IM 550F/600F/600SRF
P 800/801
Machine Code:
D0BT/D0BV/D0BW/M0CG/M0CH
Field Service Manual
Ver 1.0

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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

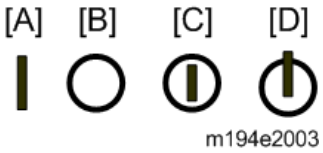
For your safety, please read this manual carefully before you use this product. Keep this manual handy for future reference.

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.

Safety

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 installed with the ADF/ARDF:
    When a thick book or three-dimensional original is placed on the exposure glass and the ARDF cover is lowered, the back side of the ARDF rises up to accommodate the original. Therefore, when closing the ARDF, please be sure to keep your hands away from the hinges at the back of the ARDF.

18. When using a vacuum cleaner around the machine, keep others away from the cleaner, especially small children.
19. For machines installed with the anti-tip components:
    The anti-tip components are necessary for meeting the requirements of IEC60950-1, the international standard for safety. The aim of these components is 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. (U.S.: UL60950-1, Europe: EN60950-1) Therefore, removal of such components must always be with the consent of the customer. Do not remove them at your own judgment.
20. **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 for several months 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 the machines installed with the 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.
- 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.

Handling the development unit cooling system

For the machines installed the development cooling system:

1. The development unit cooling system circulates propylene glycol from a sealed tank through hoses that pass behind cooling plates on the sides of each development unit.
2. The coolant tank is located at the bottom of the cooling box on the back of the main machine.
3. Always obey local laws and regulations if you need to dispose of a tank or the propylene glycol coolant.
4. The tank must never be emptied directly into a local drainage system, river, pond, or lake.
5. Contact a professional industrial waste disposal organization and ask them to dispose of the tank.

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.   _safe006   _safe007   _safe008

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 and Abbreviations

This manual uses the following symbols and abbreviations:

Symbols:

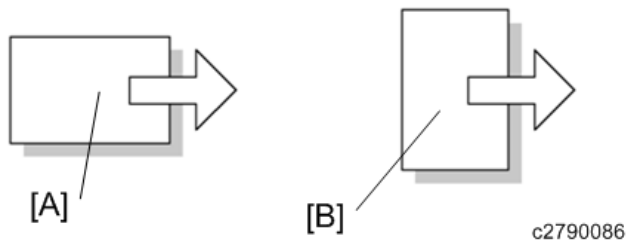
	Screw
	Black screw
	Connector
	Flexible flat cable (FFC)
	Hook
	Clamp
	Clip ring
	E-ring
	C-ring
	Timing belt
	Spring
	Location of a screw(s) to be tightened or loosened.
	Location of a connector(s), clamp(s) or spring(s) to be removed
	Direction (Rotating or moving)

Abbreviations:

Note

Abbreviations such as (M1), (S1), or (TH1) after the names of some electrical components indicate that those components are shown on a Point-to-Point diagram.

Abbreviation	Meaning
SEF	Short edge feed
LEF	Long edge feed



[A] Short edge feed (SEF)

[B] Long edge feed (LEF)

Destination:

Abbreviation	Destination
EU (-27)	European Union
AP (-29)	Asia-Pacific
CHN (-21,-25)	China

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- Windows® Internet Explorer® 9
- Internet Explorer® 10
- Internet Explorer® 11

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- The product names of Windows 7 are as follows: Microsoft® Windows® 7 Home Premium Microsoft® Windows® 7 Professional Microsoft® Windows® 7 Ultimate Microsoft® Windows® 7 Enterprise
- The product names of Windows 8.1 are as follows: Microsoft® Windows® 8.1 Microsoft® Windows® 8.1 Pro Microsoft® Windows® 8.1 Enterprise
- The product names of Windows 10 are as follows: Microsoft® Windows® 10 Home Premium Microsoft® Windows® 10 Pro Microsoft® Windows® 10 Enterprise Microsoft® Windows® 10 Education
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1. Product Information

Guidance for Those Who are Familiar with The Predecessor Product

IM 550F/600F/600SRF

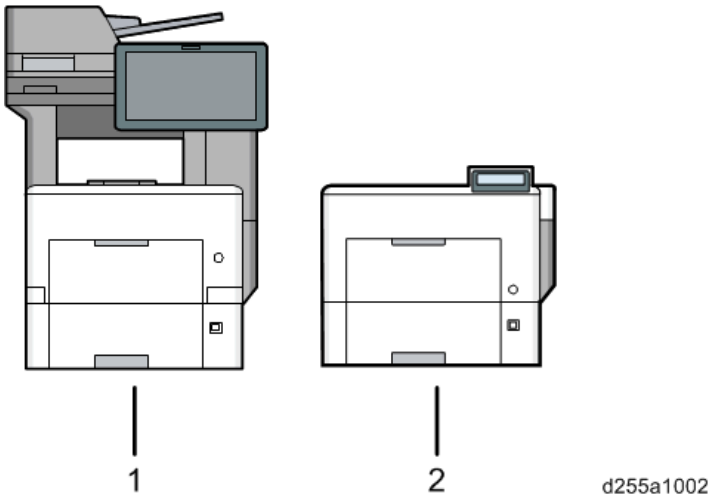
	MP 501SPF/601SPF	IM 550F/600F/600SRF (This machine)
DF	ARDF	SPDF
Print speed	MF 501SPF: 50ppm	IM 550F: 55ppm
	MF 601SPF: 60ppm	IM 600F/600SRF: 60ppm
Toner	25k toner	IM 550F: 25.5k toner
		IM 600F/600SRF: 40k toner
Finisher	-	IM 600SRF: Inner finisher
Fusing	Heater	High efficient heater (to start up the machine faster)
Operation panel	SOP-G2	SOP-G2.5
Web help support	Online help	Online help
		Offline help (Help for Image Quality & Paper Feeding)
Video explaining how to replace supplies	No	Yes (when the machine detects the end, it appears.)

P 800/801

	SP 5300DN/5310DN	P 800/801 (This machine)
Print speed	SP 5300DN: 50ppm	P 800: 55ppm
	SP 5310DN: 60ppm	P 801: 60ppm
Toner	25k toner	P 800: 25.5k toner
		P 801: 40k toner
Fusing	Heater	High efficient heater (to start up the machine faster)

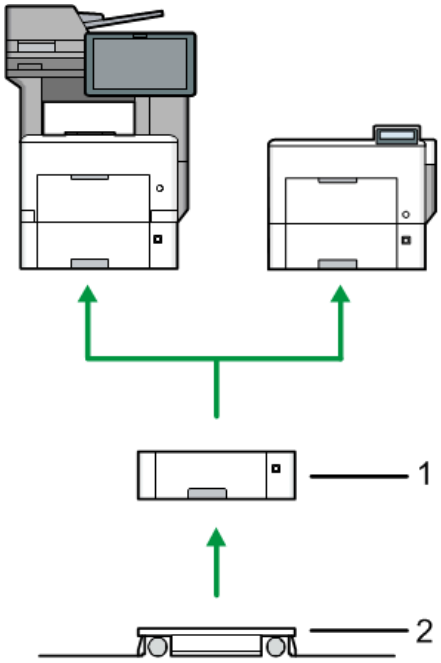
Machine Codes and Peripherals Configuration

Main Machine



No.	Item	Machine Code
1	IM 550F	D0BT-17 (NA) D0BT-27 (EU) D0BT-29 (AP)
	IM 550FG	D0BT-51 (NA, GSA model)
	IM 600F	D0BV-17 (NA) D0BV-27 (EU) D0BV-29 (AP)
	IM 600SRF	D0BW-17 (NA) D0BW-27 (EU) D0BW-29 (AP)
	IM 600SRFG	D0BW-51 (NA, GSA model)
2	P 800	M0CG-17 (NA) M0CG-27 (EU) M0CG-29 (AP)
	P 801	M0CH-17 (NA) M0CH-27 (EU) M0CH-29 (AP)

Options



d255a1000

No.	Item	Machine Code	IM 550F/600F/600SRF	P 800/801
1	Paper Feed Unit PB1160 *1	D3G7-01 (NA/EU/AP)	Yes	Yes
2	Caster Table Type M40	D0C7-01	Yes	Yes
-	OCR Unit Type M13	D3AC-23 (NA) D3AC-24 (EU) D3AC-25 (AP)	Yes	No
-	IPDS Unit Type M40	M0CK-04 (NA) M0CK-05 (EU) M0CK-06 (AP)	Yes	Yes
-	XPS Direct Print Option Type M40	M0CK-01 (NA) M0CK-02 (EU) M0CK-03 (AP)	Yes	Yes
-	VM CARD Type M37	D3GF-32	Yes	Yes
-	Device Server Option Type M37	D3GF-10 (NA) D3GF-11 (EU/AP)	Yes	Yes
-	IEEE 1284 Interface Board Type M19	D3C0-17	Yes	Yes
-	IEEE 802.11 Interface Unit Type M24	M500-08	Yes	Yes
-	File Format Converter Type M19	D3BR-04	Yes	No

No.	Item	Machine Code	IM 550F/600F/600SRF	P 800/801
-	Enhanced Security HDD Option Type M10	D792-09	Yes	Yes
-	Hard Disk Drive Option Type P8	M500-05	No	Yes
-	NFC Card Reader Type M24	D3CP-08	Yes	No
-	DataOverwriteSecurity Unit Type M19	D3BS-03	Yes	No
-	Optional Counter Interface Unit Type M12	B870-21	Yes	No
-	Fax Connection Unit Type M37	D3GF-15 (NA) D3GF-16 (EU) D3GF-17 (AP)	Yes	No
-	Fax Memory Unit M19 64MB	D3BZ-17	Yes	No
-	PostScript3 Unit Type M40	D3FL01 (NA) D3FL02 (EU) D3FL03 (AP)	Yes	No
-	PostScript3 Unit Type P19	M0CK07 (NA) M0CK08 (EU) M0CK09 (AP)	No	Yes

*1 You can attach up to four paper feed units.

Note

- The following options are installed by the end user. For instructions on installing these options, please refer to the operating instructions "Setup".
- Paper Feed Unit PB1160
- Caster Table Type M40
- IPDS Unit Type M40
- XPS Direct Print Option Type M40
- VM CARD Type M37
- Device Server Option Type M37
- IEEE 1284 Interface Board Type M19
- IEEE 802.11 Interface Unit Type M24
- File Format Converter Type M19
- PostScript3 Unit Type M40
- PostScript3 Unit Type P19
- Service installation is required for installing Paper Feed Unit PB1160 with Caster Table Type M40 depending on the machine configuration. For details, please refer to Paper Feed Unit PB1160.

Specifications

See "Appendices" for the following information:

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

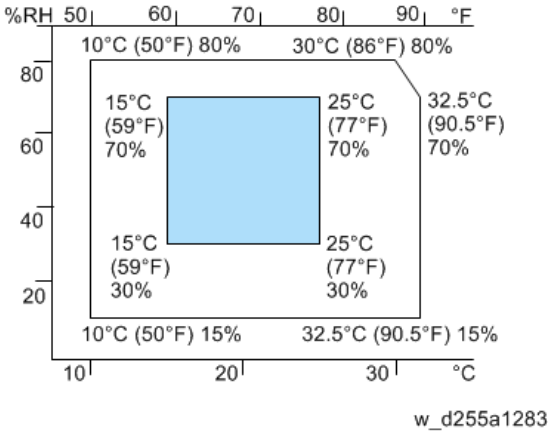
2. Installation

Installation Requirements

Environment

Optimum Environmental Conditions

Permissible and recommended temperature and humidity ranges are as follows:



- White area: permissible range
- Blue area: recommended range

Service Environmental Conditions

The service environmental conditions are as follows:

- Temperature: 50 to 90.5 °F (10 to 32.5 °C)
  (But temperature should be 86 °F (30 °C) or less when humidity is 80%.)
- Humidity: 15 to 80%
  (But humidity should be 70% or less when the temperature is 90.5 °F (32.5 °C).)

Adverse environmental conditions may affect the image quality. It is recommended to use the machine at a temperature around 59 to 77 °F or less (15 to 25 °C), and humidity around 30 to 70%.

Avoid the following locations when selecting a site for the machine.

- Avoid locations near a window or with exposure to direct sunlight.
- Avoid locations with vibrations.
- Avoid locations with drastic temperature fluctuations.
- Avoid locations with direct exposure to hot or cold air.
- Avoid poorly ventilated locations.

If the floor material is delicate, when the machine is moved after installation, the casters may damage the floor.

During copying, some ozone is released, but the amount does not cause any ill effect to one's health. If, however, the machine is used over a long period of time in a poorly ventilated room or when making an

extremely large number of copies, the smell may become unpleasant. To maintain the appropriate environment for copy work, it is suggested that the room should be properly ventilated.

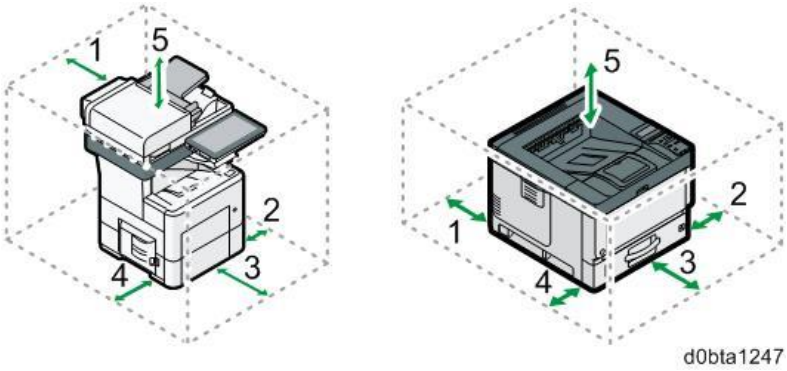
Machine Level

Front to back: Within 5 mm (0.2") of level

Right to left: Within 5 mm (0.2") of level

Minimum Space Requirements

Place the machine near the power source, and provide clearance as shown:



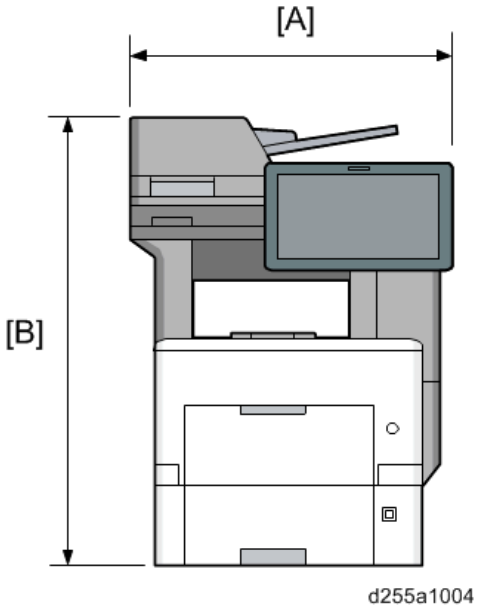
1. Rear: Over 300 mm (11.9")
2. IM 550F/600F, P 800/801: Right: Over 100 mm (3.9")
   IM 600SRF: Right: Over 300 mm (11.9")
3. Front: Over 500 mm (19.7")
4. Left: Over 300 mm (11.9")
5. Top: Over 400 mm (15.7")

Note

- The 500 mm clearance for the front is only for pulling out the paper tray. If an operator stands in front of the machine, more space is required.

Machine Dimensions

IM 550F/600F/600SRF



IM 550F/600F

W×D×H (including DF and operation panel): 480 × 539 × 644 mm (18.9" × 21.3" × 25.4")

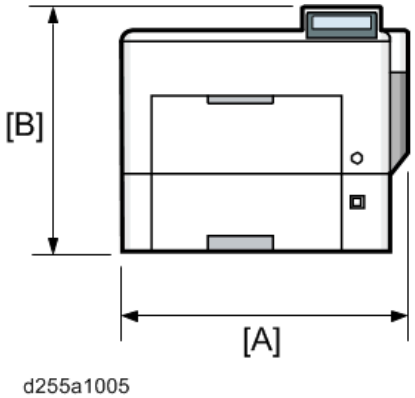
- [A]: 480 mm (18.9")
- [B]: 644 mm (25.4")

IM 600SRF

W×D×H (including DF and operation panel): 480 × 543 × 740 mm (18.9" × 21.4" × 29.2")

- [A]: 480 mm (18.9")
- [B]: 740 mm (29.2")

P 800/801



P 800

W×D×H: 420 × 410 × 346 mm (16.6" × 16.2" × 13.7")

- [A]: 420 mm (16.6")
- [B]: 346 mm (13.7")

P 801

W×D×H: 443 × 410 × 366 mm (17.5" × 16.2" × 14.5")

- [A]: 443 mm (17.5")
- [B]: 366 mm (14.5")

Power Requirements

⚠CAUTION

- Make sure that the wall outlet is near the machine and easily accessible.
- Make sure the plug is firmly inserted in the outlet.
- Avoid multi-wiring.
- Be sure to ground the machine.

Input voltage

IM 550F/600F/600SRF

- NA: 120 to 127 V, 11.5 A, 60 Hz ± 2%
- EU/AP: 220 to 240 V, 6 A, 50 Hz ± 2%/60 Hz ± 2%

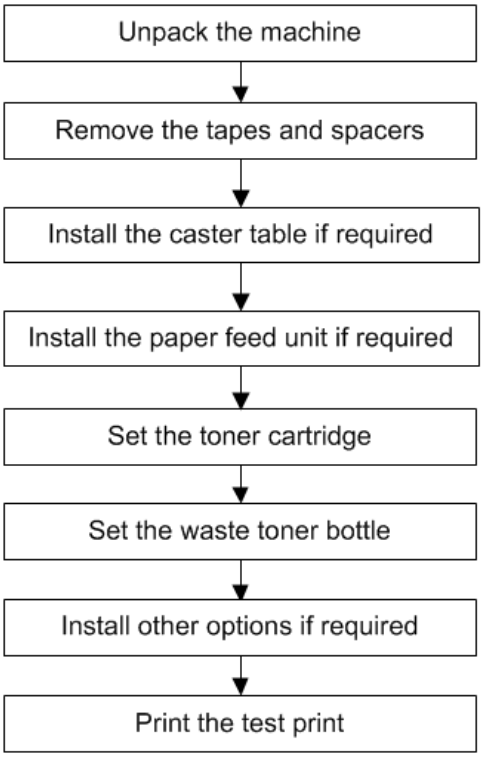
P800/801

- NA: 120 to 127 V, 11 A, 60 Hz ± 2%
- EU/AP: 220 to 240 V, 6 A, 50 Hz ± 2%/60 Hz ± 2%

For users in Norway, this product is also designed for an IT power distribution system with a phase-to-phase voltage of 230V.

Main Machine Installation

Installation Flowchart



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Accessory Check

IM 550F/600F/600SRF

Check the quantity and condition of these accessories.

No.	Description	Q'ty		
		NA	EU	AP
1	Tray adjuster	1	-	-
2	Sheet: How to hold*1	1	1	1
3	Auxiliary tray*1	1	1	1
4	Power cord	1	1	1
5	Starter toner	1	1	1
6	Waste toner bottle	1	1	1
5	Telephone cable with ferrite core	1	-	-
6	Ferrite core	-	1	1
7	CD-ROM: Drivers	1	1	1
8	Guarantee sheet	1	-	-
9	Sheet: Help Desk Card	1	1	-

No.	Description	Q'ty		
		NA	EU	AP
10	Manual: Safety	1	1	1
11	Manual: Setup	1	1	1
12	Sheet: Air	1	2	1
13	Sheet: Security	1	1	1
14	Sheet: Safety	-	1	-
15	Sheet: EULA (End User License Agreement)	1	1	1
16	Sheet: TRCU	-	1	-

*1 IM 600SRF only.

P 800/801

Check the quantity and condition of these accessories.

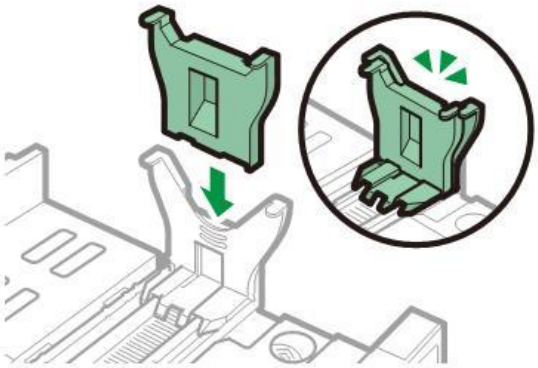
No.	Description	Q'ty		
		NA	EU	AP
1	Decal: Paper grade	1	-	-
2	NFC tag	1	1	1
3	Tray adjuster	1	-	-
4	Power cord	1	1	1
5	Starter toner	1	1	1
6	Waste toner bottle	1	1	1
7	CD-ROM: Drivers	1	1	1
8	Sheet: Help Desk Card	1	-	-
9	Sheet: EULA (End User License Agreement)	1	2	1
10	Guarantee sheet	1	-	-
11	Manual: Safety	1	3	1
12	Manual: Setup	1	3	1
13	Sheet: Control panel	1	1	-
14	Sheet: Air	1	2	1
15	Sheet: Security	1	1	1
16	Sheet: TRCU	-	1	-

Installation Procedure

This machine is installed by the end user.

For instructions on unpacking and installing the machine, please refer to the operating instructions "Setup".

NA only: The user can load HLT size paper by mounting the attachment to the paper feed tray.



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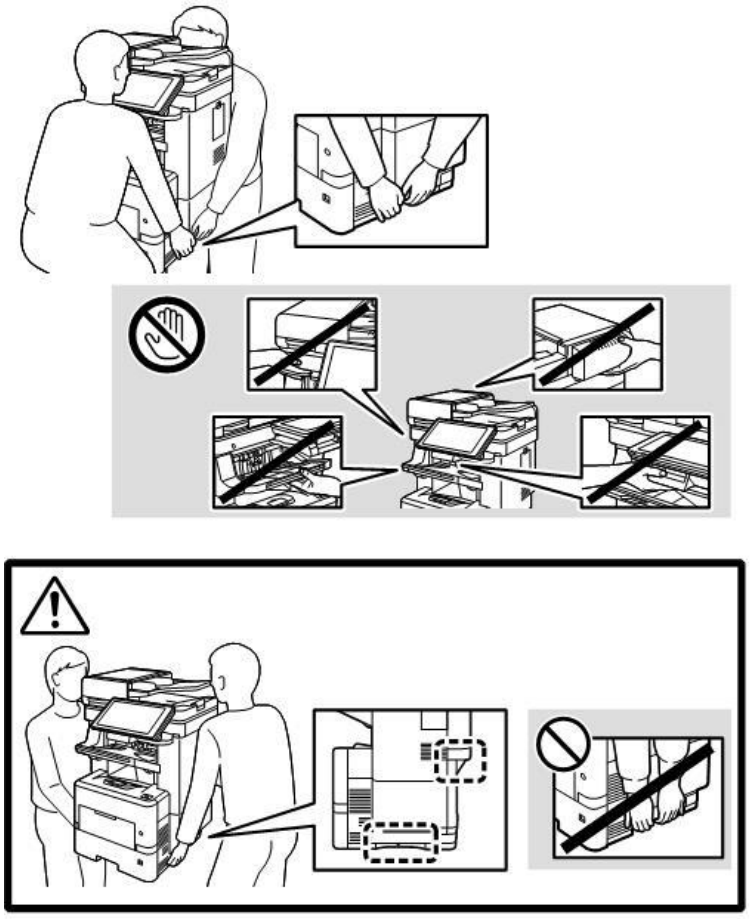
IM 600SRF: When lifting the machine, hold only the specified parts as shown below.



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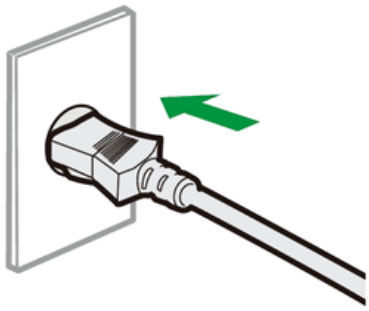
Turning the power on/Initial Settings

1. Connect the power cord to the power connector at the back of the machine.

2. Connect the power cord to the wall outlet.



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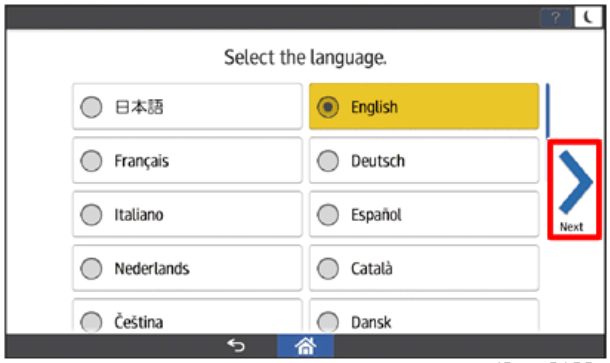
3. Press the main power switch.

The machine starts up.

4. Following the start screen, the language select screen appears.

Select the language to use, and then press [Next].

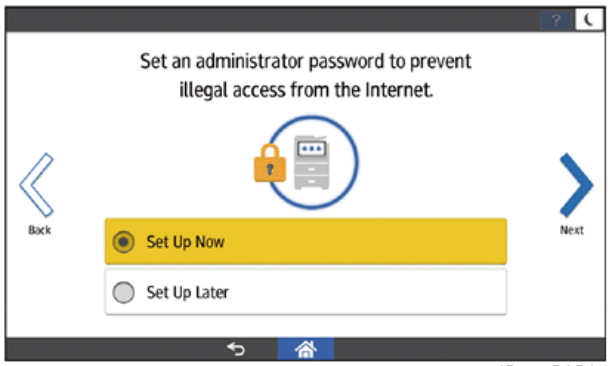


d0apc2130

5. The administrator password setting screen appears.

If your customer change the password soon, go to step 6.

If you want to skip this screen, go to step 7.



d0apc2131

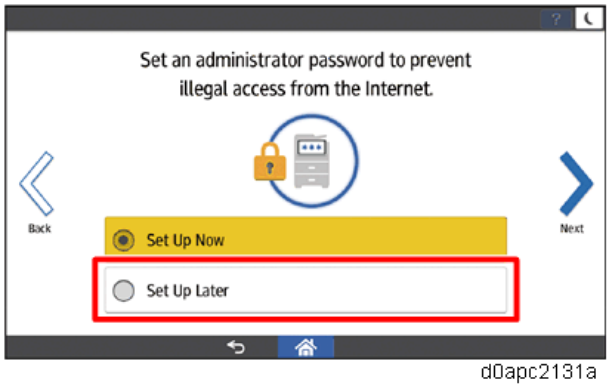
6. Press the [Set Up Now] and then press [Next]. Ask your customer to change the name of the administrator and the password as follows.

1. Press the [Administrator 1] and the [Password] dialogue boxes, enter the name and the password respectively.

2. Enter the name and the password again for confirming, and then press [OK] to register them.

3. Go to step 8.

7. Press [Set Up Later], and then press [Next] according to the instructions on the screen.



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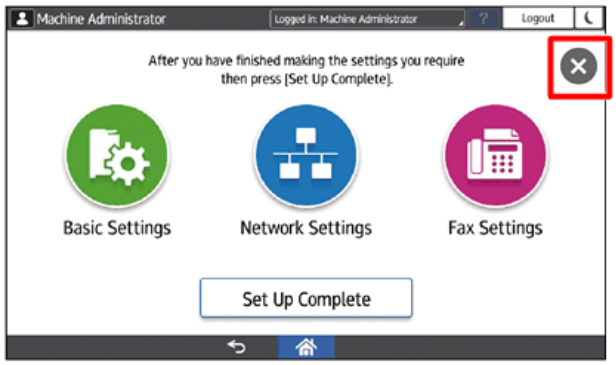
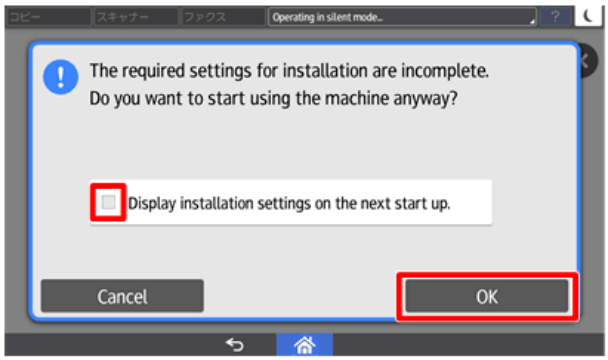
8. The Installation Settings screen appears.

Press [X].



d0apc2132

9. The following message is displayed. Uncheck the check box, and then press [OK].

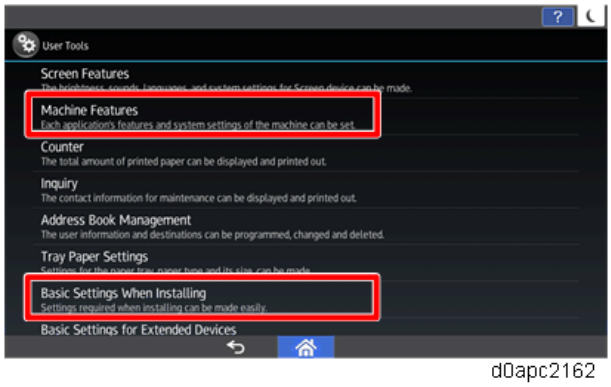


d0apc2139

10. The home screen appears.

11. Set the machine setting with one of the following menus.

- User Tools > Machine Features
- User Tools > Basic Settings When Installing

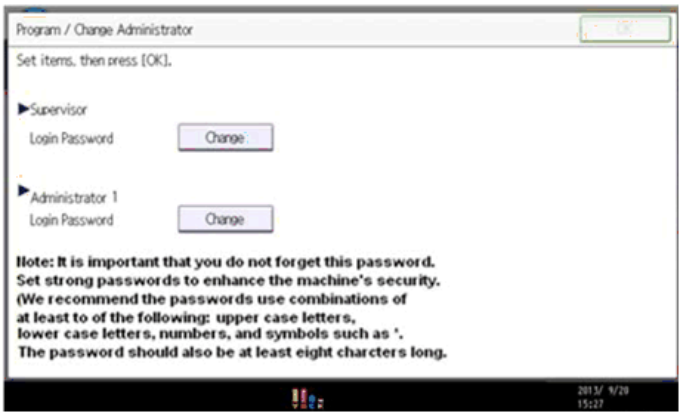


d0apc2162

Important

When [Set Up Later] on the administrator password setting screen in step 5 is selected, forcibly display the administrator password setting screen by the following procedure.

1. After the machine installation, enter the SP mode and execute the SP5-755-001 (Display Setting: Disp Administrator Password Change Scrn).
2. Power cycle the machine. The following Program/Change Administrator screen is displayed.



d296c2047

3. Ask your customer to set the supervisor and administrator password.
   If the Administrator/Supervisor Login password set, this Program/Change Administrator screen will disappear and the home screen is displayed.

Note

If a password is not necessary, this screen can be disabled with the following procedure.

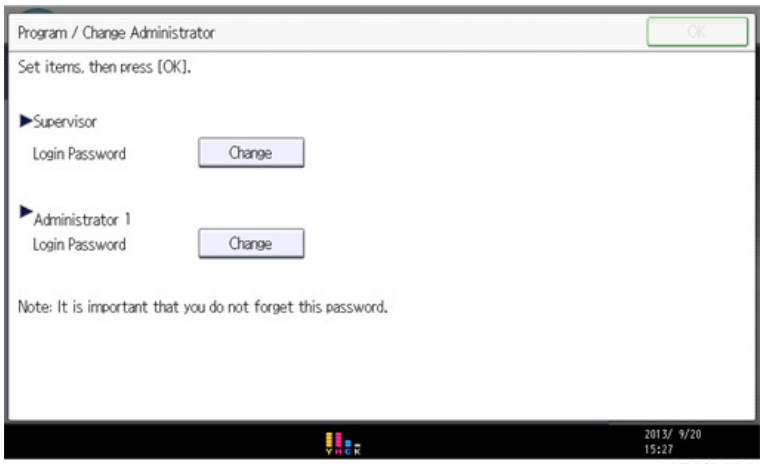
1. On the Program/Change Administrator screen, press [Change] next to Supervisor and then press [OK] without inputting any password.
2. Press [OK] again when the Confirm password screen is displayed.
3. For Administrator 1, do the same procedure as steps 1 and 2.
4. Press [OK]. The home screen is displayed.

Important Notice on Security Issues (IM 550F/IM 600F/IM 600SRF Only)

In order to increase the security of the MFP, and to ensure that the customer sets the administrator password, an administrator set/change prompt display appears at the first power-up.

Overview

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



d176f2100

When the customers set the administrator/supervisor login password, the screen disappears and the home display appears. The customer, however, can make this screen disappear with the following procedure if there is no need to set the password.

1. On the Program/Change Administrator screen, press [Change] next to Supervisor and then press [OK] without entering any password.
2. Press [OK] again when the Confirm password display appears.
3. For Administrator 1, perform the same procedure as steps 1 and 2.
4. Press [OK].
   The home display appears.
5. Turn OFF/ON the main power.

SP5-755-002 hides the administrator password input screen temporarily and continue the installation procedure without setting an administrator password. However, the Program/Change Administrator screen will appear every time you turn OFF/ON the main power if the password is not set.

Password Setting Procedure

Note

- For more details about this security issue, see "Notes on Using Multi-Function Printers Safely" supplied with the MFP.

Important

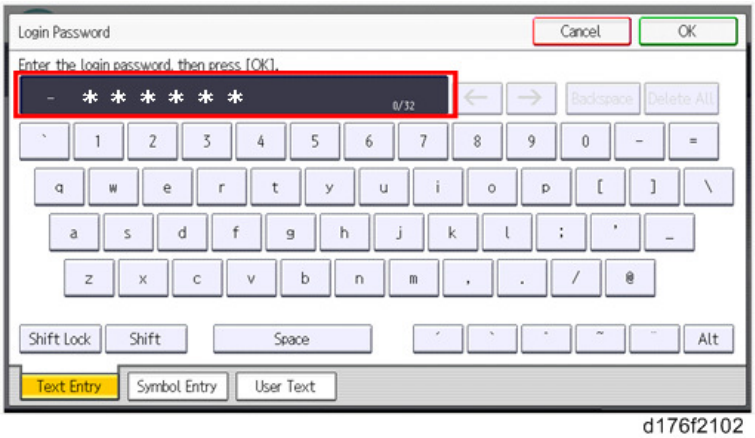
- When Supervisor / Administrator 1-4 passwords are configured via network, the "Change Supervisor login password" window will not be displayed.
- The passwords for Supervisor or Administrator 1 to 4 can be set via "System Settings". However, the Program/Change Administrator screen will appear every time the main power is turned ON if the passwords are set this way. We recommend that customers set the passwords via the network or the Program/Change Administrator screen.

1. Install the MFP.
2. Turn ON the main power.

3. Change the Supervisor login password.

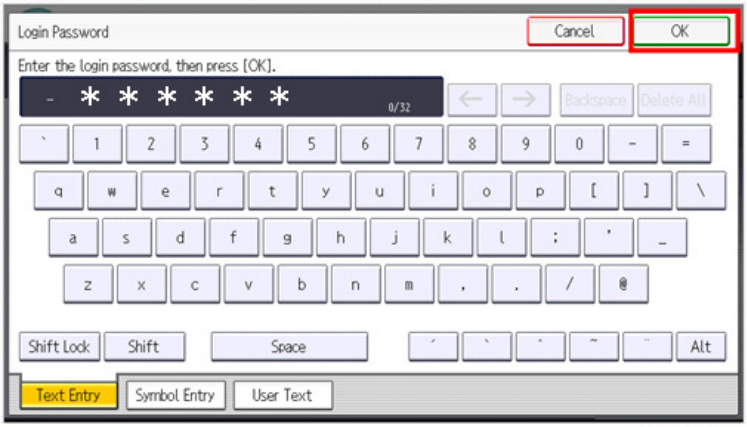
d176f2101

4. Enter a password.



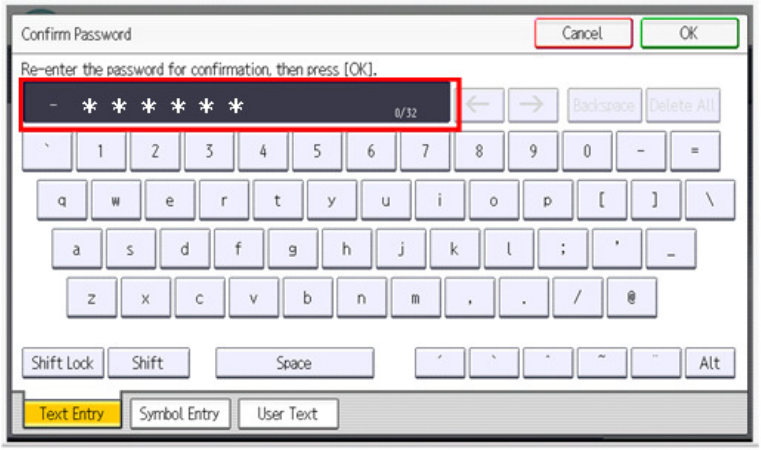
d176f2102

5. Press [OK].



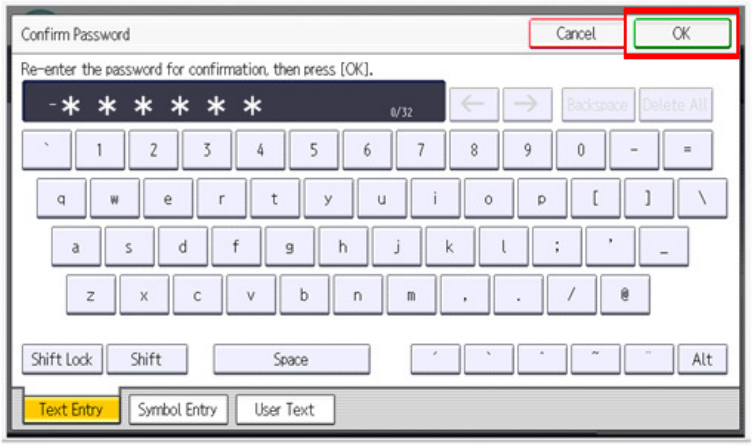
d176f2103

6. Confirm the password.



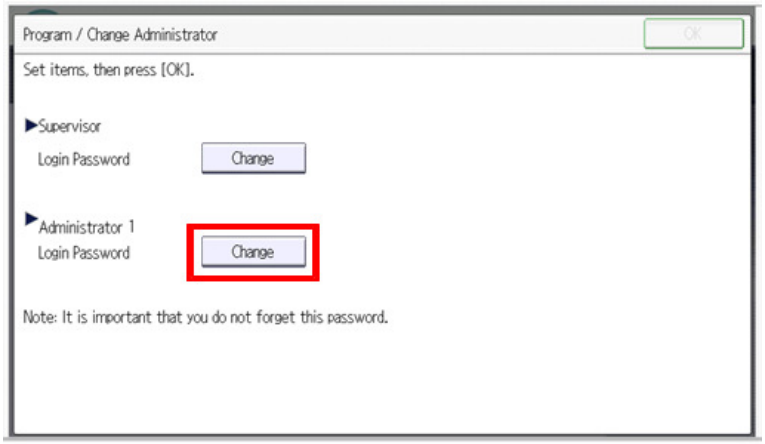
d176f2104

7. Press [OK].



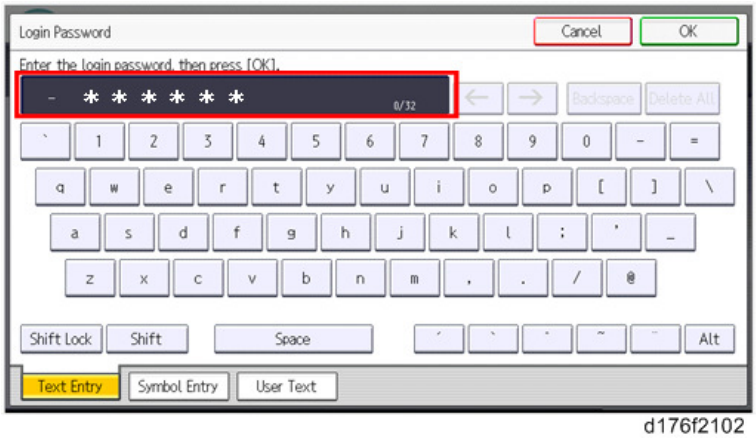
d176f2105

8. Change the Administrator 1 login password.



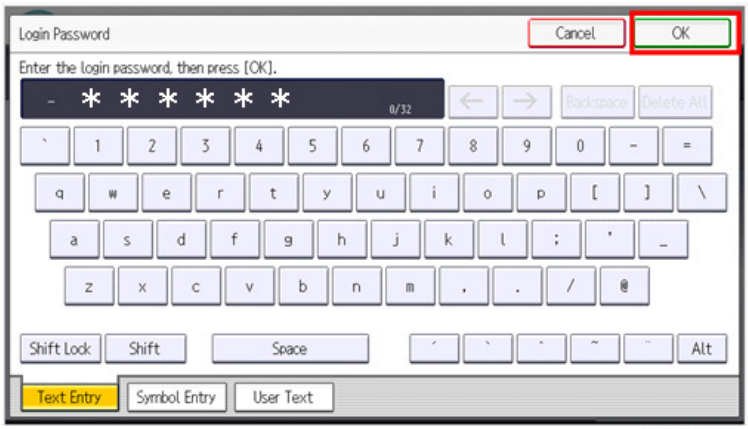
d176f2106

9. Enter the password.



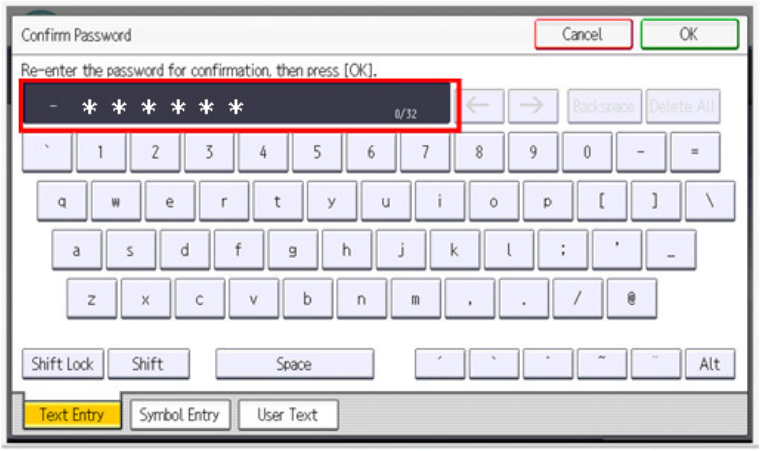
d176f2102

10. Press [OK].



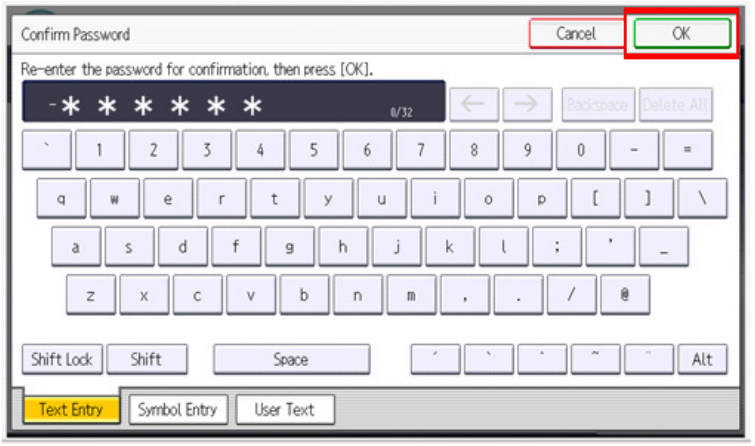
d176f2103

11. Confirm the password.



d176f2104

12. Press [OK].



d176f2105

13. Turn OFF/ON the main power.

Settings According to the Service Contract

Change the necessary settings depending on the customer's service contract.

Meter Click Charge

There are two ways to set up this function.

- **Meter click charge enabled (SP5-930-001 set to "1 (enabled)"; this is the default setting):** The counter can be displayed and printed by the customer. The service representative can then call the customer and ask for the counter.
- **Meter click charge disabled (SP5-930-001 set to "0 (disabled)"):** The counter cannot be displayed or printed by the customer. To check the counter, the service representative must print the SMC report (SP 5-990).

Item	SP No.	Function	Default
Meter Click Charge	SP5-930-001	Enables or disables Meter Click Charge. When enabled: • The counter menu shows immediately after you push the "Menu" key. In IM 550F/IM 600F/IM 600SRF, "Counter Method" (SP5-045-001) sets the type of the counter. • You can print the counter from the counter menu. When disabled: • The counter menu does not show.	1: ON
Meter Click Charge: Maintenance Kit	SP5-931-001	Enables or disables the PM alert for the maintenance kit. * This setting is unnecessary with this machine	1: No alert

Item	SP No.	Function	Default
		since this machine does not have the maintenance kit.	
Counter Method (IM 550F/IM 600F/IM 600SRF Only)	SP5-045-001	Specifies the counter display method. • 0: 1 counter mode Displays only the total counter. • 1: 2 counter mode Displays the total counter and the print counter.	0: 1 counter mode
Service Tel: Telephone/Facsimile	SP5-812-001, -002	-001: shows or sets the telephone number of the service representative. -002: shows or sets the fax number of the service station. This number is displayed on the error message screen when an SC occurs.	-

Moving the Machine

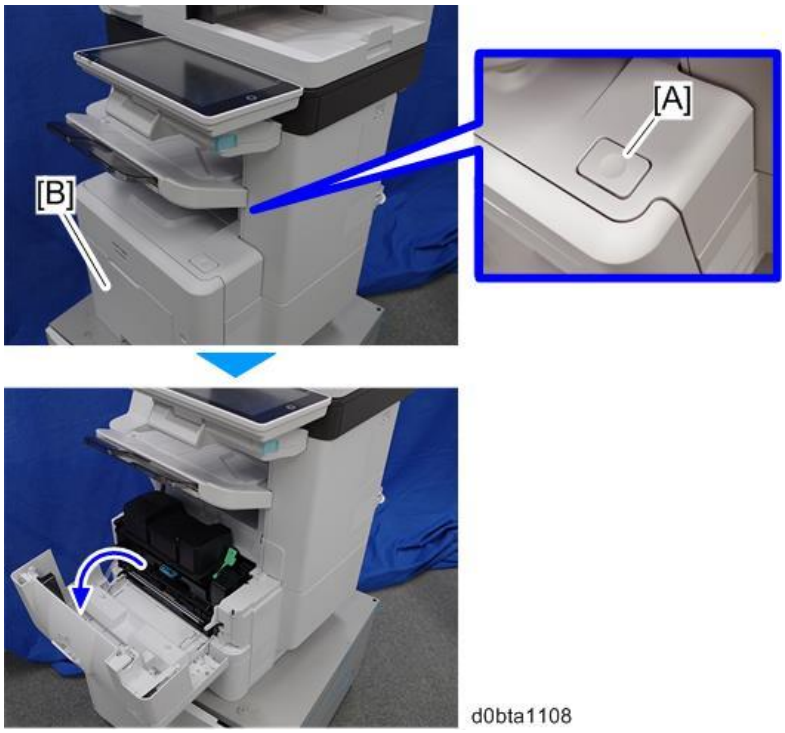
This section shows you how to manually move the machine from one floor to another floor. See the section "Transporting the Machine" if you have to pack the machine and move it a longer distance.

