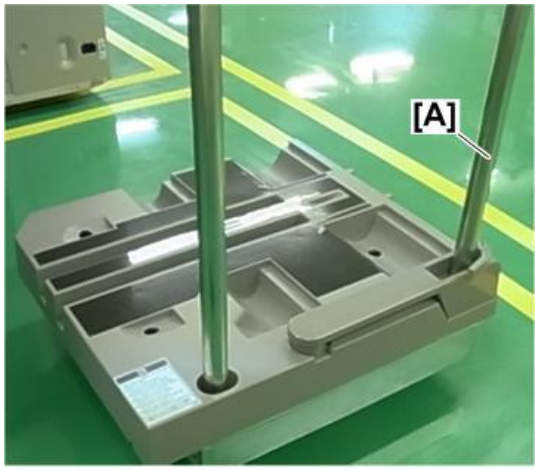
Marks can be prevented by putting scrap paper in between [A].



d194d6189

Screws On Cart's Handle Become Loose

There have been cases of screws [A] on the cart's handle loosening.



d194d6190

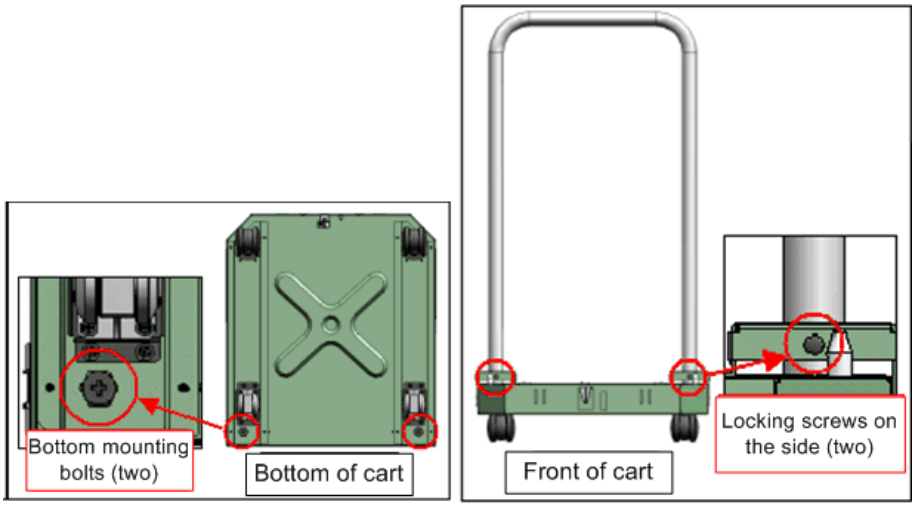
Cause:

The torque on the mounting bolt of the handle on the bottom of the cart is too low, so when the cart is loaded with paper and it is pushed/pulled repeatedly, the mounting bolt may loosen. This is likely to occur if the torque on the mounting bolt of the handle is less than 18Nm.

Solution:

If the cart's handle starts to rattle, or if the paper holder fails to be effective because of loosening, re-tighten the mounting bolt on the bottom of the handle.

Also, if the locking screws on the side of the handle get loose, re-tighten them.



w_d194e6191a

Copy Tray Type M42

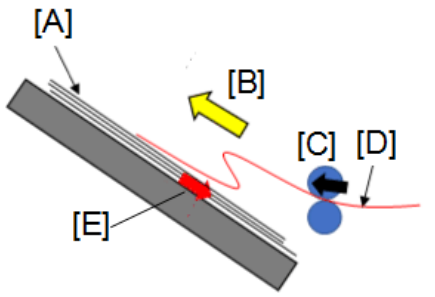
Poor Stackability on Thin Coated Paper

If the angle of the tray is at 29° when using thin coated paper, stack failures may occur. For example, exported sheets get partially rolled, drop down from the tray and/or paper jam occurs.

d0cpz1519

Cause

Due to the inclination of the paper exit tray and the load caused by friction with the tray and paper, the paper will bend and the trailing edge will remain, causing the sheets to partially roll backwards. Subsequent sheets push the stacked sheets which causes the paper to drop down or jam.



d0cpz1520

[A]: Stacked sheets

[B]: Paper transporting direction

[C]: Transporting force

[D]: Subsequent sheet

[E]: Load

Solution

Change the tray angle to 5°.
However, the poor stackability may not be resolved completely. In this case, remove the each exported sheet.
If changing the tray angle to 5°, the capacity of paper stack decreases to 100 sheets, and the

stackability for A4 LEF or smaller may be degraded.

Finisher SR4140

Punch Holes are Shifted in Main Scan Direction

Cause

Side-to-Side registration is not detected correctly due to harness disconnection or dust on the sensing area of CIS.

Solution

1. Remove paper in SR4140.
2. Close the front door.
3. Execute SP6-147-053 and check whether the result is all "0" [(7)00000000(0)].
4. Put paper on the front side of the punching area in SR4140.
5. Close the front door.
6. Execute SP6-147-053 and check whether the result is all "0" [(7)00000000(0)].
7. Put paper on the center of transporting area of the punching area in SR4140.
8. Close the front door.
9. Execute SP6-147-053 and check whether the result is all "0" [(7)00000000(0)].

If all the result of 3 SPs is not "0", the side-to-side registration fails. Check the harness connection and there is no dust on the sensing area of CIS.

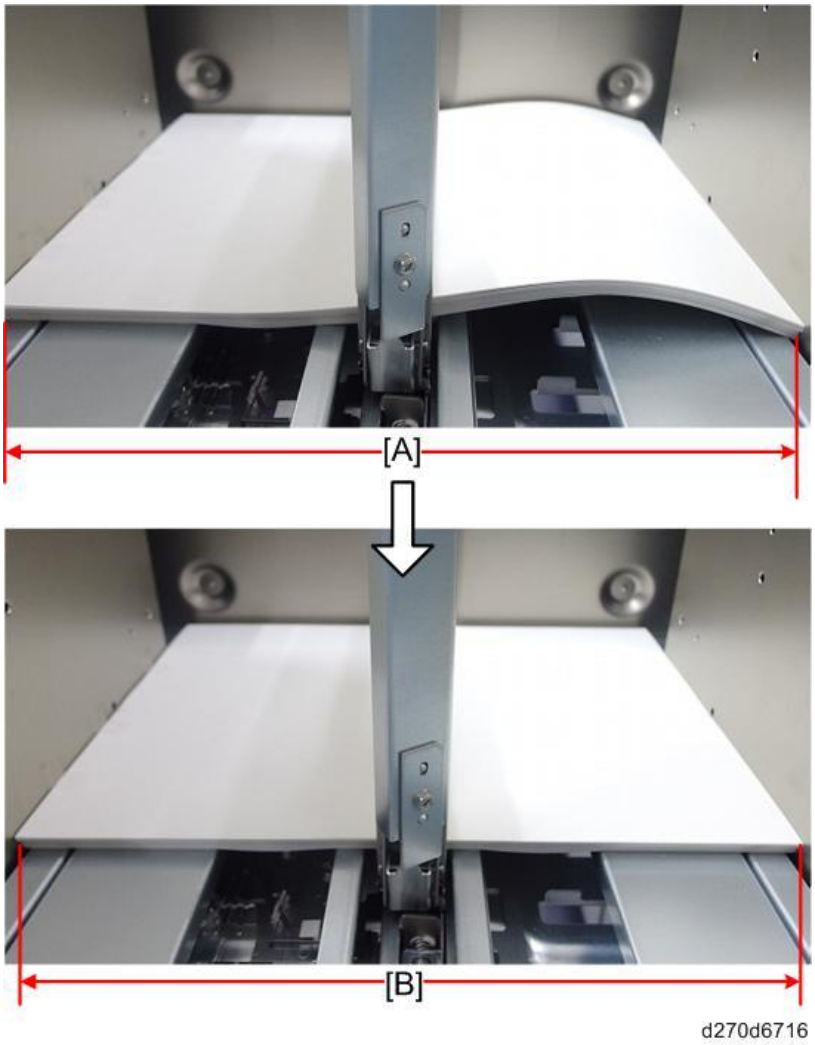
Paper Feed/Transport Problems on Vacuum Feed LCIT

Frequent Double Feeds, Failure to Feed

Cause:

Side fence/rear fence are not set correctly.

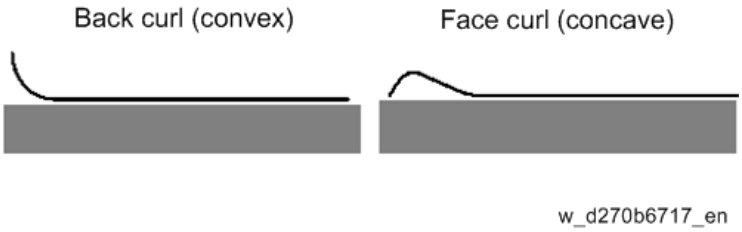
Paper with excessive buckle [A] can cause double-feeding. Make sure that the fences are at their correct positions so the paper lies flat [B].



Paper Curl

[A]	Concave curl. Paper exits with curve down.
[B]	Convex curl. Paper exits with curve up.

In either case, if the curl is excessive (not within specifications), this can cause double-feeding.

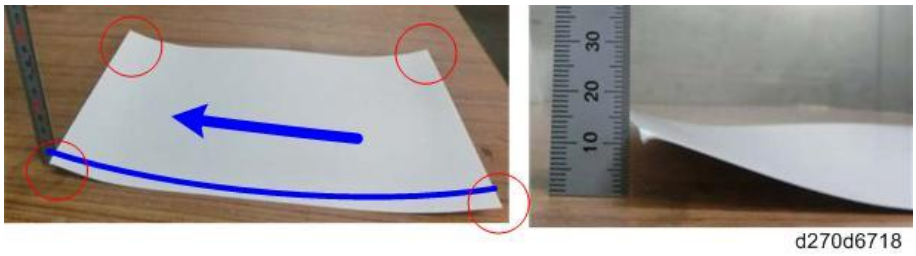


Measuring the Amount of Curl

1. Take a sheet of paper causing the problem and lay it on a flat surface.
2. Set a scale at each corner of the paper and measure the amount of curl at each of the four corners. SEF curl is shown at [A], and LEF curl is shown at [B].

Note

- Place the paper face down to measure back curl accurately.



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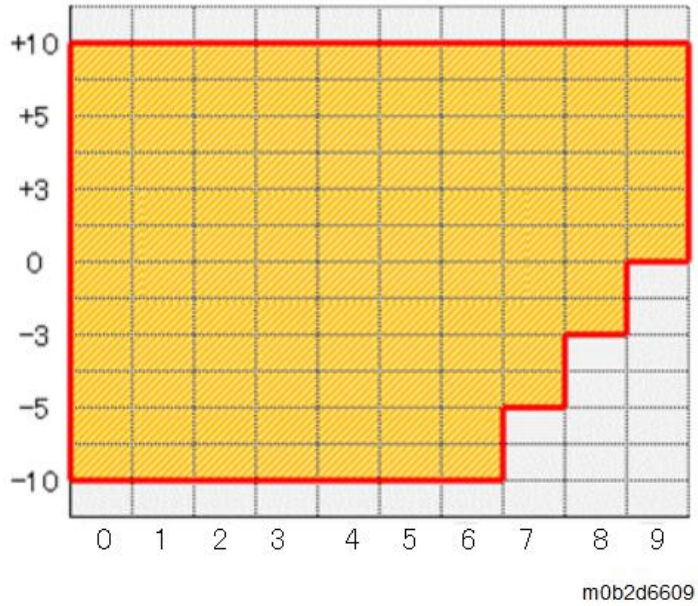
Acceptable Curl Range



m0b2d6609

Vertical axis: Curl amount (mm)

NOTE: Curl direction is "+": Face-up curl, "-": Face-down curl.

Horizontal axis: Paper thickness 0 to 9

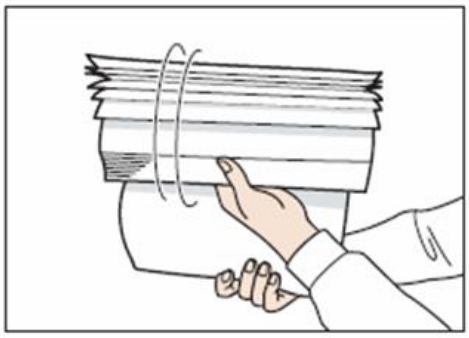
Correcting Curl

1. Lay the stack on a flat surface, opposite to the direction of curl.
2. Bend the edge up as shown to straighten the edge.

m263z0036

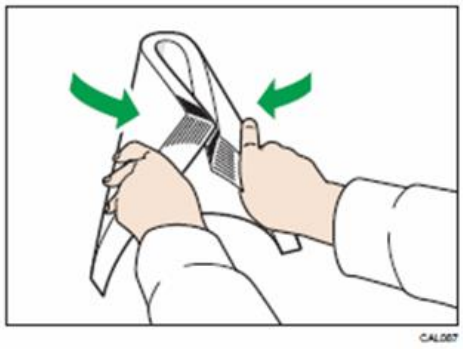
3. Repeat the procedure for the other end of the stack.
4. Fan the paper before loading it to loosen the sheets. Paper sticks together if it has excessive static

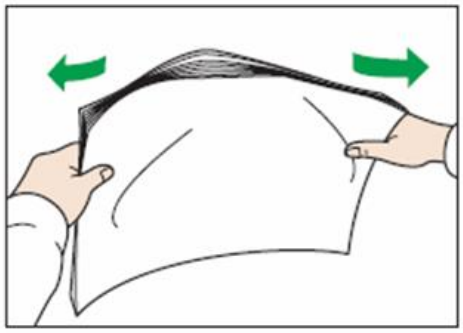
electricity, burrs (due to edge cutting) or is damp.



d194d6102

5. Hold the paper by the ends and slowly bend it several times.





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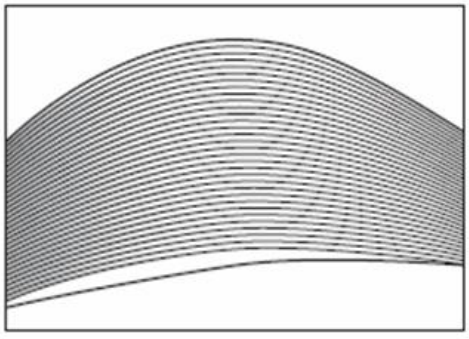
6. Make sure plenty of air gets in between the sheets.

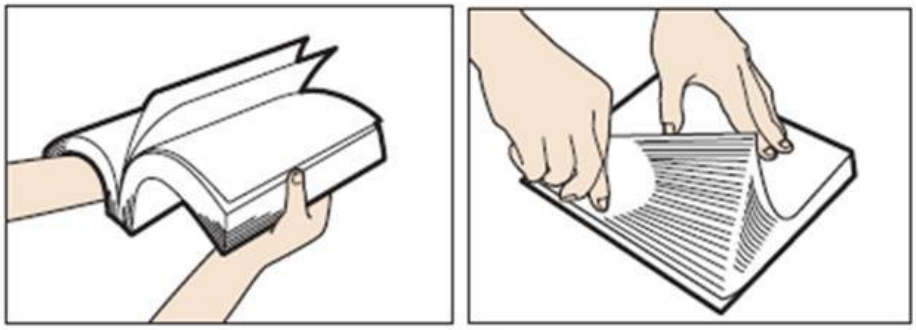


d194d6104

If the above method is difficult, fan the paper in the following way.

- Hold the paper by the edge and fan it by flipping through the sheets. Repeat this fanning for all four sides.

- Place the paper on a flat surface and press down the edges.
- Fan it by flipping through the sheets. Repeat this fanning for all four sides.



d270b0752

Double-Feeding

Cause

These are caused by a variety of factors.

Solution

The correct setting must be made for the custom paper in the tray. Check and correct the settings

1. In Advanced Settings, set 1502-119: [2-Tray LCIT: Paper Feed Mode:Paper Feed Mode:Fan Level] to “Prevent Double Feed (Weaker Blow)”. Is the problem resolved?

Yes	Finished.
No	Go to next step.

2. In Advanced Settings, change 1502-119: [2-Tray LCIT: Paper Feed Mode:Paper Feed Mode:Fan Level] to "[Prevent Double Feed (Weakest Blow)”
3. Is the problem resolved?

Yes	Finished.
No	Paper cannot be fed.

Failure to Feed

Cause

This problem is caused by a variety of factors. Take the following steps.

When feeding thin paper you may see the paper folded at the corners.

Solution

- Check the paper size setting for the tray and make sure that it matches the loaded paper size.
- Fan the paper to remove any static cling.
- If the paper is curled, remove it, turn it over, and load it again.

Note

- If these measures do not solve the problem, change the user settings described below.

1. In Advanced Settings, change 36: [Paper Feed Mode (Adjust Fan Level)] to “Moderate Dble Fd Red. (Lower)”. Problem solved?

Yes	Finished.

No	Go to next step.

2. In Advanced Settings, change 36: [Paper Feed Mode (Adjust Fan Level)] to “Low”. Problem solved?

Yes	Finished.
No	Go to next step.

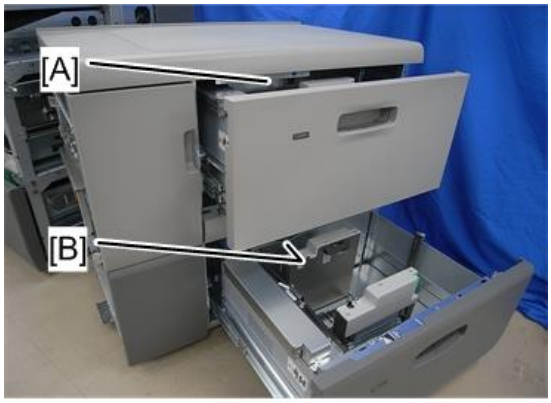
3. Clean the feed belt. (Cleaning the Paper Feed Belt)
4. Problem solved?

Yes	Finished.
No	The paper cannot be used.

Cleaning the Paper Feed Belt

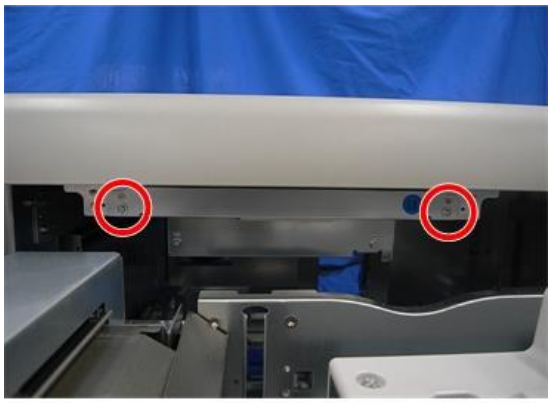
1. Open the paper trays and locate the feed belts.

- The feed belt of Tray 1 is at [A].
- The feed belt of Tray 2 is at [B]



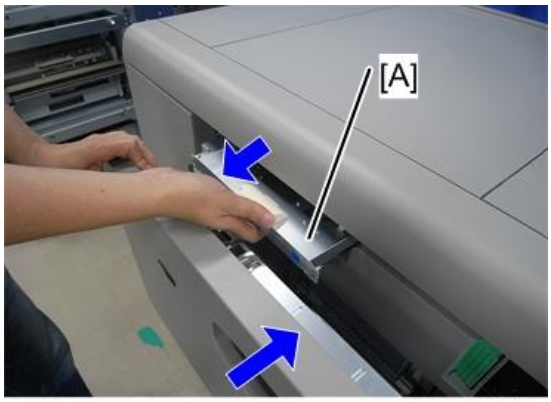
d777z0039

2. Unfasten the paper feed belt unit (x2).



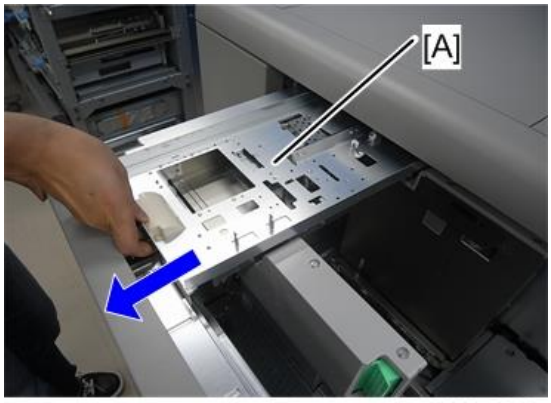
d777z0023

3. While holding the handle of the paper feed belt unit [A], close the paper tray halfway.



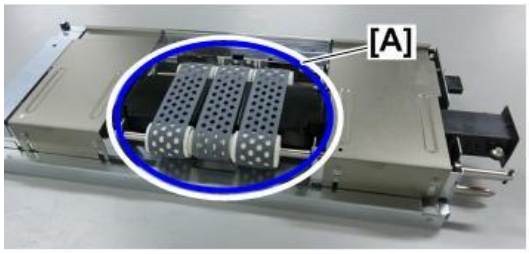
d777z0024

4. Pull the paper feed belt unit [A] out with the paper tray.



d777z0025

5. Turn the paper feed belt unit over and wipe the paper feed belt [A] with a damp cloth.

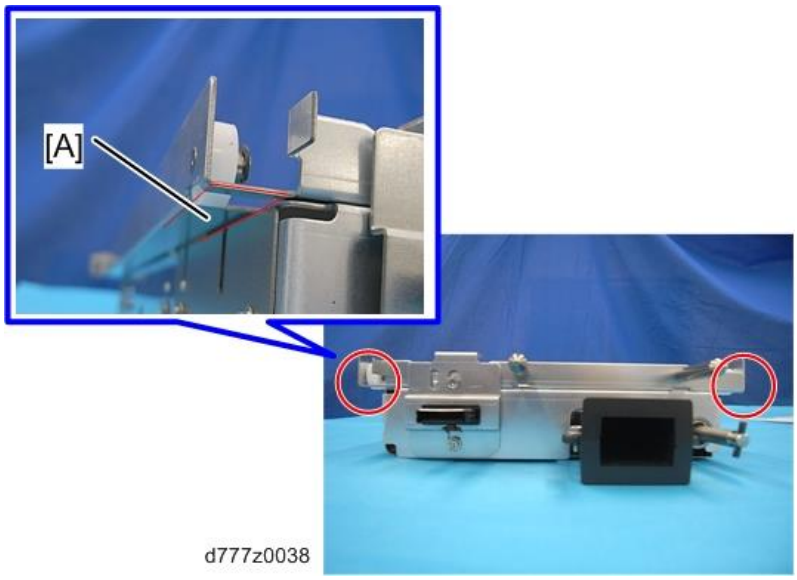


d194d6705

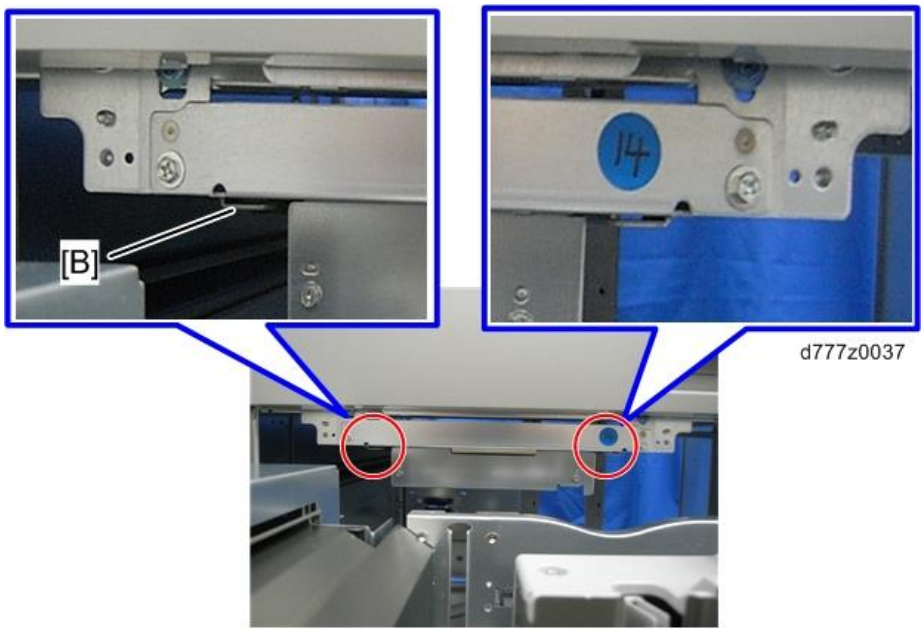
Re-installation

1. To avoid catching and damaging the paper feed belt, pull the feed belt unit out, parallel to the paper

tray.



2. To avoid damaging the feed belt when re-installing it, align the right and left guides [A] with rails [B], and then lift slightly as you slide it in.



No Feeding

This problem is caused by a variety of factors.

Note

- If the paper continues not to feed, try feeding again from the paper tray of the main machine, instead of the vacuum feed LCIT

1. Remove the paper from the paper tray and fan the paper. Problem solved?

Yes	Finished.
No	Go to next step.

2. Attach the tab sheet holder. (Attaching the Tab Holder) Problem solved?

Yes	Finished.

No	Go to next step.

3. Clean the feed unit. Problem solved?

Yes	Finished.
No	Go to next step.

4. Create a new custom paper setting.
5. In Advanced Settings, set 1502-119: [2-Tray LCIT: Paper Feed Mode:Paper Feed Mode:Fan Level] to “Prevent Non Feed (Stronger Blow)”. Problem solved?

Yes	Finished.
No	Go to next step.

6. In Advanced Settings, set 1502-119: [2-Tray LCIT: Paper Feed Mode:Paper Feed Mode:Fan Level]to “[Prevent Non Feed (Strongest Blow)”. Problem solved?

Yes	Finished.
No	Go to next step.

7. Clean the paper feed belt. (Cleaning the Paper Feed Belt)

Stack Remains Up

Cause:

The paper stack remains up after the tray has been opened because the pressure of the spring [A] on the skew correction plate is stuck between the side fence, so that the stack [B] remains up even after the plate is lowered from under it.

m263b4031

This problem occurs only when the tray is opened. This does not occur during paper feed because the bottom plate does not operate.

Solution:

Caution the operator to check the top of the stack when the tray is opened.

If paper remains up, remove the stack and load it in the tray again.

Attaching the Small Tab Sheet Holder (Thick Paper with Narrow Width)

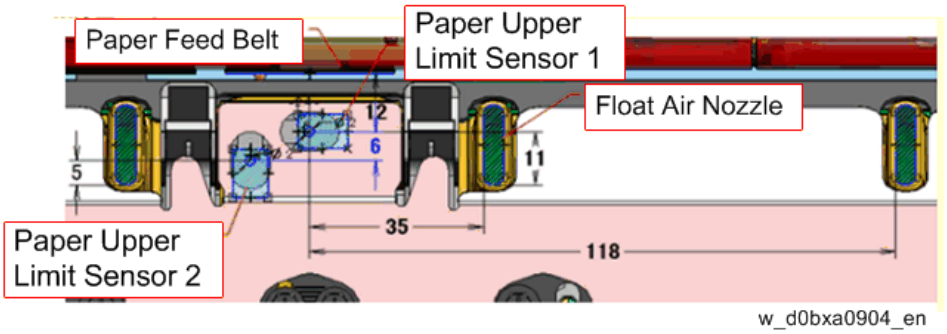
When B5 SEF to SRA4 size paper of Paper Weight 8 is fed from the last portion of the paper stack, the airflow decreases, resulting in paper misfeed.

Cause

When the paper is fed from the last portion of the paper stack, the bottom plate partially blocks the air nozzle and the airflow becomes smaller. As the amount of air is not sufficient to lift the paper, misfeeding occurs.

This tends to occur when A4/Letter size paper is fed, because only 2 float air nozzles are used, and the amount and speed of airflow is weaker.

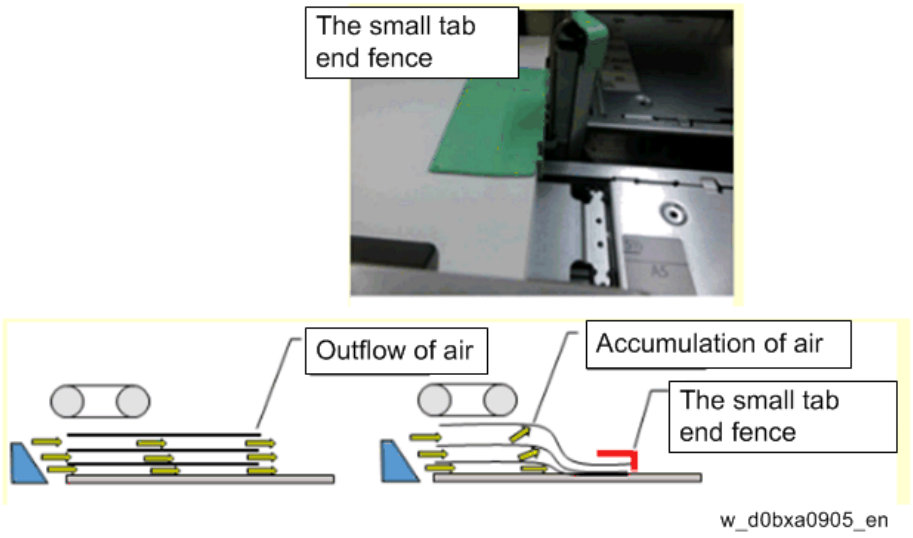
Layout of Float Air Nozzles



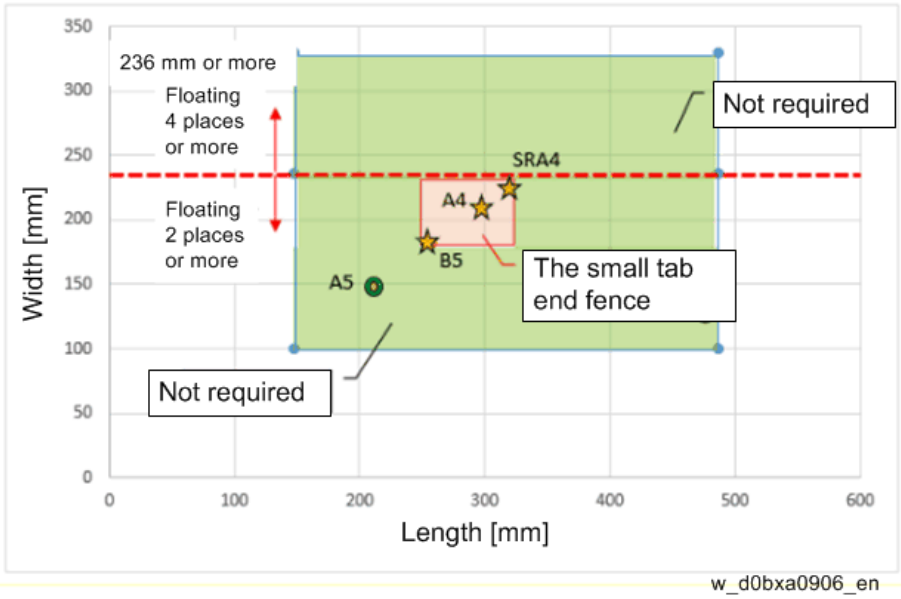
Solution

Attach the small tab end fence against the trailing edge of the paper to prevent air from escaping. The small tab end fence helps to accumulate air between the sheets of paper and helps the paper to float.

Attaching the Small Tab End Fence/ Airflow Before and After



Application range



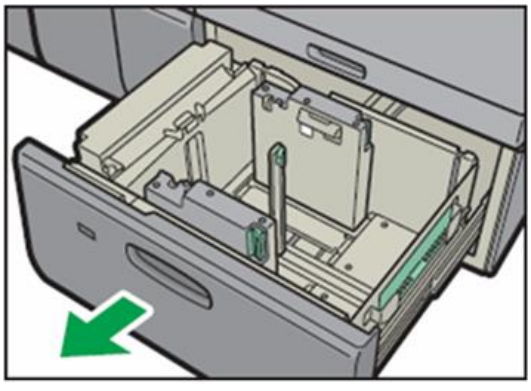
Shift Over, Over Skew, Image Skew

1. Adjust side-to-side registration for the feed tray. (Adjusting Tray Side-to-Side Registration)
2. If adjusting side-to-side registration does not solve the problem, adjust skew by inserting a shim behind the connection plate. (Correcting Skew)
3. If you are using non-carbon paper (thickness 2 or less), use the tab sheet holder. See Attaching the Tab Holder.

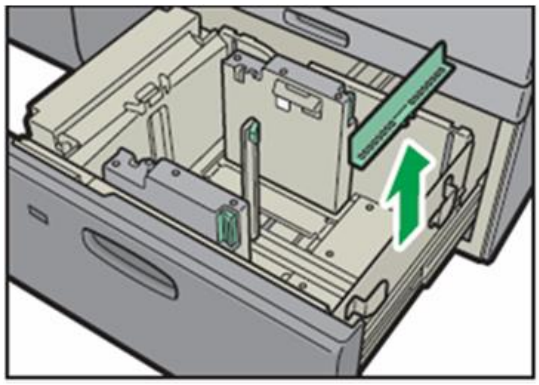
Attaching the Tab Holder

By attaching the tab sheet holder, you can prevent air from escaping at the trailing edge of the paper. This helps the paper to separate better.

1. Pull the tray out until it stops.



2. Take out the tab fence from the pocket on the right-hand side of the paper tray.



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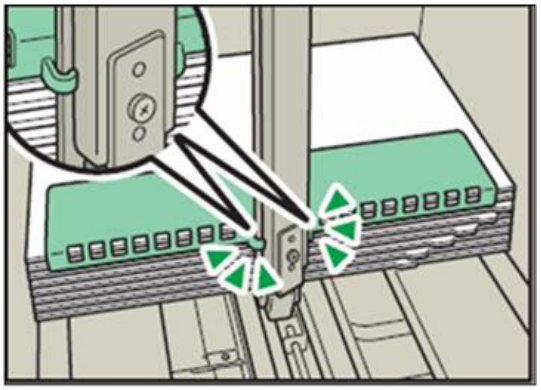
3. Set the side fences to the tabs for the paper size to be loaded, and then load the paper.
4. Attach the tab fence, and then align the end fence gently against the paper you loaded while pressing the release button of the end fence.



d270b0807

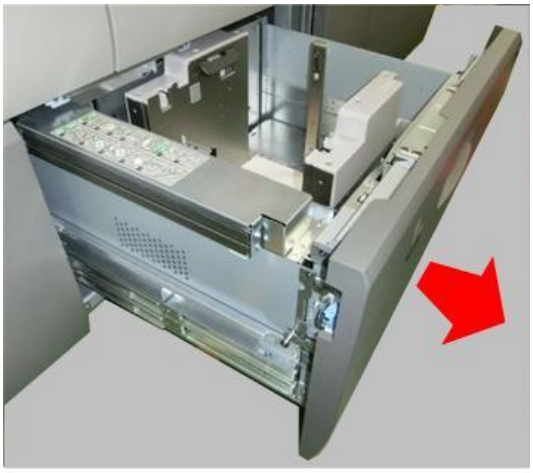
5. Close the tray.
6. Return the tab holder to the pocket on the right side of the tray when you are finished using it.

Adjusting Tray Side-to-Side Registration

Normally, you can use SP1002 to adjust the position of the images for paper feed from the LCITs. You can also change the paper feed position first, manually, by adjusting the support plate of the front cover of the tray, and then, second, adjusting the position of the image with SP1002.

1. First, determine whether the paper stack needs to be moved to the front or the rear.

2. Pull out the tray.



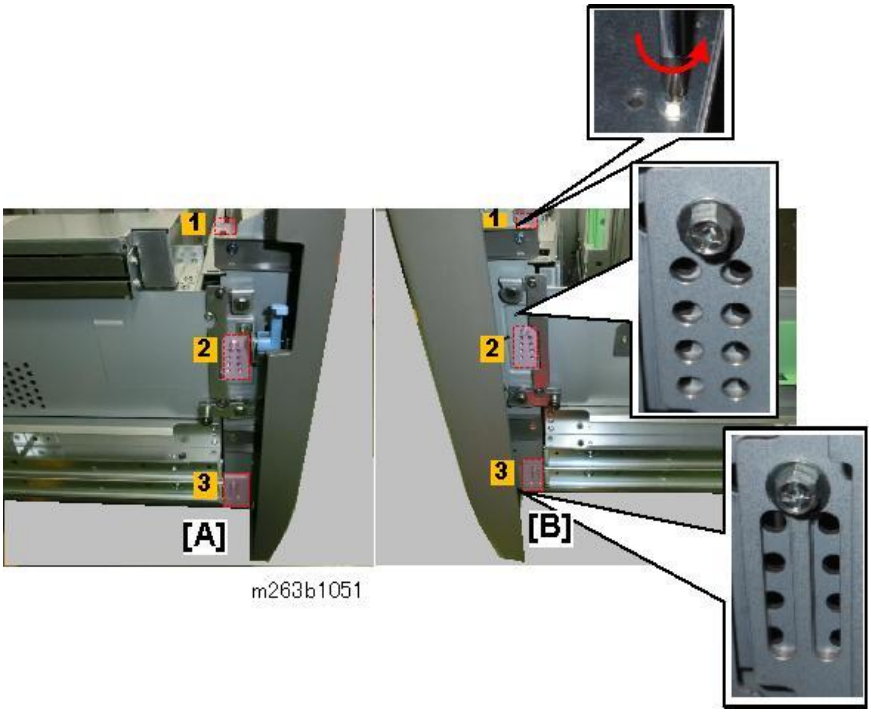
m263b1050

3. There are three adjustment points on the left side [A] and right side [B] of the tray cover.

[1] These screws need to be loosened to release the cover. They do not need to be removed.

[2] This is the top adjustment grid (left and right).

[3] This is the bottom adjustment grid (left and right)



m263b1051

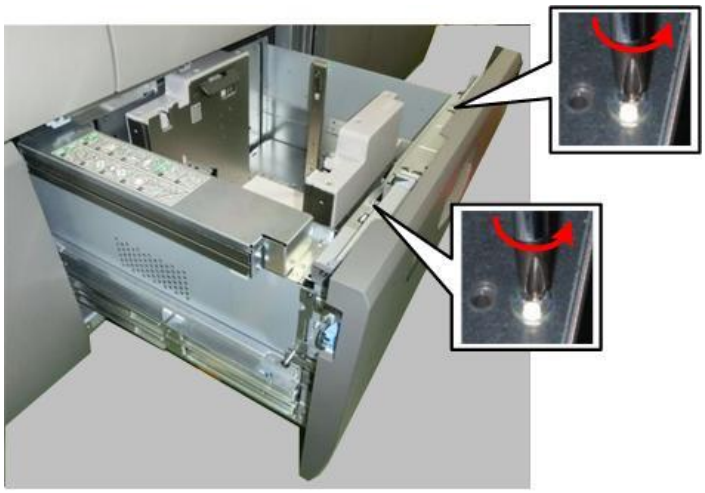
Important

- In order to change the position of the front cover plate evenly, the adjustments must be done at all six points, two on the left side (top and bottom), two on the right side (top and bottom), and two screws loosened on the top.

4. First, loosen the screws on the top front edge of the tray.

Note

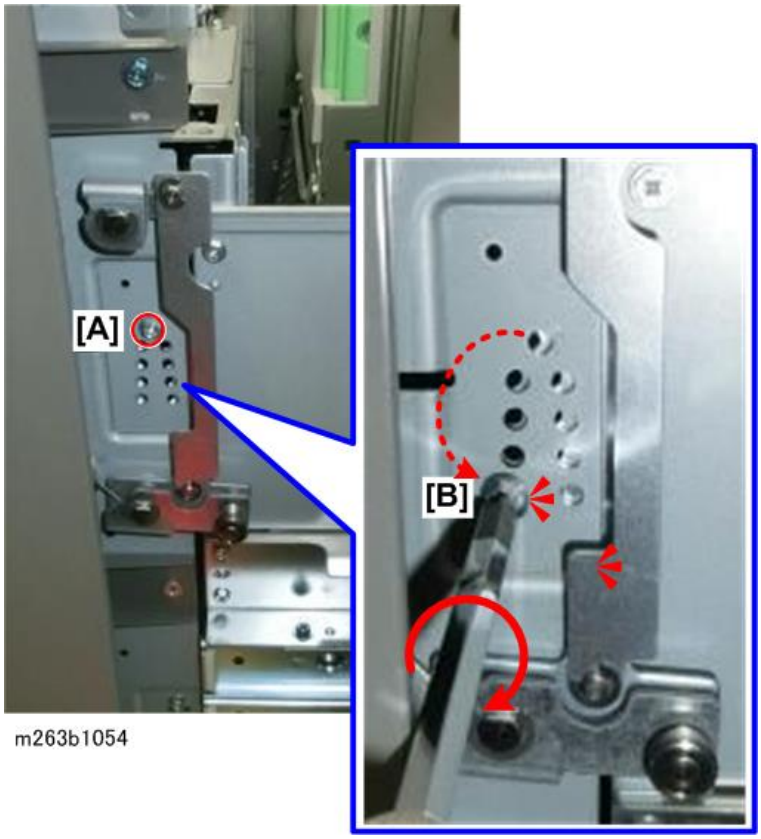
- If you cannot see the screws, remove the front cover (x4).



m263b1053

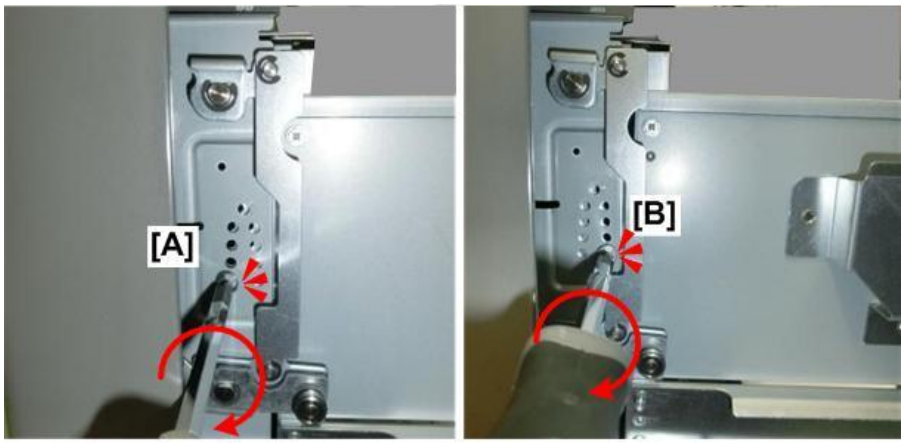
5. At each grid adjustment point, remove each screw [A]. This allows you to easily adjust the position of the cover so you can align the holes.

6. Fasten the screw into hole [B] for the selected adjustment. Be sure to fasten the screw at the same hole at each adjustment point.



m263b1054

7. The adjustment range is ±2 mm in 0.5 mm steps for each hole.
In the example below, [A] is a full 2 mm adjustment to move the paper stack to the front. [B] is a full 2 mm adjustment to move the paper stack to the rear.



m263b1052

8. Tighten the screws on the top.
9. Close the tray.
10. Make some test prints, and then go into the SP mode and do the image adjustment for the tray with SP1002.

Correcting Skew

Skew Correction Method

- Skew can be corrected using the pin [A] and bracket [B] between the main machine and LCIT by inserting a skew correction shim [C].

Skew Correction Procedure

Follow the procedure below to check for paper skew after installation.

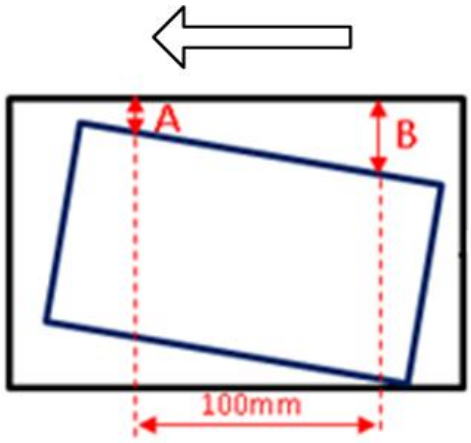
1. Go into the SP mode. Select SP2-109-003 and print Test Pattern #14.
   This is the Trim Pattern.
2. At the top of the SP mode screen, touch “Copy Screen” to go into the copy mode (the copy screen appears).
3. Make sure at least three sheets of paper are set for copying, and then print three sheets.
4. Check the placement of the Trim Pattern on the sheets as shown below.

Image Skewed to the Front

Measure the amount of skew. This is the difference between A and B.

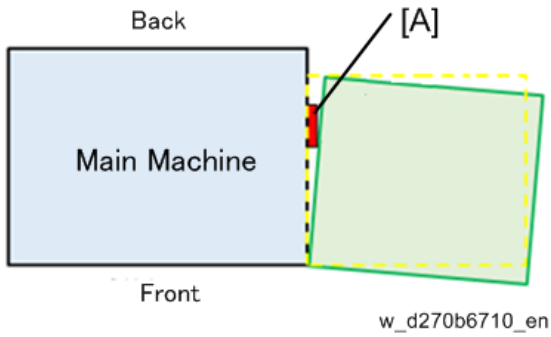
Note

- Up to four shims stacked at one point can be used to correct paper skew.



d270d6709

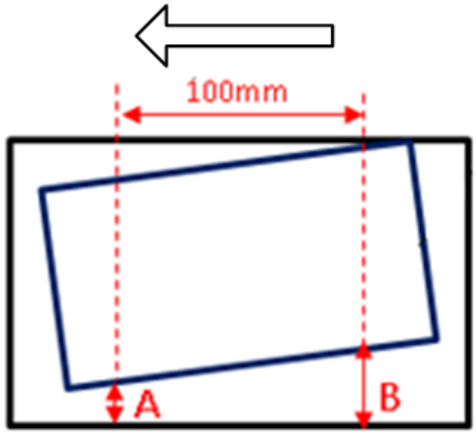
If the amount of skew (difference between A and B) is 1 mm and there is only one LCIT RT5120 in the line, insert two shims at the rear [A] as shown.



w_d270b6710_en

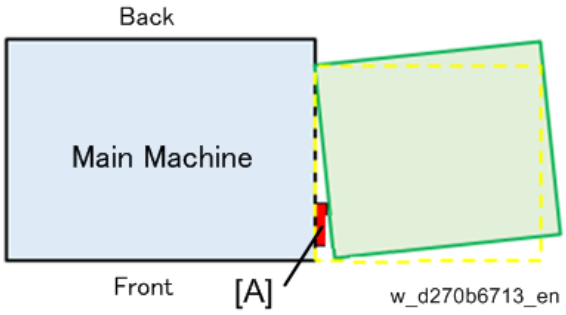
Image Skewed to the Rear

Measure the amount of skew. This is the difference between A and B.



d270d6711

If the amount of skew (difference between A and B) is 1 mm and there is only one LCIT RT5120 in the line, insert two shims at the front [A] as shown.

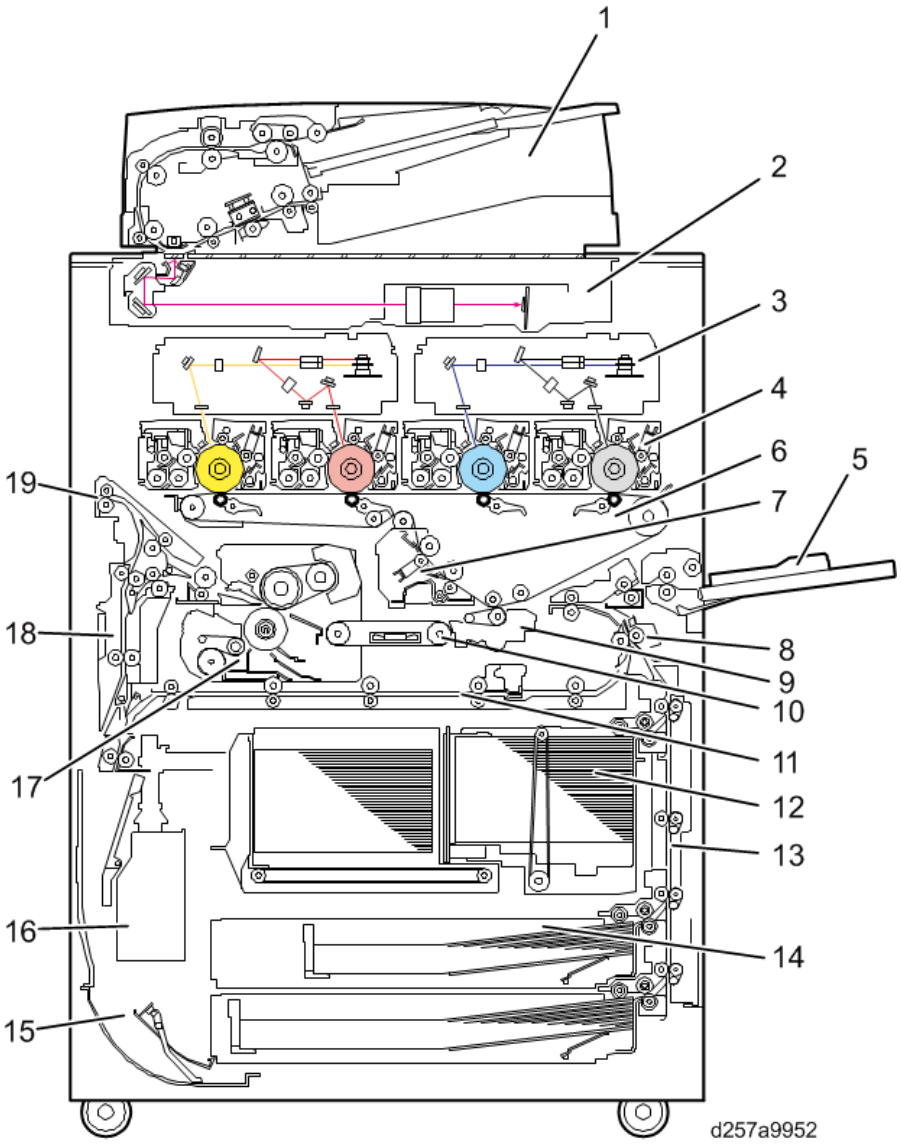

Back
Main Machine
Front
[A]
w_d270b6713_en

7. Detailed Descriptions

Product Overview

Component Layout

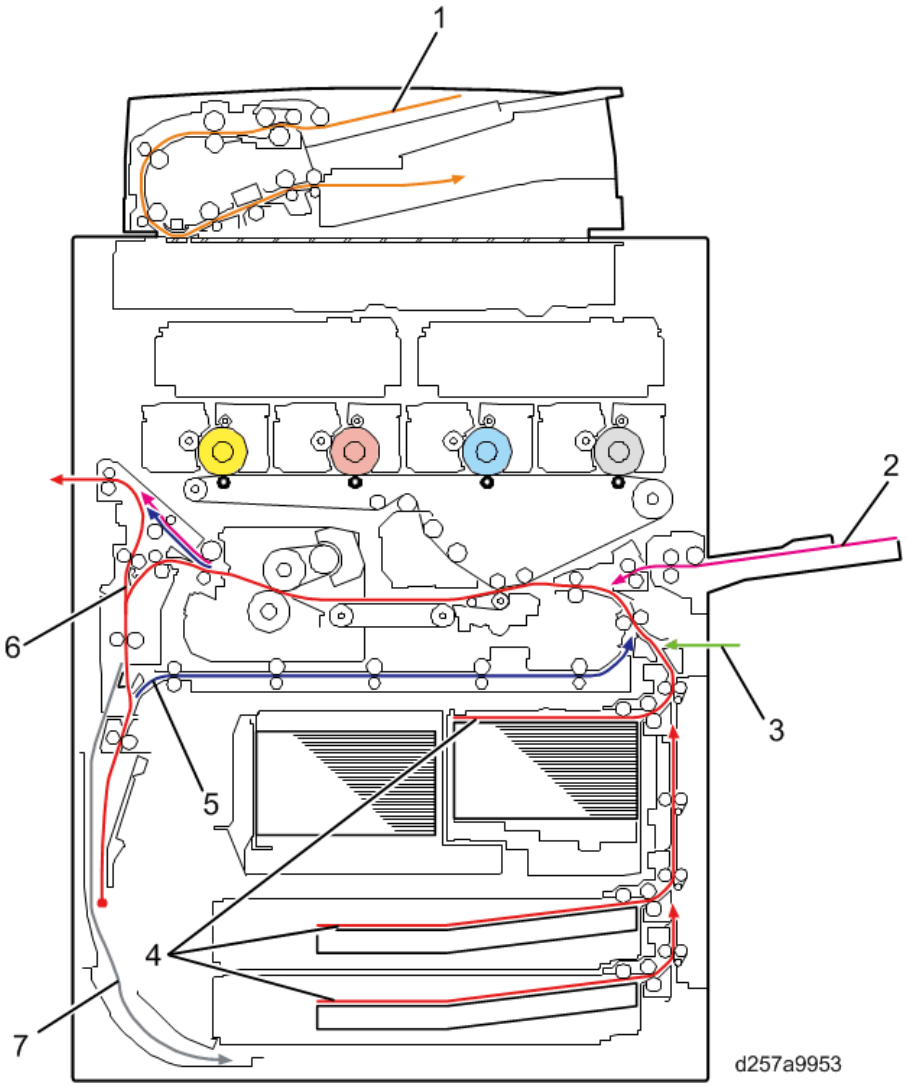
Component Layout



No.	Description	No.	Description
1	ADF	11	Duplex Unit
2	Scanner Unit	12	Tray 1 (Tandem Tray)
3	Laser Unit	13	Vertical Transport Unit
4	PCDU	14	Tray 2, 3 (Universal Tray)
5	Bypass Tray Unit	15	Paper Purge Unit

No.	Description	No.	Description
6	Image Transfer Belt Unit	16	Waste Toner Collection
7	ITB Cleaning Unit	17	Fusing Unit
8	Relay Transport Section	18	Exit / Inverter Section
9	Paper Transfer Belt Unit	19	Exit Transport Section
10	Paper Transport Belt Unit		

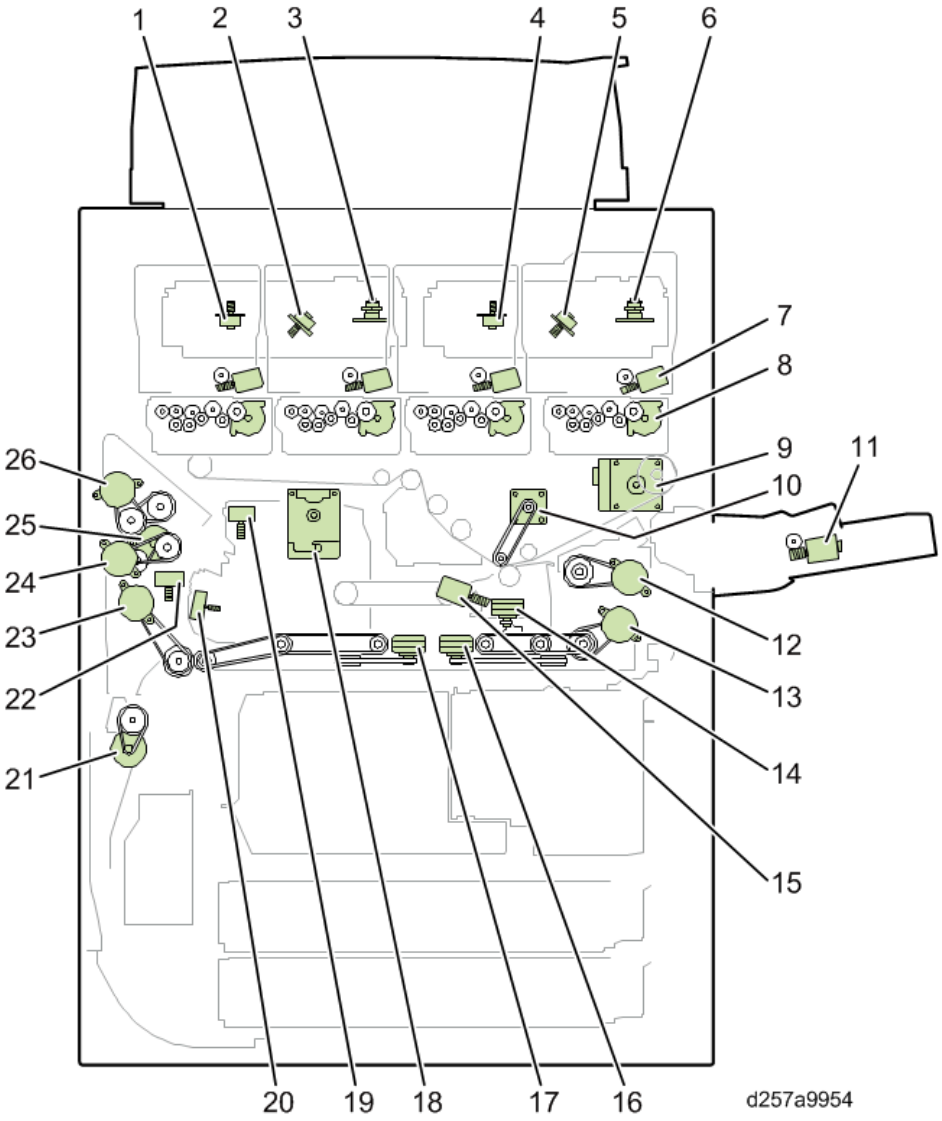
Paper Paths



No.	Description	No.	Description
1	ADF Transport Path	5	Duplex Transport Path
2	Bypass Transport Path	6	Exit / Inverter Transport Path
3	Paper Feed Path (Optional LCIT)	7	Purge Transport Path
4	Paper Feed Path (Tray 1 to 3)		

Drive Layout

Front Side

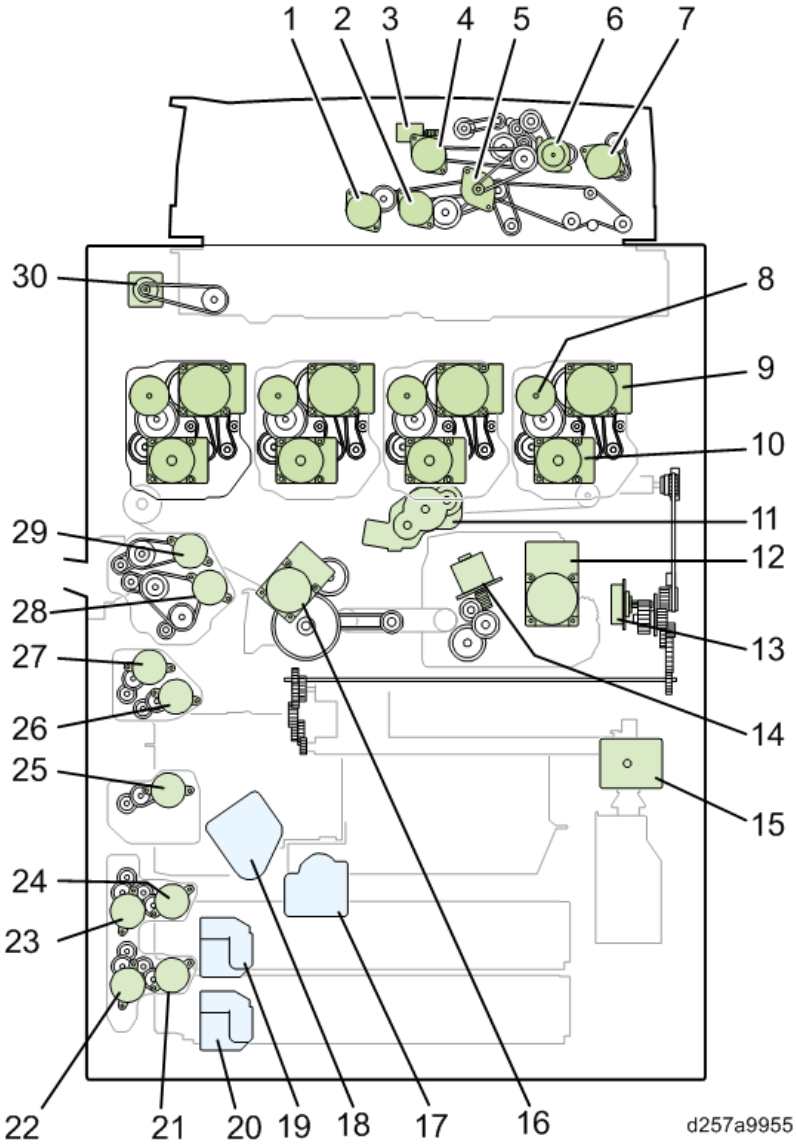


No.	Description	No.	Description
1	Image Skew Correction Motor (Y)	14	Edge Detection Sensor Shift Motor
2	Image Skew Correction Motor (M)	15	Drawer Unit Lock Motor
3	Polygon Motor (Y/M)	16	Duplex Transport Shift Motor 2
4	Image Skew Correction Motor (C)	17	Duplex Transport Shift Motor 1
5	Image Skew Correction Motor (K)	18	Fusing Belt Smoothing Roller Drive Motor*1
6	Polygon Motor (C/K)	19	Fusing Belt Smoothing Roller Contact Motor*1
7	Toner Supply Motor	20	Cleaning Web Motor*1
8	Sub Hopper Motor	21	Duplex Inverter Motor
9	ITB Motor	22	Cleaning Web Contact Motor*1
10	Paper Transfer Belt Separation Motor	23	Duplex Transport Motor
11	Bypass Tray Lift Motor*1	24	Duplex Inverter Entrance Motor

No.	Description	No.	Description
12	Registration Motor	25	Exit Inverter Motor
13	Duplex Exit Motor	26	Exit Motor

*1 Pro C5300S/C5310S only

Rear Side

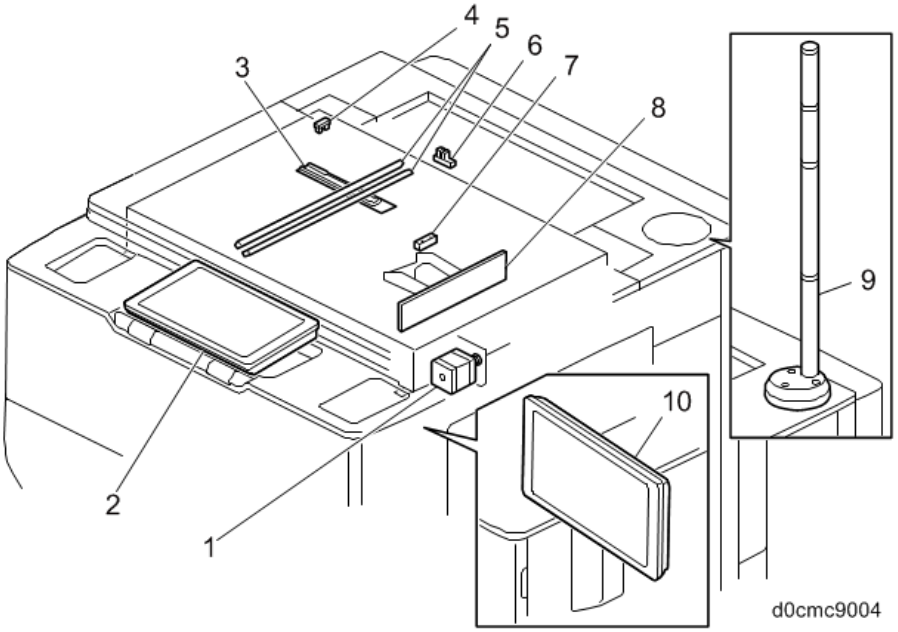


No.	Description	No.	Description
1	ADF Exit Motor	16	Paper Transfer Belt Motor
2	ADF Scanning Motor	17	Left Tray Back Fence Motor
3	ADF Bottom Plate Lift Motor	18	1st Tray Lift Motor
4	ADF Entrance Motor	19	2nd Tray Lift Motor
5	ADF Feed Motor	20	3rd Tray Lift Motor
6	ADF Pick-up Roller Lift Motor	21	3rd Paper Feed Motor
7	ADF Transport Motor	22	3rd Transport Motor
8	Drum Cleaning Motor	23	2nd Transport Motor

No.	Description	No.	Description
9	Development Motor	24	2nd Paper Feed Motor
10	Drum Motor	25	Vertical Transport Motor
11	ITB Lift Motor	26	1st Paper Feed Motor
12	Fusing Drive Motor	27	1st Transport Motor
13	Waste Toner Collection Motor	28	Relay Motor
14	Fusing Release Motor	29	Bypass Feed Motor
15	Waste Toner Bottle Motor	30	Scanner Drive Motor

Electrical Components

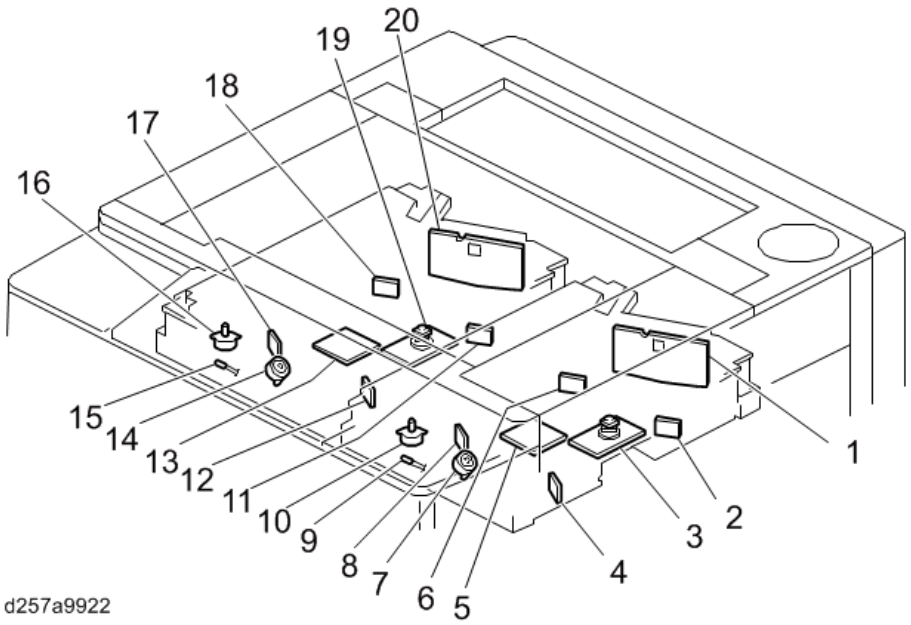
Scanner Unit



No.	Description	No.	Description
1	Scanner Drive Motor (M23)	6	DF Position Sensor (S27)
2	Operation Panel (IM C6500/C8000)	7	Original Length Sensor (S25)
3	Scanner Anti-Condensation Heater (H5)	8	SBU (PCB15)
4	Scanner HP Sensor (S24)	9	Operator Call Light (OT7) *1
5	Exposure Lamp (LED1)	10	Operation Panel (Pro C5300S/C5310S)

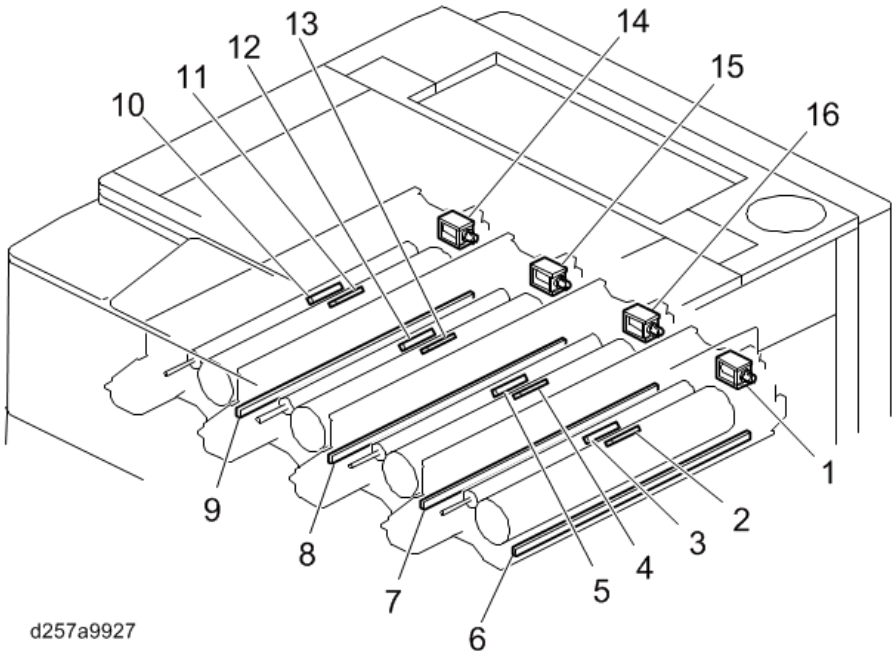
*1 Pro C5300S/C5310S only

Laser Unit



No.	Description	No.	Description
1	LD Board:C/K (PCB17)	11	Laser Synchronization Detector:Rear/M (PCB24)
2	Laser Synchronization Detector:Rear/K (PCB21)	12	Laser Synchronization Detector:Front/M (PCB25)
3	Polygon Motor (C/K) (M26)	13	Polygon Motor Control Board:Y/M (PCB23)
4	Laser Synchronization Detector:Front/K (PCB20)	14	Image Skew Correction Motor (M) (M29)
5	Polygon Motor Control Board:C/K (PCB16)	15	Thermistor (M) (TH3)
6	Laser Synchronization Detector:Rear/C (PCB19)	16	Image Skew Correction Motor (Y) (M28)
7	Image Skew Correction Motor (K) (M25)	17	Laser Synchronization Detector:Front/Y (PCB28)
8	Laser Synchronization Detector:Front/C (PCB18)	18	Laser Synchronization Detector:Rear/Y (PCB26)
9	Thermistor (K) (TH2)	19	Polygon Motor (Y/M) (M27)
10	Image Skew Correction Motor (C) (M24)	20	LD Board:Y/M (PCB22)

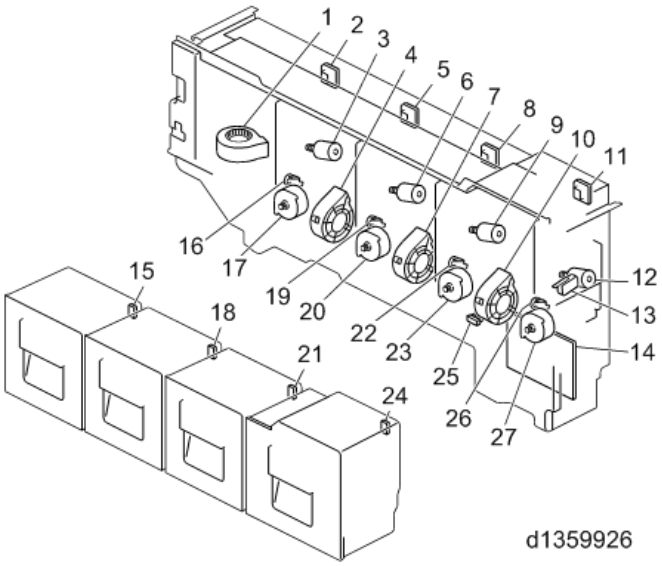
PCDU



No.	Description	No.	Description
1	Charge Roller Cleaning Roller Solenoid (SOL1) (K)	9	Quenching Lamp (L1) (Y)
2	TD Sensor (S46) (K)	10	Potential Sensor (S42) (Y)*1
3	Potential Sensor (S42) (K)*1	11	TD Sensor (S46) (Y)
4	TD Sensor (S46) (C)	12	Potential Sensor (S42) (M)*1
5	Potential Sensor (S42) (C)*1	13	TD Sensor (S46) (M)
6	Quenching Lamp (L1) (K)	14	Charge Roller Cleaning Roller Solenoid (SOL1) (Y)
7	Quenching Lamp (L1) (C)	15	Charge Roller Cleaning Roller Solenoid (SOL1) (M)
8	Quenching Lamp (L1) (M)	16	Charge Roller Cleaning Roller Solenoid (SOL1) (C)

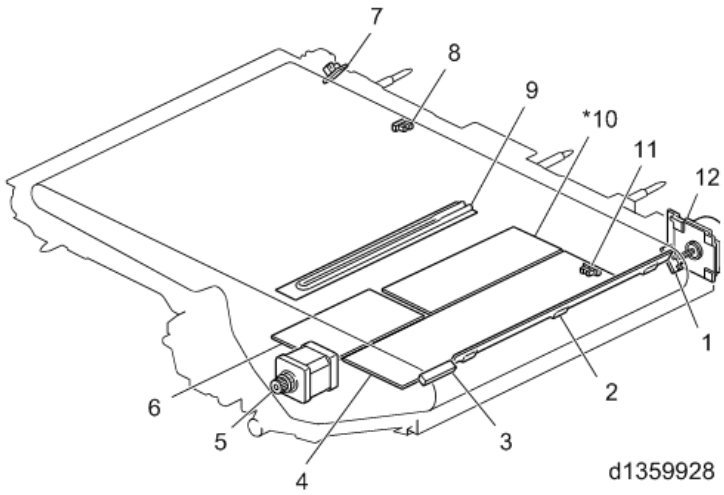
*1 Pro C5300S/C5310S only

Toner Supply Unit



No.	Description	No.	Description
1	Development Intake Fan (FAN2) (Y)	15	ID Chip:Y (OT1)
2	ID Chip Connector Board (PCB5) (Y)	16	Toner End Sensor (S3) (Y)
3	Toner Supply Motor (M3) (Y)	17	Sub Hopper Motor (M7) (Y)
4	Development Intake Fan (FAN2) (M)	18	ID Chip:M (OT2)
5	ID Chip Connector Board (PCB5) (M)	19	Toner End Sensor (S3) (M)
6	Toner Supply Motor (M3) (M)	20	Sub Hopper Motor (M7) (M)
7	Development Intake Fan (FAN2) (C)	21	ID Chip:C (OT3)
8	ID Chip Connector Board (PCB5) (C)	22	Toner End Sensor (S3) (C)
9	Toner Supply Motor (M3) (C)	23	Sub Hopper Motor (M7) (C)
10	Development Intake Fan (FAN2) (K)	24	ID Chip:K (OT4)
11	ID Chip Connector Board (PCB5) (K)	25	ITB Cleaning Unit Set Sensor (S7)
12	Toner Supply Motor (M3) (K)	26	Toner End Sensor (S3) (K)
13	Toner Supply Unit Front Cover Switch (SW1)	27	Sub Hopper Motor (M7) (K)
14	Toner Supply Board (PCB9)		

Image Transfer Belt Unit

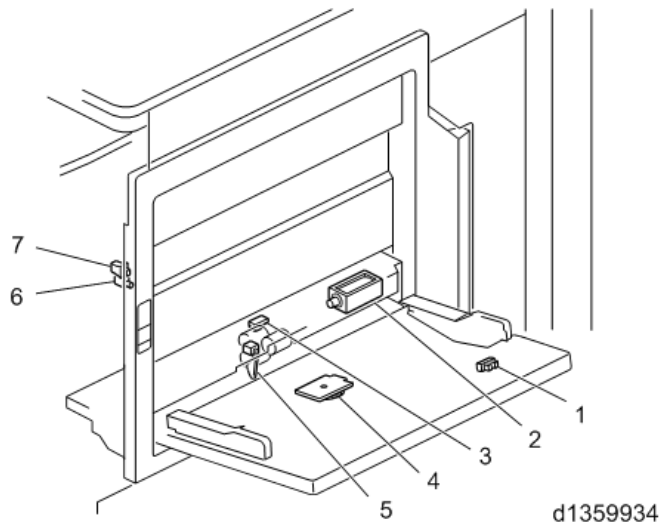


No.	Description	No.	Description
1	ITB Drive Shaft Encoder Sensor (S8)	7	ITB Driven Shaft Encoder Sensor (S9)
2	ID/MUSIC Sensors (S2)	8	ITB Lift (YMC) Sensor (S10)
3	ITB HP Sensor (S1)	9	Anti-condensation Heater
4	Transfer Power Pack/Separation Power Pack (PCB2)	10	AC Transfer Power Pack (PCB3) *1
5	Paper Transfer Belt Separation Motor (M1)	11	Paper Transfer Belt Separation Sensor (S11)
6	TDRB (PCB4)	12	ITB Motor (M2)

*1 Pro C5300S/C5310S only

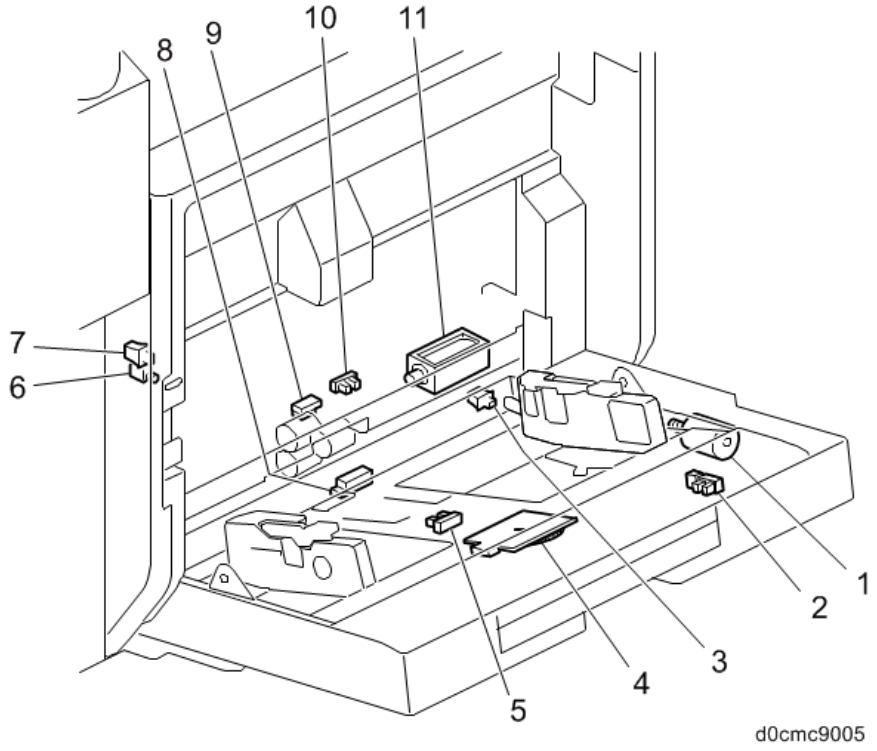
Bypass Tray Unit

Bypass Tray Unit (IM C6500/C8000)



No.	Description	No.	Description
1	Bypass Paper Length Sensor (S109)	5	Bypass Tray Paper End Sensor (S108)
2	Bypass Pick-up Solenoid (SOL11)	6	Bypass Tray LED (LED3)
3	Bypass Paper Feed Sensor (S111)	7	Bypass Tray Open Switch (SW2)
4	Bypass Paper Width Sensor (S110)		

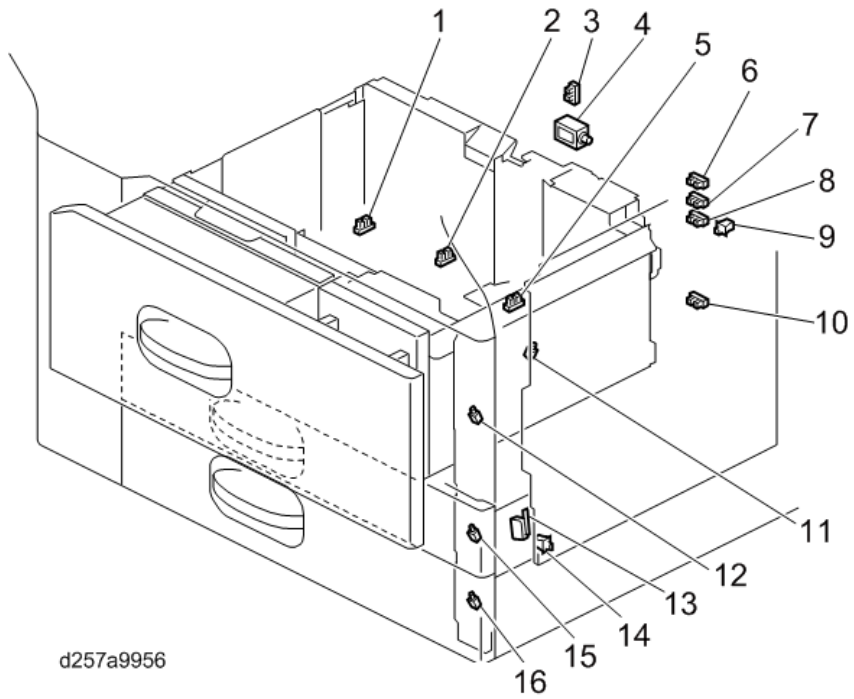
Bypass Tray Unit (Pro C5300S/C5310S)



No.	Description	No.	Description
1	Bypass Tray Lift Motor (M52) *1	7	Bypass Tray Open Switch (SW2)
2	Bypass Paper Length Sensor (S109)	8	Bypass Tray Paper End Sensor (S108)
3	Bypass Tray Set Sensor (S112) *1	9	Bypass Paper Feed Sensor (S111)
4	Bypass Paper Width Sensor (S110)	10	Bypass Tray Upper Limit Sensor (S113) *1
5	Bypass Tray Lower Limit Sensor (S107) *1	11	Bypass Pick-up Solenoid (SOL11)
6	Bypass Tray LED (LED3)		

*1 Pro C5300S/C5310S only

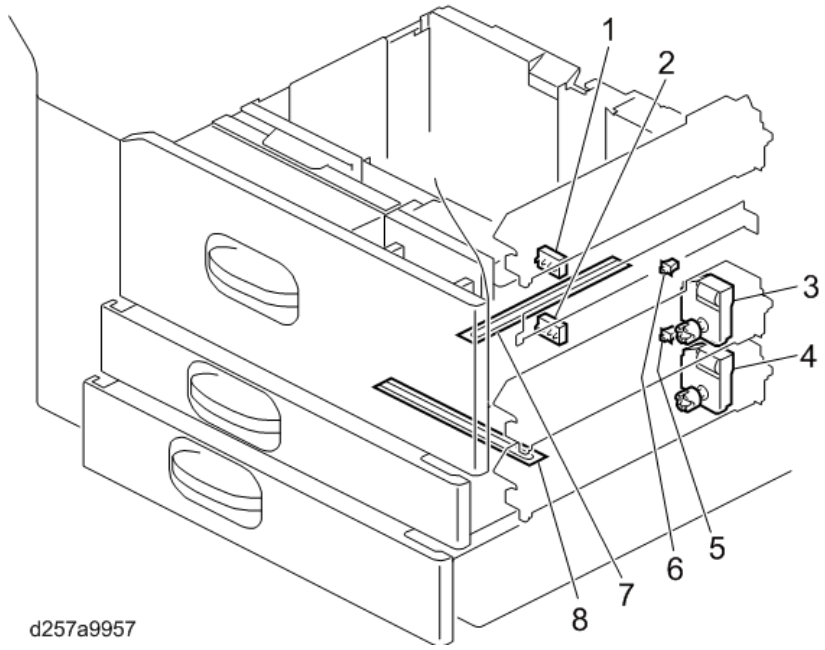
Paper Feed Section 1



No.	Description	No.	Description
1	Rear Fence HP Sensor (S102)	9	Right Tray Set Sensor (S121)
2	Left Tray Paper Sensor (S104)	10	Tray Lower Limit Sensor (S107)
3	Rear Fence Return Sensor (S103)	11	Vertical Transport LED (LED14)
4	End Fence Rear Solenoid (SOL10)	12	1st Tray LED (LED10) *1
5	Rear End Fence Closed Sensor (S105)	13	Vertical Transport Door Set Switch (SW11)
6	Paper Height Sensor 1 (S118)	14	Vertical Transport Door Open Sensor (S88)
7	Paper Height Sensor 2 (S119)	15	2nd Tray LED (LED12) *1
8	Paper Height Sensor 3 (S120)	16	3rd Tray LED (LED13) *1

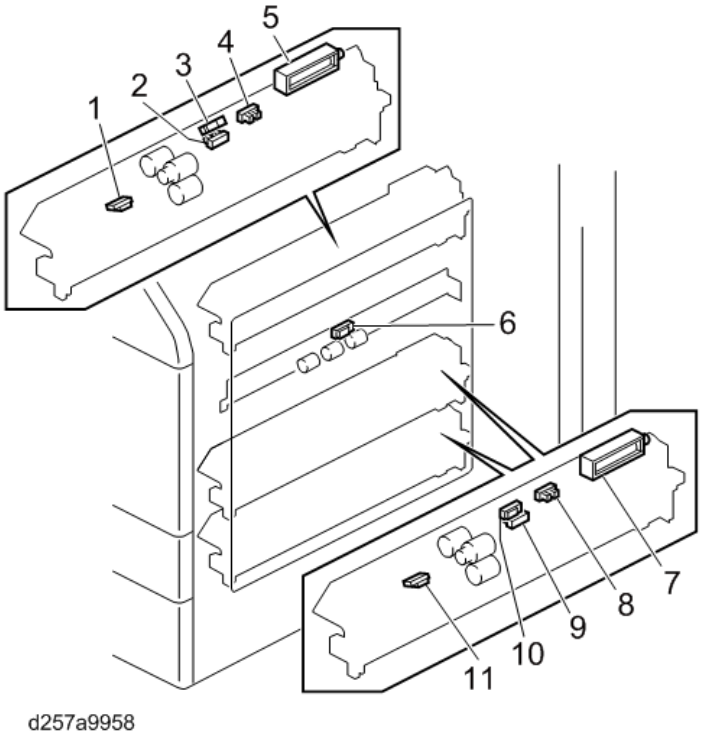
*1 Pro C5300S/C5310S only

Paper Feed Section 2



No.	Description	No.	Description
1	2nd Tray Size Switch (SW13)	5	3rd Tray Set Switch (SW14)
2	3rd Tray Size Switch (SW13)	6	2nd Tray Set Switch (SW14)
3	2nd Tray Lift Motor (M57)	7	Lower Tray Heater (H3)
4	3rd Tray Lift Motor (M57)	8	Upper Tray Heater (H2)

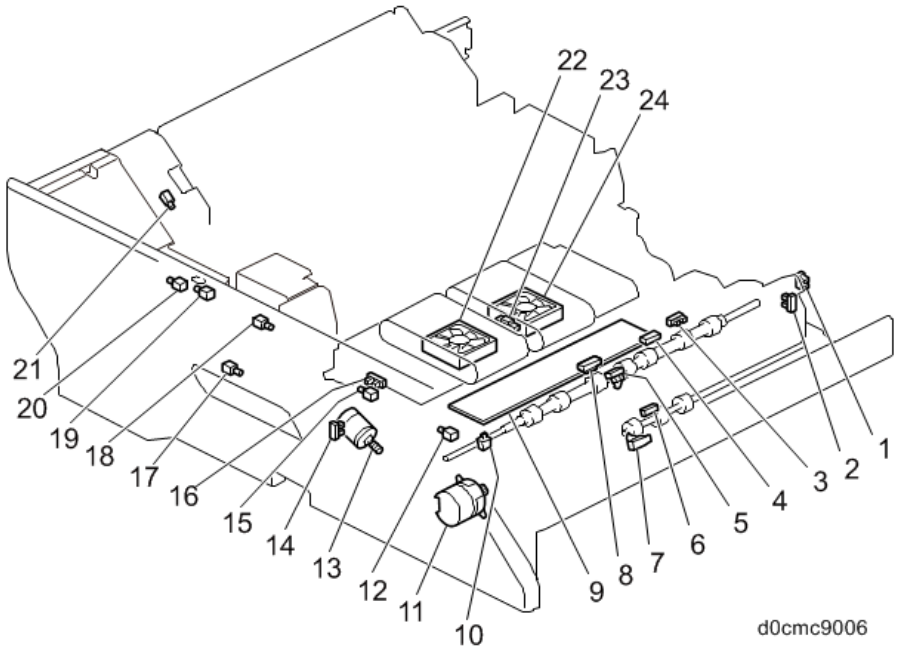
Paper Feed Section 3



No.	Description	No.	Description
1	Paper Feed Sensor (S92) (Tray 1)	7	Pick-up Solenoid (Tray 2 to 3)
2	Paper End Sensor (S90) (Tray 1)	8	Paper Tray Upper Limit Sensor (S89) (Tray 2 to 3)
3	Transport Sensor (S91) (Tray 1)	9	Paper End Sensor (S90) (Tray 2 to 3)
4	Paper Tray Upper Limit Sensor (S89) (Tray 1)	10	Transport Sensor (S91) (Tray 2 to 3)
5	Pick-up Solenoid (SOL7) (Tray 1)	11	Paper Feed Sensor (S92) (Tray 2 to 3)
6	Vertical Transport Sensor (S91)		

Drawer Unit

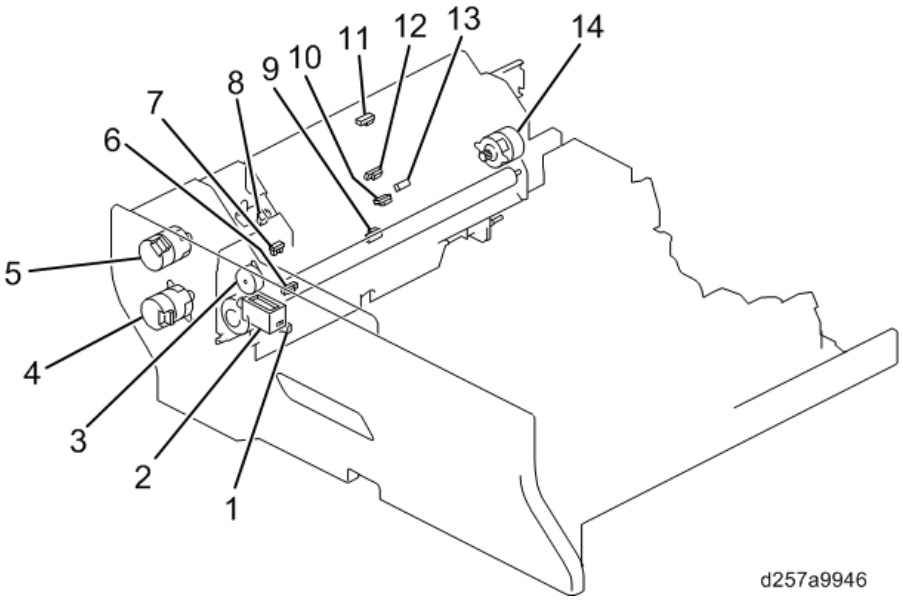
Drawer Unit 1



No.	Description	No.	Description
1	Drawer Set Sensor 1 (S56)	13	Drawer Unit Lock Motor (M44)
2	Drawer Set Sensor 2 (S57)	14	Drawer Unit Flapper Sensor (S81)
3	Drawer Unit Lock Sensor (S61)	15	Vacuum Grip LED (LED9)
4	Registration Sensor (S66)	15	Paper Transport Belt Sensor (S63)
5	Bypass Tray Paper Type Sensor (S67)	16	Drawer Unit LED (LED8)
6	Relay Sensor (S68)	18	Duplex Guide Plate JAM Process LED (LED7)
7	Paper Type Sensor (S69)	19	Fusing Separation Plate Grip LED (LED18)
8	Transfer Timing Sensor (S129)	20	Paper Exit Left Lower Guide Plate JAM Process LED (LED4)
9	DUB (PCB37)	21	Paper Exit Upper Guide Plate LED (LED6)

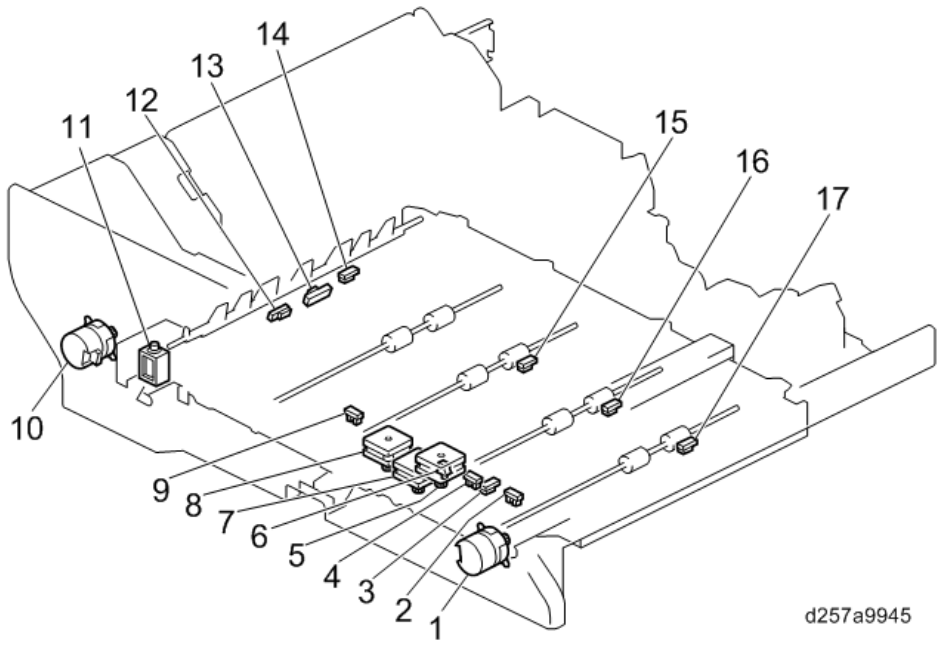
No.	Description	No.	Description
10	Upper Guide Plate Open Switch (S7)	22	Paper Transport Belt Fan (FAN28) (Front)
11	Registration Motor (M43)	23	Paper Transport Belt Unit Set Sensor (S62)
12	Upper Guide Plate LED (LED5)	24	Paper Transport Belt Fan (FAN28) (Rear)

Drawer Unit 2



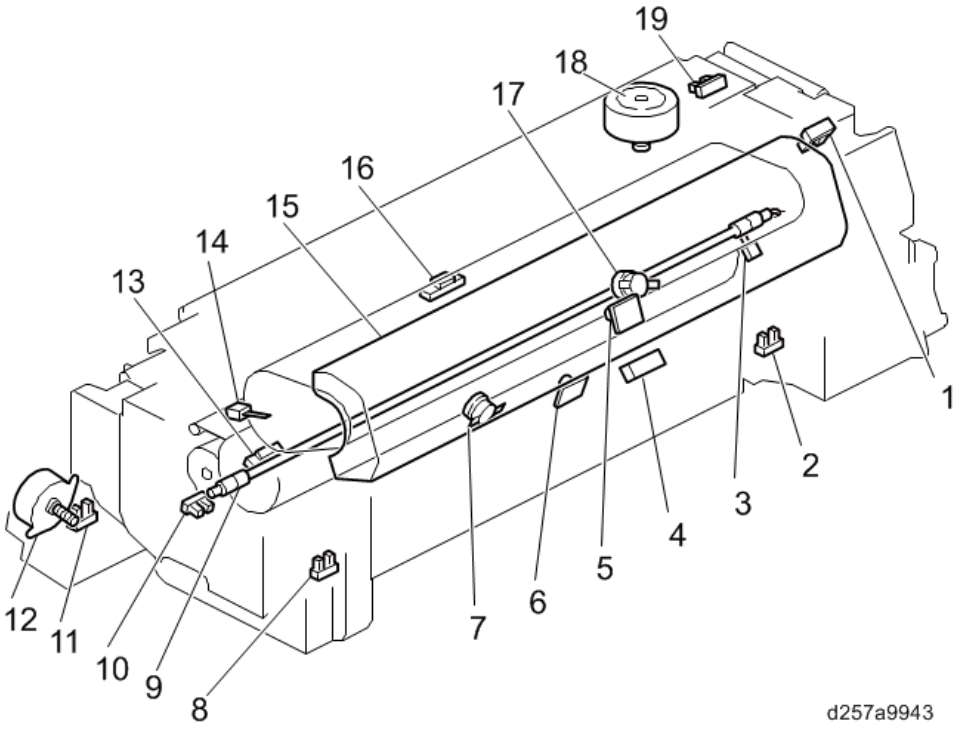
No.	Description	No.	Description
1	Paper Exit Left Guide Plate Sensor (S78)	8	Paper Exit Upper Guide Plate Sensor (S79)
2	Exit Inverter Solenoid (SOL6)	9	Inverter Exit Sensor (S75)
3	Inverter Junction Gate Motor (M41)	10	Inverter Feed-in Sensor (S80)
4	Duplex Inverter Entrance Motor (M46)	11	Paper Exit Sensor (S74)
5	Exit Motor (M47)	12	Inverter Feed-out Sensor (S76)
6	Fusing Exit Guide Plate Open Sensor (S72)	13	Paper Exit Relay Sensor (S73)
7	Inverter Junction Gate HP Sensor (S77)	14	Exit Inverter Motor (M42)

Drawer Unit 3



No.	Description	No.	Description
1	Duplex Exit Motor (M47)	10	Duplex Transport Motor (M48)
2	Duplex Transport HP Sensor 1 (S82)	11	Duplex Invert Solenoid (SOL5)
3	Edge Sensor (S58)	12	Purge Relay Sensor (S71)
4	Sensor Shift HP Switch (SW8)	13	Duplex Invert Sensor (S70)
5	Edge Sensor Shift Motor (M38)	14	Duplex Unit Entrance Sensor (S65)
6	Horizontal Feed Guide Plate Open Sensor (S83)	15	Duplex Unit Sensor 3 (S64)
7	Duplex Transport Shift Motor 2 (M39)	16	Duplex Unit Sensor 4 (S59)
8	Duplex Transport Shift Motor 1 (M40)	17	Duplex Exit Sensor (S60)
9	Duplex Transport HP Sensor 2 (S84)		

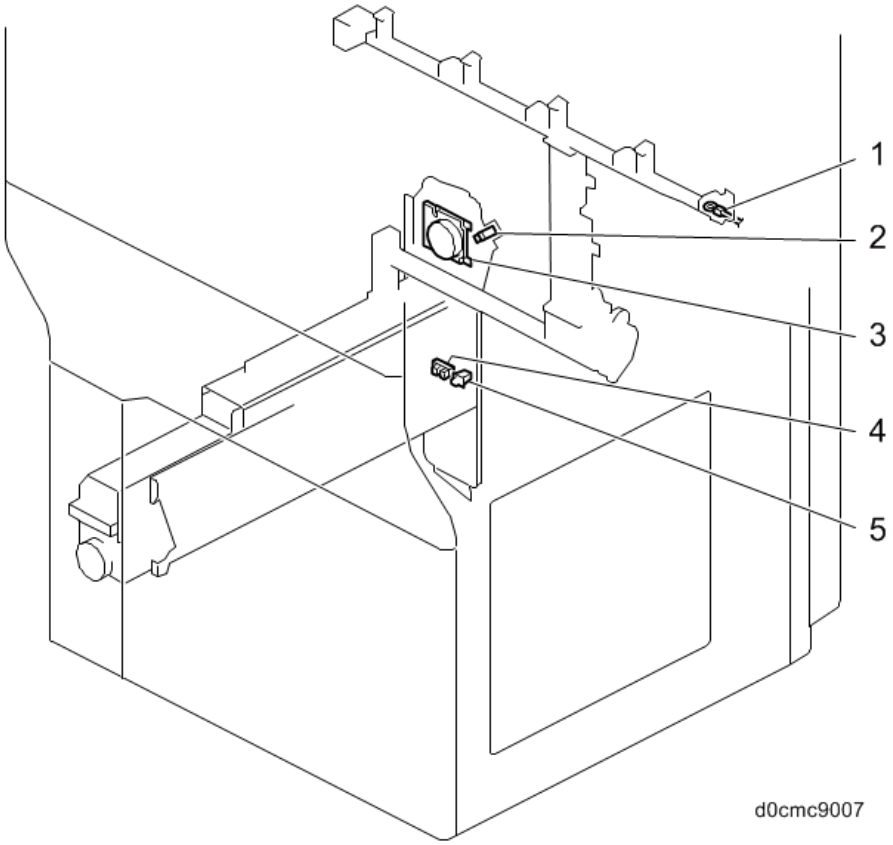
Fusing Unit



No.	Description	No.	Description
1	Heating Roller Rotation Sensor (S55)	11	Cleaning Web Contact Sensor (S87) *1
2	Pressure Roller Sensor:Rear (S51)	12	Cleaning Web Motor (M49) *1
3	Fusing Belt Thermistor (TH5)	13	Cleaning Web Set Sensor (S86) *1
4	Fusing Entrance Sensor (S22)	14	Hot Roller Shaft Thermistor (TH4) *1
5	Heating Roller Thermopile (S23)	15	IH Coil Unit
6	Pressure Roller Thermopile (S53)	16	Fusing Paper Exit Sensor (S50)
7	Pressure Roller Thermostat (TS1)	17	Heating Roller Thermostat (TS2)
8	Pressure Roller Sensor:Front (S52)	18	Cleaning Web Contact Motor (M50) *1
9	Pressure Roller Fusing Lamp (L5)	19	Fusing Belt Smoothing Roller Contact Sensor (S54) *1
10	Cleaning Web End Sensor (S85) *1		

*1 Pro C5300S/C5310S only

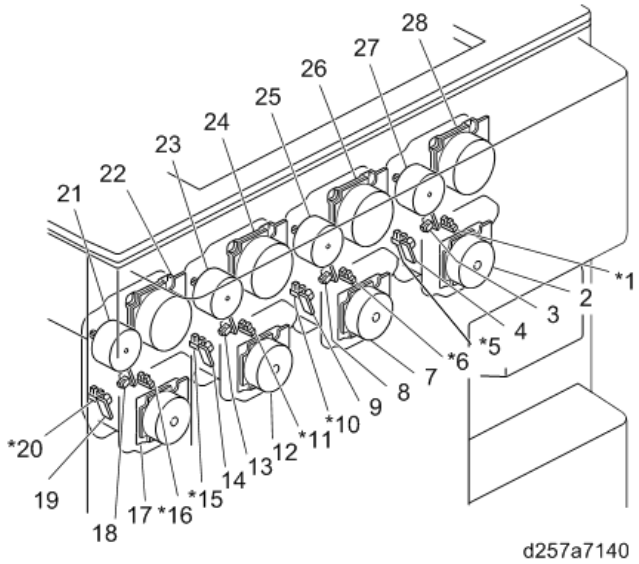
Waste Toner Collection



No.	Description	No.	Description
1	Paper Transfer Belt Waste Toner Thermistor (TH6)	4	Waste Toner Near Full Sensor (S14)
2	Waste Toner Lock Sensor (S15)	5	Waste Toner Bottle Set Sensor (S12)
3	Waste Toner Bottle Motor Sensor (S13)		

Drive Unit

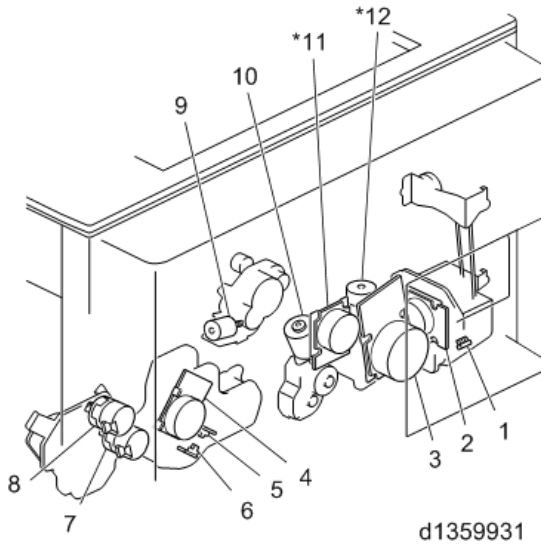
Drive Unit 1



No.	Description	No.	Description
1	Development Roller HP Sensor (S18) (Y)*1	15	Drum HP Sensor (S32) (C)*1
2	Drum Motor (M34) (Y)	16	Development Roller HP Sensor (S18) (K)*1
3	Drum Encoder Sensor (S30) (Y2)	17	Drum Motor (M34) (K)
4	Drum Encoder Sensor (S30) (Y1)	18	Drum Encoder Sensor (S30) (K2)
5	Drum HP Sensor (S32) (Y)*1	19	Drum Encoder Sensor (S30) (K1)
6	Development Roller HP Sensor (S18) (M)*1	20	Drum HP Sensor (S32) (K)*1
7	Drum Motor (M34) (M)	21	Drum Cleaning Motor (M30) (K)
8	Drum Encoder Sensor (S30) (Ma2)	22	Development Motor (M18) (K)
9	Drum Encoder Sensor (S30) (Ma1)	23	Drum Cleaning Motor (M30) (C)
10	Drum HP Sensor (S32) (M)*1	24	Development Motor (M18) (C)
11	Development Roller HP Sensor (S18) (C)*1	25	Drum Cleaning Motor (M30) (M)
12	Drum Motor (M34) (C)	26	Development Motor (M18) (M)
13	Drum Encoder Sensor (S30) (C2)	27	Drum Cleaning Motor (M30) (Y)
14	Drum Encoder Sensor (S30) (C1)	28	Development Motor (M18) (Y)

*1 Pro C5300S/C5310S only

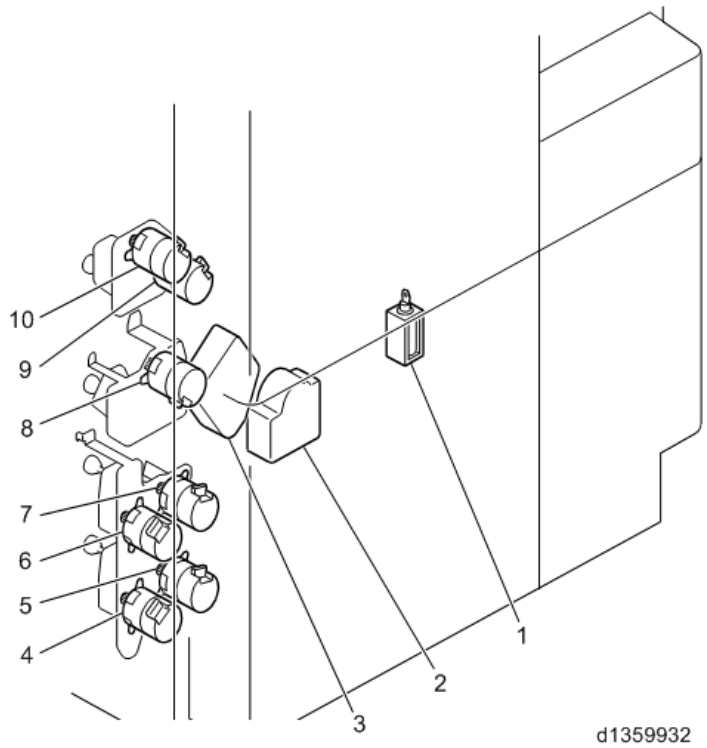
Drive Unit 2



No.	Description	No.	Description
1	Waste Toner Lock Sensor (S15)	7	Relay Motor (M53)
2	Waste Toner Collection Motor (M15)	8	Bypass Feed Motor (M54)
3	Fusing Drive Motor (M22)	9	ITB Lift Motor (M17)
4	Paper Transfer Belt Motor (M16)	10	Fusing Release Motor (M13)
5	Paper Transfer Belt Encoder Sensor (S16)	11	Fusing Belt Smoothing Roller Drive Motor (M11) *1
6	Paper Transfer Belt Encoder Sensor (S16)	12	Fusing Belt Smoothing Roller Contact Motor (M12) *1

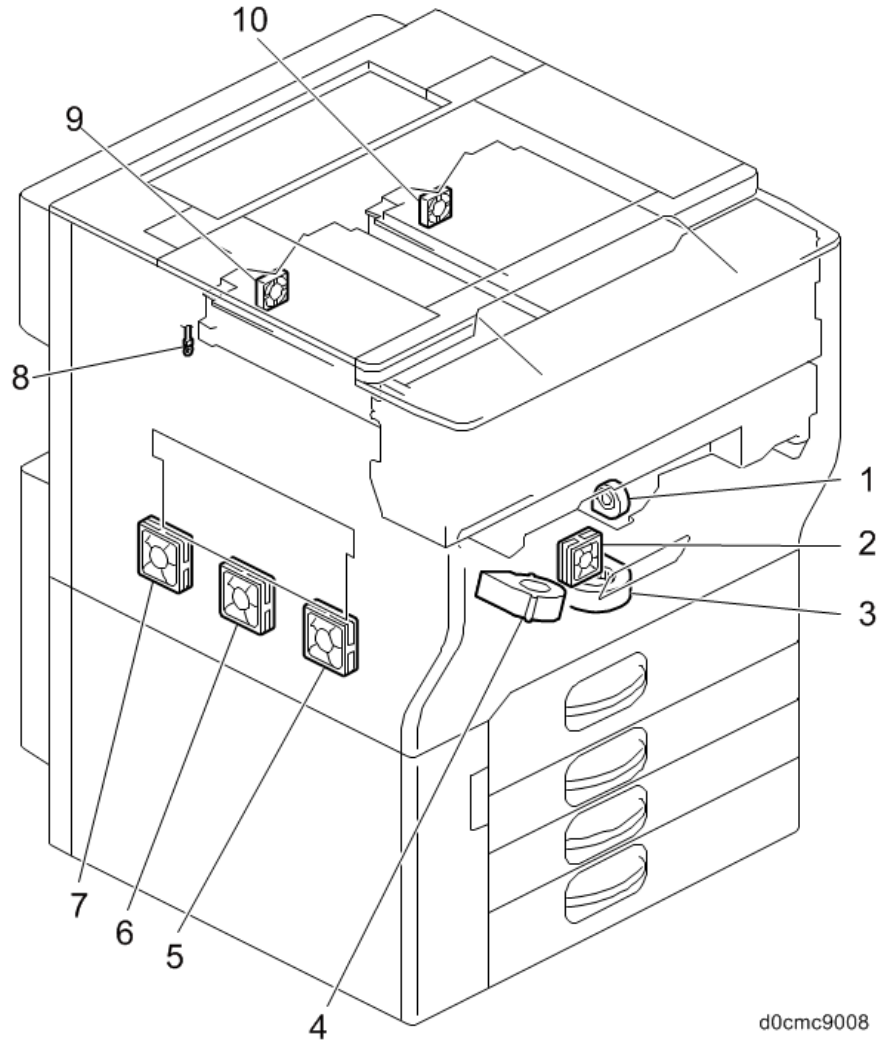
*1 Pro C5300S/C5310S only

Drive Unit 3



No.	Description	No.	Description
1	Left Tray Lock Solenoid (SOL12)	6	2nd Transport Motor (M65)
2	Rear Fence Drive Motor (M61)	7	2nd Paper Feed Motor (M64)
3	1st Tray Lift Motor (M58)	8	Vertical Transport Motor (M63)
4	3rd Transport Motor (M67)	9	1st Paper Feed Motor (M55)
5	3rd Paper Feed Motor (M66)	10	1st Transport Motor (M56)

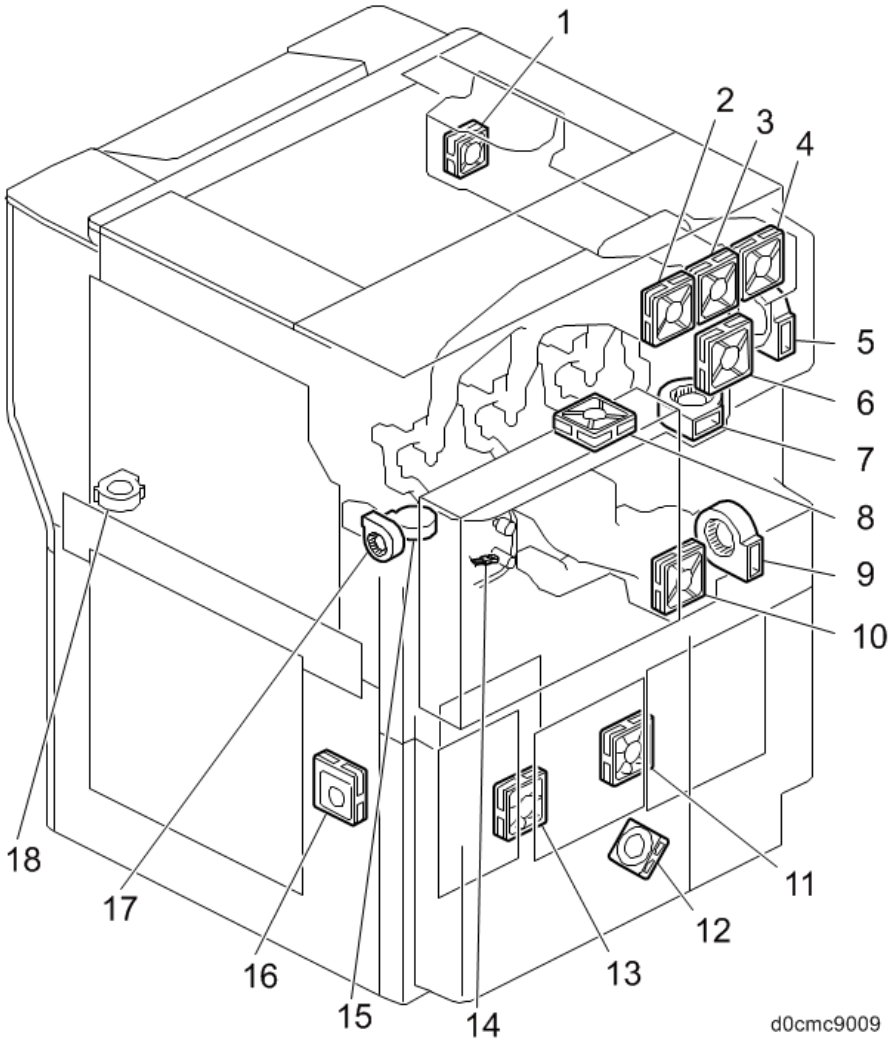
Fans 1



No.	Description	No.	Description
1	ITB Cleaning Intake Fan (FAN1)	6	Duplex Exhaust Fan (FAN12) (Middle)
2	IH Coil Cooling Fan (FAN27)	7	Duplex Exhaust Fan (FAN12) (Rear)
3	Fusing Pressure Roller Intake Fan (FAN32) *1	8	Machine Temperature Thermistor (TH1)
4	Paper Cooling Fan (FAN26)	9	Laser Unit Cooling Fan (FAN11) (Left)
5	Duplex Exhaust Fan (FAN12) (Front)	10	Laser Unit Cooling Fan (FAN10) (Right)

*1 Pro C5300S/C5310S only

Fans 2



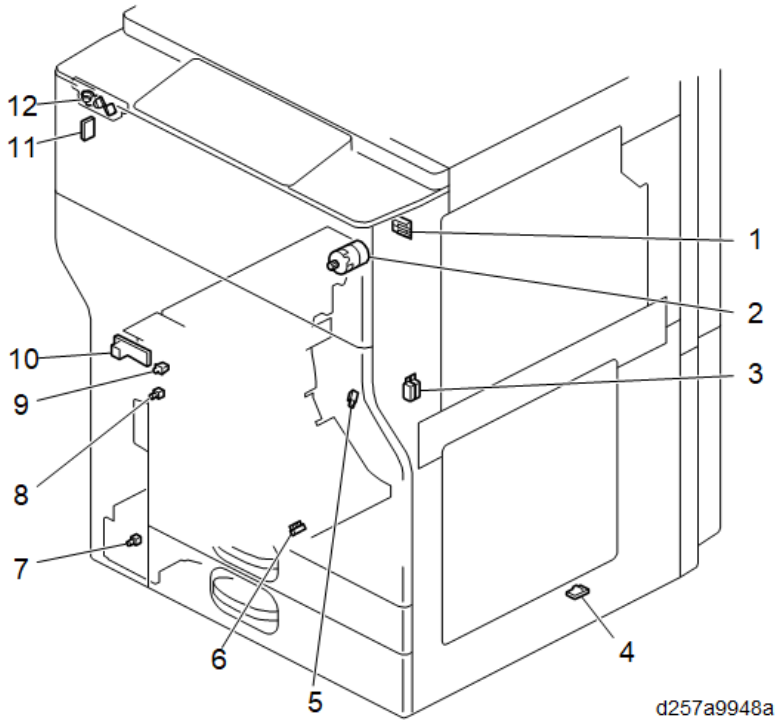
No.	Description	No.	Description
1	Heat Pipe Panel Intake Fan (FAN22)	10	Paper Transfer Belt Fusing Exhaust Fan (FAN16)
2	Development Exhaust Fan (FAN20) (Right)	11	PSU Fan (FAN23) (Left)
3	Development Exhaust Fan (FAN20) (Left)	12	IH Coil Power Cooling Fan (FAN25)
4	Heat Pipe Panel Exhaust Fan (FAN15)	13	PSU Fan (FAN23) (Right)
5	Fusing Exit Exhaust Fan (FAN18)	14	Paper Transfer Belt Waste Toner Thermistor (TH6)
6	Drive Exhaust Fan (FAN19)	15	ITB Motor Cooling Fan (FAN8)
7	Ozone Exhaust Fan (FAN17)	16	Paper Transfer Belt Waste Toner Cooling Fan (FAN6)
8	Controller Exhaust Fan (FAN9)	17	ID Sensor Cleaning Fan (FAN7)
9	Fusing Pressure Roller Exhaust Fan	18	Paper Transfer Belt Cooling Fan (FAN30)

No.	Description	No.	Description
	(FAN31) *1		

*1 Pro C5300S/C5310S only

Main Boards

Main Boards 1

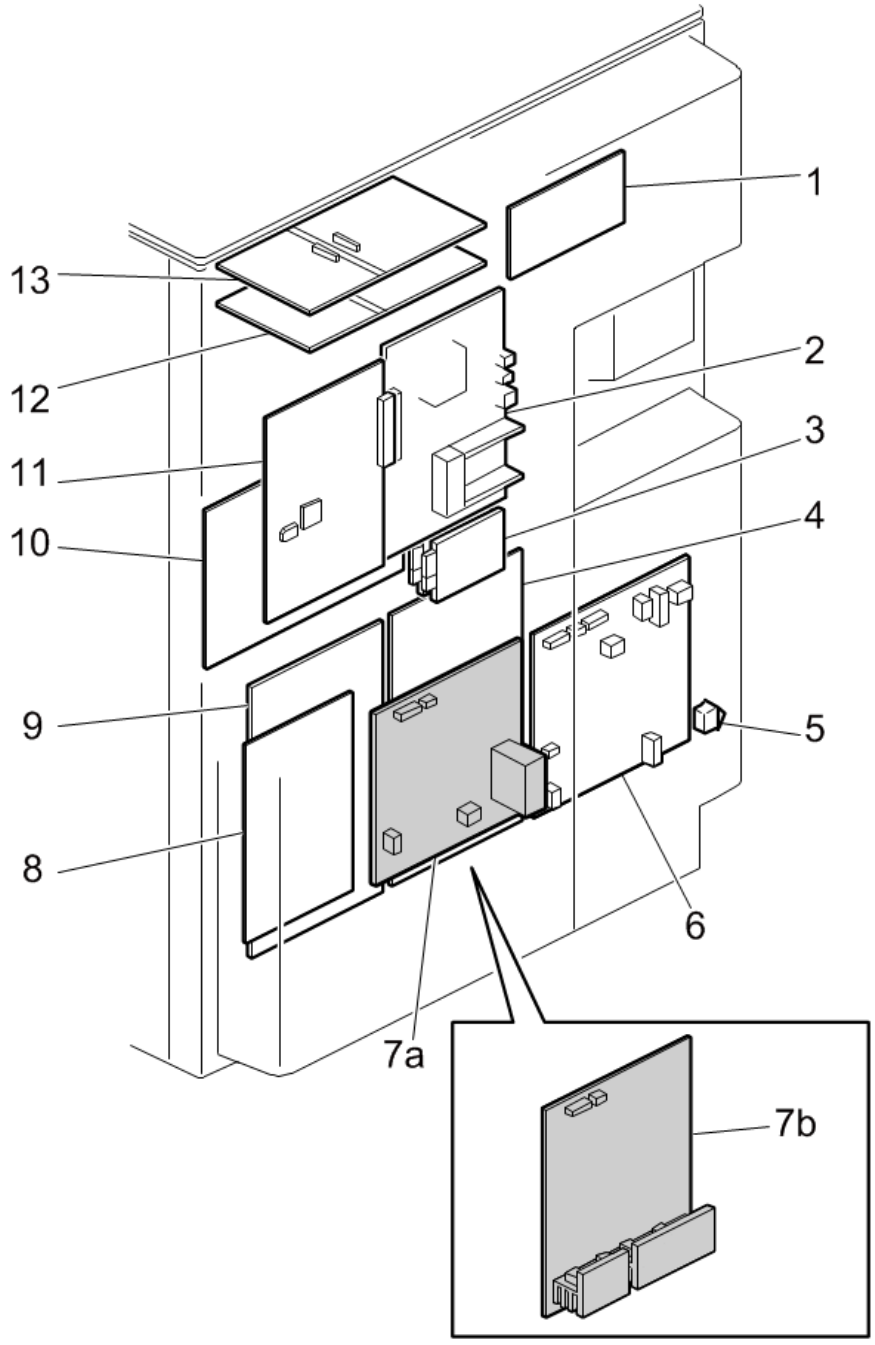


No.	Description	No.	Description
1	Toner Supply Unit Safety Switch (SW5) *1	7	Lower Guide Plate LED (LED16)
2	Duplex Inverter Motor (M51)	8	Left Lower Door LED (LED17)
3	Drawer Safety Switch (SW9)	9	Front Lower Cover Switch (SW12)
4	ITB Temperature/Humidity Sensor (S97)	10	LSB (PCB39)
5	Purge Tray LED (LED15)	11	Main Power Switch (SW3)
6	Purged Paper Sensor (S106)	12	Proximity Sensor (S28) *2

*1 Pro C5300S/C5310S only

*2 IM C6500/C8000 only

Main Boards 2



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No.	Description	No.	Description
1	Potential Sensor Board (PCB29) *1	8	PFB (PCB36)
2	Controller Board (PCB30)	9	PSU1 (PCB34)
3	HDD Unit (HDD1)	10	IOB (PCB1)
4	PSU2 (PCB33)	11	BICU (PCB14)
5	Anti-Condensation Heater Switch (SW4)	12	Combined High-Voltage Power Supply Board:CK (PCB11)

No.	Description	No.	Description
6	AC Drive Board (PCB32)	13	Combined High-Voltage Power Supply Board:MY (PCB10)
7a	IH Inverter (PCB35) (1475W Board) *2		
7b	IH Inverter (PCB35) (2500W Board) *3		

	Destination	Model	PCB
*1	All	Pro C5300S/C5310S only	-
*2	NA	IM C6500 only	1475W
*3	NA	Pro C5310/C5300S, IM C8000	2500W
	EU/AP/CHN	Pro C5310/C5300S, IM C6500/C8000	2500W

ADF

Mechanism Descriptions

General Specifications

Items		Descriptions	Remarks
Type		Auto-duplex-scan sheet-through DF	Single-path duplex sheet-through DF
Supported Original Sizes	Simplex	A3 SEF - B6 SEF/LEF 11x17 SEF - 5 1/2x8 1/2 SEF/LEF	40 - 128 g/m^2 (10.7 to 47.3 lbs)
	Duplex	A3 SEF - A5 SEF/LEF 11x17 SEF - 5 1/2x8 1/2 SEF/LEF	52.3 - 128 g/m^2 (14.0 to 47.3 lbs)
Original Standard Position		Rear left corner, front side-up.	
Original Feed Order		From the top original.	
Separation Method		Feed belt and separation roller	
Scanning Method		Sheet pass method (**Front:** White guide plate, **Back:** Color CIS + white roller)	
Placable Original Capacity		220 sheets (80 g/m^2, 20 lbs) Stack height: 25 mm or less.	250 sheets
CPM		500 mm/s (BW) 310.5 mm/s (Color)	
Scanning Throughput	Simplex	**Copy:** IM C6500/Pro C5300S: 65 ipm IM C8000/Pro C5310S: 80 ipm	LT LEF, A4 LEF 1 to 1 (BW/Color)
		Scan: 120 ipm (200 / 300dpi)	LT LEF, A4 LEF 1 to 1 (Color)
	Duplex	**Copy:** IM C6500/Pro C5300S: 65 ipm IM C8000/Pro C5310S: 80 ipm	LT LEF, A4 LEF 1 to 1 (BW/Color)
		Scan: 240 ipm (200 / 300 dpi)	LT LEF, A4 LEF 1 to 1 (Color)
Dimensions (W x D x H, mm)		587mm x 520 mm x 175 mm	
Weight		13.9 kg or less	
Power Source		DC 24V, DC 12V, DC 5V	Supplied from the main machine.
Power Consumption		60.0 W or less	

Small Paper Feeding Unit Type M37

Item	Specifications
Supported original type	Check / Bill / Receipt etc.
Original size	Width:76 to 105mm Length:148 to 218mm
Original thickness	55 to 110 g/ m^2
Original tray capacity	50 sheets (55 g/ m^2) 44 sheets (70 g/ m^2) 30 sheets (110 g/ m^2)

Supported Original Sizes

Paper Thickness		35kg	40kg	45kg	55kg	70kg	90kg	110kg	Tracing paper
		40.7 g/m^2	46.5 g/m^2	52.8 g/m^2	64 g/m^2	81.4 g/m^2	105 g/m^2	128 g/m^2	
		11lbs	12.5lbs	14lbs	17lbs	22lbs	28lbs	34lbs	TA, TE, TC
Quantity		250 Sheets		250 Sheets		220 Sheets	60 Sheets	50 Sheets	1 Sheet
Original Size	A3/A4	○		●		●	●	●	▲
	A5	○		●		●	●	●	-
	B4/B5	○		●		●	●	●	▲
	B6P	-		○		○	○	○	-
	DLT	○		●		●	●	●	-
	LT	○		●		●	●	●	-
	HLT	○		●		●	●	●	-
	F	○		●		●	●	●	-

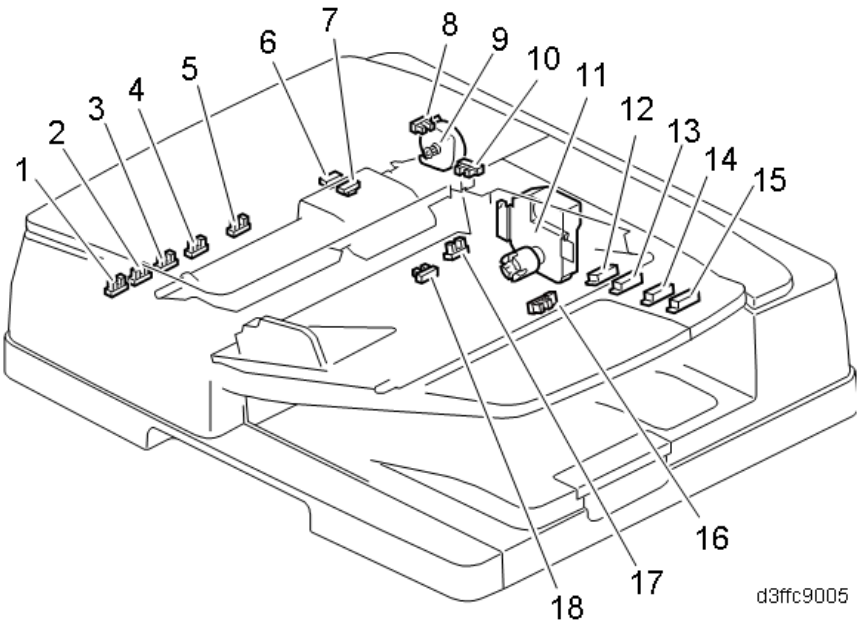
●: Possible in simplex and duplex

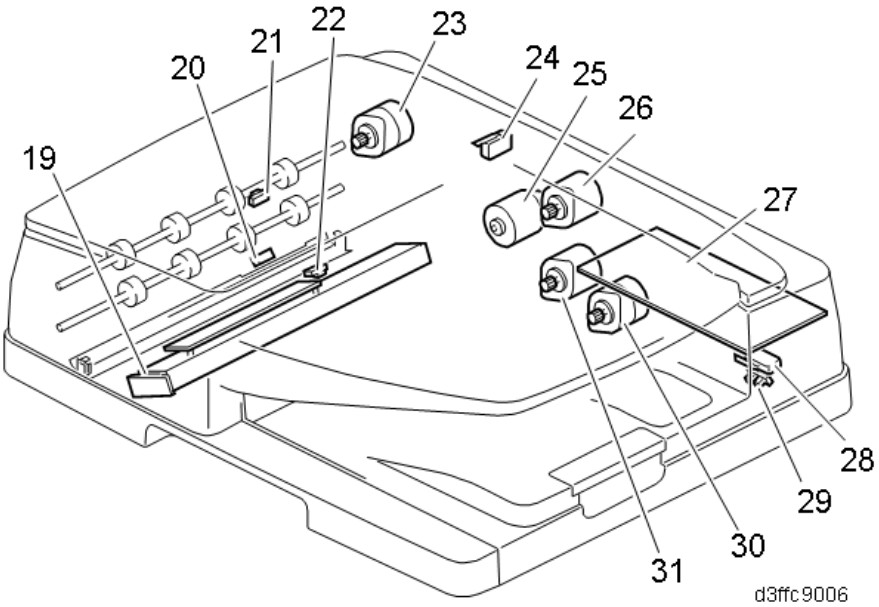
○: Simplex only

▲: SADF Simplex only

-: Not supported

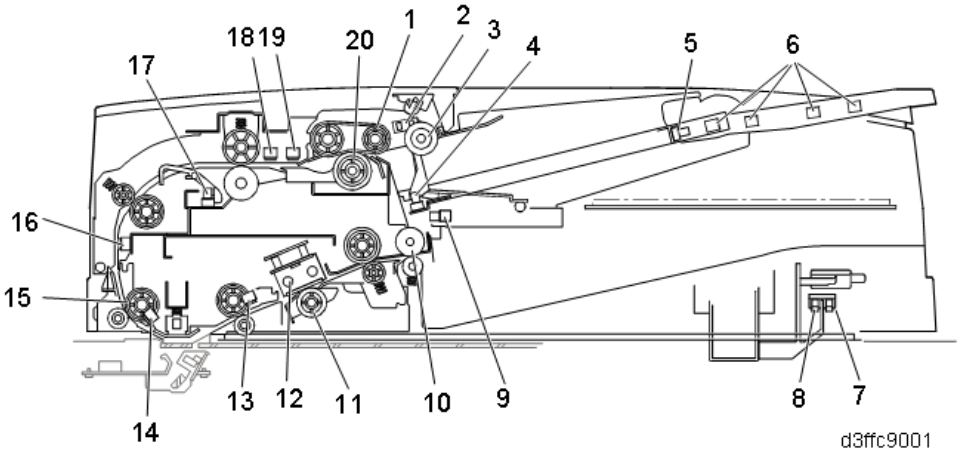
Component Layout





No.	Part	No.	Part
1	Original Width Sensor (S134) 5	17	Original Set Sensor (S139)
2	Original Width Sensor (S134) 4	18	Bottom Plate HP Sensor (S148)
3	Original Width Sensor (S134) 3	19	CIS Unit (PCB41)
4	Original Width Sensor (S134) 2	20	Original Registration Sensor (S143)
5	Original Width Sensor (S134)	21	Interval Sensor (S142)
6	Skew Correction Sensor (S141)	22	Original Exit Sensor (S144)
7	Separation Sensor (S140)	23	ADF Transport Motor (M76)
8	Pick-up Roller HP Sensor (S147)	24	ADF Feed Cover Interlock Switch (SW15)

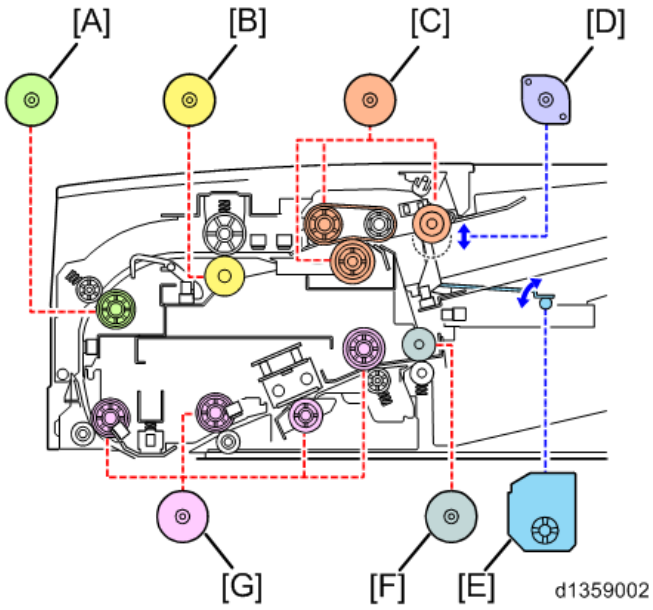
No.	Part	No.	Part
9	ADF Pick-Up Roller Lift Motor (M71)	25	ADF Feed Motor (M72)
10	Bottom Plate Position Sensor (S149)	26	Pull-out Motor (M72)
11	ADF Bottom Plate Lift Motor (M70)	27	ADF Controller Board (PCB40)
12	Original Length Sensor (A4/LT LEF) (S133)	28	ADF Lift-up Interlock Switch (SW16)
13	Original Length Sensor (B5) (S130)	29	Lift Sensor (S146)
14	Original Length Sensor (A4) (S131)	30	ADF Exit Motor (M74)
15	Original Length Sensor (LG) (S132)	31	ADF Scanning Motor (M75)
16	Small Size Paper Tray Set Sensor (S145)		



No,	Part	No.	Part
1	Feed Belt	11	CIS White Roller
2	Bottom Plate Position Sensor (S149)	12	CIS
3	Pick-up Roller	13	Original Exit Sensor (S144)
4	Original Set Sensor (S139)	14	Original Registration Sensor (S143)
5	Small Size Paper Tray Set Sensor (S145)	15	Scanning Entrance Roller
6	Original Length Sensors	16	Interval Sensor (S142)
7	Lift Sensor (S146)	17	Original Width Sensors
8	ADF Lift-up Interlock Switch (SW16)	18	Skew Correction Sensor (S141)
9	Bottom Plate HP Sensor (S148)	19	Separation Sensor (S140)
10	Exit Roller	20	ADF Separation Roller

Drive Components

The rollers in the ADF are driven by the following seven motors.



A	ADF Transport Motor (M76)	E	ADF Bottom Plate Lift Motor (M70)
B	Pull-out Motor (M73)	F	ADF Exit Motor (M74)
C	ADF Feed Motor (M72)	G	ADF Scanning Motor (M75)
D	ADF Pick-up Roller Lift Motor (M71)		

Mechanism Details

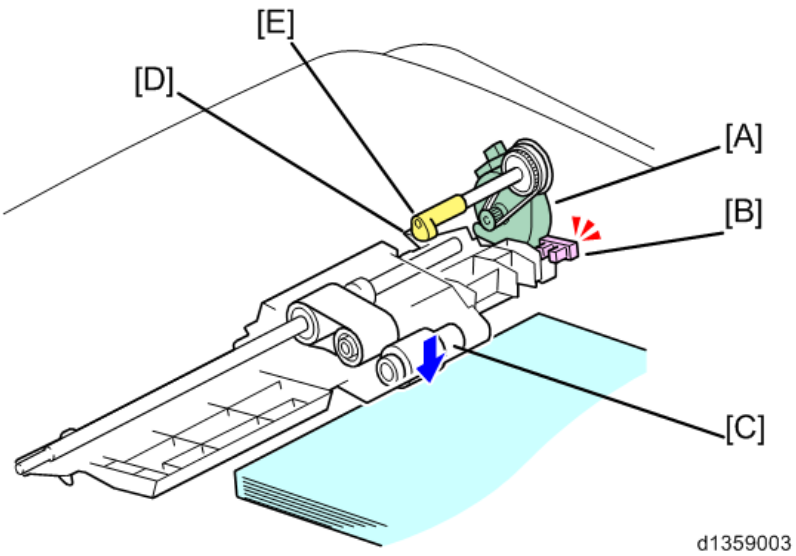
Original Pick-up

Paper Feed

When an original is placed on the original tray, its leading edge raises the feeler of the original set sensor (S139) and the sensor detects the original.

Pick-up Roller

- When there is no original on the original tray, the pick-up roller [C] swings up to the limit of its vertical movement.
- To lower the pick-up roller, the ADF pick-up roller lift motor (M71) [A] rotates the lift cam [E] which lowers the pick-up arm [D] and the pick-up roller.
- When the pick-up roller is lowered, the ADF pick-up roller lift motor (M71) [A] switches on.
- When the actuator switches off the bottom plate position sensor (S149) [B], the ADF pick-up roller lift motor (M71) goes off, and then the lift cam [E] holds the roller up.



Pick-up Roller Down Timing

The pick-up roller lowers:

- When an original (or stack of originals) is set on the original table.
- When the trailing edge of the original passes the sensor (but, it does not lower for the last original).
- For A4/LT LEF when the leading edge reaches the original registration sensor (S143).

Pick-up Roller Lift Motor On/Off Timing

The pick-up roller lift motor (M71) switches ON:

- When the original set sensor (S139) detects the leading edge of the original.
- Just after the machine is turned on

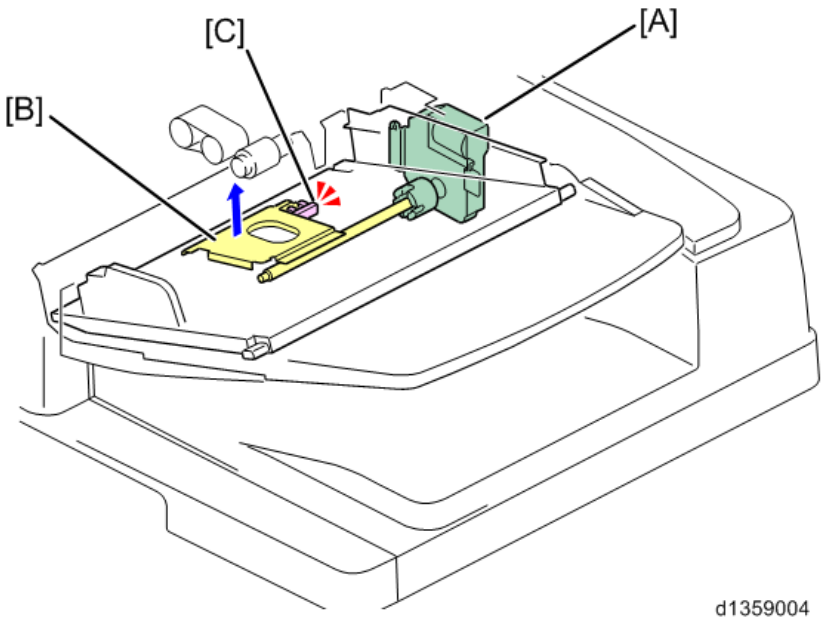
The pick-up roller lift motor (M71) switches OFF:

- When the original feed cover is open.
- When an original jams in the ADF paper path.

Bottom Plate Lift

- When an original is set on the original tray, after the pick-up roller drops, the bottom plate position sensor (S149) goes off, and then the ADF bottom plate lift motor (M70) [A] goes on and raises lift lever [B] which raises the bottom plate.
- The actuator above the pick-roller holder switches on the bottom plate position sensor (S149) (see the previous diagram), and this turns the ADF bottom plate lift motor (M70) [A] off so the stack is positioned at the correct feed position.
- During scanning with the ADF, when the top of the stack becomes too low, the pick-up roller drops low enough to turn the bottom plate position sensor (S149) off, which switches the ADF bottom plate lift motor (M70) [A] on again and raises the stack until once again it is at the paper feed position.
- This mechanism performs continuously and keeps the top of the stack at the correct feed height for original stacks of up to 220 sheets (81.4 g/m2).
- At the end of the job, the original table descends under its own weight as far as the bottom plate

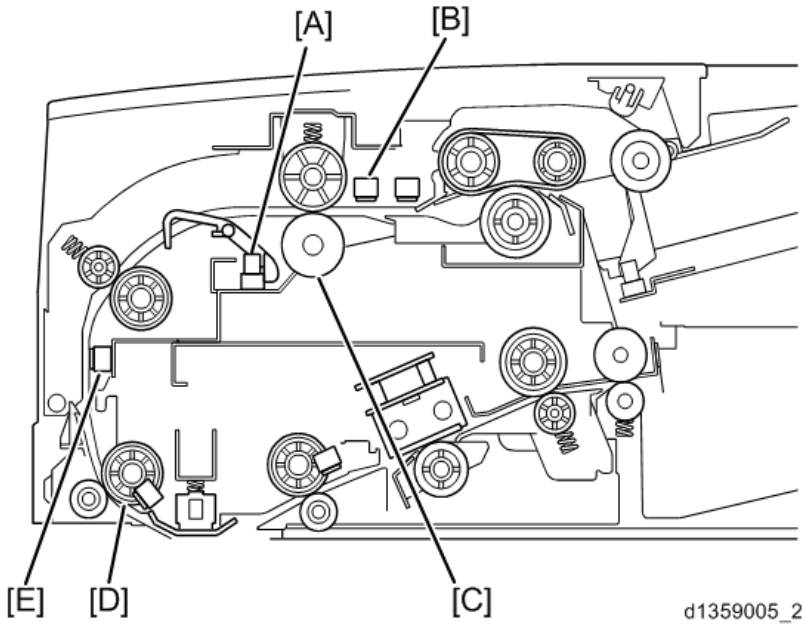
HP sensor (S148) [C].



Skew Correction

The skew correction sensor (S141) [B] detects the leading edge of the original after it passes through the separation area. When the leading edge reaches the entrance roller [C], the original is fed a bit more so that it bumps into the entrance roller [C], to make slack for skew adjustment.

For small paper (B6, A5, B5, HLT) or duplex printing, after detection by the interval sensor (S142) [E], the original bumps into the pre-scanning entrance roller [D] (this is a second skew correction, in addition to the entrance roller).



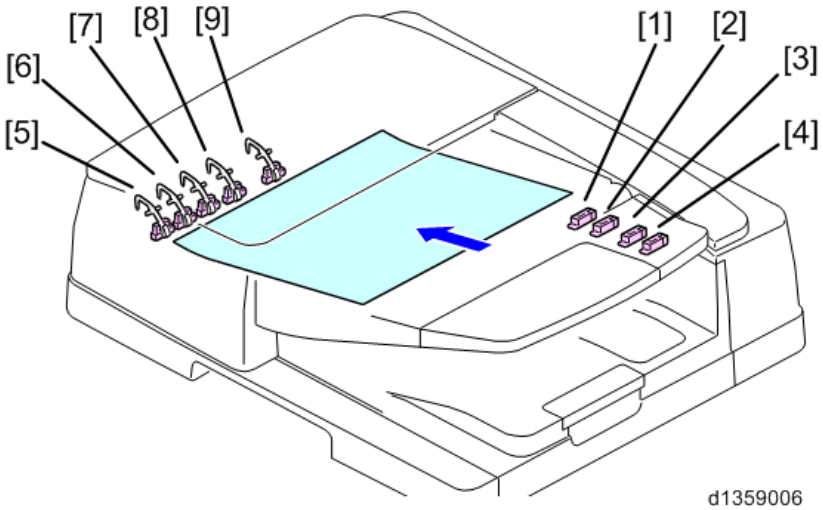
A	Original Width Sensor 1 to 5	D	Pre-Scanning Entrance Roller
B	Skew correction sensor (S141)	E	Interval sensor (S142)
C	Entrance Roller		

With SP6-020-001, the 2nd skew correction can be enabled for all paper sizes. But if this is done, the process speed becomes slower as shown below.

Application	Model	Scanning Mode	Process Speed (ppm)		Process Speed Decreasing Rate (%)
			2nd Skew Correction: OFF	2nd Skew Correction: ON	
Copy	IM C6500/C8000	Simplex	66.0	64.9	1.7
		Duplex	56.6	54.3	4.1
	Pro C5300S/C5310S	Simplex	80.8	79.4	1.7
		Duplex	56.6	54.3	4.1
Scanner (600dpi)	IM C6500/C8000, Pro C5300S/C5310S	Simplex	105.8	97.3	8.0
		Duplex	79.2	75.2	5.1
Scanner (200dpi)		Simplex	130.0	118.3	9
		Duplex	114.6	103.9	9.3

Original Size Detection

Five original width sensors (S134) detect the width of the original just when the leading edge of the original passes the interval sensor (S142). Four original length sensors on the original table detect the length. These two pieces of size information summarize the original size.



1	Original Length Sensor (A4/LT LEF) (S133)	6	Original Width Sensor 4 (S134)
2	Original Length Sensor (B5) (S130)	7	Original Width Sensor 3 (S134)
3	Original Length Sensor (A4) (S131)	8	Original Width Sensor 2 (S134)
4	Original Length Sensor (LG) (S132)	9	Original Width Sensor 1 (S134)
5	Original Width Sensor 5 (S134)		

Size (W x L)	Width Sensors					Length Sensors			
	1	2	3	4	5	A4 LEF	B5	A4	LG
A3(297x420)	ON	ON	ON	ON	ON	ON	ON	ON	ON

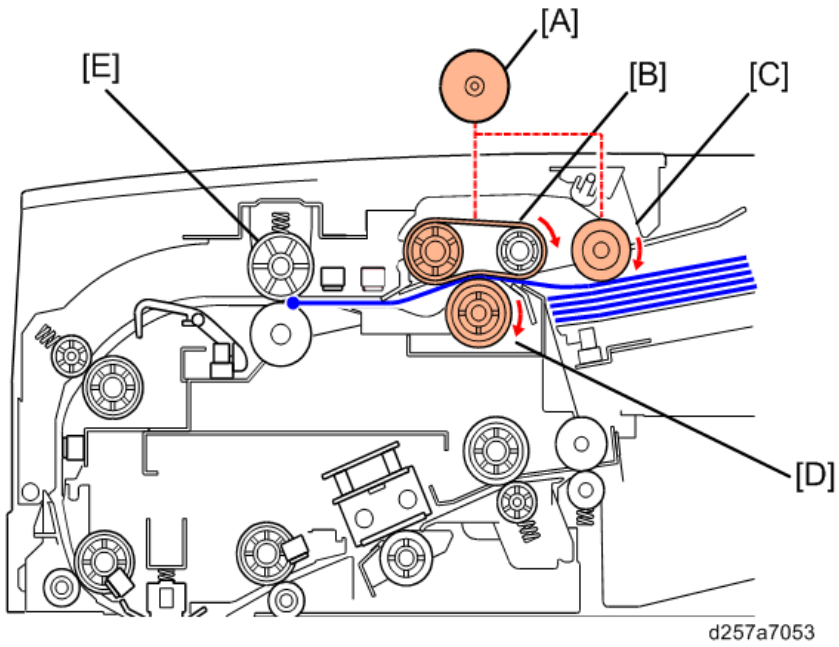
Size (W x L)	Width Sensors					Length Sensors			
	1	2	3	4	5	A4 LEF	B5	A4	LG
B4(257x364)	ON	ON	ON	---	---	ON	ON	ON	ON
A4 SEF (210x297)	ON	ON	---	---	---	ON	ON	ON	-
A4 LEF (297x210)	ON	ON	ON	ON	ON	---	---	---	---
A4 SEF (210x297)	ON	---	---	---	---	ON	ON	---	---
A4 LEF (297x210)	ON	ON	ON	---	---	---	---	---	---
A4 SEF (210x297)	---	---	---	---	---	---	---	---	---
A4 LEF (297x210)	ON	---	---	---	---	---	---	---	---
DLT SEF (11"x17")	ON	ON	ON	ON	---	ON	ON	ON	ON
DLT SEF (11"x17")	ON	ON	ON	ON	---	ON	ON	ON	ON
8 1/2"x11" SEF (LT)	ON	ON	---	---	---	ON	ON	---	---
11"x8 1/2" LEF (LT)	ON	ON	ON	ON	---	---	---	---	---

Note

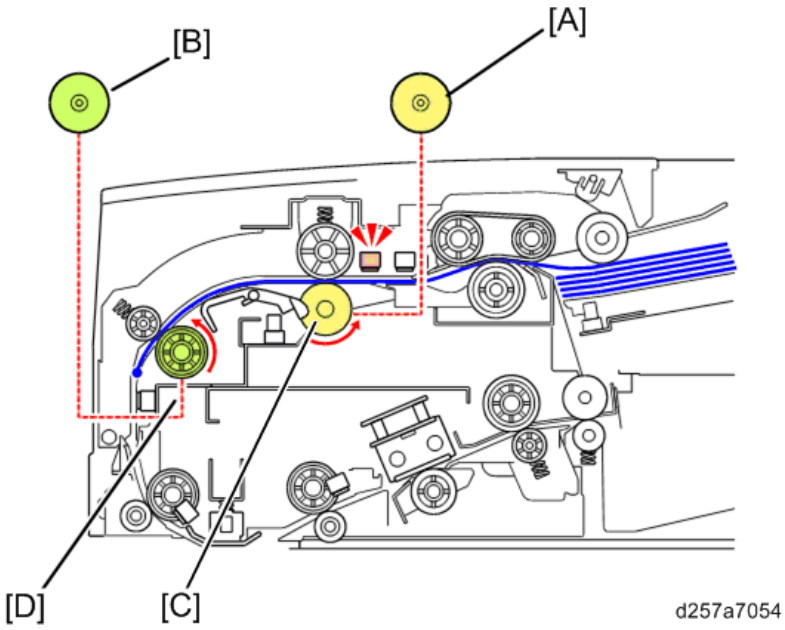
- 11"x17" and 11"x15" are detected as the same size, so you need to select one or the other with **SP6016-001** (Original Size Determination Priority) to choose whichever you are using.

Original Feed/Transport Mechanism

When the machine signals the ADF to start feeding, the ADF feed motor (M72) [A] drives the pick-up roller [C], the feed belt [B], and the ADF separation roller [D], and these rollers feed the original.
This machine uses the FRR method as the separation mechanism, with a feed belt [B] and ADF separation roller [D].
When the pick-up roller [C] feeds two or more sheets into the feed belt unit [B], the ADF separation roller [D] rotates backward to push all sheets back to the original tray except the top one. Then one sheet of the original remains and the ADF separation roller [D] rotates forward due to the torque from the torque limiter included in the ADF separation roller. Then the original is transferred by the feed belt [B] and bumps into the entrance roller [E] to correct the skew.



After skew correction at the entrance roller, the ADF feed motor (M72) [A] and the ADF transport motor (M76) [B] drive the ADF entrance roller [C] and relay roller [D] to feed the original towards the exposure glass.

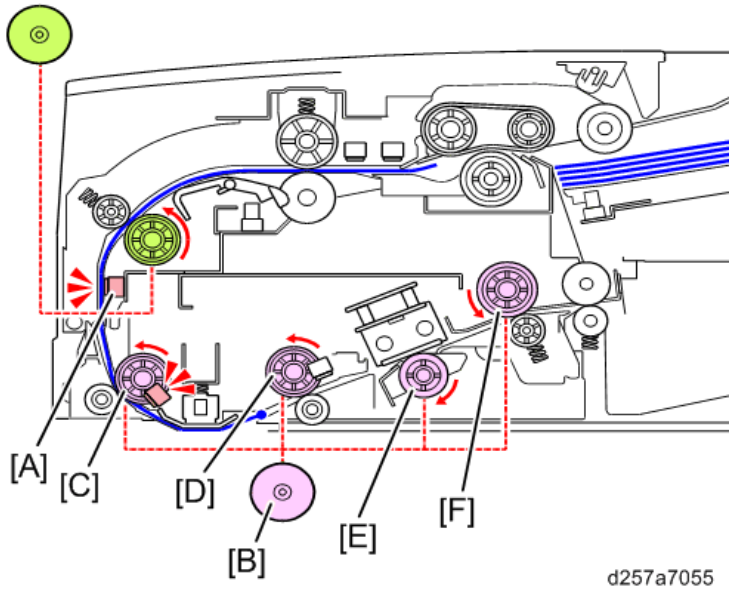


When the interval sensor (S142) [A] detects the original, the ADF scanning motor (M75) [B] drives the pre-scanning entrance roller [C], scanning relay roller [D], white roller [E], and ADF transport roller [F] in order to pass the original through the scanning area. (L: Original Registration Sensor)

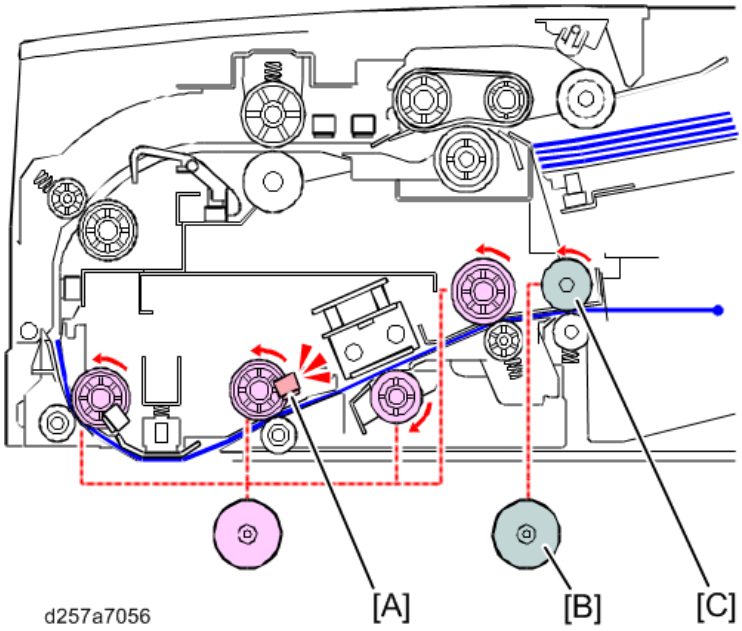
Note

After the pre-scanning entrance roller starts to rotate, the ADF feed motor (M72) drives faster to make the space smaller between the former sheet (on the scanner) and the next sheet. However, if the sheet reaches the pre-scanning entrance roller [C] at this speed, original buckle may occur due to the disparity of roller rotation speeds. So when the interval sensor (S142) [A] detects the leading edge,

original transport speed slows down so that the roller speeds match when the leading edge of the original reaches the pre-scanning entrance roller [C].



The ADF exit motor (M74) [B] drives the exit roller [C] to send original out to the exit tray when the original exit sensor (S144) [A] detects the original.



Duplex Scanning

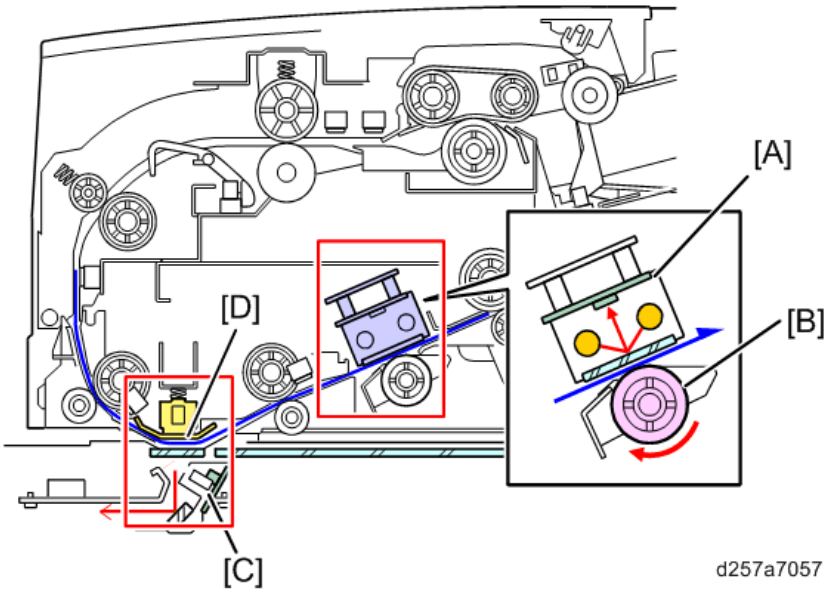
A CIS (Contact Image Sensor) [A] enables the machine to scan both faces of an original at once. The front side of the original is scanned by the scanner unit [C] and the back side of the original is scanned by the CIS [A] in the ADF.