- Turn OFF the main power and pull out the power plug.
- Close all the covers and trays.
- Remove peripherals physically attached to the main machine: paper feed unit.
- Keep the machine horizontal and move it slowly. Tipping or excessive vibrations may damage the machine.

Transporting the Machine

1. Open the front cover.

IM 550F/IM 600F/IM 600SRF: Push the button [A] and open the front cover [B].



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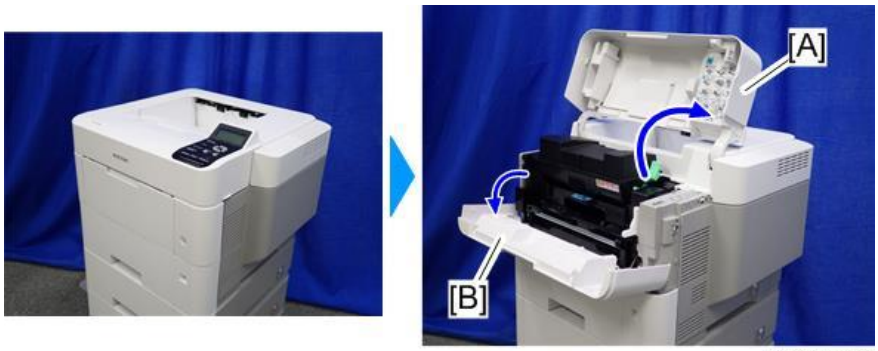
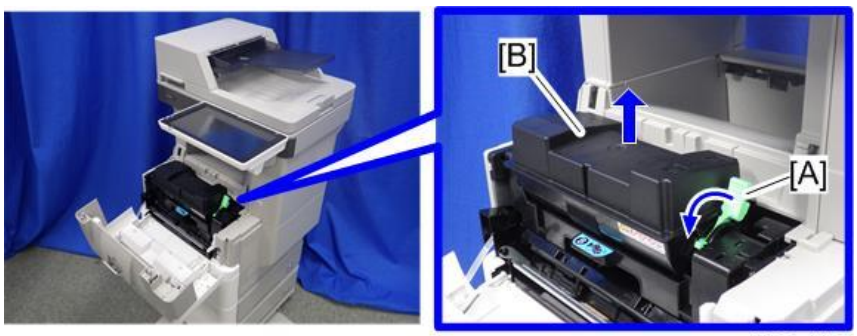
P 800/801: Open the upper cover [A], and then open the front cover [B].



d255a1432

2. Release the lock lever [A] by rotating it towards you, and then remove the toner cartridge [B]. This prevents toner leakage caused by vibration during transport.

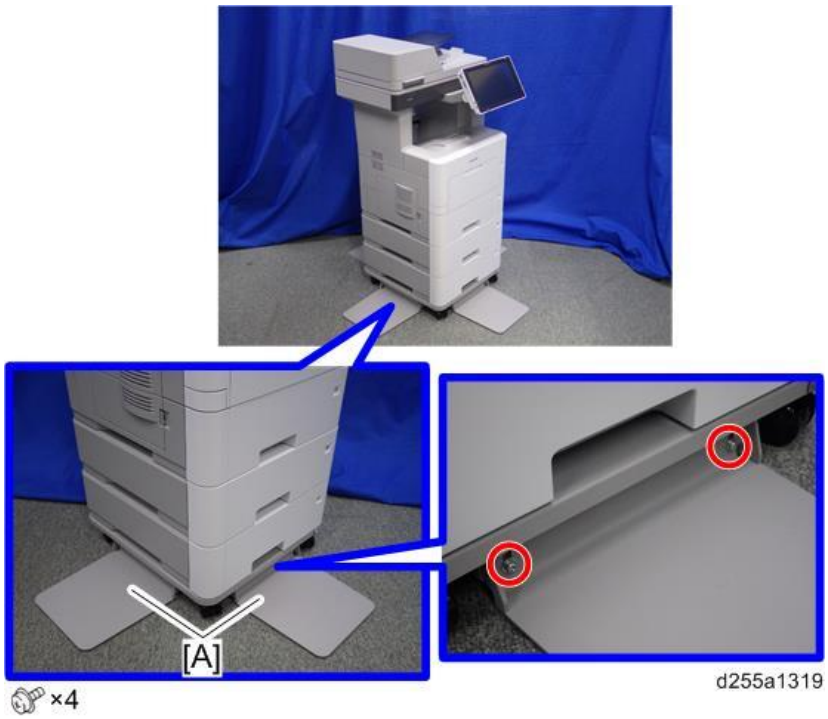


d255a1125

3. Make sure there is no paper left in the paper trays. Then fix down the bottom plates with a sheet of paper and tape.

4. If Caster Table Type M40 is installed, remove the four stands [A].

Front-left side



Rear-right side

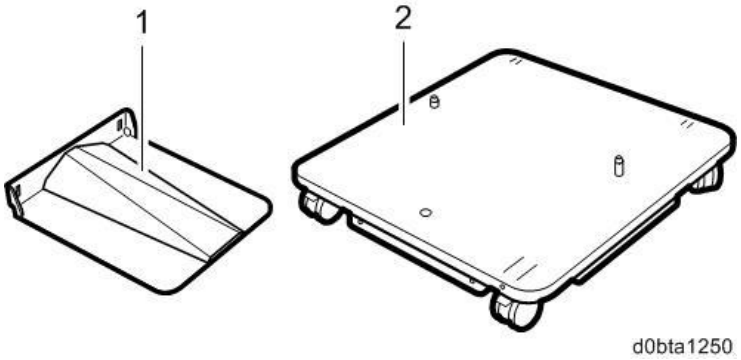
5. Lift the machine, and then move it horizontally to the new location.

6. If you have removed the stands for Caster Table Type M40, reattach them.

Caster Table Type M40

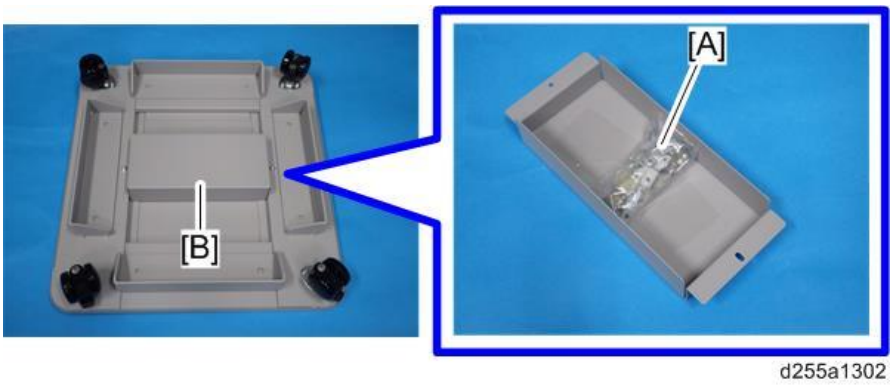
Accessory Check

No.	Description	Q'ty
1	Stands	4
2	Caster table	1
-	Manual: Installation Guide	1
-	RoHS sheet	1
-	RoHS decal	1

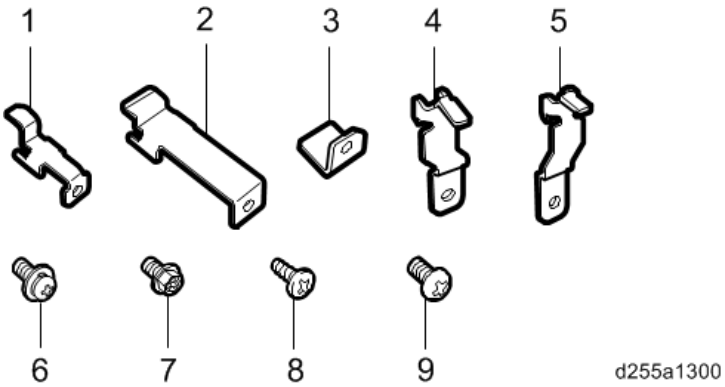


Note

- The joint brackets and screws [A] for installation are stored in the accessory box [B] on the underside of the caster table.



- The following items are stored in the accessory box.



No.	Description	Q'ty
1	Joint bracket A	2
2	Joint bracket B	1
3	Joint bracket C	4
4	Joint bracket D	4
5	Joint bracket E	4
6	Screws: polished round/spring (M4×10)	8
7	Hexagon flange screws (M4×8)	3
8	Tapping bind screws (3×8)	4
9	Screws (M3×6)	8

Installation Procedure

For instructions on unpacking and installing the Caster Table Type M40, please refer to the operating instructions "Caster Table Type M40 Installation Guide".

When installing with the paper feed unit

Installation by service representative may be required when installing Caster Table Type M40 with Paper Feed Unit PB1160, depending on the machine configuration.

Machine Configuration	IM 600SRF	IM 550F/600F		P 800/801	
		Printer only	With **1** to 4 PFU PB1160	Printer only, or with **1** PFU PB1160	With **2** to 4 PFU PB1160
Who can install the caster table	Service representative*1	End-user	Service representative*1	End-user	Service representative*1

*1 The attaching stands and connecting parts need to be installed to prevent the machine from falling over. If it falls or topples over, an injury might occur. For instructions on installing Paper Feed Unit PB1160 and Caster Table Type M40, please refer to Installation Procedure.

Paper Feed Unit PB1160

Accessory Check

No.	Description	Q'ty
1	Paper feed unit	1
-	Manual: Installation Guide	1
-	EMC address decal	1

d255a1299

Installation Procedure

For instructions on unpacking and installing Paper Feed Unit PB1160, please refer to the operating instructions "Setup".

When installing with the caster table

Installation by service representative may be required when installing Paper Feed Unit PB1160 with Caster Table Type M40, depending on the machine configuration.

Machine Configuration	IM 600SRF	IM 550F/600F		P 800/801	
		Printer only	With **1** to 4 PFU PB1160	Printer only, or with **1** PFU PB1160	With **2** to 4 PFU PB1160
Who can install the caster table	Service representative*1	End-user	Service representative*1	End-user	Service representative*1

*1 The attaching stands and connecting parts need to be installed to prevent the machine from falling over. If it falls or topples over, an injury might occur. For instructions on installing Paper Feed Unit PB1160 and Caster Table Type M40, please refer to the procedure described in this section.

Installing the optional paper feed unit on the caster table

⚠CAUTION

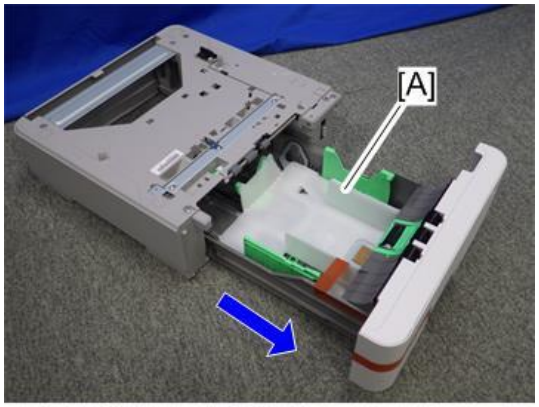
- Turn OFF the main power, and unplug the machine power cord before starting the following

procedure.

- You need two or more persons to lift the main machine. The main machine is highly unstable when it is lifted by one person and may cause injury or property damage.
- Be sure to hold the specified positions when lifting the machine.

1. Pull out the paper feed tray [A] of the optional paper feed unit.

2. Remove all tape and retainers.



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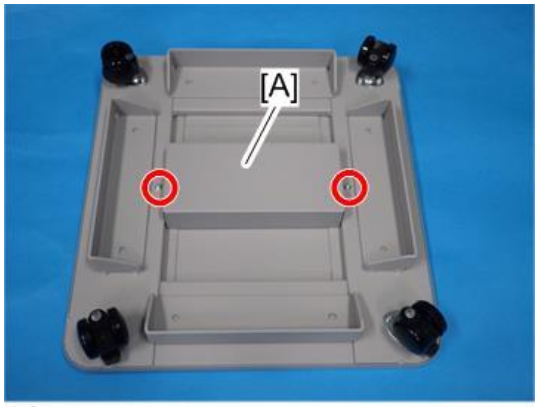
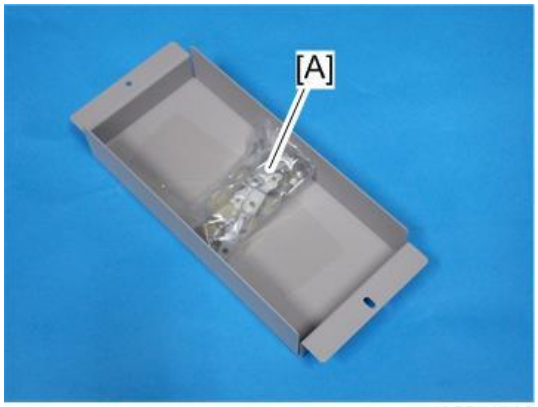
3. Turn over the caster table, and then remove the accessory bracket [A].



×2 d255a1008

4. Remove the package [A] (which contains joints, brackets, and screws) from the accessory bracket.



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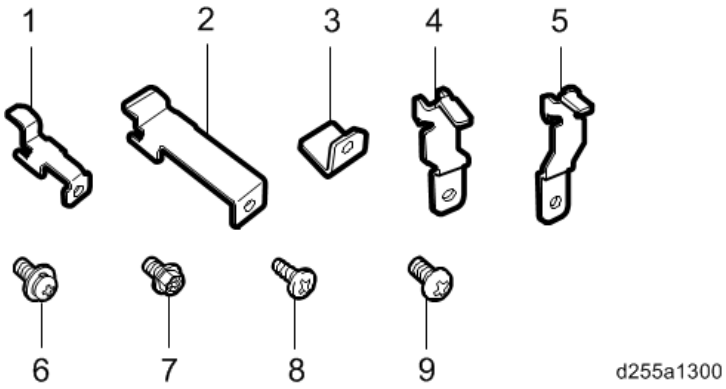
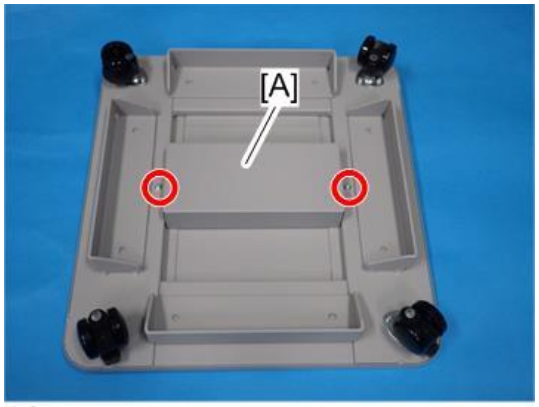
5. Check the following items in the package.



No.	Description	Q'ty
1	Joint bracket A	2
2	Joint bracket B	1
3	Joint bracket C	4
4	Joint bracket D	4
5	Joint bracket E	4
6	Screws: polished round/spring (M4×10)	8
7	Hexagon flange screws (M4×8)	3
8	Tapping bind screws (3×8)	4
9	Screws (M3×6)	8

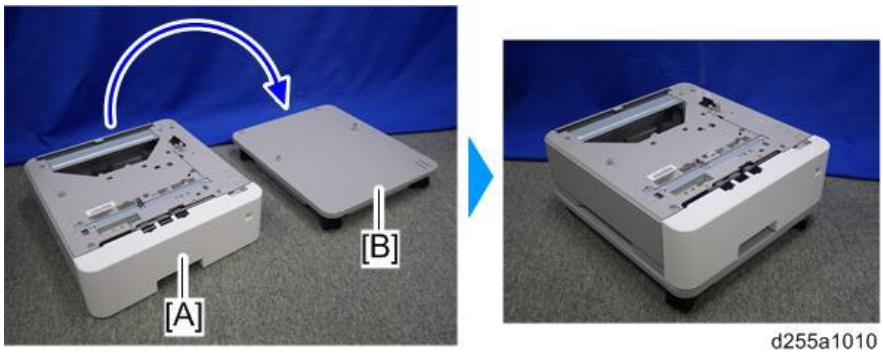
6. Install the accessory bracket on the caster table.

Use the screws removed in Step 3.



×2 d255a1008

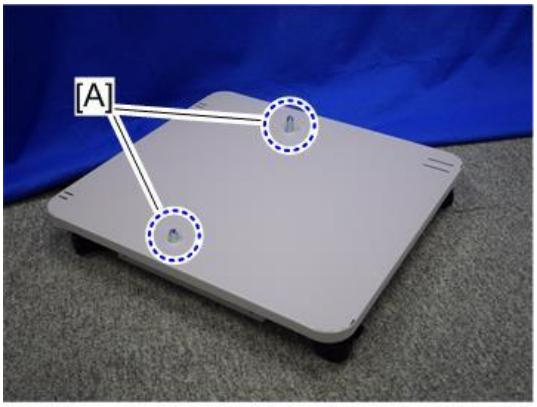
7. Install the optional paper feed unit [A] on the caster table [B].



d255a1010

Note

- There are two upright pins [A] on the caster table. Align them with the holes in the underside of the optional paper feed unit.



d255a1024

- The hole [A] in the caster table indicates the front side of the caster table.

d255a1025

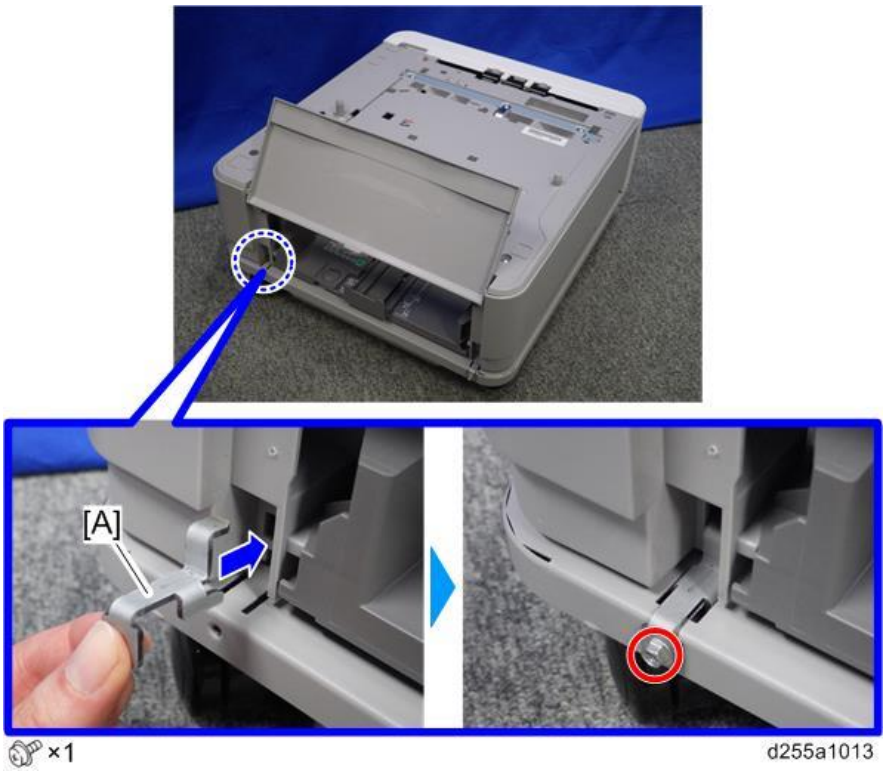
8. Open the rear cover [A] of the optional paper feed unit.

d255a1011

9. Install the joint bracket A [A] on the rear side with the hexagon flange screw (M4×8).

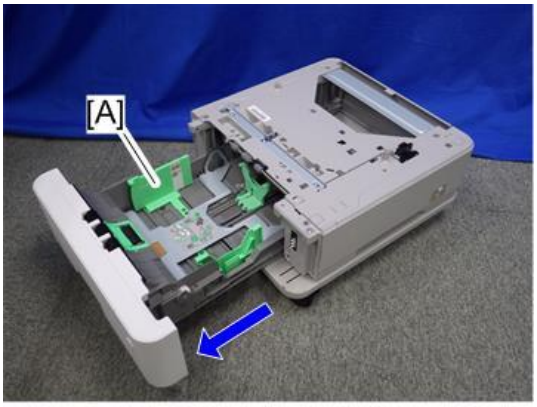
d255a1012

10. Install the joint bracket A [A] on the rear side with the hexagon flange screw (M4×8).

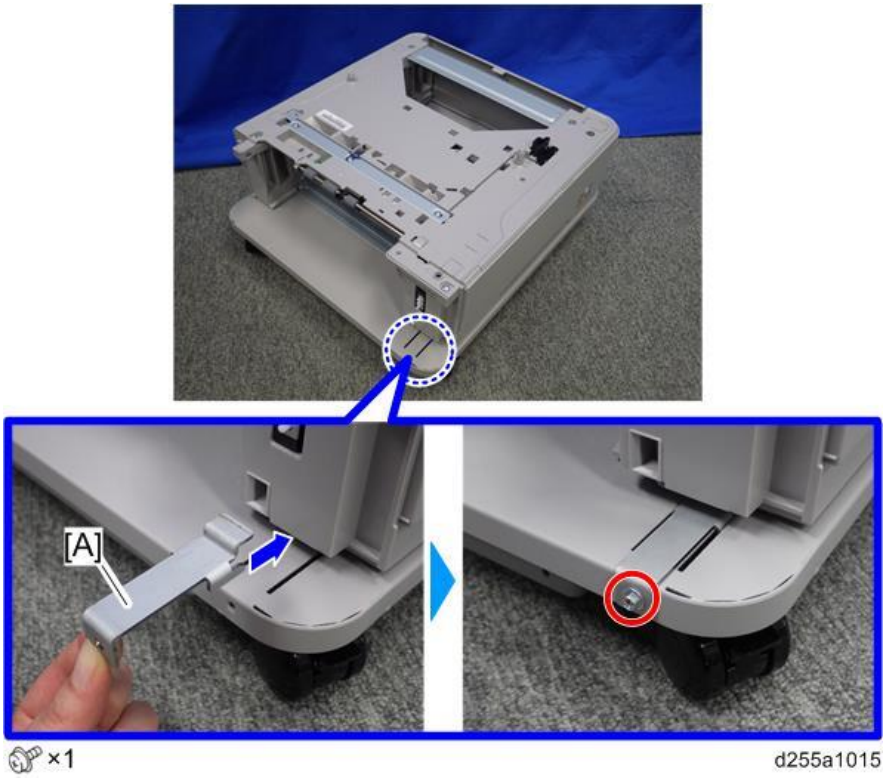


11. Close the rear cover of the optional paper feed unit.

12. Remove the paper feed tray [A] by pulling it out.



13. Install the joint bracket B [A] on the front side with the hexagon flange screw (M4×8).

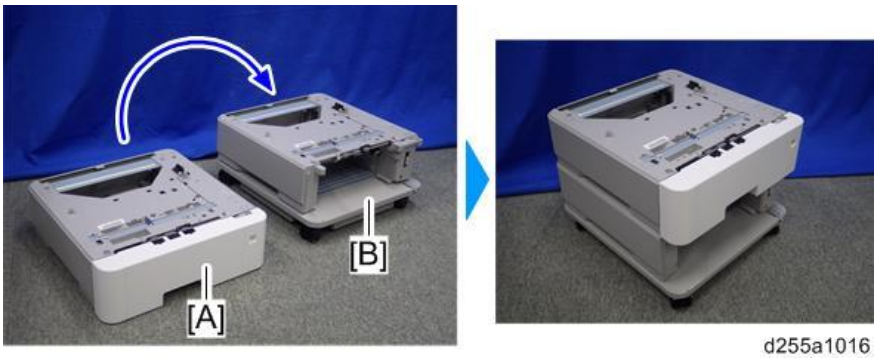


Note

- When you install two or more optional paper feed units, please refer to When installing two or more optional paper feed units.
- When you install only one optional paper feed unit, please refer to Installing the main machine on the optional paper feed unit.

When installing two or more optional paper feed units

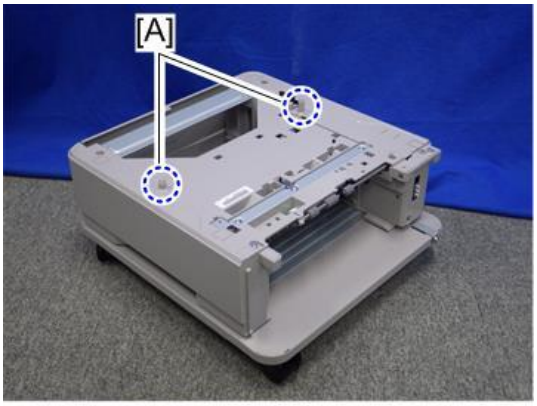
1. Install the optional paper feed unit [A] on the lower paper feed unit [B].



Note

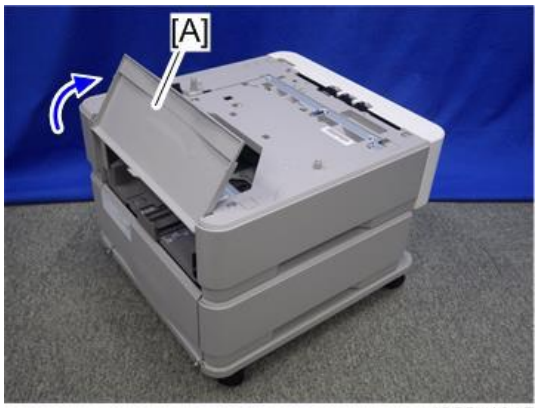
- There are two upright pins [A] on the optional paper feed unit. Align the upright pins of the lower paper feed unit with the holes in the underside of the upper paper feed unit. Then

carefully lower the upper paper feed unit.



d255a1048

2. Open the rear cover [A] of the optional paper feed unit.



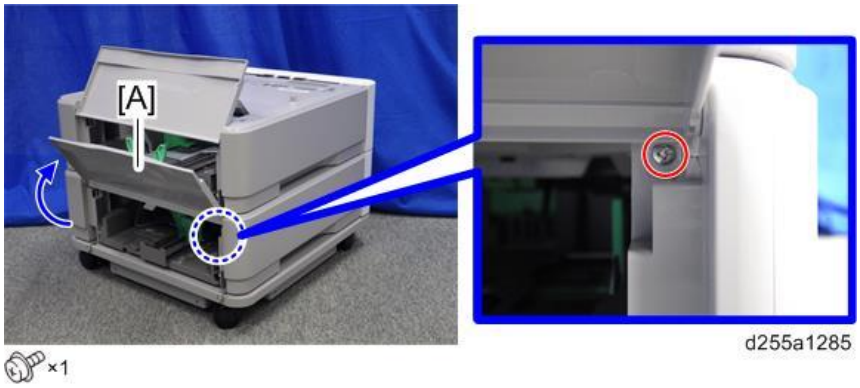
d255a1017

3. Install the joint bracket E [A] on the rear right side to secure the optional paper feed unit and lower paper feed unit.

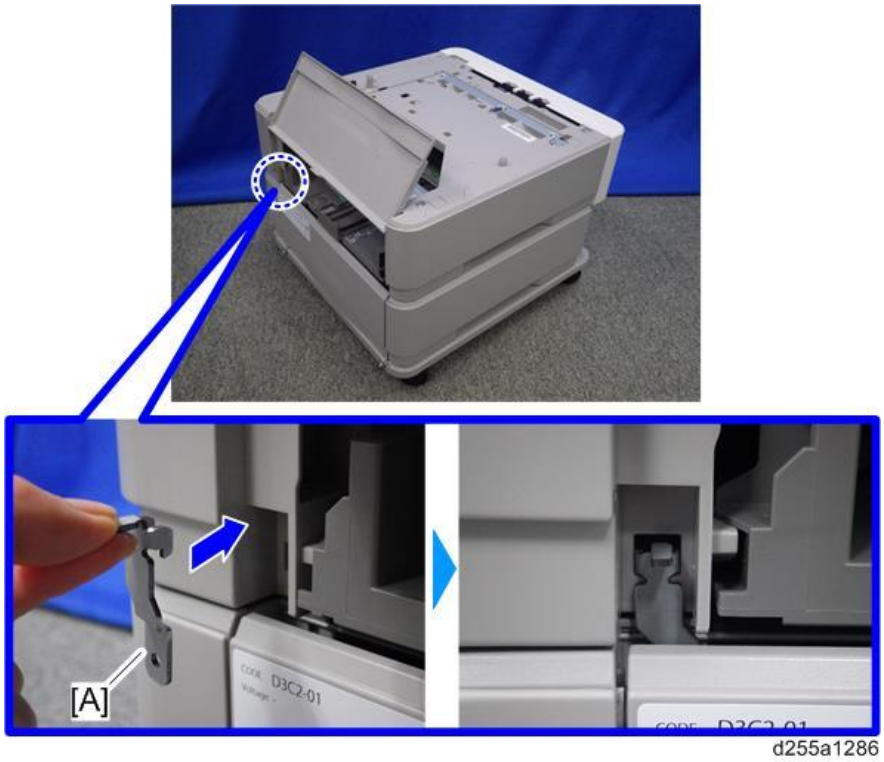
d255a1284

4. Open the rear cover [A] of the lower paper feed unit, and then secure the joint bracket installed in

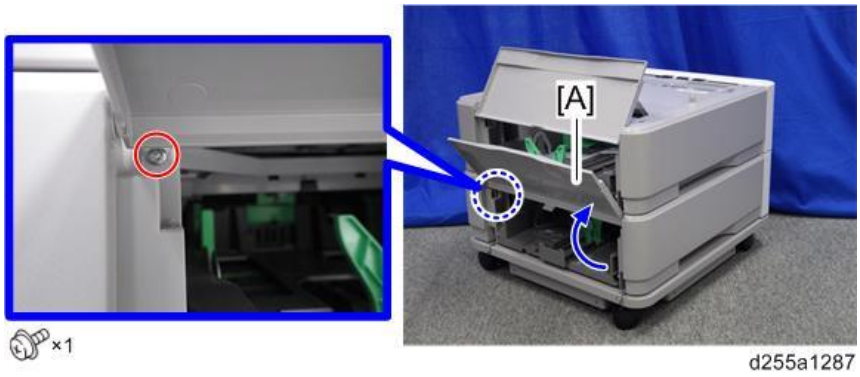
the previous step with the screw (M3×6).



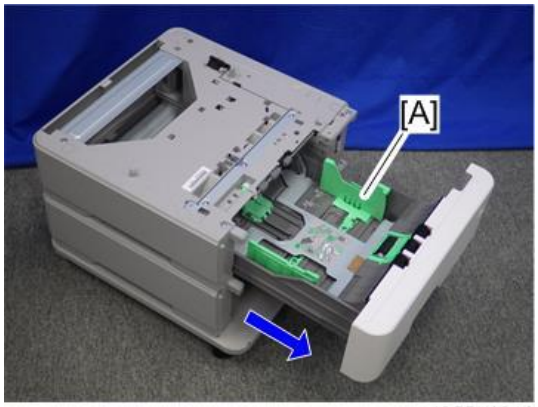
5. Install the joint bracket D [A] on the rear left side to secure the optional paper feed unit and lower paper feed unit.



6. Open the rear cover [A] of the lower paper feed unit, and then secure the joint bracket installed in the previous step with the screw (M3×6).

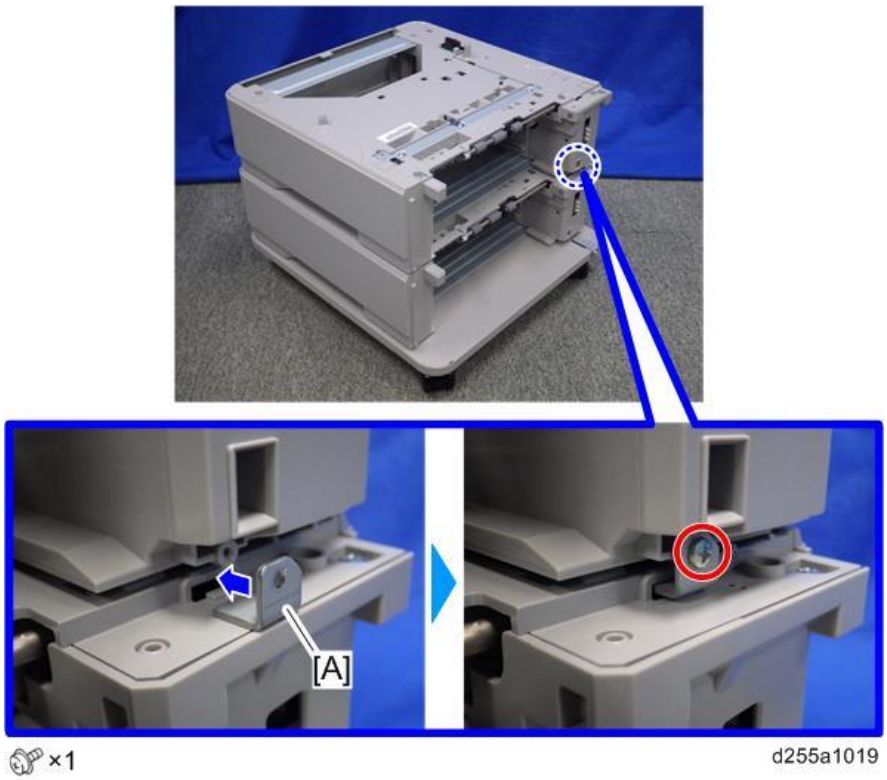


7. Remove the paper feed tray [A] by pulling it out.



d255a1018

8. Install the joint bracket C [A] on the front side to secure the upper paper feed unit and lower paper feed unit with the tapping bind screw (3×8).

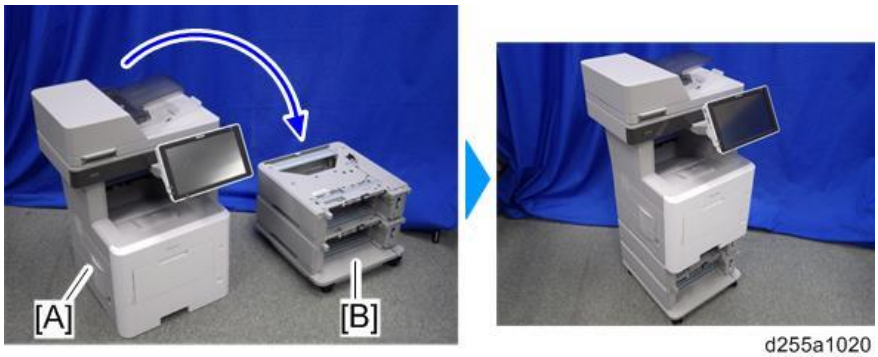


d255a1019

9. If you install more optional paper feed units, repeat Steps 1 to 8.

Installing the main machine on the optional paper feed unit

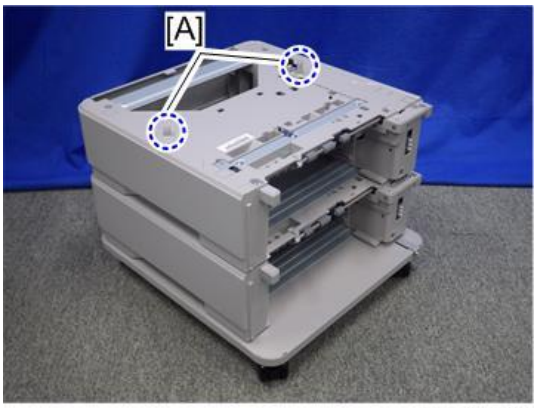
1. Install the main machine [A] on the optional paper feed unit [B].



d255a1020

Note

- There are two upright pins [A] on the optional paper feed unit. Align them with the holes in the underside of the main machine, and then carefully lower the machine.

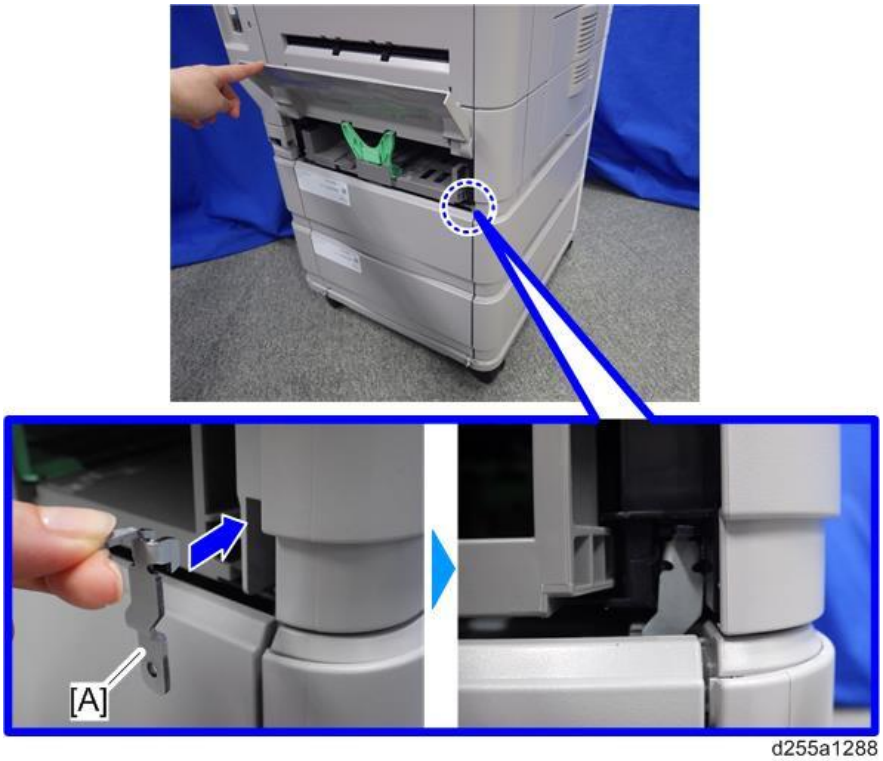


d255a1026

2. Open the rear lower cover [A] of the main machine.

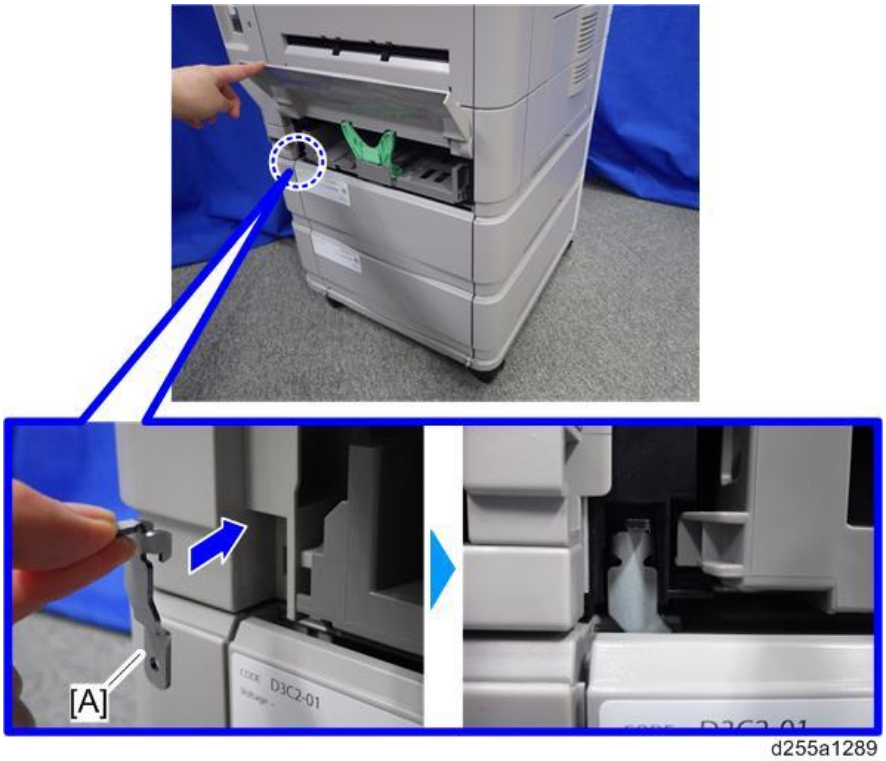
d255a1023

3. Install the joint bracket E [A] on the rear right side to secure the main machine and paper feed unit.



4. Open the rear cover [A] of the paper feed unit, and then secure the joint bracket installed in the previous step with the screw (M3×6).

5. Install the joint bracket D [A] on the rear left side to secure the main machine and paper feed unit.



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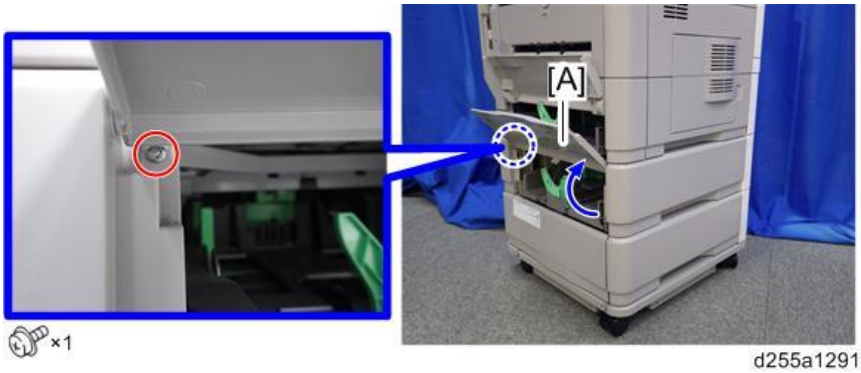
6. Open the rear cover [A] of the paper feed unit, and then secure the joint bracket installed in the previous step with the screw (M3×6).



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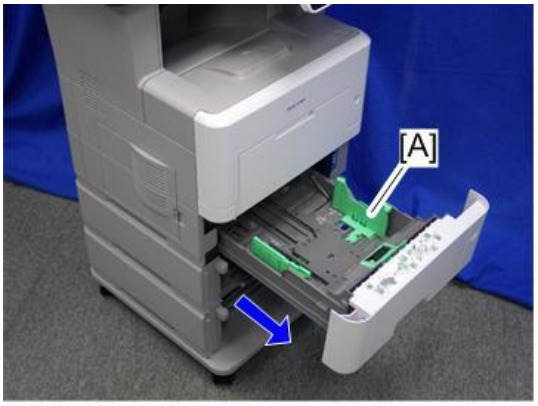
7. Remove the paper feed tray [A] of the main machine by pulling it out.



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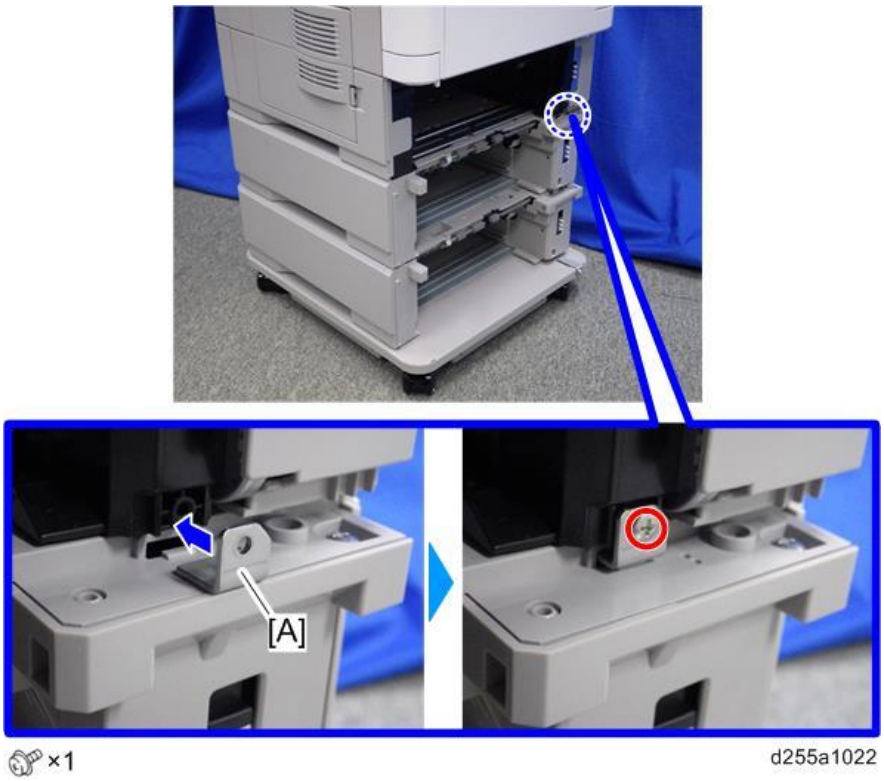
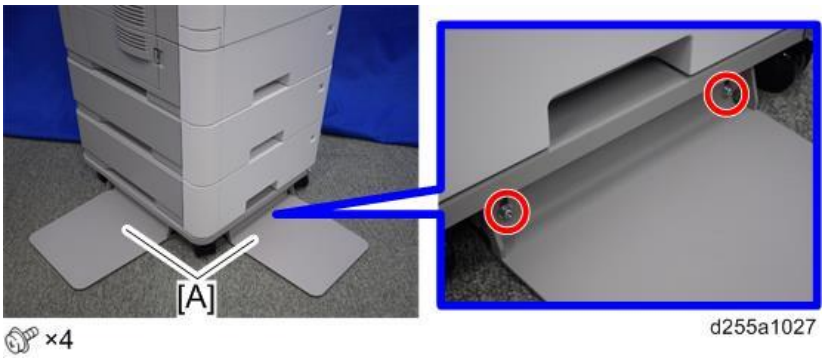
8. Install the joint bracket C [A] on the front side to secure the main machine and optional paper feed

unit with the tapping bind screw (3×8).



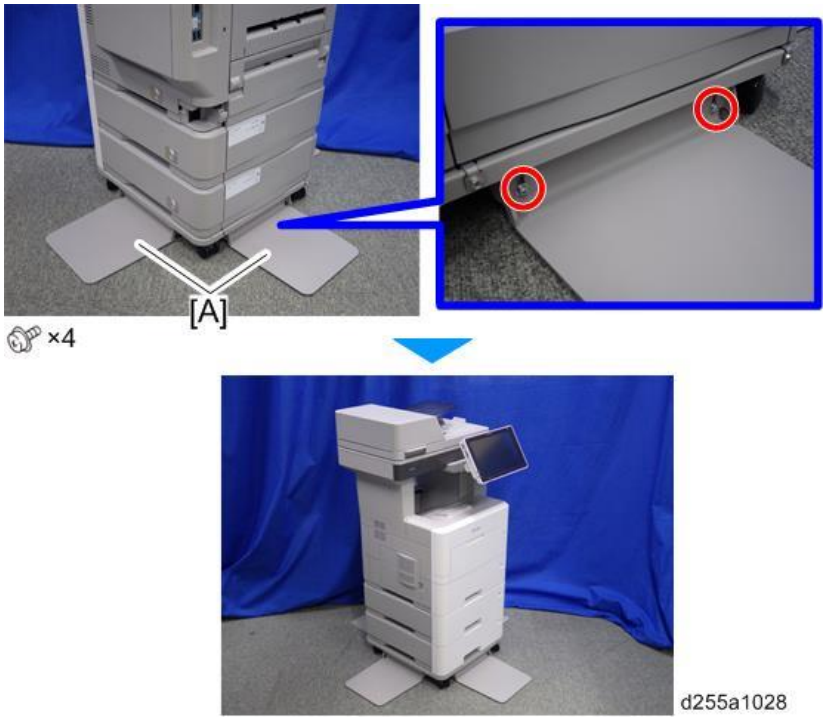
9. Put back the paper feed trays.