Scanning Method

Pro C5300S/C5310S: Contact method

IM C6500/C8000: Non-contact method

7.Detailed Descriptions



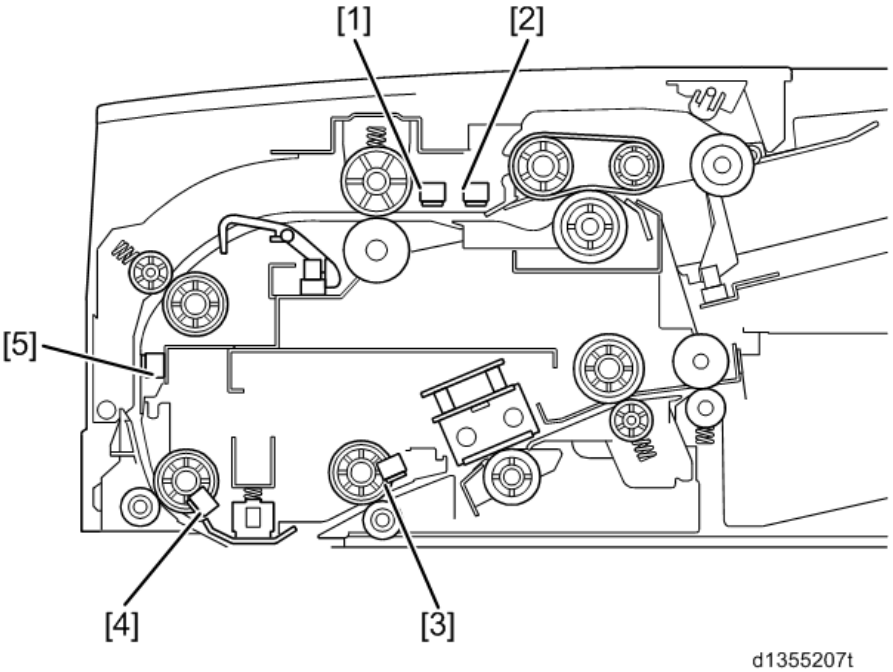
A: CIS

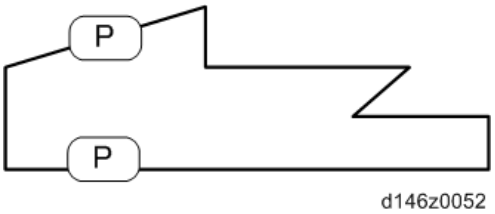
B: White Roller

C: Scanner Unit (LED)

D: White Plate

Jam Detection





1	Skew Correction Sensor (S141)	4	Original Registration Sensor (S143)
2	Separation Sensor (S140)	5	Interval Sensor (S142)
3	Original Exit Sensor (S144)		

In jam detection, the following sensors are used. The detection triggers are also shown in the list below.

Jam Display	Jam Name	Detection Trigger
P	Separation Sensor (S140) Late Jam	The leading edge cannot be detected even when the original is transported 224 mm after the feed roller starts
	Skew Correction Sensor (S141) Late Jam	The leading edge cannot be detected even when the original is transported 46 mm after the separation sensor detects the leading edge
	Interval Sensor (S142) Late Jam	The leading edge cannot be detected even when the original is transported 172 mm after the entrance roller starts
	Original Registration (S143) Sensor Late Jam	The leading edge cannot be detected even when the original is transported 96 mm after the interval sensor detects the leading edge
	Original Exit Sensor (S144) Late Jam	The leading edge cannot be detected even when the original is transported 130 mm after the original registration sensor detects the leading edge
	Separation Sensor (S140) Lag Jam	The trailing edge cannot be detected even when the original is transported xxx mm (the number comes out from the following equation) after the entrance roller starts. Equation: **(“Standard Value”-35.3) x 1.5** See list 2 below about “Standard Value”; If the user designates an original length which is larger than “Standard Value”, the machine considers the designated length as “Standard Value”.
	Skew Correction Sensor (S141) Lag Jam	The trailing edge cannot be detected even when the original is transported 46 mm after the separation sensor detects the trailing edge.
	Interval Sensor (S142) Lag Jam	The trailing edge cannot be detected even when the original is transported 49 mm after the relay motor stops.
	Original Registration (S143) Sensor Lag Jam	The trailing edge cannot be detected even when the original is transported 93 mm after the interval sensor detects the trailing edge.
	Original Exit Sensor (S144) Lag Jam	The trailing edge cannot be detected even when the original is transported 130 mm after the original registration sensor detects the trailing edge.

List 2

A4 LEF/LT LEF	B5	A4	LG	Standard Value
Not detected	Not detected	Not detected	Not detected	226.8
Detected	Not detected	Not detected	Not detected	253.8
-	Detected	Not detected	Not detected	291
-	-	Detected	Not detected	320
-	-	-	Detected	432

Abnormal Detection

No.	Abnormal Name	To Release	Possible Trigger
700-01*	ADF Bottom Plate Lift Motor Abnormal (1-Path ADF)	Reboot the machine	• Bottom plate position sensor (S149) abnormal (output abnormal) • Bottom plate HP sensor (S148) abnormal (output abnormal) • ADF bottom plate lift motor (M70) abnormal (cannot drive) • ADF controller board (PCB40) defective
700-02*	Original Pick-up Abnormal (1-Path ADF)	Reboot the machine	• ADF pick-up roller HP sensor (S147) abnormal (output abnormal) • ADF pick-up roller lift motor (M71) abnormal (cannot drive) • ADF controller board (PCB40) defective
700-04*	ADF Feed Motor Abnormal (1-Path ADF)	Reboot the machine	• Motor defective • Connector disconnected • Harness broken • Overload
700-05*	ADF Entrance Motor Abnormal (1-Path ADF)	Reboot the machine	• Motor defective • Connector disconnected • Harness broken • Overload
700-06*	ADF Transport Motor Abnormal (1-Path ADF)	Reboot the machine	• Motor defective • Connector disconnected • Harness broken • Overload
700-07*	ADF Scanning Motor Abnormal (1-Path ADF)	Reboot the machine	• Motor defective • Connector disconnected • Harness broken

No.	Abnormal Name	To Release	Possible Trigger
			• Overload
700-09*	ADF Exit Motor Abnormal (1-Path ADF)	Reboot the machine	• Motor defective • Connector disconnected • Harness broken • Overload
702-04	Protection-device Disconnection Abnormal 4 (1-Path ADF)	Reboot the machine	Motor defective or harness short in ADF pick-up roller lift motor (M71), fax transmission stamp solenoid, or ADF bottom plate lift motor (M70)
702-05	Protection-device Disconnection Abnormal 5 (1-Path ADF)	Reboot the machine	Motor defective or harness short in ADF feed motor (M72), Pull-out motor (M73), ADF transport motor (M76), ADF scanning motor (M75), or ADF exit motor (M74)
111-01	Lamp Error (Scan): Rear	Reboot the machine	• CIS defective • CIS background white roller defective • ADF control board defective • Harness defective • USB cable defective between CIS and BICU board) • BICU board defective
154-00*	Scanner Communication Error: Back Side	Reboot the machine	• CIS defective • ADF control board defective • Harness defective
151-00*	Black-level Abnormal: Back Side	Reboot the machine	• CIS defective • ADF control board defective • Harness defective • USB cable defective between CIS and BICU board) • BICU board defective
152-00*	White-level Abnormal: Back Side	Reboot the machine	• CIS defective • CIS background white roller defective • ADF control board defective • Harness defective • USB cable defective between CIS and BICU board) • BICU board defective
161-02	BICU error (LSYNC abnormal) (Back)	Reboot the machine	• Cable disconnected between CIS and IPU board (BICU board)

No.	Abnormal Name	To Release	Possible Trigger
			• CIS defective • IPU board (BICU board) defective (ASIC: Biscotti or other parts defective)
620-01	ADF Communication Error 1	Reboot the machine	• ADF connection failure • ADF control board defective • BICU board defective • Noise in the signal
620-02	ADF Communication Error 2	Reboot the machine	• ADF connection failure • ADF control board defective • BICU board defective • Noise in the signal • The connected ADF is a non-compatible model (The ADF machine code does not meet specifications).
620-03	ADF Communication Error 3	Reboot the machine	• ADF connection failure • ADF control board defective • BICU board defective • Noise in the signal
620-04	ADF Communication Error 4	Reboot the machine	• ADF connection failure • ADF control board defective • BICU board defective • Noise in the signal
703-01	Double-feed Detection Error (1-pass ADF)	Reboot the machine	• Connector disconnected • Harness broken • Double-feed detection abnormal (Output abnormal) • ADF control board defective

*Occurrence two times in a row issues an initial jam notice. Occurrence five or more times in a row issues an abnormal code notice.

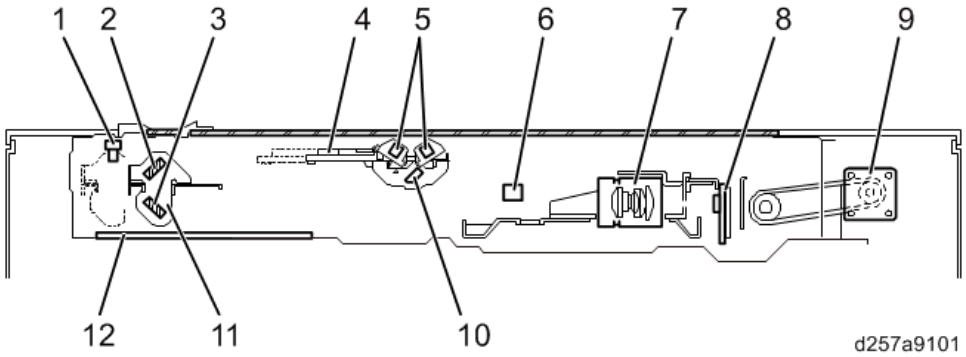
Scanner

Mechanism Descriptions

Component Layout

Light from the scanner LED passes to the sensor through the following route:

1st Mirror > 2nd Mirror > 3rd Mirror > Lens Block > Sensor (SBU)



No.	Descriptions	No.	Descriptions
1	Scanner HP Sensor (S24)	7	Lens Block
2	2nd Mirror	8	SBU (PCB15)
3	3rd Mirror	9	Scanner Drive Motor (M23)
4	1st Scanner Carriage	10	1st Mirror
5	Exposure Lamp (LED1)	11	2nd Scanner Carriage
6	Original Length Sensor (S25)	12	Scanner Anti-Condensation Heater (H5)

Overview

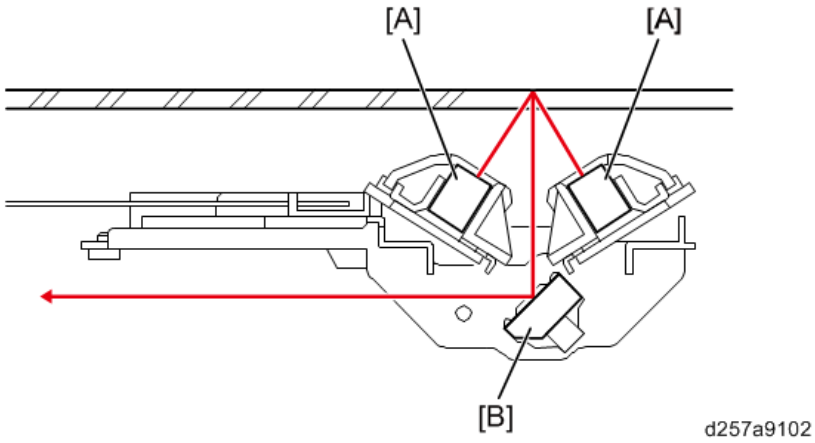
Scanner	Light source: Two LED lamps
	SBU (3-line CMOS sensor, Resolution: 600 dpi)
Drive	Scanner Drive Motor (Biphase Stepping Motor)
	Drive Wire
	Scanner HP Sensor
Original Size Detection	APS (Length Sensor x 2), CCD (Width detection)
Others	Anti-Condensation Heater (Service Option)

Mechanism Details

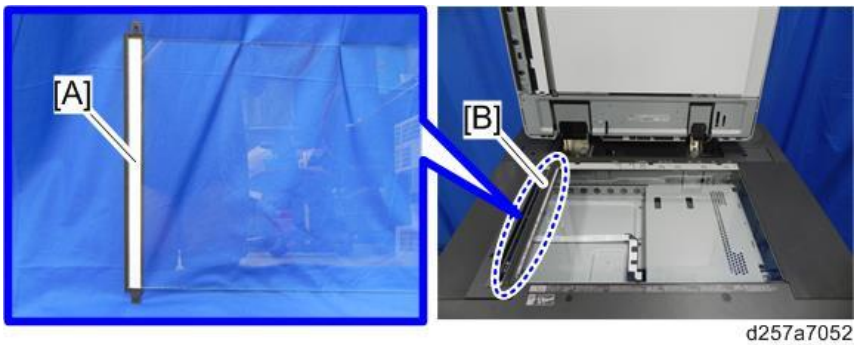
Scanner

Light from the LED lamps [A] passes to the sensor on the SBU board through the following route:

1st Mirror [B] > 2nd Mirror > 3rd Mirror > Lens Block > Sensor



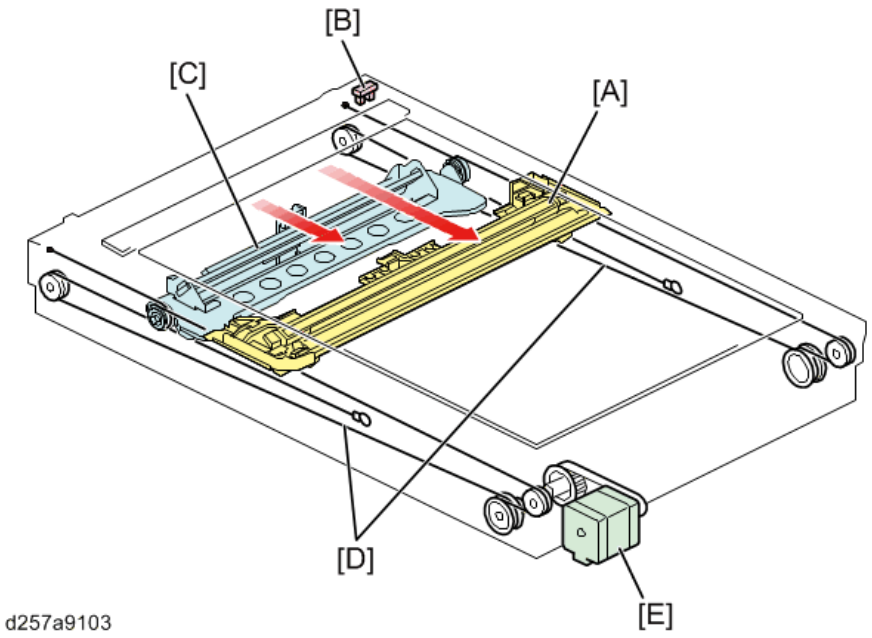
- **LED Lamp**
  LED lamps consume less power and provide better light at start-up so this machine employs LED lamps instead of xenon lamps. The power consumption is 30% of xenon lamps. To obtain the optimum light quantity, LED lamps are installed at an angle.
- **Sensor**
  The sensor collects the light that was reflected from the original and converts it to three color digital signals (R, G, B).
  The resolution of this CMOS sensor is 600dpi.
- **Shading Adjustment**
  A white plate for shading adjustment [A] is attached to the back of the scale [B]. Just after the power switch is turned on, the machine performs shading adjustment, during which the scanner unit moves to the white plate to emit LED light onto it in order to perform lamp modulation.
  For normal (book mode) scanning, the machine performs shading every page regardless of BW or color.
  For ADF scanning, the machine performs shading before the 1st sheet of the original is scanned regardless of BW or color, and then after that the machine performs shading for following sheets at regular intervals (one minute or more).



Drive

The scanner unit is driven with scanner wires [D] which are driven by the scanner drive motor (M23) [E]. Scanning is done with one run from left to right.

Scanner position control (for the 1st carriage [A]) uses the scanner HP sensor (S24) [B] as a reference point. The scanner HP sensor (S24) is near the scan area of the ADF exposure glass.

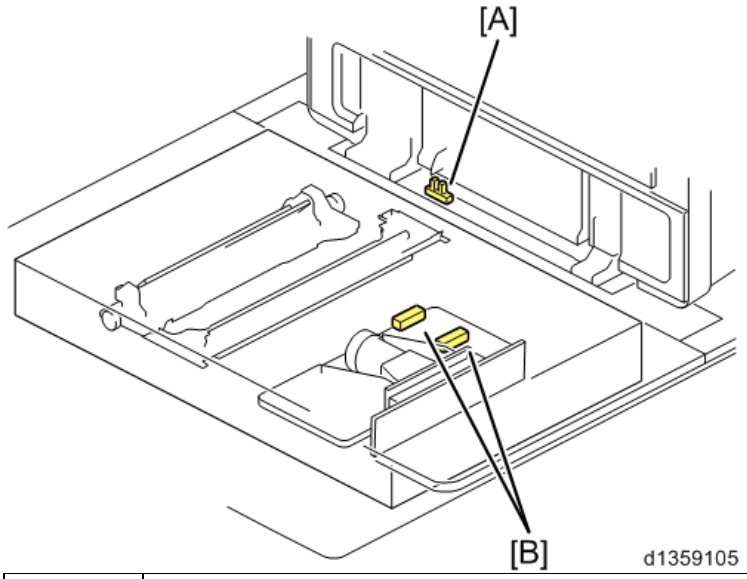


No.	Description	No.	Description
[A]	1st Carriage	[D]	Scanner Wire
[B]	Scanner HP Sensor (S24)	[E]	Scanner Drive Motor (M23)
[C]	2nd Carriage		

Original Size Detection

Two reflective sensors [B] are used to detect the original length. The original width is detected by a 3-point pre-scan using the CCD.

The DF position sensor (S27) [A] is detecting the open/closed state of the ADF. The original length is determined when the sensor state changes from “not interrupted” to “interrupted” (when the ADF is closed). Then the machine starts pre-scanning. If the sensor state stays “not interrupted“, the detected data, that is read just after [Start] is pressed, is used as original length.



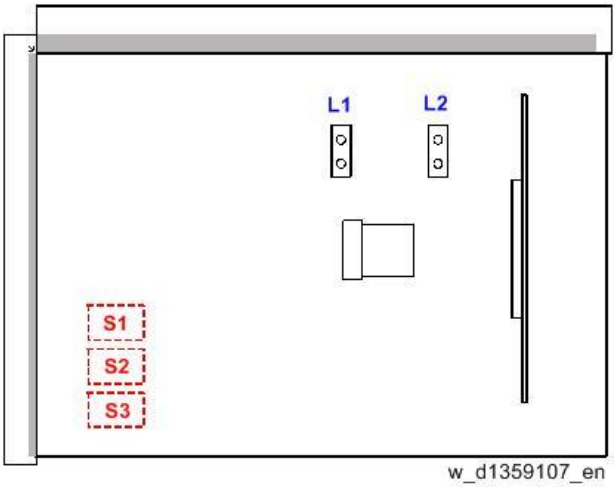
A	DF Position Sensor (S24)
B	Original Length Sensor (S25)

Original Sensor State

The original sensor states depending on original size can be seen with “SP4-301-001”.

The display in “SP4-301-001” varies as shown below.

Smaller paper than B5 cannot be detected because of the location of the sensors; the display shows “00000000” for all these sizes.



Size	L1	L2	Display in SP4301-001
A3	On	On	00000011
B4	On	On	00000011
A4: SEF	On	Off	00000001
A4: LEF	Off	Off	00000000
B5: SEF	On	Off	00000001
B5: LEF	Off	Off	00000000
A5: SEF	Off	Off	00000000

Size	L1	L2	Display in SP4301-001
A5: LEF	Off	Off	00000000

For width detection, SP4-313-010 to -036 show the CCD readings at three detection locations (S1, S2, or S3). The CCD reading is done at each detection location three times. If the value detected by the CCD at any of the three detection locations is 28 or larger twice or more, the machine detects that an original has been placed. The values shown are the latest detection results.

SP4-313-001 to -003: S1 point: R-value, G-value, B-value at CCD original size detection (Lamp off)	If the value is 1 or larger, the machine detects disturbance light and corrects threshold value automatically.	
SP4-313-004 to -006: S2 point: R-value, G-value, B-value at CCD original size detection (Lamp off)		
SP4-313-007 to -009: S3 point: R-value, G-value, B-value at CCD original size detection (Lamp off)		
SP4-313-010 to -012: S1 point: R-value, G-value, B-value at CCD original size detection (First time)	If any of the values is 28 or larger, the machine determines tentatively that an original is placed.	If the value detected at the S1 point is 28 or larger twice or more out of three times, an original exists at the S1 point.
SP4-313-019 to -021: S1 point: R-value, G-value, B-value at CCD original size detection (Second time)		
SP4-313-028 to -030: S1 point: R-value, G-value, B-value at CCD original size detection (Third time)		
SP4-313-013 to -015: S2 point: R-value, G-value, B-value at CCD		If the value detected at the S2 point is 28 or larger twice or more out of three times, an original

original size detection (First time)		exists at the S2 point.
SP4-313-022 to -024: S2 point: R-value, G-value, B-value at CCD original size detection (Second time)		
SP4-313-031 to -033: S2 point: R-value, G-value, B-value at CCD original size detection (Third time)		
SP4-313-016 to -018: S3 point: R-value, G-value, B-value at CCD original size detection (First time)		If the value detected at the S3 point is 28 or larger twice or more out of three times, an original exists at the S3 point.
SP4-313-025 to -027: S3 point: R-value, G-value, B-value at CCD original size detection (Second time)		
SP4-313-034 to -036: S3 point: R-value, G-value, B-value at CCD original size detection (Third time)		

Size Name	Feed Direction	Size (Width x Length)	S1	S2	S3
A3	SEF	297 x 420	-	-	○
B4	SEF	257 x 364	-	○	-
A4	SEF	210 x 297	○	-	-
A4	LEF	297 x 210	-	-	○
B5	SEF	182 x 257	-	-	-
B5	LEF	257 x 182	-	○	-
A5	SEF	148 x 210	-	-	-
A5	LEF	210 x 148	○	-	-
B6	SEF	128 x 182	-	-	-

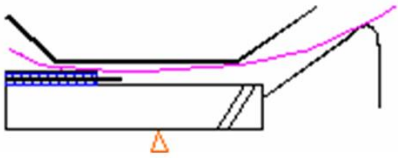
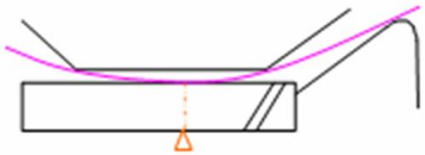
Size Name	Feed Direction	Size (Width x Length)	S1	S2	S3
B6	LEF	182 x 128	-	-	-

"○": Either of the R, G, or B values is 28 or larger.

"-": The R, G, and B values are all smaller than 28.

Original Transport from ADF

There is a difference between IM C6500 / C8000 and Pro C5300S / C5310S in the method of original transport from the ADF.

	IM C6500 / C8000	Pro C5300S / C5310S
Transport Method	Non-contact Transport	Contact Transport
Descriptions	 Because of the film attached to the glass, the original does not contact the glass.	 While passing, the original contacts the glass.
Merit	Sticky material does not normally transfer from the surface of the originals to the surface of the glass.	Stripes in images caused by dust on the glass are rare, because the glass is cleaned by contact with the original as it passes over the glass.
Demerit	Compared with the contact method, dust is more likely to remain in the original feed path, and this causes stripes in the image.	More often than in the non-contact method, stripes in the image occur due to foreign substances that stick to the surface of an original and transfer to the exposure glass.
Aim	To improve prevention of stripes on images caused by sticky foreign substances on the surfaces of originals that transfer to the exposure glass.	Comparing to users of machines for office use, users of this machine tend not to use originals that have sticky substances on the surface. For the main users of this machine, it's more important to improve prevention of stripes on images caused by dust in the original feed path.
Note	1. Be sure to replace the sheet-through glass with the film attached to the glass. 2. When you attach the film to the glass, you need to keep the left scale attached to the glass in	-

	IM C6500 / C8000	Pro C5300S / C5310S
	order to ensure the correct location of the film. (ADF Exposure Glass, Gap Sheet (IM C6500/C8000)) 3. You can change the method (contact method to non-contact, or vice versa) by replacing the parts. (Modification Procedure for Original Transport)	

Dust Detection (Side 1)

- **General**

  After an original is placed in the ADF and the [Start] key is pressed, dust detection starts.

  The machine checks for dust on the ADF exposure glass before the first original of a job is fed by the ADF.

  The operation flow varies depending on the SP mode setting.

- **Related SP codes**

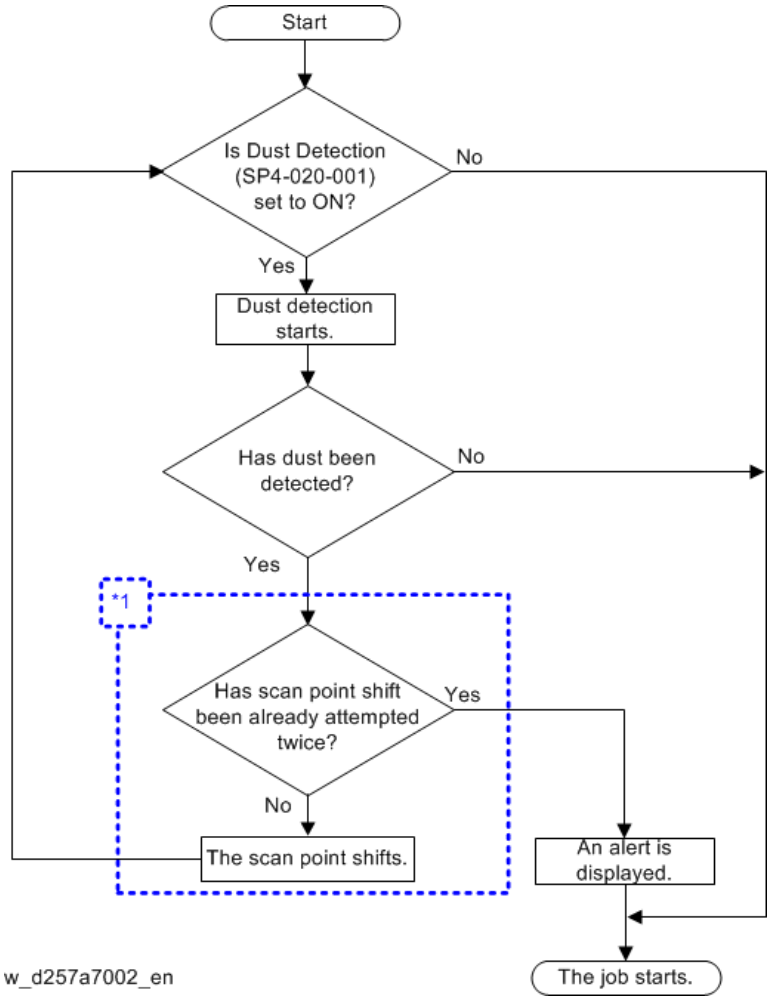
  SP4020-001: DF dust detection setting / Detection on/off setting (default “0” = “off”)

  SP4020-002: DF dust detection setting / Detection level switch setting

  SP4020-003: DF dust detection setting / Adjustment level switch setting

  SP7852-001: DF contact glass / Dust detection counter

  SP7852-002: DF contact glass / Dust clear counter



*1 For details, see "Scan Point Shift".

Dust Detection (Side 2)

- **General**

  When duplex scanning is performed after an original is placed in the ADF, dust detection (Side 2) starts.

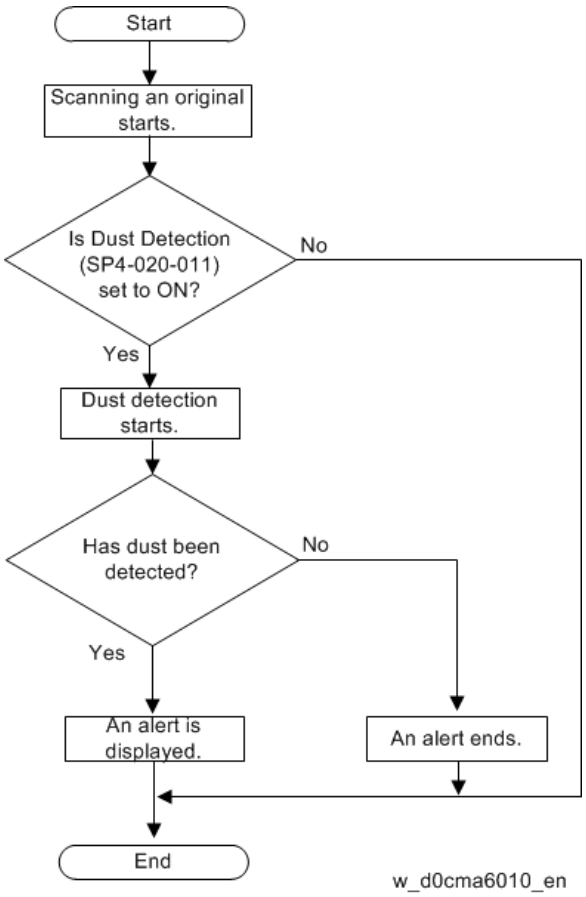
  Dust detection is performed for every original to check whether any streaks appear on the image.

  The operation flow varies depending on the SP mode setting.

- **Related SP codes**

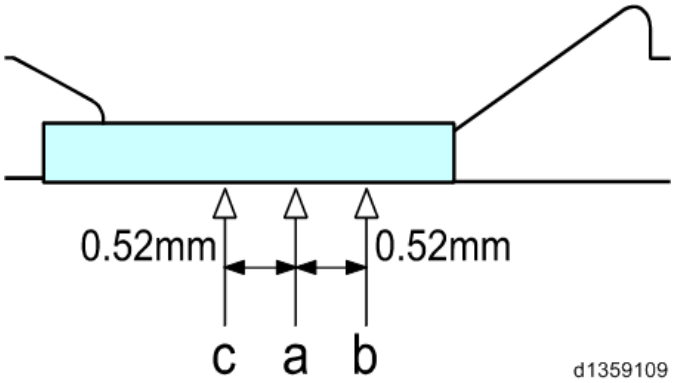
  SP4-020-011: DF Dust Check Dust Detect Level:Rear (Initial value 0: DF Dust Check OFF)

  SP4-020-012: DF Dust Check Correction Level:Rear



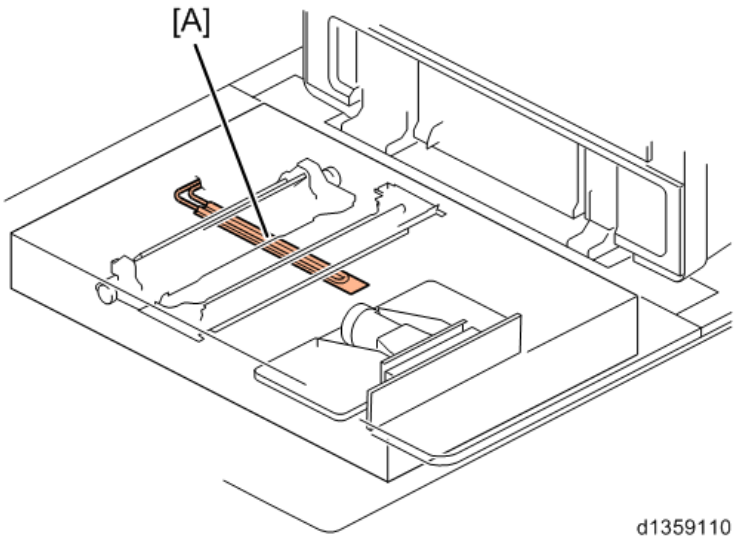
Scan Point Shift

When dust detection determines that dust exists, the scan point shifts in order to avoid the dust. There are three scanning points; one is HP (Default), the others are 0.52 mm to the right (=b) from the HP and 0.52 mm to the left (=c) from the HP. The shift is always in the following order: "a > b > c > a > b".



Scanner Anti-Condensation Heater (H5)

Under low temperature conditions, optical parts (mirrors) may become moistened. This will cause “image deletion”, “black out image”, and “gray image”. As a countermeasure against these problems, there is an anti-condensation heater [A] that is an optional service part.



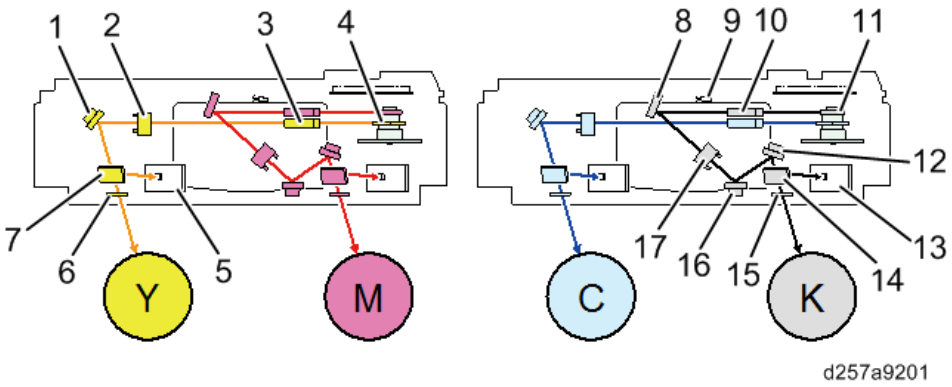
A	Scanner anti-condensation heater (H5)

Laser Unit

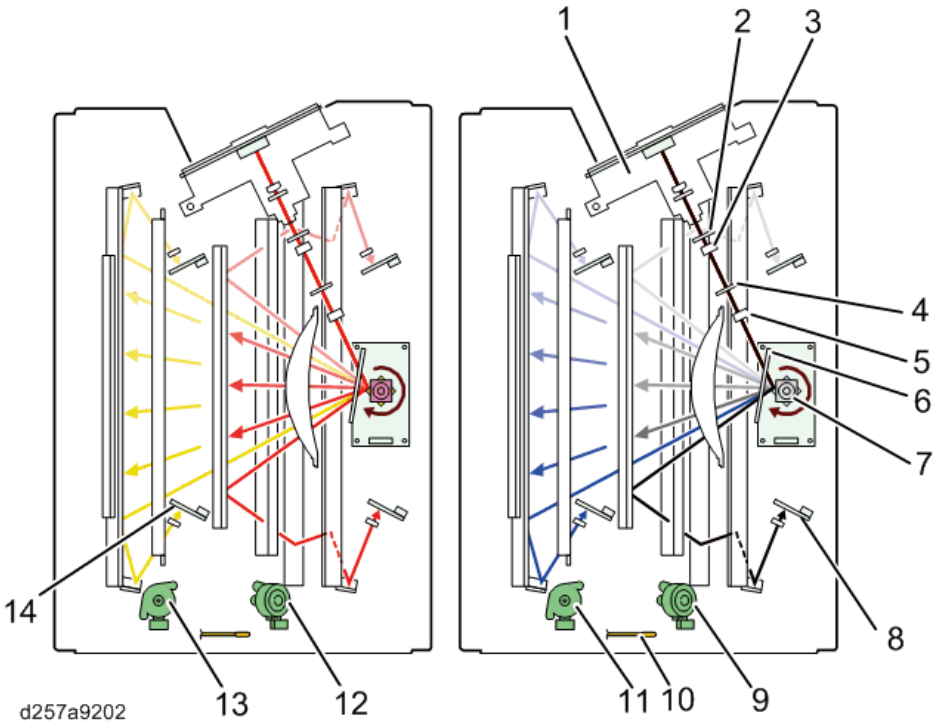
Mechanism Descriptions

This machine has two laser units (right: C, K / left: Y, M). Writing is done with a polygon motor, a LD board, and four synchronization detectors (front / back).

Component Layout



1. 1st Mirror (Y)
2. Scan Lens L2 (Y)
3. Scan Lens L1 (Y)
4. Polygon Motor (M27)
5. Laser Synchronization Detector:Rear/Y (PCB26)
6. Dust Shield Glass
7. Laser Synchronization Mirror (Rear edge)
8. 1st Mirror (K)
9. Thermistor
10. Scan Lens L1 (K)
11. Polygon Mirror
12. 3rd Mirror (K)
13. Laser Synchronization Detector:Front/K (PCB20)
14. Laser Synchronization Mirror (Front Edge)
15. Dust Shield Glass
16. 2nd Mirror (K)
17. Scan Lens L2 (K)



1. LD Board
2. ND Filter
3. PBS
4. Quarter Wave Plate
5. Cylindrical Lens
6. Soundproof Glass
7. Polygon Mirror
8. Laser Synchronization Detector:Front/K (PCB20)
9. Skew Correction Motor (K) (M25)
10. Thermistor
11. Image Skew Correction Motor (C) (M24)
12. Image Skew Correction Motor (M) (M29)
13. Image Skew Correction Motor (Y) (M28)
14. Laser Synchronization Detector:Front/Y (PCB27)

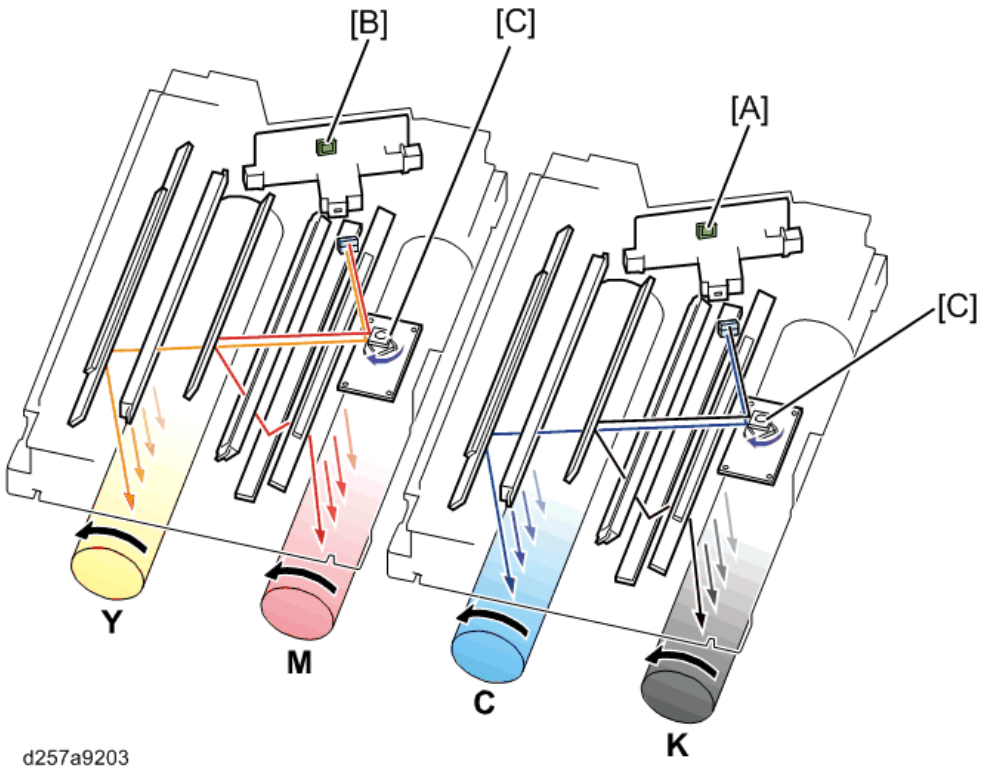
Mechanism Details

LD Unit Components

The VCSEL (Vertical Cavity Surface Emitting Laser) method is adopted in this machine, as in the Pro C7210S/C7200S series, but the components are different.

In the Pro C7210S/C7200S series, there are VCSELs for each color and hexagonal polygon mirrors. But this machine has two VCSELs (one for K/C and one for M/Y) [B] and two four-sided double-layered polygon mirrors [A].

This machine uses VCSEL technology as Pro C7210S/C7200S does, and realizes a high image quality (approx. 4800dpi x 4800dpi). But the components and the control method are different from those of the Pro C7210S/C7200S.
The polygon mirrors [C] of this machine are smaller than those of the Pro C7210S/C7200S series. But this machine realizes not only the same image quality as the Pro C7210S/C7200S series, but also a cost reduction because only two VCSELs are enough.
There is no shutter in the laser unit for K and C, unlike the previous models in this series (Pro C5300S/C5310S, IM C6500/C8000).

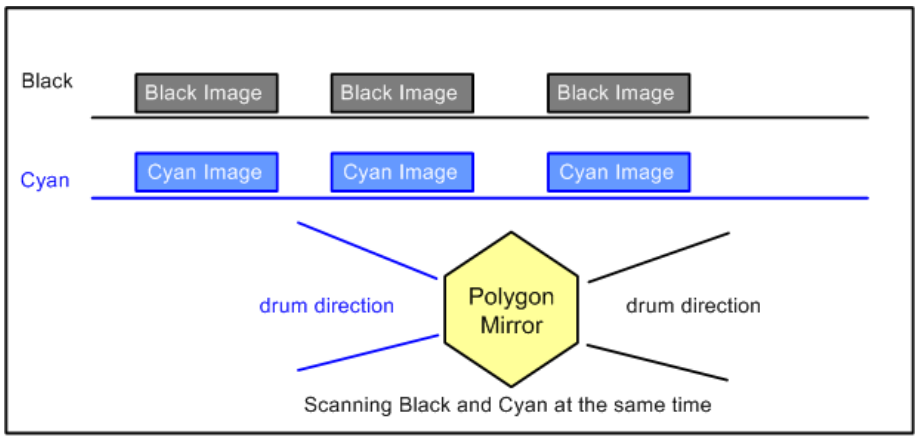


Writing Control Method Difference

In the Pro C7210S/C7200S series, each VCSEL emits a beam for one color. While in this machine, with the PBS, one VCSEL can emit a beam for two colors.
In this machine, VCSEL emits beams alternately (K > C > K > C). A beam from VCSEL is divided into two beams with the PBS. One of the beams is used for K and heads to the upper polygon mirror; the other beam is used for C and heads to the lower polygon mirror. When the K beam heads to the drum, the C beam does not head to the drum because there are differences in reflective-surface directions between the upper polygon mirror and the lower polygon mirror. Likewise, the K beam doesn't head to the drum when the C beam heads to the drum.
In the Pro C7210S/C7200S series, each color has a separate VCSEL unit, but each polygon mirror handles two colors. Beams arriving at one side of the mirror are sent to one PCU, and the beams arriving at the other side of the mirror are sent to another PCU.
In this machine, each VCSEL unit handles two colors. Instead of just one polygon mirror for two colors,

there is a stack of two mirrors (one mirror for each color). The PBS just after the exit from the VCSEL unit sends some beams to the top mirror and some to the bottom one.

Pro C7210S/C7200S series



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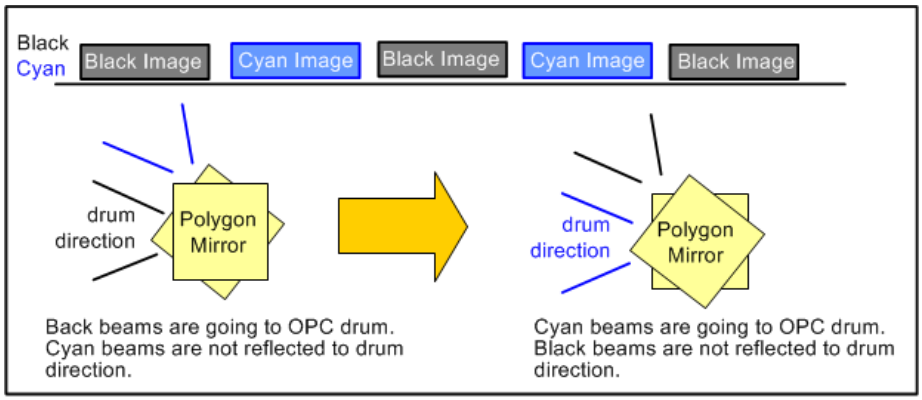
Pro C5300S/C5310S, IM C6500/C8000



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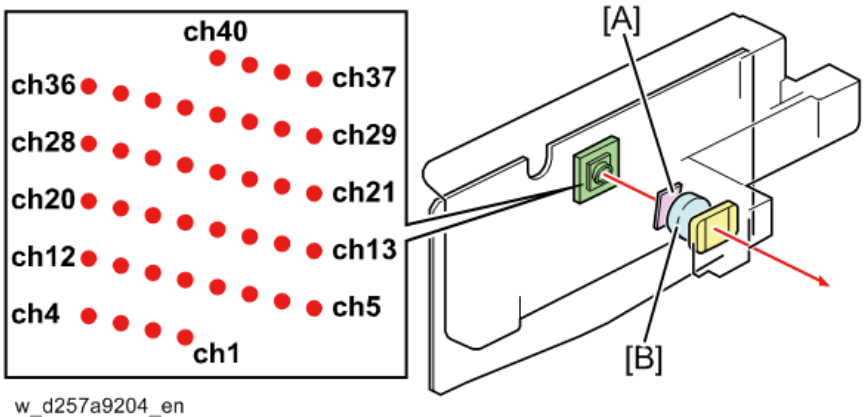
The emitter generates 40 beams (ch1 to ch40).

In a VCSEL package, a photo sensor detects the laser output. Laser beams heading to the polygon motor pass through the emitter surface, the quarter wave plate [A] and the collimating lens [B]. And then the laser is emitted to the drum in a vertical array of lines.

The VCSEL method contributes to reducing the polygon motor speed, curbing heat emission significantly, and energy saving.

VCSEL: Vertical Cavity Surface Emitting Laser



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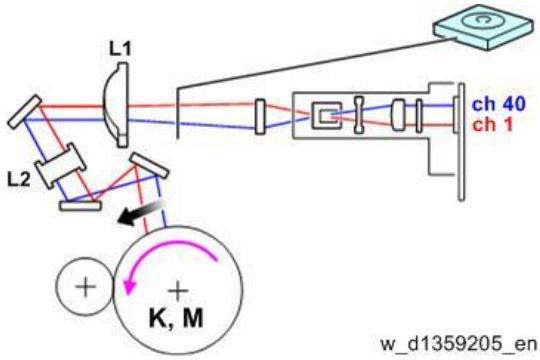
Writing with 40 Beams

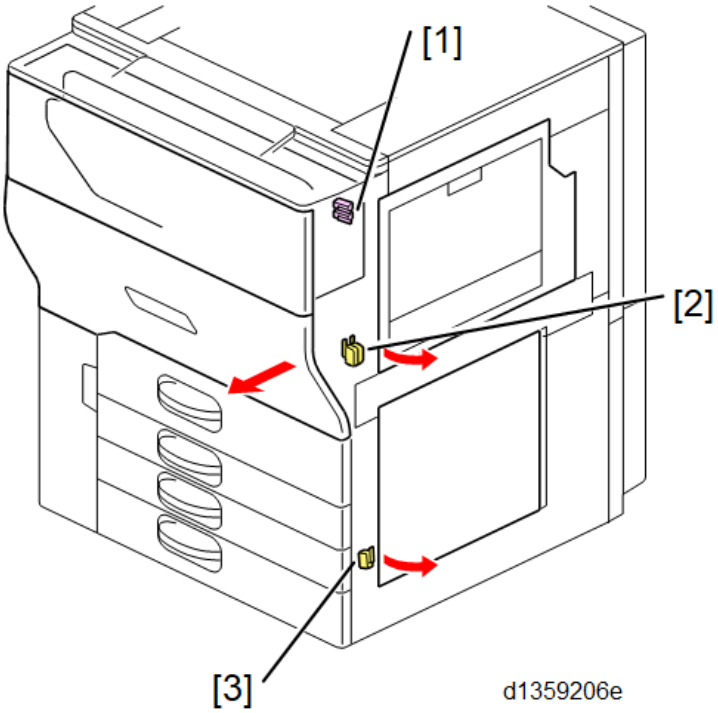
The VCSEL method has the following merits:

- Low current threshold / Low energy consumption
- High resolution for vertical writing (4800dpi)
- Temperature reduction caused by polygon motor speed reduction/noise reduction, because 40 beams are writing



LD Safety Switch (Interlock Switch)

The following diagram shows the LD safety switches.



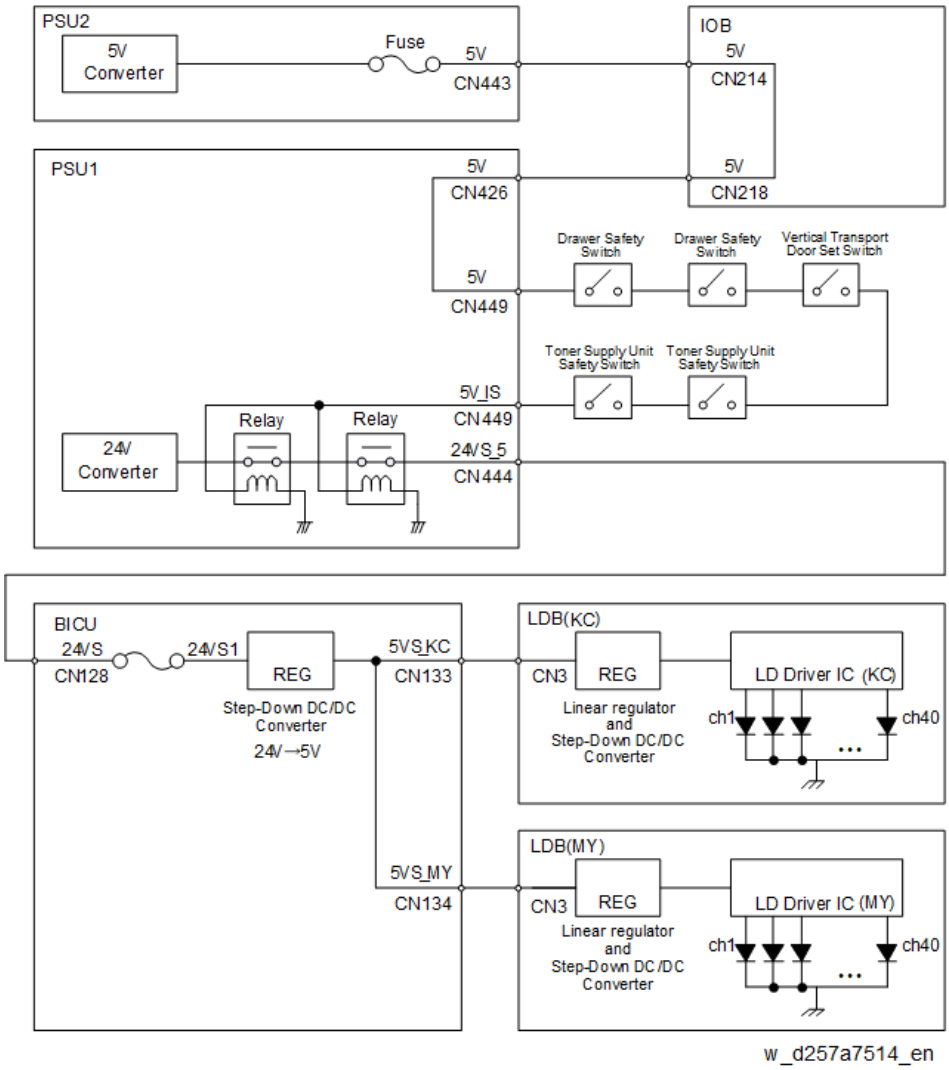
1	Toner Supply Unit Safety Switches (SW5) (Pro C5300S/C5310S only)	3	Vertical Transport Door Set Switch (SW11)
2	Drawer Safety Switches (SW9)	-	-

The LD safety switches prevent laser beams from being emitted when any of the following parts are open: bypass tray unit, vertical transport door, drawer unit cover.

The LD safety switches are installed on the 24VS line that connects the PSU to the BICU. From 24VS,

5VS for the LDB are generated. To prevent the LD from emitting, the power supply to the LD is cut when any of the parts described above are not installed.

LD Safety Switches



Line Scan

- **Mirror / Lens**

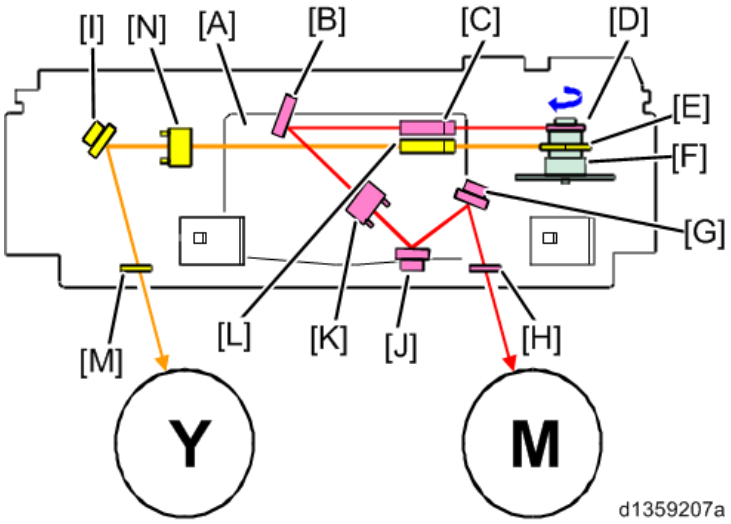
  Each color LD board [A] emits light at the time of paper transfer, which heads to each color drum through the following parts; the cylinder lens (laser beam radial-adjustment), the polygon mirror (horizontal-line scan) [D], the scan lens (L1) [C], the 1st mirror [B], the scan lens (L2) [K], 2nd mirror [J], 3rd mirror [G], the dust shield glass [H].

  Lower layer (C, Y) beams go to each color drum through the following parts: the cylinder lens, polygon mirror [E], the scan lens (L1) [L], the scan lens (L2) [N], the 1st mirror [I], the dust shield glass [M].

- **Polygon Motor (M26) (M27)**

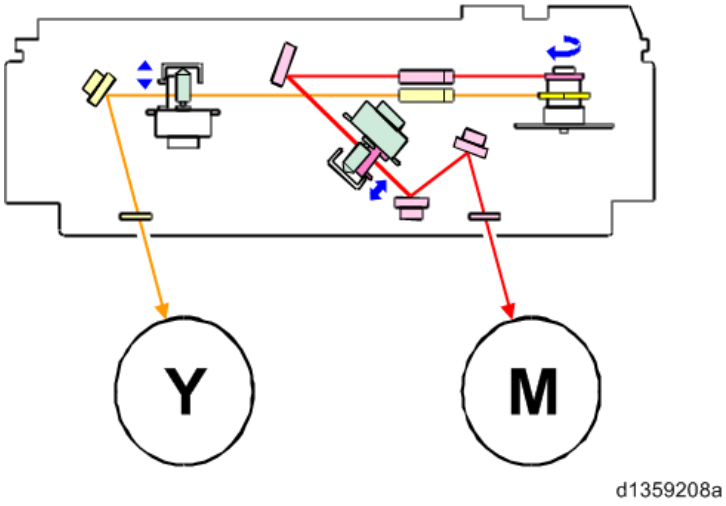
  The polygon motor [F] is composed of a motor and two mirrors attached on a drive shaft (four-sided double-layered mirrors). Laser beams are emitted to the polygon mirrors [D], [E] to write two

colors alternately.



- **Scan Lens Adjustment**

  For each color, the scan lens (L2) [A] has an image skew correction motor [B] to correct skew. This corrects color registration errors in the main scan direction.

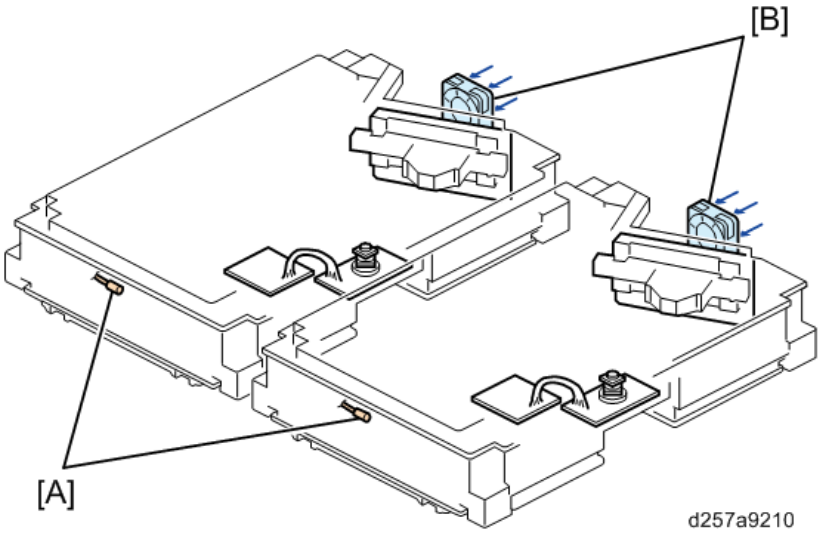


Thermal Control

The laser unit thermistor (TH2)(TH3) [A] in each laser unit monitors the temperature of each laser unit constantly. This sensor has the following role:

- Image location adjustment (adjusts the image location in response to changes in the internal temperature).

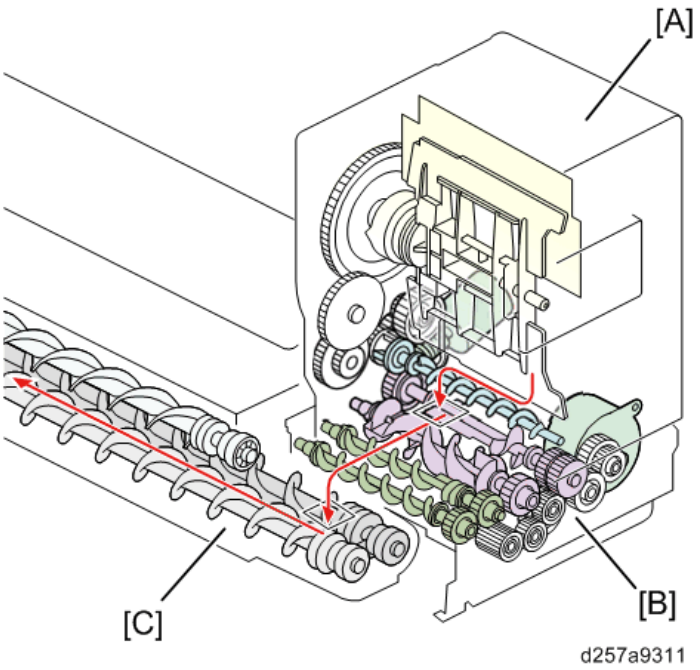
A fan (FAN10)(FAN11) [B] is installed at the back of the LD in order to cool each laser unit.


[B]
[A]
d257a9210

Toner Supply

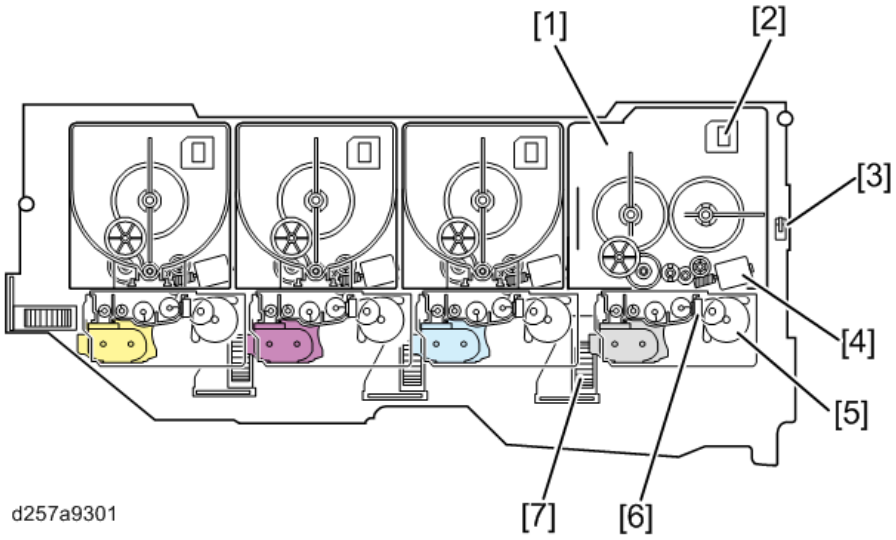
Mechanism Descriptions

The toner in the toner cartridge [A], that is installed in the toner supply unit, is transferred to the sub hopper unit [B]. The toner transferred to the sub hopper unit [B] is provided to the development unit [C] in the required quantity. Then the toner is mixed into the developer, and provided to the surface of the drum.



Component Layout

The diagram below is the IM C6500/C8000



1.	Toner Cartridge	5.	Sub Hopper Motor (M7)
2.	ID Chip Connector Board (PCB5)	6.	Toner End Sensor (S3)

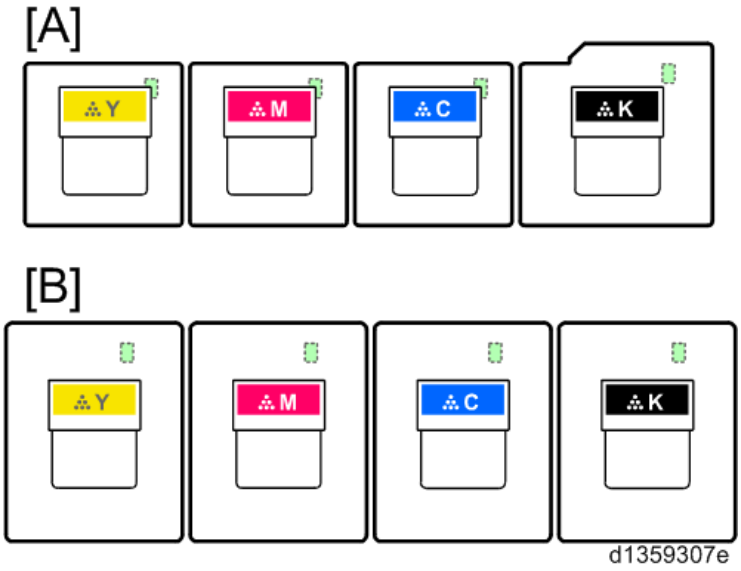
3.	Toner Supply Unit Front Cover Switch (SW1)	7.	Development Intake Fan (FAN2)
4.	Toner Supply Motor (M3)		

Difference between the IM C6500/C8000 and Pro C5300S/C5310S

One of the differences is the shape of the toner supply units as shown below. The shape of the toner supply units are different because the machine dimensions are different between IM C6500/C8000 and Pro C5300S/C5310S.

[A]: IM C6500/C8000

[B]: Pro C5300S/C5310S

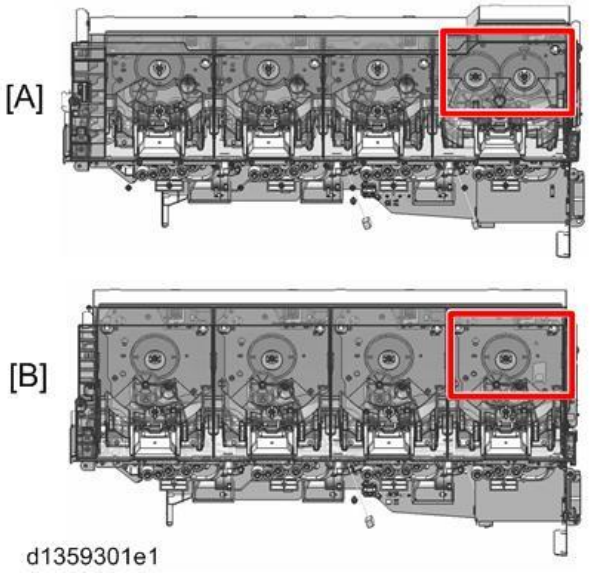


Note: For IM C6500/C8000, the toner supply unit for black is larger because the toner consumption for black is greater than for other colors.

The other difference is the number of the unit's agitators for black. IM C6500/C8000 has two agitators while Pro C5300S/C5310S has one agitator as shown below:

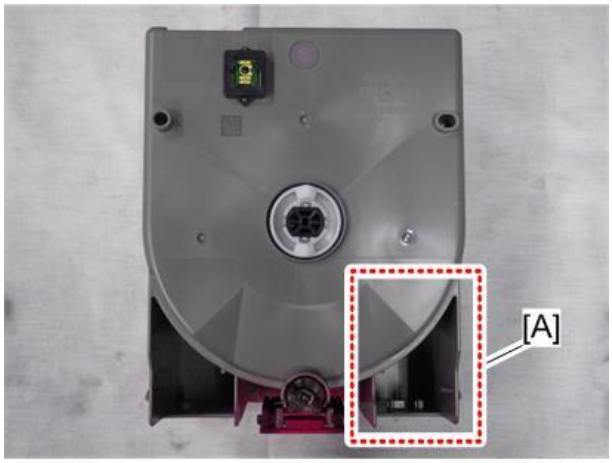
[A]: IM C6500/C8000

[B]: Pro C5300S/C5310S



Bottle Shape to Prevent Incorrect Installation

To prevent placing a bottle in the wrong place, the bottles for each color have a different shape at the rear [A].



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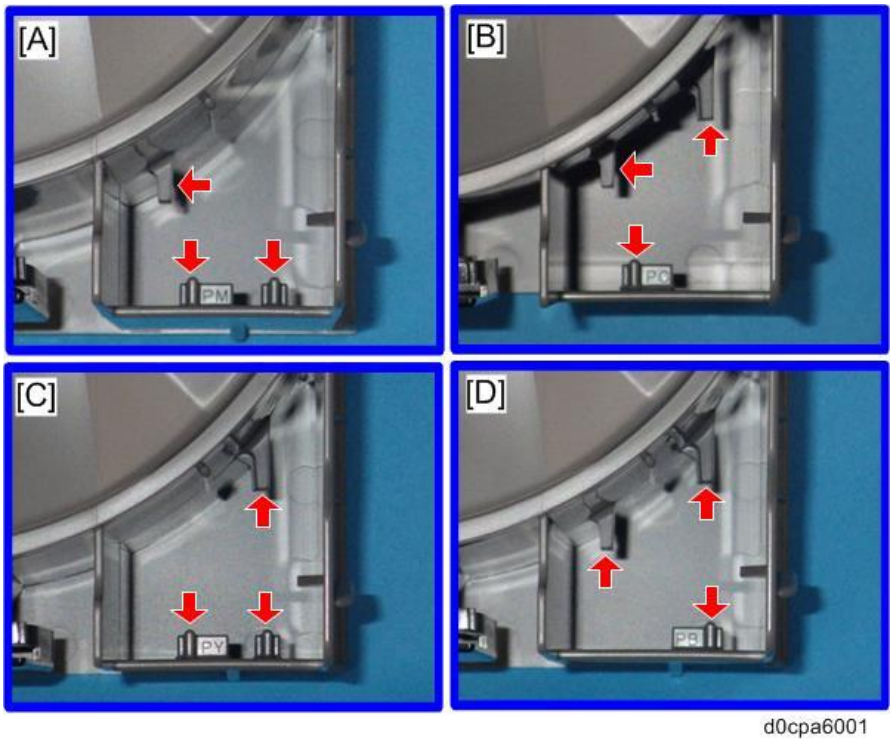
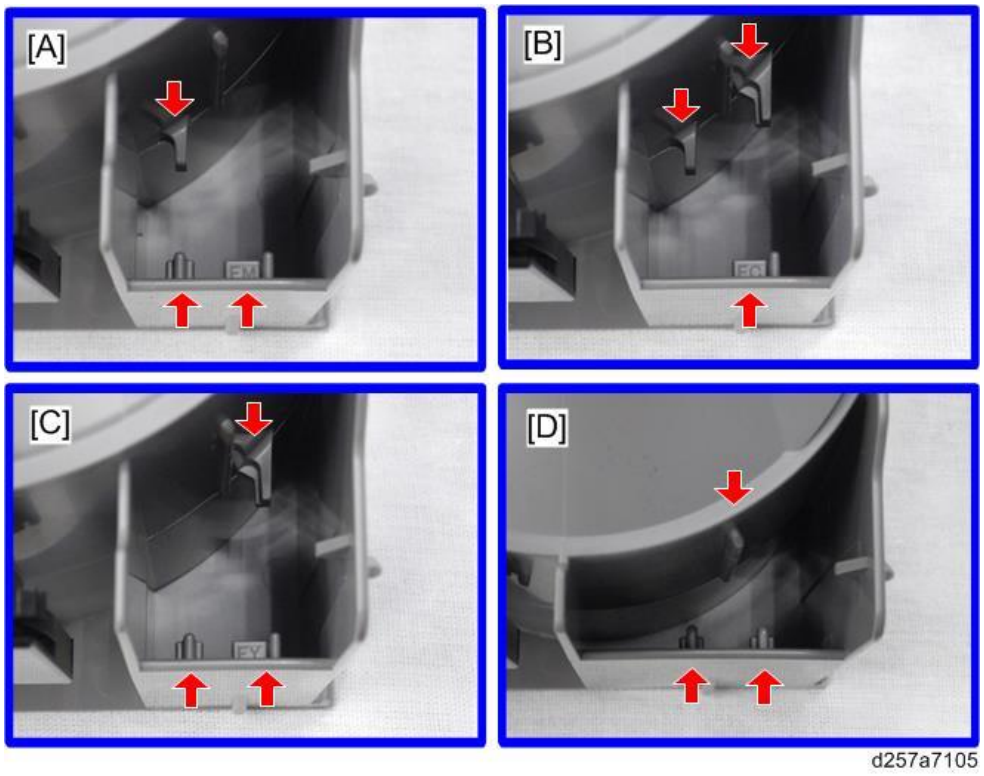
Arrows in the picture below show the differences for each color.

Pro C5300S/C5310S



d0cpa6001

IM C6500/C8000



No.	Description	No.	Description
[A]	Magenta	[C]	Yellow
[B]	Cyan	[D]	Black

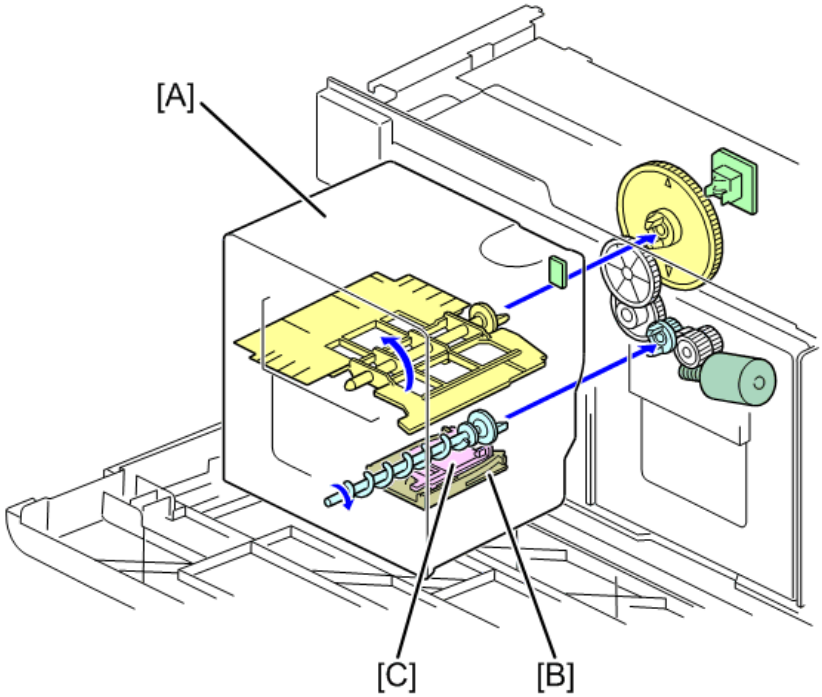
Mechanism Details

Toner Filling

Toner filling means sending toner from the toner cartridge to the sub hopper.
The following pages contain descriptions of the toner filling mechanisms.

Toner Cartridge Drive

When a toner cartridge [A] is placed, the shutter [C] on the cartridge opens and then the toner transport port [B] also opens. When a toner cartridge [A] is removed, the shutter [C] on the cartridge closes and the toner transport port [B] also closes.



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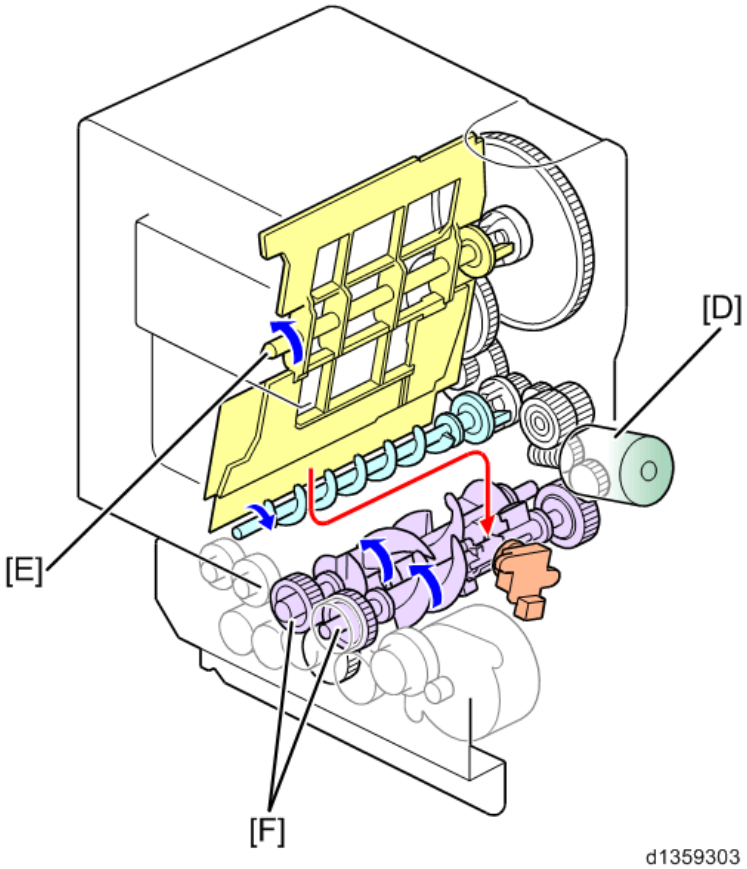
Each toner cartridge has a toner supply motor (M3) [D] that drives the agitator [E] and toner transport coils [F].



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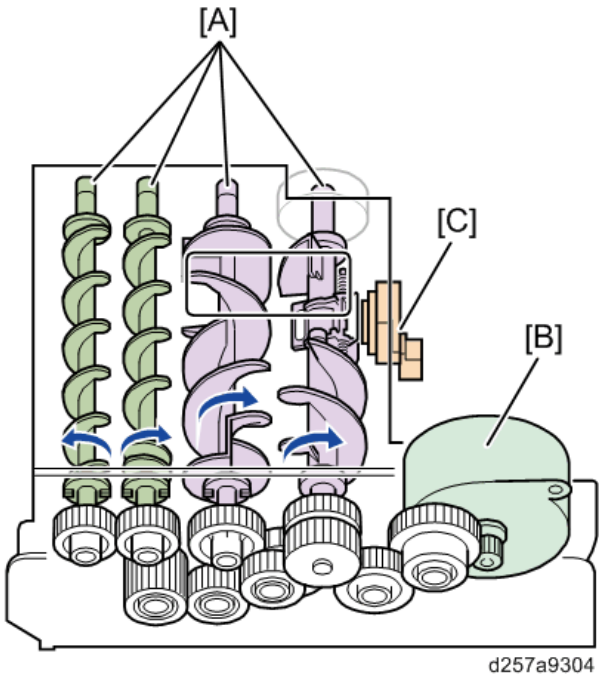
Sub Hopper

The sub hopper contains 4 transport coils [A] (larger x 2, smaller x 2)
The larger coils agitate toner and the smaller coils transport toner to the downstream part of the sub hopper.
The downstream part of the sub hopper is a toner transport path for supplying the development unit with toner.
If the toner end sensor (S3) [C] in the sub hopper detects a toner shortage in the hopper, the toner cartridge supplies toner to the sub hopper.
The 4 transport coils [A] are driven by the sub hopper motor (M7) [B] via the gears.



Toner Filling Timing

Toner filling takes place only when the ID chip and the interlock switch turn on.
- Sensor states and toner filling operations when a toner cartridge is replaced -

Bottle Replacement Procedure	ID Chip	Interlock	Supply Operation
Toner cartridge is placed	ON	ON	Driven
Toner cartridge replacement starts	ON	OFF	Not driven
After toner cartridge is removed (No toner cartridge is placed)	OFF	OFF	Not driven
During a toner cartridge replacement	OFF -->ON	OFF	Not driven
Replacement is completed	ON	ON	Driven

Toner Supply

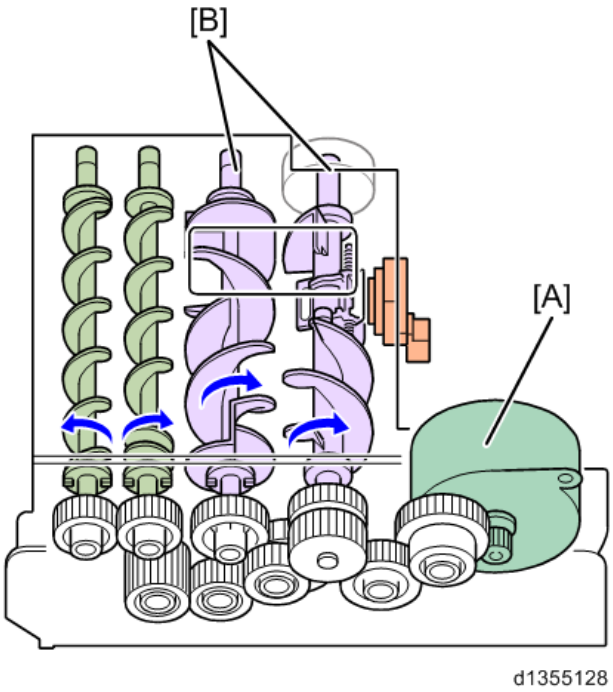
Toner supply means sending toner from the sub hopper to the development unit.

7.Detailed Descriptions

Here are explanations about toner supply mechanisms.

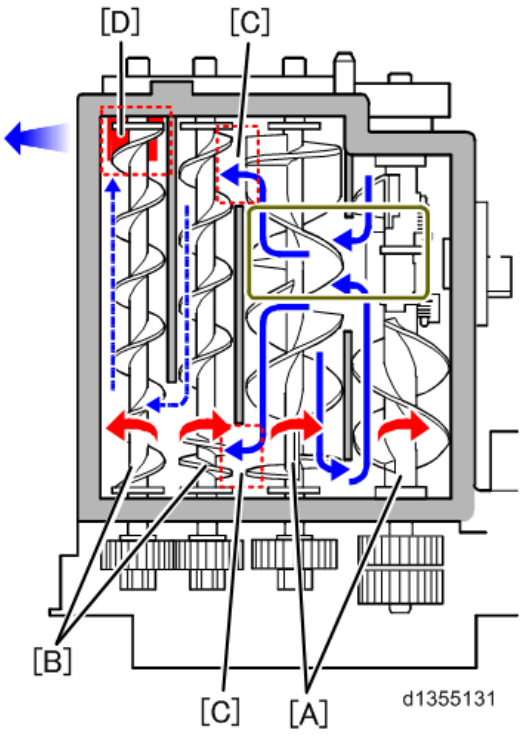
Sub Hopper Drive

For each color, the sub hopper motor (stepping motor) (M7) [A] controls toner supply to the development unit. When the TD sensor (S46) in the development unit detects that toner is needed, the sub hopper motor (M7) turns on.
The two larger coils [B] drive and agitate toner that arrives from the toner cartridge.



Toner Transport / Supply

There are four transport coils in the sub hopper.
Toner from the toner cartridge is sent to the large transport coils [A] that agitate toner. Between the large transport coils [A] and small transport coils [B], there is an open port [C] from which toner moves to the small transport coils.
The small transport coils [B] do not agitate toner but send it to the development unit through the supply port [D] for the development unit.
The large transport coils and the small transport coils differ in their blade pitch. The large transport coils [A] have a larger pitch to agitate toner easily. The small transport coils [B] have a smaller pitch so as not to supply too much toner at one time; this also means that even when the toner end sensor (S3) detects toner end, there is more toner held in the bottom of the sub hopper than if the coils were larger. This means that even when the toner cartridge becomes empty, toner auto-supply from the sub hopper continues, and you can replace a toner cartridge even during operation, which leads to reduced downtime.
400 sheets (A4/5% chart) can be printed after near-end.



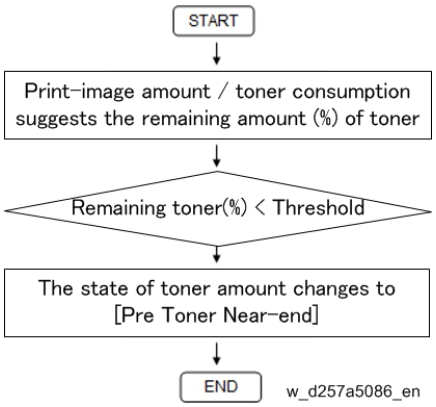
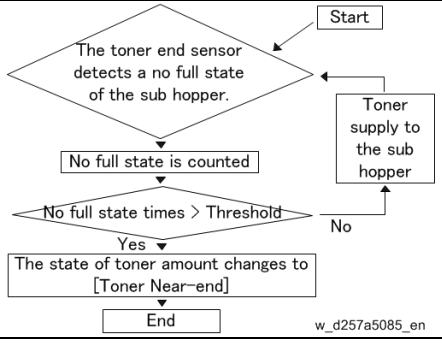
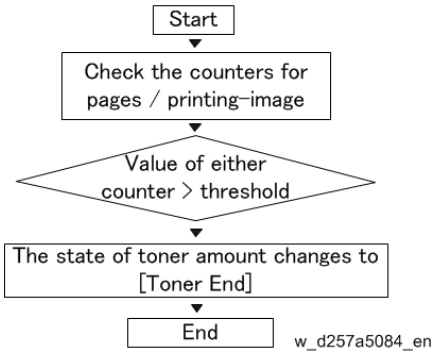
Toner End / Near-end Control

There are four remaining-toner states in this machine. This is almost the same as for the ProC751EX series.

Remaining-toner State	Descriptions
1. Sufficient Toner	Sufficient toner exists in the toner cartridge. The amount is estimated from the pixel count executed during the cartridge life.
2. Pre Toner Near-end	When the amount of toner estimated from the pixel count drops to a certain value (SP3110-011 to 014; Default = 10), the machine warns the user that the toner cartridge will be empty soon and a new one should be prepared. This function can be disabled with SP3-110-001. The default is '0: On'. This function enables an earlier notification before replacement is needed. ”Toner runs out soon. Prepare a toner bottle for replacement.” will be shown as a banner message.
3. Toner Near-end	The toner end sensor (S3) could not detect toner arriving from the toner cartridge. Remaining toner (%) in the bottle is zero. But there is toner in the sub-hopper. 400 sheets (A4/5% chart) can be printed with this toner after toner near end occurs. Toner remains only in the sub hopper. ”The toner cartridge is empty. The machine will soon stop printing. Replace toner cartridge” is displayed as a banner message. You can replace the cartridge while the machine is operating.
4. Toner End	Either 400 sheets was printed since toner near-end, or the estimated pixel count

Remaining-toner State	Descriptions
	indicates toner end, whichever comes first. The machine stops and tells the user to replace the cartridge.

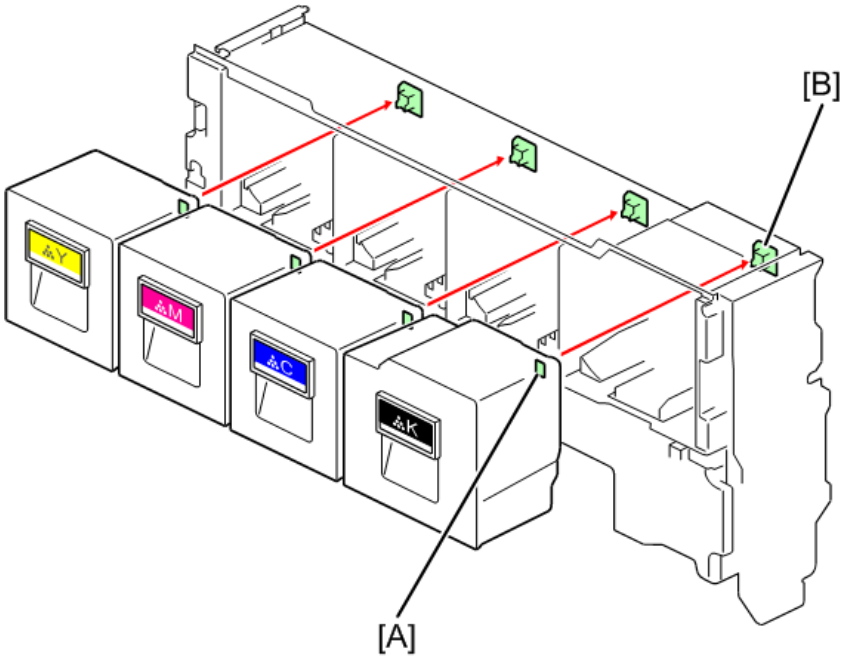
Here is a flow diagram of the toner end / near-end states, with explanations.

	Flow Diagram	Remarks
1. Toner Full		
2. Pre Toner Near-end		Prerequisite: Toner full Switch enabled/disabled In SP3110-001 [0:ON / 1:OFF] Set the threshold in SP3110-011~014 [Default: 10%]
3. Toner Near-end		Prerequisite: Toner full / Pre toner near-end The toner end sensor monitors the sub hopper but not the toner cartridge. The threshold for consecutive “Toner run out” detections is 41 (SP3120-001)
4. Toner End		Prerequisite: Toner Near-end Either 400 sheets was printed since toner near-end, or the estimated pixel count indicates toner end, whichever comes first.

Toner Cartridge Information Storage, Toner Cartridge Lock Detection

The toner cartridge has an ID chip (OT1/OT2/OT3/OT4) [A] in which toner cartridge information is stored. ID chip information is read at the terminal (ID chip connector board: PCB5) [B].

The ID chip helps to detect the toner cartridge placement. ID chip information includes the amount of toner filling, which is used to control toner end detection. The information also includes which factory produced the toner, toner type, and toner color.

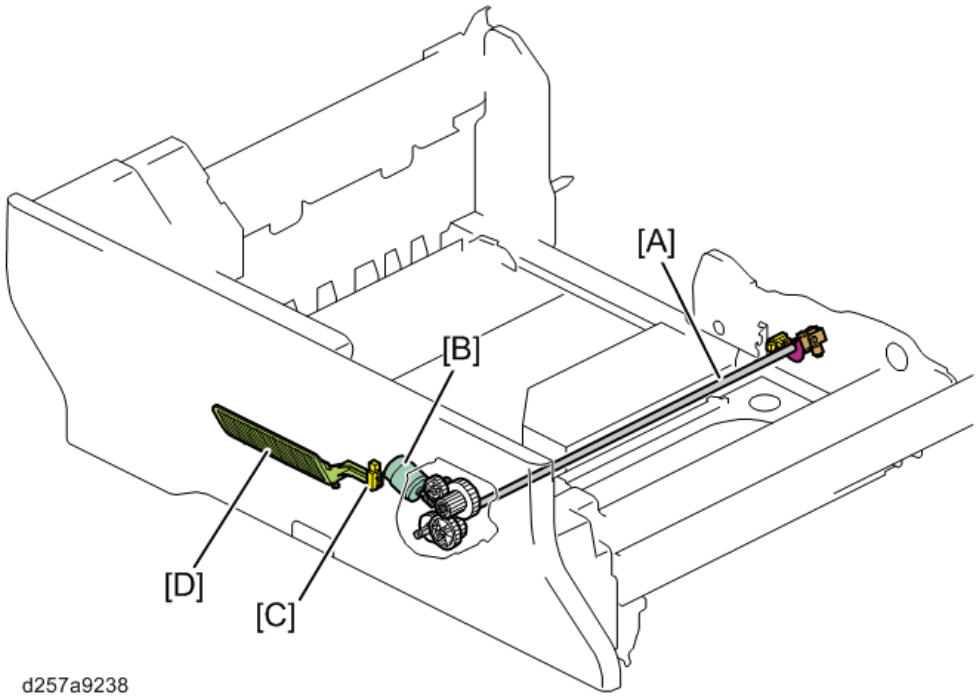

[B]
[A]
d1359306

Drawer Unit

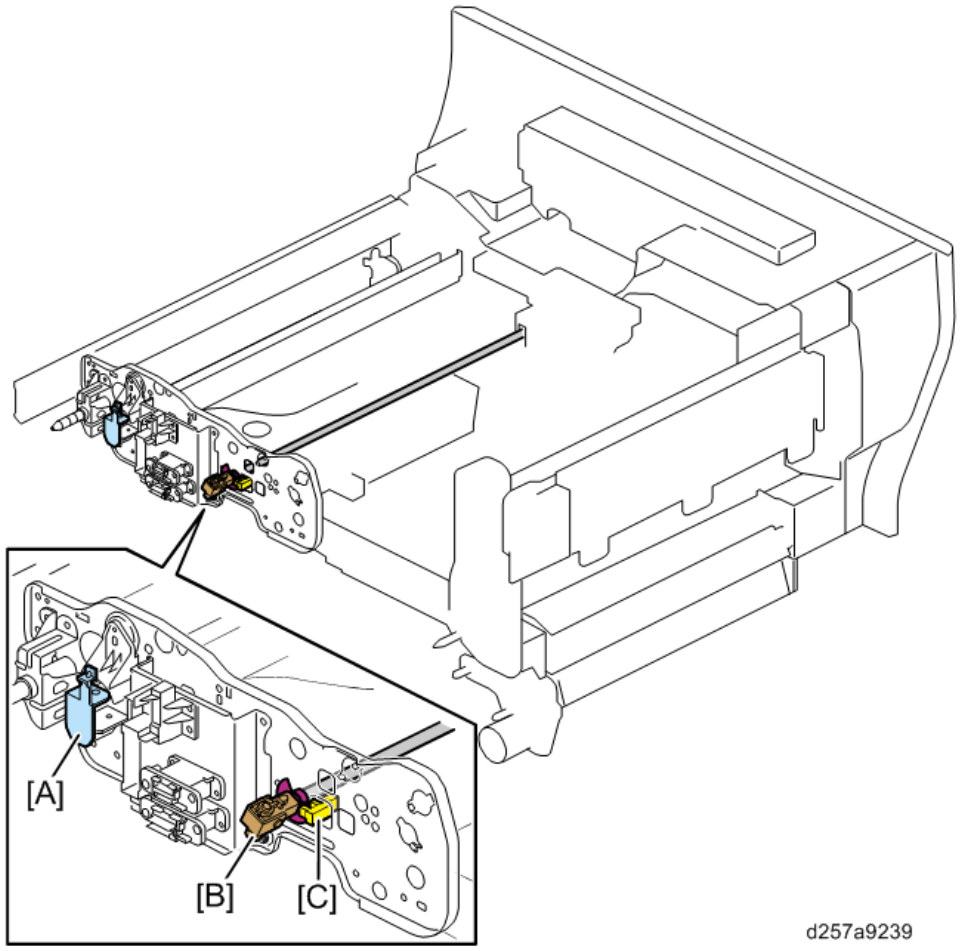
Mechanism Descriptions

The registration unit, the paper transfer belt unit, and the fusing unit are installed in the drawer unit.
This machine does not have a front cover like other series of machines have. To access the inner units of this machine, you must insert your hand into the flapper to pull the drawer unit out.
This machine has a lock mechanism that prevents paper from ripping when the drawer unit is pulled out.

Component Layout



	Name
A	Drawer Unit Lock Shaft
B	Drawer Unit Lock Motor (M44)
C	Drawer Unit Flapper Sensor (S81)
D	Drawer Unit Flapper



	Name
A	Curled Cord Guide
B	Drawer Unit Lock Shaft (End)
C	Drawer Unit Lock Sensor (S61)

Mechanism Details

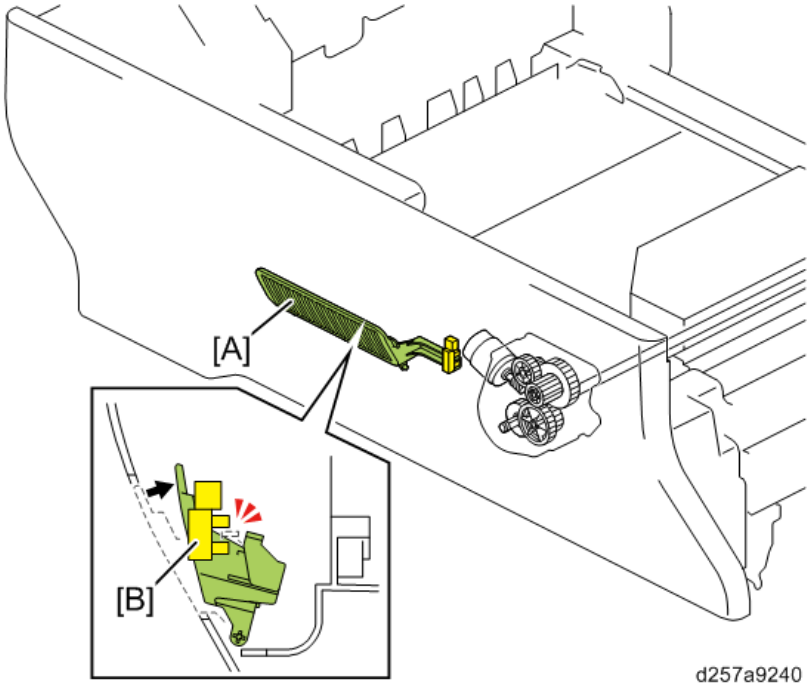
Lock Mechanism

This machine controls the drawer unit lock automatically. It also allows the locked drawer unit to open when it is necessary, in order to let users open doors in the correct order, to remove jammed paper without tearing it. The drawer unit lock motor (M44) also controls the paper transfer belt release mechanism, so that the paper transfer belt is always released when the drawer unit is ready to be opened.

When is the lock released?

- When the drawer unit flapper [A] is pushed in and the drawer unit flapper sensor (S81) [B] detects

it.



- When a jam has occurred and the LED on the drawer unit blinks.
- When the main power is OFF.
- When the right upper cover or the right lower cover is open.

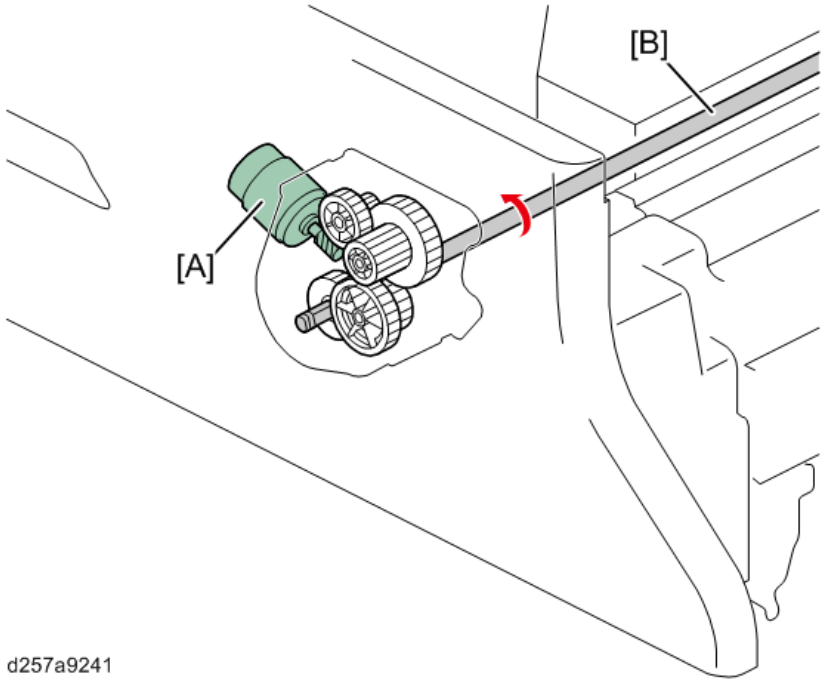
Note

Even if a condition described above is met, the lock is not released when the machine is in sleep mode. If you want to release the lock, you must make the machine return from sleep mode by touching the operation panel screen.

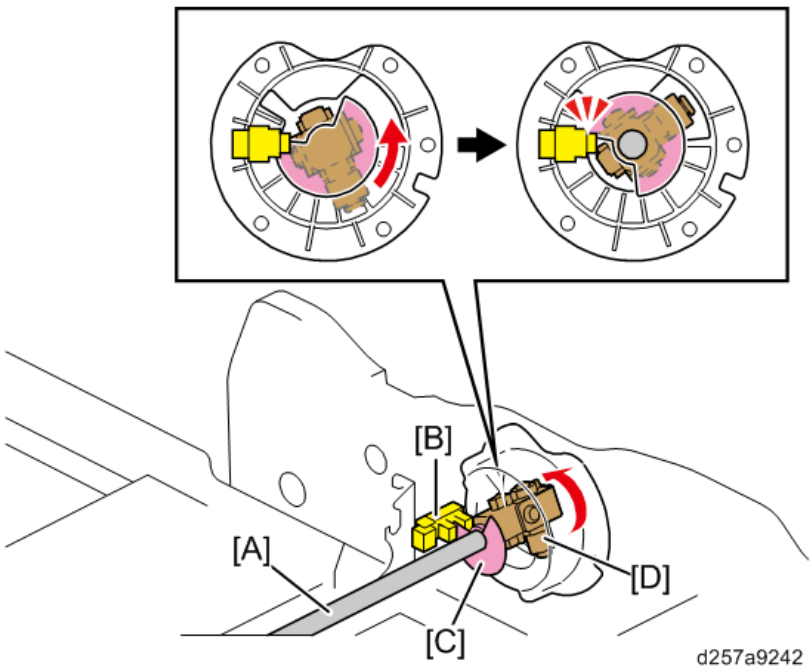
The LED on the drawer unit blinks when the drawer unit can be pulled out without ripping jammed paper.

Lock Release Operation

1. The drawer unit lock motor (M44) [A] rotates the drawer unit lock shaft [B].



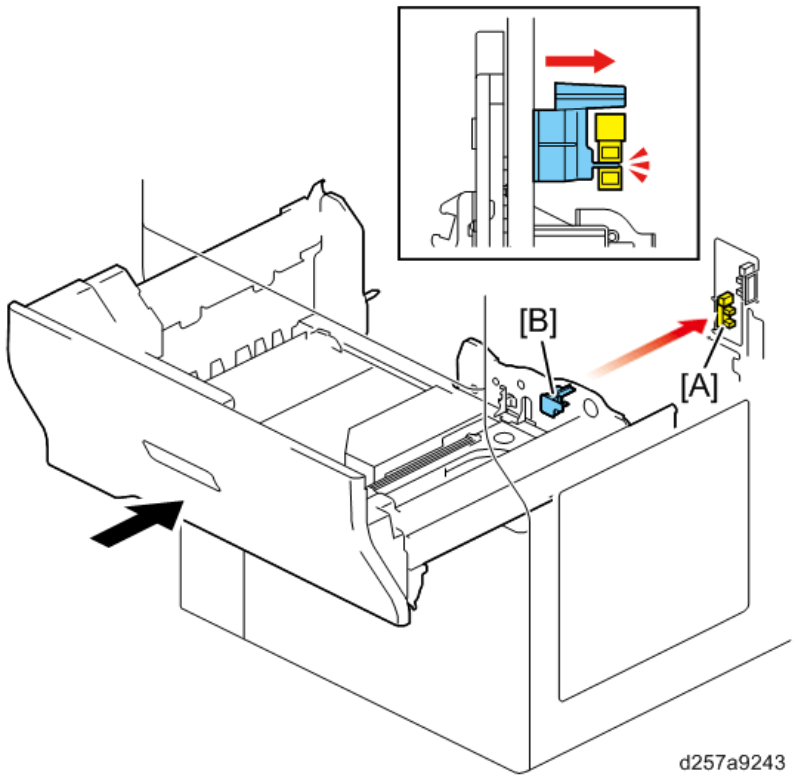
2. The drawer unit lock shaft [A] rotates counterclockwise.
3. When the drawer unit lock sensor (S61) [B] detects the edge of the actuator [C] attached to the drawer unit lock shaft, the drawer unit lock motor (M44) stops. The end of the drawer unit lock shaft comes off the holder completely. The lock is released.



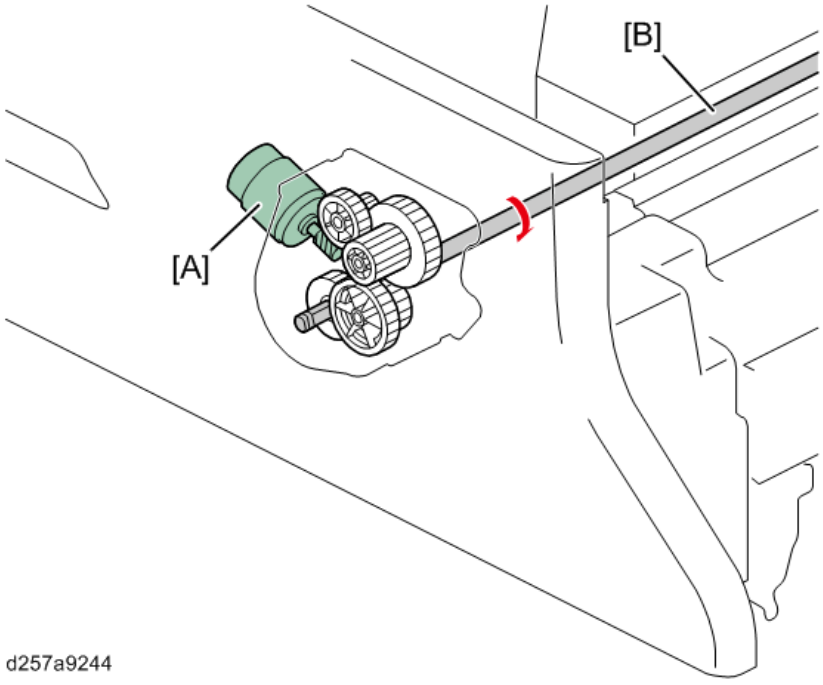
Lock Operation

1. The drawer unit is pushed in completely.

2. The drawer set sensor 1 (S56) [A] detects the tab [B] on the rear of the drawer unit.



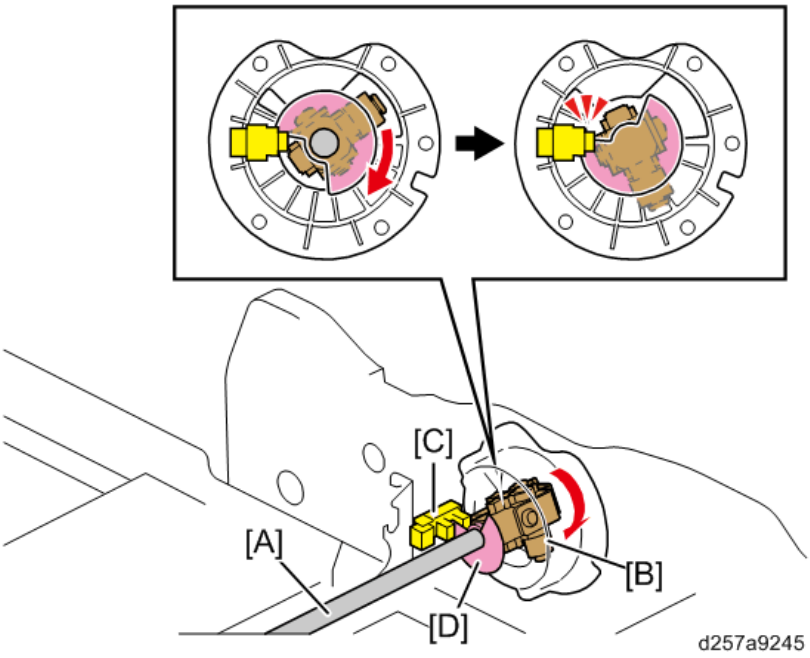
3. The drawer unit lock motor (M44) [A] turns on and the drawer unit lock shaft [B] rotates.



4. The drawer unit lock shaft [A] starts to rotate clockwise from the lock release position.

5. When the drawer unit lock sensor (S61) [C] detects the edge of the actuator [D], the drawer unit lock motor (M44) stops. The end of drawer unit lock shaft [B] is held by the holder. The drawer unit

is locked.

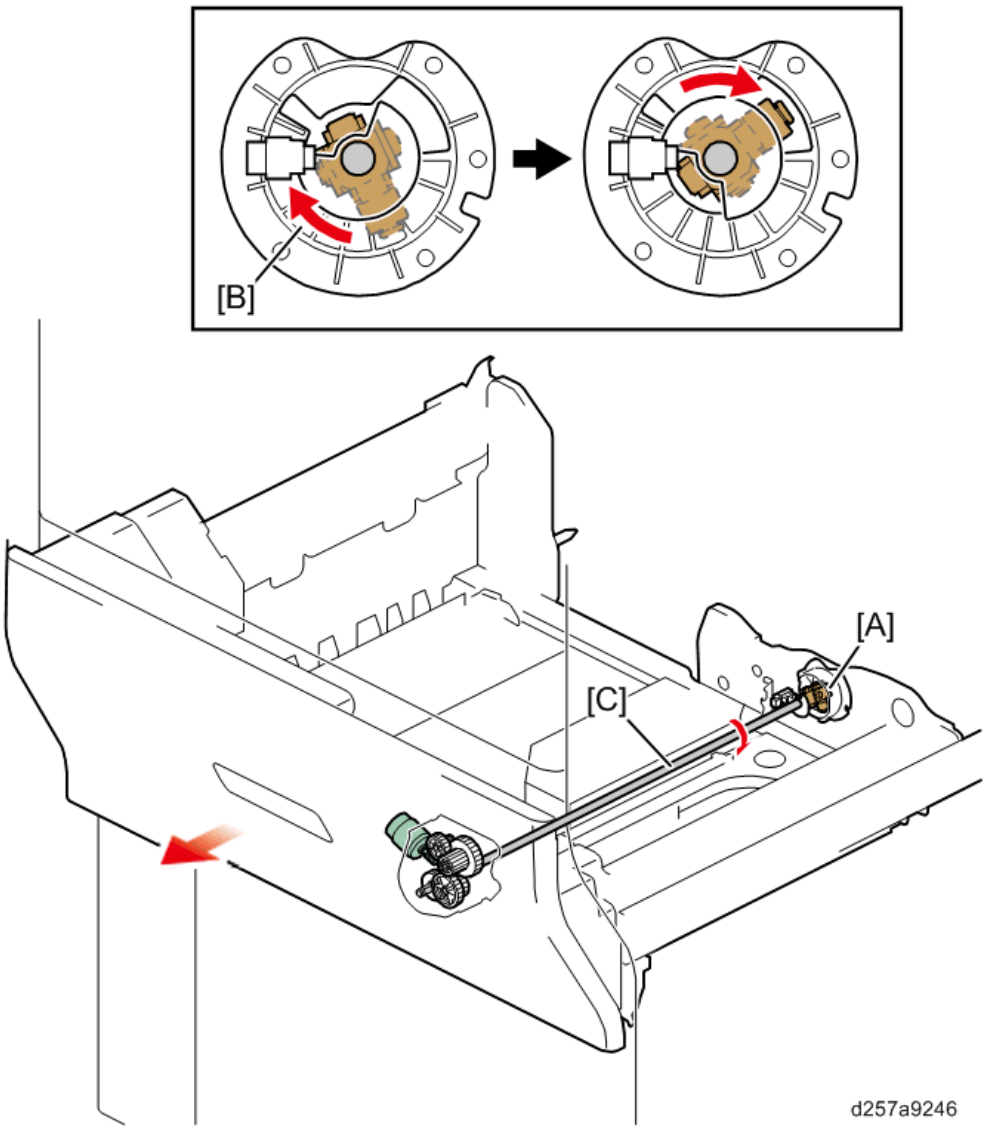


Drawer Unit Push Mechanism

When a paper jam occurs, the drawer unit is locked to prevent jammed paper from being ripped. The lock is released and the drawer unit can be pulled out after the paper sticking out from the drawer unit is removed. Also, only in the case of a paper jam, the drawer unit is pushed out 10 mm from the machine and the drawer unit LED (LED8) blinks when the lock is released. The drawer unit push mechanism is done by changing the direction of drawer unit lock shaft rotation.

The holder [B] which locks the end of the drawer unit lock shaft [A] is sloped.

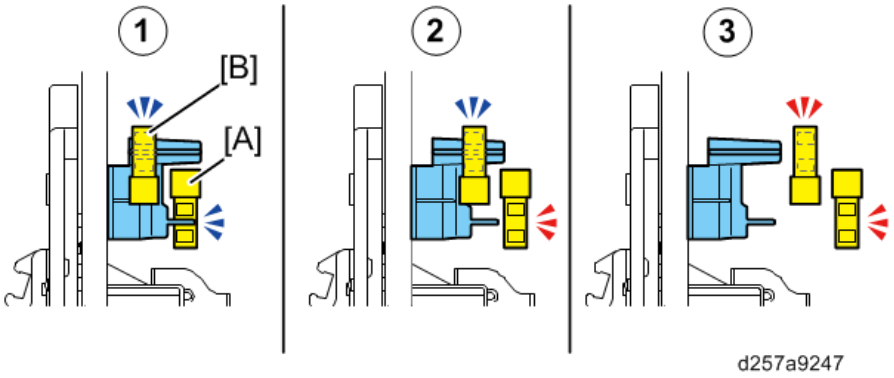
When the drawer unit lock shaft [C] rotates clockwise from the lock position (the end of the drawer unit lock shaft [A] is held by the holder), it climbs up the slope. Then it is released from the holder and the drawer unit is pushed out from the machine.



Drawer Unit Set Detection Mechanism

The set condition of the drawer unit is detected by the drawer set sensor 1 (S56) [A] and the drawer set sensor 2 (S57) [B]. The set condition is detected when the actuator blocks the light.

The drawer set sensor 2 (S57) [B] detects when the drawer unit is pulled out completely. This is used to control the jam animation when there is jammed paper. The actuator of drawer set sensor 2 (S57) [B] is longer than that of drawer set sensor 1 (S56) [A]. The combination of signals from these sensors determines the condition of the drawer unit (locked/half open/fully open).



The condition of the drawer unit is determined as follows.

No.	Drawer set sensor 1 (S56) [A]	Drawer set sensor 2 (S57) [B]	Condition of the drawer unit
1	Blocked	Blocked	Locked (The drawer unit is pushed in completely.)
2	Not blocked	Blocked	Half open (The drawer unit has been pushed out by the drawer unit push mechanism.)
3	Not blocked	Not blocked	Fully open (The drawer unit is pulled out completely.)

Drawer Unit State List

There are two states of the drawer unit. The state of the unit varies depending on the machine state.

1. Not Withdrawable

Machine State		Remarks
Output		Including application output / fax output at night
Correcting, or Self-adjusting	Warming-up, Process Control, MUSIC, Toner Recovery, Web Cleaning	
Sleep mode	The machine is in sleep mode and the operation panel display is off.	The drawer unit can be withdrawn after returning from sleep mode
Forced Power off	Forced shutdown due to blackout / disconnection, or pressing and holding the power button	Reboot allows you to withdraw the drawer unit
SC Issued	SC670 / SC672 occurs	
*Straddling Jam		The drawer unit can be withdrawn after jammed paper is removed from vertical transport / bypass tray unit / purge unit.
Defective Drawer Unit Lock-related Parts	Cannot release the drawer unit lock correctly. SC525 occurs due to a problem with the drawer unit lock	To solve this problem, you need to remove some covers and the drawer unit lock motor (M44) to

Machine State		Remarks
	motor (M44).	release the lock manually. (For details, see If the Drawer is Locked)

* In the case of a jam (such as the jams listed below) that straddles the drawer unit and another unit, jammed paper will be torn if you pull out the drawer unit, and torn paper may remain in the machine.

- Jam between the bypass tray unit and the registration unit
- Jam between the relay unit and the vertical transport
- Jam between the paper exit section and the purge unit

So in this machine, the drawer unit is locked when a straddling jam occurs.

By following the directions on the display, the drawer unit can be withdrawn after you remove jammed paper from the vertical transport / the bypass tray unit / the purge unit.

2. Withdrawable

- When the drawer unit becomes withdrawable after you put your hand into the drawer unit handle:

  The release operation of the drawer unit lock starts when you put your hand into the drawer unit handle. The drawer unit becomes withdrawable 8 seconds after you put your hand into the drawer unit handle, and then the message is displayed on the operation panel.

Machine State		Remarks
Ready	Low Power Mode	
Door or Cover Open	Cover or door opens	Any of the following opens: Upper Front Cover, Purge Door, Paper Feed Tray

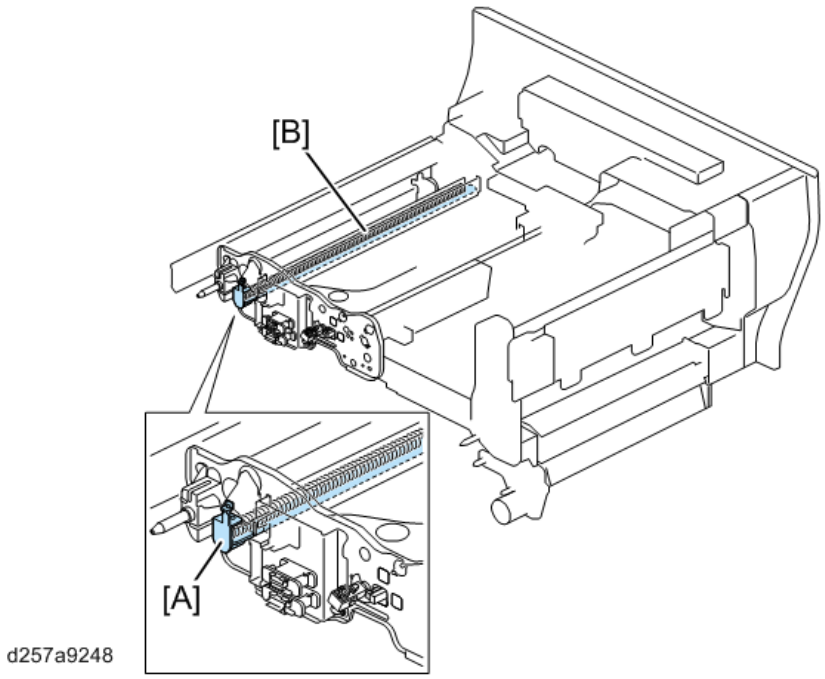
Downtime	• SC other than those listed below occurs:
	  • SC670
	  • SC672
	  • SC525
	• When the waste toner bottle is full, for replacement of the toner bottle	

Low Power	Energy Saving Mode	

- When the drawer unit is withdrawable immediately:
  - In cases that apply to neither “1. Not Withdrawable” nor “2. Withdrawable: When the waste toner bottle is full, for replacement of the toner bottle” mentioned above.
  - When SP1-040-001 is executed.

Electrical Supply

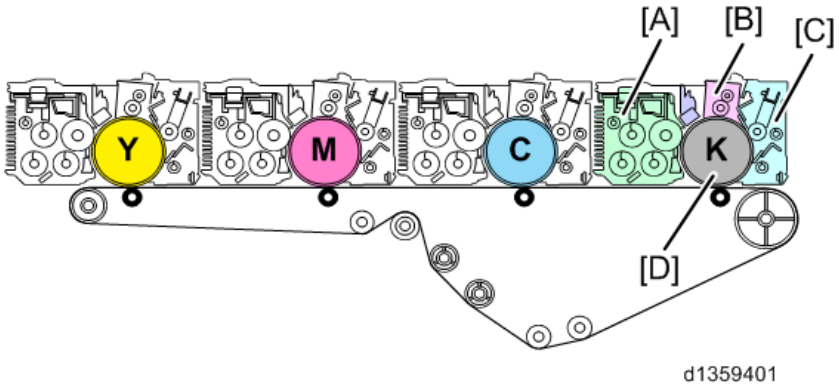
The curled cord [B] supplies electrical power (5V, 24V) to the drawer unit. The curled cord guide [A] holds the curled cord [B], which expands and contracts when the drawer unit is pulled out and pushed in.



PCDU

Mechanism Descriptions

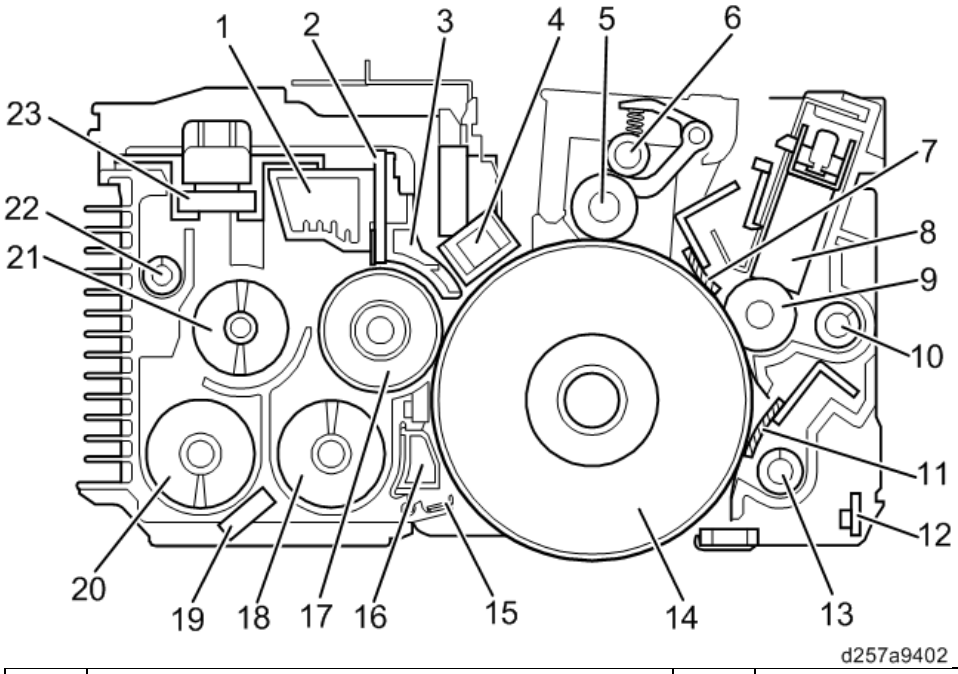
This machine uses four photoconductor units (PCDUs) in tandem (one PCDU for each color YMCK). The PCDU is composed of the drum unit [D], the development unit [A], the drum cleaning unit [C], and the charge roller unit [B]. Each color PCDU can be drawn out of the machine.
The drum unit for Pro C5310S/C5300S and the drum unit for IM C6500/C8000 are made of different material.
In IM C6500/C8000, the parts in each color PCDU are exactly the same (a drum unit [D], a development unit [A], a drum cleaning unit [C], and a charge roller unit [B]) in order to minimize the cost of parts. In Pro C5300S/C5310S, the parts in the development unit [A] for K are different from the parts for YMC.



Compatibility with the Previous Machines

Parts	Pro C5310S/C5300S	IM C6500/C8000
Drum Unit	-	✓
Charge Roller Unit	✓	✓
Drum Cleaning Unit	✓	✓

Component Layout



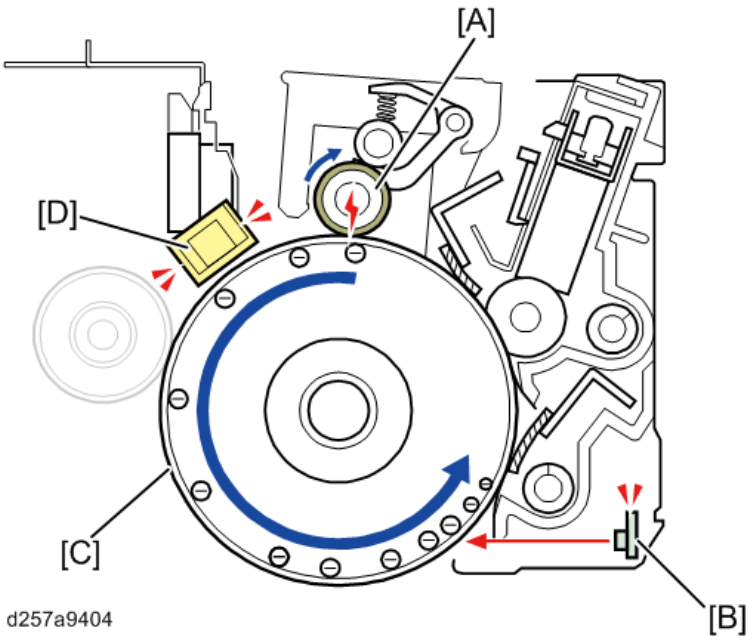
1	Heat Sink	13	Primary Toner Collection Coil
2	Doctor Blade	14	Drum
3	Entrance Seal	15	Toner Catcher
4	Potential Sensor (S42)	16	Spill Duct
5	Charge Roller	17	Development Roller
6	Charge Roller Cleaning Roller	18	Right Transport Auger
7	Lubricant Blade	19	TD Sensor (S46)
8	Lubricant Bar	20	Left Transport Auger
9	Lubricant Brush Roller	21	Upper Transport Auger
10	Secondary Toner Collection Coil	22	Developer Collection Coil
11	Drum Cleaning Blade	23	Development Filter
12	Quenching Lamp		

Mechanism Details

Charge

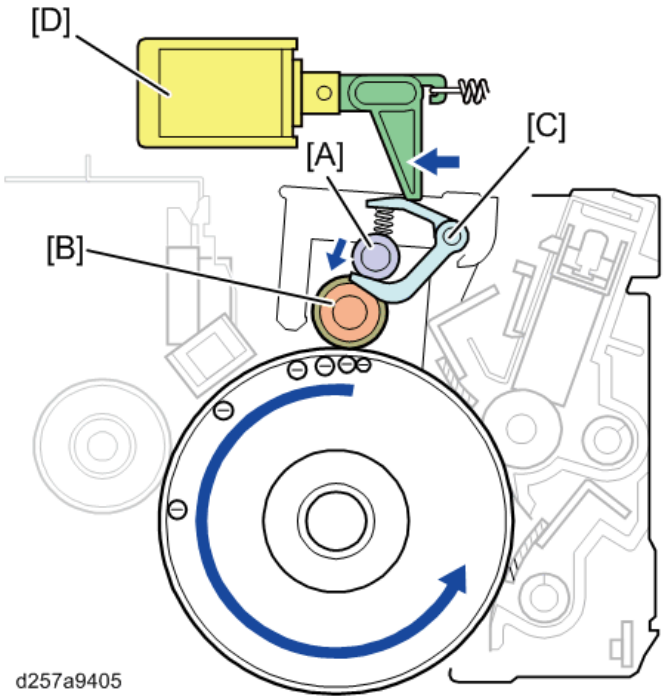
Charge, Discharge

The charge roller [A] evenly charges the drum for each color. After transfer and before cleaning, LED emission from the quenching lamp [B] discharges the surface of the drum [C]. The potential sensor (S42) [D] measures the charge on the surface of the drum. (Pro C5300S/C5310S only)



Charge Roller / Cleaning Roller

The charge roller [B] applies charge to the drum. The charge roller [B] is separated slightly from the drum surface and rotates in the opposite direction to the drum. The combined high-voltage power supply board supplies the charge roller shaft with the charge that is applied to the drum.
Uneven charge can occur if the charge roller [B] is dirty. The charge roller cleaning roller [A] cleans the charge roller to prevent this.
The charge roller cleaning roller [A] rotates in the opposite direction to the charge roller [B] in order to clean the surface of the charge roller.
The charge roller cleaning roller [A] is usually separated from the charge roller [B]. When the charge roller [B] needs to be cleaned (such as between the sheets after the charge roller rotates in a certain distance), the charge roller cleaning roller [A] comes into contact with the charge roller [B]. The charge roller cleaning roller [A] is lifted by the actuator arm [C] when it is separated from the charge roller [B].
When the charge roller [B] needs to be cleaned, the charge roller cleaning roller solenoid (SOL1) [D] turns ON to compress the spring of the actuation arm. Then the charge roller cleaning roller [A] comes into contact with the charge roller [B].
Although the cleaning may be performed automatically at a specified number of pages, it can also be performed manually by executing SP2-222-001 (Chg Roll Cleaning: Execute all).



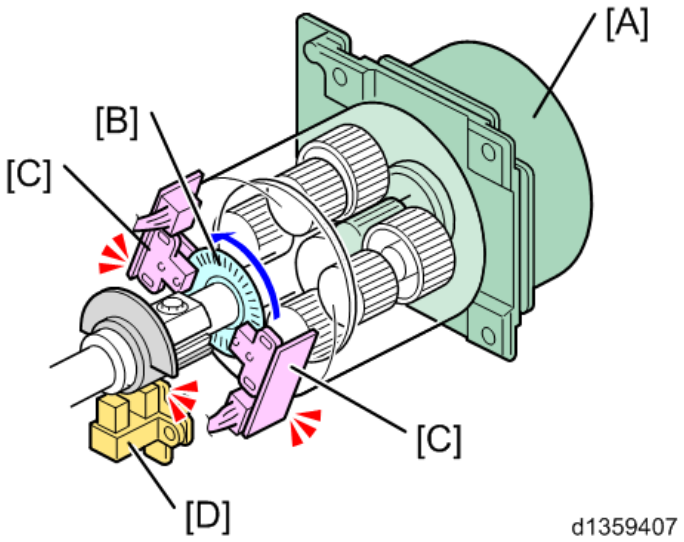
PCDU Drive

Each PCDU has two motors. The drum motor drives drum (M34) and the development motor (M18) drives development unit. For details about development drive, see Development Unit Drive.

Each color drum has a drum motor (M34) [A], and the drum is driven by the drum motor through gears. The development unit has a different motor, to remove fluctuations in load in order to improve the precision of color registration.

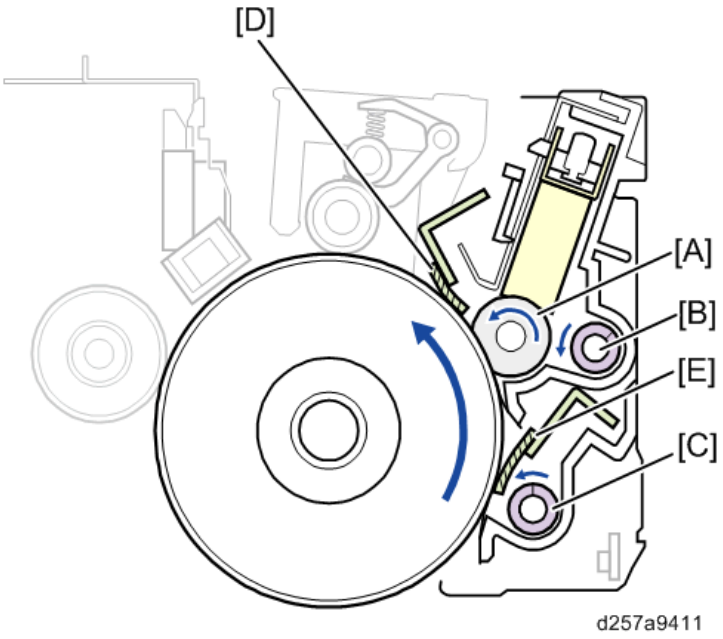
Two drum encoder sensors (S30) [C] monitor the rotation of the encoder wheel [B] and the signals are fed back to the drum motor (M34) to control the motor speed.

Only Pro C5300S/C5310S has the drum HP sensor (S32) [D] which detects drum home position using an actuator.



Drum Cleaning

The lubricant brush roller [A] and the primary [C] and secondary [B] toner collection coils are driven by the drum cleaning motor through gears.
A counter blade method is adopted for the lubricant blade [D] and the drum cleaning blade [E]. The lubricant brush roller [A] rotates in the same direction as the OPC drum in order to lubricate the drum surface. The lubricant blade [D] keeps lubricant on the surface flat.
Waste toner that is collected with the drum cleaning blade [E] and lubricant are sent to the used toner transport area by the primary toner collection coil [C].
Lubricant and used toner are sent to the rear side and expelled. The vibration plate prevents the lubricant from clumping together (which can lead to the exit clogging). This vibration plate shifts up and down in accordance with the rotation of the secondary toner collection coil [B] and prevents the exit from clogging.



PPG-Drive

The drum motors (M34) in this machine use the planetary gear reduction mechanism (PPG-Drive: Precision Planetary Gear Drive), and they are more compact and cost less. With FB/FF Control (Feed-Back/Feed-Forward Control) which accurately suppress the speed variations, the rotation accuracy of PPG-Drive is almost the same level as earlier models, such as Pro C7210S/C7200S series.
This means that this machine is more cost effective, but almost as accurate as the earlier models, Pro C7210S/C7200S series.

Lubricant End Detection

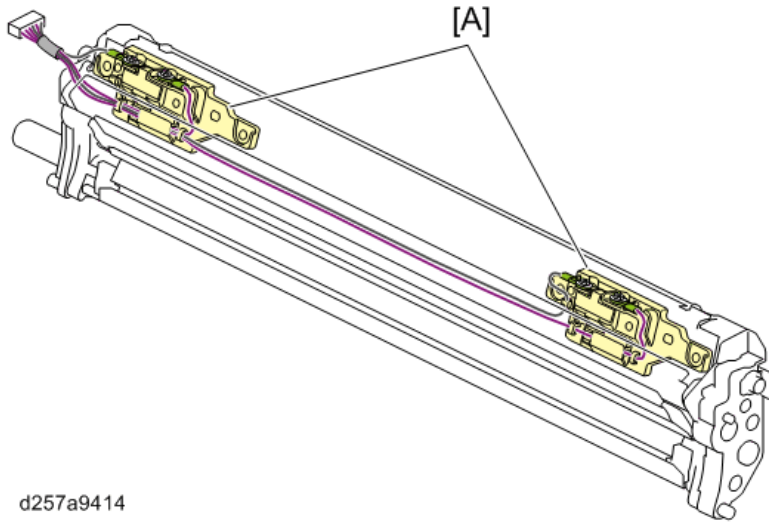
This machine has a detection mechanism for lubricant end in the drum cleaning unit, in order to prevent the drum cleaning unit from deteriorating due to lubricant depletion.

Lubricant End Detection Details

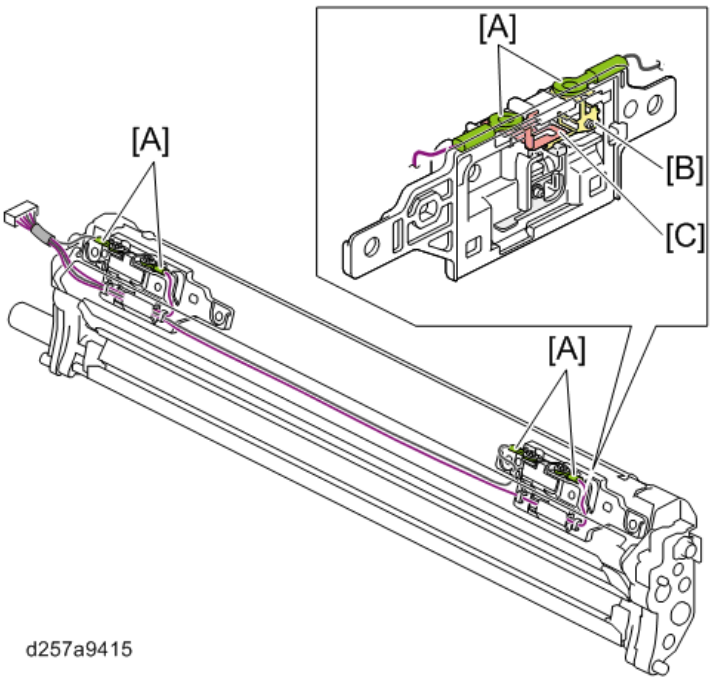
State	Descriptions
Lubricant Near-end	At each end of the lubricant bar, there is a near-end detection mechanism. As lubricant is consumed gradually, a tab in the lubricant holder shifts. When lubricant decreases to a certain amount, the tab touches the feeler and near-end is detected. When either of the lubricant end sensors is triggered, a "Near End" alert message is displayed. The machine can still be used, but a drum rotation counter begins.
Lubricant End	At 12 km of drum rotation after near-end detection, an "End" alert message is displayed. At this time, the machine stops and cannot be used until the lubricant bar is replaced. This corresponds to about 21.8k sheets (Black) / 19.1 sheets (Full Color) for IM C6500/C8000 (5P/J, Color ratio: 70%, Duplex ratio: 80%), or about 35.2k sheets (Black) / 35.4 sheets (Full Color) for Pro C5300S/C5310S (50P/J, Color ratio: 30%, Duplex ratio: 30%).

Lubricant End Detection Details

Lubrication end detectors [A] are on the rear of the lubricant blade on the upper side of the drum cleaning unit.



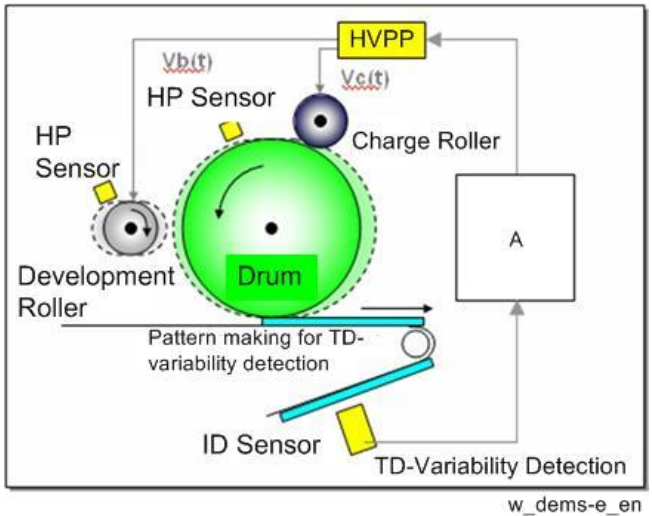
Two harnesses [A] from each lubrication end detector are connected to the drum cleaning unit. The drum cleaning unit is connected to the main machine with four harnesses. The harnesses of each detector come from electrode plate A [B] and electrode plate B [C] within each detector.



DEMS (Development Electric-field Modulation System)

In the Pro C5300S/C5310S, DEMS (Development Electric-field Modulation System) reduces banding and color unevenness which result from the change of distance between the drum and the development roller.

Small eccentricities in the rotation of the drum, charge roller, and development roller cause variations in charge on the drum, and this causes uneven image density. To correct for this, the machine monitors the image density as the drum, charge roller, and development roller rotate. To do this, the machine makes a pattern, while monitoring the angle of rotation of the drum and development roller (using the drum HP sensor and development roller HP sensor). The ID sensor above the ITB monitors variations in density of the pattern. Then, during image creation, development bias and charge voltage are adjusted for different phases of drum and development roller rotation, based on the ID sensor. The amount of toner is adjusted and color unevenness is reduced. Because this works for periodical eccentricities of both the drum and the development roller, it reduces banding at 190-mm intervals (drum) and banding at 53-mm intervals (development roller).



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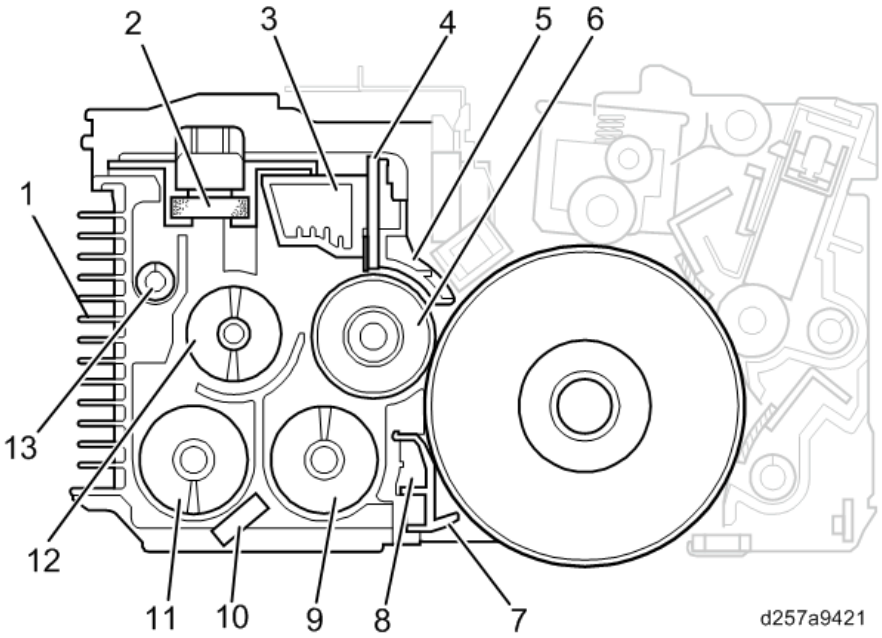
	Descriptions
A	Arithmetic Processing • Average Processing • AC/DC Detection • Toner Attached Amount <--> Voltage Conversion

Development Unit

Mechanism Descriptions

Component Layout



1	Al Heat Sink	8	Spill Duct
2	Development Filter	9	Right Transport Auger
3	Heat Sink	10	TD Sensor (S46)
4	Doctor Blade	11	Left Transport Auger
5	Entrance Seal	12	Upper Transport Auger
6	Development Roller	13	Developer Collection Coil
7	Toner Catcher		

- Development Components

Development Method	Dry system 2-element magnetic brush development
Agitation Method	3-shaft agitation method
Development Unit Drive	Individual drive in each color with a development motor
Development Bias	Applied from the power pack

Mechanism Details

Toner Supply System (Pre-mix Development System)

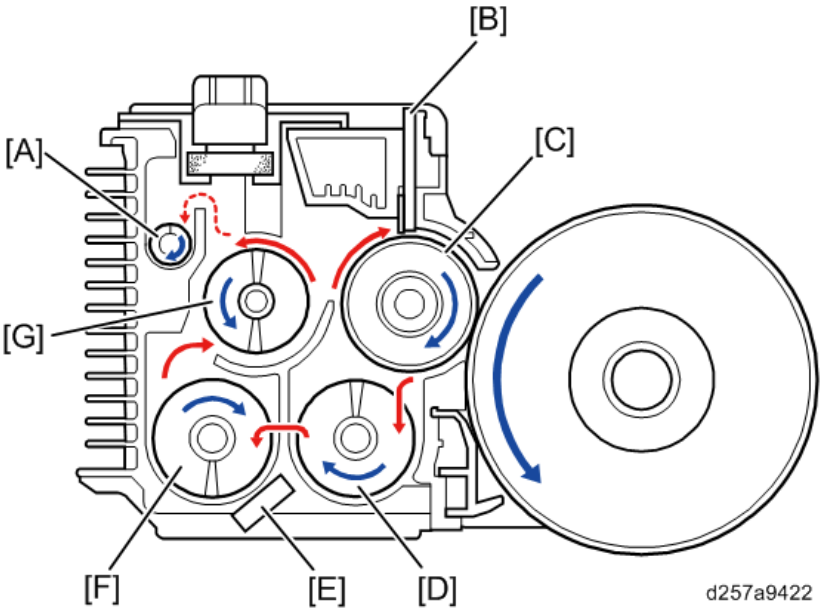
To keep image density steady, this machine adopts a development system where toner is mixed with a certain amount of developer before writing and then used developer is replaced by new developer while operating.

Note

- With the conventional two-component developer, image quality varies gradually as the carrier ages, and periodical developer replacement is essential to recover image quality. This has resulted in short replacement intervals and change in image quality each time the developer is replaced.
- The toner supply method used in this machine prevents carrier degradation in the developer unit by including a small amount of carrier in the toner bottle and using this to gradually replace the developer in the development unit. This also helps to keep the developer in good condition longer and to stabilize image quality. Toner contains some developer (the same proportion for all colors).

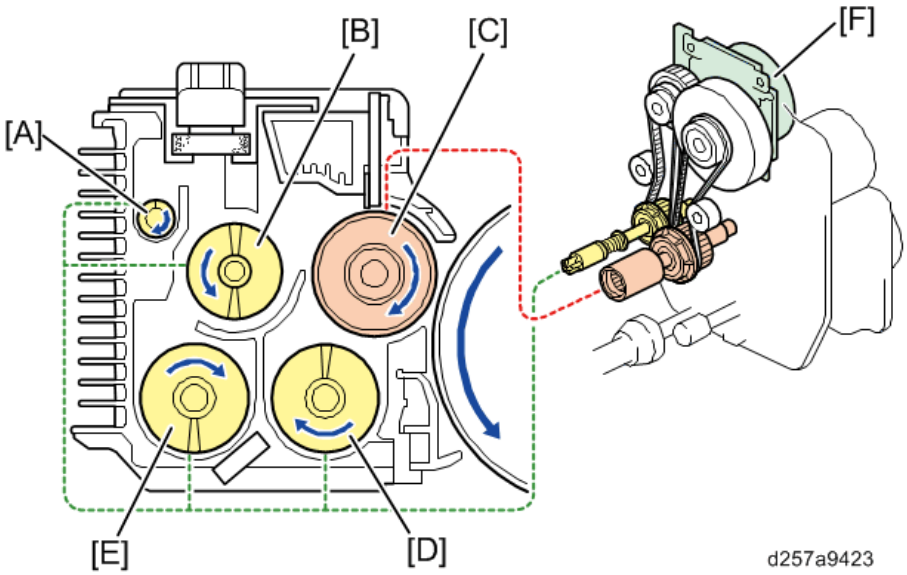
Agitation Method

A 3-shaft agitation method is adopted in this machine.
With three transport augers [D] [F] [G], toner that is transferred from the sub-hopper to the development unit is mixed into the developer, and then the mixed toner is transferred to the development sleeve [C].
The amount of mixed toner and developer on the development sleeve is regulated by the doctor blade, and the mixed toner and developer attaches to the surface of the drum.
If too much developer is supplied, excess developer is discharged by the developer collection coil [A].
The TD sensor (S46) [E] under the left transport auger [F] detects toner density.



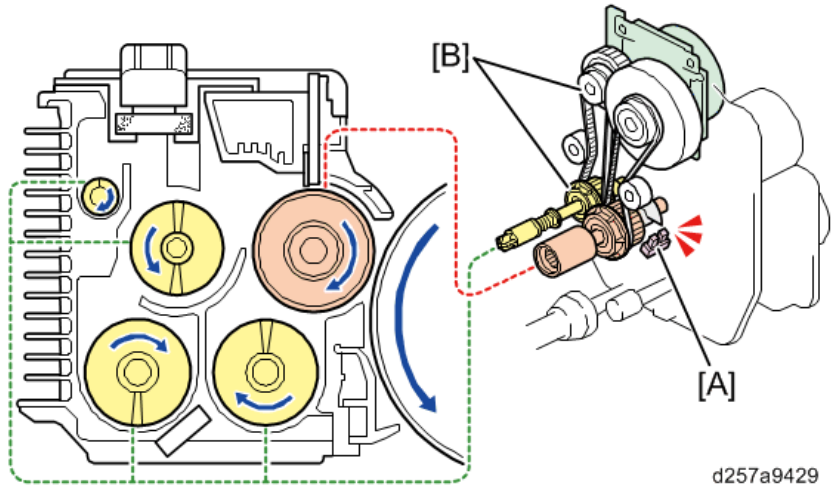
Development Unit Drive

The development motor (M18) [F] drives the development sleeve [C], the three transport augers [B] [D] [E], and the developer collection coil [A] through couplings.
Each color development unit has a development motor (M18) [F] that drives each of the units.



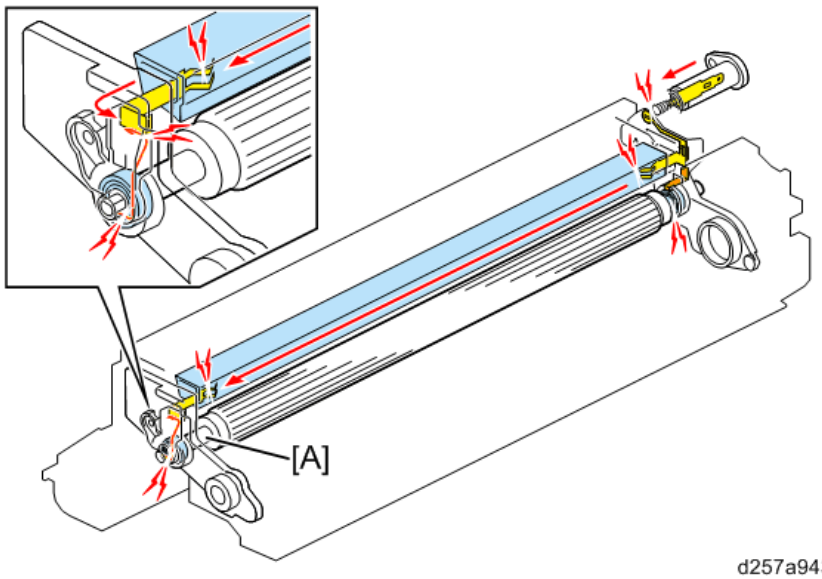
Pro C5300S/C5310S has the development roller HP sensor (S18) [A] to counteract banding (DEMS).

The number of teeth of the gears [B] for K is different from Y/M/C in Pro C5310S/C5300S.



Development Bias

Development bias is applied from the combined high-voltage power supply board (PCB10, PCB11) to the development sleeve shaft [A].



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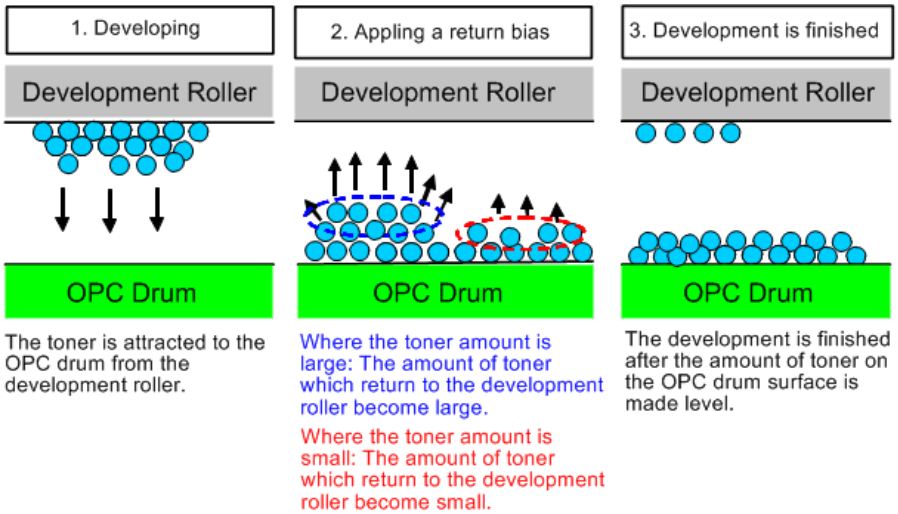
For IM C6500/C8000, the toner is developed by applying the DC bias as in previous models.
For Pro C5300S/C5310S, the development method differs depending on the colors. For K , the toner is developed by applying the DC bias in the same way as IM C6500/C8000.
For Y/M/C colors, the toner is developed with the RP (Return Pulse) development method. The toner on the surface of the drum is made level by applying the return bias as shown below, so that the color/density unevenness problem, which appears at the same interval as the drum circumference, is improved.



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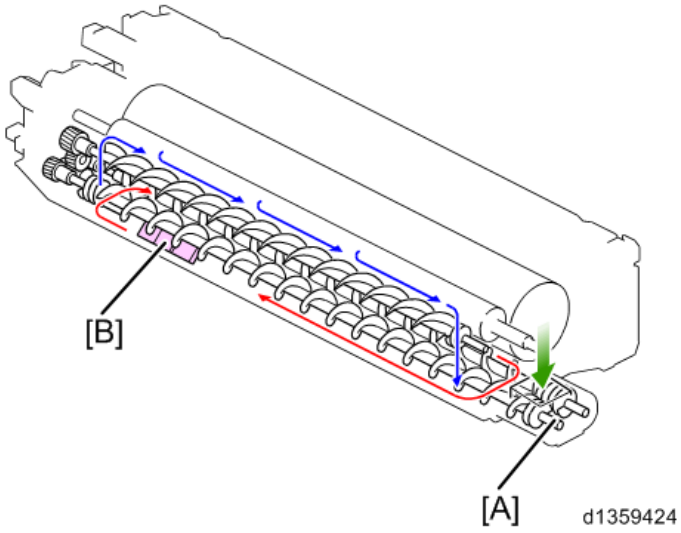
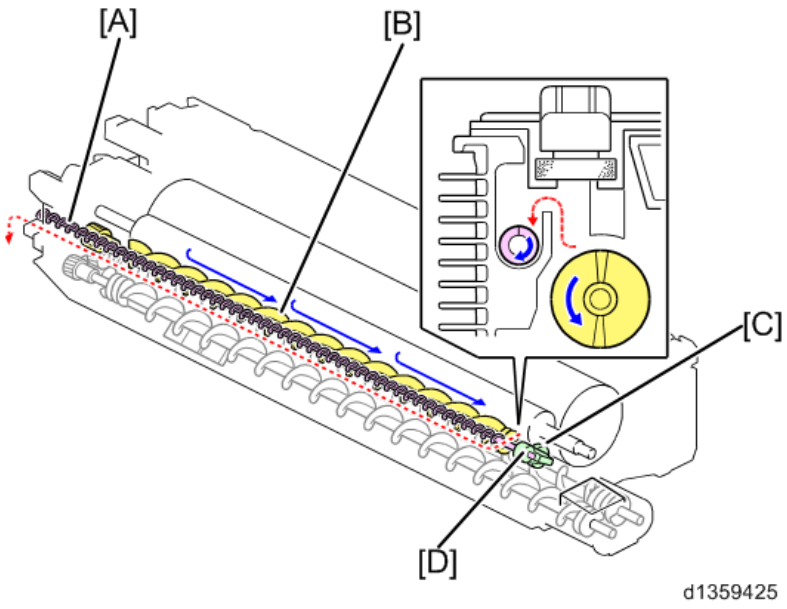
Toner Density

The TD sensor (S46) [B] installed below the left transport auger [A] detects the density of the developer mixture.



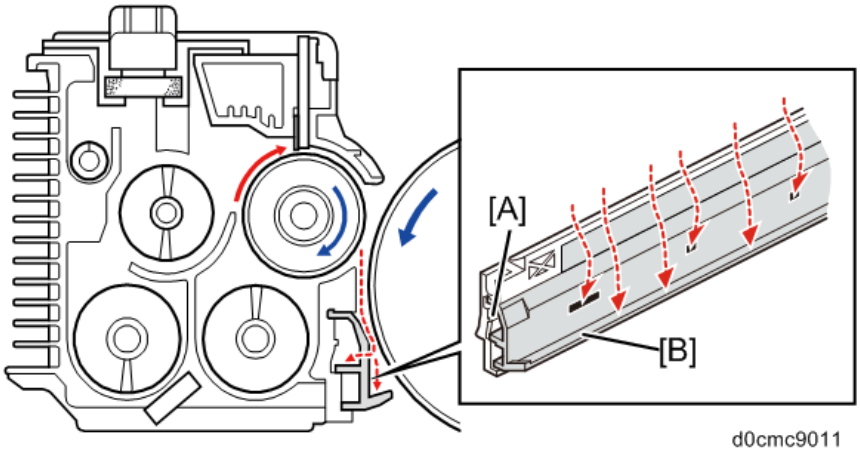
Developer Turnover

In this pre-mixed development system, toner and developer are supplied to the development unit.
If too much developer is supplied to the development unit, the extra amount of developer is discharged from the rear.
The cam [C] attached to the shaft of the upper transport auger [B] moves the lever [D] in order to rotate the developer collection coil [A] that discharges developer.



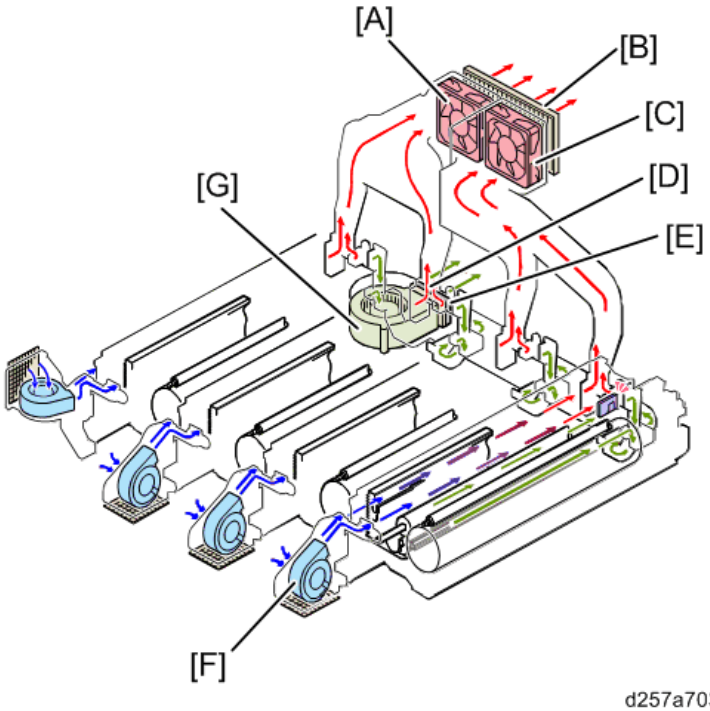
Dust Collection

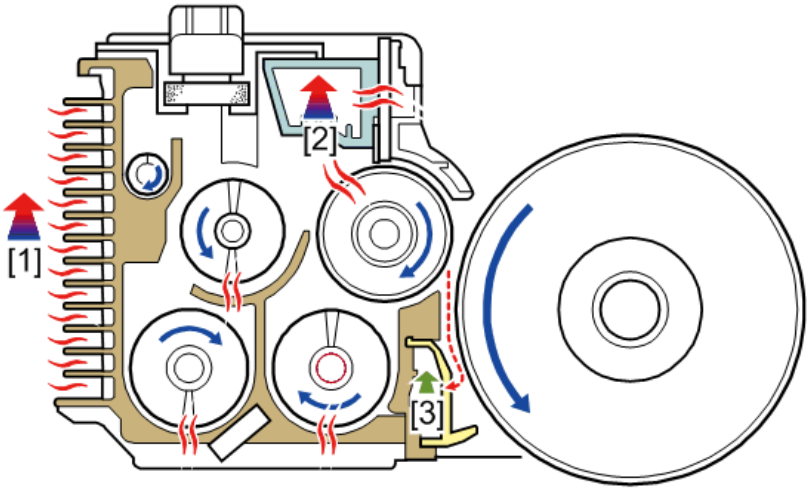
The spill duct [A] and the toner catcher [B] prevent toner scattering and developer leaks. The spill duct has holes that take scattered toner in with a fan ([F] in the drawing for the next section). The toner catcher under the spill duct receives scattered toner that cannot be taken in by the duct. The toner catcher must be cleaned every 300K.