10. Attach the two stands [A] provided with the caster table on the front and left sides with the screws (polished round/spring (M4×10)).



11. Attach the two stands [A] provided with the caster table on the rear and right sides with the screws

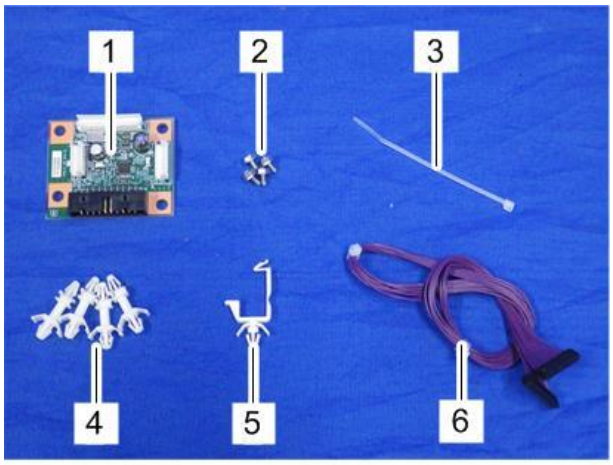
(polished round/spring (M4×10)).



Optional Counter Interface Unit Type M12 (IM 550F/600F/600SRF Only)

Accessory Check

No.	Description	Q'ty
1	MKB board	1
2	Tapping screw: M3x6	4
3	Cable tie	1
4	Plastic standoff	4
5	Harness clamp: LWS-0711	1
6	Harness	1
-	EMC address decal	1



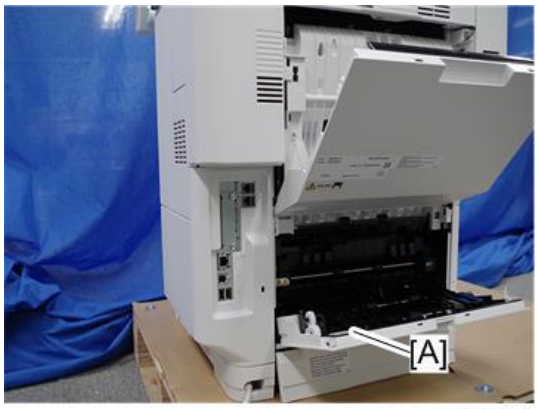
d255a1029

Installation Procedure (IM 600SRF)

⚠CAUTION

Turn OFF the main power, and unplug the machine power cord before starting the following procedure.

1. Open the rear upper cover [A].



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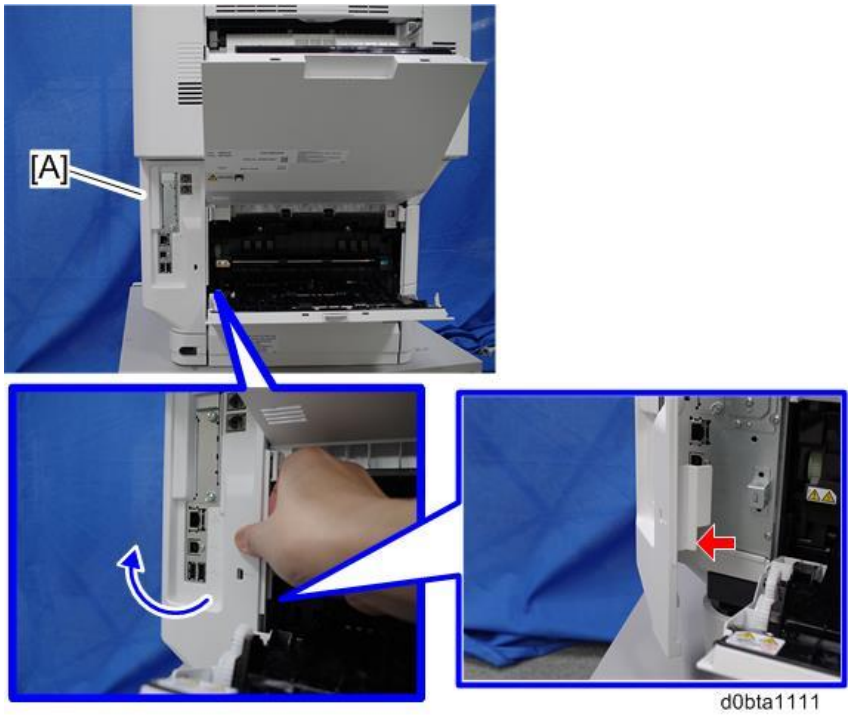
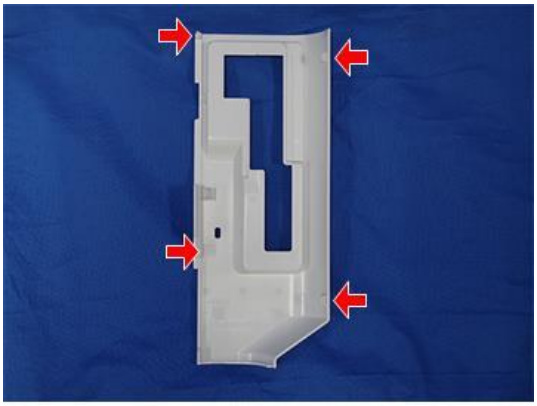
2. Release the hook by opening the right side of the cover, and then remove the cover [A] by rotating

it in the direction of the blue arrow.



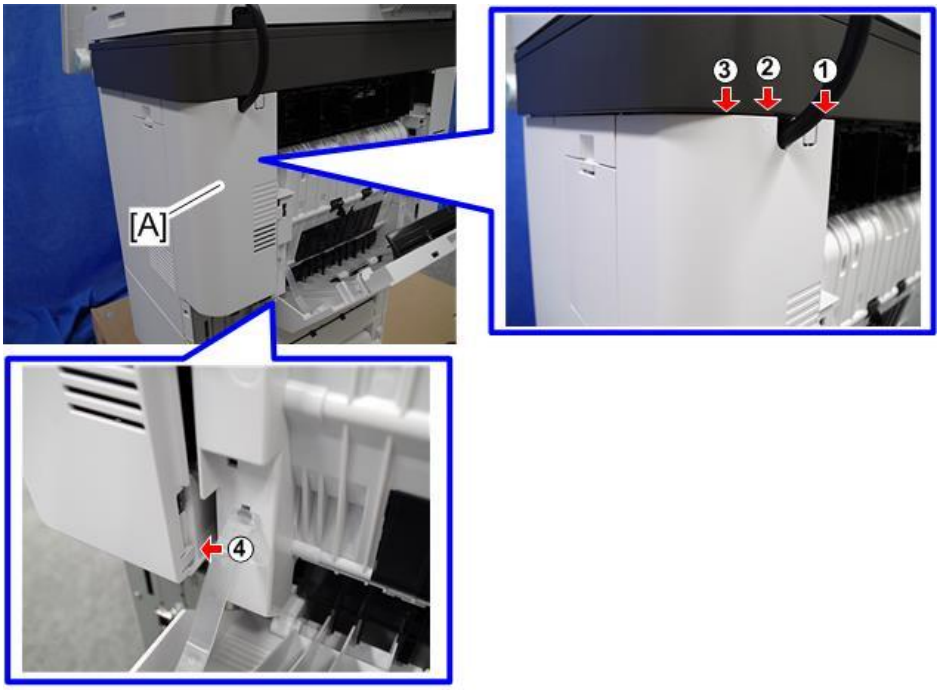
Note

- Be careful not to damage the hooks on the inside of the controller cover when you remove or install the controller cover.



3. Insert a flathead screwdriver in the order of ①, ②, and ③ to release the three hooks of the rear right stay [A].

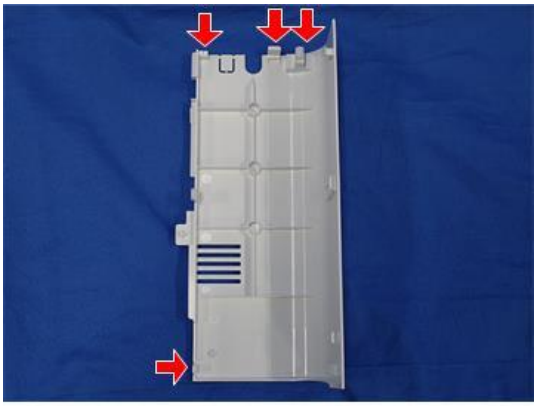
4. Release the hook ④ and remove the rear right stay [A].



d0bta1075

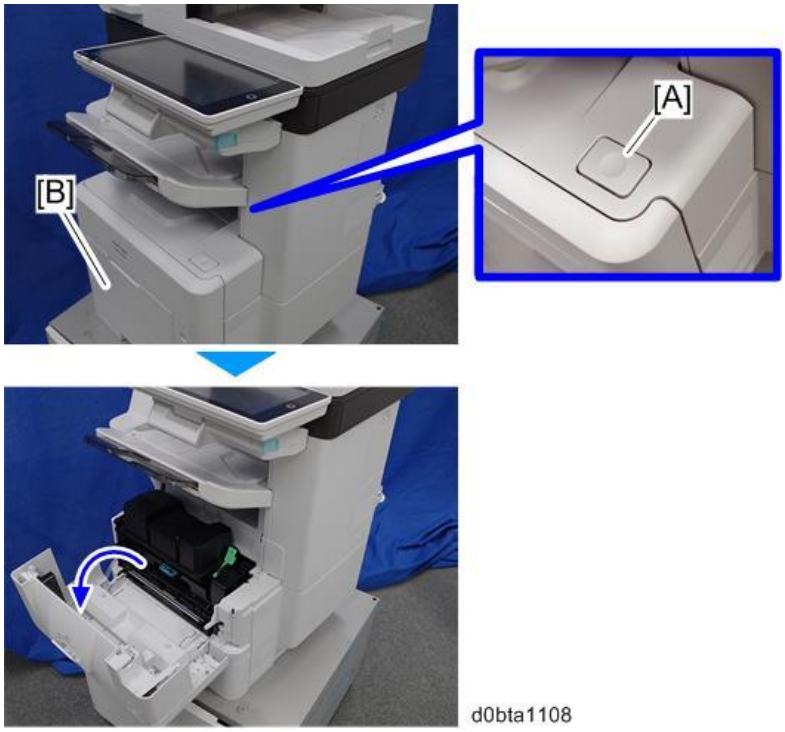
Note

- Be careful not to damage the hooks on the inside of the rear right stay when you remove or install the rear right stay.



d0bta1076

5. Push the button [A] and open the front cover [B].

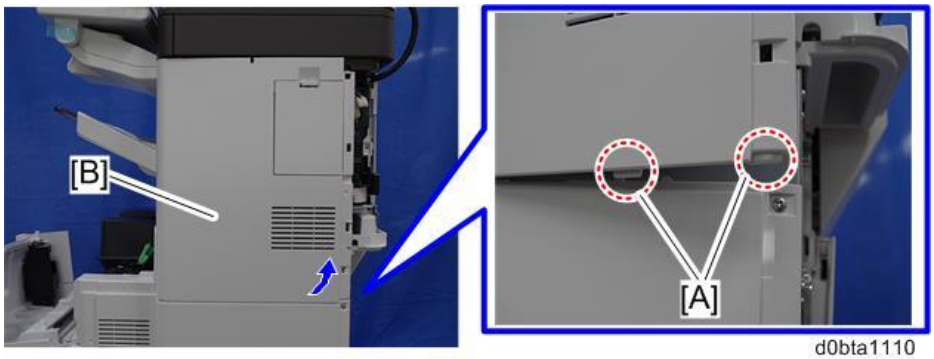


d0bta1108

6. Release the hook [A] of the right upper cover [B] by opening the cover in the direction of the arrow.

d0bta1109

7. Release the hooks [A] of the right upper cover [B] by lifting the bottom right of the cover, and then remove the cover.



d0bta1110

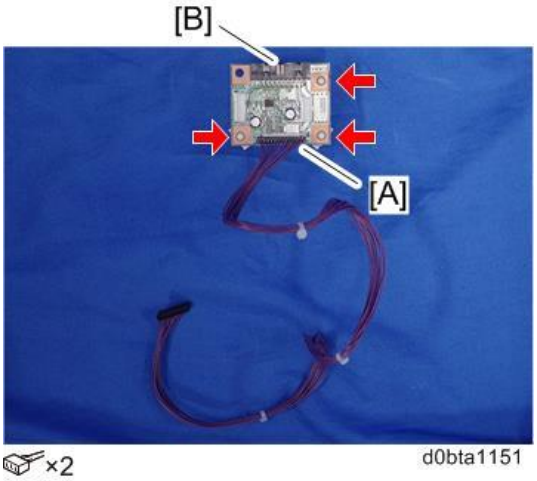
Note

- Be careful not to damage the hooks on the inside of the right upper cover when you

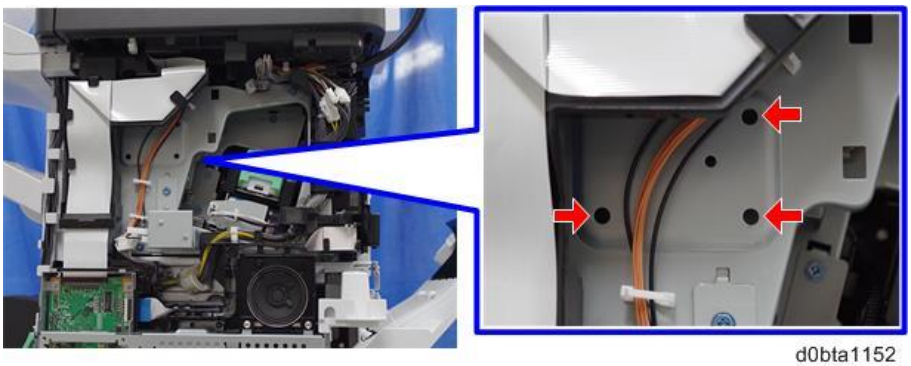
remove or install the right upper cover.

8. Remove the bracket [A].

9. Connect the harness (13 pins) to CN3 [A] and connect the harness from the optional counter device to CN4 [B] on the optional counter interface board. Then, install three plastic standoffs as shown below. Do not install the stud stay in the top left hole.

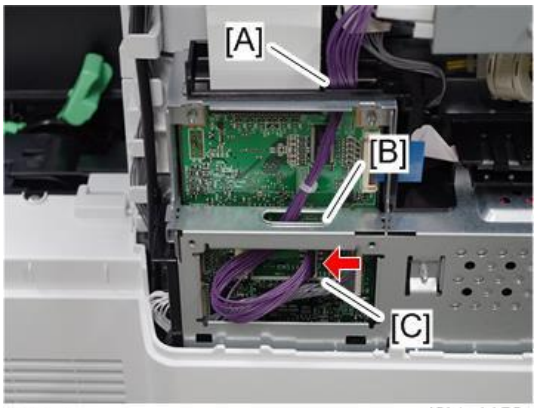


10. Install the three plastic standoffs in the three holes of the mainframe.



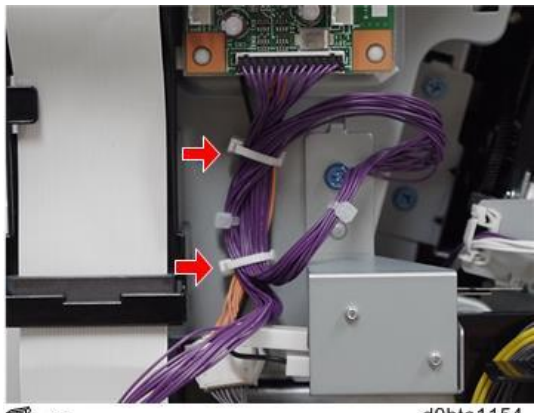
d0bta1152

11. Pass the harness through the holes [A] and [B], and then connect the other end to CN112 [C] on the BiCU.



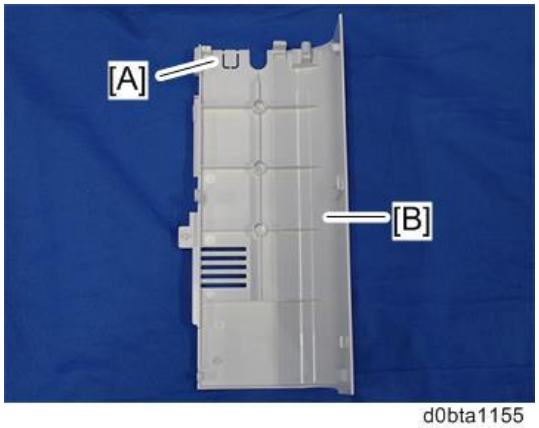
×1 d0bta1153

12. Clamp the harness using the clamps installed in the mainframe.



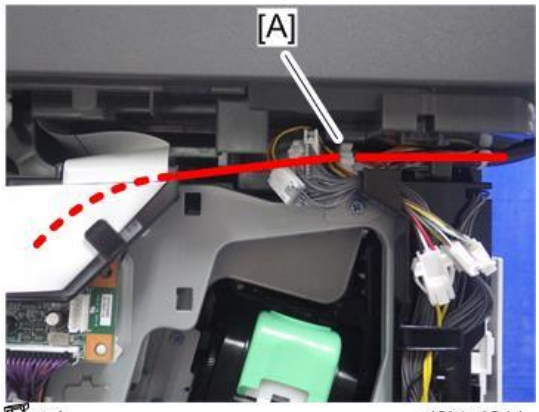
×2 d0bta1154

13. Remove the knockout [A] of the rear right stay [B] with a pair of nippers.



d0bta1155

14. Route the harness of the optional counter device as shown below, clamp it with the existing clamp [A], and pass it through the rear right stay using the hole opened in step 13.



×1 d0bta1311

15. Reassemble the machine.

Installation Procedure (IM 550F/600F)

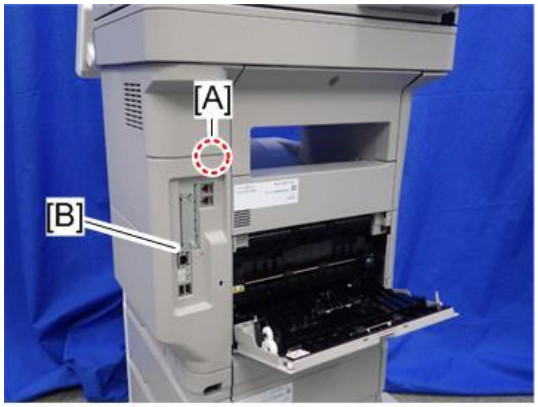
⚠CAUTION

- Turn OFF the main power, and unplug the machine power cord before starting the following procedure.

1. Open the rear upper cover [A].

d255a1030

2. Insert a flathead screwdriver into [A] to release the hook on the inside of the controller cover [B].



d255a1080

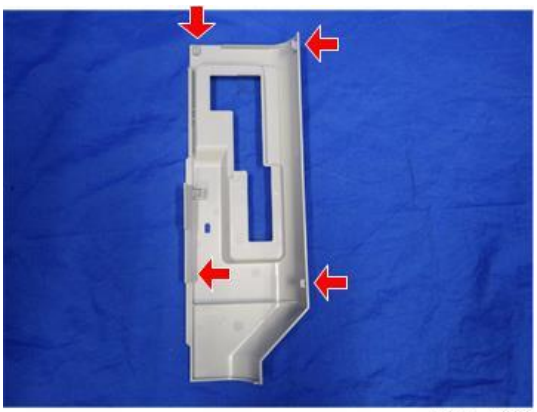
3. Release the hook by opening the right side of the cover, and then remove the cover [A] by rotating it in the direction of the blue arrow.

d255a1032

Note

- Be careful not to damage the hooks on the inside of the controller cover when you remove

or install the controller cover.



d255a1033

4. Insert a flathead screwdriver in the order of ①, ②and ③ to release the three hooks of the rear left stay [A].

5. Remove the rear right stay [A].

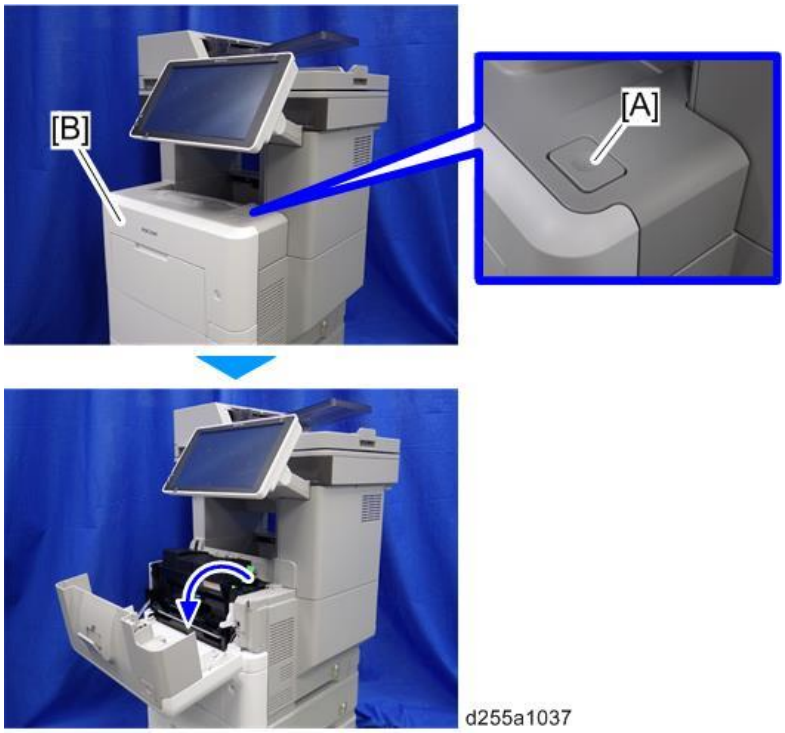
d0bta1114

Note

- Be careful not to damage the hooks on the inside of the rear left stay when you remove or install the rear right stay.

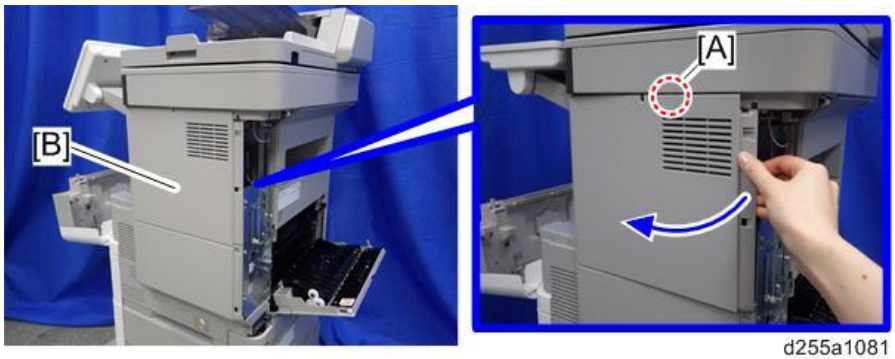
d0bta1115

6. Push the button [A] and open the front cover [B].



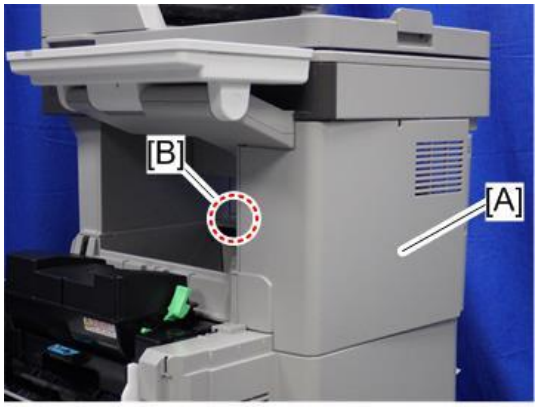
d255a1037

7. Release the hook [A] of the right upper cover [B] by opening the cover in the direction of the arrow.



d255a1081

8. Remove the right upper cover [A] by inserting a flathead screwdriver into [B].



d255a1039

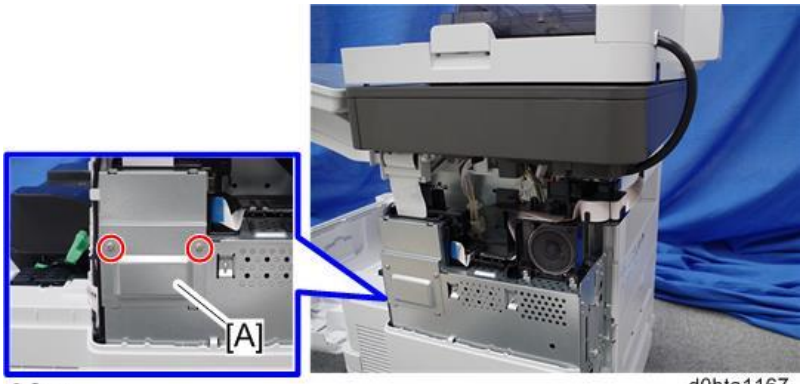
Note

- Be careful not to damage the hooks on the inside of the right upper cover when you

remove or install the right upper cover.

d255a1040

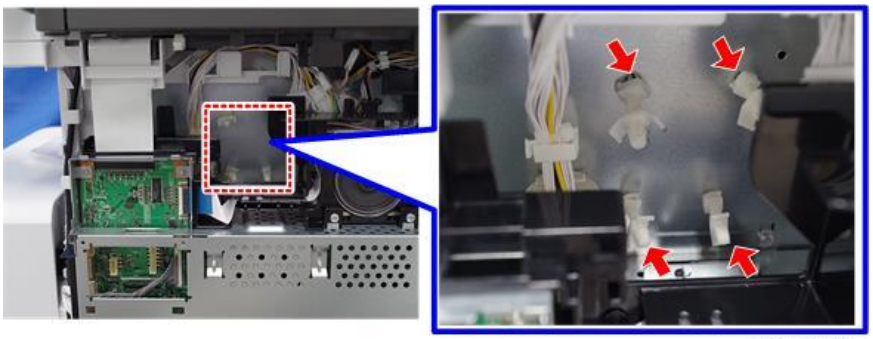
9. Remove the bracket [A].



×2

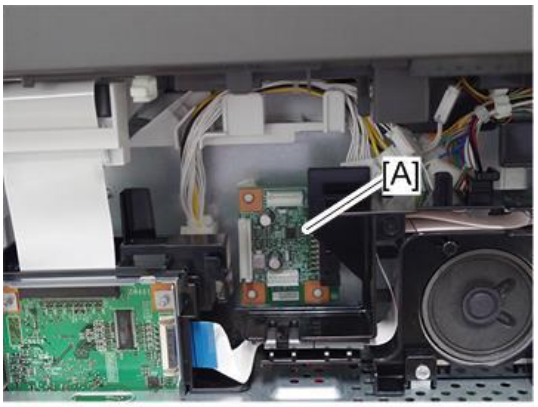
d0bta1167

10. Install the four stud stays as shown below.



d0bta1168

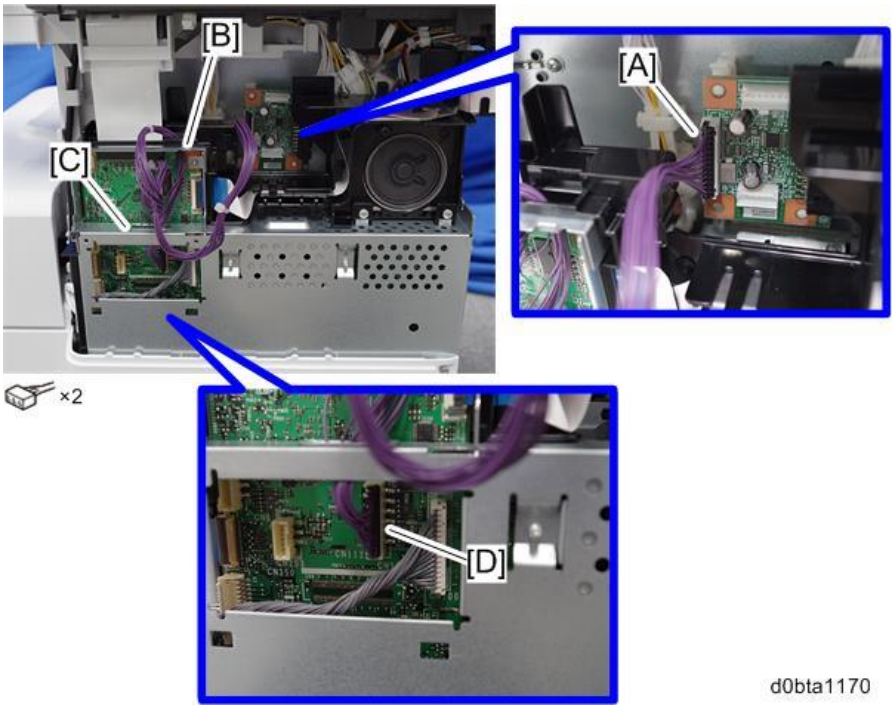
11. Install the optional counter interface board [A] on the four stud stays.



d0bta1169

12. Connect the harness (13 pins) to CN3 [A] on the optional counter interface board.

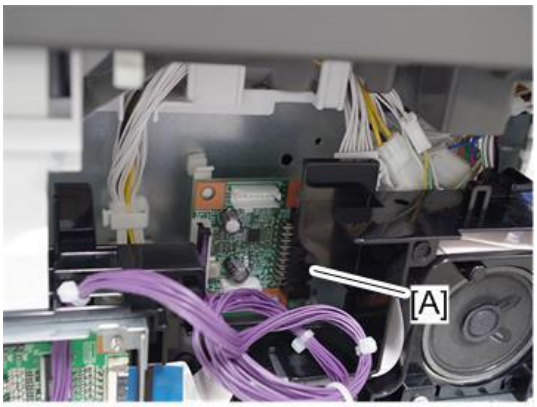
13. Pass the harness through the holes [B] and [C], and then connect the other end to CN112 [D] on the BiCU.



14. Bind the harness with the harness bind [A] as shown below.

d0bta1171

15. Connect the harness from the optional counter device to CN4 [A] on the optional counter interface board.

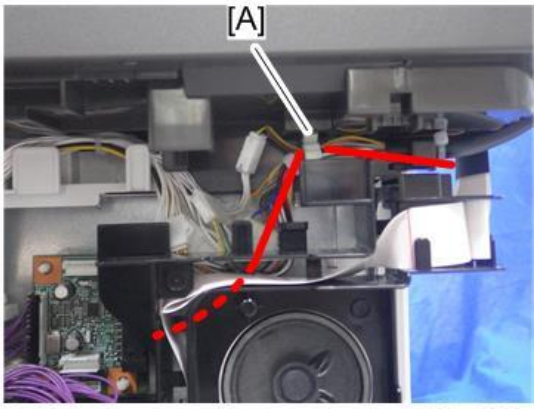


d0bta1172

16. Remove the knockout [A] of the rear right stay [B] with a pair of nippers. Then pass the harness which is connected to the optional counter interface in the previous step.

d0bta1156

17. Route the harness of the optional counter device as shown below, clamp it with the existing clamp [A], and pass it through the rear right stay using the hole opened in step 16.



d0bta1312

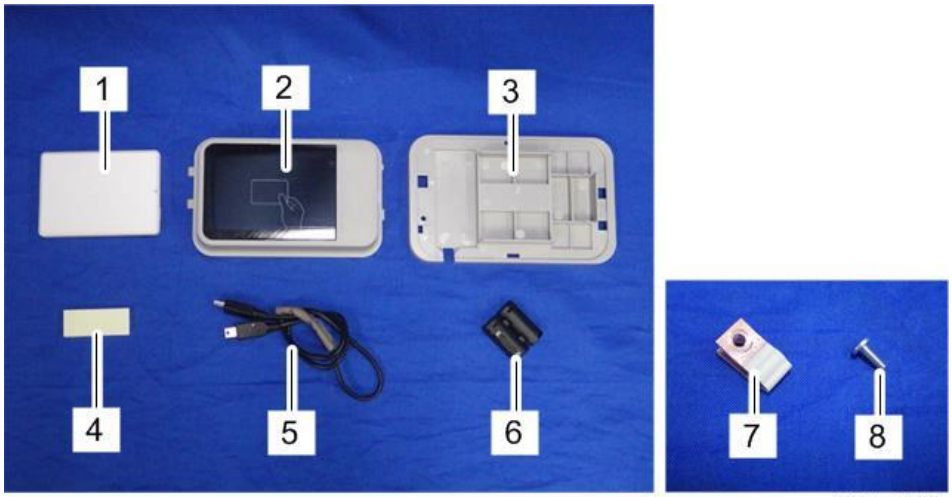
×1

18. Reassemble the machine.

NFC Card Reader Type M24 (IM 550F/600F/600SRF Only)

Accessory Check

No.	Description	Q'ty
1	NFC card reader	1
2	Upper cover	1
3	Base cover	1
4	Hoop and loop fastener	1
5	USB cable	1
6	Ferrite core	1
7	FG clamp	1
8	Tapping screw: 3×8	1
-	EMC address decal	1
-	Caution Sheet	1
-	Caution Chart	1



d255a1522

Installation Procedure (IM 600SRF)

⚠CAUTION

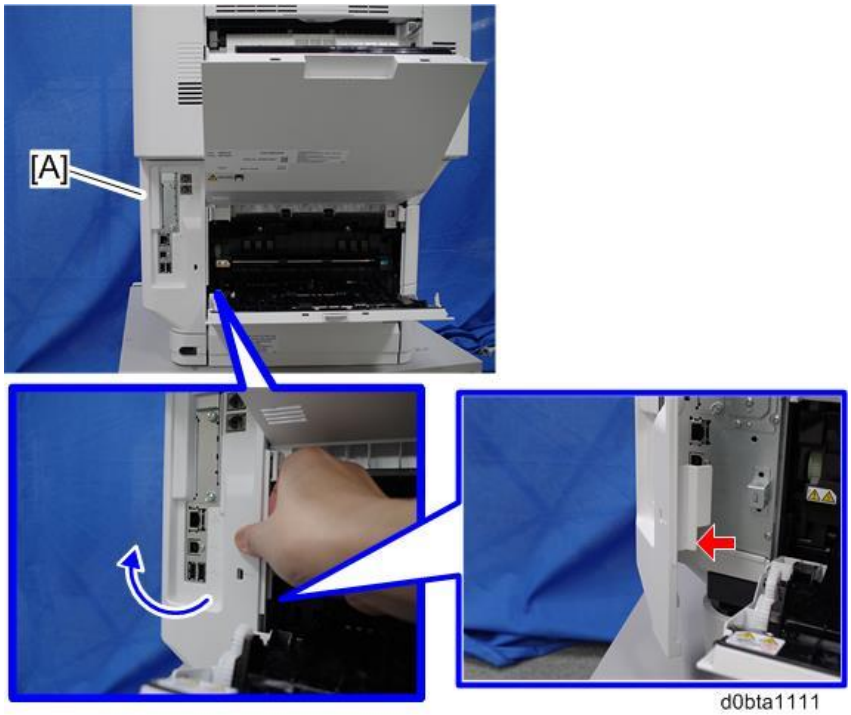
Turn OFF the main power, and unplug the machine power cord before starting the following procedure.

2.Installation

1. Open the rear upper cover [A].

d0bta1252

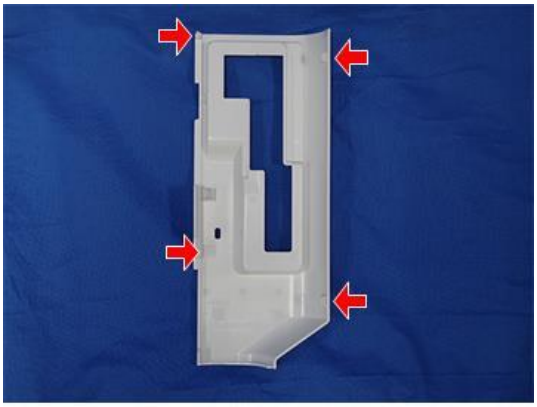
2. Release the hook by opening the right side of the cover, and then remove the cover [A] by rotating it in the direction of the blue arrow.



d0bta1111

Note

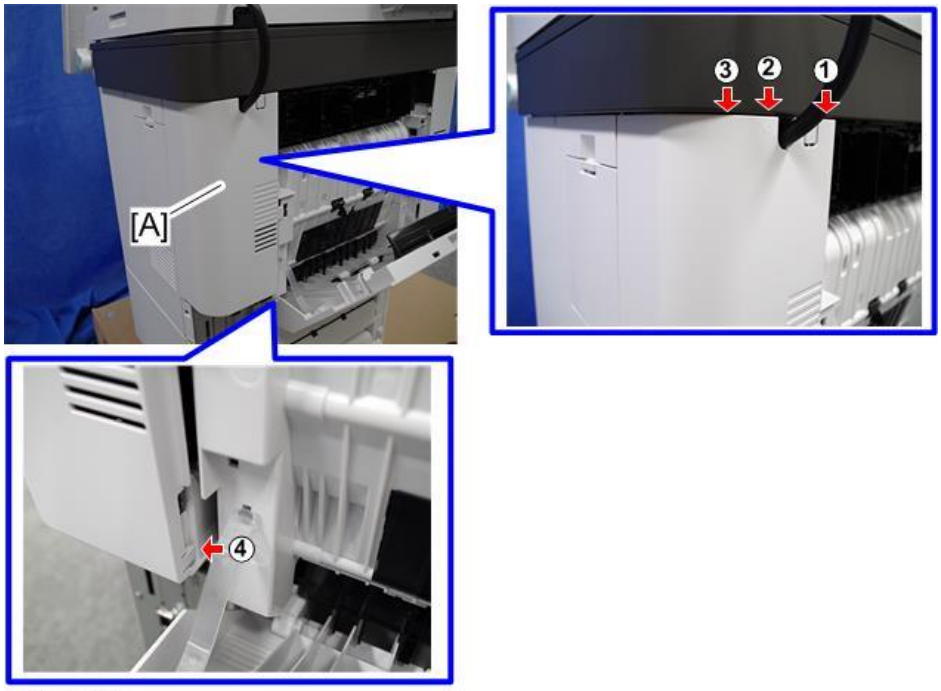
- Be careful not to damage the hooks on the inside of the controller cover when you remove or install the controller cover.



d0bta1080

3. Insert a flathead screwdriver in the order of ①, ②, and ③ to release the three hooks of the rear right stay [A].

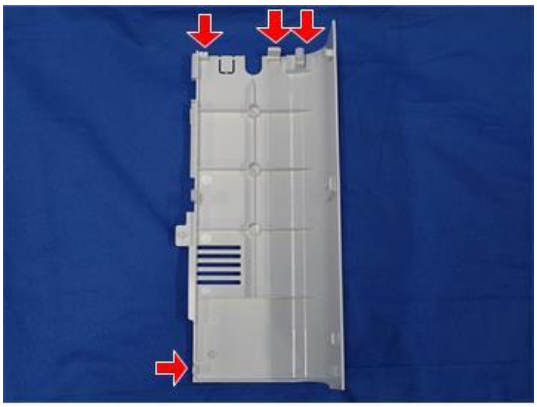
4. Release the hook ④ and remove the rear right stay [A].



d0bta1075

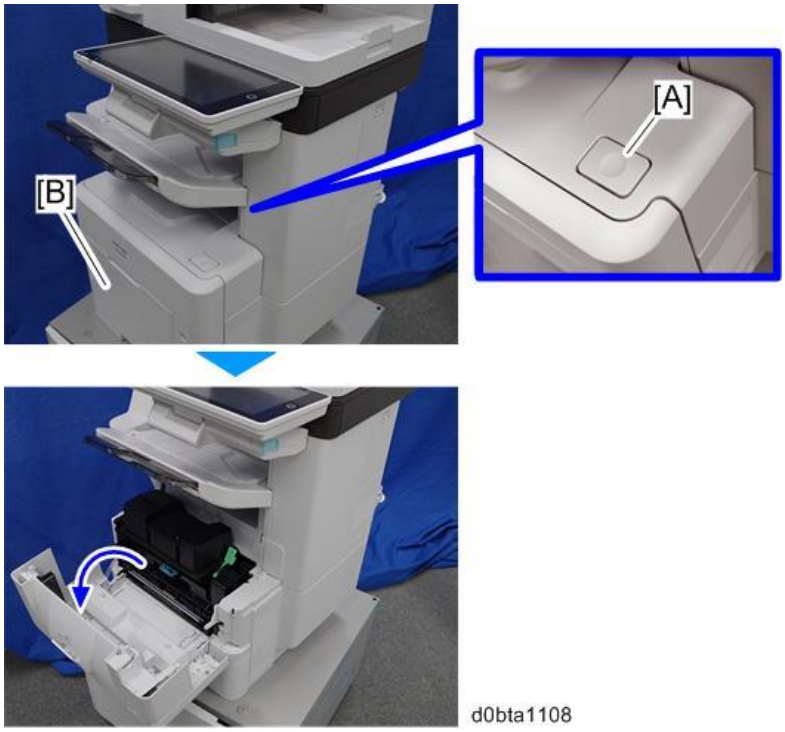
Note

- Be careful not to damage the hooks on the inside of the rear right stay when you remove or install the rear right stay.



d0bta1076

5. Push the button [A] and open the front cover [B].

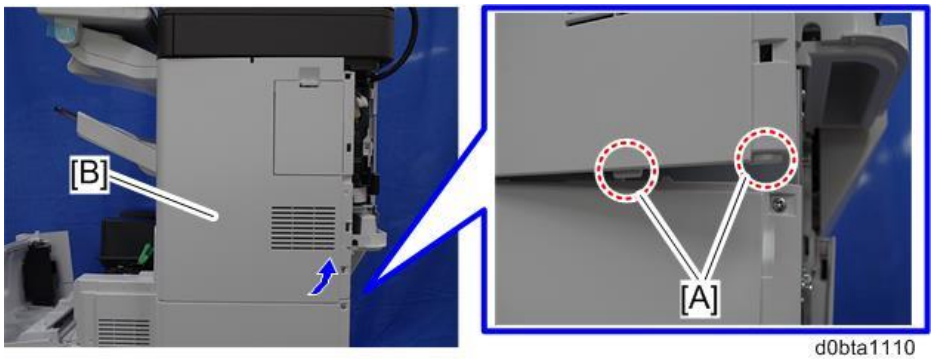


d0bta1108

6. Release the hook [A] of the right upper cover [B] by opening the cover in the direction of the arrow.

d0bta1109

7. Release the hooks [A] of the right upper cover [B] by lifting the bottom right of the cover, and then remove the cover.



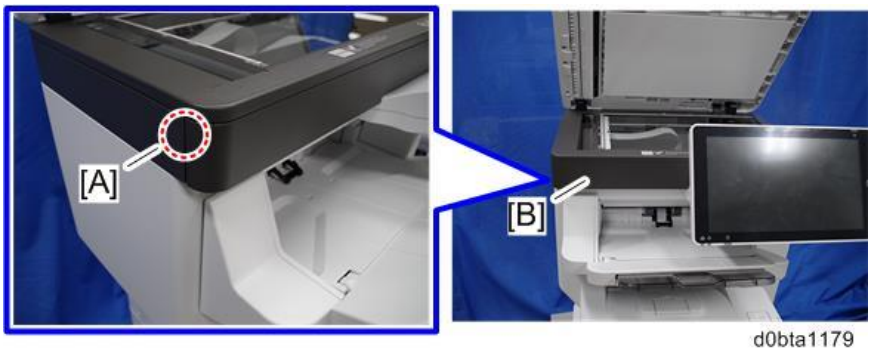
d0bta1110

Note

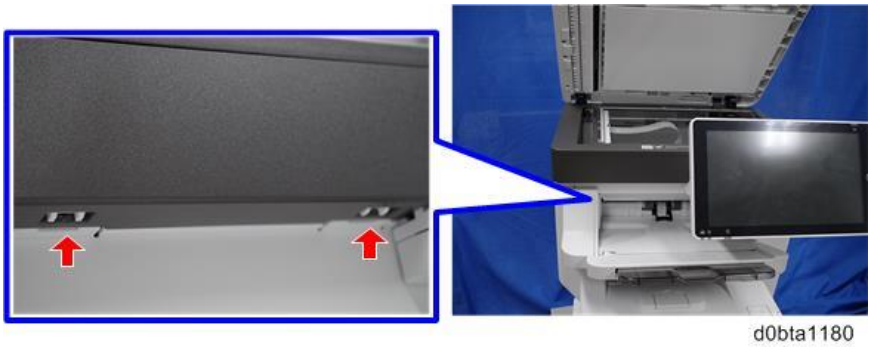
- Be careful not to damage the hooks on the inside of the right upper cover when you

remove or install the right upper cover.

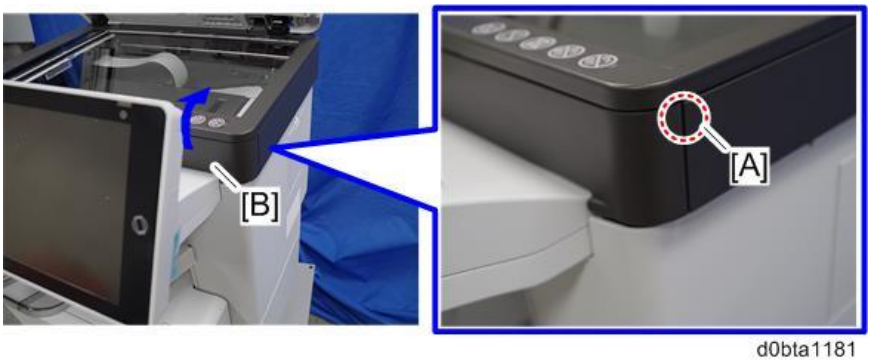
8. Insert a flathead screwdriver at [A] to release the hook of the scanner front cover [B].