Ventilation

To remove dust and ozone from air going through the charge roller unit and expel it from the machine, the development intake fan (FAN2) [F] on the front of each PCDU blows air in, and the development exhaust fan (FAN20) (left) [A], the development exhaust fan (FAN20) (right) [C], and the ozone exhaust fan (FAN17) [G] expel it. The ozone exhaust fan (FAN17) [G] has a dust filter [D] and an ozone filter [E], and the development exhaust fan (FAN20) (left) [A] and the development exhaust fan (FAN20) (right) [C] have a dust filter [B].





[1]	Air supplied from the development intake fan (FAN2) [F] and exhausted from the development exhaust fan (FAN20) (left) [A] or the development exhaust fan (FAN20) (right) [C]
[2]	Air supplied from the development intake fan (FAN2) [F] and exhausted from the development exhaust fan (FAN20) (left) [A] or the development exhaust fan (FAN20) (right) [C]
[3]	Air drawn into the hole of the spill duct and exhausted from the ozone exhaust fan (FAN17) [G]

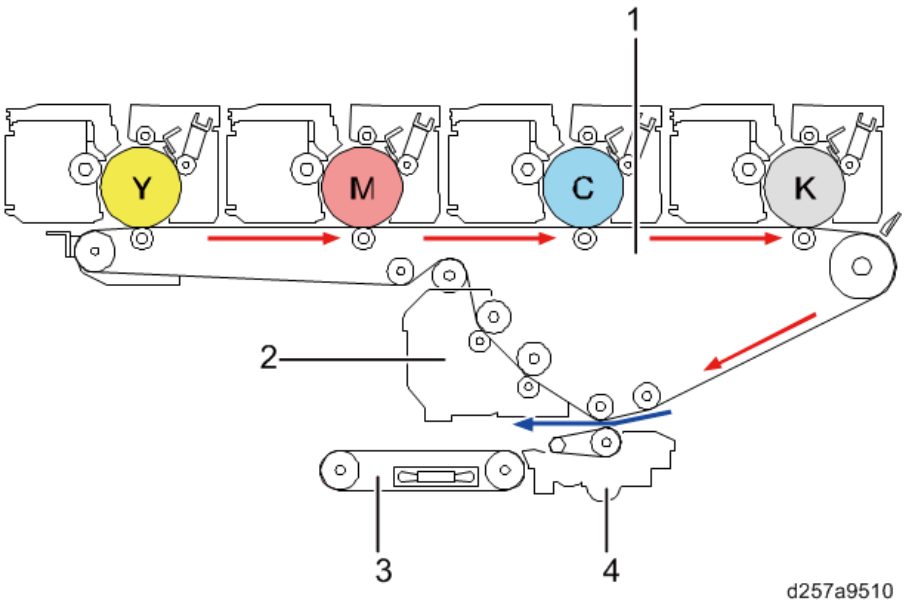
The machine prevents the following problems by expelling ozone around the PCDU.

- Uneven image density caused by ozone
- Toner adhesion caused by the increase in temperature
- Toner scattering
- Background stains caused by the increase in drum temperature
- Deterioration of the developer

Image Transfer Belt (ITB) Unit

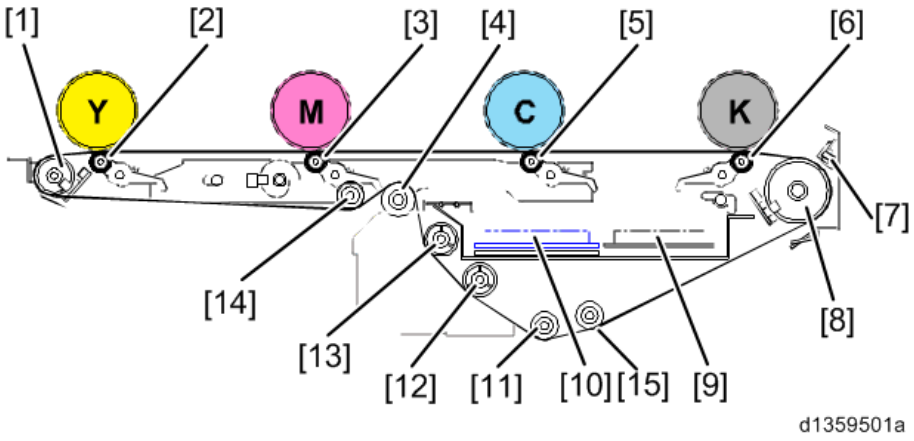
Mechanism Descriptions

An image that is transferred from the drum to the ITB is carried to the paper transfer area by the ITB. The carried image is transferred to paper in the paper transfer belt unit, and then the paper with the image is separated from the ITB. The separated paper is transferred to the fusing unit through the paper transport belt unit.



No.	Description	No.	Description
1	Image Transfer Belt Unit	3	Paper Transport Belt Unit
2	ITB Cleaning Unit	4	Paper Transfer Belt Unit

Component Layout



1	ITB Driven Roller	9	Transfer Power Pack/Separation Power Pack (PCB2)*1
2	Image Transfer Roller (Y)	10	AC Transfer Power Pack (Pro C5300S/Pro C5310 only)

3	Image Transfer Roller (M)	11	ITB Bias Roller
4	Tension Roller	12	ITB Cleaning Blade Counter Roller
5	Image Transfer Roller (C)	13	ITB Lubricant Blade Counter Roller
6	Image Transfer Roller (K)	14	Back-up Roller
7	ID/MUSIC Sensors (S2)	15	Transfer Entrance Roller*2
8	ITB Drive Roller		

*1:

Pro C5300S/C5310S: Power packs used for Pro C5300S/C5310S only (High pressure output is improved)

IM C6500/C8000: Power packs that has been used for MP C6503/C8003

*2:

Pro C5300S/C5310S: Resinous roller used for Pro C5300S/C5310S only

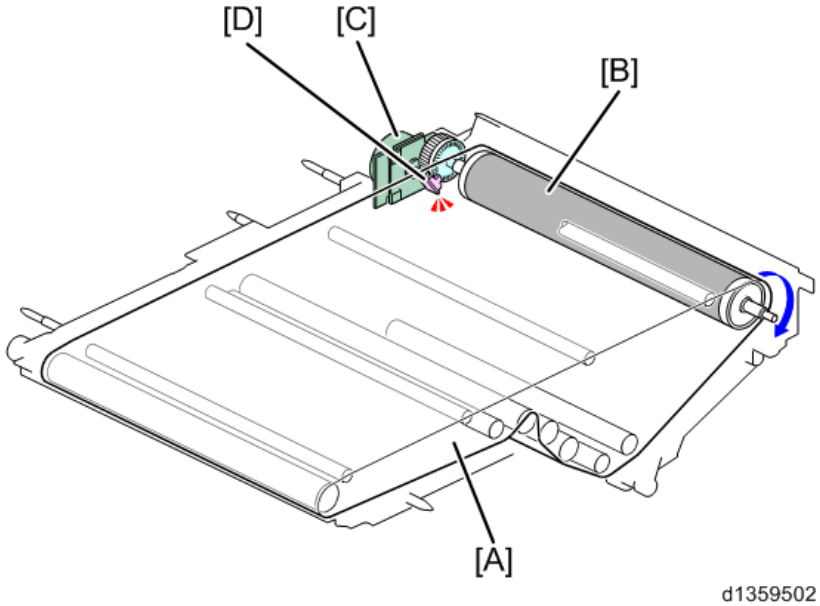
IM C6500/C8000: Metal roller that has been used for MP C6503/C8003 and Pro C5200S/C5210S

Mechanism Details

Drive

The ITB [A] is driven by the ITB motor (M2) [C] through a gear and the ITB drive roller [B].

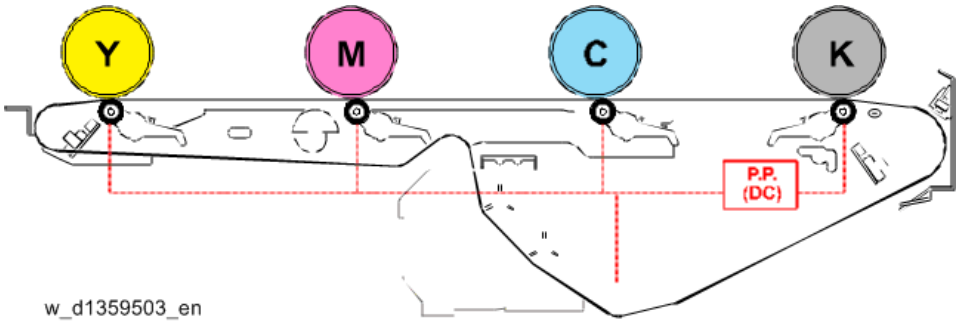
The ITB drive shaft encoder sensor (S8) [D] detects the speed of the ITB motor (M2).



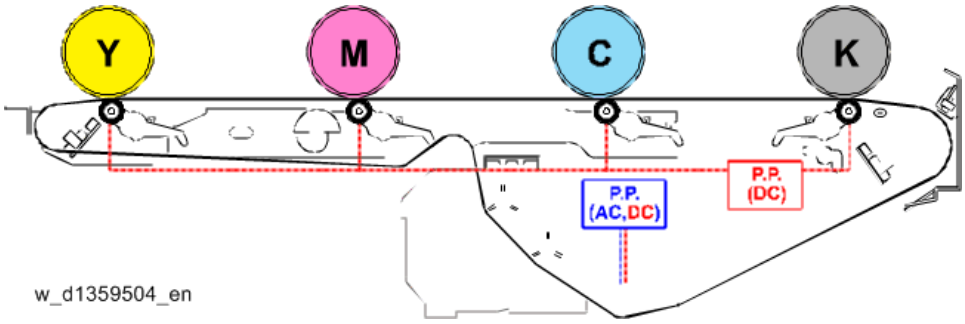
Transfer Bias

Bias is applied to the back of the ITB through each image transfer roller. A negative bias is applied to the ITB bias roller in order to improve image transfer to damp paper (repulsive transfer method) The power pack installed in the ITB unit supplies each bias.

Only Pro C5300S/C5310S has the AC/DC transfer method. Toner transfer to paper that has indentations is improved by switching alternately between DC transfer and AC transfer.



Pro C5300S/C5310S



ITB Contact / Separation

The ITB is separated from the color drums during black-and-white printing in order to prevent color drum (PCU) degradation.

In a black-and-white / color mixed job, the ITB separates from the color drums for black pages.

In black-and-white printing, the Y, M, and C drums (color drums) do not contact the ITB.

The ITB contacts only the K drum (black) in the default position. In color printing, the ITB [C] is pushed up by the ITB lift motor (M17) [A] through the cam [B] in order to contact the color drums. In black-and-white printing, only the K drum contacts the ITB. The ITB lift sensors (S10) detect contact/separation status.

For color printing after black-and-white printing, black-and-white printed paper exits the ITB unit, and then the ITB lift motor (M17) [A] turns on and pushes up the ITB in order to contact the ITB against the color drums (feed timing is controlled to make the interval between the sheets longer).

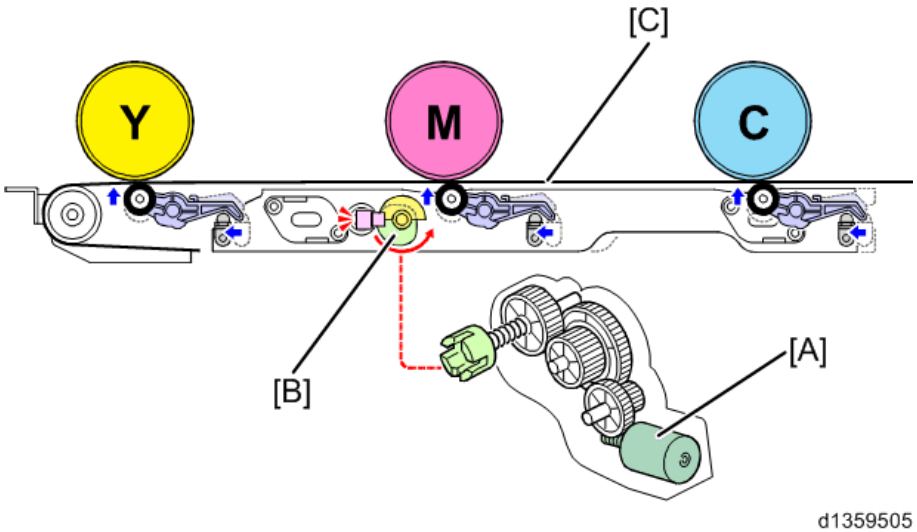


Image Transfer Speed / Belt HP

The feedback control of ITB speed is done during black-and-white printing, color printing, and MUSIC operation in order to improve color registration.
The ITB drive shaft encoder sensor (S8) [C] attached to the ITB drive shaft monitors the rotation speed of the ITB motor (M2). The ITB driven shaft encoder sensor (S9) [B] attached to the ITB driven roller shaft monitors the rotation of that roller. Readings from both encoders are used to control the speed of the ITB motor (M2). This process is known as CVEC (see below for more details).
The ITB HP sensor (S1) [A] detects the home position of the ITB.

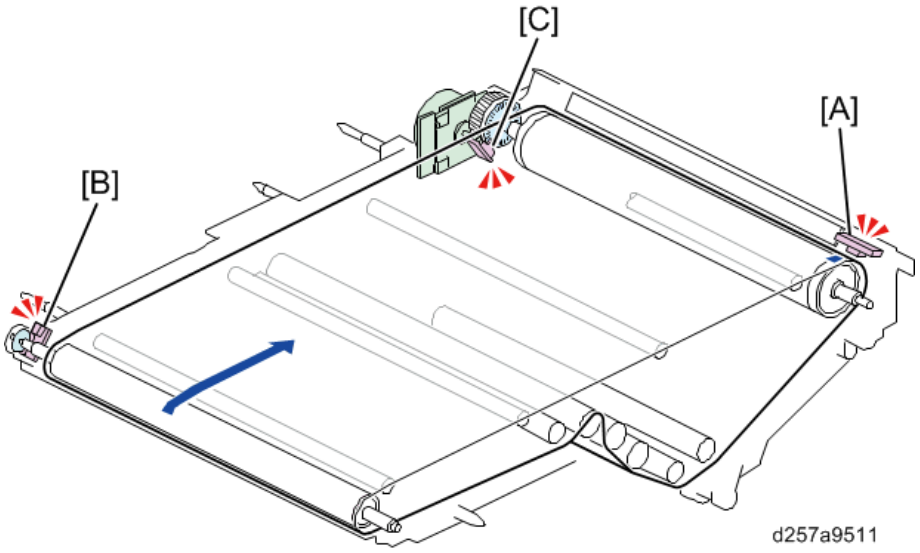
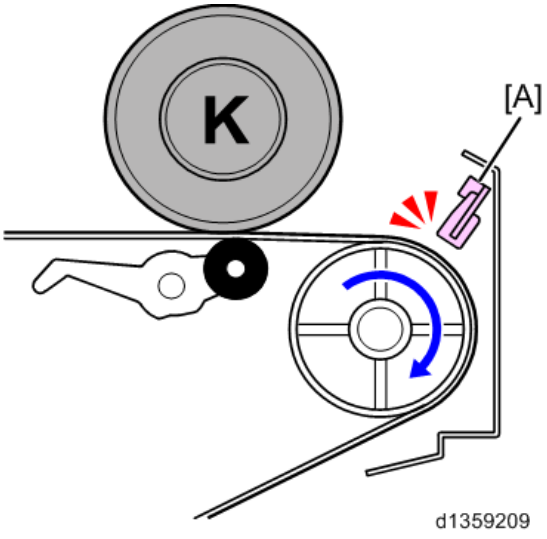


Image Location Correction

To prevent color registration errors, the machine makes a pattern on the ITB and reads it with the ID/MUSIC sensor (S2) [A] that is installed near the drive roller of the ITB.

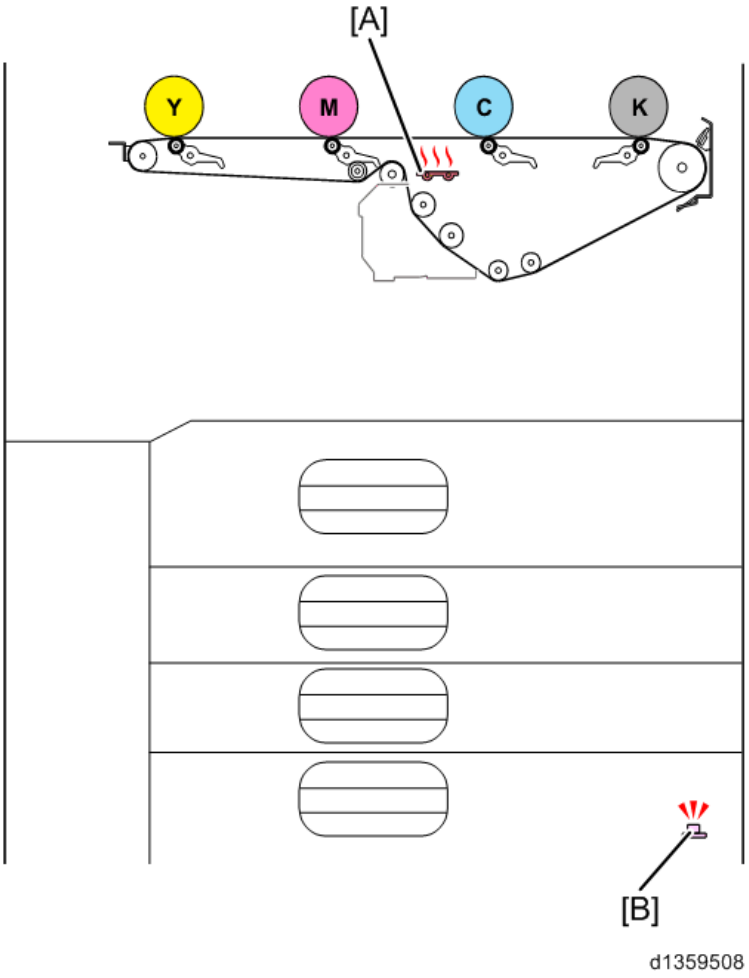


Thermal Control

The anti-condensation heater (H1) [A] prevents condensation from forming on the ITB. It turns on when

the main power switch is turned off.

The temperature/humidity sensor (S97) [B] is on the bottom of the machine (under the lowest PFU). It monitors the temperature and humidity inside the machine.



CVEC (Compensation function of belt speed Variation of Encoder roller Cycle)

CVEC (Compensation function of belt speed Variation of Encoder roller Cycle) is a technology designed to stabilize the positioning of the belt and control the speed fluctuation of the ITB.

In many older models, an encoder monitors the speed of the driven roller. But errors in speed detection could occur because of eccentricities in the encoder or vibrations of the roller shaft. Also, the conventional machines reduce color deviation by relating station pitches with the circumference of a driven roller, but it is difficult to eradicate the occurrence of belt speed fluctuation and position deviation completely.

In CVEC technology, two encoders control the speed of the ITB. From the difference between the detected values from the encoders on the drive roller and on the driven roller, the speed fluctuation of the driven roller is calculated. From this, the phase amplitude of the driven roller that affects the fluctuation rate is calculated. Then the ITB motor (M2) is controlled to counteract the phase differences. With CVEC, fluctuation in speed is reduced by more than half.

CVEC-related SC codes are shown below (Logging only)

SC Code	SC Name
SC445-01	ITB Control Abnormal : Driven Axis FB
SC445-02	ITB Control Abnormal : Driven Axis Eccentricity Adjustment Control
SC445-03	ITB Control Abnormal : ITB Control Abnormal : Dancing Control

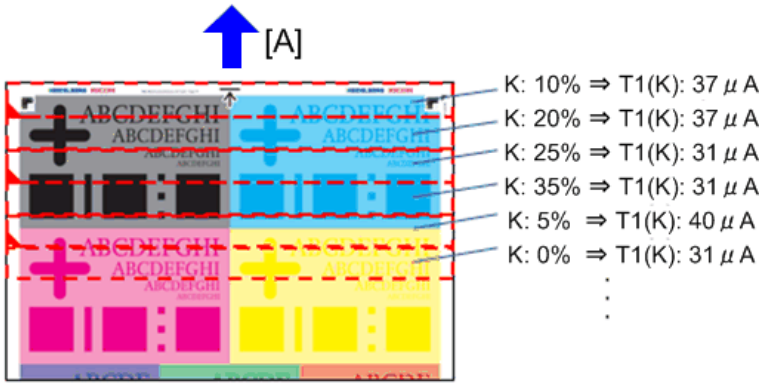
See “Troubleshooting” for finding possible causes and countermeasures.

Image Transfer Feed Forward Controller

Descriptions

This machine is equipped with the image transfer feed forward controller to correct precisely transfer current and reduce variations in image transfer properties on the page caused by different image patterns (variations in image area ratio).

To correct ITB current (K) and PTR current, the image transfer feed forward controller divides the image pattern along the direction of sub scan at constant intervals, calculates the image area ratio of each area from pixel information of each color, and then optimizes image transfer properties in the image area ratio of each area as shown below.



[A]: Feeding Direction

Related SP codes

SP	Name	Explanation
2-750-001	Transfer FF Ctll: Select	On/off settings for the image transfer feed forward controller
2-751-XXX 2-752-XXX	ITB K: FF Ctl Coeff	The image transfer feed forward controller parameter for the image transfer belt unit (K)
2-761-XXX 2-762-XXX 2-764-	PTR: FF Ctl Coeff	The image transfer feed forward controller parameter for the paper transfer belt unit

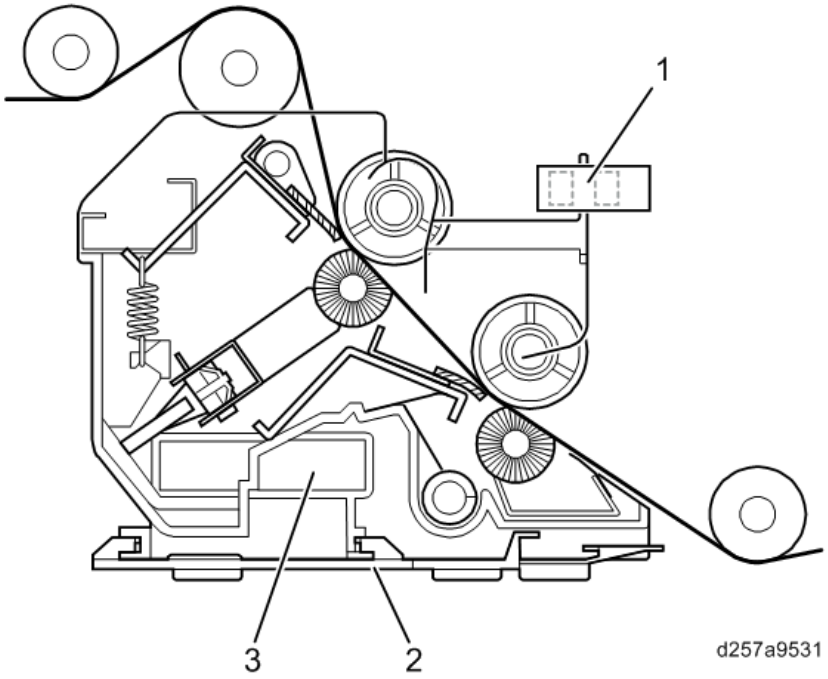
SP	Name	Explanation
XXX 2-765- XXX 2-766- XXX 2-767- XXX 2-768- XXX 2-769- XXX		

ITB Cleaning Unit

Mechanism Descriptions

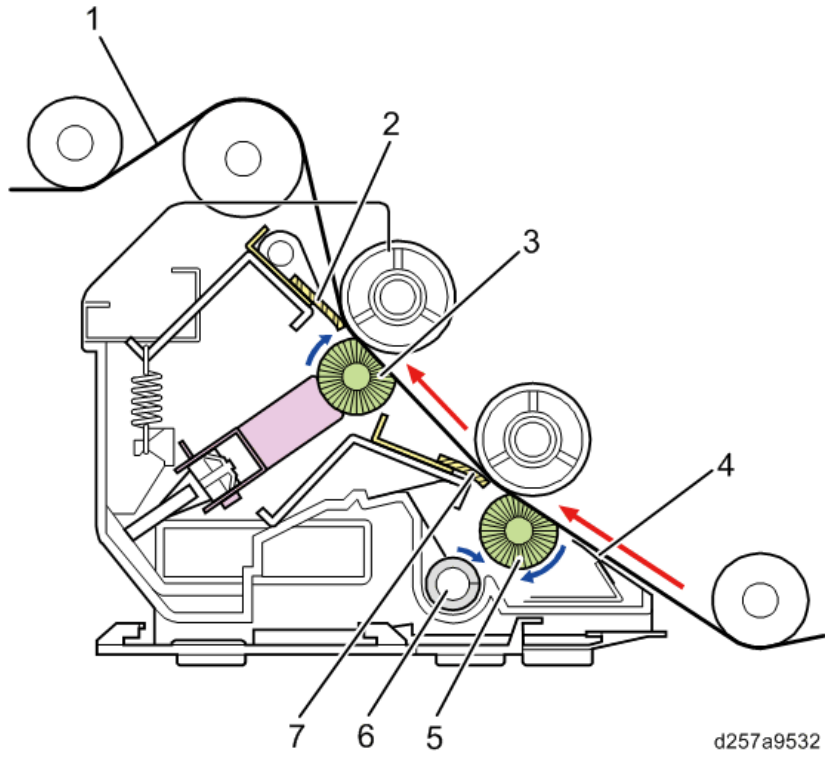
Component Layout

Front View



1	ITB Cleaning Unit Set Sensor (S7)
2	Cover
3	Duct

Cross-Sectional View



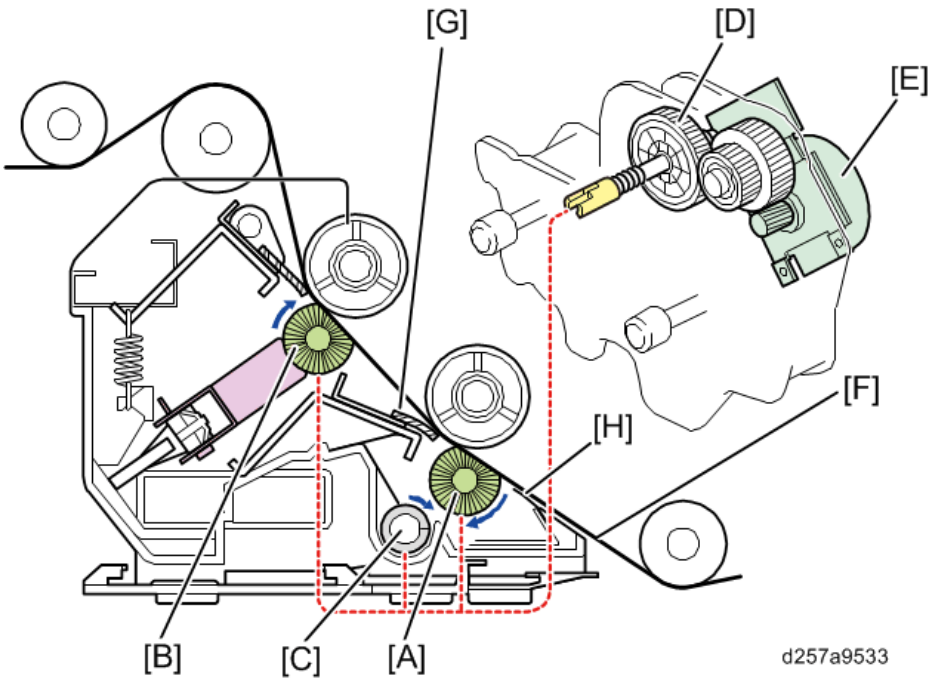
1	Image Transfer Belt (ITB)
2	ITB Lubricant Blade
3	ITB Lubricant Brush
4	Paper Dust Collection Scraper
5	ITB Cleaning Brush
6	Toner Collection Coil
7	ITB Cleaning Blade

Mechanism Details

ITB Cleaning Mechanism

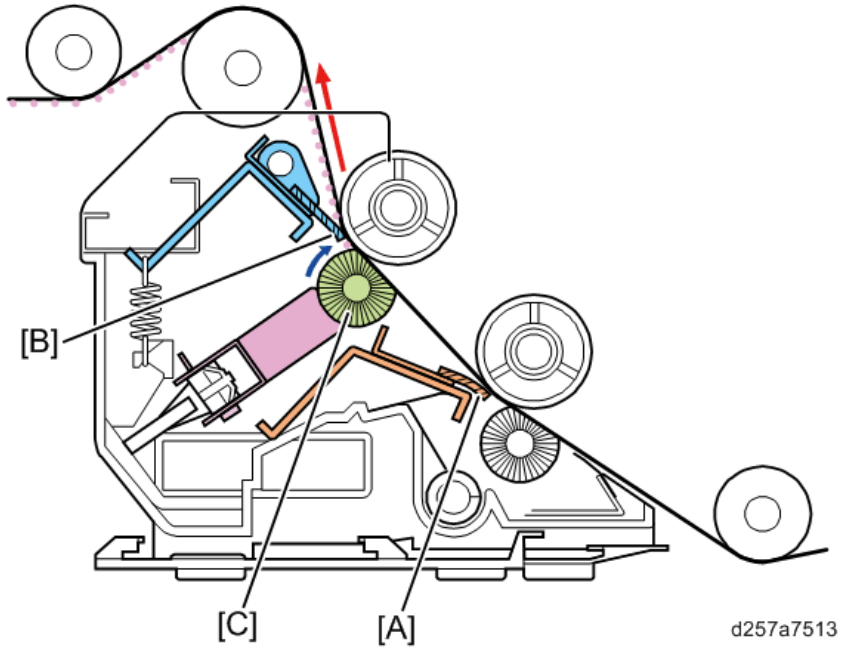
Belt Cleaning

The ITB cleaning brush [A], the ITB lubricant brush [B], and the toner collection coil [C] are driven by the paper transfer belt motor (M16) [E] through gears [D]. The ITB cleaning brush [A] removes paper dust on the ITB [F] and then the ITB cleaning blade [G] removes toner. The removed paper dust and waste toner are transported to the waste toner bottle by the toner collection coil [C]. The paper dust collection scraper [H] plucks paper dust and waste toner from the ITB cleaning brush, which sends it to the toner collection coil [C].



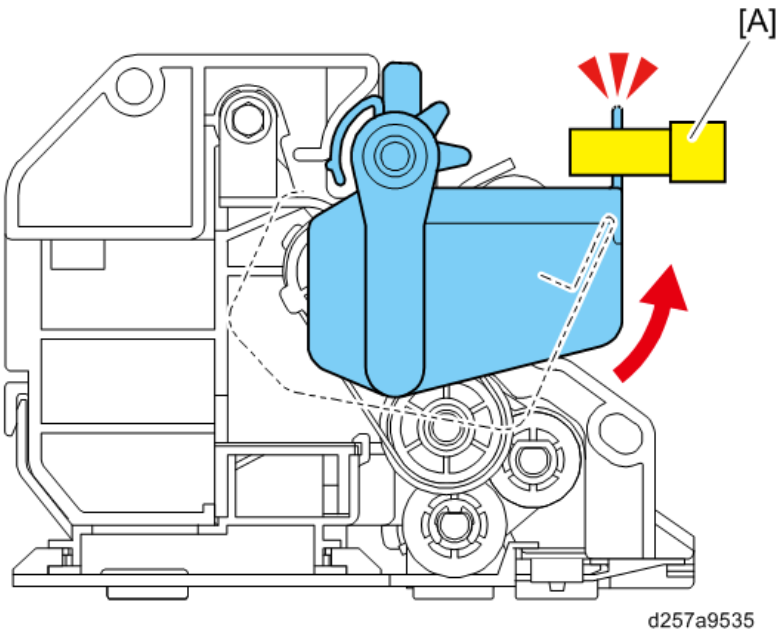
ITB Lubrication

The ITB cleaning blade [A] and the ITB lubricant blade [B] are installed against the belt movement (counter blade method). To enhance the efficiency of cleaning, lubrication is applied to the ITB by the ITB lubricant brush [C] and the ITB lubricant blade [B] spreads it evenly on the ITB.



ITB Cleaning Unit Set Sensor (S7)

When the ITB cleaning unit is inserted and the lock lever is turned, the ITB cleaning unit set sensor (S7) [A] detects the tip of the lever and the machine judges that the ITB cleaning unit is set.


[A]
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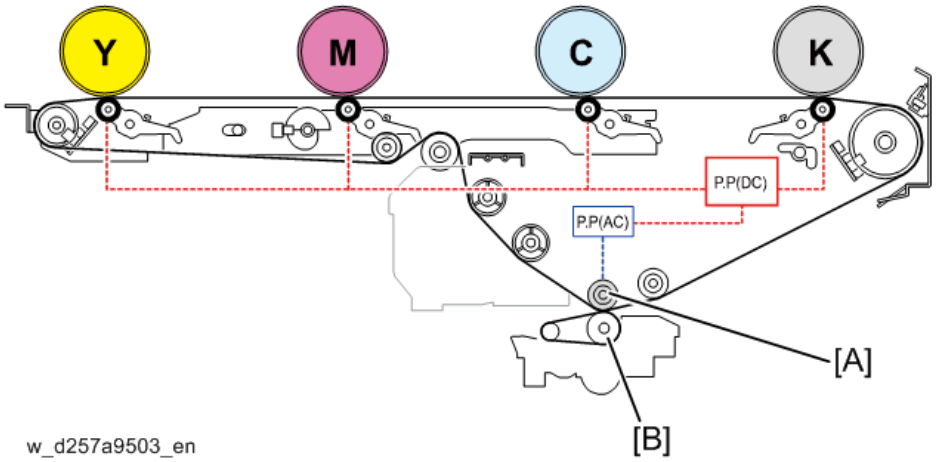
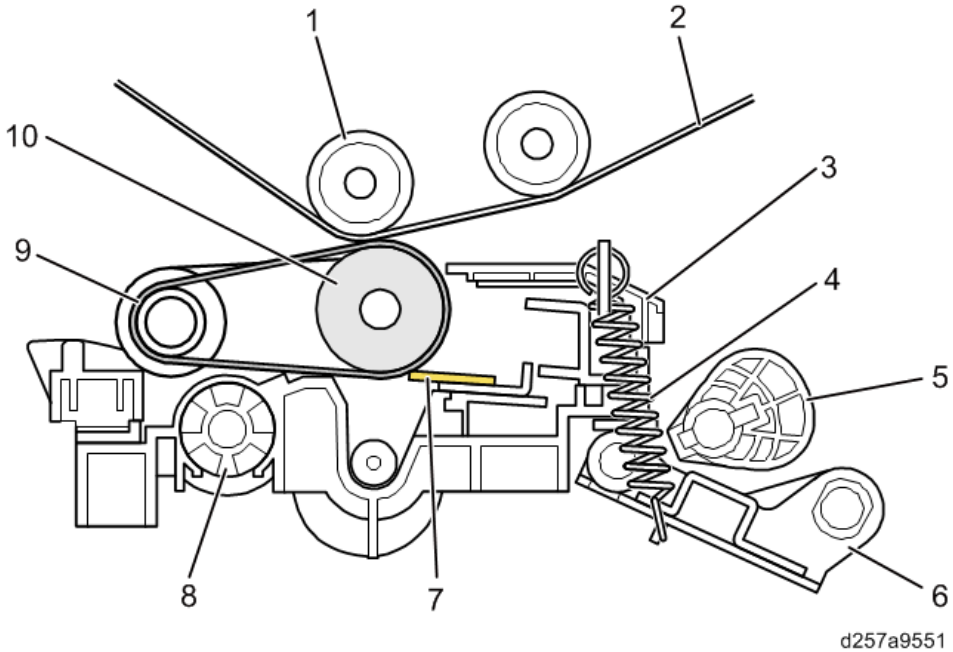
Paper Transfer Belt Unit

Mechanism Descriptions

The ITB unit has transfer power packs for belt transfer and paper transfer. These power packs supply charge to the image transfer rollers for each color and the ITB bias roller [A] (above the paper transfer roller) to transfer the image on the belt to the paper. The paper transfer roller [B] turns in accordance with the ITB bias roller [A].



Component Layout



1	ITB Bias Roller	6	Pressure Lever
2	Image Transfer Belt (ITB)	7	ITB Cleaning Blade
3	Entrance Guide	8	Paper Transfer Roller Drive Shaft
4	Pressure Spring (front / rear)	9	Paper Transfer Belt
5	Paper Transfer Roller Release Cam	10	Paper Transfer Roller

Mechanism Details

Paper Transfer Belt Lift

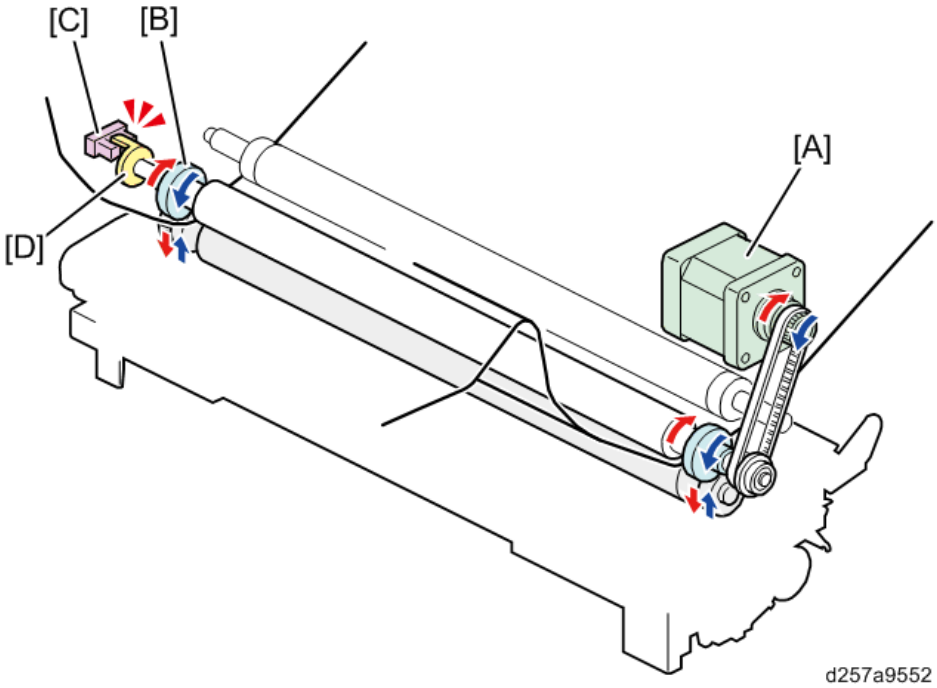
The ITB unit has a paper transfer belt lift control mechanism for the following reasons (this mechanism moves the ITB into contact with the paper transfer belt or separates them by a small distance, while pressure is applied to the paper transfer belt unit).

1. To secure paper transfer efficiency by preventing the ITB bias roller from becoming dented, which may result from the paper transfer belt and the ITB being always in contact.
2. To suppress the shock occurred when the paper enters the paper transfer section. (This machine is equipped with the shock jitter cancel mode. The state of paper transfer belt is shifted from the separated state to the contact state when the paper reaches the paper transfer section.)

Control Specifications

1. General

   The paper transfer belt separation motor (M1) [A] drives the cam [B] of the ITB bias roller. The paper transfer belt separation sensor (S11) [C] detects the actuator [D]. With this sensor [C], the machine judges whether the paper transfer belt is in contact with the ITB or not. The detected result is fed back to paper transfer belt lift control.

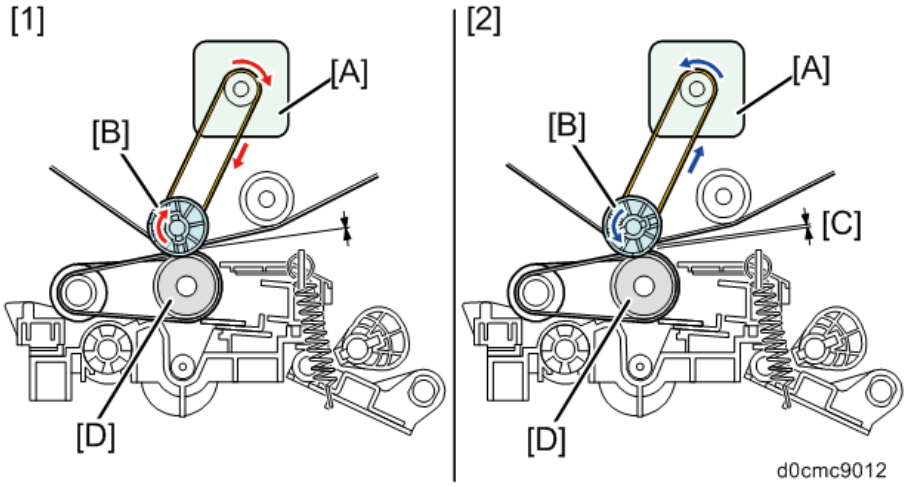


   As shown below, The paper transfer belt separation motor (M1) [A] rotates clockwise or counterclockwise in order to rotate the bias roller cam [B].

   [1]: When the paper transfer belt separation motor (M1) [A] rotates clockwise, the short diameter part of the bias roller cam [B] contacts with the bearing [D]. The paper transfer belt contacts with the ITB in this state.

   [2]: When the paper transfer belt separation motor (M1) [A] rotates counterclockwise, the long diameter part of the bias roller cam [B] contacts with the bearing [D]. The paper transfer belt is

separated from the ITB in this state.



Note

You can find whether the paper transfer belt is in contact or separated by seeing the direction of the flat face of the ITB bias roller shaft on which the bias roller cam [B] is attached.

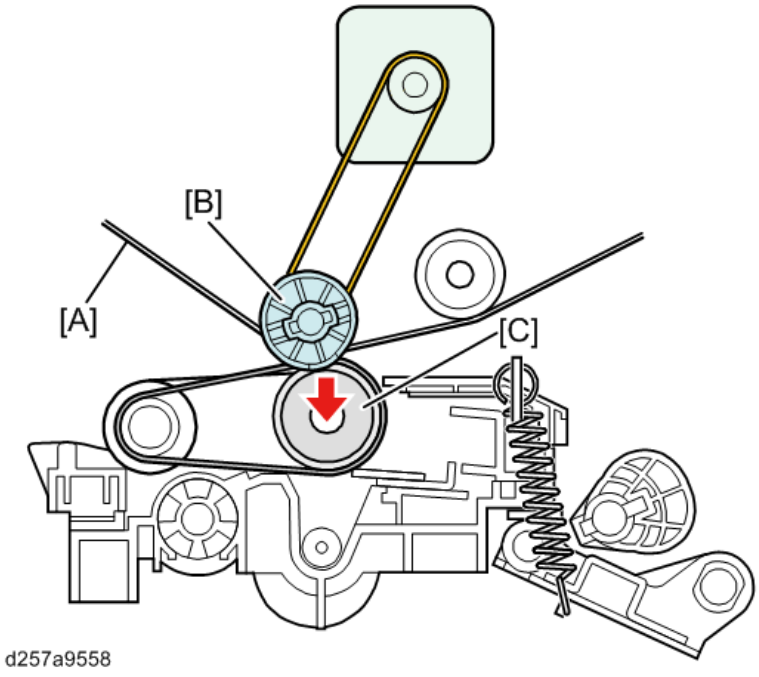
- [1]: Contact state → The flat face of the shaft points to the upper left.
- [2]: Separated state → The flat face of the shaft points to the lower right.

In the "separated" state, the separation space [C] (indicates the space between the paper transfer belt and the ITB) depends on paper thickness. The thicker paper, the larger separation space. The maximum length is 1.2 mm.

2. The direction of the ITB bias roller cam

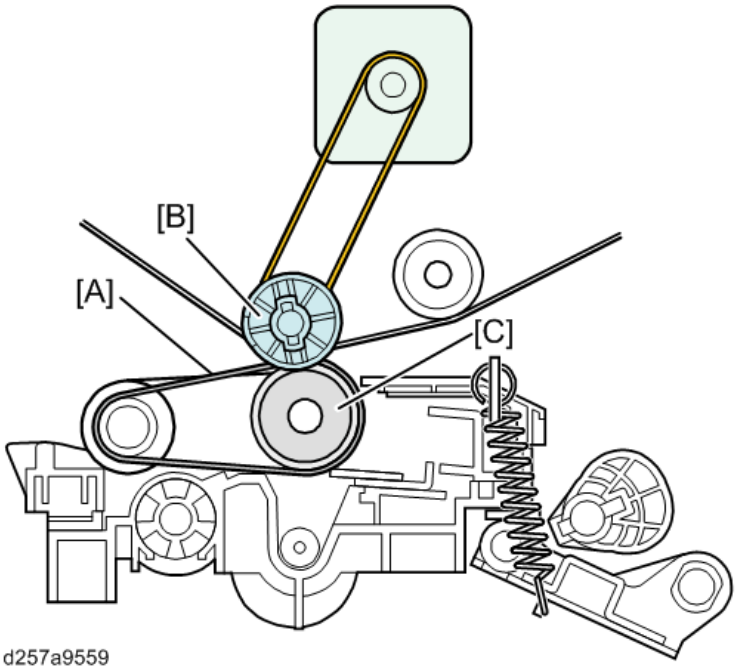
Separated state

The ITB bias roller cam [B] (bulging part) pushes the bearing of the paper transfer roller [C] down to slightly separate the paper transfer belt from the ITB [A].



Contact state

The ITB bias roller cam [B] (flat part) contacts the bearing [C]. In this state, the paper transfer belt [A] moves up slightly.



3. Sensor State

	State of Paper Transfer Belt
Interrupted	Contact
Not interrupted	Separated (Home position)

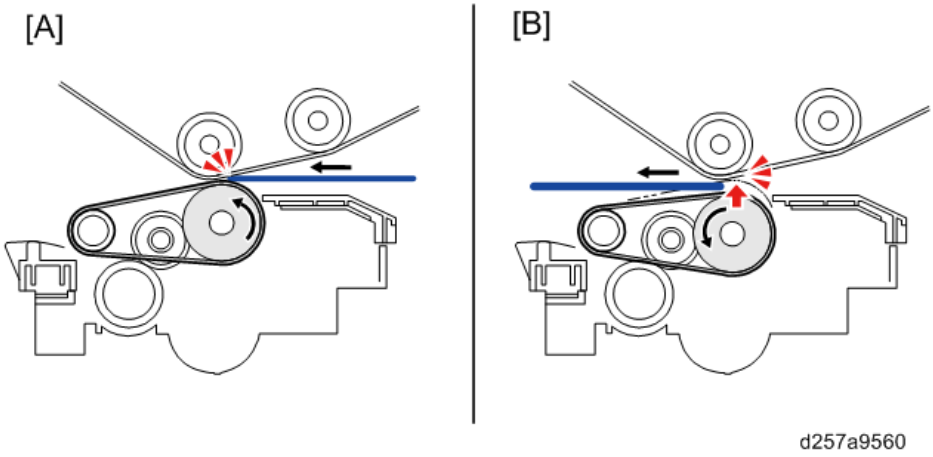
4. Contact / Separated State List

The list below shows when "contact / separation" operation is performed:

Machine State		Paper Transfer Belt State	
		Pro C5300S/C5310S	IM C6500/C8000
Ready		Separated	
While printing	Color	Contact	
	BW	Contact	
Other States	Process Control	Separated	Contact
	MUSIC	Separated	Contact
	Forced Toner Consumption	Separated	Contact
	Lubrication Mode	Contact	

5. Shock Jitter Cancel Mode

When the paper enters the nip between the ITB and the paper transfer belt [A] and when the paper exits the nip between the ITB and the paper transfer belt [B], shock will occur.



This can cause jitter on the printout. To cancel this shock jitter, the ITB bias roller is away from the paper transfer belt at the start, then the ITB bias roller contacts the paper transfer belt after the leading edge arrives at the nip, and moves away before the trailing edge passes the nip.
With the default setting, however, shock jitter may occur when thin but hard paper goes between the ITB and the paper transfer belt. To prevent this, it is possible to configure the contact/separation timing for each paper type in SP1-023-001 to 099 (Shock Jitter Cancel). If the paper is custom paper, the contact/separation timing can be set for each paper type using IMSS (Pro C5300S/C5310S only).

Shock Jitter Cancel Mode: SP1-023-001 to 099

Turn the Shock Jitter Cancel Mode on/off and turn the paper transfer belt depressurization mode on as required for each paper type to reduce shock jitter at the leading edge and the trailing edge.
Default value:
All paper types except coated paper: Shock Jitter Cancel Mode is OFF for Paper Thickness 1 to 5 and ON for Paper Thickness 6 to 9
Coated paper: Shock Jitter Cancel Mode is OFF for Paper Thickness 1 to 4 and ON for Paper Thickness 5 to 9
Values of SP1-023-001 to 099

Digit	Function	Value	Details
Thousands digit	Not used. Always set it to "0".	0	-
Hundreds digit	Switches the shock jitter cancel mode and paper transfer belt depressurization mode on/off. Always set it to 0, 1, or 2.	0	Shock jitter cancel mode: OFF. The belts are kept in contact while paper passes the nip area.
		1	Shock jitter cancel mode: ON. The "contact / separation" operation is performed according to the following SP settings:

Digit	Function	Value	Details
			- SP1-021-001 to 099 (Paper Transfer Belt Cont Timing): Contact timing - SP1-022-001 to 099 (Paper Transfer Belt Set Timing): Separation timing
		2	Paper transfer belt depressurization mode: ON. The nip pressure of the paper transfer belt is lowered during printing. The nip pressure can be adjusted using SP1-025-001 to 099 (Paper Transfer Belt Cont: Depressure). The "contact / separation" operation is not performed between sheets. The nip pressure is kept in the lower state while paper passes the nip area.
Tens digit	Switches the speed at which the paper transfer belt comes into contact with the ITB. (*1) Always set it to 0, 1, 2, or 3.	0	High speed
		1	Middle speed 2
		2	Middle speed 1
		3	Low speed
Units digit	Switches the speed at which the paper transfer belt is separated from the ITB when Shock Jitter Cancel Mode is on. (*1) Always set it to 0, 1, 2, or 3.	0	High speed
		1	Middle speed 2
		2	Middle speed 1
		3	Low speed

*1 Switching between High speed, Middle speed 2, Middle speed 1 and Low speed is to be used when shock jitter at the leading edge and/or trailing edge cannot be improved by configuring the Contact Timing/Separation Timing/Pre-contact Movement of Paper Transfer/Paper transfer belt depressurization mode, which are explained below. The lower the speed, the less likely there will be jitter.

Contact Timing: You can adjust the contact timing when the shock jitter cancel mode (SP1-023-001 to 099) is set to "1 (ON)". Larger SP values mean slower contact timing. Shock jitter at the leading edge could diminish if you delay the contact timing. However, if the contact timing is delayed too much, transfer at the leading edge of the paper can be less effective, resulting in light-colored images.

- Standard Paper: SP1-021-001 to 099 (Paper Transfer Belt Cont Timing)

- Custom Paper (Pro C5300S/C5310S only): 072.Ppr Trns Gap: On Timing

Separation Timing: You can adjust the separation timing when the shock jitter cancel mode (SP1-023-001 to 099) is set to "1 (ON)". Smaller SP values mean an earlier separation timing. Shock jitter at the trailing edge could diminish if you make the separation timing earlier. However, if the separation timing is too early, transfer at the trailing edge of the paper can be less effective, resulting in light-colored images.

- Standard Paper: SP1-022-001 to 099 (Paper Transfer Belt Set Timing)
- Custom Paper (Pro C5300S/C5310S only): 073.Ppr Trns Gap: Off Timing

Pre-contact Movement of Paper Transfer: Adjust this item when there is shock jitter at the leading edge and/or trailing edge but you cannot improve the print quality by adjusting the contact timing (SP1-021-001 to 099) and/or separation timing (SP1-022-001 to 099). Larger SP values mean larger gaps between sheets. Larger gaps may reduce shock jitter at the leading edge and/or trailing edge. However, when the gaps are too large, transfer at the leading edge and/or trailing edge of the paper can be less effective, resulting in light-colored images.

- Standard Paper: SP1-024-001 to 099 (PaperIntervalSeparatePosition)
- Custom Paper (Pro C5300S/C5310S only): 074. Pre-contact Movement of Paper Transfer

Pressure Reduction Value: Adjust this item when there is shock jitter at the leading edge and/or trailing edge but you cannot improve the print quality by adjusting the contact timing (SP1-021-001 to 099), separation timing (SP1-022-001 to 099) and/or Pre-contact Movement of Paper Transfer (SP1-024-001 to 099).

When the hundreds digit of Shock Jitter Cancel (SP1-023-001 to 099) is set to "2", the nip pressure of the paper transfer belt is lowered during printing. This SP changes the paper transfer belt nip pressure.

Larger SP values mean lower paper transfer belt nip pressure, which may reduce shock jitter. However, when the pressure is too low, transfer at the leading edge and/or trailing edge of the paper can be less effective, resulting in light-colored images.

- Standard Paper: SP1-025-001 to 099 (PTR Cont: Depressure)
- Custom Paper (Pro C5300S/C5310S only): 075. Contact Movement of Ppr Trns in Low Pressure

Shock Jitter Cancel Mode

Setting Value of SP1-023-001 to 099			Custom Paper IMSS Settings "Shock Jitter Cancel Mode"
Hundreds digit	Tens digit	Units digit	
ON/OFF/Depressurization	Contact Speed	Separation Speed	
0	0	0	0
0	0	1	1
0	0	2	2
0	0	3	3
0	1	0	16
0	1	1	17

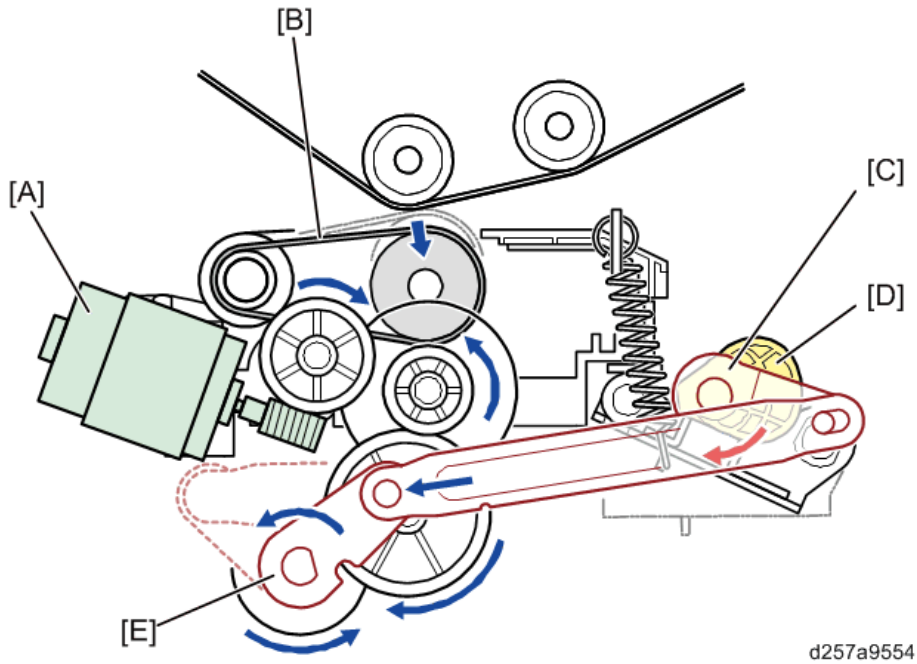
Setting Value of SP1-023-001 to 099			Custom Paper IMSS Settings "Shock Jitter Cancel Mode"
Hundreds digit	Tens digit	Units digit	
ON/OFF/Depressurization	Contact Speed	Separation Speed	
0	1	2	18
0	1	3	19
0	2	0	32
0	2	1	33
0	2	2	34
0	2	3	35
0	3	0	48
0	3	1	49
0	3	2	50
0	3	3	51
1	0	0	256
1	0	1	257
1	0	2	258
1	0	3	259
1	1	0	272
1	1	1	273
1	1	2	274
1	1	3	275
1	2	0	288
1	2	1	289
1	2	2	290
1	2	3	291
1	3	0	304
1	3	1	305
1	3	2	306
1	3	3	307
2	0	0	512
2	0	1	513
2	0	2	514
2	0	3	515
2	1	0	528
2	1	1	529
2	1	2	530
2	1	3	531
2	2	0	544

Setting Value of SP1-023-001 to 099			Custom Paper IMSS Settings "Shock Jitter Cancel Mode"
Hundreds digit	Tens digit	Units digit	
ON/OFF/Depressurization	Contact Speed	Separation Speed	
2	2	1	545
2	2	2	546
2	2	3	547
2	3	0	560
2	3	1	561
2	3	2	562
2	3	3	563

Paper Transfer Belt Release

The pressure of the paper transfer belt is released as follows when the drawer unit is withdrawn or inserted, so that it does not interfere with the image transfer belt unit.

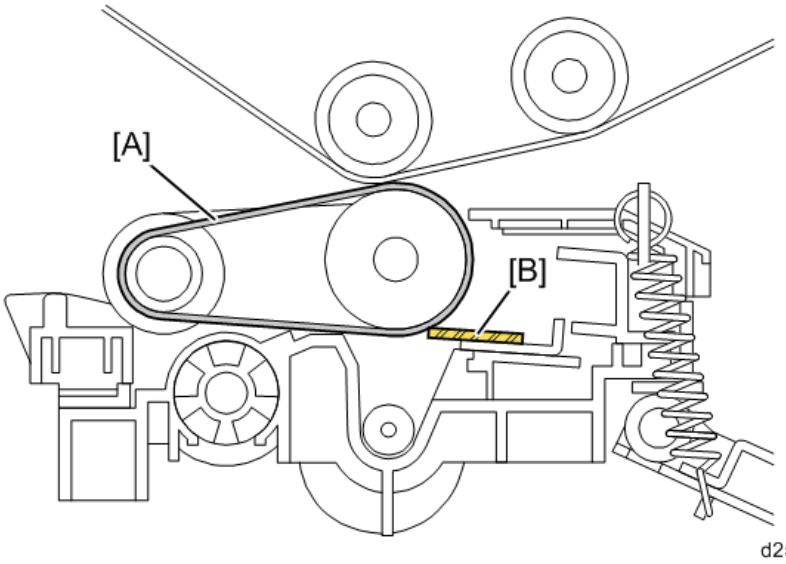
1. The drawer unit lock motor (M44) [A] rotates the link (drive) [E].
2. The link (drive) [E] moves the link (driven) [C].
3. The paper transfer belt release cam [D] moves and the paper transfer belt [B] is released (separated from the ITB).



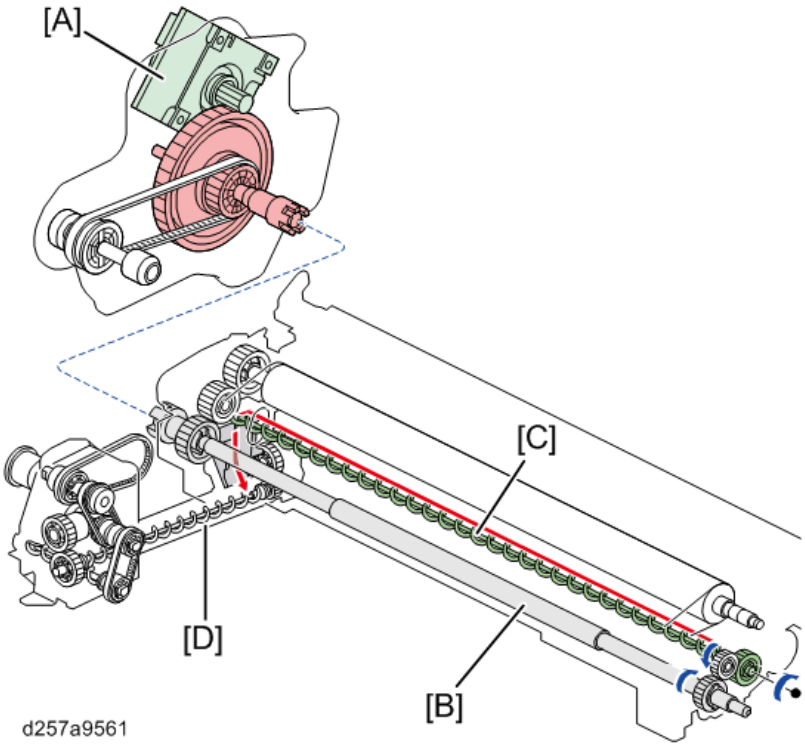
Note the difference between the effects of this motor and the paper transfer belt separation motor (M1) (described in the previous section). The paper transfer belt separation motor (M1) only moves the paper transfer belt a small distance from the ITB, to reduce shock jitter. The above mechanism moves the paper transfer belt completely away from the ITB.

Paper Transfer Belt Cleaning

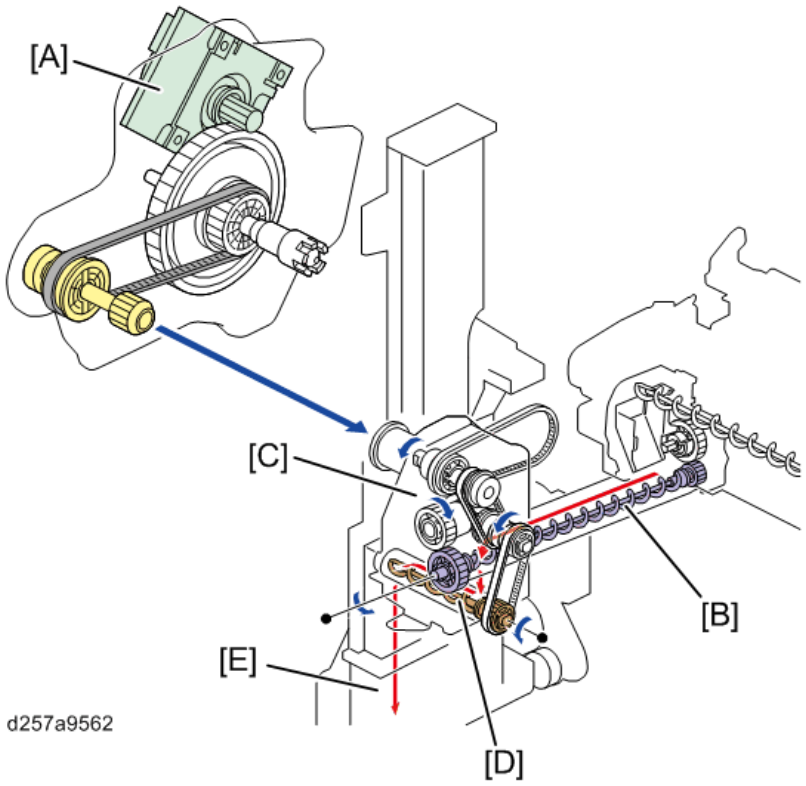
Toner on the paper transfer belt [A] is scraped off by the cleaning blade [B].



Toner that is scraped off the paper transfer belt is transported to the rear side [D] of the drawer unit by the transport coil [C] which is driven by the paper transfer belt motor (M16) [A] via the shaft [B].

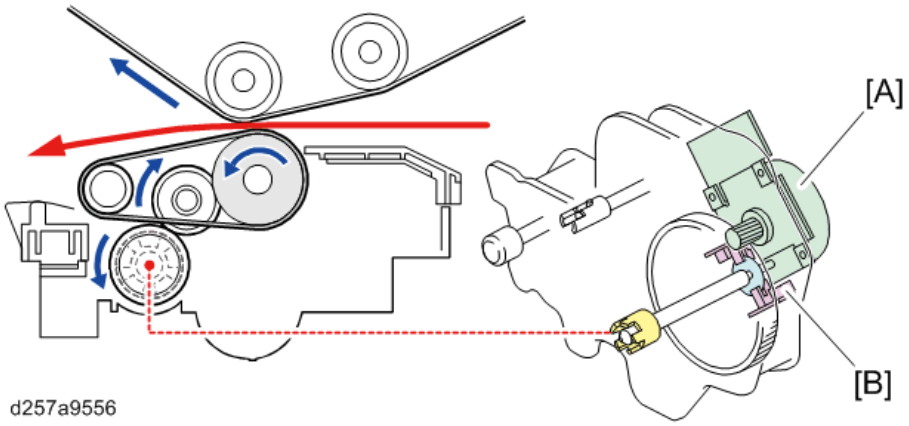


Toner that is transported to the paper transfer belt waste toner transport unit [C] at the rear of the drawer unit, is transported to the vertical waste toner path [E] by the transport coils [B] and [D]. Both of the transport coils [B] and [C] are driven by the paper transfer belt motor (M17) [A]. In the end, it is transported to the waste toner bottle with the waste toner from the drum cleaning unit and the used developer from the development unit through the vertical waste toner path [E].



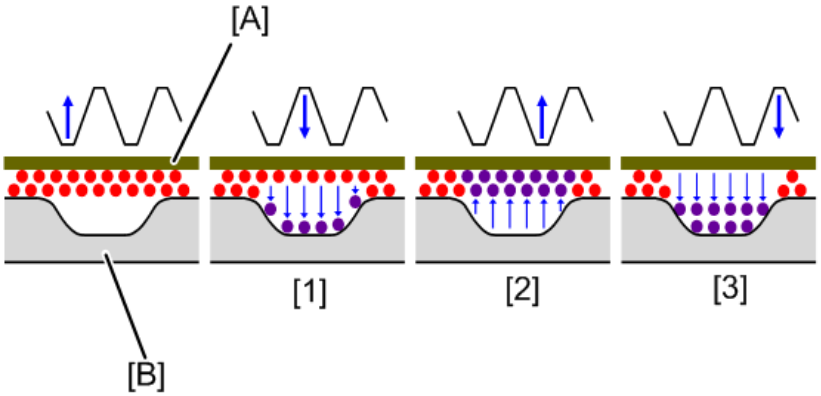
Paper Transfer Belt Drive

The paper transfer belt encoder sensor (S16) [B] detects the speed of the rotation for the feedback control to adjust the speed of the paper transfer belt.
The paper transfer belt motor (M16) [A] drives not only the paper transfer roller but also the ITB cleaning and the paper transport belt.



AC Transfer method (Pro C5300S/Pro C5310S only)

Pro C5300S/C5310S only: By changing the transfer method (DC or AC) alternately, toner transfer to paper that has indentations or or non-smooth plain paper is improved. You need to turn this feature on if you wish to use it. The way to turn it on is explained later.



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A	Image Transfer Belt (ITB)
B	Indentation (Paper Surface)

	Descriptions	Applied Current
1	A portion of the toner is transferred.	DC
2	Toner returns and contacts the toner remaining on the ITB, which affects the attachment state of this toner.	AC
3	After the toner attachment state changes, the toner is more likely to be transferred.	DC

This mechanism turns on in the following conditions shown below:

In Copy Mode

- The tray that is used is linked with a paper type registered in the paper library as requiring AC*.

In Printer Mode

- The tray that is used is linked with a paper type registered in the paper library as requiring AC*.
- The tray that is used is linked with a paper type registered in the paper library as requiring AC*. Then you use the driver to select a paper type that requires AC.

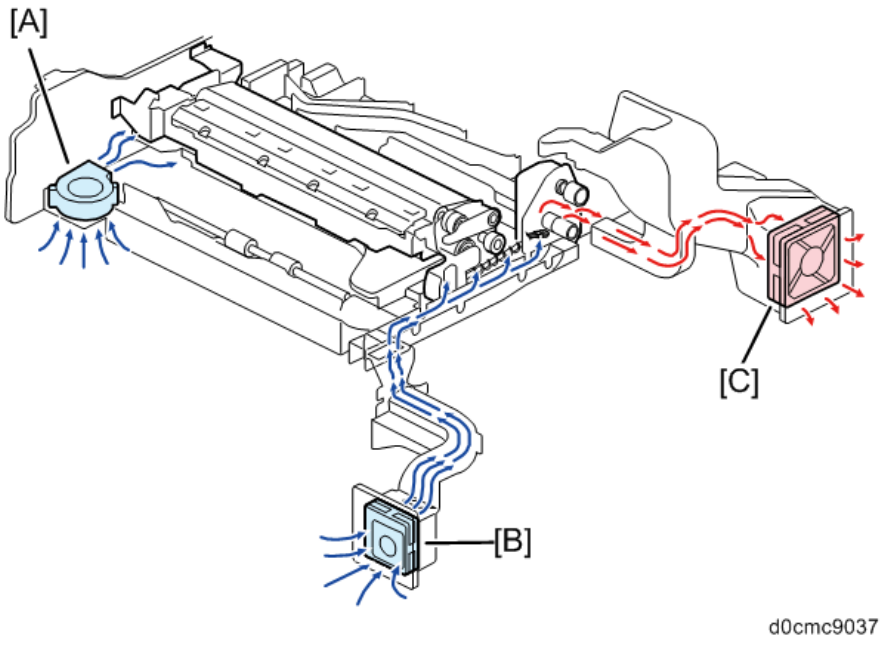
Note

- With SP2-850-101 to 999, you can also turn on/off AC application for each paper thickness.
- But if AC is applied to a paper type that is registered as not requiring AC, problems such as vertical streaks may occur.

Cooling Mechanism

The paper transfer belt cooling fan (FAN30) [A] and the paper transfer belt waste toner cooling fan (FAN6) [B] intake the external air to cool the paper transfer belt unit.

The paper transfer belt fusing exhaust fan (FAN16) [C] ejects heat.

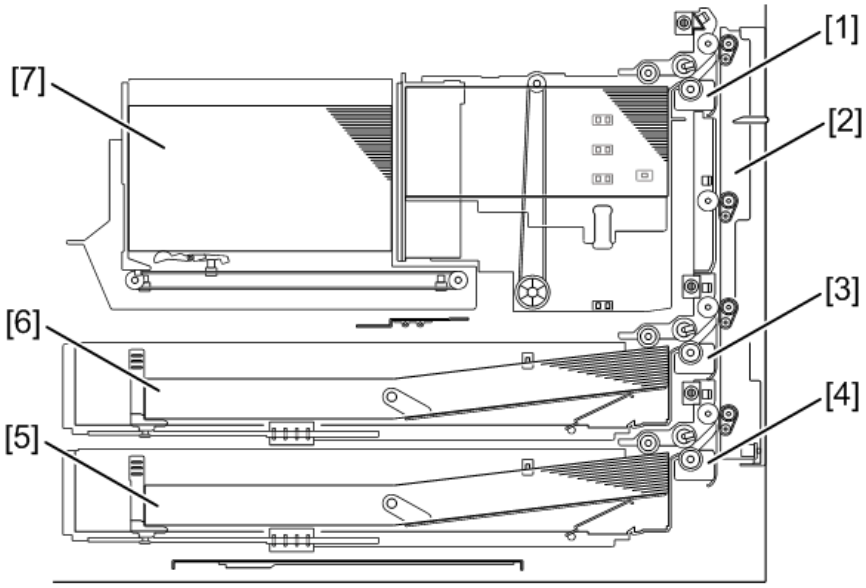

[A]
[B]
[C]
d0cmc9037

Paper Feed Unit

Mechanism Descriptions

Component Layout

The paper feed unit employs an FRR method that has a press-release function, with a hysteretic maintenance-free torque limiter. Each roller is driven by a DC motor.



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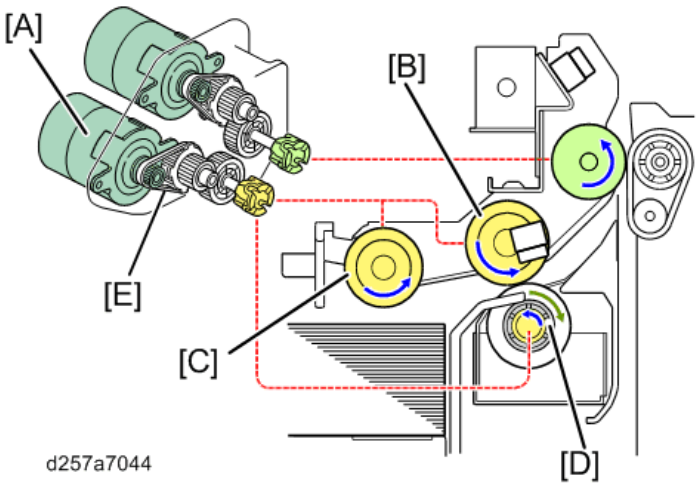
No.	Description	No.	Description
1	Paper Feed Unit for Tray 1	5	Tray 3
2	Vertical Transport	6	Tray 2
3	Paper Feed Unit for Tray 2	7	Tray 1 (Tandem Tray)
4	Paper Feed Unit for Tray 3		

Mechanism Details

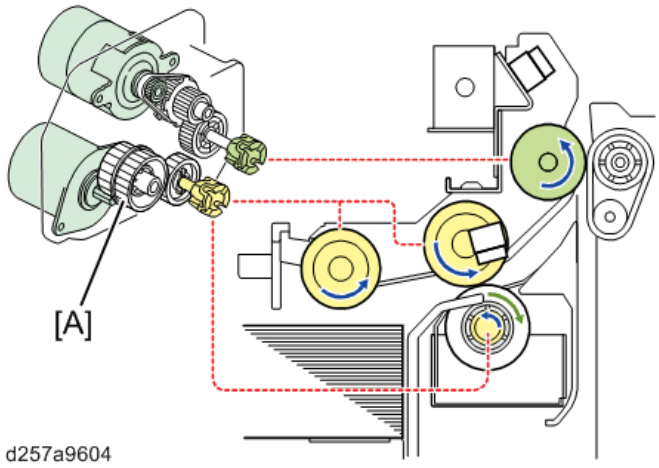
Bank

Feed/Separation

The paper feed motor (M56/M64/M66) [A] turns ON to drive the feed roller [B]. The feed roller rotates the pick-up roller [C] through the timing belt, and feeds the top sheet of paper. The paper feed motor also drives the separation roller [D], through the relay gear. The separation roller [D] rotates at the same time as the feed roller [B] due to the friction between the separation roller [D] and the feed roller [B]. The paper feed motor [A] drives the feed roller [B] via the timing belt [E].

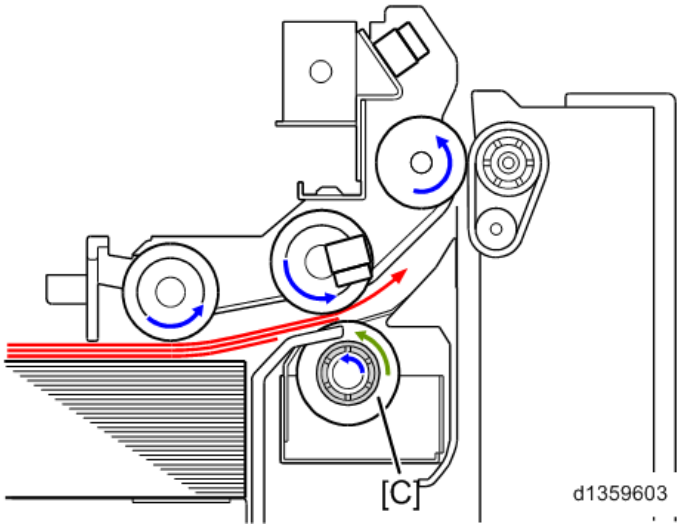


In the 2nd/3rd paper feed drive units of Pro C5300S/C5310S, the paper feed motor drives the feed roller via the gear [A] instead of the timing belt.



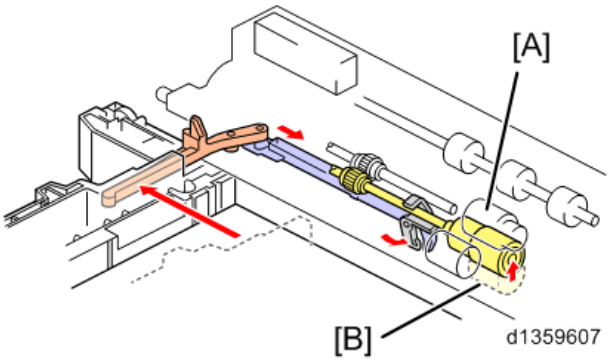
When two or more sheets of paper are fed, the separation roller [D] rotates in reverse to push back the lower sheet of paper to the tray.

The fed paper is transported to the registration roller.



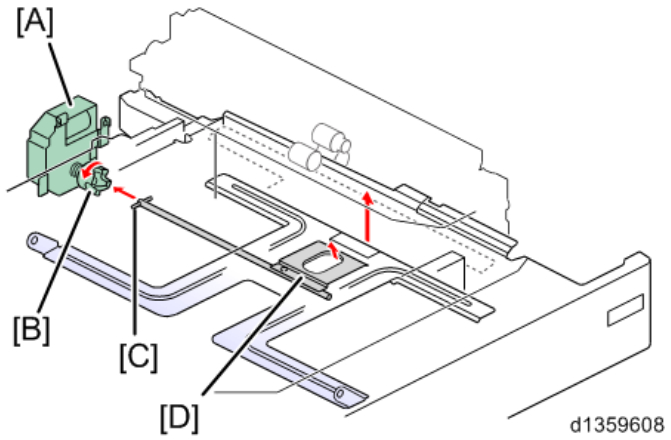
Separation Roller Contact

The separation roller [B] is separated from the feed roller [A] when the paper feed tray is removed. When the paper feed tray is installed, the separation roller [B] is pressed against the feed roller [A].

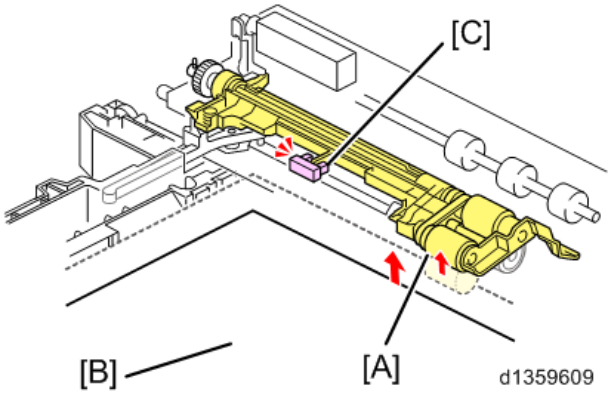


Tray Shift-up/down

1. When the tray lift motor (M57) [A] on the rear side rotates, the coupling [B] engages with the pin [C] on the lift arm of the bottom plate, and then the arm rotates. The bottom plate [D] is raised by the rotation of the arm.
   When the paper feed tray is removed, the engagement of the coupling [B] and the pin [C] is released. Then the bottom plate [D] falls down by its own weight.
   The remaining amount of paper in the tray is detected by the angle of the tray lift motor rotation.

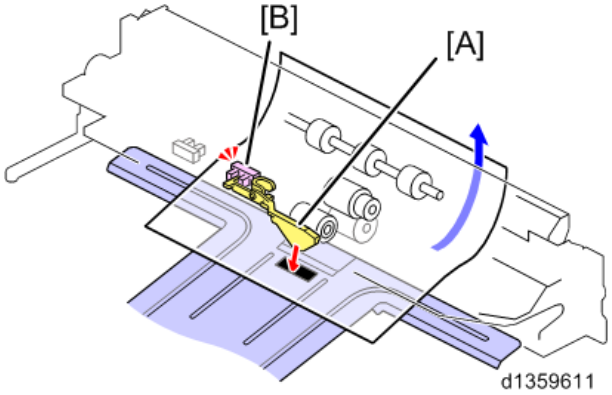


2. When the paper feed tray is installed, the pick-up roller [A] descends. If the bottom plate is raised in this state, the pick-up roller [A] is lifted by the top sheet of the paper in the tray. Then the actuator turns the paper tray upper limit sensor (S89) [C] OFF and the tray lift motor (M57) turns OFF.
   The top of the stack of paper in the tray lowers during copying/printing. When the paper tray upper limit sensor (S89) [C] is turned ON because of this, the tray lift motor (M57) turns ON again and lifts the paper [B].



Paper End Detection

When the paper in the paper feed tray runs out, the actuator [A] turns the paper end sensor (S90) [B] ON. Then paper end is detected.



Tandem Tray (1st Tray)

1. Paper Size Detection

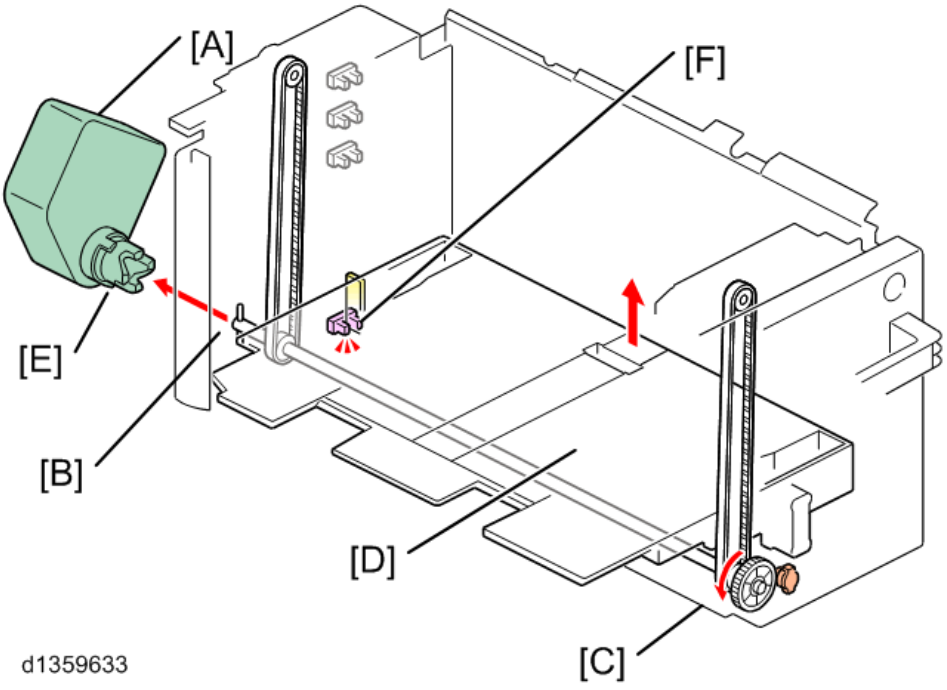
   The tandem tray cannot detect the size of the paper loaded in the tray. Therefore, you need to adjust the side fence and back fence, and then select the paper size in SP5-959-001.

SP No.	SP Name	Default
SP5-959-001	Paper Size 1st Tray (Tandem)	NA: 0 (A4 LEF) EU, AP, CHN: 1 (8.5"x11" LEF)

2. Tray Shift-up/down

   When the paper tray lift motor [A] on the rear side of the right tandem tray rotates, the coupling [E] engages with the pin [B] on the lift arm of the bottom plate, and then the arm rotates. Then the timing pulley [C] rotates and drives the timing belt. The bottom plate [D] is raised by the timing belt. When the right tandem tray is withdrawn, the engagement of the coupling [E] and the pin [B] is released. Then the bottom plate [D] falls down by its own weight. A damper is installed to prevent the bottom plate from falling suddenly.

   The upper limit of the bottom plate level is detected by the paper tray upper limit sensor attached to the pick-up roller assembly unit. The lower limit of the bottom plate level is detected by the paper tray lower limit sensor [F].

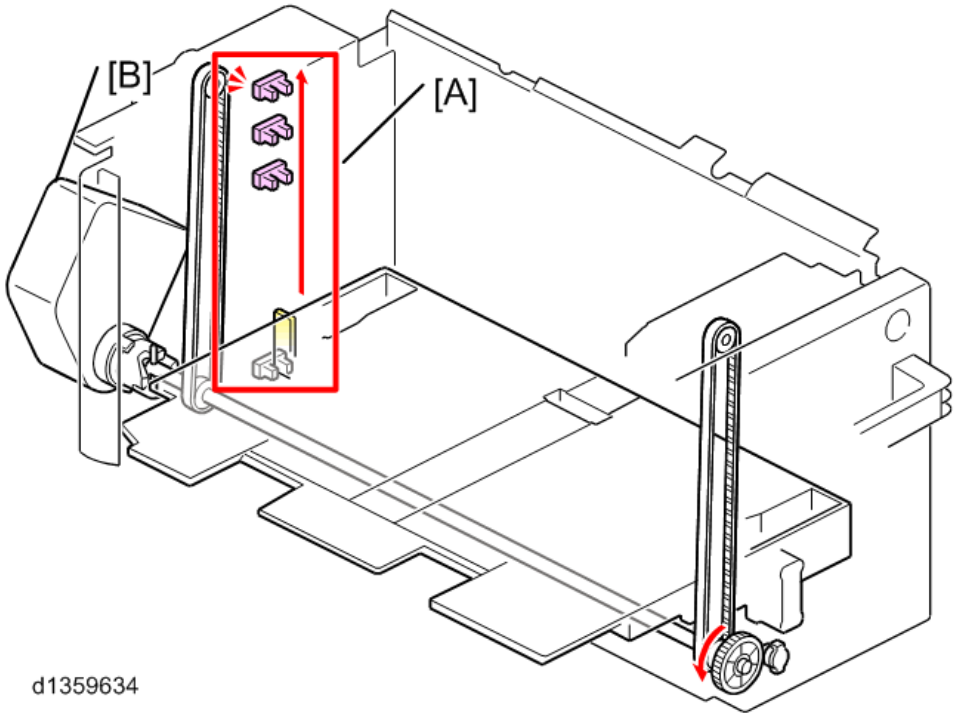


3. Remaining Paper Detection

   The paper height sensors 1 (S118), paper height sensor 2 (S119), paper height sensor 3 (S120) and tray lower limit sensor (S117) [A] on the rear side of the tandem right tray detect the amount of paper remaining in the tray. After the tray lift motor (M57) [B] stops, the machine checks the sensors from the lower sensor to the upper sensor (remaining amount: 10%, 30%, 70%, and 100% in order). The determination of the remaining paper amount is made based on which sensor is

interrupted first. Then the operation panel shows the remaining paper amount. If none of the four sensors are interrupted, the panel shows that the remaining paper amount is 100%.

The paper end sensor (S90) detects when there is no paper in the right tray.

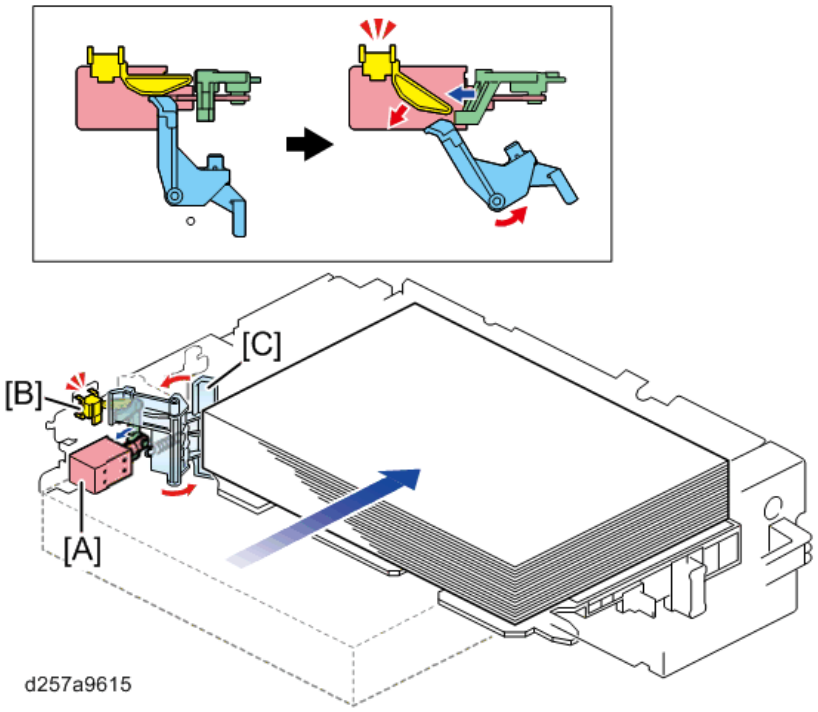


4. Right Tandem Tray End Fence Shift

When the paper in the right tandem tray runs out, the end fence rear solenoid (SOL10) [A] turns ON to open the rear end fence [C] if paper is set in the left tandem tray.

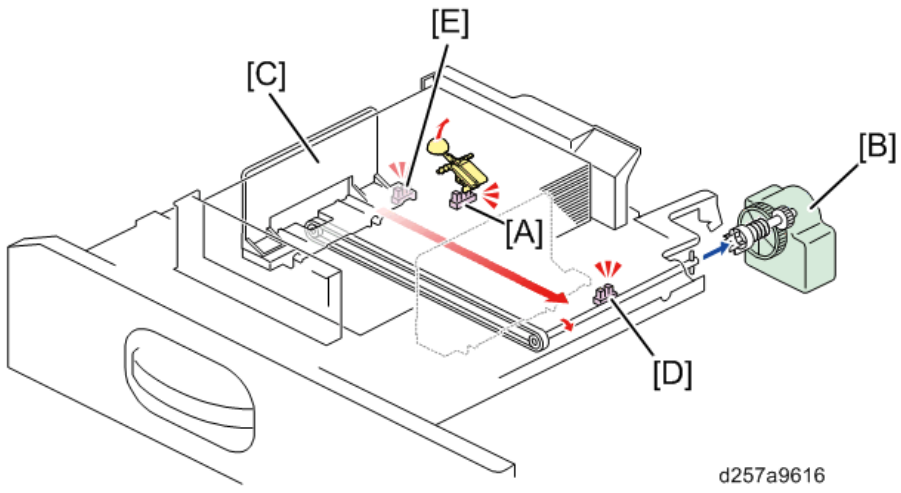
The paper is moved from the left tandem tray into the right tandem tray when the rear end fence [C] is opened. When the rear end fence [C] is completely opened, the rear fence return sensor (S103) [B] is turned OFF (interrupted). Then, after the paper is moved into the right tray, the end fence rear solenoid (SOL10) [A] turns OFF to close the rear end fence [C].

The rear fence return sensor (S103) [B] detects whether the rear end fence [C] is open or closed. If the rear end fence [C] is not closed, the operation panel asks the user to place the paper correctly in the tray.



5. Left Tandem Tray Back Fence Shift

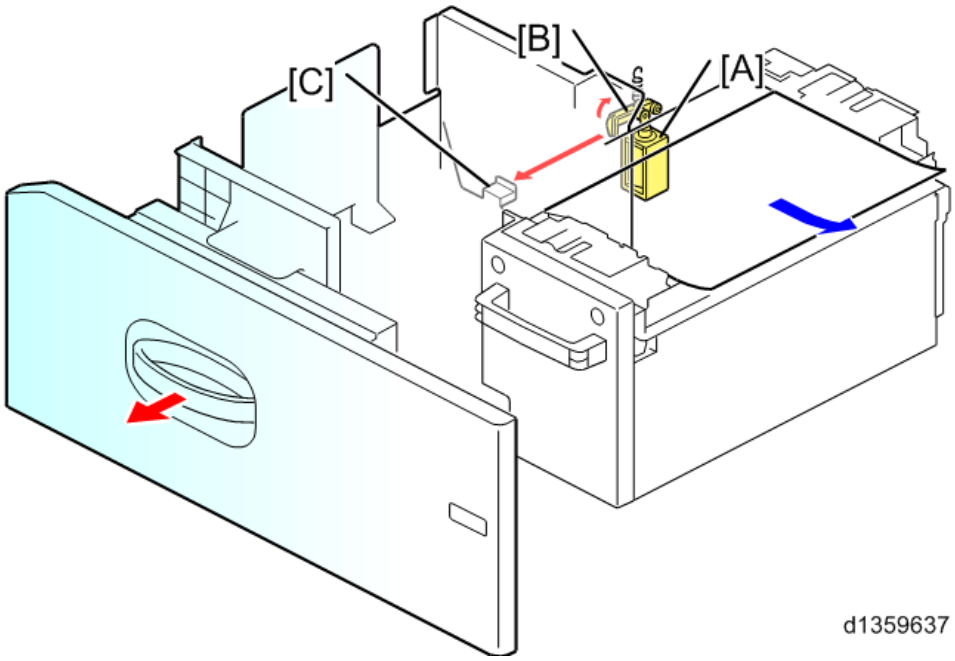
When the paper end sensor (S90) in the right tandem tray detects paper end while the left tray paper sensor (S104) [A] in the left tandem tray detects that paper exists, the rear fence drive motor (M61) (DC motor) [B] turns ON at the same time as the rear end fence movement. Then the left tray back fence [C] pushes the stacked paper in the left tandem tray to the right tandem tray. When the rear fence return sensor (S103) [D] turns ON, the rear fence drive motor (M61) starts rotating in the reverse direction, until the rear fence HP sensor (S102) [E] detects the left tray back fence.



6. Left Tray Lock

The left tandem tray cannot be withdrawn while the paper is being delivered from the left to the right tandem tray. When the machine starts delivering the paper from the left to the right tandem tray, the left tray lock solenoid (SOL12) [A] turns ON and the lock latch [B] hooks onto the hook [C] on the rear of the left tandem tray. After the paper has been delivered and the left tray back fence returns to the home position, the left tray lock solenoid (SOL12) [A] turns OFF and the latch [B] is

released from the hook [C]. This mechanism prevents the tray from being withdrawn while the paper is being delivered.

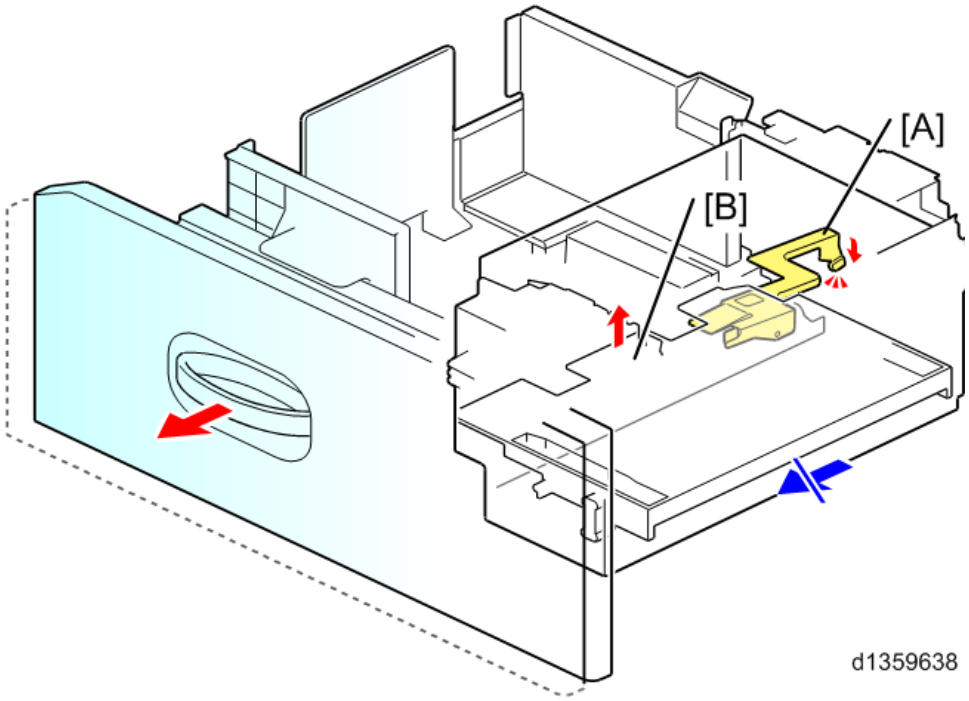


7. Right Tray Lock

When the bottom plate [B] of the right tray lifts from its lowest position, the joint lever [A] falls under its own weight and the right tray is locked.

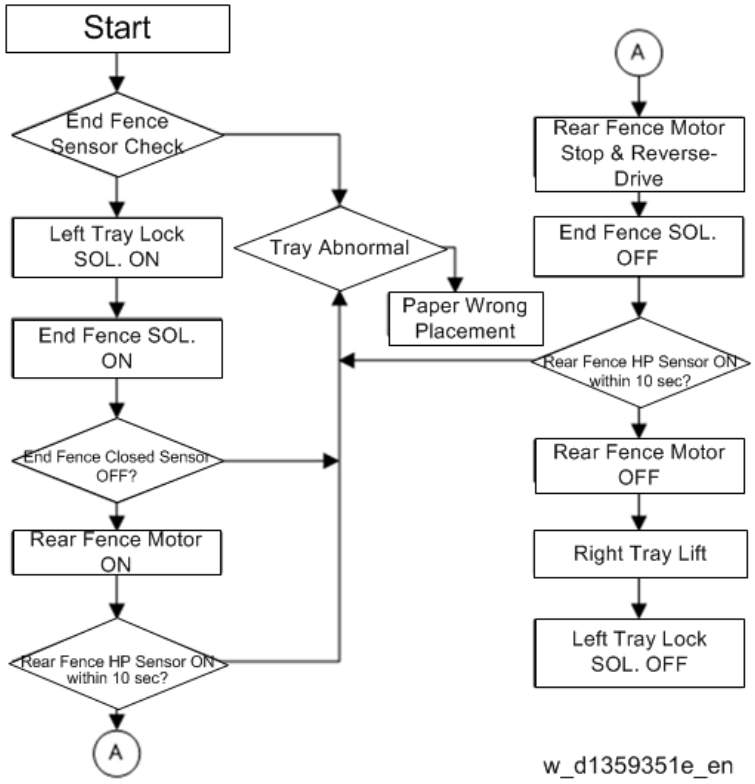
When the bottom plate [B] is in the lowest position, the lock lever of the left tray latches onto the joint lever and both of the trays can be withdrawn at once.

When the bottom plate [B] is being lifted or is at the feed position, the lock lever rises and only the left tray can be pulled out.



8. Tandem Operation

When the machine detects paper end in the right tandem tray during feeding or when lifting the bottom plate, the machine proceeds with the following operation after the bottom plate in the right tray reaches the lowest position, if there is paper in the left tandem tray.

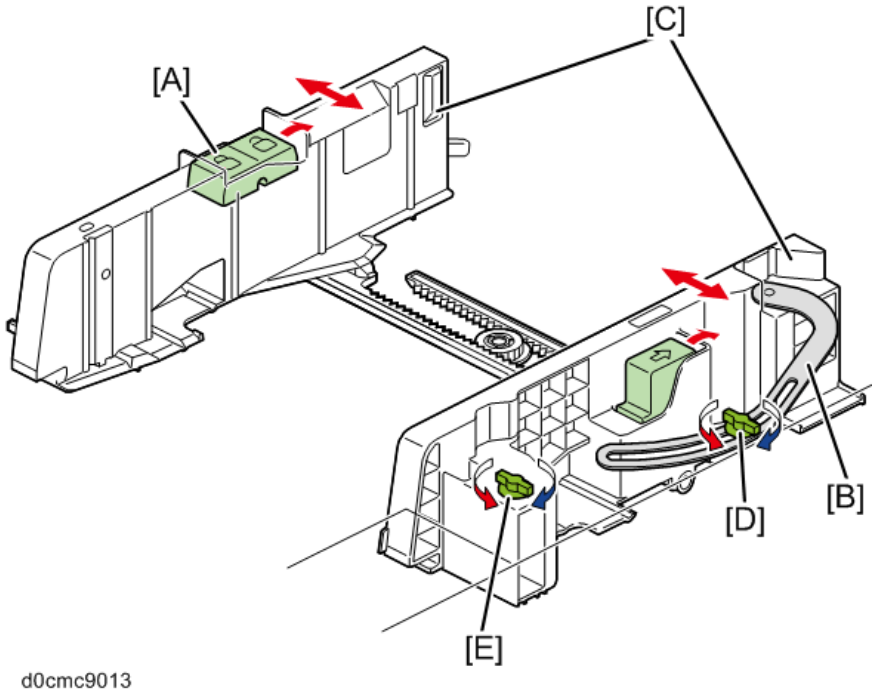


Side Fence Lock Mechanism (2nd Tray-3rd Tray)

The pressure mechanism of the side fence for this machine is changed from the previous one to improve the accuracy of image position.

The paper feed tray has a lock lever [A] to help feed the paper straight. (Pro C5300S/C5310S has a side fence support plate [B].)

After adjusting the side fences [C] in accordance with the paper size, you need to lock the lock lever [A] to fix the side fence position. Furthermore, you can prevent the rattling of the side fences by tightening the shoulder screws [D] [E] of the side fence support plate [B] for Pro C5300S/C5310S.



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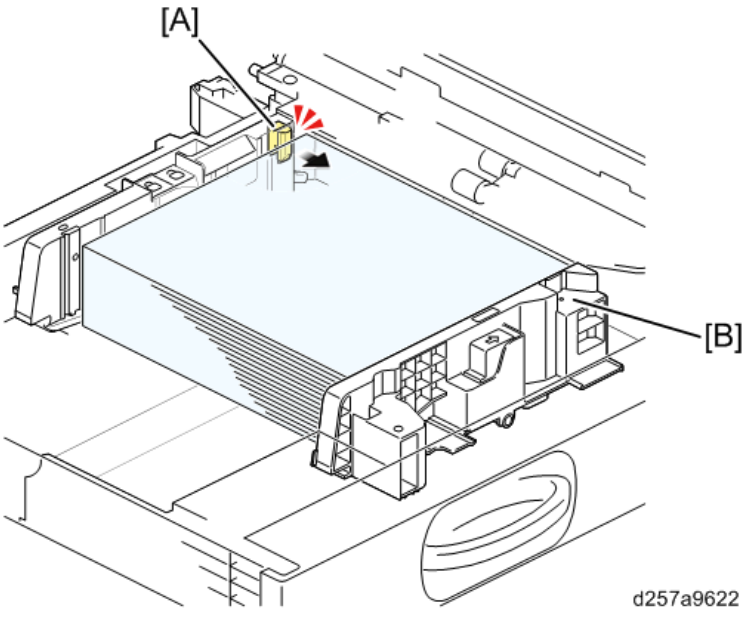
Note

- The side fence support plate [B] for IM C6500/C8000 is provided as a service part. For details about installing the side fence support plate for IM C6500/C8000, see Installing the Side Fence Support Plate (IM C6500/C8000) .

Paper Alignment (1st Tray-3rd Tray)

The paper feed tray has a pressure plate [A] on the rear side fence to help feed the paper straight. The pressure plate [A] pushes the paper towards the front side fence [B]. Therefore, the paper is drawn to the front side fence [B] and it is fed straight.



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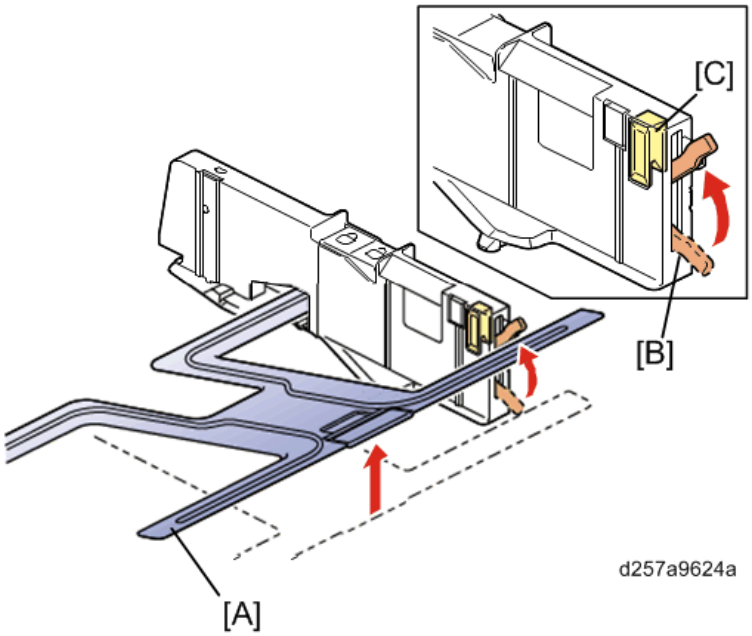
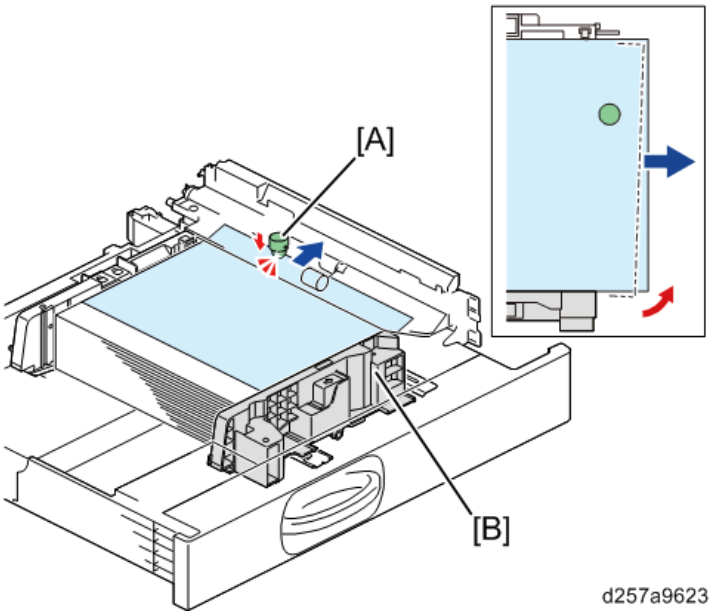
The bottom plate [A] is raised when the amount of remaining paper in the tray is reduced. In addition to

this, Pro C5300S/C5310S has a lever [B] in the paper tray. When the bottom plate [A] rises, the lever [B] is pushed up, and the pressure from the pressure plate [C] is decreased.



Friction Ball Mechanism (1st Tray-3rd Tray) (Pro C5300S/C5310S only)

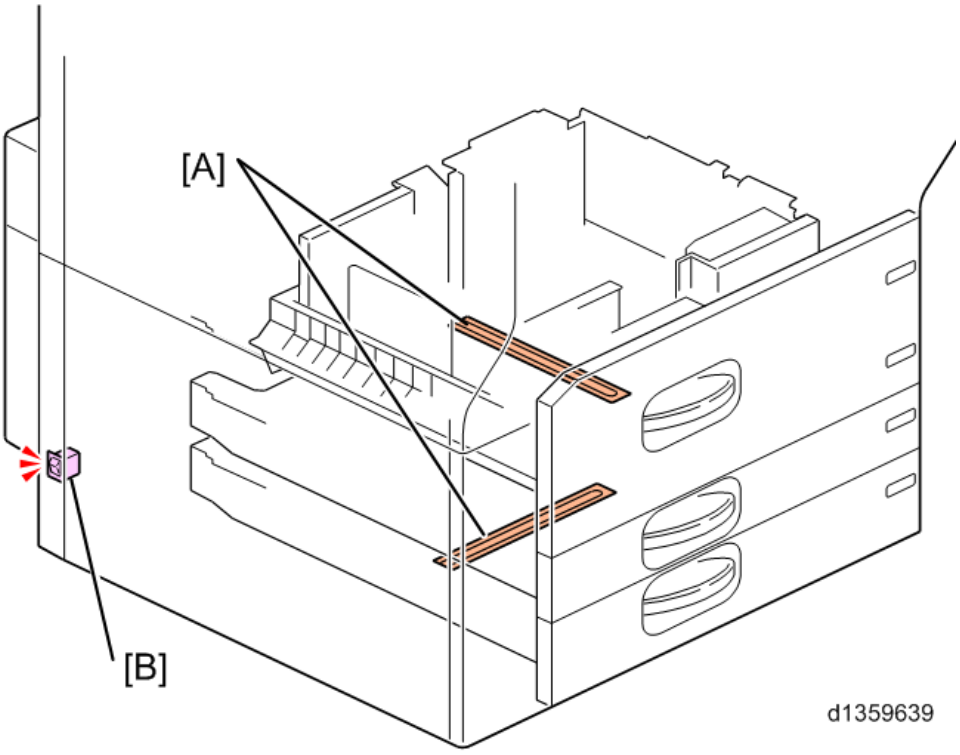
Pro C5300S/C5310S has a friction ball [A] in the paper feed section to help feed the paper straight. The friction ball [A] applies a load to the upper side of the paper. The paper is drawn towards the front side fence [B] while the paper is feeding. This helps feed the paper straight.



Dehumidification Function

Anti-condensation heaters [A] are provided as service parts. They can be installed under the 3rd tray and the 1st tray. To use the heaters, turn on the anti-condensation heater switch (SW4) [B] at the rear side of the machine. If SP5-965-001 is set to "0", the heaters are on independent of the ON/OFF status of the main power switch. If the scanner anti-condensation heater and the LCIT heaters (for

RT4060/RT4070/RT5140) are also installed on the machine, those heaters are turned ON at the same time.

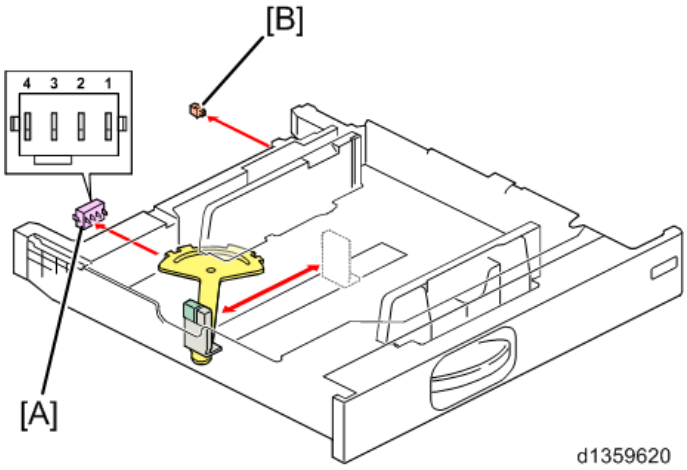


Note

For details about installing the heaters for paper feed trays, see Tray Heater.

Paper Size Auto-detection

The machine detects the paper size automatically when the side fences and end fence are adjusted. The status of the side fences and end fence affect the tray size switch [A]. The machine figures out the paper size from the switch combination of the tray size switches, and then shows it on the operation panel. The relation between the switch combination and the detected size is shown below.
The machine has a tray set switch (SW14) [B] on the right rear side of the paper tray.



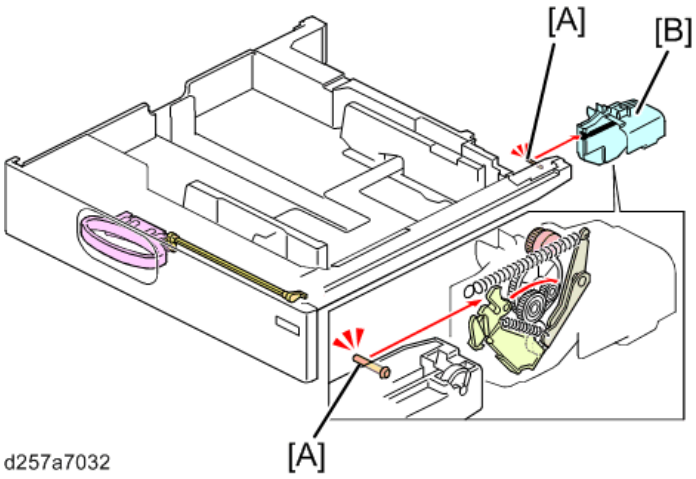
0: Switch OFF (Sensor Output: H)

1: Switch ON (Sensor Output: L)

Destination				Board Information			
JPN	NA	EU	ASIA	Knob 4	Knob 3	Knob 2	Knob 1
13"×19"	13"×19"	13"×19"	13"×19"	1	1	0	1
SRA3 (12"×18")	12"×18" (SRA3)	SRA3 (12"×18")	SRA3 (12"×18")	1	0	1	0
A3 (DLT)	DTL (A3)	A3 (DLT)	A3 (DLT)	0	1	0	0
B4 (LG)	LG (B4)	B4 (LG)	B4 (LG)	0	0	1	1
				0	1	1	1
A4 SEF	A4 SEF	A4 SEF	A4 SEF	1	1	1	0
LT SEF	LT SEF	LT SEF	LT SEF	1	1	0	0
B5 SEF	B5 SEF	B5 SEF	B5 SEF	1	0	0	0
A4 LEF (LT LEF)	A4 LEF (LT LEF)	A4 LEF (LT LEF)	A4 LEF (LT LEF)	0	0	0	1
B5 LEF (Exe _LEF)	B5 LEF (Exe LEF)	B5 LEF (Exe LEF)	B5 LEF (Exe LEF)	0	0	1	0
A5 LEF (HLT LEF)	A5 LEF (HLT LEF)	A5 LEF (HLT LEF)	A5 LEF (HLT LEF)	0	1	0	1

Tray Pull-in Mechanism

The pin [A] on the right rear side of a paper tray is pulled in by the pull-in lever in the lever unit [B] when the paper tray is inserted in the machine, and then the paper tray is pulled in.



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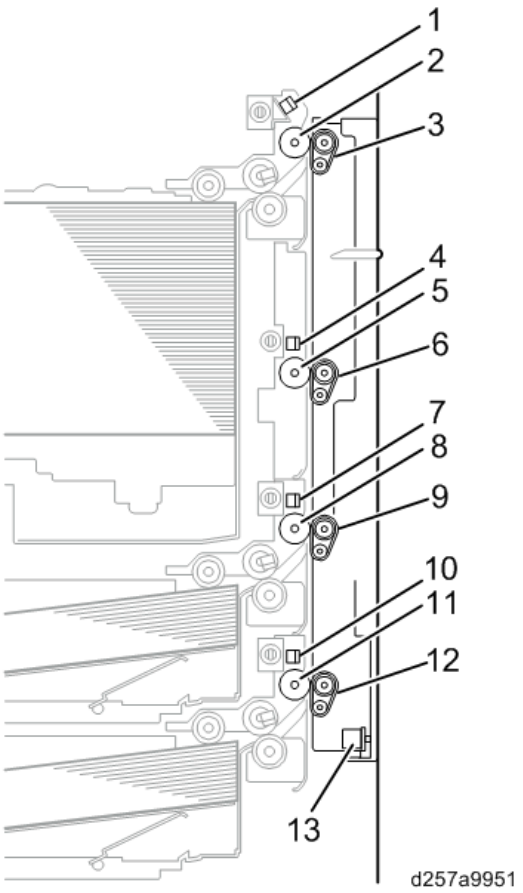
Vertical Transport

Mechanism Descriptions

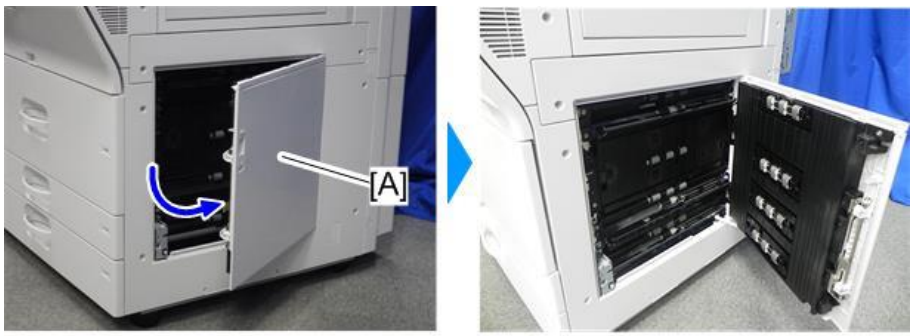
Component Layout



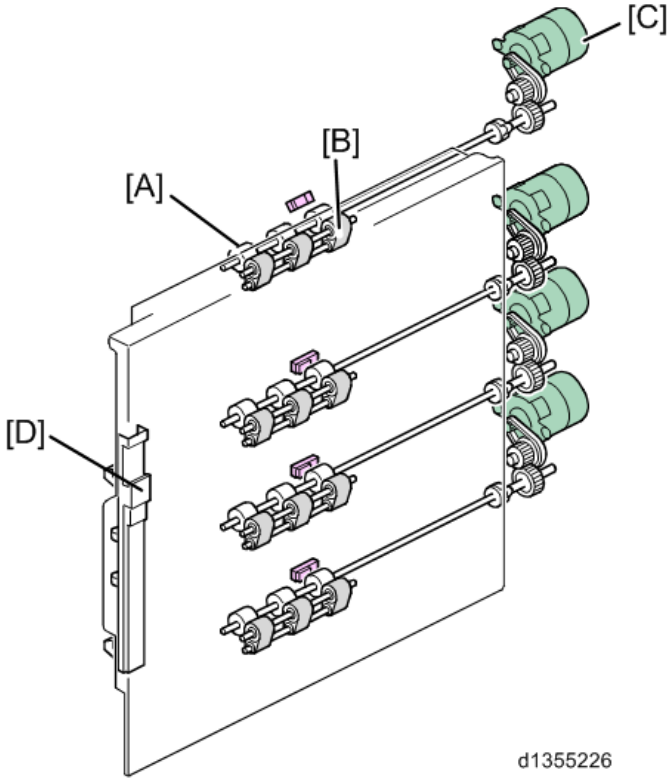
No.	Description	No.	Description
1	Transport Sensor (S91) (Tray 1)	8	2nd Transport Roller
2	1st Transport Roller	9	2nd Driven Belt
3	1st Driven Belt	10	Transport Sensor (S91) (Tray 3)
4	Vertical Transport Sensor (S91)	11	3rd Transport Roller
5	Vertical Transport Roller	12	3rd Driven Belt
6	Vertical Driven Belt	13	Vertical Transport Door Set Switch (SW11)
7	Transport Sensor (S91) (Tray 2)		

Mechanism Details

The vertical transport is integrated with the outer cover in this machine. This makes it easier to remove the jammed paper by opening the vertical transport door [A].



Each paper feed unit built into the main machine has vertical transport rollers [A]. The vertical transport motor (M63) [C] drives the vertical transport roller shaft.
The vertical transport door is held by the support pin. When the vertical transport door is closed, the vertical transport door lever [D] is locked.
Driven belts [B] are installed opposite each vertical transport roller [A]. A spring under pressure brings the driven belts [B] into pressure contact with the vertical transport rollers [A].



By-pass Tray Unit

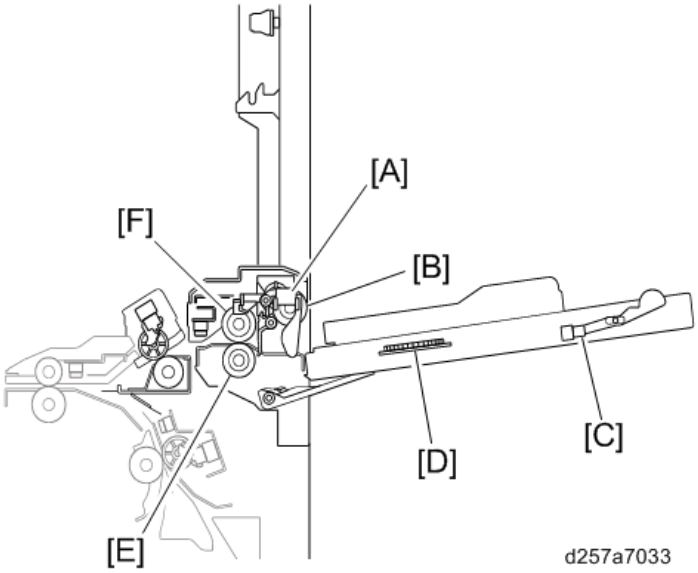
Mechanism Descriptions

Component Layout

The big differences between IM C6500/C8000 and Pro C5300S/C5310S are as follows.

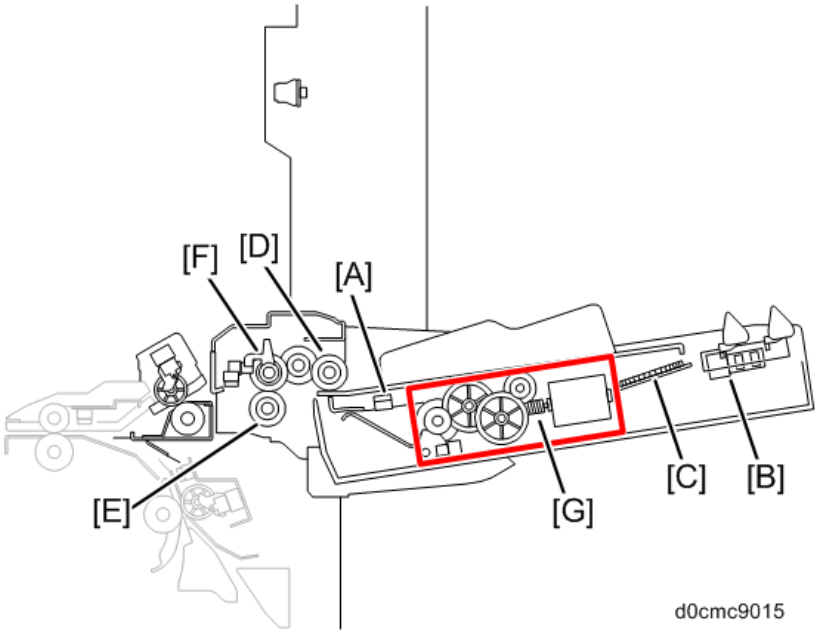
- The location of the bypass tray paper end sensor (S108) [A] is different.
- The bypass tray of Pro C5300S/C5310S has a bottom plate lift mechanism [G].

IM C6500/C8000



No.	Description	No.	Description
[A]	Bypass tray paper end sensor (S108)	[D]	Bypass paper width sensor (S110)
[B]	Bypass pick-up roller	[E]	Bypass separation roller
[C]	Bypass paper length sensor (S109)	[F]	Bypass feed roller

Pro C5300S/C5310S

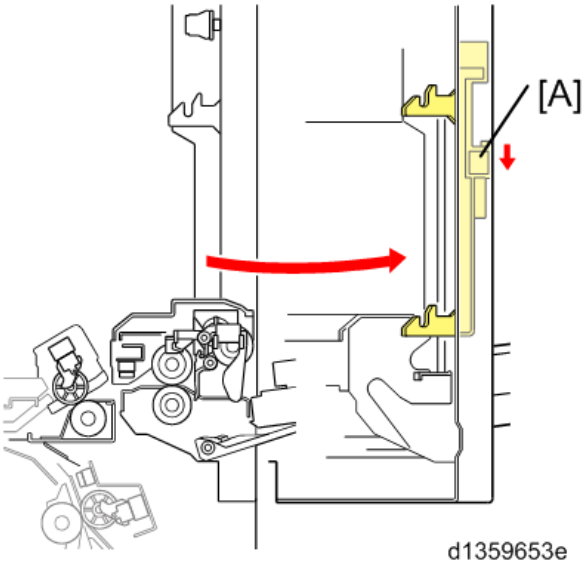


No.	Description	No.	Description
[A]	bypass tray paper end sensor (S108)	[E]	Bypass separation roller
[B]	Bypass paper length sensor (S109)	[F]	Bypass feed roller
[C]	Bypass paper width sensor (S110)	[G]	Bottom plate lift mechanism
[D]	Bypass pick-up roller		

Mechanism Details

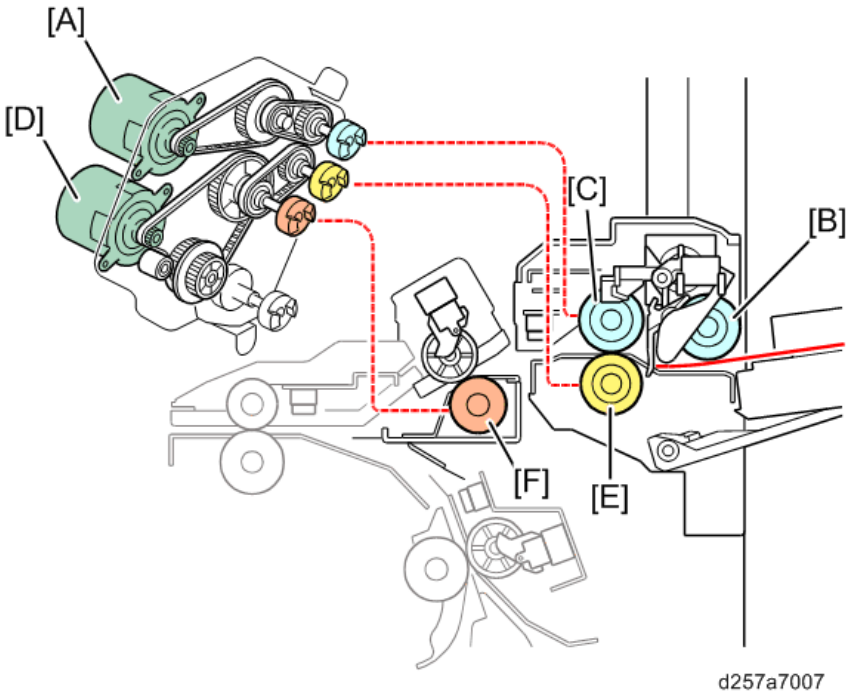
Bypass Tray Unit Open/Close

The bypass tray unit can be opened by pushing down the bypass release lever [A]. This mechanism prevents the jammed paper from tearing into pieces when removing the paper.



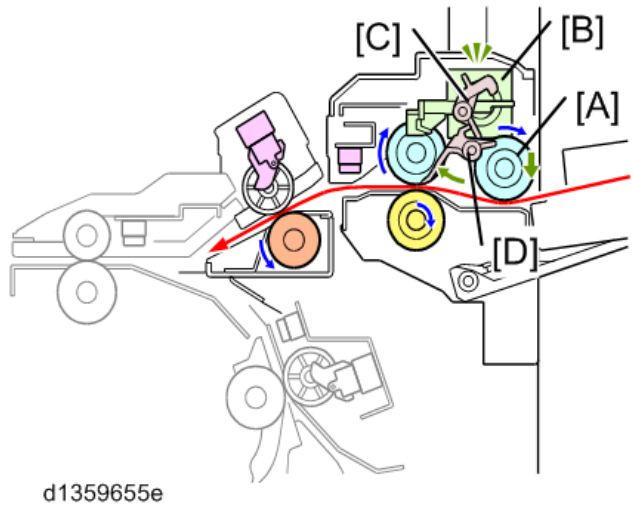
Paper Feed/Transport Drive

Feed and separation in the bypass tray are controlled by two motors. The bypass feed motor (M54) [A] drives bypass pick-up roller [B] and the bypass feed roller [C]. The relay motor (M53) [D] drives the bypass separation roller and the relay roller.



Pick-up/Feed

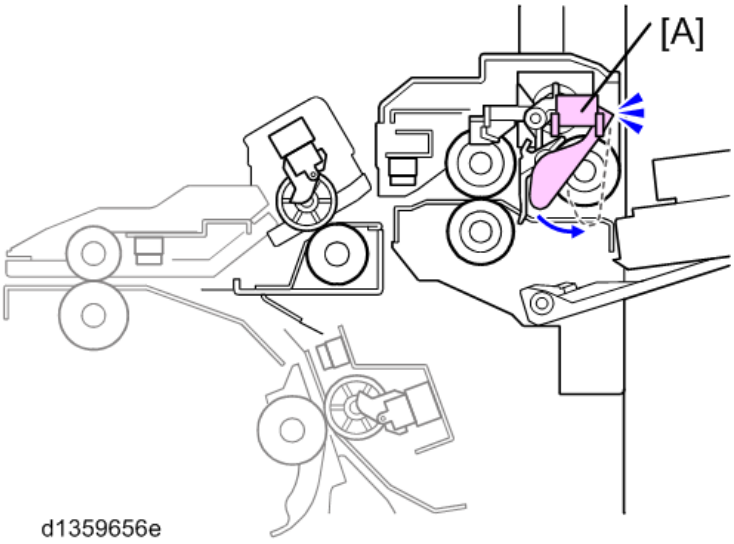
The FRR method is the paper separation method in this machine.
Only for IM C6500/C8000, the bypass pick-up roller [A] has a stopper [D]. The bypass pick-up roller [A] is shifted up/down by the bypass pick-up solenoid (SOL11) [B]. When the bypass pick-up solenoid (SOL11) [B] turns ON, the bypass pick-up roller [A] is shifted down. The lever [C] that locks the paper stopper [D] is moved and the paper stopper [D] is released. The paper can pass through between the bypass feed roller and the bypass separation roller in this state.
When the paper stopper [D] is locked, the paper cannot pass through between the bypass feed roller and the bypass separation roller.
The paper stopper [D] is released whenever the bypass pick-up roller [A] is shifted down and one sheet of paper is fed. The fed paper is transported between the bypass feed roller and the bypass separation roller without being interrupted by the paper stopper [D].



Bypass Paper End Detection

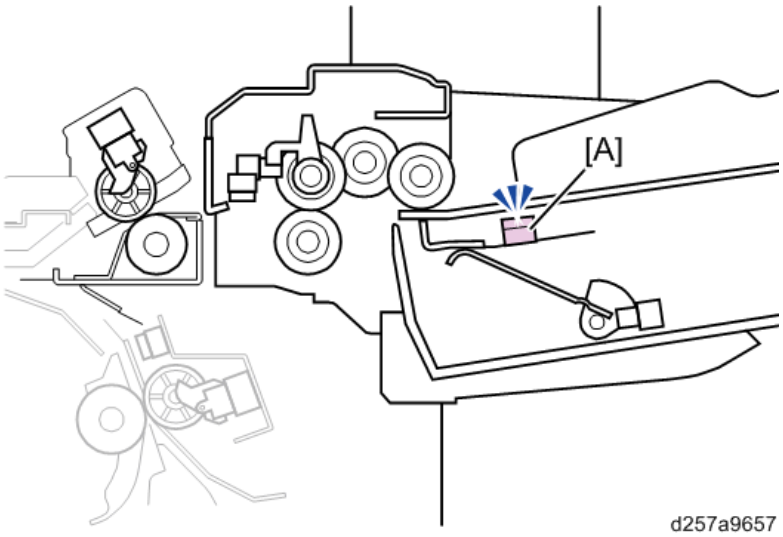
IM C6500/C8000

The bypass tray paper end sensor (S108) [A] has a feeler. When the paper in the bypass tray runs out, the feeler moves forward and its upper end interrupts the bypass tray paper end sensor (S108) [A]. Then the machine detects paper end.



Pro C5300S/C5310S

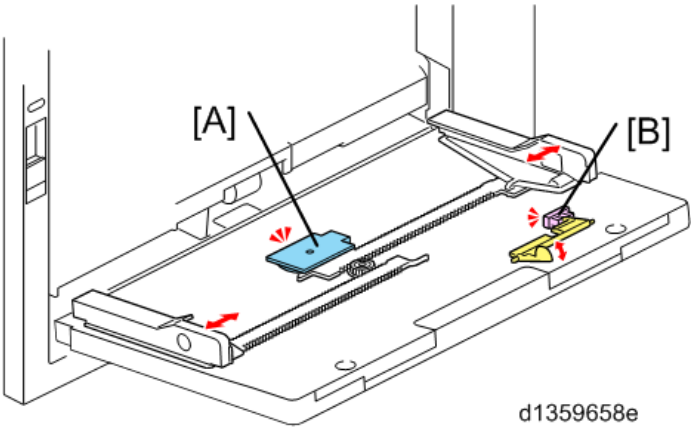
The bypass bottom plate has a bypass tray paper end sensor (S108) [A], which is a reflective photo sensor. When there is paper in the bypass tray, the bypass tray paper end sensor (S108) [A] is turned ON (interrupted). When the paper in the bypass tray runs out, the bypass tray paper end sensor (S108) [A] is turned OFF (not interrupted). Then the machine detects paper end.



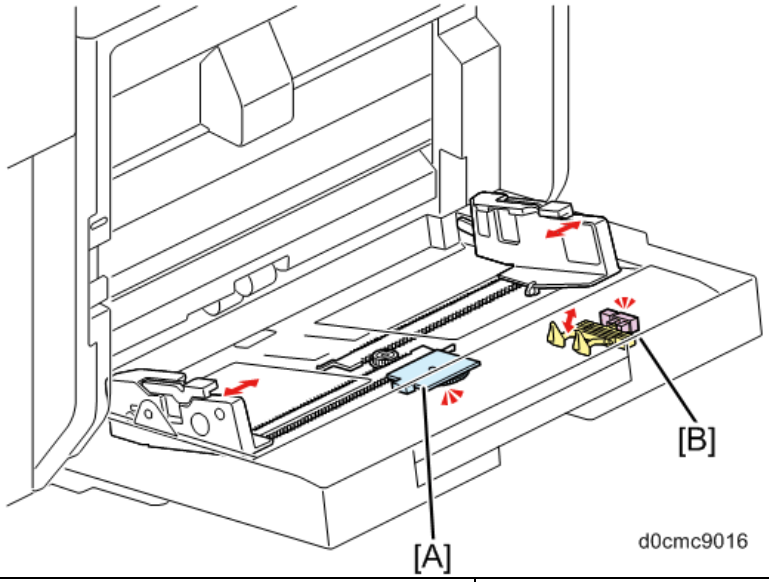
Paper Size Detection

The paper size is detected by the bypass paper width sensor (S110) [A] and the bypass paper length sensor (S109) [B].

IM C6500/C8000



Pro C5300S/C5310S



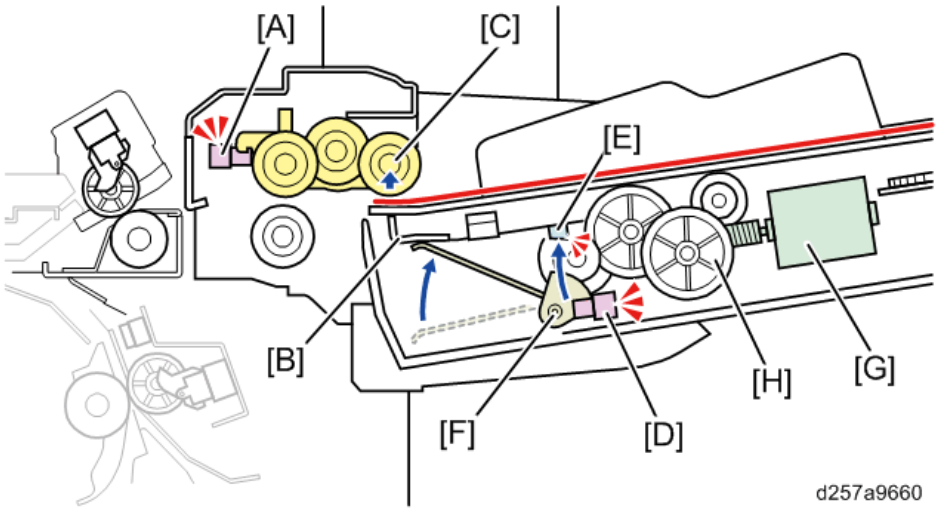
Detected Size			Sensor Output Signal					
JPN	NA	Except JPN/NA	bypass paper width sensor (S110)					bypass paper length sensor (S109)
			CN1	CN2	CN3	CN4	CN5	0N: 0 (Not interrupted) OFF: 1 (interrupted)
Letter SEF	HLT SEF	A6 SEF	0	1	1	1	1	0
B6 SEF		B6 SEF	0	0	1	1	1	1
A5 SEF		A5 SEF	1	0	1	1	1	0
B5 SEF	B5 SEF	B5 SEF	1	0	0	1	1	1
A4 SEF	LT SEF LG SEF	A4 SEF	1	1	0	1	1	0
A5 SEF	HLT LEF	A5 LEF						1
B4 SEF	DLT SEF	B4 SEF	1	1	0	0	1	0
B5 LEF	LT LEF	B5 LEF						1
A3 SEF	DLT SEF	A3 SEF	1	1	0	0	0	0
A4 LEF	LT LEF	A4 LEF						1
A3 SEF	12"×18" SEF	A3 SEF	1	1	1	0	0	0
A4 LEF	LT LEF	A4 LEF						1
SRA3 SEF	SRA3 SEF	SRA3 SEF	1	1	1	0	1	0
A4 LEF	LT LEF	A4 LEF						1
13"×19" SEF	13"×19" SEF	13"×19" SEF	1	1	1	1	1	0
A4 LEF	LT LEF	A4 LEF						1

Bypass Bottom Plate Lift (Pro C5300S/C5310S only)

When the bypass pick-up roller [C] is lifted due to the elevation of the bottom plate [B], the actuator interrupts the bypass tray upper limit sensor (S113) [A]. Then the machine detects the elevation of the bottom plate [B].

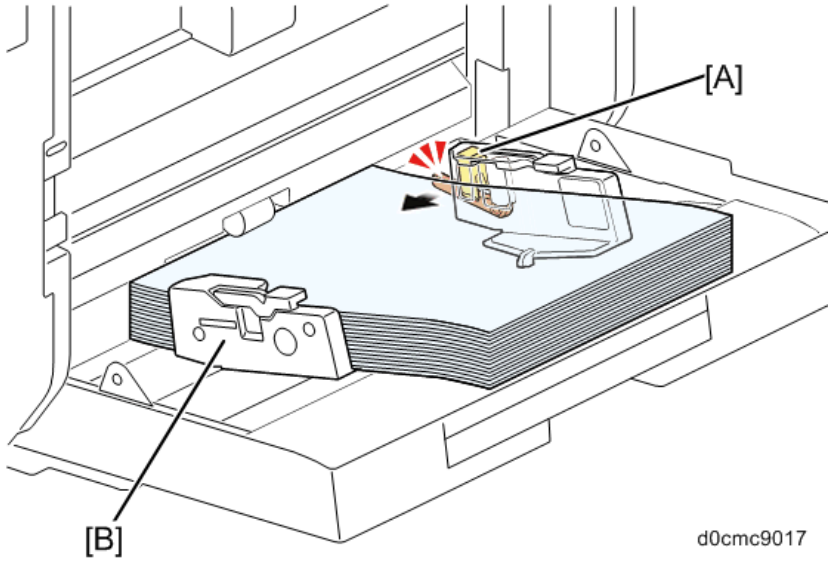
When the bottom plate [B] is lowered and returned to the home position, the projection [E] on the back of the bottom plate interrupts the bypass tray lower limit sensor (S107) [D]. Then the machine detects the lowering of the bottom plate [B].

The bottom plate is lifted and lowered by the bypass tray lift motor (M52) [G] via the gears [H] and the lever [F].



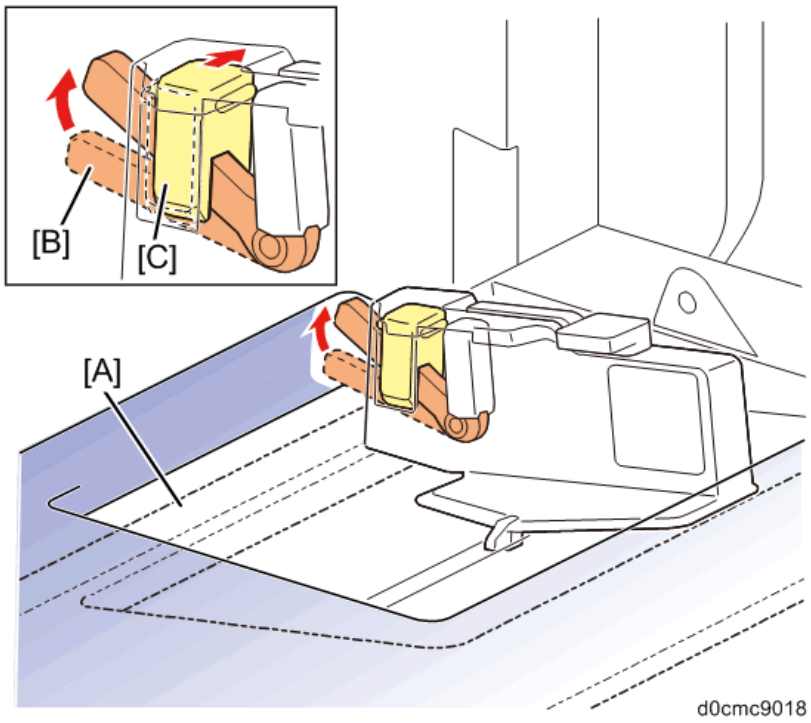
Paper Alignment

The pressure plate [A] on the rear side fence helps to feed the paper straight. The pressure plate [A] pushes the paper towards the front side fence [B]. Therefore, the paper is drawn to the front side fence [B] and it is fed straight.



Pro C5300S/C5310S has the bottom plate [A] and the lever [B]. The bottom plate [A] is raised when the paper is used up. When the lever [B] is pushed up by the elevation of the bottom plate [A], the pressing

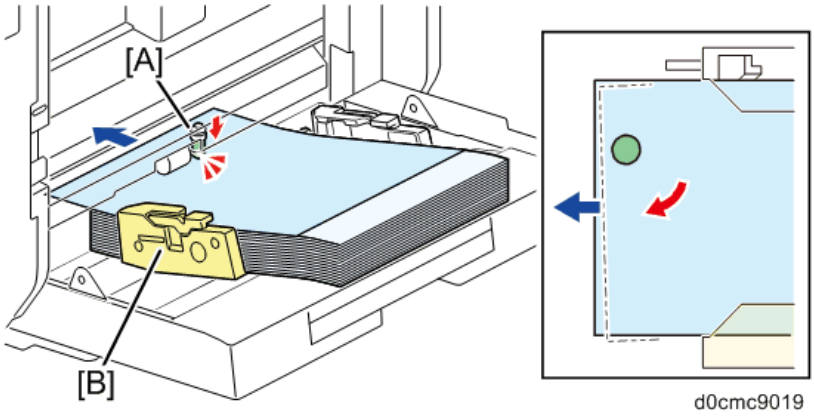
force of the pressure plate [C] is decreased.



Friction Ball Mechanism (Pro C5300S/C5310S only)

Pro C5300S/C5310S has a friction ball [A] in the bypass tray section to help feed paper straight. The friction ball [A] applies a load to the paper from above.

The paper rotates and is drawn towards the front side fence [B] since a load is applied from above while the paper is feeding. This mechanism helps feed the paper straight.

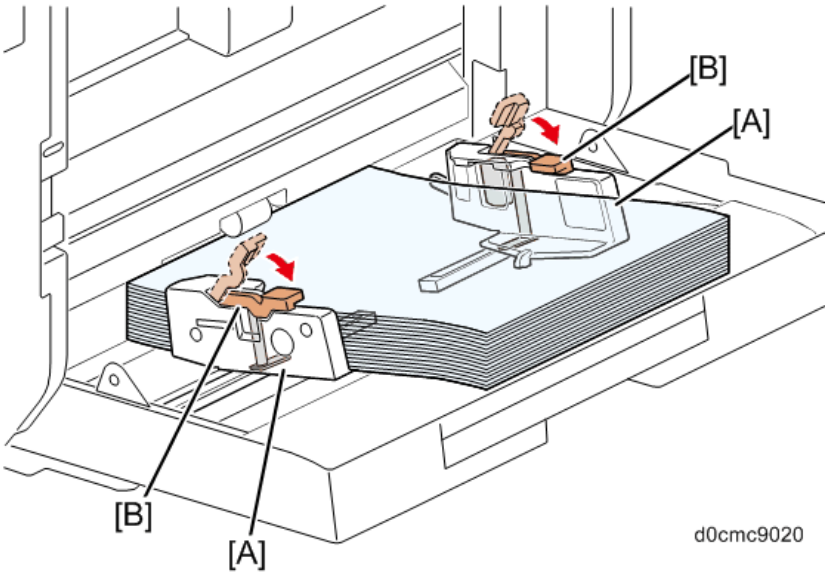


Side Fence Lock Mechanism (Pro C5300S/C5310S only)

Pro C5300S/C5310S has lock levers [B] on the side fences [A] in order to help feed paper straight.

After adjusting the side fences [A] in accordance with the paper size, you need to lock the lock levers [B] to fix the side fence position.

Lock is completed by falling the lever over the upper side of the side fence. This lock system aims to reduce the clearance and improve the accuracy of image position.

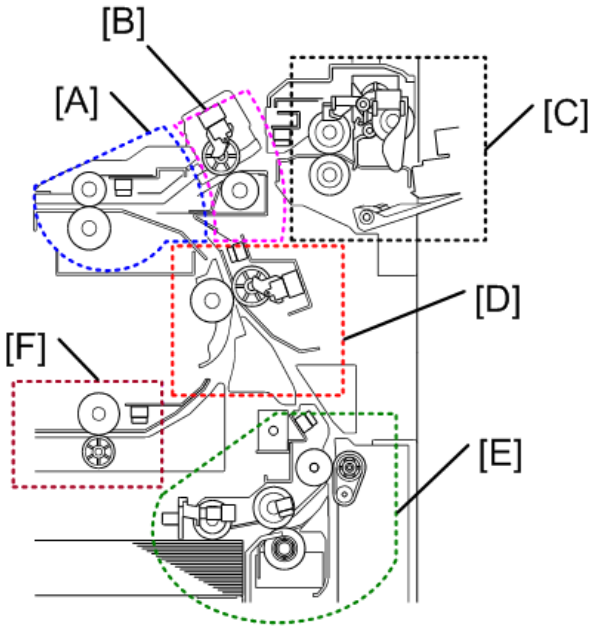

[B]
[A]
[B]
[A]
d0cmc9020

Paper Registration

Mechanism Descriptions

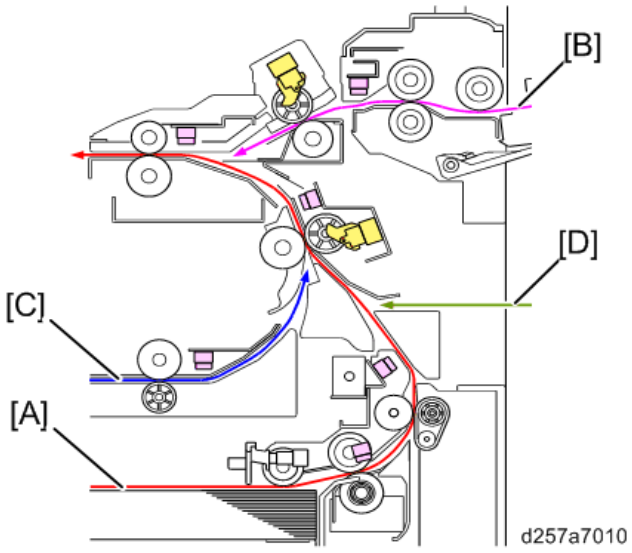
Component Layout

General Layout



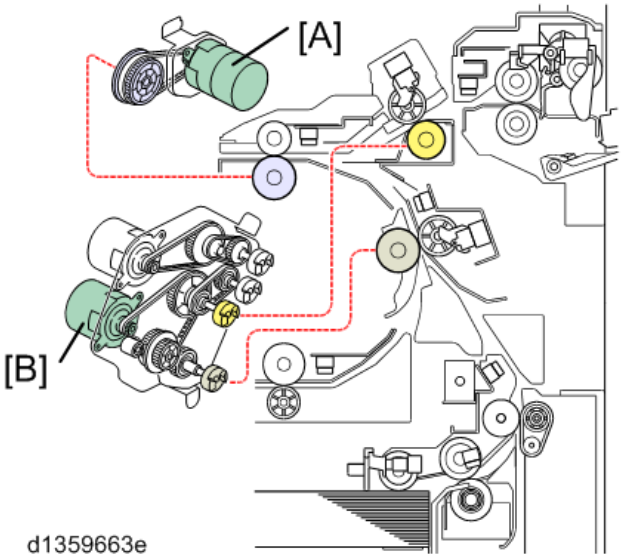
No.	Description	No.	Description
[A]	Registration Section	[D]	Relay Transport Section
[B]	Bypass Relay Transport Section	[E]	Bank Feed Section
[C]	Bypass Feed Section	[F]	Duplex Transport Section (horizontal transport path)

Transport Path Layout



No.	Description	No.	Description
[A]	Bank Paper Path	[C]	Duplex Paper Path
[B]	Bypass Paper Path	[D]	LCIT (option) Paper Path

Drive Layout



No.	Description	No.	Description
[A]	Registration Motor (M43)	[B]	Relay Motor (M53)

Mechanism Details

Registration

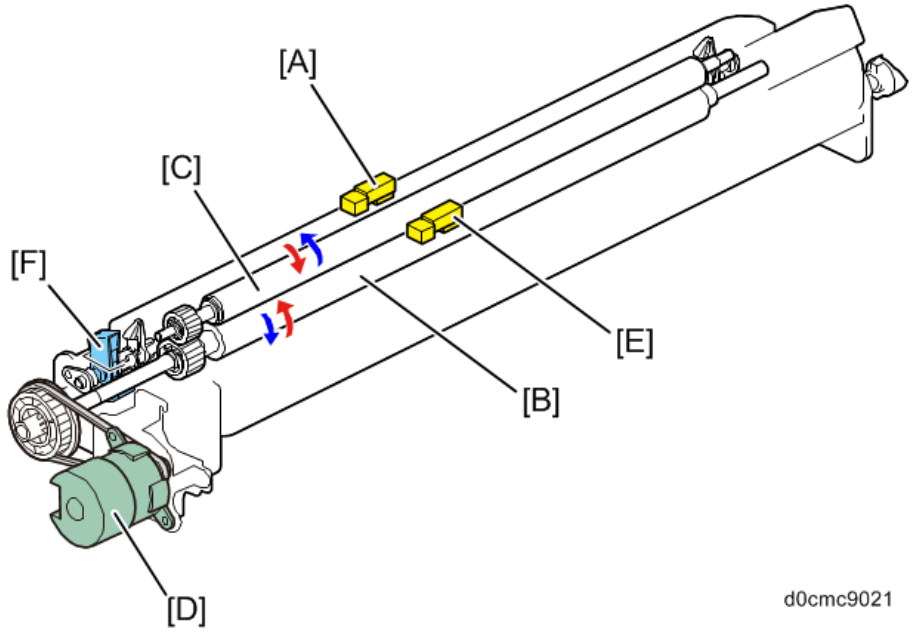
Registration Transport

The paper from the bank/LCIT (option)/duplex transport section is transported to the registration section through the relay transport section.
The paper from the bypass feed section is transported to the registration section through the bypass relay transport section. The bypass relay transport section is located in the registration unit.
When the registration sensor (S66) [E] detects the leading edge of the paper, the relay motor (M53) starts to slow down.
After the leading edge of the paper hits the registration rollers [B] [C] for the skew correction, the relay motor (M53) stops. (For details about the adjustment of the paper buckle, see "Skew Correction" in this section.) Then the registration motor (M43) [D] rotates in reverse, to correct the skewing of paper by rotating the registration rollers in reverse. (Registration Roller Reverse Control)
After the skewing of paper is corrected, the registration motor (M43) [D] rotates forward, to feed the paper into the machine by rotating the registration rollers [B] [C] forward. (For details about the adjustment of the transport timing, see "Leading Edge Registration" in this section.) In order to adjust the feed of the leading edge so it aligns correctly with the start of image transfer, Pro C5310S/C5300S detects the leading edge of the paper with the transfer timing sensor (S129) [A], and adjust the timing to

decrease the paper transporting speed.

The registration mechanism is driven by a single motor [D], so this machine does not have a registration clutch. This prevents shock-jitter which occurs when a registration clutch turns ON.

When a paper jam occurs, lever [F] separates the upper registration roller (idle) [C] from the lower registration roller (drive) [B] to let the user easily remove the jammed paper.



Skew Correction

The leading edge of the paper is made to hit the registration rollers and the paper buckles in order to be aligned for the skew correction.

If the paper buckle is too small, the whole width of the paper leading edge does not hit the registration rollers. Then the paper skew is not corrected completely. The paper buckle can be adjusted with SP1-004-001 to 042. For details about the skew adjustment, see Adjustment 005: Registration.

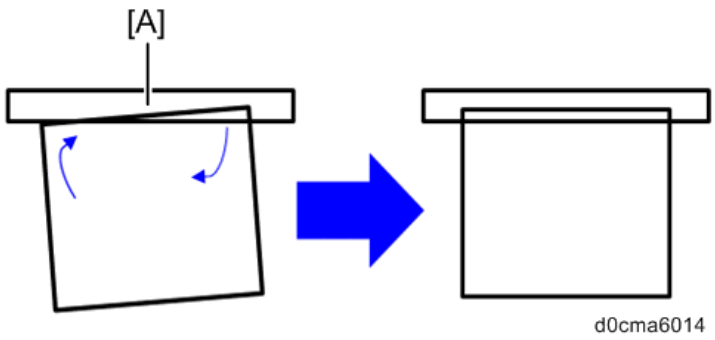
SP No.	SP Name	Value
1-004-001	Reg Buckle Adj:Tray1	-5 to 5 mm
1-004-002	Reg Buckle Adj:Bypass Tray	-5 to 5 mm
1-004-003	Reg Buckle Adj:Duplex	-5 to 5 mm
1-004-004	Reg Buckle Adj:LCT	-5 to 5 mm
1-004-005	Reg Buckle Adj:Thick1	-5 to 5 mm
1-004-006	Reg Buckle Adj:Thick2	-5 to 5 mm
1-004-007	Reg Buckle Adj:Thick3	-5 to 5 mm
1-004-008	Reg Buckle Adj:Thick4	-5 to 5 mm
1-004-009	Reg Buckle Adj:Thick5	-5 to 5 mm
1-004-010	Reg Buckle Adj:Tray2	-5 to 5 mm
1-004-011	Reg Buckle Adj:Tray3	-5 to 5 mm
1-004-012	Reg Buckle Adj:Tray4	-5 to 5 mm

SP No.	SP Name	Value
1-004-013	Reg Buckle Adj:Thin	-5 to 5 mm
1-004-014	Reg Buckle Adj:Plain1	-5 to 5 mm
1-004-015	Reg Buckle Adj:Plain2	-5 to 5 mm
1-004-016	Reg Buckle Adj:Mid-Thick	-5 to 5 mm
1-004-017	Reg Buckle Adj:Dup:Thin	-5 to 5 mm
1-004-018	Reg Buckle Adj:Dup:Plain1	-5 to 5 mm
1-004-019	Reg Buckle Adj:Dup:Plain2	-5 to 5 mm
1-004-020	Reg Buckle Adj:Dup:Mid-Thick	-5 to 5 mm
1-004-021	Reg Buckle Adj:Dup:Thick1	-5 to 5 mm
1-004-022	Reg Buckle Adj:Dup:Thick2	-5 to 5 mm
1-004-023	Reg Buckle Adj:Dup:Thick3	-5 to 5 mm
1-004-024	Reg Buckle Adj:Dup:Thick4	-5 to 5 mm
1-004-025	Reg Buckle Adj:Dup:Thick5	-5 to 5 mm
1-004-031	Reg Buckle Adj:2T LCT Bypass	-5 to 5 mm
1-004-032	Reg Buckle Adj:2T LCT Tray1	-5 to 5 mm
1-004-033	Reg Buckle Adj:2T LCT Tray2	-5 to 5 mm
1-004-034	Reg Buckle Adj:LCT:Thin	-5 to 5 mm
1-004-035	Reg Buckle Adj:LCT:Plain1	-5 to 5 mm
1-004-036	Reg Buckle Adj:LCT:Plain2	-5 to 5 mm
1-004-037	Reg Buckle Adj:LCT:Mid-Thick	-5 to 5 mm
1-004-038	Reg Buckle Adj:LCT:Thick1	-5 to 5 mm
1-004-039	Reg Buckle Adj:LCT:Thick2	-5 to 5 mm
1-004-040	Reg Buckle Adj:LCT:Thick3	-5 to 5 mm
1-004-041	Reg Buckle Adj:LCT:Thick4	-5 to 5 mm
1-004-042	Reg Buckle Adj:LCT:Thick5	-5 to 5 mm

To improve the skew correction capability, the registration rollers [A] are rotated in reverse after the paper is made to hit the registration rollers [A]. (Registration Roller Reverse Control)

When the registration rollers are rotated in reverse, skewing of the paper is corrected as shown below.