9. Release the two hooks of the scanner front cover [A].



10. Insert a flathead screwdriver at [A] to release the hook, and then remove the scanner front cover [B].

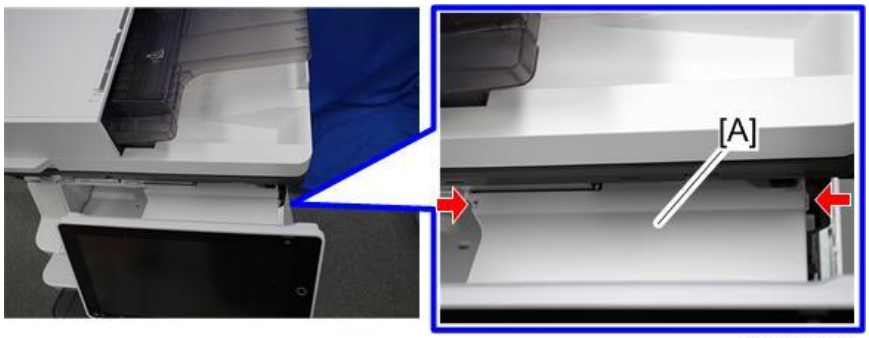


Note

- Be careful not to damage the hooks on the inside of the scanner front cover when you remove or install the scanner front cover.

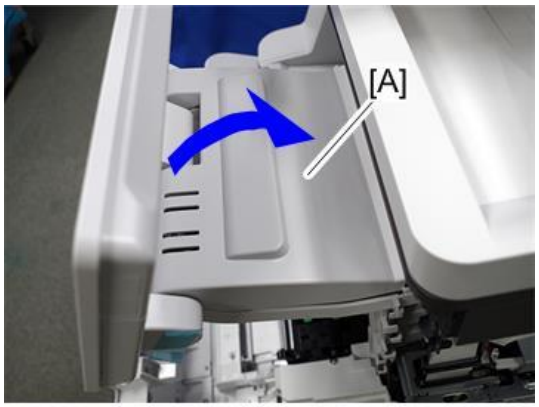
d0bta1182

11. Release the two hooks of the operation panel arm upper cover [A].



d0bta1157

12. Remove the operation panel arm upper cover [B].



d0bta1158

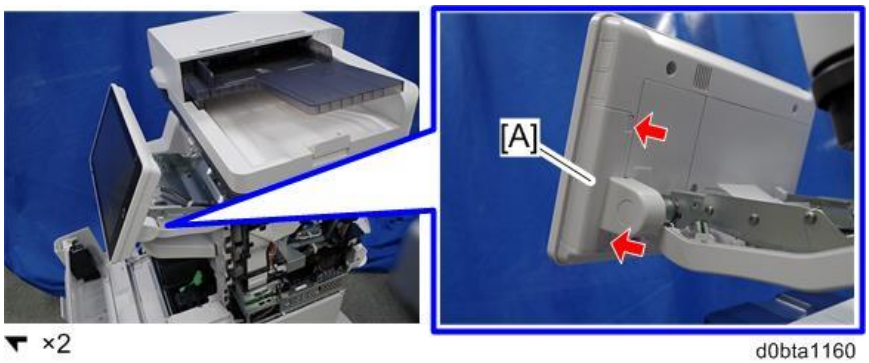
Note

- Be careful not to damage the hooks on the inside of the operation panel arm upper cover

when you remove or install the operation panel arm upper cover.

d0bta1159

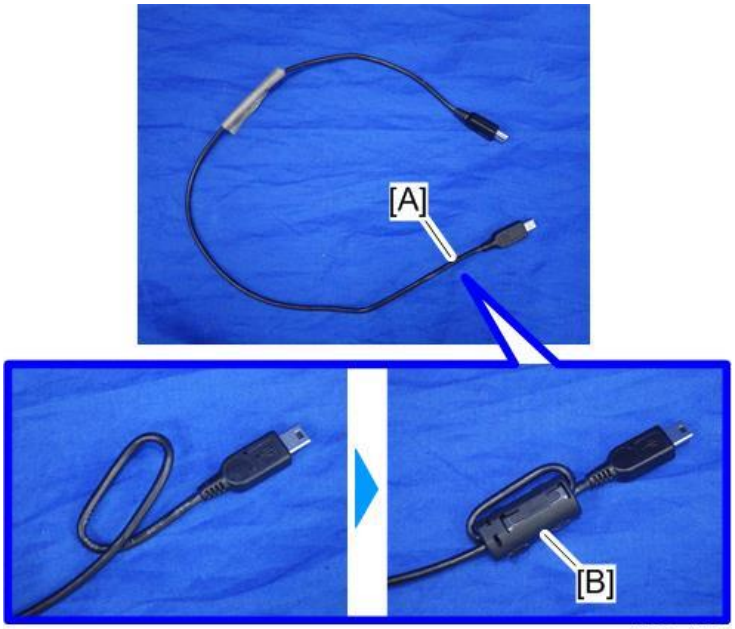
13. Remove the hinge cover [A] from the operation panel.



×2

d0bta1160

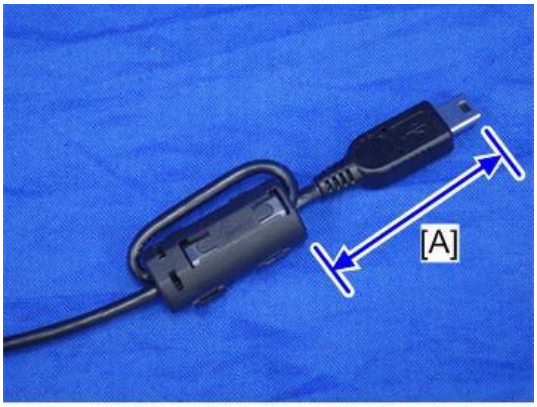
14. Make a loop at the end of the USB cable [A], and then attach the ferrite core [B], as shown below.



d255a1531

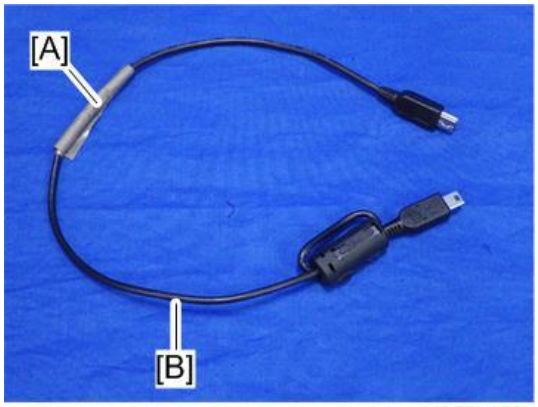
Note

- Attach the ferrite core at a distance of 4.0 cm (1.6 inch) [A] from the end of USB cable.



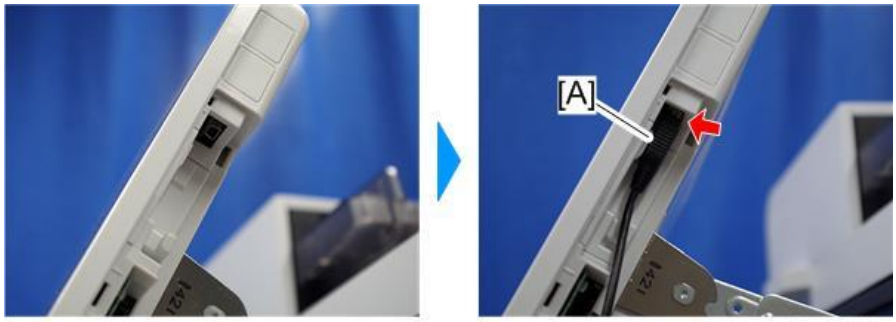
d255a1532

15. Peel off the conductive tape [A] from the USB cable [B].



d255a1524

16. Insert the USB cable [A] into the USB connector of the operation panel.



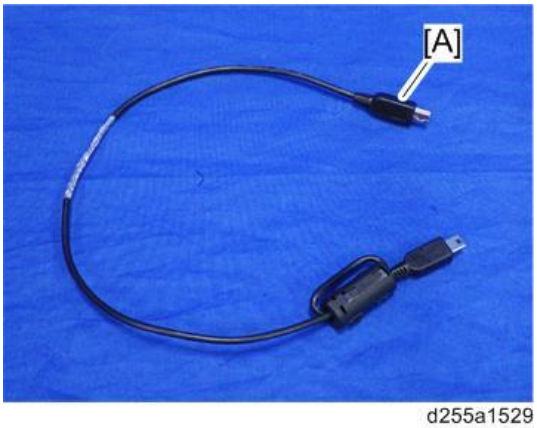
×1

d0bta1161

Note

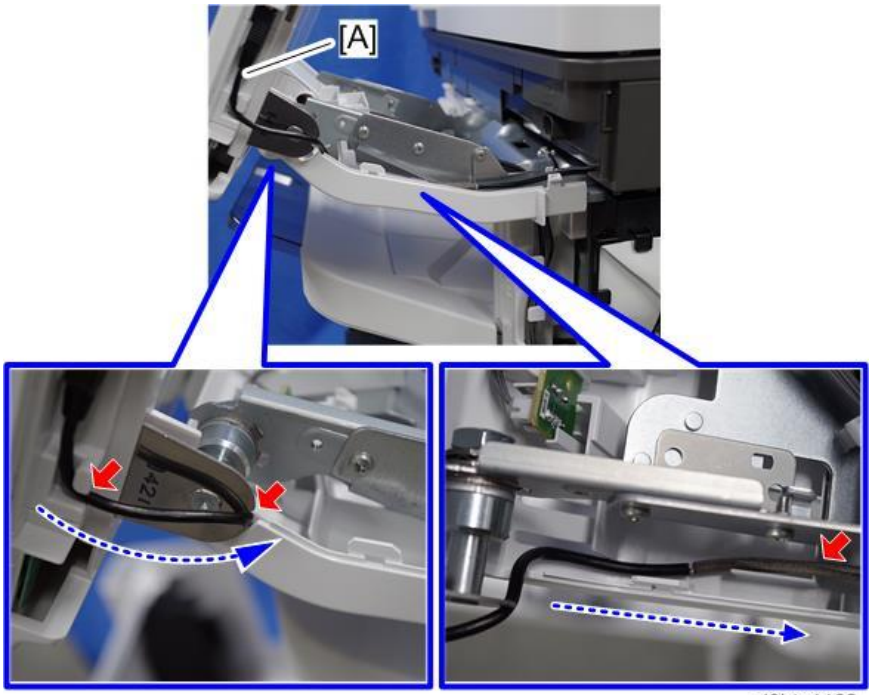
- Insert the end [A] of the USB cable, where the ferrite core is not attached, into the media

slot of the operation panel.



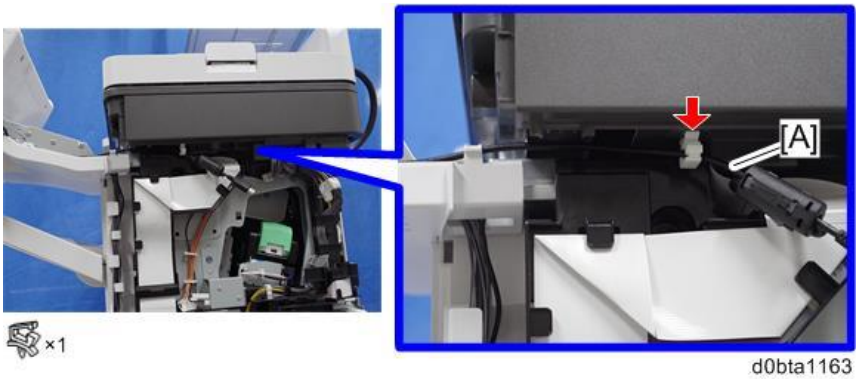
d255a1529

17. Route the USB cable [A] to the right side of the machine.



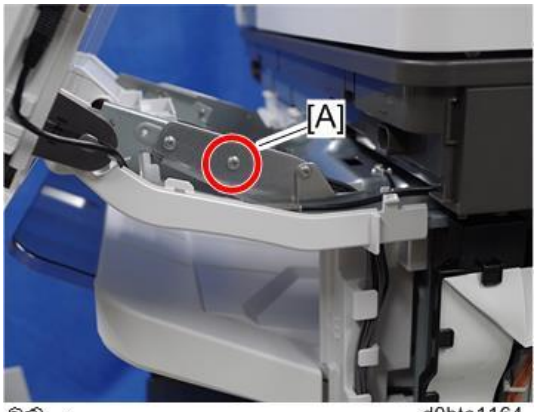
d0bta1162

18. Secure the USB cable [A] with the clamp.



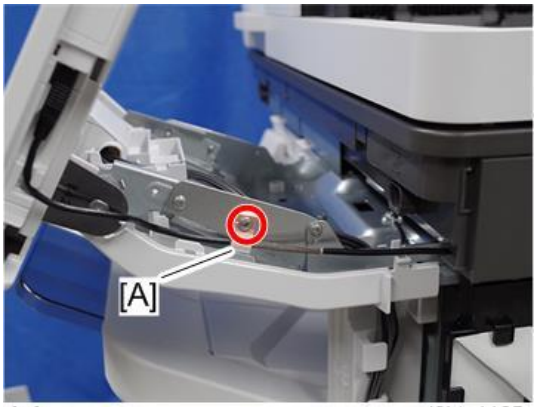
d0bta1163

19. Remove the screw [A] from the operation panel arm.



×1 d0bta1164

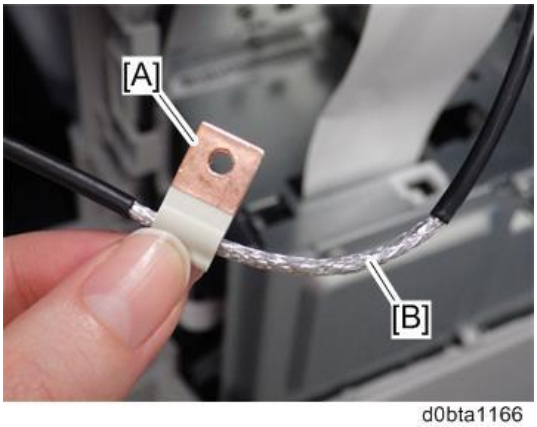
20. Install the FG clamp [A] to the operation panel arm.



×1 d0bta1165

Note

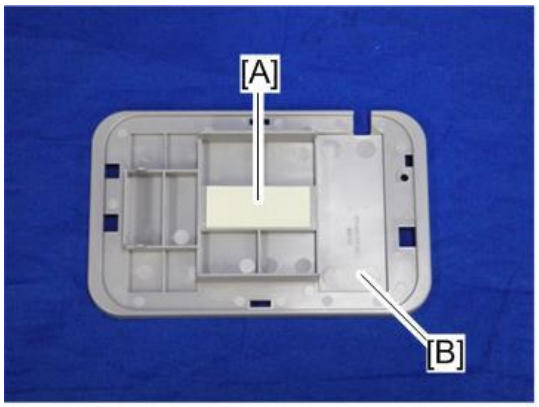
- When installing the FG clamp, bind the USB cable [B] with the FG clamp [A]. Make sure to bind the part where the coating is stripped partially.



d0bta1166

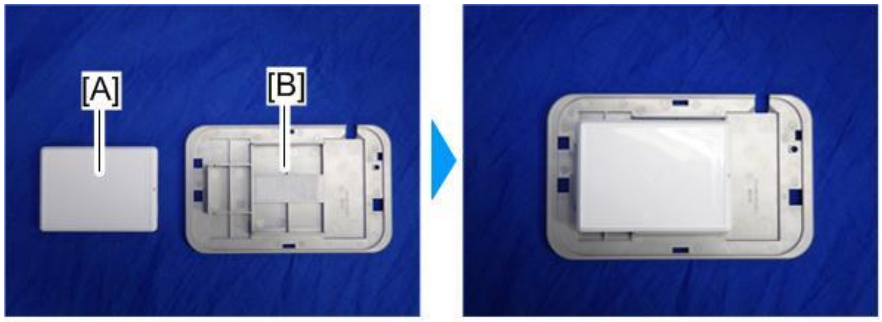
- When installing the FG clamp [A], use the screw provided with NFC Card Reader Type M24.

21. Attach the hook and loop fastener [A] to the base cover [B] at the position shown below.



d255a1324

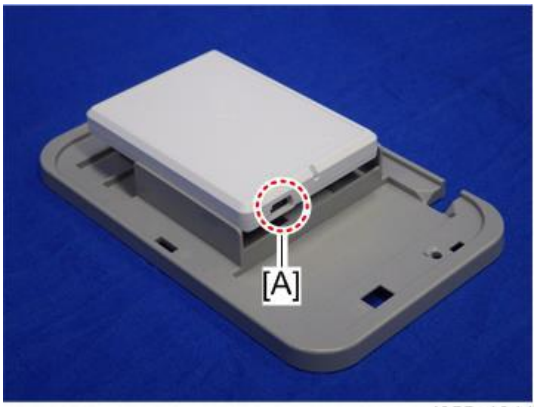
22. Peel off the mount from the hook and loop fastener, and then attach the NFC card reader [A] to the base cover [B] at the position shown below.



d255a1325

Note

- Attach the NFC card reader with the USB port [A] of the NFC card reader set to face right.

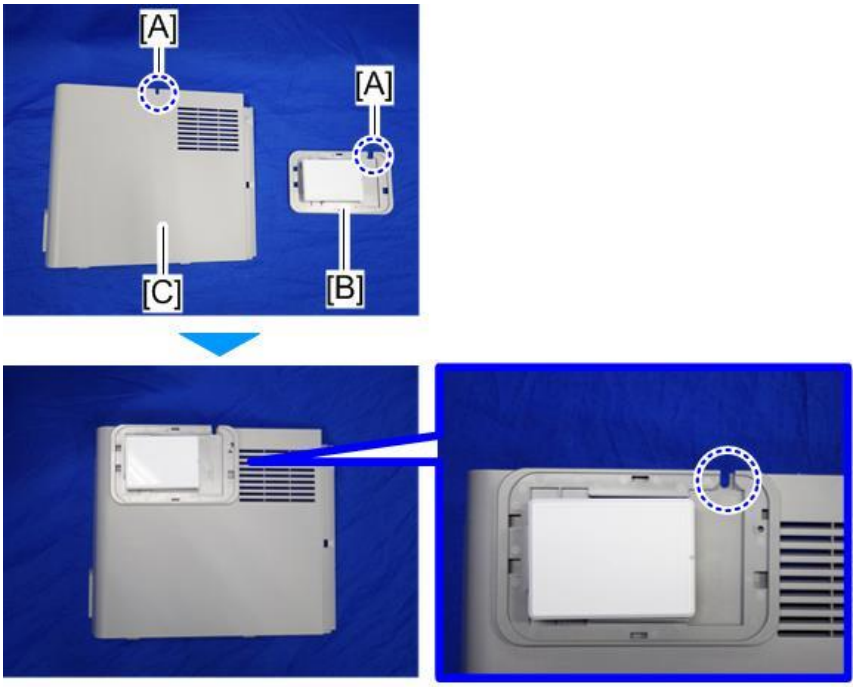


d255a1344

23. Peel off the mount [A] of the seal from the back side [B] of the base cover.

d255a1310

24. Fit the notch part [A] of the base cover [B] into the right upper cover [C] of the main machine, and then attach it.



d255a1311

25. Reattach the right upper cover [A] to the main machine.

d255a1314

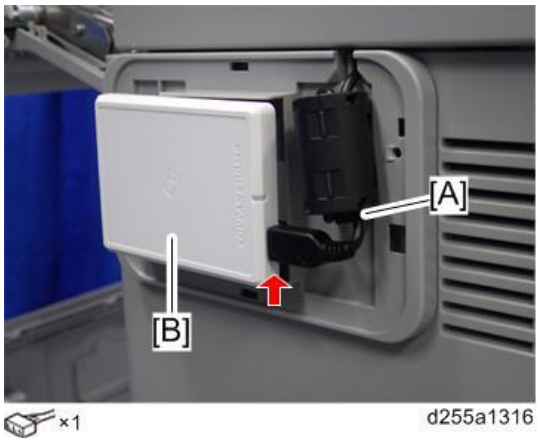
Note

- When attaching the right upper cover, pull out the USB cable [A] through the notch [B] in

the right upper cover.

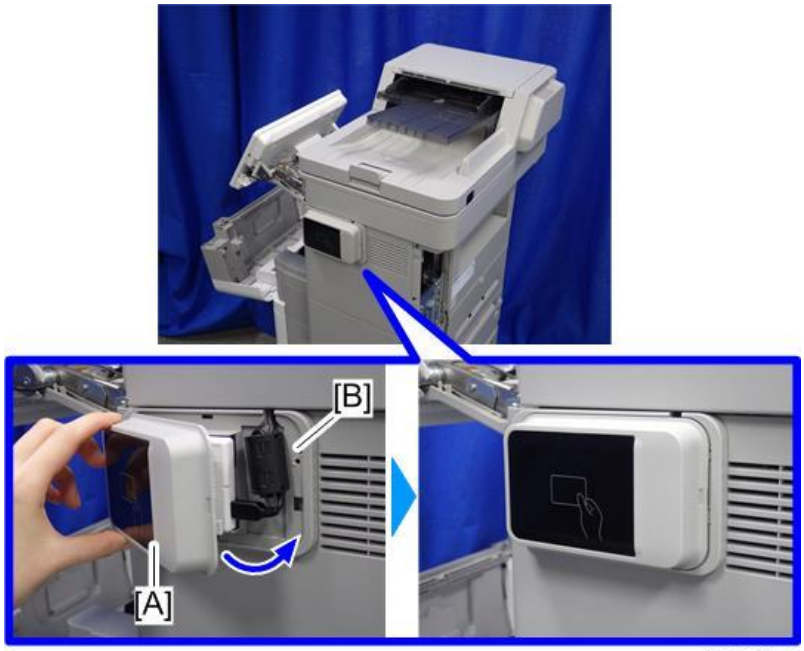
d255a1315

26. Connect the USB cable [A] to the NFC card reader [B].



d255a1316

27. Attach the upper cover [A] to the base cover [B].



d255a1317

28. Reassemble the machine.

Installation Procedure (IM 550F/600F)

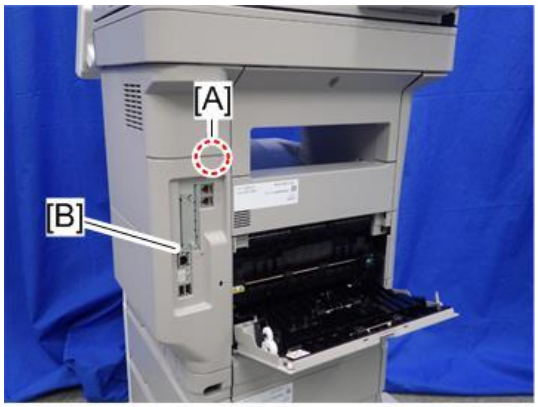
⚠CAUTION

- Turn OFF the main power, and unplug the machine power cord before starting the following procedure.

1. Open the rear upper cover [A].

d255a1030

2. Insert a flathead screwdriver into [A] to release the hook on the inside of the controller cover [B].



d255a1080

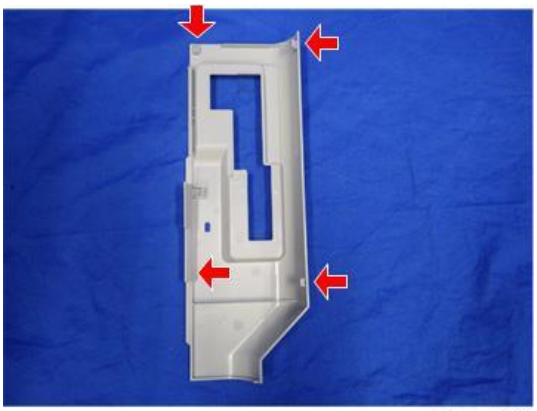
3. Release the hook by opening the right side of the cover, and then remove the cover [A] by rotating

it in the direction of the blue arrow.

d255a1032

Note

- Be careful not to damage the hooks on the inside of the controller cover when you remove or install the controller cover.



d255a1033

4. Insert a flathead screwdriver in the order of ①, ②, and ③ to release the three hooks of the rear left stay [A].

5. Remove the rear right stay [A].

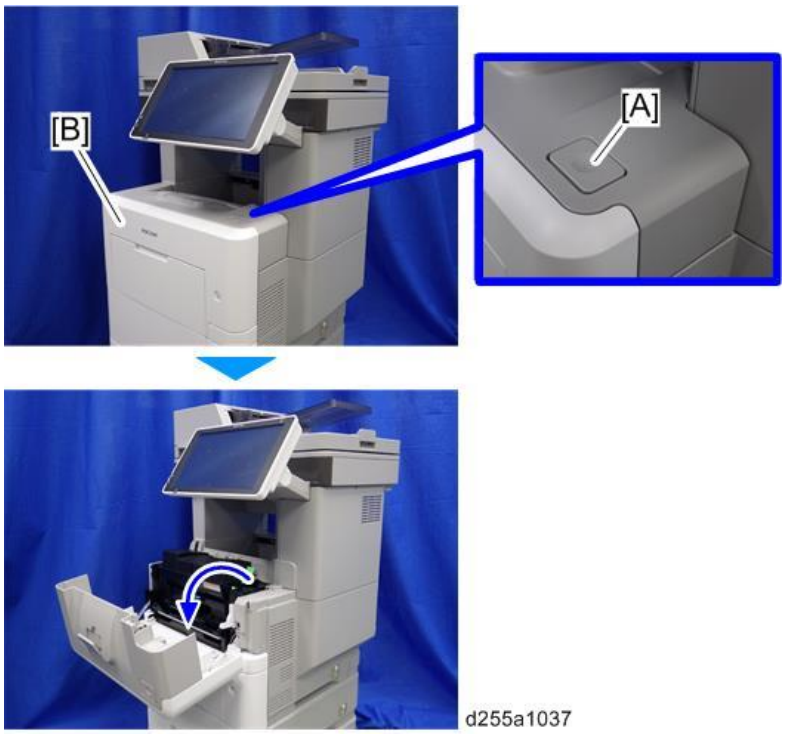
d0bta1114

Note

- Be careful not to damage the hooks on the inside of the rear left stay when you remove or install the rear right stay.

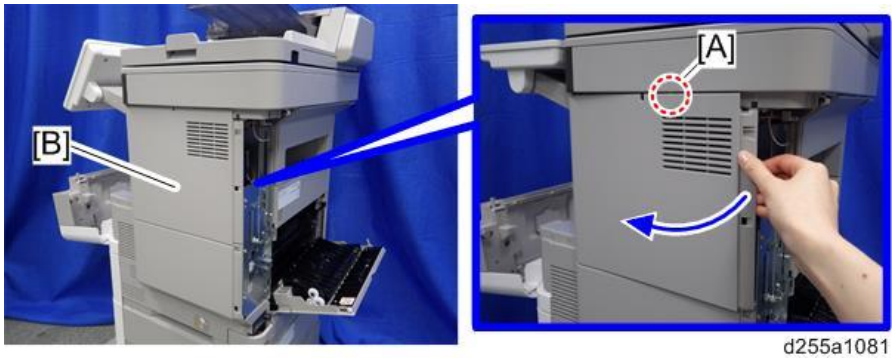
d0bta1115

6. Push the button [A] and open the front cover [B].



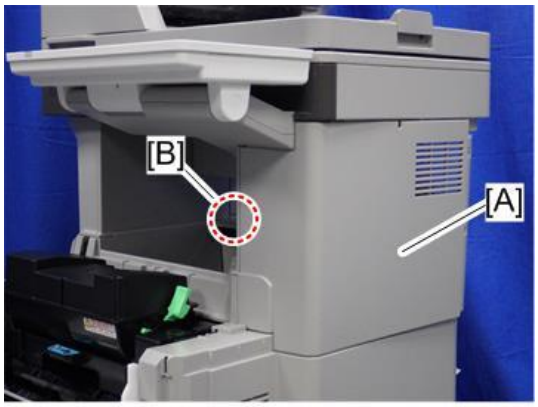
d255a1037

7. Release the hook [A] of the right upper cover [B] by opening the cover in the direction of the arrow.



d255a1081

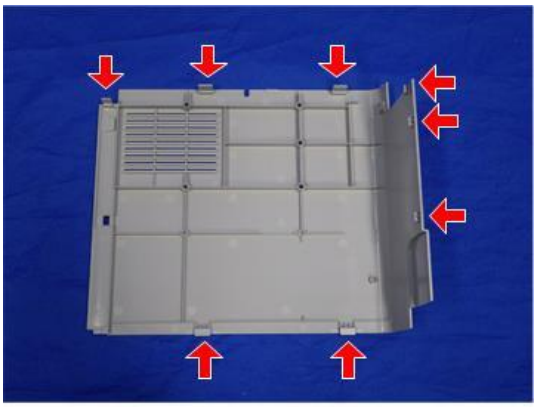
8. Remove the right upper cover [A] by inserting a flathead screwdriver into [B].



d255a1039

Note

- Be careful not to damage the hooks on the inside of the right upper cover when you remove or install the right upper cover.

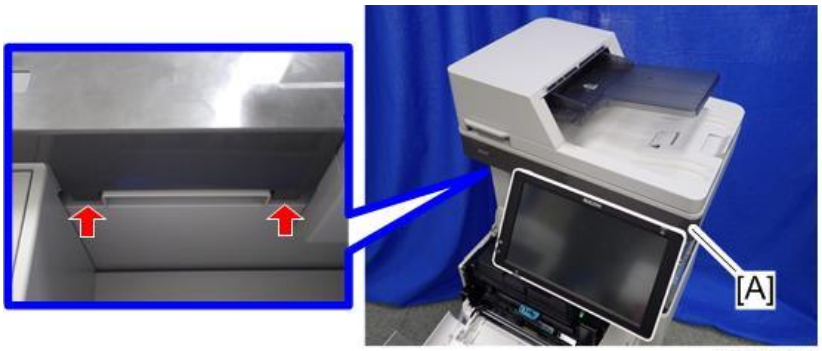


d255a1040

9. Insert a flathead screwdriver at [A] to release the hook of the scanner front cover [B].

d255a1480

10. Release the two hooks of the scanner front cover [A].



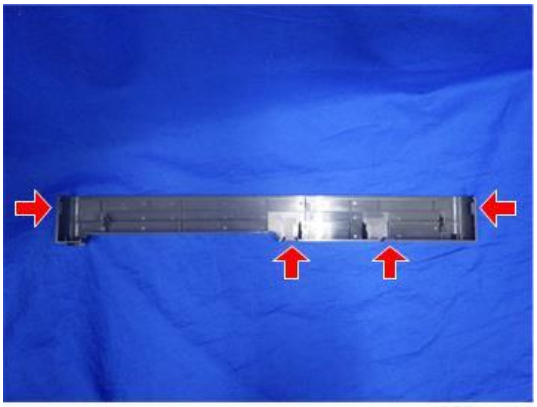
d255a1481

11. Insert a flathead screwdriver at [A] to release the hook, and then remove the scanner front cover [B].

d255a1482

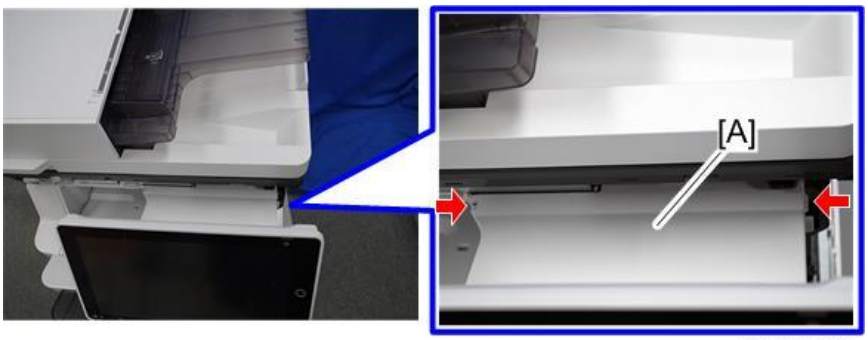
Note

- Be careful not to damage the hooks on the inside of the scanner front cover when you remove or install the scanner front cover.



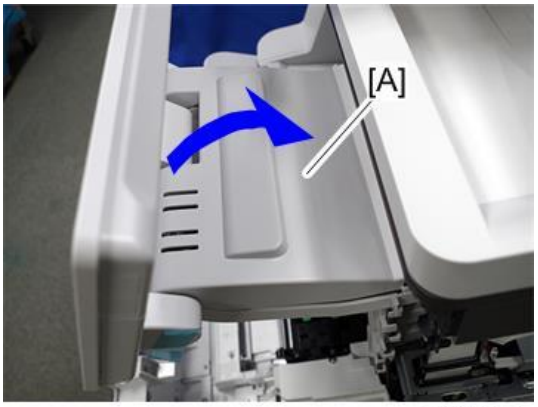
d255a1186

12. Release the two hooks of the operation panel arm upper cover [A].



d0bta1157

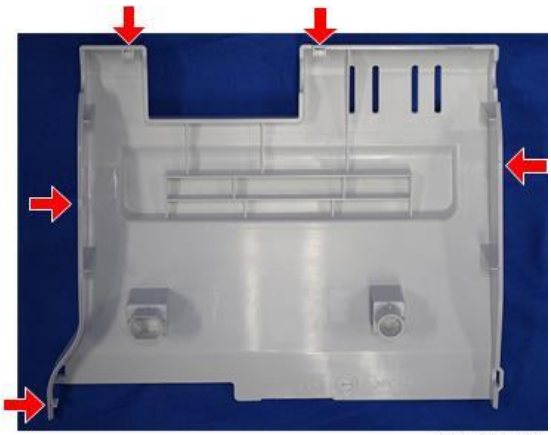
13. Remove the operation panel arm upper cover [B].



d0bta1158

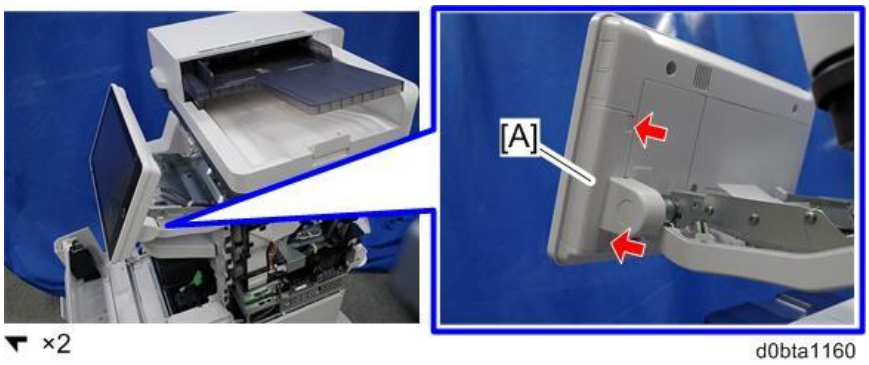
Note

- Be careful not to damage the hooks on the inside of the operation panel arm upper cover when you remove or install the operation panel arm upper cover.

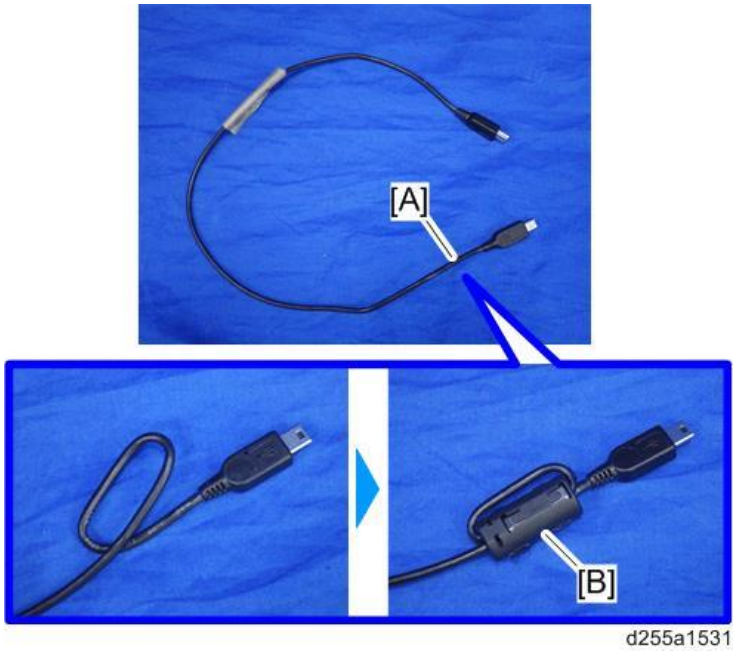


d0bta1159

14. Remove the hinge cover [A] from the operation panel.

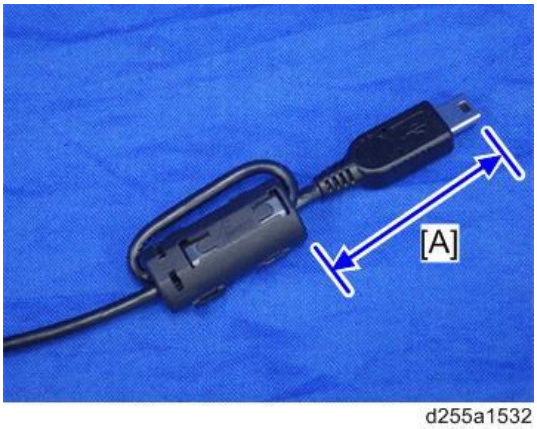


15. Make a loop at the end of the USB cable [A], and then attach the ferrite core [B], as shown below.

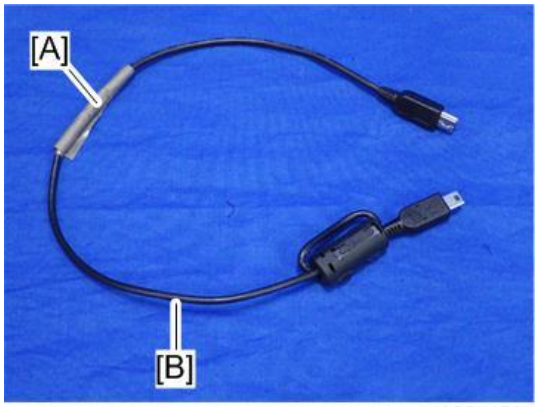


Note

- Attach the ferrite core at a distance of 4.0 cm (1.6 inch) [A] from the end of USB cable.

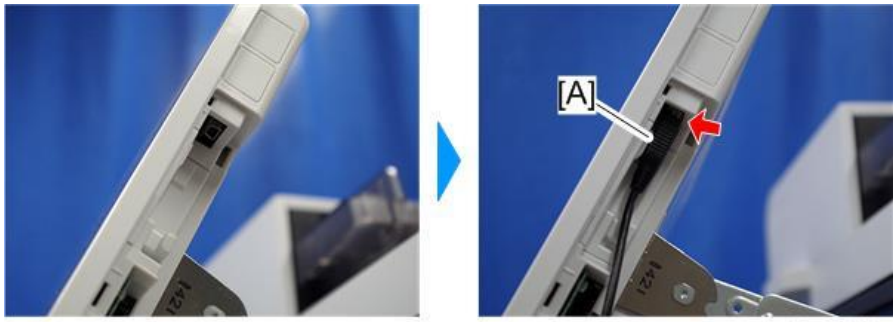


16. Peel off the conductive tape [A] from the USB cable [B].



d255a1524

17. Insert the USB cable [A] into the USB connector of the operation panel.

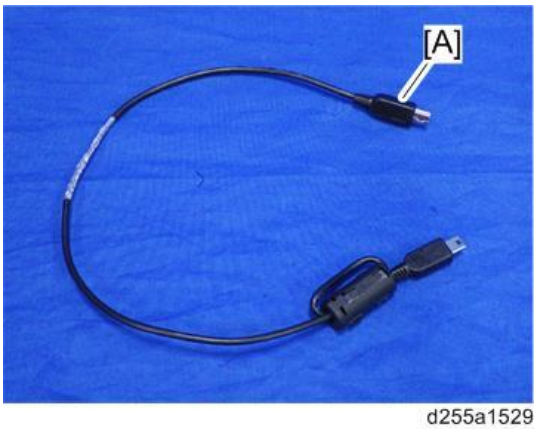


×1

d0bta1161

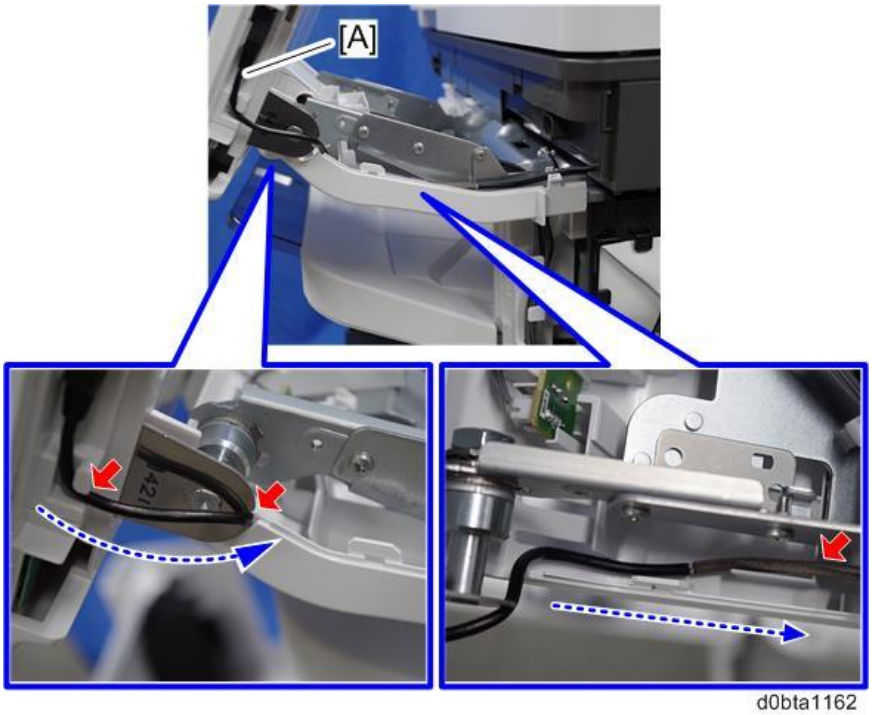
Note

- Insert the end [A] of the USB cable, where the ferrite core is not attached, into the media slot of the operation panel.

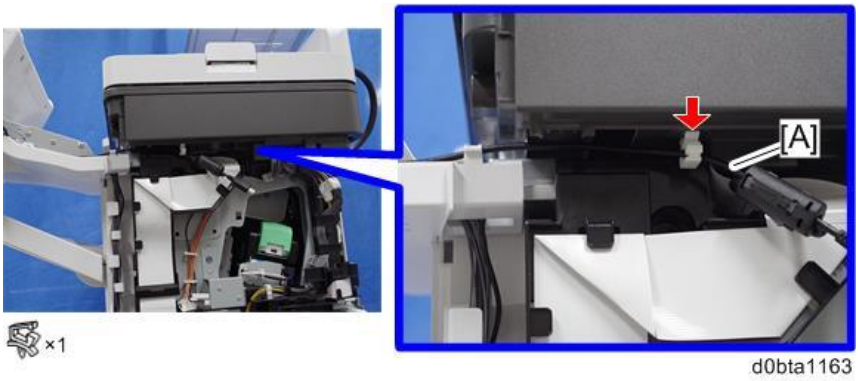


d255a1529

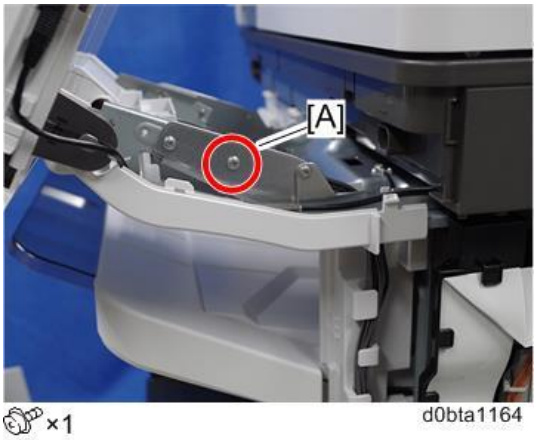
18. Route the USB cable [A] to the right side of the machine.



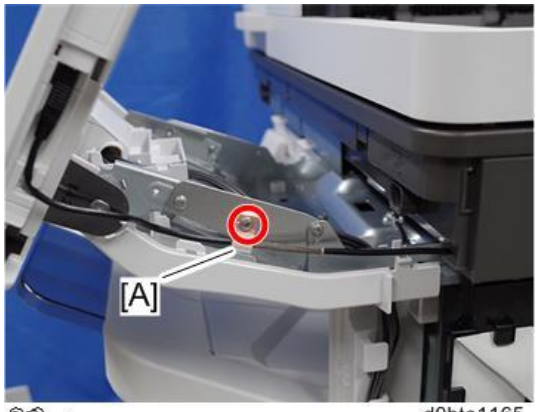
19. Secure the USB cable [A] with the clamp.



20. Remove the screw [A] from the operation panel arm.



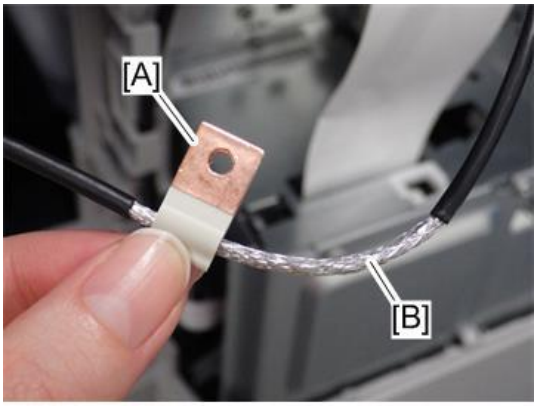
21. Install the FG clamp [A] to the operation panel arm.



×1 d0bta1165

Note

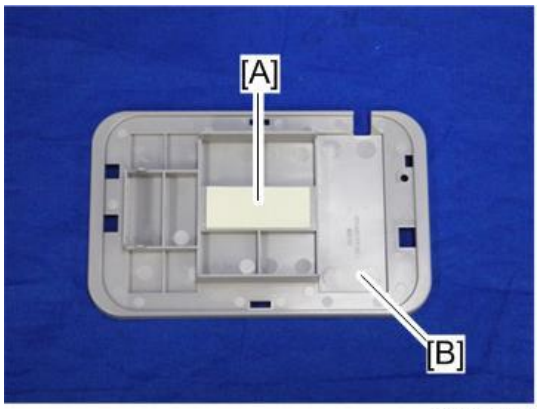
- When installing the FG clamp, bind the USB cable [B] with the FG clamp [A]. Make sure to bind the part where the coating is stripped partially.



d0bta1166

- When installing the FG clamp [A], use the screw provided with NFC Card Reader Type M24.