- The leading edge of the paper, which enters between the roller nip, is transported to the upstream side of the transfer direction.
- The leading edge of the paper, which does not sufficiently enter between the roller nip, is transported to the down stream side of the transfer direction.

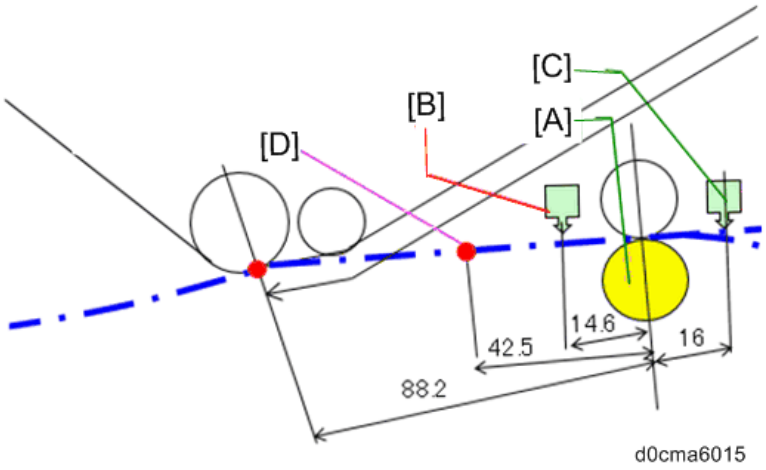


Leading Edge Registration

The leading edge registration is made by adjusting the paper transport timing of the registration rollers. The registration rollers stop the paper and adjust the timing for feeding the paper into the machine order to match the positions of the paper and the image on the transfer belt. The leading edge registration can be adjusted by SP1-001-001 to 016 (Lead Edge Reg). For details, see Adjustment 005: Registration.

Pro C5310S/C5300S has the transfer timing sensor (S129) [B] at 14.6 mm from the registration roller [A]. ([C]: registration sensor (S66))

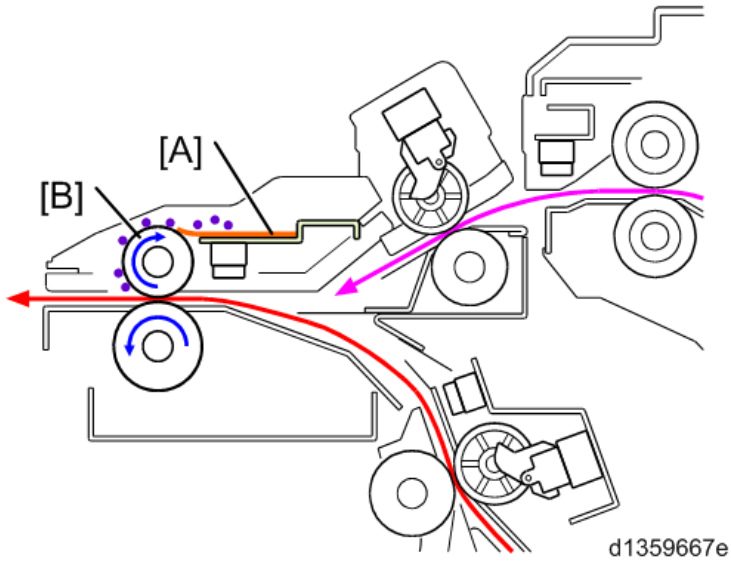
After the skew correction, the paper is transported in an amplifying speed until the paper reaches 42.5 mm [D] from the registration roller [A]. Then the transporting speed is decreased to the process speed. When the paper is transported in the amplifying speed, the transfer timing sensor (S129) detects the leading edge of the paper, and then the delay amount of the paper is calculated from a relationship between an actual measurement value and an ideal value. Based on the results of these calculations, transporting delay is corrected by changing a timing [D] for decreasing the paper transporting speed. After adjusting the feed of the leading edge so it aligns correctly with the start of image transfer, the paper is transported to the paper transfer belt unit.



Paper Dust Collection

The dust collection sheet [A] is attached to the upper registration roller (idle) [B]. The dust collection sheet [A] stays in contact with the upper registration roller (idle) all the time. This decreases the amount

of paper dust that falls into the machine.

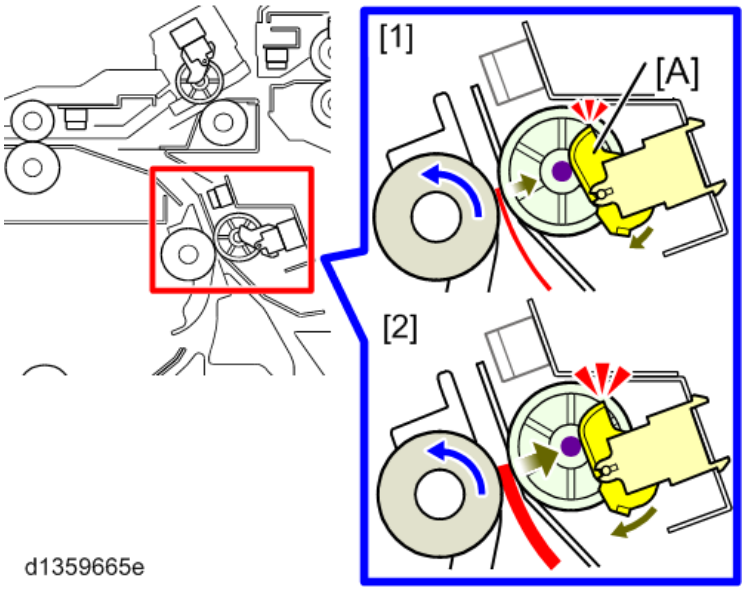


Paper Thickness, Double Feed Detection

The best conditions for image transfer and fusing depend on paper thickness and paper type. Therefore, it is important to select the correct paper thickness on the operation panel for high quality printing. Also, fusing failure or paper jam can occur if the paper thickness is different from the one selected on the operation panel.
For the above reasons, this machine has a paper thickness/double feed detection feature to prevent problems caused by selecting the wrong paper thickness on the operation panel.

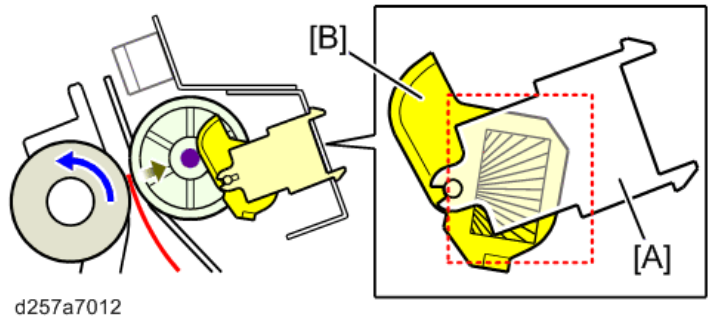
Basic Operation

The paper type sensor (lever-type encoder sensor) (S69) [A] measures the thickness of the paper. Then the machine uses the measurement results to check that the paper thickness is correct and that there is no double feed. If the paper thickness is different or a double feed has occurred, the machine stops feeding the paper.

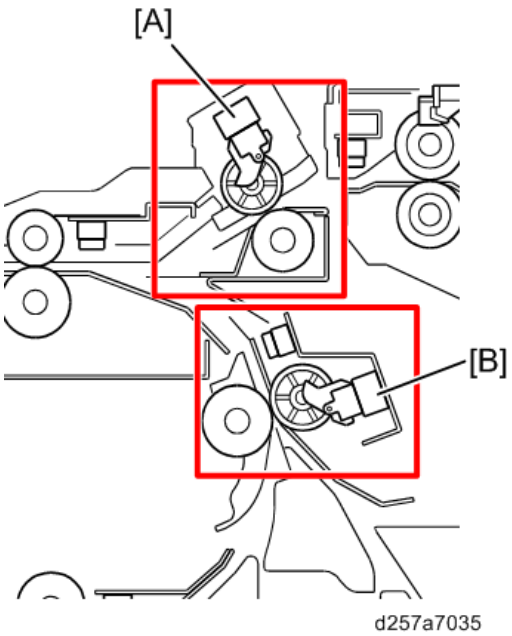


No.	Description	No.	Description
[1]	When thin paper passes	[2]	When thick paper passes

The paper type sensor (S69) [A] detects the rotation amount of the lever [B], and then checks if the paper thickness is correct and that there is no double feed.



There are two paper type sensors. One is installed in the bypass relay transport section and the other is in the relay transport section. The paper type sensor (S67) [A] in the bypass relay transport section detects the thickness of the paper transported from the bypass tray. The paper type sensor (S69) [B] in the relay transport section detects the thickness of the paper transported from the bank feed section/LCIT (option)/duplex transport section.



Paper Removal Method

If the machine detects the wrong paper thickness or a double feed, you can remove the paper in the same way as the usual jam removal operation. You need to do the following after removing the paper.

- If the machine detected the wrong paper thickness:
  Change the paper in the paper tray, so that the thickness of the paper in the tray matches the one selected on the operation panel.
  -or-
  Change the paper thickness on the operation panel, so that the paper thickness selected on the operation panel matches the one in the paper tray.
- If the machine detected a double feed:
  Fan the stack of paper in the paper tray.

Paper Thickness Detection

After the first sheet of paper reaches the paper thickness measurement section, the paper type sensor measures the paper thickness and the machine compares the measurement result and the paper thickness selected on the operation panel (Tray Setting).
If the measured thickness is not within the allowable range as shown in the table below, the machine determines that the paper thickness is wrong, and stops feeding the paper. Then J098 (JAM) is displayed on the operation panel.

Alert		Paper Thickness Measurement Result								
		Thin	Plain 1	Plain 2	Middle Thick	Thick 1	Thick 2	Thick 3	Thick 4	Thick 5
Tray Setting	Thin	-				JAM	JAM	JAM	JAM	JAM
	Plain 1		-				JAM	JAM	JAM	JAM

	Plain 2			-				JAM	JAM	JAM
	Middle Thick				-				JAM	JAM
	Thick 1	JAM				-				JAM
	Thick 2	JAM	JAM				-			
	Thick 3	JAM	JAM	JAM				-		
	Thick 4	JAM	JAM	JAM	JAM				-	
	Thick 5	JAM	JAM	JAM	JAM	JAM				

Alert		Paper Thickness Measurement Result								
		Thickness 1	Thickness 2	Thickness 3	Thickness 4	Thickness 5	Thickness 6	Thickness 7	Thickness 8	Thickness 9
Tray Setting	Thickness 1	-				JAM	JAM	JAM	JAM	JAM
	Thickness 2		-				JAM	JAM	JAM	JAM
	Thickness 3			-				JAM	JAM	JAM
	Thickness 4				-				JAM	JAM
	Thickness 5					-				JAM
	Thickness 6	JAM					-			
	Thickness 7	JAM	JAM					-		
	Thickness 8	JAM	JAM	JAM					-	
	Thickness 9	JAM	JAM	JAM	JAM					

Double Feed Detection

There are two types of double feed:

- The preceding sheet is double fed, but the succeeding sheet is fed normally: J095 is displayed
- The preceding sheet is fed normally, but the succeeding sheet is double fed: J099 is displayed

The machine compares the thickness of two paper sheets (preceding sheet and succeeding sheet) consecutively fed from the same paper tray. If the paper thickness difference between the two paper sheets is larger than the double-feed detection threshold, the machine detects a double feed and stops feeding the paper. Then J095 or J099 is displayed on the operation panel.

The measured paper thickness value, which is used for the double-feed judgement, is reset at the following times.

- When the main power is turned ON. (The machine resets the measured values of the paper which has been fed from all the paper trays.)
- When all the doors are closed while the main power is ON.
- When the paper tray is pulled out and inserted again. (The machine resets the measured values of the paper which has been fed from the paper tray which was pulled out and inserted again.)
- When the status of the bypass tray paper end sensor (S108) is shifted from the paper absent state to the paper present state. (The machine resets the measured value of the paper which was fed from the bypass tray.)
- When printing on paper for the first time since the paper thickness setting was changed on the operation panel. (The machine resets the measured value of the paper fed from the paper tray for which the paper thickness setting was changed.)
- When a double feed occurs. (The machine resets the measured value of the paper transported from the paper tray in which the double feed occurred)
- When a paper jam occurs.
- After returning from the energy saving mode.

Note

- The paper thickness detection feature and the double feed detection feature can be turned ON/OFF with UP mode and SP mode for each tray. (The default setting is ON)

SP No.	SP Name	Value
SP1-302-001 to 006	Dbl-Feed Detect: Tray 1 to Tray 4, LCIT, Bypass Tray	0: OFF 1: ON
SP1-313-001 to 006	Paper Thickness Detect: Tray 1 to Tray 4, LCIT, Bypass Tray	0: OFF 1: ON

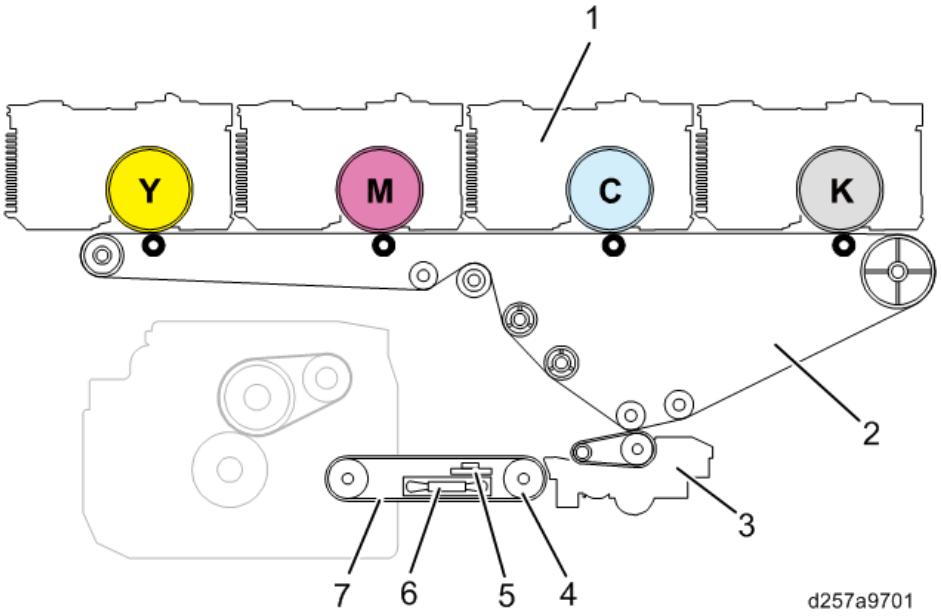
- If the different paper types are mixed in the paper tray, the machine cannot detect the paper thickness properly.

Paper Transport Belt Unit

Mechanism Descriptions

Component Layout

After the image has been transferred to the paper in the paper transfer belt unit, the paper transport belt unit feeds the paper to the fusing unit.

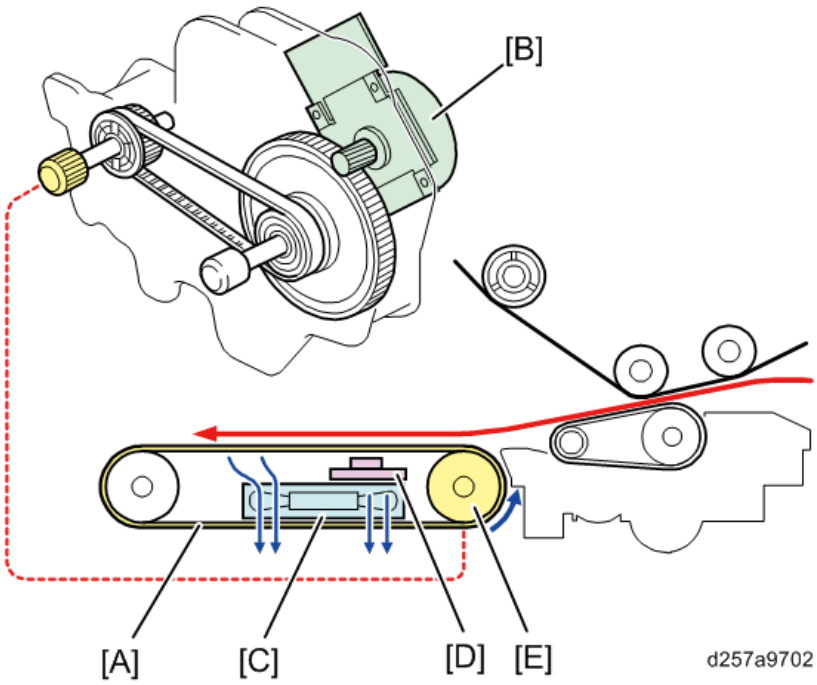


1	PCDU	5	Paper Transport Belt Sensor (S63)
2	Image Transfer Belt Unit	6	Paper Transport Belt Fan (FAN28)
3	Paper Transfer Belt Unit	7	Paper Transport Belt
4	Paper Transport Belt Unit		

Mechanism Details

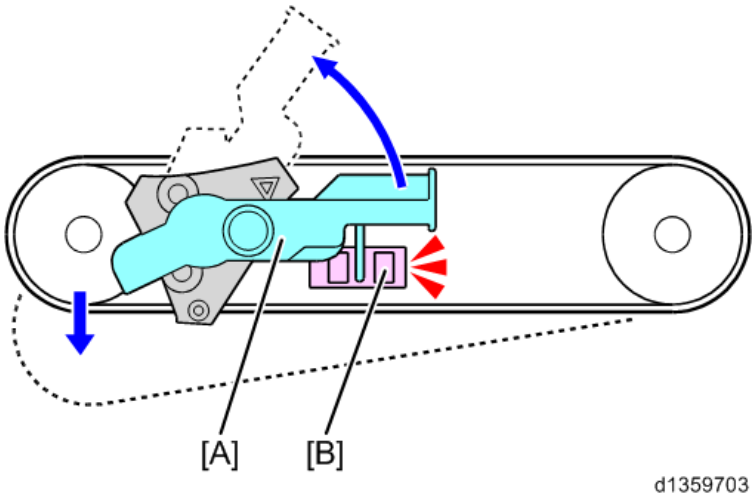
Paper Transport Belt Attraction

The paper transfer belt motor (M16) [B] drives the paper transport belt [A] via gears and paper transport belt drive roller [E]. The paper transport belt fans (FAN28) [C] draw air through holes in the paper transport belt [A]. This holds the paper on the belt. Then the paper transport belt feeds the paper from the paper transfer belt unit to the fusing unit. The paper transport belt sensor (S63) [D] in the paper transport belt unit detects paper jams.



Paper Transport Belt Unit Detection

The paper transport belt unit can be lowered by lifting the lever [A], in order to facilitate jam removal.
The paper transport belt sensor (S63) [B] detects whether the paper transport belt unit is seated in the operational position or not.



Paper Transport Belt Height Adjustment

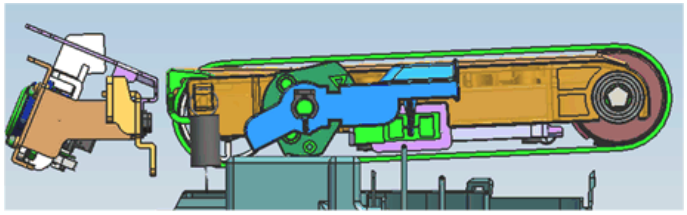
The belt position (height) of the paper transport belt unit can be adjusted.
This can be used as a countermeasure for paper transport problem (bridge jam) and abnormal image (vertical streaks).

When aligned with the " ○" mark (default)

7.Detailed Descriptions

d0cma6003

Paper transport belt unit exit height: default:



d0cma6004

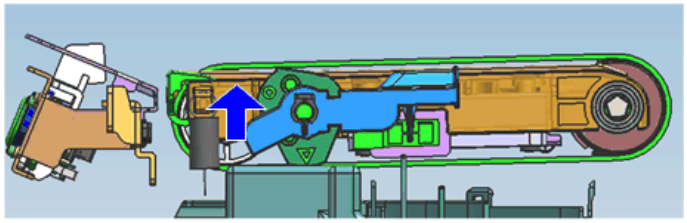
Target:

The optimum configuration for paper transportation capability and margin against abnormal images when using thin to thick paper.

When aligned with the " △ " mark

d0cma6005

Paper transport belt unit exit height: raised by 2 mm:



d0cma6006

Effect:

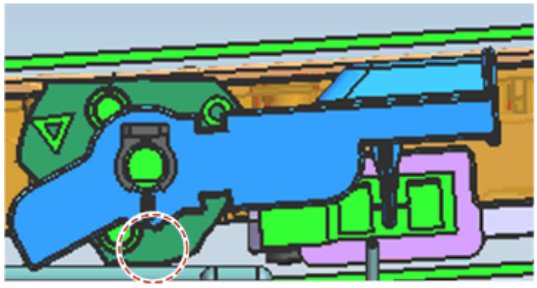
- Increases the margin against lag jam (bridge jam) of small size thick paper between paper transfer roller unit - paper transport belt unit - fusing unit.
- Paper transportation capability may be improved because the contact area between the belt and paper becomes larger.

Jam code examples: JAM24 (Fusing Paper Feed Sensor: Late Jam), JAM 72 (Paper Transport Belt Unit Set Sensor: Lag Jam)

Side effect: Paper transportation capability of thin paper may be lowered, which may lead to folded

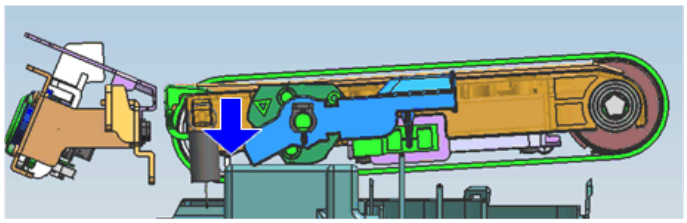
edges and paper jams.

When aligned with the position with no mark



d0cma6007

Paper transport belt unit exit height: lowered by 2 mm:



d0cma6008

Effect:

- Increases the margin against toner scattering caused by friction between paper and the ribs of the paper transport belt unit exit (in low-temperature, low-humidity environments).
- Toner scattering may be reduced because the friction between paper and the ribs of the paper transport belt unit exit is reduced.

* It is required that you lower the fusing unit entrance guide plate by 1 mm to secure paper transportation capability.

d0cma6009

- Target: Increased margin against unevenness on the side edges of thin paper.
- Effect: Decreased margins against creases, earthworms and shock jitter.

Side effect:

7.Detailed Descriptions

Decreased margin against bridge jams

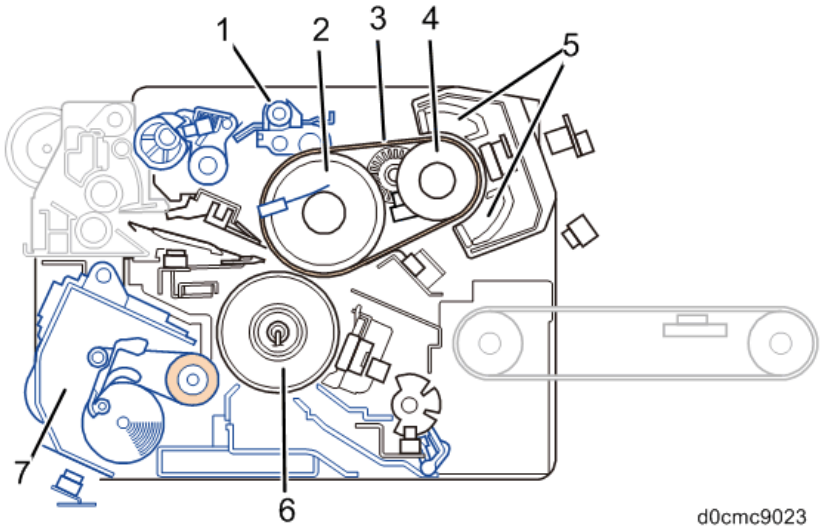
Paper transportation capability to the fusing unit worsens and margins against creases, earthworms and shock jitter decreases.

Fusing Unit

Mechanism Descriptions

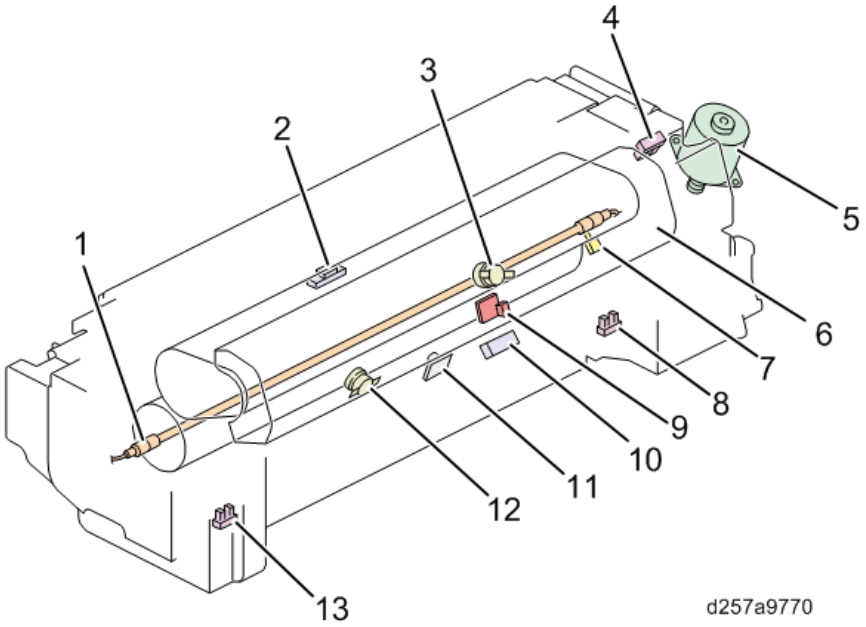
Component Layout

Paper transported from the paper transport belt unit enters the fusing unit, where the paper is pressed between the pressure roller and fusing roller to fuse the toner to the paper. The components in blue are only for Pro C5300S/C5310S to improve paper handling and maintain quality over a long period. Pro C5300S/C5310S has a fusing belt smoothing roller that removes the roughness on the fusing belt caused by the paper edges, and the fusing cleaning web unit that removes material attached to the fusing belt.



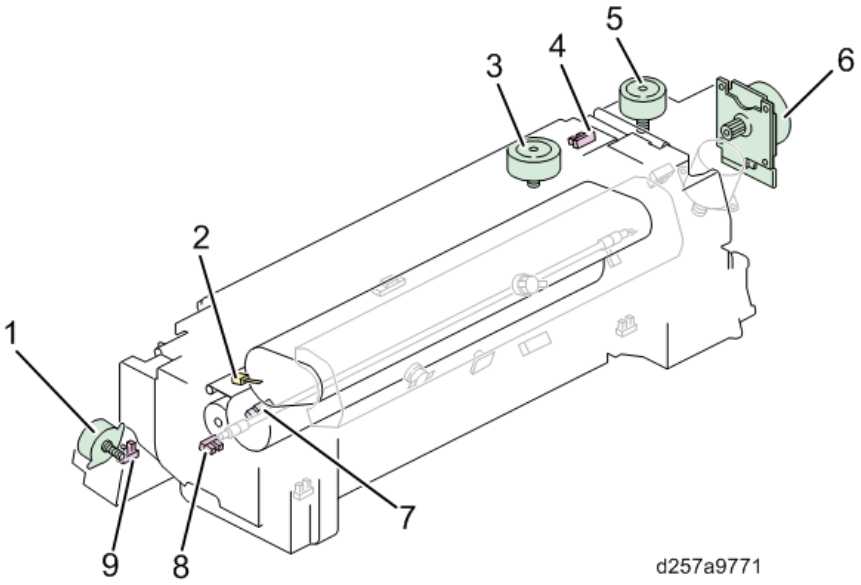
No.	Descriptions	No.	Descriptions
1	Fusing Belt Smoothing Roller	5	IH Coil
2	Fusing Roller	6	Pressure Roller
3	Fusing Belt	7	Fusing Cleaning Web Unit
4	Heating Roller		

Common Components for IM C6500/C8000 and Pro C5300S/C5310S



No.	Name	No.	Name
1	Pressure Roller Fusing Lamp (L5)	8	Pressure Roller Sensor:Rear (S51)
2	Fusing Paper Exit Sensor (S50)	9	Heating Roller Thermopile (S23)
3	Heating Roller Thermostat (TS2)	10	Fusing Entrance Sensor (S22)
4	Heating Roller Rotation Sensor (S55)	11	Pressure Roller Thermopile (S53)
5	Fusing Release Motor (M13)	12	Pressure Roller Thermostat (TS1)
6	IH Coil Unit	13	Pressure Roller Sensor:Front (S52)
7	Fusing Belt Thermistor (TH5)		

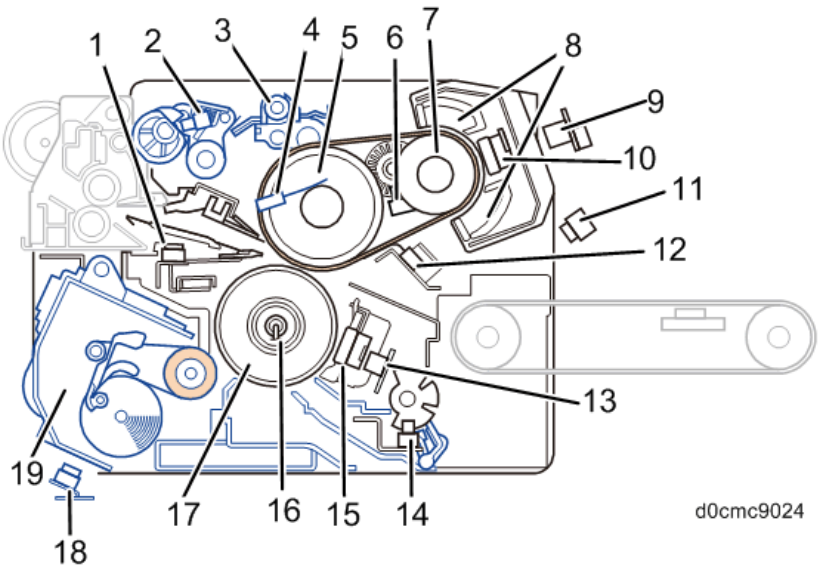
Components Only for Pro C5300S/C5310S



No.	Name	No.	Name
1	Cleaning Web Motor (M49)	6	Fusing Belt Smoothing Roller Drive Motor (M11)
2	Hot Roller Shaft Thermistor (TH4)	7	Cleaning Web Set Sensor (S86)
3	Cleaning Web Contact Motor (M50)	8	Cleaning Web End Sensor (S85)
4	Fusing Belt Smoothing Roller Contact Sensor (S54)	9	Cleaning Web Contact Sensor (S87)
5	Fusing Belt Smoothing Roller Contact Motor (M12)		

Component Descriptions

The components in blue are only for Pro C5300S/C5310S.



No.	Descriptions	No.	Descriptions
1	Fusing Paper Exit Sensor (S50) **Related Error:** JAM024	11	Fusing Entrance Sensor (S22) **Related Error:** JAM001
2	Fusing Belt Smoothing Roller Contact Sensor (S54) **Related Error:** SC570-00	12	Fusing Belt Thermistor (TH5) **Related Error:** SC561-00, SC562-02/03
3	Fusing Belt Smoothing Roller Prevents damage to the belt caused by paper edges.	13	Pressure Roller Thermopile (S53) **Related Error:** SC551-00, SC552-02/03, SC553-00, SC554-00
4	Hot Roller Shaft Thermistor (TH4) **Related SP:** SP1-101-021 **Related Error:** SC579-00, SC580-03	14	• Front Pressure Roller Sensor:Front (S52) **Related Error:** SC569-04 • Rear Pressure Roller Sensor:Rear (S51)

No.	Descriptions	No.	Descriptions
			Related Error: SC569-02, SC562-03
5	Fusing Roller	15	Pressure Roller Thermostat (TS1)
6	Heating Roller Rotation Sensor (S55) **Related Error:** SC548-00	16	Pressure Roller Fusing Lamp (L5)
7	Heating Roller	17	Pressure Roller
8	IH Coil	18	Cleaning Web Set Sensor (S86)
9	Heating Roller Thermopile (S23)	19	Fusing Cleaning Web Unit
10	Heating Roller Thermostat (TS2)		

Mechanism Details

Fusing Mechanism

Belt fusing is adopted in this machine.

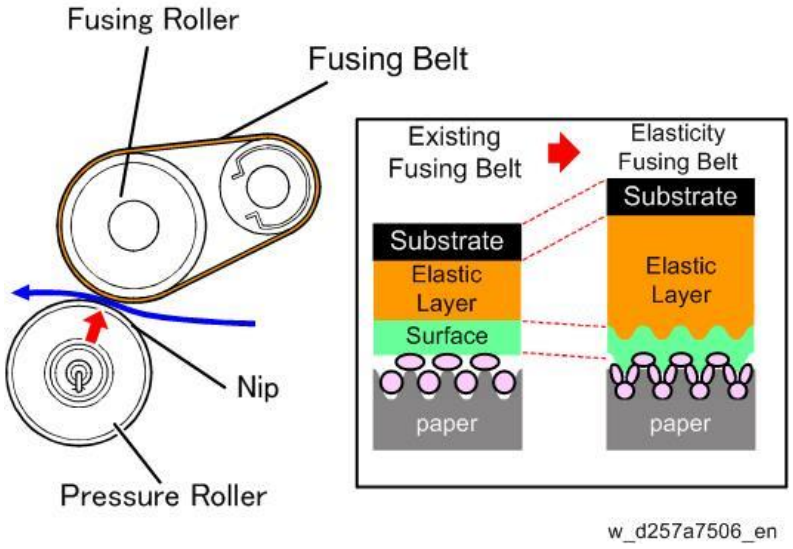
The surface of the fusing belt is made from polymide and is covered with silicone rubber that is coated by fluororesin. The fusing belt is driven by the fusing roller (Φ57).

1. Fusing roller material

   The following material is used to shorten the warm-up time for IM C6500/C8000, to improve the image quality of the coated paper for Pro C5300S/C5310S.

   - IM C6500/C8000: Sponge rubber
   - Pro C5300S/C5310S: Solid rubber

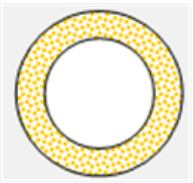
   The elastic layer of the fusing belt of Pro C5300S/C5310S is thickened in order to let the belt enter indentations in the paper that existing belts cannot be inserted into. This improved fusing belt imposes pressure and heat equally on all parts of the paper, and dramatically enhances fusing efficiency.



2. Fusing Roller

   In this machine, the fusing roller materials are different between Pro C5300S/5310S and IM

C6500/C8000 in order to suit different types of users as follows.

Machine Type	IM C6500/C8000	Pro C5300S/C5310S
Diagram	 d1355185 Silicone foam roller φ57*1	 d1355182 Silicone solid roller φ57*1
Details	Employed for energy saving improvement. **Merits** Shorter warming-up time • IM C6500/C8000: Less than 55sec **Demerits** • Lower image quality than Pro C5300S/C5310S/C5100S/C5110S. • Lower productivity than Pro C5300S/C5310S/C5100S/C5110S.	Employed for image quality and productivity provement. **Merits** • Superior to MP C6503/8003/C6502/8002 in image quality of coated paper • High productivity **Demerits** Longer warming-up time • Pro C5300S/C5310S: Less than 120sec

*1 The outer diameter of the fusing roller is larger than the predecessor model. This increases the nip width and the fusing temperature is lowered.

3. Heating roller

   The heating roller (Φ35) is made of a magnetic shunt alloy. The flux shield plate (aluminum) and the shaft (aluminum) are included in the roller.

4. IH Coil (external heating IH)

   In this machine, an IH coil heats the heating roller and the fusing belt.

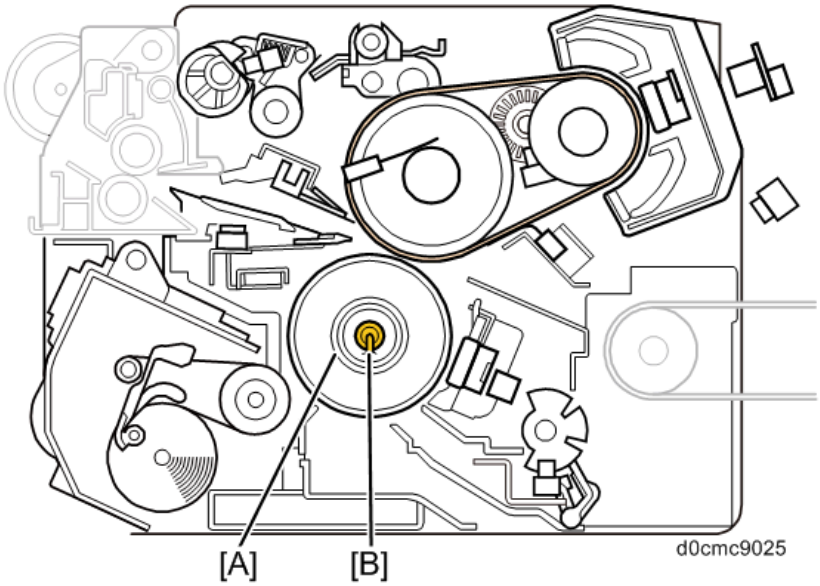
   The IH coil is employed in order to realize fast heating and temperature uniformity.

5. Pressure Roller (Φ55)

   The pressure roller (Φ50) surface is made of iron covered with silicone rubber that is coated with a fluororesin tube. The pressure roller has a fusing lamp in it.

6. Fusing Lamp

   There is a fusing lamp [B] inside the pressure roller [A]. This heats the pressure roller when starting up and when warming up. It also keeps the machine heat during waiting.

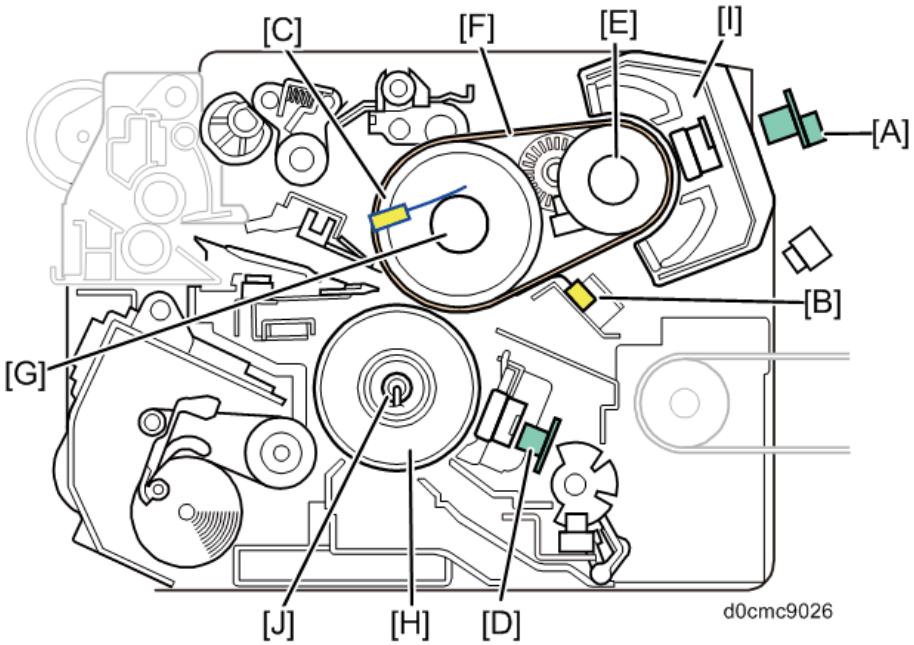


7. Fusing separation plate
   Other models have multiple separation plates but this model has only one plate. This prevents folding, jams, and damage to the image.

Thermal Control

Thermal Control Sensors

This machine has thermal control sensors that monitor various locations to control the IH coil [I] and the pressure roller fusing lamp (L5) [J] in order to keep the proper temperature.

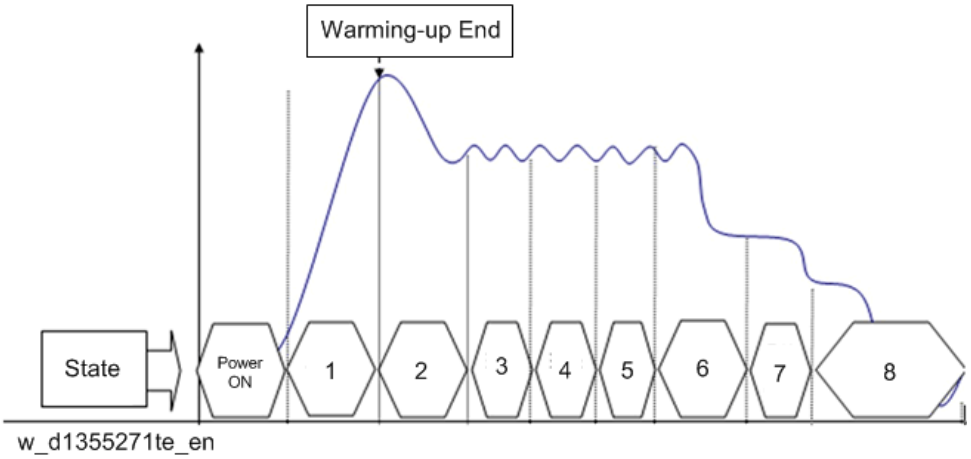


Thermal Control Sensor	Monitoring Area
Heating Roller Thermopile (S23) [A]	Heating Roller [E] (Center)
Fusing Belt Thermistor (TH5) [B]	Fusing Belt [F] (End)
Hot Roller Shaft Thermistor (TH4) [C]	Hot Roller Shaft [G] (Ends)

Thermal Control Sensor	Monitoring Area
(Pro C5300S/C5310S only)	
Heating Roller Thermopile (S53) [D]	Pressure Roller [H] (Center)

Thermal Transition

This machine controls the fusing unit to change the temperature in the fusing unit, depending on the eight states listed below:



State	Descriptions
1. Start-up, Restart-up	The machine detects that all covers (doors) are closed and then starts the fusing warming-up. The machine controls the fusing drive motor (M22), the IH coil, and the pressure roller fusing lamp (L5) to increase the fusing temperature up to the target temperature.
2. Rotation after Reload	After fusing warming-up finishes, the fusing drive motor (M22) turns on for a certain time to keep the fusing temperature at a specified level (adjusted with “SP1107-001: Heating R”, “SP1107-002: Pressure R”).
3. Before Paper Passing	The machine increases the temperature of the fusing roller and of the pressure roller to reach "Paper Passing-start Temperature".
4. While Paper Passing	While paper is passing through the machine.
5. After Paper Passing	After the last sheet of a job passes the fusing paper exit sensor (S50), the machine controls the fusing drive motor (M22), IH coil, and the pressure roller fusing lamp (L5) to keep the target temperature (target temperature is adjusted with "SP1108-001: Heating R”, “SP1108-002: Pressure R").
6. Ready	When the "After Paper Passing" state finishes, the machine turns to the "Ready" state. The machine controls the fusing drive motor (M22), the IH heater, and the pressure roller fusing lamp (L5) in order to maintain the fusing temperature (can be adjusted with "SP1107-001: Heating R", "SP1107-002: Pressure R")

7.Detailed Descriptions

State	Descriptions
7. Low Power Mode	A specified time passes after fusing system is ready to print, and then the IH coil and fusing drive motor (M22) turn off. At the same time, the pressure roller fusing lamp (L5) turns on in order to keep the target temperature (can be adjusted with "SP1107-006") of the pressure roller.
8. Sleep Mode	A specified time (normal: 1 minute) passes after the machine enters the "ready" state, and then the machine cuts the power supply for the IH coil, the pressure roller fusing lamp (L5), and the fusing drive motor (M22).

The tables below show the target temperature for the heating roller and pressure roller for each state.

Reload

	IM C6500	IM C8000	Pro C5300S	Pro C5310S
Heating Roller	143°C	143°C	148°C	153°C
Pressure Roller	130°C	140°C	100°C	100°C

After Reload/Paper Passing

	IM C6500	IM C8000	Pro C5300S	Pro C5310S
Heating Roller	133°C	140°C	136°C	143°C
Pressure Roller	130°C	130°C	90°C	90°C

Permission to Start Printing (IM C6500/C8000: Plain Paper 1, Pro C5300S/C5310S: Paper Weight 2)

	IM C6500	IM C8000	Pro C5300S	Pro C5310S
Heating Roller	120°C	128°C	123°C	126°C
Pressure Roller	70°C	70°C	30°C	30°C

Ready

	IM C6500	IM C8000	Pro C5300S	Pro C5310S
Heating Roller	133°C	140°C	120°C	120°C
Pressure Roller	130°C	130°C	90°C	90°C

Low Power Mode

	IM C6500	IM C8000	Pro C5300S	Pro C5310S
Heating Roller	-	-	-	-
Pressure Roller	130°C	130°C	90°C	90°C

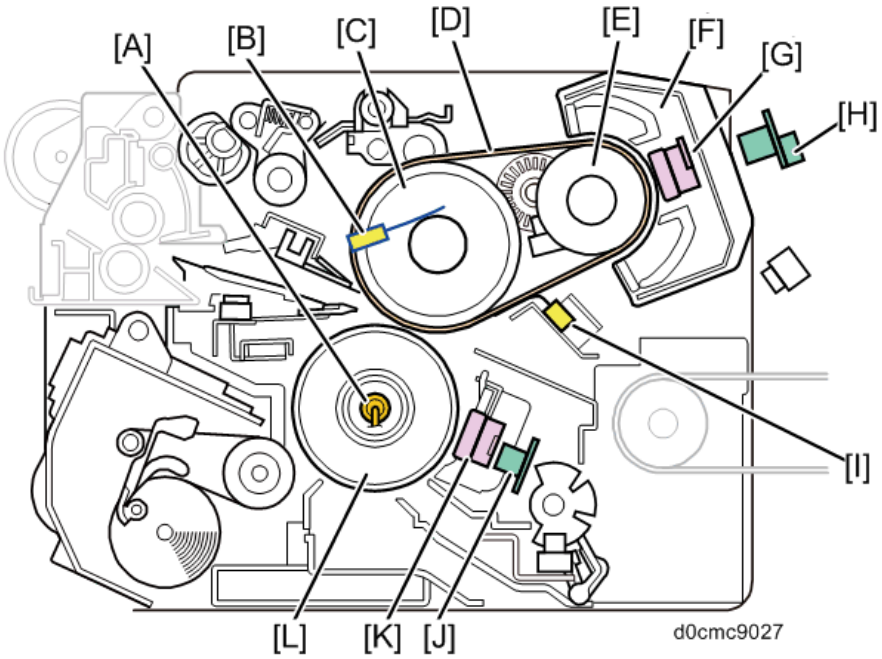
Fusing Unit Overheat Prevention

This machine has 3 ways to prevent overheating: soft-overheat detection, hard-overheat detection, thermostat

The component call-outs correspond to the diagram below.

	Heating Roller	Pressure Roller
Soft-overheat Detection	For all machine types **SC543-00** Name: Heating Roller Thermopile (S23) [H] Detection Temp.: More than 240°C **SC563-00** Name: Hot Roller Shaft Thermistor (TH4) [I] Detection Temp.: More than 250°C	For all machine types **SC553-00** Name: Pressure Roller Thermopile (S53) [J] Detection Temp.: More than 220°C
Hard-overheat Detection	For all machine types **SC544-00** Name: Heating Roller Thermopile (S23) [H] Detection Temp.: More than 250°C **SC564-00** Name: Hot Roller Shaft Thermistor (TH4) [I] Detection Temp.: More than 260°C	For all machine types **SC554-00** Name: Pressure Roller Thermopile (S53) [J] Detection Temp.: More than 250°C
Thermostat	When the thermostat detects an abnormality, SC689-00 or SC582-01 occurs.	When the thermostat detects an abnormality, SC555-00 or SC552-02, 03 occurs.
	If a thermostat has been activated, replace the entire fusing unit. It's possible that the IH coil [F] / the fusing belt [D] / the heating roller [E] / the fusing roller [C] / the pressure roller [L] are damaged.	

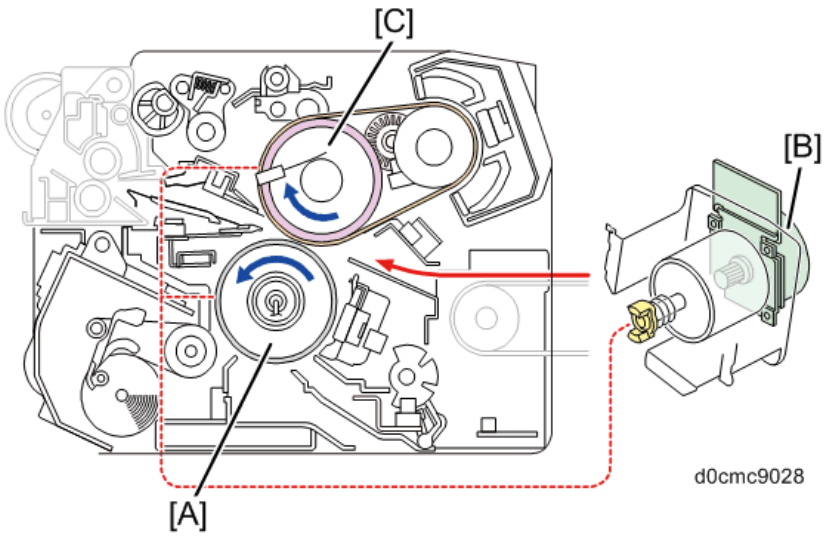
Related Components Location Diagram



[A]	Pressure Roller Fusing Lamp (L5)	[G]	Heating Roller Thermostat (TS2)
[B]	Hot Roller Shaft Thermistor (TH4)	[H]	Heating Roller Thermopile (S23)
[C]	Fusing Roller	[I]	Fusing Belt Thermistor (TH5)
[D]	Fusing Belt	[J]	Pressure Roller Thermopile (S53)
[E]	Heating Roller	[K]	Pressure Roller Thermostat (TS1)
[F]	IH Coil	[L]	Pressure Roller

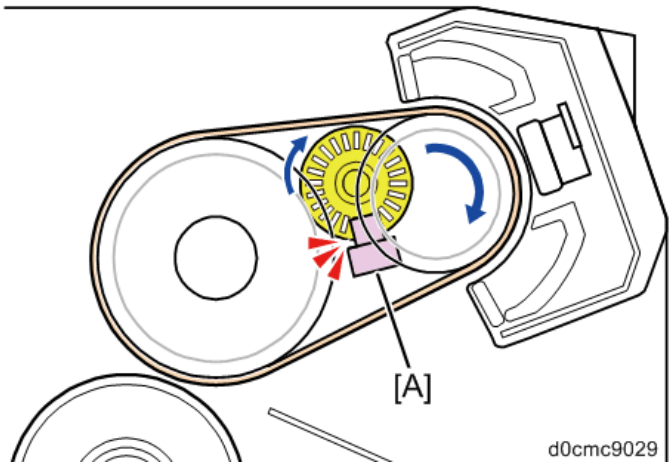
Fusing Drive

- IM C6500/C8000
  Through gears, the fusing drive motor (M22) [B] drives the pressure roller [A], and that also rotates the fusing roller [C].
- Pro C5300S/C5310S
  Through gears, the fusing drive motor (M22) [B] drives the fusing drive roller [C], and that also rotates the pressure roller [A].



Rotation Detection

The heating roller rotation sensor (S55) [A] detects the rotation of the fusing belt and the results are fed back to the fusing drive motor (M22). The heating roller rotation sensor (S55) prevents too much heating by the IH heater that can cause fire damage or machine break-down. When the heating roller rotation sensor (S55) [A] detects that the fusing belt is not rotating, the machine cuts off the current to the IH coil.



Pro C5300S/C5310S has a fusing roller that drives, being covered with the thick rubber.
If the fusing roller expands because of thermal change, the speed of the fusing belt increases, which results in creating abnormal images.
To keep the speed of the fusing belt constant, the heating roller rotation sensor (S55) [A] detects the rotation of the fusing belt. If an unexpected value is detected, the reading is used to control the rotation of the fusing drive motor (M22).

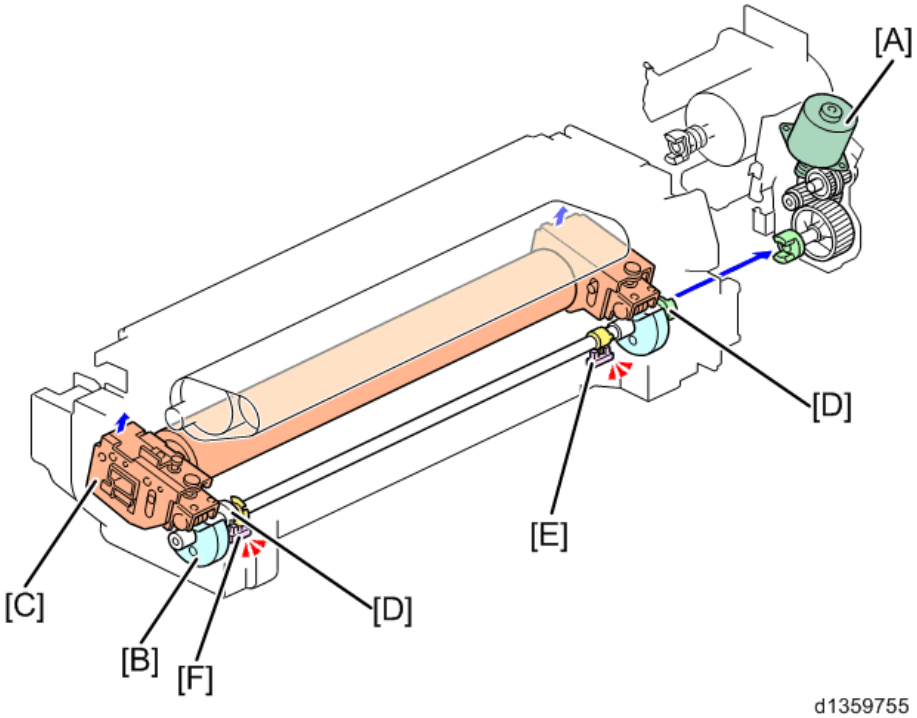
Pressure Mechanism

The pressure roller has a release control mechanism to release fusing pressure when a job is not in

progress. This contributes to reducing deformation of the pressure roller.
When a job starts, the fusing release motor (M13) [A] drives, the pressure roller cams [B] turn, and the pressure roller unit [C] shifts up. When a job finishes, the fusing release motor (M13) [A] drives in the opposite direction, and the pressure roller unit [C] shifts down and pressure is released. With the actuators [D], the front and rear sensors near the axial points of the pressure roller cams detect the following:

- Pressure Roller Sensor:Front (S52)
  Detects the angle of the cam in 3 steps to control the nip pressure
- Pressure Roller Sensor:Rear (S51)
  Detects HP

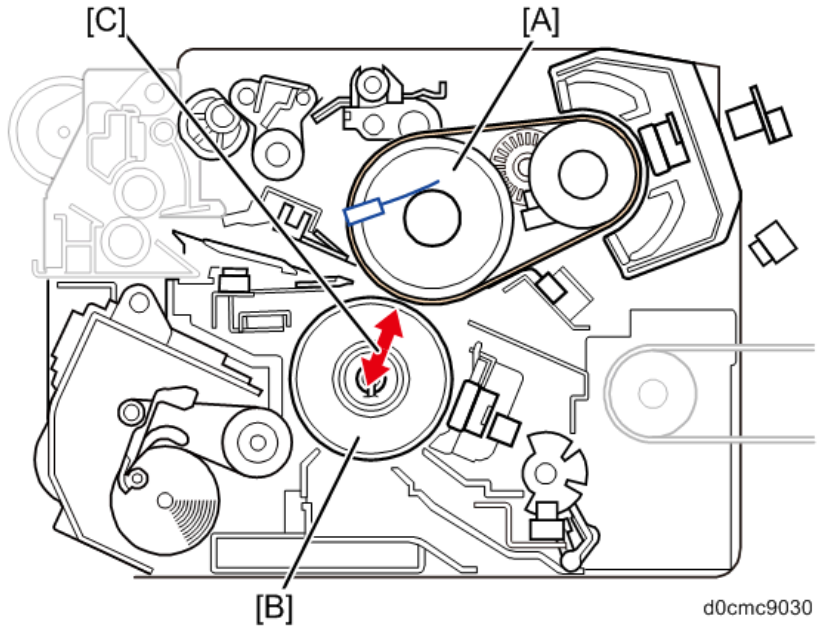
The fusing release motor (M13) [A] is driven by a DC brushless motor with an encoder.
After the motor has applied pressure, it stays on because otherwise the roller rotation while paper is passing would tend to release the pressure.



In addition, the nip pressure is adjustable in 3 steps by changing the angle of the cam, depending on thickness of paper.

	State	Default Value
Pressure Position 0	Released	-
Pressure Position 1	The fusing drive motor (M22) drives in reverse to remove jammed paper (not changeable in SP mode)	2mm
Pressure Position 2	For envelope feeding (changeable with SP1-989-xxx)	3.5mm
Pressure Position 3	For paper feeding (not changeable in SP mode)	IM C6500/C8000: 16.7±0.2mm

	State	Default Value
		Pro C5300S/C5310S: 17.4±0.3mm



[A]: Fusing Roller

[B]: Pressure Roller

[C]: Changing the nip width by changing the pressure position

Fusing Nip-band Adjustment (Envelope)

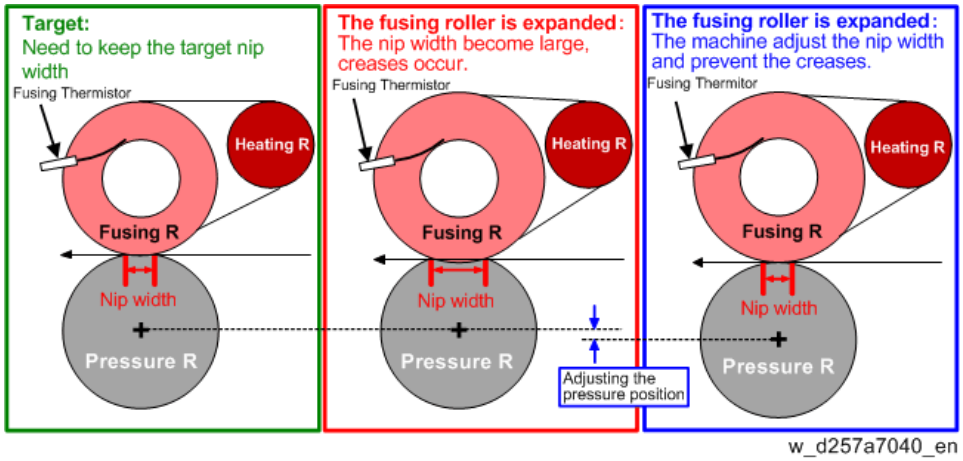
To reduce creases in envelopes, this machine lowers nip pressure if the following settings are made:

- Select [Envelope] as [Paper Type] in [Paper Size/Paper Type]
  - Press the [Settings] -> [Tray/Paper Settings] to open the [Paper Size/Paper Type] screen.
- Select [Envelope] as [Paper Type] in [Tray Paper Settings] for IMSS setting (Pro C5300S/C5310S only)

  Press the [Tray Paper Settings] on the Home screen to open the [Tray Paper Settings] screen.

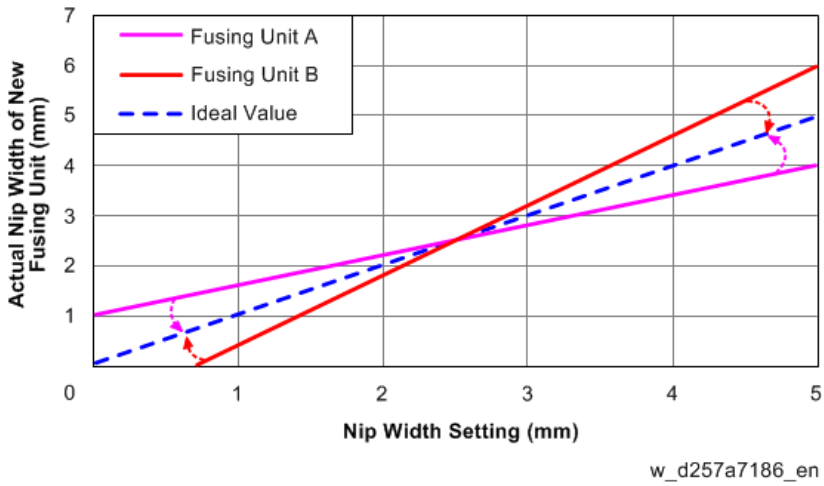
The pressure position 2 (envelope position) is selected automatically as a nip width so that the nip width for envelope printing becomes narrower in order to reduce the nip pressure.

The nip width adjustment is performed by changing the pressure roller position. The machine predicts the thermal expansion coefficient of the fusing roller from the output of the hot roller shaft thermistor (TH4). The machine changes the pressure roller position according to the thermal expansion coefficient of the fusing roller, so that the nip width becomes optimal for envelope printing.



Nip Width Adjustment for New Fusing Unit (Pro C5300S/C5310S)

The nip width of the fusing unit vary among individual units. Therefore, after replacing the fusing unit with a new one, the nip width needs to be adjusted by entering the adjustment value on the label attached to the fusing unit.



By performing this adjustment, the nip width adjustment for the envelope, described above, can be done correctly.

For details about how to make the nip width adjustment for a new fusing unit, see Adjustment for the Nip Width of the Fusing Unit (Pro C5300S/C5310S only).

Jam Detection

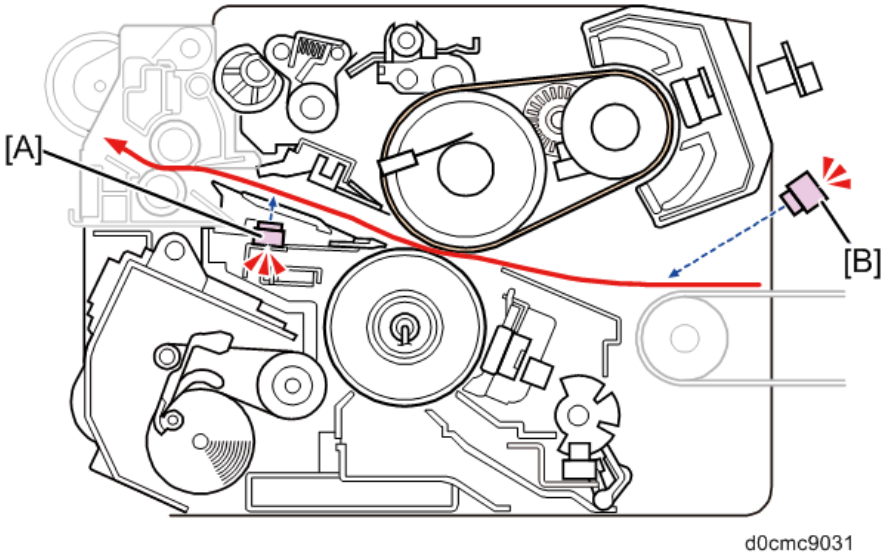
The fusing paper exit sensor (S50) [A] detects jams by monitoring the ejected paper.

The fusing entrance sensor (S22) [B] detects paper remaining in the fusing area after a jam occurs. It is not used during normal printing.

If you replace the fusing entrance sensor (S22) [B], do the following initial procedure:

1. Make sure that remaining paper does not block the optical path of the fusing entrance sensor (S22) [B] (blue arrow from the sensor).
2. Close the drawer unit and the right cover.
3. Do "SP1-134-001".

4. Make sure that the value is around 200 to 400 in "SP1-134-002".
   If the value is not around 200 to 400, paper could be remaining in the fusing unit or the drawer unit may not be completely closed.
   Therefore, remove the paper from the fusing unit and close the drawer unit completely. Then do "SP1-134-001" again.
5. Turn OFF the machine, and then turn it ON again.



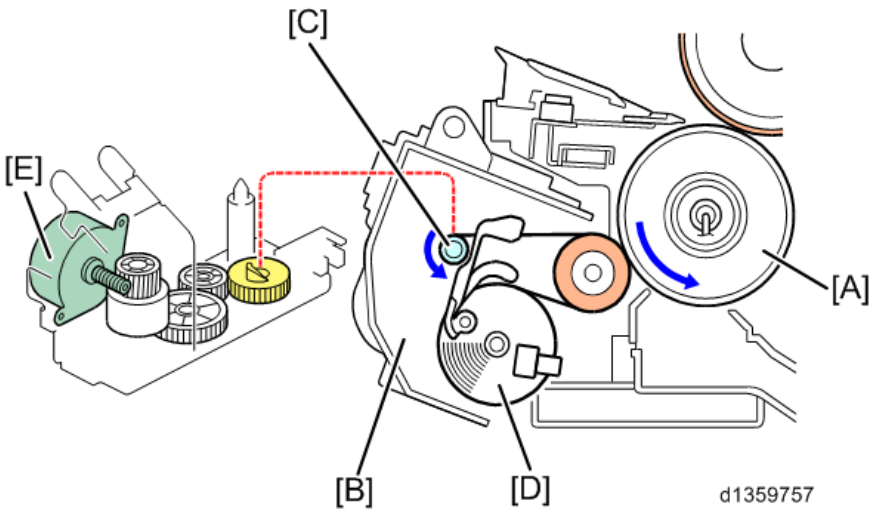
Cleaning Mechanism (Pro C5300S/C5310S)

The Pro C5300S/C5310S has a fusing cleaning web unit. Material attached to the fusing belt is removed by the fusing cleaning web unit [B] through the pressure roller [A], in order to prevent black spots on prints.

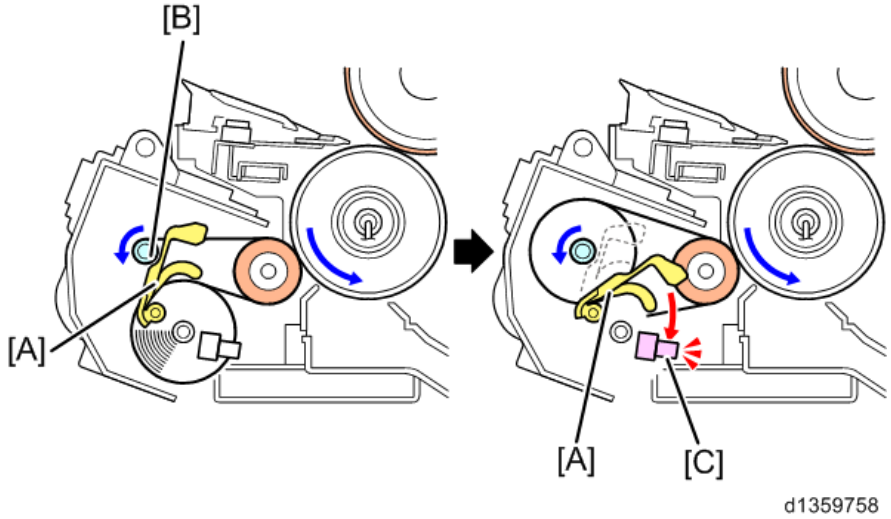
The fusing cleaning web unit [B] uses the cleaning web method (heatproof non-woven fabric).

The fusing cleaning web [D] contacts the pressure roller [A] and wipes off toner and paper dust on the roller's surface while being rolled up by the web take-up roller [C]. The fusing cleaning web [D] contains silicone oil in order to lubricate the pressure roller and the fusing belt. The fusing cleaning web [D] is driven by the cleaning web motor (M49) [E], which turns on every time a certain number of sheets are printed in a job, and rolls up a certain length of the fusing cleaning web.

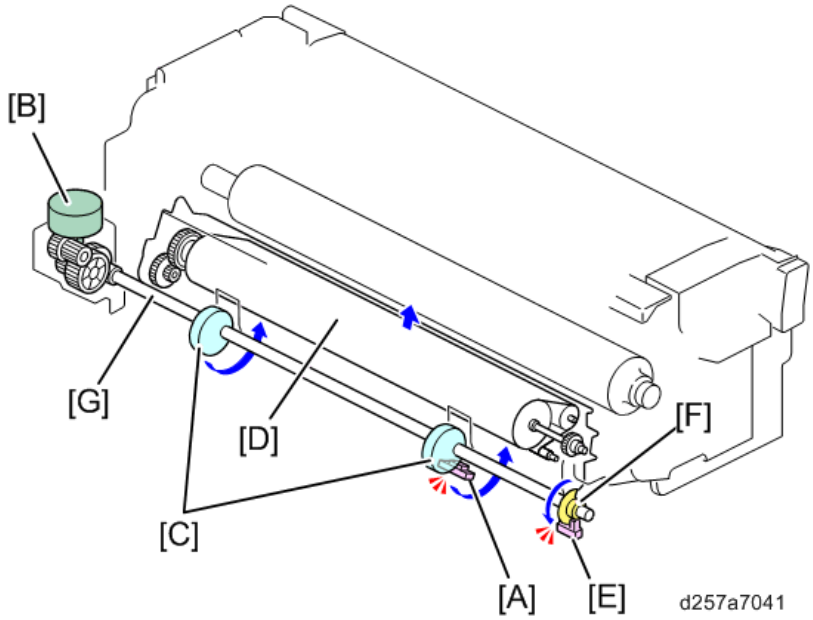
The web take-up roller [C] rolls up the used web.



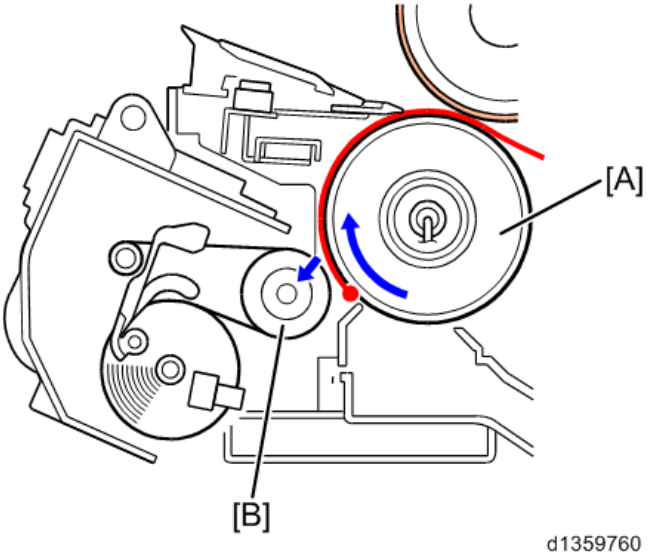
- Web Near-End
  When the fusing cleaning web consumption reaches the setting in SP1-902-004, the operation panel shows "Web Near-End". If the SP setting is 81% (default), the machine shows "Web Near-End" on the operation panel at 450K.
- Web End
  The fusing cleaning web unit has the actuator [A]. As the web take-up roller [B] rolls the used web up, the actuator [A] shifts down. When the web is all used up, the cleaning web end sensor (S85) [C] detects the actuator [A]. The machine stops printing after this is detected.



- Cleaning Web Set Sensor (S86) / Cleaning Web Contact Sensor (S87)
  The cleaning web set sensor (S86) [A] detects whether the fusing cleaning web unit exists or not. The cleaning web contact motor (M50) [B] rotates the shaft [G] on which two disks [C] are attached. The disks [C] push up the fusing cleaning web unit to make the fusing cleaning web [D] contact the pressure roller. At this time, the cleaning web contact sensor (S87) [E] detects the actuator [F] on the shaft and the machine detects that the fusing cleaning web contacts the pressure roller.

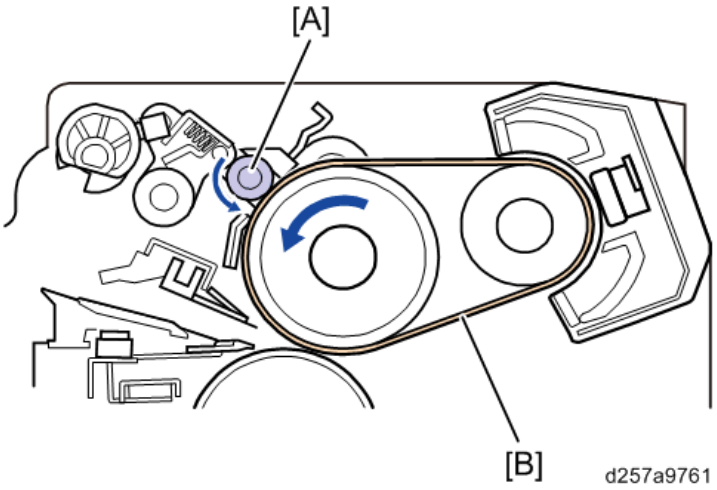


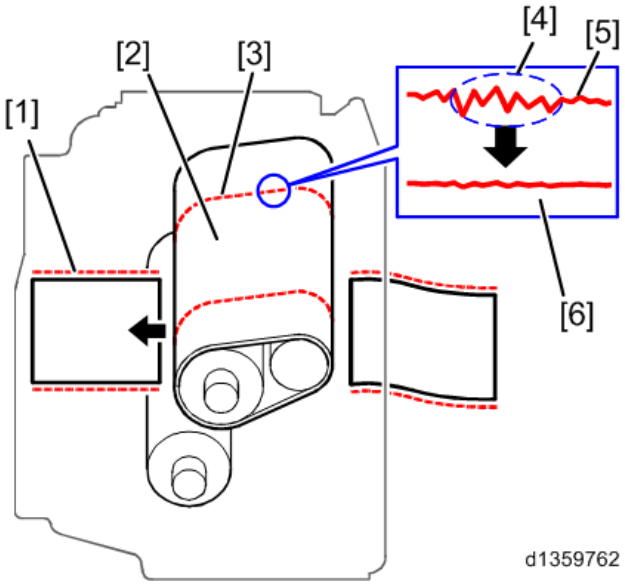
- Counter Measure for Cleaning Web Jam
  With Pro C5300S/C5310S, when small size paper jams, the pressure roller [A] drives in reverse so that the machine can detect the remaining paper. Then the remaining paper moves to an area where it can be removed easily.
  But if the pressure roller [A] drives in reverse while the fusing cleaning web [B] contacts it, the fusing cleaning web can become wrapped around the roller. So to prevent that, the fusing cleaning web separates from the pressure roller when a jam occurs.



Fusing Belt Smoothing Roller (Pro C5300S/C5310S only)

The fusing belt smoothing roller [A] removes damage on the belt caused by the edges of the paper.
The fusing belt smoothing roller [A] polishes the surface of the fusing belt [B] in order to remove roughness caused by the edges of paper that has passed through the fusing unit, and to prevent glossy streaks on prints.





No.	Description	No.	Description
1	Paper Edge	4	Paper Edge Position
2	Fusing Belt	5	Belt Surface
3	Paper Edge Trace (roughness)	6	Polished Belt Surface with the fusing belt smoothing roller

How to use the fusing belt smoothing roller function

The fusing belt smoothing roller function is not automatically executed if the factory default settings are used. The smoothing fusing roller auto execution feature is turned ON when [1: Roller Lifetime Priority] or [2: Short Waiting Time Priority] is selected for [062. Fusing Belt Smoothing Setting] in IMSS settings. The fusing belt smoothing roller can be run manually by executing SP1-133-110 or the adjustment settings for operators and the adjustment settings for skilled operators (0525-01).

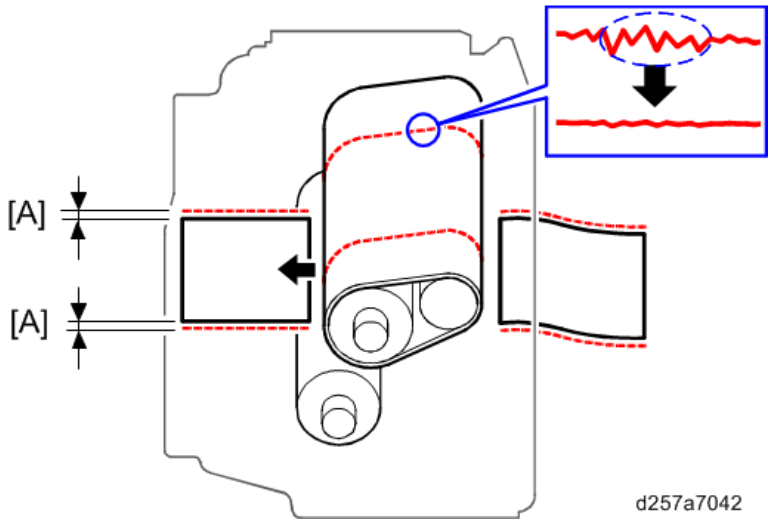
The specification is as shown below:

Item	Descriptions
SP No.	SP1-133-110
Adjustment Settings for Skilled	0210-01

Item	Descriptions
Operators	
Adjustment Settings for Operators	0210-01
Operation Specification	Roller rotates in 2 minutes in 1 cycle
Yield	260 minutes (133 cycles)
Near-End	Pro C5300S: 258 minutes (rest 4 cycles) Pro C5310S: 254 minutes (rest 6 cycles) This can be modified with "SP1-133-131".
End	266 minutes This can be modified with "SP1-133-132".
How to check the use rate	With the PM parts list shown on the operation panel display.

Notes

- When you execute fusing belt smoothing more than six times in a row but no improvement appears, replace the fusing belt.
- The polishing performance could be deteriorated before the fusing belt smoothing belt roller reaches the target yield/end, due to variations in each fusing belt smoothing roller. In this case, replace the fusing belt smoothing roller.
- When using a paper type with which glossy stripes easily appear, the glossy stripes can be prevented by shortening the execution interval of fusing belt smoothing according to the variations [A] in paper edge passing position.



If the variation in paper edge passing position [A] is small, adjust the execution interval of fusing belt smoothing to a shorter value while referring to the table below. If the variation in paper edge passing position [A] is large, adjust the execution interval of fusing belt smoothing to a longer value while referring to the table below.

The variation in paper edge passing position is 0.3mm normally in this machine. However, the variation could be smaller than 0.3mm due to the individual differences between machines. In that

case, the execution interval of fusing belt smoothing should be adjusted to a shorter value, and because of that, the lifetime of the fusing belt smoothing roller and fusing belt will become shorter.

Variations in paper edge passing position [mm]	Execution interval of fusing belt smoothing [kp]	Lifetime of the fusing belt smoothing belt roller [kp]	Lifetime of the fusing roller [kp]
0.2	1.5	90	200
0.4	3	180	400
0.6	4.5	270	600

Fusing Heat-shutout / Cooling Mechanism

Fusing Heat-shutout

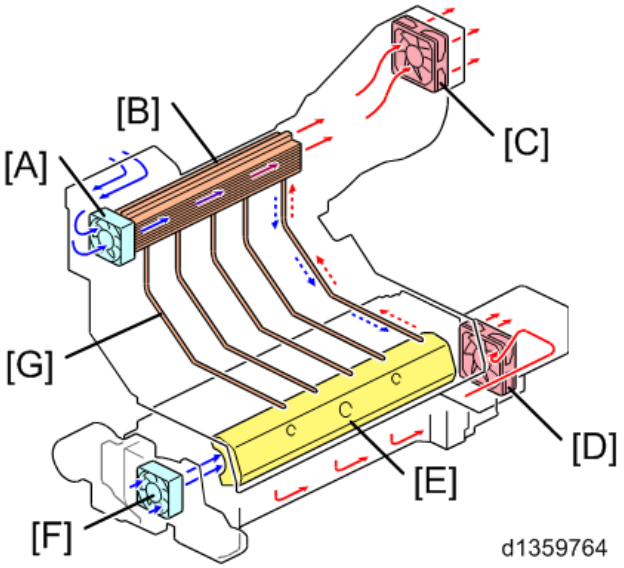
To prevent the heat of the fusing unit from affecting the laser unit, this machine has fusing heat pipes. Five heat pipes [G] are integrated in the aluminum panel. The heat pipes reach the heat sink [B] in the upper left part of the machine.

The heat pipe panel intake fan (FAN22) [A] cools down the heat sink [B] whose temperature rises because of the circulation in the heat pipes. The heat pipe panel exhaust fan (FAN15) [C] sucks the hot air out of the rear of the machine.

IH Coil Cooling

The IH coil cooling fan (FAN27) [F] in the front side of the machine sucks in air to cool the IH coil unit [E]. This air goes through the IH coil unit [E]. Then the paper transfer belt fusing exhaust fan (FAN16) [D] sucks air out of the rear of the machine.

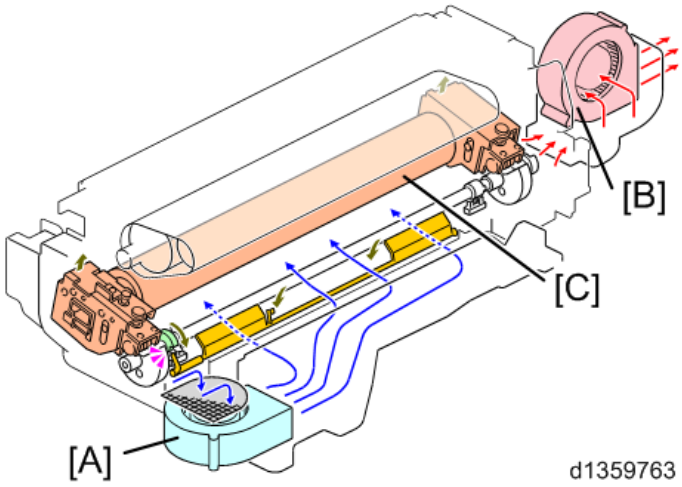
The paper transfer belt fusing exhaust fan (FAN16) [D] also sucks out the heat around the paper transfer belt unit.



Pressure Roller Cooling (Pro C5300S/C5310S Only)

The fusing pressure roller intake fan (FAN32) [A] sucks air out of the machine to make an air current under the pressure roller [C], in order to cool the pressure roller down. The fusing pressure roller

exhaust fan (FAN31) [B] sucks air out of the rear of the machine.



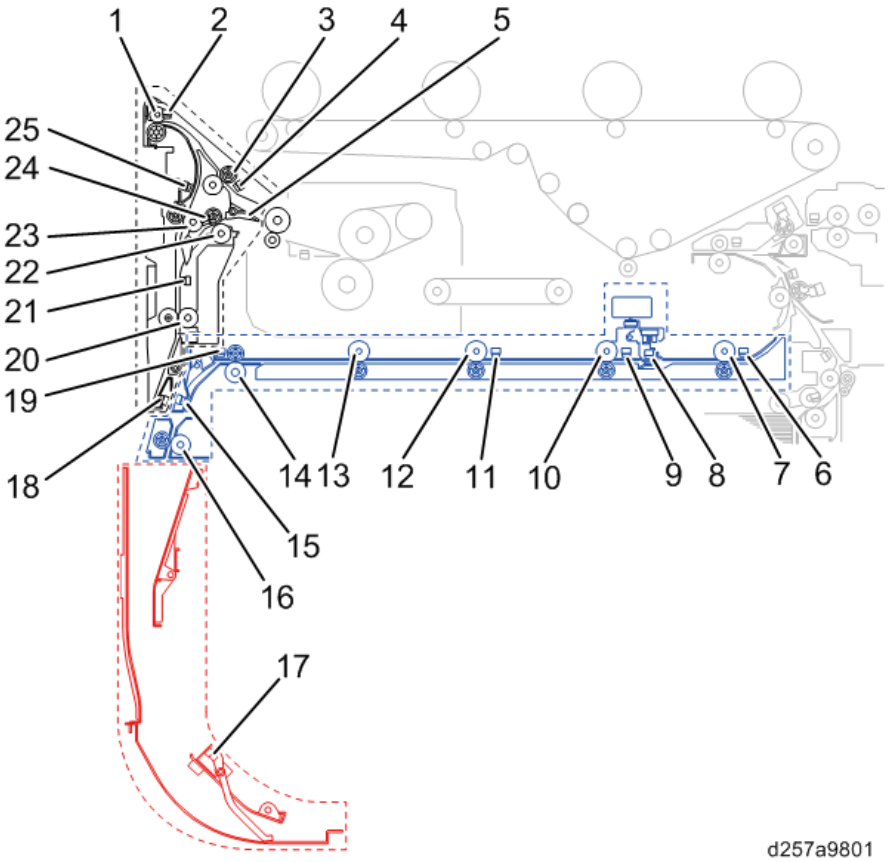
This mechanism prevents the temperature of the pressure roller from increasing. This mechanism allows the machine to reduce the frequency of downtime caused by excessive heating of the pressure roller during consecutive printing.

Paper Exit and Duplexing

Mechanism Descriptions

Component Layout

Section Layout



Black: Inverter (Face-down) / Exit Section

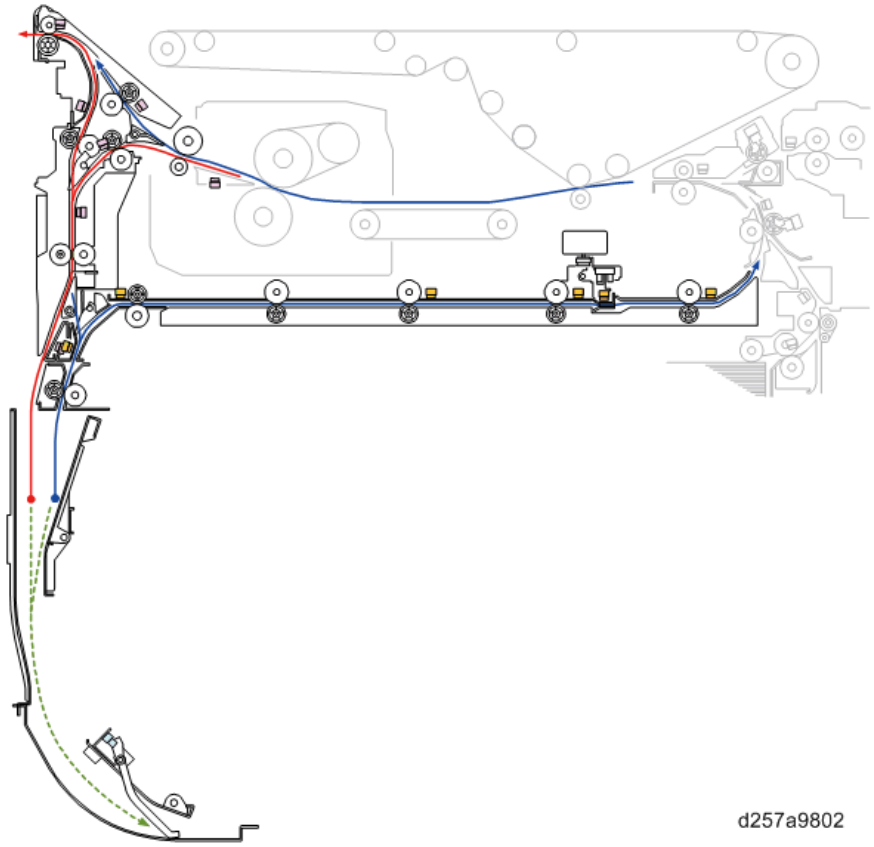
Blue: Duplex Section

Red: Purge Section

No.	Description	No.	Description
1	Paper Exit Roller	14	Duplex Transport Roller 1
2	Paper Exit Sensor (S74)	15	Duplex Invert Sensor (S70)
3	Paper Exit Relay Roller	16	Duplex Invert Roller
4	Paper Exit Relay Sensor (S73)	17	Purged Paper Sensor (S106)
5	Inverter Junction Gate	18	Purge Relay Sensor (S71)
6	Duplex Exit Sensor (S60)	19	Duplex Unit Entrance Sensor (S65)
7	Duplex Exit Roller	20	Inverter Exit Roller
8	Edge Sensor (S58)	21	Inverter Exit Sensor (S75)
9	Duplex Unit Sensor 4	22	Inverter Feed-in Roller
10	Duplex Transport Roller 4	23	Inverter Feed-out Roller

No.	Description	No.	Description
11	Duplex Unit Sensor 3	24	Inverter Feed-in Sensor
12	Duplex Transport Roller 3	25	Inverter Feed-out Sensor
13	Duplex Transport Roller 2		

Transport Layout

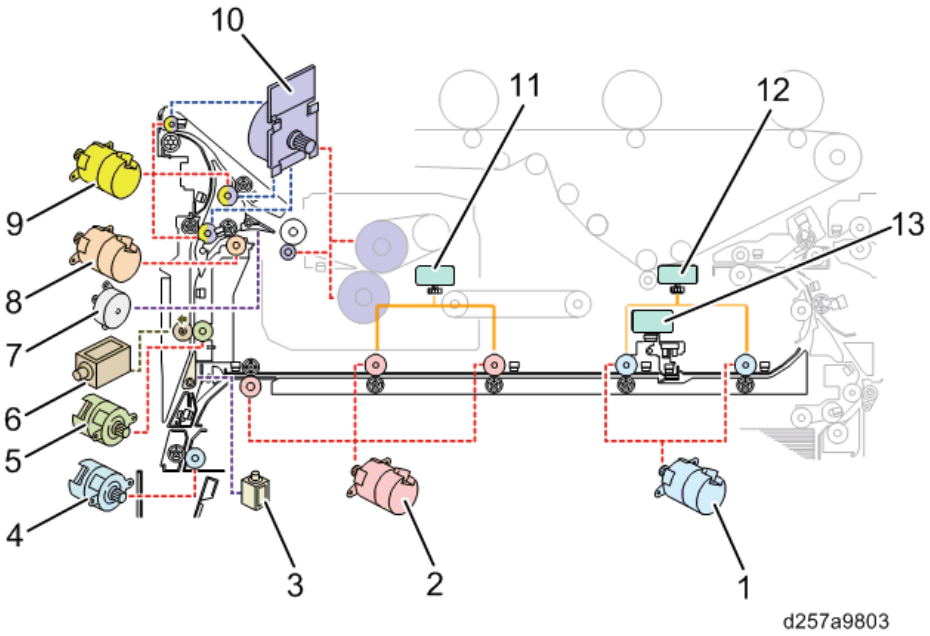


Red: Inverter (Face-down) / Exit Paper Path

Blue: Duplex Paper Path

Green: Purge Paper Path

Drive Layout



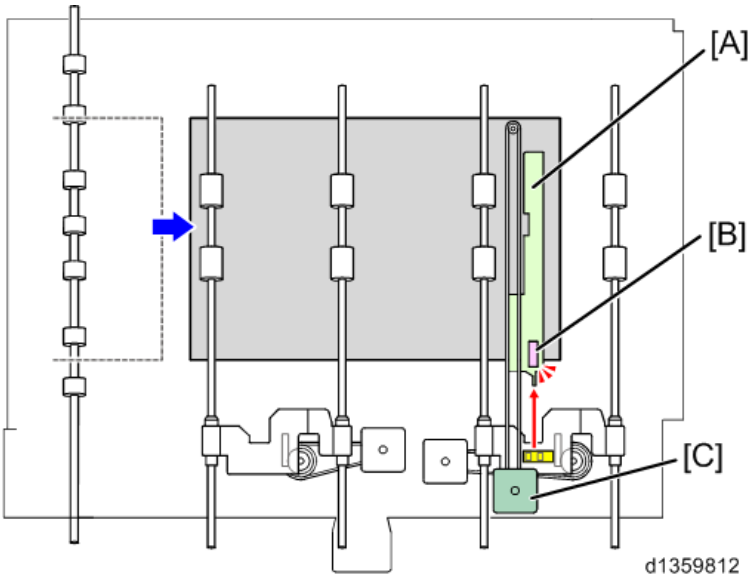
No.	Description	No.	Description
1	Duplex Exit Motor (M47)	8	Duplex Inverter Entrance Motor (M46)
2	Duplex Transport Motor (M48)	9	Exit Motor (M45)
3	Duplex Invert Solenoid (SOL5)	10	Fusing Drive Motor (M22)
4	Duplex Inverter Motor (M51)	11	Duplex Transport Shift Motor 1 (M40)
5	Exit Inverter Motor (M42)	12	Duplex Transport Shift Motor 2 (M39)
6	Exit Inverter Solenoid (SOL6)	13	Edge Sensor Shift Motor (M38)
7	Inverter Junction Gate Motor (M41)		

Mechanism Details

Transport Operation

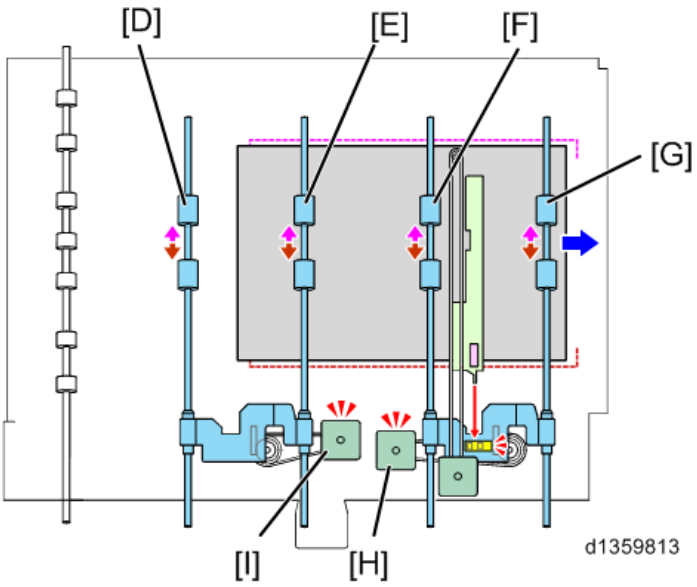
Side-to-side Registration

In this machine, rollers in duplex paper path shift to perform side-to-side registration.
After the leading edge of the paper passes the edge detection unit [A], the edge sensor (S58) [B] shifts in the main-scan direction to detect the paper edge. The edge sensor (S58) [B] is driven by the edge sensor shift motor (M38) [C].

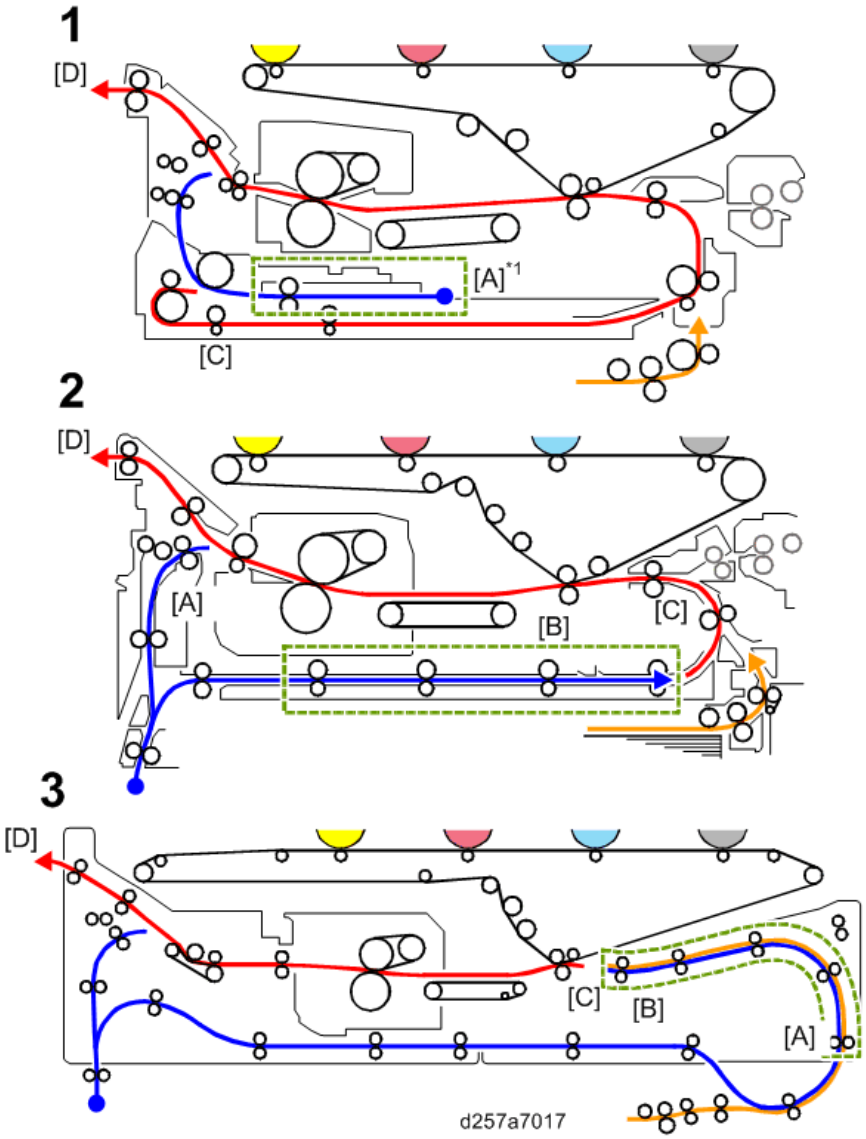


For paper with a feed length of 220 mm (8.66 inches) or less (A4 LEF / LT LEF or less), the duplex transport roller 4 [F] and the duplex exit roller [G] shift in the main-scan direction in order to adjust the paper position in the main-scan direction after the leading edge of the paper passes the duplex exit roller [G]. The machine corrects the paper position in the main-scan direction based on the data detected by the edge sensor (S58) [B]. The duplex transport roller 4 [F] and the duplex exit roller [G] are driven by the duplex transport shift motor 2 (M39) [H].

For paper with a feed length of more than 220 mm (8.66 inches) (B5 SEF or more), the duplex transport shift motor 1 (M40) [I] drives in addition to the duplex transport shift motor 2 (M39) [H], so that the duplex exit roller [G] and the duplex transport roller 2/3/4 [D] [E] [F] move at the same time to adjust the paper position in the main-scan direction. Paper shift amount is corrected by SP1-601-001 to 009 (Dup:RollerShift12:MoveFineAdj). These SPs adjust the writing position corresponding to SP1-003-017 to 022 and SP1-003-034 to 036.



Comparing Side-to-side Registration Methods of Similar Models



No.	Description
[A]	The paper enters the side-to-side registration section.
[B]	The machine detects the leading edge of the paper.
[C]	The paper exits from the side-to-side registration section.
[D]	The paper exits from the machine.
*	The machine does not have the mechanism for [B].

1. **MPC7501/MPC6501 (Jogger Fence Method)**

   The registration correction is performed by the jogger fence when the machine transports the paper from the duplex inverter path to the duplex paper path by switching back. Therefore, the paper position and distance between the sheets are not adjusted for the first print side of the paper. The transport distance between the end of the registration section and the image transfer section is long.

2. **IM C6500/C8000, Pro C5300S/C5310S (Roller Shift Method)**

   The machine detects the leading edge of the paper, and then perform the registration correction

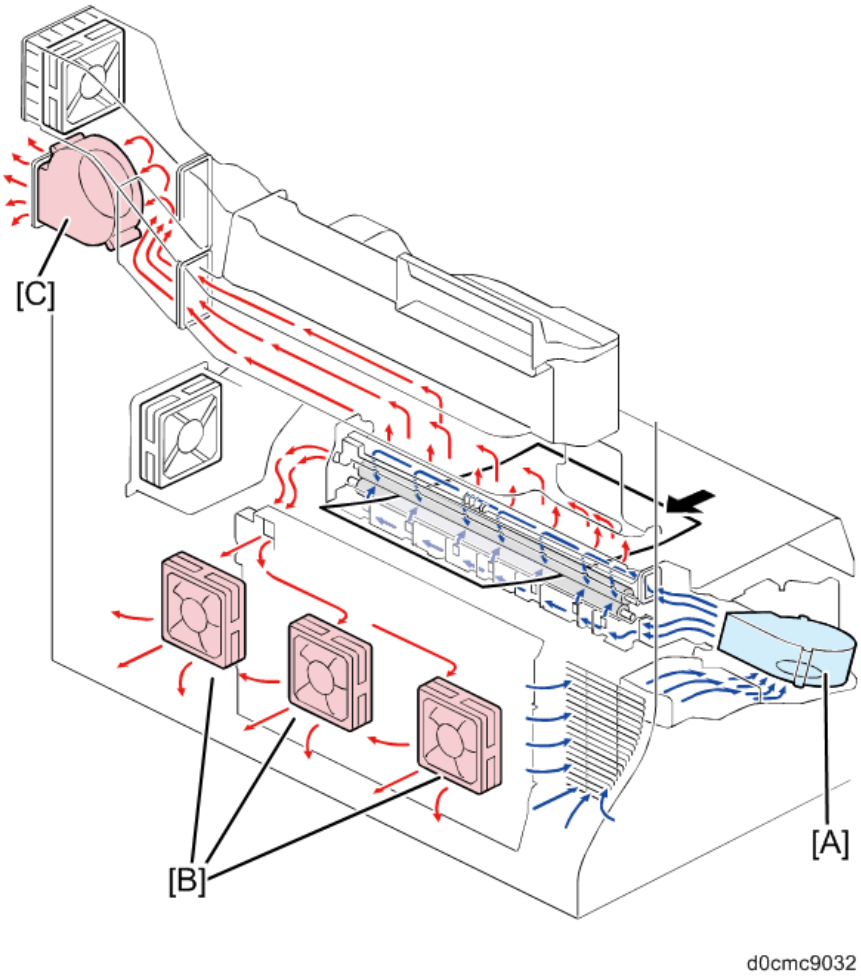
with the paper transport roller using the detected data. The registration correction is performed in the duplex paper path. Therefore, the paper position and distance between the sheets are not adjusted for the first side of the paper. The transport distance between the end of the registration section and the image transfer section is shorter than that of MP C7501/C6501. This means that the paper transport stability of this machine is superior to MP C7501/C6501.

3. **ProC751EX/Proc651EX (Roller Unit Shift Method)**
   Regardless of first side or second side printing, the machine performs the registration correction whenever the paper passes the shift unit in the paper transport section. Therefore, the registration correction is performed before the image transfer for both sides of the paper. This means that this machine has high stability for transporting the paper and high registration accuracy for both sides of paper.

Inverter, Paper Exit

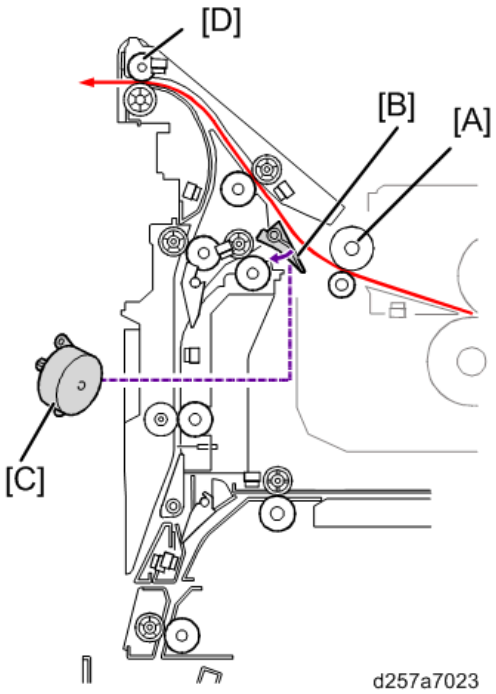
Paper Cooling

To cool the paper ejected from the fusing unit, some fans for intake/exhaust are installed on the paper exit and duplexing section.
The external air is drawn into the paper cooling fan (FAN26) [A] and ejected from the duplex exhaust fans (FAN12) [B] and the fusing exit exhaust fan (FAN18) [C] through the paper path. The air currents make paper cooler and eject it.



Straight Through Output (Face-up Output)

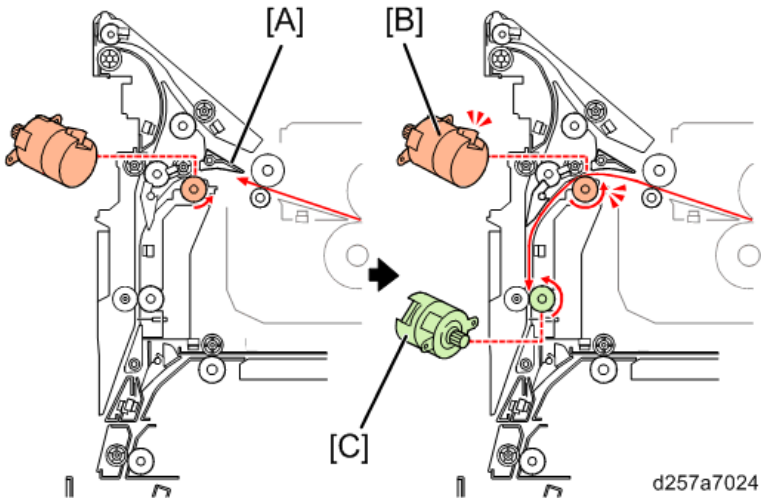
With straight through output, paper from the fusing unit passes under the paper exit entrance roller [A]. When the inverter junction gate motor (M41) [C] drives counterclockwise for a certain time, the inverter junction gate [B] is pushed down and the paper is sent to the exit roller [D]. This roller transfers the paper to the downstream device, under the control of the exit motor (M45).



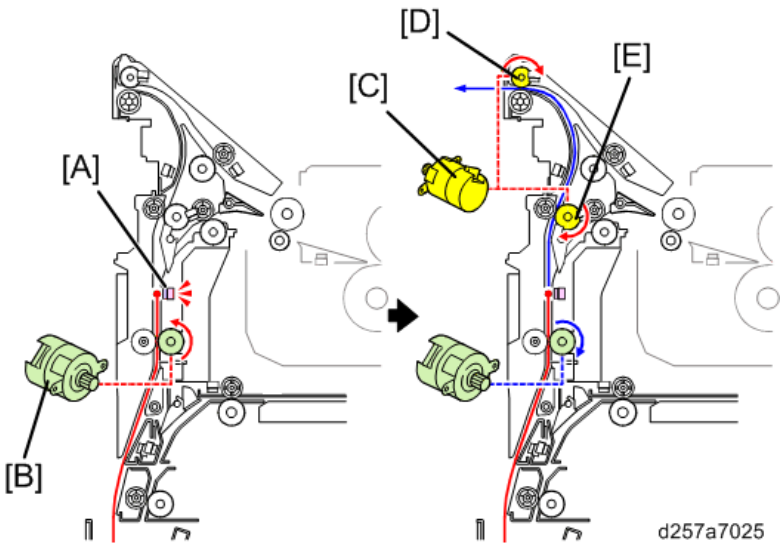
Inverter Output (Face-down Output)

With inverter output (face-down output), the paper that is passed under the paper exit entrance roller is sent to the inverter exit path with the inverter junction gate [A]. The inverter junction gate motor (M41) keeps driving clockwise for a certain time, and then stops.

The leading edge of the paper reaches the exit inverter roller, then the duplex inverter entrance motor (M46) [B] starts and transports the paper to the inverter section. After the trailing edge of the paper is ejected from the paper exit entrance roller, the machine speeds up the duplex inverter entrance motor (M46) [B] and the exit inverter motor (M42) [C] .

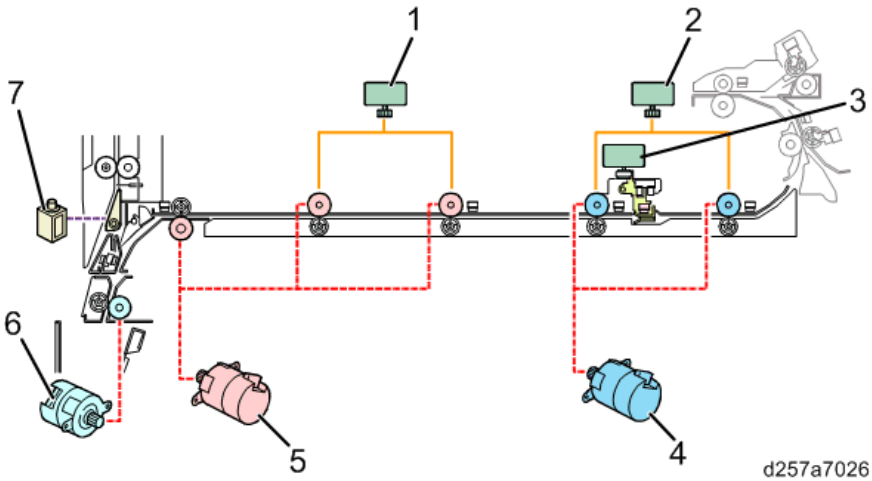


When the inverter exit sensor (S75) [A] detects the trailing edge of the paper, the exit inverter motor (M42) [B] rotates in reverse and transports the paper to the exit section (inverter transport). In the exit section, the exit motor (M45) [C] drives the paper exit roller [D] and the inverter exit roller [E] to eject the paper.



Duplex

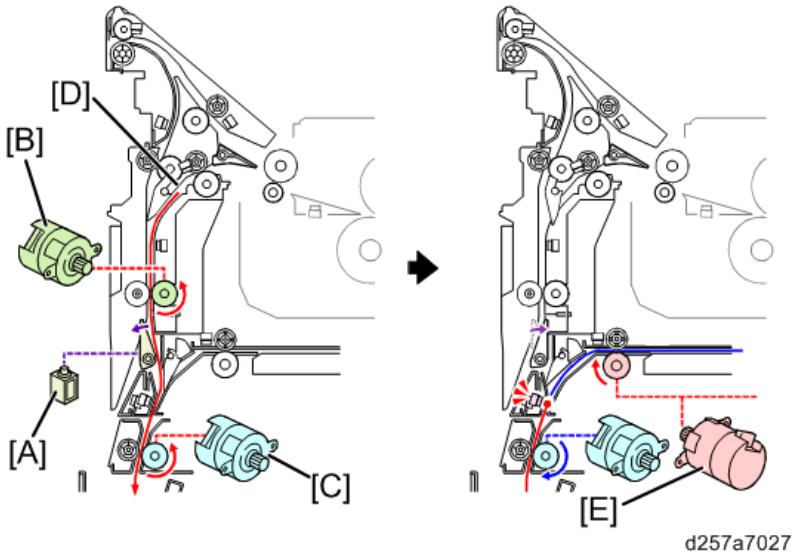
Drive Components



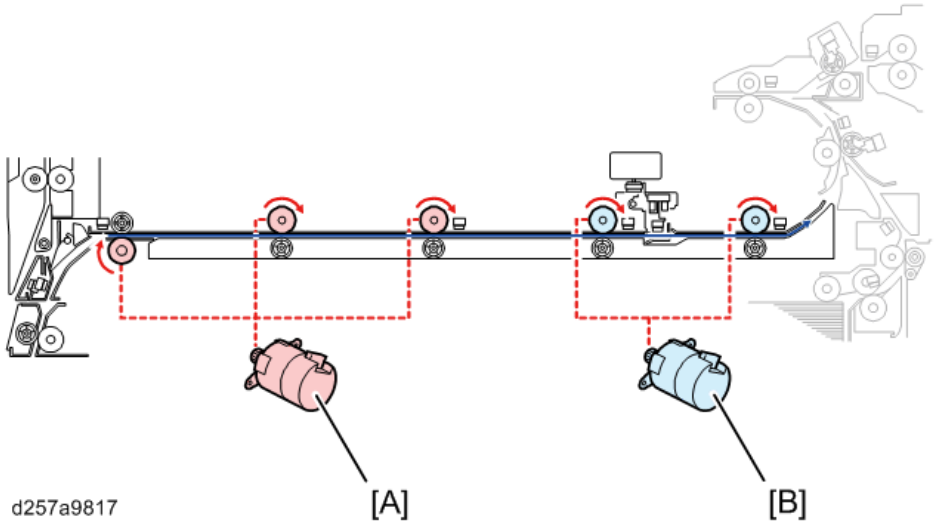
No.	Description	No.	Description
1	Duplex Transport Shift Motor 1 (M40)	5	Duplex Transport Motor (M48)
2	Duplex Transport Shift Motor 2 (M39)	6	Duplex Inverter Motor (M51)
3	Edge Sensor Shift Motor (M38)	7	Duplex Invert Solenoid (SOL5)
4	Duplex Exit Motor (M47)		

Duplex Transfer

When the inverter feed-in sensor (S80) [D] detects the leading edge of the paper, the duplex invert solenoid (SOL5) [A] turns ON and transports the paper towards the duplex section. The exit inverter motor (M42) [B] and the duplex inverter motor (M51) [C] drives to transport the paper to the inverter path. Then the duplex inverter motor (M51) [C] rotates in reverse and transports the paper to the duplex paper path (this is called a switchback operation).



The paper that has entered the duplex transport path is transported by the three duplex transport rollers (driven by the duplex transport motor [A]) and the two duplex transport rollers (driven by the duplex exit motor [B]), and then enters the paper transport section for the second side printing.



Duplex Interleaving

The interleave process during duplex printing is different, depending on the size of the paper as described below.

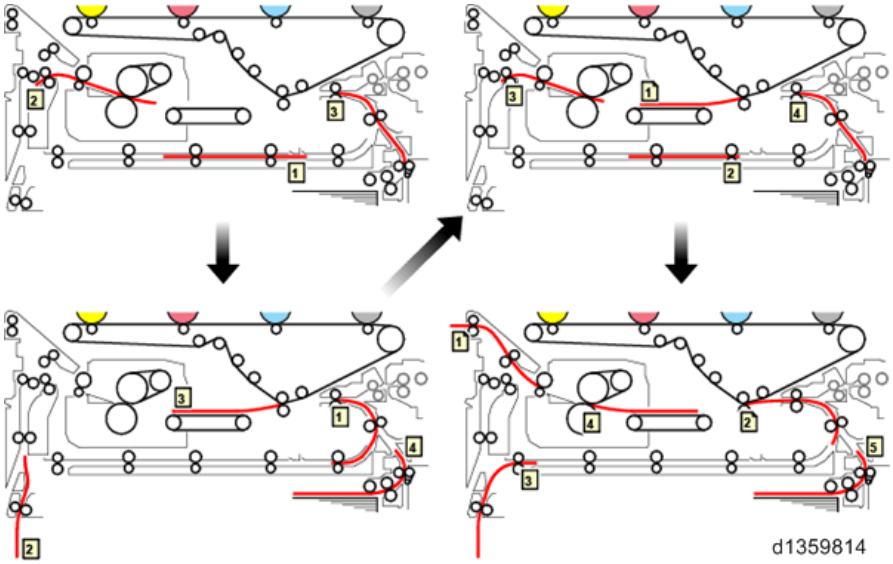
Paper Length	Interleaved Sheets
Longer than or equal to 139.7 mm (5.5 inches), shorter than or equal to 220 mm (8.66 inches)	3
Longer than 220 mm (8.66 inches), shorter than or equal to 487.7 mm (19.2 inches)	2

Paper location and flow in a 3-sheet interleaving pattern

The image transfer order in a 3-sheet interleaving pattern is as follows:

7.Detailed Descriptions

1st sheet (front side) -> 2nd sheet (front side) -> 3rd sheet (front side) -> 1st sheet (back side) -> 4th sheet (front side) -> 2nd sheet (back side) -> 5th sheet (front side) -> 3rd sheet (back side) -> 6th sheet (front side) -> 4th sheet (back side) -> 7th sheet (front side)...

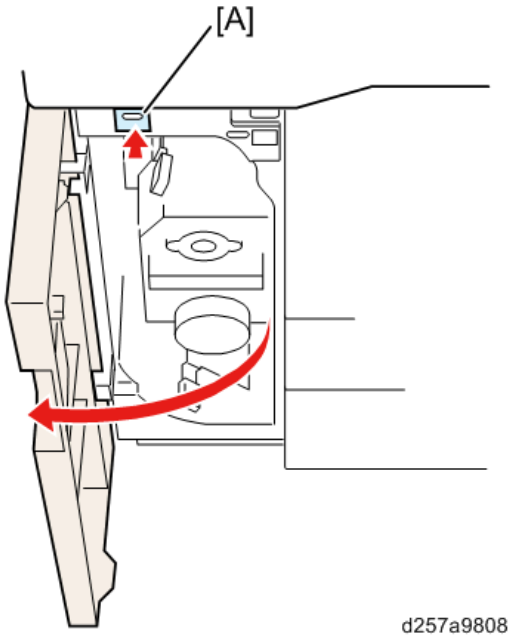


Paper Purge

Mechanism Descriptions

When the front lower cover switch (SW12) [A] at the lower left side of the machine is pressed, the machine ejects paper which remains in the machine.

- When a paper jam has occurred in the inverter exit path:
  When the paper straddles the drawer unit and the main machine, the paper is transported towards the downstream device by pressing the front lower cover switch (SW12) [A].
- When a paper jam has occurred in the duplex inverter path:
  When the paper straddles the drawer unit and the main machine, the paper is transported to the paper purge tray by pressing the front lower cover switch (SW12) [A].

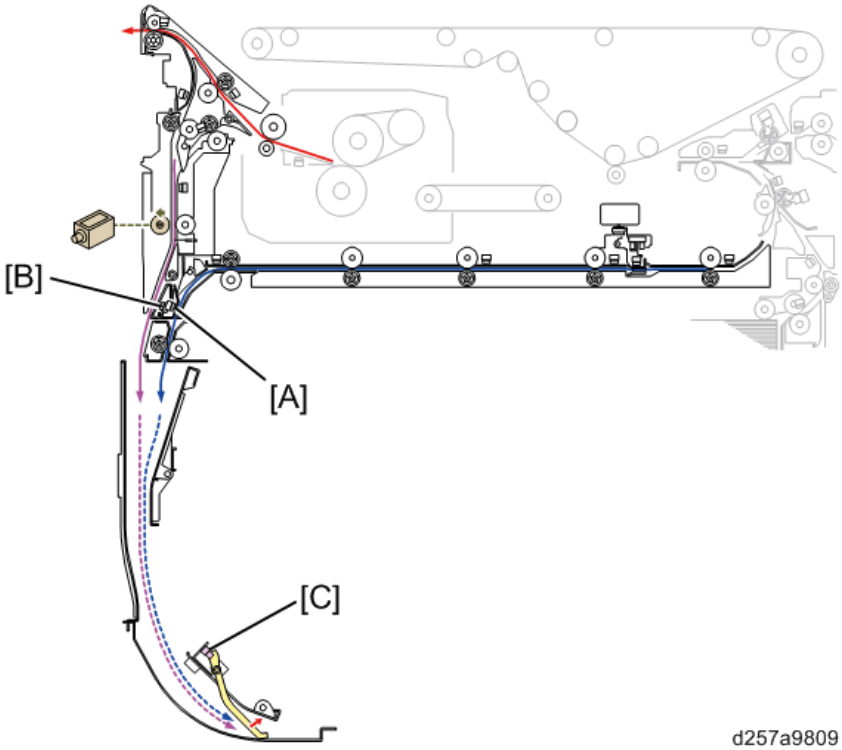


Mechanism Details

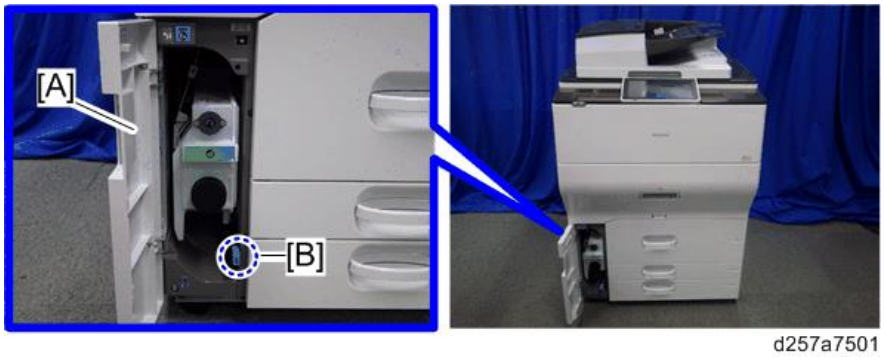
If the front lower cover switch (SW12) at the lower left side of the machine is pressed when a paper jam has occurred, the paper which straddles the drawer unit and the main machine is transported to the downstream device or the purge tray.
If the duplex invert sensor (S70) [A] or the purge relay sensor (S71) [B] detects paper when the front lower cover switch (SW12) is pressed, the machine drives the following motors to feed the paper to the purge tray.

- Duplex Inverter Entrance Motor (M46)
- Exit Inverter Motor (M42)
- Duplex Inverter Motor (M51) (Drives only when the duplex invert sensor is ON.)
- Duplex Transport Motor (M48) (Drives only when the duplex unit entrance sensor is ON. The motor is rotated in reverse.)

The purged paper sensor (S106) [C] detects paper in the purge tray.



If the purged paper sensor (S106) detects paper or if the E5 guide plate [B] is opened while the front lower door [A] is opened, the purge tray LED (LED15) is lit. Therefore, the status of the purge tray can be easily seen by the purge tray LED (LED15).

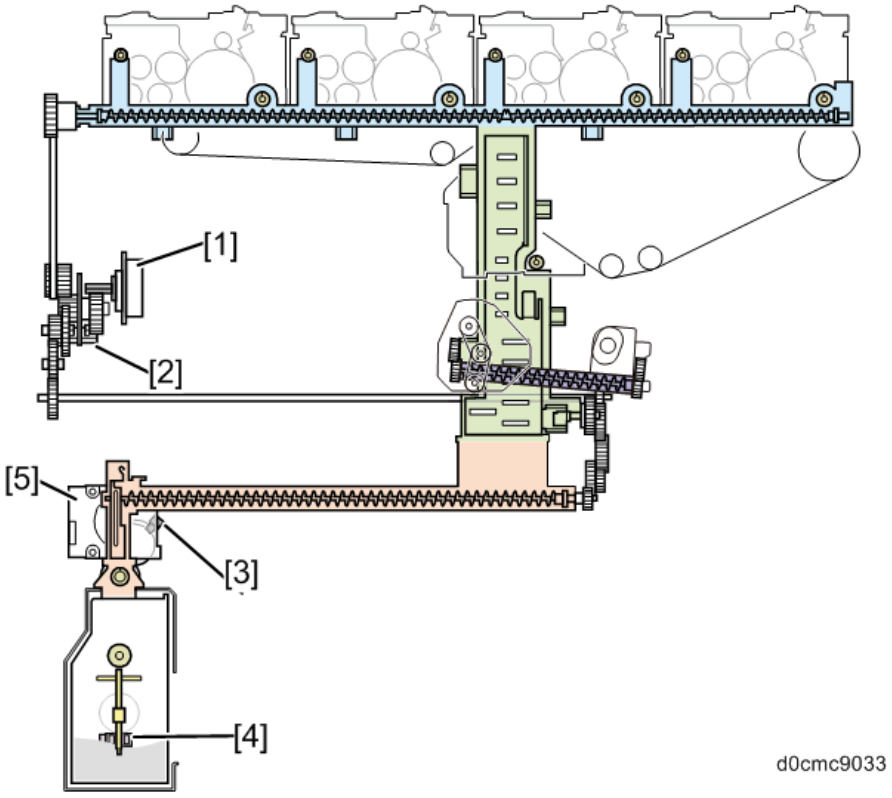


Waste Toner Collection

Mechanism Descriptions

Component Layout

The used toner, used developer, and paper dust from each unit are automatically collected and transported to the waste toner bottle.
The waste toner path is composed of three sections; the upper waste toner path, vertical waste toner path, lower waste toner path.



No.	Description	No.	Description
1	Waste Toner Collection Motor (M15)	4	Waste Toner Near Full Sensor (S14)
2	Waste Toner Lock Sensor (S15)	5	Waste Toner Bottle Motor (M14)
3	Waste Toner Bottle Motor Sensor (S13)		

Mechanism Details

Waste Toner Path

There are three waste toner paths in this machine.

- Upper Waste Toner Path
  The waste toner [B] from the drum cleaning unit and the used developer [A] from the development unit are transported to the upper waste toner path.
- Vertical Waste Toner Path

The waste toner and paper dust [C] from the ITB cleaning unit are transported to the vertical waste toner path.

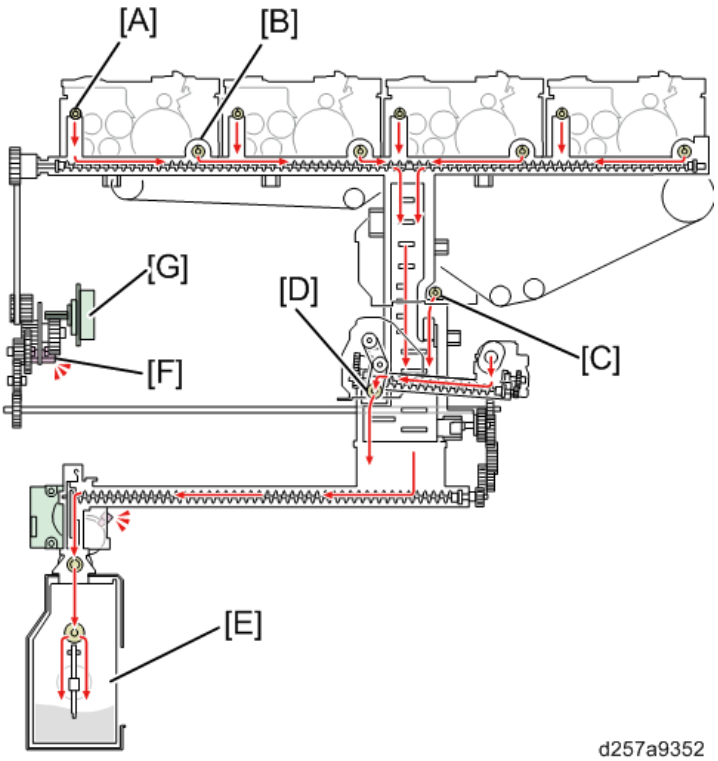
The waste toner and paper dust [D] from the paper transfer belt cleaning section are transported to the vertical waste toner path.

- Lower Waste Toner Path

  The waste toner, used developer, and paper dust fallen from the vertical toner path are transported to the waste toner bottle [E].

When the transport coil [B] is clogged and cannot rotate while transporting the waste toner, the waste toner lock sensor (S15) [F] detects this, and the machine stops the waste toner collection motor (M15) [G]. Then SC488 (Machine Waste Toner Lock Detection Error) is displayed on the operation panel.

When the torque of the transport coils in the waste toner path increases while transporting the waste toner, the torque limiter slips. Then the waste toner lock sensor (S15) [F] detects the torque increase and the machine stops the waste toner collection motor (M15) [G]. Then SC488 (Machine Waste Toner Lock Detection Error) is displayed on the operation panel.

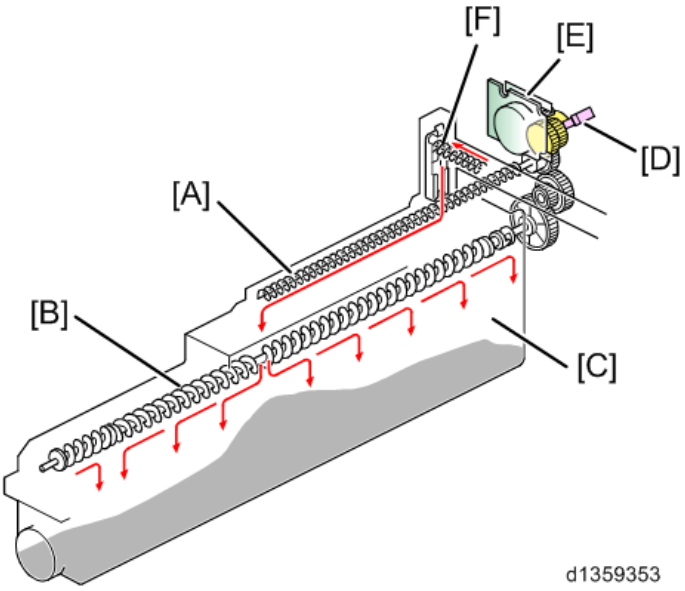


Waste Toner Bottle Transfer, Waste Toner Bottle Drive, Torque Detection Part

The waste toner transferred from the lower waste toner path falls into the waste toner bottle [C] via the toner collection transfer coil [A] and the collection bottle transfer coil [B]. The toner collection transfer coil [A] and the collection bottle transfer coil [B] are driven by the waste toner bottle motor (M14) [E] via gears.

When the torque of the toner collection transfer coil [A] or the collection bottle transfer coil [B] increase, the torque limiter slips. Then the waste toner bottle motor sensor (S13) [D] detects the torque increase and the machine stops the waste toner bottle motor (M14) [E]. The machine displays on the operation

panel that the waste toner bottle is full. After removing/installing the waste toner bottle while the main power is on, the machine displays SC486 (Bottle Waste Toner Lock Detection Error) on the operation panel if the waste toner bottle motor sensor (S13) [D] detects the torque increase again while the waste toner bottle motor (M14) is driving.

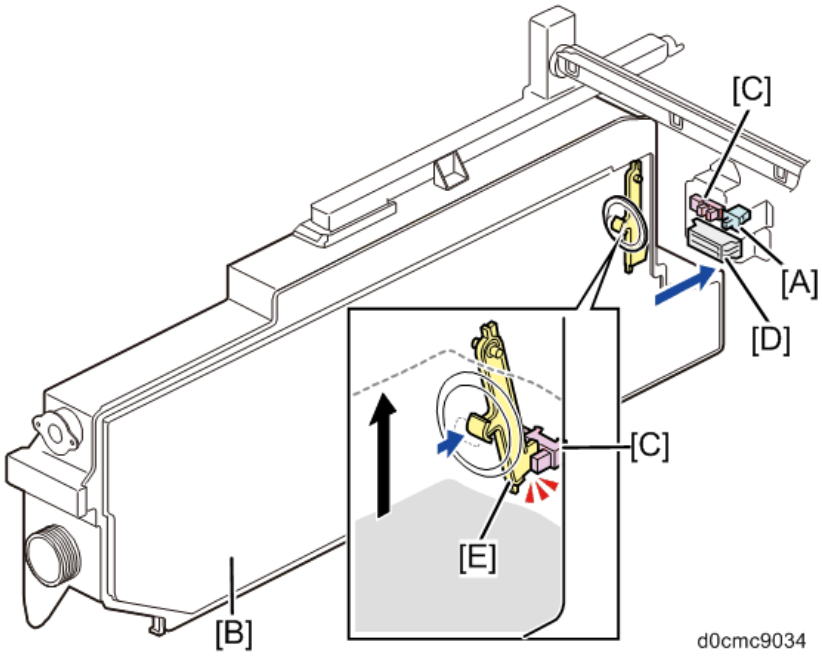


Sensor Detection

The waste toner bottle set sensor (S12) [A] judges whether the waste toner bottle [B] is set properly or not.

The waste toner near full sensor (S14) [C] detects when the waste toner bottle is getting full. As the waste toner piles up in the waste toner bottle, the feeler [E] is pushed by the waste toner, and then the feeler interrupts the waste toner near full sensor (S14) [C]. Then the machine assumes the waste toner bottle is in a near-full state. Waste toner bottle full detection occurs at 110K after near-full detection. The waste toner flows into the waste toner bottle from the central part, and then it falls down to the front and rear in order not to pile up all in one place.

When the waste toner bottle [B] is placed in the machine, the magnet catch [D] attracts the plate that is attached to the waste toner bottle [B] in order to set the waste toner bottle correctly. At this time, the waste toner bottle pushes the waste toner bottle set sensor (S12) [A] that detects whether there is a waste toner bottle in the machine.



Waste Toner Bottle Automatic Delivery Service

The automatic delivery service will also commence for the waste toner bottle. (The toner bottle delivery service is already in operation.)

The call center will configure the required settings, but the timing of waste toner bottle delivery (spare kept or not) is configured by the service technician using the following SP.

SP5-507-070 (Supply/CC Alarm: WasteTonerBottle Call Timing)

0	On detecting a new product	Spare kept
1	PM counter 50% full Value in SP7-958-142 (PM Value Setting:DaysThreshold) You can check the PM counter in SP7-621 (PM Counter Display). 50 % is a measure when a waste toner bottle is used under the standard condition.	Spare not kept
2***Default**	Value in SP7-956-142 (Estimated Remain Days: Waste Toner Bottle)	Spare not kept

Difference Between Spare Kept and not Kept

	Spare not kept	Spare kept
Overview	Spare waste toner bottle not kept on customer's premises.	Spare waste toner bottle kept on customer's premises at all times after product shipment.
First unit	1 bottle (installed to machine)	1 bottle (installed to machine) Note: It is necessary to order spare waste toner bottle.

Call timing	Set capacity • When the value is "1" in SP5-507-070 (Initial Value) SP3-800-015 (Waste Toner Full Detection:PM near full threshold) • When the value is "2" in SP5-507-070 You can change the timing with SP7-958-142 (PM Value Setting:DaysThreshold)	On detecting a new unit
Collection	Kept by customer for collection at time of next delivery.	At the time of spare waste toner bottle delivery

Note

To start Toner and Waste Toner Bottle Automatic Delivery Service, the following SPs must be enabled :

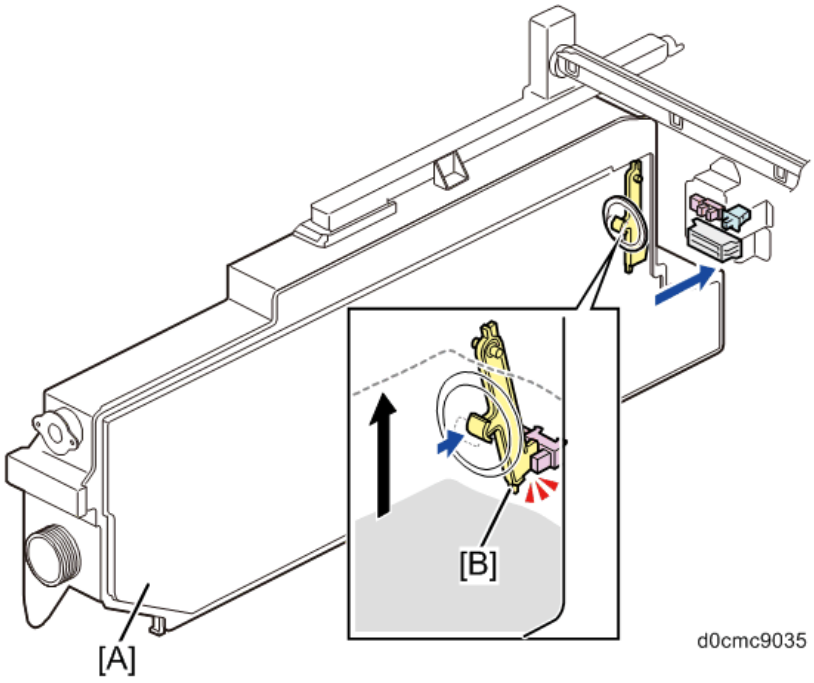
- Set SP5-507-006 (Supply/CC Alarm: WasteTonerBottle) to "1 (enable)"
- Set SP5-515-010 (SC/Alarm Setting: Supply Automatic Ordering Call) to "1 (enable)"

A customer support operator remotely connects the client's machine via @Remote and configure required settings It is not necessary that a service technician changes the SPs on the customer site.

New Waste Toner Bottle Detection

This machine does not have a new waste toner bottle detection feature.

The machine recognizes that a new waste toner bottle has been installed when the waste toner bottle [A] is removed, the feeler [B] returns to the regular position, and printing is done prescribed times.



Counter for the Remaining Life of the Waste Toner Bottle

Even if the waste toner bottle is replaced, the counter for the remaining life of the waste toner bottle (days until the waste toner bottle becomes full) is not reset automatically. The machine keeps counting

until the counter becomes "0" even after the waste toner bottle is replaced. Therefore, the machine does not use this counter for new waste toner bottle detection.

PM Counter of the Waste Toner

The PM counter of the waste toner indicates the amount of toner (mg) in the waste toner bottle.
The capacity of the waste toner bottle is 2280g. The machine detects the near-full state when the toner in the waste toner bottle becomes 1850g.

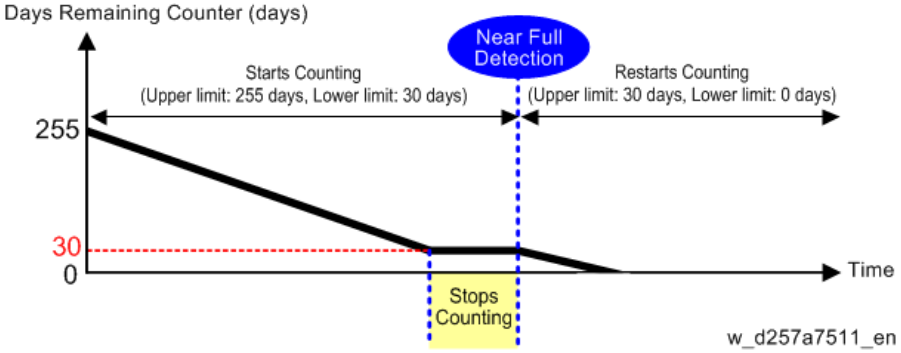
Days Remaining Counter of the Waste Toner Bottle

The replacement time of the PM part can be estimated from the days remaining counter.

Days Remaining Counter

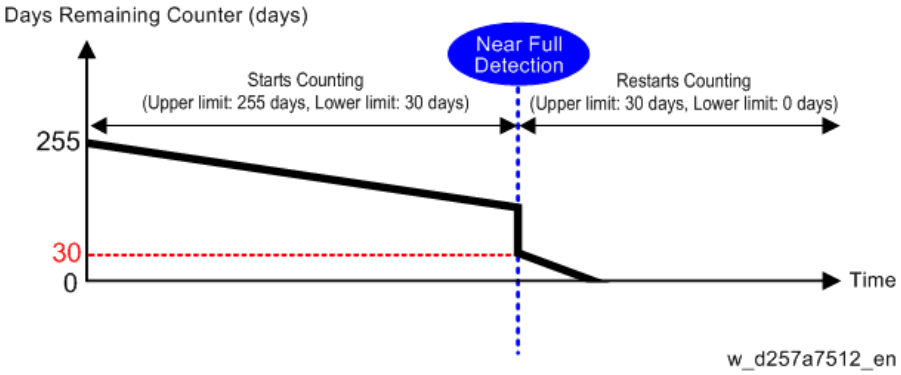
The days remaining counter shows the remaining days until replacement is required for the PM part. The machine calculates the consumption of the PM part from the number of printed sheets and the number of days having passed since the last replacement, and then displays the remaining days in the SP mode. When the waste toner bottle is replaced, the days remaining counter of the waste toner bottle starts counting . The count starts from 255 (days). The days remaining counter of the waste toner bottle can be checked with SP7-951-142.
However, the amount of waste toner accumulated inside the waste toner bottle differs according to the printing conditions, such as the toner coverage of the image. Therefore, the days remaining counter which is calculated from the number of printed sheets is only a reference value. To bring the days remaining counter closer to the actual waste toner bottle condition, the output from the waste toner near full sensor (S14) is also used, as follows. Until the waste toner near full sensor (S14) detects the near-full state, the days remaining counter counts from 255 to 30 (days). Then the days remaining counter counts from 30 to 0 (days) after the waste toner near full sensor (S14) detects the near-full state.

- When the days remaining counter is faster than the actual waste toner bottle status;
  If the waste toner near full sensor (S14) does not detect the near-full state when the days remaining counter reaches 30 (days), this means that the days remaining counter is faster than the actual waste toner bottle condition. Therefore, the days remaining counter stops counting when the counter reaches 30 (days). Then, after the waste toner near full sensor (S14) detects the near-full state, it restarts counting from 30 (days).



- When the days remaining counter is slower than the actual waste toner bottle status;

If the waste toner near full sensor (S14) detects the near-full state before the days remaining counter reaches 30 (days), this means that the days remaining counter is slower than the actual waste toner bottle condition. When the waste toner near full sensor (S14) detects the near-full state, the days remaining counter is reset to 30 (days) and starts counting from there.



Operation Control According to Changes in the Days Remaining Counter

The machine does the following based on the value of the days remaining counter.

1. The waste toner bottle is replaced.
2. The days remaining counter starts counting from 255 (days).
3. When the waste toner near full sensor (S14) detects the near-full state, the days remaining counter starts counting from 30 (days).
4. When the days remaining counter reaches 15 (days)*1, an @Remote warning is given (only in the models with @Remote connection).
5. When the days remaining counter reaches 5 (days)*2, the machine displays the near-full state on the operation panel.
6. When the number of sheets printed from the near-full detection*3 reaches the prescribed number or when the amount of waste toner inside the waste toner bottle accumulated from the near-full detection*3 reaches the prescribed amount, the machine displays the full state on the operation panel and stops the operation.

*1 This can be changed with SP7-958-142 (PM Value Setting:DaysThreshold).

*2 This can be changed with SP3-800-014 (Waste Toner Full Detection: Threshold : Remainder days).

*3 This 'the near-full detection' means when the waste toner near full sensor (S14) detects the near-full state.

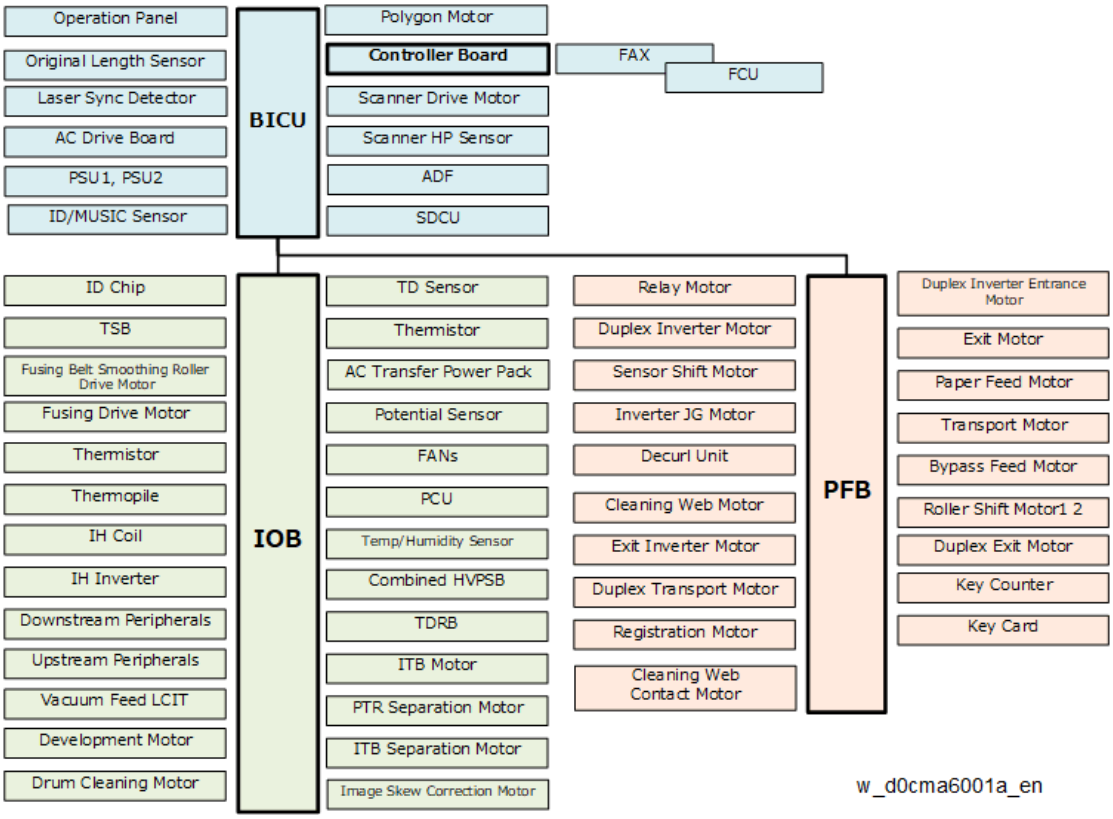
PM Counter of the Waste Toner Bottle

The PM counter of the waste toner bottle can be checked with SP7-621-142. The PM counter indicates the amount of toner (mg) in the waste toner bottle. The capacity of the waste toner bottle is 2280g. The machine detects the near-full state when the toner in the waste toner bottle becomes 1850g.

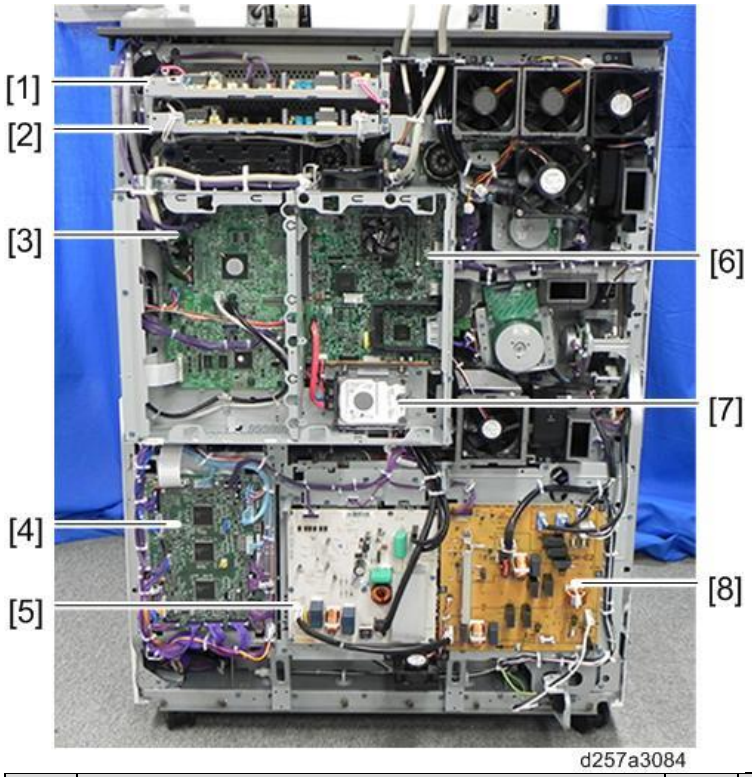
Electrical Components

Mechanism Descriptions

Block Diagram

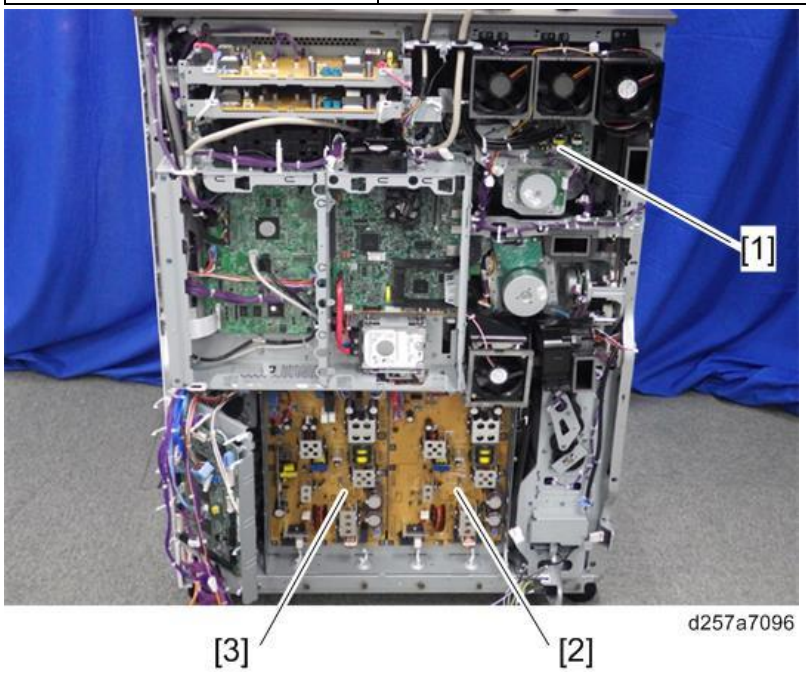


Board Location

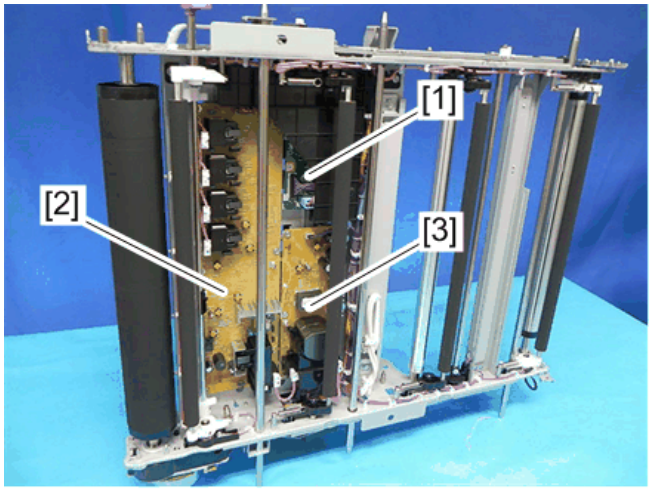


No.	Description	No.	Description
1	Combined High-Voltage Power Supply Board:MY (PCB10)	5	IH Inverter (PCB35) 1475W Board: IM C6500 only (NA) 2500W Board: Pro C5310/C5300S, IM C8000 (NA) Pro C5310/C5300S, IM C6500/C8000 (EU/AP/CHN)
2	Combined High-Voltage Power Supply Board:CK (PCB11)	6	Controller Board (PCB30)
3	BICU (PCB14)	7	HDD Unit (HDD1)
4	PFB (PCB36)	8	AC Drive Board (PCB32)

No.	Description
1	IOB (PCB1)



No.	Description	No.	Description
1	Potential Sensor Board (PCB31) (located behind the drive exhaust fan)	3	PSU2 (PCB33) (located behind the IH inverter)
2	PSU1 (PCB34) (located behind the IH inverter)		



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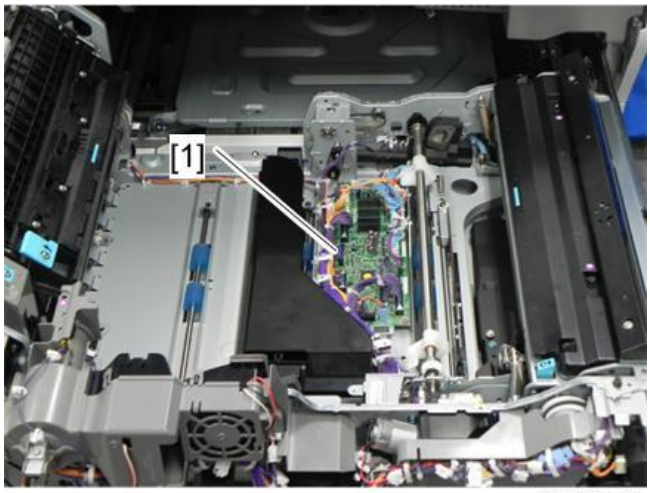
No.	Description	No.	Description
1	TDRB (PCB4)	3	AC Transfer Power Pack (PCB3) (Pro C5300S/C5310S Only)
2	Transfer Power Pack/Separation Power Pack (PCB2)		



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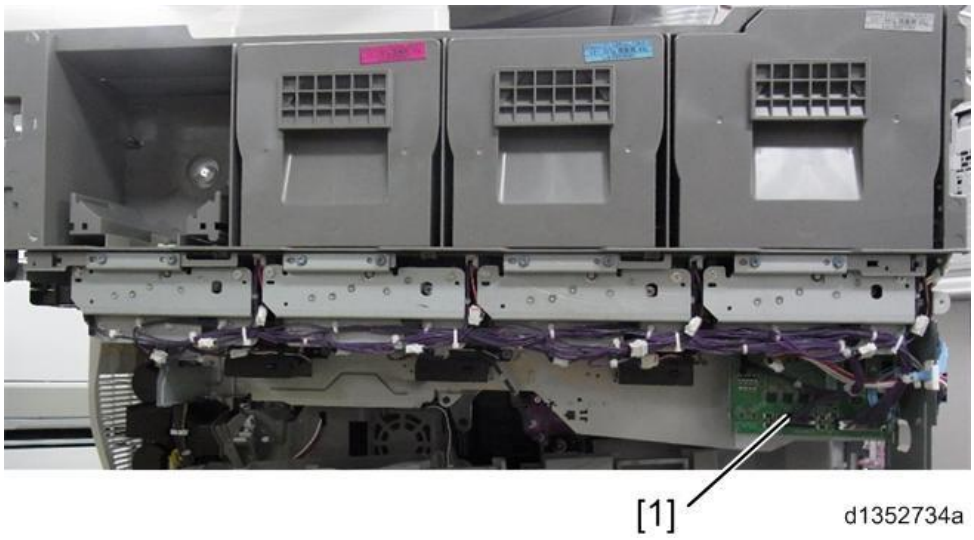
No.	Description
1	DUB (PCB37)



No.	Description
1	TSB (PCB9)

Mechanism Details

Outline of Each Board

- IOB (PCB1) (IN/Out Control Board)
  Controls solenoids, motors and sensors in the engine section.
- PFB (PCB36) (Paper Feed Board)
  Controls solenoids, motors and sensors in the paper transport section.
- DUB (PCB37) (Drawer Unit Board)
  Controls solenoids, motors and sensors in the drawer unit.
- TSB (PCB9) (Toner Supply Board)
  Controls motors and sensors in the toner supply unit.
- BICU (PCB14) (Base-engine, Image Processing & Control Unit)
  Controls the engine and the image process.
- Controller Board (PCB30)
  Controls whole machine systems such as:
  - Printer / Scanner Control
  - Memory Control (including the HDD)
  - Operation Panel Control

This board has a Dip switch (default: on). But this should not be changed or used normally.

- SBU (PCB15) (Sensor Board Unit)
  Converts a scanned image into analog signals and also converts analog signals into digital signals. The SBU interfaces with the BICU and controls scanner internal I/O signals according to the instructions from the CPU.
- Transfer Power Pack/Separation Power Pack (PCB2)

Generates the high voltage power supplies for the copy process.

- AC Transfer Power Pack (PCB3) *Pro C5300S/C5310S Only
  Generates the high voltage power source for AC transfer.
- TDRB (PCB4) (Transfer Driver Board)
  Controls the ITB unit.
- LDB (PCB17)(PCB22) (Laser Diode Drive Board)
  LD control board that drives the VCSEL.
- OPU (PCB38)
  Controls the operation panel.
- AC Drive Board (PCB32)
  Performs AC control for the fusing heater and the anti-condensation heater.
- PSU (PCB33) (PCB34) (Power Supply Unit)
  Supplies DC power to each board. The major difference between PSU1 and PSU2 is as follows.
  - PSU1: The converter for energy saving is fixed on the board (The standing substrate is fixed on the board). The 24V power supply is cut off by an interlock switch[*1].
  - PSU2: The 24V power supply is not cut off by an interlock switch[*1].

  *1 Drawer safety switch 1/2, Vertical transport door set switch, Toner supply unit safety switch 1/2
- IH Inverter (PCB35)
  Controls the power supply for the heating roller in the fusing unit and the IH coil.
  According to the destination and model as shown below, the PCB is installed on the IH inverter.