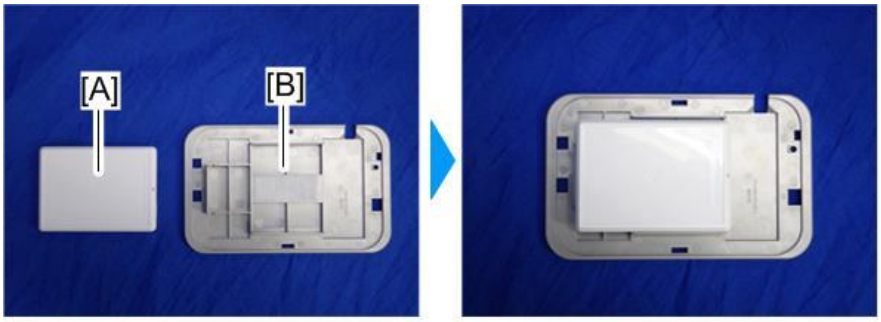
22. Attach the hook and loop fastener [A] to the base cover [B] at the position shown below.



d255a1324

23. Peel off the mount from the hook and loop fastener, and then attach the NFC card reader [A] to the

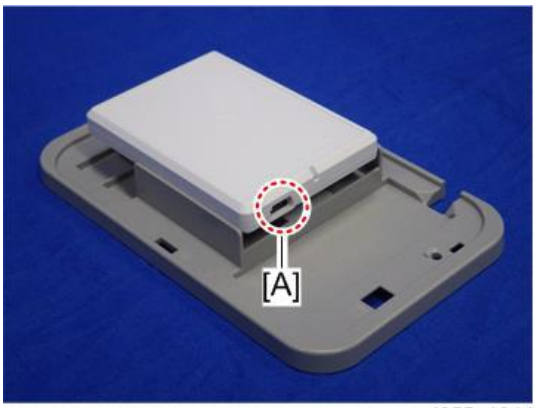
base cover [B] at the position shown below.



d255a1325

Note

- Attach the NFC card reader with the USB port [A] of the NFC card reader set to face right.



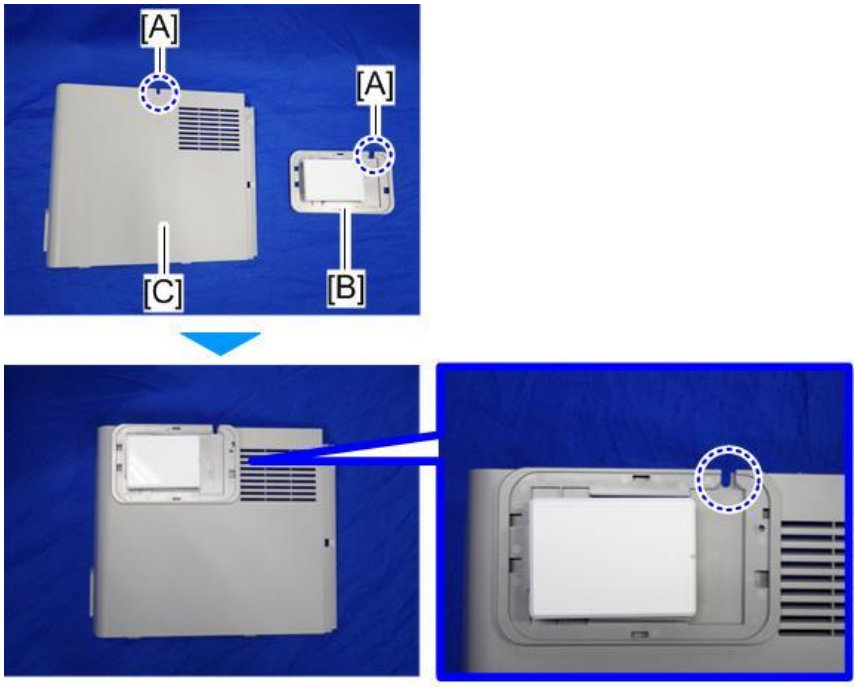
d255a1344

24. Peel off the mount [A] of the seal from the back side [B] of the base cover.

d255a1310

25. Fit the notch part [A] of the base cover [B] into the right upper cover [C] of the main machine, and

then attach it.



d255a1311

26. Reattach the right upper cover [A] to the main machine.

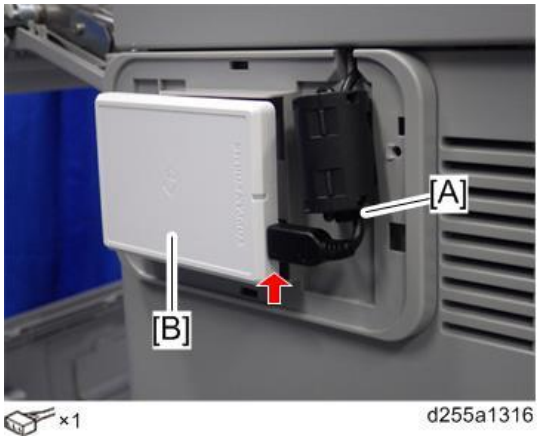
d255a1314

Note

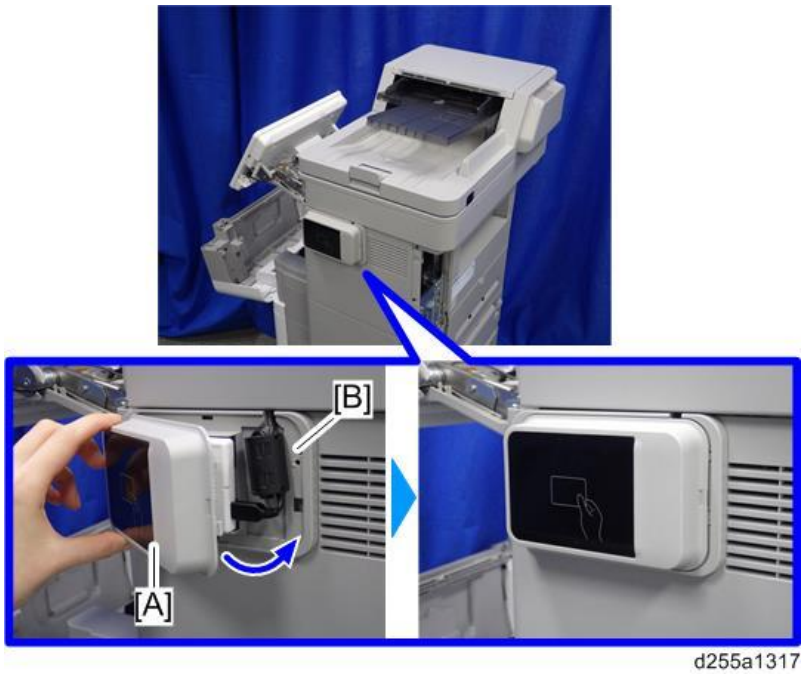
- When attaching the right upper cover, pull out the USB cable [A] through the notch [B] in the right upper cover.

d255a1315

27. Connect the USB cable [A] to the NFC card reader [B].



28. Attach the upper cover [A] to the base cover [B].



29. Reassemble the machine.

Enhanced Security HDD Option Type M10 (D792-09)

Accessory Check

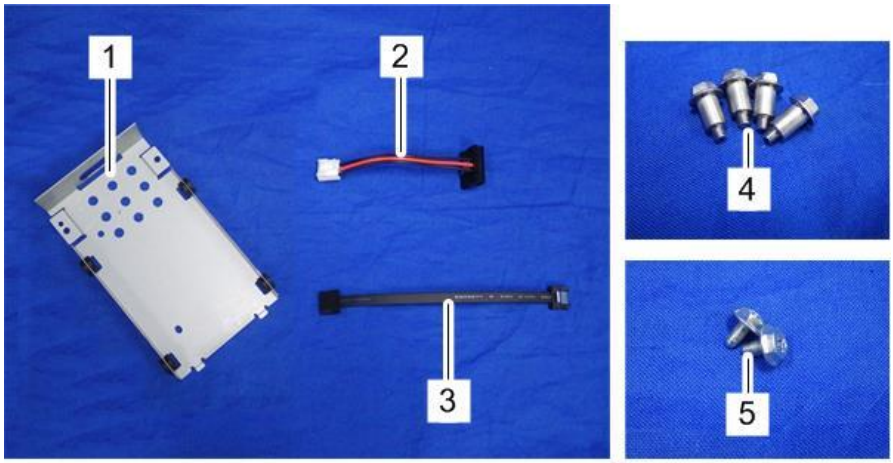
No.	Description	Q'ty
1	Enhanced security HDD	1
-	EMC address sheet	1

d191b0076

Note

- The following parts are separately required when installing Enhanced Security HDD Option Type M10 on P 800/801 in which Hard Disk Drive Option Type P8 is not installed.

No.	Description	Q'ty
1	HDD bracket	1
2	Power source cable	1
3	Data cable	1
4	Stepped screw	4
5	Tapping screw	2



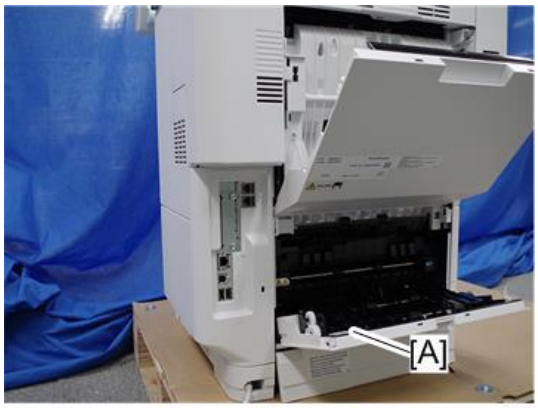
d255a1486

Installation Procedure (IM 600SRF)

⚠CAUTION

- Turn OFF the main power, and unplug the machine power cord before starting the following procedure.

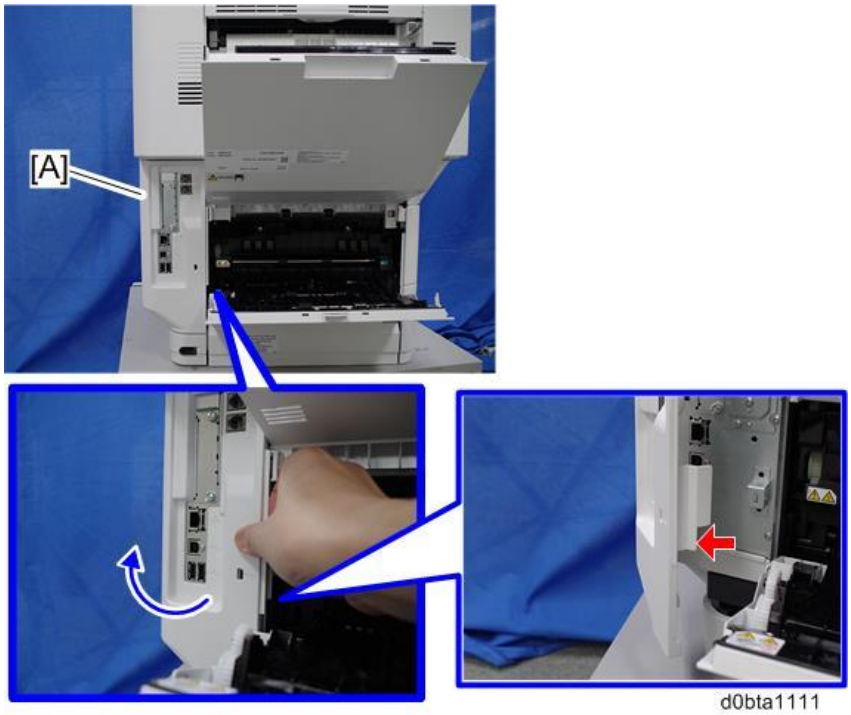
1. Open the rear upper cover [A].



d0bta1252

2. Release the hook by opening the right side of the cover, and then remove the cover [A] by rotating

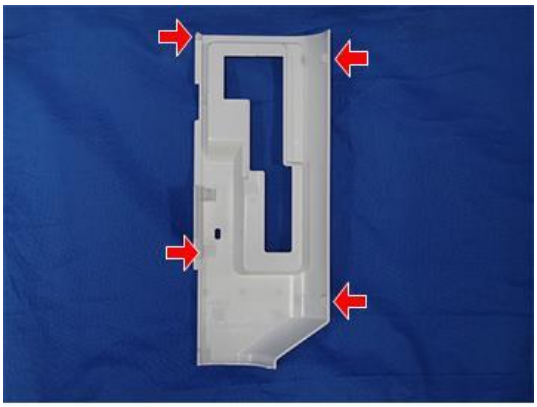
it in the direction of the blue arrow.



d0bta1111

Note

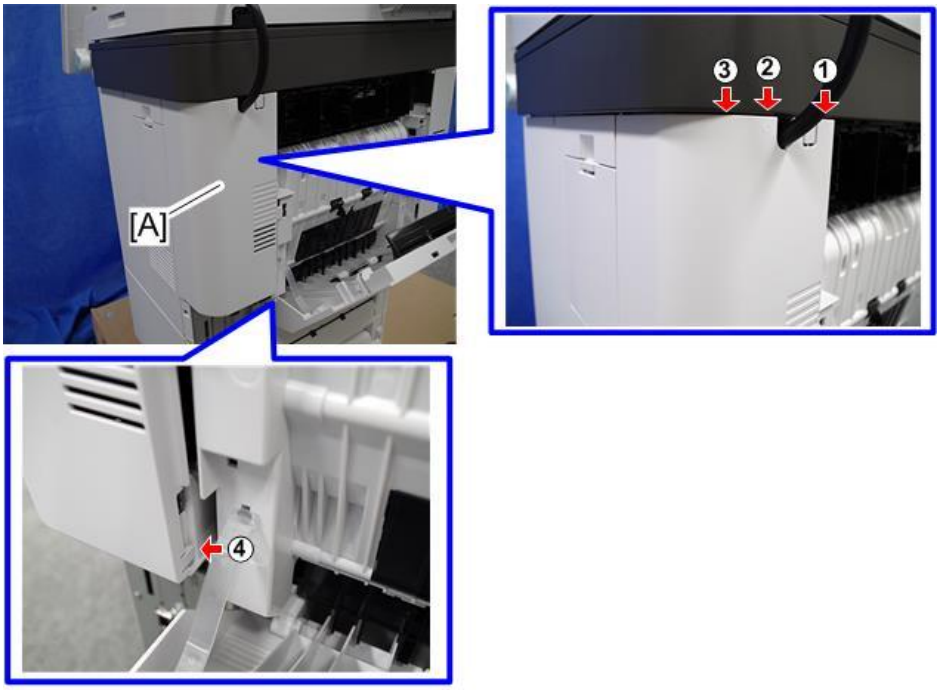
- Be careful not to damage the hooks on the controller cover when removing or installing.



d0bta1080

3. Insert a flathead screwdriver in the order of ①, ②and ③ to release the three hooks of the rear right stay [A].

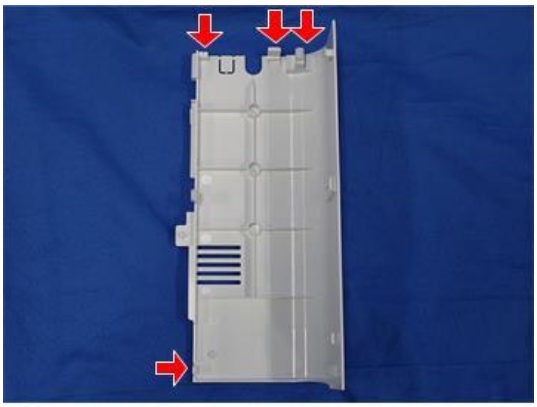
4. Release the hook ④ and remove the rear right stay [A].



d0bta1075

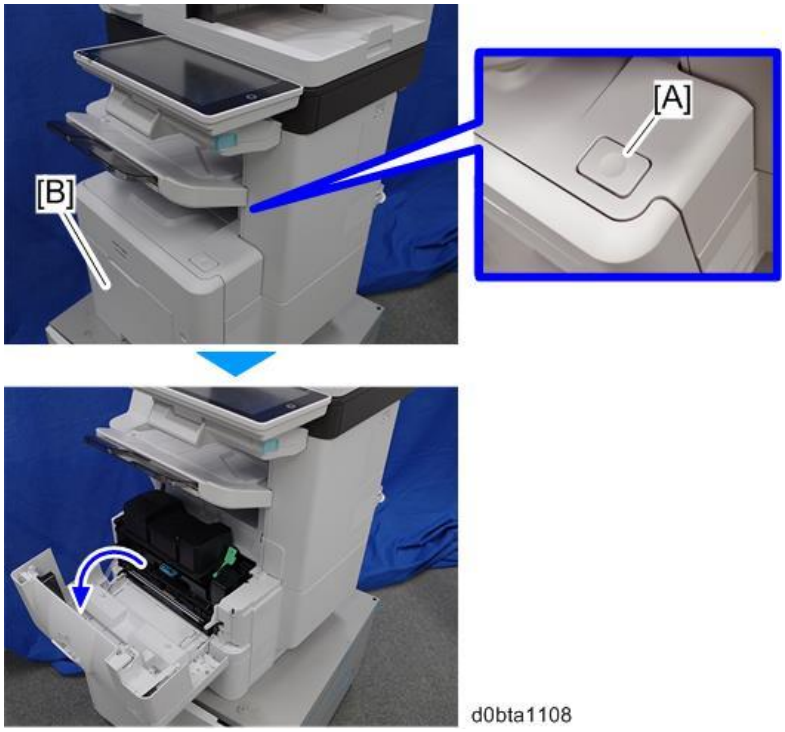
Note

- Be careful not to damage the hooks on the rear right stay when removing or installing.



d0bta1076

5. Push the button [A] and open the front cover [B].

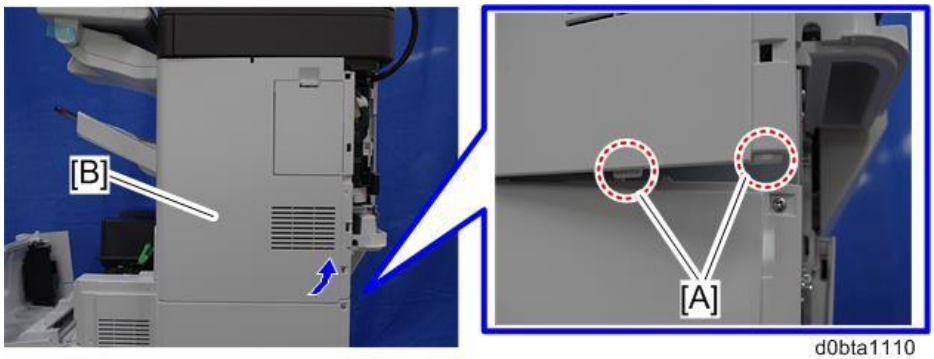


d0bta1108

6. Release the hook [A] of the right upper cover [B] by opening the cover in the direction of the arrow.

d0bta1109

7. Release the hooks [A] of the right upper cover [B] by lifting the bottom right of the cover, and then remove the cover.



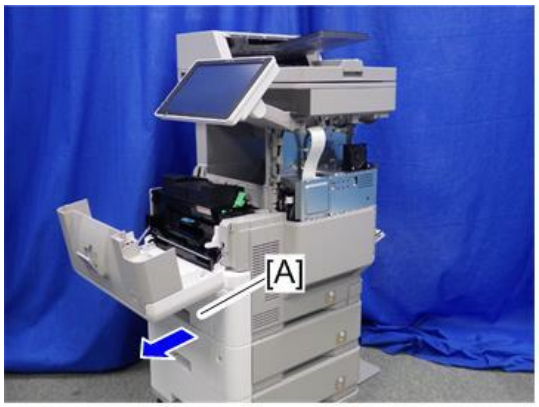
d0bta1110

Note

- Be careful not to damage the hooks on the right upper cover when removing or installing.

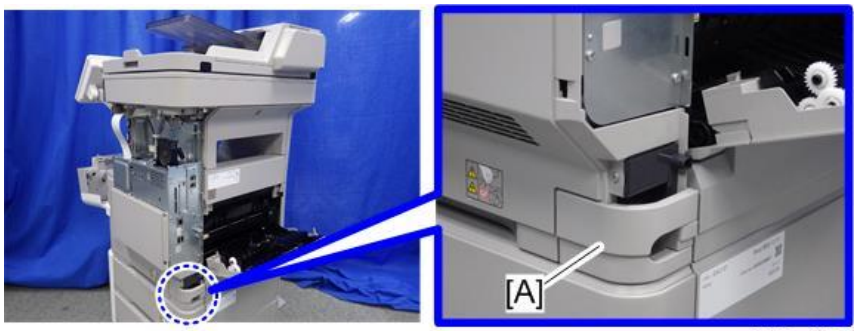
d0bta1081

8. Remove the paper feed tray [A] by pulling it out.



d255a1071

9. Remove the power connector cover [A].



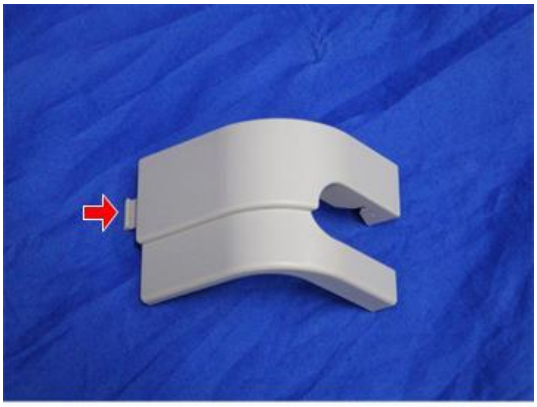
d255a1072

Note

- When removing the power connector cover, pull it in the direction of the arrow.

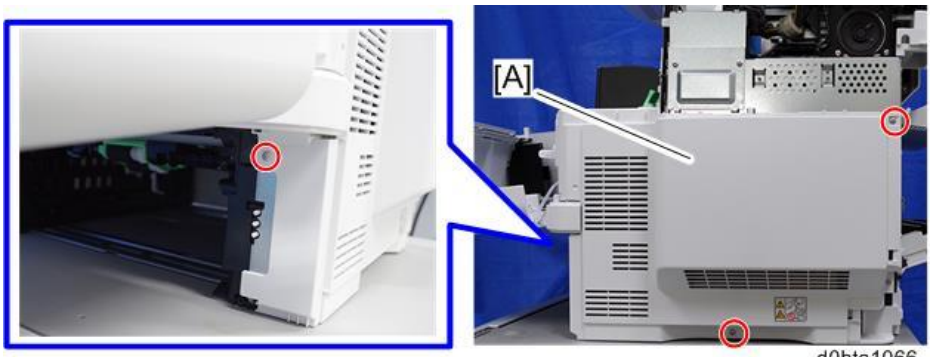
d255a1073

- Be careful not to damage the hook on the power connector cover when removing or installing.



d255a1078

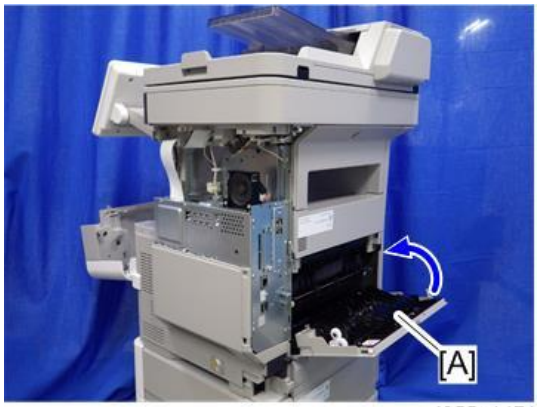
10. Remove the three screws from the right lower cover [A].



×3

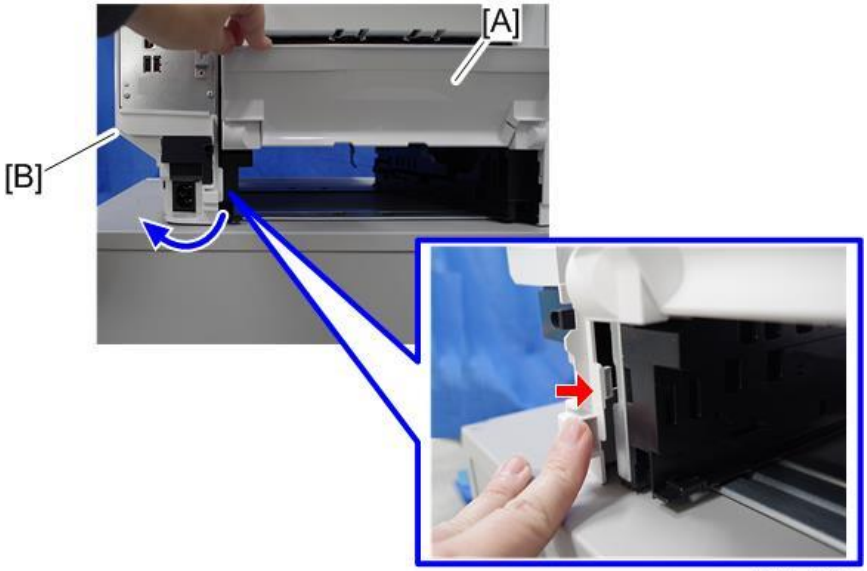
d0bta1066

11. Close the rear upper cover [A].



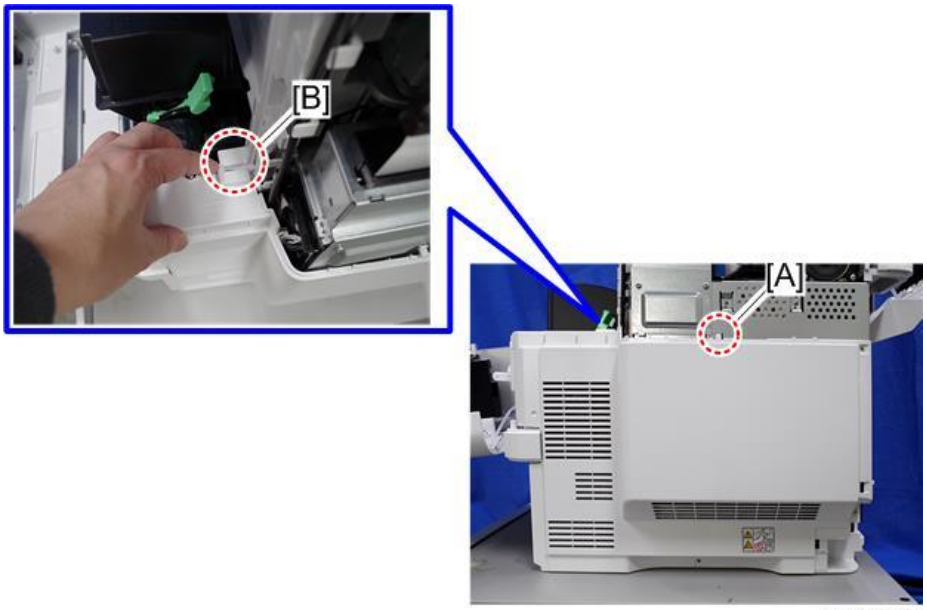
d255a1471

12. Open the rear lower cover [A], and then release the hook of the right lower cover [B] by rotating it in the direction of the blue arrow.



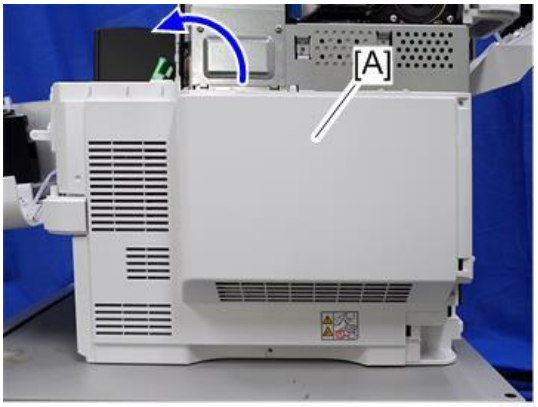
d0bta1068

13. Release the hooks [A] and [B].



d0bta1069

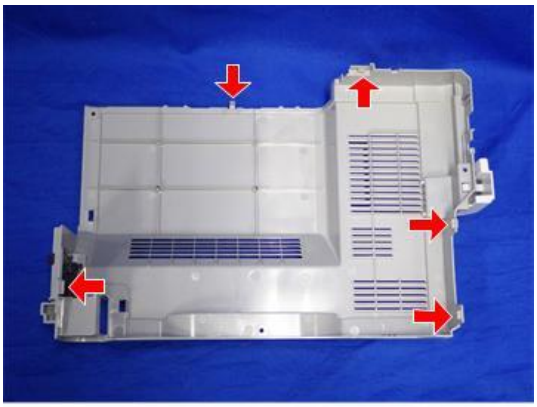
14. Remove the right lower cover [A] by rotating it in the direction of the arrow.



d0bta1070

Note

- Be careful not to damage the hooks on the right lower cover when removing or installing.



d255a1079

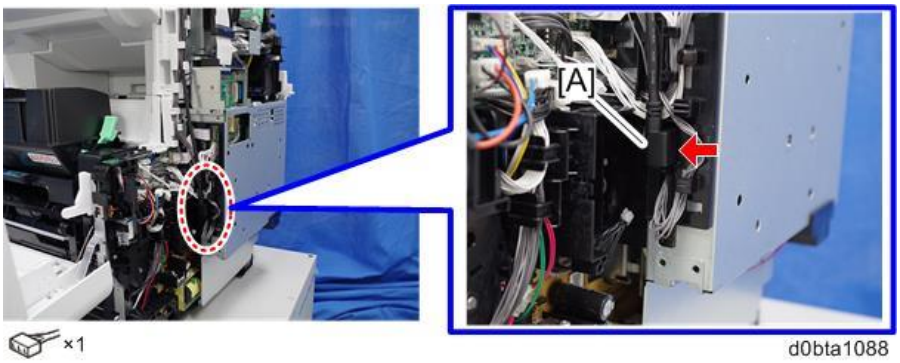
- Do not remove the screw [A] when removing the right lower cover [B].

d0bta1098

15. Remove the bracket [A].

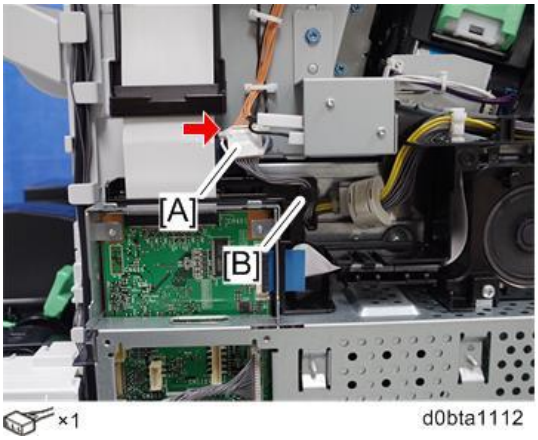
d0bta1082

16. Disconnect the USB connector [A] of the operation panel.



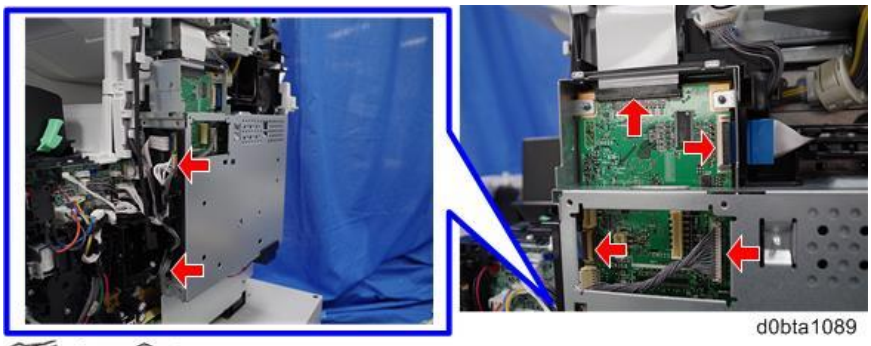
d0bta1088

17. Disconnect the connector [A] and release the harness from the harness guide [B].



d0bta1112

18. Disconnect the three flat cables and two connectors.

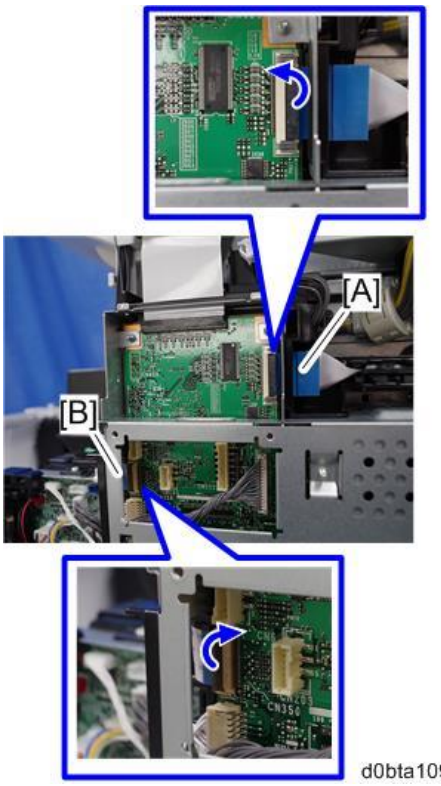


d0bta1089

×3 ×3

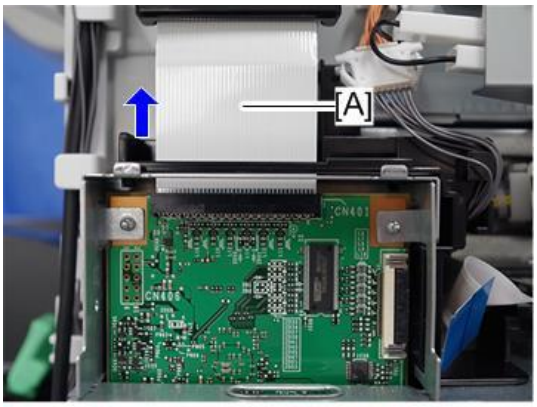
Note

- Make sure to open the flap before disconnecting the flat cables [A] and [B], as shown in the following pictures. Otherwise, the connector may be damaged.



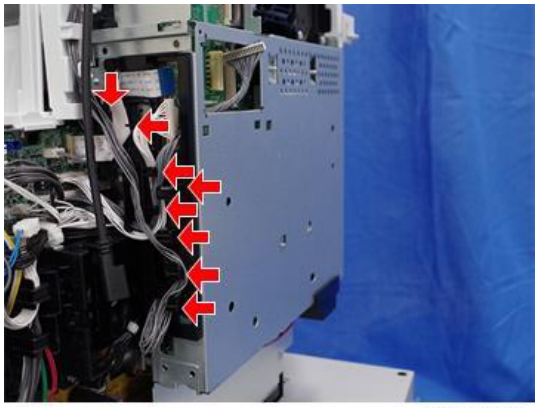
d0bta1090

- When disconnecting the flat cable [A], pull it out in the direction of the arrow.



d0bta1091

19. Release the flat cable and harness from the harness guides.



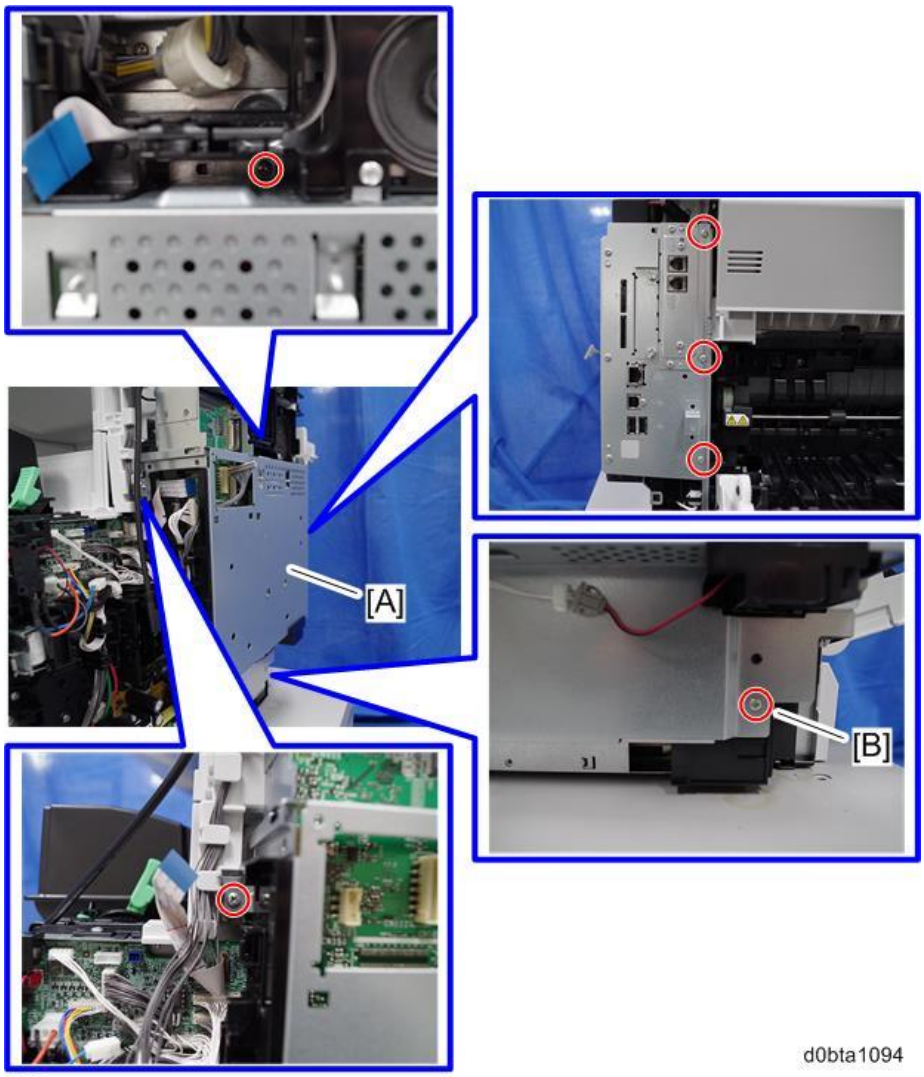
d0bta1092

20. Remove the cover [A].

×1

d0bta1093

21. Remove the six screws from the controller box [A].

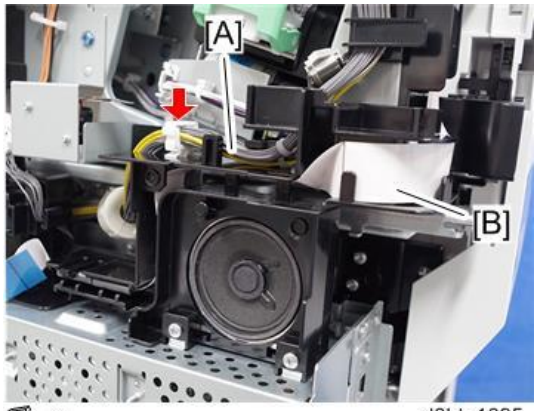


×6

Note

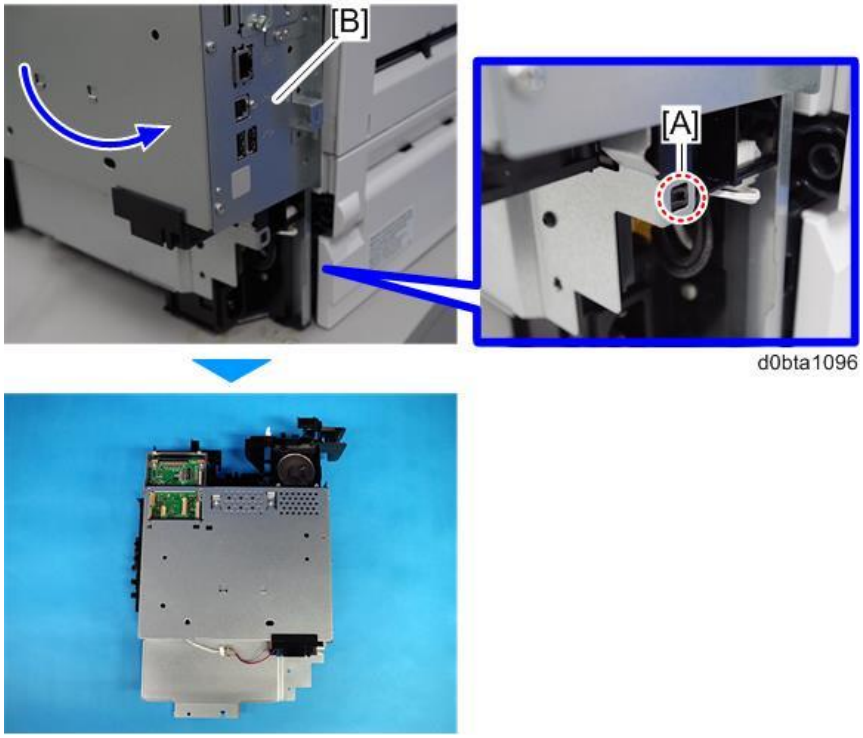
- The screw [B] is a tapping screw. Be careful not to use the wrong screw when installing the controller box.

22. Release the harnesses [A] and FFC [B] from the cable guides.

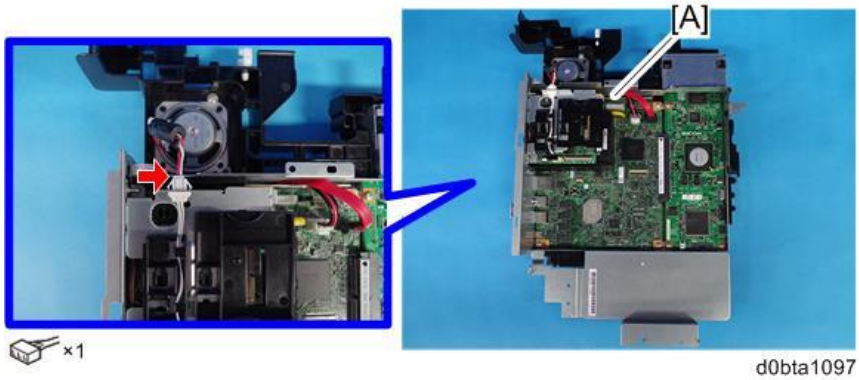


×1 d0bta1095

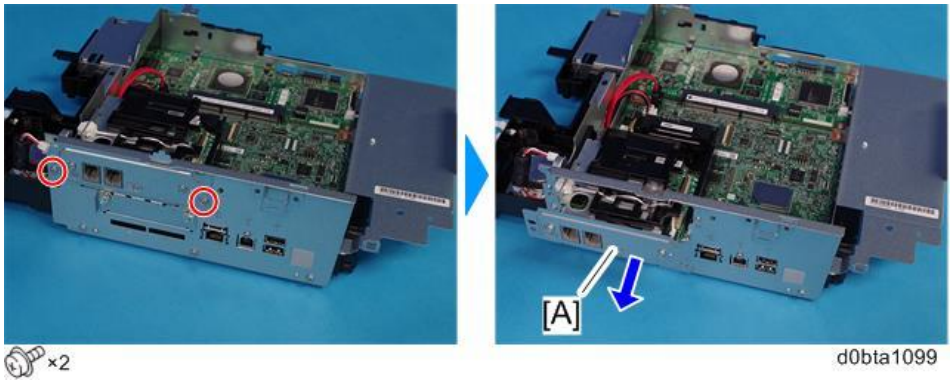
23. Release the hook [A], and then remove the controller box [B] by rotating it counter-clockwise.



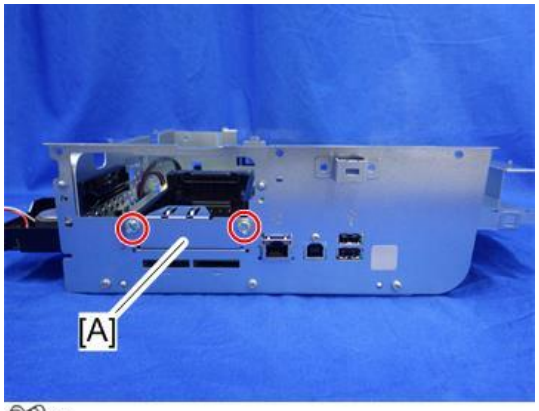
24. Disconnect the connector on the controller box [A].



25. Remove the fax unit [A].

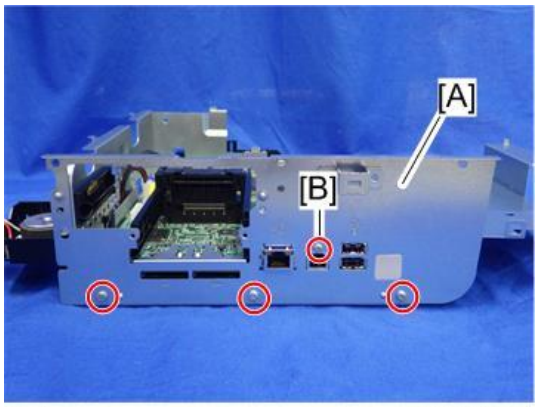


26. Remove the slot cover [A].



×2 d255a1094

27. Remove the controller box cover [A].

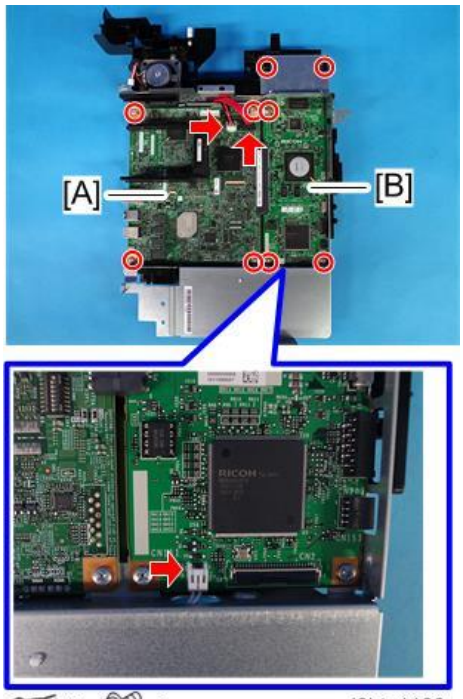


×4 d255a1095

Note

- The screw [B] is a small screw. Be careful not to use the wrong screw when installing the controller box cover.

28. Remove the controller board [A] with the BiCU [B].

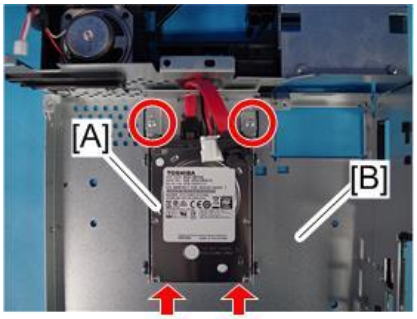


×3, ×9 d0bta1100

Note

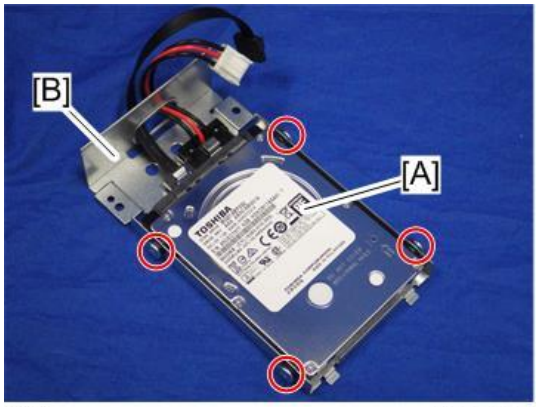
- Be careful not to damage the backside of the controller board [A] and the BiCU [B].