Destination	Model	PCB
NA	Pro C5300S/C5310S, IM C8000	2500W
	IM C6500	1475W
EU/AP/CHN	Pro C5300S/C5310S, IM C6500/C8000	2500W

⚠CAUTION

- If the AC power cord is connected to an electrical outlet, power is supplied to the controller board, the operation unit and other modules even when the main power is turned OFF. Therefore, when performing maintenance work such as replacing parts, in addition to turning off the main power with the push switch, always unplug the AC power cord.

HDD Details (Memory Capacity for Stored Documents)

This machine has HDD (320GB x 2) for image storage.

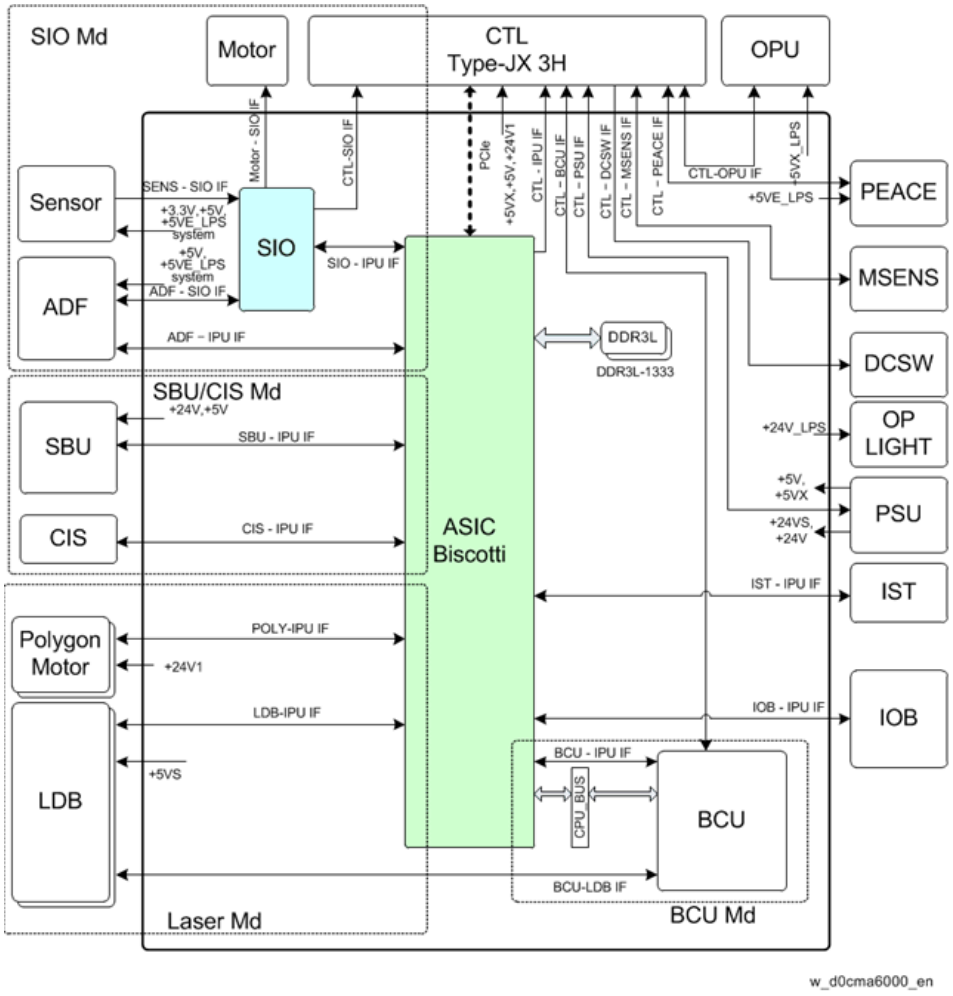
Item	Specification
Memory Capacity	320GB×2
Memory Capacity for Document Box	170GB
Store Capacity	**Storing only with the copy function (A4):** • BW Original: Approx. 15,000 pages • Full-color Original: Approx. 5,000 pages

Item	Specification
	Storing only with the printer function (A4, 600dpi, 2bit): • BW Original: Approx. 15,000 pages • Full-color Original: Approx. 15,000 pages
	Storing only with the scanner function (A4, 200dpi, 8bit/JPEG): Approx. 15,000 pages
Document Box Capacity	Max. 3,000 docs
Total Page Capacity in All Functions	Total 15,000 Pages
Page Capacity per document	Max. 3,000 Pages /document
Memory Sort Capacity	Approx. 40GB - Details - For copier: 25GB For printer: 8GB For printer interruption: 8GB

Image Processing

Mechanism Descriptions

Block Diagram



Mechanism Details

SBU (PCB15): Sensor Board Unit

Converts the image reflected from the front side of the originals into digital image signals, then transmits them to the BICU.

CIS: Contact Image Sensor

Converts the image reflected from the back side of the originals into digital image signals, then transmits them to the BICU.

Characteristic Value Memorization

SBU characteristics are stored in the BICU. These characteristic values need adjustment when the lens block is replaced.

- SP4-008-001 (Sub Scan Magnification Adj)
- SP4-010-001 (Sub Scan Registration Adj)
- SP4-011-001 (Main Scan Reg)
- SP4-688-002 (Scan Image Density Adjustment)

Preventing Dirty Background for DF Scanning

The scanned density difference between ADF and Book scanning can be adjusted with SP4-688-002 (Scan Image Density Adjustment). Adjusting the scanned density difference prevents image problems such as dirty background.

Test Mode

SP4-699-001 generates a VPU test pattern as a diagnostic tool for SBU malfunctions. Press [Start] after selecting the VPU test pattern in SP4-699-001. The VPU test pattern is output. The SBU state can be checked with the output image.

SP4-699-001 (SBU Test Pattern Change)

Setting Value	Description
0 (default)	Image output
1	Test pattern output / Fixed-value output (682-digit)
2	Test pattern output / Horizontal gradation pattern (10-bit tone, 2-dots/step)
3	Test pattern output / Vertical gradation pattern (10-bit tone, 2-lines/step)
4	Test pattern output / Grid pattern (20mm x 10mm Grid pattern)

BICU Function Outline

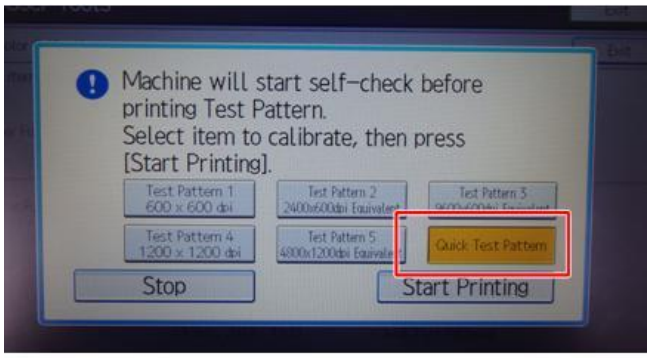
- Scanner Data Processing
  An ASIC on the BICU performs scanner processing, including black level correction, white level correction, and gray balance correction. The ASIC on the BICU also has AE (automatic exposure control) function.
- Converts image signals from the SBU and CIS into various types of image, and outputs them to the controller (memory) via a PCI bus.
- Receives image signals from the controller (memory) via a PCI bus, and converts them into images to output to the LDB.
- Outputs the sheet-through ADF control signal.
- Relays various types of signals and power sources.

Image Processing Outline

In the BICU, digital image signals that are transmitted from the SBU pass through processes such as shading correction, line-to-line adjustment, and other image processing. Then image data is converted into digital signals (2-bits/pixel, or 4-bits/pixel) and sent to the printer unit. (For details about image data flow, see Block Diagram)

Auto Color Calibration (ACC) Quick Correction Mode

In response to the request from the service technician to reduce the time for adjustment during machine installation, this machine is equipped with Quick Correction Mode for Auto Color Calibration (ACC).
In the previous model, it was necessary to execute correction in all resolutions (Test Patterns 1 to 5), but this model executes the correction in all resolutions by only executing Quick Test Pattern once.



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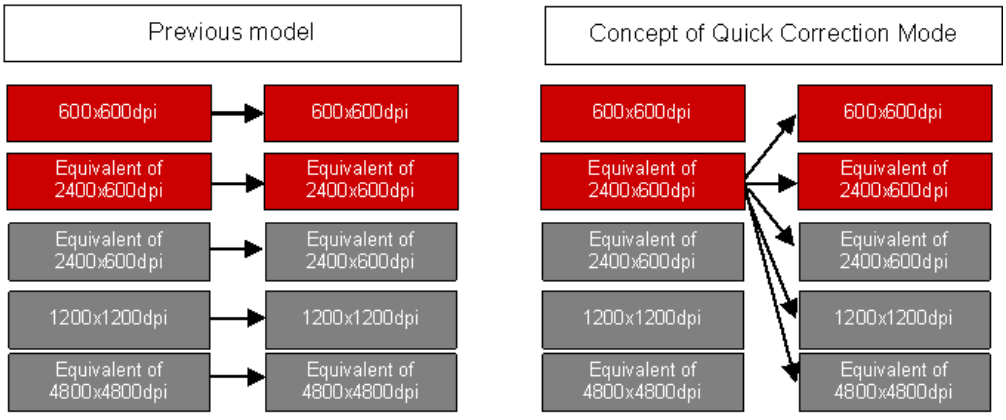
Note

- If the printed image is not adjusted properly after executing Quick Mode, perform ACC with normal mode (test pattern in applicable resolution) again.

Notes on Quick Correction Mode

- In Quick Correction Mode, the machine scans in the default scan resolution mode of 2400 dpi × 600 dpi and applies the adjustment value calculated from the scan result to all resolution modes.



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Disadvantage

- The correction is slightly less accurate compared to the correction executed separately in each scan resolution mode (for the colors).

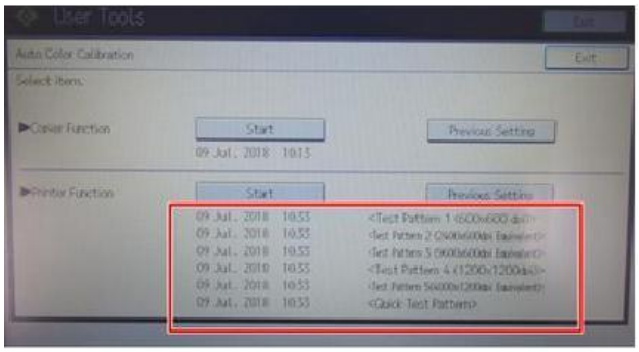
Advantage

- Reducing the time taken for machine installation.

Execution History

- When executing Auto Color Calibration (ACC) in Quick Correction mode, the execution time is

logged for Test Patterns 1 to 5 in addition to that for Quick Correction mode.



Process Control

Mechanism Descriptions

In the electro-photographic process, the optimum parameters for maintaining image quality vary due to the following factors: fluctuations in humidity and temperature, print mode (image dimensions, P/J), and ageing and degradation of toner, developer, and drum. So the machine needs to determine the best conditions by detecting the development ability (development gamma) of the machine at certain times. Process control adjusts the image writing conditions for keeping image density steady. In this machine, there are two types of process control as follows:

- **Potential Control**
  Controls development potential, which is the gap between the drum potential and the development bias, in order to keep the targeted tone.
- **Toner Supply Control**
  Controls the toner supply amount for the development unit in order to keep the amount of toner that attaches to the paper steady.

To perform process control correctly, the machine requires "initializing" at the initial installation or at replacement of the development unit, developer, or drum. "Initializing" performs the parameter initialization for the process control based on the behavior before aging of the development unit, developer, and drum.

List of Process Control Acronyms

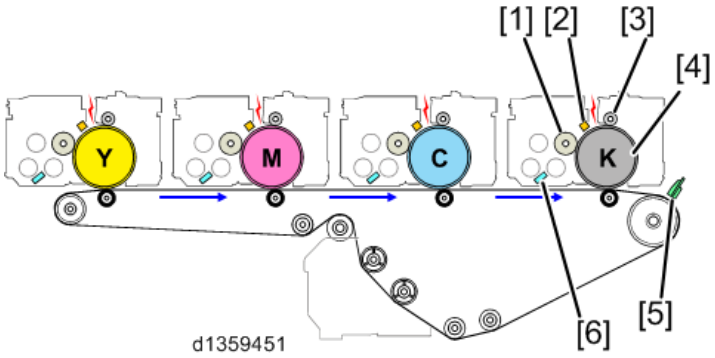
The potential control phase of process control involves many adjustments. Here is list of acronyms used in the descriptions of process control adjustments.

Acronym	Description
Vt	TD sensor output value at the present time.
Vtref	Target output value of the TD sensor.
Initial μ count	The value detected by the TD sensor (μ sensor) during the initialization. The initial μ count is a counting value which corresponds to the frequency. Therefore, the detected counting value needs to be converted to Vt to be used for toner supply control.
Vsp	ID sensor output value when ID sensor patterns are read.
Vsg	ID sensor output value of the non-image part of the ITB.
Vpot	Development potential (Vb-Vl)
Vb	Development bias
Vd	Charge potential
Vl	Drum surface potential of the part illuminated by laser light during printing.
Vpl	Target potential for adjusting the laser power (laser power is adjusted so that the drum has this potential).

Components

Process Control Component Layout

This machine uses four photoconductor development units (PCDUs) in tandem (one PCDU for each color YMCK).



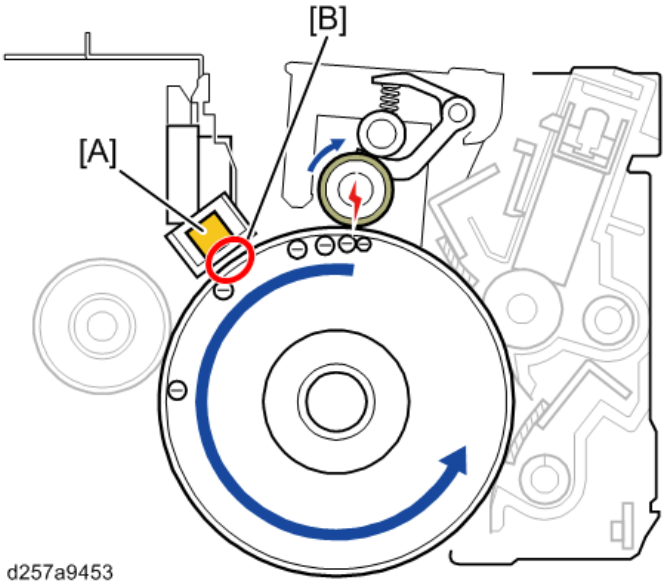
1	Development Roller	4	Drum
2	Potential Sensor*1	5	ID Sensor
3	Charge Roller	6	TD Sensor

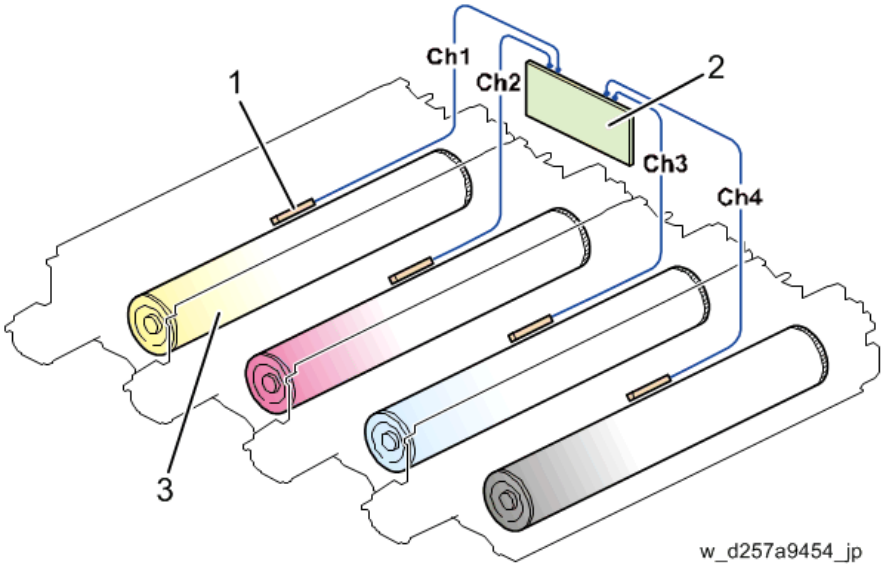
*1 Pro C5300S/C5310S only

Sensors for Potential Control

Potential Sensors (Pro C5300S/C5310S only)

Potential sensors measure electrical potential on the surface of the drum, and are installed in the left upper side of the drum unit (viewed from the front of the machine). Each color station has one. The space [B] between the drum surface and the potential sensor [A] is 3 mm.





No.	Description	No.	Description
1	Potential Sensor*1	3	Drum
2	Potential Sensor Board		

*1 Pro C5300S/C5310S only

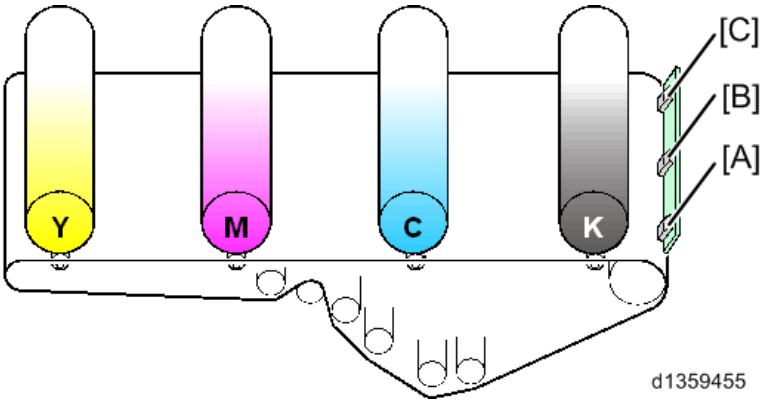
IM C6500/C8000 has no potential sensor. There are some differences between the models.

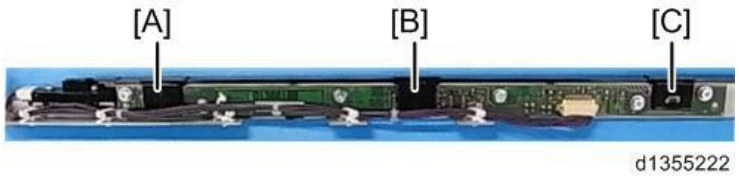
✓

		IM C6500/C8000	Pro C5310S/C5300S	Notes
System Differences in Hardware	ID Sensor	✓		
	TD sensor	✓		
	Potential Sensor	-*1	✓	Corresponding to use without Potential sensor
Potential Detection Alternative Means	✓*1	-	Corresponding to use without Potential sensor	
DEMS	-	✓		
Paper Type Adhesion Amount	-	✓		
IBACC	✓*1	-	Corresponding to use without Potential sensor	

*1: Changes from IM C6500/C8000

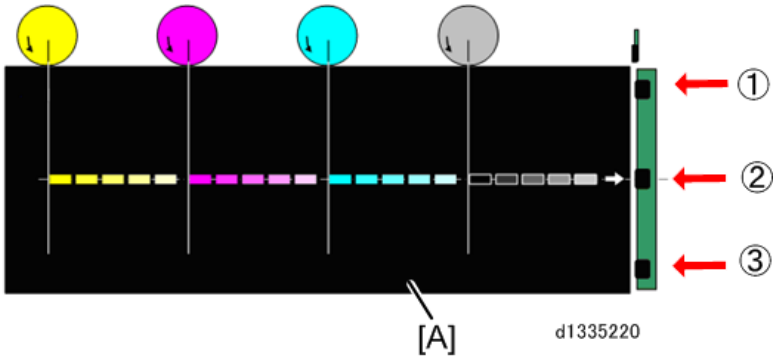
ID / Music Sensor





- [A]: Front
- [B]: Center
- [C]: Rear

Tone Pattern on the ITB



- [A]: ITB
- ①,②,③: MUSIC Sensor = A sensor to detect MUSIC control patterns
- ②: ID Sensor = A sensor to measure the amount of toner that is attached to the ITB. This sensor is used to detect the patterns for image adjustment that are made during potential control, and is also used to detect ID patterns between sheets.

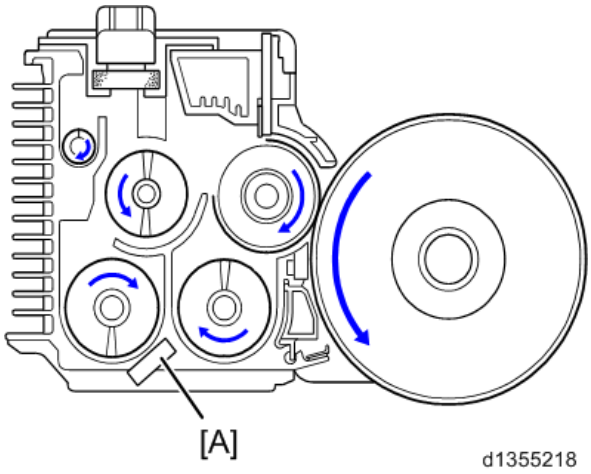
Temperature / Humidity Sensor

The temperature/humidity sensor located at the right rear side of the machine detects the temperature and humidity. This sensor affects the potential control (developer agitation time, target developer gamma determination) and charge current adjustment.

Sensors for Toner Supply

TD Sensor (Toner Density Sensor)
2108

The TD sensor [A] is a non-contact type sensor that detects the toner density in the development unit. This sensor is attached under the development unit. The amount of toner that is added to the development unit depends on the toner density detected by the TD sensor.
This machine uses the μ sensor, which is a non-contact type sensor. The μ sensor cannot detect Vt directly. The output value of the μ sensor is a counting value which corresponds to the frequency. Therefore, the detected counting value needs to be converted to Vt to use for toner supply control.
The TD sensor has an ID chip. The ID chip contains information specific for the machine type, development unit information, rotation running distance of the drum, and information for image density control.



Initial Settings

"Initial setting" means a process to initialize the process control parameters in order to keep the targeted tone based on the behavior (before aging-degradation) of a new development unit, new developer, and a new drum.
It's essential for a machine to perform "Initial settings" correctly at the initial installation or at replacement of a development unit, developer, or drum.
If not, the machine cannot perform the process control correctly and wrong image density (too thin or thick) / toner scattering could occur.

Installation, Developer Replacement

When the drawer unit is closed after new developer has been installed successfully (SP3-024-001), the TD sensor initial setting starts automatically and then the adjustments for image quality (charge current adjustment, transfer current adjustment, potential control, MUSIC). This completes the machine set up for operation.
The automatic initial setting result comes out on the following SP codes:

- SP3-025-001 (Dev Fill OK? - From Left: YMCK)
- SP3-031-001 (TD Sens Init OK? - From Left: YMCK)
- SP3-012-001 (ProCon OK? - History: Last)

Other Initial Settings

The following initial settings must be executed if necessary.

Initialize Processing (SP3-020-001)

Pressing [EXECUTE] starts this processing sequence:

- Development auger agitation of developer
- Charge current adjustment for drum charge roller
- Transfer current adjustment
- Process control (potential control)
- MUSIC

Initialize TD Sensor (SP3-030-001 to 006)

Pressing [EXECUTE] starts the development auger to agitate the developer then initiates the TD sensor.

Initiate Cleaning (SP3-032-001 to 006)

Pressing [EXECUTE] develops the coverage pattern on the drum with the ITB retracted, so that it is removed by the PCDU cleaning unit. The number of pages for the coverage pattern can be set with SP3-032-021 (Force Tnr Supply: Exe). (Default: 6)

Forced Toner Supply (SP3-050-001 to 006)

Pressing [EXECUTE] activates the toner supply clutch to move toner from the sub hopper to the development unit. The amount of toner supplied with one execution of this SP can be set with SP3-050-021 to 024 (Supply Quantity: KCMY). (Default: 1wt%)

Toner Filling (SP3-051-001)

Pressing [EXECUTE] moves toner from the toner bottle to the sub hopper.

Image Quality Adjustment (SP3-011-001 to 005)

Pressing [EXECUTE] for the following SP codes shown below executes process control/MUSIC.

- SP3-011-001 (Manual ProCon :Exe - Normal ProCon)
- SP3-011-002 (Manual ProCon :Exe - Density Adjustment)
- SP3-011-003 (Manual ProCon :Exe - ACC RunTime ProCon)
- SP3-011-004 (Manual ProCon :Exe - Full MUSIC)
- SP3-011-005 (Manual ProCon :Exe - Normal MUSIC)

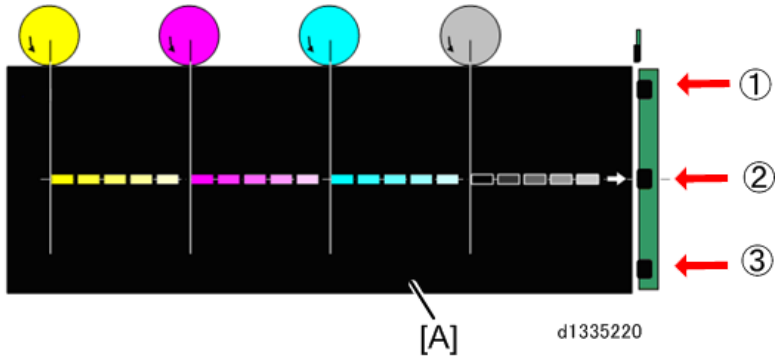
Process Control

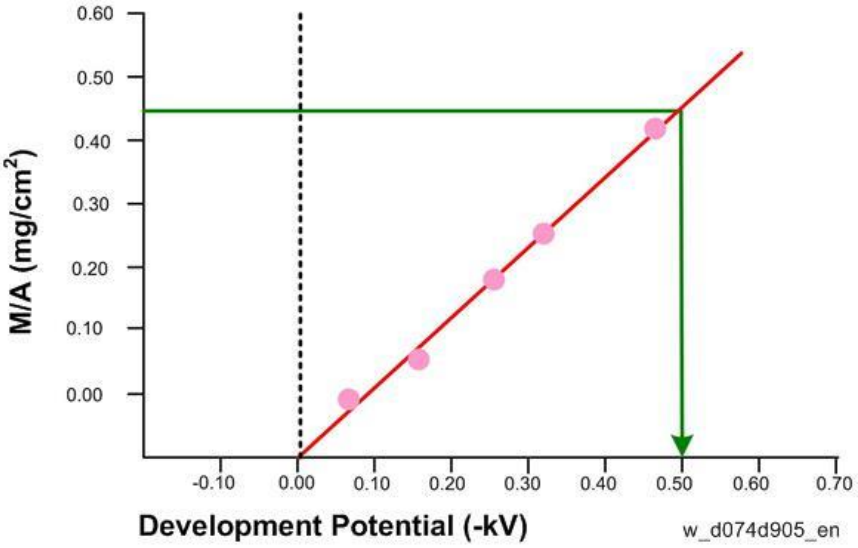
Potential Control

Potential control is executed at prescribed times to perform adjustments in the copy process in order to achieve the target image density and produce the best quality images. These adjustments include

changing drum charge bias, development roller bias, and LD power.

Gradation patterns are created at prescribed intervals and read by the potential sensors (①,②,③) and the center ID/Music sensor (②) on the ITB. The machine uses these readings to calculate development gamma for each color.





Because IM C6500/C8000 has no potential sensor, development potential is calculated as an estimated value.

Potential Control Execution Condition

Potential control is triggered by the following conditions;

- **When the main power is turned ON / When the machine returns from the energy saving mode**
- **At the start of a print job**

  If any of the following conditions is met after the last print job has ended;

1. Idle time ≥ Time threshold setting [min.] (SP3-532-001)
2. Ambient temperature changed ≥ Temperature threshold setting [°C] (SP3-532-002)
3. Relative humidity changed ≥ Relative humidity threshold setting [%RH] (SP3-532-003)
4. Absolute humidity changed ≥ Absolute humidity threshold setting [g/m^3] (SP3-532-004)

- **During Printing**

1. Page counter for BW (SP3-529-006) ≥ Interval setting for BW [page] (SP3-533-002)

2. Page counter for FC (SP3-529-007) ≥ Interval setting for FC [page] (SP3-533-012)

- **At the end of a print job**

1. Page counter for BW (SP3-529-006) ≥ Interval setting for BW [page] (SP3-534-002)
2. Page counter for FC (SP3-529-007) ≥ Interval setting for FC [page] (SP3-534-012)

- **When the front cover open is notified**

  If any of the following conditions is met after the last print job has ended;

1. Idle time ≥ Time threshold setting [min.] (SP3-530-001), and Page counter (SP3-530-007, 008) ≥ Interval setting [page] (SP3-530-005,006) at power ON
2. Ambient temperature changed ≥ Temperature threshold setting [°C] (SP3-530-002)
3. Relative humidity changed ≥ Relative humidity threshold setting [%RH] (SP3-530-003)
4. Absolute humidity changed ≥ Absolute humidity threshold setting [g/m^3] (SP3-530-004)

- **Result**

  The process control result is displayed in SP3-012-001 (ProCon OK?: History:Latest) with an 8-digit code. See the table below.

Result Code

Category	Code	Result name	Description
00 and larger	00	Not executed	Factory default setting(SP default)
10 and larger Result (Normal)	11	Succeeded	-
15 and 16 Potential Sensor	15	Potential Sensor Vd error (Upper limit)	Vd > MAX
	16	Potential Sensor Vd error (Lower limit)	Vd < MIN
20 and larger ID Sensor	21	ID Sensor Vsg adjust error	Out of range from Vsg=4.0±x.x[V/step]
	22	ID Sensor LED Adjust error	Ifsg > Max
	23	ID Sensor Output error (Positive reflect)	Vsg_reg < Min (Max)
	24	ID Sensor output error (Diffusion reflect)	Vsg_dif < Min (Max)
	25	ID Sensor offset Voltage error (Positive reflect)	Voffset_reg > Max
	26	ID Sensor offset Voltage error (Diffusion reflect)	Voffset_dif > Max
40 and larger TD Sensor	41	TD Sensor Output (MAX)	Vt > MAX
	42	TD Sensor Output (MIN)	Vt < MIN
	43	TD Sensor Error (MAX)	Correct development gamma, and Vt > MAX
	44	TD Sensor Error (MIN)	Correct development gamma, and Vt <

Category	Code	Result name	Description
			MIN
45 and larger ID Pattern detection	45	ID Pattern extract error	Cannot detect ID Pattern
	50	Vmin_Bk/K2 error (Max)	K:Vmin_Bk / CMY:K2 > Max
	51	Vmin_Bk/K2 error (Min)	K:Vmin_Bk / CMY:K2 < Min
	52	K5 error (Max)	K5>Max
	53	K5 error (Min)	K5<Min
	54	K5 calculated approximate point error	K5 calculated approximate point < Min
	55	Development gamma error (Max)	Development gamma > Max
	56	Development gamma error (Min)	Development gamma < Min
	57	Start developing voltage: Vk error (Max)	Start developing voltage: Vk > Max
	58	Start developing voltage: Vk error (Min)	Start developing voltage: Vk < Min
	59	Not enough valid data	Adhesion amount data for development gamma calculation point is under 2
60 and larger Potential adjustment	61	LD won't light	P patter is not written.
	62	Residual potential: Vr error	Vr > Max
	63	Electrified potential: Vd adjust error	Vd cannot be adjusted in target range.
	64	Exposure potential: Vpl adjust error	Vpl cannot be adjusted in target range
70 and larger Toner density adjustment	71	Toner filling error	
	72	Toner supply error	
90 and larger Result(End)	90	Potential not adjusted	Potential control method is set as [0:FIX]
	99	Stopped	Stopped by door open, power off, error. (Set when execute.)

Note

- Execution result example (In order of YMCK from left)
- Factory default (SP default): [00,00,00,00]
- Starting adjust: [99,99,99,99]
- Fail Vsg adjust(Y): [21,99,99,99]
- Error of Development gamma Max(C): [99,99,55,99]
- Succeeded: [11,11,11,11]

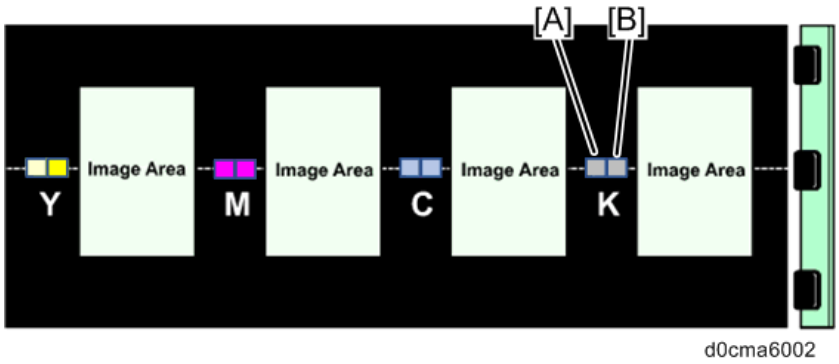
Toner Supply Control

Two methods of toner supply are used with this machine to stabilize the amount of toner supplied to the development unit.

- **0: Fixed supply**
  This mode fixes the amount of toner supplied to the development unit. Do not use this mode except for troubleshooting.
- **4: DANC Supply (with Vtref Correction)**
  In this mode, the necessary amount of toner is supplied to the area where the toner is consumed in the development unit, in order to steady the toner density in the development unit. Choose this mode normally.
  *DANC Supply: Divided image Active Noise Control (Image Divide Type Active Noise Control)

If the toner supply amount is calculated based on the amount of toner used in the covered areas only, errors can increase, especially when changes occur in ambient temperature and drum characteristics. This makes it difficult to control the toner supply amount only with the pixel count.
Therefore, the ID pattern is created on the ITB between sheets at a set interval (default: every 10 sheets). The machine controls the Vtref value using the readings of the ID sensor pattern on the ITB, to stabilize the amount of toner on the ITB.

ID Pattern Detection for Toner Supply Control



[A]: Halftone
[B]: Solid
The ID pattern is created on the ITB between sheets at a set interval (default: every 10 sheets). The machine controls the Vtref value using the readings of the ID sensor pattern on the ITB, to stabilize the amount of toner on the ITB.
The target amount of toner on the ITB (M/A) is specified in the following SPs.

- K toner: SP3-620-001
- YMC toner: SP3-620-002 to 004

The default of the target amount of toner on the ITB is as follows.

- Plain paper
  BK printing: 0.378 mg/cm^2, Color printing: 0.433 mg/cm^2
- Glossy paper

BK printing: 0.378 mg/cm^2, Color printing: 0.389 mg/cm^2

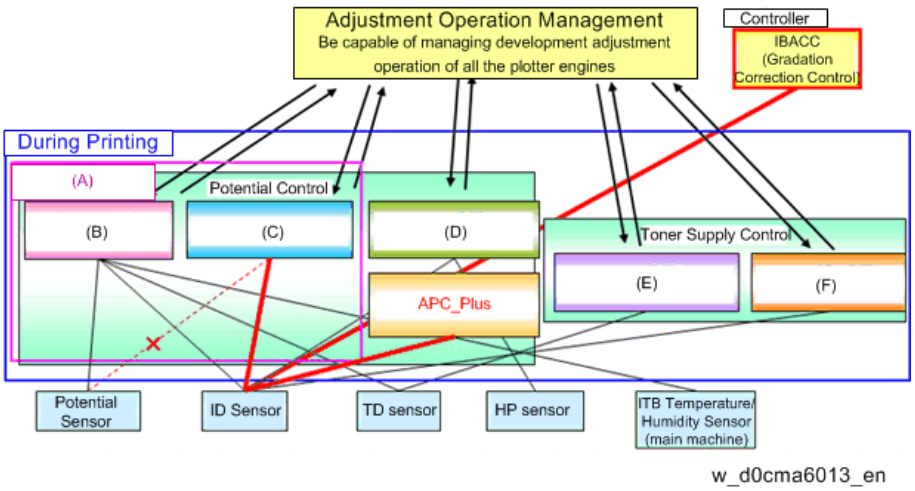
The toner supply control is performed using Vt and Vtref. The machine constantly controls the toner density (toner supply amount for the development unit) to bring Vt (TD sensor output at the present time) close to Vtref (target output of the TD sensor).

- **When Vt is greater than Vtref (when the density of the ID sensor pattern is higher than the target amount of toner):**
  The machine performs the toner supply control so that Vtref increases (decreases the toner supply amount for the development unit).
- **When Vt is less than Vtref (when the density of the ID sensor pattern is lower than the target amount of toner):**
  The machine performs the toner supply control so that Vtref decreases (increases the toner supply amount for the development unit).

Control Configuration

Outline

IBACC (Intermediate Belt type of inner ACC) maintains the quality of gradation in the images. To do this, the machine makes a gradation pattern on the transfer belt, and measures variations in density between the middle to the highlight tone, which solid printing control cannot correct perfectly. The machine feeds back variations in the density to the image-processing parameters (the digital gamma correction table).



(A)	• Power ON/Before Printing • Job End
(B)	Potential Control (Solid Density Control)
(C)	LD Power Control
(D)	DEMS Control (Density Variation Correction Control)
(E)	DANC Control (TC Stable Control inside Development Unit)
(F)	Vtref Correction Control (Repeat Density Control)

Operation Timing

IBACC must be done in the shortest time possible, in cooperation with process control. This is because the process requires time to adjust. If the ON/OFF setting of IBACC operation (SP3-600-030) is ON, IBACC is done at the time of normal process control. If the setting is OFF, the IBACC is not done. Before the IBACC procedure, the machine determines whether IBACC can be done, based on the engine condition. If there is an error in the latest process control, the following IBACC is considered to be unnecessary.

Patch Pattern

The area gradation pattern of 8 gradations for each color is detected at the center.

Others

Proximity Sensor (S28) (IM C6500/C8000 only)

The proximity sensor [A] is located on the right upper corner of the main machine for IM C6500/C8000.

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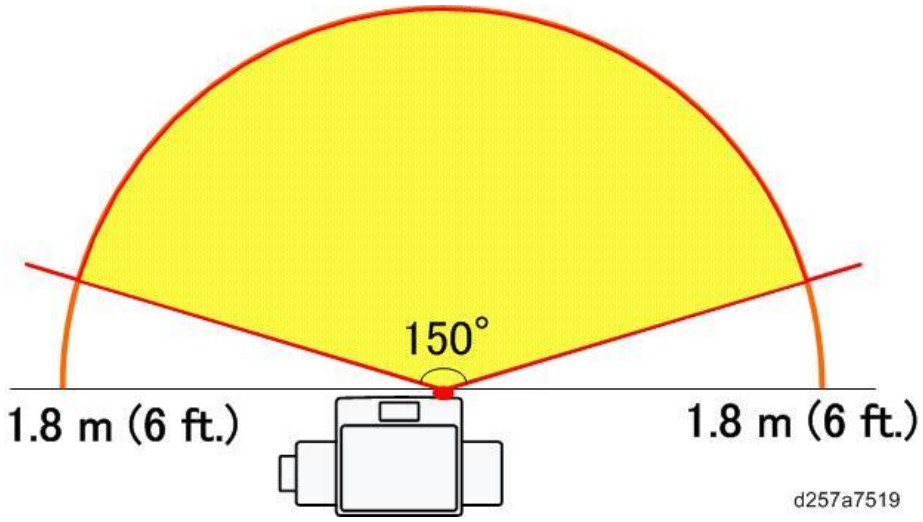
When the machine has been idle for a long period and the proximity sensor (S28) detects the presence of anyone in front of the machine, it signals the machine to prepare itself for quick recovery to operation status by shortening the time required for the machine to recover full operation (pre-recovery mode) before the operator even touches the machine or operation panel. The proximity sensor (S28) employs infrared and can detect the presence of the operator within an arc of 150° out to 1.8 m (6 ft.) away from the front of the machine.



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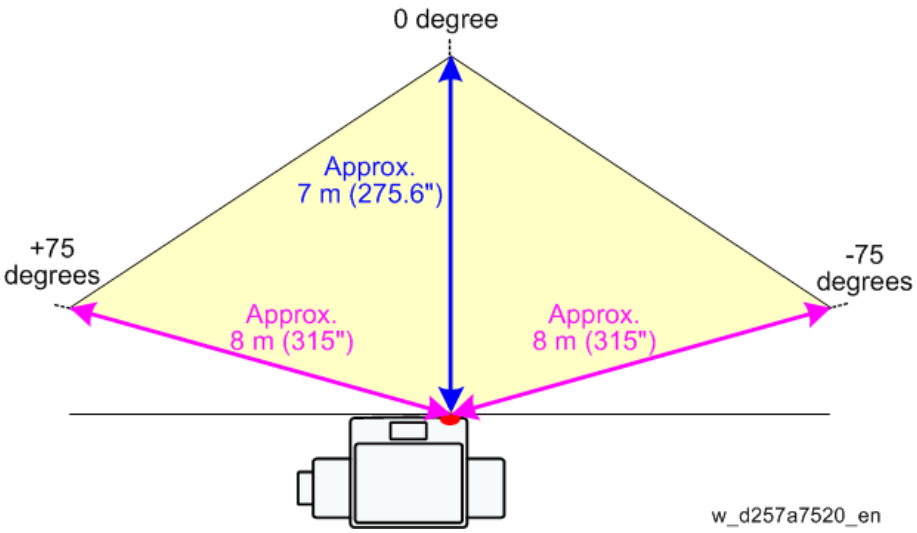
The following diagram shows the image of the area covered by the sensor on the floor.
Basically, the sensor detects the presence of an operator coming to the machine from the distance of approximately 1.8 m. However, it may also detect the presence of someone walking across the area.
The infrared sensor's detection performance is influenced by the ambient temperature. The sensing distance increases in a lower ambient temperature and decreases in a higher ambient temperature.
As a guide, the sensing distance starts decreasing from 1.8 m when the ambient temperature starts rising to 28 °C and above.
The sensor covers the area in front of the machine obliquely downward, detecting people's legs (around their knees). Its sensing performance is influenced by the kind of clothes people are wearing.



Sensor Operation

There are three phases in the operation of the proximity sensor:

- First, the sensor detects the presence of the operator within the arc in front of the machine, and then signals the machine to leave the STR mode (or Engine OFF mode) and enter the Pre-recovery mode.
- Second, as soon as the machine enters the Pre-recovery mode it resets the Engine Off mode timer for 5 min. If the operator does not touch the machine for 5 minutes, the machine slips back into the Engine Off mode. If the operator touches the LCD, or opens and closes the ADF or front door, etc., the machine shifts to Standby mode.
- Third, once the machine enters Standby mode, if the operator does nothing to start operation, the machine will gradually step down from Standby mode to Lower Energy mode, Quiet mode, Engine Off mode, and then finally to STR mode.

Operation Modes

Here are more details about these operation mode levels.

Mode	Description
STR mode	Suspend-to-RAM mode. The power supply to the CPU, adjacent chips, and the clock on the controller board is shut down.
Engine Off mode	The fusing lamps and other engine components remain off. The operation panel backlight is off, but there is power supplied to the operation panel and the controller boards.
Pre-recovery mode	The operation panel and HDD are on but the engine components remain off (Energy Save mode). However, the operation backlight still remains off, so there is no change on the operation panel to indicate that the machine has shifted from STR mode, through Engine Off mode, and into Pre-recovery mode.
Quiet mode	Fusing lamps still remain off, but the HDD and SD cards are accessible so the machine can receive jobs (Data In) and incoming faxes.

Mode	Description
Lower Power mode	Finally, power is restored to the fusing lamps but maintained at low temperature.
Standby mode	The machine is ready to operate.

User Tools

The operation of the proximity sensor can be switched off and on with a User Tool setting.

1. Touch "User Tools" on the operation panel.
2. Select "Settings" > "System Settings" > "Machine" > "Power/Energy Saving" > "Human Detection Sensor".
   You can switch the sensor off/on by selected "Disabled"/"Enabled". The default setting is "Enabled".

Related SC Codes

One of two SC codes is issued if the proximity sensor fails.

SC869-01 Proximity sensor failure: Error 1.

The sensor remained on for over 24 hours.

- Cycling the machine off/on does not cancel this error.
- When this error occurs the machine enters sensor failure mode and ignores subsequent input from the proximity sensor.
- Even though the sensor is on, the machine does not enter Pre-recovery mode, and the Engine Off timer setting is not affected and continues to operate normally.
- To cancel the error, switch off the proximity sensor with the User Tool setting described above.
- The sensor and its components require replacement.

SC869-02 Proximity sensor failure: Error 2

The sensor remained off, even after the operator performed 20 actions with the machine operation panel, opening and closing the front door, ADF, etc. The machine will issue this error code after every 20 events in operation of the machine.

- Cycling the machine off/on does not cancel this error.
- To cancel the error, switch off the proximity sensor with the User Tool setting described above.
- The sensor and its components require replacement.

Related SP Codes

There is one proximity sensor related SP code: SP5-102-203 Auto Detect: human detection check. This is an on/off check.

- Enter "0" to switch the sensor off.
- Enter "1" to switch the sensor on.

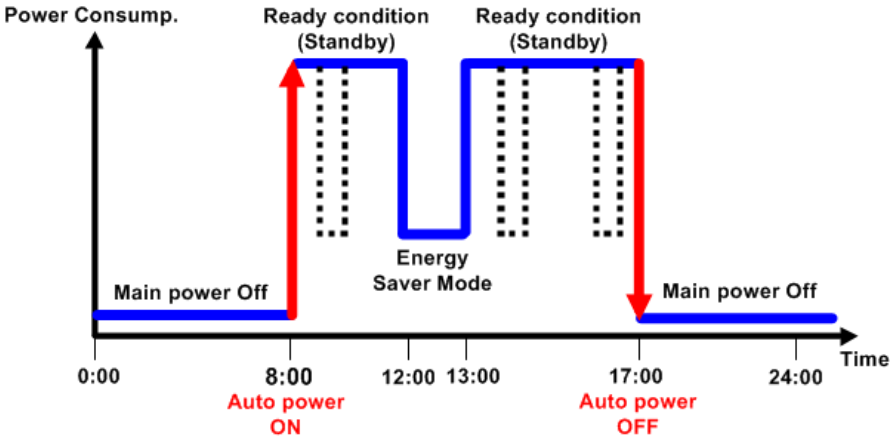
This SP is used to check the operation of the sensor. It confirms that the sensor can be switched off and

on normally. (Default: On). This check can be used regardless of the User Tools setting. Even if the sensor is switched off with the User Tools setting, a check can be done with this SP code.

Energy Save

Energy Saver Timer (Weekly Timer)

- With this timer, the user can choose when the machine will automatically enter and recover from Energy Saver mode, as well as when it will turn on and off. The user does not need to worry about turning the machine on or off in the morning, during lunchtime, or when leaving the office. As a result, the machine contributes to overall energy saving in the user's office environment, while at the same time helping to improve work efficiency.
- The user is able to control how far the machine will power down, i.e. only to Energy Saver mode or all the way off.
- With auto power ON and OFF, the user need not remember to turn the machine on and off every day.
  - Auto power ON:
    Improves work efficiency, as machine warm-up is already completed by the time the user is ready to begin work (the user is not made to wait).
  - Auto power OFF:
    Prevents unnecessary power consumption during after-work hours, saving power.



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- The user can disable the "Weekly Timer", so that the machine power is not turned on automatically during extended periods of inactivity (Ex. Summer holiday).
- A password can be set so that the machine can be used during this period if necessary, but only by the select group who know this password.

Note

- To set the Weekly Timer, go to [Settings] > [System Settings] > [Date/Time/Timer] > [Timer] > [Weekly Timer Detailed Settings].

Sleep Mode Timer

Overview

You can set the sleep mode timer setting on [Settings] -> [System Settings] -> [Date/Time/Timer] -> [Timer] -> [Sleep Mode Timer].

Details

After a specified period has passed, or [Energy Saver] is pressed, the machine enters Sleep mode in order to conserve energy. Specify the time to elapse before Sleep mode.

- Pro C5300S/C5310S: 1 to 240 minutes (Default: 60 minutes)
- IM C6500/C8000: 1 to 60 minutes (Default: EU/AP:60 minutes, NA:40minutes)

No Sleep Transition Mode (ON/OFF)

When the internal temperature reaches 40°C, the machine enters the extended rotation mode. This mode is so noisy that complaints might be received from the users.
To prevent the machine from entering the extended rotation mode frequently, the new mode, standby cooling mode that controls the temperature rise during standby time is added.
In the standby cooling mode (38.5 to 40°C), fans operate moderately because the machine cannot enter the sleep mode unless the internal temperature falls below 38.5°C. It is expected that this mode is effective in 60 percent of the users.

Settings

Specify "1: ON" at SP1-948-005. (Default: 0: OFF)
(No Sleep Transision Ctrl: ON/OFF Setting)

Side effect

- When No Sleep Transition is on, the machine may take longer time up to 90 minutes to enter sleep mode than the time when No Sleep Transition is off.
- The machine seems to be off when you see the screen off but the fans are actually rotating at the rear side of the machine.

Restriction

The standby cooling mode is not so much effective in the following users;

- Ambient temperature is high. (Users that operate the machine when the temperature is over 30°C)
- Users that execute massive printing. (Jobs above ACV20000 and 100P/J)

Note

- Sleep Mode Timer may not work when error messages appear.
- Depending on which Embedded Software Architecture application is installed on it, the machine might take longer than indicated to enter Sleep mode.

Fusing Unit Off Mode (Energy Saving)

Overview

You can set Fusing Unit Off mode on [Settings] -> [System Settings] -> [Date/Time/Timer] -> [Timer] ->

[Fusing Unit Off Mode (Energy Saving) On/Off].

Details

You can specify whether Fusing Unit Off mode is enabled or not. When Fusing Unit Off mode is enabled, the display is on but the fusing unit is off to save energy. The machine requires roughly the same time as warm-up time to recover from Fusing Unit Off mode. The default setting is "Off".

- If "Fusing Unit Off Mode (Energy Saving) On/Off" is set to "On", you can specify when to exit Fusing Unit Off mode and the time to elapse before entering Fusing Unit Off mode.
- If "Exit Fusing Unit Off Mode" is set to "On Printing", the machine exits Fusing Unit Off mode when printing is performed.
- If "Exit Fusing Unit Off Mode" is set to "On Operating Control Panel", the machine exits Fusing Unit Off mode when a key other than the copy function key is pressed on the control panel of the machine.

If printing is performed with the copy function or a key in the copy function is pressed on the control panel of the machine, the machine exits Fusing Unit Off mode regardless of this setting. If the timer is set to [On], you can set the time from 10 seconds to 240 minutes, using the number keys.

Energy Saving Recovery Setting for Business Application

Overview

You can specify the energy saving recovery setting for business application in [Settings] -> [System Settings] -> [Machine] -> [Power/Energy Saving] -> [Energy Saving Recovery for Business Application].

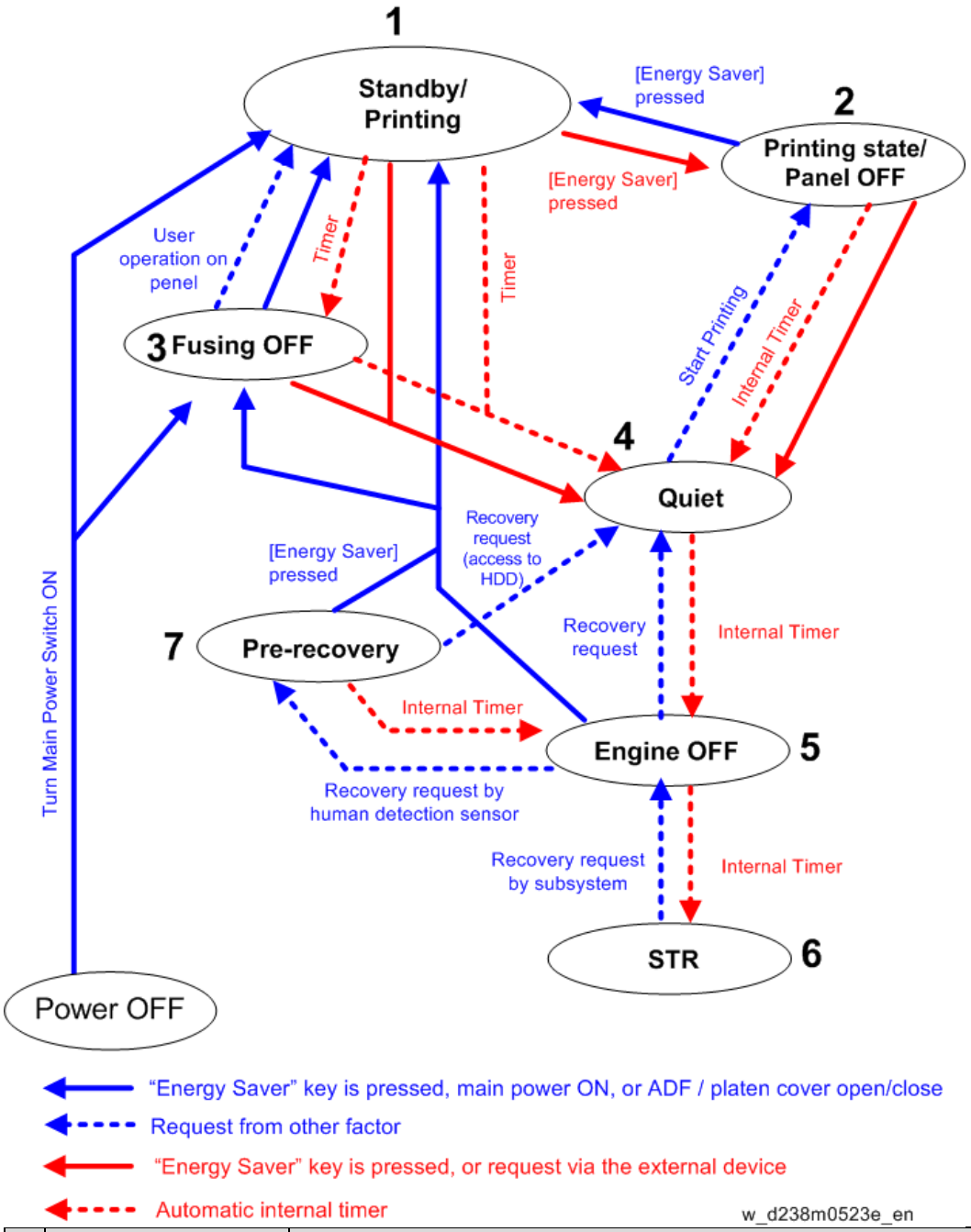
Details

Specify whether or not to enable low-energy recovery from Sleep mode to use applications independent of the machine, such as Address Book Management or Browser.
If "On (Energy Saving)" is selected, it takes longer than usual to be ready to use the machine. The default setting is "Off".

Recovery Time/Reduced Electrical Consumption

<table>
<tr><th></th><th>Pro C5310S</th><th>Pro C5300S</th><th>IM C8000</th><th>IM C6500</th></tr>
<tr><td>Reduced electrical consumption in Sleep mode</td><td colspan="2">0.72 W</td><td>NA/EU: 0.72 W
AP: 0.74 W</td><td>NA/EU: 0.74 W
AP: 0.62 W</td></tr>
<tr><td>Time of switch into Sleep mode</td><td colspan="2">60 minutes</td><td colspan="2">EU/AP: 60 minutes
NA: 40 minutes</td></tr>
<tr><td>Time of switch out from Sleep mode</td><td colspan="2">119 seconds</td><td>38 seconds</td><td>NA/EU: 38 seconds
AP: 42 seconds</td></tr>
</table>

Power States of this Machine



	State	Description
1	Standby/Printing	• State where normal operation is possible after warm-up • State during printing
2	Printing state/Panel OFF	State when printing with the backlight of the operation panel turned off
3	Fusing OFF	State where the Standby Fusing OFF state is entered when the time set with the "Fusing Unit Off Mode (Energy Saving) On/Off" setting of the User Tools has elapsed. • State where the operation panel is flashing and the fusing heater is OFF.

	State	Description
		• The bottom plate of the paper feed tray is raised.
4	Quiet state	Quiet state is entered when the Energy Saving key is pressed or the time set with the "Sleep Mode Timer" of the User Tools has elapsed. This is a temporary energy saving state before entering sleep mode. • Basically, no homing (initialization) of peripheral devices is performed. • The bottom plate of the paper feed tray is raised. • The fusing heater is turned OFF.
5	Engine OFF (Sleep mode)	Entered from Quiet state with internal timer. • The relevant power systems (24V, 12V, 5V) are turned OFF at the same time as the fusing heater. • When receiving a fax or printing is performed in engine OFF state, warm-up is started and printing is performed while the backlight of the operation panel is turned OFF.
6	STR state (Sleep mode)	Supplying of power and clock to the CPU and peripheral chips on the controller board is stopped.
7	Pre-recovery	The Pre-recovery state is entered from STR state when the Proximity Sensor detects presence of a person. This is the Energy Saving state where the power of the operation panel and HDD is ON and the power of the engine is OFF, but the backlight of the operation panel LCD is off.

Device state for each Energy Saving state

State	Energy Saving LED	Operation panel LCD	Engine (Printer/Scanner)	HDD	CTL
Standby/Printing	ON	ON	ON	ON	ON
Printing state/Panel OFF	ON	OFF	ON (Only scanner is in Quiet state)	ON	ON
Fusing OFF	ON	ON	ON (Both printer/scanner are in Quiet state)	ON	ON
Quiet state	ON	OFF **ON**[*1]	ON (Both printer/scanner are in Quiet state)	ON	ON
Engine OFF	Blinking gradually **ON**[*1]	Sleep **OFF or ON**[*1]	OFF	OFF **ON**[*1]	ON

State	Energy Saving LED	Operation panel LCD	Engine (Printer/Scanner)	HDD	CTL
STR state	Blinking gradually	Sleep	OFF	OFF	STR
Pre-recovery	ON	OFF **ON**[*1]	OFF	ON	ON

*1 When [Energy Saving Recvry. for Business Applicatn.] is [On (Energy Saving)], ON/OFF is determined by the internal timer of the Smart Operation Panel.

Transition of operation panel to Energy Saving when [Energy Saving Recvry. for Business Applicatn.] is [On (Energy Saving)]

Normally, the Energy Saving state of the operation panel LCD changes in step with the energy saving state of the MFP/LP main unit, but to support the scenario where an application that does not use the engine (printer/scanner) is executed from the operation panel, the Energy Saving state of the operation panel is transitioned through the three states ON, OFF, and Sleep with its internal timer when "Energy Saving Recvry. for Business Applicatn." is "On" (Energy Saving).

Verification of Up Time for each Energy Saving State

The up time for each power state of the machine can be checked with SP8-961 (Electricity Status). It is also output on the SMC sheet.

SP	Name	Description
SP8-961-001	Ctrl Standby Time	Cumulative time of Engine OFF mode, Quiet mode, and Standby mode
SP8-961-002	STR Time	Cumulative time of STR mode
SP8-961-003	Main Power Off Time	Cumulative time of state in which the power plug is connected to the outlet but the main power is off
SP8-961-004	Reading and Printing Time	Cumulative time of state in which both the plotter engine and scanner engine are running or warming up
SP8-961-005	Printing Time	Cumulative time of the state in which the plotter engine is running
SP8-961-006	Reading Time	Cumulative time of the state in which the scanner engine is running
SP8-961-007	Eng Waiting Time	Cumulative time of state in which the power state of the engine is Standby state
SP8-961-008	Low Power State Time	Not used for this machine
SP8-961-	Quiet State Time	Cumulative time of the state in which the power state of the engine

SP	Name	Description
009		is Quiet state
SP8-961-010	Heater Off State Time	Cumulative time of the state in which the power state of the engine is Fusing OFF state
SP8-961-011	LCD on Time	Cumulative time of the state in which the backlight of the LCD is on.

Checking the Up time by Device State

SP8-941 (Machine Status) keeps a record of the amount of time that the machine spends in each mode.

SP	Name	Description
SP8-941-001	Operation Time	Cumulative time of the state in which the engine state notification is enabled. The state in which the engine is not running (such as when storing to HD only with the controller) is excluded from the running state.
SP8-941-002	Standby Time	Cumulative time of the state in which the engine state is not running.
SP8-941-003	Low Power Time	Not used for this machine
SP8-941-004	Sleep mode time	Cumulative time in Sleep Mode state.
SP8-941-005	Off Mode Time	Cumulative time in which the Energy Saving state of the device is Engine OFF state.
SP8-941-006 to 009	Down time	Cumulative time in which the device is disabled because itself or its component is in the following state. • SP8-941-006: SC (excluding mode SC) • SP8-941-007: Jam (plotter) • SP8-941-008: Jam (scanner) • SP8-941-009: Supply/PM unit end

With this data, and the power consumption values from the specifications, we can estimate the amount of energy that is used by the machine.

This should only be used as a reference value, because the power consumption specifications are measured in a controlled environment with a constant power supply.

To get an exact measurement at the customer's site, a watt meter must be used to measure the actual energy consumed.

To use SP8-941 to calculate the energy consumed:

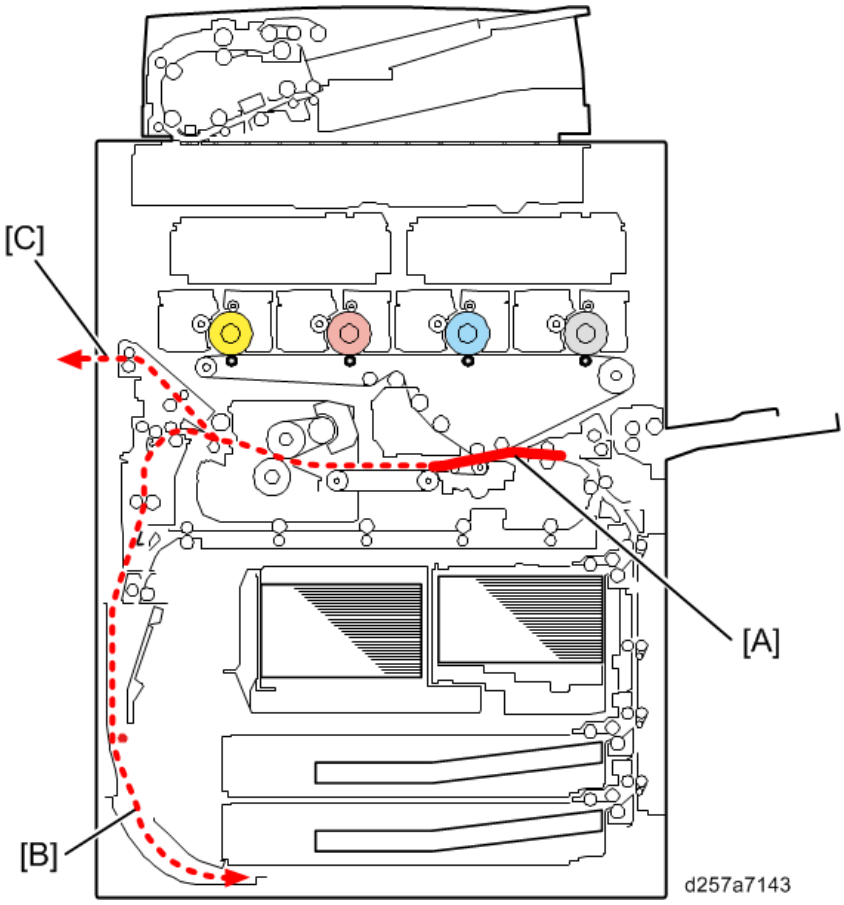
- At the start of the measurement period, read the values of SP8-941-001 to 005.
- At the end of the measurement period, read the values of SP8-941-001 to 005 again.
- Find the amount of time spent in each mode (subtract the earlier measurement from the later

measurement).

- Multiply this by the power consumption spec for each mode.
- Convert the result to kWh (kilowatt hours)

Paper Removal Mechanism for Jam J058/J098

When J058 (Bypass Paper Feed Sensor: Lag Jam) or J098 (Paper thickness error) occurred, the machine transfers the paper, which causes the paper jam, to the purge unit [B]. The preceding paper of the jammed paper is also transferred to the purge unit [B] or the exit tray [C]. It makes easier to remove the remained paper by ejecting paper in the machine.



- J058 (Bypass Paper Feed Sensor: Lag Jam): When a paper in the different size from the setting in the operation panel is transferred.
- J098 (Paper thickness error): When a paper in the different thickness from the setting in the operation panel is transferred.

When a paper cannot be transferred to the purge unit or the exit tray according to conditions, the paper stops inside or before the drawer unit.

Paper Removing Control for Jammed Paper

The paper, which causes a jam, is controlled according to the cause of the paper jam as follows.

J058 (Bypass Paper Feed Sensor: Lag Jam)

Cause of the Paper Jam	Jammed Paper Movement
1. The paper length is longer than the paper setting	The first sheet: Transfer to the purge unit After the second sheet: Stop inside the drawer unit
2. The paper length is shorter than the paper setting	Transfer to the purge unit

* When the leading edge of the paper has passed 30 to 40 mm short of the inverter junction gate by the straight through output, the paper stops inside the drawer unit.

J098 (Paper thickness error)

Cause of the Paper Jam	Jammed Paper Movement
1. The paper thickness is thicker or thinner than the paper setting	Transfer to the purge unit
2. The paper thickness is above the maximum value[*1]	Stop inside the drawer unit

*1: The value set in SP1-318-001 and 002 (Paper Thick Detect Max Value: Coated Paper: Thick1-Thick9)

Paper Removing Control for the Paper Other Than Jammed Paper

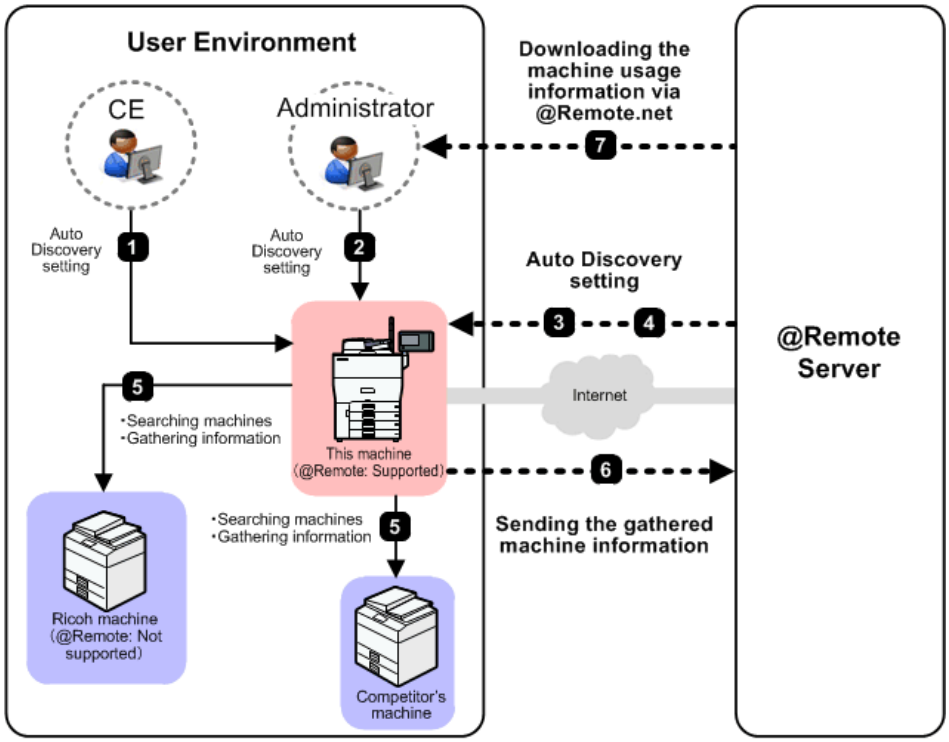
The paper except the paper, which causes a paper jam, is controlled as follows.

- Proceeding paper:
  - Not in the duplex unit: Transfer to the exit tray
  - Inside the duplex unit: Transfer to the purge unit, or stop inside the drawer unit
- Succeeding paper: Stop inside or before the drawer unit. When the paper is in the standby position, stop on the spot.

@Remote New Function (Auto Discovery)

The Auto Discovery function gathers the usage information of devices that do not support @Remote service (including competitor's machines) on the network, and sends the information to the @Remote server.

This means the customer and CE can get visualized information about devices that do not support @Remote service (including competitor's machines).



1. **Auto Discovery setting by CE**
   The CE specifies the ON/OFF setting or execution time of the Auto Discovery setting with SP mode.
2. **Auto Discovery setting by a customer (administrator)**
   The administrator specifies the ON/OFF setting or execution time of the Auto Discovery setting from the operation panel or WIM.
3. **Auto Discovery setting from the @Remote server**
   The server specifies the ON/OFF setting or execution time of Auto Discovery via the internet.
4. **Checking the Auto Discovery setting by the @Remote server**
   The server checks the Auto Discovery setting of the machine. When the Auto Discovery setting has been changed, the machine notifies the @Remote server.
5. **Searching for machines, gathering information**
   When the execution time set in the Auto Discovery setting has come, the machine searches for machines in the range of the specified IP addresses. A maximum of 255 machines can be searched. If the machine was turned OFF during Auto Discovery, the search will be executed at the next start-up.
6. **Notice of gathered information to the @Remote servers**
   The machine sends the gathered machine information to the @Remote server. The following information is mainly sent.
   - Captured date
   - Device ID, MAC address
   - Model name, device name
   - Vender ID

- Device IP address
- Controller version
- NIC version
- Language code
- Country/Area code
- Counter (Total, Printer, Fax, Copy)
- Device status information (Toner, Jam, Cover, SC, Staple)

7. **Downloading the machine usage information from the @Remote server**

Auto Discovery Function Settings

The Auto Discovery function can be set up with SP mode. The user can also set up the Auto Discovery function from the operation panel or WIM.

Setting from the SP mode

Perform the settings with the following SP modes.

SP	Set Value	Description
SP5-517-061 (AutoDiscovery Execution Setting)	0: Not Available (Default) 1: Available	ON/OFF setting of the Auto Discovery function.
SP5-517-062 (AutoDiscovery Execution Interval)	0: Every day (Default) 1: Every week	Interval of gathering information by the Auto Discovery function.
SP5-517-063 (AutoDiscovery Execution Weekday)	0: Sun (Default) 1: Mon 2: Tue 3: Wed 4: Thu 5: Fri 6: Sat	Set the interval of the Auto Discovery function, when SP5-517-062 is set to [1: Every Week].
SP5-517-064 (AutoDiscovery Execution Hour)	0 to 23 (Hour)	Specify the time of execution (Hour)
SP5-517-065 (AutoDiscovery Execution Minute)	0 to 59 (Minute)	Specify the time of execution (Minute)
SP5-517-066 (AutoDiscovery SNMP Community Name)	- (Default: public)	Set the SNMP community name

Setting from the operation panel

The settings can be performed with the following: [Settings] -> [System Settings] -> [Machine] -> [@Remote Service] -> [Auto Discovery].

Firmware Update Method Using the Firmware Package

Each firmware module (such as System/Copy, Engine, etc.) used to be updated individually. However, an all-inclusive firmware package (package_ALL) is now available.

There are three ways to update using the firmware package.

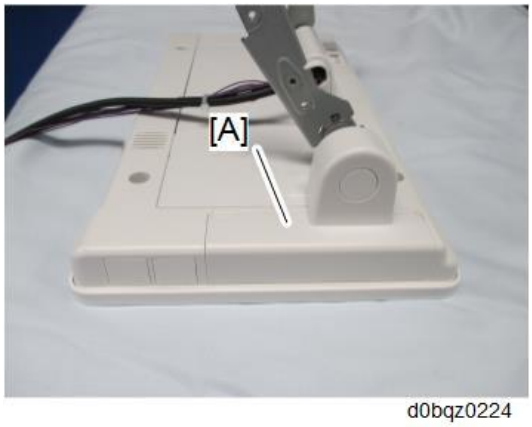
- Package Firmware Update via a network: SFU (Smart Firmware Update)
  The CE can download the firmware package to the machine via a network, and then update the firmware. For details, see Firmware Update (Smart Firmware Update).
- Package Firmware Update via a network: ARFU (Auto Remote Firmware Update)
  The machine automatically checks the server for the latest firmware package version. If the version of the package on the global server is later than that of the package installed on the machine, or if the machine has not downloaded the firmware package, the machine downloads the latest package to update the machine's firmware. For details, see Firmware Update (Auto Remote Firmware Update).
- Package Firmware Update with an SD card
  Package firmware update can be performed using the conventional SD card method by writing the packaged firmware directly to the SD card. For details, see Firmware Update (SD Card).

8. Smart Operation Panel

Replacement and Adjustment

NFC Board

1. Remove the operation panel unit. (Refer to "Operation Panel (PCB13)", "Replacement and Adjustment" in Main Chapters.)
2. Remove the hinge cover [A].



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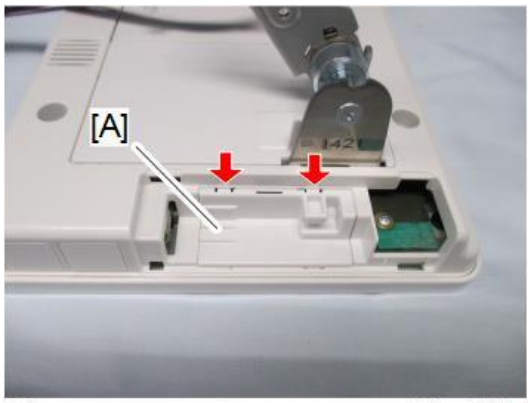
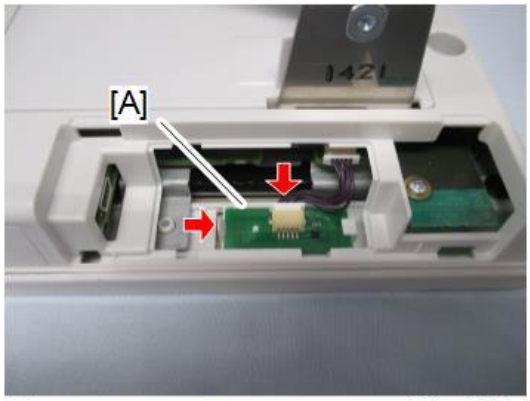
3. Remove the cover of the NFC board [A].



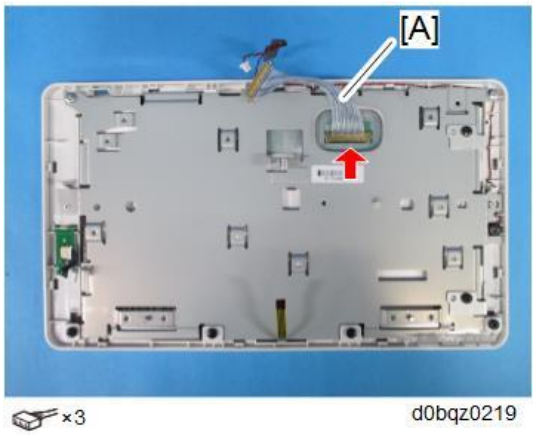
×2 d0bqz0225

4. Remove the NFC board [A].



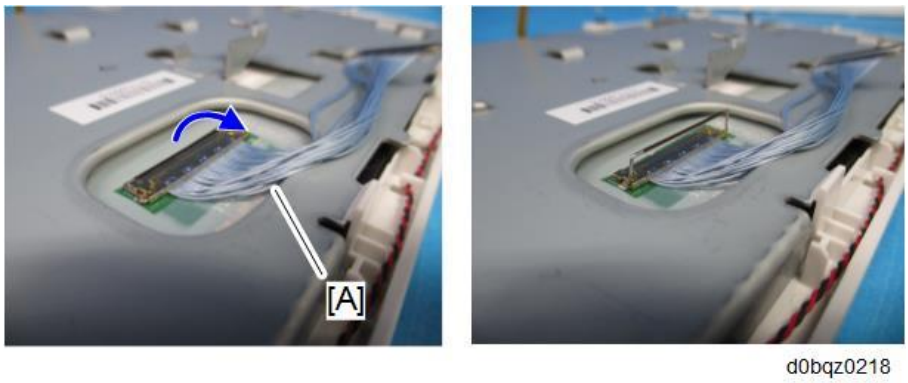
LCD

1. Remove the operation panel unit. (Refer to "Operation Panel (PCB13)", "Replacement and Adjustment" in Main Chapters.)
2. Remove the main controller board (Main Controller Board).
3. Remove the connector of the LCD I/F cable [A].

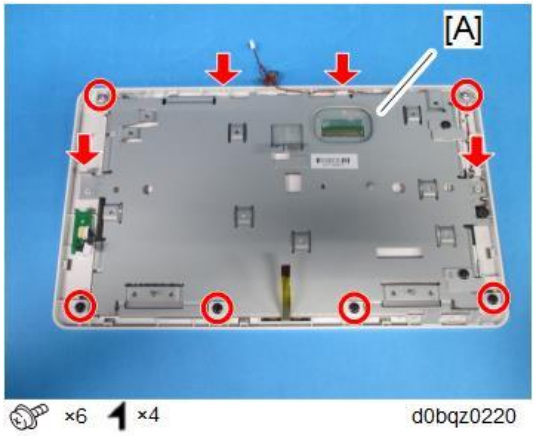


Note

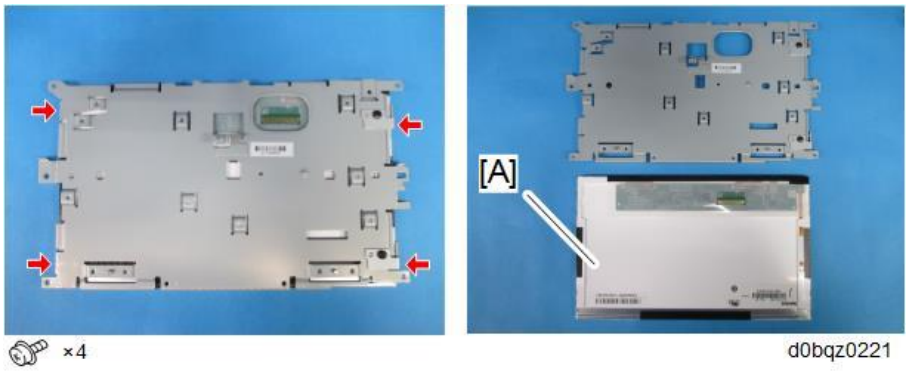
Lift the fastener of the LCD I/F cable [A].



4. Remove the LCD unit [A].



5. Remove the LCD [A].



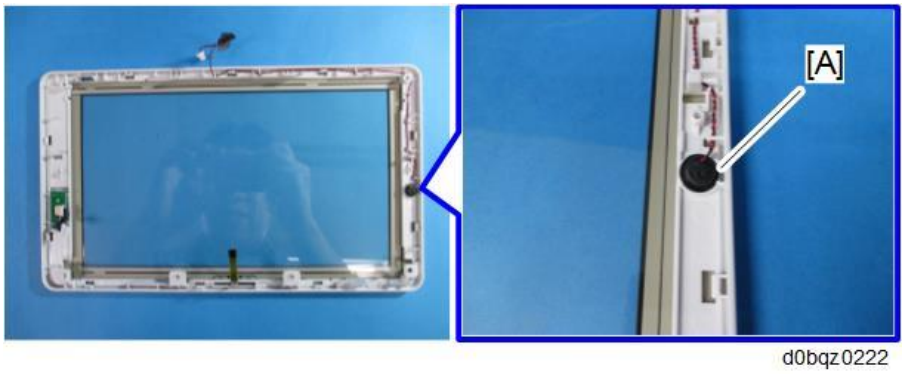
Note

- After replacing the LCD, perform the following checks.
  - LCD Check (LCD Check)
  - TouchPanel Check (TouchPanel Check)
- Perform "TouchPanel Calibration" (TouchPanel Calibration) and "MultiTouch Calibration" (MultiTouch Calibration) of the Self Check function.

Microphone

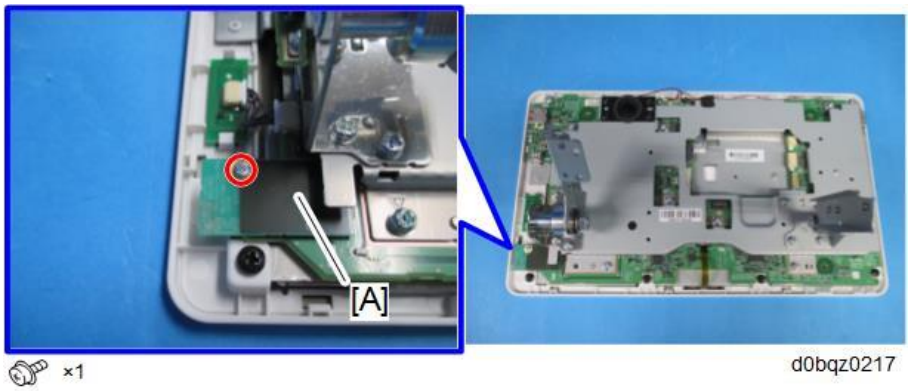
1. Remove the operation panel unit. (Refer to "Operation Panel (PCB13)", "Replacement and Adjustment" in Main Chapters.)
2. Remove the main controller board (Main Controller Board).
3. Remove the LCD unit (LCD).

4. Remove the microphone [A].



Wi-Fi Module

1. Remove the operation panel unit. (Refer to "Operation Panel (PCB13)", "Replacement and Adjustment" in Main Chapters.)
2. Remove the base bracket (Main Controller Board).
3. Remove the Wi-Fi module [A].



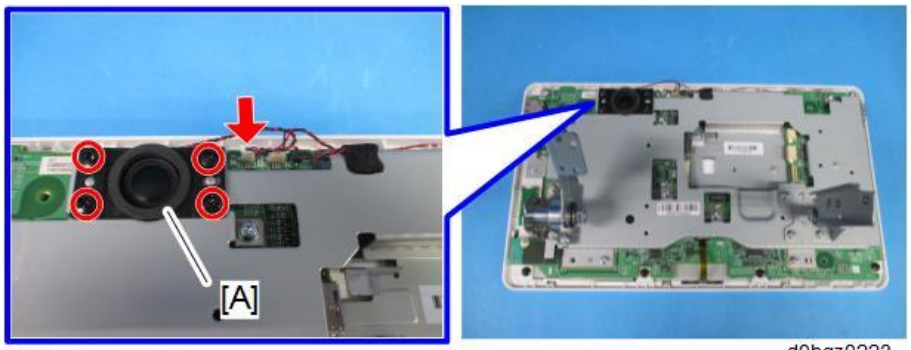
Note

- After replacing the Wi-Fi module, perform the following checks:
  - Wireless LAN Check (Wireless LAN Check)
  - Bluetooth Check (Bluetooth Check)

Speaker

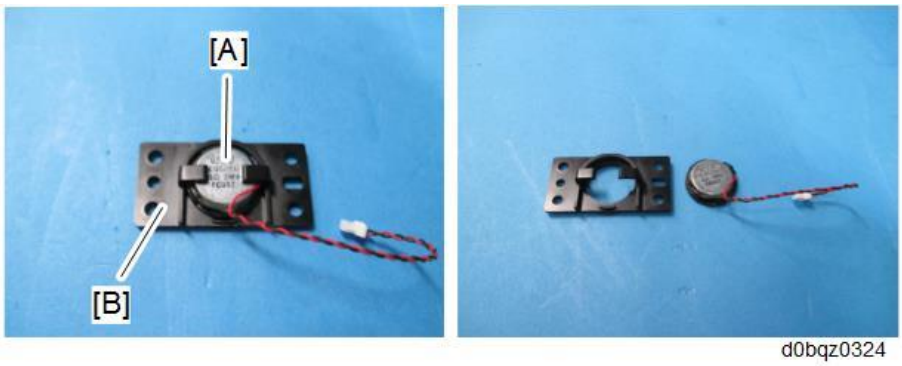
1. Remove the operation panel unit. (Refer to "Operation Panel (PCB13)", "Replacement and Adjustment" in Main Chapters.)
2. Remove the bottom cover (Main Controller Board).

3. Remove the speaker [A] together with the speaker holder.



×4 ×1

4. Remove the speaker [A] from the speaker holder [B].

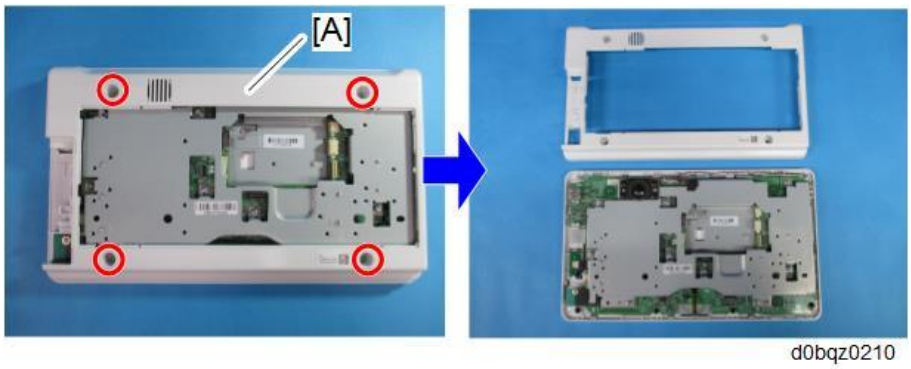


Note

- After replacing the speaker, perform the following check.
  - Speaker Check (Speaker Check)

Main Controller Board

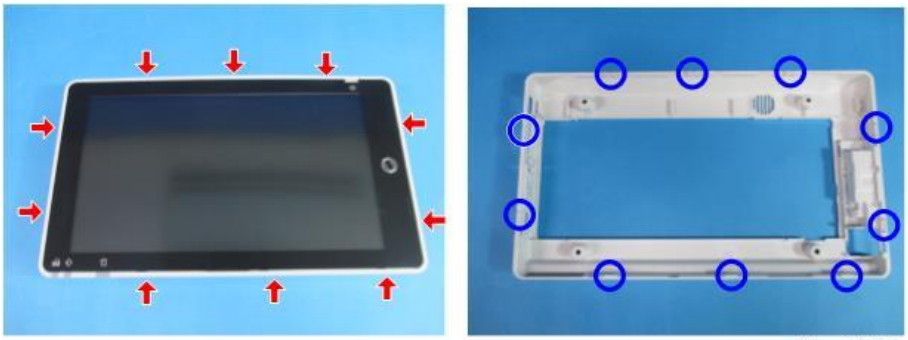
1. Remove the operation panel unit. (Refer to "Operation Panel (PCB13)", "Replacement and Adjustment" in Main Chapters.)
2. Remove the bottom cover [A] (×4).



Note

- There are ten hooks inside the operation panel unit. Before removing the operation panel

bottom cover, check the photos below.



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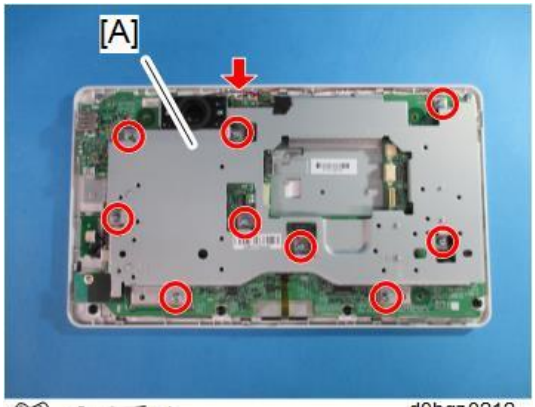
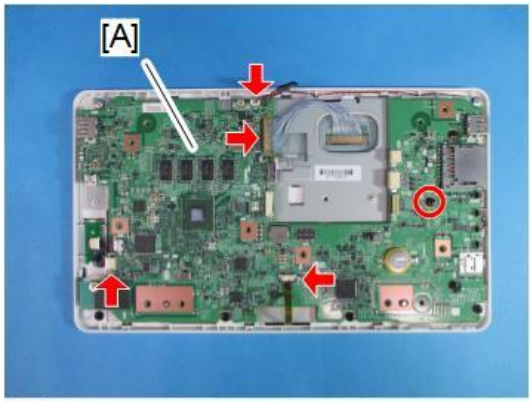
3. Remove the base bracket [A].



×9 ×1 d0bqz0212

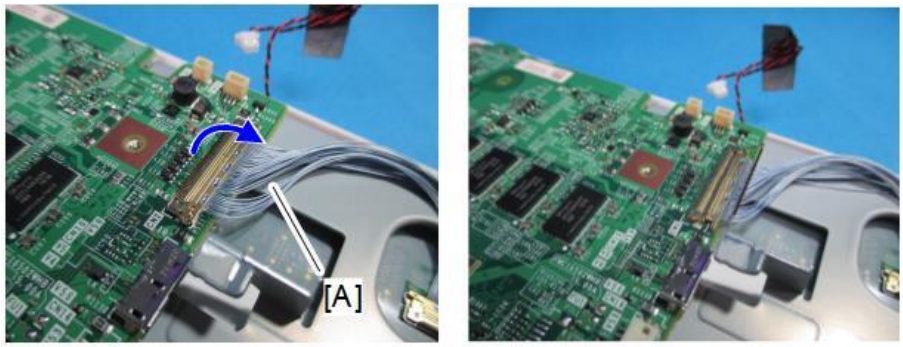
4. Remove the main controller board [A].



×1 ×3 ×1 d0bqz0213

Note

Lift the fastener of the LCD I/F cable [A] on the main controller board side.



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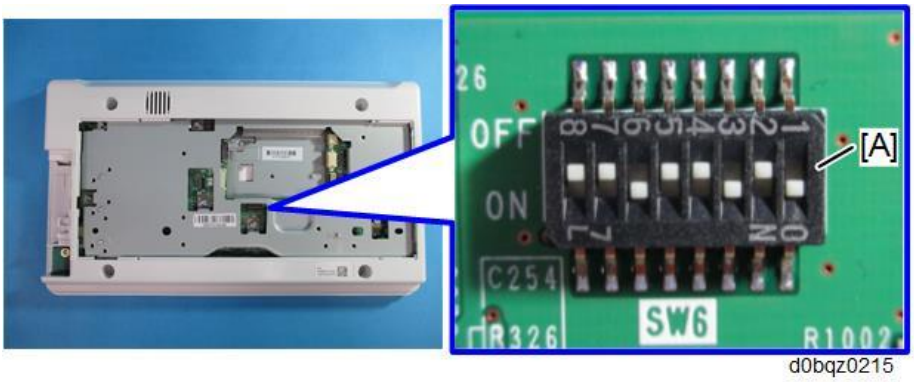
Note

- By factory default, the following switches of the DIP switch [A] on the main controller board are set to ON: No.1, No.3, and No.6. When installing the operation panel unit, make sure that the DIP switch setting is correct for the MFP on which you are installing the panel.



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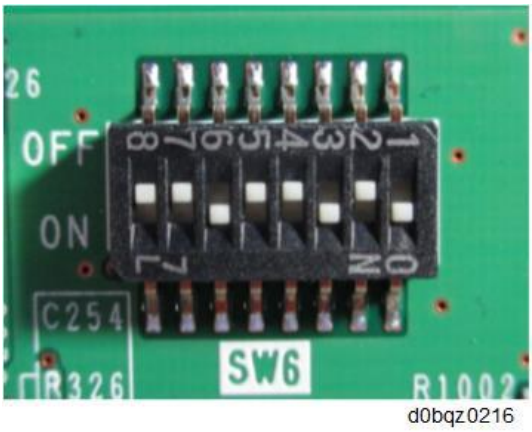
- The correct DIP switch setting depends on the MFP. Note the DIP switch settings of the old operation panel unit before replacing, and apply the same settings to the new Smart Operation Panel.
  The following example is for DIP switch settings when the following switches are set to ON: No.1, No.3, and No.6 (this is the factory default setting of a service part).



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- If the DIP switch setting is wrong, SC672 will be displayed.
- DIP switch No.1 turns ON/OFF the SC reduction function. Change the setting when needed.
  - 0 (OFF): The SC is displayed on the operation panel when SC672/SC673 occur.
  - 1 (ON): If the error is caused by a software defect when SC672/SC673

occur, automatically reboot is performed and the SC is reset. If the error is caused by a hardware defect when SC672/SC673 occur, the SC is displayed on the operation panel.

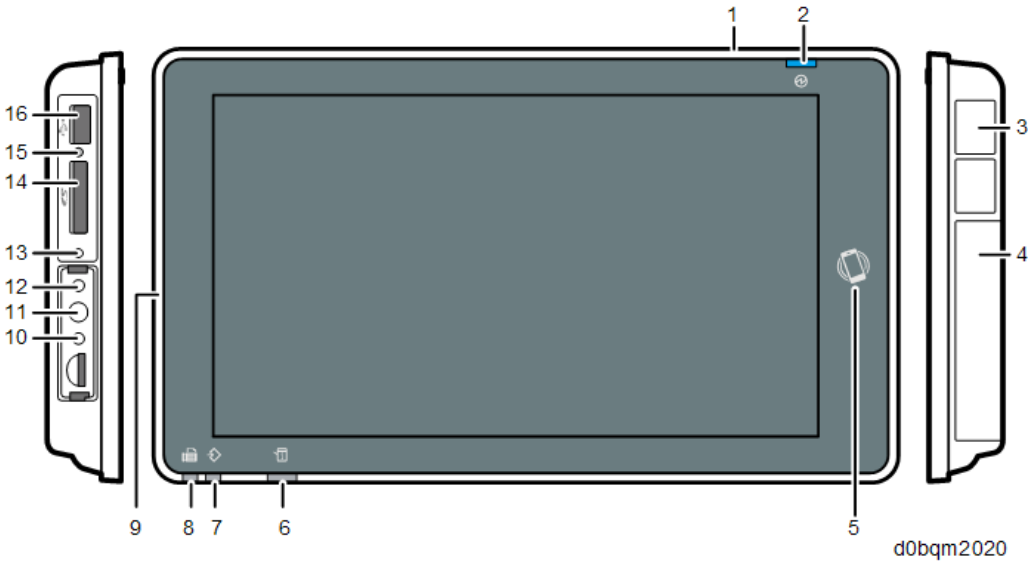
- After replacing the main controller board, perform the following checks:
  - LED Check (LED Check)
  - Key Check (Key Check)

Mechanism

System Components

Hardware Specifications

Components



No.	Name	No.	Name
1	Speaker	9	Microphone
2	Main power indicator	10	Extended Feature key (EX3)
3	USB slot for digital cameras	11	Extended Feature key (EX2)
4	USB slot for NFC card readers	12	Extended Feature key (EX1)
5	NFC tag	13	Control panel reboot key
6	[Check Status] indicator	14	SD card slot
7	Data In indicator (facsimile and printer modes)	15	Media access lamp
8	Fax indicator	16	USB slot

Basic Specifications

Category	Specification
LCD panel	• Size 10.1 inch panel • Resolution WSVGA (1024x600) • Bit width RGB666 (18 bit color) • Brightness 250cd/m^2 (typ.) • Backlight

Category	Specification
	LED Backlight (life: 15,000 hours)
CPU	ARM Cortex-A9 Quad Core 1GHz（SoC：MCIMX6Q5EYM10AD）
Touch panel	Low load touch panel (recognizes touches to two points)
Memory	• Volatile Memory RAM (DDR3L-1066), 2GB • Non-Volatile Memory eMMC NAND, 8GB Note • Uses a 16GB product in SLC Mode. • Program area and data area for the operating system and applications.
External interfaces	• USB Memory USB2.0 Host Type-A • SD Card SD card slot 1ch (SD*1/SDHC*2) *1 Up to 2GB *2 Up to 32GB • USB expansion USB2.0 Host Type-A (for camera, USB keyboard, USB card reader) • USB expansion USB2.0 Host Type-miniB (for NFC expansion)
Network	• Wireless LAN 802.11ac/a/b/g/n (for Taiwan/China/Asia) 802.11b/g/n (2.4GHz only) (for North America/EU/Korea) • Bluetooth Bluetooth4.2
Audio input/output	Monaural speaker 1ch (output: 1 to 2 W), Microphone
RTC accuracy	±52.56 seconds per month (using external crystal oscillator, 20 ppm)
Hard keys	• Extended Feature keys (EX1, EX2, and EX3) Use for startup in extended mode etc. • Control panel reboot key Use to reboot the control panel when it freezes.
LED types	• Main power indicator (blue) Lights when the power is on. Flashes slowly in Sleep mode. Flashes gradually in Energy Saver mode • [Check Status] indicator lamp (red/blue)

Category	Specification
	Lights when an error occurs. • Data In indicator (blue) Flashes when the machine receives data from a printer driver or LAN-Fax driver. • Fax indicator (blue) Flashes while sending or receiving a fax. Lights when there is a received fax document in the fax memory. • Media access lamp (blue) Lights when there is an SD card inserted in the SD card slot.
Maximum power consumption	4.5 W or less in standby mode (excluding external interfaces and internal feature expansions) 6 W or less when using wireless LAN (during high-load operation)
NFC	Built-in NFC tag Made by Vanskee Enterprise RCH-NTI2CP1K-BSA-PCB-CE-1128
Power consumption in Sleep mode	0.18 W or less (When in Sleep mode, power is not supplied to USB devices connected to the USB slots except when the IC card R / W (NFC) is connected.)
Tilt function	Equipped with an angle-adjustable hinge. Clicks at the standard position. Depending on the model, there is also a hinge-less fixed type.

Specification comparison with the previous model

Item	This model	Previous model
Appearance	 d0bqm2210	 d196a2016
Control panel size (Width × Height)	274.5 × 160 mm	267 × 160 mm
Brightness of LCD panel	250cd/m^2 (typ.)	200cd/m^2 (typ.)
CPU	ARM Cortex-A9 Quad Core 1GHz (SoC: MCIMX6Q5EYM10AD)	ARM Cortex-A9 Dual Core 1GHz (SoC: MCIMX6D5EYM10AC)
Volatile Memory	RAM (DDR3L-1066), 2GB	RAM (DDR3-1066), 2GB
Wireless LAN	802.11ac/a/b/g/n (for Taiwan/China/Asia) 802.11b/g/n (2.4GHz only) (for North America/EU/Korea)	802.11b/g/n

Item	This model	Previous model
Bluetooth	Bluetooth4.2	Bluetooth4.0
NFC tag	Built in	Not equipped
Power consumption in Sleep mode	0.18 W or less	0.35 W or less

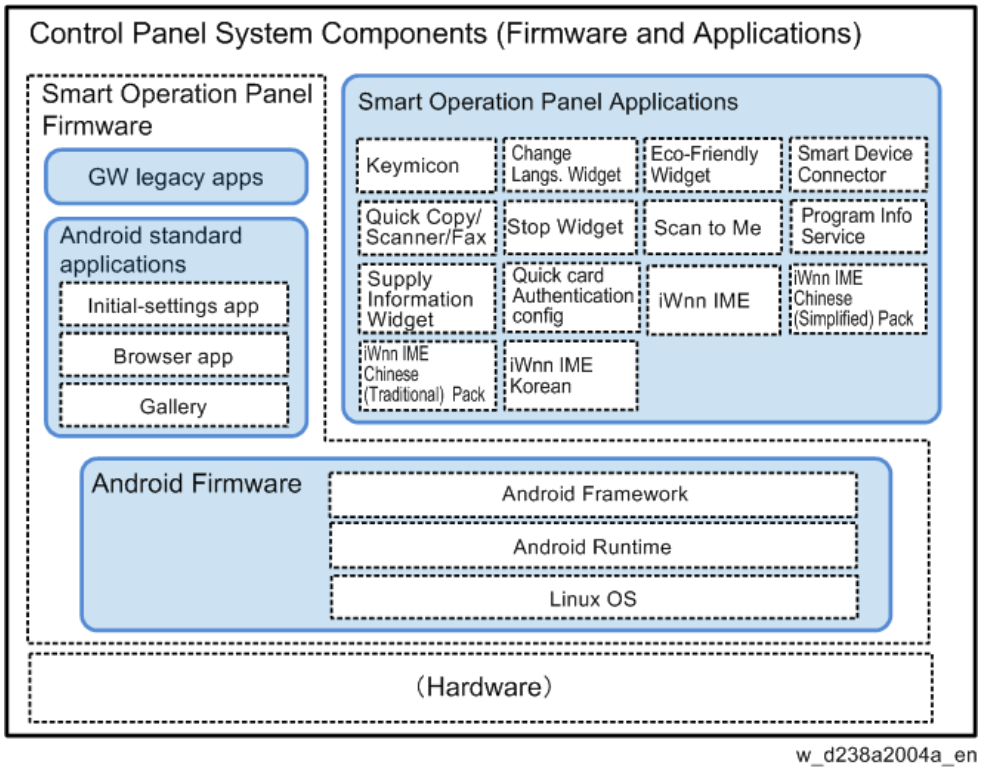
Available languages

Japanese, English, French, German, Italian, Spanish, Dutch, Norwegian, Danish, Swedish, Polish, Portuguese, Hungarian, Czech, Finnish, Simplified Chinese, Traditional Chinese, Thai, Russian, Arabic, Greek, Korean, Catalan, Turkish, Brazilian Portuguese

Note: Available languages may vary depending on the machine's specifications.

Software Specifications

A software package consisting of the Android Firmware and the manufacturer's own pre-installed applications is installed on the Smart Operation Panel.



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The following three types of software are installed on the Smart Operation Panel.

1. Android Firmware (Android OS)
2. Pre-installed applications
3. Applications that can be installed additionally

Android Firmware (Android OS)

The Android Firmware (Android OS) consists of the following modules that are called "stacks".

- Linux kernel
- Android Runtime

- Library
- Application Framework

Pre-installed applications

On the Smart Operation Panel, applications such as the GW applications (Copy/Printer/Document Server/Scanner/Fax), Control Panel Browser, the standard keyboard, Installer, Gallery, Self Check are pre-installed. Unlike those installed on the controller board of the MFP, GW applications that are installed on the Smart Operation Panel are for controlling operation and display of the Smart Operation Panel.
Pre-installed applications are provided as part of the control panel firmware (Cheetah System) together with the Android firmware. When you update the control panel firmware using the recovery mode or another method, the pre-installed applications will also be updated.

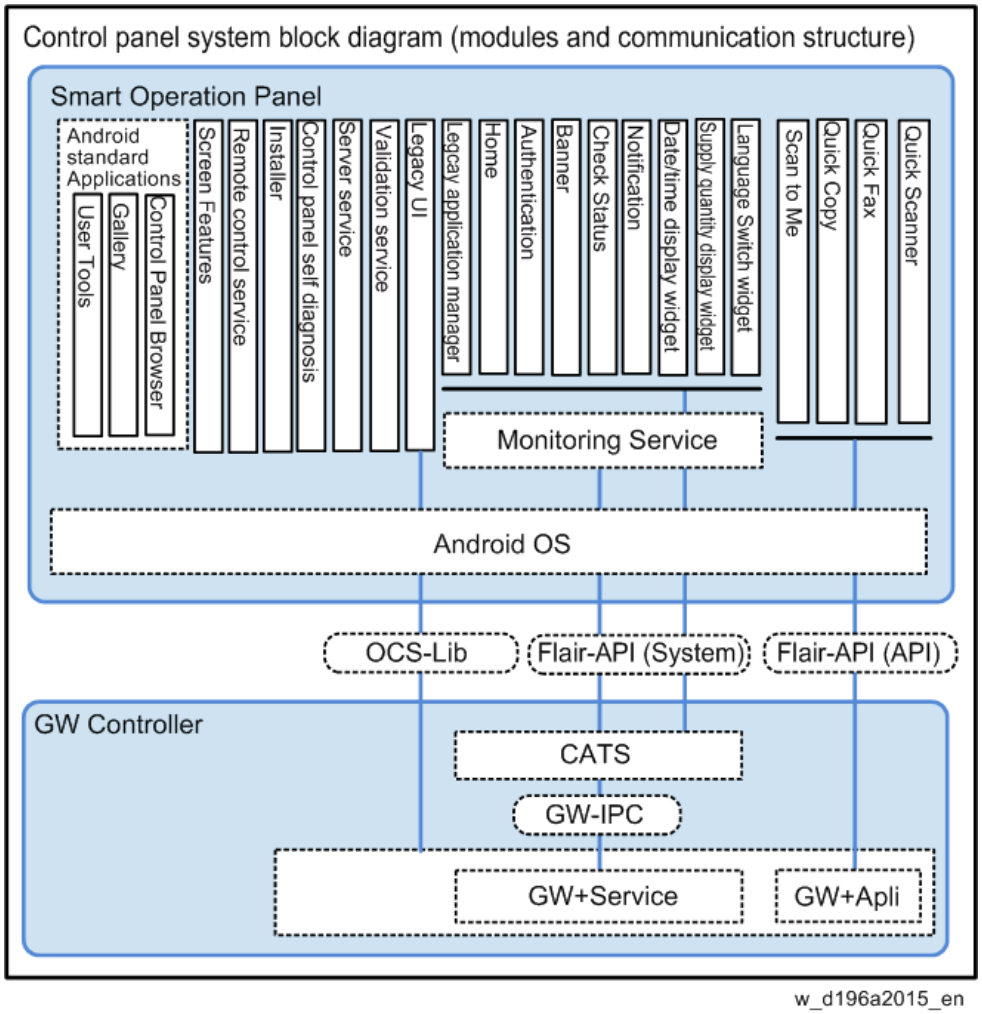
Applications that can be installed

On the Smart Operation Panel, applications can be installed in addition to the pre-installed applications. Applications that can be installed include optional applications that customers can purchase, applications that are installed only on machines sold in specific regions, and custom-made applications. On an MFP, applications such as Simple UI applications (Quick Copy, Quick Fax, and Quick Scanner) and Scan to Me are installed.

Communication Specifications

The Smart Operation Panel and the GW controller are connected by a USB 2.0/3.0 cable. They communicate with each other via the Android OS on the Smart Operation Panel, using protocols called “OCS Library” and “Flair-API (System/Application)”.

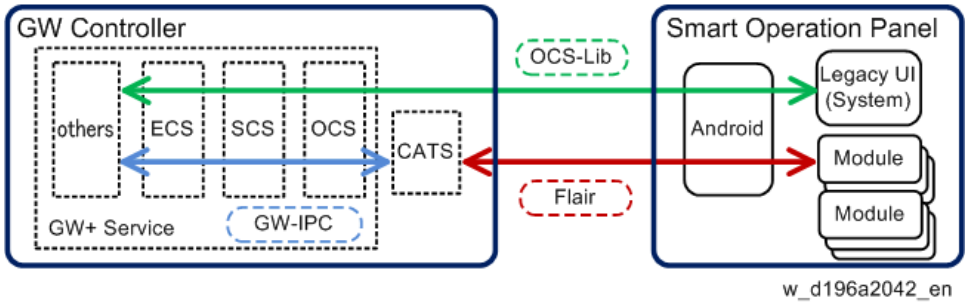
System block diagram



Overview of Components

Communication module/signal name	Details
OCS Library	OSC stands for Operating Control Service. It is a module that controls the control panel. The set of signals used by this module to control the control panel are called the OCS Library. It is used during communication between the Legacy UI (system) module on the Smart Operation Panel and the GW module for the following processes. • Deciding on the display format suitable for a particular model of the control panel, so that the intended image data can be converted to actual image data. • Converting touch panel operations to commands.
Flair-API (System/Application)	Flair is the manufacturer's own communication interface between software modules. The interface uses a generic WebAPI. It is divided into two parts: a part that communicates directly with

Communication module/signal name	Details
	applications such as the application manager, Home, Authentication, Banner, Check Status, and Widgets, and a part that monitors applications. It communicates with the GW controller via the CATS module.
CATS	CATS stands for Cheetah Application Total System. It is a module in the GW controller. Because the Smart Operation Panel uses the Android OS, the contents and protocols of communication are not the same as those of the conventional control panel. CATS serves as an intermediary between the GW controller and the Smart Operation Panel. It also controls the power status of the control panel. CATS communicates with the Smart Operation Panel using the Flair-API, and communicates with the GW module using the GW-API.
GW-IPC	The name of the interface used among modules in the GW controller. The role is the same as that of the Flair-API.

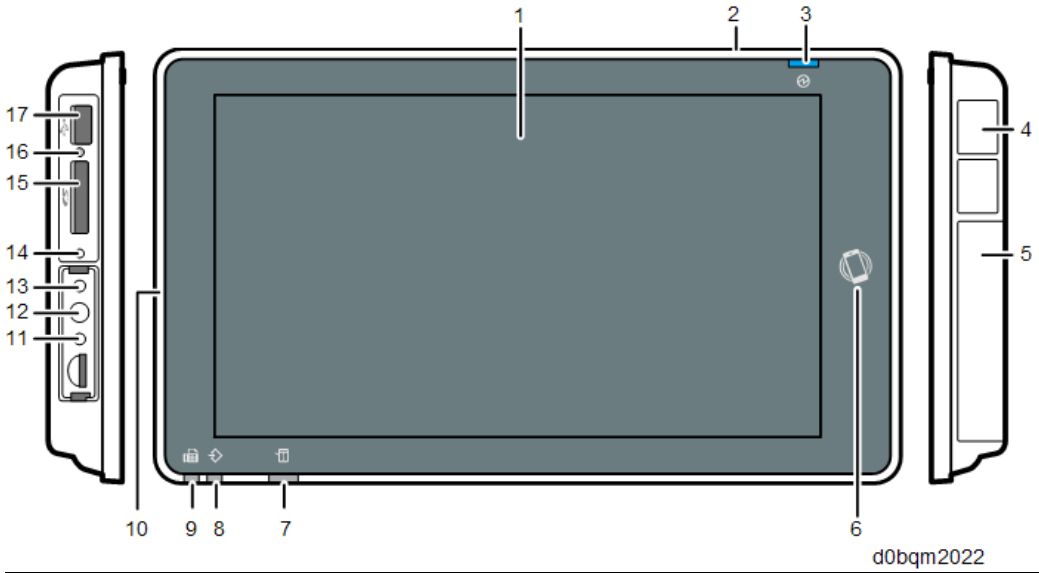


Note

- API stands for Application Programming Interface. An API is an interface that software modules use in order to communicate with each other.

Panel Components/Screen Layout

Components of the Control Panel

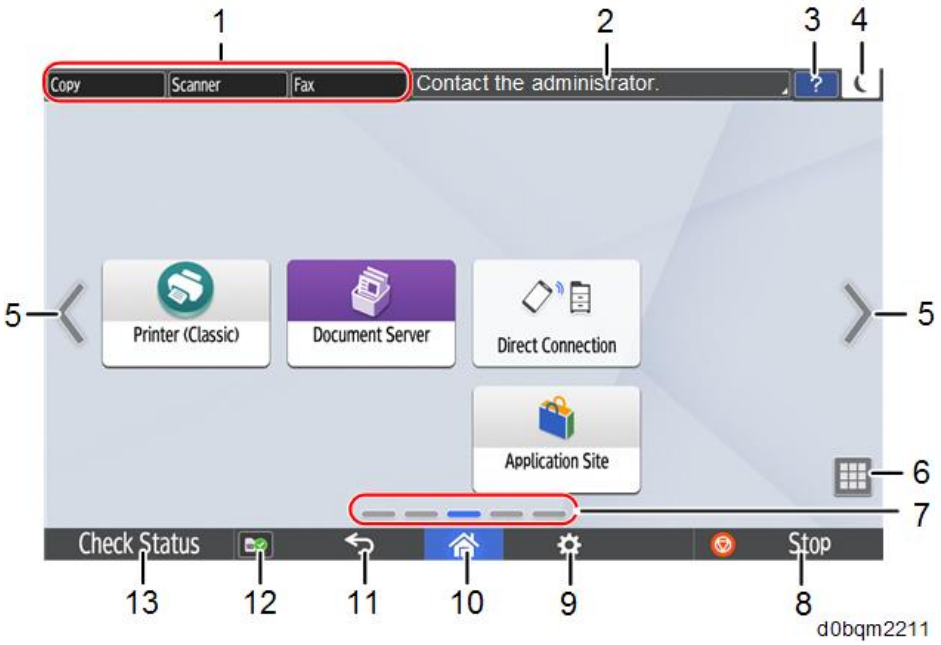


No.	Name	Description
1	Display panel	Displays icons for functions and applications. Displays the operation screens, operation keys and other information.
2	Speaker	Produces the operation and warning sounds.
3	Main power indicator	Indicates power OFF/ON, and energy saving status.
4	USB slot for digital cameras	You can connect the optional numeric keypad and digital cameras.
5	USB slot for NFC card readers	You can connect the authentication card reader/writer and devices supporting near-field communication (NFC).
6	NFC tag	Used to connect the machine and a smart device with the RICOH simple input and output.
7	[Check Status] indicator	Indicates system status.
8	Data In indicator	Flashes when the machine receives data from a printer driver or LAN-Fax driver.
9	Fax indicator	Indicates fax status. • During communication: Flashes • When fax documents have been received using Substitute Reception: Lights • When the machine has received a confidential fax document: Lights
10	Microphone	There is currently no function that uses this.
11	Extended Feature	Used for system maintenance, such as control panel self-check.

No.	Name	Description
	key (EX3)	
12	Extended Feature key (EX2)	Used for system maintenance, such as control panel self-check.
13	Extended Feature key (EX1)	Used for system maintenance, such as control panel self-check.
14	Control panel reboot key	Used when rebooting the control panel.
15	SD card slot	Insert an SD card here.
16	Media access lamp	Lights when an external media is inserted into the SD card slot or the USB slot.
17	USB slot	Insert a USB memory device here.

Panel Display

Soft keys displayed on the screen（when the Authentication Function is Disabled）



No.	Name	Description
1	[Function] keys	Users can assign shortcuts for each application. Up to three applications can be assigned as shortcuts. When an application is assigned as a function key, users can call the application from any screen. The function keys are disabled by default. Users must enable this function to be able to allocate applications to function keys.
2	[System messages] key	System messages are displayed in this area. If there are multiple messages to be displayed, they are displayed alternately. Tapping the message opens a dialog which shows all the messages.

No.	Name	Description
3	[Help] key	This icon is displayed when Help is available for the displayed screen or errors occurring when the machine is connected to the Internet. Specify [Cookie] in the control panel browser to [ON] to display Help properly.
4	[Energy Saver] key	Enters Sleep mode.
5	[Switch Screens] key	Press to scroll the screens right and left. The Home screen has 5 screens. You can switch between the screens by flicking.
6	[Application List] key	Displays the list of installed applications.
7	[Current display position] key	Shows which of the five screens is currently displayed.
8	[Stop] key	Stops the scanning of a document, fax transmission, or printing to paper.
9	[Menu] key	Displays the menu screen of the application in use. May not be available depending on the application.
10	[Home] key	Displays the Home screen.
11	[Back] key	Use this to go back to the previous screen when the Screen Features Settings screen or the screen of an application is displayed.
12	[Media] key	Displays icons when a USB flash drive or SD card is inserted. By pressing this key, you can choose the media to remove and use. Depending on the media, one of the following icons appear.
13	[Check Status] key	You can check the status of the MFP, each function, and the current job. You can also check the job history and maintenance information of the MFP.

	USB icon (key)
	SD card icon (key)
	USB/SD icon (key)

Items that Appear when the Authentication Function is Enabled

Login user information and login/logout key also appear.

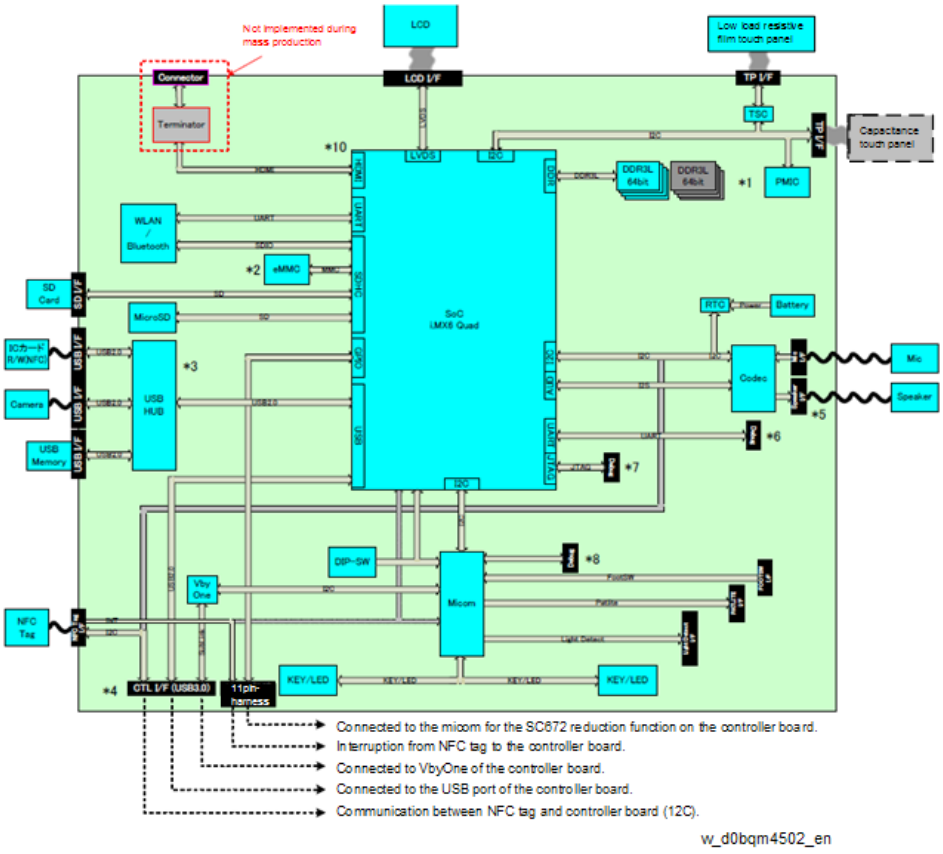
No.	Name	Description
1	[User icon] key	You can configure the authentication setting. This key appears when someone is logging in. If pressed after logging in, the login user name appears for a while in the login user information display area.
2	[Login/Logout] key	This key is displayed if the authentication function is enabled. By pressing [Login], the login menu appears. If you have already logged in, [Logout] appears. By pressing [Logout], you can log out.
3	Login user information display area	The name of the user logging in appears in this area. By pressing the [User icon] key, the name of the user logging in appears for approximately 5 seconds (and then automatically switches back to displaying the function keys.)

Items that Appear According to the Security Setting

No.	Name	Description
1	Extended Security icon	This icon is displayed if [System Settings] > [Administrator Tools] > [Extended Security] > [Enhance File Protection] is set to [On].
2	Overwrite icon	Displays the hard disk overwrite status when [System Settings] > [Administrator Tools] > [Auto Erase Memory Setting] is set to [On].

Electrical Components

Operation Panel Unit



Touch Panel

The touch panel of this machine uses a 4-wire resistive film method (low load resistive film analog 4-wire method). It can detect two points for flick/drag/pinch-in/pinch-out operations. Resistive touch panel has been adopted in order to allow operation with a prosthetic hand.

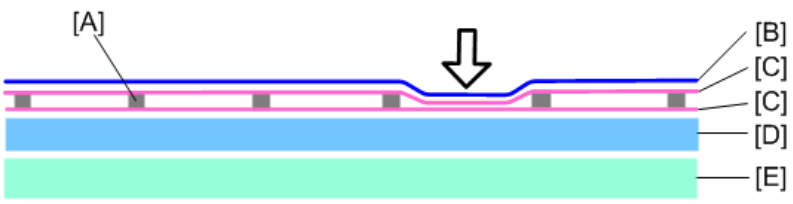
Basic Structure

An analog 4-wire resistive film touch panel has 2 layers. Two materials (mainly film or glass) with transparent conductive film (ITO) are attached such that the transparent conductive film layers face each other.

When the film is pressed with a finger or a pen, the transparent conductive films contact each other and the touch panel operation is recognized.

Insulators (spacing dots) secure space between the two transparent conductive film layers to prevent short-circuiting.

Because the transparent conductive film has a uniform resistance characteristic, the resistance value reflects the distance of contact.



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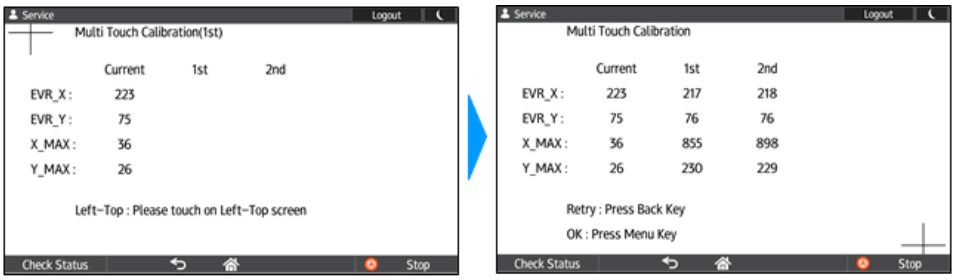
[A]: Spacing dot

[B]: PET film
[C]: Transparent conductive film
[D]: Base glass
[E]: LCD panel

Self-Check (multi-touch calibration) mechanism

With the Multi-touch calibration in the self-check function, the touch panel is automatically calibrated using the results of touches to the top left and bottom right positions.
The values of “EVR_X”, “EVR_Y”, “X_MAX”, and “Y_MAX” are used for internal processing. They do not indicate the positions or distance of the touched points. There is no problem unless there is a huge difference between the values of the first calibration and the second calibration.



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Controlling the Power Supply

Exiting Energy Saving Modes

Because this model of Smart Operation Panel has no hardware keys, the MFP exits from energy saving mode when the user does one of the following:

- Touches the display panel
- Lifts the ADF
- Sets an original in the ADF

Screen Startup Mode

Startup Modes

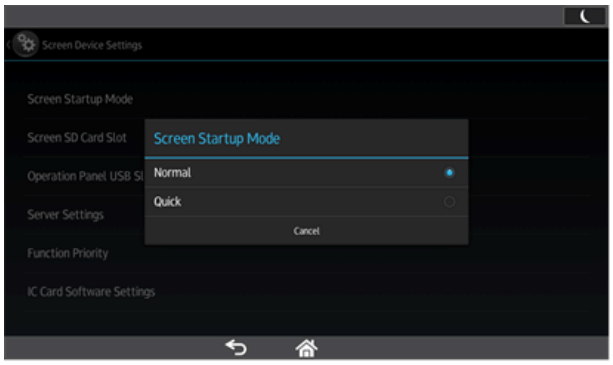
There are two screen startup modes. The factory default setting is Normal.

1. Normal
   This is the standard startup mode. When the main power of the MFP is turned ON, the control panel starts up using less power compared to Quick mode.
2. Quick
   By preparing for the next startup when the machine shuts down, the control panel starts up faster than in Normal mode.

Changing the Screen Startup Mode

Screen Startup Mode can be changed in Screen Features Settings.

Select [Screen Features Settings] > [SYSTEM] > [Screen Device Settings] > [Screen Startup Mode], and then select [Normal] or [Quick].



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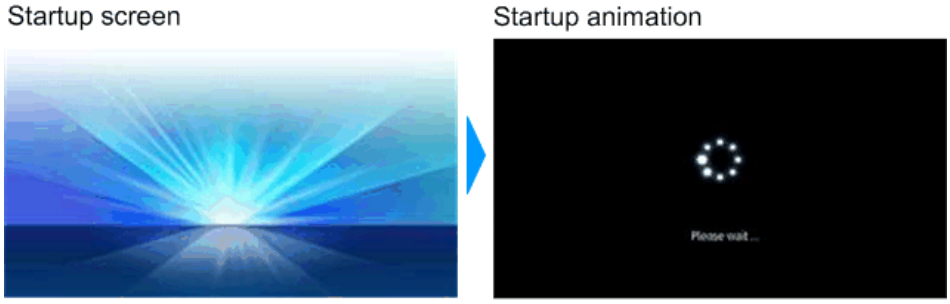
Note

- In the following cases, the control panel starts up in Normal mode even if [Quick] is selected.
  - The power cord has been disconnected from the power outlet after the last shutdown.
  - The MFP is turned ON after being turned OFF due to reasons such as a power failure.
  - The MFP was not properly shut down the last time it was turned OFF.

How the Control Panel Starts Up

In Normal mode

The startup screen is displayed on the display panel, followed by the startup animation.



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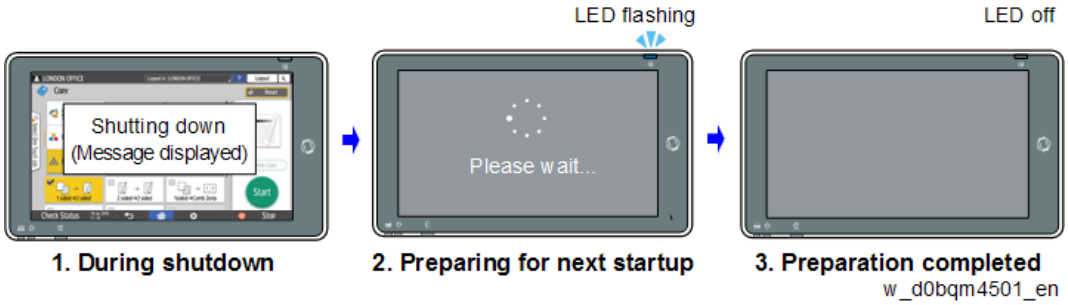
In Quick mode

The [Home] screen is displayed immediately after the main power of the MFP is turned ON. The startup screen displayed when starting in Normal mode is not displayed.

How the Screen Shuts Down When Quick mode Is Selected

When Quick mode is selected, the MFP prepares for the next startup when it shuts down. The main power indicator flashes during preparation for the next startup. The indicator turns off when preparation is completed.



If the MFP is turned ON during shutdown, the preparation for the next startup continues. When preparation for the next startup is completed, the control panel starts up in Quick mode.

Note

- When Quick mode is selected, the control panel starts up faster than in Normal mode but shutdown takes longer than in Normal mode.

Shutdown Functions

The shutdown functions and their uses are as follows.

Shutdown mode	Use	Operation
Normal Shutdown	Same as shutdown by users.	Turn the main power switch off.
Forced shutdown	When normal shutdown does not complete even though you waited a long time.	Hold the main power switch 6 seconds or longer.
Shutdown for parts replacement	• When you have to disconnect the power cord from the power outlet, such as when replacing parts. • When you want to start the machine normally and then enter recovery mode, without changing the Startup mode in Screen Features Settings. (For updating control panel firmware)	Turn the main power switch off while holding down [Stop]. Continue to hold down the [Stop] key until the shutdown screen is displayed.
Shutdown for software update	When you are going to turn on the MFP within 5 minutes for updating the MFP firmware or package. (Use shutdown for parts replacement if you are updating the control panel firmware.)	Turn the main power switch off while holding down the [EX1] key. Continue to hold down the [Stop] key until the shutdown screen is displayed.

Normal Shutdown

The MFP is equipped with a function to shut down safely for the following reasons:

- Prevent damage to the file systems in the HDD and the NAND flash memory.
- Prevent paper from being left inside the body of the MFP (except when paper is jammed).

The shutdown process begins when the main power switch is pressed. To make a forced shutdown, press and hold the main power switch for 6 seconds. However, if you force a shutdown during the shutdown process, data being processed may be lost. Forced shutdown is to be used to shut down the MFP without disconnecting the power cord when the shutdown process cannot be completed.

Other Shutdown Functions

This MFP has two additional shutdown functions to facilitate maintenance.

Shutting down the MFP for parts replacement (Starting up in Normal mode when Quick mode is selected)

When Quick mode is selected, the MFP prepares for the next startup when it shuts down. This causes the shutdown process to take longer than when Normal mode is selected.

If you need to disconnect the power cord after shutdown in order to replace parts or for other reasons, you can use the following procedure to shut down the MFP just like you do in Normal mode. This shortens the time it takes to shut down the MFP.

- Procedure

  Turn the main power switch OFF while holding down the [Stop] key on the control panel. Continue to hold down the [Stop] key until the shutdown screen is displayed.

Shutting down the MFP for software updates (Shutting down the MFP with the control panel in Sleep mode)

If you are going to turn ON the MFP within 5 minutes, you can use the following procedure to shut down the MFP with the control panel in Sleep mode.

- Procedure

  Turn the main power switch OFF while holding down the [EX1] key. Continue to hold down the [EX1] key until the shutdown screen is displayed.

Note

- You must turn ON the MFP within 5 minutes.
- If more than 5 minutes has elapsed after shutting down the MFP using the above procedure, the machine starts up in Normal mode even if Quick mode is selected.

System Maintenance

Maintenance Modes

Service program (SP) modes for the Smart Operation Panel are as follows:

Mode	Use	Notes
SP Mode (MFP)	SP modes for the MFP (controller, engine)	The numeric keys are required to enter this mode. Display the application where soft keys are displayed or the soft keys of the SP mode.
Service mode (operation panel)	SP modes for the Smart Operation Panel. • Changing SP mode settings in the Screen Features Settings menu. • Installing and updating applications that can be installed	Same as above
Recovery mode	Maintenance modes for the Android OS • Updating firmware • Initializing all data	-

Login to/Logout from Control Panel Service Mode

Login

Use the soft key numbers to log in to the service mode on the control panel, the same way as logging into SP mode on the MFP.

Note

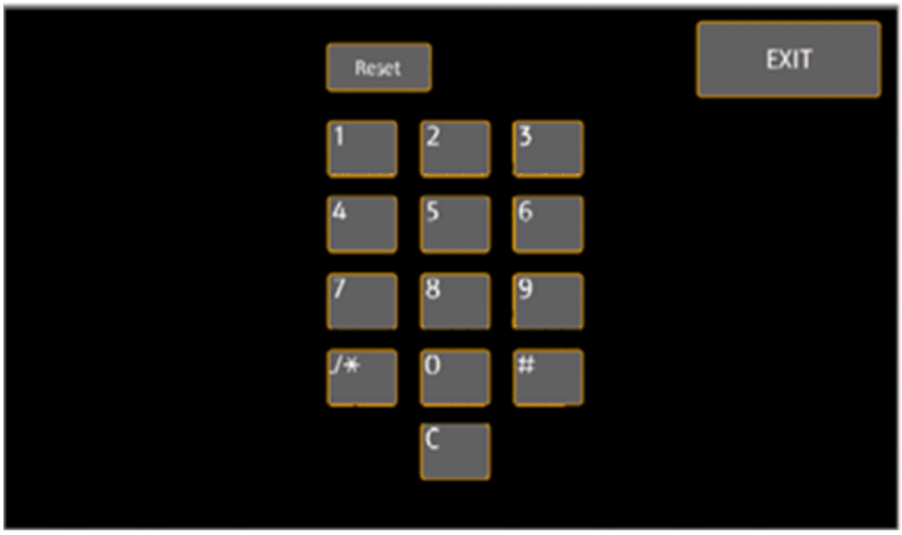
- You cannot log in to the service mode of the control panel when one of the following screens is displayed.
  - Stop All Jobs
  - Settings
  - Address Book Management

Use the numeric keys on one of the following screens.

- Soft keys on the application screen where soft keys appear
- Soft keys for the control panel's service mode (displayed by pressing both the [EX3] key and [Check Status] at the same time)

Note

- To exit the soft keys, press [EXIT] on the screen.



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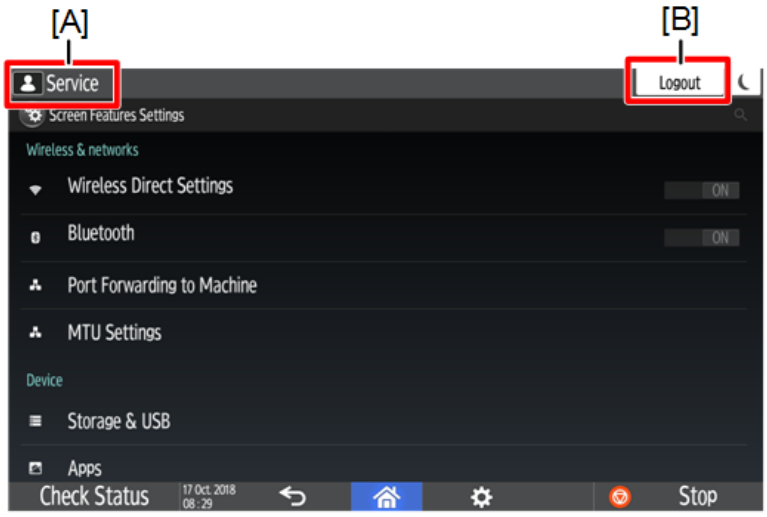
Login Status Indicator

When you log in to the control panel's service mode, the Screen Features Settings screen is displayed.

- "Service" is displayed in the login information area [A].
- [Logout] is displayed in the Login key area [B] to allow logout from the service mode.



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Logout

Press [Logout] to log out from the control panel's service mode.

Note

- You need to logout manually because the Auto Logout function does not work.

Depending on the authentication settings of the MFP, the following screen is displayed after you log out.

Authentication settings		
Administrator authentication: OFF User authentication: OFF	Administrator authentication: ON User authentication: OFF	Administrator authentication: ON User authentication: ON
Screen of the function selected in [Function Priority]	Screen of the function selected in [Function Priority]	[Home] screen

When Entry to Service Mode Is Prohibited by the Administrator

The administrator of the MFP can prohibit entry into the control panel's service mode by enabling [Settings] > [System Settings] > [Settings for Administrator] > [Security] > [Service Mode Lock]. When [Service Mode Lock] is enabled, the machine does not enter the service mode even if you enter the number combination for the control panel's service mode. A beeping sound indicates login failure.

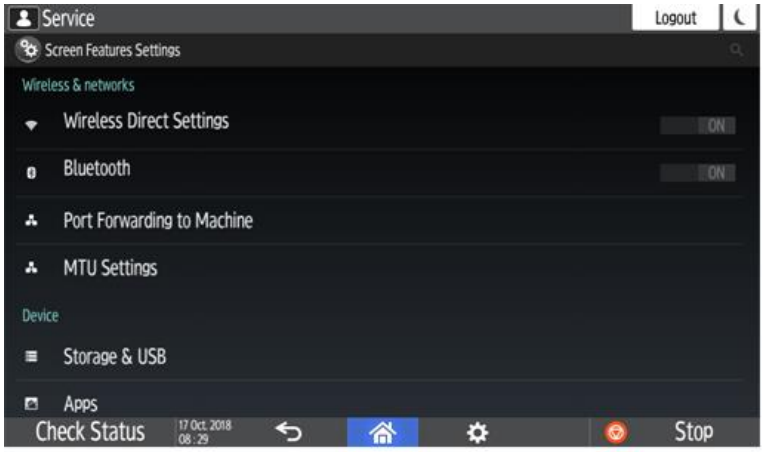
Note

- The machine can enter the recovery mode even if [Service Mode Lock] is enabled.

Service Mode Menu

There are four setting menus:

- Wireless & Networks
- Device
- Personal
- System



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Wireless & Networks

Menu level			Description
1st level	2nd level	3rd level	
Wireless Direct Settings	Group Owner Mode		You can only view the setting.
	Connection Password		You can only view the setting.

Menu level			Description
1st level	2nd level	3rd level	
	DHCP Server IP Address		You can only view the setting.
	DHCP IP Address Range		You can only view the setting.
	Select Channel		You can only view the setting.
	Fix SSID		You can only view the setting.
	PEER DEVICES		View and configure devices that can be connected.
	REMEMBERED GROUPS		Displays groups that have been previously connected.
Bluetooth	ON/OFF		You can only view the setting.
	SEARCH FOR DEVICES		Scans for Bluetooth devices in the vicinity.
	(name of this device)		You can only view the setting.
	PAIRED DEVICES		View and configure paired devices.
	AVAILABLE DEVICES		View and configure available devices.
Port Forwarding to Machine	Port Forwarding Settings	Port Forwarding Config 1-20	Requests sent to the wireless LAN unit of the Smart Operation Panel can be forwarded to the controller of the MFP. You can enable or disable ports to forward these requests.
MTU Settings	PathMTU(Enable/Disable)		Enables/disables the PathMTU size set in [MTU Size]. When you change this setting, the control panel restarts.
	MTU Size		Sets the size of PathMTU. Default: 1500.

Device

Menu level			Description
1st level	2nd level	3rd level	
Storage & USB	Internal storage	Used and Total Storage Capacity	Displays the used size and total size of the internal storage.
	SD CARD*1	Used and Total SD Card Capacity Safely Remove Hardware icon ( )	Displays the used size and total size of the SD card. *To remove the SD card, click the or icon instead of the Safely Remove Hardware icon ( ).

Menu level			Description
1st level	2nd level	3rd level	
	USB STORAGE*2	Used and Total USB Storage Capacity Safely Remove Hardware icon ( )	Displays the used size and total size of the USB storage device. *To remove the USB flash drive, click the or icon instead of the Safely Remove Hardware icon ( ).
Apps	Install	Install from SD Card	Install or update applications from an SD card.
		Install from Server	Enter a product key to install or update applications from the server.
		Application Site	Startup Application Site.
		Activate Applications	Activate applications that have been installed from the server.
		Update Applications	Update applications that have been installed.
		Uninstall	Uninstall applications.
		Install From Internal Storage	Install applications from internal storage.
		Check Server Connect	Check if you can connect to the Server.
		Firmware update	Update the firmware from the SD card set in the operation panel slot. If the SD card is not inserted, an error message is displayed.

*1 Displayed only when an SD card is inserted into the SD card slot of the operation panel.

*2 Displayed only when an USB storage device is inserted into the USB slot of the operation panel.

Personal

Menu level			Description
1st level	2nd level	3rd level	
Lauguage & input	Registration Keyboard	-	You can register the external keyboard, display the connected keyboard, or remove the external keyboard.

System

Menu level				Description
1st level	2nd level	3rd level	4th level	
Screen Device Settings Information	Status			Displays the following: • Wireless LAN MAC address • Interface Settings • Wi-Fi settings (ON/OFF)

Menu level				Description
1st level	2nd level	3rd level	4th level	
				• IP address
	Legal information	Open source licenses		Displays the open source license information.
		System WebView Licences		Displays the license of the system used in this machine.
		Wallpapers		Displays the copy light of the picture of the wallpaper.
	Software Version List	Version List Record Save to SD Card*1		Displays the versions of operation panel firmware and installed applications. When saving the software version list on an SD card, insert an SD card into the SD card slot of the operation panel, and then press [Save to SD Card].
	Operation Panel Kind			Displays the hardware information of the operation panel with a 4-digit code.
				1st digit: LCD size • 1: 10.1" • 2: 7" • 3: 17"
				2nd digit: LCD vendor • 0: AUO • 1: INNOLUX • 2: Dongbond • 5: AUO • 6: Giantplus
				3rd digit: eMMC version • 5: Version 4.41 • 7: Version 5.00 • 8: Version 5.10
				4th digit: PCB vendor • N: NEC • R: RICOH
Screen Device	Use of External Interface	Screen SD Card slot		Specify the SD card slot availability on the Smart

Menu level				Description
1st level	2nd level	3rd level	4th level	
Settings				Operation Panel. When [Inactive] is selected, no power is available because the hardware is deactivated.
		Screen USB Port 1 to 3		Specify the USB port availability on the Smart Operation Panel for each USB port. When [Inactive] is selected, no power is available because the hardware is deactivated.
		Prohibit Use of External Interface	Wi-Fi (Do not Prohibit / Prohibit)	If you select [Prohibit] for this setting, the Wi-Fi function is automatically set to [OFF] and the Wi-Fi function setting is hidden at [Settings] > [System Settings] > [Network/Interface] > [Control Panel: Wireless LAN]. If you select [Do not prohibit] for this setting, the Wi-Fi function setting in [Control Panel: Wireless LAN] is displayed. The setting remains unchanged.
			Wireless Direct (Do not Prohibit / Prohibit)	If you select [Prohibit] for this setting, the Wireless Direct function is automatically set to [OFF] and the Wireless Direct function setting is hidden at [Settings] > [System Settings] > [Network/Interface] > [Control Panel: Wireless LAN]. If you select [Do not prohibit] for this setting, the Wireless Direct function setting in [Control Panel: Wireless LAN] is displayed. The setting remains unchanged.
			Bluetooth	If you select [Prohibit] for this

Menu level				Description
1st level	2nd level	3rd level	4th level	
			(Do not Prohibit / Prohibit)	setting, the Bluetooth function is automatically set to [OFF] and the Bluetooth function setting is hidden at [Settings] > [System Settings] > [Network/Interface] > [Bluetooth]. If you select [Do not prohibit] for this setting, the Bluetooth function setting in [Bluetooth] is displayed. The setting remains unchanged.
			Screen SD Card Slot (Do not Prohibit / Prohibit)	If you select [Prohibit] for this setting, the Screen SD Card Slot function is automatically set to [OFF] and [Control Panel SD Card Slot] is hidden at [Settings] > [System Settings] > [Machine] > [External Device]. If you select [Do not prohibit] for this setting, [Control Panel SD Card Slot] is displayed. The setting remains unchanged.
			Screen USB Memory Slot (Do not Prohibit / Prohibit)	If you select [Prohibit] for this setting, the Screen USB Memory Slot function is automatically set to [OFF] and [Control Panel USB Memory Slot] is hidden at [Settings] > [System Settings] > [Machine] > [External Device]. If you select [Do not prohibit] for this setting, [Control Panel USB Memory Slot] is displayed. The setting remains unchanged.
	Server Settings	Port number		Input a port number for communication with the import/export and RFU server.

Menu level				Description
1st level	2nd level	3rd level	4th level	
				The input number is used for both HTTP and HTTPS connections. (Normally, input a number within 55101-55111.)
	Home Key Settings	Home Key Settings		You can change the transition destination except for the Home screen when pushing the [Home] icon.
		Home Key Assignment Mode		Normal mode: In addition to pressing the [Home] icon, in all statuses such as logout and restoring from lower power display mode, the screen transitions to the destination which the user set with [Home Key Application]. UI change mode: The screen transitions to the destination which the user set with [Home Key Application] only when you press the [Home] icon.
		Home Key Application		You can set the application of the transition destination when pressing the [Home] icon.
		Show default Home for unauthenticated user		You can specify whether the guest user can access the application selected in [Home Key Application] when user authentication is set to ON.
		System Home Key Icon Settings		You can use this setting only when [Home Key Assignment Mode] is [ON] and [UI Change Mode] is selected in [Home Key Assignment Mode]. You cannot set other than the

Menu level				Description
1st level	2nd level	3rd level	4th level	
				above because of high brightness.
	Application Settings			Displays a list of installed applications. If you press [SETTINGS] for an application, the setting screen for the CE is displayed. The screen does not change if the application has no setting items.
	Recovery by Authentication Priority	Recovery by Authentication Priority		This setting gives priority to the recovery time from energy saving modes when an IC card authentication device is connected. When this setting is selected, the MFP does not enter Engine OFF mode, and always recovers from Silent mode.
		Start Time (hh:mm)		You can specify the start time of Authentication priority mode. Note: This can be changed only when [Recovery by Authentication Priority] is deselected.
		Period (Hours)		You can specify the period of validity of Authentication priority mode. Note: This can be changed only when [Recovery by Authentication Priority] is deselected.
	Backup/Restore Settings			Specify whether to enable or disable backups and restore backup data.
	Screen device always-connection			This setting prevents the operation panel from entering Sleep mode, so that Bluetooth

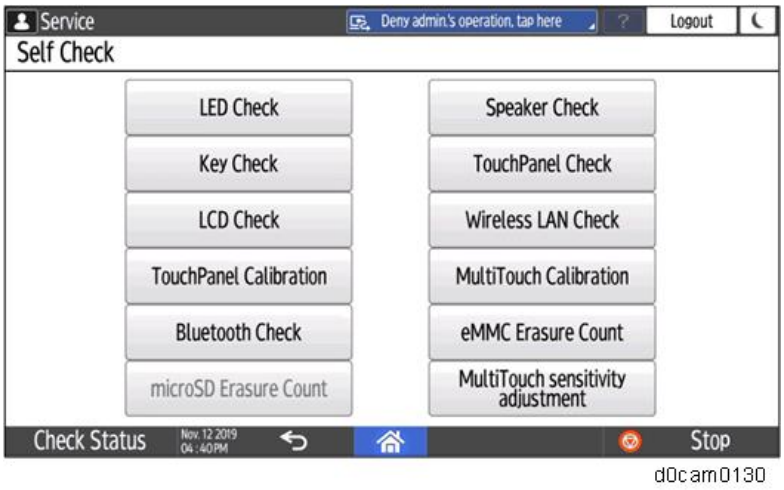
Menu level				Description
1st level	2nd level	3rd level	4th level	
	Setting			and other communication devices remain connected. When this setting is selected, the operation panel does not enter Sleep mode. Only the LCD (display panel) turns OFF.
	Intelligent Voice Control			Specify whether or not to display the AI Speaker Link Setting Menu. Inactive: hide Active: view If deactivated, the function itself is turned OFF.
	Panel Self Check			Starts self-diagnosis of the operation panel. (Panel Self Check)

*1 This can be pressed only when an SD card is inserted to the SD card slot of the operation panel.

Panel Self Check

The following are available as self-diagnostics functions of the control panel:

- LED Check
- Key Check
- LCD Check
- TouchPanel Calibration
- Bluetooth Check
- Speaker Check
- TouchPanel Check
- Wireless LAN Check
- MultiTouch Calibration
- eMMC Erasure Count
- MultiTouch sensitivity Adjustment



*The [microSD Erasure Count] menu cannot be used with this machine.

Note

- The [Self Check] menu is displayed in either English or Japanese. The language can be changed using [Change Language] in the Home screen.
- If an unavailable language is selected, English will be displayed.
- With some diagnostic items, press [Back] [A] at the bottom of the screen to return to the top menu of [Self Check].

LED Check

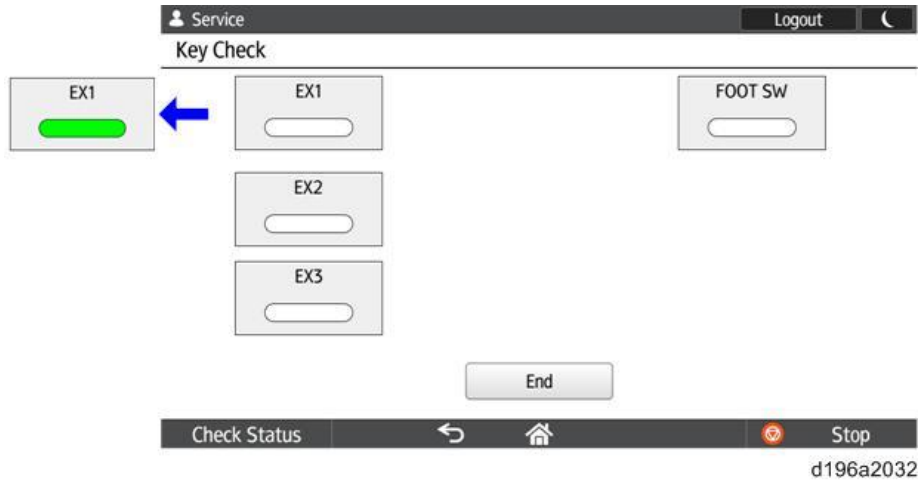
Select the [All Light On] check box, and make sure the following LEDs light:

- Data In indicator (facsimile and printer modes)
- Fax indicator
- [Check Status] indicator (flashes in red and orange alternately)
- Operation call light (if attached) (lights in red/blue)

When the check is completed, press [Back] to return to the top menu of [Self Check].

Key Check

Check if the Extended Feature keys on the left side of the control panel (EX1, EX2, EX3 from top to bottom) are functioning normally. If they are functioning normally, the key will turn green when pressed. [FOOT SW] is not used.



When the check is completed, press [End] to return to the top menu of [Self Check].

LCD Check

Visually inspect the color of the LCD. The displayed colors are white/black/red/green/blue. The LCD changes to the next color when you press it.

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The check is completed when all colors have been displayed. The screen returns to the top menu of [Self Check].

TouchPanel Calibration

Calibrate the touch panel by touching the center of each of the five “+” signs.
The five “+” signs are displayed in the order of top left, bottom right, bottom left, center, and top right.
After you have touched the five “+” signs, the display switches to the [Retry/OK] screen.

- If you want to calibrate again, press [EX1].
- If you want to confirm that the calibration results are OK, press the [EX3] key to return to the top menu of [Self Check].

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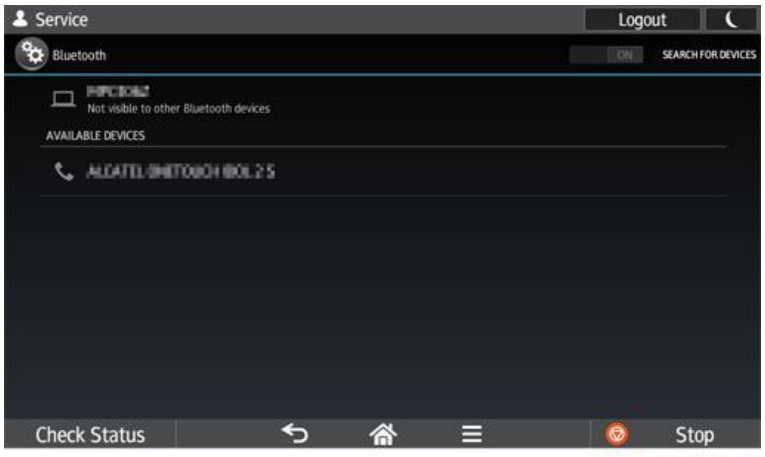
Bluetooth Check

Check and configure the Bluetooth device connection.



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When the check is completed, press [Back] to return to the top menu of [Self Check].

Note

- You cannot switch Bluetooth to [ON] or [OFF] from the [Self Check] menu. Before checking the Bluetooth device connection, specify [ON] for [Bluetooth] in [Screen Features Settings] > [WIRELESS & NETWORKS] > [Bluetooth].

Speaker Check

Tests the speaker by playing the reference sound.

1. Select the frequency (220Hz, 440Hz, 880Hz, 1760Hz, or 2000Hz).
2. Press [START/STOP] to play the sound.
3. Touch the volume bar, and play the sound at minimum and maximum volumes.
4. Press [START/STOP] to stop the sound.

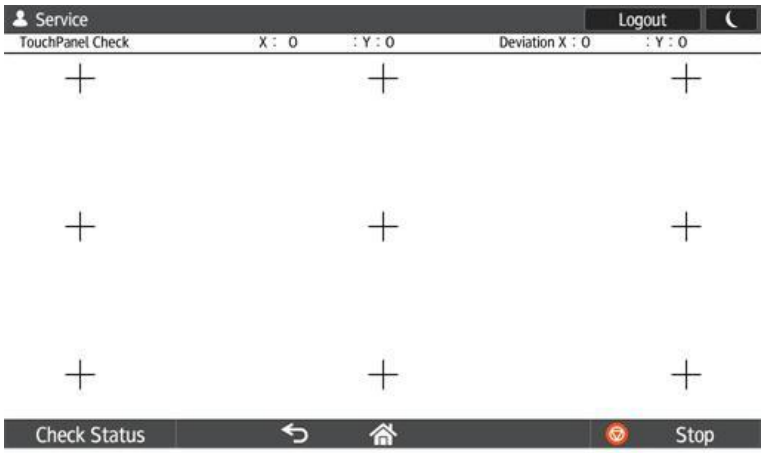
When the check is completed, press [Back] to return to the top menu of [Self Check].

TouchPanel Check

For each of the nine reference points on the screen, the distance between the detected pressed position and the nearest reference point is displayed. The distance is displayed continually near each reference point.

If all the distances between each detected pressed position and the nearest of the five reference points on the screen (at the four corners and the center) are within ±12px, the [OK] button appears. (However, even when the [OK] button is being displayed, if you press the screen again and the distance exceeds ±12px, the [OK] button disappears.)

8.Smart Operation Panel



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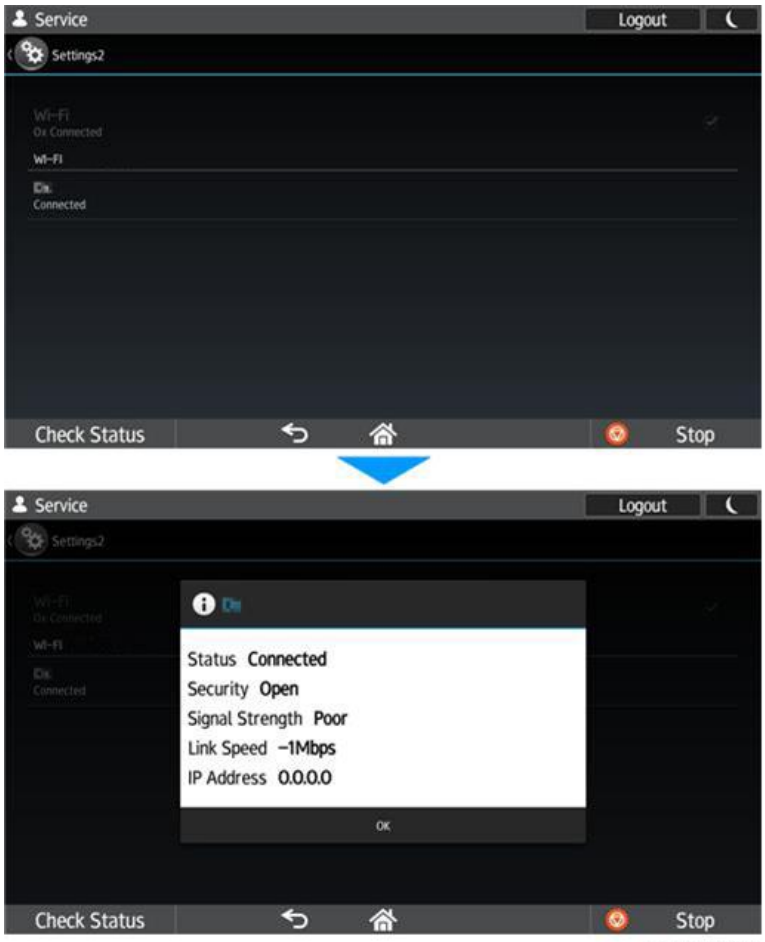
If you press the [OK] button, the inspection implementation status switches to “Adjusted” and the screen returns to the self-inspection menu.

If you press the [Back] key, the inspection implementation status does not switch and the screen returns to the self-inspection menu.

Wireless LAN Check

Checks the condition of the wireless LAN connection.

When you select the connected access point, the signal strength, IP address and other information are displayed.