29. Remove the HDD with the bracket [A] from the controller box [B].



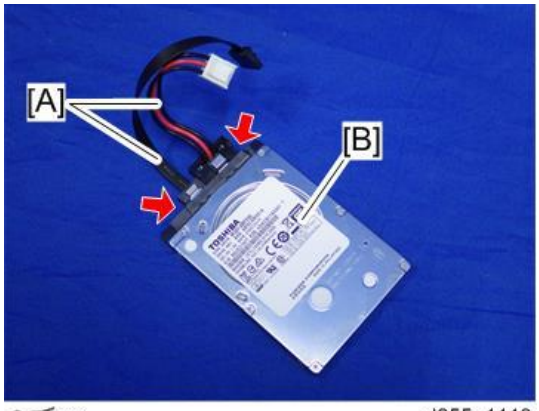
×2 ×2 d0bta1106

30. Remove the HDD [A] from the HDD bracket [B].



×4 d255a1114

31. Disconnect the two cables [A] from the HDD [B].

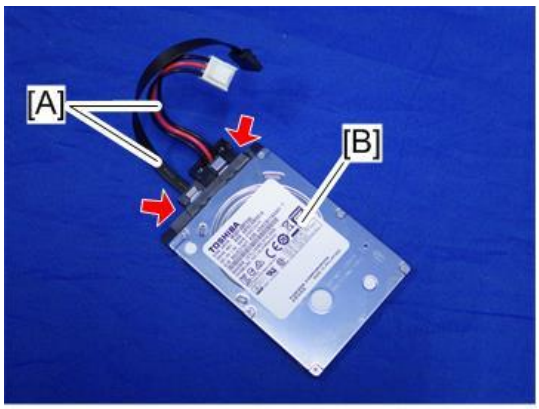


×2 d255a1113

32. Remove the enhanced security HDD from its protective package.

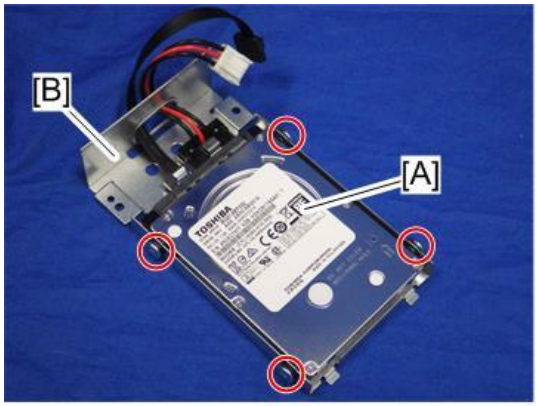
d191b0078

33. Connect the two cables [A] to the enhanced security HDD [B].



×2 d255a1113

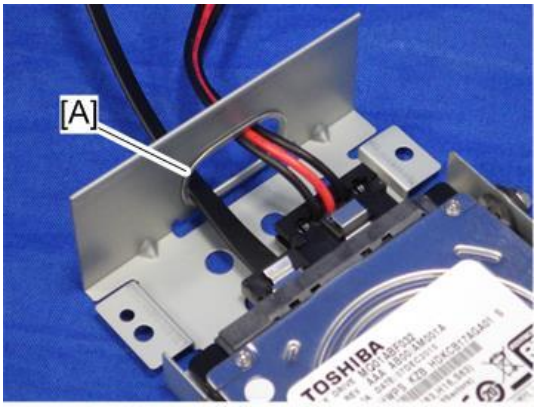
34. Install the enhanced security HDD [A] on the HDD bracket [B].



×4 d255a1114

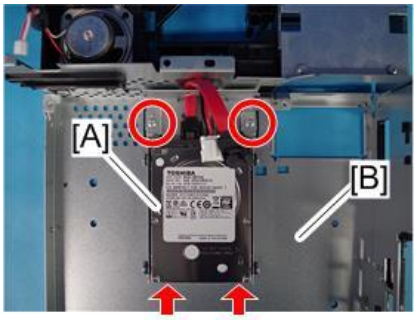
Note

- When installing the enhanced security HDD on the bracket, make sure to pass the cables through the hole [A] of the HDD bracket.



d255a1478

35. Install the HDD with the bracket [A] on the controller box [B].



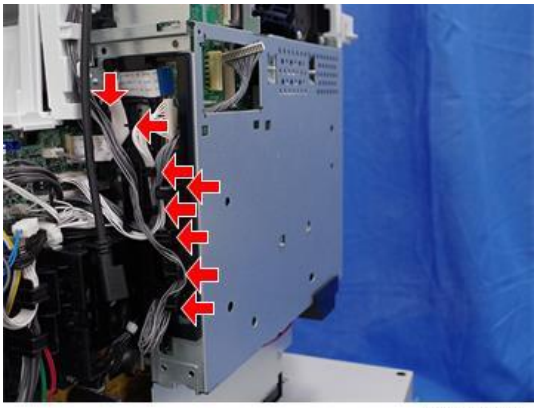
×2 ×2 d0bta1106

36. Reassemble the machine.

Note

- When reattaching the controller box [A], make sure to secure the harness and flat cable to

the harness guides, as shown below.



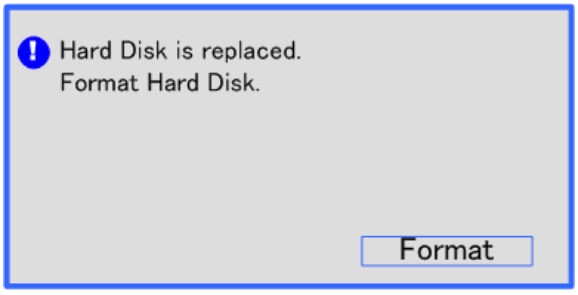
d0bta1092

- When reattaching the bracket [A] of the controller box [B], do not interpose the harness and the flat cable between the bracket and the controller box.

d0bta1082

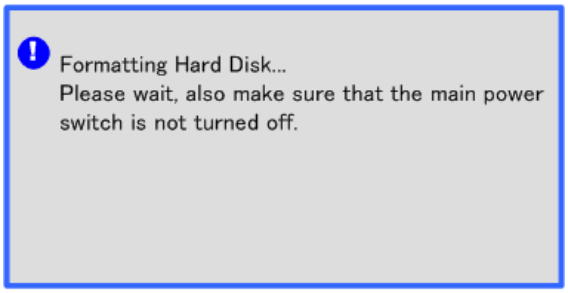
After Installing the HDD

1. Connect the power cord and turn ON the main power. "Format Hard Disk" message will be displayed.



d191b0081

2. Press [Format].

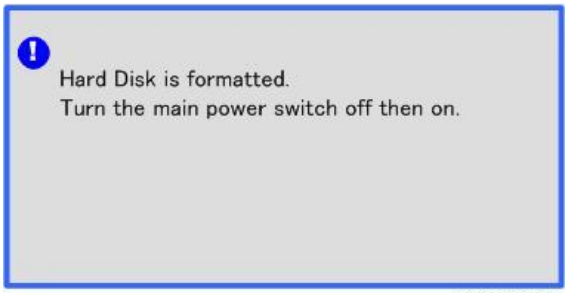


d191b0082

3. Wait for the machine to finish formatting the hard disk.

Important

- Do not touch the power switch while the hard disk format is in progress. Wait for the machine to tell you that the formatting is finished.



d191b0083

4. Turn the main power OFF/ON after the "Hard Disk is formatted" message.
5. Enter the SP mode.
6. Execute SP5-853-001 to copy the preset stamp data from the firmware to the hard disk. Follow the instructions on the screen. This will require three or four minutes.
7. Turn the main power OFF/ON.

Installation Procedure (IM 550F/600F)

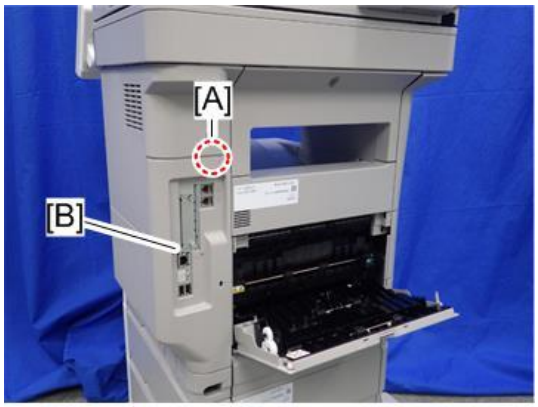
⚠CAUTION

- Turn OFF the main power, and unplug the machine power cord before starting the following procedure.

1. Open the rear upper cover [A].

d255a1030

2. Insert a flathead screwdriver into [A] to release the hook on the inside of the controller cover [B].



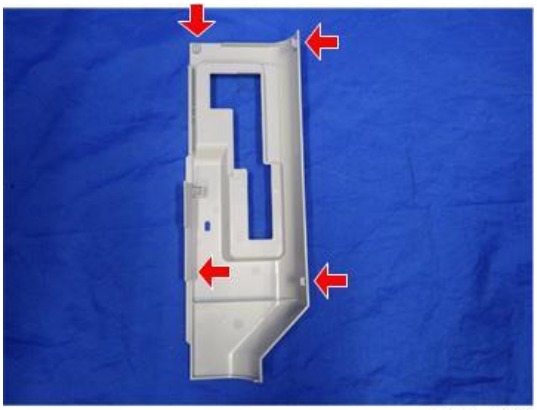
d255a1080

3. Release the hook by opening the right side of the cover, and then remove the cover [A] by rotating it in the direction of the blue arrow.

d255a1032

Note

- Be careful not to damage the hooks on the inside of the controller cover when you remove or install the controller cover.



d255a1033

4. Insert a flathead screwdriver in the order of ①, ②, and ③ to release the three hooks of the rear left stay [A].

5. Remove the rear right stay [A].

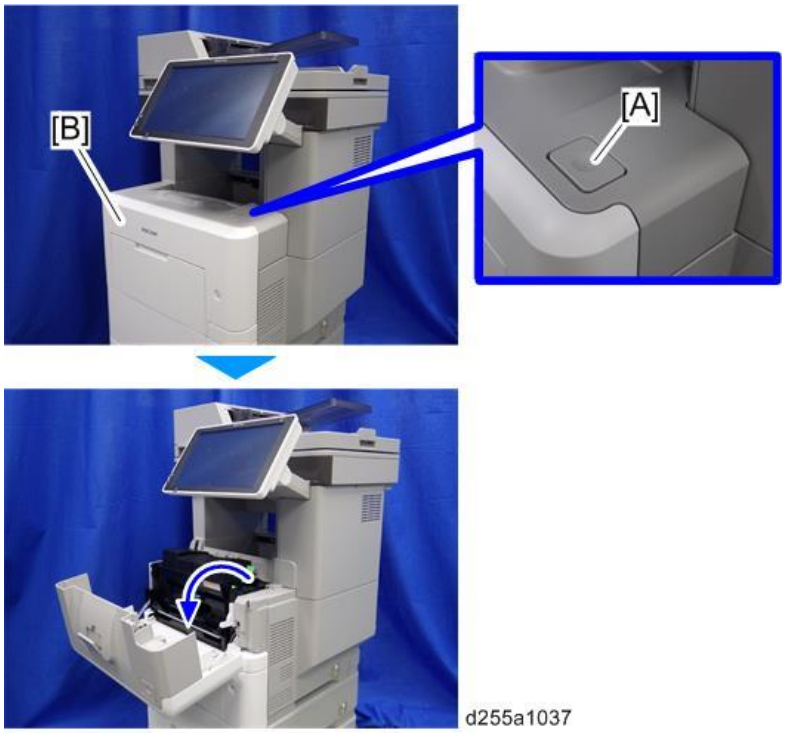
d0bta1114

Note

- Be careful not to damage the hooks on the inside of the rear left stay when you remove or install the rear left stay.

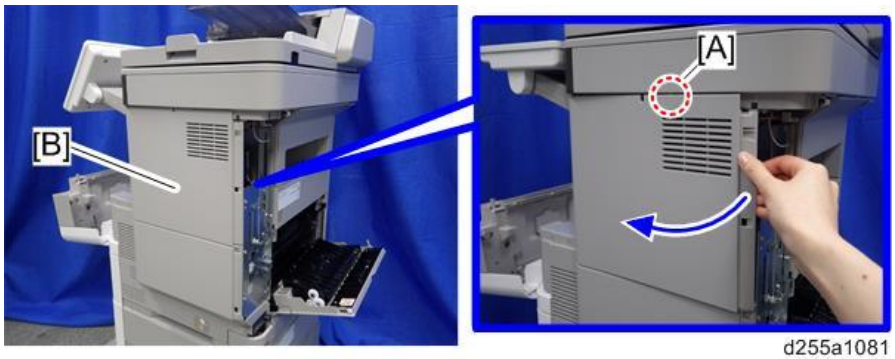
d0bta1115

6. Push the button [A] and open the front cover [B].



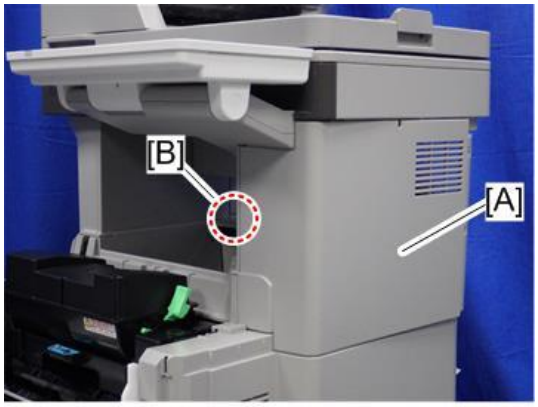
d255a1037

7. Release the hook [A] of the right upper cover [B] by opening the cover in the direction of the arrow.



d255a1081

8. Remove the right upper cover [A] by inserting a flathead screwdriver into [B].



d255a1039

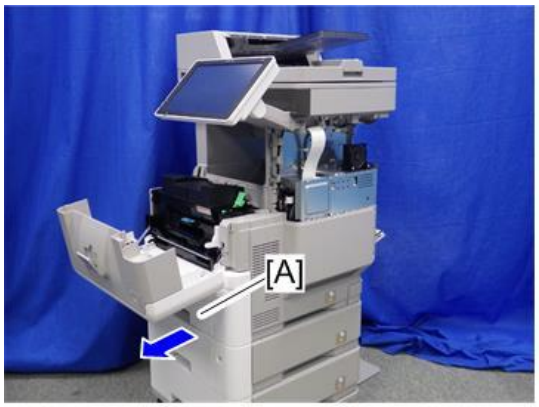
Note

- Be careful not to damage the hooks on the inside of the right upper cover when you

remove or install the right upper cover.

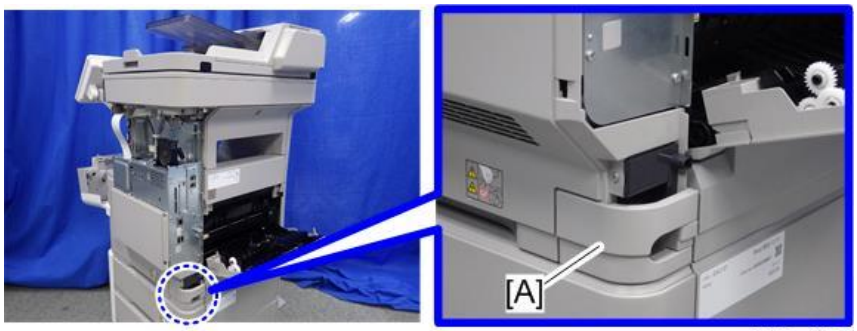
d255a1040

9. Remove the paper feed tray [A] by pulling it out.



d255a1071

10. Remove the power connector cover [A].



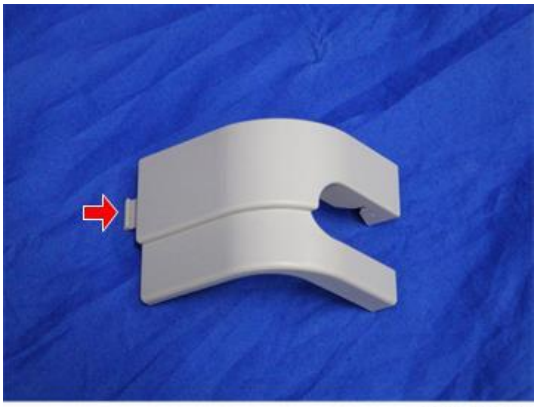
d255a1072

Note

- When removing the power connector cover, pull it in the direction of the arrow.

d255a1073

- Be careful not to damage the hook on the power connector cover when you remove or install the power connector cover.

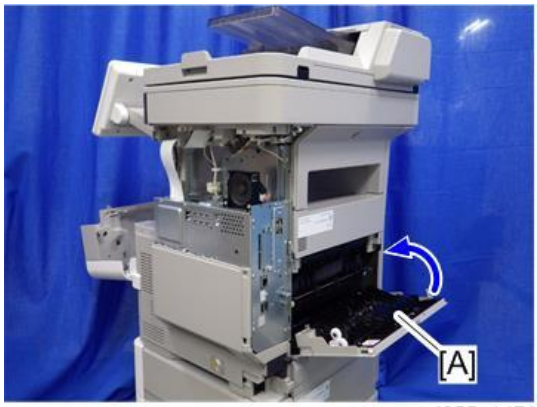


d255a1078

11. Remove the four screws from the right lower cover [A].

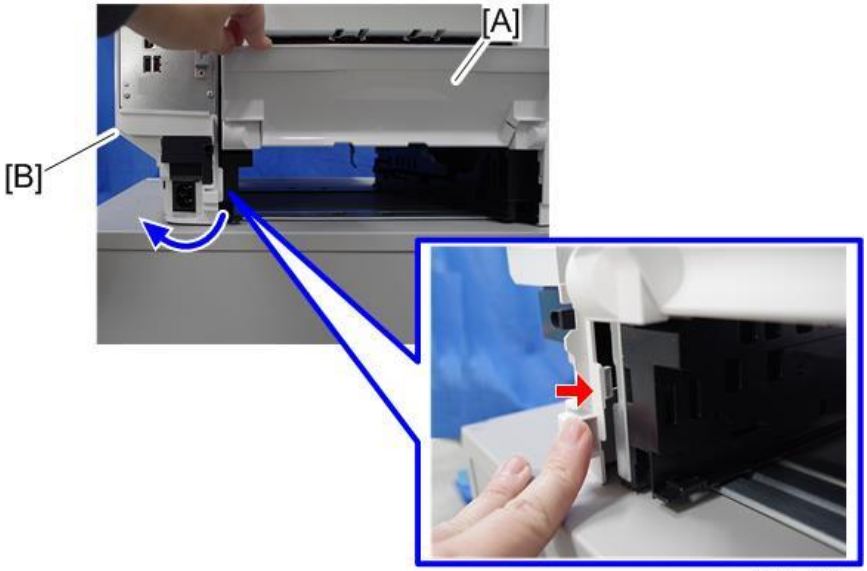
d255a1074

12. Close the rear upper cover [A].



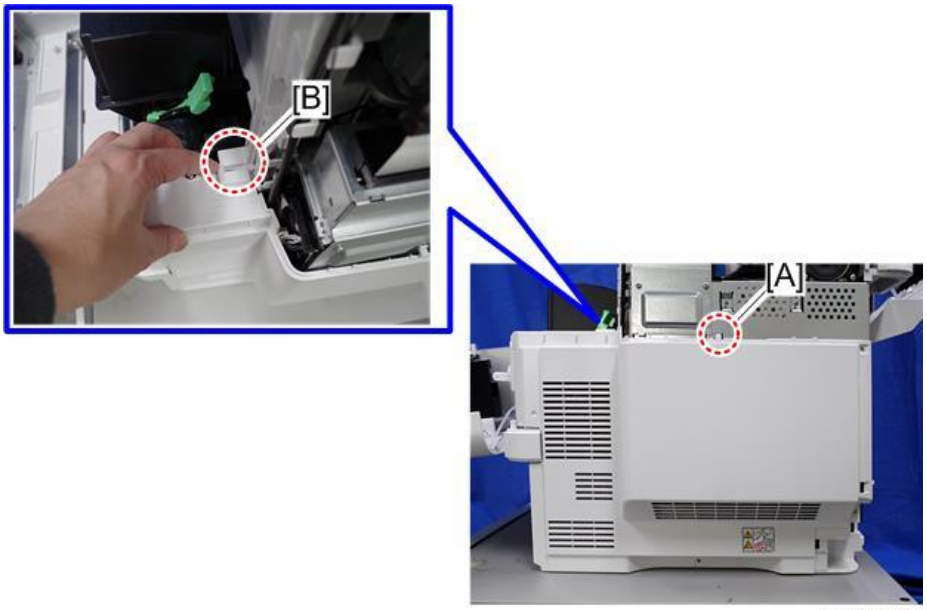
d255a1471

13. Open the rear lower cover [A], and then release the hook of the right lower cover [B] by rotating it in the direction of the blue arrow.



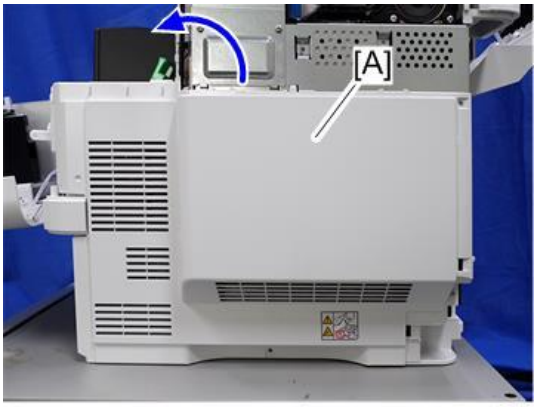
d0bta1068

14. Release the hooks [A] and [B].



d0bta1069

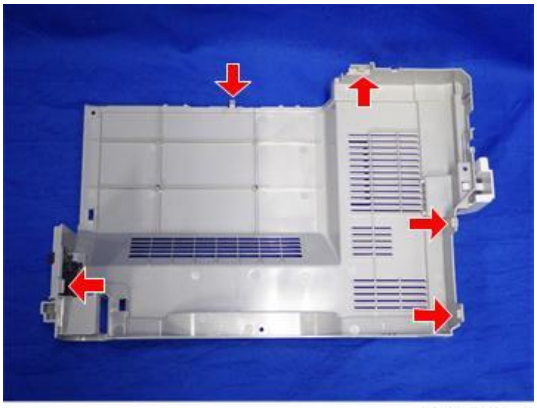
15. Remove the right lower cover [A] by rotating it in the direction of the arrow.



d0bta1070

Note

- Be careful not to damage the hooks on the inside of the right lower cover when you remove or install the right lower cover.



d255a1079

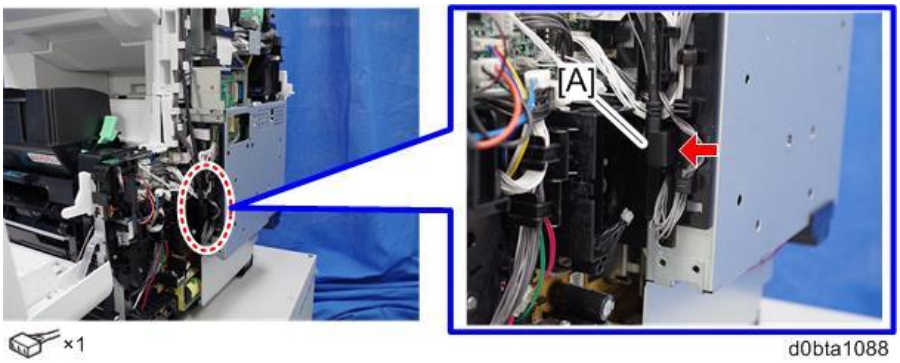
- Do not remove the screw [A] when removing the right lower cover [B].

d0bta1098

16. Remove the bracket [A].

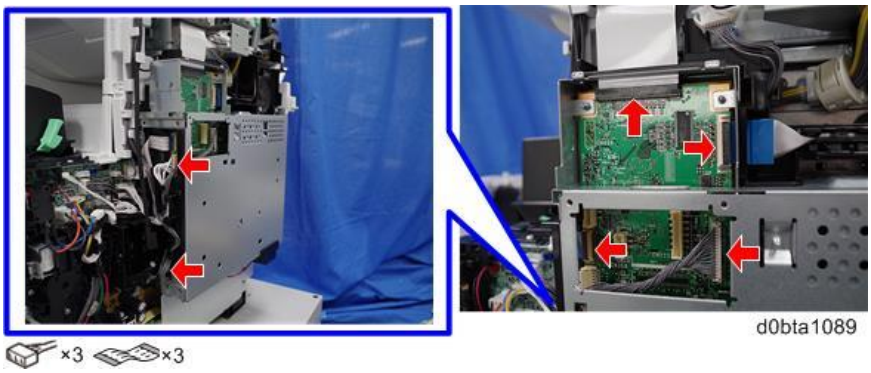
d0bta1082

17. Disconnect the USB connector [A] of the operation panel.



d0bta1088

18. Disconnect the three flat cables and two connectors.

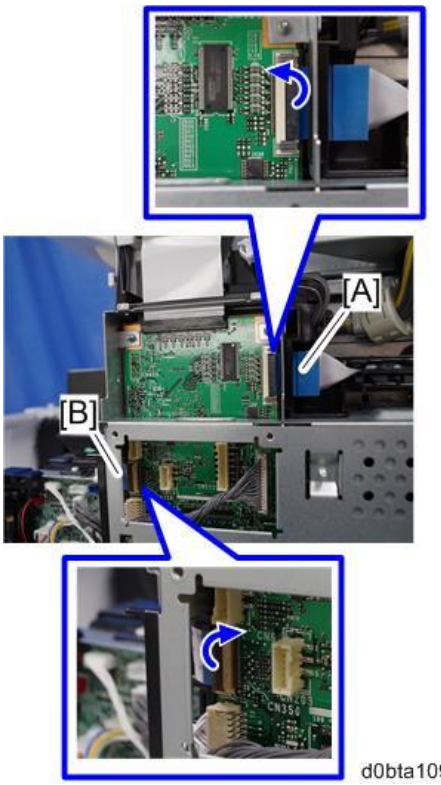


d0bta1089

Note

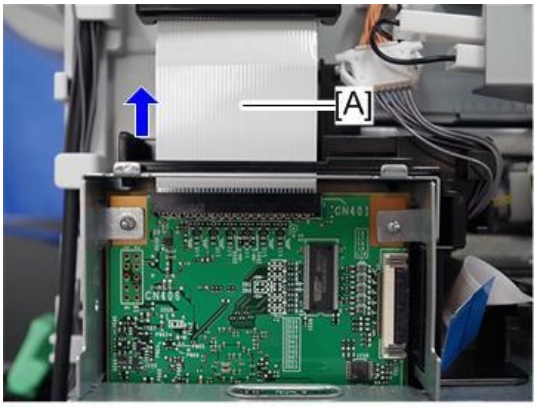
- Make sure to open the flap before disconnecting the flat cables [A] and [B], as shown in

the following pictures. Otherwise, the connector may be damaged.



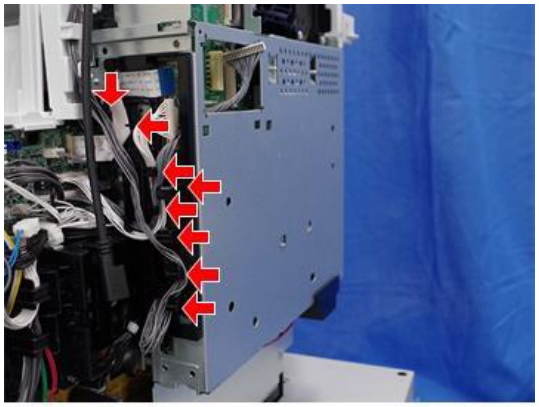
d0bta1090

- When disconnecting the flat cable [A], pull it out in the direction of the arrow.

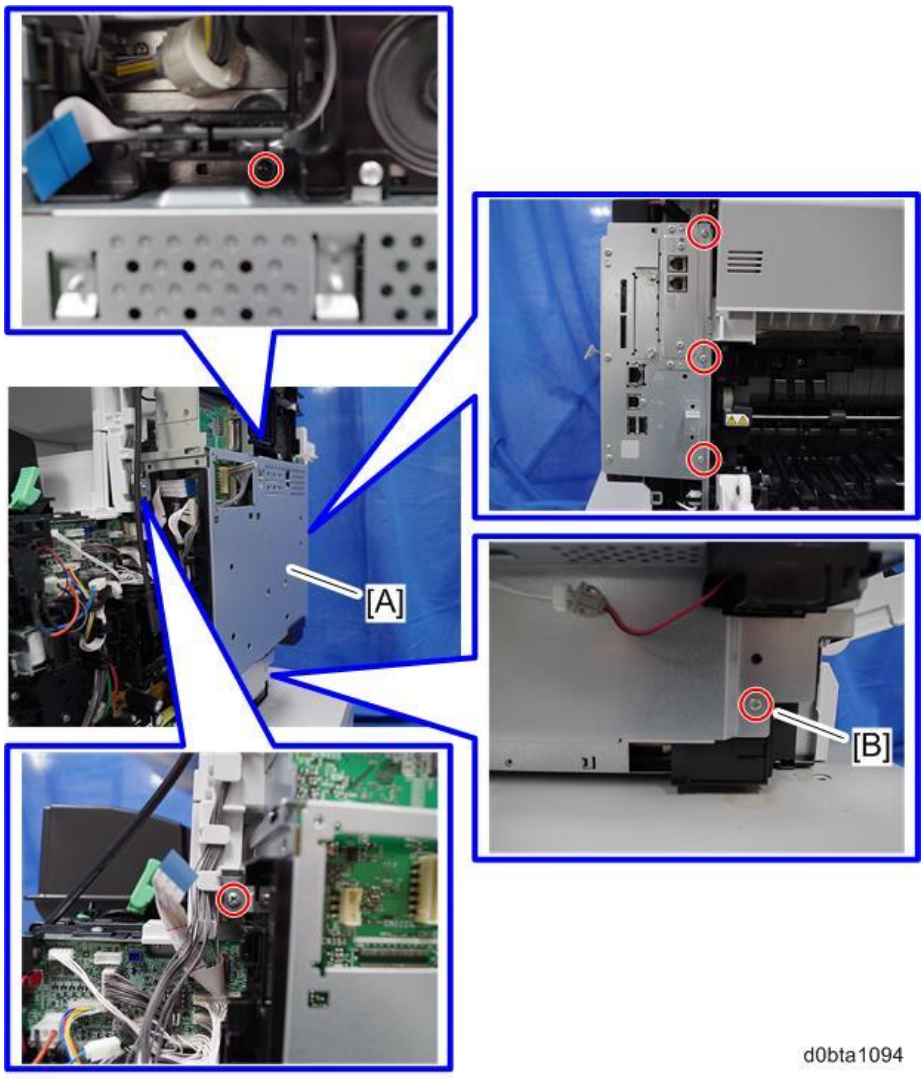


d0bta1091

19. Release the flat cable and harness from the harness guides.


d0bta1092

20. Remove the six screws from the controller box [A].



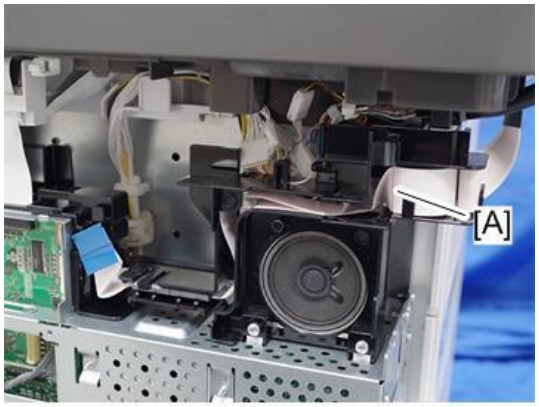
d0bta1094

×6

Note

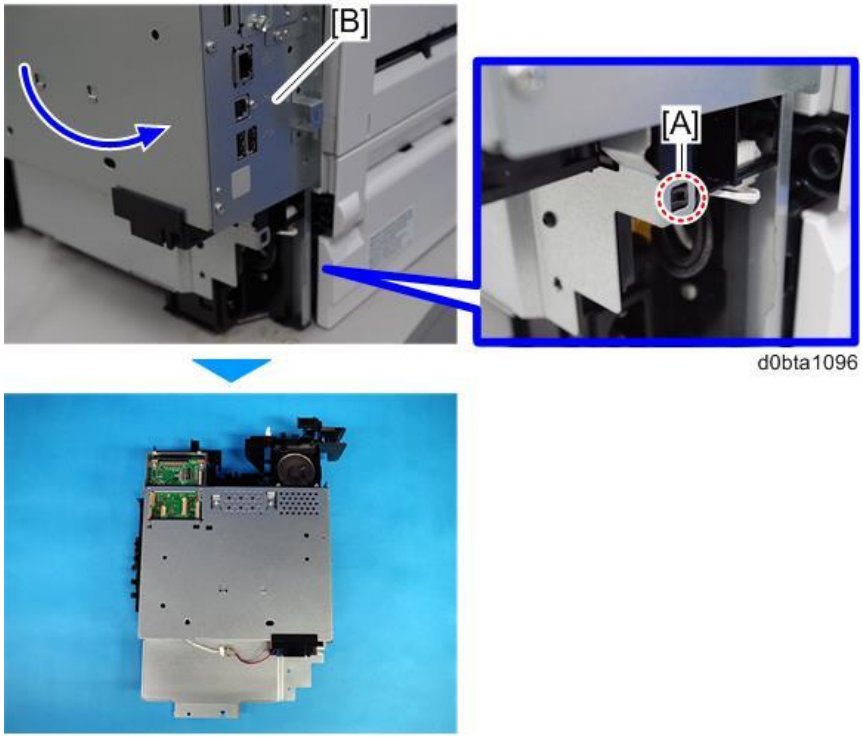
- The screw [B] is a tapping screw. Be careful not to use the wrong screw when installing the controller box.

21. Release the FFC [A] from the cable guides.

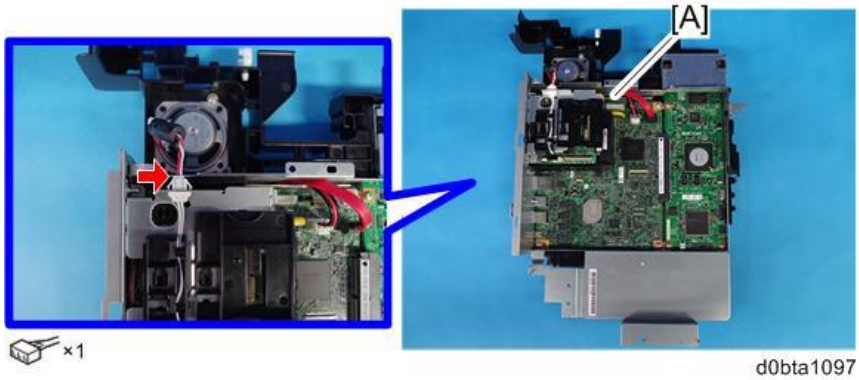


d0bta1113

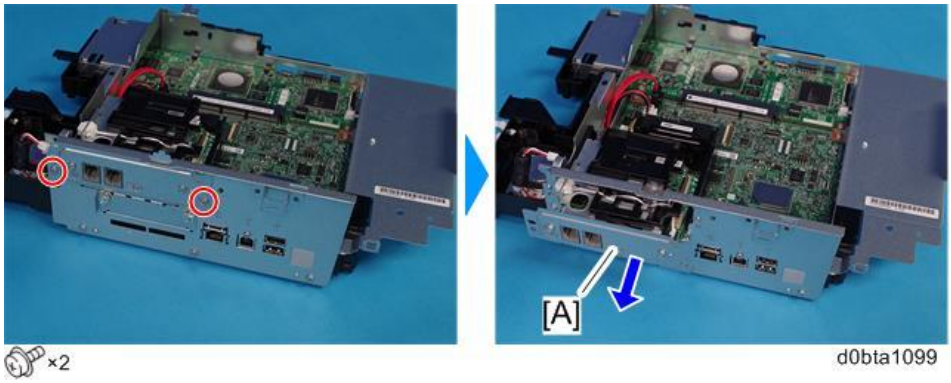
22. Release the hook [A], and then remove the controller box [B] by rotating it counter-clockwise.



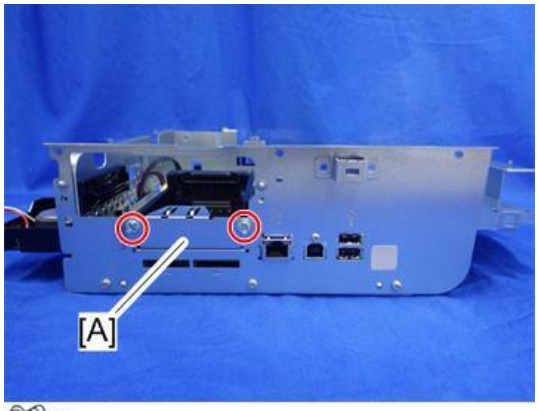
23. Disconnect the connector on the controller box [A].



24. Remove the fax unit [A].

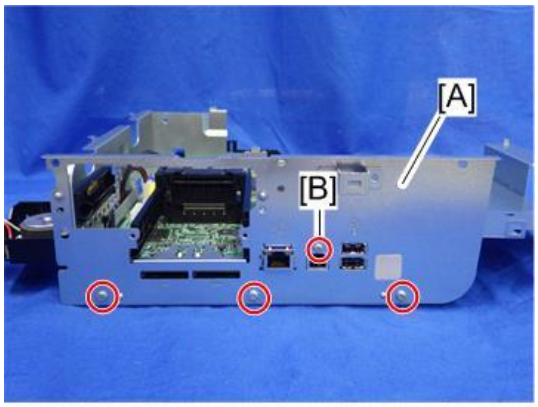


25. Remove the slot cover [A].



×2 d255a1094

26. Remove the controller box cover [A].

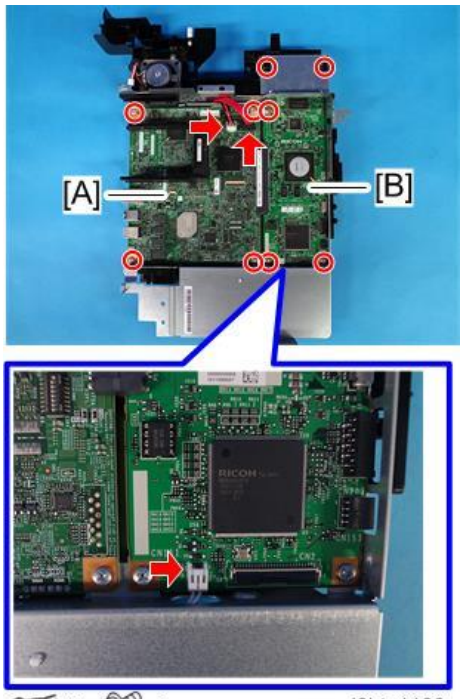


×4 d255a1095

Note

- The screw [B] is a small screw. Be careful not to use the wrong screw when installing the controller box cover.

27. Remove the controller board [A] with the BiCU [B].

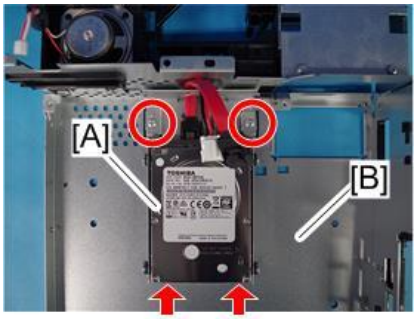


×3, ×9 d0bta1100

Note

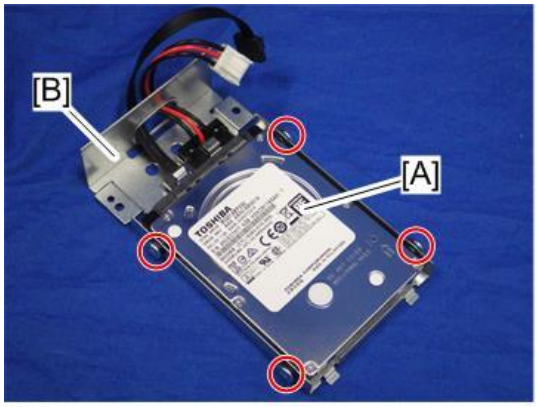
- Be careful not to damage the backside of the controller board [A] and the BiCU [B].

28. Remove the HDD with the bracket [A] from the controller box [B].



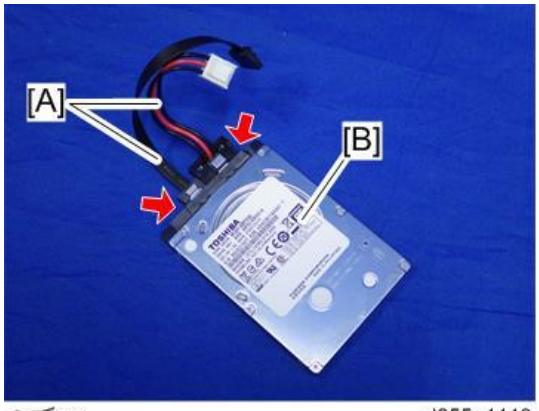
×2 ×2 d0bta1106

29. Remove the HDD [A] from the HDD bracket [B].



×4 d255a1114

30. Disconnect the two cables [A] from the HDD [B].

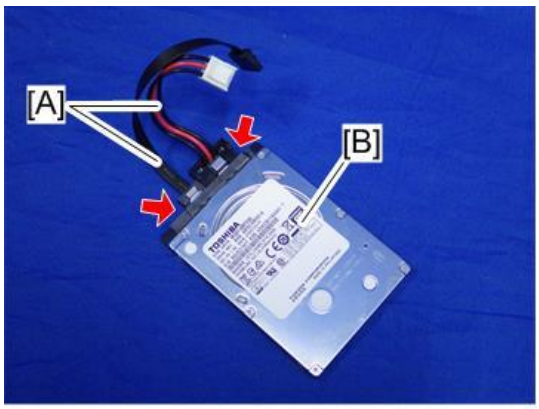


×2 d255a1113

31. Remove the enhanced security HDD from its protective pack.

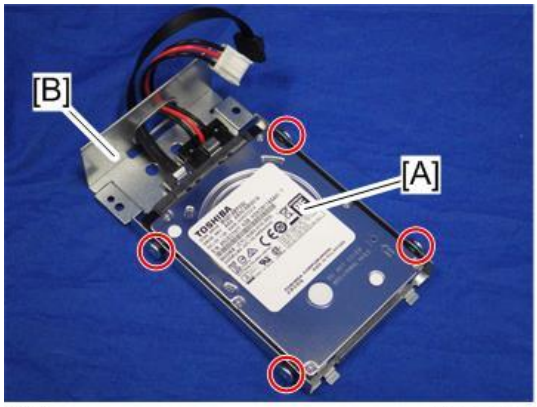
d191b0078

32. Connect the two cables [A] to the enhanced security HDD [B].



×2 d255a1113

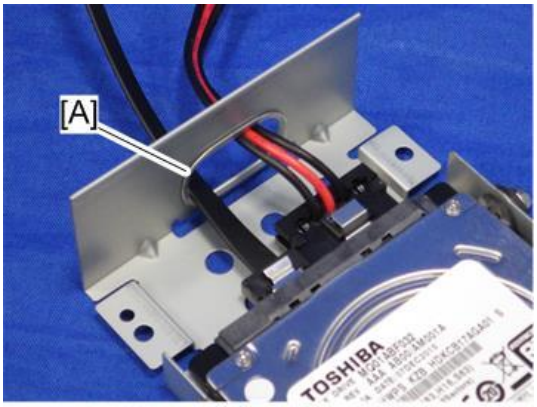
33. Install the enhanced security HDD [A] on the HDD bracket [B].



×4 d255a1114

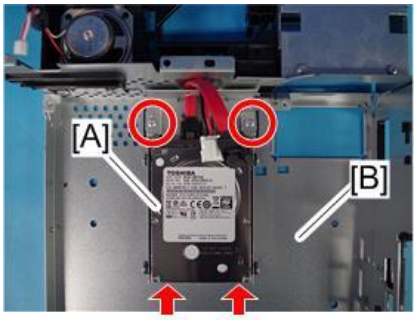
Note

- When installing the enhanced security HDD on the bracket, make sure to pass the cables through the hole [A] of the HDD bracket.



d255a1478

34. Install the HDD with the bracket [A] on the controller box [B].



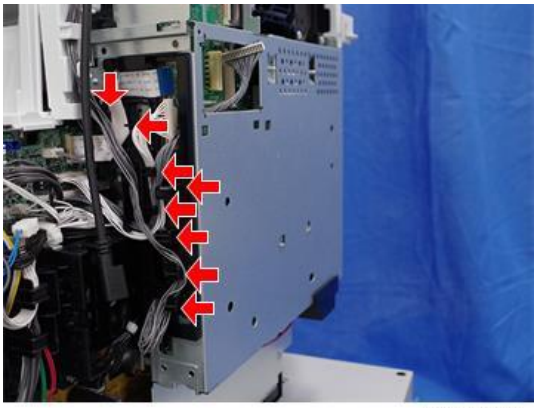
×2 ×2 d0bta1106

35. Reassemble the machine.

Note

- When reattaching the controller box [A], make sure to secure the harness and flat cable to

the harness guides, as shown below.



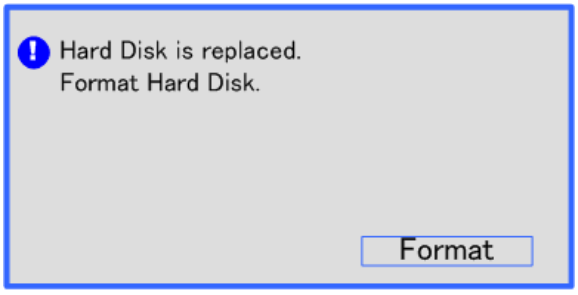
d0bta1092

- When reattaching the bracket [A] of the controller box [B], do not interpose the harness and the flat cable between the bracket and the controller box.

d0bta1082

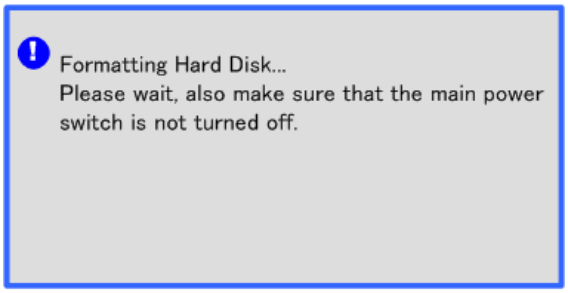
After Installing the HDD

1. Connect the power cord and turn ON the main power. "Format Hard Disk" message will be displayed.



d191b0081

2. Press [Format].

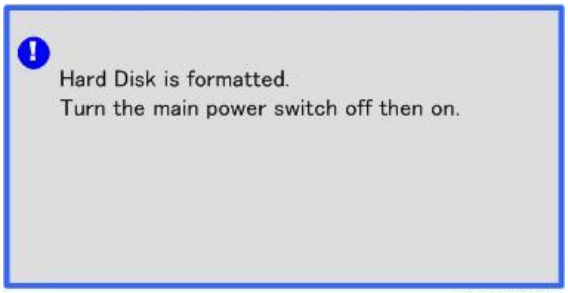


d191b0082

3. Wait for the machine to finish formatting the hard disk.

Important

- Do not touch the power switch while the hard disk format is in progress. Wait for the machine to tell you that the formatting is finished.



d191b0083

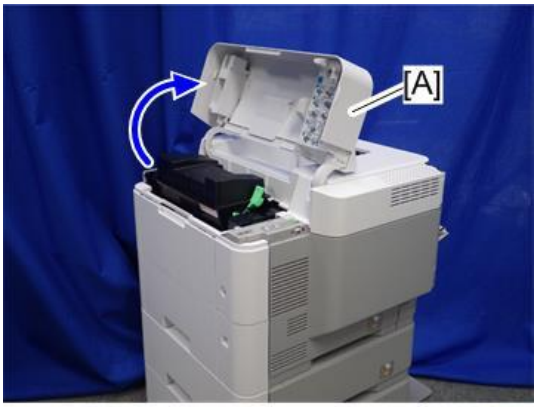
4. Turn the main power OFF/ON after the "Hard Disk is formatted" message.
5. Enter the SP mode.
6. Execute SP5-853-001 to copy the preset stamp data from the firmware to the hard disk. Follow the instructions on the screen. This will require three or four minutes.
7. Turn the main power OFF/ON.

Installation Procedure (P 800/801)

⚠CAUTION

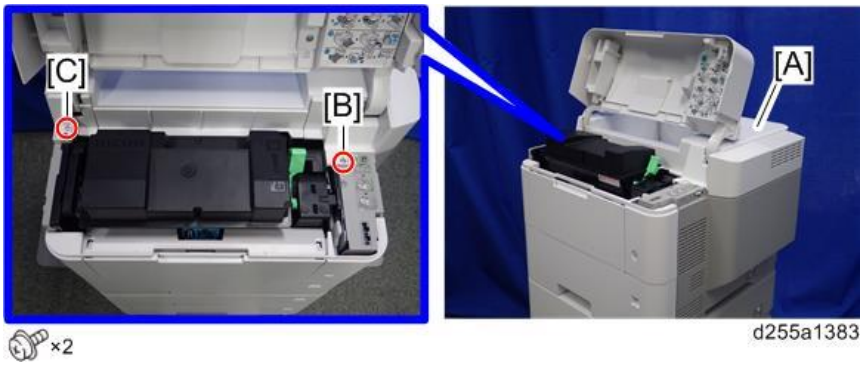
- Turn OFF the main power, and unplug the machine power cord before starting the following procedure.

1. Open the upper cover [A].



d255a1382

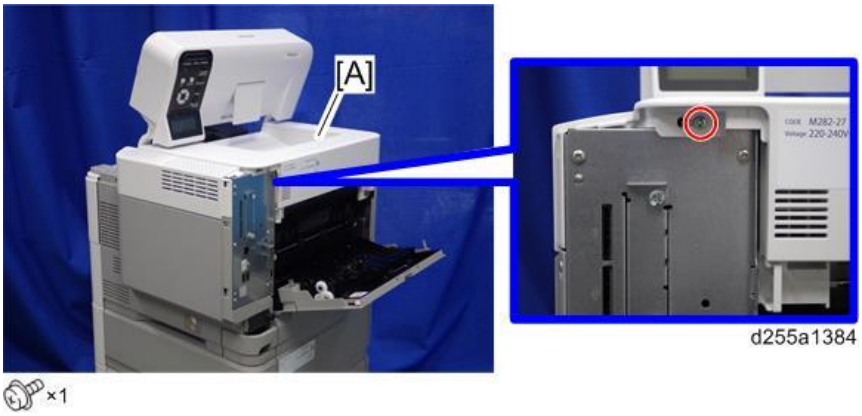
2. Remove the two screws from the upper cover [A].



Note

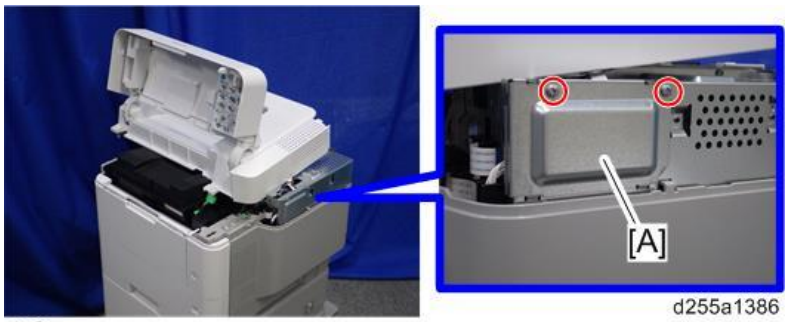
- The screw [B] is a sems screw. The screw [C] is a tapping screw. Be careful not use the wrong screws when installing the upper cover.

3. Remove the screw from the rear side of the upper cover [A].



4. Lift the upper cover [A] by releasing the two hooks, and then put it on the mainframe so that you can access the bracket [B] on the right side of the machine.

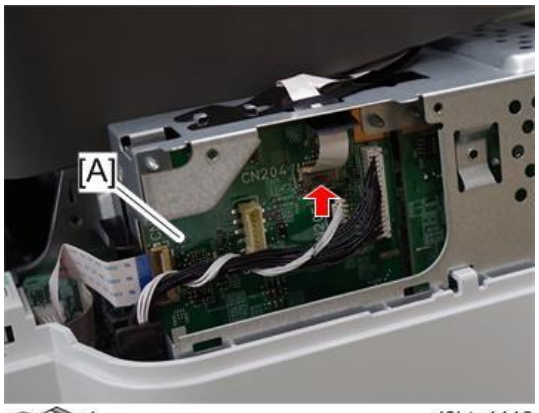
5. Remove the bracket [A].



d255a1386

×2

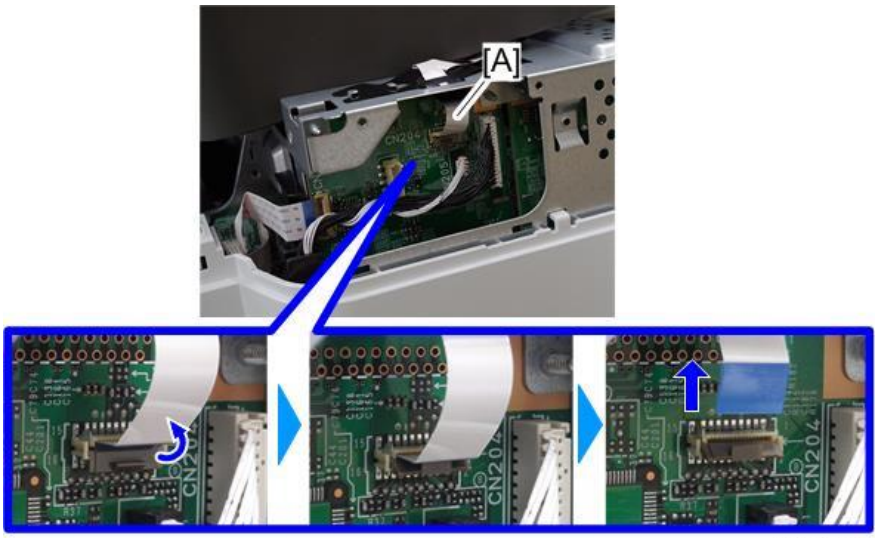
6. Disconnect the flat cable from the BiCU [A].



×1 d0bta1116

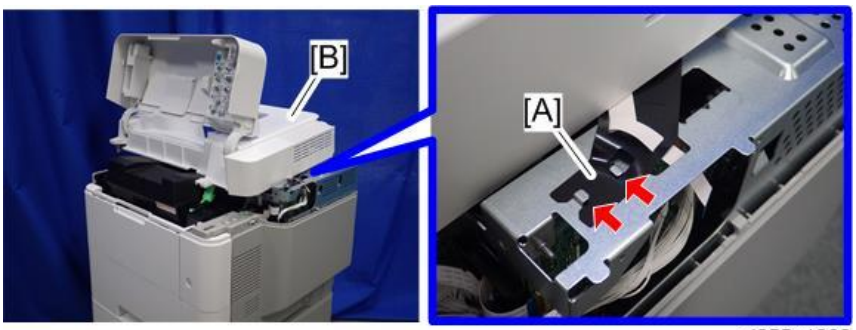
Note

- Make sure to open the flap before disconnecting the flat cable [A], as shown in the following pictures. Otherwise, the connector may be damaged.



d0bta1117

7. Remove the plastic sheet [A] from the mainframe (hook×2), and then remove the upper cover [B].



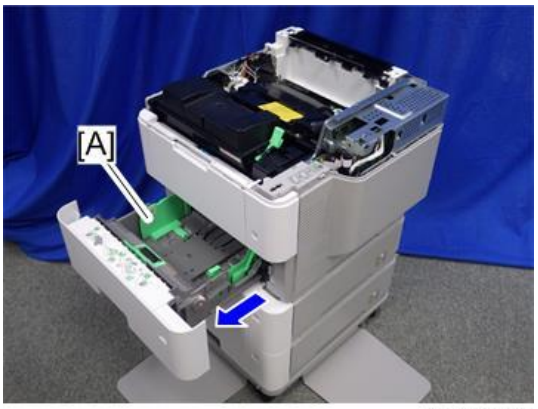
d255a1389

Note

- Be careful not to damage the hooks on the inside of the upper cover when you remove or install the upper cover.

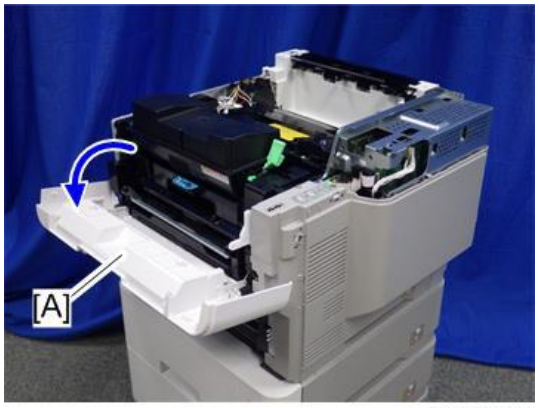
d255a1390

8. Remove the paper feed tray [A] by pulling it out.



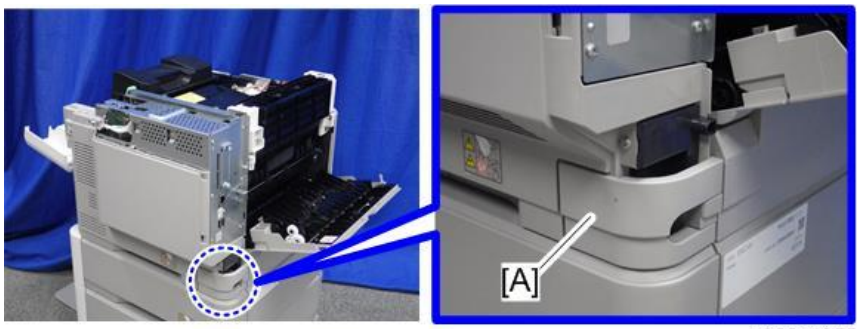
d255a1353

9. Open the front cover [A].



d255a1354

10. Remove the power connector cover [A].



d255a1355

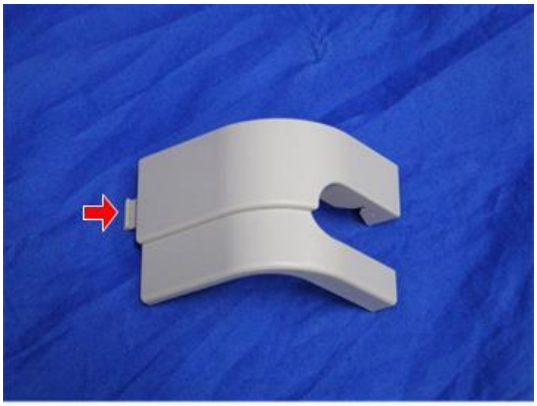
Note

- When removing the power connector cover, pull it in the direction of the arrow.

d255a1356

- Be careful not to damage the hook on the power connector cover when you remove or

install the power connector cover.



d255a1078

11. Remove the five screws from the right cover [A].

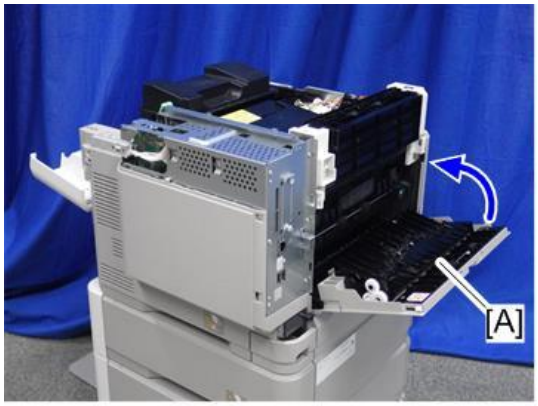
d255a1357

×5

Note

- The screw [B] is a tapping screw. The screw [C] is a long screw. Be careful not to use the wrong screws when installing the right cover.

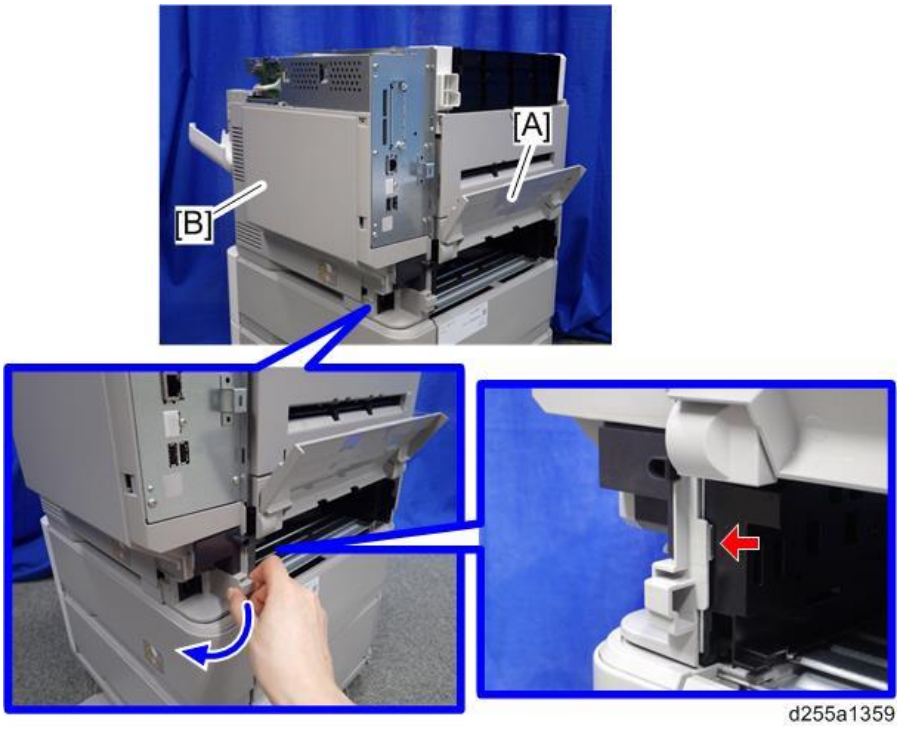
12. Close the rear upper cover [A].



d255a1358

13. Open the rear lower cover [A], and then release the hook of the right cover [B] by rotating it in the

direction of the blue arrow.



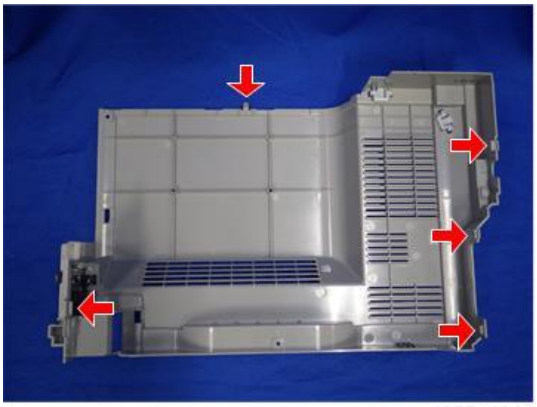
d255a1359

14. Release the four hooks, and then remove the right cover [A].

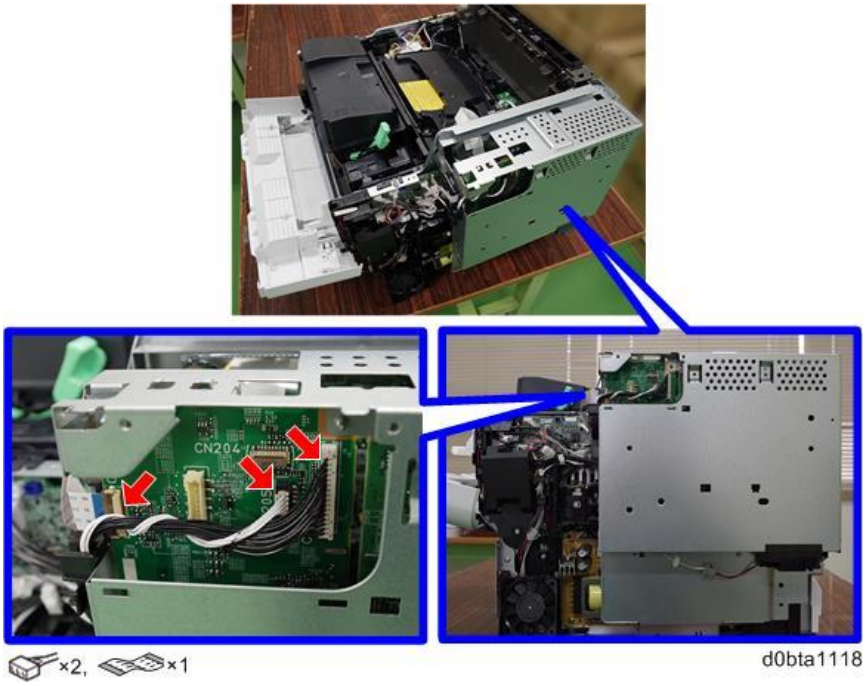
d255a1360

Note

- Be careful not to damage the hooks on the inside of the right cover when you remove or install the right cover.

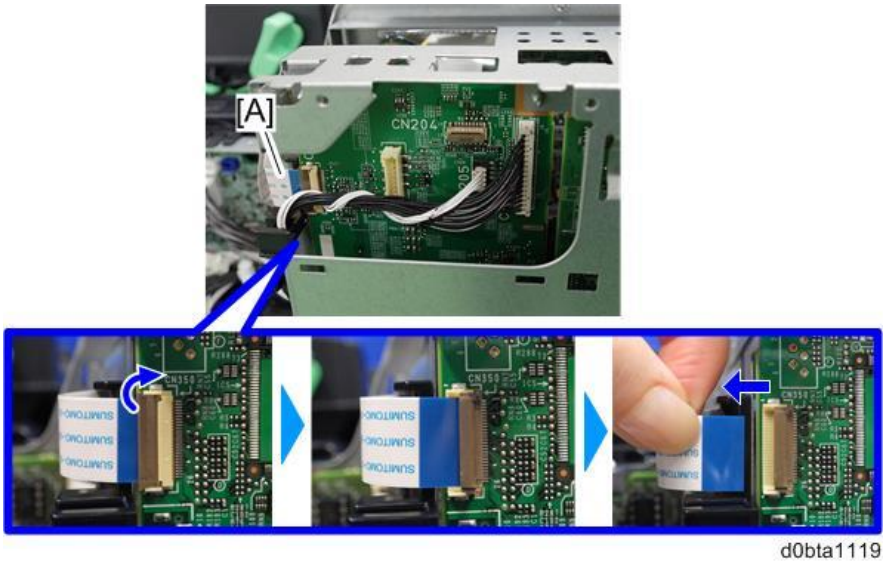

d255a1361

15. Disconnect the flat cable and two connectors.

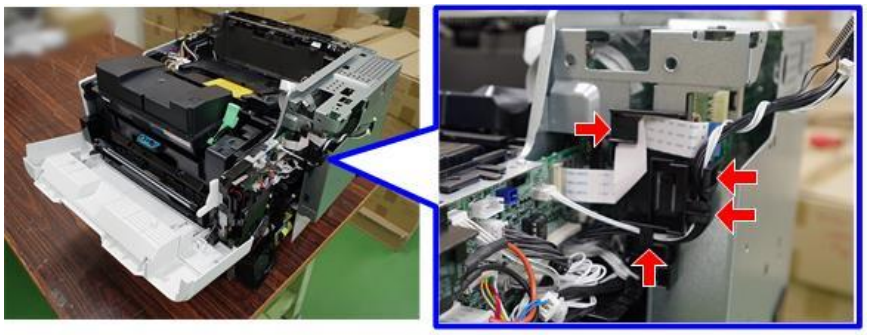


Note

- Make sure to open the flap before disconnecting the flat cable [A], as shown in the following pictures. Otherwise, the connector may be damaged.

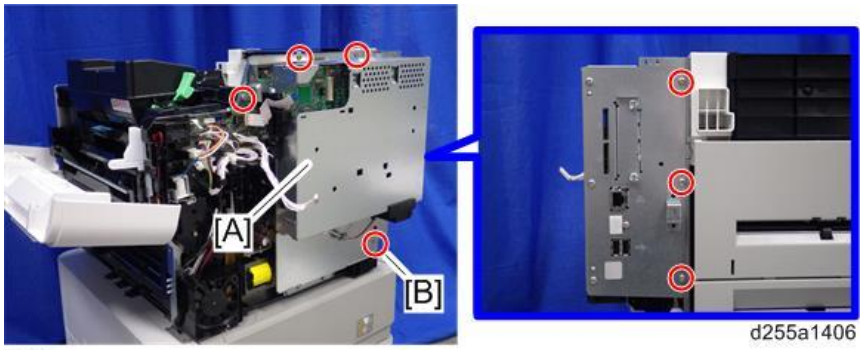


16. Release the flat cable and harness from the harness guides.



d0bta1120

17. Remove the seven screws from the controller box [A].



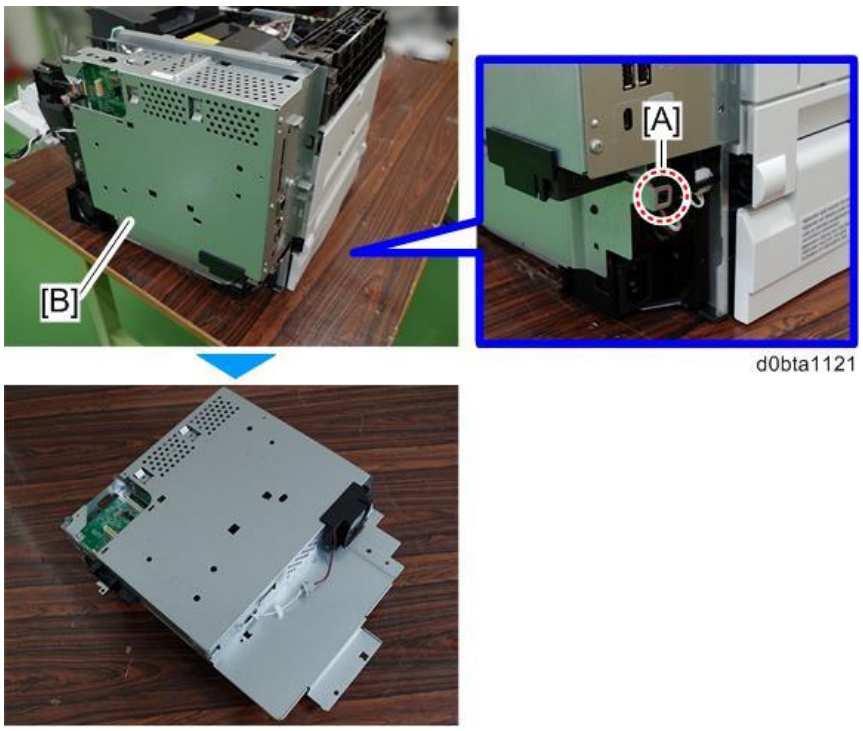
d255a1406

×7

Note

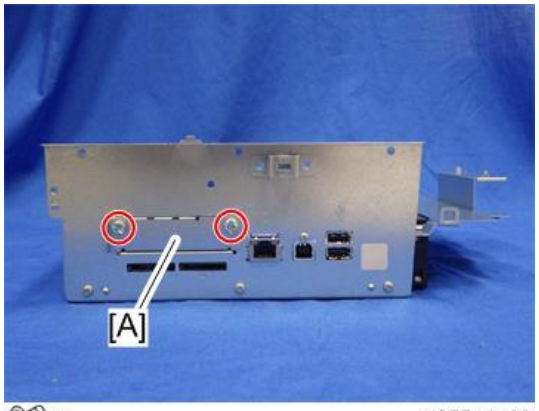
- The screw [B] is a tapping screw. Be careful not to use the wrong screws when installing the controller box.

18. Release the hook [A], and then remove the controller box [B].



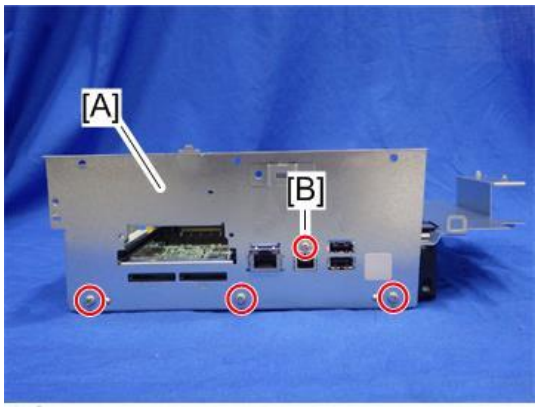
d0bta1121

19. Remove the slot cover [A].



×2 d255a1409

20. Remove the controller box cover [A].

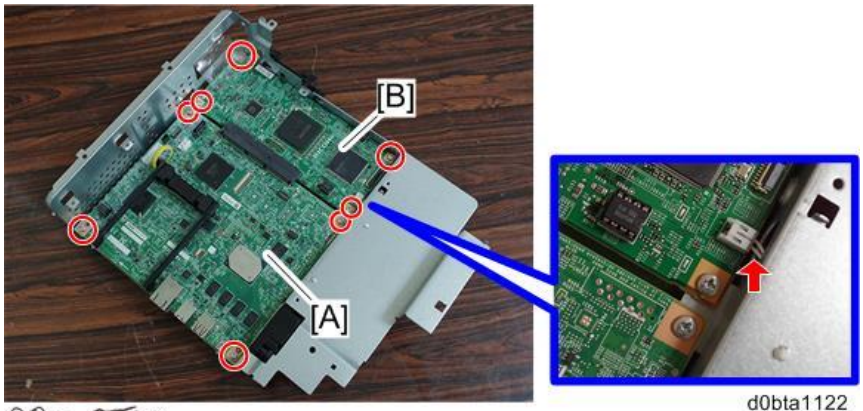


×4 d255a1410

Note

- The screw [B] is a small screw. Be careful not to use the wrong screw when installing the controller box cover.

21. Remove the controller board [A] with the BiCU [B].



×8, ×1 d0bta1122

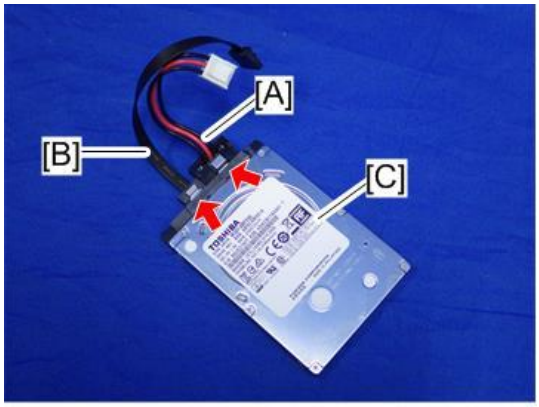
Note

- Be careful not to damage the backside of the controller board [A] and the BiCU [B].

22. Remove the enhanced security HDD from its protective packaging.

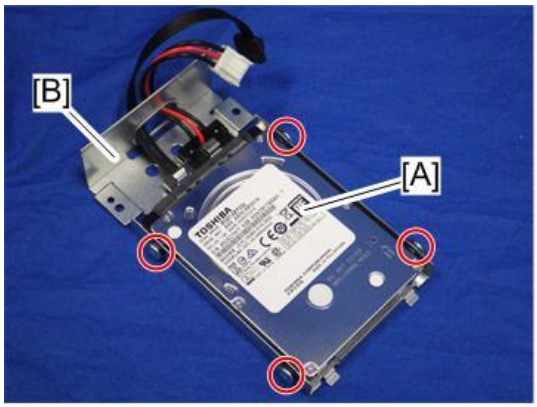
d191b0078

23. Connect the power source cable [A] and data cable [B] to the enhanced security HDD [C].



×2 d255a1487

24. Install the enhanced security HDD [A] on the HDD bracket [B] with the stepped screws.

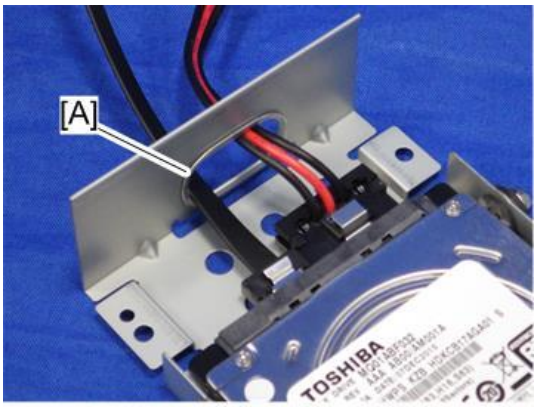


×4 d255a1114

Note

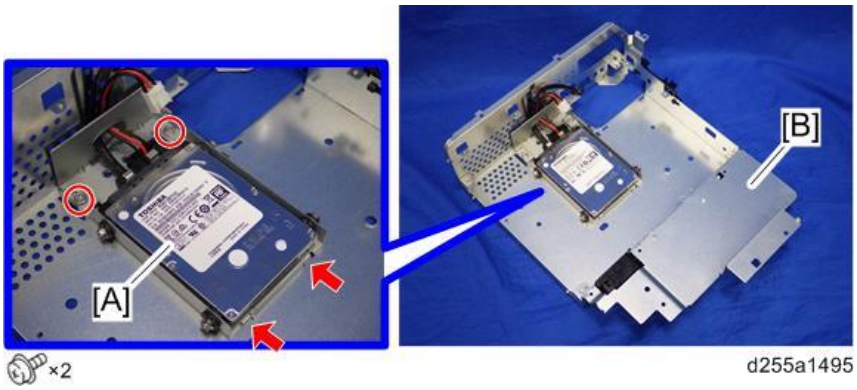
- When installing the enhanced security HDD on the bracket, make sure to pass the cables

through the hole [A] of the HDD bracket.



d255a1478

25. Install the HDD with the bracket [A] on the controller box [B] with the tapping screws. (hook×2)

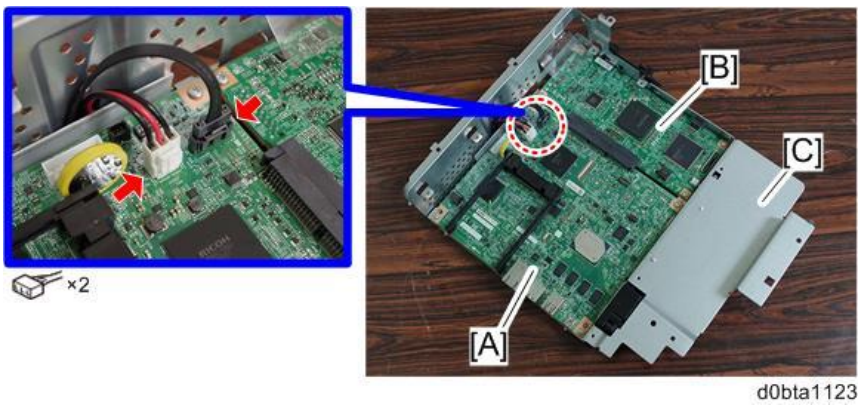


d255a1495

26. Reassemble the machine.

Note

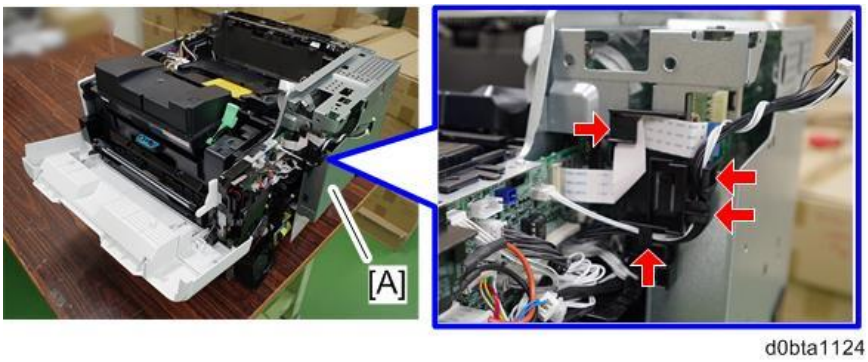
- When reattaching the controller board [A] with the BiCU [B] on the controller box [C], connect the two cables of the HDD to the controller board [A].



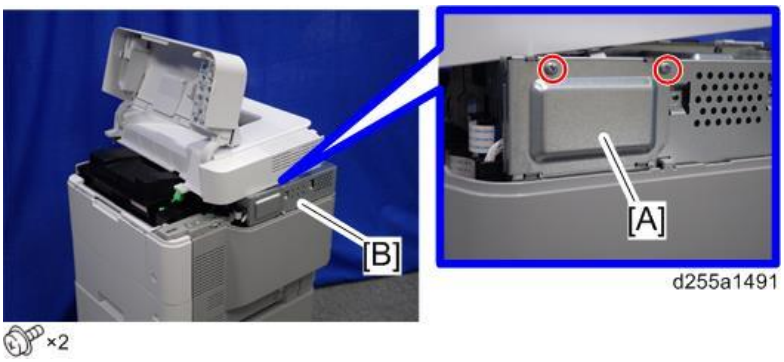
d0bta1123

- When reattaching the controller box [A], make sure to secure the harness and flat cable to

the harness guides, as shown below.



- When reattaching the bracket [A] of the controller box [B], do not interpose the harness and the flat cable between the bracket and the controller box.



After Installing the HDD

1. Connect the power cord and turn ON the main power.
   The message "Hard Disk is replaced. Format Hard Disk." is displayed.
2. Select [Format]. The message "Formatting Hard Disk…Please wait, also make sure the main power switch is not turned off." is displayed.
3. Wait for the machine to finish formatting the hard disk.

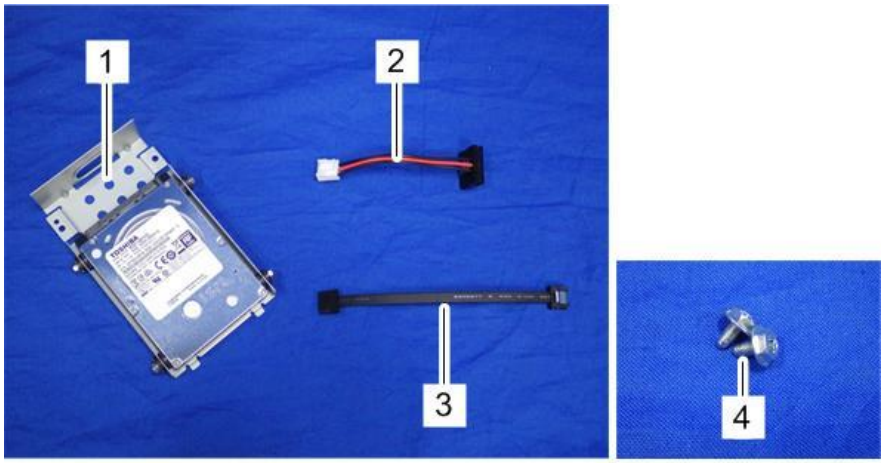
   Important

   - Do not touch the power switch while the hard disk format is in progress. Wait for the machine to tell you that the formatting is finished. When the formatting is finished, the message "Hard Disk is formatted. Turn the main power switch off then on" is displayed.
4. Turn the main power OFF/ON after the message tells you formatting is finished.

Hard Disk Drive Option Type P8 (M500-05) (P 800/801 Only)

Accessory Check

No.	Description	Q'ty
1	HDD	1
2	Power source cable	1
3	Data cable	1
4	Tapping screw: round point: 3×6	2



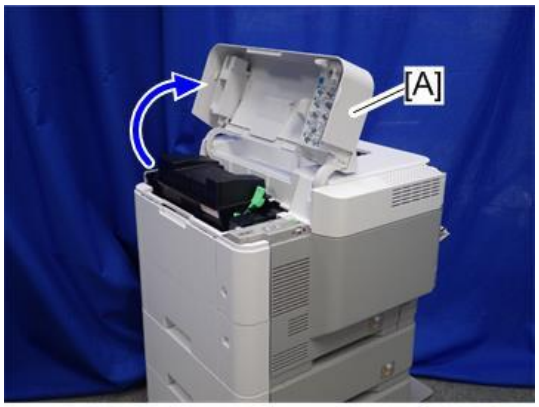
d255a1474

Installation Procedure

⚠CAUTION

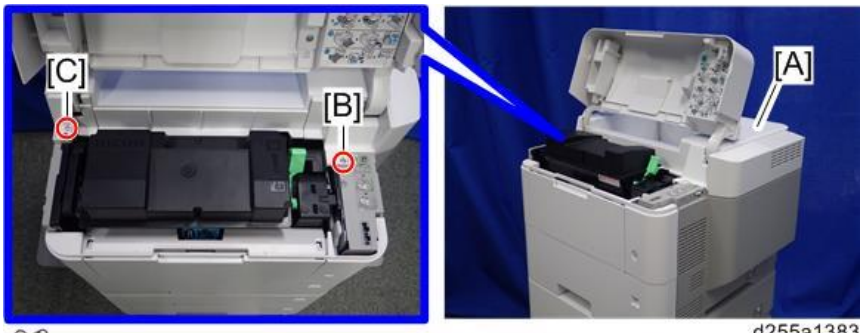
- Turn OFF the main power, and unplug the machine power cord before starting the following procedure.
- You need two or more persons to lift the main machine. The main machine is highly unstable when it is lifted by one person and may cause injury or property damage.
- Be sure to hold the specified positions when lifting the machine.

1. Open the upper cover [A].



d255a1382

2. Remove the two screws from the upper cover [A].



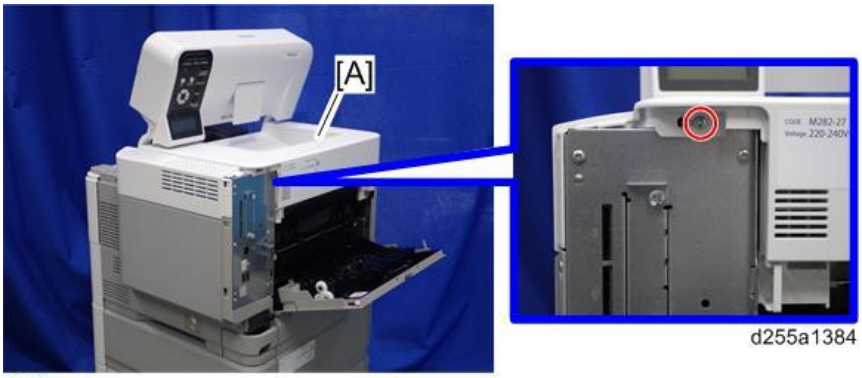
×2

d255a1383

Note

- The screw [B] is a sems screw. The screw [C] is a tapping screw. Be careful do not use the wrong screws when installing the upper cover.

3. Remove the screw from the rear side of the upper cover [A].



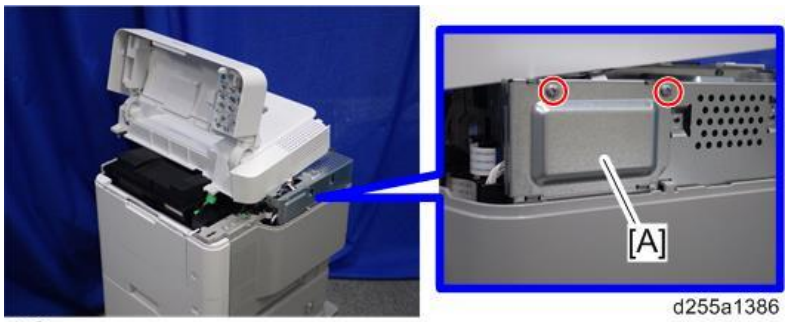
d255a1384

×1

4. Lift the upper cover [A] by releasing the two hooks, and then put it on the mainframe so that you can access the bracket [B] on the right side of the machine.

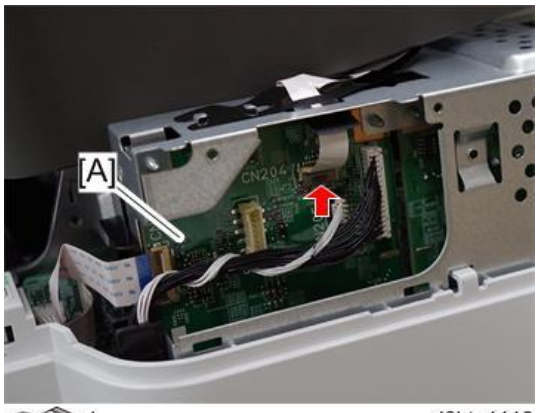
d255a1385

5. Remove the bracket [A].



×2

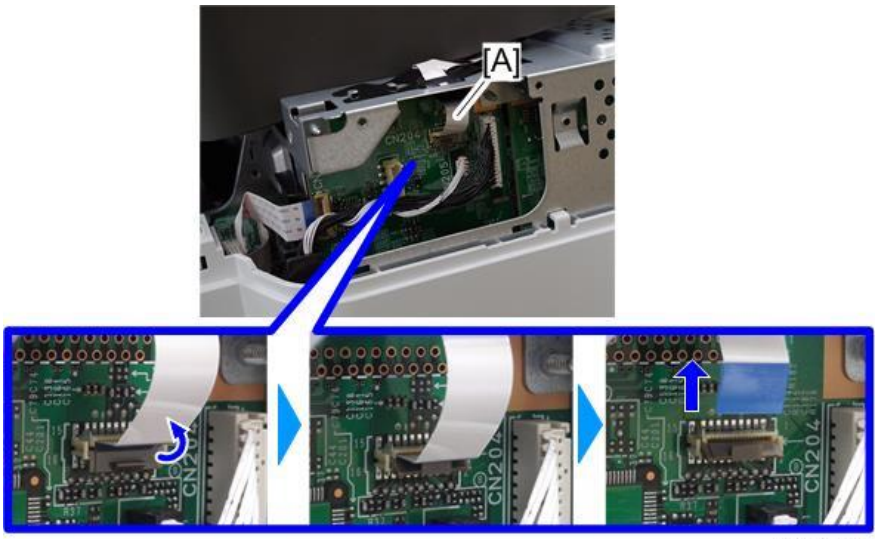
6. Disconnect the flat cable from the BiCU [A].



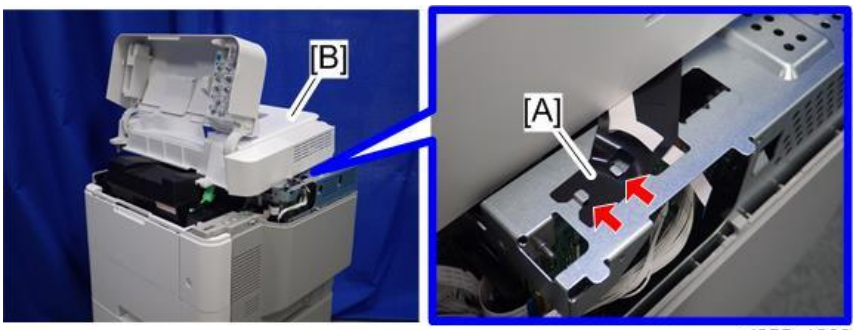
×1

Note

- Make sure to open the flap before disconnecting the flat cable [A], as shown in the following pictures. Otherwise, the connector may be damaged.



7. Remove the plastic sheet [A] from the mainframe (hook×2), and then remove the upper cover [B].



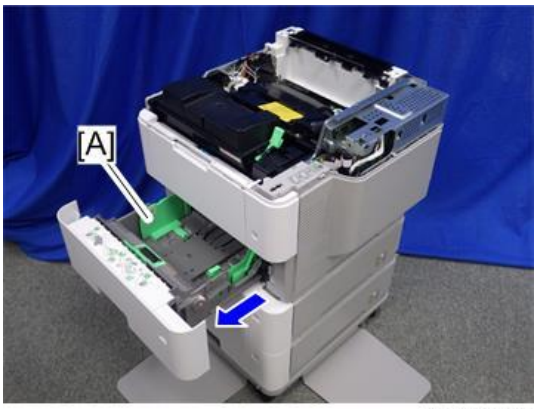
d255a1389

Note

- Be careful not to damage the hooks on the inside of the upper cover when you remove or install the upper cover.