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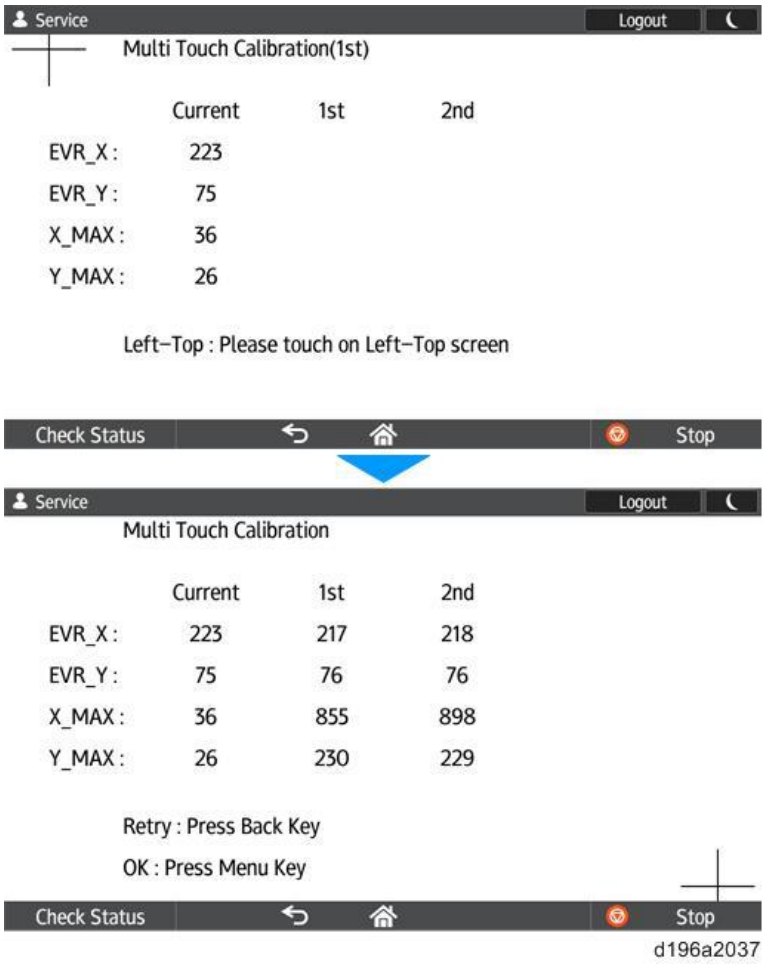
When the check is completed, press [Back] to return to the top menu of [Self Check].

MultiTouch Calibration

Calibrate the touch panel for multi-tap input methods such as pinch-in/pinch-out.
Touch the center of both “+” signs. The two “+” signs are displayed in the order of top left and bottom right. Repeat the procedure. The touch panel will be calibrated.

- If you want to adjust it again, press the [EX1] key.
- If you want to confirm that the calibration results are OK, press the [EX3] key to return to the top menu of [Self Check].



The “Back Key” in the message is actually the [EX1] key and the “Menu Key” in the message is actually the [EX3] key.

Note

- The values of “EVR_X”, “EVR_Y”, “X_MAX”, and “Y_MAX” are for internal processing and do not indicate the positions or distance of the points touched. There is no problem unless there is a huge difference between the values of the first calibration and the second calibration.

eMMC Erasure Count

Displays the status of the eMMC Erasure Count and the current number of times of rewriting.

8.Smart Operation Panel

MultiTouch Sensitivity Adjustment

Adjusts the MultiTouch sensitivity of the operation panel.

Check the influence of external noise. If the detection level is 3 or higher, adjustment is necessary.

The sensitivity level can be adjusted between "0" and "10". The default setting is "10". If set to "0", the MultiTouch function is turned off.

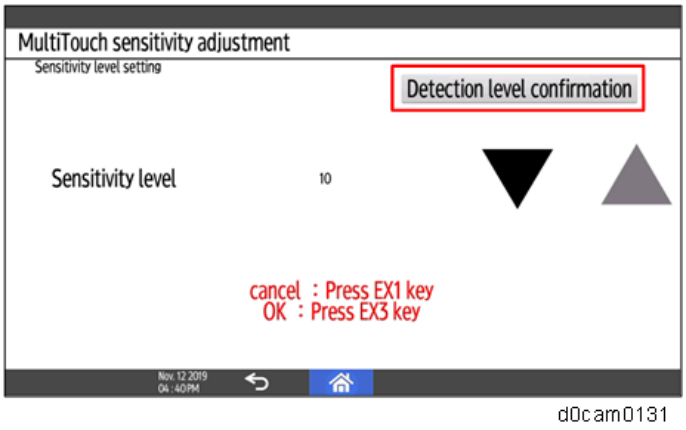
- Sensitivity level: 10 (Default)
- Sensitivity level: 0 (MultiTouch function off.)

Note

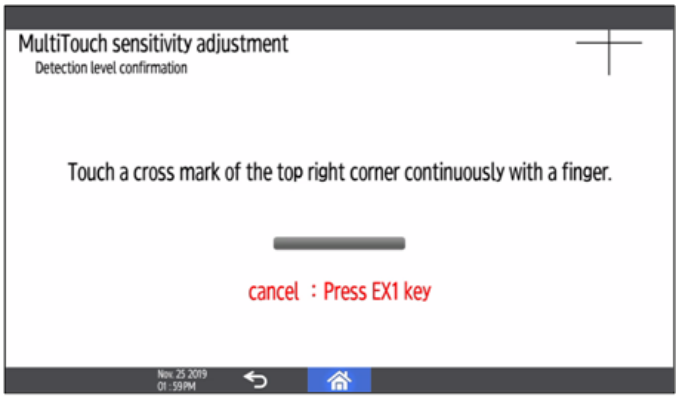
- If the sensitivity level is set to "0", the MultiTouch function is turned off and you cannot pinch in or out.
- If the sensitivity level is set between "1" and "9", the distance between the 2 points for detecting MultiTouch increases as the sensitivity level is decreased. At the default setting (sensitivity level 10), MultiTouch is detected for a distance of approximately 3 cm between the 2 points. At sensitivity level 1, MultiTouch is detected for a distance of approximately 4 cm between the 2 points.

Adjustment Procedure

1. Press [Detect level confirmation].



2. Keep your finger on the cross at the top right.



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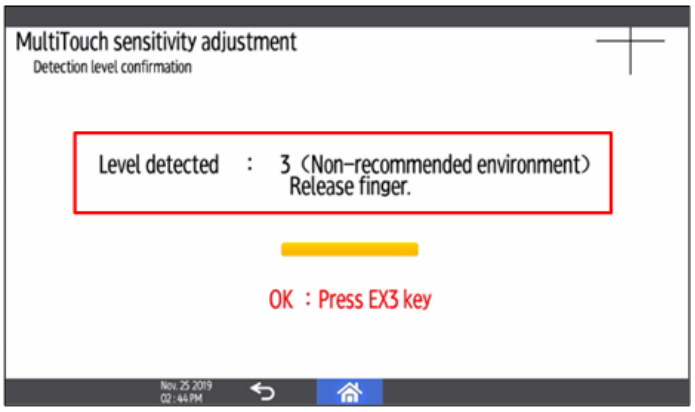
3. Check the result. If the detection level is "3" or "4", adjust the MultiTouch sensitivity.



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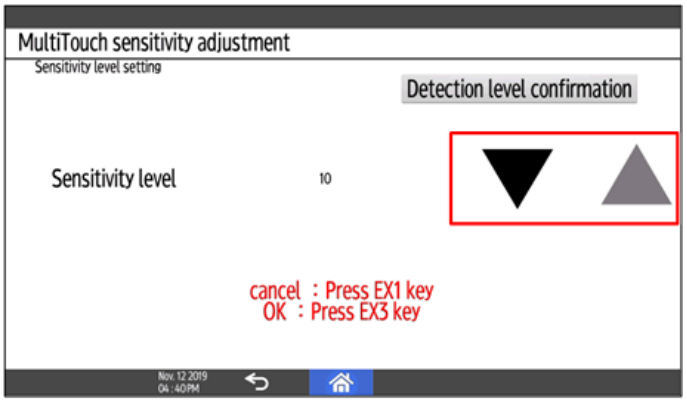
4. Use [V] or [^] to adjust the sensitivity level.



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Recovery Mode

The recovery mode menu is as follows. Ask your manager for details on how to enter Recovery mode.

Menu	Description
reboot system now	Reboots the Android OS.
apply update from	Updates the Cheetah System firmware by specifying the folder path.

Menu	Description
sdcard	
wipe data/factory reset	Deletes all installed applications and all settings on the Cheetah.
wipe cache partition	Deletes all data that is stored on the cache partition. Currently, Cheetah does not use the cache partition, so nothing happens when this menu item is accessed.
wipe free area partition	Deletes all data that is stored on the free partition. Cheetah stores the version history on the free partition. When this menu item is selected, it will then disappear.
wipe LegacyUI area	Deletes Legacy UI.
micon update from sdcard	Updates Keymicon by specifying the folder path.
view recovery logs	Displays the recovery log.

Note

- If [Settings] > [System Settings] > [Settings for Administrator] > [Security] > [Extended Security Settings] > [Update Firmware] is set to [Prohibit], the control panel cannot enter the recovery mode.
- Ask your manager for information on how to enter the Recovery Mode.

Special Key Combinations

Function	Operation for Smart Operation Panel
Resetting Settings	In the Settings screen, press a Settings category while holding down the EX3 key. Available for: System Settings, Copier/Document Server Settings, and Scanner Settings.
System Reset	Hold down the EX3 key and [#] simultaneously for 10 seconds. Resets the controller software of the main machine.
Application Reset	Hold down the EX3 key and [9] simultaneously for 10 seconds. Resets a single application.
Resetting User Code Authentication	Hold down [Reset] for 2 seconds. Returns to the User Code entry screen.

Backup/Restore for Smart Operation Panel Application/Settings Function

Overview

Application settings and additional applications installed on the Smart Operation Panel can be backed up automatically and can be restored, e.g. after Smart Operation Panel replacement.
In Cheetah SP mode, select [Screen Device Settings]> [Backup / Restore Settings].

Data that can be backed up and restored

- System application settings*1
- Standard application settings*1
- Pre-install application settings*1
- Add-on applications (including hybrids)*2

*1: The system application, standard installed application, and pre-installed application are installed in MultiLink-Panel, so the application itself is not backed up or restored after replacement.
*2: Add-on applications settings are not backed up or restored.

Backup

Note

- After replacing the smart operation panel, if the version of the operation panel system firmware is older than a certain version, update it to a later version.
- Backup cannot be performed manually by the user or the technician.
- During the backup, the message being backed up is displayed and other operations cannot be performed.

- A backup is performed 24 hours after the last backup. If the machine doesn't have backup data, the first backup is performed at 2:00AM.
- A backup cannot be performed under any of the conditions below. Backup will retry 1 hour later.
  - During ARFU, firmware updating from download site, etc
  - LCD on the operation panel: ON.
  - HDD cannot be accessed for 60 sec.
- If the backup data has not changed, no backup will be performed. (Maximum - 7 days)
- During the backup, the LCD is off.
- Backup data is stored on the HDD.
- The amount of time for the backup is as follows:
  Example:

	Data	Backup time
Additional applications	106MB	1m 6s
Application settings	0.2MB	36s
Total	106.2MB	1m 42s

Disabling the Backup setting

The default setting is “Enabled”. To change it to “Disabled”, uncheck “Enabled”. Restarting the machine is not necessary.

Select [Screen Device Settings] > [Backup/Restore Settings] in Screen SP mode.

Restore

Note

- After replacing the smart operation panel, if the version of the operation panel system firmware is older than a certain version, update it to a later version.
- If the machine doesn’t have any backup data, the restore function cannot be used.

1. Enter [OpPanel-SP] and go [Screen Device Settings] > [Backup/Restore Settings] > [Start Restore].
2. After a message indicating that restoration takes several minutes is displayed, touch "execute".
   A message saying please wait for a while is displayed. Time is about 10 minutes.
3. After a message indicating that the next message is displayed, touch [Close].
   A message that the restoration was successful is displayed.
4. Turn the main switch off/on.

Restore Error Codes

If restore fails, an error code appears on the operation panel.

Code	Cause	Solution
1	Failed to restore additionally installed application data	Retry the Restore procedure.
3	Failed to restore application setting data	Retry the Restore procedure.

Software Update

Updating the Smart Operation Panel

Important

- In the case of models provided with package firmware only, updates for the Smart Operation Panel and applications are also provided via package firmware. For details, see ”Firmware Update (SD Card)”.

There are three methods to update the Smart Operation Panel. The method is different depending on what you want to update.

1. Installation/update from a media
2. Installation/update from the eDC Server
3. Installation/update from Application Site

Update method	Features	Control panel firmware	Applications
Installation/update from a media	Installation or update is possible in the following two ways. 1. Applications • Use the installation screen in the control panel's service mode to update applications. • You can install or update multiple applications at once. • You can also uninstall an application. 2. Package firmware (SD card or USB flash drive) Refer to "Firmware Update (SD Card)".	Yes	Yes
Installation/update from the eDC Server	Install or update applications directly from the eDC Server. This method is mainly for paid applications. A product key is required when an application is installed for the first time. *The update procedure is the same as when updating the Smart Operation Panel application already released.	No	Yes
Installation/update from Application Site	Installation and Updating of applications and firmware update can be done from Application Site. When administrator authentication is enabled, an administrator privilege is required to start Application Site. If you log in to the operation panel service mode, however, you can use it with CE privilege.	Yes*1	Yes

*1 Update can only be done by using a package file.

The following two methods can be used for updating the firmware.

- Update from a media
- Installation/update from Application Site

The following three methods can be used for updating an application.

- Installation/update from a media
- Installation/update from the eDC Server
- Installation/update from Application Site

Installation/Update from a Media

Installing/Updating an Application

Creating a media card for update

1. Download the update modules from the Firmware Download Center.
2. Unzip the downloaded file.
3. Create a folder named “romdata” in the root directory of the media.
4. Put the unzipped file in the “romdata” folder.

Update procedure

1. Log in to the control panel in service mode.
2. Insert the SD card into the SD card slot of the control panel.
3. Select [Apps] > [Install] > [Install from SD Card].
4. Select the application you want to install or update, and then press [Install]
5. The installation or update results are displayed.
6. Check that the application is correctly installed or updated, and then press [reboot operation panel].

Package Update

This method uses the package update function to update the control panel firmware and/or applications. The package update function is provided by the controller.
Update is done in the following order:

1. Controller firmware
2. Applications
3. Control panel firmware

If the control panel firmware has to be updated, the control panel starts in the recovery mode and the firmware is automatically updated.
The control panel restarts when updating is completed. The result notification is processed after the control panel restarts.
Refer to ”Firmware Update (Removable Media)” for details.

When Installation/Update Is Prohibited

If [Settings] > [System Settings] > [Settings for Administrator] > [Security] > [Extended Security Settings] > [Update Firmware] is set to [Prohibit], the execution key is grayed out and installation/update cannot be executed.
When trying to update from a PC, updating fails and the result is recorded as “Failed”.

Installation/Update from the eDC Server

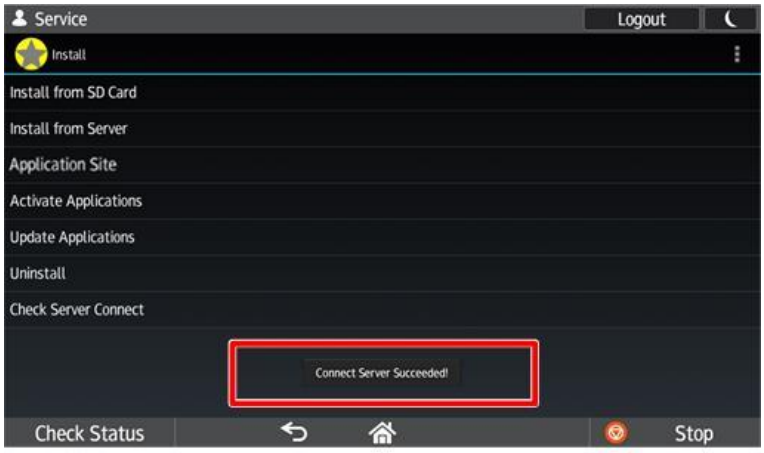
Downloads applications from the eDC Server, and installs or updates them.

Note

- Installation/activation/update of applications from the server can only be done in the service mode.

Check Server Connect

1. Log in to the control panel's service mode.
2. Select [Apps] > [Install].
3. Press [Check Server Connect] and make sure that "Connect Server Succeeded!" is displayed.



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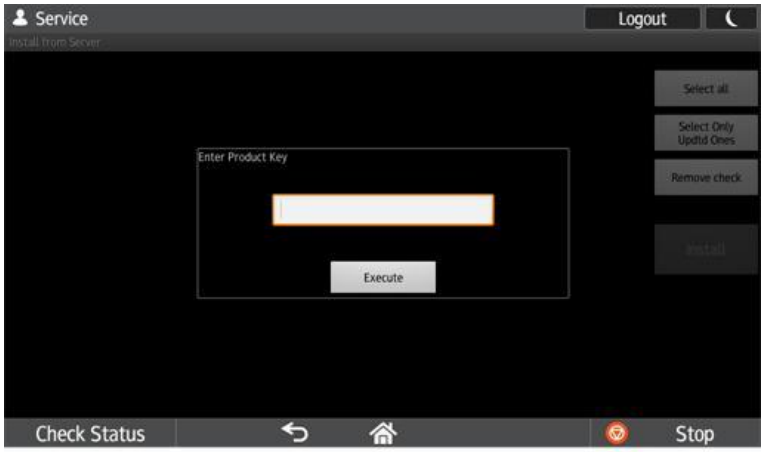
Note

- The server address is stored in the firmware of the Smart Operation Panel.
- To connect to the server, the network settings of the MFP must be configured correctly. For the required configuration, see the Field Service Manual of the MFP.
- If server connection fails, see Troubleshooting for error codes.

Installation

1. Log in to the control panel's service mode.
2. Select [Apps] > [Install].
3. Select [Install from Server].
4. Enter the product key and press [Execute].



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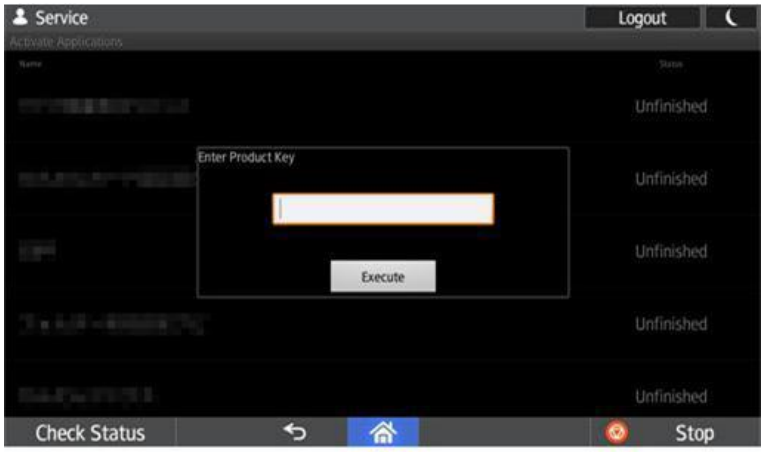
5. Follow the instructions shown on the screen.

Note

- An application cannot be installed unless it is digitally signed by Ricoh.

Activation

1. Log in to the control panel's service mode.
2. Select [Apps] > [Install].
3. Select [Activate Applications].
4. Select the application to be activated, and then enter the activation key and press [Execute].



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5. Follow the instructions shown on the screen.

Note

- Only charged applications have to be activated.

Update

1. Log in to the control panel's service mode.
2. Select [Apps] > [Install].
3. Select [Update Applications].
4. Select the application to be updated, and then press [Check Update Status].
5. Follow the instructions shown on the screen.

Forced Uninstallation

If you try to uninstall an activated application without first deactivating it, the uninstallation will fail. However, the application can be uninstalled without deactivation (forced uninstallation) in the following circumstances:

- Uninstallation using the service login uninstallation menu
- Deactivation failure due to the license information stored in the control panel not matching the license information published by the server

Note

- Forced uninstallation cannot be performed if deactivation fails because of other factors (such as failure to connect to the server because of temporary network disconnection or server maintenance).

During forced uninstallation, the message indicating that deactivation failed appears.
If [OK] of the message is selected, uninstallation is executed forcibly without deactivation.

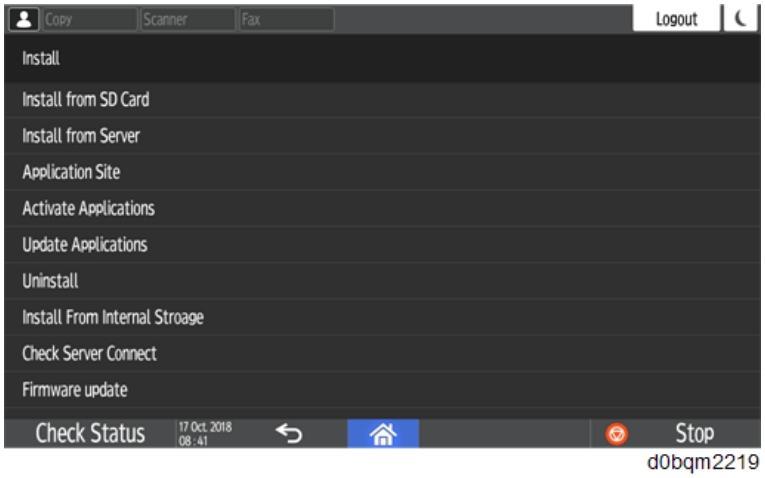
If [Cancel] of the message is selected, uninstallation is not executed.

Note

- If executing forced uninstallation, forced deactivation must also be executed on the eDC server. Accordingly, check whether the license has been published for the eDC server.

Application Site

"Application Site" has been added to Screen Service mode. Field engineers can start up Application Site to install or update applications or firmware without needing user administrator credentials.



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This menu item opens Application Site by using the Web Browser NX app.

Troubleshooting

MultiTouch Misdetection by the Operation Panel due to an AM Radio Signal

Problem

MultiTouch is detected even though only a single point on the operation panel is touched.

Cause

If there is an AM radio tower near the machine's location, the person using the operation panel acts as an antenna and radio noise enters the operation panel. As the result, in spite of only a single point being touched, the machine senses MultiTouch.

Solution

Adjust the MultiTouch sensitivity of the operation panel.
Operation panel SP mode > Screen Device Settings > Panel Self Check > MultiTouch Sensitivity Adjustment

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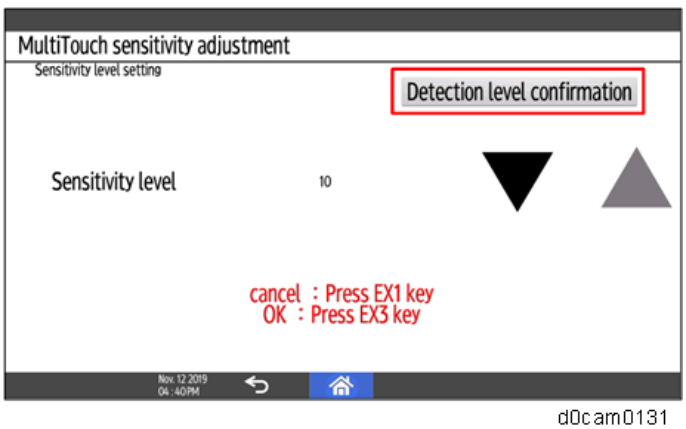
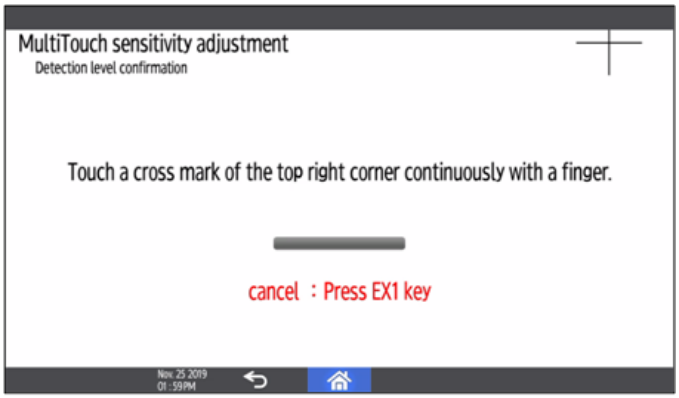
Checking the Influence of External Noise in the Installation Environment

1. Press [Detection level confirmation].



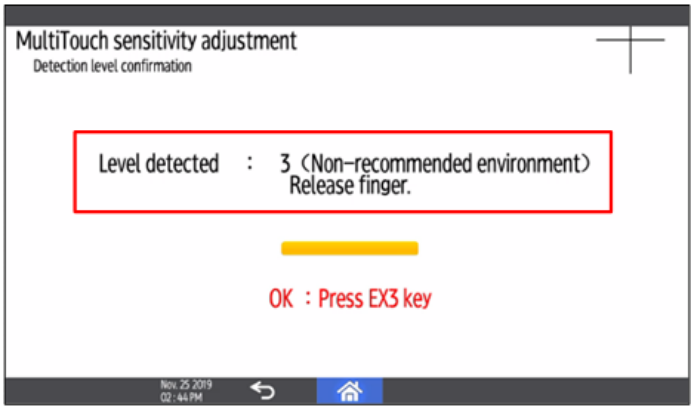
d0cam0131

2. Keep your finger on the cross at the top right.



d0cam0133

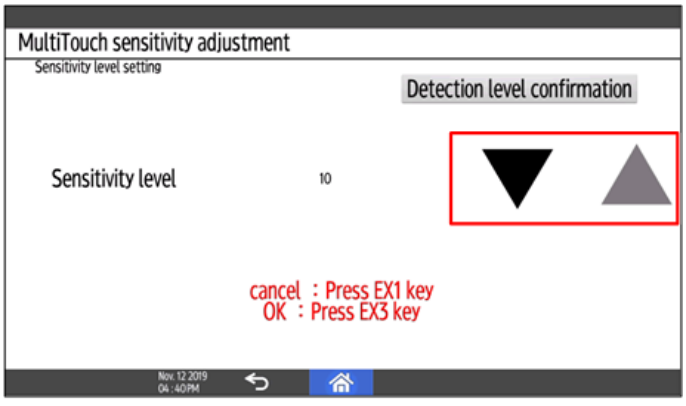
3. Check the result, and if the detection level is "3" or "4", adjust the MultiTouch sensitivity.
<Displayed Result Example>



d0cam0134

Detection Result

- Detection Level 1 (Best): No Problem. (Not required to adjust the sensitivity level.)
- Detection Level 2 (Fine environment): No Problem. (Not required to adjust the sensitivity level.)
- Detection Level 3 (Non-recommended environment): Receiving the external noise influence. (Required to adjust the sensitivity level)
- Detection Level 4 (Unusable environment): Receiving the external noise influence. (Required to adjust the sensitivity level)



d0cam0132

Sensitivity Level Adjustment

- In "Checking the Influence of External Noise in the Installation Environment", if the detection level is "3" or "4", you are receiving the external noise influence, so adjust the sensitivity level.
- The sensitivity level can be adjusted between "0" and "10". (Default: 10). If set to "0", the MultiTouch function is turned off.
- When decreasing the sensitivity level, perform "Checking the Influence of External Noise in the Installation Environment" again to check the influence of external noise.
  - Sensitivity level: 10 (Default)
  - Sensitivity level: 0 (MultiTouch function off.)

Note

- If the sensitivity level is set to "0", the MultiTouch function is turned off and you cannot pinch in or out.
- If the sensitivity level is set between "1" and "9", the distance between the 2 points for detecting MultiTouch increases as the sensitivity level is decreased.
- At the default setting (sensitivity level 10), MultiTouch is detected for a distance of approximately 3 cm between the 2 points. At sensitivity level 1, MultiTouch is detected for a distance of approximately 4 cm between the 2 points.
- If you cannot enter the adjustment menu due to receiving the radio wave influence, connect a mouse to the operation panel by USB connection or operate with a non-conducting pen.
- Take care not to use a pointed obstacle for the operation. Doing so may damage the operation panel.

Problems and Errors Related to Hardware

Symptom	Solution
The touch panel is damaged (broken, dented, etc.) and cannot be operated.	• Connecting a commercially available USB mouse enables the same operation as the touch panel. • Replace the LCD. • Replace the operation panel unit (you need to transfer user information, and reinstall the applications, etc.). Refer to "Factory Reset and Restoration".
The touch panel does not respond.	• Connecting a commercially available USB mouse enables the same operation as the touch panel. • Execute the Panel Self Check. • Check the operations other than that of the touch panel. • Replace the LCD.

Symptom	Solution
	• Replace the operation panel unit (you need to transfer user information, and reinstall the applications, etc.). Refer to "Factory Reset and Restoration".
The touch panel's coordinates have shifted substantially, resulting in not being able to execute its calibration.	• Connecting a commercially available USB mouse enables the same operation as the touch panel. So you can execute the calibration • Execute the Panel Self Check, or the TouchPanel Calibration • Execute the MultiTouch Calibration. • If the shift occurs even after turning the power and then back ON, check the battery voltage of the operation panel's main controller board. • Replace the main controller board. • Replace the operation panel unit (you need to transfer user information, and reinstall the applications, etc.). Refer to "Factory Reset and Restoration".
Cannot enter the SSP mode.	If using the screen in a Classic Application, it does not support multitouch, so you cannot enter the SSP mode by the normal operation. Instead, use the EX3 key. Press and hold the EX3 key, and then press the "System/Copy" button in the SP mode menu.
SC672-11 appears.	**Cause** Communication between the controller and the operation panel was not established after a normal startup. USB cable between the operation panel and the MFP is disconnected, damaged or defective. **Solution** Reconnect or replace the USB cable. For details about how to replace the USB cable, refer to the service manual for the MFP. **Reference** For details about SC672, refer to the service manual for the MFP.

Symptom	Solution
SC672-12 appears.	**Cause** Communication between the controller and the operation panel was interrupted after a normal startup. USB cable between the operation panel and the MFP is disconnected, damaged or defective. **Solution** Reconnect or replace the USB cable. For details about how to replace the USB cable, refer to the service manual for the MFP. **Reference** For details about SC672, refer to the service manual for the MFP.

Errors Related to Applications

Pre-installed Applications

Applicable applications
Copy (Classic) / Scanner (Classic) / Printer (Classic) / Document Server / Quick Copy / Quick Fax / Quick Scanner / Web Browser
/ Quick ID Card Authentication Config*
*Depends on the model whether it is a pre-installed application

If an error related to the application occurs, the operation panel’s operating system automatically restarts the application (with a confirmation dialog box).

Third-Party Application

If using a third-party application, the error message, code and solution may vary depending on the application. Follow the third-party vendor’s instructions.

Factory Reset and Restoration

This section explains the Factory Reset and subsequent procedure. Factory Reset may be executed when an abnormal operation due to the system or an application occurs or when replacing the operation panel (at the request of the customer to delete settings, etc.)

Important

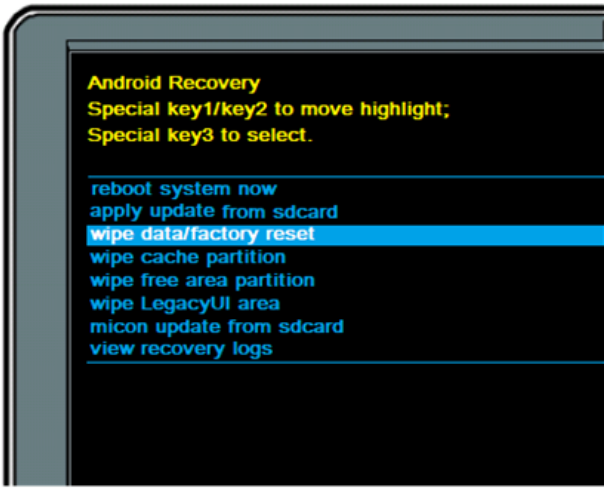
- When you execute the Factory Reset:
  All data that created by users will be initialized.
  All applications (including the applications from eDC server or Application Site) will be deleted.

Items	Objective		
	Only delete data	Reset application configuration to factory settings.	Update system and reset application configuration to factory settings.
Exporting configuration file	-	As required	As required
Storing user information other than those exported	-	As required	As required
Factory reset	**Required**	**Required**	**Required**
System update	-	-	**Required**
Application installation	-	**Required**	**Required**
Importing configuration file	-	As required	As required
Registering user information other than those imported	-	As required	As required

Before executing Factory Reset, be sure to obtain the package firmware and copy it to the SD card.

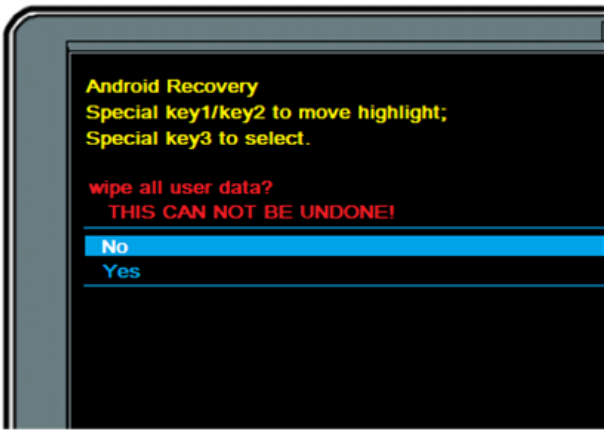
Factory Reset

1. Enter the recovery mode.
2. Select and execute "wipe data/factory reset".
   Press the EX1 and EX2 keys to move the cursor up and down.
   Press the EX3 key to execute the selected function.



d0bqm2011

3. A reconfirmation screen is displayed. Select [Yes].



d0bqm2012

The message “wiping data…” appears and the data and cache are cleared (within 1 minute).
On completion, the displayed screen returns to the recovery mode menu.
If you reboot the machine as is, the machine cannot display the messages in the local language because of the absence of the LegacyUI data.
The pre-installed applications have also been deleted, so the alert appears.
For restoration, follow the installation procedure of package firmware, and update it.

Errors that occur during application update from an SD card

Error Messages

Error message	Explanation	Solution
Insert a correct SD card.	-	• Remove the SD card and insert it again. • Make sure that the directory of the SD card is correct. You must create the "app" folder in the root directory of the SD card and put the zip file in the "app" folder.
You are trying to install the same application with a different part number. Is it OK to continue?	Displayed when you attempt to update an application that is the same but has a different part number.	Check the file, and select [OK] or [Cancel].
Some applications could not be installed.	Displayed in the following cases. • You attempted to update a module (application) in	Restart the control panel and repeat the update procedure.

Error message	Explanation	Solution
	use. • The application is corrupted.	
- (The application you want to update is not displayed in the list of applications.)	-	• Make sure that the directory of the SD card is correct. You must create the "app" folder in the root directory of the SD card and put the zip file in the "app" folder. • Check the application file in the SD card.

Error Codes

Error codes may appear along with the message reporting the installation failure.

Error Code	Explanation
215-01	Installation of an application that cannot be used according to the system configuration was attempted. (Example: This occurs when installing an application with the copier, scanner and fax functions on a non-MFP printer. However, if any of these functions can be used, the application with such multiple functions can be installed.)
215-02	This occurs if the hard disk cannot be used.
215-03	An application that does not match the type (LP/MFP) or model has been installed. *
215-04	Installation of an application that cannot be installed for Basic model was attempted.
221	The system cannot stop the application for the update or uninstallation.
222	The signature is not authentic.
235	The signature is not authentic.

* If the model information (type or model) does not match, even if SC215-03 does light up at the time of installation, the error message may appear the next time the machine is started. The message shows the model information of the correct firmware and installed firmware. This can be restored by updating the firmware to the version with the correct model information.

Errors that occur during update from the eDC Server

Example of an error code display

8.Smart Operation Panel

d0bqm2209

XXX (3 digit error)

Error code	Explanation
101	Server connection error
102	Signature verification error
103	License error (for example, the product key was keyed in wrongly)
215	Dependency check error Displayed when the control panel firmware version does not meet the installation requirement of the application. Example: The firmware version of the control panel is 1.02 and you attempted to install an application that requires firmware version 1.03.
20X	Other errors

Note

- An additional 3-digit code may be displayed to indicate the details.
  Example: 101-805

XXX -XXX (3 digit-3 digit error)

Error code	Explanation	Solution
101-801	Connection Timeout	Check the network settings of the device. • Network selection (MFP / Operation Panel) • IP address • Default gateway • Check DNS etc.
101-802	SSL communication failed	Check the network settings of the device.
101-803	Proxy authentication failed	Check the proxy settings of the device.

Error code	Explanation	Solution
101-804	Proxy Connection Timeout	Check the proxy settings of the device.
101-805	The server is under maintenance. Connection timeout. (An incorrect network was selected on the operation panel.)	Resume the operation after completing the server maintenance. Check the machine's network settings.
103-705	Executed activation for an already-activated machine with a different product key.	Execute the update, not activation.
201-700	Activation is being attempted from a device with an unauthorized serial number.	Check the machine's network settings.
203-706	License update has been executed using a deactivated product key. => User operation is required because the settings remain even after deactivation.	Execute activation, not license update.

Other Troubleshooting

Operation Panel Unit

HW: Hardware issue, SW: Software issue

No.	Symptom		Cause	Solution
1	Both the Smart Operation Panel and the blue LED on the operation panel do not turn on. 	HW	The Smart Operation Panel cannot be supplied with electrical power.	**1.** Reconnect the USB cable between the BICU and the Smart Operation Panel. **2.** Replace the USB cable. **3.** Replace the main controller board. **4.** Replace the BICU.
2	The Smart Operation Panel does not turn on, but the blue LED on the operation panel turns on.	HW	The Smart Operation Panel can be supplied with electrical power (blue LED lamp), but nothing can be displayed on the LCD.	**1.** Reconnect the LCD I/F cable. **2.** Replace the LCD. **3.** Replace the main controller board. **4.** Replace the LCD I/F cable.

No.	Symptom		Cause	Solution
3	A splash (blue) screen or “Please wait” message stays on the display. 	SW HW	The Smart Operation Panel and LCD can be supplied with electrical power, but software issues occur during the boot-up sequence. Firmware or eMMC data on the Board is defective.	**1.** Update the Cheetah System firmware in recovery mode. **2.** Do a factory reset. **3.** Replace the main controller board.

Pro C5300S/C5310S, IM C6500/C8000
Machine Code: D0CP/D0CQ, D0CM/D0CN
Appendices

Initial Release: Jan, 2020
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1. Specifications

General Specifications

Main Machine

Item	IM C6500/C8000	Pro C5300S/C5310S
Configuration	Console	
CPU	Intel® Atom Processor-I 1.6GHz	
Memory	4.0 GB	
HDD	320 GB × 2	
Color Support	Full Color	
Photoreceptor Type	OPC Drum	
Copy System	Laser Beam Electrostatic Transfer System	
Develop System	Dry Two-component Triple Shaft O.D. Cycle Develop System	
Fusing	Oil-less Belt-fusing Method	
Original Holder type	Fixed Holder	
Original Scanning System	Flat Scanning System	
Warm-up time (23°C (73.4°F), rated voltage)	**EU/AP/CHN/TWN/KOR** IM C6500/C8000 • Normal mode: 45 seconds • Quick mode: 38 seconds **NA** IM C6500 • Normal mode: 45 seconds • Quick mode: 43 seconds IM C8000 • Normal mode: 45 seconds • Quick mode: 38 seconds	Pro C5300S/C5310S • 119 seconds
First copy time	IM C6500: • B&W: 5.5 seconds or less • Full color: 7.5 seconds or less	Pro C5300S • B&W: 9.2 seconds or less • Full color: 10.6 seconds or less Pro C5310S • B&W: 8.1 seconds or less

Item	IM C6500/C8000	Pro C5300S/C5310S
	IM C8000: • B&W: 4.8 seconds or less • Full color: 6.4 seconds or less	• Full color: 9.6 seconds or less
Copy/print speed	IM C6500: 65 sheets/minute IM C8000: 80 sheets/minute (A4 LEF, 8 1/2 x 11 LEF, Paper Weight 2)	Pro C5300S: 65 sheets/minute Pro C5310S: 80 sheets/minute (A4 LEF, 8 1/2 x 11 LEF, Paper Weight 2)
Maximum original size	A3 SEF, 11 x17 SEF	

Original scanning area	Exposure Glass
	• Vertical: Up to 297 mm (11.7 inches)
	• Horizontal: Up to 432 mm (17. 1 inches)
	ADF
	• Vertical: 128 to 297 mm (5.1 to 11.7 inches)
	• Horizontal
	  • Copy function: 128 to 1,260 mm (5.1 to 49.7 inches)
	  • Scanner function: 128 to 432 mm (5.1 to 17. 1 inches)
	  • Facsimile function: 128 to 1,200 mm (5.1 to 47.3 inches)	

Originals	Sheet, book, three-dimensional object	
Tray 1 copy size (Tandem) • IM C6500/C8000: Thin Paper–Thick Paper 3 • Pro C5300S/C5310S: Paper Weight 1–Paper Weight 8	A4 LEF, 8 1/2×11 LEF	
Tray 1 copy size (A3/11 x 17 tray unit) • IM C6500/C8000: Thin Paper–Thick Paper 3 • Pro C5300S/C5310S: Paper Weight 1–Paper Weight 8	**Standard:** EU/AP/CHN/TWN/KOR: A3 SEF NA: 11 × 17 SEF **Select the paper size:** EU/AP/CHN/TWN/KOR: A4, B4 JIS SEF, 11 × 17 SEF, 8 1/2 × 14 SEF, 8 1/2 × 11 NA: A3 SEF, A4, B4 JIS SEF, 8 1/2 × 14 SEF, 8 1/2 × 11 **Custom size:**	

Item	IM C6500/C8000	Pro C5300S/C5310S
	• Vertical: 210.0–305.0 mm (8.27–12.00 inches) • Horizontal: 210.0–439.0 mm (8.27–17.28 inches)	
Tray 2 and 3 copy size • IM C6500/C8000: Thin Paper–Thick Paper 3 • Pro C5300S/C5310S: Paper Weight 1–Paper Weight 8	**Paper sizes that can be detected automatically:** EU/AP/CHN/TWN/KOR: A3 SEF, A4, A5 LEF, B4 JIS SEF, B5 JIS, 8 1/2 × 11 SEF, 13 × 19 SEF, SRA3 SEF NA: A4 SEF, B5 JIS SEF, 11 × 17 SEF, 8 1/2 × 14 SEF, 8 1/2 × 11, 7 1/4 × 10 1/2 LEF, 5 1/2 × 8 1/2 LEF, 12 × 18 SEF, 13 × 19 SEF **Select the paper size using the Tray Paper Settings menu:** EU/AP/CHN/TWN/KOR: A5 SEF, A6 SEF, B6 JIS SEF, 11 × 17 SEF, 8 1/2 × 14 SEF, 8 1/2 × 13 SEF, 8 1/2 × 11 LEF, 8 1/4 × 14 SEF, 8 1/4 × 13 SEF, 8 × 13 SEF, 7 1/4 × 10 1/2, 5 1/2 × 8 1/2, 8K SEF, 16K, 12 × 18 SEF, 11 × 15 SEF, 11 × 14 SEF, 10 × 15 SEF, 10 × 14 SEF, 13 × 19 1/5 SEF, 12 3/5 × 19 1/5 SEF, 12 3/5 × 18 1/2 SEF, 13 × 18 SEF, SRA4, 8 1/2 × 13 2/5 SEF, 226 × 310 mm (Only Pro), 310 × 432 mm (Only Pro) NA: A3 SEF, A4 LEF, A5, A6 SEF, B4 JIS SEF, B5 JIS LEF, B6 JIS SEF, 8 1/2 × 13 SEF, 8 1/4 × 14 SEF, 8 1/4 × 13 SEF, 8 × 13 SEF, 7 1/4 × 10 1/2 SEF, 5 1/2 × 8 1/2 SEF, 8K SEF, 16K, 11 × 15 SEF, 11 × 14 SEF, 10 × 15 SEF, 10 × 14 SEF, 13 × 19 1/5 SEF, 12 3/5 × 19 1/5 SEF, 12 3/5 × 18 1/2 SEF, 13 × 18 SEF, SRA3 SEF, SRA4, 226 × 310 mm (Only Pro), 310 × 432 mm SEF (Only Pro), 8 1/2 × 13 2/5 SEF (Only Pro) **Custom size:** • Horizontal: 100.0–330.2 mm (3.94–13.00 inches) • Vertical: 139.7–487.7 mm (5.50–19.20 inches)	
Bypass tray copy size • IM C6500/C8000: Thin Paper–Thick Paper 4 • Pro C5300S/C5310S: Paper Weight 1–Paper Weight 9	**Paper sizes that can be detected automatically:** EU/AP/CHN/TWN/KOR: A3 SEF, A4, A5, A6 SEF, B4 JIS SEF, B5 JIS, B6 JIS SEF, 13 × 19 SEF, SRA3 SEF NA: 11 × 17 SEF, 8 1/2 × 11, 5 1/2 × 8 1/2, 12 × 18 SEF, 13 × 19 SEF, SRA3 SEF **Select the paper size using the Tray Paper Settings menu:** EU/AP/CHN/TWN/KOR: 11 × 17 SEF, 8 1/2 × 14 SEF, 8 1/2 × 13 SEF, 8 1/2 × 11, 8 1/4 × 14 SEF, 8 1/4 × 13 SEF, 8 × 13 SEF, 7 1/4 × 10 1/2, 5 1/2 × 8 1/2, 12 × 18 SEF, 11 × 15 SEF, 11 × 14 SEF, 10 × 15 SEF, 10 × 14 SEF, 13 × 19 1/5 SEF, 12 3/5 × 19 1/5 SEF,	

<table>
<tr><th>Item</th><th>IM C6500/C8000</th><th>Pro C5300S/C5310S</th></tr>
<tr><td></td><td colspan="2">12 3/5 × 18 1/2 SEF, 13 × 18 SEF, SRA4, 8 1/2 × 13 2/5 SEF, 226 × 310 mm (Only Pro), 310 × 432 mm SEF (Only Pro), 4 1/5 × 5 1/2 SEF (Only Pro)
NA:
A3 SEF, A4, A5, A6 SEF, B4 JIS SEF, B5 JIS, B6 JIS SEF, 8 1/2 × 14 SEF, 8 1/2 × 13 SEF, 8 1/4 × 14 SEF, 8 1/4 × 13 SEF, 8 × 13 SEF, 7 1/4 × 10 1/2, 11 × 15 SEF, 11 × 14 SEF, 10 × 15 SEF, 10 × 14 SEF, 13 × 19 1/5 SEF, 12 3/5 × 19 1/5 SEF, 12 3/5 × 18 1/2 SEF, 13 × 18 SEF, SRA4, 8 1/2 × 13 2/5 SEF, 226 × 310 mm (Only Pro), 310 × 432 mm SEF (Only Pro), 4 1/5 × 5 1/2 SEF (Only Pro)
Custom size:
• Horizontal: 90.0–330.2 mm (3.55–13.00 inches)
• Vertical: 139.7–487.7 mm (5.50–19.20 inches)</td></tr>
<tr><td rowspan="2">Bypass tray copy size (Other)</td><td rowspan="2">Translucent paper:
A3 SEF, A4, B4 JIS SEF, B5 JIS
Label paper (Thin Paper–Thick Paper 4):
A4, B4 JIS SEF
Tab stock (Thin Paper–Thick Paper 4):
A4 LEF, 8 1/2 × 14 SEF, 8 1/2 × 11 LEF
Envelopes (Thick Paper 2–Thick Paper 4):
4 1/8 × 9 1/2, 3 7/8 × 7 1/2, C5 Env, C6 Env SEF, DL Env</td><td>Translucent paper:
A3 SEF, A4, B4 JIS SEF, B5 JIS
Transparencies
A4, 8 1/2 × 11
Label paper (Paper Weight 1–Paper Weight 9):
A4, B4 JIS SEF
Tab stock (Paper Weight 1–Paper Weight 9):
A4 LEF, 8 1/2 × 14 SEF, 8 1/2 × 11 LEF
Envelopes (Paper Weight 6–Paper Weight 8):
4 1/8 × 9 1/2, 3 7/8 × 7 1/2, C5 Env, C6 Env SEF, DL Env</td></tr>
<tr><td>High gloss coated paper (Matte/Grossy)
Paper sizes that can be detected automatically:
EU/AP/CHN/TWN/KOR:
A3 SEF, A4, A5, A6 SEF, B4 JIS SEF, B5 JIS, B6 JIS SEF, 13 × 19 SEF, SRA3 SEF
NA:
11 × 17 SEF, 8 1/2 × 11, 5 1/2 × 8 1/2, 12 × 18 SEF, 13 × 19 SEF, SRA3 SEF
Select the paper size using the Tray Paper Settings menu:
EU/AP/CHN/TWN/KOR:</td></tr>
</table>

Item	IM C6500/C8000	Pro C5300S/C5310S
		11 × 17 SEF, $8^1/_2$ × 14 SEF, $8^1/_2$ × 13 SEF, $8^1/_2$ × 11, $8^1/_4$ × 14 SEF, $8^1/_4$ × 13 SEF, 8 × 13 SEF, 8 × 10 SEF, 71/4 × $10^1/_2$, $5^1/_2$ × $8^1/_2$, 12 × 18 SEF, 11 × 15 SEF, 11 × 14 SEF, 10 × 15 SEF, 10 × 14 SEF, 13 × $19^1/_5$ SEF, $12^3/_5$ × $19^1/_5$ SEF, $12^3/_5$ × $18^1/_2$ SEF, 13 × 18 SEF, SRA4, 226 × 310 mm, 310 × 432 mm SEF, 81/2 × $13^2/_5$ SEF, $4^1/_5$ × $5^1/_2$ SEF NA: A3 SEF, A4, A5, A6 SEF, B4 JIS SEF, B5 JIS, B6 JIS SEF, $8^1/_2$ × 14 SEF, $8^1/_2$ × 13 SEF, $8^1/_4$ × 14 SEF, $8^1/_4$ × 13 SEF, 8 × 13 SEF, 8 × 10 SEF, $7^1/_4$ × $10^1/_2$, 11 × 15 SEF, 11 × 14 SEF, 10 × 15 SEF, 10 × 14 SEF, 13 × $19^1/_5$ SEF, $12^3/_5$ × $19^1/_5$ SEF, $12^3/_5$ × $18^1/_2$ SEF, 13 × 18 SEF, SRA4, 226 × 310 mm, 310 × 432 mm SEF, $8^1/_2$ × $13^2/_5$ SEF, $4^1/_5$ × $5^1/_2$ SEF **Custom size:** • Vertical: 90.0–330.2 mm (3.55–13.00 inches) • Horizontal: 139.7–487.7 mm (5.50–19.20 inches)
Duplex copy size	A3 SEF, A4, A5, A6 SEF, B4 JIS SEF, B5 JIS, B6 JIS SEF, 11 × 17 SEF, $8^1/_2$× 14 SEF, $8^1/_2$ × 13 SEF, $8^1/_2$ × 11, $8^1/_4$ × 14 SEF, $8^1/_4$ × 13 SEF, 8 × 13 SEF, $7^1/_4$ × $10^1/_2$, $5^1/_2$ × $8^1/_2$, 8K SEF, 16K, 12 × 18 SEF, 11 × 15 SEF, 11 × 14 SEF, 10 × 15 SEF, 10 × 14 SEF, 13 × $19^1/_5$ SEF, 13 × 19 SEF, $12^3/_5$ × $19^1/_5$ SEF, $12^3/_5$ × $18^1/_2$ SEF, 13 × 18 SEF, SRA3 SEF, SRA4, $8^1/_2$ × $13^2/_5$ SEF, 226 × 310 mm (Only Pro), 310 × 432 mm SEF (Only Pro), $4^1/_5$ × $5^1/_2$ SEF (Only Pro) **Custom Size:** • Vertical: 100.0–330.2 mm (3.94–13.00 inches) • Horizontal: 139.7–487.7 mm (5.50–19.20 inches)	
Paper weight	Tray 1 to 3: 52.3 to 256 g/m^2 (14.0 lb. Bond–141.0 lb. Index) Bypass Tray: 52.3 to 300	Tray 1 to 3: 52.3 to 300.0 g/m^2 (14.0 lb. Bond–165.0 lb. Index) Bypass Tray: 52.3–360.0 g/m^2 (14.0 Bond–198.0 lb. Index)

Item	IM C6500/C8000	Pro C5300S/C5310S
	g/m^2 (14.0 lb. Bond–165.0 lb. Index) Duplex: 52.3–256.0 g/m^2 (14.0 lb. Bond–141.0 lb. Index)	Duplex: 52.3–360.0 g/m^2 (14.0 Bond–198.0 lb. Index)
Missing image area	Leading edge: • 5.0 ±1.5 mm (0.20 ±0.06 inches) (Thin Paper–Plain Paper 2) • 4.0 ±1.8/-1.2 mm (0.16 ±0.07/-0.05 inches) (Middle Thick–Thick Paper 4) Trailing edge: • 5.0 ±2.0 mm (0.20 ±0.08 inches) (Thin Paper–Middle Thick) • 4.0 ±2.0 mm (0.16 ±0.08 inches) (Thick Paper 1–Thick Paper 4) Left edge: 2.0±1.5 mm (0.08–0.06 inches) Right edge: 2.0±1.5 mm (0.08–0.06 inches)	Leading edge: • 5.0 ±1.5 mm (0.20 ±0.06 inches) (coated paper: Paper Weight 2 to 4, uncoated paper: Paper Weight 1 to 3) • 4.0 ±1.5 mm (0.16 ±0.06 inches) (coated paper: Paper Weight 5 to 9, uncoated paper: Paper Weight 4 to 9) Trailing edge: • 5.5 ±1.5 mm (0.22 ±0.06 inches) (coated paper: Paper Weight 2) • 5.0 ±1.5 mm (0.20 ±0.06 inches) (coated paper: Paper Weight 3 to 6, uncoated paper: Paper Weight 1 to 4) • 4.0 ±1.5 mm (0.16 ±0.06 inches) (coated paper: Paper Weight 7 to 9, uncoated paper: Paper Weight 5 to 9) Left edge: 2.0±1.5 mm (0.08–0.06 inches) Right edge: 2.0±1.5 mm (0.08–0.06 inches)
Preset reproduction ratio (%)	**EU/AP/CHN/TWN/KOR:** 400, 200, 141, 122, 115, 100, 93, 82, 75, 71, 65, 50, 25 **NA:** 400, 200, 155, 129, 121, 100, 93, 85, 78, 73, 65, 50, 25	
Reproduction ratio (zoom)	From 25–400% in increments of 1%	
Resolution (scanning originals)	600 × 600 dpi	
Resolution (copying)	2400 × 4800 dpi	
Tone	256 tones	
Paper capacity (80 g/m^2, 20 lb. Bond)	Tray 1 (Tandem tray): 2,500 sheets (1,250 sheets × 2) Trays 2 and 3: 550 sheets Bypass tray: 100 sheets	Tray 1 (Tandem tray): 2,500 sheets (1,250 sheets × 2) Trays 2 and 3: 550 sheets Bypass tray: 100 sheets

Item	IM C6500/C8000	Pro C5300S/C5310S
	Optional: Tray 1 (A3/11 x 17 tray unit): 1,000 sheets	Optional: Tray 1 (A3/11 x 17 tray unit): 1,000 sheets
Continuance copy run	1–9,999 sheets	
Power requirements	**EU/AP/CHN/TWN/KOR:** 220–240 V, 12–10 A, 50/60 Hz **NA:** • IM C6500: 120–127 V, 16 A, 60 Hz • IM C8000: 208–240 V, 12 A, 60 Hz	**EU/AP/CHN/TWN/KOR:** 220–240 V, 16 A, 50/60 Hz **NA:** 208–240V, 16 A, 60 Hz

Power consumption (Main unit only)	**EU/AP/CHN/TWN/KOR:**
	• IM C6500
	  • Ready: 186 W
	  • During printing: B&W: 1,147 W / Color: 1,270 W
	  • Maximum: 2,400 W or less
	• IM C8000
	  • Ready: 191 W
	  • During printing: B&W: 1,325 W / Color: 1,474 W
	  • Maximum: 2,400 W or less
	NA:
	• IM C6500
	  • Ready: 186 W
	  • During printing: B&W: 1,178 W / Color: 1,327 W
	  • Maximum: 1,920 W or less
	• IM C8000
	  • Ready: 191 W
	  • During printing:
		EU/AP/CHN/TWN/KOR:
		• Pro C5300S
		  • Ready: 221 W
		  • During printing: B&W: 1,262 W / Color: 1,391 W
		  • Maximum: 3,840 W or less
		• Pro C5310S
		  • Ready: 228 W
		  • During printing: B&W: 1,450 W / Color: 1,570 W
		  • Maximum: 3,840 W or less
		NA:
		• Pro C5300S
		  • Ready: 248 W
		  • During printing: B&W: 1,264 W / Color: 1,369 W
		  • Maximum: 3,840 W or less
		• Pro C5310S
		  • Ready: 232 W
		  • During printing: B&W: 1,435 W / Color: 1,586 W
		  • Maximum: 3,840 W or less
		The power level when the main switch is turned off and the power cord is plugged into an outlet: 1 W or less

Item	IM C6500/C8000	Pro C5300S/C5310S
	B&W: 1,354 W / Color: 1,481 W • Maximum: 2,400 W or less The power level when the main switch is turned off and the power cord is plugged into an outlet: 1 W or less	
Power consumption (Complete system)	**EU/AP/CHN/TWN/KOR:** Maximum: 2,400 W or less **NA:** • IM C6500 Maximum: 1,920 W or less • IM C8000 Maximum: 2,400 W or less The complete system consists of the main unit, wide LCT, Interposer, Finisher SR4140, and cooling fan unit.	**EU/AP/CHN/TWN/KOR:** Maximum: 3,840 W or less **NA:** Maximum: 3,840 W or less The complete system consists of the main unit, wide LCT, Decurler unit, Twin interposer, and finisher bridge unit.
Dimensions (W x D x H)	750 × 880 × 1,225 mm (29.6 × 34.7 × 48.3 inches)	799 × 880 × 1,225 mm (31.5 × 34.7 × 48.3 inches) (excluding the control panel and the attention light)
Space for main unit (W × D)	1,557 × 1,265 mm (61.3 × 49.8 inches) (including the bypass tray and copy tray) W: When extended fully by extending the copy tray H: When the paper tray is pulled out	1,611 × 1,265 mm (63.4 × 49.8 inches) (including the bypass tray and copy tray W: When extended fully by extending the copy tray H: When the paper tray is pulled out
Weight	Approx. 250 kg (551.2 lb.)	Approx. 262 kg (577.7 lb.)
Noise emission (Sound power level: Main unit only)	IM C6500 • Stand-by: 33.8 dB (A) • Copying: B&W: 67.8 dB (A) / Color: 68.7 dB (A)	Pro C5300S • Stand-by: 33.7 dB (A) • Copying: B&W: 68.5 dB (A) / Color: 68.7 dB (A)

Item	IM C6500/C8000	Pro C5300S/C5310S
	IM C8000 • Stand-by: 33.7 dB (A) • Copying: B&W: 69.3 dB (A) / Color:70.3 dB (A)	Pro C5310S • Stand-by: 33.9 dB (A) • Copying: B&W: 69.6 dB (A) / Color: 70.0 dB (A)
Noise emission (Sound power level: Complete system)	IM C6500 • Stand-by: 52.3 dB (A) • Copying: 73.5 dB (A) IM C8000 • Stand-by: 51.6 dB (A) • Copying: 75.2 dB (A)	Pro C5300S • Stand-by: 49.4 dB (A) • Copying: 73.5 dB (A) Pro C5310S • Stand-by: 50.0 dB (A) • Copying: 75.2 dB (A)
Noise emission (Sound pressure level: Main unit only)	IM C6500 • Stand-by: 18.7 dB (A) • Copying: B&W: 55.5 dB (A) / Color: 55.8 dB (A) IM C8000 • Stand-by: 18.4 dB (A) • Copying: B&W: 57.0 dB (A) / Color: 57.0 dB (A)	Pro C5300S • Stand-by: 35.1 dB (A) • Copying: 58.6 dB (A) Pro C5310S • Stand-by: 34.8 dB (A) • Copying: 60.3 dB (A)
Noise emission (Sound pressure level: Complete system)	IM C6500 • Stand-by: 39.6 dB (A) • Copying: 59.6 dB (A) IM C8000 • Stand-by: 38.6 dB (A) • Copying: 61.8 dB (A)	Pro C5300S • Stand-by: 40.6 dB (A) • Copying: 64.9 dB (A) Pro C5310S • Stand-by: 41.8 dB (A) • Copying: 65.6 dB (A)
Laser Standard	Class 1 (This Unit falls under "class 1 laser product" based on JIS C 6802 (IEC 60825-1) Laser product safety regulation.)	

ADF Specifications

Items		Descriptions	Remarks
Type		Auto-duplex-scan sheet-through DF	Single-path duplex sheet-through DF
Supported Original Sizes	Simplex	A3 SEF - B6 SEF/LEF 11 x 17 SEF - $5^1/_2$ x $8^1/_2$ SEF/LEF	40 - 128 g/m^2 (10.7 to 47.3 lbs)
	Duplex	A3 SEF - A5 SEF/LEF 11 x 17 SEF - $5^1/_2$ x $8^1/_2$ SEF/LEF	52.3 - 128 g/m^2 (14.0 to 47.3 lbs)
Original Standard Position		Rear left corner, front side-up.	
Original Feed Order		From the top original.	

1.Specifications

Items		Descriptions	Remarks
Separation Method		Feed belt and separation roller	
Scanning Method		Sheet pass method (**Front:** White guide plate, **Back:** Color CIS + white roller)	
Placable Original Capacity		220 sheets (80 g/m^2, 20 lbs) Stack height: 25 mm or less.	250 sheets
CPM		500 mm/s (BW) 310.5 mm/s (Color)	
Scanning Throughput	Simplex	**Copy:** IM C6500/Pro C5300S: 65 ipm IM C8000/Pro C5310S: 80 ipm	LT LEF, A4 LEF 1 to 1 (BW/Color)
		Scan: 120 ipm (200 / 300dpi)	LT LEF, A4 LEF 1 to 1 (Color)
	Duplex	**Copy:** IM C6500/Pro C5300S: 65 ipm IM C8000/Pro C5310S: 80 ipm	LT LEF, A4 LEF 1 to 1 (BW/Color)
		Scan: 240 ipm (200 / 300 dpi)	LT LEF, A4 LEF 1 to 1 (Color)
Dimensions (W x D x H, mm)		587mm x 520 mm x 175 mm	
Weight		13.9 kg or less	
Power Source		DC 24V, DC 12V, DC 5V	Supplied from the main machine.
Power Consumption		60.0 W or less	

Supported Original Sizes

Paper Thickness		35kg 40.7 g/m^2 11lbs	40kg 46.5 g/m^2 12.5lbs	45kg 52.8 g/m^2 14lbs	55kg 64 g/m^2 17lbs	70kg 81.4 g/m^2 22lbs	90kg 105 g/m^2 28lbs	110kg 128 g/m^2 34lbs	Tracing paper TA, TE, TC	Remarks
Quantity		250 Sheets		250 Sheets		220 Sheets	150 Sheets	125 Sheets	1 Sheet	*1: Possible in simplex and duplex *2: Simplex only
Original Size	A3/A4	*2		*1		*1	*1	*1	*3	
	A5	*2		*1		*1	*1	*1	-	
	B4/B5	*2		*1		*1	*1	*1	*3	
	B6P	-		*2		*2	*2	*2	-	
	DLT	*2		*1		*1	*1	*1	-	
	LT	*2		*1		*1	*1	*1	-	

Paper Thickness		35kg	40kg	45kg	55kg	70kg	90kg	110kg	Tracing paper	Remarks
		40.7 g/m^2	46.5 g/m^2	52.8 g/m^2	64 g/m^2	81.4 g/m^2	105 g/m^2	128 g/m^2		
		11lbs	12.5lbs	14lbs	17lbs	22lbs	28lbs	34lbs	TA, TE, TC	
	HLT	*2		*1		*1	*1	*1	-	*3: SADF Simplex only
	F	*2		*1		*1	*1	*1	-	

Small Paper Feeding Unit Type M37

Item	Specifications
Supported original type	Check / Bill / Receipt etc.
Original size	Width:76 to 105mm Length:148 to 218mm
Original thickness	55 to 110 g/ m^2
Original tray capacity	50 sheets (55 g/ m^2) 44 sheets (70 g/ m^2) 30 sheets (110 g/ m^2)

Printer Spacifications

Item	IM C6500/C8000	Pro C5300S/C5310S
Printing speed	IM C6500: 65 pages/minute IM C8000: 80 pages/minute (A4 LEF, 8$^1/_2$ × 11 LEF, plain paper, one-side printing)	Pro C5300S: 65 pages/minute Pro C5310S: 80 pages/minute (A4 LEF, 8$^1/_2$ × 11 LEF, Paper Weight 2, one-side printing)
Resolution	200 dpi, 300 dpi, 400 dpi, 600 dpi, 1,200 dpi	
Printer language	Standard: PCL 5c/6, PostScript 3 Emulation, PDF Emulation, MediaPrint (JPEG, TIFF) Option: Genuine Adobe PostScript 3, IPDS, XPS	
Interface	Standard: • Ethernet (10BASE-T/100BASE-TX/1000BASE-T)	Standard: • Ethernet (10BASE-T/100BASE-TX/1000BASE-T)

Item	IM C6500/C8000	Pro C5300S/C5310S
	• USB2.0 (Type B) port • USB2.0 (Type A) port (on the control panel) • SD card slot (on the control panel) Option: • IEEE 1284 parallel interface • IEEE 802.11a/b/g/n wireless LAN interface • File format converter • Device Server option	• USB2.0 (Type B) port • USB2.0 (Type A) port (on the control panel) • SD card slot (on the control panel) Option: • IEEE 1284 parallel interface • IEEE 802.11a/b/g/n wireless LAN interface • File format converter
Network protocol	TCP/IP (IPv4, IPv6)	
USB interface	Transmission spec: USB 2.0 Standard Connectable device: Devices corresponding to USB 2.0 Standard	
Operating system	• Windows 7/8.1/10 • Windows Server 2008/2008 R2/2012/2012 R2/2016/2019 • macOS 10.12 or later	
Fonts	• PostScript 3/PDF Emulation, PCL 5c/6: 93 fonts • Genuine Adobe PostScript 3/PDF: 136 fonts • IPDS: 108 fonts	
Store function	• Total number of documents that can be stored: Up to 3,000 documents • Number of pages for each document that can be stored: Up to 3,000 pages • Total number of pages of all documents that can be stored: Up to 15,000 pages	

Scanner Spacifications

Scanning

Item	IM C6500/C8000	Pro C5300S/C5310S
Type	Full-color scanner	
Scan method	Flatbed scanning	
Image sensor type	CCD Image Sensor	
Scan type	Sheet, book, three-dimensional object	
Original sizes that can be scanned	• Length: 10–297 mm (0.4–11 inches) • Width: 10–432 mm (0.4–17 inches)	
Scan sizes automatically detectable from the exposure	**EU/AP/CHN/TWN/KOR** A3 SEF, A4, A5 LEF, B4 JIS SEF, B5 JIS	

Item	IM C6500/C8000	Pro C5300S/C5310S
glass	**NA** 11 × 17 SEF, 8 1/2 × 14 SEF, 8 1/2 × 13 2/5 SEF, 8 1/2 × 11, 5 1/2 × 8 1/2 LEF	
Scan sizes automatically detectable from the ADF	**EU/AP/CHN/TWN/KOR** A3 SEF, A4, A5, B4 JIS SEF, B5 JIS, B6 JIS, 11 × 17 SEF, 8 1/2 × 11 **NA** A3 SEF, A4, 11 × 17 SEF, 8 1/2 × 14 SEF, 8 1/2 × 13 2/5 SEF, 8 1/2 × 11, 7 1/4 × 10 1/2 SEF, 5 1/2 × 8 1/2, 10 × 14 SEF	
Scan speed (the machine equipped with the one-pass duplex scanning ADF)	When scanning one-sided originals (black and white, full color) 120 pages/minute When scanning two-sided originals (black and white, full color) 240 pages/minute When using the E-mail, Scan to Folder, WSD (Push Type), or Scan to Removable device (Original size: A4 LEF/8 1/2 × 11, Resolution: 300 dpi) • Black and white Original Type: B & W two-value, Compression (MMR): Compressed, ITU-T No1 Chart • Full Color Original type: Text/Photo, Compression (Gray Scale/Full Color): Default, Original Chart Scanning speed differs depending on the operating environment of the machine and computer, scan settings, and the content of originals.	
Tone	Black & White: 2 tones Full Color/Gray Scale: 256 tones	
Basic scanning resolution	200 dpi	
Image compression type for black and white (two-value)	TIFF (MH, MR, MMR, JBIG2)	
Image compression type for gray scale/full color	JPEG	
Interface	Standard: • Ethernet (10BASE-T/100BASE-TX/1000BASE-T) • USB 2.0 (Type A) port (on the control panel) • SD card slot (on the control panel) Option: • IEEE 802.11a/b/g/n wireless LAN interface	

Item	IM C6500/C8000	Pro C5300S/C5310S
Network protocol	TCP/IP	
WSD	Supported	
DSM	Supported*1	

*1 The function can be used only in Scanner (Classic).

E-mail transmission

Item	IM C6500/C8000	Pro C5300S/C5310S
Scanning resolution	100 dpi, 200 dpi, 300 dpi, 400 dpi, 600 dpi	
Protocol*1	POP, SMTP*2, IMAP4	
Output format	TIFF, JPEG, PDF, High Compression PDF, PDF/A, Searchable PDF*3*4	

*1 Supporting Web mail transmission

*2 Supporting SMTP over SSL

*3 To perform OCR, the optional OCR unit is required.

*4 The number of characters that can be scanned optically is about 40,000 characters per page.

Scan to Folder

Item	IM C6500/C8000	Pro C5300S/C5310S
Scanning resolution	100 dpi, 200 dpi, 300 dpi, 400 dpi, 600 dpi	
Protocol	SMB, FTP • You can use SMB protocol (139/TCP, 137/UDP) or CIFS protocol (445/TCP) for sending folders with SMB. • The Scan to Folder function with SMB protocol (139/TCP, 137/UDP) is enabled under NetBIOS over TCP/IP environment only. • You cannot use the Scan to Folder function with SMB under NetBEUI.	
Output format	TIFF, JPEG, PDF, High Compression PDF, PDF/A, Searchable PDF*1*2	

*1 To perform OCR, the optional OCR unit is required.

*2 The number of characters that can be scanned optically is about 40,000 characters per page.

Network TWAIN Scanner

Item	IM C6500/C8000	Pro C5300S/C5310S
Scanning resolution	100–1,200 dpi*1	
Protocol	TCP/IP	
Operating system	Windows 7/8.1/10 Windows Server 2008/2008 R2/2012/2012 R2/2016/2019 (TWAIN scanner runs in 32-bit compatible mode on a 64-bit operating system, so TWAIN scanner is not compatible with 64-bit applications. Use 32-bit applications. IC	

Item	IM C6500/C8000	Pro C5300S/C5310S
	card Authentication System is not compatible with 64-bit operating system.)	

*1 The maximum resolution depends on the scan size.

WIA scanner

Item	IM C6500/C8000	Pro C5300S/C5310S
Scanning resolution (Main scanning × Sub-scanning)	100–1,200 dpi*1	
Protocol	TCP/IP	
Operating system	Windows 7/8.1/10 Windows Server 2008/2008 R2/2012/2012 R2/2016/2019 (WIA scanner can function under both 32- and 64-bit operating systems.)	

*1 The maximum resolution depends on the scan size.

Supported Paper Sizes

Original Size Detection

Size (W x L) [mm]	NA		EU/AP	
	Book	ADF	Book	ADF
A3 SEF (297 x 420)	-	Y	Y*4	Y
B4 SEF (257 x 364)	-	-	Y*4	Y
A4 SEF (210 x 297)	Y*5	Y	Y*4*5	Y
A4 LEF (297 x 210)	Y*5	Y	Y*4*5	Y
B5 SEF (182 x 257)	-	-	Y*4	Y
B5 LEF (257 x 182)	-	-	Y*4	Y
A5 SEF (148 x 210)	-	-	Y*2*4	Y
A5 LEF (210 x 148)	-	-	Y*4	Y
B6 SEF (128 x 182)	-	-	-	Y
B6 LEF (182 x 128)	-	-	-	Y
DLT SEF (11" x 17")	Y	Y*Da	-	Y*De
LG SEF (8.5" x 14")	Y	Y*Db	-	-
Oficio SEF (9.5" x 13.4")	Y	Y*Sb	-	-
LT SEF (8.5" x 11")	Y*5	Y*Dc	Y*5	Y*Df
LT LEF (11" x 8.5")	Y*5	Y*Dd	Y*5	Y*Dg
HLT SEF (5.5" x 8.5")	Y*2	Y	-	-
HLT LEF (8.5" x 5.5")	-	Y	-	-
F SEF (8" x 13")	-	-	Y*Sh	Y*Sh
Foolscap SEF (8.5" x 13")	-	-	Y*Dh	Y*Dh
Folio SEF (8.25" x 13")	-	-	Y*Sh	Y*Sh
11" x 15" SEF (11" x 15")	-	Y*Sa	-	-
10" x 14" SEF (10" x 14")	-	Y	-	-
(8" x 10" SEF (8" x 10")	-	Y*Sc	-	-
US EXE SEF (7.25" x 10.5")	-	Y	-	-
US EXE LEF (10.5 x 7.25")	-	Y*Sd	-	-
8K SEF (267 x 390)	-	-	Y*4	Y*Se
16K SEF (195 x 267)	-	-	Y*4	Y*Sf
16K LEF (267 x 195)	-	-	Y*4	Y*Sg

Y: Available

-: Not available

Sizes with letters (a to h) means only one of the sizes with the same letter can be selected by size detection. "D" is for default set sizes, and when setting "S" sizes for size detection from SP mode, "D" sizes can no longer be detected.

(*2) For detected originals smaller then HLT/A5 size, with SP mode either "Detect as HLT/A5" or "Detect as Unknown" can be selected. (Default is "Detect as unknown")

(*4) Switch Book scanner original detection between ""K"" series and ""A/B"" series from SP mode. (Cannot set both to detect, but 8K/16K detect can be set from SP mode)

- 8K SEF -> Switch between A3, B4 SEF
- 16K SEF -> Switch between A4, A5, B5 SEF
- 16K LEF -> Switch between A4, A5, B5 LEF - Cannot switch only either size.

(*5) Can be selected by switching A4/LT from SP mode:

- Standard detect (default)
- When placing A4/LT size LEF, detect as A4 LEF. When placing SEF, detect as LT SEF.
- When placing A4/LT size LEF, detect as LT LEF. When placing SEF, detect as A4 SEF.

Paper Feed

Mainframe

Size (W x L) [mm]	NA				EU/AP			
	Tray 1 (Tandem)	Tray 1 (A3/11 x 17)	Tray 2/3	Bypass	Tray 1 (Tandem)	Tray 1 (A3/11 x 17)	Tray 2/3	Bypass
A3 SEF (297 x 420)	-	K	G[2]	E	-	H	A[2]	J
A4 SEF (210 x 297)	-	K	A	E	-	K	A	J
A4 LEF (297 x 210)	K	K	G[1]	E	H	K	A[1]	J
A5 SEF (148 x 210)	-	-	B	E	-	-	B	J
A5 LEF (210 x 148)	-	-	G[6]	E	-	-	A[6]	J
A6 SEF (105 x 148)	-	-	B	E	-	-	B	J
B4 SEF (257 x 364)	-	K	G[3]	E	-	K	A[3]	J
B5 SEF (182 x 257)	-	-	A	E	-	-	A	J
B5 LEF (257 x 182)	-	-	G[4]	E	-	-	A[4]	J
B6 SEF (128 x 182)	-	-	B	E	-	-	B	J

Size (W x L) [mm]	NA				EU/AP			
	Tray 1 (Tandem)	Tray 1 (A3/11 x 17)	Tray 2/3	Bypass	Tray 1 (Tandem)	Tray 1 (A3/11 x 17)	Tray 2/3	Bypass
DLT SEF (11" x 17")	-	H	A[2]	J	-	K	G[2]	E
Legal (8.5" x 14")	-	K	A[3]	G[1]	-	K	G[3]	E
Foolscap (8.5" x 13")	-	-	B	E	-	K	B	E
LT SEF (8.5" x 11")	[H]	K	A	J[1]	K	K	A	E
LT LEF (11" x 8.5")	-	K	A[1]	J	-	-	G[1]	E
Gov. LG SEF (8.25" x 14")	-	-	B	E	-	-	B	E
Folio SEF (8.25" x 13")	-	-	B	E	-	-	B	E
F/GL (8" x 13")	-	-	B	E	-	-	B	E
GLT SEF (8" x 10.5")	-	-	-	-	-	-	-	-
GLT LEF (10.5" x 8")	-	-	-	-	-	-	-	-
Eng Quatro SEF (8" x 10")	-	-	B	E	-	-	B	E
Eng Quatro LEF (10" x 8")	-	-	-	-	-	-	-	
Executive SEF (7.25" x 10.5")	-	-	B	E	-	-	B	E
Executive LEF (10.5" x 7.25")	-	-	A[4]	E	-	-	G[4]	E
HLT SEF (5.5" x 8.5")	-	-	B	J	-	-	A	E
HLT LEF (8.5" x 5.5")	-	-	A[6]	J	-	-	G[6]	E
SRA3 SEF (420 x 320)	-	-	G[5]	J	-	-	A[5]	J
SRA4 SEF	-	-	B	E	-	-	B	E
SRA4 LEF	-	-	B	E	-	-	B	E

Size (W x L) [mm]	NA				EU/AP			
	Tray 1 (Tandem)	Tray 1 (A3/11 x 17)	Tray 2/3	Bypass	Tray 1 (Tandem)	Tray 1 (A3/11 x 17)	Tray 2/3	Bypass
Com10 (104.8 x 241.3)	-	-	B	E	-	-	B	E
Monarch (98.4 x 190.5)	-	-	-	E	-	-	-	E
C5 (162 x 229)	-	-	B	E	-	-	B	E
DL (110 x 220)	-	-	B	E	-	-	B	E
8K SEF (267 x 390)	-	-	B	-	-	-	B	-
16K SEF (195 x 267)	-	-	B	-	-	-	B	-
16K LEF (267 x 195)	-	-	B	-	-	-	B	-

A: Automatic paper size detection, and selectable from "Paper size button"

B: Selectable from "Paper size button" in User Tools

G: Paper size detected automatically can be changed from SP mode

(Automatic detection of A^1 and G^1 is exclusive to each other. In order to print G^1, paper setting should be changed from User Tools.)

E: Selectable from User Tools > Paper size selection Copier screen

J: Automatic detection or selected from "Bypass tray"

H: Default setting when shipped

K: Selectable from SP mode or printer driver.

Q: Paper size detected automatically depending on the region

-: Not available

LCT

Size (W x L) [mm]	NA				EU/AP			
	RT4060	RT4070/ RT5140	BY5020	RT5120	RT4060	RT4070/ RT5140	BY5020	RT5120
A3 SEF (297 x 420)	-	A	A	A	-	A	A	A
A4 SEF (210 x 297)	-	G^1	Q^1	Q^1	-	A^1	A^1	A^1
A4 LEF (297 x 210)	K	A	A	A	H	A	A	A
A5 SEF (148 x	-	A	A	A	-	A	A	A

1.Specifications

Size (W x L) [mm]	NA				EU/AP			
	RT4060	RT4070/ RT5140	BY5020	RT5120	RT4060	RT4070/ RT5140	BY5020	RT5120
210)								
A5 LEF (210 x 148)	-	G[2]	Q[2]	Q[2]	-	A[2]	A[2]	A[2]
A6 SEF (105 x 148)	-	B	A	B	-	B	A	B
B4 SEF (257 x 364)	-	A	A	A	-	A	A	A
B5 SEF (182 x 257)	-	G[3]	Q[3]	Q[3]	-	G[3]	Q[3]	Q[3]
B5 LEF (257 x 182)	K	A	A	Q[4]	K	A	A	Q[4]
B6 SEF (128 x 182)	-	B	B	B	-	B	B	B
DLT SEF (11" x 17")	-	A	A	A	-	A	A	A
Legal (8.5" x 14")	-	B	B	A	-	B	B	A
Foolscap (8.5" x 13")	-	B	B	B	-	B	B	B
LT SEF (8.5" x 11")	H	A[1]	A[1]	A[1]	K	G[1]	Q[1]	Q[1]
LT LEF (11" x 8.5")	-	A	A	A	-	A	A	A
Gov. LG SEF (8.25" x 14")	-	B	B	B	-	B	B	B
Folio SEF (8.25" x 13")	-	B	B	B	-	B	B	B
F/GL (8" x 13")	-	A[3]	A[3]	A[3]	-	A[3]	A[3]	A[3]
GLT SEF (8" x 10.5")	-	-	-	-	-	-	-	-
GLT LEF (10.5" x 8")	-	-	-	-	-	-	-	-
Eng Quatro SEF (8" x 10")	-	-	B	B	-	-	B	B
Eng Quatro LEF	-	-	-	-	-	-	-	-

Size (W x L) [mm]	NA				EU/AP			
	RT4060	RT4070/ RT5140	BY5020	RT5120	RT4060	RT4070/ RT5140	BY5020	RT5120
(10" x 8")								
Executive SEF (7.25" x 10.5")	-	B	B	B	-	B	B	B
Executive LEF (10.5" x 7.25")	-	B	B	B	-	B	B	B
HLT SEF (5.5" x 8.5")	-	A	A	A	-	A	A	A
HLT LEF (8.5" x 5.5")	-	A[2]	A[2]	A[2]	-	G2	Q[2]	Q[2]
SRA3 SEF (420 x 320)	-	G[4]	Q[5]	A	-	A4	A[5]	A
SRA4 SEF	-	B	B	B	-	B	B	B
SRA4 LEF	-	B	B	A	-	B	B	A
Com10 (104.8 x 241.3)	-	B	-	-	-	B	-	-
Monarch (98.4 x 190.5)	-	-	-	-	-	-	-	-
C5 (162 x 229)	-	B	B	-	-	B	B	-
DL (110 x 220)	-	B	B	-	-	B	B	-
8K SEF (267 x 390)	-	B	B	B	-	B	B	B
16K SEF (195 x 267)	-	B	B	B	-	B	B	B
16K LEF (267 x 195)	-	B	B	B	-	B	B	B

Paper Exit

Size (W x L) [mm]	Copy tray	Finisher SR5090/SR5100/SR4150/SR4160		Finisher SR5110/SR5120/SR4140		Stacker SK5040		Trimmer TR5050
		Proof tray	Shift tray	Upper shift tray	Lower shift tray	Stack	Proof	Side trim
A3 SEF (297 x	A	A	A	A	A	A	A	A

1.Specifications

Size (W x L) [mm]	Copy tray	Finisher SR5090/SR5100/SR4150/SR4160		Finisher SR5110/SR5120/SR4140		Stacker SK5040		Trimmer TR5050
		Proof tray	Shift tray	Upper shift tray	Lower shift tray	Stack	Proof	Side trim
420)								
A4 SEF (210 x 297)	A	A	A	A	A	A	A	A
A4 LEF (297 x 210)	A	A	A	A	A	A	A	
A5 SEF (148 x 210)	A	A	A	A	A	A	A	
A5 LEF (210 x 148)	A	A	A	A	A	A	A	
A6 SEF (105 x 148)	A	A	B	A	A		A	
B4 SEF (257 x 364)	A	A	A	A	A	A	A	A
B5 SEF (182 x 257)	A	A	A	A	A	A	A	A
B5 LEF (257 x 182)	A	A	A	A	A	A	A	
B6 SEF (128 x 182)	A	A	A	A	A		A	
DLT SEF (11" x 17")	A	A	A	A	A	A	A	A
Legal SEF (8.5" x	Y	A	A	A	A	A	A	A

Size (W x L) [mm]	Copy tray	Finisher SR5090/SR5100/SR4150/SR4160		Finisher SR5110/SR5120/SR4140		Stacker SK5040		Trimmer TR5050
		Proof tray	Shift tray	Upper shift tray	Lower shift tray	Stack	Proof	Side trim
14")								
Foolscap SEF (8.5" x 13")	Y	A	A	A	A	A	A	A
LT SEF (8.5" x 11")	Y	A	A	A	A	A	A	A
LT LEF (11" x 8.5")	Y	A	A	A	A	A	A	
Government LG SEF (8.25" x 14")	Y	A	A	A	A	A	A	A
Folio SEF (8.25" x 13")	Y	A	A	A	A	A	A	A
F/GL SEF (8" x 13")	Y	A	A	A	A	A	A	A
G LT SEF (8" x 10.5")	Y	A	A	A	A	A	A	A
G LT LEF (10.5" x 8")	Y	A	A	A	A	A	A	
Eng Quatro SEF (8" x 10")	Y	A	A	A	A	A	A	
Eng Quatro LEF (10" x 8")	Y	A	A	A	A	A	A	
Executive	Y	A	A	A	A	A	A	A

1.Specifications

Size (W x L) [mm]	Copy tray	Finisher SR5090/SR5100/SR4150/SR4160		Finisher SR5110/SR5120/SR4140		Stacker SK5040		Trimmer TR5050
		Proof tray	Shift tray	Upper shift tray	Lower shift tray	Stack	Proof	Side trim
SEF (7.25" x 10.5")								
Executive LEF (10.5" x 7.25")	Y	A	A	A	A	A	A	
HLT SEF (5.5" x 8.5")	Y	A	A	A	A	A	A	
HLT LEF (8.5" x 5.5")	Y	A	A	A	A	A	A	
8K SEF (267 x 390)	Y	A	A	A	A	A	A	A
16K SEF (195 x 267)	Y	A	A	A	A	A	A	A
16K LEF (267 x 195)	Y	A	A	A	A	A	A	-
12" x 18" SEF	Y	A	A	A	A	A	A	A
11" x 15" SEF	Y	A	A	A	A	A	A	A
11" x 14" SEF	Y	A	A	A	A	A	A	A
10" x 15" SEF	Y	A	A	A	A	A	A	A
10" x 14" SEF	Y	A	A	A	A	A	A	A

A: Can be fed.

B: Can be fed, but the output quality is not guaranteed.

Software Accessories

Printer Drivers

Operating System*1	Printer Language		
	RPCS	PostScript 3	PCL 6
Windows 7 *2	Supported	Supported	Supported
Windows 8.1 *3	Supported	Supported	Supported
Windows 10 *4	Supported	Supported	Supported
Windows Server 2008 *5	Supported	Supported	Supported
Windows Server 2012 *6	Supported	Supported	Supported
Windows Server 2016 *7	Supported	Supported	Supported
Windows Server 2019 *8	Supported	Supported	Supported
OS X/macOS *9	Not available	Not available	Supported

*1 Windows operating system supports both versions (32/64 bit).

*2 Microsoft Windows 7 Home Premium/Professional/Ultimate/Enterprise

*3 Microsoft Windows 8.1/Pro/Enterprise

*4 Microsoft Windows 10 Home/Pro/Pro for Workstation/Enterprise/Education

*5 Windows Server 2008 Standard/Enterprise、Windows Server 2008 R2 Standard/Enterprise

*6 Windows Server 2012 Foundation/Essentials/Standard、Windows Server 2012 R2 Foundation

*7 Windows Server 2016 Standard/Essentials/Datacenter/MultiPoint Premium Server

*8 Windows Server 2019 Standard/Datacenter/Essentials

*9 OS X/macOS 10.11 or later

Scanner and LAN-Fax Drivers

Operating System	TWAIN*1	PC-FAX
Windows 7	Supported	Supported
Windows 8.1	Supported	Supported
Windows 10	Supported	Supported
Windows Server 2008/2008 R2	Supported	Supported
Windows Server 2012/2012 R2	Supported	Supported
Windows Server 2016	Supported	Supported
Windows Server 2019	Supported	Supported
OS X	Not available	Not available

*1 TWAIN scanner runs on a 64-bit operating system, but is not compatible with 64-bit applications. Use it with 32-bit applications.

Optional Equipment

LCIT RT4060

Item	Specification
Paper Size:	A4 LEF, B5 JIS LEF, $8^1/_2$ x 11 SEF
Paper Thickness:	52.3 – 216.0 g/m^2 (14.0 lb. Bond – 79.9 lb. Cover)
Capacity:	4,400 sheets
Power Source:	Draw from main unit
Power Consumption:	50W or less
Weight:	Approx. 23 kg (50.7 lb.)
Dimensions (W x D x H):	352 x 540 x 625 mm (13.9 x 21.3 x 24.7 inches)

LCIT RT5140/RT4070

Note

- Pro C5300S/C5310S: LCIT RT5140
- IM C6500/C8000: LCIT RT4070

Item	Specification
Paper Size:	• A3 SEF, A4, A5, B4 JIS SEF, B5 JIS, 11 x 17 SEF, $8^1/_2$ x 11, 8 x 13 SEF, $5^1/_2$ x $8^1/_2$, SRA3 SEF, 12 x 18 SEF, A6 SEF*1, B6 JIS SEF*1, $8^1/_2$ x 14 SEF, $8^1/_2$ x 13 SEF, $8^1/_4$ x 14 SEF, $8^1/_4$ x 13 SEF, $7^1/_4$ x $10^1/_2$, 8K SEF, 16K, 11 x 15 SEF, 11 x 14 SEF, 10 x 15 SEF, 10 x 14 SEF, 13 x $19^1/_5$ SEF, 13 x 19 SEF, $12^3/_5$ x $19^1/_5$ SEF, $12^3/_5$ x $18^1/_2$ SEF, 13 x 18 SEF, SRA4, 226 x 310 mm*2, 310 x 432 mm SEF*2, $8^1/_2$x $13^2/_5$ SEF, $4^1/_5$ x $5^1/_2$ SEF*1*2 • Custom size*1: Vertical: 100.0–330.2 mm (3.94–13.00 inches) Horizontal: 139.7–487.7 mm (5.50–19.20 inches) *1 The postcard side fences are required to load paper that is between 100.0 and 139.2 mm (3.94 and 5.48 inches). *2 LCIT RT5140 only.
Paper Thickness:	• ILCIT RT4070 52.3 – 300.0 g/m^2 (14.0 lb. Bond – 165.0 lb. Index) • LCIT RT5140 52.3 – 360.0 g/m^2 (14.0 lb. Bond – 198.0 lb. Index)
Capacity:	2,200 sheets
Power Source:	Draw from main unit
Power Consumption:	85 W or less
Weight:	Approx. 83 kg (183.0 lb.)

Item	Specification
Dimensions (W x D x H):	869 x 730 x 658 mm (34.3 x 28.8 x 26.0 inches)

Bridge Unit BU5030

Item	Specifications
Configuration:	Console type, Horizontal transport unit
Power source:	5V/24V
MAX power consumption:	85 W or less
Dimensions (W x D x H):	Unit only: 302 × 730 × 1,000 mm (11.9 × 28.7 × 39.4 inches) (Except protruding parts) When installed: 227 × 730 × 1,000 mm (8.9 ×28.7 × 39.4 inches) (Except protruding parts)
Weight:	Approx. 41 kg (90.4 lb.)

Vacuum Feed LCIT RT5120

Note

- Only Pro C5300S/C5310S

Item	Specifications
Configuration	Console, attached to the right side of the main machine
Paper weight	Tray 1: 52.3 to 360.0g/m^2 Tray 2: 52.3 to 360.0g/m^2
Paper size	Auto Detectable Paper Sizes: A3 SEF, A4, A5, B4 SEF, B5, 11×17 SEF, $8^1/_2$×14 LEF, $8^1/_2$×11 LEF, $5^1/_2$×$8^1/_2$ SEF, 12×18 SEF, 13×$19^1/_5$ SEF, SRA3 SEF, SRA4 LEF Paper sizes that need to be specified: A6 SEF, B6 SEF, $8^1/_2$×13 SEF, $8^1/_2$×11 SEF, $8^1/_4$×14 SEF, $8^1/_4$×13 SEF, 8×13 SEF, 8×10 SEF, $7^1/_4$×$10^1/_2$, $5^1/_2$×$8^1/_2$ LEF, 8K SEF, 16K, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, 13×19 SEF, $12^3/_5$×$19^1/_5$ SEF, $12^3/_5$×$18^1/_2$ SEF, 13×18 SEF, SRA4 SEF, $8^1/_2$×$13^2/_5$ SEF, $4^1/_5$×$5^1/_2$ SEF Custom size: Width: 100mm to 330.2mm

Item	Specifications
	Length: 39.7mm to 487.7mm
Paper tray capacity	Tray 1: 2440 sheets Tray 2: 2440 sheets Paper thickness: 0.1 mm
Power source	AC100 to 120V±10%
Power consumption	1000W
Dimensions (W x D x H)	1,024mm x 730mm x1,000mm Excluding protruding parts
Weight	Less than 255kg Excluding accessories

Multi Bypass Tray BY5020

Note

- Only Pro C5300S/C5310S

Item	Specification
Configuration	Mounted on top of the LCT
Tray	Single tray with extension
Tray capacity	550 sheets (Normal Paper)
Paper size	A3 SEF, A4, A5, A6 SEF, B4 SEF, SEF, B6 SEF, 11×17 SEF, $8^1/_2$×14 SEF, $^1/_2$×13 SEF, $8^1/_2$×11, $8^1/_4$×14 SEF, $8^1/_4$×13 SEF, 8×13 SEF, 8×$10^1/_2$, 8×10, $7^1/_4$×$10^1/_2$, $5^1/_2$×$8^1/_2$, 182×210 mm, 170×210 mm, 210×340 SEF, Postcard SEF, 8K SEF, 16K, 12×18 SEF, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, 13×$19^1/_5$ SEF, 13×19 SEF, $12^3/_5$×$19^1/_5$ SEF, $12^3/_5$×$18^1/_2$ SEF, 13×18 SEF, SRA3 SEF, SRA4 **Custom size:** SEF: 100 to 330.2 mm LEF: 139.7 to 487.7 mm
Paper weight	52.3 to 216.0g/m^2
Paper size adjustment	Universal size tray with adjustable size fences for width adjustment, one end fence for length adjustment
Power source	DC 24V±10% 5±V5% (Main machine to LCT)
Power consumption	Less than 70W
Dimensions (w	690 × 561 × 210 mm (27 × 22 × 8.3 inches)

Item	Specification
× d × h)	
Weight	Approx. 20 kg (44 lb.)
Paper remains detection	4 sensors (4 steps) at 500, 450, 250, 50 sheets remaining (accuracy ±50 sheets with paper 0.11 mm thick), displayed on the main machine operation panel
Jam handling	Paper tray slides open for jam removal
Jam reset	Paper tray opening and closing

Vacuum Feed Banner Sheet Tray Type S9

Note

- Only Pro C5300S/C5310S

Item	Specifications	Notes
Paper capacity	800 sheets Paper thickness: 0.1 mm	
Paper Thickness	52.3 to 360.0g/m^2	487.8mm or more: up to 300 g/m^2
Paper size	Length: 420mm to 700mm Width: 210mm to 330.2mm	Require the installation of vacuum feed banner sheet tray to the exit tray side.
Tray	1	When linked, it connects to the most upstream of the vacuum feed LCIT RT5100.
Output Paper Capacity	200 sheets Paper thickness: 0.1 mm	Install the extension tray to the shift tray of the finisher.
Dimensions (W×D×H)	1,310mm x 730mm x 1,000mm This option only: 286mm x 540mm x 294mm	
Weight	7kg or less	

Copy Tray Type M42/M26

Note

- Pro C5300S/C5310S: Copy Tray Type M26
- IM C6500/C8000: Copy Tray Type M42

Item	Specification
Paper Size:	Paper width: 90 - 330.2 mm Paper length: 139.7 - 1260 mm
Paper Thickness:	• Copy Tray Type M42

Item	Specification
	52.3 – 300.0 g/m^2 (14.0 lb. Bond – 165.0 lb. Index) • Copy Tray Type M26 52.3 – 360.0 g/m^2 (14.0 lb. Bond – 198.0 lb. Index)
Paper capacity (80 g/m^2, 20 lb. Bond):	500 sheets
Weight:	Approx. 2.8 kg (6.1 lb.)
Dimensions (W x D x H):	350 × 500 × 192 mm (13.7 × 19.6 × 7.5 inches)

Decurl Unit DU5080

Note

- Only Pro C5300S/C5310S

Item	Specification
Paper Size:	A3 SEF, A4 LEF/SEF, A5 LEF/SEF, A6 SEF, B4 JIS SEF, B5 JIS LEF/SEF, B6 JIS SEF, 11 × 17 SEF, 8.5 × 14 SEF, 8.5 × 13 SEF, 8.5 × 11 LEF/SEF, 8.25 × 14 SEF, 8.25 × 13 SEF, 8 × 13 SEF, 8 × 10 SEF, 7.25 × 10.5 LEF/SEF, 5.5 × 8.5 LEF/SEF, 4.125 × 9.5 SEF, 3.875 × 7.5 SEF, C5 Env LEF/SEF, C6 Env SEF, DL Env SEF, 8K SEF, 16K LEF/SEF, 12 × 18 SEF, 11 × 15 SEF, 11 × 14 SEF, 10 × 15 SEF, 10 × 14 SEF, 13 × 19.2 SEF, 13 × 19 SEF, 12.6 × 19.2 SEF, 12.6 × 18.5 SEF, 13 × 18 SEF, SRA3 SEF, SRA4 LEF/SEF, 226 × 310 mm LEF/SEF, 310 × 432 mm SEF, 8.5 × 13.4 SEF, custom size
Paper Thickness:	52.3 – 360.0 g/m^2
Power Source:	Draw from main unit
Power Consumption:	30W or less
Weight:	Approx. 30 kg (66.2 lb.)
Dimensions (W x D x H):	170 × 730 × 1010 mm (6.7 × 28.8 × 39.7 inches)

Buffer Pass Unit Type S9

Note

- Only Pro C5300S/C5310S

Item	Specification	Remarks
Paper Size:	A3 SEF, A4, A5, A6 SEF, B4 SEF, B5, B6 SEF, 11 x 17 SEF, 8.5 x 14 SEF, 8.5 x 11, 8 x 13 SEF, 7.25 x 10.5, 5.5 x 8.5 SEF, 8K SEF, 16K, 12 x 18 SEF, 11 x 15 SEF, 11 x 14 SEF, 10 x 15 SEF, 10 x 14 SEF, 13 x 19.2 SEF, 13 x 19 SEF, 12.6 x 19.2 SEF, 12.6 x 18.5 SEF, 13 x 18 SEF, SRA3 SEF,	100 x 139.7 mm - 330 x 1260 mm (4.0 x 5.5 inches - 12.9 x 49.6 inches) Subject to

Item	Specification	Remarks
	SRA4, Postcard (SEF), Custom size	specifications of the main machine.
Paper Thickness:	52.3 to 360.0 g/m^2 (14.0 lb. Bond to 198.0 lb. Index)	
Power Source:	EU/AP/CHN/KOR: 220–240 V, 1 A, 50/60 Hz NA/TWN: 100–120 V, 3 A, 60 Hz	A separate power source is required.
Power Consumption:	200 W or less	
Weight:	approx. 92kg (202.9 lb.)	
Dimensions (W x D x H):	330 x 725 x 980 mm (13.0 x 28.6 x 38.6 inches)	

Multi-Folding Unit FD4010

Item		Specification
Folding Methods:		Z-Folding, Half Fold, Letter Fold-in, Letter Fold-out
Paper Size:	Fold	• With Z-fold: A3 SEF, A4 SEF, B4 JIS SEF, 11 x 17 SEF, 8.5 x 14 SEF, 8.5 x 11 SEF, 8K SEF, 12 x 18 SEF, 8.5 x 13.4 SEF • With Half Fold: A3 SEF, A4 SEF, B4 JIS SEF, B5 JIS SEF, 11 x 17 SEF, 8.5 x 14 SEF, 8.5 x 11 SEF, 8K SEF, 12 x 18 SEF, 13 x 19.2 SEF, 13 x 19 SEF, 12.6 x 19.2 SEF, 12.6 x 18.5 SEF, 13 x 18 SEF, SRA3 SEF, SRA4 SEF, 8.5 x 13.4 SEF • With Letter Fold-in: A3 SEF, A4 SEF, 11 x 17 SEF, 8.5 x 14 SEF, 8.5 x 11 SEF, 8.5 x 13.4 SEF • With Letter Fold-out: A3 SEF, A4 SEF, B4 JIS SEF, 11 x 17 SEF, 8.5 x 14 SEF, 8.5 x 11 SEF, 8.5 x 13.4 SEF
	Multiple sheets	• With Letter Fold-in, Letter Fold-out: A4 SEF, 8.5 x 11 SEF
Paper Thickness:	Fold	64.0 to 105.0 g/m^2 (17.1–28.0 lb. Bond)
	Multiple sheets	64.0 to 80.0 g/m^2 (17.1–21.3 lb. Bond)
Power Source:		• EU/AP/CHN/KOR 220–240 V, 50/60 Hz • NA/TWN

Item	Specification
	100–120 V, 50/60 Hz (A separate power source is required.)
Power Consumption:	60W or less
Weight:	45 kg (99.2 lb.) or less
Dimensions (W x D x H):	209 x 730 x 980 mm (8.2 x 28.8 x 38.6 inches) (Except protruding parts)
Tray Paper Capacity (80 g/m^2):	With Z-fold: Not available With Letter Fold-in, Fold-out: 30 or more
Tray Full Detection:	Available

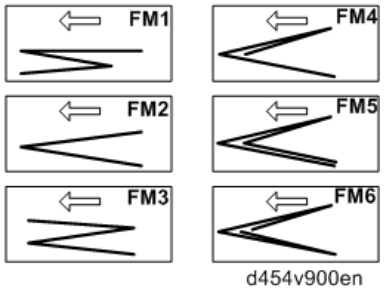
Multi-folding Unit FD5020/FD4020

Note

- Pro C5300S/C5310S: Multi-folding Unit FD5020
- IM C6500/C8000: Multi-folding Unit FD4020

General

Item	Specification	
Operating Environment:	Temperature and humidity ranges: Same as main machine.	
Service Life:	Expected: 5 years or 60,000 K (A4 LEF)	
Paper Weight:	40 to 300 g/m^2	
Speed:	Straight-Through	100 to 758 mm/s
	Folding	169 to 758 mm/s
Straight-Through Feed:	Size	Postcard to 13x19.2"
	Type	Used paper: A3, A4, B4, B5 OHP: A4, B5 Tap paper: A4 LEF, LT LEF
Folding Methods:	6 methods (FM1 to FM6) • FM1: Z-Folding • FM2: Half Fold • FM3: Letter Fold-out • FM4: Letter Fold-in • FM5: Double Parallel Fold • FM6: Gate Fold	

Item	Specification
	

Paper Sizes (Straight Through):	---	Postcard to 13 x 19.2 in.
Paper Sizes & Weight (Folding):	FM1	A3, B4, DLT, LG, A4, LT, 12x18", 8-kai
	FM2	A3, B4, DLT, LG, A4, B5, LT 12x18", 12.6x18.5", 12.6x19.2", 13x18", 13x19", 13x19.2", 226x310 mm, 310x432 mm, SRA3, SRA4, 8-kai **(64 to 105 g/m^2)**
	FM3	A3, B4, DLT, LG, A4, LT, B5, 12x18", 8-kai **(64 to 80 g/m^2)**
	FM4	
	FM5	
	FM6	
Multiple Folding:	FM1	Not allowed
	FM2	Max. 3 (64 to 80 g/m^2 only)
	FM3	Max. 3 (64 to 80 g/m^2 only)
	FM4	Max. 3 (64 to 80 g/m^2 , B4, A4, LT, B5 only)
	FM5	Not allowed
	FM6	
Line Speed (Only FM1 Z-Folded paper can exit downstream):		
No Fold	350 mm/sec. to top tray To downstream: Same as main machine.	
FM1	758 mm/sec. to top tray (paper < 355.6 mm long) 450 mm/sec. to top tray (paper < 355.6 mm long) To downstream: Same as main machine.	
FM2	1 Sheet: Same as main machine 2-3 Sheets: 454 mm/sec. 758 mm/sec. to top tray (paper <355.6 mm long) 350 mm/sec. to top tray (paper < 279.4 <355.6 mm long) 250 mm/sec. to top tray (paper < 279.4 mm long)	

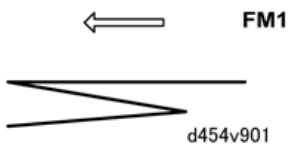
FM3 FM4	1 Sheet: Same as main machine 2-3 Sheets: 454 mm/sec. to top tray 350 mm/sec. to top tray (paper < 420 mm long) 250 mm/sec. to top tray (paper < 420 mm long)		
FM5	1 Sheet: Same as main machine 350 mm/sec. to top tray (paper < 420 mm long) 250 mm/sec. to top tray (paper < 420 mm long)		
FM6	1 Sheet: Same as main machine as far as 3rd Stopper. At 3rd stopper feeds 50 mm at 100 mm/sec. 350 mm/sec. to top tray (paper < 420 mm long) 250 mm/sec. to top tray (paper < 420 mm long)		
Power Supply:	NA	AC 120V 60 Hz, 2.0A	
	EU	AC 220 to 240V, 50/60 Hz 1.2A	
Power Consumption:	240 W		
Size (W x D x H):	470 x 1000 x 730 mm (18.5 x 39.4 x 28.7 in.)		
Level:	Less than 5 mm deviation at front/back, left/right		
Weight:	92 kg (203 lb.)		
Noise Level (dB A):	Mode	Alone	System
	No Folding	< 72 dB	---
	Folding	< 72 dB	< 76 dB

Tray Capacity

The capacity of the tray on top of the unit for folded paper is determined by these variables:

- Folding Methods (FM1 to FM6)
- Paper size
- Paper weight

Folding Mode FM1



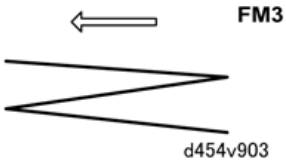
Size	Weight (Standard) 64 to 80 g/m^2	Weight (Heavy) 64 to 80 g/m^2
8-kai	35	20
12x18"	35	20
A3 SEF	35	20
DLT	35	20
B4 SEF	35	20

Size	Weight (Standard) 64 to 80 g/m²	Weight (Heavy) 64 to 80 g/m²
LG SEF	35	20
A4 SEF	30	20
LT SEF	30	20

Folding Mode FM2

Size	Weight (Standard) 64 to 80 g/m²	Weight (Heavy) 64 to 80 g/m²
13x19.2"	40	25
13x19"	40	25
12.6x19.2"	40	25
12.6x18.5"	40	25
13x18"	40	25
SRA3 (320x450 mm)	40	25
SRA4 (225x320 mm)	40	25
226x310 mm	40	25
310x432 mm	40	25
8-kai	40	25
12x18"	40	25
A3 SEF	40	25
DLT	40	25
B4 SEF	40	25
LG SEF	40	25
A4 SEF	50	50
LT SEF	50	50
B5 SEF	50	50

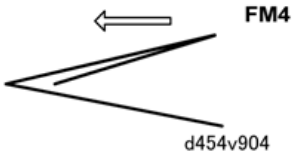
Folding Mode FM3



Size	Weight (Standard) 64 to 80 g/m²	Weight (Heavy) 64 to 80 g/m²
8-kai	30	20

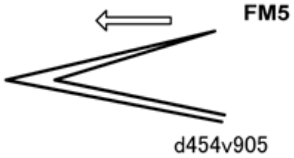
Size	Weight (Standard) 64 to 80 g/m^2	Weight (Heavy) 64 to 80 g/m^2
12x18"	30	20
A3 SEF	30	20
DLT	30	20
B4 SEF	30	20
LG SEF	30	20
A4 SEF	40	30
LT SEF	40	30
B5 SEF	40	30

Folding Mode FM4



Size	Weight (Standard) 64 to 80 g/m^2	Weight (Heavy) 64 to 80 g/m^2
8-kai	40	20
12x18"	40	20
A3 SEF	40	20
DLT	40	20
B4 SEF	40	20
LG SEF	40	20
A4 SEF	50	40
LT SEF	50	40
B5 SEF	50	40

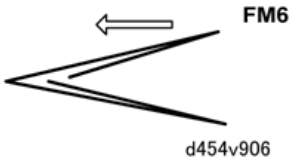
Folding Mode FM5



Size	Weight (Standard) 64 to 80 g/m^2	Weight (Heavy) 64 to 80 g/m^2
8-kai	30	20
12x18"	30	20
A3 SEF	30	20
DLT	30	20
B4 SEF	30	20

Size	Weight (Standard) 64 to 80 g/m²	Weight (Heavy) 64 to 80 g/m²
LG SEF	30	20
A4 SEF	30	30
LT SEF	30	30
B5 SEF	30	30

Folding Mode FM6



Size	Weight (Standard) 64 to 80 g/m²	Weight (Heavy) 64 to 80 g/m²
8-kai	50	20
12x18"	50	20
A3 SEF	50	20
DLT	50	20
B4 SEF	50	20
LG SEF	50	20
A4 SEF	30	30
LT SEF	30	30
B5 SEF	30	30

Cover Interposer Tray CI5050/CI4040

Note

- Pro C5300S/C5310S: Cover Interposer Tray CI5050
- IM C6500/C8000: Cover Interposer Tray CI4040

Item	Specification
Paper Size:	A3 SEF, A4, A5, B4 JIS SEF, B5 JIS, 11 x 17 SEF, 8.5 x 14 SEF, 8.5 x 11, 8.5 x 13 SEF, 7.25 x 10.5 SEF, 5.5 x 8.5, 10 x 14 SEF, 8K SEF, 16K, 8.5 x 13.4 SEF, 8.25 x 13 SEF, 8 x 13 SEF, 12 x 18 SEF
Paper Thickness:	64.0 to 216.0 g/m² (17.1 lb. Bond–79.9 lb. Cover)
Capacity:	200 sheets (80g/m²)
Power Source:	Draw from main unit
Power Consumption:	43 W or less
Weight:	Approx. 12 kg (26.5 lb.)
Dimensions (W x	500 x 600 x 600 mm (19.7 x 23.7 x 23.7 inches)

Item	Specification
D x H):	

Cover Interposer Tray CI4050

Note

- Only IM C6500/C8000

Item	Specification
Paper Size:	A3 SEF, A4 LEF/SEF, A5 LEF/SEF, B4 JIS SEF, B5 JIS LEF, 11 x 17 SEF, 8.5 x 11 LEF/SEF, 8 x 13 SEF, 5.5 x 8.5 LEF/SEF, SRA3 SEF, 12 x 18 SEF, B5 JIS SEF, 8.5 x 14 SEF, 8.5 x 13 SEF, 8.25 x 14 SEF, 8.25 x 13 SEF, 7.25 x 10.5 LEF/SEF, 8K SEF, 16K LEF/SEF, 11 x 15 SEF, 11 x 14 SEF, 10 x 15 SEF, 10 x 14 SEF, 13 x 19.2 SEF, 13 x 19 SEF, 12.6 x 19.2 SEF, 12.6 x 18.5 SEF, 13 x 18 SEF, 226 x 310 mm LEF/SEF, 310 x 432 mm SEF, SRA4 LEF/SEF, 8.5 x 13.4 SEF, Custom size
Paper Thickness:	64.0 to 216.0 g/m^2 (17.1 lb. Bond–79.9 lb. Cover)
Capacity:	240 sheets x 2 drawers
Power Source:	Draw from main unit
Power Consumption:	84 W or less
Weight:	Approx. 45 kg (99.3 lb.)
Dimensions (W x D x H):	540 x 730 x 1,270 mm (21.3 x 28.8 x 50.0 inches)

Cover Interposer Tray CI5050

Note

- Only Pro C5300S/C5310S

Items	Specification	Notes
Separation Method:	FRR separation and air assist	
Transport Method:	Roller Transport	
Paper Size:	A5/HLT - 13" (330.2mm) x 19.2" (487.7mm)	
Paper Thickness:	Standard Paper: 52.3 to 350g/m^2 Coated Paper: 105.1 to 350g/m^2 If paper thickness is 300.1 to 350g/m^2, the paper brand of SP-C is designated.	
Acceptable Curl Amount:	H: within±15 mm, R: 40 or more	
Capacity:	220 sheets (paper pressure: 0.1 mm) x 2	

Items	Specification	Notes
	trays	
Paper Detection:	Available	
Power Source:	Direct current+5V Direct current+24V	Each power source is provided from the main machine.
Power Consumption:	95W or less	
Dimensions (W×D×H):	740×730×1,350 mm	
Weight:	60kg or less	

High Capacity Stacker SK5040

Note

- Only Pro C5300S/C5310S

Item		Specification	Notes
Configuration		Console type	
Speed		169 to 758mm/s	
Dimension (W x D x H)		900×730×1,000mm	
Weight		Stacker: less than 120kg	Cart: less than 15kg
Power Supply		NA: AC100V, 50/60Hz EU: AC200V, 50/60Hz	DC power supply from the main machine: 5V AC power supply: no supply from the main machine
Power Consumption		Less than 104W	
Shift Tray			
Stack capacity	5,000 sheets	A3 (max.13"×19.2"),A3 SEF,B4 SEF,A4 SEF, A4 LEF,DLT SEF,LG SEF, Oficio SEF, LT SEF,LT LEF	The capacity to be calculated with 0.1mm thick paper.
	2,500 sheets	B5 SEF,B5 LEF,A5 SEF,A5 LEF,HLT SEF,HLT LEF	
Paper size		331×488mm (13"×19.2") to A5	
Paper weight		40 to 400g/m2	Less than 52 g/m^2/more than 350 g/m^2: paper type

Item	Specification	Notes
		is limited.
Proof Tray		
Stack capacity	250 sheets (more than A4,LT)	The capacity to be calculated with 0.1mm thick paper.
Paper size	331x488mm (13”x19.2”) to A6 SEF / postcard	
Paper weight	40 to 400g/m2	Less than 52 g/m^2/more than 350 g/m^2: paper type is limited.
Relay path		
Paper size	331×488mm (13"×19.2") to A6SEF/ postcard	
Stack capacity	40 to 400g/m2	Less than 52 g/m^2/more than 350 g/m^2: paper type is limited.

Mail Box CS4010

Note

- Only IM C6500/C8000

Item	Specification
Bin	9 Bins
Paper Size	A3 SEF, A4, A5, B4 JIS SEF, B5 JIS, 11 x 17 SEF, 8^1/$_2$ x 14 SEF, 8^1/$_2$ x 13 SEF, 8^1/$_2$ x 11, 8^1/$_4$ x 14 SEF, 8^1/$_4$ x 13 SEF, 8 x 13 SEF, 7^1/$_4$ x 10^1/$_2$, 5^1/$_2$ x 8^1/$_2$, 8K SEF, 16K, 11 x 15 SEF, 11 x 14 SEF, 10 x 15 SEF, 10 x 14 SEF, 8^1/$_2$ x 13^2/$_5$ SEF
Paper Thickness	60.0 to 128.0 g/m^2 (16.1 lb. Bond–47.3 lb. Cover)
Capacity	100 Sheets each bin, total 900 Sheets (80g/m^2)
Power Source	Draw from main unit
Power Consumption	30 W or less
Weight	approx. 15kg (33.1 lb.)
Dimensions (W x D x H)	540 x 600 x 660 mm (21.3 × 23.7 × 26.0 inches)

Finisher SR5090

Note

- Only Pro C5300S/C5310S

Item		Specification
Upper Tray	Paper size	A3 SEF, A4, A5, A6 SEF, B4 SEF, B5, B6 SEF, 11×17 SEF, 8 1/2×14 SEF, 8 1/2×13 SEF, 8 1/2×11, 8 1/4×14 SEF, 8 1/4×13 SEF, 8×13 SEF, 8×10 SEF, 7 1/4×10 1/2, 5 1/2×8 1/2, Post card SEF, 8K SEF, 16K, 12×18 SEF, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, 13×19 1/5 SEF, 13×19 SEF, 12 3/5×19 1/5 SEF, 12 3/5×18 1/2 SEF, 13×18 SEF, SRA3 SEF, SRA4, 226×310mm, 310×432mm SEF, 8 1/2×13 2/5 SEF, Custom size
	Stack capacity (80 g/m2, 20 lb. Bond)	Without Z-fold: • 250 sheets (A4, 8 1/2×11 or smaller) • 50 sheets (B4, 8 1/2×14 or larger) With Z-fold: • 20 sheets (A4, 8 1/2 ×11 or smaller) • 30 sheets (B4, 8 1/2 ×14 or larger)
	Paper weight	52.3–216.0 g/m2 (14.0 lb. Bond–79.9 lb. Cover)
Shift Tray	Paper size	A3 SEF, A4, A5, B4 SEF, B5, B6 SEF, 11×17 SEF, 8 1/2×14 SEF, 8 1/2×13 SEF, 8 1/2×11, 8 1/4×14 SEF, 8 1/4×13 SEF, 8×13 SEF, 8×10 SEF, 7 1/4×10 1/2, 5 1/2×8 1/2, Post card SEF, 8K SEF, 16K, 12×18 SEF, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, 13×19 1/5 SEF, 13×19 SEF, 12 3/5×19 1/5 SEF, 12 3/5×18 1/2 SEF, 13×18 SEF, SRA3 SEF, SRA4, 226×310mm, 310×432mm SEF, 8 1/2×13 2/5 SEF, Custom size
	Paper weight for the Finisher Shift Tray	Without Z-fold: • 52.3–300.0 g/m2 (14.0 lb. Bond–165.0 lb. Index) With Z-fold: • 64.0–105.0g/ m2 (17.1-28.0 lb. Bond)
	Paper sizes that can be shifted when delivered to both finisher trays	A3 SEF, A4, A5, B4 SEF, B5, 11×17 SEF, 8 1/2×14 SEF, 8 1/2×13 SEF, 8 1/2×11, 8 1/4×14 SEF, 8 1/4×13 SEF, 8×13 SEF, 8×10 SEF, 7 1/4×10 1/2, 5 1/2×8 1/2, 8K SEF, 16K, 12×18 SEF, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, SRA4 SEF, 226×310 SEF, 8 1/2×13 2/5 SEF, Custom size
	Paper weight that can be shifted when delivered to the Finisher Shift Tray	52.3–300.0 g/m2 (14.0 lb. Bond–165.0 lb. Index)

Item		Specification
	Stack capacity to the Finisher Shift Tray	Without Z-fold: • A4 LEF, 8 1/2×11 LEF: 3,000 sheets • A3 SEF, A4 SEF, B4 SEF, B5, 11×17 SEF, 8 1/2×14 SEF, 8 1/2×11 SEF, 12×18 SEF, SRA3 SEF, 13×19 1/5 SEF, Length 182-488 mm: 1,500 sheets • A5 LEF, Length 148-182 mm: 500 sheets • A5 SEF, B6 SEF, 5 1/2 ×8 1/2 SEF: 100 sheets With Z-fold: • A4, 8 1/2”×11”or smaller: 20 sheets • B4, 8 1/2”×14”or larger: 30 sheets
Staple Tray	Staple paper size	A3 SEF, A4, B4 SEF, B5, 11×17 SEF, 8 1/2×14 SEF, 8 1/2×13 SEF, 8 1/2×11, 8 1/4×14 SEF, 8 1/4×13 SEF, 8×13 SEF, 7 1/4×10 1/2, 8K SEF, 16K, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, 226×310mm SEF, 8 1/2×13 2/5 SEF
	Staple paper weight	52.3–105.0 g/m2 (14.0–28.0 lb. Bold) You can use a sheet of paper weighing between 105.1 g/m2 (28.1 lb. Bond) and 256.0 g/m2 (141.0 lb. Index) per set as a slip sheet.
	Staple capacity (80 g/m2, 20 lb. Bond)	Without Z-fold and Mixed Sizes: • 65 sheets (A3 SEF, A4, B4 JIS SEF, B5 JIS, 11×17 SEF, 8 1/2×14 SEF, 8 1/2×13 SEF, 8 1/2×11, 8 1/4×14 SEF, 8 1/4×13 SEF, 8×13 SEF, 7 1/4×10 1/2 LEF/SEF, 8K SEF, 16K, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, 226×310 mm SEF, 8 1/2×13 2/5 SEF) With Mixed Sizes: • 65 sheets (A3 SEF/A4 LEF, B4 JIS SEF/B5 JIS LEF, 11×17 SEF/8 1/2×11 LEF) With Z-fold: • 8 sheets: 52.0–80.0g/m2 (13.9–21.0 lb. Bond) • 5 sheets: 80.1–105.0g/m2 (21.1–28.0 lb. Bond)
	Stack capacity after stapling (80 g/m2, 20 lb. Bond)	Without Z-fold and Mixed Sizes: • 13–65 sheets: 150–46 sets (A4 LEF, 8 1/2 × 11 LEF) • 2–12 sheets: 150 sets (A4 LEF, 8 1/2 × 11 LEF) • 10–65 sheets: 100–23 sets • 2–9 sheets: 100 sets With Mixed Sizes: • 2–65 sheets: 23 sets (A3 SEF/A4 LEF, B4 JIS SEF/B5 JIS LEF, 11×17 SEF/8 1/2×11 LEF) With Z-fold:

Item		Specification
		• 1–8 sheets: 23sets
	Staple position	Top 1, Bottom 1, Slant, Bottom Slant, Left 2, Top 2
Power consumption		67 W or less (Power is supplied from the main unit.)
Dimensions (W × D × H)		657×730×980mm (25.9 × 28.7 × 38.6 inches)
Weight		Without punch unit: 38 kg (83.8 lb.) or less With punch unit: 41 kg (90.4 lb.) or less

Booklet Finisher SR5100

Note

- Only Pro C5300S/C5310S

Item		Specification
Upper Tray	Paper size	A3 SEF, A4, A5, A6 SEF, B4 SEF, B5, B6 SEF, 11×17 SEF, $8^1/_2$×14 SEF, $8^1/_2$×13 SEF, $8^1/_2$×11, $8^1/_4$×14 SEF, $8^1/_4$×13 SEF, 8×13 SEF, 8×10 SEF, $7^1/_4$×$10^1/_2$, $5^1/_2$×$8^1/_2$, Post card SEF, 8K SEF, 16K, 12×18 SEF, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, 13×$19^1/_5$ SEF, 13×19 SEF, $12^3/_5$×$19^1/_5$ SEF, $12^3/_5$×$18^1/_2$ SEF, 13×18 SEF, SRA3 SEF, SRA4, 226×310mm, 310×432mm SEF, $8^1/_2$×$13^2/_5$ SEF, Custom size
	Stack capacity (80 g/m^2, 20 lb. Bond)	Without Z-fold: • 250 sheets (A4, $8^1/_2$×11 or smaller) • 50 sheets (B4, $8^1/_2$×14 or larger) With Z-fold: • 20 sheets (A4, $8^1/_2$ ×11 or smaller) • 30 sheets (B4, $8^1/_2$ ×14 or larger)
	Paper weight	52.3–216.0 g/m^2 (14.0 lb. Bond–79.9 lb. Cover)
Shift Tray	Paper size	A3 SEF, A4, A5, B4 SEF, B5, B6 SEF, 11×17 SEF, $8^1/_2$×14 SEF, $8^1/_2$×13 SEF, $8^1/_2$×11, $8^1/_4$×14 SEF, $8^1/_4$×13 SEF, 8×13 SEF, 8×10 SEF, $7^1/_4$×$10^1/_2$, $5^1/_2$×$8^1/_2$, Post card SEF, 8K SEF, 16K, 12×18 SEF, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, 13×$19^1/_5$ SEF, 13×19 SEF, $12^3/_5$×$19^1/_5$ SEF, $12^3/_5$×$18^1/_2$ SEF, 13×18 SEF, SRA3 SEF, SRA4, 226×310mm, 310×432mm SEF, $8^1/_2$×$13^2/_5$ SEF, Custom size
	Paper weight to the Finisher Shift Tray	Without Z-fold: • 52.3–300.0 g/m^2 (14.0 lb. Bond–165.0 lb. Index) With Z-fold: • 64.0–105.0g/ m^2 (17.1-28.0 lb. Bond)
	Paper sizes that	A3 SEF, A4, A5, B4 SEF, B5, 11×17 SEF, $8^1/_2$×14 SEF, $8^1/_2$×13 SEF,

Item		Specification
	can be shifted when delivered to both finisher trays	$8^1/_2$×11, $8^1/_4$×14 SEF, $8^1/_4$×13 SEF, 8×13 SEF, 8×10 SEF, $7^1/_4$×$10^1/_2$, $5^1/_2$×$8^1/_2$, 8K SEF, 16K, 12×18 SEF, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, SRA4 SEF, 226×310mm SEF, $8^1/_2$×$13^2/_5$ SEF, Custom size
	Paper weight that can be shifted when delivered to the Finisher Shift Tray	52.3–300.0 g/m^2 (14.0 lb. Bond–165.0 lb. Index)
	Stack capacity to the Finisher Shift Tray	Without Z-fold: • A4 LEF, $8^1/_2$×11 LEF: 2,000 sheets • A3 SEF, A4 SEF, B4 SEF, B5, 11×17 SEF, $8^1/_2$×14 SEF, $8^1/_2$×11 SEF, 12×18 SEF, SRA3 SEF, 13×$19^1/_5$ SEF, Length 182-488 mm: 1,000 sheets • A5 LEF, Length 148-182 mm: 500 sheets • A5 SEF, B6 SEF, $5^1/_2$ ×$8^1/_2$ SEF: 100 sheets With Z-fold: • A4, $8^1/_2$"×11"or smaller: 20 sheets • B4, $8^1/_2$"×14"or larger: 30 sheets
Staple Tray	Staple paper size	A3 SEF, A4, B4 SEF, B5, 11×17 SEF, $8^1/_2$×14 SEF, $8^1/_2$×13 SEF, $8^1/_2$×11, $8^1/_4$×14 SEF, $8^1/_4$×13 SEF, 8×13 SEF, $7^1/_4$×$10^1/_2$, 8K SEF, 16K, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, 226×310mm SEF, $8^1/_2$×$13^2/_5$ SEF
	Staple paper weight	52.3–105.0 g/m^2 (14.0–28.0 lb. Bold) You can use a sheet of paper weighing between 105.1 g/m2 (28.1 lb. Bond) and 256.0 g/m2 (141.0 lb. Index) per set as a slip sheet.
	Staple capacity (80 g/m^2, 20 lb. Bond)	Without Z-fold and Mixed Sizes: • 65 sheets (A3 SEF, A4, B4 JIS SEF, B5 JIS, 11×17 SEF, $8^1/_2$×14 SEF, $8^1/_2$×13 SEF, $8^1/_2$×11, $8^1/_4$×14 SEF, $8^1/_4$×13 SEF, 8×13 SEF, $7^1/_4$×$10^1/_2$ LEF/SEF, 8K SEF, 16K, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, 226×310mm SEF, $8^1/_2$×$13^2/_5$ SEF) With Mixed Sizes: • 65 sheets (A3 SEF/A4 LEF, B4 JIS SEF/B5 JIS LEF, 11×17 SEF/$8^1/_2$×11 LEF, 8K SEF/16K LEF) With Z-fold: • 8 sheets: 52.0–80.0g/m^2 (13.9–21.0 lb. Bond) • 5 sheets: 80.1–105.0g/m^2 (21.1–28.0 lb. Bond)
	Stack capacity	Without Z-fold and Mixed Sizes:

Item		Specification
	after stapling (80 g/m^{2,} 20 lb. Bond)	• 13–65 sheets: 150–30 sets (A4 LEF, 8^1/$_2$ × 11 LEF) • 2–12 sheets: 150 sets (A4 LEF, 8^1/$_2$ × 11 LEF) • 10–65 sheets: 100–15 sets • 2–9 sheets: 100 sets With Mixed Sizes: • 2–65 sheets: 15 sets (A3 SEF/A4 LEF, B4 JIS SEF/B5 JIS LEF, 11×17 SEF/8^1/$_2$×11 LEF) With Z-fold: • 1–8 sheets: 30sets
	Staple position	Top 1, Bottom 1, Slant, Bottom Slant, Left 2, Top 2
Saddle stitch	Saddle stitch capacity	• Paper between 64.0 g/m^2 (17.1 lb. Bond) and 80.0 g/m^2 (20.0 lb. Bond): 1 set (20 sheets) • Paper between 80.1 g/m^2 (20.1 lb. Bond) and 105.0 g/m^2 (28.0 lb. Bond): 1 set (10 sheets)
	Saddle stitch paper size	A3 SEF, A4 SEF, B4 SEF, B5 SEF, 11×17 SEF, 8^1/$_2$×14 SEF, 8^1/$_2$×11 SEF, 8^1/$_4$×14 SEF, 8^1/$_4$×13 SEF, 12×18 SEF, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, 13×18 SEF, SRA3 SEF, SRA4 SEF, 8^1/$_2$×13^2/$_5$ SEF, Custom size
	Saddle stitch paper weight	• Plain Paper: 64.0–105.0 g/m^2 (17.1–28.0 lb. Bond) • Coated Paper: 81.4–105.0 g/m^2 (21.7–28.0 lb. Bond) You can use a sheet of paper weighing up to 216.0 g/m^2 (79.9 lb. Cover) per set as a cover sheet.
	Stack capacity after saddle stitching	• 2–5 sheets: 30 sets • 6–10 sheets: 15 sets • 11–15 sheets: 10 sets • 16–20 sheets: 6 sets
	Saddle stitch position	Center 2 positions
Folding	Types of folds	Half fold
	Half fold paper size	A3 SEF, A4 SEF, B4 SEF, B5 SEF, 11×17 SEF, 8^1/$_2$×14 SEF, 8^1/$_2$×11 SEF, 8^1/$_4$×14 SEF, 8^1/$_4$×13 SEF, 12×18 SEF, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, 13×18 SEF, SRA3 SEF, SRA4 SEF, 8^1/$_2$×13^2/$_5$ SEF, LGT, Custom size (Width: 182 to 330 mm, Length: 257 to 457 mm)
	Folding capacity of half folding	• 1 sheet: 64.0-216.0g/m^2 • 2–5 sheets: 64.0-105.0g/m^2

Item		Specification
	function	
Power consumption		67 W or less (Power is supplied from the main unit.)
Dimensions (W × D × H)		657×730×980mm (25.9 × 28.7 × 38.6 inches)
Weight		Without punch unit: 58 kg (127.9 lb.) or less With punch unit: 61 kg (134.5 lb.) or less

Finisher SR4150

Note

- Only IM C6500/C8000

Item		Specification
Upper Tray	Paper size	A3 SEF, A4, A5, A6 SEF, B4 SEF, B5, B6 SEF, 11×17 SEF, $8^1/_2$×14 SEF, $8^1/_2$×13 SEF, $8^1/_2$×11, $8^1/_4$×14 SEF, $8^1/_4$×13 SEF, 8×13 SEF, 8×10 SEF, $7^1/_4$×$10^1/_2$, $5^1/_2$×$8^1/_2$, Post card SEF, 8K SEF, 16K, 12×18 SEF, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, 13×$19^1/_5$ SEF, 13×19 SEF, $12^3/_5$×$19^1/_5$ SEF, $12^3/_5$×$18^1/_2$ SEF, 13×18 SEF, SRA3 SEF, SRA4, $8^1/_2$×$13^2/_5$ SEF, Custom size
	Stack capacity (80 g/m^2, 20 lb. Bond)	• 250 sheets (A4, $8^1/_2$×11 or smaller) • 50 sheets (B4, $8^1/_2$×14 or larger)
	Paper weight	52.3–216.0 g/m^2 (14.0 lb. Bond–79.9 lb. Cover)
Shift Tray	Paper size	A3 SEF, A4, A5, B4 SEF, B5, B6 SEF, 11×17 SEF, $8^1/_2$×14 SEF, $8^1/_2$×13 SEF, $8^1/_2$×11, $8^1/_4$×14 SEF, $8^1/_4$×13 SEF, 8×13 SEF, 8×10 SEF, $7^1/_4$×$10^1/_2$, $5^1/_2$×$8^1/_2$, Post card SEF, 8K SEF, 16K, 12×18 SEF, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, 13×$19^1/_5$ SEF, 13×19 SEF, $12^3/_5$×$19^1/_5$ SEF, $12^3/_5$×$18^1/_2$ SEF, 13×18 SEF, SRA3 SEF, SRA4, $8^1/_2$×$13^2/_5$ SEF, Custom size
	Paper weight	52.3–300.0 g/m^2 (14.0 lb. Bond–165.0 lb. Index)
	Paper sizes that can be shifted when delivered to both finisher trays	A3 SEF, A4, A5, B4 SEF, B5, 11×17 SEF, $8^1/_2$×14 SEF, $8^1/_2$×13 SEF, $8^1/_2$×11, $8^1/_4$×14 SEF, $8^1/_4$×13 SEF, 8×13 SEF, 8×10 SEF, $7^1/_4$×$10^1/_2$, $5^1/_2$×$8^1/_2$, 8K SEF, 16K, 12×18 SEF, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, SRA4 SEF, Custom size
	Paper weight that can be shifted when delivered to the Finisher Shift Tray	52.3–300.0 g/m^2 (14.0 lb. Bond–165.0 lb. Index)
	Stack capacity to	• 3,000 sheets: A4 LEF, $8^1/_2$×11 LEF

Item		Specification
	the Finisher Shift Tray	• 1,500 sheets: A3 SEF, A4 SEF, B4 JIS SEF, B5 JIS, 11×17 SEF, $8^1/_2$×14, $8^1/_2$×11 SEF, 12×18 SEF, SRA3 SEF, 13×$19^1/_5$ SEF • 500 sheets: A5 LEF • 100 sheets: A5 SEF, B6 JIS SEF, $5^1/_2$× $8^1/_2$ SEF When using paper that has a horizontal length of 487.8–1,260.0 mm (19.21–49.60 inches), remove output sheets one by one from the tray.
Staple Tray	Staple paper size	A3 SEF, A4, B4 SEF, B5, 11×17 SEF, $8^1/_2$×14 SEF, $8^1/_2$×13 SEF, $8^1/_2$×11, $8^1/_4$×14 SEF, $8^1/_4$×13 SEF, 8×13 SEF, $7^1/_4$×$10^1/_2$, 8K SEF, 16K, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, $8^1/_2$×$13^2/_5$ SEF
	Staple paper weight	52.3–105.0 g/m^2 (14.0–28.0 lb. Bold) You can use a sheet of paper weighing between 105.1 g/m2 (28.1 lb. Bond) and 256.0 g/m2 (141.0 lb. Index) per set as a slip sheet.
	Staple capacity (80 g/m^2, 20 lb. Bond)	Without Mixed Sizes: • 65 sheets (A3 SEF, A4, B4 JIS SEF, B5 JIS, 11×17 SEF, $8^1/_2$×14 SEF, $8^1/_2$×13 SEF, $8^1/_2$×11, $8^1/_4$×14 SEF, $8^1/_4$×13 SEF, 8×13 SEF, $7^1/_4$×$10^1/_2$ LEF/SEF, 8K SEF, 16K, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, $8^1/_2$×$13^2/_5$ SEF) With Mixed Sizes: • 65 sheets (A3 SEF/A4 LEF, B4 JIS SEF/B5 JIS LEF, 11×17 SEF/$8^1/_2$×11 LEF)
	Stack capacity after stapling (80 g/m^2, 20 lb. Bond)	Without Mixed Sizes: • 2–19 sheets: 150 sets (A4 LEF, $8^1/_2$× 11 LEF) • 20–65 sheets: 150–46 sets (A4 LEF, $8^1/_2$×11 LEF) • 2–14 sheets: 100 sets (A4 SEF, B5 JIS, $8^1/_2$×11 SEF) • 15–65 sheets: 100–23 sets (A4 SEF, B5 JIS, $8^1/_2$×11 SEF) • 2–14 sheets: 100 sets (other size paper) • 15–65 sheets: 100–23 sets (other size paper) With Mixed Sizes: • 2–65 sheets: 23 sets (A3 SEF/A4 LEF, B4 JIS SEF/B5 JIS LEF, 11×17 SEF/$8^1/_2$×11 LEF)
	Staple position	Top 1, Bottom 1, Slant, Bottom Slant, Left 2, Top 2
Power consumption		67 W or less (Power is supplied from the main unit.)
Dimensions (W × D × H)		657×730×980mm (25.9 × 28.7 × 38.6 inches)
Weight		Without punch unit: 38 kg (83.8 lb.) or less With punch unit: 41 kg (90.4 lb.) or less

Booklet Finisher SR4160

Note

- Only IM C6500/C8000

Item		Specification
Upper Tray	Paper size	A3 SEF, A4, A5, A6 SEF, B4 SEF, B5, B6 SEF, 11×17 SEF, $8^1/_2$×14 SEF, $8^1/_2$×13 SEF, $8^1/_2$×11, $8^1/_4$×14 SEF, $8^1/_4$×13 SEF, 8×13 SEF, 8×10 SEF, $7^1/_4$×$10^1/_2$, $5^1/_2$×$8^1/_2$, Post card SEF, 8K SEF, 16K, 12×18 SEF, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, 13×$19^1/_5$ SEF, 13×19 SEF, $12^3/_5$×$19^1/_5$ SEF, $12^3/_5$×$18^1/_2$ SEF, 13×18 SEF, SRA3 SEF, SRA4, $8^1/_2$×$13^2/_5$ SEF, Custom size
	Stack capacity (80 g/m^2, 20 lb. Bond)	• 250 sheets (A4, $8^1/_2$×11 or smaller) • 50 sheets (B4, $8^1/_2$×14 or larger)
	Paper weight	52.3–216.0 g/m^2 (14.0 lb. Bond–79.9 lb. Cover)
Shift Tray	Paper size	A3 SEF, A4, A5, B4 SEF, B5, B6 SEF, 11×17 SEF, $8^1/_2$×14 SEF, $8^1/_2$×13 SEF, $8^1/_2$×11, $8^1/_4$×14 SEF, $8^1/_4$×13 SEF, 8×13 SEF, 8×10 SEF, $7^1/_4$×$10^1/_2$, $5^1/_2$×$8^1/_2$, Post card SEF, 8K SEF, 16K, 12×18 SEF, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, 13×$19^1/_5$ SEF, 13×19 SEF, $12^3/_5$×$19^1/_5$ SEF, $12^3/_5$×$18^1/_2$ SEF, 13×18 SEF, SRA3 SEF, SRA4, $8^1/_2$×$13^2/_5$ SEF, Custom size
	Paper weight for the Finisher Shift Tray	52.3–300.0 g/m^2 (14.0 lb. Bond–165.0 lb. Index)
	Paper sizes that can be shifted when delivered to both finisher trays	A3 SEF, A4, A5, B4 SEF, B5, 11×17 SEF, $8^1/_2$×14 SEF, $8^1/_2$×13 SEF, $8^1/_2$×11, $8^1/_4$×14 SEF, $8^1/_4$×13 SEF, 8×13 SEF, 8×10 SEF, $7^1/_4$×$10^1/_2$, $5^1/_2$×$8^1/_2$, 8K SEF, 16K, 12×18 SEF, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, SRA4 SEF, Custom size
	Paper weight that can be shifted when delivered to the Finisher Shift Tray	52.3–300.0 g/m^2 (14.0 lb. Bond–165.0 lb. Index)
	Stack capacity to the Finisher Shift Tray	• 2,000 sheets: A4 LEF, $8^1/_2$ × 11 LEF • 1,000 sheets: A3 SEF, A4 SEF, B4 JIS SEF, B5 JIS, 11×17 SEF, $8^1/_2$×14, $8^1/_2$×11 SEF, 12×18 SEF, SRA3 SEF, 13×$19^1/_5$ SEF • 500 sheets: A5 LEF • 100 sheets: A5 SEF, B6 JIS SEF, $5^1/_2$× $8^1/_2$ SEF When using paper that has a horizontal length of 487.8–1,260.0 mm

Item		Specification
		(19.21–49.60 inches), remove output sheets one by one from the tray.
Staple Tray	Staple paper size	A3 SEF, A4, B4 SEF, B5, 11×17 SEF, $8^1/_2$×14 SEF, $8^1/_2$×13 SEF, $8^1/_2$×11, $8^1/_4$×14 SEF, $8^1/_4$×13 SEF, 8×13 SEF, $7^1/_4$×$10^1/_2$, 8K SEF, 16K, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, $8^1/_2$×$13^2/_5$ SEF
	Staple paper weight	52.3–105.0 g/m^2 (14.0–28.0 lb. Bold) You can use a sheet of paper weighing between 105.1 g/m2 (28.1 lb. Bond) and 256.0 g/m2 (141.0 lb. Index) per set as a slip sheet.
	Staple capacity (80 g/m^2, 20 lb. Bond)	Without Mixed Sizes: • 65 sheets (A3 SEF, A4, B4 JIS SEF, B5 JIS, 11×17 SEF, $8^1/_2$×14 SEF, $8^1/_2$×13 SEF, $8^1/_2$×11, $8^1/_4$×14 SEF, $8^1/_4$×13 SEF, 8×13 SEF, $7^1/_4$×$10^1/_2$ LEF/SEF, 8K SEF, 16K, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, $8^1/_2$×$13^2/_5$ SEF) With Mixed Sizes: • 65 sheets (A3 SEF/A4 LEF, B4 JIS SEF/B5 JIS LEF, 11×17 SEF/$8^1/_2$×11 LEF)
	Stack capacity after stapling (80 g/m^2, 20 lb. Bond)	Without Mixed Sizes: • 2–12 sheets: 150 sets (A4 LEF, $8^1/_2$× 11 LEF) • 13–65 sheets: 150–30 sets (A4 LEF, $8^1/_2$×11 LEF) • 2–9 sheets: 100 sets (A4 SEF, B5 JIS, $8^1/_2$×11 SEF) • 10–65 sheets: 100–15 sets (A4 SEF, B5 JIS, $8^1/_2$×11 SEF) • 2–9 sheets: 100 sets (other size paper) • 10–65 sheets: 100–15 sets (other size paper) With Mixed Sizes: • 2–65 sheets: 23 sets (A3 SEF/A4 LEF, B4 JIS SEF/B5 JIS LEF, 11× 7 SEF/$8^1/_2$×11 LEF)
	Staple position	Top 1, Bottom 1, Slant, Bottom Slant, Left 2, Top 2
Saddle stitch	Saddle stitch capacity	• Paper between 64.0 g/m^2 (17.1 lb. Bond) and 80.0 g/m^2 (20.0 lb. Bond): 1 set (20 sheets) • Paper between 80.1 g/m^2 (20.1 lb. Bond) and 105.0 g/m^2 (28.0 lb. Bond): 1 set (10 sheets)
	Saddle stitch paper size	A3 SEF, A4 SEF, B4 SEF, B5 SEF, 11×17 SEF, $8^1/_2$×14 SEF, $8^1/_2$×11 SEF, $8^1/_4$×14 SEF, $8^1/_4$×13 SEF, 12×18 SEF, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, 13×18 SEF, SRA3 SEF, SRA4 SEF, $8^1/_2$×$13^2/_5$ SEF

Item		Specification
	Saddle stitch paper weight	• Plain Paper: 64.0–105.0 g/m^2 (17.1–28.0 lb. Bond) • Coated Paper: 81.4–105.0 g/m^2 (21.7–28.0 lb. Bond) You can use a sheet of paper weighing up to 216.0 g/m^2 (79.9 lb. Cover) per set as a cover sheet.
	Stack capacity after saddle stitching	• 2–5 sheets: 30 sets • 6–10 sheets: 15 sets • 11–15 sheets: 10 sets • 16–20 sheets: 6 sets
	Saddle stitch position	Center 2 positions
Folding	Types of folds	Half fold
	Half fold paper size	A3 SEF, A4 SEF, B4 SEF, B5 SEF, 11×17 SEF, 8$^1/_2$×14 SEF, 8$^1/_2$×11 SEF, 8$^1/_4$×14 SEF, 8$^1/_4$×13 SEF, 12×18 SEF, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, 13×18 SEF, SRA3 SEF, SRA4 SEF, 8$^1/_2$×13$^2/_5$ SEF
	Folding capacity of half folding function	• 1 sheet: 64.0-216.0g/m^2 • 2–5 sheets: 64.0-105.0g/m^2
Power consumption		67 W or less (Power is supplied from the main unit.)
Dimensions (W × D × H)		657×730×980mm (25.9 × 28.7 × 38.6 inches)
Weight		Without punch unit: 58 kg (127.9 lb.) or less With punch unit: 61 kg (134.5 lb.) or less

Punch Unit PU3090

Note

- Pro C5300S/C5310S: For Finisher SR5090/Booklet Finisher SR5100
- IM C6500/C8000: For Finisher SR4150/Booklet Finisher SR4160

Paper size:

Punch unit type		Paper size
2 & 4 holes type (D3FP-01, -03)	2 holes	SEF: A3, A4, A5, B4 JIS, B5 JIS, 11 × 17, 8$^1/_2$ × 14, 8$^1/_2$ × 13, 8$^1/_2$ × 11, 8$^1/_4$ × 14, 8$^1/_4$ × 13, 8 × 13, 8 × 10, 7$^1/_4$ × 10$^1/_2$, 5$^1/_2$ × 8$^1/_2$, 8K, 16K, 11 × 15, 11 × 14, 10 × 15, 10 ×14, SRA4, 226 × 310 mm[*1], 8$^1/_2$ × 13$^2/_5$, custom size *1 Pro C5300S/C5310S only
		LEF: A4, A5, B5 JIS, 8$^1/_2$ × 11, 7$^1/_4$ × 10$^1/_2$, 5$^1/_2$ × 8$^1/_2$, 16K, custom size
	4 holes	SEF: A3, B4 JIS, 11 × 17, 8K, 11 × 15, 11 × 14, custom size
		LEF: A4, B5 JIS, 8$^1/_2$ × 11, 7$^1/_4$ × 10$^1/_2$, 16K, custom size

Punch unit type		Paper size
4 holes type (D3FP-02)	4 holes	SEF: A3, A4, A5, B4 JIS, B5 JIS, B6 JIS, 11 × 17, 8 1/2 × 14, 8 1/2 × 13, 8 1/2 × 11, 8 1/4 × 14, 8 1/4× 13, 8 × 13, 8 × 10, 7 1/4 × 10 1/2, 5 1/2 × 8 1/2, 8K, 16K, 11 × 15, 11 × 14, 10 × 15, 10 × 14, SRA4, 226 × 310 mm*1, 8 1/2 × 13 2/5, custom size *1 Pro C5300S/C5310S only
		LEF: A4, A5, B5 JIS, 8 1/2 × 11, 7 1/4 × 10 1/2, 5 1/2 × 8 1/2, 16K, custom size
2 & 3 holes type (D3FP-00)	2 holes	SEF: A3, A4, A5, B4 JIS, B5 JIS, B6 JIS, 11 × 17, 8 1/2 × 14, 8 1/2 × 13, 8 1/2 × 11, 8 1/4 × 14, 8 1/4 × 13, 8 × 13, 8 × 10, 7 1/4 × 10 1/2, 5 1/2 × 8 1/2, 8K, 16K, 11 × 15, 11 × 14, 10 × 15, 10 × 14, SRA4, 226 × 310 mm*1, 8 1/2 × 13 2/5, custom size *1 Pro C5300S/C5310S only
		LEF: A4, A5, B5 JIS, 8 1/2 × 11, 7 1/4 × 10 1/2, 5 1/2 × 8 1/2, 16K, custom size
	3 holes	SEF: A3, B4 JIS, 11 × 17, 8K, 11 × 15, 11 × 14, 10 × 15, 10 × 14, custom size
		LEF: A4, B5 JIS, 8 1/2 × 11, 7 1/4 × 10 1/2, 16K, custom size

Paper weight:

- IM C6500/C8000: 52.3–256.0 g/m2 (14.0 lb. Bond–141.0 lb. Index)
- Pro C5300S/C5310S: 52.3–256.0 g/m^2 (14.0 lb. Bond–79.9 lb. Cover)

Output Jogger Unit Type M25

Item	Specification
Paper Size	A3 SEF, A4, A5 LEF, B4 JIS SEF, B5 JIS LEF, 11 × 17 SEF, 8 1/2 × 14 SEF, 8 1/2 × 11, 5 1/2 × 8 1/2 LEF, 12 × 18 SEF, 13 × 19 1/5 SEF
Power Source	Draw from main unit
Power Consumption	15 W or less
Weight	Approx. 2 kg (4.4 lb.)
Dimensions (W x D x H)	169 x 539 x 203 mm (6.7 x 21.3 x 8.0 inches)

Finisher SR5110

Note

- Only Pro C5300S/C5310S

Item	Specification	Remarks
Power consumption	150 W or less	A separate power source is required.
Dimensions (W x D x H)	996 x 730 x 1415 mm (39.2 x 28.7 x 55.7 inches) (without the shift trays extended) 1113 x 730 x 1490 mm (43.8 x 28.7 x 58.7	

Item		Specification	Remarks
		inches) (with the shift trays extended)	
Weight		Approximately 135 kg (298 lb)	
Staple position		Top, Left 2, Top 2, Bottom, Top Slant, Right 1, Right 2	
Paper size for shift tray 1	Without Z-fold	A3 SEF, A4, A5, A6 SEF, B4 JIS SEF, B5 JIS, B6 JIS SEF, 11 x 17 SEF, $8^1/_2$ x 14 SEF, $8^1/_2$ x 13 SEF, $8^1/_2$ x 11, $8^1/_4$ x 14 SEF, $8^1/_4$ x 13 SEF, 8 x 13 SEF, 8 x 10 SEF, $7^1/_4$ x $10^1/_2$, $5^1/_2$ x $8^1/_2$, 8K SEF, 16K, 12 x 18 SEF, 11 x 15 SEF, 11 x 14 SEF, 10 x 15 SEF, 10 x 14 SEF, 13 x $19^1/_5$ SEF, 13 x 19 SEF, $12^3/_5$ x $19^1/_5$ SEF, $12^3/_5$ x $18^1/_2$ SEF, 13 x 18 SEF, SRA3 SEF, SRA4, 226 x 310 mm, 310 x 432 mm SEF, $8^1/_2$ x $13^2/_5$ SEF, $8^1/_2$ x $13^1/_2$ SEF, custom size	
	With Z-fold	A3 SEF, A4 SEF, B4 JIS SEF, 11 x 17 SEF, $8^1/_2$ x 14 SEF, $8^1/_2$ x 11 SEF, 8K SEF, 12 x 18 SEF, $8^1/_2$ x $13^2/_5$ SEF	
Stack capacity for shift tray 1	Without Z-fold	A4, $8^1/_2$ x 11: 1,000 sheets Other sizes: 500 sheets	80 g/m^2 paper
	With Z-fold	30 sheets	
Paper weight for shift tray 1	Without Z-fold	40.0–350.0 g/m^2 (34.4–300.9 kg)	300.1–350.0 g/m^2: Specified paper only
	With Z-fold	64.0–105.0 g/m^2 (55.1–90.3 kg)	
Paper size for shift tray 2	Without Z-fold	A3 SEF, A4, A5, B4 JIS SEF, A6 SEF, B5 JIS, B6 JIS SEF, 11 x 17 SEF, $8^1/_2$ x 14 SEF, $8^1/_2$ x 13 SEF, $8^1/_2$ x 11, $8^1/_4$ x 14 SEF, $8^1/_4$ x 13 SEF, 8 x 13 SEF, 8 x 10 SEF, $7^1/_4$ x $10^1/_2$, $5^1/_2$ x $8^1/_2$, 8K SEF, 16K, 12 x 18 SEF, 11 x 15 SEF, 11 x 14 SEF, 10 x 15 SEF, 10 x 14 SEF, 13 x $19^1/_5$ SEF, 13 x 19 SEF, $12^3/_5$ x $19^1/_5$ SEF, $12^3/_5$ x $18^1/_2$ SEF, 13 x 18 SEF, SRA3 SEF, SRA4, 226 x 310 mm, 310 x 432 mm SEF, $8^1/_2$ x $13^2/_5$ SEF, $8^1/_2$ x $13^1/_2$ SEF, custom size	
	With Z-fold	A3 SEF, A4 SEF, B4 JIS SEF, 11 x 17 SEF, $8^1/_2$ x 14 SEF, $8^1/_2$ x 11 SEF, 8K SEF,	

Item		Specification	Remarks
		12 x 18 SEF, 8 1/2 x 13 2/5 SEF, 8 1/2 x 13 1/2 SEF	
Stack capacity for shift tray 2 (without Z-fold)	Without staple	A4 LEF, B5 LEF, 8 1/2 x 11 SEF: 3,000 sheets A3 SEF, A4 SEF, B4 SEF, B5 SEF, 11 x 17 SEF, 8 1/2 x 14 SEF, 8 1/2 x 11 SEF, SRA4, 226 x 310mm: 1,500 sheets 12 x 18 SEF, 13 x 19 1/5 SEF, SRA3 SEF, 13 x19 SEF, 12 3/5 x 19 1/5 SEF, 12 3/5 x 18 1/2 SEF, 13 x 18 SEF, 310 x 432 mm: 1,000 sheets A5 LEF, 5 1/2 x 8 1/2 LEF: 500 sheets A5 SEF, 5 1/2 x 8 1/2 SEF: 100 sheets	
	With staple	A3 SEF, B4 SEF, 11 x 17 SEF, 8 1/2 x 14 SEF: 10–50 sheets: 150–30 sets,2–9 sheets: 150 sets A4LEF, B5LEF, 8 1/2 x 11 LEF: 20–100 sheets: 125–25sets, 10–19 sheets: 200–10sets, 2–9 sheets: 150sets, 20–100 sheets: 150–30 sets A4 SEF, B5 SEF, 8 1/2 x 11 SEF: 10–100 sheets: 150–15 sets, 2–9 sheets: 150 sets Mixed Sizes: 2–50 sheets: 30 sets (A3 SEF and A4 LEF, B4 SEF and B5LEF, 11 x 17 SEF and 8 1/2 x 11 LEF, 8K SEF and 16K LEF)	80 g/m^2 paper
Stack capacity for shift tray 2 (with Z-fold)	Without staple	30 sheets	80 g/m^2 paper
	With staple	1–10 sheets: 30–3 sets (Z-folded A3 SEF and A4 LEF, Z-folded B4 JIS SEF and B5 JIS LEF, Z-folded 11 x 17 SEF and 8 1/2 x 11 LEF, Z-folded 8K SEF and 16K LEF)	
Paper weight for shift tray 2	Without Z-fold	40.0–470 g/m^2 (34.4–403.9 kg)	400.1–470.0 g/m^2: Specified paper only
	With Z-fold	64.0–105.0 g/m^2 (55.1–90.3 kg)	
Staple paper size	Without Z-fold	A3 SEF, B4JIS SEF, A4, B5, 11 x 17 SEF, 8 1/2 x 14 SEF, 8 1/2 x 11, 8 1/4 x 14 SEF, 8 1/2 x 13 SEF, 8 1/4 x 13 SEF, 8 x 13 SEF, 8	

<table>
<tr><th colspan="2">Item</th><th colspan="3">Specification</th><th>Remarks</th></tr>
<tr><td></td><td></td><td colspan="3">x 10 SEF, 7 1/4 x 10 1/2, 8K SEF, 16K, 11 x 15 SEF, 11 x 14 SEF, 10 x 15 SEF, 10 x 14 SEF</td><td></td></tr>
<tr><td></td><td>With Z-fold</td><td colspan="3">A3 SEF, B4 SEF, 11 x 17 SEF, 8K SEF</td><td></td></tr>
<tr><td></td><td>With Z-fold and Mixed Sizes</td><td colspan="3">A3 SEF and A4 LEF
B4 SEF and B5LEF
11 x 17 SEF and 8 1/2 x 11 LEF
8K SEF and 16K LEF</td><td></td></tr>
<tr><td rowspan="14">Staple capacity</td><td>Without Z-fold</td><td colspan="3">A4, B5, 8 1/2 x 11, 8 x 10 1/2, 8 x 10, 7 1/4 x 10 1/2, 16K: 100 sheets
A3 SEF, B4 SEF, 11 x 17 SEF, 11 x 15 SEF, 11 x 14 SEF, 10 x 15 SEF, 10 x 14 SEF, 8 1/2 x 14 SEF, 8 1/2 x 13 SEF, 8 1/4 x 14 SEF, 8 1/4 x 13 SEF, 8 x 13 SEF, 8K SEF: 50 sheets</td><td rowspan="14">80 g/m2 paper</td></tr>
<tr><td>With Mixed Sizes</td><td colspan="3">50 sheets (A3 SEF and A4 LEF, B4 SEF and B5LEF, 11 x 17 SEF and 8 1/2 x 11 LEF, 8K SEF and 16K LEF)</td></tr>
<tr><td>With Z-fold</td><td colspan="3">10 sheets</td></tr>
<tr><td rowspan="11">Combination of Z-folded sheets and unfolded sheets</td><td>Z-folded sheets</td><td>Unfolded sheets</td><td></td></tr>
<tr><td>10</td><td>0</td><td></td></tr>
<tr><td>9</td><td>0–10</td><td></td></tr>
<tr><td>8</td><td>0–20</td><td></td></tr>
<tr><td>7</td><td>0–30</td><td></td></tr>
<tr><td>6</td><td>0–40</td><td></td></tr>
<tr><td>5</td><td>0–50</td><td></td></tr>
<tr><td>4</td><td>0–60</td><td></td></tr>
<tr><td>3</td><td>0–70</td><td></td></tr>
<tr><td>2</td><td>0–80</td><td></td></tr>
<tr><td>1</td><td>0–90</td><td></td></tr>
<tr><td>Staple paper weight</td><td>With Mixed Sizes</td><td colspan="3">63.1–80.0 g/m2 (54.3–68.8 kg)</td><td>You can use up to two sheets of A4 or 8 1/2 x 11 size paper weighing up to 200.0 g/m2 per set as slip sheets. The thickness of the set must be 11 mm or smaller.</td></tr>
</table>

Item		Specification	Remarks
	With Z-fold	64.0–105 g/m^2 (55.0–90.3 kg)	

Booklet Finisher SR5120

Note

- Only Pro C5300S/C5310S

Item		Specification	Remarks
Power consumption		150 W or less	A separate power source is required.
Dimensions (W x D x H)		996 x 730 x 1415 mm (39.2 x 28.7 x 55.7 inches) (without the shift trays extended) 1113 x 730 x 1490 mm (43.8 x 28.7 x 58.7 inches) (with the shift trays extended)	
Weight		Approximately 160 kg (353 lb)	
Saddle stitch positions		Center 2 positions	
Types of folds		Half Fold	
Paper size for shift tray 1	Without Z-fold	A3 SEF, A4, A5, A6 SEF, B4 JIS SEF, B5 JIS, B6 JIS SEF, 11 x 17 SEF, 8^1/$_2$ x 14 SEF, 8^1/$_2$ x 13 SEF, 8^1/$_2$ x 11, 8^1/$_4$ x 14 SEF, 8^1/$_4$ x 13 SEF, 8 x 13 SEF, 8 x 10 SEF, 7^1/$_4$ x 10^1/$_2$, 5^1/$_2$ x 8^1/$_2$, 8K SEF, 16K, 12 x 18 SEF, 11 x 15 SEF, 11 x 14 SEF, 10 x 15 SEF, 10 x 14 SEF, 13 x 19^1/$_5$ SEF, 13 x 19 SEF, 12^3/$_5$ x 19^1/$_5$ SEF, 12^3/$_5$ x 18^1/$_2$ SEF, 13 x 18 SEF, SRA3 SEF, SRA4, 226 x 310 mm, 310 x 432 mm SEF, 81/2 x 13^2/$_5$ SEF, 8^1/$_2$ x 13^1/$_2$ SEF, custom size	
	With Z-fold	A3 SEF, A4 SEF, B4 JIS SEF, 11 x 17 SEF, 8^1/$_2$ x 14 SEF, 8^1/$_2$ x 11 SEF, 8K SEF, 12 x 18 SEF, 8^1/$_2$ x 13^2/$_5$ SEF, 8^1/$_2$ x 13^1/$_2$ SEF	
Stack capacity for shift tray 1	Without Z-fold	A4, 8^1/$_2$ x 11: 1,000 sheets Other sizes: 500 sheets	80 g/m^2 paper
	With Z-fold	30 sheets	
Paper weight for shift tray 1	Without Z-fold	40.0–350.0 g/m^2 (34.4–300.9 kg)	300.1–350.0 g/m^2: Specified paper only
	With Z-fold	64.0–105.0 g/m^2 (55.1–90.3 kg)	

Item		Specification	Remarks
Paper size for shift tray 2	Without Z-fold	A3 SEF, A4, A5, B4 JIS SEF, A6 SEF, B5 JIS, B6 JIS SEF, 11 x 17 SEF, 8 1/2 x 14 SEF, 8 1/2 x 13 SEF, 8 1/2 x 11, 8 1/4 x 14 SEF, 8 1/4 x 13 SEF, 8 x 13 SEF, 8 x 10 SEF, 7 1/4 x 10 1/2, 5 1/2 x 8 1/2, 8K SEF, 16K, 12 x 18 SEF, 11 x 15 SEF, 11 x 14 SEF, 10 x 15 SEF, 10 x 14 SEF, 13 x 19 1/5 SEF, 13 x 19 SEF, 12 3/5 x 19 1/5 SEF, 12 3/5 x 18 1/2 SEF, 13 x 18 SEF, SRA3 SEF, SRA4, 226 x 310 mm, 310 x 432 mm SEF, 8 1/2 x 13 2/5 SEF, 8 1/2 x 13 1/2 SEF, custom size	
	With Z-fold	A3 SEF, A4 SEF, B4 JIS SEF, 11 x 17 SEF, 8 1/2 x 14 SEF, 8 1/2 x 11 SEF, 8K SEF, 12 x 18 SEF, 8 1/2 x 13 2/5 SEF, 8 1/2 x 13 1/2 SEF	
Stack capacity for shift tray 2 (without Z-fold)	Without staple	A4 LEF, B5 LEF, 8 1/2 x 11 SEF: 2,500 sheets A3 SEF, A4 SEF, B4 SEF, B5 SEF, 11 x 17 SEF, 8 1/2 x 14 SEF, 8 1/2 x 11 SEF, SRA4, 226 x 310mm: 1,500 sheets 12 x 18 SEF, 13 x 19 1/5 SEF, SRA3 SEF, 13 x19 SEF, 12 3/5 x 19 1/5 SEF, 12 3/5 x 18 1/2 SEF, 13 x 18 SEF, 310 x 432 mm: 1,000 sheets A5 LEF, 5 1/2 x 8 1/2 LEF: 500 sheets A5 SEF, 5 1/2 x 8 1/2 SEF: 100 sheets	
	With staple	A3 SEF, B4 SEF, 11 x 17 SEF, 8 1/2 x 14 SEF: 10–50 sheets: 150–30 sets,2–9 sheets: 150 sets A4LEF, B5LEF, 8 1/2 x 11 LEF: 20–100 sheets: 125–25sets, 10–19 sheets: 200–10sets, 2–9 sheets: 150sets, 20–100 sheets: 150–30 sets A4 SEF, B5 SEF, 8 1/2 x 11 SEF: 10–100 sheets: 150–15 sets, 2–9 sheets: 150 sets Mixed Sizes: 2–50 sheets: 30 sets (A3 SEF and A4 LEF, B4 SEF and B5LEF, 11 x 17 SEF and 8 1/2 x 11 LEF, 8K SEF and	80 g/m^2 paper

Item		Specification		Remarks
		16K LEF)		
Stack capacity for shift tray 2 (with Z-fold)	Without staple	30 sheets		80 g/m^2 paper
	With staple	1–10 sheets: 30–3 sets (Z-folded A3 SEF and A4 LEF, Z-folded B4 JIS SEF and B5 JIS LEF, Z-folded 11 x 17 SEF and 8^1/$_2$ x 11 LEF, Z-folded 8K SEF and 16K LEF)		
Paper weight for shift tray 2	Without Z-fold	40–470 g/m^2 (34.4–403.9 kg)		400.1–470.0 g/m^2: Specified paper only
	With Z-fold	64.0–105.0 g/m^2 (55.1–90.3 kg)		
Staple paper size	Without Z-fold	A3 SEF, B4JIS SEF, A4, B5, 11 x 17 SEF, 8^1/$_2$ x 14 SEF, 8^1/$_2$ x 11, 8 ^{1}/$_4$ x 14 SEF, 8^1/$_2$ x 13 SEF, 8^1/$_4$ x 13 SEF, 8 x 13 SEF, 8 x 10 SEF, 7^1/$_4$ x 10^1/$_2$, 8K SEF, 16K, 11 x 15 SEF, 11 x 14 SEF, 10 x 15 SEF, 10 x 14 SEF		
	With Z-fold	A3 SEF, B4 SEF, 11 x 17 SEF, 8K SEF		
	With Z-fold and Mixed Sizes	A3 SEF and A4 LEF B4 SEF and B5LEF 11 x 17 SEF and 8^1/$_2$ x 11 LEF 8K SEF and 16K LEF		
Staple capacity	Without Z-fold	A4, B5, 8^1/$_2$ x 11, 8 x 10^1/$_2$, 8 x 10, 7^1/$_4$ x 10^1/$_2$, 16K: 100 sheets A3 SEF, B4 SEF, 11 x 17 SEF, 11 x 15 SEF, 11 x 14 SEF, 10 x 15 SEF, 10 x 14 SEF, 8^1/$_2$ x 14 SEF, 8^1/$_2$ x 13 SEF, 8^1/$_4$ x 14 SEF, 8^1/$_4$ x 13 SEF, 8 x 13 SEF, 8K SEF: 50 sheets		80 g/m^2 paper
	With Mixed Sizes	50 sheets (A3 SEF and A4 LEF, B4 SEF and B5LEF, 11 x 17 SEF and 8^1/$_2$ x 11 LEF, 8K SEF and 16K LEF)		
	With Z-fold	10 sheets		
	Combination of Z-folded sheets and unfolded sheets	Z-folded sheets	Unfolded sheets	
		10	0	
		9	0–10	
		8	0–20	
		7	0–30	

Item		Specification		Remarks
		6	0–40	
		5	0–50	
		4	0–60	
		3	0–70	
		2	0–80	
		1	0–90	
Staple paper weight	With Mixed Sizes	63.1–80.0 g/m^2 (54.3–68.8 kg)		You can use up to two sheets of A4 or 8^1/$_2$ x 11 size paper weighing up to 200.0 g/m^2 per set as slip sheets. The thickness of the set must be 11 mm or smaller.
	With Z-fold	64.0–105 g/m^2 (55.0–90.3 kg)		
Staple position		Top, Left 2, Top 2, Bottom, Top Slant, Right 1, Right 2, Center		
Saddle stitch capacity		30 sheets		When using the specified paper
Saddle stitch paper size		A3 SEF, A4 SEF, B4 JIS SEF, B5 JIS SEF, 11 x 17 SEF, 8^1/$_2$ x 14 SEF, 8^1/$_2$ x 13 SEF, 8^1/$_2$ x 11 SEF, 8^1/$_4$ x 14 SEF, 8^1/$_4$ x 13 SEF, 8 x 13 SEF, 7^1/$_4$ x 10^1/$_2$ SEF, 8K SEF, 16K SEF, 12 x 18 SEF, 11 x 15 SEF, 11 x 14 SEF, 10 x 15 SEF, 10 x 14 SEF, 13 x 19^1/$_5$ SEF, 13 x 19 SEF, 12^3/$_5$ x 19^1/$_5$ SEF, 12^3/$_5$ x 18^1/$_2$ SEF, 13 x 18 SEF, SRA3 SEF, SRA4 SEF, 226 x 310 mm SEF, 310 x 432 mm SEF, 8^1/$_2$ x 13^1/$_2$ SEF, 8^1/$_2$ x 13^2/$_5$ SEF		
Stack capacity after saddle stitching		2– 5 sheets: approx. 45 sets 6–10 sheets: approx. 23 sets 11–15 sheets: approx. 25 sets 16–20 sheets: approx. 10 sets 21–30 sheets: approx. 5 sets		When using the A3 size specified paper
Saddle stitch paper weight		52.3–350 g/m^2		52.3–63 g/m^2 and 256.1–350 g/m^2: Specified paper only

Item	Specification	Remarks
Corner stapling paper weight	64–80 g/m^2 (55.0–68.8 kg)	
Folding capacity of half folding function	6 sheets: 52.3–105.0 g/m^2 2 sheets: 105.1–163.0g/m^2 1 sheet: 163.1–350.0g/m^2	

Punch Unit PU5030

Note

Only Pro C5300S/C5310S: For Finisher SR5110/Booklet Finisher SR5120

Paper size:

Punch unit type		Paper size
2 & 4 holes type (D3GJ-27)	2 holes	SEF: A3, A4, A5, B4 JIS, B5 JIS, B6 JIS, 11 × 17, 8 1/2 × 14, 8 1/2 × 13, 8 1/2 × 11, 8 1/4 × 14, 8 1/4 × 13, 8 × 13, 8 × 10, 7 1/4 × 10 1/2, 5 1/2 × 8 1/2, 8K, 16K, 11 × 15, 11 × 14, 10 × 15, 10 × 14, custom size
		LEF: A4, A5, B5 JIS, 8 1/2 × 11, 7 1/4 × 10 1/2, 5 1/2 × 8 1/2, 16K, custom size
	4 holes	SEF: A3, B4 JIS, 11 × 17, 8K, 12 × 18, 11 × 15, 11 × 14, custom size
		LEF: A4, B5 JIS, 8 1/2 × 11, 7 1/4 × 10 1/2, 16K, custom size
4 holes type (D3GJ-28)	4 holes	SEF: A3, A4, A5, B4 JIS, B5 JIS, B6 JIS, 11 × 17, 8 1/2 × 14, 8 1/2 × 13, 8 1/2 × 11, 8 1/4 × 14, 8 1/4 × 13, 8 × 13, 8 × 10, 7 1/4 × 10 1/2, 5 1/2 × 8 1/2, 8K, 16K, 11 × 15, 11 × 14, 10 × 15, 10 × 14, custom size
		LEF: A4, A5, B5 JIS, 8 1/2 × 11, 7 1/4 × 10 1/2, 5 1/2 × 8 1/2, 16K, custom size
2 & 3 holes type (D3GJ-17)	2 holes	SEF: A3, A4, A5, A6, B4 JIS, B5 JIS, B6 JIS, 11 × 17, 8 1/2 × 14, 8 1/2 × 13, 8 1/2 × 11, 8 1/4 × 14, 8 1/4 × 13, 8 × 13, 8 × 10, 7 1/4 × 10 1/2, 5 1/2 × 8 1/2, 8K, 16K, 11 × 15, 11 × 14, 10 × 15, 10 × 14, custom size
		LEF: A4, A5, B5 JIS, 8 1/2 × 11, 7 1/4 × 10 1/2, 5 1/2 × 8 1/2, 16K, custom size
	3 holes	SEF: A3, B4 JIS, 11 × 17, 8K, 11 × 15, 11 × 14, 10 × 15, 10 × 14, custom size
		LEF: A4, B5 JIS, 8 1/2 × 11, 7 1/4 × 10 1/2, 16K, custom size

Paper weight:

- 52.3–300.0 g/m^2 (14.0 lb. Bond–165.0 lb. Index)

Finisher SR4140

Note

- Only IM C6500/C8000

Item		Specification
Paper size	Upper	• Without Z-Folding

Item		Specification
	Tray	A3 SEF, A4, A5, A6 SEF, B4 JIS SEF, B5 JIS, B6 JIS SEF, 11×17 SEF, $8^1/_2$×14 SEF, 8×13 SEF, $8^1/_2$×11, $8^1/_4$× 14 SEF, $8^1/_4$×13 SEF, 8×13 SEF, $7^1/_4$×$10^1/_2$, $5^1/_2$×$8^1/_2$, 8K SEF, 16K, 12×18 SEF, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, 13×$19^1/_5$ SEF, 13×19 SEF, $12^3/_5$×$19^1/_5$ SEF, $12^3/_5$×$18^1/_2$ SEF, 13×18 SEF, SRA3 SEF, SRA4, $8^1/_2$×$13^2/_5$ SEF, Custom size • With Z-Folding A3 SEF, A4 SEF, B4 JIS SEF, 11×17 SEF, $8^1/_2$×14 LEF, $8^1/_2$×11 LEF Following is applicable when FD4010 is installed: Half fold: A3 SEF, A4 SEF, B4 SEF, 11×17 SEF, $8^1/_2$×14 SEF, $8^1/_2$×11 SEF, 8K SEF, SRA3 SEF, SRA4 SEF, $8^1/_2$ ×$13^1/_5$, 12×18 , $12^3/_5$×$18^1/_2$, 13×18, 13×19, $12^3/_5$×$19^1/_5$, 13×$19^1/_5$ Letter Fold-in, Letter Fold-out: A3 SEF, 11×17 SEF
	Shift Tray	• Without Z-Folding A3 SEF, A4, A5, A6 SEF, B4 JIS SEF, B5 JIS, B6 JIS SEF, 11×17 SEF, $8^1/_2$×14 SEF, 8×13 SEF, $8^1/_2$×11, $8^1/_4$×14 SEF, $8^1/_4$×13 SEF, 8×13 SEF, $7^1/_4$×$10^1/_2$, $5^1/_2$×$8^1/_2$, 8K SEF, 16K, 12×18 SEF, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, 13×$19^1/_5$ SEF, 13×19 SEF, $12^3/_5$×$19^1/_5$ SEF, $12^3/_5$×$18^1/_2$ SEF, 13×18 SEF, SRA3 SEF, SRA4, $8^1/_2$×$13^2/_5$ SEF, Custom size • With Z-Folding A3 SEF, A4 SEF, B4 JIS SEF, 11×17 SEF, $8^1/_2$×14 LEF, $8^1/_2$×11 LEF Output jogger unit • Without Z-Folding A3, A4, A5, 11×17 SEF to $5^1/_2$×$8^1/_2$ SEF, 12×18, 13×19 • With Z-folding A3 , B4 , A4 SEF, 11×17 SEF, $8^1/_2$×14 , $8^1/_2$×11 SEF, 12×18 , 8K *Following is applicable when FD4010 is installed • Half fold: A3, A4, B4, 8K, $8^1/_2$×$13^2/_5$, 12×18, $12^3/_5$×$19^1/_5$, $12^3/_5$×$18^1/_2$, 13×$19^1/_5$, 13×19, 13×18, SRA3, SRA4
	Staple	• Without Z-Folding A3 SEF, A4, B4 JIS SEF, B5, 11×17 SEF, $8^1/_2$×14 SEF, 8×13 SEF, $8^1/_2$×11, $8^1/_4$×14 SEF, $8^1/_4$×13 SEF, 8×13 SEF, $7^1/_4$×$10^1/_2$, 8K SEF, 16K, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, $8^1/_2$× $13^2/_5$ SEF • With Z-Folding A3 SEF, B4 JIS SEF, 11×17 SEF • With Z-Folding, Mixed Size A3 SEF and A4 LEF, B4 JIS SEF and B5 JIS LEF, 11×17 SEF and

Item		Specification
		$8^1/_2$×11 LEF
Paper weight	Upper Tray	• Without Z-fold: 52.3–216.0 g/m^2 (14.0 lb. Bond–79.9 lb. Cover) • With Z-fold: 64.0–105.0 g/m^2 (17.1–28.0 lb. Bond) *Following is applicable when FD4010 is installed • Half fold, Letter Fold-in, Letter Fold-out 64.0 - 105.0g/m^2
	Shift Tray	• Without Z-fold: 52.3–300.0 g/m^2 (14.0 lb. Bond–165.0 lb. Index) • With Z-fold: 64.0–105.0 g/m^2 (17.1–28.0 lb. Bond)
	Staple	• Without Z-Folding 64.0–90.0 g/m^2 (17.1–24.0 lb. Bond) • With Z-Folding 64.0–80.0 g/m^2 (17.1–21.3 lb. Bond)
Capacity	Upper Tray	• Without Z-Folding A4, $8^1/_2$×11 or smaller: 500 sheets B4, $8^1/_2$× 14 or larger: 250 sheets • With Z-Folding 30 sheets *Following is applicable when FD4010 is installed • Half fold: A4, $8^1/_2$×11 or smaller: 30 sheets B4, $8^1/_2$×14 or larger: 40 sheets • Letter Fold-in, Letter Fold-out: A3, 11×17: 40 sheets (As a reference value)
	Shift Tray	• Without Z-Folding A4 LEF, B5 JIS LEF, $8^1/_2$×11 LEF: 3,000 sheets A3 SEF, A4 SEF, B4 JIS SEF, B5 JIS SEF, 11×17 SEF, $8^1/_2$×14 SEF, $8^1/_2$×11 SEF: 1,500 sheets 12×18 SEF, 13×19 SEF: 1,000 sheets A5 LEF, $5^1/_2$×$8^1/_2$LEF: 500 sheets A5 SEF, $5^1/_2$×$8^1/_2$ SEF: 100 sheets When using paper that has a horizontal length of 487.8–1,260.0 mm (19.21–49.60 inches), remove output sheets one by one from the tray. • With Z-Folding 30 sheets

Item		Specification
		*Following is applicable when FD4010 is installed • Half fold A4, 8 1/2×11 or smaller: 20 sheets B4, 8 1/2×14 or larger: 30 sheets
	Staple	• Without Z-Folding A3 SEF, B4 JIS SEF, 11×17 SEF, 8 1/2×14 SEF, 8 1/2×13 SEF, 8 1/4×14 SEF, 8 1/4×13 SEF, 8×13 SEF, 8K SEF, 11×15 SEF, 11×14 SEF, 10×15 SEF, 10×14 SEF, 8 1/2×13 2/5 SEF: 50 sheets A4, B5 JIS, 8 1/2×11, 7 1/4×10 1/2, 16K: 100 sheets • Mixed Size 50 sheets (A3 SEF /A4 LEF, B4 JIS SEF/B5 JIS LEF, 11×17 SEF/8 1/2×11 LEF) • With Z-Folding 10 sheets • Combination of With and Without Z-Folding 10 sheets of Z-Folding and 0 sheets Without Z-Folding, 9 sheets of Z-Folding and 0 to 10 sheets Without Z-Folding, 8 sheets of Z-Folding and 0 to 20 sheets Without Z-Folding, 7 sheets of Z-Folding and 0 to 30 sheets Without Z-Folding, 6 sheets of Z-Folding and 0 to 40 sheets Without Z-Folding, 5 sheets of Z-Folding and 0 to 50 sheets Without Z-Folding, 4 sheets of Z-Folding and 0 to 60 sheets Without Z-Folding, 3 sheets of Z-Folding and 0 to 70 sheets Without Z-Folding, 2 sheets of Z-Folding and 0 to 80 sheets Without Z-Folding, 1 sheet of Z-Folding and 1 to 90 sheets Without Z-Folding
Staple position		5 positions (Top 1, Bottom 1, Slant, Left 2, Top 2)
Power source		Draw from main unit
Power consumption		100 W or less
Weight		approx. 75 kg (165.4 lb.)
Dimensions (W×D×H):		806×730×980 mm (31.8×28.8×38.6 inches)

Punch Unit PU5050

Note

- Only IM C6500/C8000: For Finisher SR4140

Paper size:

Punch unit type		Paper size
2 & 4 holes type	2 holes	SEF: A3, A4, A5, A6, B4 JIS, B5 JIS, B6 JIS, 11 × 17, 8 1/2 × 14, 8 1/2 × 13, 8 1/2 × 11,

Punch unit type		Paper size
(D3HE-02)		$8^1/_4$ × 14, $8^1/_4$ × 13, 8 × 13, $7^1/_4$ × $10^1/_2$, $5^1/_2$ × $8^1/_2$, 8K, 16K, 12 × 18, 11 × 15, 11 × 14, 10 × 15, 10 × 14, $8^1/_2$ × $13^2/_5$, custom size
		LEF: A4, A5, B5 JIS, $8^1/_2$ × 11, $7^1/_4$ × $10^1/_2$, $5^1/_2$ × $8^1/_2$, 16K, custom size
	4 holes	SEF: A3, B4 JIS, 11 × 17, 8K, 12 × 18, 11 × 15, 11 × 14, custom size
		LEF: A4, B5 JIS, $8^1/_2$ × 11,$7^1/_4$ × $10^1/_2$, 16K, custom size
4 holes type (D3HE-03)	4 holes	SEF: A3, A4, A5, B4 JIS, B5 JIS, B6 JIS, 11 × 17, $8^1/_2$ × 14, $8^1/_2$ × 13, $8^1/_2$ × 11, $8^1/_4$ × 14, $8^1/_4$ × 13, 8 × 13, $7^1/_4$ × $10^1/_2$, $5^1/_2$ × $8^1/_2$, 8K, 16K, 12 × 18, 11 × 15, 11 × 14, 10 × 15, 10 × 14, $8^1/_2$× $13^2/_5$, custom size
		LEF: A4, A5, B5 JIS, $8^1/_2$ × 11, $7^1/_4$ × $10^1/_2$, $5^1/_2$ × $8^1/_2$, 16K, custom size
2 & 3 holes type (D3HE-01)	2 holes	SEF: A3, A4, A5, A6, B4 JIS, B5 JIS, B6 JIS, 11 × 17, $8^1/_2$ × 14, $8^1/_2$ × 13, $8^1/_2$ × 11, $8^1/_4$ × 14, $8^1/_4$ × 13, 8 × 13, $7^1/_4$ × $10^1/_2$, $5^1/_2$ × $8^1/_2$, 8K, 16K, 12 × 18, 11 × 15, 11 × 14, 10 × 15, 10 × 14, $8^1/_2$ × $13^2/_5$, custom size
		LEF: A4, A5, B5 JIS, $8^1/_2$ × 11, $7^1/_4$ × $10^1/_2$, $5^1/_2$ × $8^1/_2$, 16K, custom size
	3 holes	SEF: A3, B4 JIS, 11 × 17, 8K, 12 × 18, 11 × 15, 11 × 14, 10 × 15, 10 × 14, custom size
		LEF: A4, B5 JIS, $8^1/_2$ × 11, $7^1/_4$ × $10^1/_2$, 16K, custom size

Paper weight:

- 52.3–300.0 g/m^2 (14.0 lb. Bond–165.0 lb. Index)

Trimmer Unit TR5050

Item	Specification	Note
Configuration	Small console	
Line Speed	349.3 mm/s (Between each stack: 8.2 secs or longer)	
Supported Paper Sizes	13 x 19.2, 13 x 19, 12.6 x 19.2, 12.6 x 18.5, 13 x 18, SRA3 (320 x 420 mm), 12 x 18, A3, B4, SRA4 (320 x 225 mm), 226 x 310 mm, A4, B5, DLT, LG, LT **Custom Size** Width: 182 - 330 mm Length: 257 - 488 mm (before folding)	
Paper Capacity	Up to 30 sheets	Folded and saddle-stitched
Dimensions	1,115 x 591 x 555 mm (43.9 x 23.3 x 21.9 inches)	
Weight	75 kg (165.4 lb) or less	
Power requirements	100 - 240 V, 2 A, 50/60 Hz	

1.Specifications

Item	Specification	Note
Power consumption	75 W Maximum: 250 W	

Trimmer

Item	Specification	Note
Cutter Type	Guillotine	
Trim Capability	60 sheets (80g/m^2)	Folded and saddle-stitched

Exit Tray

Booklet Length After Trimming (mm)		Typical Sizes	1-5 Sheets	6-10 Sheets	11-15 Sheets	16-20 Sheets	21-30 Sheets
118.5 or longer	Shorter than 133.0	B5	60	35	25	20	20
133.0 or longer	Shorter than 160.0	A4, LT	60	35	25	20	20
160.0 or longer	Shorter than 190.1	B4, LG	60	40	25	20	20
191.0 or longer	Shorter than 242.0	A3, DLT	60	40	25	25	20

2. Preventive Maintenance Tables

PM Tables for Mainmachine (Pro C5300S/C5310S)

The yield figures in these tables are based on the following conditions.

- A4/LT LEF (Simplex)
- 5% image coverage ratio
- 5P/J (pages per job)

Symbol keys	Meaning
S	Service technician (CE)
U	User
T	TCRU trained user
●	Replace after total page count elapses
◎	Replace according to machine log count (sheet count, distance count, whichever occurs first)
▲	Must inspect, clean, lubricate (if applicable)
△	Inspect, clean, lubricate (if applicable) as necessary
Note	Materials required for cleaning, lubrication, etc.

Scanner

Item	S/U/T	Interval (pages)	Note
1st mirror	S	▲300K	Optics cloth
2nd mirror	S	▲300K	Optics cloth
3rd mirror	S	▲300K	Optics cloth
Exposure Glass	S/U	▲300K	Cleaning cloth
Original Length Sensors	S	▲300K	Dry cloth
ADF Exposure Glass	S/U	▲300K	Cleaning cloth

PCDU

Item	S/U/T	Interval (pages)		Note
		Pro C5300S	Pro C5310S	
Drum Cleaning Unit	T	◎400K	◎500K	Replace the unit by TCRU trained user. 189km distance (equivalent to 400K or 500K pages)
(Drum Cleaning Blade)	S	◎400K	◎500K	Replace with a set at the same time. 189km distance (equivalent to 400K or
(Side seal: cleaning	S	◎400K	◎500K	

2.Preventive Maintenance Tables

Item	S/U/T	Interval (pages)		Note
		Pro C5300S	Pro C5310S	
blade)				500K pages)
(Lubrication Roller)	S	◎400K	◎500K	Replace with a set at the same time. 189km distance (equivalent to 400K or 500K pages)
(Lubricant Bar)	S	◎400K	◎500K	
(Lubricant Blade)	S	◎400K	◎500K	Replace with a set at the same time. 189km distance (equivalent to 400K or 500K pages)
(Side seal: Lubricant Blade)	S	◎400K	◎500K	
(Lubrication Roller Drive Joint)	S	◎400K	◎500K	189km distance (equivalent to 400K or 500K pages)
Charge Roller Unit	S/T	◎500K	◎700K	Replace the unit. 250km distance (equivalent to 500K or 700K pages)
OPC Drum	S	◎1,400K	◎1,900K	670km distance (equivalent to 1,400K or 1,900K pages)
Potential Sensor	S	▲300K		Dry cloth
Quenching Lamp	S	▲300K		Dry cloth
Drum Shaft	S	▲300K		GREASE-KS660B

Development

Item	S/U/T	Interval (pages)	Note
Development Unit	S	▲300K	Wipe with a dry cloth when cleaning
	S	◎800K	303.4km distance (equivalent to 800K pages)
(Developer)	S	◎800K	Collect with a plastic bag 303.4km distance (equivalent to 800K pages)
(Development Filter)	S	◎800K	303.4km distance (equivalent to 800K pages)
(Gears)	S	▲300K	Blower brush, Dry cloth

Toner Supply

Item	S/U/T	Interval (pages)	Note
Toner Supply Unit	S	▲300K	Blower brush, Dry cloth

Transfer

Item	S/U/T	Interval (pages)		Note
		Pro C5300S	Pro C5310S	
ITB Unit				
(Image Transfer Belt)	S	◎1,800K		861km distance (equivalent to 1,800K pages)
(Image Transfer Roller)	S	◎1,800K		861km distance (equivalent to 1,800K pages)
(ITB Bias Roller)	S	◎1,500K		718km distance (equivalent to 1,500K pages)
(Rollers)	S	▲1,000K		
(ID Sensor)	S	▲1,000K		
ITB Cleaning Unit	T	◎500K	◎700K	Replace the unit by TCRU trained user. 239.4km distance (equivalent to 500K or 700K pages)
(ITB Lubricant Brush)	S	◎500K	◎700K	Replace all together. 239.4km distance (equivalent to 500K or 700K pages)
(ITB Lubricant Blade)	S	◎500K	◎700K	
(ITB Lubricant Bar)	S	◎500K	◎700K	
(ITB Cleaning Blade)	S	◎500K	◎700K	239.4km distance (equivalent to 500K or 700K pages)
Paper Transfer Belt Unit	T	◎500K	◎700K	Replace the unit by TCRU trained user. 239.4km distance (equivalent to 500K or 700K pages)
(Cleaning Blade)	S	◎500K	◎700K	239.4km distance (equivalent to 500K or 700K pages)
(Joint of the Paper Transfer Drive Shaft)	S	▲300K		Lubricate with the grease (Barrierta S552R) after replacing the paper transfer belt unit.
(Paper Transfer Lubrication Roller)	S	◎300K	◎400K	Replace with a set at the same time. 143.6km distance (equivalent to 300K or 400K pages)
(Paper Transfer Lubricant Bar)	S	◎300K	◎400K	
Paper Transport Belt Unit Set Sensor	S	▲300K		Remove toner and paper dust, Blower brush
Paper Transport Belt	S	▲300K		Damp cloth

Fusing

Item	S/U/T	Interval (pages)	Note
Fusing Unit	T	◎600K	Replace the unit by TCRU trained user
(Fusing Belt)	S	◎600K	
(Fusing Roller)	S	◎900K	
(Pressure Roller)	S	◎900K	
(Stripper Plate: Fusing Roller)	S	▲300K	Remove toner and paper dust, Dry cloth
(Stripper Plate: Pressure Roller)	S	▲300K	Remove toner and paper dust, Dry cloth
(Fusing Entrance Guide)	S	▲300K	Remove toner and paper dust, Dry cloth
(Thermistor (Fusing Belt)	S	▲600K	Remove toner and paper dust, Dry cloth Do at the same time as when replacing PM parts.
(Thermistor (Hot Roller Shaft)	S	▲900K	Remove toner and paper dust, Dry cloth Do at the same time as when replacing PM parts.
(Gears)	S	▲300K	FLUOTRIBO MG GREASE
(Pressure Roller Thermopile)	S	▲900K	Dry cloth
(Heating Roller Thermopile)	S	▲300K	Dry cloth
Fusing Belt Smoothing Roller	T	◎300K	Operating time 16000 sec. (equivalent to 300K pages)
Fusing Cleaning Web Unit	T	◎600K	Replace the unit by TCRU trained user
(Fusing Cleaning Web)	S	◎600K	
(Web Pressing Roller)	S	◎600K	
(Web Roller Stopper)	S	◎600K	

Miscellaneous

Item	S/U/T	Interval (pages)	PM	Note
Waste Toner Bottle*1	U	◎		Replace when toner bottle is full.
Drawer Unit	S		▲	Remove toner and paper dust, Dry cloth
Ozone Filters (Large)	S	◎1,200K		
Ozone Filters (Small)	S	◎1,200K		

Item	S/U/T	Interval (pages)	PM	Note
Toner Shield Glass (Laser Unit)	S	▲300K		Cleaning tool for toner shield glass
Dust Filters (Large)	T	◎600K		
Dust Filters (Small)	T	◎300K		
Deodorization Filter	S	◎1,200K		
Development Intake Dust Filter	S	▲600K		Blower brush or cloth
Pressure Roller Dust Filter	S	▲600K		Blower brush or cloth
Duplex Exhaust Ozone Filters	S	▲600K		Blower brush or cloth
Particulate Filters (Fusing/Paper Exit)	S	◎1,200K		
Particulate Filters (Transfer/Fusing)	S	◎1,200K		
Particulate Filters (Fusing Pressure Roller)	S	◎1,200K		

*1: The customer replaces the Waste Toner Bottle. By changing SP5-073-001, service replacement mode for Waste Toner Bottle is enabled. Never try to empty toner out of the waste toner bottle to use the same bottle again; always replace the bottle with a new one. This is because the transfer coil inside the bottle may break.

Paper Feed (Paper Trays)

Item	S/U/T	Interval (pages)	PM/EM	Note
Tray 1 Pick-up Roller	T		△	Damp cloth Replace when the frequency of jams or multi-feeding is increasing. (Upper limit 500K)
Tray 2 Pick-up Roller	T		△	
Tray 3 Pick-up Roller	T		△	
Tray 1 Feed Roller	T		△	Damp cloth Replace when the frequency of jams or multi-feeding is increasing. (Upper limit 500K)
Tray 2 Feed Roller	T		△	
Tray 3 Feed Roller	T		△	
Tray 1 Separation Roller	T		△	Damp cloth Replace when the frequency of jams or multi-feeding is increasing. (Upper limit 500K)
Tray 2 Separation Roller	T		△	
Tray 3 Separation Roller	T		△	
Tray 1 Paper Transport Roller (drive/idle)	S	▲300K		Damp cloth

2.Preventive Maintenance Tables

Item	S/U/T	Interval (pages)	PM/EM	Note
Tray 2 Paper Transport Roller (drive/idle)	S	▲300K		Damp cloth
Tray 3 Paper Transport Roller (drive/idle)	S	▲300K		Damp cloth
Tray 1 Transport Sensor	S	△300K	△	Blower brush
Tray 2 Transport Sensor	S	△300K	△	Blower brush
Tray 3 Transport Sensor	S	△300K	△	Blower brush
Tray 1 Paper Feed Sensor	S	△300K	△	Blower brush
Tray 2 Paper Feed Sensor	S	△300K	△	Blower brush
Tray 3 Paper Feed Sensor	S	△300K	△	Blower brush

Paper Feed (Mainframe)

Item	S/U/T	Interval (pages)	PM/EM	Note
Registration Rollers (drive/idle)	S	▲300K	△	Damp cloth
Relay Roller (drive/idle)	S	▲300K	△	Damp cloth
Bypass Relay Roller (drive/idle)	S	▲300K	△	Damp cloth
Registration Sensor	S	▲300K	△	Blower brush
Transfer Timing Sensor	S	▲300K	△	Blower brush Clean the opposing part
Relay Sensor	S	▲300K	△	Blower brush
Paper Dust Collection Unit	S	▲300K	△	Paper dust out and dry cloth
Registration Guide Plates (upper/lower)	S	△300K	△	Dry cloth
Bypass Paper Feed Sensor	S	△300K	△	Blower brush
Bypass Tray Paper End Sensor	S	△300K	△	Blower brush

Item	S/U/T	Interval (pages)	PM/EM	Note
Bypass Pick-up Roller	T		△	Damp cloth Replace when the frequency of jams or multi-feeding is increasing. (Upper limit 160K)
Bypass Feed Roller	T		△	
Bypass Separation Roller	T		△	

Paper Exit, Duplex

Item	S/U/T	Interval (pages)	PM/EM	Note
Heat Pipe Roller (drive/driven)	S	▲300K	△	Damp cloth
Paper Exit Roller (drive/idle)	S	▲300K	△	Damp cloth
Inverter Exit Roller (drive/idle)	S	▲300K	△	Damp cloth
Inverter Feed Out Roller (drive/idle)	S	▲300K	△	Damp cloth
Paper Exit Relay Roller (drive/idle)	S	▲300K	△	Damp cloth
Inverter Feed In Roller (drive/idle)	S	▲300K	△	Damp cloth
Paper Exit Relay Sensor	S	△300K	△	Blower brush
Paper Exit Sensor	S	△300K	△	Blower brush
Inverter Feed-in Sensor	S	△300K	△	Blower brush
Inverter Exit Sensor	S	△300K	△	Blower brush
Inverter Feed-out Sensor	S	△300K	△	Blower brush
Discharge Brush (Paper Exit)	S	△300K	△	Clean and Dry cloth Replace when it is deformed or damaged.
Discharge Brush (Inverter)	S	△300K	△	Clean and Dry cloth Replace when it is deformed or damaged.
Purge Relay Sensor	S	△300K	△	Blower brush
Paper Exit Feed Guide Plates (Top/Center/Left)	S	▲300K	△	Clean and Dry cloth
Papee Exit Entrance Guide Plate	S	▲300K	△	Clean and Dry cloth
Duplex Invert Roller (drive/idle)	S	△300K	△	Damp cloth
Duplex Transport Roller 1 (drive/idle)	S	▲300K	△	Damp cloth
Duplex Transport Roller 2 (drive/idle)	S	▲300K	△	Damp cloth
Duplex Transport Roller 3 (drive/idle)	S	▲300K	△	Damp cloth

2.Preventive Maintenance Tables

Item	S/U/T	Interval (pages)	PM/EM	Note
Duplex Transport Roller 4 (drive/idle)	S	▲300K	△	Damp cloth
Duplex Exit Roller (drive/idle)	S	▲300K	△	Damp cloth
Inverter Junction Gate HP Sensor	S	△300K	△	Blower brush
Duplex Invert Sensor	S	△300K	△	Blower brush
Duplex Unit Entrance Sensor	S	△300K	△	Blower brush
Duplex Unit Sensor 3	S	△300K	△	Blower brush
Duplex Unit Sensor 4	S	△300K	△	Blower brush
Duplex Exit Sensor	S	△300K	△	Blower brush
Edge Sensor	S	△300K	△	Blower brush
Duplex Entrance Guide Plate	S	△300K	△	Clean and Dry cloth
Horizontal Feed Guide Plates (upper/lower)	S	▲300K	△	Clean and Dry cloth
Purge Guide Plate (Lower)	S	▲300K	△	Clean and Dry cloth

PM Tables for Mainmachine (IM C6500/C8000)

The yield figures in these tables are based on the following conditions.

- A4/LT LEF (Simplex)
- 5% image coverage ratio
- 5P/J (pages per job)

Symbol keys	Meaning
S	Service technician (CE)
U	User
●	Replace after total page count elapses
◎	Replace according to machine log count (sheet count, distance count, whichever occurs first)
▲	Must inspect, clean, lubricate (if applicable)
△	Inspect, clean, lubricate (if applicable) as necessary
Note	Materials required for cleaning, lubrication, etc.

Scanner

Item	S/U	Interval (pages)	Note
1st mirror	S	▲300K	Optics cloth
2nd mirror	S	▲300K	Optics cloth
3rd mirror	S	▲300K	Optics cloth
Exposure Glass	S/U	▲300K	Cleaning cloth
Original Length Sensors	S	▲300K	Dry cloth
ADF Exposure Glass	S/U	▲300K	Cleaning cloth

PCDU

Item	S/U	Interval (pages)	Note
Drum Cleaning Unit			
(Drum Cleaning Blade)	S	◎300K	Replace with a set at the same time.
(Side seal: cleaning blade)	S	◎300K	189km distance (equivalent to 300K pages)
(Lubrication Roller)	S	◎300K	Replace with a set at the same time.
(Lubricant Bar)	S	◎300K	189km distance (equivalent to 300K pages)
(Lubricant Blade)	S	◎300K	Replace with a set at the same time.
(Side seal: Lubricant Blade)	S	◎300K	189km distance (equivalent to 300K pages)
(Lubrication Roller Drive Joint)	S	◎300K	189km distance (equivalent to 300K pages)

2.Preventive Maintenance Tables

Item	S/U	Interval (pages)	Note
Charge Roller Unit	S	◎400K	Replace the unit. 250km distance (equivalent to 400K pages)
OPC Drum	S	◎1,000K	670km distance (equivalent to 1,000K pages)
Potential Sensor	S	▲300K	Dry cloth
Quenching Lamp	S	▲300K	Dry cloth
Drum Shaft	S	▲300K	GREASE-KS660B

Development

Item	S/U	Interval (pages)	Note
Development Unit	S	▲300K	Wipe with a dry cloth when cleaning.
	S	◎600K	257.9km distance (equivalent to 600K pages)
(Developer)	S	◎600K	Collect with a plastic bag. 257.9km distance (equivalent to 600K pages)
(Development Filter)	S	◎600K	257.9km distance (equivalent to 600K pages)
(Gears)	S	▲300K	Blower brush, Dry cloth

Toner Supply

Item	S/U	Interval (pages)	Note
Toner Supply Unit	S	▲300K	Blower brush, Dry cloth

Transfer

Item	S/U	Interval (pages)	Note
ITB Unit			
(Image Transfer Belt)	S	◎1,800K	945km distance (equivalent to 1,800K pages)
(Image Transfer Roller)	S	◎1,800K	945km distance (equivalent to 1,800K pages)
(ITB Bias Roller)	S	◎1,500K	828km distance (equivalent to 1,500K pages)
(Rollers)	S	▲1,000K	
(ID Sensor)	S	▲1,000K	
ITB Cleaning Unit			
(ITB Lubricant Brush)	S	◎500K	Replace all together. 300km distance (equivalent to 500K pages)
(ITB Lubricant Blade)	S	◎500K	
(ITB Lubricant Bar)	S	◎500K	
(ITB Cleaning Blade)	S	◎500K	300km distance (equivalent to 500K pages)
Paper Transfer Belt Unit			
(Cleaning Blade)	S	◎500K	300km distance (equivalent to 500K pages)

Item	S/U	Interval (pages)	Note
(Joint of the Paper Transfer Drive Shaft)	S	▲300K	Lubricate with the grease (Barrierta S552R) after replacing the paper transfer belt unit.
Paper Transport Belt Unit Set Sensor	S	▲300K	Remove toner and paper dust, Blower brush
Paper Transport Belt	S	▲300K	Damp cloth

Fusing

Item	S/U	Interval (pages)	Note
Fusing Unit			
(Fusing Belt)	S	◎700K	
(Fusing Roller)	S	◎700K	
(Pressure Roller)	S	◎900K	
(Stripper Plate: Fusing Roller)	S	▲300K	Remove toner and paper dust, Dry cloth
(Stripper Plate: Pressure Roller)	S	▲300K	Remove toner and paper dust, Dry cloth
(Fusing Entrance Guide)	S	▲300K	Remove toner and paper dust, Dry cloth
(Thermistor (Fusing Belt)	S	▲700K	Remove toner and paper dust, Dry cloth Do at the same time as when replacing PM parts
(Thermistor (Hot Roller Shaft)	S	▲900K	Remove toner and paper dust, Dry cloth Do at the same time as when replacing PM parts
(Gears)	S	▲300K	FLUOTRIBO MG GREASE
(Pressure Roller Thermopile)	S	▲900K	Dry cloth
(Heating Roller Thermopile)	S	▲300K	Dry cloth

Miscellaneous

Item	S/U	Interval (pages)	PM	Note
Waste Toner Bottle[*1]	U	◎		Replace when toner bottle is full
Drawer Unit	S		▲	Remove toner and paper dust, Dry cloth
Ozone Filters (Large)	S	◎1,200K		
Ozone Filters (Small)	S	◎1,200K		
Toner Shield Glass (Laser Unit)	S	▲300K		Cleaning tool for toner shield glass

2.Preventive Maintenance Tables

Item	S/U	Interval (pages)	PM	Note
Dust Filters (Large)	S	◎600K		
Dust Filters (Small)	S	◎300K		
Deodorization Filter	S	◎1,200K		
Development Intake Dust Filter	S	▲600K		Blower brush or cloth
Duplex Exhaust Ozone Filters	S	▲600K		Blower brush or cloth
Particulate Filters (Fusing/Paper Exit)	S	◎1,200K		
Particulate Filters (Transfer/Fusing)	S	◎1,200K		
Particulate Filters (Fusing Pressure Roller)	S	◎1,200K		

*1: The customer replaces the Waste Toner Bottle. By changing SP5-073-001, service replacement mode for Waste Toner Bottle is enabled. Never try to empty toner out of the waste toner bottle to use the same bottle again; always replace the bottle with a new one. This is because the transfer coil inside the bottle may break.

Paper Feed (Paper Trays)

Item	S/U	Interval (pages)	PM/EM	Note
Tray 1 Pick-up Roller	S		△	Damp cloth Replace when the frequency of jams or multi-feeding is increasing. (Upper limit 500K)
Tray 2 Pick-up Roller	S		△	
Tray 3 Pick-up Roller	S		△	
Tray 1 Feed Roller	S		△	Damp cloth Replace when the frequency of jams or multi-feeding is increasing. (Upper limit 500K)
Tray 2 Feed Roller	S		△	
Tray 3 Feed Roller	S		△	
Tray 1 Separation Roller	S		△	Damp cloth Replace when the frequency of jams or multi-feeding is increasing. (Upper limit 500K)
Tray 2 Separation Roller	S		△	
Tray 3 Separation Roller	S		△	
Tray 1 Paper Transport Roller (drive/idle)	S	▲300K		Damp cloth
Tray 2 Paper Transport Roller (drive/idle)	S	▲300K		Damp cloth
Tray 3 Paper Transport	S	▲300K		Damp cloth

Item	S/U	Interval (pages)	PM/EM	Note
Roller (drive/idle)				
Tray 1 Transport Sensor	S	△300K	△	Blower brush
Tray 2 Transport Sensor	S	△300K	△	Blower brush
Tray 3 Transport Sensor	S	△300K	△	Blower brush
Tray 1 Paper Feed Sensor	S	△300K	△	Blower brush
Tray 2 Paper Feed Sensor	S	△300K	△	Blower brush
Tray 3 Paper Feed Sensor	S	△300K	△	Blower brush

Paper Feed (Mainframe)

Item	S/U	Interval (pages)	PM/EM	Note
Registration Rollers (drive/idle)	S	▲300K	△	Damp cloth
Relay Roller (drive/idle)	S	▲300K	△	Damp cloth
Bypass Relay Roller (drive/idle)	S	▲300K	△	Damp cloth
Registration Sensor	S	▲300K	△	Blower brush
Relay Sensor	S	▲300K	△	Blower brush
Paper Dust Collection Unit	S	▲300K	△	Paper dust out and dry cloth
Registration Guide Plates (upper/lower)	S	△300K	△	Dry cloth
Bypass Paper Feed Sensor	S	△300K	△	Blower brush
Bypass Pick-up Roller	S		△	Damp cloth Replace when the frequency of jams or multi-feeding is increasing. (Upper limit 160K)
Bypass Feed Roller	S		△	
Bypass Separation Roller	S		△	

Paper Exit, Duplex

Item	S/U	Interval (pages)	PM/EM	Note
Heat Pipe Roller (drive/driven)	S	▲300K	△	Damp cloth
Paper Exit Roller (drive/idle)	S	▲300K	△	Damp cloth

2.Preventive Maintenance Tables

Item	S/U	Interval (pages)	PM/EM	Note
Inverter Exit Roller (drive/idle)	S	▲300K	△	Damp cloth
Inverter Feed Out Roller (drive/idle)	S	▲300K	△	Damp cloth
Paper Exit Relay Roller (drive/idle)	S	▲300K	△	Damp cloth
Inverter Feed In Roller (drive/idle)	S	▲300K	△	Damp cloth
Paper Exit Relay Sensor	S	△300K	△	Blower brush
Paper Exit Sensor	S	△300K	△	Blower brush
Inverter Feed-in Sensor	S	△300K	△	Blower brush
Inverter Exit Sensor	S	△300K	△	Blower brush
Inverter Feed-out Sensor	S	△300K	△	Blower brush
Discharge Brush (Paper Exit)	S	△300K	△	Clean and Dry cloth
Discharge Brush (Inverter)	S	△300K	△	Clean and Dry cloth
Purge Relay Sensor	S	△300K	△	Blower brush
Paper Exit Feed Guide Plates (Top/Center/Left)	S	▲300K	△	Clean and Dry cloth
Papee Exit Entrance Guide Plate	S	▲300K	△	Clean and Dry cloth
Duplex Invert Roller (drive/idle)	S	△300K	△	Damp cloth
Duplex Transport Roller 1 (drive/idle)	S	▲300K	△	Damp cloth
Duplex Transport Roller 2 (drive/idle)	S	▲300K	△	Damp cloth
Duplex Transport Roller 3 (drive/idle)	S	▲300K	△	Damp cloth
Duplex Transport Roller 4 (drive/idle)	S	▲300K	△	Damp cloth
Duplex Exit Roller (drive/idle)	S	▲300K	△	Damp cloth
Inverter Junction Gate HP Sensor	S	△300K	△	Blower brush
Duplex Invert Sensor	S	△300K	△	Blower brush
Duplex Unit Entrance Sensor	S	△300K	△	Blower brush
Duplex Unit Sensor 3	S	△300K	△	Blower brush
Duplex Unit Sensor 4	S	△300K	△	Blower brush
Duplex Exit Sensor	S	△300K	△	Blower brush
Edge Sensor	S	△300K	△	Blower brush
Duplex Entrance Guide Plate	S	△300K	△	Clean and Dry cloth
Horizontal Feed Guide Plates (upper/lower)	S	▲300K	△	Clean and Dry cloth
Purge Guide Plate (Lower)	S	▲300K	△	Clean and Dry

Item	S/U	Interval (pages)	PM/EM	Note
				cloth

PM Tables for Peripherals

Note

- The amounts mentioned as the PM interval indicate the number of prints.
- After carrying out PM, clear the maintenance counter (SP7-622).

Symbol keys	Meaning
S	Service technician (CE)
U	User
●	Replace after total page count elapses
◎	Replace according to machine log count (sheet count, distance count, whichever occurs first)
▲	Must inspect, clean, lubricate (if applicable)
△	Inspect, clean, lubricate (if applicable) as necessary
Note	Materials required for cleaning, lubrication, etc.

ADF

Item	S/U	Interval	PM/EM	Note
Feed Belt	S	◎120K	△	Water or Alcohol damp cloth
Pick-up Roller	S	◎120K	△	Water or Alcohol damp cloth
Separation Roller	S	◎120K	△	Water or Alcohol damp cloth
CIS unit Surface Glass	S/U		△	Cleaning cloth
Sensors	S		△	Blower brush
White Plate	S/U		△	Water or Alcohol damp cloth, Dry cloth
Gears	S		△	MOLYKOTE EM-50L
ADF Entrance Roller	S		△	Water or Alcohol damp cloth
Relay Roller	S		△	Water or Alcohol damp cloth
Pre-scanning Entrance Roller	S		△	Water or Alcohol damp cloth
Scanning Relay Roller	S		△	Water or Alcohol damp cloth
ADF Transport Roller	S		△	Water or Alcohol damp cloth
Exit Roller	S		△	Water or Alcohol damp cloth
Idle Rollers	S		△	Water or Alcohol damp cloth
White Roller	S		△	Water or Alcohol damp cloth
White Guide Plate	S/U		△	Water or Alcohol damp cloth

LCIT RT4060

Item	S/U	Interval	PM/EM	Note
Pickup Roller	S	◎1000K	△	Dump cloth
Feed Roller	S	◎1000K	△	Dump cloth
Separation Roller	S	◎1000K	△	Dump cloth

LCIT RT5140/RE4070

Note

- Pro C5300S/C5310S: LCIT RT5140
- IM C6500/C8000: LCIT RT4070

Item	S/U	Interval	PM/EM	Note
Pickup Roller	S	◎300K	△	Dump cloth
Feed Roller	S	◎300K	△	Dump cloth
Separation Roller	S	◎300K	△	Dump cloth

Bridge Unit BU5030

Note

- Only Pro C5300S/C5310S

Item	S/U	Interval	Note
Bridge Entrance Roller	S	▲100K	-
Rotary Gate Roller	S	▲100K	-
Bridge Exit Roller	S	▲100K	-
Bridge Timing Sensor	S	▲100K	Remove paper dust,Blower brush
Rotary Gate Exit Sensor	S	▲100K	Remove paper dust,Blower brush
CIS	S	▲100K	Remove paper dust, Blower brush
Shift Unit Guide Plate	S	▲100K	Remove paper dust, Dry cloth
CIS Guide Plate	S	▲100K	Remove paper dust,Dry cloth

Vacuum Feed LCIT RT5120

Note

- Only Pro C5300S/C5310S

Item	S/U/T	Interval	Note
Feed Belt (Tray1, 2)	S	△100K ◎ 7,000K	Water or Alcohol damp cloth Replace 3 belts at the same time.
Rollers (drive,	S	△100K	Water or Alcohol damp cloth

Item	S/U/T	Interval	Note
idle rollers)			Replace them if paper jam and double feed occur frequently.
Sensors	S	△100K	Blower brush
Transport Guide Plate	S	△100K	Water or Alcohol damp cloth
Side Fence Slide Shaft	S	△100K	Clean when the side fence does not slide smoothly. Cleaning and lubrication of the shaft (Motor oil with 10W-30 viscosity from any manufacturer [such as Japan Energy JOMO GP-S 10W-30])

Decurl Unit DU5080

Note

- Only Pro C5300S/C5310S

Item	S/U	Interval	Note
Transport guide plate	S	△500K	Water or Alcohol damp cloth
Decurl rollers (drive, idle roller)	S	△500K	Water or Alcohol damp cloth
Transport rollers (drive, idle roller)	S	△500K	Water or Alcohol damp cloth

Buffer Pass Unit Type S9

Note

- Only Pro C5300S/C5310S

Item	S/U/T	Interval	Note
Transport Guide Plate	S/U	△ 100K*	Alcohol damp cloth *As required if toner stains or scratches appear on the printed paper
Transport Sensor	S	△100K	Remove paper dust with blower brush
Transport Roller (drive)	S/U	△100K	Water damp cloth
Transport Roller (idle)	S/U	△100K	Alcohol damp cloth
Driving Joint	S	△400K	Apply grease if a noise is produced due to the joints wearing out. (Sumico Lubricant Moly Hi-Temp Grease) *For details about the lubrication procedure, see the Buffer Pass Unit Type S9 service manual.

Cover Interposer Tray CI5050/CI4040

Note

- Pro C5300S/C5310S: Cover Interposer Tray CI5050
- IM C6500/C8000: Cover Interposer Tray CI4040

Item	S/U/T	Interval	EM	Note
Drive Rolled	S		△	Damp cloth
Idle Roller	S		△	Damp cloth
Anti-static Brushes	S		△	Damp cloth
Feed Belt	S	◎60K		
Pick-up Roller	S	◎60K		
Reverse Roller	S	◎60K		
Bearings	S		△	Silicone oil if noisy
Sensors	S		△	Blower brush
Gears	S		△	MOLYKOTE EM-50L

Cover Interposer Tray CI5040

Note

- Only Pro C5300S/C5310S

Item	S/U/T	Interval	PM/EM	Note
Pick-up Roller	S	◎60K	△	Damp cloth, and then dry cloth
Feed Roller	S	◎60K	△	Damp cloth, and then dry cloth
Reverse Roller	S	◎60K	△	Damp cloth, and then dry cloth
Sensors	S		△	Blower brush
Transport Guide Plate	S		△	Damp cloth, and then dry cloth
Drive, Idle rollers	S		△	Damp cloth, and then dry cloth

Cover Interposer Tray CI4050

Note

- Only IM C6500/C8000

Item	S/U/T	Interval	EM	Note
Drive Rolled	S		▲	Damp cloth
Idle Roller	S		▲	Damp cloth
Feed Belt	S	◎60K	▲	Damp cloth
Pick-up Roller	S	◎60K	▲	Damp cloth
Reverse Roller	S	◎60K	▲	Damp cloth
Sensors	S		▲	Blower brush
Gears	S		△	GREASE 501

Multi-folding Unit FD5020/FD4020

Note

- Pro C5300S/C5310S: Multi-folding Unit FD5020
- IM C6500/C8000: Multi-folding Unit FD4020

Item	S/U/T	EM	Note
Drive Rollers	S	△	Alcohol damp cloth
Idle Rollers	S	△	
Anti-static Brushes	S	△	
Bearings	S	△	Silicone oil if noisy
Sensors	S	△	Blower brush
Fold Rollers (1st, 2nd, 3rd)	S	△	Alcohol dampened cloth
Crease Rollers (drive, idle roller)	S	△	
Fold Roller Drive Gears	S	△	If lubrication insufficient, apply G501

Multi-folding Unit FD4010

Note

- Only IM C6500/C8000

Item	S/U/T	Interval	EM	Note
Transporting Rollers	S		△	Damp cloth
Folding Exit Roller	S		△	Damp cloth
Idle Rollers	S		△	Damp cloth
Folding Rollers	S		△	Damp cloth
Tray	S		△	Damp cloth
Sensors	S		△	Blower brush or dump cloth
Bearings	S		△	Silicone oil if noisy
Polyester film at creasing unit	S	◎ 1,000K folding		

High Capacity Stacker SK5040

Note

- Only Pro C5300S/C5310S

Item	S/U/T	Interval	Note
Drive Rollers	S	△ 500K	Alcohol damp cloth

Item	S/U/T	Interval	Note
Idle Rollers	S	△ 500K	Alcohol damp cloth
Anti-Static Brush	S	△ 500K	Alcohol damp cloth
Bearings	S	△ 500K	Lubricate with the grease when error occurs. Apply silicone oil for resin bearings. Apply launa oil for metallic bearings.
Sensors	S	△ 500K	Blower brush
Jogger Fences	S	△ 500K	Alcohol damp cloth
Shift Tray Rail	S	△ 500K	Lubricate with the grease (Mobiltemp 78).
Paddles	S	△ 500K	Alcohol damp cloth
Exit Roller Shaft	S	△ 500K	

Finisher SR5110/ Booklet Finisher SR5120

Note

- Only Pro C5300S/C5310S

Item	S/T/U	Interval	EM	Note
Drive Rollers	S	△500K	△	Alcohol damp cloth
Idle Rollers	S	△500K	△	
Anti-static Brushes	S	△500K	△	
Brush Roller	S	◎2,500K*1		
Bearings	S	△500K	△	Silicone oil if noisy
Sensors	S	△500K	△	Blower brush
Jog Fences	S	△500K	△	Make sure screws are tight
Corner Stapler	S	◎5,000K*1		Staple some times for test after replacement.
Punch Unit	S	◎2,000K*1		
Trimmings Hopper	S	△500K	△	Empty hopper

2.Preventive Maintenance Tables

Item	S/T/U	Interval	EM	Note
Positioning Roller	S	◎2,500K*1		
Shift Sponge Roller	S	◎3,000K*1		
Booklet Stapler	S	◎20,000K*1		Staple some times for test after replacement.
Shift Tray Worm Gear	S	△500K	△	
Booklet Output Tray Belt	S	△500K	△	Alcohol damp cloth

*1 Separate counts are logged for the operation of these rollers because they will not be the same as the sheet counts for the main machine (the finisher will not be used for every job so the counts will be different). Be sure to replace these items after their individual counts have been exceeded

Finisher SR5090/SR4150, Booklet Finisher SR5100/SR4160

Note

- Pro C5300S/C5310S: Finisher SR5090/ Booklet finisher SR5100
- IM C6500/C8000: Finisher SR4150/ Booklet finisher SR4160

Item	S/U	Interval	PM/EM	Note
Drive Rollers (Drive/Idle)	S	△500K	△	Alcohol damp cloth
Idle Rollers	S	△500K	△	Alcohol damp cloth
Quenching Brush	S	△500K	△	Alcohol damp cloth
Bearings	S	△500K	△	Silicone Grease G-501 if noisy
Sensors	S	△500K	△	Blower brush
Corner Stapler	S	◎ (3,000K*1)		Replace when staple counter in log data reaches 300K staplings. After replacement test stapler operation.
Booklet Stapler	S	◎ (1,000K*1)		Replace when staple counter in log data reaches 100K staplings. After replacement test stapler operation.
Punch Unit	S	◎ (3,000K*1)		Replace when punch counter in log data reaches 1000K.
Punch Dust	U		△	Discard paper dust when the hopper is detected to be full.
Stacking Sponge Roller	S	◎ (3,000K*1)		Replace after 3000K sheets have passed through the shift tray.

*1 Separate counts are logged for the operation of these rollers because they will not be the same as the sheet counts for the main machine (the finisher will not be used for every job so the counts will be

different). Be sure to replace these items after their individual counts have been exceeded

Finisher SR4140

Note

- Only IM C6500/C8000

Item	S/T/U	Interval	PM	Note
Drive Rollers	S		△	Alcohol damp cloth
Idle Rollers	S		△	
Anti-static Brushes	S		△	
Brush Roller	S	◎ (2,500K*1)		Replace after 1250K sheets have passed through the staple tray.
Bearings	S		△	Silicone oil if noisy
Sensors	S		△	Blower brush
Jogger Fences	S		△	Make sure screws are tight
Corner Stapler	S	◎ (5,000K*1)		Replace when staple counter in log data reaches 500K staplings. After replacement test stapler operation.
Punch Unit (Option)	S	◎ (2,000K*1)		Replace when punch counter in log data reaches 1000K.
Punch Hopper	U	△		Discard paper dust when the hopper is detected to be full.
Trimmings Hopper	S	▲500K	▲	Empty hopper
Positioning Roller	S	◎ (5,000K*1)		Replace after 1250K sheets have passed through the staple tray.
Drug Roller	S	◎ 3,000K*1		Replace after 3000K sheets have passed through the shift tray.

*1 Separate counts are logged for the operation of these rollers because they will not be the same as the sheet counts for the main machine (the finisher will not be used for every job so the counts will be different). Be sure to replace these items after their individual counts have been exceeded

Trimmer Unit TR5050

Note

- Only Pro C5300S/C5310S

2.Preventive Maintenance Tables

Item	S/U/T	Interval	EM	Note
Rollers (drive, idle rollers)	S		△	Dump cloth
Belts	S		△	Dump cloth
Discharge brush	S		△	Blower brush
Roller shafts	S		△	Lubricate with silicone oil if noisy
Sensors	S		△	Blower brush
Paper trimmings hopper	U		△	Make sure the user knows how to empty the hopper
Trimming Blade	S	◎400K		Replace the blade after 400K. SP7-989-001 (Trim Count) displays the total count.

Yield Parts (IM C6500/C8000 Only)

Main Machine

Item	Target Yield
Development Unit	
Gears (5 parts/unit)	2,100K
Image Transfer	
Image Transfer Belt (ITB)	1,800K
Image Transfer Roller (KYMC)	1,800K
Paper Transfer	
Belt Unit	2,100K
Fusing	
Heating Roller (Core)	2,100K
Paper Feed	
Pick-up Roller	500K
Feed Roller	500K
Separation Roller	500K
Bypass Tray	
Bypass Pick-up Roller	160K
Bypass Feed Roller	160K
Bypass Separation Roller	160K

LCIT RT4060

Item	Target Yield
Pick-up Roller	1,000K
Feed Roller	1,000K
Separation Roller	1,000K

LCIT RT4070

Item	Target Yield
Pick-up Roller	300K
Feed Roller	300K
Separation Roller	300K

Cover Interposer Tray CI4040

Item	Target Yield
Feed Belt	60K
Reverse Roller	60K
Pick-up Roller	60K

Cover Interposer Tray CI4050

Feed Belt	Target Yield
Feed Belt	60K
Reverse Roller	60K
Pick-up Roller	60K

Finisher SR4150 /Booklet Finisher SR4160

Item	Target Yield
Stacking Sponge Roller	3,000K

Finisher SR4140

Item	Target Yield
Positioning Roller	2,500K
Drag Roller	3,000K

3. Service Program Mode

Enabling and Disabling Service Program Mode

⚠CAUTION

- Make sure that the data-in LED (⇨) is not on before you go into the SP mode. This LED indicates that some data is coming to the machine. When the LED is on, wait for the copier to process the data.

Note

- The Service Program Mode is for use by service representatives only. If this mode is used by anyone other than service representatives for any reason, data might be deleted or settings might be changed. In such case, product quality cannot be guaranteed any more.

Entering SP Mode

For details, ask your supervisor.

Exiting SP Mode

- Press "Exit" on the LCD twice to return to the copy window.

Types of SP Modes

- System SP: SP modes related to the engine functions
- Printer SP: SP modes related to the controller functions
- Scanner SP: SP modes related to the scanner functions
- Fax SP: SP modes related to the fax functions

Select one of the Service Program modes (System, Printer, Scanner, or Fax) from the touch panel as shown in the diagram below after you access the SP mode. This section explains the functions of the System/Printer/Scanner SP modes. Refer to the Fax service manual for the Fax SP modes.

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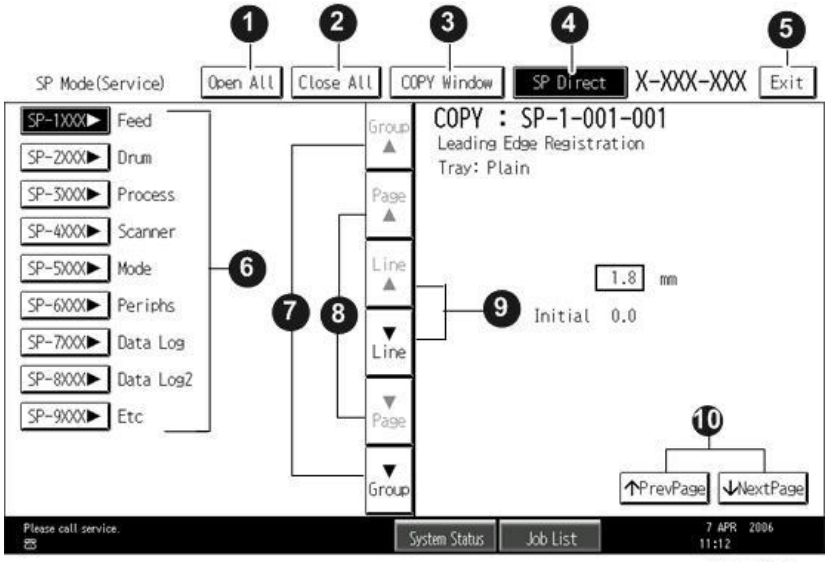
SP Mode Button Summary

Here is a short summary of the touch-panel buttons.



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1	Opens all SP groups and sublevels.
2	Closes all open groups and sublevels and restores the initial SP mode display.

3	Opens the copy window (copy mode) so you can make test copies. Press SP Mode (highlighted) in the copy window to return to the SP mode screen,
4	Enter the SP code directly with the number keys if you know the SP number. Then press #. (The required SP Mode number will be highlighted when pressing #. If not, just press the required SP Mode number.)
5	Press two times to leave the SP mode and return to the copy window to resume normal operation.
6	Press any Class 1 number to open a list of Class 2 SP modes.
7	Press to scroll the show to the previous or next group.
8	Press to scroll to the previous or next display in segments the size of the screen display (page).
9	Press to scroll the show the previous or next line (line by line).
10	Press to move the highlight on the left to the previous or next selection in the list.

Switching Between SP Mode and Copy Mode for Test Printing

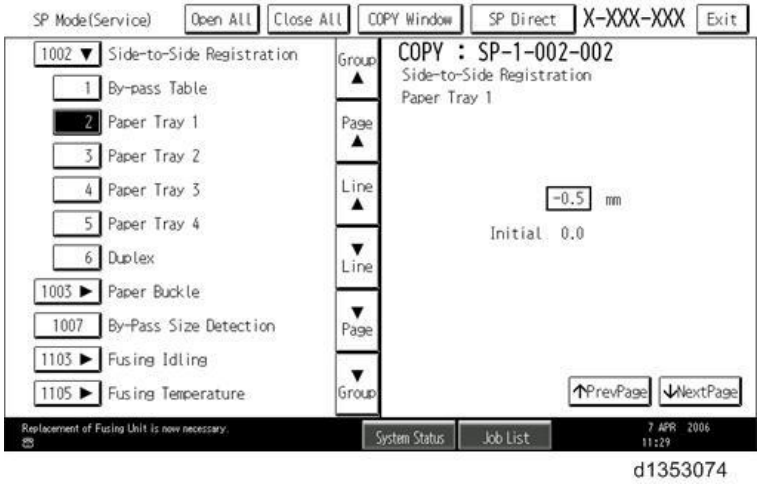
1. In the SP mode, select the test print. Then press "Copy Window".
2. Use the copy window (copier mode), to select the appropriate settings (paper size, etc.) for the test print.
3. Press Start to start the test print.
4. Press SP Mode (highlighted) to return to the SP mode screen and repeat from step 1.

Selecting the Program Number

Program numbers have two or three levels.

1. Refer to the Service Tables to find the SP that you want to adjust before you begin.
2. Press the Group number on the left side SP Mode window that contains the SP that you want to adjust.
3. Use the scrolling buttons in the center of the SP mode window to show the SP number that you want to open. Then press that number to expand the list.
4. Use the center touch-panel buttons to scroll to the number and title of the item that you want to set and press it. The small entry box on the right activates and shows the below default or the current

settings.



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Note

- Refer to the Service Tables for the range of allowed settings.

5. Do this procedure to enter a setting:
   - Press ⚇ to toggle between plus and minus and use the keypad to enter the appropriate number. The number you enter writes over the previous setting.
   - Press # to enter the setting. (The value is not registered if you enter a number that is out of range.)
   - Press "Yes" when you are prompted to complete the selection.
6. If you need to perform a test print, press Copy Window to open the copy window and select the settings for the test print. Press Start ◈ and then press SP Mode (highlighted) in the copy window to return to the SP mode display.
7. Press Exit two times to return to the copy window when you are finished.

Service Mode Lock/Unlock

At locations where the machine contains sensitive data, the customer engineer cannot operate the machine until the Administrator turns the service mode lock off. This function makes sure that work on the machine is always done with the permission of the Administrator.

1. If you cannot go into the SP mode, ask the Administrator to log in with the User Tool and then set "Service Mode Lock" to OFF after he or she logs in:
   User Tools > System Settings > Administrator Tools > Service Mode Lock > OFF
   - This unlocks the machine and lets you get access to all the SP codes.
   - The CE can service the machine and turn the machine off and on. It is not necessary to ask the Administrator to log in again each time the machine is turned on.
2. Go into the SP mode and set SP5-169 to "1" if you must use the printer bit switches.
3. After machine servicing is completed:
   - Change SP5169 from "1" to "0".
   - Turn the machine off and on. Tell the administrator that you have completed servicing the

machine.

- The Administrator will then set the "Service Mode Lock" to ON.

Remarks

Display on the Control Panel Screen

The maximum number of characters which can show on the control panel screen is limited to 30 characters. For this reason, some of the SP modes shown on the screen need to be abbreviated. The following are abbreviations used for the SP modes for which the full description is over 20 characters.

Paper Weight (IM C6500/C8000)

- Thin Paper: 52.3–65.9 g/m^2 (14.0–17.9 lb. Bond)
- Plain Paper 1: 66.0–80.9 g/m^2 (18.0–21.9 lb. Bond)
- Plain Paper 2: 81.0–100.9 g/m^2 (22.0–27.0 lb. Bond)
- Middle Thick: 101.0–127.4 g/m^2 (27.1 lb. Bond–46.9 lb. Cover)
- Thick Paper 1: 127.5–150.0 g/m^2 (47.0–55.0 lb. Cover)
- Thick Paper 2: 150.1–216.0 g/m^2 (55.1–79.9 lb. Cover)
- Thick Paper 3: 216.1–256.0 g/m^2 (80.0 lb. Cover–141.0 lb. Index)
- Thick Paper 4: 256.1–300.0 g/m^2 (141.1–165.0 lb. Index)

Paper Weight (Pro C5300S/C5310S)

- Paper Weight 1: 52.3–65.9 g/m^2 (14.0–17.9 lb. Bond/ 19.0–24.0 lb. Cover/ 29.0–36.0 lb. Index)
- Paper Weight 2: 66.0–80.9 g/m^2 (18.0–21.9 lb. Bond/ 24.1–29.9 lb. Cover/ 36.1–44.9 lb. Index)
- Paper Weight 3: 81.0–100.9 g/m^2 (22.0–27.0 lb. Bond/ 30.0–37.0 lb. Cover/ 45.0–55.9 lb. Index)
- Paper Weight 4: 101.0–127.4 g/m^2 (27.1–34.0 lb. Bond/ 37.1–46.9 lb. Cover/ 56.0–70.0 lb. Index)
- Paper Weight 5: 127.5–150.0 g/m^2 (34.1–40.0 lb. Bond/ 47.0–55.0 lb. Cover/ 70.1–82.9 lb. Index)
- Paper Weight 6: 150.1–216.0 g/m^2 (40.1–57.9 lb. Bond/ 55.1–79.9 lb. Cover/ 83.0–119.0 lb. Index)
- Paper Weight 7: 216.1–256.0 g/m^2 (58.0–68.0 lb. Bond/ 80.0–94.0 lb. Cover/ 119.1–141.0 lb. Index)
- Paper Weight 8: 256.1–300.0 g/m^2 (68.1–80.0 lb. Bond/ 94.1–110.0 lb. Cover/ 141.1–165.0 lb. Index)
- Paper Weight 9: 300.1–360.0 g/m^2 (80.1–96.0 lb. Bond/ 110.1–132.0 lb. Cover/ 165.1–198.0 lb. Index)

Paper Type	**Paper Feed Station**
N: Normal paper	P: Paper tray
MTH: Middle thick paper	B: By-pass table
TH: Thick paper	

Color Mode [Color] [K]: Black in B&W mode [Y], [M], or [C]: Yellow, Magenta, or Cyan in Full Color mode [YMC]: Only for Yellow, Magenta, and Cyan [FC]: Full Color mode [FC, K], [FC, Y], [FC, M], or [FC, C]: Black, Yellow, Magenta, or Cyan in full color mode
Process Speed (IM C6500/C8000) L: Low speed /ML: Middle low speed /M: Middle speed /H: High speed (Standard) IM C6500: L: 158.76 mm/s /M: 176.4 mm/s /H: 287.07 mm/s IM C8000: L: 158.76 mm/s /ML: 176.4 mm/s /M: 287.07 mm/s /H: 352.8 mm/s
Process Speed (Pro C5300S/C5310S) L: Low speed /ML: Middle low speed /M: Middle speed /H: High speed (Standard) Pro C5300S: L: 158.76 mm/s/ M: 246.96 mm/s/ H: 287.07 mm/s Pro C5310S: L: 158.76 mm/s/ M: 246.96 mm/s/ H: 352.8 mm/s
Print Mode S: Simplex D: Duplex

Service Table Key

Notation	What it means
ENG	Engine SP
CTL	Controller SP
[Min to Max/Init./Step]	Example: [-9 to 9 / 0 / 0.1mm]. The setting can be adjusted in the range ±9, value reset to 0 after an NVRAM reset, and the value can be changed in 0.1 mm steps with each key press.
*	Value stored in NVRAM. After a RAM reset, this default value (factory setting) is restored.

Engine and Controller SP Tables

In this machine, the SP tables are provided in PDF format.

Refer to the separate PDF.

Input Check

Main Machine Input Check

5803	**[Input Check]** Gets information of specified sensor. Refer to the tables below for bit information of each port.		
5-803-001	IOB_PIB_port01	ENG	[0 to 255 / 0 / 1] Not used
5-803-002	IOB_PIB_port03	ENG	[0 to 255 / 0 / 1] Not used
5-803-003	IOB_PIB_port07	ENG	[0 to 255 / 0 / 1] Bit 0: Separation Power Pack error (0: Normal, 1: SC detected) Bit 1: Watchdog unlock signal (0: Normal, 1: Watchdog clear) Bit 2 to 5: Not used Bit 6: AC Transfer Power Pack error (0: Normal, 1: SC detected) Bit 7: Not used
5-803-004	IOB_PIB_port08	ENG	[0 to 255 / 0 / 1] Bit 0: Not used Bit 1: Laser Unit Cooling Fan (Left): Lock signal (0: Normal, 1: Stopped/Locked) Bit 2: Laser Unit Cooling Fan (Right): Lock signal (0: Normal, 1: Stopped/Locked) Bit 3: Drum Cleaning Set Detection/ K (0: Set, 1: Not set) Bit 4: Drum Cleaning Set Detection/ C (0: Set, 1: Not set) Bit 5: Drum Cleaning Set Detection/ M (0: Set, 1: Not set) Bit 6: Drum Cleaning Set Detection/ Y (0: Set, 1: Not set) Bit 7: Not used
5-803-005	IOB_PIB_port09	ENG	[0 to 255 / 0 / 1] Bit 0 to 4: Not used Bit 5: Toner Supply Unit Set Detection (0: Set, 1: Not set) Bit 6: Toner Supply Unit Front Cover Switch (0: Closed, 1: Open) Bit 7: Not used
5-803-006	IOB_PIB_port12	ENG	[0 to 255 / 0 / 1] Bit 0: ID Sensor Cleaning Fan: Lock signal (0: Normal, 1: Stopped/Locked) Bit 1: ITB Motor Cooling Fan: Lock signal (0: Normal, 1:

			Stopped/Locked) Bit 2: Not used Bit 3: External watchdog detection (0: Detected, 1: Not detected) Bit 4: Transfer Power Pack error/ K (0: Normal, 1: SC detected) Bit 5: Transfer Power Pack error/ C (0: Normal, 1: SC detected) Bit 6: Transfer Power Pack error/ M (0: Normal, 1: SC detected) Bit 7: Transfer Power Pack error/ Y (0: Normal, 1: SC detected)
5-803-007	IOB_PIB_port23	ENG	[0 to 255 / 0 / 1] Bit 0: Lubricant Residual Amount Switch/K (0: Near End, 1: Normal) Bit 1: Lubricant Residual Amount Switch/C (0: Near End, 1: Normal) Bit 2: Lubricant Residual Amount Switch/M (0: Near End, 1: Normal) Bit 3: Lubricant Residual Amount Switch/Y (0: Near End, 1: Normal) Bit 4: LCT break release signal (0: Break, 1: Release) Bit 5: TSB break release signal (0: Break, 1: Release) Bit 6: TDCU break release signal (0: Break, 1: Release) Bit 7: Potential sensor power (0: Power Off, 1: Power On)
5-803-008	IOB_PIB_port27	ENG	[0 to 255 / 0 / 1] Bit 0: Development bias error/K (0: Normal, 1: SC detected) Bit 1: Development bias error/C (0: Normal, 1: SC detected) Bit 2: Development bias error/M (0: Normal, 1: SC detected) Bit 3: Development bias error/Y (0: Normal, 1: SC detected) Bit 4: Charge Power Pack error/K (0: Normal, 1: SC detected) Bit 5: Charge Power Pack error/C (0: Normal, 1: SC detected) Bit 6: Charge Power Pack error/M (0: Normal, 1: SC detected) Bit 7: Charge Power Pack error/Y (0: Normal, 1: SC detected)
5-803-009	IOB_PIB_EXINT	ENG	[0 to 255 / 0 / 1] Bit 0: Drum HP Sensor/Y (0: Not HP, 1: HP) Bit 1: Development Roller HP Sensor/Y (0: Not HP, 1: HP) Bit 2: Drum HP Sensor/M (0: Not HP, 1: HP) Bit 3: Development Roller HP Sensor/M (0: Not HP, 1: HP) Bit 4: Drum HP Sensor/C (0: Not HP, 1: HP) Bit 5: Development Roller HP Sensor/C (0: Not HP, 1: HP) Bit 6: Drum HP Sensor/K (0: Not HP, 1: HP) Bit 7: Development Roller HP Sensor/K (0: Not HP, 1: HP)

5-803-010	IOB_FSB_port01	ENG	[0 to 255 / 0 / 1] Bit 0: Not used Bit 1: Paper Transfer Belt Waste Toner Cooling Fan (0: Normal, 1: Stopped/Locked) Bit 2 to 7: Not used
5-803-011	IOB_FSB_port02	ENG	[0 to 255 / 0 / 1] Bit 0: Not used Bit 1: AC Controller Set detection (0: Set, 1: Not set) Bit 2 to 7: Not used
5-803-012	IOB_FSB_port03	ENG	[0 to 255 / 0 / 1] Bit 0 to 3: Not used Bit 4: Duplex Exhaust Fan/Rear: Lock signal (0: Normal, 1: Stopped/Locked) Bit 5: Fusing Pressure Roller Exhaust Fan: Lock signal (0: Normal, 1: Stopped/Locked) Bit 6: Ozone Exhaust Fan: Lock signal (0: Normal, 1: Stopped/Locked) Bit 7: Fusing Exit Exhaust Fan: Lock signal (0: Normal, 1: Stopped/Locked)
5-803-013	IOB_FSB_port07	ENG	[0 to 255 / 0 / 1] Bit 0: IH inverter error (0: Normal, 1: IH error) Bit 1 to 3: Not used Bit 4: Waste Toner Bottle Motor: Lock signal (0: Normal, 1: Stopped/Locked) Bit 5 to 7: Not used
5-803-014	IOB_FSB_port08	ENG	[0 to 255 / 0 / 1] Bit 0: Not used Bit 1: Fusing unit specification 0: Voltage (0: 200 V, 1: 100 V) Bit 2: Not used Bit 3: Fusing unit specification 2: Type (0: Pro C5300S/C5310S, 1: IM C6500/C8000) Bit 4 to 6: Fusing unit Set detection (Set= [0, 0, 0]) Bit 7: Not used

5803	**[INPUT Check]** Gets information of specified sensor. Refer to the tables below for bit information of each port.		
5-803-015	IOB_FSB_port09	ENG	[0 to 255 / 0 / 1] Bit 0 to 3: Not used

			Bit 4: 24VS1 output monitor (0: Normal output, 1: Abnormal output/OFF) Bit 5 to 7: Not used
5-803-016	IOB_FSB_port12	ENG	[0 to 255 / 0 / 1] Bit 0: Not used Bit 1: Controller Exhaust Fan: Lock signal (0: Normal, 1: Stopped/Locked) Bit 2: Development Exhaust Fan/Right: Lock signal (0: Normal, 1: Stopped/Locked) Bit 3: Development Exhaust Fan/Left: Lock signal (0: Normal, 1: Stopped/Locked) Bit 4 to 7: Not used
5-803-017	IOB_FSB_port13	ENG	[0 to 255 / 0 / 1] Bit 0: Duplex Exhaust Fan/Middle: Lock signal (0: Normal, 1: Stopped/Locked) Bit 1: PSU Fan/Right: Lock signal (0: Normal, 1: Stopped/Locked) Bit 2: PSU Fan/Left: Lock signal (0: Normal, 1: Stopped/Locked) Bit 3: IH Coil Power Cooling Fan: Lock signal (0: Normal, 1: Stopped/Locked) Bit 4: Paper Transfer Belt Fusing Exhaust Fan: Lock signal (0: Normal, 1: Stopped/Locked) Bit 5: Drive Exhaust Fan: Lock signal (0: Normal, 1: Stopped/Locked) Bit 6: Duplex Exhaust Fan/Front: Lock signal (0: Normal, 1: Stopped/Locked) Bit 7: Not used
5-803-018	IOB_FSB_port17	ENG	[0 to 255 / 0 / 1] Bit 0: Heat Pipe Panel Intake Fan: Lock signal (0: Normal, 1: Stopped/Locked) Bit 1: Heat Pipe Panel Exhaust Fan: Lock signal (0: Normal, 1: Stopped/Locked) Bit 2 to 3: Not used Bit 4: Pressure Roller Sensor: Front (0: Not interrupted, 1: Interrupted) Bit 5: Pressure Roller Sensor: Rear (0: Not interrupted, 1: Interrupted) Bit 6 to 7: Not used

5-803-019	IOB_FSB_port21	ENG	[0 to 255 / 0 / 1] Bit 0 to 1: Not used Bit 2: Development Motor/K: Maker (0: NMB, 1: NIDEC) Bit 3 to 7: Not used
5-803-020	IOB_FSB_port22	ENG	[0 to 255 / 0 / 1] Bit 0 to 3: Not used Bit 4: Waste Toner Bottle Motor Sensor (0: Not interrupted, 1: Interrupted) Bit 5: Waste Toner Bottle Set Sensor (0: Set, 1: Not set) Bit 6: Not used Bit 7: Waste Toner Near Full Sensor (0: Normal, 1: Near-full)
5-803-021	IOB_FSB_port23	ENG	[0 to 255 / 0 / 1] Bit 0: Development Motor/Y: Maker (0: NMB, 1: NIDEC) Bit 1 to 5: Not used Bit 6: Development Motor/M: Maker (0: NMB, 1: NIDEC) Bit 7: Not used
5-803-022	IOB_FSB_port25	ENG	[0 to 255 / 0 / 1] Bit 0 to 1: Not used Bit 2: Development Motor/C: Maker (0: NMB, 1: NIDEC) Bit 3 to 7: Not used
5-803-023	IOB_FSB_port26	ENG	[0 to 255 / 0 / 1] Bit 0 to 6: Not used Bit 7: Waste Toner Collection Motor (BLM): Lock signal (0: Normal, 1: Stopped/Locked)
5-803-024	IOB_FSB_port24	ENG	[0 to 255 / 0 / 1] Bit 0: Not used Bit 1: Fusing Roller Sychronization Pulse signal (0: Not interrupted, 1: Interrupted) Bit 2 to 7: Not used
5-803-025	IOB_FSB_port28	ENG	[0 to 255 / 0 / 1] Bit 0: Not used Bit 1: Fusing Belt Smoothing Roller Contact Sensor (0: Not HP, 1: HP) Bit 2: Fusing Motor: Lock signal (0: Normal, 1: Stopped/Locked) Bit 3 to 4: Not used Bit 5: Fusing Belt Smoothing Roller Drive Motor: Lock signal (0: Normal, 1: Stopped/Locked) Bit 6 to 7: Not used
5-803-	IOB_FSB_port29	ENG	[0 to 255 / 0 / 1]

026			Bit 0: Pressure Roller: High temperature (0: High temperature, 1: Normal) Bit 1: Hot Roller/Front: High temperature (0: High temperature, 1: Normal) Bit 2: Hot Roller/Center: High temperature (0: High temperature, 1: Normal) Bit 3: Finisher: BREAK detection (0: BREAK, 1: BREAK off) Bit 4: Fusing Paper Feed Sensor (0: Paper, 1: No paper) Bit 5 to 7: Not used
5-803-027	IOB_FSB_EXINT	ENG	[0 to 255 / 0 / 1] Bit 0: Pressure Roller Sensor (Front) (0: Not interrupted, 1: Interrupted) Bit 1: Interlock door open/close (0: Door closed, 1: Door open) Bit 2 to 3: Not used Bit 4: Zero cross 2 (0: Zero cross detected, 1: Normal) Bit 5 to 7: Not used
5-803-028	PFB_V1_port07	ENG	[0 to 255 / 0 / 1] Bit 0: Tray1 Transport Sensor (0: Paper, 1: No paper) Bit 1: (Vertical Transport Sensor (0: Paper, 1: No paper)) Bit 2: Tray 2 Transport Sensor (0: Paper, 1: No paper) Bit 3: Tray 3 Transport Sensor (0: Paper, 1: No paper) Bit 4: Tray1 Paper Feed Sensor (0: Paper, 1: No paper) Bit 5: Not used Bit 6: Tray 2 Paper Feed Sensor (0: Paper, 1: No paper) Bit 7: Tray 3 Paper Feed Sensor (0: Paper, 1: No paper)
5-803-029	PFB_V1_port09	ENG	[0 to 255 / 0 / 1] Bit 0: Tandem Tray Set detection/left (0: Set, 1: Not set) Bit 1: Not used Bit 2: Bypass Tray open/close (0: Closed, 1: Open) Bit 3: Not used Bit 4: Front Lower Cover SW (0: Closed, 1: Open) Bit 5: Drawer Unit Lock Sensor (0 to 1: Lock, 1 to 0: Unlock) Bit 6: Vertical Transport Door Set Switch (0: Closed, 1: Open) Bit 7: Not used
5-803-030	PFB_V1_port19	ENG	[0 to 255 / 0 / 1] Bit 0: Rear Fence HP sensor (0: Not HP, 1: HP) Bit 1: Rear Fence Return Sensor (0: Not pressed, 1: Pressed) Bit 2: Left Tray Paper Densor (0: Paper, 1: No paper) Bit 3 to 7: Not used

5-803-031	PFB_V1_port27	ENG	[0 to 255 / 0 / 1] Bit 0 to 5: Not used Bit 6: Duplex Invert Sensor (0: Paper, 1: No paper) Bit 7: Not used
5-803-032	PFB_V2_port07	ENG	[0 to 255 / 0 / 1] Bit 0: Decurl Unit: Front door open/close (0: Closed, 1: Open) Bit 1: Decurl Roller Unit Direction Sensor (0: Downward curl, 1: Upward curl) Bit 2: Decurler Unit: Set detection (0: Set, 1: Not set) Bit 3: Decurl Roller Unit Set Sensor (0: Set, 1: Not set) Bit 4: Soft Roller HP sensor (0: Not HP, 1: HP) Bit 5: Decurl Unit: Exit Sensor (0: Paper, 1: No paper) Bit 6: Decurl Unit: Entrance Sensor (0: Paper, 1: No paper) Bit 7: Not used
5-803-033	PFB_V2_port08	ENG	[0 to 255 / 0 / 1] Bit 0 to 3: Not used Bit 4: Key Counter FB (0: Drive ON, 1: Drive OFF) Bit 5: Key Card set (0: Set, 1: Not set) Bit 6: Key Counter set (0: Set, 1: Not set) Bit 7: Not used
5-803-034	PFB_V2_port11	ENG	[0 to 255 / 0 / 1] Bit 0: Bypass Tray Paper End Sensor (0: Paper, 1: Paper end) Bit 1: Mainframe LED Switch/left (0: ON, 1: OFF) Bit 2 to 7: Not used
5-803-035	PFB_V2_port13	ENG	[0 to 255 / 0 / 1] Bit 0 to 1: Not used Bit 2 to 6: Bypass Paper Width Sensor (See **Table 1** below.) Bit 7: Not used

Table 1

Width					Length	NA	Other Area
Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	SP5-803-037 Bit 2		
0	1	1	1	1	0	HLT_SEF	A6_SEF
					1		
0	0	1	1	1	0		B6_SEF
					1		
1	0	1	1	1	0		A5_SEF
					1		
1	0	0	1	1	0	B5_SEF	B5_SEF

Width					Length	NA	Other Area
Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	SP5-803-037 Bit 2		
					1		
1	1	0	1	1	0	LT_SEF / LG_SEF	A4_SEF
					1	HLT_LEF	A5_LEF
1	1	0	0	1	0	DLT_SEF	B4_SEF
					1	Exe_LEF	B5_LEF
1	1	0	0	0	0	DLT_SEF	A3_SEF
					1	LT_LEF	A4_LEF
1	1	1	0	0	0	12"×18"_SEF	A3_SEF
					1	LT_LEF	A4_LEF
1	1	1	0	1	0	SRA3_SEF	SRA3_SEF
					1	LT_LEF	A4_LEF
1	1	1	1	1	0	13"×19"_SEF	13"×19"_SEF
					1	LT_LEF	A4_LEF

5803	**[Input Check]** Gets information of specified sensor. Refer to the tables below for bit information of each port.		
5-803-036	PFB_V2_port14	ENG	[0 to 255 / 0 / 1] Bit 0 to 1: Not used Bit 2: Cleaning Web Contact Sensor (0: Separated, 1: In contact) Bit 3 to 7: Not used
5-803-037	PFB_V2_port15	ENG	[0 to 255 / 0 / 1] Bit 0 to 1: Not used Bit 2: Bypass Paper Length Sensor (0: Long paper, 1: Short paper) Bit 3 to 7: Not used
5-803-038	PFB_V2_port18	ENG	[0 to 255 / 0 / 1] Bit 0 to 3: Not used Bit 4: Tray 2 Tray Lift Motor: Paper Remaining 1 Bit 5: Tray 2 Tray Lift Motor: Paper Remaining 2 Bit 6: Tray 3 Tray Lift Motor: Paper Remaining 1 Bit 7: Tray 3 Tray Lift Motor: Paper Remaining 2 (See **Table 2** below.)

Table 2

Paper End Sensor	Paper Remaining 1	Paper Remaining 2	Remaining Paper	Panel Display
0	0	0	100%	Four bars
0	1	0	70%	Three bars
0	1	1	30%	Two bars
0	0	1	10%	One bar
1	-	-	No paper	None

5803	**[Input Check]** Gets information of specified sensor. Refer to the tables below for bit information of each port.		
5-803-039	PFB_V2_port19	ENG	[0 to 255 / 0 / 1] Bit 0: Tray 1 Paper Tray Upper Limit Sensor (0: Not upper limit, 1: Upper limit) Bit 1: Not used Bit 2: Tray 2 Paper Tray Upper Limit Sensor (0: Not upper limit, 1: Upper limit) Bit 3: Tray 3 Paper Tray Upper Limit Sensor (0: Not upper limit, 1: Upper limit) Bit 4: Tray 1 Paper End Sensor (0: No paper, 1: Paper) Bit 5: Not used Bit 6: Tray 2 Paper End Sensor (0: No paper, 1: Paper) Bit 7: Tray 3 Paper End Sensor (0: No paper, 1: Paper)
5-803-040	PFB_V2_port24	ENG	[0 to 255 / 0 / 1] Bit 0 to 3: Not used Bit 4: Bypass Paper Feed Sensor (0: Paper, 1: No paper) Bit 5 to 7: Not used
5-803-041	PFB_V2_port29	ENG	[0 to 255 / 0 / 1] Bit 0 to 2: Not used Bit 3: DUB_UART Break (0: Break, 1: Break OFF) Bit 4 to 7: Not used
5-803-042	PFB_V2_EXINT	ENG	[0 to 255 / 0 / 1] Bit 0: Inverter Junction Gate HP Sensor/Rise (0: Not HP, 1: HP) Bit 1: Inverter Junction Gate HP Sensor/Fall (0: Not HP, 1: HP) Bit 2: Not used Bit 3: Sensor Shift HP Sensor/Rise (0: Not HP, 1: HP) Bit 4: Sensor Shift HP Sensor/Fall (0: Not HP, 1: HP) Bit 5 to 6: Not used

			Bit 7: Edge Sensor (0: Paper, 1: No paper)
5-803-043	PFB_V3_port07	ENG	[0 to 255 / 0 / 1] Bit 0: Not used Bit 1: Rear End Fence Closed Sensor (0: End fence closed, 1: End fence open) Bit 2: Tandem Tray: Tray Lower Limit Sensor (0: Not lower limit, 1: Lower limit) Bit 3: Tandem Tray: Paper Height Sensor 1 (0: No paper, 1: Paper) Bit 4: Tandem Tray: Paper Height Sensor 2 (0: No paper, 1: Paper) Bit 5: Tandem Tray: Paper Height Sensor 3 (0: No paper, 1: Paper) Bit 6 to 7: Not used
5-803-044	PFB_V3_port13	ENG	[0 to 255 / 0 / 1] Bit 0 to 3: Not used Bit 4: Drawer Set Sensor 1 (0: Drawer not set, 1: Drawer set) Bit 5: Not used Bit 6: Blown fuse detection (0: Normal, 1: Abnormal) Bit 7: Not used
5-803-045	PFB_V3_port14	ENG	[0 to 255 / 0 / 1] Bit 0: Not used Bit 1: Duplex Exit Sensor (0: Paper, 1: No paper) Bit 2: Paper Exit Sensor (0: Paper, 1: No paper) Bit 3 to 7: Not used
5-803-046	PFB_V3_port15	ENG	[0 to 255 / 0 / 1] Bit 0: Paper exit full detection (0: Not full, 1: Full) Bit 1: Paper Exit Relay Sensor (0: Paper, 1: No paper) Bit 2: Inverter Feed-out Sensor (0: Paper, 1: No paper) Bit 3 to 7: Not used
5-803-047	PFB_V3_port17	ENG	[0 to 255 / 0 / 1] Not used
5-803-048	PFB_V3_port18	ENG	[0 to 255 / 0 / 1] Bit 0: Tray 3 paper size switch/knob 4 Bit 1: Tray 3 paper size switch/knob 3 Bit 2: Tray 3 paper size switch/knob 2 Bit 3: Tray 3 paper size switch/knob 1 (See **Table 3** below.) Bit 4: Right tray set sensor (0: Set, 1: Not set)

			Bit 5: Not used Bit 6: Tray 2 set sensor (0: Set, 1: Not set) Bit 7: Tray 3 set sensor (0: Set, 1: Not set)
5-803-049	PFB_V3_port19	ENG	[0 to 255 / 0 / 1] Bit 0 to 3: Not used Bit 4: Tray 2 paper size switch/knob 4 Bit 5: Tray 2 paper size switch/knob 3 Bit 6: Tray 2 paper size switch/knob 2 Bit 7: Tray 2 paper size switch/knob 1 (See **Table 3** below.)

Table 3

Knob 4	Knob 3	Knob 2	Knob 1	NA	EU	AP/CHN/TWN/KOR
1	1	0	1	13"×19"	13"×19"	13"×19"
1	0	1	0	12"×18"	SRA3	SRA3
0	1	0	0	DLT	A3	A3
0	0	1	1	LG	B4	B4
0	1	1	1			
1	1	1	0	A4_SEF	A4_SEF	A4_SEF
1	1	0	0	LT_SEF	LT_SEF	LT_SEF
1	0	0	0	B5_SEF	B5_SEF	B5_SEF
0	0	0	1	LT_LEF	A4_LEF	A4_LEF
0	0	1	0	Exe_LEF	B5_LEF	B5_LEF
0	1	0	1	HLT_LEF	A5_LEF	A5_LEF

5803	**[INPUT Check]** Gets information of specified sensor. Refer to the tables below for bit information of each port.		
5-803-050	PFB_V3_port22	ENG	[0 to 255 / 0 / 1] Bit 0 to 5: Not used Bit 6: Copy Tray: Cooling Fan (0: Normal, 1: Error) Bit 7: Not used
5-803-051	PFB_V3_port24	ENG	[0 to 255 / 0 / 1] Bit 0: Paper Transport Belt Unit Set Sensor (0: Paper, 1: No paper) Bit 1: Not used Bit 2: Relay Sensor (0: Paper, 1: No paper) Bit 3: Inverter Feed-in Sensor (0: Paper, 1: No paper) Bit 4 to 7: Not used

5-803-052	PFB_V3_port25	ENG	[0 to 255 / 0 / 1] Bit 0: Drawer Set Sensor 2 (0: Drawer not set, 1:Drawer set) Bit 1: Not used Bit 2: Shift roller home position sensor 1 (0: Not HP, 1: HP) Bit 3: Shift roller home position sensor 2 (0: Not HP, 1: HP) Bit 4: Vertical Transport Sensor (0: Paper, 1: No paper) Bit 5: Purged Paper Sensor (0: No paper, 1: Paper) Bit 6: Purge Relay Sensor (0: Paper, 1: No paper) Bit 7: Inverter Exit Sensor (0: Paper, 1: No paper)
5-803-053	PFB_V3_port30	ENG	[0 to 255 / 0 / 1] Bit 0: A3/11"x17" Tray Unit Set detection (0: Tray set, 1: Tray not set) Bit 1: Bypass Tray Set Sensor (0: Set, 1: Not set) Bit 2: Bypass Tray Lower Limit Sensor (0: Not lower limit, 1: Lower limit) Bit 3: Bypass Tray Upper Limit Sensor (0: Not upper limit, 1: Upper limit) Bit 4 to 7: Not used
5-803-054	PFB_V3_EXINT	ENG	[0 to 255 / 0 / 1] Bit 0: Registration Sensor: Paper entrance (0: Paper, 1: No paper) Bit 1: Duplex Unit Entrance Sensor (0: Paper, 1: No paper) Bit 2: Registration Sensor: Paper exit (0: Paper, 1: No paper) Bit 3: Not used Bit 4: Transfer Timing Sensor (0: Paper, 1: No paper) Bit 5: Not used Bit 6: Duplex Unit Sensor 3 (0: Paper, 1: No paper) Bit 7: Duplex Unit Sensor 4 (0: Paper, 1: No paper)
5-803-055	DUB_port04	ENG	[0 to 255 / 0 / 1] Bit 0: IH Coil Cooling Fan error detection (0: Normal, 1: Abnormal) Bit 1: Fusing Pressure Roller Intake Fan error detection(0: Normal, 1: Abnormal) Bit 2: Not used Bit 3: Paper Transport Belt Fan/rear error detection (0: Normal, 1: Abnormal) Bit 4: Paper Transport Belt Fan/front error detection (0: Normal, 1: Abnormal) Bit 5: Cleaning Web End Sensor (0: Web remaining, 1: Web

			end) Bit 6: Drawer Unit Flapper Sensor (0: Hand inserted, 1: Hand not inserted) Bit 7: Fusing Separation Plate Grip LED (0: ON, 1: OFF)
5-803-056	DUB_port05	ENG	[0 to 255 / 0 / 1] Bit 0: Inverter Feed-out Sensor (0: Paper, 1: No paper) Bit 1: Duplex Exit Sensor (0: Paper, 1: No paper) Bit 2: Transfer Timing Sensor (0: Paper, 1: No paper) Bit 3: Not used Bit 4: Duplex Unit Sensor 3 (0: Paper, 1: No paper) Bit 5: Duplex Unit Sensor 4 (0: Paper, 1: No paper) Bit 6: Duplex Invert Sensor (0: Paper, 1: No paper) Bit 7: Paper Transport Belt Sensor (0: Not set, 1: Set)
5-803-057	DUB_port06	ENG	[0 to 255 / 0 / 1] Bit 0: Registration Sensor (0: Paper, 1: No paper) Bit 1 to 4: Not used Bit 5: Relay Sensor (0: Paper, 1: No paper) Bit 6: Paper Transport Belt Unit Set Sensor (0: Paper, 1: No paper) Bit 7: Cleaning Web Set Sensor (0: Set, 1: Not set)
5-803-058	DUB_port07	ENG	[0 to 255 / 0 / 1] Bit 0 to 3: Not used Bit 4:Paper Cooling Fan error detection (0: Normal, 1: Abnormal) Bit 5: Not used Bit 6: Edge Sensor (0: Paper, 1: No paper) Bit 7: Purge Relay Sensor (0: Paper, 1: No paper)
5-803-059	DUB_port08	ENG	[0 to 255 / 0 / 1] Bit 0: Paper Exit Relay Sensor (0: Paper, 1: No paper) Bit 1 to 6: Not used Bit 7: Duplex Unit Entrance Sensor (0: Paper, 1: No paper)
5-803-060	DUB_port09	ENG	[0 to 255 / 0 / 1] Bit 0 to 4: Not used Bit 5: Inverter Feed-in Sensor (0: Paper, 1: No paper) Bit 6: Inverter Exit Sensor (0: Paper, 1: No paper) Bit 7: Paper Exit Sensor (0: Paper, 1: No paper)
5-803-061	DUB_port18	ENG	[0 to 255 / 0 / 1] Bit 0: Fusing Exit Guide Plate Open Sensor (0: Closed, 1: Open)

			Bit 1: Not used Bit 2: Paper Exit Left Guide Plate Sensor (0: Closed, 1: Open) Bit 3: Not used Bit 4: Paper Exit Upper Guide Plate Sensor (0: Closed, 1: Open) Bit 5: Not used Bit 6: Registration Upper Guide Plate Open (0: Closed, 1: Open) Bit 7: Horizontal Feed Guide Plate Open Sensor (0: Closed, 1: Open)
5-803-062	DUB_port24	ENG	[0 to 255 / 0 / 1] Not used
5-803-063	TSB_port06	ENG	[0 to 255 / 0 / 1] Bit 0: ITB Cleaning Intake Fan error detection (0: Normal, 1: Abnormal) Bit 1 to 4: Not used Bit 5: ITB Cleaning Unit Set Sensor (0: Not set, 1: Set) Bit 6 to 7: Not used
5-803-064	TSB_port07	ENG	[0 to 255 / 0 / 1] Bit 0: Development Intake Fan/K error detection (0: Normal, 1: Abnormal) Bit 1: Development Intake Fan/C error detection (0: Normal, 1: Abnormal) Bit 2: Development Intake Fan/M error detection (0: Normal, 1: Abnormal) Bit 3: Development Intake Fan/Y error detection (0: Normal, 1: Abnormal) Bit 4: Toner End Sensor/K (0: Toner end, 1: Toner remaining) Bit 5: Toner End Sensor/C (0: Toner end, 1: Toner remaining) Bit 6: Toner End Sensor/M (0: Toner end, 1: Toner remaining) Bit 7: Toner End Sensor/Y (0: Toner end, 1: Toner remaining)
5-803-065	Fuse_det	ENG	[0 to 255 / 0 / 1] Bit 0: Blown fuse detection/PFB 1 (0: Normal, 1: Error) Bit 1: Blown fuse detection/PFB 2 (0: Normal, 1: Error) Bit 2: Blown fuse detection/Cleaning Web Motor (0: Normal, 1: Error) Bit 3: Blown fuse detection/Image Skew Correction Motor (0: Normal, 1: Error) Bit 4 to 7: Not used

5-803-066	DUB_port01	ENG	[0 to 255 / 0 / 1] Bit 0: Not used Bit 1: Paper Transfer Belt Cooling Fan error detection (0: Normal, 1: Abnormal) Bit 2 to 7: Not used
5-803-067	DUB_port12	ENG	[0 to 255 / 0 / 1] Not used

5803	**[INPUT Check]** Gets information of specified sensor.		
5-803-101	1st Right Tray Set Detection	ENG	[0 to 1 / 0 / 1] 1: Not set, 0: Set
5-803-102	1st Left Tray Set Detection	ENG	[0 to 1 / 0 / 1] 1: Not set, 0: Set
5-803-103	Tray 2 Set Sensor	ENG	[0 to 1 / 0 / 1] *Not used
5-803-104	Tray 3 Set Sensor	ENG	[0 to 1 / 0 / 1] *Tray 2 set sensor 1: Not set, 0: Set
5-803-105	Tray 4 Set Sensor	ENG	[0 to 1 / 0 / 1] *Tray 3 set sensor 1: Not set, 0: Set
5-803-106	Tray 2 Size Detection SW	ENG	[0 to 15 / 0 / 1] *Not used
5-803-107	Tray 3 Size Detection SW	ENG	[0 to 15 / 0 / 1] *Tray 2 size switch See **Table 3** above.
5-803-108	Tray 4 Size Detection SW	ENG	[0 to 15 / 0 / 1] *Tray 3 size switch See **Table 3** above.
5-803-109	Bypass Main Scan Length Sensor	ENG	[0 to 31 / 0 / 1] See **Table 1** above. Since the 3rd digit from the left is SP5-803-110 ON/OFF information, refer to the 5 digits from the right.
5-803-110	Bypass Sub Scan Length Sensor	ENG	[0 to 1 / 0 / 1] 1: ON, 0: OFF
5-803-111	Tray 1 Paper End Sensor	ENG	[0 to 1 / 0 / 1] 1: No paper, 0: Paper remaining
5-803-112	Tray 2 Paper End Sensor	ENG	[0 to 1 / 0 / 1] *Not used
5-803-	Tray 3 Paper End Sensor	ENG	[0 to 1 / 0 / 1] *Tray 2 paper end sensor

113			1: No paper, 0: Paper remaining
5-803-114	Tray 4 Paper End Sensor	ENG	[0 to 1 / 0 / 1] *Tray 3 paper end sensor 1: No paper, 0: Paper remaining
5-803-115	Bypass Paper End Sensor	ENG	[0 to 1 / 0 / 1] 1: No paper, 0: Paper remaining
5-803-116	Left Tray Paper Detect Sensor	ENG	[0 to 1 / 0 / 1] 1: No paper, 0: Paper
5-803-117	Tray 1: Upper Limit Sensor	ENG	[0 to 1 / 0 / 1] 1: Upper limit, 0: Not upper limit
5-803-118	Tray 2: Upper Limit Sensor	ENG	[0 to 1 / 0 / 1] *Not used
5-803-119	Tray 3: Upper Limit Sensor	ENG	[0 to 1 / 0 / 1] *Tray 2 upper limit sensor 1: Upper limit, 0: Not upper limit
5-803-120	Tray 4: Upper Limit Sensor	ENG	[0 to 1 / 0 / 1] *Tray 3 upper limit sensor 1: Upper limit, 0: Not upper limit
5-803-121	Tray 1: Lower Limit Sensor	ENG	[0 to 1 / 0 / 1] 1: Detected, 0: Not detected
5-803-122	Tray 1: Paper Height Sensor 1	ENG	[0 to 1 / 0 / 1] 1: Detected, 0: Not detected
5-803-123	Tray 1: Paper Height Sensor 2	ENG	[0 to 1 / 0 / 1] 1: Detected, 0: Not detected
5-803-124	Tray 1: Paper Height Sensor 3	ENG	[0 to 1 / 0 / 1] 1: Detected, 0: Not detected
5-803-125	Tray 2 Paper Height Detection 1	ENG	[0 to 1 / 0 / 1] *Not used
5-803-126	Tray 2 Paper Height Detection 2	ENG	[0 to 1 / 0 / 1] *Not used
5-803-127	Tray 3 Paper Height Detection 1	ENG	[0 to 1 / 0 / 1] *Tray 2 upper height detection 1 See **Table 2** above.
5-803-128	Tray 3 Paper Height Detection 2	ENG	[0 to 1 / 0 / 1] *Tray 2 upper height detection 2 See **Table 2** above.
5-803-129	Tray 4 Paper Height Detection 1	ENG	[0 to 1 / 0 / 1] *Tray 3 upper height detection 1 See **Table 2** above.
5-803-130	Tray 4 Paper Height Detection 2	ENG	[0 to 1 / 0 / 1] *Tray 3 upper height detection 2 See **Table 2** above.
5-803-131	Tray 1 Transport HP Detection Sn	ENG	[0 to 1 / 0 / 1] 1: Detected, 0: Not detected
5-803-	Tray 1 Transport Press	ENG	[0 to 1 / 0 / 1]

132	Detection Sn		1: Detected, 0: Not detected
5-803-133	Rear Side Fence Close Sensor	ENG	[0 to 1 / 0 / 1] 1: Unlock, 0: Locked
5-803-134	1st Paper Feed Sensor	ENG	[0 to 1 / 0 / 1] 1: No paper, 0: Paper
5-803-135	2nd Paper Feed Sensor	ENG	[0 to 1 / 0 / 1] *Not used
5-803-136	3rd Paper Feed Sensor	ENG	[0 to 1 / 0 / 1] *Tray 2 paper feed sensor 1: No paper, 0: Paper
5-803-137	4th Paper Feed Sensor	ENG	[0 to 1 / 0 / 1] *Tray 3 paper feed sensor 1: No paper, 0: Paper
5-803-138	Bypass Feed Sensor	ENG	[0 to 1 / 0 / 1] 1: No paper, 0: Paper
5-803-139	Transport Sensor 1	ENG	[0 to 1 / 0 / 1] 1: No paper, 0: Paper
5-803-140	Transport Sensor 2	ENG	[0 to 1 / 0 / 1] *Vertical tansport sensor
5-803-141	Transport Sensor 3	ENG	[0 to 1 / 0 / 1] *Tray 2 transport sensor 1: No paper, 0: Paper
5-803-142	Transport Sensor 4	ENG	[0 to 1 / 0 / 1] *Tray 3 transport sensor 1: No paper, 0: Paper
5-803-145	Main Unit Relay Sensor	ENG	[0 to 1 / 0 / 1] 1: No paper, 0: Paper The value changes only when the drawer unit is locked.
5-803-146	Registration Sensor	ENG	[0 to 1 / 0 / 1] 1: No paper, 0: Paper The value changes only when the drawer unit is locked.
5-803-147	Paper Exit Relay Sensor	ENG	[0 to 1 / 0 / 1] 1: No paper, 0: Paper The value changes only when the drawer unit is locked.
5-803-148	Paper Exit Sensor	ENG	[0 to 1 / 0 / 1] 1: No paper, 0: Paper The value changes only when the drawer unit is locked.
5-803-	Paper Exit Tray Full Sensor	ENG	[0 to 1 / 0 / 1]

149			1: Detected, 0: Not detected
5-803-150	Inverter Entrance Sensor	ENG	[0 to 1 / 0 / 1] 1: No paper, 0: Paper The value changes only when the drawer unit is locked.
5-803-151	Paper Exit Inverter Sensor	ENG	[0 to 1 / 0 / 1] 1: No paper, 0: Paper The value changes only when the drawer unit is locked.
5-803-152	Inverter Exit Sensor	ENG	[0 to 1 / 0 / 1] 1: No paper, 0: Paper The value changes only when the drawer unit is locked.
5-803-153	Purge Relay Sensor	ENG	[0 to 1 / 0 / 1] 1: No paper, 0: Paper The value changes only when the drawer unit is locked.
5-803-154	Purge Paper Sensor	ENG	[0 to 1 / 0 / 1] 1: Paper, 0: No paper
5-803-155	Duplex Inverter Sensor	ENG	[0 to 1 / 0 / 1] 1: No paper, 0: Paper The value changes only when the drawer unit is locked.
5-803-156	Duplex Entrance Sensor	ENG	[0 to 1 / 0 / 1] 1: No paper, 0: Paper The value changes only when the drawer unit is locked.
5-803-157	TransferTimingSN	ENG	[0 to 1 / 0 / 1] 1: No paper, 0: Paper The value changes only when the drawer unit is locked.
5-803-159	Duplex Transport Sensor 3	ENG	[0 to 1 / 0 / 1] 1: No paper, 0: Paper The value changes only when the drawer unit is locked.
5-803-160	Duplex Transport Sensor 4	ENG	[0 to 1 / 0 / 1] 1: No paper, 0: Paper The value changes only when the drawer unit is locked.

5-803-161	Duplex Exit Sensor	ENG	[0 to 1 / 0 / 1] 1: No paper, 0: Paper The value changes only when the drawer unit is locked.
5-803-162	Inverter Entra Junc Solenoid Home Sensor	ENG	[0 to 1 / 0 / 1] 1: Not HP, 0: HP The value changes only when the drawer unit is locked.
5-803-163	Heatpipe Unit Set Sensor	ENG	[0 to 1 / 0 / 1] Not used
5-803-164	Roller HP Detect Sensor 1	ENG	[0 to 1 / 0 / 1] 1: Not HP, 0: HP The value changes only when the drawer unit is locked.
5-803-165	Roller HP Detect Sensor 2	ENG	[0 to 1 / 0 / 1] 1: Not HP, 0: HP The value changes only when the drawer unit is locked.
5-803-166	Sensor Shift Home Detect Sn	ENG	[0 to 1 / 0 / 1] 1: Not HP, 0:HP The value changes only when the drawer unit is locked.
5-803-167	Edge Detect Sensor	ENG	[0 to 1 / 0 / 1] 1: No paper, 0: Paper The value changes only when the drawer unit is locked.
5-803-168	Paper Feed 1 Motor Error	ENG	[0 to 31 / 0 / 1] 1: Detected, 0: Not detected
5-803-169	Paper Feed 2 Motor Error	ENG	[0 to 31 / 0 / 1] *Not used
5-803-170	Paper Feed 3 Motor Error	ENG	[0 to 31 / 0 / 1] *2nd paper feed motor 1: Detected, 0: Not detected
5-803-171	Paper Feed 4 Motor Error	ENG	[0 to 31 / 0 / 1] *3rd paper feed motor 1: Detected, 0: Not detected
5-803-172	Bypass Paper Feed Error	ENG	[0 to 31 / 0 / 1] 1: Detected, 0: Not detected
5-803-173	Transport Motor 1 Error	ENG	[0 to 31 / 0 / 1] 1: Detected, 0: Not detected

5-803-174	Transport Motor 2 Error	ENG	[0 to 31 / 0 / 1] *Vertical tranport motor 1: Detected, 0: Not detected
5-803-175	Transport Motor 3 Error	ENG	[0 to 31 / 0 / 1] *2nd paper transport motor 1: Detected, 0: Not detected
5-803-176	Transport Motor 4 Error	ENG	[0 to 31 / 0 / 1] *3rd paper transport motor 1: Detected, 0: Not detected
5-803-177	Main Unit Relay Motor Error	ENG	[0 to 31 / 0 / 1] 1: Detected, 0: Not detected
5-803-178	Registration Motor Error	ENG	[0 to 31 / 0 / 1] 1: Detected, 0: Not detected
5-803-180	Paper Exit Motor Error	ENG	[0 to 31 / 0 / 1] 1: Detected, 0: Not detected
5-803-181	Paper Exit Inverter Motor Error	ENG	[0 to 31 / 0 / 1] 1: Detected, 0: Not detected
5-803-182	Inverter Entrance Motor Error	ENG	[0 to 31 / 0 / 1] 1: Detected, 0: Not detected
5-803-184	Duplex Inverter Motor Error	ENG	[0 to 31 / 0 / 1] 1: Detected, 0: Not detected
5-803-185	Duplex Transport Motor Error	ENG	[0 to 31 / 0 / 1] 1: Detected, 0: Not detected
5-803-186	Duplex Exit Motor Error	ENG	[0 to 31 / 0 / 1] 1: Detected, 0: Not detected
5-803-187	Bypass BotPlt Lower Limit Position Sn	ENG	[0 to 1 / 0 / 1] 1: Detected, 0: Not detected
5-803-188	Bypass BotPlt Upper Limit Position Sn	ENG	[0 to 1 / 0 / 1] 1: Detected, 0: Not detected
5-803-189	Bypass Tray Set Sensor	ENG	[0 to 1 / 0 / 1] 1: Not set, 0: Set
5-803-190	Regist Upper Guide Plate Sensor	ENG	[0 to 1 / 0 / 1] 1: Not set, 0: Set
5-803-191	Paper Exit Left Guide Plate Sensor	ENG	[0 to 1 / 0 / 1] 1: Not set, 0: Set
5-803-192	Paper Exit Upper Guide Plate Sensor	ENG	[0 to 1 / 0 / 1] 1: Not set, 0: Set
5-803-193	Horizontal Transport Guide Plate Sensor	ENG	[0 to 1 / 0 / 1] 1: Not set, 0: Set
5-803-194	Main Unit LED-SW Left (LED)	ENG	[0 to 1 / 0 / 1] 1: OFF, 0: ON

5-803-200	HP Senser	ENG	[0 to 1 / 0 / 1] Not used
5-803-201	Platen Cover Sensor	ENG	[0 to 1 / 0 / 1] 1: Closed, 0: Open
5-803-202	Upper Right Cover Open Switch	ENG	[0 to 1 / 0 / 1] 1: Open, 0: Closed
5-803-203	Lower Right Cover Open Switch	ENG	[0 to 1 / 0 / 1] 1: Open, 0: Closed
5-803-204	Drawer Lock Sensor	ENG	[0 to 1 / 1 / 1] 1: Locked, 0: Unlock
5-803-205	Drawer Set Sensor	ENG	[0 to 1 / 0 / 1] 1: Set, 0: Not set
5-803-206	Drawer Knob Sensor	ENG	[0 to 1 / 0 / 1] 1: Release, 0: Gripped

LCIT RT4060/RT4070/RT5140 Input Check

Note

- Pro C5300/C5310S: LCIT RT4060/RT5140
- IM C6500/C8000: LCIT RT4060/RT4070

5803	**[INPUT Check]** Gets information of specified sensor. Refer to the tables below for bit information of each port.		
5-803-082	A3LCT-CPU-Port1	ENG	[0 to 255 / 0 / 1] Bit 0: Front Cover opening/closing Detection Sensor (0: Open, 1: Close) Bit 1: Transport Sensor (0:Detected, 1: Not Detected) Bit 2: Exit Sensor (0: Detected, 1: Not Detected) Bit 3: Feed Sensor (0: Detected, 1: Not Detected) Bit 4: Paper End Detection Sensor (0: Detected, 1: Not Detected) Bit 5: Upper Limit Detection Sensor (0: Upper Limit, 1: No Upper Limit) Bit 6: Upper Left Cover opening-closing Detection Sensor (0: Open, 1: Close) Bit 7: Relay Sensor (0: Detected, 1: Not Detected)

5-803-083	A3LCT-CPU-Port2	ENG	[0 to 255 / 0 / 1] Bit 0: Remaining Detection Sensor 1 (0: Not Detected, 1: Detected) Bit 1: Remaining Detection Sensor 2 (0: Not Detected, 1: Detected) Bit 2: Remaining Detection Sensor 3 (0: Not Detected, 1: Detected) Bit 3: Remaining Detection Sensor 4 (0: Not Detected, 1: Detected) Bit 4: Size Detection Sensor 1 (0: Not Detected, 1: Detected) Bit 5: Size Detection Sensor 2 (0: Not Detected, 1: Detected) Bit 6: Size Detection Sensor 3 (0: Not Detected, 1: Detected) Bit 7: Length Detection Sensor (0: Not Detected, 1: Detected)
5-803-084	A3LCT-CPU-Port4	ENG	[0 to 255 / 0 / 1] Bit 0: DIPSW1 (0: ON, 1: OFF) Bit 1: DIPSW2 (0: ON, 1: OFF) Bit 2: DIPSW3 (0: ON, 1: OFF) Bit 3: DIPSW4 (0: ON, 1: OFF) Bit 4: DIPSW5 (0: ON, 1: OFF) Bit 5: DIPSW6 (0: ON, 1: OFF) Bit 6: DIPSW7 (0: ON, 1: OFF) Bit 7: DIPSW8 (0: ON, 1: OFF)
5-803-085	A3LCT-CPU-PortA	ENG	[0 to 255 / 0 / 1] Bit 0 to 4: Not used Bit 5: Alarm before Fan (0: Normal, 1: Not Normal) Bit 6: Not used Bit 7: Alarm after Fan (0: Normal, 1: Not Normal)
5-803-086	A3LCT-CPU-PortB	ENG	[0 to 255 / 0 / 1] Bit 0 to 4: Not used Bit 5: Tray Set (0: Set, 1: Unset) Bit 6 to 7: Not used
5-803-087	A3LCT-CPU-PortC	ENG	[0 to 255 / 0 / 1] Bit 0 to 2: Not used Bit 3: Feed Unit Set Detection (0: Set, 1: Unset) Bit 4 to 7: Not used
5-803-088	A3LCT-CPU-PortD	ENG	[0 to 255 / 0 / 1] Bit 0: Feed Motor FAULT (0: Normal, 1: Not Normal) Bit 1 to 7: Not used
5-803-	A3LCT-CPU-	ENG	[0 to 255 / 0 / 1]

089	PortE		Bit 0 to 6: Not used Bit 7: Feed Motor STS0 (0: Ready, 1: E2PROM Download)
5-803-092	A3LCT-CPU-PortF	ENG	[0 to 255 / 0 / 1] Bit 0: Feed Motor STS0 (0: Ready, 1: E2PROM Download) Bit 1: Transport Motor FAULT (0: Normal, 1: Not Normal) Bit 2 to 7: Not used
5-803-093	A3LCT-CPU-PortG	ENG	[0 to 255 / 0 / 1] Bit 0 to 1: Not used Bit 2: Feed Motor STS0 (0: Ready, 3: E2PROM Download) Bit 3: Transport Motor FAULT (0: Normal, 1: Not Normal) Bit 4 to 7: Not used
5-803-094	A4LCT-CPU-Port1	ENG	[0 to 255 / 0 / 1] Bit 0: Slide Detection Sensor 1 (0: Detected, 1: Not Detected) Bit 1: Slide Detection Sensor 2 (0: Detected, 1: Not Detected) Bit 2: Lower Limit Detection Sensor (0: No Lower Limit, 1: Lower Limit) Bit 3: Feed Sensor (0: Detected, 1: Not Detected) Bit 4: Paper End Detection Sensor (0: Detected, 1: Not Detected) Bit 5: Upper Limit Detection Sensor (0: Upper Limit, 1: No Upper Limit) Bit 6: Paper Detection Sensor (0: Detected, 1: Not Detected) Bit 7: Relay Sensor (0: Detected, 1: Not Detected)
5-803-095	A4LCT-CPU-Port2	ENG	[0 to 255 / 0 / 1] Bit 0: Remaining Detection Sensor 1 (0: Not Detected, 1: Detected) Bit 1: Remaining Detection Sensor 2 (0: Not Detected, 1: Detected) Bit 2: Remaining Detection Sensor 3 (0: Not Detected, 1: Detected) Bit 3: Remaining Detection Sensor 4 (0: Not Detected, 1: Detected) Bit 4 to 7: Not used
5-803-096	A4LCT-CPU-Port4	ENG	[0 to 255 / 0 / 1] Bit 0: DIPSW1 (0: ON, 1: OFF) Bit 1: DIPSW2 (0: ON, 1: OFF) Bit 2: DIPSW3 (0: ON, 1: OFF) Bit 3: DIPSW4 (0: ON, 1: OFF) Bit 4: DIPSW5 (0: ON, 1: OFF)

			Bit 5: DIPSW6 (0: ON, 1: OFF) Bit 6: DIPSW7 (0: ON, 1: OFF) Bit 7: DIPSW8 (0: ON, 1: OFF)
5-803-097	A4LCT-CPU-PortC	ENG	[0 to 255 / 0 / 1] Bit 0: Not used Bit 1: Paper Supply Cover opening-closing SW (0: Close, 1: Open) Bit 2 to 4: Not used Bit 5: Tray Down SW (0: ON, 1: OFF) Bit 6 to 7: Not used
5-803-098	A4LCT-CPU-PortD	ENG	[0 to 255 / 0 / 1] Bit 0: Feed Motor FAULT (0: Not Normal, 1: Normal) Bit 1 to 7: Not used
5-803-099	A4LCT-CPU-PortF	ENG	[0 to 255 / 0 / 1] Bit 0: Feed Motor STS0 (0: Ready, 1: E2PROM Download) Bit 1: Transport Motor FAULT (0: Not Normal, 1: Normal) Bit 2 to 7: Not used
5-803-100	A4LCT-CPU-PortG	ENG	[0 to 255 / 0 / 1] Bit 0 to 1: Not used Bit 2: Feed Motor STS0 (0: Ready, 3: E2PROM Download) Bit 3 to 7: Not used

Buffer Pass Unit Type S9 Input Check

Note

- Only Pro C5300S/C5310S

5803	**[Input Check(Buffer Pass Unit)]** Gets information of specified sensor. Refer to the tables below for bit information of each port.		
5-803-210	Buffer Pass Unit:CTB_H8S-Port9	ENG	[0 to 255 / 0 / 1]
5-803-211	Buffer Pass Unit:CTB_H8S-PortA	ENG	[0 to 255 / 0 / 1]
5-803-212	Buffer Pass Unit:CTB_H8S-PortB	ENG	[0 to 255 / 0 / 1]
5-803-213	Buffer Pass Unit:CTB_H8S-PortC	ENG	[0 to 255 / 0 / 1]
5-803-214	Buffer Pass Unit:CTB_H8S-PortD	ENG	[0 to 255 / 0 / 1]

5-803-215	Buffer Pass Unit:CTB_H8S-PortE	ENG	[0 to 255 / 0 / 1]

Port 9 (5-803-210) bit information

bit	Component	0	1
bit0	-	-	-
bit1	-		
bit2	Lower Exhaust Fan (Downstream)	Normal	Abnormal
bit3	Lower Exhaust Fan (Upstream)	Normal	Abnormal
bit4	-	-	-
bit5	-	-	-
bit6	Lower Cooling Fan (Rear)	Normal	Abnormal
bit7	Lower Cooling Fan (Front)	Normal	Abnormal

Port A (5-803-211) bit information

bit	Component	0	1
bit0	Front Door Open/closed Switch	Closed	Open
bit1	-	-	-
bit2	-	-	-
bit3	-	-	-
bit4	-	-	-
bit5	-	-	-
bit6	-	-	-
bit7	-	-	-

Port B (5-803-212) bit information

bit	Component	0	1
bit0	Right Transport Motor	Normal	Abnormal
bit1	Left Transport Motor	Normal	Abnormal
bit2	-	-	-
bit3	-	-	-
bit4	-	-	-
bit5	-	-	-
bit6	-	-	-
bit7	-	-	-

Port C (5-803-213) bit information

bit	Component	0	1
bit0	-	-	-

bit	Component	0	1
bit1	-	-	-
bit2	Upper Exhaust Fan (Downstream)	Normal	Abnormal
bit3	Upper Exhaust Fan (Upstream)	Normal	Abnormal
bit4	-	-	-
bit5	-	-	-
bit6	Upper Cooling Fan (Rear)	Normal	Abnormal
bit7	Upper Cooling Fan (Front)	Normal	Abnormal

Port D (5-803-214) bit information

bit	Component	0	1
bit0	Transport Sensor 6	Detected	Not detected
bit1	Transport Sensor 3	Detected	Not detected
bit2	Transport Sensor 7	Detected	Not detected
bit3	Transport Sensor 2	Detected	Not detected
bit4	Transport Sensor 8	Detected	Not detected
bit5	Transport Sensor 1	Detected	Not detected
bit6	-	-	-
bit7	-	-	-

Port E (5-803-215) bit information

bit	Component	0	1
bit0	-	-	-
bit1	-	-	-
bit2	24V Monitoring	24V_ON	24V_OFF
bit3	24V_INT Monitoring	24VINT_ON	24VINT_OFF
bit4	Transport Unit Set Detection	Set	Not Set
bit5	-	-	-
bit6	Transport Sensor 5	Detected	Not detected
bit7	Transport Sensor 4	Detected	Not detected

Vacuum Feed LCIT RT 5120/ Bridge Unit BU5030 Input Check

Note

- Only Pro C5300S/C5310S

5803	**[Input Check]** Gets information of specified sensor. Refer to the tables below for bit information of each port.		
5-803-	Twin LCT1 Port1	ENG	[0 to 255 / 0 / 1]

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5-803-217	Twin LCT1 Port2	ENG	[0 to 255 / 0 / 1]
5-803-218	Twin LCT1 Port3	ENG	[0 to 255 / 0 / 1]
5-803-219	Twin LCT1 Port4	ENG	[0 to 255 / 0 / 1]
5-803-220	Twin LCT1 Port5	ENG	[0 to 255 / 0 / 1]
5-803-221	Twin LCT1 Port6	ENG	[0 to 255 / 0 / 1]
5-803-222	Twin LCT1 Port7	ENG	[0 to 255 / 0 / 1]
5-803-223	Twin LCT1 Port8	ENG	[0 to 255 / 0 / 1]
5-803-224	Twin LCT1 Port9	ENG	[0 to 255 / 0 / 1]
5-803-225	Twin LCT1 Port10	ENG	[0 to 255 / 0 / 1]
5-803-226	Twin LCT1 Port11	ENG	[0 to 255 / 0 / 1]
5-803-227	VacFeed LCT Relay Paper Transport 1	ENG	[0 to 255 / 0 / 1]
5-803-228	2T LCT relay : connect (1:set, 0:non-set)	ENG	[0 to 1 / 0 / 1] The connection of the bridge unit can be confirmed.

Port1 (SP5-803-216) Bit Information

bit	Component	0	1
bit0	Interlock Switch (Front Door Open/Closed Switch)	Closed	Open
bit1	Multi Bypass Slide Detection	Closed	Open
bit2	-	-	-
bit3	-	-	-
bit4	Banner Sheet Tray: Cover Open Switch	Closed	Open
bit5	Banner Sheet Tray: Top Cover Open Switch	Closed	Open
bit6	Banner Sheet Tray: Tray Lift Switch	Detected	Not detected
bit7	-	-	-

Port2 (SP5-803-217) Bit Information

Bit	Component	0	1
bit0	Multi Bypass Set Detection	Detected	Not detected
bit1	-	-	-
bit2	Banner Sheet Tray Set Detection	Detected	Not detected
bit3	LCT Exit Roller Contact Sensor	Not detected	Detected
Bit4	Tray 1 Vertical Transport Contact Sensor	Not detected	Detected
Bit5	Tray 1 Vertical Transport Exit Contact Sensor	Not detected	Detected
Bit6	Vertical Transport Entrance Sensor	Not detected	Detected
Bit7	Tray 2 Vertical Transport Exit Contact Sensor	Not detected	Detected

Port3 (SP5-803-218) Bit Information

Bit	Component	0	1
bit0	Tray1 Paper Tray Set Detection	Set	Not set
bit1	Tray1 Paper Feed Belt Set Detection	Set	Not set
bit2	Tray1 Upper Limit Detection	Not detected	Detected
bit3	Tray1 Paper Upper Limit Sensor 1	Detected	Not detected
bit4	Tray1 Paper Upper Limit Sensor 2	Detected	Not detected
bit5	-	-	-
bit6	Tray1 Paper Height Middle Sensor	Not detected	Detected
bit7	Tray1 Paper Lower Limit Sensor	Detected	Not detected

Port4 (SP5-803-219) Bit Information

Bit	Component	0	1
bit0	Tray1 Paper Size Sensor 1	Not detected	Detected
bit1	Tray1 Paper Size Sensor 2	Not detected	Detected
bit2	Tray1 Paper Size Sensor 3	Not detected	Detected
bit3	Tray1 Paper Size Sensor 4	Not detected	Detected
bit4	Tray1 LCIT Paper Length Sensor 1	Not detected	Detected
bit5	Tray1 LCIT Paper Length Sensor 2	Not detected	Detected
bit6	-	-	-
bit7	Tray1 Paper End Detection	Paper detected	Paper end

Port5 (SP5-803-220) Bit Information

Bit	Component	0	1
bit0	Tray2 Paper Tray Set Detection	Set	Not set
bit1	Tray2 Paper Feed Belt Set Detection	Set	Not set
bit2	Tray2 Upper Limit Detection	Not detected	Detected
bit3	Tray2 Paper Upper Limit Sensor 1	Upper limit	Other

Bit	Component	0	1
bit4	Tray2 Paper Upper Limit Sensor 2	Upper limit	Other
bit5	-	-	-
bit6	Tray2 Paper Height Middle Sensor	Detected	Not detected
bit7	Tray2 Paper Lower Limit Sensor	Lower limit	Other

Port6 (SP5-803-221) Bit Information

Bit	Component	0	1
Bit0	Tray2 Paper Size Sensor 1	Not detected	Detected
bit1	Tray2 Paper Size Sensor 2	Not detected	Detected
bit2	Tray2 Paper Size Sensor 3	Not detected	Detected
bit3	Tray2 Paper Size Sensor 4	Not detected	Detected
bit4	Tray2 LCIT Paper Length Sensor 1	Not detected	Detected
bit5	Tray2 LCIT Paper Length Sensor 2	Not detected	Detected
bit6	-	-	-
bit7	Tray2 Paper End Detection	Paper detected	Paper end

Port7 (SP5-803-222) Bit Information

Bit	Component	0	1
bit0	Bypass Tray: Tray Lift Switch	Detected	Not detected
bit1	Bypass Tray: Tray Upper Limit Sensor 1	Upper limit	Other
bit2	Bypass Tray: Tray Upper Limit Sensor 2	Upper limit	Other
bit3	Bypass Tray: Paper Height Sensor 1	Not detected	Detected
bit4	Bypass Tray: Paper Height Sensor 2	Not detected	Detected
bit5	Bypass Tray: Tray Lower Limit Sensor	Other	Lower limit
bit6	Bypass Tray: Paper End Sensor	Not detected	Paper end
bit7	-	-	-

Port8 (SP5-803-223) Bit Information

Bit	Component	0	1
bit0	Bypass Tray: Paper Width Switch 1	Detected	Not detected
bit1	Bypass Tray: Paper Width Switch 2	Detected	Not detected
bit2	Bypass Tray: Paper Width Switch 3	Detected	Not detected
bit3	Bypass Tray: Paper Width Switch 4	Detected	Not detected
bit4	Bypass Tray: Paper Width Switch 5	Detected	Not detected
bit5	Bypass Tray: Paper Length Sensor	Detected	Not detected
bit6	-	-	-
bit7	-	-	-

Port9 (SP5-803-224) Bit Information

Bit	Component	0	1
bit0	Tray1 Feed Sensor	Detected	Not detected
bit1	Tray1 Transport Sensor	Detected	Not detected
bit2	Tray1 Vertical Transport Sensor	Detected	Not detected
bit3	Tray1 Vertical Transport Exit Sensor	Detected	Not detected
bit4	Tray2 Feed Sensor	Detected	Not detected
bit5	Tray2 Transport Sensor	Detected	Not detected
bit6	Tray2 Vertical Transport Sensor	Detected	Not detected
bit7	Vertical Transport Entrance Sensor	Detected	Not detected

Port10 (SP5-803-225) Bit Information

Bit	Component	0	1
bit0	Bypass: Paper Feed Sensor	Detected	Not detected
bit1	Bypass: Relay Sensor	Detected	Not detected
bit2	Bypass Vertical Transport Sensor	Detected	Not detected
bit3	-	-	-
bit4	-	-	-
bit5	-	-	-
bit6	-	-	-
bit7	-	-	-

Port11 (SP5-803-226) Bit Information

Bit	Component	0	1
bit0	LCIT Exit Sensor	Detected	Not detected
bit1	-	-	-
bit2	-	-	-
bit3	-	-	-
bit4	-	-	-
bit5	-	-	-
bit6	-	-	-
bit7	-	-	-

Bridge Unit 1 (SP5-803-227) Bit Information

Bit	Component	0	1
bit0	Bridge Timing Sensor	Detected	Not detected
bit1	Rotary Gate Exit Sensor	Detected	Not detected
bit2	Bridge Exit Sensor	Detected	Not detected
bit3	Shift Unit HP Sensor	Not HP	HP

Bit	Component	0	1
bit4	Rotary Gate HP Sensor	Not HP	HP
bit5	-	-	-
bit6	-	-	-
bit7	-	-	-

ADF Input Check

6011	**[1-Pass ADF INPUT Check]** Gets information of specified sensor.		
6-011-001	Original Length 1 (B5 Sensor)	ENG	[0 to 1 / 0 / 1] 1: Paper detected
6-011-002	Original Length 2 (A4 Sensor)	ENG	[0 to 1 / 0 / 1] 1: Paper detected
6-011-003	Original Length 3 (LG Sensor)	ENG	[0 to 1 / 0 / 1] 1: Paper detected
6-011-004	Original Width 1	ENG	[0 to 1 / 0 / 1] 1: Paper detected
6-011-005	Original Width 2	ENG	[0 to 1 / 0 / 1] 1: Paper detected
6-011-006	Original Width 3	ENG	[0 to 1 / 0 / 1] 1: Paper detected
6-011-007	Original Width 4	ENG	[0 to 1 / 0 / 1] 1: Paper detected
6-011-008	Original Width 5	ENG	[0 to 1 / 0 / 1] 1: Paper detected
6-011-009	Original Detection	ENG	[0 to 1 / 0 / 1] 1: Set
6-011-010	Separation Sensor	ENG	[0 to 1 / 0 / 1] 1: Paper detected
6-011-011	Skew Correction	ENG	[0 to 1 / 0 / 1] 1: Paper detected
6-011-012	Scan Entrance Sensor	ENG	[0 to 1 / 0 / 1] 1: Paper detected
6-011-013	Registration Sensor	ENG	[0 to 1 / 0 / 1] 1: Paper detected

6-011-014	Exit Sensor	ENG	[0 to 1 / 0 / 1] 1: Paper detected
6-011-015	Feed Cover Sensor	ENG	[0 to 1 / 0 / 1] 1: Open
6-011-016	Lift Up Sensor	ENG	[0 to 1 / 0 / 1] 1: Lift up
6-011-018	Pick-Up Roller HP Sensor	ENG	[0 to 1 / 0 / 1] 0: HP
6-011-021	Bottom Plate HP Sensor	ENG	[0 to 1 / 0 / 1] 0: HP
6-011-022	Bottom Plate Position Sensor	ENG	[0 to 1 / 0 / 1] 1: Not correct position
6-011-023	Original Length 4 (LT/A4 Tail Sensor)	ENG	[0 to 1 / 0 / 1] 1: Paper detected
6-011-024	Double Feed Detect Sensor	ENG	[0 to 1 / 0 / 1] 1: Double feed detected
6-011-025	Feeding Unit Sensor	ENG	[0 to 1 / 0 / 1] 1: Set

Finisher SR5090/SR4150, Booklet Finisher SR5100/SR4160 Input Check

Note

- Pro C5300S/C5310S: Finisher SR5090/ Booklet finisher SR5100
- IM C6500/C8000: Finisher SR4150/ Booklet finisher SR4160

6123	**[INPUT Check: 2K/3K FIN]** Gets information of specified sensor.		
6-123-001	Entrance Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-123-002	Horizontal Transport Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-123-003	Switchback Transport Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-123-004	Proof Exit Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-123-005	Shift Exit Sensor	ENG	[0 to 1 / 0 / 1]

			0: Paper detected 1: Paper not detected
6-123-006	Booklet Stapler Exit Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-123-007	Paper Exit Open/Close Guide HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Other 1: HP
6-123-008	Punch HP Sensor	ENG	[0 to 1 / 0 / 1] 0: HP 1: Other
6-123-009	Punch Movement HP Sensor	ENG	[0 to 1 / 0 / 1] 0: HP 1: Other
6-123-010	S-to-S Registration Detection HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Other 1: HP
6-123-011	Lower Junction Solenoid HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Other 1: HP
6-123-012	Jogger Fence HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Other 1: HP
6-123-013	Hitroll HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Other 1: HP
6-123-014	Feed Out Belt HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Other 1: HP
6-123-015	Staple Moving HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Other 1: HP
6-123-016	Booklet Stapler HP Sensor	ENG	[0 to 1 / 0 / 1] 0: HP 1: Other
6-123-017	Booklet Jogger HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Other 1: HP

6-123-018	Booklet Jog Solenoid HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Other 1: HP
6-123-019	Booklet Standard Fence HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Other 1: HP
6-123-020	Bklet Stapler HP Sensor	ENG	[0 to 1 / 0 / 1] 0: HP 1: Other
6-123-022	Folder Blade Cam HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Other 1: HP
6-123-023	Fold Plate HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Other 1: HP
6-123-024	Shift Roller HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Other 1: HP
6-123-028	Drag Roller Vibrating HP Sensor	ENG	[0 to 1 / 0 / 1] 0: HP 1: Other
6-123-029	LE Guide HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Other 1: HP
6-123-030	TE Stack Plate HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Other 1: HP
6-123-031	Staple Tray Paper Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-123-032	ITB Paper Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-123-033	Booklet Stapler Transport Paper Sn: Upper	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-123-034	Booklet Stapler Transport Paper Sn: Lower	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected

6-123-035	Paper Height Sensor: Shift	ENG	[0 to 1 / 0 / 1] 0: Not detected 1: Detected
6-123-036	Corner Stapler Paper Height Sensor 1	ENG	[0 to 1 / 0 / 1] 0: Not detected 1: Detected
6-123-037	Corner Stapler Paper Height Sensor 2	ENG	[0 to 1 / 0 / 1] 0: Not detected 1: Detected
6-123-038	Proof Tray Full Sensor	ENG	[0 to 1 / 0 / 1] 0: Full 1: Not full
6-123-039	Booklet Stapler Full Sensor 1	ENG	[0 to 1 / 0 / 1] 0: Not detected 1: Detected
6-123-040	Booklet Stapler Full Sensor 2	ENG	[0 to 1 / 0 / 1] 0: Not detected 1: Detected
6-123-041	Punch Registration Detection Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected 1: Not detected
6-123-042	Punch RPS Sensor	ENG	[0 to 1 / 0 / 1] 0: Not detected 1: Detected
6-123-043	Corner Stapler Leading Edge Detection Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected 1: Not detected
6-123-044	Corner Stapler Staple End Sensor	ENG	[0 to 1 / 0 / 1] 0: Staple available 1: No staple
6-123-045	Booklet Stapler Staple End Sensor: Front	ENG	[0 to 1 / 0 / 1] 0: Staple available 1: No staple
6-123-046	Booklet Stapler Staple End Sensor: Rear	ENG	[0 to 1 / 0 / 1] 0: Staple available 1: No staple
6-123-047	Shift Tray Lower Limit Sensor 1	ENG	[0 to 1 / 0 / 1] 0: Not detected 1: Detected

6-123-048	Shift Tray Lower Limit Sensor 2	ENG	[0 to 1 / 0 / 1] 0: Not detected 1: Detected
6-123-049	Shift Tray Lower Limit Sensor 3	ENG	[0 to 1 / 0 / 1] 0: Not detected 1: Detected
6-123-050	Shift Tray Lower Limit Sensor 4	ENG	[0 to 1 / 0 / 1] 0: Not detected 1: Detected
6-123-051	Shift Tray Lower Limit Sensor 5	ENG	[0 to 1 / 0 / 1] 0: Not detected 1: Detected
6-123-052	Punch Chad Full Sensor	ENG	[0 to 1 / 0 / 1] 0: Full 1: Not full
6-123-053	Punch Set Sensor	ENG	[0 to 1 / 0 / 1] 0: Connected 1: Unconnected
6-123-054	Shift Jogger Set Detection	ENG	[0 to 1 / 0 / 1] 0: Connected 1: Unconnected
6-123-055	Booklet Stapler Set Detection	ENG	[0 to 1 / 0 / 1] 0: Connected 1: Unconnected
6-123-056	Front Door Open Switch	ENG	[0 to 1 / 0 / 1] 0: Closed 1: Open
6-123-057	Dynamic Roller Open/Close Guide Plate Sensor	ENG	[0 to 1 / 0 / 1] 0: Closed 1: Open
6-123-058	Tray Upper Limit SW	ENG	[0 to 1 / 0 / 1] 0: Other 1: Upper limit
6-123-059	Paper Exit Open/Close Guide Plate Limit SW	ENG	[0 to 1 / 0 / 1] 0: Other 1: Upper limit
6-123-060	Punch DIP SW1	ENG	[0 to 1 / 0 / 1] 0: ON 1: OFF

6-123-061	Punch DIP SW2	ENG	[0 to 1 / 0 / 1] 0: ON 1: OFF
6-123-065	Paper Guide HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Other 1: HP
6-123-066	Shift Jogger HP Sensor: Front	ENG	[0 to 1 / 0 / 1] 0: Other 1: HP
6-123-067	Shift Jogger HP Sensor: Rear	ENG	[0 to 1 / 0 / 1] 0: Other 1: HP
6-123-068	Shift Jogger Retraction HP Sensor: Upper	ENG	[0 to 1 / 0 / 1] 0: Other 1: HP
6-123-069	Shift Jogger Retraction HP Sensor: Lower	ENG	[0 to 1 / 0 / 1] 0: HP 1: Other
6-123-070	Tray up-and-down SW	ENG	[0 to 1 / 0 / 1] 0: ON 1: OFF
6-123-071	TE Height Front Detection	ENG	[0 to 1 / 0 / 1] 0: Detected 1: Not detected
6-123-072	TE Height Rear Detection	ENG	[0 to 1 / 0 / 1] 0: Detected 1: Not detected

Finisher SR4140 Input Check

Note

- Only IM C6500/C8000

6147	**[FIN INPUTCheck 3KFIN(100Bind)]** Gets information of specified sensor.		
6-147-001	Entrance Sensor	ENG	[0 or 1 / 0 / 1/step] Paper Detected: 0 Paper Not Detected: 1

6-147-002	Proof Exit Sensor	ENG	[0 or 1 / 0 / 1/step] Paper Detected: 0 Paper Not Detected: 1
6-147-003	Shift Tray Exit Sensor 1	ENG	[0 or 1 / 0 / 1/step] Paper Detected: 0 Paper Not Detected: 1
6-147-004	Staple Exit Sensor	ENG	[0 or 1 / 0 / 1/step] Paper Detected: 0 Paper Not Detected: 1
6-147-005	Tray Lower Limit Sensor	ENG	[0 to 1 / 0 / 1] Other: 0 Lower Limit: 1
6-147-006	Shift Tray Near Full Sensor	ENG	[0 to 1 / 0 / 1] Other: 0 Lower Limit: 1
6-147-007	Feed-Out Belt HP Sensor	ENG	[0 to 1 / 0 / 1] Home: 0 Other: 1
6-147-008	Jogger HP Sensor	ENG	[0 to 1 / 0 / 1] Home: 0 Other: 1
6-147-009	Shift Tray Half-Turn Sensor 1	ENG	[0 to 1 / 0 / 1] Home: 0 Other: 1
6-147-010	Stapler HP Front/Rear Sensor	ENG	[0 to 1 / 0 / 1] Home: 0 Other: 1
6-147-011	Stapler HP Sensor	ENG	[0 to 1 / 0 / 1] Home: 0 Other: 1
6-147-012	Staple Out Sensor	ENG	[0 to 1 / 0 / 1] Cartridge Detected: 0 Cartridge Not Detected: 1
6-147-013	Staple Tray Paper Sensor	ENG	[0 to 1 / 0 / 1] Paper Detected: 0 Paper Not Detected: 1
6-147-014	Front Door Open Switch	ENG	[0 to 1 / 0 / 1] Close: 0 Open: 1

6-147-015	Punch Detection Sensor	ENG	[0 to 1 / 0 / 1] Not Changed: 0 Changed: 1
6-147-016	Punch HP Sensor 1	ENG	[0 to 1 / 0 / 1] Home: 0 Other: 1
6-147-017	Punch-out Hopper Full Sensor	ENG	[0 to 1 / 0 / 1] Not Full: 0 Full: 1
6-147-018	Stapling Paper Height Sensor	ENG	[0 to 1 / 0 / 1] Paper Detected: 0 Paper Not Detected: 1
6-147-019	Paper Detection Sensor: Shift	ENG	[0 to 1 / 0 / 1] Paper Detected: 0 Paper Not Detected: 1
6-147-020	Jam Detection Sensor	ENG	[0 to 1 / 0 / 1] Paper Detected: 0 Paper Not Detected: 1
6-147-021	Proof Full Detection Sensor	ENG	[0 to 1 / 0 / 1] Not Full: 0 Full: 1
6-147-022	Stapler Rotation Sensor 1	ENG	[0 to 1 / 0 / 1] Home: 0 Other: 1
6-147-023	Stapler Trimmings Hopper Full Sensor	ENG	[0 to 1 / 0 / 1] Not Full: 0 Full: 1
6-147-024	Pre-Stack Sensor	ENG	[0 to 1 / 0 / 1] Paper Detected: 0 Paper Not Detected: 1
6-147-025	Stack Plate HP Sensor (Center)	ENG	[0 to 1 / 0 / 1] Home: 0 Other: 1
6-147-026	Exit Guide Open Sensor	ENG	[0 to 1 / 0 / 1] Home: 0 Other: 1
6-147-027	Stapler Rotation Sensor 2	ENG	[0 to 1 / 0 / 1] Home: 0 Other: 1

6-147-028	Staple Ready Sensor	ENG	[0 to 1 / 0 / 1] Staple Detected: 0 Staple Not Detected: 0
6-147-029	Stack Plate HP Sensor (Front)	ENG	[0 to 1 / 0 / 1] Home: 0 Other: 1
6-147-030	Stack Plate HP Sensor (Back)	ENG	[0 to 1 / 0 / 1] Home: 0 Other: 1
6-147-031	Positioning Roller HP Sensor	ENG	[0 to 1 / 0 / 1] Home: 0 Other: 1
6-147-032	Return Drive HP Sensor	ENG	[0 to 1 / 0 / 1] Home: 0 Other: 1
6-147-033	Stapling Paper Height Sensor	ENG	[0 to 1 / 0 / 1] Paper Detected: 0 Paper Not Detected: 1
6-147-034	Shift Lower Limit Sensor (Large Paper)	ENG	[0 to 1 / 0 / 1] Other: 0 Lower Limit: 1
6-147-035	Punch HP Sensor 2	ENG	[0 to 1 / 0 / 1] Home: 0 Other: 1
6-147-036	Shift Jogger Sensor	ENG	[0 to 1 / 0 / 1] Not Changed: 0 Changed: 1
6-147-037	Shift Jogger HP Sensor	ENG	[0 to 1 / 0 / 1] Home: 0 Other: 1
6-147-038	Shift Jogger Retraction HP Sensor	ENG	[0 to 1 / 0 / 1] Retract: 0 Not Retract: 1
6-147-039	Emergency Stop Switch	ENG	[0 to 1 / 0 / 1] OFF: 0 ON: 1
6-147-040	Top Fence HP Sensor	ENG	[0 to 1 / 0 / 1] Home: 0 Other: 1

6-147-041	Bottom Fence HP Sensor	ENG	[0 to 1 / 0 / 1] Home: 0 Other: 1
6-147-042	LowerTray Full Sensor (Z-Folded Paper)	ENG	[0 to 1 / 0 / 1] Not Full: 0 Full: 1
6-147-043	Shift Tray Exit Sensor 2	ENG	[0 to 1 / 0 / 1] Paper Detected: 0 Paper Not Detected: 1
6-147-044	Upper Tray Junction Gate HP Sensor	ENG	[0 to 1 / 0 / 1] Home: 0 Other: 1
6-147-045	Staple Junction Gate HP Sensor	ENG	[0 to 1 / 0 / 1] Home: 0 Other: 1
6-147-046	Pre-Stack Junction Gate HP Sensor	ENG	[0 to 1 / 0 / 1] Home: 0 Other: 1
6-147-047	Pre-Stack Sensor (Right)	ENG	[0 to 1 / 0 / 1] Home: 0 Other: 1
6-147-048	Pre-Stack Junction Gate Release HP Sensor	ENG	[0 to 1 / 0 / 1] Home: 0 Other: 1
6-147-049	Shift Tray Half-Turn Sensor 2	ENG	[0 to 1 / 0 / 1] Home: 0 Other: 1
6-147-050	Staple Trimmings Hopper Set Sensor	ENG	[0 to 1 / 0 / 1] Detected: 0 Not Detected: 1
6-147-051	Tray Upper Limit SW	ENG	[0 to 1 / 0 / 1] Upper limit: 1 Other: 0
6-147-052	Punch Unit HP Sensor	ENG	[0 to 1 / 0 / 1] Home: 1 Other: 0
6-147-053	Punch Side-to-Side Regist Sn	ENG	[0 to 255 / 0 / 1] The horizontal detection position of the paper is displayed with a value from 0 to 255.

Mail Box CS4010 Input Check

Note

- Only IM C6500/C8000

6160	**[INPUT Check Print Post]** Gets information of specified sensor.		
6-160-001	Paper Detect Sn 1	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-160-002	Vert Transport Sn:Bin1	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-160-003	Paper Overflow Sn 1	ENG	[0 to 1 / 0 / 1] 0: Not full 1: Full
6-160-004	Paper Detect Sn 2	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-160-005	Vert Transport Sn2:Bin3	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-160-006	Paper Overflow Sn 2	ENG	[0 to 1 / 0 / 1] 0: Not full 1: Full
6-160-007	Paper Detect Sn 3	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-160-008	Paper Overflow Sn 3	ENG	[0 to 1 / 0 / 1] 0: Not full 1: Full
6-160-009	Paper Detect Sn 4	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-160-010	Vert Transport Sn3:Bin5	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-160-011	Paper Overflow Sn 4	ENG	[0 to 1 / 0 / 1] 0: Not full 1: Full

6-160-012	Paper Detect Sn 5	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-160-013	Paper Overflow Sn 5	ENG	[0 to 1 / 0 / 1] 0: Not full 1: Full
6-160-014	Paper Detect Sn 6	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-160-015	Vert Transport Sn4:Bin7	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-160-016	Paper Overflow Sn 6	ENG	[0 to 1 / 0 / 1] 0: Not full 1: Full
6-160-017	Paper Detect Sn 7	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-160-018	Paper Overflow Sn 7	ENG	[0 to 1 / 0 / 1] 0: Not full 1: Full
6-160-019	Paper Detect Sn 8	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-160-020	Vert Transport Sn 5:Bin9	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-160-021	Paper Overflow Sn 8	ENG	[0 to 1 / 0 / 1] 0: Not full 1: Full
6-160-022	Paper Detect Sn 9	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-160-023	Paper Overflow Sn 9	ENG	[0 to 1 / 0 / 1] 0: Not full 1: Full
6-160-024	Door Open Switch	ENG	[0 to 1 / 0 / 1] 0: Open 1: Closed

Cover Interposer Tray CI5050/CI4040 Input Check

Note

- Pro C5300S/C5310S: Cover Interposer Tray CI5050
- IM C6500/C8000: Cover Interposer Tray CI4040

6166	**[INPUT Check:1-Tray CIT]** Gets information of specified sensor.		
6-166-001	Paper Feed Cover Sensor	ENG	[0 to 1 / 0 / 1] 1: Set
6-166-002	Bottom Plate HP Sensor	ENG	[0 to 1 / 0 / 1] 1: Feed position
6-166-003	Paper Near End Sensor	ENG	[0 to 1 / 0 / 1] 1: Near end
6-166-004	Paper Set Sensor	ENG	[0 to 1 / 0 / 1] 1: Paper detected
6-166-005	Bottom Plate HP Sensor	ENG	[0 to 1 / 0 / 1] 1: HP
6-166-006	Grip Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper detected
6-166-007	Guide Plate Set Sensor	ENG	[0 to 1 / 0 / 1] 1: Set
6-166-008	Paper Exit Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper detected
6-166-009	Paper Set Sensor	ENG	[0 to 1 / 0 / 1] 0: Set
6-166-010	Width Sensor 1	ENG	[0 to 1 / 0 / 1] 1: Detected
6-166-011	Width Sensor 2	ENG	[0 to 1 / 0 / 1] 1: Detected
6-166-012	Width Sensor 3	ENG	[0 to 1 / 0 / 1] 1: Detected
6-166-013	Length Sensor 1	ENG	[0 to 1 / 0 / 1] 1: Detected
6-166-014	Length Sensor 2	ENG	[0 to 1 / 0 / 1] 1: Detected
6-166-015	Length Sensor 3	ENG	[0 to 1 / 0 / 1] 1: Detected

Finisher SR5110/ Booklet Finisher SR5120 Input Check

Note

- Only Pro C5300S/C5310S

6261	**[Finisher Input Check 2.5K/3.5K]** Gets information of specified sensor.		
6-261-001	Finisher Entrance Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper, 1: No paper
6-261-002	Pre-stack Paper Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper, 1: No paper
6-261-003	Pre-stack Roller HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Pressurized, 1: Non-pressurized
6-261-004	Junction Gate Motor (Proof/Shift Tray)	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-005	Junction Gate Motor (Shift/Staple)	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-006	Upper Tray Transport Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper, 1: No paper
6-261-007	Upper Tray Exit Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper, 1: No paper
6-261-008	Punch Vertical Registration Sn	ENG	[0 to 1 / 0 / 1] 0: Paper, 1: No paper
6-261-009	Punch Side-to-Side Regist Sn	ENG	[0 to 255 / 0 / 1] 0 to 255: CIS readings
6-261-010	Punch Blade HP Sensor1	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-011	Punch Unit HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-012	Punch Blade HP Sensor2	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-013	Punch Hopper Full Sensor	ENG	[0 to 1 / 0 / 1] 0: Full, 1: Not full
6-261-014	Punch Set Sensor	ENG	[0 to 1 / 0 / 1] 0: Set, 1: Not set
6-261-015	Vibrating Plate Up-Down Moving HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-016	Corner Stapler HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-	Stapler Rotation HP Sn: Front	ENG	[0 to 1 / 0 / 1]

017			0: Not detected, 1: Detected
6-261-018	Stapler Rotation HP Sn: Rear	ENG	[0 to 1 / 0 / 1] 0: Not detected, 1: Detected
6-261-019	Fence S-to-S Moving HP Senser	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-020	Fence Up-Down Moving HP Senser	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-021	Jogger Fence HP Sensor: Front	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-022	Jogger Fence HP Sensor: Rear	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-023	Positioning Roller Vibrating HP Senser	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-024	Top Fence HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-025	Stack Feed-out Belt HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-026	Stapling Tray Paper Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper, 1: No Paper
6-261-027	Corner Stapler HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-028	Staple End Sensor	ENG	[0 to 1 / 0 / 1] 0: Staple available, 1: No staple (Not set)
6-261-029	Self-Limit Sensor	ENG	[0 to 1 / 0 / 1] 0: Staple available, 1: No staple
6-261-030	Dust Box Full Sensor	ENG	[0 to 1 / 0 / 1] 0: Not full, 1: Full (Not set)
6-261-031	Stapler Near End Sensor	ENG	[0 to 1 / 0 / 1] 0: Not near end, 1: Near end
6-261-032	Vibrating Plate S-to-S Moving HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-033	Stapling Tray Entrance Sensor	ENG	[0 to 1 / 0 / 1] 0: No paper, 1: Paper
6-261-034	Stack Transport Unit HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-035	Stack JG Vibrating HP Senser	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP

6-261-036	Bklet Top Fence HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-037	Bklet Stplr Clamp Roller HP Sn	ENG	[0 to 1 / 0 / 1] 0: Non-pressurized, 1: Pressurized
6-261-038	Fold Plate Cam HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-039	Fold Blade HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-040	Bklet Side Fence HP Sn: Front	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-041	Bklet Side Fence HP Sn: Rear	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-042	Bklet Stplr Bottom Fence HP Sn	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-043	Fold Unit Entrance Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper, 1: No paper
6-261-044	Horizontal Fold Roller Release HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Non-pressurized, 1: Pressurized
6-261-045	Horizontal Fold Roller Movement HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-046	Bklet Stapler Exit Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper, 1: No paper
6-261-047	Bklet Stapler HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-048	Bklet Stplr Stpl End Sn: Front	ENG	[0 to 1 / 0 / 1] 0: Staple available, 1: No staple (Not set)
6-261-049	Bklet Stplr Stpl End Sn: Rear	ENG	[0 to 1 / 0 / 1] 0: Staple available, 1: No staple (Not set)
6-261-051	Bklet Tray Paper Set Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper, 1: No paper
6-261-052	Bklet Tray limit swich Sensor	ENG	[0 to 1 / 0 / 1] 0: Limit, 1: Limitless
6-261-053	Shift Tray Exit Sensor: Long: Lower Tray	ENG	[0 to 1 / 0 / 1] 0: Paper, 1: No paper
6-261-054	Shift Tray Exit Sensor: Short: Lower Tray	ENG	[0 to 1 / 0 / 1] 0: Paper, 1: No paper

6-261-055	Exit Guide HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-056	Drag Roller Vibrating HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-057	Shift Tray Press Lever HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-058	Shift Tray Upper Limit Switch	ENG	[0 to 1 / 0 / 1] 0: Not detected, 1: Detected
6-261-059	Shift Tray HP Sensor: Front	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-060	Shift Tray HP Sensor: Rear	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-061	Shift Tray Paper Height Sensor: Staple	ENG	[0 to 1 / 0 / 1] 0: Not detected, 1: Detected
6-261-062	Shift Tray Paper Height Sensor: Shift	ENG	[0 to 1 / 0 / 1] 0: Not detected, 1: Detected
6-261-063	Shift Tray Paper Height Sensor: Z-Fold	ENG	[0 to 1 / 0 / 1] 0: Not detected, 1: Detected
6-261-064	Shift Tray Paper Height Sensor: TE	ENG	[0 to 1 / 0 / 1] 0: Not upper limit, 1: Upper limit
6-261-065	Shift Tray Full Sensor: 500	ENG	[0 to 1 / 0 / 1] 0: Not detected, 1: Detected
6-261-066	Shift Tray Full Sensor: 1000	ENG	[0 to 1 / 0 / 1] 0: Not detected, 1: Detected
6-261-067	Shift Tray Full Sensor: 1500	ENG	[0 to 1 / 0 / 1] 0: Not detected, 1: Detected
6-261-068	Shift Tray Full Sensor(L-Limit)	ENG	[0 to 1 / 0 / 1] 0: Not detected, 1: Detected
6-261-069	Shift Tray Full Sensor(Reserve)	ENG	[0 to 1 / 0 / 1] Not used
6-261-070	Paper Height Sensor(Stack)	ENG	[0 to 1 / 0 / 1] 0: No paper, 1: Paper
6-261-071	Shift Tray Emergency Stop SW	ENG	[0 to 1 / 0 / 1] 0: Detected, 1: Not detected
6-261-072	Shift Tray Jogger Fence HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-073	Shift Tray Jog Fence Retra HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP

6-261-074	Upper Tray Drag Roller Vibrating HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-075	Upper Tray Press Lever HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-076	Upper Tray Upper Limit Switch	ENG	[0 to 1 / 0 / 1] 0: Not detected, 1: Detected
6-261-077	Upper Tray HP Sensor: Front	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-078	Upper Tray HP Sensor: Rear	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-079	Upper Tray Paper Height Sensor: Staple	ENG	[0 to 1 / 0 / 1] Not used
6-261-080	Upper Tray Paper Height Sensor: Shift	ENG	[0 to 1 / 0 / 1] 0: Not detected, 1: Detected
6-261-081	Upper Tray Paper Height Sensor: Z-Fold	ENG	[0 to 1 / 0 / 1] 0: Not detected, 1: Detected
6-261-082	Upper Tray Paper Height Sensor: TE	ENG	[0 to 1 / 0 / 1] 0: Not upper limit, 1: Upper limit
6-261-083	Upper Tray Full Sensor: 500	ENG	[0 to 1 / 0 / 1] 0: Not detected, 1: Detected
6-261-086	Upper Tray Full Sensor(L-Limit)	ENG	[0 to 1 / 0 / 1] 0: Not detected, 1: Detected
6-261-087	Upper Full Sensor(Reserve)	ENG	[0 to 1 / 0 / 1] Not used
6-261-088	Upper Tray Emergency Stop SW	ENG	[0 to 1 / 0 / 1] 0: Detected, 1: Not detected
6-261-089	Upper Tray Jogger Fence HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-090	Upper Tray Jog Fence Retra HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP, 1: HP
6-261-091	Front Door Switch1	ENG	[0 to 1 / 0 / 1] 0: Closed, 1: Open
6-261-092	Front Door Switch2	ENG	[0 to 1 / 0 / 1] 0: Closed, 1: Open
6-261-094	Punch Type 1	ENG	[0 to 1 / 0 / 1] JP: 091: 1, 092: 1 NA: 091: 1, 092: 0 EU: 091: 0, 092: 1
6-261-095	Punch Type 2	ENG	

			NE: 091: 0, 092: 0
6-261-096	Staple Tray Set Sensor	ENG	[0 to 1 / 0 / 1] 0: Set, 1: Not set
6-261-097	Reserved	ENG	[0 to 1 / 0 / 1] Not used
6-261-098	Upper Tray Paper Ejection SW	ENG	[0 to 1 / 0 / 1] 0: Detected, 1: Not detected

Multi-folding Unit FD5020/FD4020 Input Check

Note

- Pro C5300S/C5310S: Multi-Folding Unit FD5020
- IM C6500/C8000:Multi-Folding Unit FD4020

6309	**[INPUT Check Multi Folder]** Gets information of specified sensor.		
6-309-001	Entrance Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-309-002	Entrance JG HP Sensor	ENG	[0 to 1 / 0 / 1] 1: HP
6-309-004	Registration Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-309-005	Dynamic Roller HP Sensor	ENG	[0 to 1 / 0 / 1] 1: HP
6-309-006	Registration Roller HP Sensor	ENG	[0 to 1 / 0 / 1] 1: HP
6-309-007	Fold Plate HP Sensor	ENG	[0 to 1 / 0 / 1] 1: HP
6-309-008	Jogger Fence HP Sensor	ENG	[0 to 1 / 0 / 1] 1: HP
6-309-010	1st Stopper Paper Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-309-011	1st Stopper HP Sensor	ENG	[0 to 1 / 0 / 1] 1: HP
6-309-012	2nd Stopper Paper Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-309-013	2nd Stopper HP Sensor	ENG	[0 to 1 / 0 / 1] 1: HP
6-309-014	3rd Stopper Paper Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected

6-309-015	3rd Stopper HP Sensor	ENG	[0 to 1 / 0 / 1] 1: HP
6-309-016	Direct-Send JG HP Sensor	ENG	[0 to 1 / 0 / 1] 1: HP
6-309-017	FM6 Pawl HP Sensor	ENG	[0 to 1 / 0 / 1] 0: HP
6-309-018	Top Tray Paper Path Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-309-019	Top Tray Exit Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-309-020	Horizontal Path Exit Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-309-021	Top Tray Full Sensor (E)	ENG	[0 to 1 / 0 / 1] 1: Detected
6-309-023	Front Door Switch (SW1)	ENG	[0 to 1 / 0 / 1] 0: Closed
6-309-024	Horizontal Path Paper Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-309-025	Vertical Path Paper Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-309-026	Bypass Entrance Paper Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-309-027	Bypass Exit Paper Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected

Multi-folding Unit FD4010 Input Check

Note

- Only IM C6500/C8000

6377	**[INPUT Check]** Gets information of specified sensor.		
6-377-001	Entrance Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-377-002	Registration Front Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-377-003	Registration Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-377-004	Paper Stack Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected

6-377-005	1st 2-direction Paper Feed SN	ENG	[0 to 1 / 0 / 1] 0: Detected
6-377-006	2nd 2-direction Paper Feed SN	ENG	[0 to 1 / 0 / 1] 0: Detected
6-377-007	Crease Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-377-008	Bridge Exit Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-377-009	Top Tray Exit Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-377-010	Entrance JG HP Sensor	ENG	[0 to 1 / 0 / 1] 1: HP
6-377-011	Relay JG HP Sensor	ENG	[0 to 1 / 0 / 1] 1: HP
6-377-012	Folding JG HP Sensor	ENG	[0 to 1 / 0 / 1] 1: HP
6-377-013	Anti-Winding JG HP Sensor	ENG	[0 to 1 / 0 / 1] 1: HP
6-377-014	Crease HP Sensor	ENG	[0 to 1 / 0 / 1] 1: HP
6-377-015	Top Tray Paper Exit Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-377-016	After Folding Paper Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-377-017	Under Folding Paper Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-377-018	Cover SW	ENG	[0 to 1 / 0 / 1] 1: Open
6-377-019	Entrance Guide Plate SW	ENG	[0 to 1 / 0 / 1] 1: Open
6-377-020	Before Regist. Transport Guide Plate SW	ENG	[0 to 1 / 0 / 1] 1: Open
6-377-021	Regist. Transport Guide Plate SW	ENG	[0 to 1 / 0 / 1] 1: Open
6-377-022	After Fold Transport Guide Plate SW	ENG	[0 to 1 / 0 / 1] 1: Open
6-377-023	Crease Guide Plate SW	ENG	[0 to 1 / 0 / 1] 1: Open

6-377-024	Relay Transport Guide Plate SW	ENG	[0 to 1 / 0 / 1] 1: Open
6-377-025	Top Tray Exit Guide Plate SW	ENG	[0 to 1 / 0 / 1] 0: Open
6-377-026	Top Tray Exit Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected

Cover Interposer Tray CI4050 Input Check

Note

- Only IM C6500/C8000

6400	**[Cvr 2-Inserter Input Check]** Gets information of specified sensor.		
6-400-001	1st Paper Feed Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-400-002	2nd Paper Feed Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-400-003	1st Transport Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-400-004	2nd Transport Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-400-005	1st Vertical Transport Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-400-006	2nd Vertical Transport Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-400-007	Paper Exit Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-400-008	Entrance Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected

6-400-009	Exit Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-400-010	1st Pick-up Roller HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP 1: HP
6-400-011	2nd Pick-up Roller HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP 1: HP
6-400-012	1st Upper Limit Sensor	ENG	[0 to 1 / 0 / 1] 0: Not detected 1: Detected
6-400-013	2nd Upper Limit Sensor	ENG	[0 to 1 / 0 / 1] 0: Not detected 1: Detected
6-400-014	1st Lower Limit Sensor	ENG	[0 to 1 / 0 / 1] 0: Not detected 1: Detected
6-400-015	2nd Lower Limit Sensor	ENG	[0 to 1 / 0 / 1] 0: Not detected 1: Detected
6-400-016	1st Paper Near End Sensor	ENG	[0 to 1 / 0 / 1] 0: Not near-end 1: Near-end
6-400-017	2nd Paper Near End Sensor	ENG	[0 to 1 / 0 / 1] 0: Not near-end 1: Near-end
6-400-018	1st Paper End Sensor	ENG	[0 to 1 / 0 / 1] 0: Not paper end 1: Paper end
6-400-019	2nd Paper End Sensor	ENG	[0 to 1 / 0 / 1] 0: Not paper end 1: Paper end
6-400-020	1st Paper Length Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected 1: Not detected
6-400-021	2nd Paper Length Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected 1: Not detected

6-400-022	1st Paper Width Sensor 1	ENG	[0 to 1 / 0 / 1] 0: Detected 1: Not detected
6-400-023	1st Paper Width Sensor 2	ENG	[0 to 1 / 0 / 1] 0: Detected 1: Not detected
6-400-024	1st Paper Width Sensor 3	ENG	[0 to 1 / 0 / 1] 0: Detected 1: Not detected
6-400-025	1st Paper Width Sensor 4	ENG	[0 to 1 / 0 / 1] 0: Detected 1: Not detected
6-400-026	1st Paper Width Sensor 5	ENG	[0 to 1 / 0 / 1] 0: Detected 1: Not detected
6-400-027	2nd Paper Width Sensor 1	ENG	[0 to 1 / 0 / 1] 0: Detected 1: Not detected
6-400-028	2nd Paper Width Sensor 2	ENG	[0 to 1 / 0 / 1] 0: Detected 1: Not detected
6-400-029	2nd Paper Width Sensor 3	ENG	[0 to 1 / 0 / 1] 0: Detected 1: Not detected
6-400-030	2nd Paper Width Sensor 4	ENG	[0 to 1 / 0 / 1] 0: Detected 1: Not detected
6-400-031	2nd Paper Width Sensor 5	ENG	[0 to 1 / 0 / 1] 0: Detected 1: Not detected
6-400-032	1st Feed Cover Sensor	ENG	[0 to 1 / 0 / 1] 0: Open 1: Closed
6-400-033	2nd Feed Cover Sensor	ENG	[0 to 1 / 0 / 1] 0: Open 1: Closed
6-400-034	Cover Vertical Transport Switch	ENG	[0 to 1 / 0 / 1] 0: Open 1: Closed

6-400-035	Front Door Open Switch	ENG	[0 to 1 / 0 / 1] 0: Closed 1: Open

Cover Interposer Tray CI5040 Input Check

Note

- Only Pro C5300S/C5310S

6410	**[Interpsr Air Assist Input Check]** Gets information of specified sensor.		
6-410-001	1st Paper Feed Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-410-002	2nd Paper Feed Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-410-003	1st Transport Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-410-004	2nd Transport Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-410-005	1st Vertical Transport Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-410-006	2nd Vertical Transport Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-410-007	3rd Vertical Transport Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-410-008	Entrance Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-410-009	Exit Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-410-010	1st Upper Limit Sensor	ENG	[0 to 1 / 0 / 1] 1: Detected
6-410-011	2nd Upper Limit Sensor	ENG	[0 to 1 / 0 / 1] 1: Detected
6-410-012	1st Lower Limit Sensor	ENG	[0 to 1 / 0 / 1] 1: Detected
6-410-013	2nd Lower Limit Sensor	ENG	[0 to 1 / 0 / 1] 1: Detected
6-410-	1st Paper Near End Sensor 1	ENG	[0 to 1 / 0 / 1]

014			1: Detected
6-410-015	2nd Paper Near End Sensor 1	ENG	[0 to 1 / 0 / 1] 1: Detected
6-410-016	1st Paper End Sensor	ENG	[0 to 1 / 0 / 1] 1: Detected
6-410-017	2nd Paper End Sensor	ENG	[0 to 1 / 0 / 1] 1: Detected
6-410-018	1st Paper Length Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-410-019	2nd Paper Length Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-410-020	1st Paper Width Sensor 1	ENG	[0 to 1 / 0 / 1] 0: Detected
6-410-021	1st Paper Width Sensor 2	ENG	[0 to 1 / 0 / 1] 0: Detected
6-410-022	1st Paper Width Sensor 3	ENG	[0 to 1 / 0 / 1] 0: Detected
6-410-023	1st Paper Width Sensor 4	ENG	[0 to 1 / 0 / 1] 0: Detected
6-410-024	1st Paper Width Sensor 5	ENG	[0 to 1 / 0 / 1] 0: Detected
6-410-025	2nd Paper Width Sensor 1	ENG	[0 to 1 / 0 / 1] 0: Detected
6-410-026	2nd Paper Width Sensor 2	ENG	[0 to 1 / 0 / 1] 0: Detected
6-410-027	2nd Paper Width Sensor 3	ENG	[0 to 1 / 0 / 1] 0: Detected
6-410-028	2nd Paper Width Sensor 4	ENG	[0 to 1 / 0 / 1] 0: Detected
6-410-029	2nd Paper Width Sensor 5	ENG	[0 to 1 / 0 / 1] 0: Detected
6-410-030	Vertical Transport Cover Switch	ENG	[0 to 1 / 0 / 1] 1: Closed
6-410-031	Front Door Open Switch	ENG	[0 to 1 / 0 / 1] 1: Closed
6-410-032	Double Feed Detect Sensor	ENG	[0 to 1 / 0 / 1] It can be confirmed that double-feed detection functions.

			0: Not detectable, 1: Detectable
6-410-033	Double Feed Detect Sensor Connection	ENG	[0 to 1 / 0 / 1] 1: Detected
6-410-034	1st Paper Near End Sensor 2	ENG	[0 to 1 / 0 / 1] 1: Detected
6-410-035	2nd Paper Near End Sensor 2	ENG	[0 to 1 / 0 / 1] 1: Detected

Bridge Unit BU5020 Input Check

Note

- Only Pro C5300S/C5310S

6450	**[Bridge Unit Input Check]** Gets information of specified sensor.		
6-450-001	Entrance Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-450-002	Exit Sensor	ENG	[0 to 1 / 0 / 1] 0: Detected
6-450-003	Front Door Open Switch	ENG	[0 to 1 / 0 / 1] 0: Closed

High Capacity Stacker SK5040 Input Check

Note

- Only Pro C5300S/C5310S

6600	**[Stacker1 Input Check]** Gets information of specified sensor.		
6-600-001	Entrance Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-600-002	Shift Tray Exit Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-600-003	Proof Tray Exit Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-600-004	Exit Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-600-005	Transport Sensor	ENG	[0 to 1 / 0 / 1]

			0: Paper detected 1: Paper not detected
6-600-006	Proof Tray Full Sensor	ENG	[0 to 1 / 0 / 1] 0: Full 1: Not full
6-600-007	Shift Tray JG HP Sensor	ENG	[0 to 1 / 0 / 1] 0: HP 1: Not HP
6-600-008	Proof Tray JG HP Sensor	ENG	[0 to 1 / 0 / 1] 0: HP 1: Not HP
6-600-009	Shift Roller HP Sensor	ENG	[0 to 1 / 0/ 1] 0: HP 1: Not HP
6-600-010	Front Jogger Fence HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP 1: HP
6-600-011	Rear Jogger Fence HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP 1: HP
6-600-012	Jog Fence Retraction HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP 1: HP
6-600-013	LE Stopper HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP 1: HP
6-600-014	Paper Height Sensor	ENG	[0 to 1 / 0 / 1] 0: Not detected 1: Detected
6-600-015	Shift Tray Paper Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-600-016	Tray Full Sensor 1: 25%	ENG	[0 to 1 / 0 / 1] 0: Tray not detected 1: Tray detected
6-600-017	Tray Full Sensor 2: 50%	ENG	[0 to 1 / 0 / 1] 0: Tray not detected 1: Tray detected

6-600-018	Tray Full Sensor 3: 75%	ENG	[0 to 1 / 0 / 1] 0: Tray not detected 1: Tray detected
6-600-019	Tray Full Sensor 4: 100%	ENG	[0 to 1 / 0 / 1] 0: Tray not detected 1: Tray detected
6-600-020	Tray Low Limit Sensor	ENG	[0 to 1 / 0 / 1] 0: Tray not detected 1: Tray detected
6-600-021	Roll Away Cart Set SW	ENG	[0 to 1 / 0 / 1] 0: Cart detected 1: Cart not detected
6-600-022	Tray Guard Sensor 1	ENG	[0 to 1 / 0 / 1] 0: Not detected 1: Detected
6-600-023	Tray Guard Sensor 2	ENG	[0 to 1 / 0 / 1] 0: Not detected 1: Detected
6-600-024	Sub Jogger HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP 1: HP
6-600-025	Down Button	ENG	[0 to 1 / 0 / 1] 0: ON 1: OFF
6-600-026	Jam Button	ENG	[0 to 1 / 0 / 1] 0: ON 1: OFF
6-600-027	Top Door SW	ENG	[0 to 1 / 0 / 1] 0: Closed 1: Open
6-600-028	Front Door SW	ENG	[0 to 1 / 0 / 1] 0: Closed 1: Open
6-600-029	Shutter HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP 1: HP

Trimmer Unit TR5050 Input Check

Note

- Only Pro C5300S/C5310S

6650	**[Input Check: Trimmer]** Gets information of specified sensor.		
6-650-001	Entrance Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper not detected 1: Paper detected
6-650-002	Stopper Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper not detected 1: Paper detected
6-650-003	Exit Sensor	ENG	[0 to 1 / 0 / 1] 0: Paper not detected 1: Paper detected
6-650-004	Booklet Sensor 1	ENG	[0 to 1 / 0 / 1] 0: Paper detected 1: Paper not detected
6-650-005	Booklet Sensor 2	ENG	[0 to 1 / 0 / 1] 0: Paper not detected 1: Paper detected
6-650-006	Booklet Sensor 3	ENG	[0 to 1 / 0 / 1] 0: Paper not detected 1: Paper detected
6-650-007	Trimming Blade HP Sensor	ENG	[0 to 1 / 0 / 1] 0: HP 1: Not HP
6-650-008	Cut Position HP Sensor	ENG	[0 to 1 / 0 / 1] 0: HP 1: Not HP
6-650-009	Press Roller HP Sensor	ENG	[0 to 1 / 0 / 1] 0: HP 1: Not HP
6-650-010	Press Stopper HP Sensor	ENG	[0 to 1 / 0 / 1] 0: HP 1: Not HP
6-650-011	Scrap Hopper Full HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Full 1: Not full

6-650-012	Scrap Hopper HP Sensor	ENG	[0 to 1 / 0 / 1] 0: Not HP 1: HP
6-650-013	Door Switch	ENG	[0 to 1 / 0 / 1] 0: Open 1: Closed

Output Check

Main Machine Output Check

5803	**[Output Check]** Execute the movement check of the specified part.		
5-804-080	Polygon Motor: KC	ENG	[OFF/ON]
5-804-081	Polygon Motor: MY	ENG	[OFF/ON]
5-804-202	Scanner Lamp	ENG	[OFF/ON] When SC101-01, SC101-02, SC102-00, or SC14- 00 occurs, it is used to check for light source failure.
5-804-220	LCT: Pickup SOL	ENG	[OFF/ON]
5-804-221	LCT:Feed Mtr:Feed Speed2:550mm/sec	ENG	[OFF/ON] The motor is driven at paper feed speed.
5-804-222	LCT:Feed Mtr:Feed Speed1:352.8mm/sec	ENG	[OFF/ON] The motor is driven at process line speed.
5-804-223	LCT:Transport Mtr:Feed Speed2:550mm/sec	ENG	[OFF/ON] The motor is driven at paper feed speed.
5-804-234	LCT:Transport Mtr:Feed Speed1:352.8mm/sec	ENG	[OFF/ON] The motor is driven at process line speed.
5-804-235	LCT:Exit Mtr:Feed Speed2:550mm/sec	ENG	[OFF/ON] The motor is driven at paper feed speed.
5-804-236	LCT:Exit Mtr:Feed Speed1:352.8mm/sec	ENG	[OFF/ON] The motor is driven at process line speed.
5-804-237	A3LCT: Front Fan	ENG	[OFF/ON]
5-804-238	A3LCT: Rear Fan	ENG	[OFF/ON]
5-804-239	A3LCT: Left Upper Cover LED	ENG	[OFF/ON]
5-804-240	A3LCT: Front Cover LED	ENG	[OFF/ON]
5-804-241	A3LCT: Tray LED	ENG	[OFF/ON]
5-804-	A4LCT: Paper Supply Cover	ENG	[OFF/ON]

242	LED		
5-804-243	A4LCT: Slide Knob LED	ENG	[OFF/ON]
5-804-244	LCT:Active Tray LED	ENG	[OFF/ON]

5805	**[Output Check]** Execute the movement check of the specified part.		
5-805-001	Purge Upper Guide LED	ENG	[OFF/ON]
5-805-002	Purge Lower Guide LED	ENG	[OFF/ON]
5-805-003	Vertical Transport Door LED	ENG	[OFF/ON]
5-805-004	Lower Left Door LED	ENG	[OFF/ON]
5-805-005	Bypass Door LED	ENG	[OFF/ON]
5-805-006	Main Unit LED-SW Left (LED)	ENG	[OFF/ON]
5-805-007	Fusing Guide LED/D2	ENG	[OFF/ON]
5-805-008	Paper Exit Upper Guide LED	ENG	[OFF/ON]
5-805-009	Paper Exit Left Guide LED	ENG	[OFF/ON]
5-805-010	Horizontal Transport Guide LED	ENG	[OFF/ON]
5-805-011	Regist Upper Guide LED	ENG	[OFF/ON]
5-805-012	Main Unit Drawer LED	ENG	[OFF/ON]
5-805-013	Fusing Guide LED	ENG	[OFF/ON]
5-805-014	Purge Open LED	ENG	[OFF/ON]
5-805-015	Feed Tray 1 LED	ENG	[OFF/ON] Only Pro C5300S/C5310S

5-805-016	Feed Tray 2 LED	ENG	[OFF/ON] Only Pro C5300S/C5310S
5-805-017	Feed Tray 3 LED	ENG	[OFF/ON] Only Pro C5300S/C5310S
5-805-018	Feed Tray 4 LED	ENG	[OFF/ON] Only Pro C5300S/C5310S
5-805-020	u Sensor Select: Y	ENG	[OFF/ON]
5-805-021	u Sensor Select: M	ENG	[OFF/ON]
5-805-022	u Sensor Select: C	ENG	[OFF/ON]
5-805-023	u Sensor Select: K	ENG	[OFF/ON]
5-805-024	u Sensor Power Ctrl	ENG	[OFF/ON]
5-805-025	Potential Sensor Power Ctrl	ENG	[OFF/ON]
5-805-026	Toner Bottle ID Power Ctrl	ENG	[OFF/ON]
5-805-027	Lubricant End SW Power Ctrl	ENG	[OFF/ON]
5-805-028	24VS1 Converter	ENG	[OFF/ON]
5-805-030	Duplex Exhaust Fan F/C/R	ENG	[OFF/ON]
5-805-031	Tfr Fus Exhaust Fan: Full Spd	ENG	[OFF/ON]
5-805-032	Tfr Fus Exhaust Fan: Half Spd	ENG	[OFF/ON]
5-805-033	IH Power Cooling Fan: Full Spd	ENG	[OFF/ON]
5-805-034	IH Power Cooling Fan: Half Spd	ENG	[OFF/ON]
5-805-035	PSU&Ctrl Exhaust Fan: Full Spd	ENG	[OFF/ON]
5-805-036	PSU&Ctrl Exhaust Fan: Half Spd	ENG	[OFF/ON]

5-805-037	PT Fan F/R	ENG	[OFF/ON]
5-805-039	IH Coil Cooling Fan: Full Spd	ENG	[OFF/ON]
5-805-040	IH Coil Cooling Fan: Half Spd	ENG	[OFF/ON]
5-805-041	HP Exhaust Fan: Full Spd	ENG	[OFF/ON]
5-805-042	HP Exhaust Fan: Half Spd	ENG	[OFF/ON]
5-805-043	Dev Exhaust Fan R/L: Full Spd	ENG	[OFF/ON]
5-805-044	Dev Exhaust Fan R/L: Half Spd	ENG	[OFF/ON]
5-805-045	HP Suction Fan: Full Spd	ENG	[OFF/ON]
5-805-046	HP Suction Fan: Half Spd	ENG	[OFF/ON]
5-805-047	Imaging Cooling Fan R/L	ENG	[OFF/ON]
5-805-048	P Sensor Cleaning Fan	ENG	[OFF/ON]
5-805-049	ITB Motor Cooling Fan	ENG	[OFF/ON]
5-805-050	Dev Fan Y/M: Full Spd	ENG	[OFF/ON]
5-805-051	Dev Fan Y/M: Half Spd	ENG	[OFF/ON]
5-805-052	Dev Fan C/K: Full Spd	ENG	[OFF/ON]
5-805-053	Dev Fan C/K: Half Spd	ENG	[OFF/ON]
5-805-054	ITB Cooling Fan: Full Spd	ENG	[OFF/ON]
5-805-055	ITB Cooling Fan: Half Spd	ENG	[OFF/ON]
5-805-056	Exit Cooling Fan	ENG	[OFF/ON]

5-805-059	Fusing Paper Exit Exhaust Fan	ENG	[OFF/ON]
5-805-060	Ozone Fan	ENG	[OFF/ON]
5-805-061	Drive Exhaust Fan Left	ENG	[OFF/ON]
5-805-062	Fus Press Roller Suction Fan	ENG	[OFF/ON] Only Pro C5300S/C5310S
5-805-063	Fus Press Roller Exhaust Fan	ENG	[OFF/ON] Only Pro C5300S/C5310S
5-805-064	Waste Toner Cooling Fan/Full Spd	ENG	[OFF/ON]
5-805-065	Waste Toner Cooling Fan/Half Spd	ENG	[OFF/ON]
5-805-068	Buffer Pass Fan	ENG	[OFF/ON]
5-805-070	Tray 1 PickUp SOL	ENG	[OFF/ON]
5-805-071	Tray 2 PickUp SOL	ENG	[OFF/ON]
5-805-072	Tray 3 PickUp SOL	ENG	[OFF/ON]
5-805-073	Tray 4 PickUp SOL	ENG	[OFF/ON]
5-805-074	Bypass Pickup SOL	ENG	[OFF/ON]
5-805-075	Left Tray Lock SOL	ENG	[OFF/ON]
5-805-076	Duplex Inverter SOL	ENG	[OFF/ON]
5-805-077	Exit/Inverter JG SOL	ENG	[OFF/ON]
5-805-078	Tray 1 Rear Side Fence SOL	ENG	[OFF/ON]
5-805-079	Charge Clean Lift SOL: Y	ENG	[OFF/ON]
5-805-080	Charge Clean Lift SOL: M	ENG	[OFF/ON]

5-805-081	Charge Clean Lift SOL: C	ENG	[OFF/ON]
5-805-082	Charge Clean Lift SOL: K	ENG	[OFF/ON]
5-805-086	PCL_Y	ENG	[OFF/ON]
5-805-087	PCL_M	ENG	[OFF/ON]
5-805-088	PCL_C	ENG	[OFF/ON]
5-805-089	PCL_K	ENG	[OFF/ON]
5-805-102	ITB Lift Motor(FC): Attach	ENG	[OFF/ON]
5-805-103	ITB Lift Motor(FC): Detach	ENG	[OFF/ON]
5-805-104	PTR Lift Motor: Attach	ENG	[OFF/ON]
5-805-105	PTR Lift Motor: Detach	ENG	[OFF/ON]
5-805-106	Toner Bottle Motor Y: CW	ENG	[OFF/ON] If ON for more than 10 sec. the toner may be clogged.
5-805-107	Toner Bottle Motor Y: CCW	ENG	
5-805-108	Toner Bottle Motor M: CW	ENG	
5-805-109	Toner Bottle Motor M: CCW	ENG	
5-805-110	Toner Bottle Motor C: CW	ENG	
5-805-111	Toner Bottle Motor C: CCW	ENG	
5-805-112	Toner Bottle Motor K: CW	ENG	
5-805-113	Toner Bottle Motor K: CCW	ENG	
5-805-114	Used Toner Bottle Motor	ENG	[OFF/ON]

5-805-115	Toner Discharge Motor	ENG	[OFF/ON]
5-805-116	ITB Motor: Std Spd	ENG	[OFF/ON]
5-805-117	ITB Motor: Mid Spd	ENG	[OFF/ON]
5-805-118	ITB Motor: MidLow Spd	ENG	[OFF/ON]
5-805-119	ITB Motor: Low Spd	ENG	[OFF/ON]
5-805-120	PTR Motor: Std Spd	ENG	[OFF/ON]
5-805-121	PTR Motor: Mid Spd	ENG	[OFF/ON]
5-805-122	PTR Motor: MidLow Spd	ENG	[OFF/ON]
5-805-123	PTR Motor: Low Spd	ENG	[OFF/ON]
5-805-124	Y Drum Motor: Std Spd	ENG	[OFF/ON]
5-805-125	Y Drum Motor: Mid Spd	ENG	[OFF/ON]
5-805-126	Y Drum Motor: MidLow Spd	ENG	[OFF/ON]
5-805-127	Y Drum Motor: Low Spd	ENG	[OFF/ON]
5-805-128	M Drum Motor: Std Spd	ENG	[OFF/ON]
5-805-129	M Drum Motor: Mid Spd	ENG	[OFF/ON]
5-805-130	M Drum Motor: MidLow Spd	ENG	[OFF/ON]
5-805-131	M Drum Motor: Low Spd	ENG	[OFF/ON]
5-805-132	C Drum Motor: Std Spd	ENG	[OFF/ON]
5-805-133	C Drum Motor: Mid Spd	ENG	[OFF/ON]

5-805-134	C Drum Motor: MidLow Spd	ENG	[OFF/ON]
5-805-135	C Drum Motor: Low Spd	ENG	[OFF/ON]
5-805-136	K Drum Motor: Std Spd	ENG	[OFF/ON]
5-805-137	K Drum Motor: Mid Spd	ENG	[OFF/ON]
5-805-138	K Drum Motor: MidLow Spd	ENG	[OFF/ON]
5-805-139	K Drum Motor: Low Spd	ENG	[OFF/ON]
5-805-140	Y DrumCln Motor: Std Spd	ENG	[OFF/ON]
5-805-141	Y DrumCln Motor: Mid Spd	ENG	[OFF/ON]
5-805-142	Y DrumCln Motor: MidLow Spd	ENG	[OFF/ON]
5-805-143	Y DrumCln Motor: Low Spd	ENG	[OFF/ON]
5-805-144	M DrumCln Motor: Std Spd	ENG	[OFF/ON]
5-805-145	M DrumCln Motor: Mid Spd	ENG	[OFF/ON]
5-805-146	M DrumCln Motor: MidLow Spd	ENG	[OFF/ON]
5-805-147	M DrumCln Motor: Low Spd	ENG	[OFF/ON]
5-805-148	C DrumCln Motor: Std Spd	ENG	[OFF/ON]
5-805-149	C DrumCln Motor: Mid Spd	ENG	[OFF/ON]
5-805-150	C DrumCln Motor: MidLow Spd	ENG	[OFF/ON]
5-805-151	C DrumCln Motor: Low Spd	ENG	[OFF/ON]
5-805-152	K DrumCln Motor: Std Spd	ENG	[OFF/ON]

5-805-153	K DrumCln Motor: Mid Spd	ENG	[OFF/ON]
5-805-154	K DrumCln Motor: MidLow Spd	ENG	[OFF/ON]
5-805-155	K DrumCln Motor: Low Spd	ENG	[OFF/ON]
5-805-156	Y Dev Motor: Std Spd	ENG	[OFF/ON]
5-805-157	Y Dev Motor: Mid Spd	ENG	[OFF/ON]
5-805-158	Y Dev Motor: MidLow Spd	ENG	[OFF/ON]
5-805-159	Y Dev Motor: Low Spd	ENG	[OFF/ON]
5-805-160	M Dev Motor: Std Spd	ENG	[OFF/ON]
5-805-161	M Dev Motor: Mid Spd	ENG	[OFF/ON]
5-805-162	M Dev Motor: MidLow Spd	ENG	[OFF/ON]
5-805-163	M Dev Motor: Low Spd	ENG	[OFF/ON]
5-805-164	C Dev Motor: Std Spd	ENG	[OFF/ON]
5-805-165	C Dev Motor: Mid Spd	ENG	[OFF/ON]
5-805-166	C Dev Motor: MidLow Spd	ENG	[OFF/ON]
5-805-167	C Dev Motor: Low Spd	ENG	[OFF/ON]
5-805-168	K Dev Motor: Std Spd	ENG	[OFF/ON]
5-805-169	K Dev Motor: Mid Spd	ENG	[OFF/ON]
5-805-170	K Dev Motor: MidLow Spd	ENG	[OFF/ON]
5-805-171	K Dev Motor: Low Spd	ENG	[OFF/ON]

5-805-172	Toner Feed Bottle Motor Y	ENG	[OFF/ON] If ON for more than 10 sec. the toner may be clogged. If 172 to 175 for this SP are on, toner is forcibly supplied to the development unit and toner density changes.
5-805-173	Toner Feed Bottle Motor M	ENG	
5-805-174	Toner Feed Bottle Motor C	ENG	
5-805-175	Toner Feed Bottle Motor K	ENG	
5-805-176	Fuzing Motor CW: Std Spd	ENG	[OFF/ON]
5-805-177	Fuzing Motor CCW: Std Spd	ENG	[OFF/ON]
5-805-178	Fuzing Motor CCW: Mid Spd	ENG	[OFF/ON]
5-805-179	Fuzing Motor CCW: MidLow Spd	ENG	[OFF/ON]
5-805-180	Fuzing Motor CCW: Low Spd	ENG	[OFF/ON]
5-805-183	Refresh Roller Drv Motor: CW	ENG	[OFF/ON] Only Pro C5300S/C5310S
5-805-184	Refresh Roller Drv Motor: CCW	ENG	[OFF/ON] Only Pro C5300S/C5310S
5-805-185	Web Cleaning: Attach	ENG	[OFF/ON] Only Pro C5300S/C5310S
5-805-186	Web Cleaning: Detach	ENG	[OFF/ON] Only Pro C5300S/C5310S
5-805-187	Web Cleaning Drv Motor: CW	ENG	[OFF/ON] Only Pro C5300S/C5310S

5806	**[Output Check]** Execute the movement check of the specified part.		
5-806-001	Feed Mtr 1:Feed Speed1:Std Speed	ENG	[OFF/ON]
5-806-002	Feed Mtr 1:Feed Speed1:Mid Speed	ENG	[OFF/ON]
5-806-003	Feed Mtr 1:Feed Speed1:Mid-Low Speed	ENG	[OFF/ON]
5-806-004	Feed Mtr 1:Feed Speed1:Low Speed	ENG	[OFF/ON]
5-806-005	Feed Mtr 1:Feed Speed2:Std Speed	ENG	[OFF/ON]
5-806-006	Feed Mtr 1:Feed Speed2:Mid Speed	ENG	[OFF/ON]
5-806-007	Feed Mtr 1:Feed Speed2:Mid-Low Speed	ENG	[OFF/ON]

5-806-008	Feed Mtr 1:Feed Speed2:Low Speed	ENG	[OFF/ON]
5-806-009	Feed Mtr 2:Feed Speed1:Std Speed	ENG	[OFF/ON]
5-806-010	Feed Mtr 2:Feed Speed1:Mid Speed	ENG	[OFF/ON]
5-806-011	Feed Mtr 2:Feed Speed1:Mid-Low Speed	ENG	[OFF/ON]
5-806-012	Feed Mtr 2:Feed Speed1:Low Speed	ENG	[OFF/ON]
5-806-013	Feed Mtr 2:Feed Speed2:Std Speed	ENG	[OFF/ON]
5-806-014	Feed Mtr 2:Feed Speed2:Mid Speed	ENG	[OFF/ON]
5-806-015	Feed Mtr 2:Feed Speed2:Mid-Low Speed	ENG	[OFF/ON]
5-806-016	Feed Mtr 2:Feed Speed2:Low Speed	ENG	[OFF/ON]
5-806-017	Feed Mtr 3:Feed Speed1:Std Speed	ENG	[OFF/ON]
5-806-018	Feed Mtr 3:Feed Speed1:Mid Speed	ENG	[OFF/ON]
5-806-019	Feed Mtr 3:Feed Speed1:Mid-Low Speed	ENG	[OFF/ON]
5-806-020	Feed Mtr 3:Feed Speed1:Low Speed	ENG	[OFF/ON]
5-806-021	Feed Mtr 3:Feed Speed2:Std Speed	ENG	[OFF/ON]
5-806-022	Feed Mtr 3:Feed Speed2:Mid Speed	ENG	[OFF/ON]
5-806-023	Feed Mtr 3:Feed Speed2:Mid-Low Speed	ENG	[OFF/ON]
5-806-024	Feed Mtr 3:Feed Speed2:Low Speed	ENG	[OFF/ON]
5-806-025	Feed Mtr 4:Feed Speed1:Std Speed	ENG	[OFF/ON]
5-806-026	Feed Mtr 4:Feed Speed1:Mid Speed	ENG	[OFF/ON]
5-806-027	Feed Mtr 4:Feed Speed1:Mid-Low Speed	ENG	[OFF/ON]
5-806-028	Feed Mtr 4:Feed Speed1:Low Speed	ENG	[OFF/ON]
5-806-029	Feed Mtr 4:Feed Speed2:Std Speed	ENG	[OFF/ON]
5-806-030	Feed Mtr 4:Feed Speed2:Mid Speed	ENG	[OFF/ON]
5-806-031	Feed Mtr 4:Feed Speed2:Mid-Low Speed	ENG	[OFF/ON]
5-806-032	Feed Mtr 4:Feed Speed2:Low Speed	ENG	[OFF/ON]
5-806-033	Transport Mtr1:Feed Speed1:Std Speed	ENG	[OFF/ON]
5-806-034	Transport Mtr1:Feed Speed1:Mid Speed	ENG	[OFF/ON]
5-806-035	Transport Mtr1:Feed Speed1:Mid-Low Speed	ENG	[OFF/ON]
5-806-036	Transport Mtr1:Feed Speed1:Low Speed	ENG	[OFF/ON]
5-806-037	Transport Mtr1:Feed Speed2:Std Speed	ENG	[OFF/ON]
5-806-038	Transport Mtr1:Feed Speed2:Mid Speed	ENG	[OFF/ON]
5-806-039	Transport Mtr1:Feed Speed2:Mid-Low Speed	ENG	[OFF/ON]
5-806-040	Transport Mtr1:Feed Speed2:Low Speed	ENG	[OFF/ON]
5-806-041	Transport Mtr2:Feed Speed1:Std Speed	ENG	[OFF/ON]
5-806-042	Transport Mtr2:Feed Speed1:Mid Speed	ENG	[OFF/ON]
5-806-043	Transport Mtr2:Feed Speed1:Mid-Low Speed	ENG	[OFF/ON]
5-806-044	Transport Mtr2:Feed Speed1:Low Speed	ENG	[OFF/ON]
5-806-045	Transport Mtr2:Feed Speed2:Std Speed	ENG	[OFF/ON]

5-806-046	Transport Mtr2:Feed Speed2:Mid Speed	ENG	[OFF/ON]
5-806-047	Transport Mtr2:Feed Speed2:Mid-Low Speed	ENG	[OFF/ON]
5-806-048	Transport Mtr2:Feed Speed2:Low Speed	ENG	[OFF/ON]
5-806-049	Transport Mtr3:Feed Speed1:Std Speed	ENG	[OFF/ON]
5-806-050	Transport Mtr3:Feed Speed1:Mid Speed	ENG	[OFF/ON]
5-806-051	Transport Mtr3:Feed Speed1:Mid-Low Speed	ENG	[OFF/ON]
5-806-052	Transport Mtr3:Feed Speed1:Low Speed	ENG	[OFF/ON]
5-806-053	Transport Mtr3:Feed Speed2:Std Speed	ENG	[OFF/ON]
5-806-054	Transport Mtr3:Feed Speed2:Mid Speed	ENG	[OFF/ON]
5-806-055	Transport Mtr3:Feed Speed2:Mid-Low Speed	ENG	[OFF/ON]
5-806-056	Transport Mtr3:Feed Speed2:Low Speed	ENG	[OFF/ON]
5-806-057	Transport Mtr4:Feed Speed1:Std Speed	ENG	[OFF/ON]
5-806-058	Transport Mtr4:Feed Speed1:Mid Speed	ENG	[OFF/ON]
5-806-059	Transport Mtr4:Feed Speed1:Mid-Low Speed	ENG	[OFF/ON]
5-806-060	Transport Mtr4:Feed Speed1:Low Speed	ENG	[OFF/ON]
5-806-061	Transport Mtr4:Feed Speed2:Std Speed	ENG	[OFF/ON]
5-806-062	Transport Mtr4:Feed Speed2:Mid Speed	ENG	[OFF/ON]
5-806-063	Transport Mtr4:Feed Speed2:Mid-Low Speed	ENG	[OFF/ON]
5-806-064	Transport Mtr4:Feed Speed2:Low Speed	ENG	[OFF/ON]
5-806-065	Relay Mtr:CW:Feed Speed1:Std Speed	ENG	[OFF/ON]
5-806-066	Relay Mtr:CW:Feed Speed1:Mid Speed	ENG	[OFF/ON]
5-806-067	Relay Mtr:CW:Feed Speed1:Mid-Low Speed	ENG	[OFF/ON]
5-806-068	Relay Mtr:CW:Feed Speed1:Low Speed	ENG	[OFF/ON]
5-806-069	Relay Mtr:CW:Feed Speed2:Std Speed	ENG	[OFF/ON]
5-806-070	Relay Mtr:CW:Feed Speed2:Mid Speed	ENG	[OFF/ON]
5-806-071	Relay Mtr:CW:Feed Speed2:Mid-Low Speed	ENG	[OFF/ON]
5-806-072	Relay Mtr:CW:Feed Speed2:Low Speed	ENG	[OFF/ON]
5-806-073	Relay Mtr:CCW:Feed Speed1:Std Speed	ENG	[OFF/ON]
5-806-074	Relay Mtr:CCW:Feed Speed1:Mid Speed	ENG	[OFF/ON]
5-806-075	Relay Mtr:CCW:Feed Speed1:Mid-Low Speed	ENG	[OFF/ON]
5-806-076	Relay Mtr:CCW:Feed Speed1:Low Speed	ENG	[OFF/ON]
5-806-077	Relay Mtr:CCW:Feed Speed2:Std Speed	ENG	[OFF/ON]
5-806-078	Relay Mtr:CCW:Feed Speed2:Mid Speed	ENG	[OFF/ON]
5-806-079	Relay Mtr:CCW:Feed Speed2:Mid-Low Speed	ENG	[OFF/ON]
5-806-080	Relay Mtr:CCW:Feed Speed2:Low Speed	ENG	[OFF/ON]
5-806-081	Relay Mtr:Position Hold Stop	ENG	[OFF/ON]
5-806-082	Registration Mtr:Feed Speed1:Std Speed	ENG	[OFF/ON]
5-806-083	Registration Mtr:Feed Speed1:Mid Speed	ENG	[OFF/ON]

5-806-084	Registration Mtr:Feed Speed1:Mid-Low Speed	ENG	[OFF/ON]
5-806-085	Registration Mtr:Feed Speed1:Low Speed	ENG	[OFF/ON]
5-806-086	Registration Mtr:Feed Speed2:Std Speed	ENG	[OFF/ON]
5-806-087	Registration Mtr:Feed Speed2:Mid Speed	ENG	[OFF/ON]
5-806-088	Registration Mtr:Feed Speed2:Mid-Low Speed	ENG	[OFF/ON]
5-806-089	Registration Mtr:Feed Speed2:Low Speed	ENG	[OFF/ON]
5-806-090	Registration Mtr:Position Hold Stop	ENG	[OFF/ON]
5-806-091	Bypass Feed Mtr:Feed Speed1:Std Speed	ENG	[OFF/ON]
5-806-092	Bypass Feed Mtr:Feed Speed1:Mid Speed	ENG	[OFF/ON]
5-806-093	Bypass Feed Mtr:Feed Speed1:Mid-Low Speed	ENG	[OFF/ON]
5-806-094	Bypass Feed Mtr:Feed Speed1:Low Speed	ENG	[OFF/ON]
5-806-095	Bypass Feed Mtr:Feed Speed2:Std Speed	ENG	[OFF/ON]
5-806-096	Bypass Feed Mtr:Feed Speed2:Mid Speed	ENG	[OFF/ON]
5-806-097	Bypass Feed Mtr:Feed Speed2:Mid-Low Speed	ENG	[OFF/ON]
5-806-098	Bypass Feed Mtr:Feed Speed2:Low Speed	ENG	[OFF/ON]
5-806-103	Inverter Ent Mtr:Exit Speed1:Std Speed	ENG	[OFF/ON]
5-806-104	Inverter Ent Mtr:Exit Speed1:Mid Speed	ENG	[OFF/ON]
5-806-105	Inverter Ent Mtr:Exit Speed1:Mid-Low Speed	ENG	[OFF/ON]
5-806-106	Inverter Ent Mtr:Exit Speed1:Low Speed	ENG	[OFF/ON]
5-806-107	Inverter Ent Mtr:Exit Speed2:Std Speed	ENG	[OFF/ON]
5-806-108	Inverter Ent Mtr:Exit Speed2:Mid Speed	ENG	[OFF/ON]
5-806-109	Inverter Ent Mtr:Exit Speed2:Mid-Low Speed	ENG	[OFF/ON]
5-806-110	Inverter Ent Mtr:Exit Speed2:Low Speed	ENG	[OFF/ON]
5-806-111	Exit/Inverter Mtr:CW:Exit Speed1:Std Speed	ENG	[OFF/ON]
5-806-112	Exit/Inverter Mtr:CW:Exit Speed1:Mid Speed	ENG	[OFF/ON]
5-806-113	Exit/Inverter Mtr:CW:Exit Spd1:Mid-Low Spd	ENG	[OFF/ON]
5-806-114	Exit/Inverter Mtr:CW:Exit Speed1:Low Speed	ENG	[OFF/ON]
5-806-115	Exit/Inverter Mtr:CWW:Exit Speed1:Std Speed	ENG	[OFF/ON]
5-806-116	Exit/Inverter Mtr:CWW:Exit Speed1:Mid Speed	ENG	[OFF/ON]
5-806-117	Exit/Inverter Mtr:CWW:Exit Spd1:Mid-Low Spd	ENG	[OFF/ON]
5-806-118	Exit/Inverter Mtr:CWW:Exit Speed1:Low Speed	ENG	[OFF/ON]
5-806-119	Exit/Inverter Mtr:CW:Exit Speed2:Std Speed	ENG	[OFF/ON]
5-806-120	Exit/Inverter Mtr:CW:Exit Speed2:Mid Speed	ENG	[OFF/ON]
5-806-121	Exit/Inverter Mtr:CW:Exit Spd2:Mid-Low Spd	ENG	[OFF/ON]
5-806-122	Exit/Inverter Mtr:CW:Exit Speed2:Low Speed	ENG	[OFF/ON]
5-806-123	Exit/Inverter Mtr:CWW:Exit Speed2:Std Speed	ENG	[OFF/ON]
5-806-124	Exit/Inverter Mtr:CWW:Exit Speed2:Mid Speed	ENG	[OFF/ON]
5-806-125	Exit/Inverter Mtr:CWW:Exit Spd2:Mid-Low Spd	ENG	[OFF/ON]

5-806-126	Exit/Inverter Mtr:CWW:Exit Speed2:Low Speed	ENG	[OFF/ON]
5-806-127	Exit/Inverter Mtr: Position Hold	ENG	[OFF/ON]
5-806-128	Exit Mtr:Exit Speed1:Std Speed	ENG	[OFF/ON]
5-806-129	Exit Mtr:Exit Speed1:Mid Speed	ENG	[OFF/ON]
5-806-130	Exit Mtr:Exit Speed1:Mid-Low Speed	ENG	[OFF/ON]
5-806-131	Exit Mtr:Exit Speed1:Low Speed	ENG	[OFF/ON]
5-806-132	Exit Mtr:Exit Speed2:Std Speed	ENG	[OFF/ON]
5-806-133	Exit Mtr:Exit Speed2:Mid Speed	ENG	[OFF/ON]
5-806-134	Exit Mtr:Exit Speed2:Mid-Low Speed	ENG	[OFF/ON]
5-806-135	Exit Mtr:Exit Speed2:Low Speed	ENG	[OFF/ON]
5-806-136	Duplex/Inverter Mtr:CW:Exit Speed1:Std Speed	ENG	[OFF/ON]
5-806-137	Duplex/Inverter Mtr:CW:Exit Spd1:Mid Spd	ENG	[OFF/ON]
5-806-138	Duplex/Inverter Mtr:CW:Exit Spd1:Mid-Low Spd	ENG	[OFF/ON]
5-806-139	Duplex/Inverter Mtr:CW:Exit Spd1:CW:Low Spd	ENG	[OFF/ON]
5-806-140	Duplex/Inverter Mtr:CW:Dup Speed:Std Speed	ENG	[OFF/ON]
5-806-141	Duplex/Inverter Mtr:CW:Dup Speed:Mid Speed	ENG	[OFF/ON]
5-806-142	Duplex/Inverter Mtr:CW:Mid:DupSpd:Mid-LowSpd	ENG	[OFF/ON]
5-806-143	Duplex/Inverter Mtr:CW:Low Speed	ENG	[OFF/ON]
5-806-144	Duplex/Inverter Mtr:Exit Speed1:Std Speed	ENG	[OFF/ON]
5-806-145	Duplex/Inverter Mtr:Exit Speed1:Mid Speed	ENG	[OFF/ON]
5-806-146	Duplex/Inverter Mtr:Exit Spd1:Mid-Low Spd	ENG	[OFF/ON]
5-806-147	Duplex/Inverter Mtr:Exit Spd1:CWW:Low Spd	ENG	[OFF/ON]
5-806-148	Duplex/Inverter Mtr:CW:Dup Speed:Std Speed	ENG	[OFF/ON]
5-806-149	Duplex/Inverter Mtr:CWW:Dup Speed:Mid Speed	ENG	[OFF/ON]
5-806-150	Duplex/Inverter Mtr:CWW:Mid:DupSpd:Mid-LowSp	ENG	[OFF/ON]
5-806-151	Duplex/Inverter Mtr:CWW:Low Speed	ENG	[OFF/ON]
5-806-152	Duplex/Inverter Mtr:Hold	ENG	[OFF/ON]
5-806-153	Duplex Feed Mtr:Feed Speed1:Std Speed	ENG	[OFF/ON]
5-806-154	Duplex Feed Mtr:Feed Speed1:Mid Speed	ENG	[OFF/ON]
5-806-155	Duplex Feed Mtr:Feed Speed1:Mid-Low Speed	ENG	[OFF/ON]
5-806-156	Duplex Feed Mtr:Feed Speed1:Low Speed	ENG	[OFF/ON]
5-806-157	Duplex Feed Mtr:Feed Speed2:Std Speed	ENG	[OFF/ON]
5-806-158	Duplex Feed Mtr:Feed Speed2:Mid Speed	ENG	[OFF/ON]
5-806-159	Duplex Feed Mtr:Feed Speed2:Mid-Low Speed	ENG	[OFF/ON]
5-806-160	Duplex Feed Mtr:Feed Speed2:Low Speed	ENG	[OFF/ON]
5-806-161	Duplex Feed Mtr:Std Speed	ENG	[OFF/ON]
5-806-162	Duplex Feed Mtr:Mid Speed	ENG	[OFF/ON]
5-806-163	Duplex Feed Mtr:Mid-Low Speed	ENG	[OFF/ON]

5-806-164	Duplex Feed Mtr:Low Speed	ENG	[OFF/ON]
5-806-165	Duplex Feed Mtr (Hold)	ENG	[OFF/ON]
5-806-166	Duplex Exit Mtr:Feed Speed1::Std Speed	ENG	[OFF/ON]
5-806-167	Duplex Exit Mtr:Feed Speed1::Mid Speed	ENG	[OFF/ON]
5-806-168	Duplex Exit Mtr:Feed Speed1::Mid-Low Speed	ENG	[OFF/ON]
5-806-169	Duplex Exit Mtr:Feed Speed1::Low Speed	ENG	[OFF/ON]
5-806-170	Duplex Exit Mtr:Feed Speed2::Std Speed	ENG	[OFF/ON]
5-806-171	Duplex Exit Mtr:Feed Speed2::Mid Speed	ENG	[OFF/ON]
5-806-172	Duplex Exit Mtr:Feed Speed2::Mid-Low Speed	ENG	[OFF/ON]
5-806-173	Duplex Exit Mtr:Feed Speed2::Low Speed	ENG	[OFF/ON]
5-806-174	Duplex Exit Mtr:Feed Speed:Std Speed	ENG	[OFF/ON]
5-806-175	Duplex Exit Mtr:Feed Speed:Mid Speed	ENG	[OFF/ON]
5-806-176	Duplex Exit Mtr:Feed Speed:Mid-Low Speed	ENG	[OFF/ON]
5-806-177	Duplex Exit Mtr:Feed Speed:Low Speed	ENG	[OFF/ON]
5-806-178	Tray 1 Lift Motor: (Up: 1s)	ENG	[OFF/ON]
5-806-179	Tray 1 Lift Motor: (Down: 1s)	ENG	[OFF/ON]
5-806-180	Tray 2 Lift Motor: (Up: 1s)	ENG	[OFF/ON]
5-806-181	Tray 2 Lift Motor: (Down: 1s)	ENG	[OFF/ON]
5-806-182	Tray 3 Lift Motor: (Up: 1s)	ENG	[OFF/ON]
5-806-183	Tray 3 Lift Motor: (Down: 1s)	ENG	[OFF/ON]
5-806-184	Tray 4 Lift Motor: (Up: 1s)	ENG	[OFF/ON]
5-806-185	Tray 4 Lift Motor: (Down: 1s)	ENG	[OFF/ON]
5-806-186	Tandem Tray Transport Motor (Rev: 1s)	ENG	[OFF/ON]
5-806-187	Tandem Tray Transport Motor (Fwd: 1 s)	ENG	[OFF/ON]
5-806-188	Exit/Inverter JG SOL	ENG	[OFF/ON]
5-806-189	Exit/Inverter JG SOL	ENG	[OFF/ON]
5-806-190	Exit/Inverter JG SOL	ENG	[OFF/ON]
5-806-191	Shift Roller Motor1:Std Speed	ENG	[OFF/ON]
5-806-192	Shift Roller Motor1:Mid Speed	ENG	[OFF/ON]
5-806-193	Shift Roller Motor1:Mid-Low Speed	ENG	[OFF/ON]
5-806-194	Shift Roller Motor1:Low Speed	ENG	[OFF/ON]
5-806-195	Shift Roller Motor1:Homing	ENG	[OFF/ON]
5-806-196	Shift Roller Motor2:Std Speed	ENG	[OFF/ON]
5-806-197	Shift Roller Motor2:Mid Speed	ENG	[OFF/ON]
5-806-198	Shift Roller Motor2:Mid-Low Speed	ENG	[OFF/ON]
5-806-199	Shift Roller Motor2:Low Speed	ENG	[OFF/ON]
5-806-200	Shift Roller Motor2:Homing	ENG	[OFF/ON]
5-806-201	Sensor Shift Motor:Std Speed	ENG	[OFF/ON]

5-806-202	Sensor Shift Motor:Mid Speed	ENG	[OFF/ON]
5-806-203	Sensor Shift Motor:Mid-Low Speed	ENG	[OFF/ON]
5-806-204	Sensor Shift Motor:Low Speed	ENG	[OFF/ON]
5-806-205	Sensor Shift Motor:Homing	ENG	[OFF/ON]
5-806-206	Bypass Bottom Plate Lift Motor: Up	ENG	[OFF/ON]
5-806-207	Bypass Bottom Plate Lift Motor: Down	ENG	[OFF/ON]
5-806-210	Charge/Development: CLK	ENG	[OFF/ON]
5-806-211	Charge DC Voltage: Y	ENG	[OFF/ON]
5-806-212	Charge DC Voltage: M	ENG	[OFF/ON]
5-806-213	Charge DC Voltage: C	ENG	[OFF/ON]
5-806-214	Charge DC Voltage: K	ENG	[OFF/ON]
5-806-215	Charge AC Voltage: Y	ENG	[OFF/ON]
5-806-216	Charge AC Voltage: M	ENG	[OFF/ON]
5-806-217	Charge AC Voltage: C	ENG	[OFF/ON]
5-806-218	Charge AC Voltage: K	ENG	[OFF/ON]
5-806-223	Development Bias: Y	ENG	[OFF/ON]
5-806-224	Development Bias: M	ENG	[OFF/ON]
5-806-225	Development Bias: C	ENG	[OFF/ON]
5-806-226	Development Bias: K	ENG	[OFF/ON]
5-806-227	Development AC: Y	ENG	[OFF/ON]
5-806-228	Development AC: M	ENG	[OFF/ON]
5-806-229	Development AC: C	ENG	[OFF/ON]
5-806-230	Development AC: K	ENG	[OFF/ON]
5-806-231	Primary Transfer: Y	ENG	[OFF/ON]
5-806-232	Primary Transfer: M	ENG	[OFF/ON]
5-806-233	Primary Transfer: C	ENG	[OFF/ON]
5-806-234	Primary Transfer: K	ENG	[OFF/ON]
5-806-235	Secondary Transfer :+	ENG	[OFF/ON]
5-806-236	Secondary Transfer :-	ENG	[OFF/ON]
5-806-237	Secondary Transfer :AC	ENG	[OFF/ON]
5-806-238	Secondary Transfer :CLK	ENG	[OFF/ON]
5-806-239	Secondary Transfer Power Ctrl	ENG	[OFF/ON]
5-806-245	Decurl Pressure SW STM	ENG	[OFF/ON]
5-806-246	Decurl Transfer STM:Std Spd	ENG	[OFF/ON]
5-806-247	Decurl Transfer STM:Mid Spd	ENG	[OFF/ON]
5-806-248	Decurl Transfer STM:MidLow Spd	ENG	[OFF/ON]
5-806-249	Decurl Transfer STM:Low Spd	ENG	[OFF/ON]
5-806-250	RelayExit Mtr:Feed Speed1:Std Speed	ENG	[OFF/ON]

5-806-251	RelayExit Mtr:Feed Speed1:Mid Speed	ENG	[OFF/ON]
5-806-252	RelayExit Mtr:Feed Speed1:Low Speed	ENG	[OFF/ON]
5-806-253	RelayExit Mtr:Feed Speed2:Std Speed	ENG	[OFF/ON]
5-806-254	RelayExit Mtr:Feed Speed2:Mid Speed	ENG	[OFF/ON]
5-806-255	RelayExit Mtr:Feed Speed2:Low Speed	ENG	[OFF/ON]

Buffer Pass Unit Type S9 Output Check

Note

- Only Pro C5300S/C5310S

5804	**[Input Check(Buffer Pass Unit)]** Execute the movement check of the specified part.		
5-804-245	Buffer Pass Unit:Feed Motor 1	ENG	[OFF/ON]
5-804-246	Buffer Pass Unit:Feed Motor 2	ENG	[OFF/ON]
5-804-247	Buffer Pass Unit:Cool Fan 1-2	ENG	[OFF/ON]
5-804-248	Buffer Pass Unit:Exhaust Fan 1-2	ENG	[OFF/ON]
5-804-249	Buffer Pass Unit:Cool Fan 3-4	ENG	[OFF/ON]
5-804-250	Buffer Pass Unit:Exhaust Fan 3-4	ENG	[OFF/ON]

Vacuum Feed LCIT RT 5120/ Bridge Unit BU5030 Output Check

Note

- Only Pro C5300S/C5310S

5808	**[Output Check]** Execute the movement check of the specified part.		
5-808-001	Twin LCT1 F1 Belt M	ENG	[OFF/ON]
5-808-002	Twin LCT1 F1 Trans M	ENG	[OFF/ON]
5-808-003	Twin LCT1 F1 V-Trans M1	ENG	[OFF/ON]
5-808-004	Twin LCT1 F1 V-Trans M2	ENG	[OFF/ON]
5-808-005	Twin LCT1 F1 Float Fan	ENG	[OFF/ON]
5-808-006	Twin LCT1 F1 Separate Fan	ENG	[OFF/ON]
5-808-007	Twin LCT1 F1 Fr Side Fan	ENG	[OFF/ON]
5-808-008	Twin LCT1 F1 Rr Side Fan	ENG	[OFF/ON]
5-808-009	Twin LCT1 F1 Suction Fan1	ENG	[OFF/ON]
5-808-010	Twin LCT1 F1 Suction Fan2	ENG	[OFF/ON]
5-808-011	Twin LCT1 F1 Return Fan	ENG	[OFF/ON]
5-808-013	Twin LCT1 F2 Belt M	ENG	[OFF/ON]
5-808-014	Twin LCT1 F2 Trans M	ENG	[OFF/ON]
5-808-015	Twin LCT1 F2 V-Trans M1	ENG	[OFF/ON]

5-808-016	Twin LCT1 F2 V-Trans M2	ENG	[OFF/ON]
5-808-017	Twin LCT1 V-Trans Exit M	ENG	[OFF/ON]
5-808-018	Twin LCT1 F2 Float Fan	ENG	[OFF/ON]
5-808-019	Twin LCT1 F2 Separate Fan	ENG	[OFF/ON]
5-808-020	Twin LCT1 F2 Fr Side Fan	ENG	[OFF/ON]
5-808-021	Twin LCT1 F2 Rr Side Fan	ENG	[OFF/ON]
5-808-022	Twin LCT1 F2 Suction Fan1	ENG	[OFF/ON]
5-808-023	Twin LCT1 F2 Suction Fan2	ENG	[OFF/ON]
5-808-024	Twin LCT1 F2 Return Fan	ENG	[OFF/ON]
5-808-025	Twin LCT1 Exit M	ENG	[OFF/ON]
5-808-026	Twin LCT1 F1 V-Trans Roller Retract M	ENG	[OFF/ON]
5-808-027	Twin LCT1 F1 V-Trans Exit Roller Retract M	ENG	[OFF/ON]
5-808-028	Twin LCT1 F2 V-Trans Exit Roller Retract M	ENG	[OFF/ON]
5-808-029	Twin LCT1 V-Trans Entrance Roller Retract M	ENG	[OFF/ON]
5-808-030	Twin LCT1 Exit Roller Retract M	ENG	[OFF/ON]
5-808-031	Twin LCT Bypass Feed M	ENG	[OFF/ON]
5-808-032	Twin LCT Bypass Trans M	ENG	[OFF/ON]
5-808-033	Twin LCT Bypass V-Trans M1	ENG	[OFF/ON]
5-808-034	Twin LCT Bypass V-Trans M2	ENG	[OFF/ON]
5-808-035	Twin LCT Bypass Pickup SOL	ENG	[OFF/ON]
5-808-036	Twin LCT1 F1 Float Fan Shut SOL	ENG	[OFF/ON]
5-808-037	Twin LCT1 F1 Return Fan Shut SOL	ENG	[OFF/ON]
5-808-038	Twin LCT1 F1 Suction Fan Shut SOL	ENG	[OFF/ON]
5-808-039	Twin LCT1 F2 Float Fan Shut SOL	ENG	[OFF/ON]
5-808-040	Twin LCT1 F2 Return Fan Shut SOL	ENG	[OFF/ON]
5-808-041	Twin LCT1 F2 Suction Fan Shut SOL	ENG	[OFF/ON]
5-808-042	Twin LCT1 F1 LED	ENG	[OFF/ON]
5-808-043	Twin LCT1 F2 LED	ENG	[OFF/ON]
5-808-044	Twin LCT1 F1 V-Trans LED	ENG	[OFF/ON]
5-808-045	Twin LCT1 F2 V-Trans LED	ENG	[OFF/ON]
5-808-046	Twin LCT1 H-Trans LED	ENG	[OFF/ON]
5-808-047	Twin LCT1 LCT Exit LED	ENG	[OFF/ON]
5-808-051	VacFeedLCTRelayRelayEnt(StdSpdVf2)	ENG	[OFF/ON]
5-808-052	VacFeed LCT Relay Rotary Gate M(Homing)	ENG	[OFF/ON]
5-808-053	VacFeed LCT Relay Rotary Gate M(Movement 3)	ENG	[OFF/ON]
5-808-054	VacFeed LCT Relay Rotary Gate M(Std. Sppd)	ENG	[OFF/ON]
5-808-055	VacFeed LCT Relay Rotary Gate M(Mid. Sppd)	ENG	[OFF/ON]
5-808-056	VacFeed LCT Relay Rotary Gate M(Low Spd)	ENG	[OFF/ON]

5-808-057	VacFeed LCT Relay Unit Shift M(Homing)	ENG	[OFF/ON]
5-808-058	VacFeed LCT Relay Unit Shift M(Drive CW)	ENG	[OFF/ON]
5-808-059	VacFeed LCT Relay Unit Shift M(Drive CCW)	ENG	[OFF/ON]
5-808-060	VacFeed LCT Relay Relay Jam LED A	ENG	[OFF/ON]

ADF Output Check

6012	**[1-Pass ADF OUTPUT Check]** Execute the movement check of the specified part.		
6-012-001	Pick-Up Motor Forward	ENG	[OFF/ON]
6-012-003	Feed Motor Forward	ENG	[OFF/ON]
6-012-005	Relay Motor Forward	ENG	[OFF/ON]
6-012-009	Exit Motor Forward	ENG	[OFF/ON]
6-012-010	Bottom Plate Motor For/Rev	ENG	[OFF/ON]
6-012-012	Stamp	ENG	[OFF/ON]
6-012-015	Pull-Out Motor Forward	ENG	[OFF/ON]
6-012-016	Middle Motor Forward	ENG	[OFF/ON]

Finisher SR5090/SR4150, Booklet Finisher SR5100/SR4160 Output Check

Note

- Pro C5300S/C5310S: Finisher SR51090/ Booklet finisher SR5100
- IM C6500/C8000: Finisher SR4150/ Booklet finisher SR4160

6124	**[OUTPUT Check: 2K/3K FIN]** Execute the movement check of the specified part.		
6-124-001	Entrance Transport Motor	ENG	[OFF/ON]
6-124-002	Horizontal Transport Motor	ENG	[OFF/ON]
6-124-003	Pre-Stack Transport Motor	ENG	[OFF/ON]
6-124-004	ITB Transport Motor	ENG	[OFF/ON]
6-124-005	Exit Motor	ENG	[OFF/ON]
6-124-006	Upper Junction Solenoid	ENG	[OFF/ON]
6-124-007	TE Stack Plate Motor	ENG	[OFF/ON]
6-124-008	Paper Exit Open/Close Guide Plate Motor	ENG	[OFF/ON]
6-124-009	Punching Motor	ENG	[OFF/ON]
6-124-010	Punch Move Motor	ENG	[OFF/ON]
6-124-011	S-to-S Registration Detection Move Motor	ENG	[OFF/ON]
6-124-012	Lower Junction Solenoid Motor	ENG	[OFF/ON]
6-124-013	Jogger Motor	ENG	[OFF/ON]
6-124-014	Positioning Roller Rotation Motor	ENG	[OFF/ON]

6-124-015	Stack Feed-out Motor	ENG	[OFF/ON]
6-124-016	Booklet Stapler Move Motor	ENG	[OFF/ON]
6-124-017	Corner Stapler Motor	ENG	[OFF/ON]
6-124-018	Booklet Stapler Side Fence Motor	ENG	[OFF/ON]
6-124-019	Booklet Stapler Jog Solenoid Move Motor	ENG	[OFF/ON]
6-124-020	Booklet Stapler Standard Fence Motor	ENG	[OFF/ON]
6-124-021	Booklet Stapler Motor	ENG	[OFF/ON]
6-124-022	Dynamic Roller Transport Motor	ENG	[OFF/ON]
6-124-023	Folder Transport Motor	ENG	[OFF/ON]
6-124-025	Square-fold Motor	ENG	[OFF/ON]
6-124-026	Tray Lift Motor	ENG	[OFF/ON]
6-124-027	Shift Motor	ENG	[OFF/ON]
6-124-028	Front Shift Jogger Motor	ENG	[OFF/ON]
6-124-029	Rear Shift Jogger Motor	ENG	[OFF/ON]
6-124-030	Shift Jogger Retraction Motor	ENG	[OFF/ON]
6-124-031	Drag Roller Vibrating Motor	ENG	[OFF/ON]
6-124-032	LE Guide Motor	ENG	[OFF/ON]
6-124-033	Navigation LED (All)	ENG	[OFF/ON]
6-124-037	Positioning Roller Transport Motor	ENG	[OFF/ON]
6-124-038	Paper Guide Motor	ENG	[OFF/ON]

Finisher SR4140 Output Check

Note

- Only IM C6500/C8000

6148	**[FIN OUTPUTCheck 3KFIN(100Bind)]** Execute the movement check of the specified part.		
6-148-001	Upper Transport Motor	ENG	[OFF/ON]
6-148-002	Shift Exit M:Cont	ENG	[OFF/ON]
6-148-003	Upper Tray JG Mtr:Cont	ENG	[OFF/ON]
6-148-004	Tray Lift Moter:1 Op	ENG	[OFF/ON]
6-148-005	Jogger Moter:1 Op	ENG	[OFF/ON]
6-148-006	Stapler Front/Rear Moter:1 Op	ENG	[OFF/ON]
6-148-007	Stapler Moter:1 Op	ENG	[OFF/ON]
6-148-008	Punch Drive Motor	ENG	[OFF/ON]
6-148-009	Stapler JG Mtr:Cont	ENG	[OFF/ON]
6-148-010	Stp Hammer Moter:1 Op	ENG	[OFF/ON]
6-148-011	Feed Out M:1 Op	ENG	[OFF/ON]
6-148-012	Tray Shift Moter:1 Op	ENG	[OFF/ON]

6-148-013	Stapler Rotation Moter:1 Op	ENG	[OFF/ON]
6-148-014	Stp Exit M:Cont	ENG	[OFF/ON]
6-148-015	Open Exit Moter:1 Op	ENG	[OFF/ON]
6-148-016	Fold Plate Moter:1 Op	ENG	[OFF/ON]
6-148-017	Prestack JG Moter:1 Op	ENG	[OFF/ON]
6-148-018	Prestack Stop Moter:1 Op	ENG	[OFF/ON]
6-148-019	Fold M:Front:1 Op	ENG	[OFF/ON]
6-148-020	Fold M:Back:1 Op	ENG	[OFF/ON]
6-148-021	Return Drv Moter:1 Op	ENG	[OFF/ON]
6-148-022	Return TransM:Cont	ENG	[OFF/ON]
6-148-023	Shift Jog Moter:1 Op	ENG	[OFF/ON]
6-148-024	Shift Jog Shunt Moter:1 Op	ENG	[OFF/ON]
6-148-025	Top Fence Motor:1 Op	ENG	[OFF/ON]
6-148-026	Bottom Fence Motor:1 Op	ENG	[OFF/ON]
6-148-027	Lower Transport Mtr:Cont	ENG	[OFF/ON]
6-148-028	Upper Tray Exit Mtr:Cont	ENG	[OFF/ON]
6-148-029	Positioning Roller Mtr:Cont	ENG	[OFF/ON]
6-148-030	Prestack Trans Mtr:Cont	ENG	[OFF/ON]
6-148-031	Staple Trim Chute SOL:1 Op	ENG	[OFF/ON]
6-148-032	Punch Movement Motor	ENG	[OFF/ON]
6-148-033	Punch S-to-S Regist: CIS Lamp	ENG	[OFF/ON]
6-148-034	Entrance Transport Motor	ENG	[OFF/ON]

Mail Box CS4010 Output Check

Note

- Only IM C6500/C8000

6161	**[OUTPUT Check Print Post]** Execute the movement check of the specified part.		
6-161-001	Vert Transport Motor	ENG	[OFF/ON]
6-161-002	Junction Gate SOL1	ENG	[OFF/ON]
6-161-003	Turn Gate SOL1	ENG	[OFF/ON]
6-161-004	Turn Gate SOL2	ENG	[OFF/ON]
6-161-005	Turn Gate SOL3	ENG	[OFF/ON]
6-161-006	Turn Gate SOL4	ENG	[OFF/ON]
6-161-007	Turn Gate SOL5	ENG	[OFF/ON]
6-161-008	Turn Gate SOL6	ENG	[OFF/ON]
6-161-009	Turn Gate SOL7	ENG	[OFF/ON]
6-161-010	Turn Gate SOL8	ENG	[OFF/ON]

Finisher SR5110/ Booklet Finisher SR5120 Output Check

Note

- Only Pro C5300S/C5310S

6262	**[Finisher Output Check 2.5K/3.5]** Execute the movement check of the specified part.		
6-262-001	Entrance Motor	ENG	[OFF/ON]
6-262-002	Registration Motor	ENG	[OFF/ON]
6-262-003	Junction Vertical Trans Motor	ENG	[OFF/ON]
6-262-004	Upper Tray Vertical Trans Motor	ENG	[OFF/ON]
6-262-005	Pre-stack Release Motor	ENG	[OFF/ON]
6-262-006	Pre-stack Motor	ENG	[OFF/ON]
6-262-007	Junction Gate Motor (Proof/Shift Tray)	ENG	[OFF/ON]
6-262-008	Junction Gate Motor (Shift/Staple)	ENG	[OFF/ON]
6-262-009	Upper Tray Exit Motor	ENG	[OFF/ON]
6-262-010	Horizontal Transport Motor	ENG	[OFF/ON]
6-262-011	Punch Movement Motor	ENG	[OFF/ON]
6-262-012	Exit Guide Motor	ENG	[OFF/ON]
6-262-013	Punch Drive Motor	ENG	[OFF/ON]
6-262-014	Stapling Tray Entrance Motor	ENG	[OFF/ON]
6-262-015	Vibrating Plate Up-Down Moving Motor	ENG	[OFF/ON]
6-262-016	Punch S-to-S Regist: CIS Lamp	ENG	[OFF/ON]
6-262-	Stapler Rotation Motor	ENG	[OFF/ON]

017			
6-262-018	Stapler Movement Motor	ENG	[OFF/ON]
6-262-019	Fence Up-Down Moving Motor	ENG	[OFF/ON]
6-262-020	Fence S-to-S Moving Motor	ENG	[OFF/ON]
6-262-021	Front Jogger Fence Motor	ENG	[OFF/ON]
6-262-022	Rear Jogger Fence Motor	ENG	[OFF/ON]
6-262-023	Positioning Roller Vibrating Motor	ENG	[OFF/ON]
6-262-024	Positioning Roller Motor	ENG	[OFF/ON]
6-262-025	Feed Out Belt Motor	ENG	[OFF/ON]
6-262-026	Top Fence Motor	ENG	[OFF/ON]
6-262-027	Vibrating Plate S-to-S Moving Motor	ENG	[OFF/ON]
6-262-028	Staple Motor	ENG	[OFF/ON] If the stapler drives staples with no paper present, this could jam and damage the stapler.
6-262-029	Stack Transport Open/Close Motor	ENG	[OFF/ON]
6-262-030	Stack JG Vibrating Motor	ENG	[OFF/ON]
6-262-031	Stack Transport Motor	ENG	[OFF/ON]
6-262-032	Reserved	ENG	[OFF/ON]
6-262-033	Bklet Stplr Clamp Roller Motor	ENG	[OFF/ON]
6-262-034	Bklet Stplr Bottom Fence Motor	ENG	[OFF/ON]
6-262-035	Bklet Stplr Side Fence Motor	ENG	[OFF/ON]

6-262-036	Bklet Stplr Top Fence Motor	ENG	[OFF/ON]
6-262-037	Horizontal Fold Roller Release Motor	ENG	[OFF/ON]
6-262-038	Horizontal Fold Roller Movement HP Motor	ENG	[OFF/ON]
6-262-039	Bklet Stplr Mt	ENG	[OFF/ON] If the stapler drives staples with no paper present, this could jam and damage the stapler.
6-262-040	Booklet Tray Motor	ENG	[OFF/ON]
6-262-041	Fold Roller Motor	ENG	[OFF/ON]
6-262-042	Fold Blade Motor	ENG	[OFF/ON]
6-262-043	Shift Transport Motor: Lower Tray	ENG	[OFF/ON]
6-262-044	Drag Drive Motor: Lower Tray	ENG	[OFF/ON]
6-262-045	Drag Roller Motor: Lower Tray	ENG	[OFF/ON]
6-262-046	Shift Tray Lift Motor: Lower Tray	ENG	[OFF/ON]
6-262-047	Shift Tray Jogger Fence Mt: Lower Tray	ENG	[OFF/ON]
6-262-048	Shift Tray Jog Fence Retra Mt: Lower Tray	ENG	[OFF/ON]
6-262-049	Exit Fan Motor: Lower Tray	ENG	[OFF/ON]
6-262-050	Press Lever: Lower Tray	ENG	[OFF/ON]
6-262-051	Shift Transport Motor: Upper Tray	ENG	[OFF/ON]
6-262-052	Drag Drive Motor: Upper Tray	ENG	[OFF/ON]
6-262-053	Drag Roller Motor: Upper Tray	ENG	[OFF/ON]
6-262-	Shift Tray Lift Motor: Upper	ENG	[OFF/ON]

054	Tray		
6-262-055	Shift Tray Jogger Fence Mt: Upper Tray	ENG	[OFF/ON]
6-262-056	Shift Tray Jog Fence Retra Mt: Upper Tray	ENG	[OFF/ON]
6-262-057	Exit Fan Motor: Upper Tray	ENG	[OFF/ON]
6-262-058	Press Lever: Upper Tray	ENG	[OFF/ON]
6-262-059	Jam LED	ENG	[OFF/ON]
6-262-060	Lower Tray Exit Motor	ENG	[OFF/ON]
6-262-061	Booklet Stack Transport Motor	ENG	[OFF/ON]

Multi-folding Unit FD5020/FD4020 Output Check

Note

- Pro C5300S/C5310S: Multi-Folding Unit FD5020
- IM C6500/C8000:Multi-Folding Unit FD4020

6310	**[Output Check]** Execute the movement check of the specified part.		
6-310-001	Horizontal Transport Motor	ENG	[OFF/ON]
6-310-002	Top Tray Transport Motor	ENG	[OFF/ON]
6-310-003	Top Tray Exit Motor	ENG	[OFF/ON]
6-310-004	Dynamic Roller Transport Motor	ENG	[OFF/ON]
6-310-005	Registration Roller Transport Motor	ENG	[OFF/ON]
6-310-007	Entrance JG Motor	ENG	[OFF/ON]
6-310-008	1st Stopper Motor	ENG	[OFF/ON]
6-310-009	2nd Stopper Motor	ENG	[OFF/ON]
6-310-010	3rd Stopper Motor	ENG	[OFF/ON]
6-310-011	Dynamic Roller Lift Motor	ENG	[OFF/ON]
6-310-012	Registration Roller Release Motor	ENG	[OFF/ON]
6-310-013	Fold Plate Motor	ENG	[OFF/ON]
6-310-014	Jogger Fence Motor	ENG	[OFF/ON]
6-310-016	Direct-Send JG Motor	ENG	[OFF/ON]
6-310-017	FM6 Pawl Motor	ENG	[OFF/ON]
6-310-018	1st Fold Motor	ENG	[OFF/ON]

6-310-019	2nd Fold Motor	ENG	[OFF/ON]
6-310-020	Crease Motor	ENG	[OFF/ON]
6-310-021	Bypass JG Solenoid	ENG	[OFF/ON]
6-310-022	Exit JG Solenoid	ENG	[OFF/ON]
6-310-023	Top Tray JG Solenoid	ENG	[OFF/ON]
6-310-024	LE Stop Pawl Solenoid	ENG	[OFF/ON]
6-310-025	Reverse JG Solenoid	ENG	[OFF/ON]
6-310-026	Horizontal Exit Motor	ENG	[OFF/ON]

Multi-folding Unit FD4010 Ouput Check

Note

- Only IM C6500/C8000

6378	**[OUTPUT Check]** Execute the movement check of the specified part.		
6-378-001	Entrance Motor	ENG	[OFF/ON]
6-378-002	Registration Front Motor	ENG	[OFF/ON]
6-378-003	Registration Motor	ENG	[OFF/ON]
6-378-004	Paper Stack Motor	ENG	[OFF/ON]
6-378-005	Folding Motor	ENG	[OFF/ON]
6-378-006	2nd 2-direct Paper Feed Motor	ENG	[OFF/ON]
6-378-007	1st Transport Motor	ENG	[OFF/ON]
6-378-008	2nd Transport Motor	ENG	[OFF/ON]
6-378-009	Top Tray Exit Motor	ENG	[OFF/ON]
6-378-010	Entrance JG Motor	ENG	[OFF/ON]
6-378-011	Relay JG Motor	ENG	[OFF/ON]
6-378-012	Folding Junction Motor	ENG	[OFF/ON]
6-378-013	Anti-Winding JG HP Motor	ENG	[OFF/ON]
6-378-014	Crease Motor	ENG	[OFF/ON]
6-378-015	Navigation LED (All)	ENG	[OFF/ON]

Cover Interposer Tray CI4050 Output Check

Note

- Only IM C6500/C8000

6401	**[Cvr 2-Inserter Output Check]** Execute the movement check of the specified part.		
6-401-001	OFF (Stop)	ENG	[OFF/ON]
6-401-002	1st Pick-up Motor	ENG	[OFF/ON]

6-401-003	2nd Pick-up Motor	ENG	[OFF/ON]
6-401-004	1st Paper Feed Motor	ENG	[OFF/ON]
6-401-005	2nd Paper Feed Motor	ENG	[OFF/ON]
6-401-006	1st Transport Motor	ENG	[OFF/ON]
6-401-007	2nd Transport Motor	ENG	[OFF/ON]
6-401-008	Vertical Transport Motor	ENG	[OFF/ON]
6-401-009	Horizontal Transport Motor	ENG	[OFF/ON]

Cover Interposer Tray CI5040 Output Check

Note

- Only Pro C5300S/5310S

6411	**[Interpsr Air Assist Output Check]** Execute the movement check of the specified part.		
6-411-001	1st Pickup Solenoid	ENG	[OFF/ON]
6-411-002	2nd Pickup Solenoid	ENG	[OFF/ON]
6-411-003	1st Paper Feed Motor	ENG	[OFF/ON]
6-411-004	2nd Paper Feed Motor	ENG	[OFF/ON]
6-411-005	1st Transport Motor	ENG	[OFF/ON]
6-411-006	2nd Transport Motor	ENG	[OFF/ON]
6-411-007	1st Vertical Transport Motor	ENG	[OFF/ON]
6-411-008	2nd Vertical Transport Motor	ENG	[OFF/ON]
6-411-009	3rd Vertical Transport Motor	ENG	[OFF/ON]
6-411-010	Horizontal Transport Motor	ENG	[OFF/ON]
6-411-011	1st Blower Fan	ENG	[OFF/ON]
6-411-012	2nd Blower Fan	ENG	[OFF/ON]

Bridge Unit BU5020 Output Check

Note

- Only Pro C5300S/C5310S

6451	**[Bridge Unit Output Check]** Execute the movement check of the specified part.		
6-451-001	Transport Motor	ENG	[OFF/ON]

High Capacity Stacker SK5040 Output Check

Note

- Only Pro C5300S/C5310S

6601	**[Stacker1 Output Check]**

	Execute the movement check of the specified part.		
6-601-001	Entrance Motor/Fan2	ENG	[OFF/ON]
6-601-002	Proof Tray Exit Motor	ENG	[OFF/ON]
6-601-003	Shift Exit Motor	ENG	[OFF/ON]
6-601-004	Transport Motor	ENG	[OFF/ON]
6-601-005	Shift JG Motor	ENG	[OFF/ON]
6-601-006	Proof Tray JG Motor	ENG	[OFF/ON]
6-601-007	Shift Motor	ENG	[OFF/ON]
6-601-008	Front Jogger Fence Motor	ENG	[OFF/ON]
6-601-009	Rear Jogger Fence Motor	ENG	[OFF/ON]
6-601-010	Jogger Fence Retraction Motor	ENG	[OFF/ON]
6-601-011	LE Stopper Motor	ENG	[OFF/ON]
6-601-012	Sub Jogger Motor	ENG	[OFF/ON]
6-601-013	Tray Lift Motor	ENG	[OFF/ON]
6-601-014	Front Door Lock SOL	ENG	[OFF/ON]
6-601-015	Fan1	ENG	[OFF/ON]
6-601-016	Tray Full LED	ENG	[OFF/ON]
6-601-017	Jam LED	ENG	[OFF/ON]
6-601-018	Jog In Progress LED	ENG	[OFF/ON]
6-601-019	Tray Lift LED	ENG	[OFF/ON]
6-601-020	Error LED	ENG	[OFF/ON]
6-601-021	Shutter Motor	ENG	[OFF/ON]
6-601-022	Exit Fan Motor	ENG	[OFF/ON]

Trimmer Unit TR5050 Output Check

Note

- Only Pro C5300S/C5310S

6651	**[Output Check: Trimmer]** Execute the movement check of the specified part.		
6-651-001	Entrance Motor	ENG	[OFF/ON]
6-651-002	Exit Motor	ENG	[OFF/ON]
6-651-003	Press Roller Motor	ENG	[OFF/ON]
6-651-004	Cut Position Motor	ENG	[OFF/ON]
6-651-005	Press Stopper Motor	ENG	[OFF/ON]
6-651-006	Tray Motor	ENG	[OFF/ON]
6-651-007	Trimming Blade Motor	ENG	[OFF/ON]

Printer SP Mode

1001	Bit Switch			
001	Bit Switch 1		0	1
	bit 0	**DFU**	-	-
	bit 1	**sysName Value**	Model name (PnP name)	Hostname
		This BitSw can switch the value of the sysName of the standard MIB. 0 (default): Model name (PnP name) 1: Host name		
	bit 2	**DFU**	-	-
	bit 3	**I/O Timeout**	Disabled	Enabled
		Enables/Disables MFP I/O Timeouts. If disabled, the MFP I/O Timeout setting will not be in effect. I/O Timeouts will never occur.		
	bit 4	**SD Card Save Mode**	Disabled	Enabled
		This BitSw enables the SD card save mode setting menu to be displayed. After enabling this BitSw, the Card Save settings will appear under: "User Tools > Machine Features >Printer Features > List/Test print"		
	bit 5	**Paper Size Error Margin**	±5pt	±10pt
		When a PS job is printed on a custom paper size, the job might not print because of a paper size mismatch caused by a calculation error. This BitSw can set the allowable margin of error value.Note:This is available for PS, PDF only		
	bit 6	**Color Balance Switching 1**	Disabled	Enabled
		This BitSw can be used to restore the color balance to match that of Fuji-Xerox devices. Note: If both BitSw #2-0, BitSw #2-4 and BitSw #1-6 are configured to "1", the configuration of #2-0 will be given priority and the color balance of 09S and earlier models will be used.		
	bit 7	**DFU**	-	-

1001	Bit Switch			
002	Bit Switch 2		0	1
	bit 0	**Color Balance Switching 2**	Standard Color Balance	Color balance of 09S and earlier models.
		This BitSw can be used to restore the color balance to match 09S and earlier model deveices. Note: If both BitSw #2-0 and BitSw #2-4 are configured to "1", the configuration of #2-0 will be given priority and the color balance of 09S and earlier models will be used.		

1001	Bit Switch			
	bit 1	**DFU**	-	-
	bit 2	**Collation Type**	Shift Collation	Normal Collation
		The type of collation will be applied to a job when the job does not explicitly define a collation type. Note: If #5-0 is enabled, this BitSw has no effect.		
	bit 3	**PDL Auto Switching**	Enable	Disable
		Enables/Disables the MFPs ability to switch the PDL processor when receiving a job which contains both PS and PCL5e/c.		
	bit 4	**Color Balance Switching 3**	Standard Color Balance	Color balance of 09A and extended 09A models.
		This BitSw can be used to restore the color balance to match 09A and extended 09A model devices. Note: If both BitSw #2-0 and BitSw #2-4 are configured to "1", the configuration of #2-0 will be given priority and the color balance of 09S and earlier models will be used.		
	bit 5	**DFU**	-	-
	bit 6	**Switch dither**	Use normal dither	Use alternative dither
		*Please refer to RTB #RD014018		
	bit 7	**DFU**	-	-

1001	Bit Switch			
003	Bit Switch 3		0	1
	bit 0	**DFU**	-	-
	bit 1	**DFU**	-	-
	bit 2	**Legacy HP Compatibility**	Disabled	Enabled
		Uses the same left margin as older HP models such as HP4000/HP8000.This setting enables the starting position of the graphics in the job to be changed.If this BitSw is enabled, the left margin command of "<ESC>*r0A" will be conducted as "<ESC>*r1A". PCL command are bellow: - <Esc> *r0A ->Start Graphics at X coordinate of Zero - <Esc> *r1A ->Start Graphics at Current Cursor Note:This is available for PCL5e/c only.		
	bit 3 to	**DFU**	-	-

1001	Bit Switch			
	7			

1001	Bit Switch			
004	Bit Switch 4		0	1
	bit 0 to 5	**DFU**	-	-
	bit 6	Bypass Tray Paper Direction	LEF	SEF
		Changes the paper direction used with "Machine Setting(s): Any Type" in the bypass tray. This setting enables the direction of the paper in the bypass tray to specified		
	bit 7	**DFU**	-	-

1001	Bit Switch			
005	Bit Switch 5		0	1
	bit 0	**Display Finishing Settings**	Hide settings	Display settings
		If enabled, users will be able to configure the Collate Settings, Staple Settings, and Punch Settings from the operation panel. The available Settings will depend on the device and configured options. After enabling this BitSw, the settings will appear under: "User Tools > Machine Features >Printer Features > System"		
	bit 1	**Number of Copies with Paper Mismatch**	Print Single Copy	Print All Copies
		If a paper size or type mismatch occurs during the printing of multiple copies, only a single copy is output by default. Using this bit switch, the device can be configured to print all copies even if a paper mismatch occurs.		
	bit 2	**GPS Filter**	Enabled	Disabled
		If the GPS Filter is disabled, SDK applications will not be able to alter the print data standard printer applications receive. Note: The main purpose of this BitSw is for troubleshooting the effects of SDK applications on data.		
	bit 3	**PS Trigger for PDL Switching**	Standard pattern	Pattern1
		Specifying the auto detection algorithm for PS while switching the print language. If the Pattern1 is selected, "%%" is used as a printer system PS trigger.		
	bit 4	**Increase max. number of stored jobs.**	Disabled (100)	Enabled (xxx)
		Changes the maximum number of jobs that can be stored on the HDD. The default (disabled) is 100. If this is enabled, the max. will be raised to 750 or 1000 depending on the model.		

1001	Bit Switch			
	bit 5	**Direction of Output**	Face-down	Face-up
		This setting enables you to specify the whether the paper is output face-down or face-up onto the output tray.		
	bit 6	**Change Imposition Specification**	Standard specification	Old model specification
		This setting enables the specification for imposition such as page alignment and image rotation to be changed to the specification of old models when job orientation and paper size are mixed. The old models are below: • PCL: 04A and earlier models • PS/PDF/RPCS: 05S and earlier models • BMLinkS: 05A and earlier models IRIPS PS/PDF: • 09A and earlier models: Operation under current model specification is not supported (Operation with older specification is recommended) • 15S and later models: Operation under current model specification is supported.		
	bit 7	**Paper Path for Letterhead Simplex Job**	Simplex paper path	Duplex paper path
		This setting enables the simplex job to be routed through the duplex unit. Only affects jobs specified as letterhead.		

1001	Bit Switch			
006	Bit Switch 6		0	1
	bit 0	**Forced printing**	Disabled	Enabled
		If enabled, the image will be printed regardless of whether the specified roller is of the correct size paper or not. This is similar to "Form Feed" on a standard printer. The default is disabled.		
		Include bypass in auto tray select	Disable	Enable
		If enabled, the Bypass tray will be included in auto tray selection.		
	bit 1 to 7	**DFU**	-	-

1001	Bit Switch			
007	Bit Switch 7		0	1
	bit 0	**Print path**	Disabled	Enabled
		If enabled, simplex pages (in mixed simplex/duplex PS/PCL5 jobs only) and the last page of an odd-paged duplex job (PS, PCL5, PCL6), are always routed through the duplex unit. Not having to switch paper paths increases the print speed slightly.		

1001	Bit Switch			
	bit 1 to 7	**DFU**	-	-

1001	Bit Switch			
008	Bit Switch 8		0	1
	bit 0 to 2	**DFU**	-	-
	bit 3	**BW Printing without the PJL Color Command "DATAMODE"**	Disabled	Enabled
		This setting enables a job to be printed in BW without the PJL color command "DATAMODE". Note: Color jobs will not be printed without the PJL color command "DATAMODE". Note:This is available for PCL, PS only.		
	bit 4 to 5	**DFU**	-	-
	bit 6	**Orientation Auto Detect Function (PS)**	Enabled	Disabled
		Automatically chooses page orientation of PostScript jobs (Landscape or Portrait) based on the content.		
		PJL/PDL Color Command Priority	PJL Priority	PDL Priority
		This setting enables the priority of a PDL color command to be changed when a PJL color command is "@PJL RENDERMODE = GRAYSCALE" in a job. Note:This is available for PCL,RPCS,PS.		
	bit 7	**[PDF]: Orientation Auto Detect Function**	Enabled	Disabled
		Automatically chooses page orientations of PDF jobs (Landscape or Portrait) based on the content.		

1001	Bit Switch			
009	Bit Switch 9		0	1
	bit 0	**PDL Auto Detection timeout of jobs submitted via USB or Parallel Port (IEEE 1284).**	Disabled (Immediately)	Enabled (10 seconds)
		To be used if PDL auto-detection fails. A failure of PDL autodetection does not necessarily mean that the job can not be printed. This bit switch tells the device whether to time-out immediately (default) upon failure or to wait 10 seconds.		
	bit 1	**DFU**	-	-

1001	Bit Switch		
	bit 2	**Job Cancel after Jam**	Not cancelled	Cancelled
		This setting enables it to be specifed whether jobs will be cancelled after a jam occurs. Note: If this BitSw is enabled, printing under the following conditions might result in problems: • Job submission via USB or Parallel Port • Spool printing (WIM >Configuration > Device Settings > System) • Printing a large number of jobs continuously (The status of the job are not acquired when jobs exceeding the number guaranteed by the job monitor are continuously printed.)	
	bit 3	**Bypass Tray Paper Rotation (SEF/LEF)**	Disabled	Enabled
		his BitSw causes the device to revert to the behavior of previous generations. It only takes effect if ""Bypass Tray Setting Priority"" = ""Driver/Command"". Previous spec (BitSw=1): If a standard sized paper mismatch occurred in the bypass tray, the MFP always prompted for SEF paper. If this BitSw=0 (default) then in the event of a standard sized paper mismatch, the MFP will always prompt for paper of the rotation (SEF/LEF) determined by the MFP bypass tray paper setting or by the bypass tray sensor. Note:This is available for PCL,PS only.	
	bit 4	**Timing of the PJL Status ReadBack (JOB END) when printing multiple collated copies.**	Mode 0	Mode 1
		This BitSw determines the timing of the PJL STATUS JOB END sent when multiple collated copies are being printed. Mode 0: JOB END is sent by the device to the client after the first copy has completed printing. This causes the page counter to be incremented after the first copy and then again at the end of the job. Mode 1: JOB END is sent by the device to the client after the last copy has finished printing. This causes the page counter to be incremented at the end of each job.	
	bit 5	**UTF-8 Mode**	Enabled	Disabled
		Enabled (=0): Text composed of UTF-8 characters can be displayed in the operation panel. Disabled (=1): UTF-8 characters cannot be displayed in the operation panel. For example, job names are sometimes stored in the MIB using UTF-8 encoded characters. When these are displayed on the operation panel, they will be garbled unless this BitSw is enabled (=0).	
	bit 6	**Print Option Configuration (rsh, rcp, ftp)**	Enabled	Disable
		This BitSw enables the specification of the configuration of the print option using rcp/rsh/ftp.	

1001	Bit Switch			
	bit 7	**Enable/Disable Print from USB/SD's Preview function**	Enabled	Disabled
		Determines whether the Print from USB/SD function will have the Preview function. Enabled (=0): Print from USB/SD will have the Preview function. Disabled (=1): Print from USB/SD will not have the Preview function.		

1001	Bit Switch			
010	Bit Switch A		0	1
	bit 0 to 4	**DFU**	-	-
	bit 5	**Store and Skip Errored Job locks the queue**	Queue is not locked after SSEJ	Queue locked after SSEJ
		If this is 1, then after a job is stored using Store and Skip Errored Job (SSEJ), new jobs cannot be added to the queue until the stored job has been completely printed.		
	bit 6	**Allow use of Store and Skip error Job if connected to an external charge device.**	Does not allow SSEJ with ECD	Allows SSEJ with ECD
		If this is 0, Store and Skip Errored Job (SSEJ) will be automatically disabled if an external charge device is connected. **Note:** We do not officially support enabling this bit switch (1). Use it at your own risk.		
	bit 7	**Job cancels remaining pages when the paid-for pages have been printed on an external charge device**	Job does not cancel	Job cancels
		When setting 1 is enabled, after printing the paid-for pages on an external charge device, the job that includes any remaining pages will be canceled. This setting will prevent the next user from printing the unnecessary pages from the previous user's print job.		

1001	Bit Switch			
011	Bit Switch B		0	1
	bit 0	**Show Menu List**	Hide Menu List	Show Menu List
		If this is 0, the Menu List button will be removed from Printer Features.		
	bit 1	**Print job interruption**	Does not allow interruption	Allow interruption
		0 (Default): Print jobs are not interrupted. If a job is promoted to the top of the print queue, it will wait for the currently printing job to finish. 1: If a job is promoted to the top of the queue, it will interrupt the currently printing job		

1001	Bit Switch			
		and start printing immediately.		
	bit 2	**DFU**	-	-
	bit 3	**Change the behavior of the center staple**	Cancel the job	Continue to print
		This Bit Switch can change the behavior of the center staple when the maximum number of sheets for stapling is exceeded. 0 (default): The job is canceled and an error is recorded in the log. 1: The job is not canceled and is produced. How the job is produced in any behavior depends on the type of finisher.		
	bit 4	**"Apply Auto Paper Select" to Override Paper Size or Paper Type of the Device**	Disabled	Enabled
		If this BitSw is enabled, the "Apply Auto Paper Select" setting will decide if the paper size or paper type that is specified in the device settings should be overridden by the job's commands when "Tray Setting Priority" is set to "Driver/Command" or "Machine Setting(s): Any Type". - Apply Auto Paper Select = OFF: Overridden (priority is given to the job's commands) - Apply Auto Paper Select = ON: NOT overridden (priority is given to the device settings)		
	bit 5	**DFU**	-	-
	bit 6	**Tray Selection when a Paper Mismatch Occurs.**	Disabled	Enabled
		This BitSw enables the inactive auto paper select tray to be unselectable when a paper size/type mismatch occurs.		
	bit 7	**Paper Type Mismatch Display**	Disabled	Enabled
		When this BitSw is enabled, an error dialog appears when a custom/IMSS user setting paper type name mismatch occurs.		

1001	Bit Switch			
012	Bit Switch C		0	1
	bit 0 to 2	**DFU**	-	-
	bit 3	**Switching paper discharge operation when the limit number of sheets stapled is exceeded**	one by one	Upper limit number
		Switching paper discharge operation when the limit number of sheets stapled is exceeded		

1001	Bit Switch			
	bit 4	**DFU**	-	-
	bit 5	**Change the user ID type displayed on the operation panel**	Login User Name	User ID
		If this BitSw is enabled, the user ID type on the operation panel can change to the user ID behavior exhibited in 14A and earlier models.		
	bit 6	**AirPrint**	Enabled	Disabled
		For 15S and later models that support AirPrint, AirPrint can be disabled by changing this Bit Switch from 0 (default) to 1.		
	bit 7	**AirPrint PDF**	Enabled	Disabled
		-		

1002	Bit Switch			
001	Bit Switch (2) 1		0	1
	bit 0	**Paper Size Mismatch Display**	Enabled	Disabled
		Display warning screen (40909) of paper size mismatch		
	bit 1 to2	**DFU**	-	-
	bit 3	**Switch dither**	Alternative dither	Alternative dither
		Switch dither		
	bit 4	**Input tray mask**	Enabled	Disabled
		Enable / disable input tray mask		
	bit 5	**PDL Filter**	Disabled	Enabled
		Enable / disable the PDL Filter setting in Web Image Monitor		
	bit 6 to 7	**DFU**	-	-

1002	Bit Switch			
002	Bit Switch (2) 2		0	1
	bit 0 to 7	**DFU**	-	-

1002	Bit Switch			
003	Bit Switch (2) 3		0	1
	bit 0 to 7	**DFU**	-	-

1002	Bit Switch			
004	Bit Switch (2) 4		0	1
	bit 0 to 7	**DFU**	-	-

1002	Bit Switch			
005	Bit Switch (2) 5		0	1
	bit 0	**PDF speeding printing operation**	Enabled	Disabled
		PDF speeding printing operation		
	bit 1 to 7	**DFU**	-	-

1002	Bit Switch			
006	Bit Switch (2) 6		0	1
	bit 0 to 7	**DFU**	-	-

1001	Bit Switch			
007	Bit Switch (2) 7		0	1
	bit 0 to 7	**DFU**	-	-

1002	Bit Switch			
008	Bit Switch (2) 8		0	1
	bit 0 to 7	**DFU**	-	-

1002	Bit Switch			
009	Bit Switch (2) 9		0	1
	bit 0 to 7	**DFU**	-	-

1002	Bit Switch			
010	Bit Switch (2) A		0	1
	bit 0 to 7	**DFU**	-	-

1002	Bit Switch			
011	Bit Switch (2) B		0	1
	bit 0 to 7	**DFU**	-	-

1002	Bit Switch			
012	Bit Switch (2) C		0	1
	bit 0 to 7	**DFU**	-	-

1003	**[Clear Setting]**		
1-003-001	Initialize System	CTL*	Initializes settings in the System menu of the user mode.
1-003-003	Delete Program	CTL*	**DFU**

1004	**[Print Summary]**		
1-004-001	Service Summary	CTL	Prints the service summary sheet (a summary of all the controller settings).

1005	**[Display Version]**		
1-005-002	Printer Version	CTL	Displays the version of the controller firmware.

1101	**[ToneCtlSet]**		
	Recalls a set of gamma settings. This can be either a) the factory setting, b) the previous setting, or c) the current setting.		
1-101-001	Factory	CTL	[Execute]
1-101-002	Previous	CTL	
1-101-003	Current	CTL	
1-101-004	ACC	CTL	

1102	**[Resolution Settings]**		
	Sets the printing mode (resolution) for the printer gamma adjustment. The asterisk (*) shows which mode is set. • 00: *1200x1200Photo • 01: 600x600Text • 02: 1200x1200Text • 03: 1200x600Text • 04: 600x600Photo • 05: 1200x600Photo • 06: 600x600Text • 07: 600x600Text		
1-102-001	Tone Control Mode Selection	CTL	[0 to 99 / **0** / 1

1103	**[PrnColorSheet]**		
1-103-001	ToneCtlSheet	CTL	Prints the test page to check the color balance before and after the gamma adjustment.
1-103-002	ColorChart	CTL	

1104	**[ToneCtlValue]**		
	Adjusts the printer gamma for the mode selected in the Mode Selection menu.		
1-104-001	Black: Highlight	CTL	[0 to 30 / **15** / 1]
1-104-021	Cyan: Highlight	CTL	
1-104-041	Magenta: Highlight	CTL	
1-104-061	Yellow: Highlight	CTL	
1-104-002	Black: Shadow	CTL	
1-104-022	Cyan: Shadow	CTL	
1-104-042	Magenta: Shadow	CTL	
1-104-062	Yellow: Shadow	CTL	
1-104-003	Black: Middle	CTL	
1-104-023	Cyan: Middle	CTL	
1-104-043	Magenta: Middle	CTL	
1-104-063	Yellow: Middle	CTL	
1-104-004	Black: IDmax	CTL	
1-104-024	Cyan: IDmax	CTL	
1-104-044	Magenta: IDmax	CTL	
1-104-064	Yellow: IDmax	CTL	

1105	**[Save Tone Cntrol Value]**		
	Saves the print gamma (adjusted with the Gamma Adj.) as the new Current Setting. Before the machine stores the new "current settingR", it moves the data stored as the "current setting" to the "previous setting" memory-storage location.		
1-105-001	Save Tone Cntrol Value	CTL*	[EXECUTE]

1106	**[Toner Limit]**		
	Adjusts the maximum toner amount for image development.		
1-106-001	Toner Limit Value	CTL*	[100 to 400 / **0** / 1]

1110	**[Media Print Device Setting]**		
	Enable or disable the media print support function.		
1-110-002	0: Disable 1:Enable	CTL*	[0 to 1 / **1** / 1]

1111	**[All Job Delete Mode]**		
1-111-001	0: Exclusive New Job 1: Including New Job	CTL*	[0 or 1 / **1** / 1]

1113	[IBACC Correction Execute]		
	0: Do not calculate IBACC gamma (Make IBACC Gamma Linear) 1: Calculate IBACC gamma		
1-113-001	-	CTL*	[0～1 / **1** / 1]

1114	[IBACC]		
1-114-001	-	CTL	[EXECUTE]
	Returns the IBACC gamma correction to the previous value.		
1-114-002	-	CTL	[EXECUTE]
	Restore the IBACC gamma correction value to the factory default value.		

1115	[IBACC Execution Date and Time Display]		
	Displays the execution date and time when one of the following is executed: • Running IBACC with Procon: Date and time when IBACC succeeded for all resolutions. However, if IBACC fails, the date and time are not recorded. • When IBACC is reset from SP: Date and time when IBACC is reset to previous values for all resolutions. • When IBACC is returned to factory defaults from SP: Date and time when IBACC is returned to factory defaults for all resolutions.		
1-115-001	-	CTL*	[EXECUTE]

1122	[Delete ALL Job History]		
	Delete all job history files stored in the internal storage.		
1-122-001	-	CTL	[EXECUTE]

7910	[PDL]		
	Reports the machine code string.		
7-910-150	RPCS	CTL	[- / - / -]
7-910-151	PS	CTL	[- / - / -]
7-910-152	RPDL	CTL	[- / - / -]
7-910-153	R98	CTL	[- / - / -]
7-910-154	R16	CTL	[- / - / -]
7-910-155	RPGL	CTL	[- / - / -]
7-910-156	R55	CTL	[- / - / -]
7-910-157	RTIFF	CTL	[- / - / -]
7-910-158	PCL	CTL	[- / - / -]
7-910-159	PCLXL	CTL	[- / - / -]

7-910-160	MSIS	CTL	[- / - / -]
7-910-161	MSIS(OPT)	CTL	[- / - / -]
7-910-162	PDF	CTL	[- / - / -]
7-910-163	BMLinkS	CTL	[- / - / -]
7-910-164	PICTBRIDG	CTL	[- / - / -]
7-910-165	PJL	CTL	[- / - / -]
7-910-166	IPDS	CTL	[- / - / -]
7-910-167	MediaPrint:JPEG	CTL	[- / - / -]
7-910-168	MediaPrint:TIFF	CTL	[- / - / -]
7-910-169	XPS	CTL	[- / - / -]
7-910-180	FONT	CTL	[- / - / -]
7-910-181	FONT1	CTL	[- / - / -]
7-910-182	FONT2	CTL	[- / - / -]
7-910-183	FONT3	CTL	[- / - / -]
7-910-184	FONT4	CTL	[- / - / -]
7-910-185	FONT5	CTL	[- / - / -]
7-910-186	FONT6	CTL	[- / - / -]
7-910-187	FONT7	CTL	[- / - / -]

7911	**[PDL]**		
	Reports the version character string.		
7-911-150	RPCS	CTL	[- / - / -]
7-911-151	PS	CTL	[- / - / -]
7-911-152	RPDL	CTL	[- / - / -]
7-911-153	R98	CTL	[- / - / -]
7-911-154	R16	CTL	[- / - / -]
7-911-155	RPGL	CTL	[- / - / -]
7-911-156	R55	CTL	[- / - / -]
7-911-157	RTIFF	CTL	[- / - / -]
7-911-158	PCL	CTL	[- / - / -]
7-911-159	PCLXL	CTL	[- / - / -]
7-911-160	MSIS	CTL	[- / - / -]
7-911-161	MSIS(OPT)	CTL	[- / - / -]
7-911-162	PDF	CTL	[- / - / -]
7-911-163	BMLinkS	CTL	[- / - / -]
7-911-164	PICTBRIDG	CTL	[- / - / -]
7-911-165	PJL	CTL	[- / - / -]
7-911-166	IPDS	CTL	[- / - / -]

7-911-167	MediaPrint:JPEG	CTL	[- / - / -]
7-911-168	MediaPrint:TIFF	CTL	[- / - / -]
7-911-169	XPS	CTL	[- / - / -]
7-911-180	FONT	CTL	[- / - / -]
7-911-181	FONT1	CTL	[- / - / -]
7-911-182	FONT2	CTL	[- / - / -]
7-911-183	FONT3	CTL	[- / - / -]
7-911-184	FONT4	CTL	[- / - / -]
7-911-185	FONT5	CTL	[- / - / -]
7-911-186	FONT6	CTL	[- / - / -]
7-911-187	FONT7	CTL	[- / - / -]

Scanner SP Mode

SP1-XXX (System and Others)

1001	[Scan Nv Version]		
1-001-005	-	*CTL	[- / - / -]
	Operates automatic initialization to ensure that scanner NV is initialized if necessary. To do this SP, specify the version of scanner NV within 9 characters. “Function name”_”Machine code”_”Serial number” - Function name: Enter “3”. - Machine code: Enter the machine code with three characters. - Serial number: Enter the number (default: 001).		

1005	[Erase margin(Remote scan)]		
1-005-001	Range from 0 to 5 mm	*CTL	[0 to 5 / **0** / 1 mm/step]
	Creates an erase margin for all edges of the scanned image. If the machine has scanned the edge of the original, create a margin. This SP is activated only when the machine uses TWAIN scanning.		

1009	[Remote scan disable]		
1-009-001	0:enable 1:disable	*CTL	[0 or 1 / **0** / 1 /step]
	Enable or disable remote scan.		

1010	[Non Display ClearLight PDF]		
1-010-001	0:Display 1:Nondisplay	*CTL	[0 or 1 / **0** / 1 /step]
	Display or nondisplay ClearLight PDF function.		

1011	[Org Count Disp]		
1-011-001	0:ON 1:OFF	*CTL	[0 or 1 / **0** / 1 /step]
	Display or nondisplay original counter. 0: Displays remaining memory. 1: Displays original counter.		

1012	[UserInfo Release]		
1-012-001	0:No 1:Yes	*CTL	[0 or 1 / **1** / 1 /step]
	Set if the following user information is released or not. - Destination of the mail, folder, CS - Sender - Message		

	- Subject - Fail name

1013	**[Scan to Media Device Setting]**		
1-013-002	0:OFF 1:ON	*CTL	[0 or 1 / **1** / 1 /step]
	Enable or disable ScanTo media device.		

1014	**[Scan to Folder Pass Input Set]**		
1-014-001	0:OFF 1:ON	*CTL	[0 or 1 / **0** / 1 /step]
	Sets enable or disable the password setting when make a Scan to Folder job.		

1016	**[Scan To Email Sender Address]**		
1-016-001	0: Login user address 1: POP before SMTP address	*CTL	[0 or 1 / **0** / 1 /step]
	Specify the Scan To Email sender address.		

1040	**[Scan: LT/LG Mixed Sized Sizes Setting]**		
1-040-001	0:OFF 1:ON	*CTL	[0 or 1 / **1** / 1 /step] (NA) [0 or 1 / **0** / 1 /step] (Other)
	Enables or disables mixing LT/LG size documents for scanner. 0: Disable, 1: Enable Default For North America: 1 Others: 0		

1041	**[Scan:FlairAPI Setting]**			
1-041-001	0x00 – 0xff	*CTL	* see BitSwitch below:	
	Sets Scanner FlairAPI Function enable / disable. This SP is set by BitSwitch and needs to reboot the machine after making changes.			
bit	Setting	meanings		Description
		0	1	
bit 0	Start of FlairAPI Server	**Off (Do not Start)**	On (Start)	Sets whether to start exclusive FlairAPI http server. If it is 0, scanning FlairAPI function and simple UI function will be disabled.
bit 1	Access permission of FlairAPI from outside of the	**Disabled**	Enabled	If it is “0”, accessing is limited from the machine only, such as operating panel, SDK/J, MFP browsers etc… If it is “1”, accessing is allowed from outside of FlairAPI

	machine			such as PC, Remote UI, IT-Box etc…
bit 2	IPv6 (Exclusive) / IPv4 (Priority) Switching	**IPv6 (Exclusive)**	IPv4 (Priority)	If this bit is “0”, only IPv6 accessing is permitted. If this bit is “1” and IPv4 is enabled, the machine uses IPv4 accessing. If this bit is “1” and IPv4 is disabled, the machine uses IPv6 accessing. In this case, it is unable to access through Smart Operation Panel if IPv4 address is enabled.
bit 3	Remote UI Function	**Not Used**	Use	Sets use of Remote UI for scanner function.
bit 4	Reserved	-	-	-
bit 5	Reserved	-	-	-
bit 6	Reserved	-	-	-
bit 7	Reserved	-	-	-

1042	**[Scan To Email Sender Address]**		
1-042-001	0: Pursuant to the language setting (Default) 1: MM/DD/YYYY 2: DD/MM/YYYY 3: YYYY/MM/DD	*CTL	[0 to 3 / **0** / 1 /step]
	Specify the format to display the date when sending files by Scan To Email.		

1043	**[Result Screen Doc Name Display]**		
1-043-001	0: NoDisplay 1: Display	*CTL	[0 to 1 / **0** / 1 /step]
	Specify whether or not to display the document name (for security purposes) on the screen displaying the Scan To Email transmission result.		

SP2-XXX (Scanning-image Quality)

2021	**[Compression Level(Grayscale)]**		
	Selects the compression ratio for grayscale processing mode (JPEG) for the five settings that can be selected at the operation panel.		
2-021-	Comp1:5-95	*CTL	[5 to 95 / 20 / 1 /step]

001			
2-021-002	Comp2:5-95	*CTL	[5 to 95 / 40 / 1 /step]
2-021-003	Comp3:5-95	*CTL	[5 to 95 / 65 / 1 /step]
2-021-004	Comp4:5-95	*CTL	[5 to 95 / 80 / 1 /step]
2-021-005	Comp5:5-95	*CTL	[5 to 95 / 95 / 1 /step]

2023	**[ClearLightPDF:ACS Setting]**		
2-023-001	0:OFF 1:ON	*CTL	[0 to 1 / 0 / 1 /step]

2024	**[Compression ratio of ClearLightPDF]**		
	Selects the compression ratio for clearlight PDF for the two settings that can be selected at the operation panel.		
2-024-001	Compression Ratio(Normal)	*CTL	[5 to 95 / 25 / 1 /step]
2-024-002	Compression Ratio(High)	*CTL	[5 to 95 / 15 / 1 /step]

2025	**[Compression ratio of ClearLightPDF JPEG2000]**		
	Selects the compression ratio for clearlight PDF for the two settings that can be selected at the operation panel.		
2-025-001	Compression Ratio(Normal) JPEG2000	*CTL	[5 to 95 / 25 / 1 /step]
2-025-002	Compression Ratio(High) JPEG2000	*CTL	[5 to 95 / 15 / 1 /step]

2030	**[OCR PDF DetectSens]**		
2-030-001	White Lumi Value: 0 - 255	*CTL	[0 to 255 / 250 / 1 / step]
2-030-002	White Pix Ratio: 0 - 100	*CTL	[0 to 100 / 80 / 1 / step]
2-030-003	White Tile Ratio: 0 -100	*CTL	[0 to 100 / 80 / 1 / step]

2031	**[Vertical Judgment Setting]**		
2-031-001	Function Setting: 0 - 1	*CTL	[0 to 1/ 0 / 1 / step] 0:Enable 1:Disable

	When the image does not become upright state due to the vertical judgment error, set this SP to "0: Disable". After changing the setting, turn OFF/ON the main power.		
2-031-002	Algorithm Setting: 0 - 2	*CTL	[0 to 2 / 0 / 1 / step] 0: Normal Algorithm 1: Simple Algorithm 2: Composite Algorithm
	Set the identification algorithm when SP2-031-001 is "1: Enable". Change the setting when the vertical judgment error occur frequently. After changing the setting, turn OFF/ON the main power.		

SP3-XXX (Scanning-image Quality)

3044	**[Compression Settings(ClearLightPDF)]**		
3-044-001	-	CTL*	[0 to 1 / 1 / 1]
	Specify the compression ratio of scanned image data when using clear light PDF. 0: High (The value in SP2-024-02 is applied.) 1: Normal (The value in SP2-024-01 is applied.)		

3045	**[Searching Target Setting]**		
3-045-001	-	CTL*	[0 to 5 / 5 / 1]
	Specify which location (server) to search first when searching for the mail address. 0: LDAP Server 1 1: LDAP Server 2 2: LDAP Server 3 3: LDAP Server 4 4: LDAP Server 5 5: Machine Address Book		

3053	**[Compression Method Setting (ClearLightPDF)]**		
3-053-001	-	CTL*	[0 to 1 / 0 / 1]
	Specify the compression ratio of scanned image data when using clear light PDF. 0: JPEG (The value in SP2-025-02 is applied.) 0: JPEG2000 (The value in SP2-025-01 is applied.)		
3-053-002	-	CTL*	[0 to 1 / 0 / 1]
	Specify the compression ratio of a scanned text image when using clear light PDF. 0: MMR		

	1: JBIG2

3066	[High ComprerssionPDF Priority Setting]		
3-066-001	-	CTL*	[0 to 1 / 1 / 1]
	Specify the clear light PDF generation mode. 0: Generate PDF 1: Handling Speed		

3067	[flate Compression Setting]		
3-067-001	-	CTL*	[0 to 1 / 1 / 1]
	Specify whether to enable or disable clear light PDF compression. 0: Disable 1: Enable		

3070	[Scan Limit Warning Display Setting]		
3-070-001	-	CTL*	[0 to 1 / 1 / 1]
	Specify whether or not to display the warning when the number of scans reaches the upper limit. 0: Not Display 1: Display		

3071	[Function Use Count]		
3-071-001	WSD	CTL*	[0 to 4294967295 / 0 / 1]
	Counts the number of jobs sent via Scan to PC of the WSD function.		
3-071-002	DSM	CTL*	[0 to 4294967295 / 0 / 1]
	Counts the number of jobs sent via Scan to PC of the DSM function.		
3-071-003	SmallSizeTray	CTL*	[0 to 4294967295 / 0 / 1]
	Counts the number of originals fed from the small paper feeding unit. *This machine does not count because it does not come with this optional unit.		
3-071-004	BlankDetect Ocr	CTL*	[0 to 4294967295 / 0 / 1]
	Counts the number of jobs to which the blank paper elimination function (with OCR) is applied.		
3-071-005	BlankDetect	CTL*	[0 to 4294967295 / 0 / 1]
	Counts the number of jobs to which the blank paper elimination function (without OCR) is applied.		
3-071-	AirPrint/Mopria	CTL*	[0 to 4294967295 / 0 / 1]

006	Counts the number of pages scanned with AirPrint/Mopria.		
3-071-007	ScanToURL	CTL*	[0 to 4294967295 / 0 / 1]
	Counts the number of pages sent with ScanToURL.		

3072	**[Total Job Count]**		
3-072-001	LegacyScan	CTL*	[0 to 4294967295 / 0 / 1]
	Counts the number of times a job is executed using “Scanner (Classic)”.		
3-072-002	SmartScan	CTL*	[0 to 4294967295 / 0 / 1]
	Counts the number of times a job is executed using “Scanner”.		
3-072-003	SimpleScan	CTL*	[0 to 4294967295 / 0 / 1]
	Counts the number of times a job is executed using “Simple Scanner”.		
3-072-004	MediaScan	CTL*	[0 to 4294967295 / 0 / 1]
	Counts the number of times a job is executed using the Media Scanner function.		
3-072-005	OtherScan	CTL*	[0 to 4294967295 / 0 / 1]
	Counts the number of times a job is executed using any other scanner function.		

4. Device Software Configuration

Management Features

How to Disable the Document Server Function

1. Enter 'Copy' SP mode.
2. Change SP5-967-001 to 1. (0:ON 1:OFF)
3. Reboot the machine.

Note

- When the above SP mode (SP5-967-001) is OFF (=1), both the Document Server and Locked Print functions will be disabled.

Printing Features

Behavior of USB Printer Detection

An MFP connected via USB sends its product name and unique serial number. With the data, the machine determines whether requires a printer driver for the USB device to be installed.
SP5-844-005 allows you to change how to determine the MFP requires a printer driver installation:

- **OFF**
  If SP5-844-005 is set to OFF, the unique serial number of the device is sent to the computer. As a result, if the device is swapped out for a device of the same product, pop-up messages will appear, because the serial numbers between the two are different.
- **Level 1**
  If SP5-844-005 is set to Level 1, a common serial number for the product such as "MP 305+" series is sent to the computer. As a result, if the device is swapped out for a device of the same product, pop-up messages will not appear because the devices are recognized as having the same serial number.
- **Level 2**
  If SP5-844-005 is set to Level 2, a common serial number for all GW/GW+ models is sent to the computer. As a result, if a GW/GW+ device is swapped out for a different GW/GW+ device, pop-up messages will not appear because the devices are both recognized as being based on GW/GW+.

Auto PDL Detection Function

Overview

The Auto PDL Detection function gives the MFP the ability to determine the PDL of a job or of specific parts of a job. This can be especially useful in cases where the PDL is not specified or if the job contains multiple PDLs. This is only possible if the job was not created using a driver.

Conditions for detection of the PDL

The MFP will only attempt to detect a job's PDL if all of the following conditions are met.

- No @PJL ENTER LANGUAGE command is contained in the job
- No submission protocol options (lpr, ftp, rcp, or rsh options) have been used to specify the PDL
- User Tools > Printer > System > Printer Language = Auto

Note

- The printer is unable to detect PCL6 or RPCS. However these are almost always created using a driver and therefore contain the PJL command specifying the PDL.

PDL detection by the printer system, PCL interpreter and PS interpreter

There are 3 components in the printer which can perform Auto PDL Detection:

1. **Printer system:**

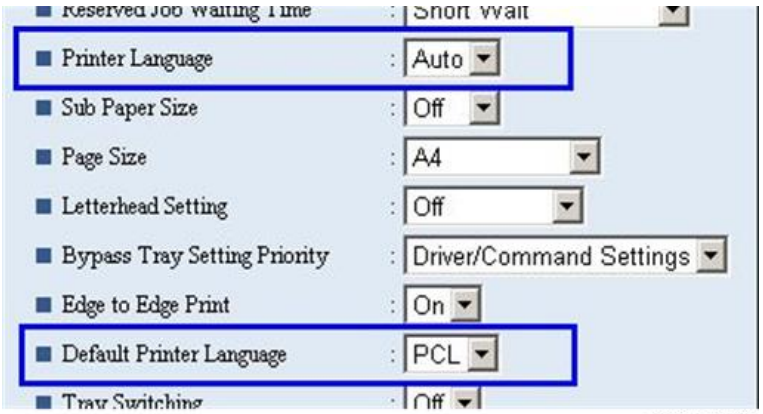
Uses a set of triggers unique to PCL5, PS or PDF. Up to 2KB from the start of the job can be searched for triggers.

2. **PCL interpreter:**
   It can detect PS triggers in PCL data. If a PS trigger is detected, the PCL interpreter will abort processing and return the unprocessed part of the job back to the printer system. Up to 256 bytes from the start of each page can be searched for triggers.
3. **PS interpreter:**
   It can detect PCL5 triggers in PS data. If a PCL trigger is detected, the PS interpreter will abort processing and return the unprocessed part of the job back to the printer system. The entire page (regardless of the number of bytes) is searched for triggers.

Note

- 2. and 3. can be disabled using Printer Bit Switch 2-3=1.
- If the "Printer Language" is configured to anything other than Auto, all detection will be disabled.
- An interpreter submits a job page by page to the rasterizer. Therefore, when an interpreter detects a trigger mid-job, the previous pages will have already been submitted and will be output using the previously detected PDL.
- If the PDL cannot be detected by the printer system, then the PDL defaults to the one configured in "Configuration > Printer Basic Settings > Default Printer Language".

The Printer Language setting and Default Printer Language setting in WIM:



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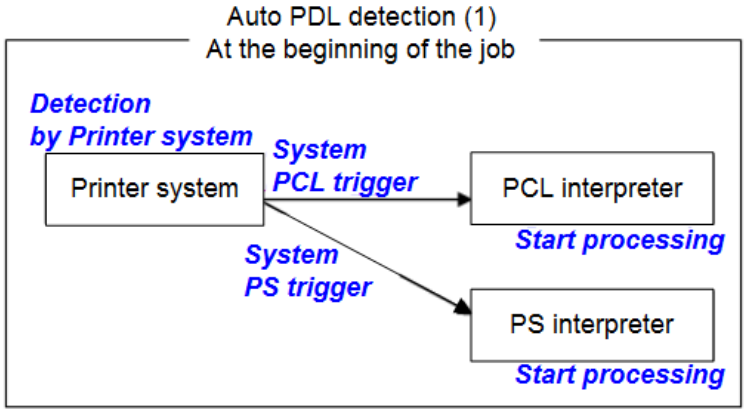
PDL selection and switching

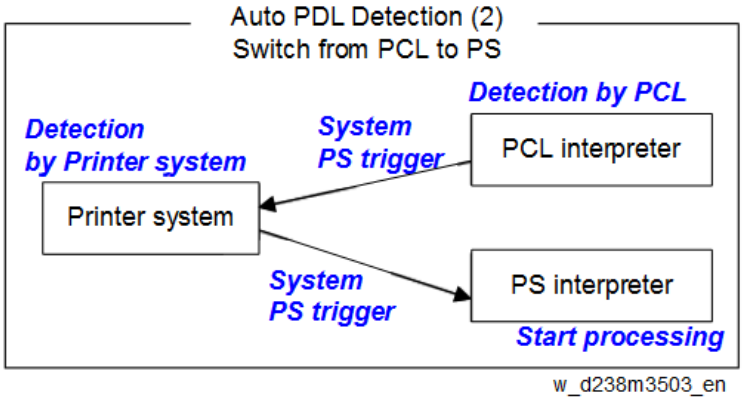
3 types of PDL selection/switching are performed:

1. PDL selection (PCL5 or PS (including PDF)) at the beginning of the job: performed by the printer

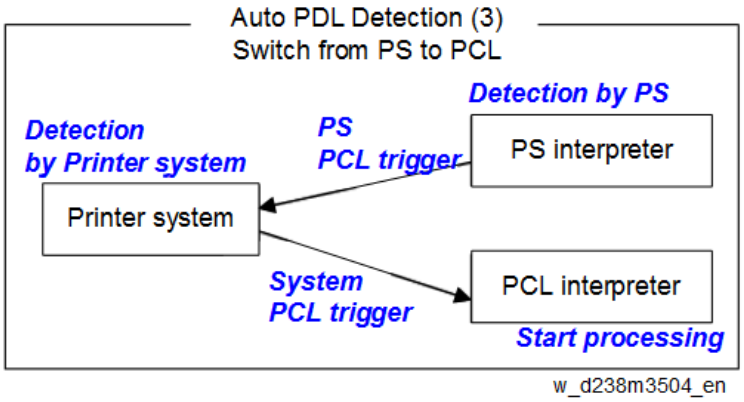
system



2. PDL switching from PCL5 to PS: performed by the PCL interpreter and the printer system



3. PDL switching from PS to PCL5: performed by the PS interpreter and the printer system



Triggers

Printer system

PCL5 triggers	[ESC]E [FF]
PS triggers	%!PS-Adobe-3.1 %! dict begin

	bind def findfont showpage /statusdict 0 startjob [EOT] } + space character + "def" userdict (*)
PDF triggers	%PDF- %!PS-Adobe-M.nPDF- (*M, n=numeric)

* "userdict" is excluded by configuring Printer Bit Switch 5-3=1.

Note

- Up to 2KB from the start of the job can be searched for triggers.
- "%%" can be added to the PS triggers by configuring Printer Bit Switch 5-3=1
- If a job is identified as PDF, it will be sent to the PS interpreter to be processed as a regular PS job.

PS interpreter

PCL5 trigger	[ESC]E and 2 or more continuous PCL commands

Note

- Up to 256 bytes from the start of each page can be searched for triggers.

Some possible problems

Garbled output:

If a string of characters (or binary data) is mistaken as a trigger and an incorrect PDL is applied, the output will be garbled.

Incorrect printer settings:

Printer settings, for example the paper size, is incorrectly applied. This can happen when the printer settings at the beginning of the job are initialized before a PDL switch occurred and no settings were configured for the rest of the job.

Printer Bit Switch description

Bit Switch 2-3

This controls Auto PDL Detection by the PCL interpreter and PS interpreter.

BitSW 2-3=0 (default):

If PDL switching is applied to the job, all of the printer system, PCL interpreter and PS interpreter will search for switching criteria (triggers).

BitSW 2-3=1:

Only the printer system will search for switching criteria (triggers). PCL/PS interpreters will not.

Bit Switch 5-3

This affects the PDL switching criteria (triggers) used by the printer system.

BitSW 5-3=0 (default):

"%%" is not used as a printer system PS trigger. "%%" will not call the PS interpreter.

BitSW 5-3=1:

"%%" is used as a printer system PS trigger.

The reason that "%%" is not included as a trigger by default, is that a string of text in the body of the job such as the below, could result in a false positive. This would trigger a switch and result garbled output.

%%%%%%%%%%%%%%%%%%%%%%%%%%%%

However some customers prefer that "%%" be included as a switching criteria. BitSW5-3=1 should be used in such a case.

Note

- A side effect of BitSW5-3=1 is that "userdict" will no longer be used as a PS trigger.

Bit Switch 9-0

These determine whether Auto PDL Detection for print jobs transmitted via USB/parallel will wait 10 seconds to make sure the first 2KB of the job has been sent.

The Printer system portion of the Auto PDL Detection function is only performed on the first 2KB of a job and can wait up to 10 seconds for that first 2KB to arrive. As the printer is unable to detect the end of jobs submitted over a USB/Parallel connection, it might be preferable to not wait 10 seconds if jobs of less than 2KB are going to be printed. Enabling/disabling this waiting time is the purpose of BitSw 9-0.

BitSw 9-0=0 (default):

The printer system will not wait 10 seconds for the first 2KB of data to arrive.

BitSw 9-0=1:

The printer system will wait up to 10 seconds for the first 2KB of data to arrive.

Print Images Rotation

Printer Bit Switch description

Bit Switch 5-6

This changes the way an MFP/LP rotates PCL, PS, PDF, or RPCS print images.

BitSW 5-6=0 (default):

A uniform binding edge (short or long edge) will be applied to every page of every job. Pages will always be rotated as if they were to be bound on that edge.

BitSW 5-6=1:

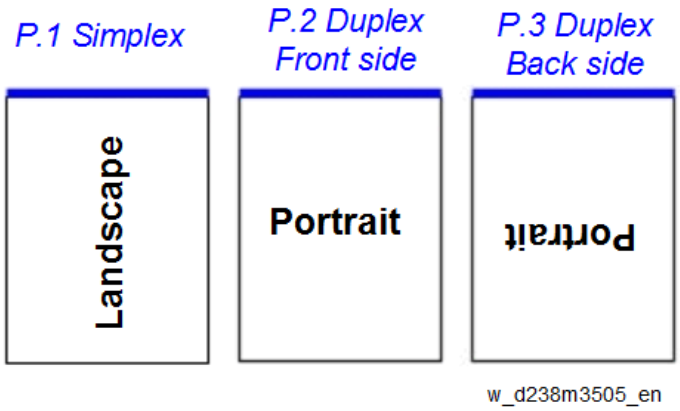
A uniform binding edge (short or long edge) will only be applied if the job is stapled, punched, or Z-folded. Otherwise, the bound edge might differ from page to page.

Example:

A 3-page job. Page 1 has the PCL simplex command. Page 2 and 3 have the PCL duplex long-edge bind commands.

No finishing options (staple, punch, z-fold) are used.

Bit Switch #5-6=0:



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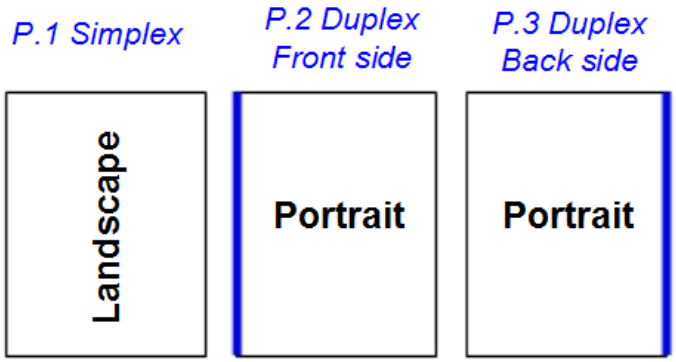
Bit Switch #5-6=1:



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Note

- Used in conjunction with Bit Switch #5-6, Orientation Auto Detect for PS/PDF jobs might cause unexpected results.

PJL USTATUS

Printer Bit Switch description

Bit Switch 9-4

These control the way PJL USTATUS returns page count totals in cases where multiple copies of a job are being printed.

BitSw 9-4=0 (default):

This change the way an MFP/LP rotates PCL, PS, PDF, or RPCS print images.

1. The page count for a single copy is returned after the first copy is printed.
2. The page count for the rest of the copies, excluding the first copy, is returned after all copies have been printed.
3. This emulates an older HP PCL firmware spec. It is only needed for compatibility with legacy software.

BitSw 9-4=1:
The page count for all copies is output after all copies have been printed.
This emulates more recent HP PCL firmware specs.
For example, consider 3 copies of a 3 page job:
9-4 = 0
@PJL USTATUS JOB
START
NAME="TEST_page1-3"
@PJL USTATUS PAGE
1
@PJL USTATUS PAGE
2
@PJL USTATUS PAGE
3
@PJL USTATUS JOB
END
NAME="TEST_page1-3"
PAGES=3
<comment> The page count of the first copy is returned.</comment>
@PJL USTATUS PAGE
1
@PJL USTATUS PAGE
2
@PJL USTATUS PAGE
3
@PJL USTATUS PAGE
4
@PJL USTATUS PAGE
5
@PJL USTATUS PAGE
6
<comment> The page count of the remaining two copies is returned.</comment>
9-4 = 1
@PJL USTATUS JOB
START
NAME="Microsoft Word - TEST_page1-3"
@PJL USTATUS PAGE
1
@PJL USTATUS PAGE

2
@PJL USTATUS PAGE
3
@PJL USTATUS PAGE
4
@PJL USTATUS PAGE
5
@PJL USTATUS PAGE
6@PJL USTATUS PAGE
7
@PJL USTATUS PAGE
8
@PJL USTATUS PAGE
9
@PJL USTATUS JOB
END
NAME="Microsoft Word - TEST_page1-3"
PAGES=9
<comment> The page count of all three copies is returned.</comment>

Scanner Features

The Setting of SMTP authentication in Scan to Email

Scan to Email fails with the error message "Transmission has failed ". The SMTP username and password are correct. How can I make Scan to Email pass?

Change SP 5-860-022 "SMTP Auth. From Field Replacement" to On. By doing this, Scan to Email will pass the SMTP authentication.

Note

- Using this option to solve the above problem, the device SMTP email address will appear in the email's "From" field. The email address of the user who sent the email or the admnistrator will appear in the "Reply-to" field.

Explanation

This is an SMTP authentication issue that aborts transmission of an already started Scan to Email. Currently this has only been reproduced using MS-Exchange server.

MS-Exchange requires that all of the following match:

1. The sender's address in the "MAIL FROM" field. This is also known as the "envelope sender" or "MIME sender". It is an SMTP command sent at the beginning of the email transmission process.
2. The sender's address in the mail header "From:" field. This appears as "From" in email clients. It is a part of the email itself.
3. The email address corresponding to the SMTP username used to login into the SMTP server.

When the MFP logins into the SMTP server, the email address of the username 3) will be compared to 1) and 2). If these comparisons fail, authentication will also fail. Exchange server will stop the transmission procedure, and the "Transmission has failed" message will be returned to the sender.

Typical example

NG case:

SP5-860-022 is Off:

1. The "MAIL FROM" field = device
2. The mail header "From:" field = use
3. The SMTP username = device

When the SMTP server compares 2) and 3) the Exchange Server will stop the transmission procedure.

OK case:

SP5-860 can be used to make the values in the above example, match.

In this example, if SP5-860-022 is On, the user's email address in the mail header '2)' will be replaced by the Administrator's email address.

To solve the problem, the Administrator's address must be the same as the device's address.

If this is done:

1. The "Mail From: field = device
2. The mail header "From:" field = administrator

3. The SMTP username = device

1,2 and 3 must match and the authentication should be successful.

Note

- The user's email address will still be inserted into the reply-to field.

The device SMTP user name, password, and email address are configurable in [User Tools] > [Machine Features] > [System Settings] > [File Transfer] > [SMTP Authentication].

User email addresses are configurable in the user configuration of the Address Book.

The administrator email address is configurable in [User Tools] > [Machine Features] > [System Settings] > [File Transfer] > [Administrator's Email Address].

The Qualification Switching of Scan to Folder

Determining which account Scan to Folder uses to access a scan destination and the effects of System SP 5-846-021.

This method depends on how the destination is accessed, whether authentication is being used, and SP 5-846-021.

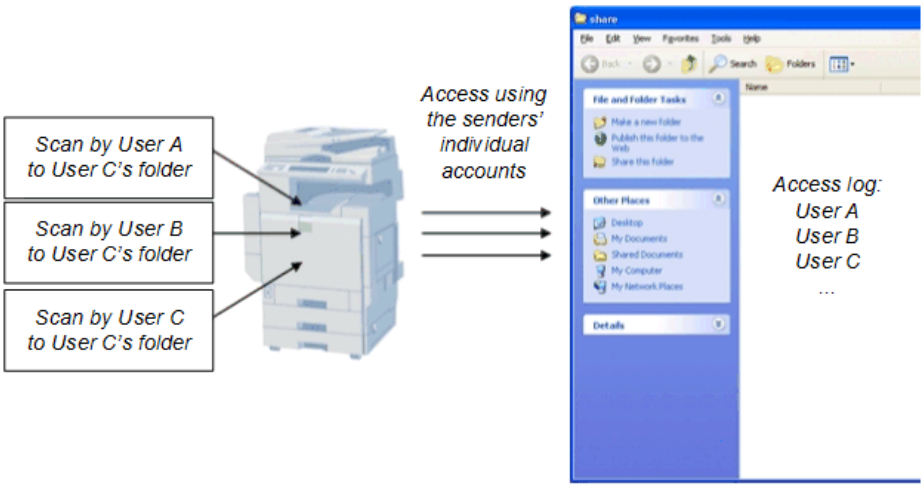
Cases:

Case	Destination selection	User auth.	Account used to access the folder
A	Manual entry	Either enabled or disabled	The user's account *
B	Destination list	disabled	The recipient's account (as configured in the Address Book's Folder Authentication setting)
C		enabled	If SP 5-846-021 = 0 (default): The authenticated user's account 1: The recipient's account (as configured in the Address Book's Folder Authentication setting)

* The "user's account" will be either the one entered during scanning (see the Manual Entry screen capture) or if User Auth. is enabled, the account configured in the user's Folder Authentication setting will be used.

The destination's access logs:

Case A or Case C with SP=0: The access logs can be used to determine which user sent the scan.



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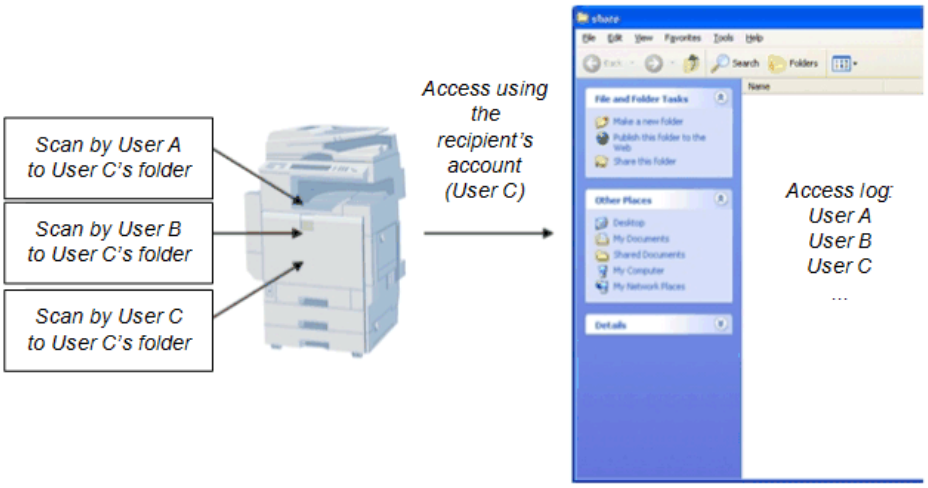
Case B or Case C with SP=1: All access will be logged as the same user.



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Security Features

How to Restrict Access to the WIM Job Menu

1. Enter 'Printer' SP mode.
2. Set SP5-888-001

   0: (default): "Job" menu is enabled.

   1: "Job" menu is disabled.

Note

- This setting takes effect only if user authentication (other than User Code auth.) is disabled.

How to Restrict Web Image Monitor Access to the Document Server

System (Copier) SP 5-885-020 bit 0, 1 and 7 restrict Web Image Monitor access to the DS. It disables the following WIM settings:

- The entire Document Server menu (shown in blue in fig1)
- Job > Document Server (shown in red in fig1)

See the following for details:

Bit 0:

Bit 0 = 0 (default): Allows anyone (guests, users, admins) access to the DS via WIM.

Bit 0 = 1: Prevents everyone from accessing the DS via WIM.

Bit 1:

Bit 1 = 0 (default): Allows anyone (guests, users, admins) access to the DS via WIM.

Bit 1 = 1: Only administrators can access the DS via WIM.

Note

- Without admin privileges, even authenticated users will be unable to access the DS via WIM.

Bit 7:

Bit 7 = 0 (default): Allows anyone (guests, users, admins) access to the DS via WIM.

Bit 7 = 1: Only administrators and authenticated users can access the DS via WIM.

The most restrictive result of combining these three configurations will take priority. So for example:

Bit 0 = 0

Bit 1 = 1

Bit 7 = 1

As Bit 1 = 1 is the most restrictive of the three, it will take presedence over the other two and only administrators will be able to access the DS via WIM.

Note

- In order for SP5-885-020 to have any effect, the Document Server must be enabled (SP5-967-001=0). For information about SP5-967-001, refer to Disabling the Document Server using System SP5-967-001.
- Access to the entire "Job" menu can be restricted using SP 5-888-001. For details, refer to Use of SP 5-888-001 to restrict access to the "Job" menu on WIM.

User Authentication for Specific MFP Applications

The SP5-420 settings enable/disable User Authentication for specific MFP applications.

SP 5-420 User Authentication Value (Default: 0)

SP 5-420	User Authentication	Value (Default: 0)	
SP5-420-001	Copy	0 (ON)	1 (OFF)
SP5-420-011	Document Server		
SP5-420-021	Fax		
SP5-420-031	Scanner		
SP5-420-041	Printer		

1. Enable User Authentication for the device as a whole:
   User Tools > System Settings > Administrator Tools > User Authentication Management
2. Use the SP5-420 settings to specify the applications to which User authentication is to apply.