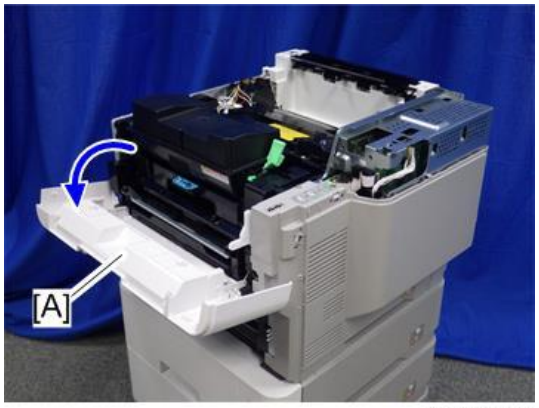
d255a1390

8. Remove the paper feed tray [A] by pulling it out.



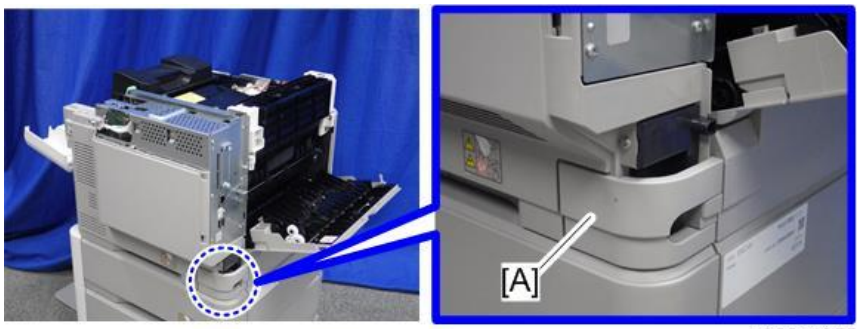
d255a1353

9. Open the front cover [A].



d255a1354

10. Remove the power connector cover [A].



d255a1355

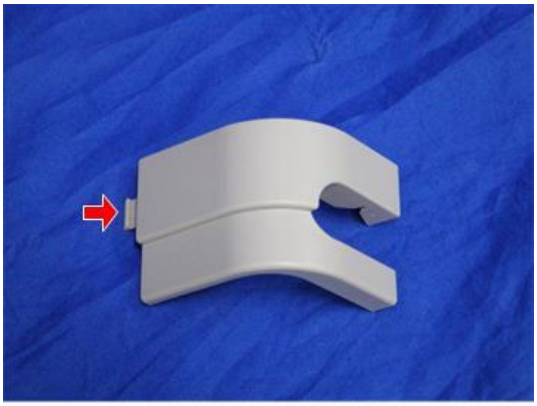
Note

- When removing the power connector cover, pull it in the direction of the arrow.

d255a1356

- Be careful not to damage the hook on the power connector cover when you remove or

install the power connector cover.



d255a1078

11. Remove the five screws from the right cover [A].

d255a1357

×5

Note

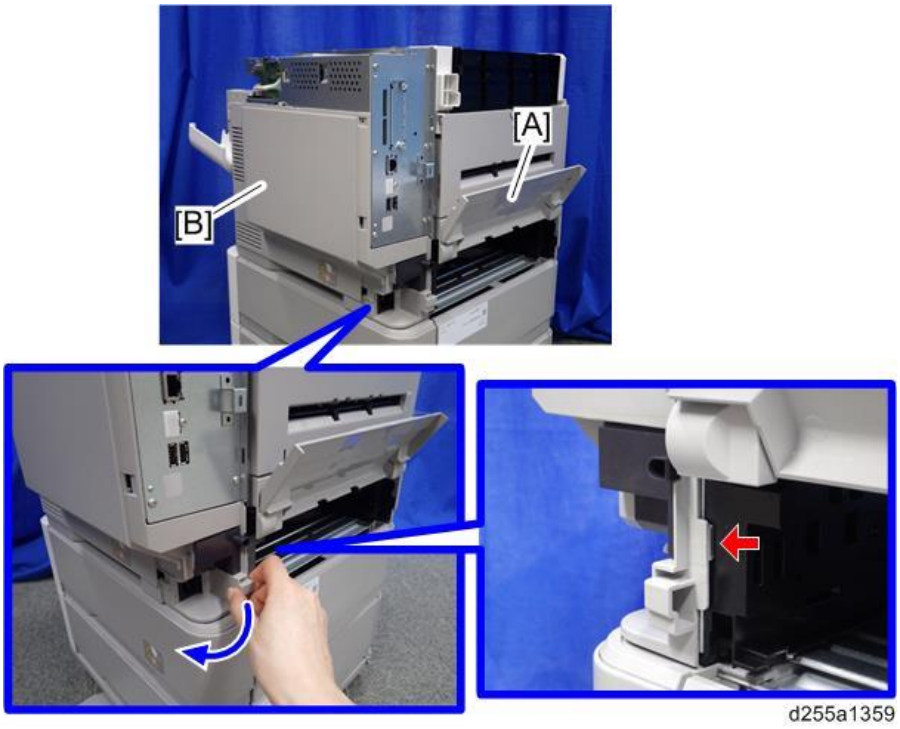
- The screw [B] is a tapping screw. The screw [C] is a long screw. Be careful not to use the wrong screws when installing the right cover.

12. Close the rear upper cover [A].

d255a1358

13. Open the rear lower cover [A], and then release the hook of the right cover [B] by rotating it in the

direction of the blue arrow.



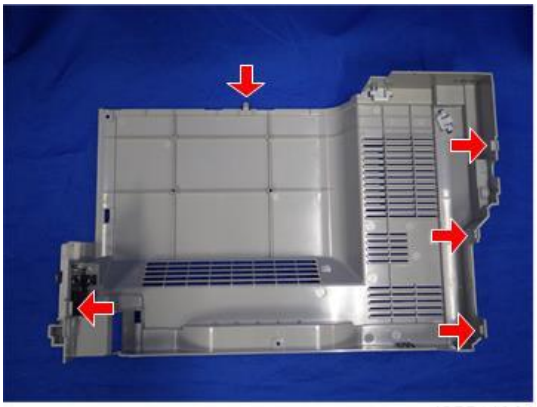
d255a1359

14. Release the four hooks, and then remove the right cover [A].

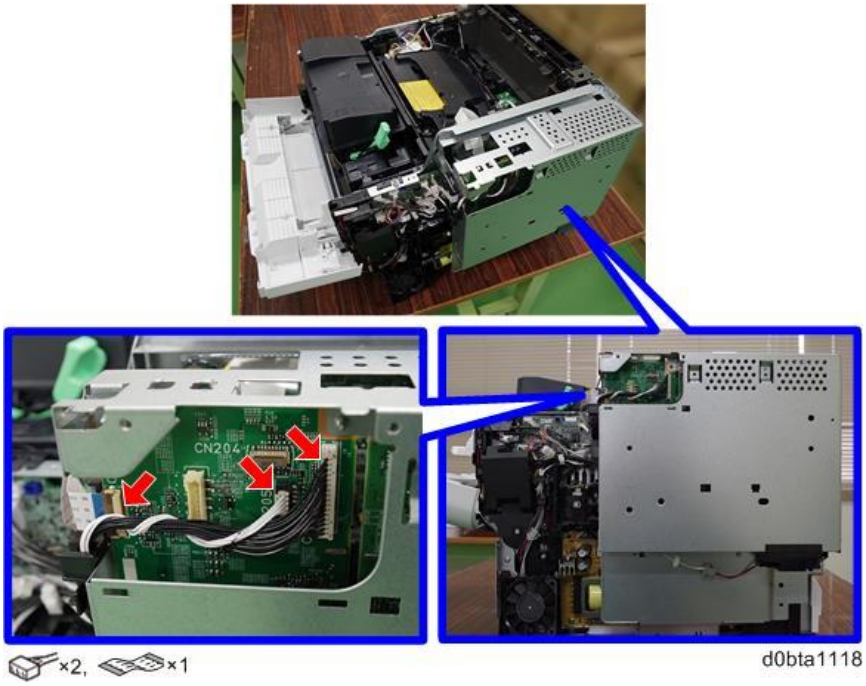
d255a1360

Note

- Be careful not to damage the hooks on the inside of the right cover when you remove or install the right cover.

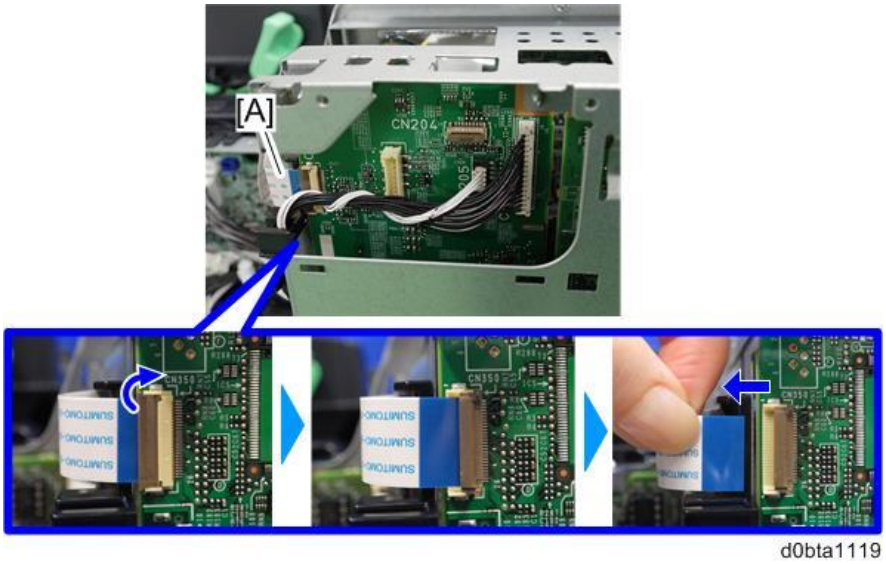

d255a1361

15. Disconnect the flat cable and two connectors.

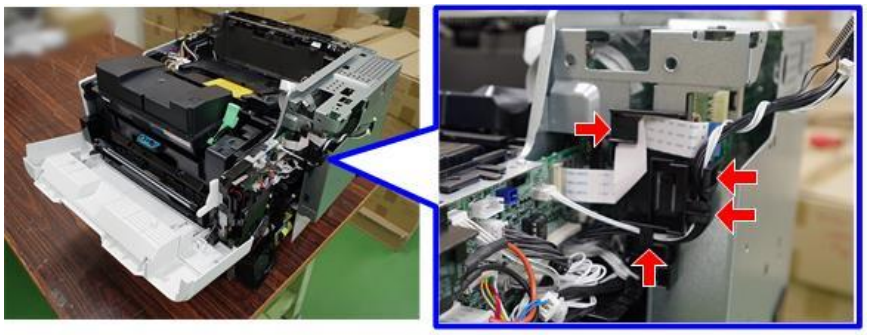


Note

- Make sure to open the flap before disconnecting the flat cable [A] as shown in the following pictures. Otherwise, the connector may be damaged.

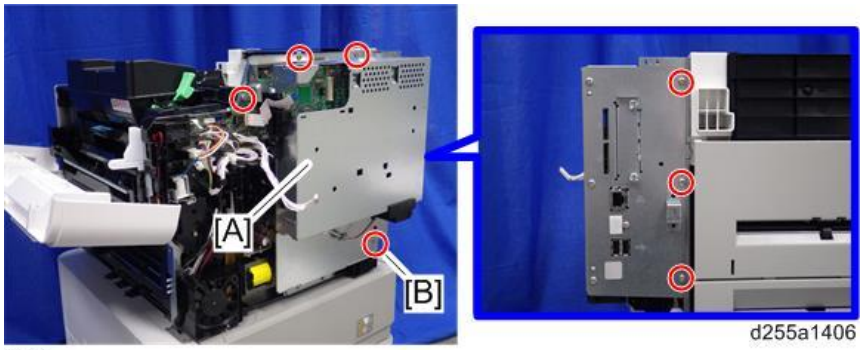


16. Release the flat cable and harness from the harness guides.



d0bta1120

17. Remove the seven screws from the controller box [A].



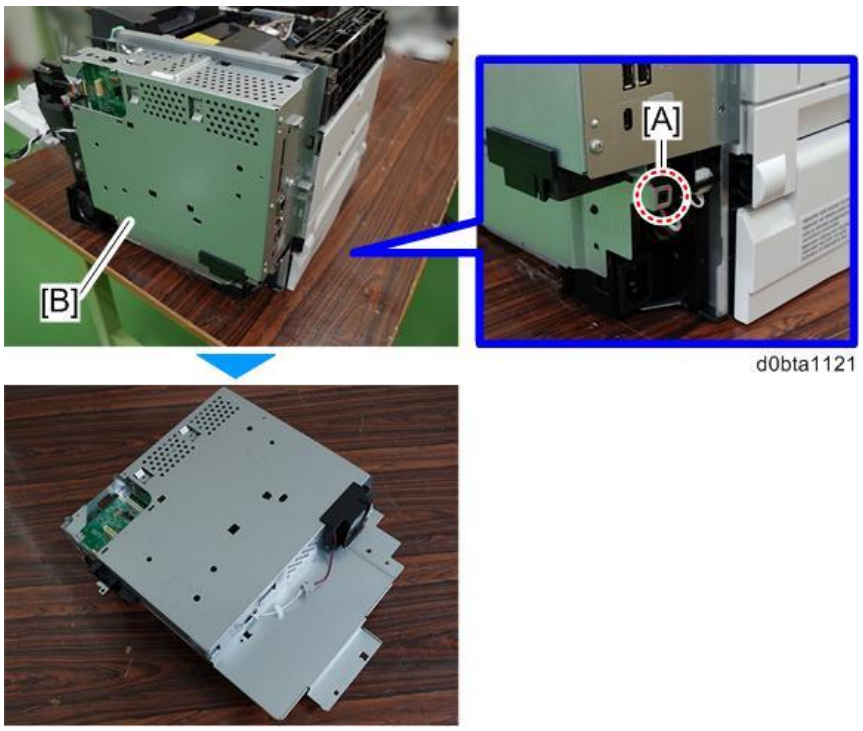
d255a1406

×7

Note

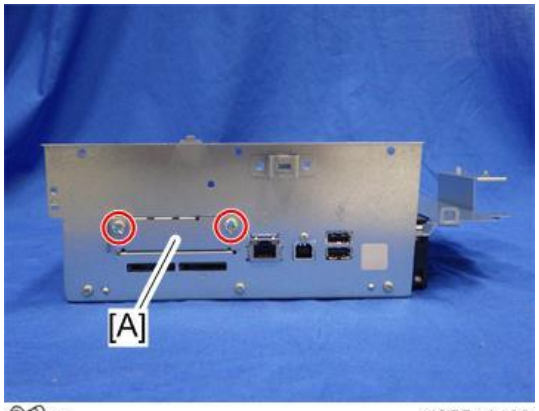
- The screw [B] is a tapping screw. Be careful not to use the wrong screws when installing the controller box.

18. Release the hook [A], and then remove the controller box [B].



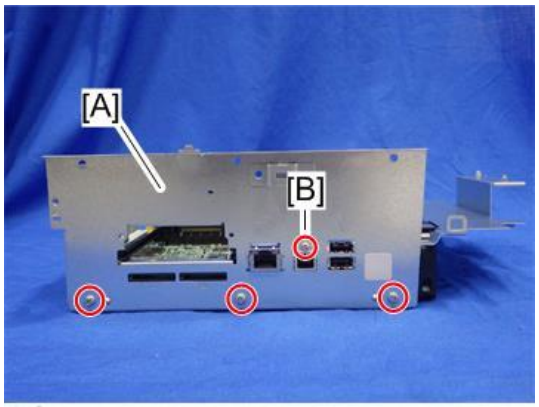
d0bta1121

19. Remove the slot cover [A].



×2 d255a1409

20. Remove the controller box cover [A].

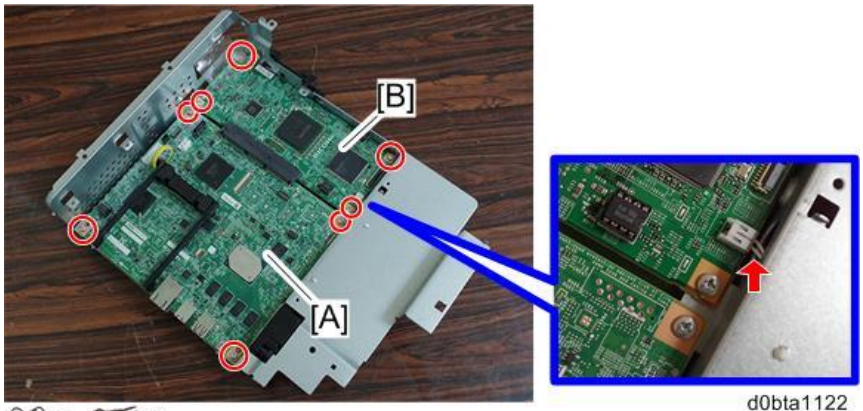


×4 d255a1410

Note

- The screw [B] is a small screw. Be careful not to use the wrong screw when installing the controller box cover.

21. Remove the controller board [A] with the BiCU [B].

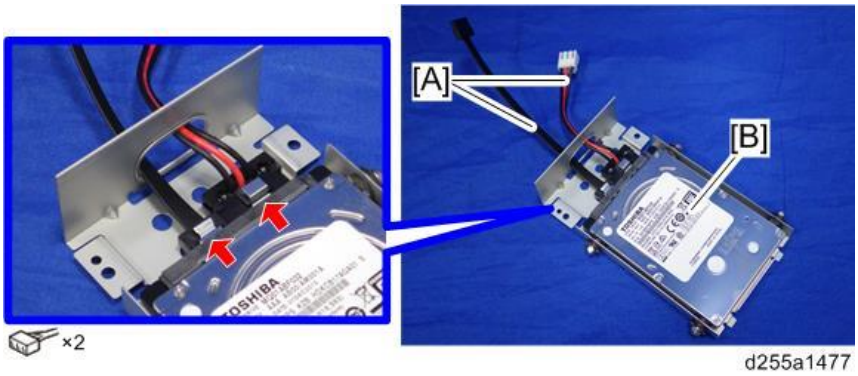


×8, ×1 d0bta1122

Note

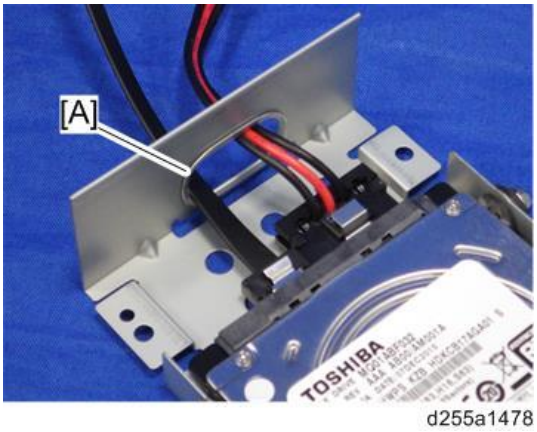
- Be careful not to damage the backside of the controller board [A] and the BiCU [B].

22. Connect the two cables [A] to the HDD [B].

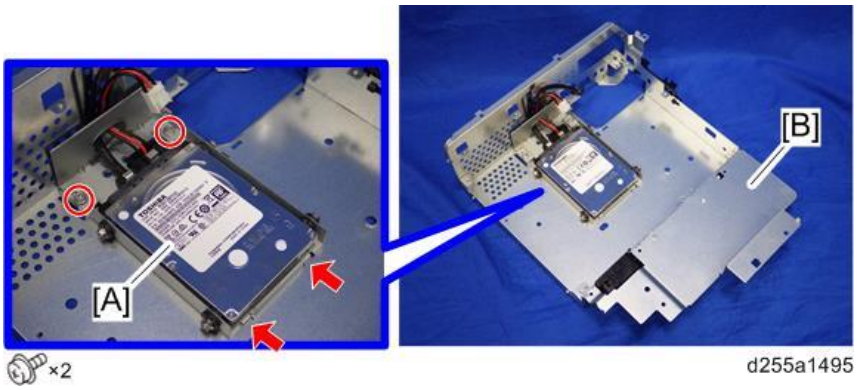


Note

- Make sure to pass the cables through the hole [A] of the HDD bracket.



23. Install the HDD [A] on the controller box [B] with the tapping screws. (hook×2)

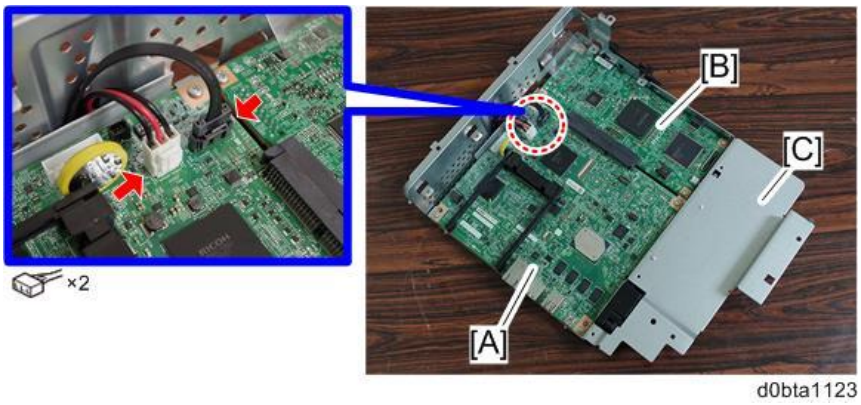


24. Reassemble the machine.

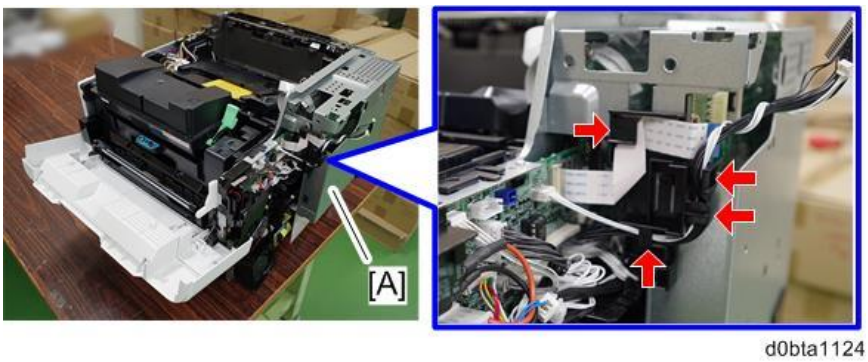
Note

- When reattaching the controller board [A] with the BiCU [B] on the controller box [C],

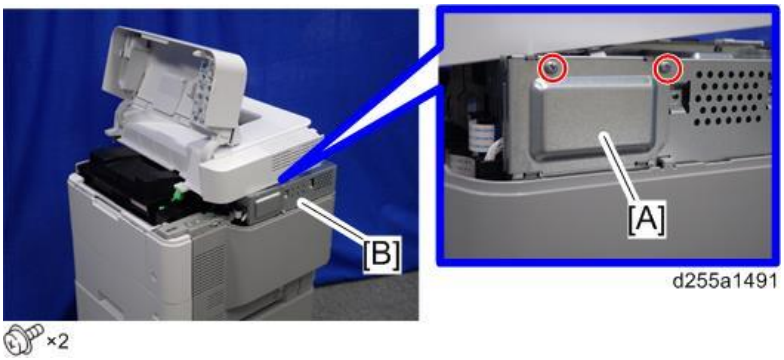
connect the two cables of the HDD to the controller board [A].



- When reattaching the controller box [A], make sure to secure the harness and flat cable to the harness guides, as shown below.



- When reattaching the bracket [A] of the controller box [B], do not interpose harness and flat cable between bracket and controller box.



After Installing the HDD

1. Connect the power cord and turn ON the main power.
   The message "Hard Disk is replaced. Format Hard Disk." is displayed.
2. Select [Format]. The message "Formatting Hard Disk…Please wait, also make sure the main power switch is not turned off." is displayed.
3. Wait for the machine to finish formatting the hard disk.

Important

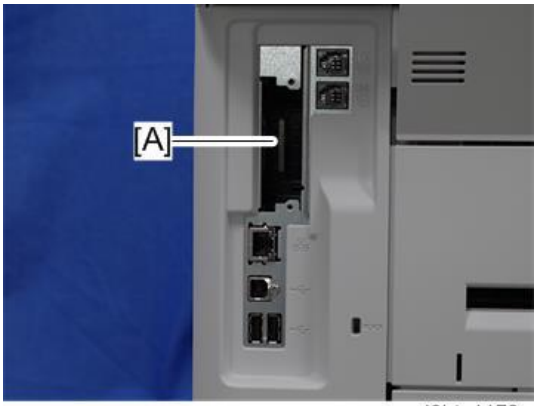
- Do not touch the power switch while the hard disk format is in progress. Wait for the

machine to tell you that the formatting is finished. When the formatting is finished, the message "Hard Disk is formatted. Turn the main power switch off then on" is displayed.

4. Turn the main power OFF/ON after the message tells you formatting is finished.

Internal Options

List of Slots

IM 550F/600F/600SRF	P 800/801
 d0bta1173	d0bta1174

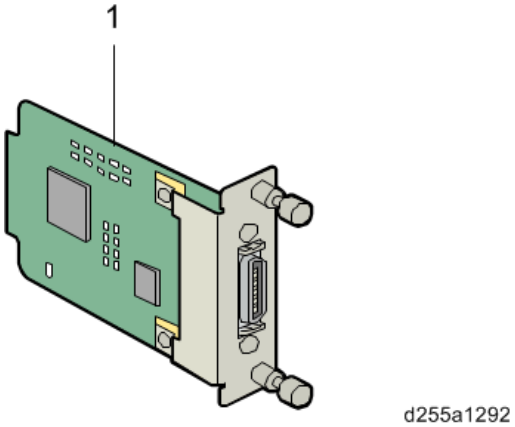
Slot		Option
[A]	I/F slot	Device Server Option Type M37
		IEEE 1284 Interface Board Type M19
		IEEE 802.11 Interface Unit Type M24
		File Format Converter Type M19*1

*1 IM 550F/600F/600SRF only

IEEE 1284 Interface Board Type M19 (D3C0-17)

Accessory Check

No.	Description	Q'ty
1	IEEE 1284 interface board	1
-	EMC address sheet	1
-	FCC sheet	1
-	RoHS sheet	1
-	RoHS decal	1



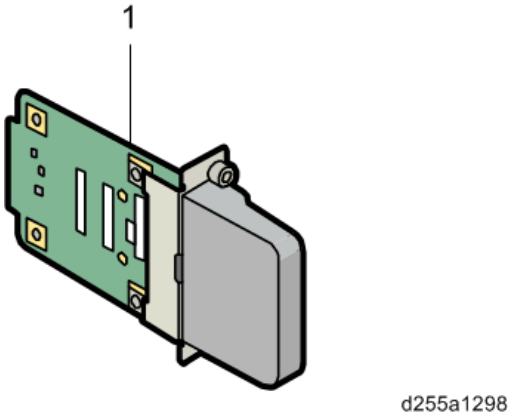
Installation Procedure

IEEE 1284 Interface Board Type M19 is installed by the end user. For instructions on installing, please refer to the operating instructions "Setup".

IEEE 802.11 Interface Unit Type M24 (M500-08)

Accessory Check

No.	Description	Q'ty
1	IEEE 802.11 interface board	1



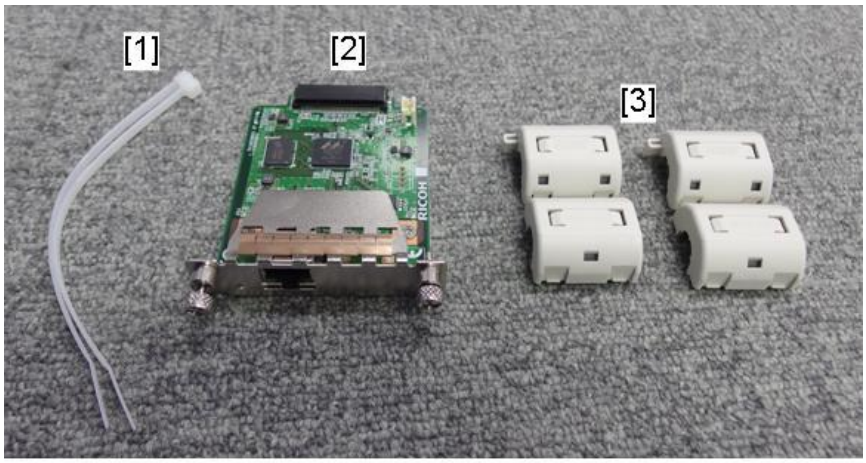
Installation Procedure

IEEE 802.11 Interface Unit Type M24 is installed by the end user. For instructions on installing, please refer to the operating instructions "Setup".

Device Server Option Type M37

Accessory Check

No	Items	Q'ty	Remarks
1	Cable Ties	2	
2	Interface Board	1	
3	Ferrite Core	2	



d0bqm0392

Note

- An Ethernet cable is not packed with this option.

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.

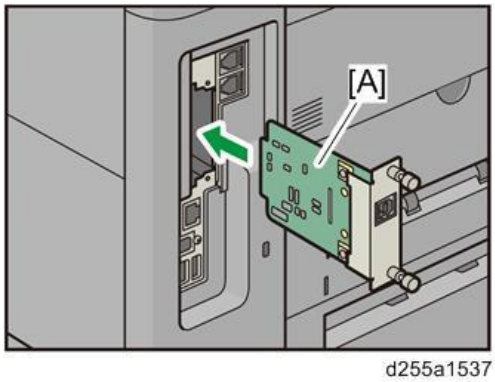
Important

- The 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 device server option must be configured after installing this option.

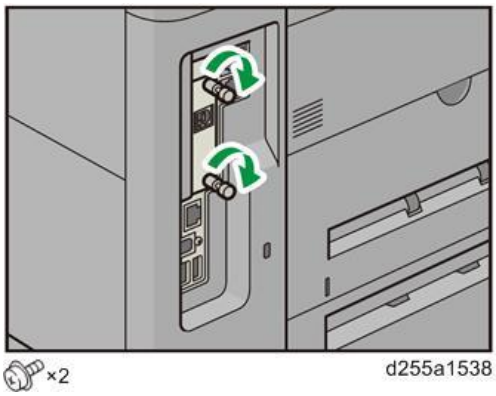
1. Turn OFF the main power of the machine, and unplug the power cord from the wall socket.

2. Remove the slot cover [A].

3. Insert the interface board into the I/F slot.

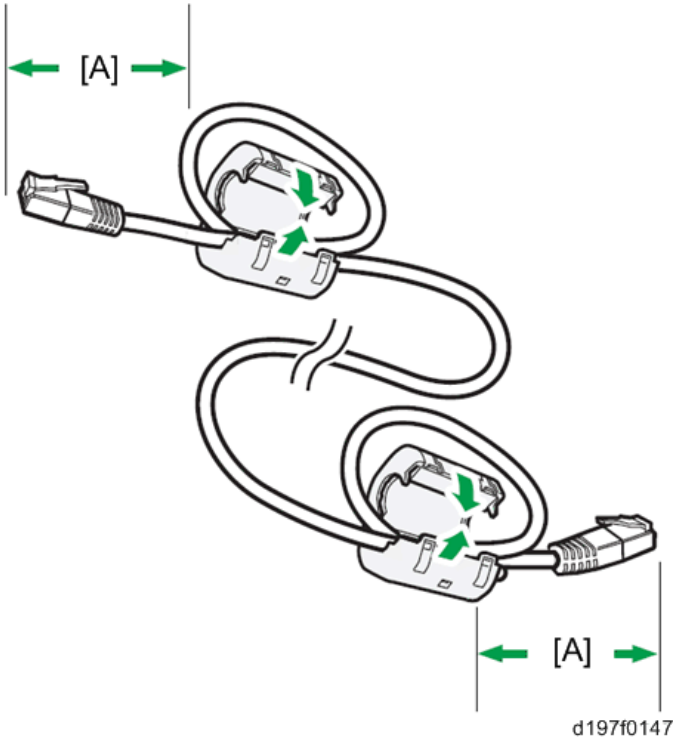


4. Tighten the two screws to secure the interface board.

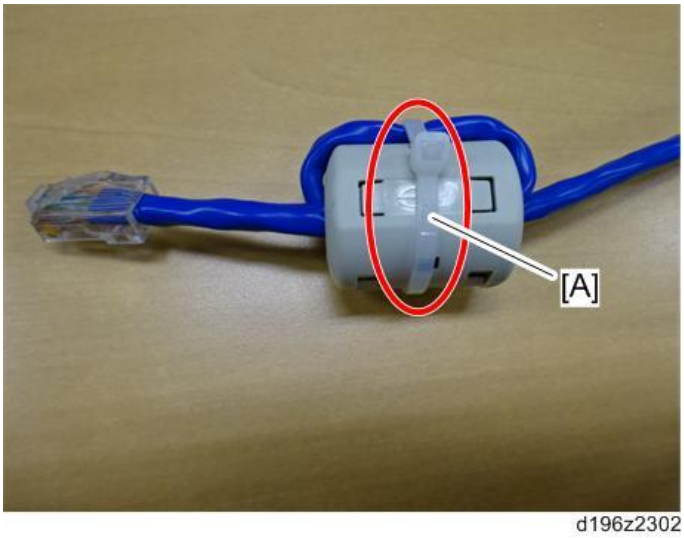


5. Attach the ferrite cores to the Ethernet cable, while looping the cable at 3 cm (approx. 1.2 inches)

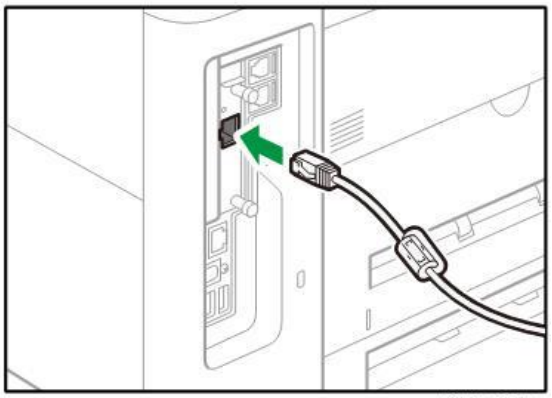
[A] from each end of the cable.



6. Only for installing this option in North America, bind both cores with cable ties [A] as shown below. The two binds are not included in options produced before March 2015. To bind the cores, use the binds registered as service parts or similar ones.



7. Insert the Ethernet cable into the Ethernet port on this option.



d0bta1251

8. Insert the other end of the Ethernet cable to a PC for network setting.

9. Plug the power cord into the wall socket and turn on the main power of the machine.

10. Make sure that the machine recognizes this option correctly by doing one of the following:

1. Access the option's IP address from a web browser.
2. Ping the option's IP address from a command prompt on a Windows PC in the same network as the mainframe.

   If the IP address cannot be found (DHCP server), use the MAC address. This is the number printed on the seal attached to the printed circuit board.

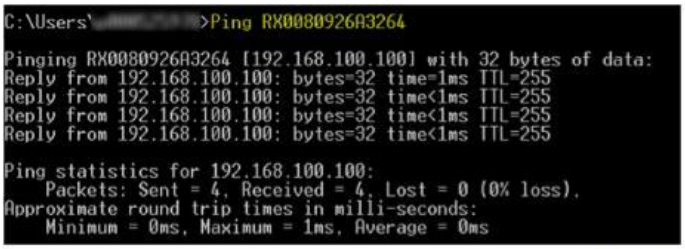
d0bqm0395

3. Use "RX" + the option's MAC address and access a web browser.

   Example: http://RX0080926A3264

d196z2351

4. Ping "RX" + "MAC address" from the command prompt on a windows PC which is on the same network as the mainframe.



d196z2352

Note

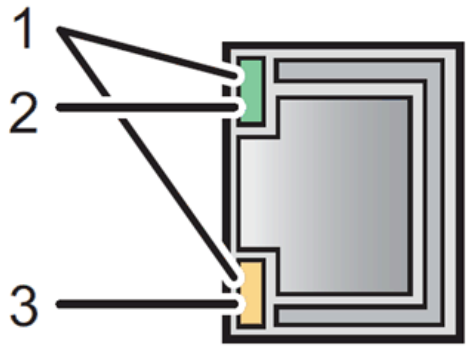
- When installing the Device Server Option Type M37, the installation status is not shown on the configuration page.

Note

- The customer should keep the slot covers which were removed.

What Do the LED Indications Mean?

When this option is properly 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

If the machine which has this option enters the energy save mode, you cannot print because there will be a communication error. Follow the instructions below to disable the energy save mode.

IM 550F/600F/600SRF

1. Press [Settings] on the Home screen.
2. Press [Machine Features Settings].
3. Press [Administrator Tools] in [System Settings].
4. Press [Energy Saver Mode to Disable Print Server].
5. Press [Disable Mode].
6. Press [OK].

P 800/801

1. Select [System] -> Press [OK] on the controller panel.
2. Select [Engy Sv Md to Dsbl Prt Srv] -> Press [OK].
3. Select [Disable Mode] -> Press [OK].

IP Address Setting

This section describes how to set an IP address on this option manually. Note that you can set an IP address which is not only on the same network segment but also on a different network segment to share a single printer with devices in multiple networks.

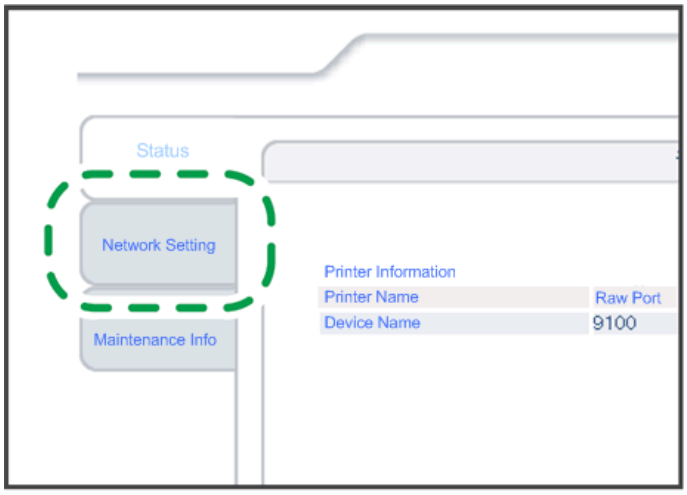
Important

- You cannot change the IP address for this option from the operation panel of the main machine. The setting must be done from a web browser on your PC.
- 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.

   Note

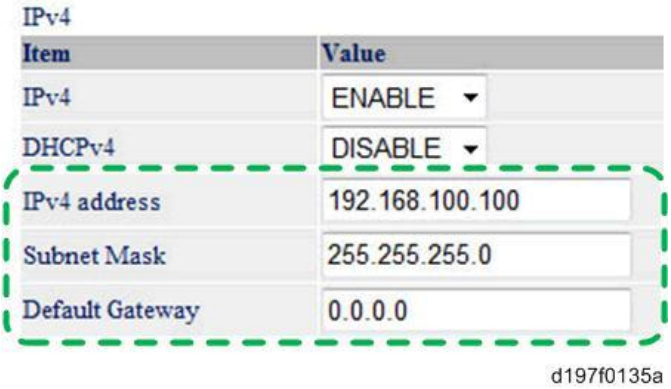
   - The setting screen for this option appears.
7. Click [Network Setting].



d197f0134

8. Type [root] in the user name textbox and click [OK].

9. Input [IP Address], [Subnet Mask] and [Default Gateway].



10. Set other items if needed.

11. Press [Set]

12. Close the web browser.

13. Disconnect the Ethernet cable from the PC.

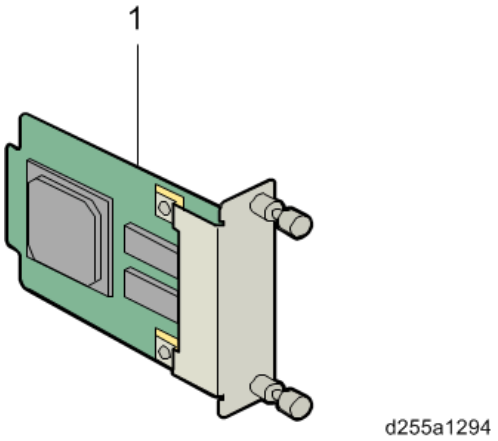
14. Connect the Ethernet cable to a network device (e.g. switching hub).

15. Set the IP address of this option in the printer driver which you use.

File Format Converter Type M19 (D3BR-04) (IM 550F/600F/600SRF Only)

Accessory Check

No.	Description	Q'ty
1	File Format Converter (MLB: Media Link Board)	1
-	EMC address sheet	1
-	FCC sheet	1
-	RoHS decal	1
-	RoHS label	1

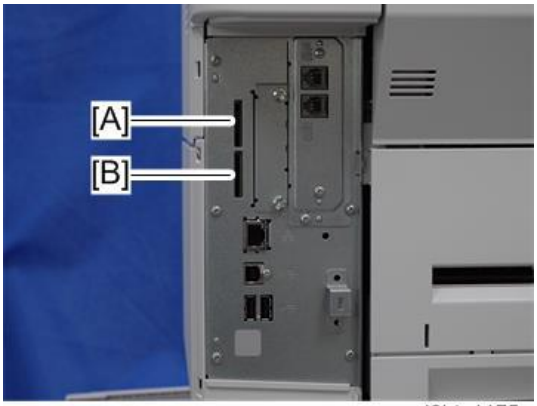
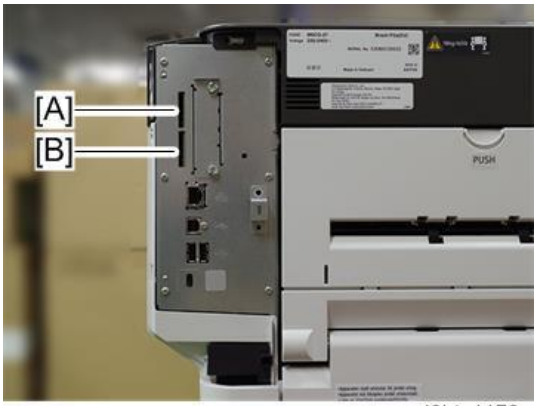


Installation Procedure

File Format Converter Type M19 is installed by the end user. For instructions on installing, please refer to the operating instructions "Setup".

SD Card Options

SD Card Slots

IM 550F/600F/600SRF	P 800/801
 d0bta1175	 d0bta1176

Slots		Description
[A]	SD Card Slot 1 (option slot)	Use for the following SD card options. • PostScript3 Unit Type M40*1 • PostScript3 Unit Type P19*2 • OCR Unit Type M13*1 • IPDS Unit Type M40 • XPS Direct Print Option Type M40 • VM Card Type M37 • Fax Connection Unit Type M37*1 • DataOverwriteSecurity Unit Type M19*1
[B]	SD Card Slot 2 (service slot)	Use for service only (for example, updating the firmware).

*1 IM 550F/600F/600SRF only

*2 P 800/801 only

Note

- Optional SD cards can be set in either Slot 1 or Slot 2. However, Slot 2 is the service slot, so it is recommended that Slot 1 to be used to install the SD card options.

SD Card Appli Move

Overview

The service program "SD Card Appli Move" (SP5-873) lets you copy application programs from one SD card to another SD card.

You cannot run application programs from Slot 2. However, you can move application programs from Slot 2 to Slot 1 with the following procedure.

When merging SD cards, the target SD card should have the largest memory size of all the application SD cards.

Be very careful when you do the SD Card Appli Move procedure:

- The necessary data 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 copy 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.
- Keep the SD card in a safe place after you copy the application program from one card to another card. This is for the following reasons:
  1) The SD card can be the only proof that the user is licensed to use the application program.
  2) You may need to check the SD card and its data to solve a problem in the future.

SD Card Appli Move

1. Choose an SD card with enough space.
2. Enter SP5-873 "SD Card Appli Move". This SP copies the application programs from the original SD card in SD Card Slot 2 to the SD card in SD Card Slot 1. Move the application from the SD card in Slot 2 to the card in Slot 1.
3. Exit the SP mode.

Move Exec

The menu "Move Exec" (SP5-873-001) lets you copy application programs from the original SD card to another SD card.

Important

- Do not turn ON the write protect switch of any application SD card. 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 OFF the main power.
2. Make sure that an SD card is in SD Card Slot 1. The application program is copied to this SD card.
3. Insert the SD card (having stored the application program) in SD Card Slot 2. The application program is copied from this SD card.

4. Turn ON the main power.
5. Enter the SP mode.
6. Select SP5-873-001 "Move Exec".
7. Follow the messages shown on the operation panel.
8. Turn OFF the main power.
9. Remove the SD card from SD Card Slot 2.
10. Turn ON the main power.
11. Check that the application programs run normally.

Undo Exec

The menu "Undo Exec" (SP5-873-002) lets you copy back application programs from an SD card to the original SD card. 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 any application SD card. 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 OFF the main power.
2. Insert the original SD card in SD Card Slot 2. The application program is copied back into this card.
3. Insert the SD card (having stored the application program) in SD Card Slot 1. The application program is copied back from this SD card.
4. Turn ON the main power.
5. Enter the SP mode.
6. Select SP5-873-002 "Undo Exec".
7. Follow the messages shown on the operation panel.
8. Turn OFF the main power.
9. Remove the SD card from SD card slot 2.

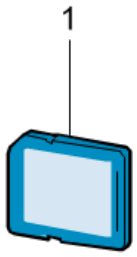
   Note

   - This step assumes that the application programs in the SD card are used by the machine.
10. Turn ON the main power.
11. Check that the application programs run normally.

OCR Unit Type M13 (D3AC-23, 24, 25) (IM 550F/600F/600SRF Only)

Accessory Check

No.	Description	Q'ty
1	OCR unit SD card	1
-	Caution sheet (EU only)	1
-	RoHS sheet (AP only)	1
-	RoHS decal (AP only)	1



d255a1297

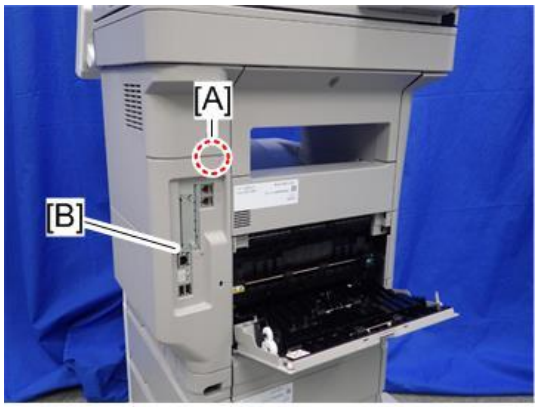
Installation Procedure

1. Turn OFF the main power.
2. Open the rear upper cover [A].

d255a1030

3. **IM 550F/600F:** Insert a flathead screwdriver into [A] to release the hook on the inside of the

controller cover [B].



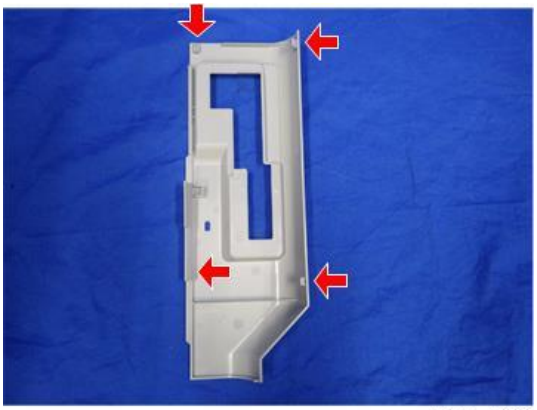
d255a1080

4. Release the hook by opening the right side of the cover, and then remove the cover [A] by rotating it in the direction of the blue arrow.

d255a1032

Note

- Be careful not to damage the hooks on the inside of the controller cover when you remove or install the controller cover.



d255a1033

5. Insert the OCR Unit Type M13 SD card in SD Card Slot 1 [A] (upper slot).

6. Turn ON the main power.
7. 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.
8. When "operation complete" is displayed, press [Close].

   Note

   - If the installation fails, "Failed" is displayed. Perform the following steps.
     - Check whether it is a used SD card.
     - Turn OFF the main power, and repeat steps 1-5.
9. Turn OFF/ON the main power.
10. Press [Enter] in SP5-878-004 (Option Setup: OCR Dictionary).
    Dictionary data is copied to the HDD.

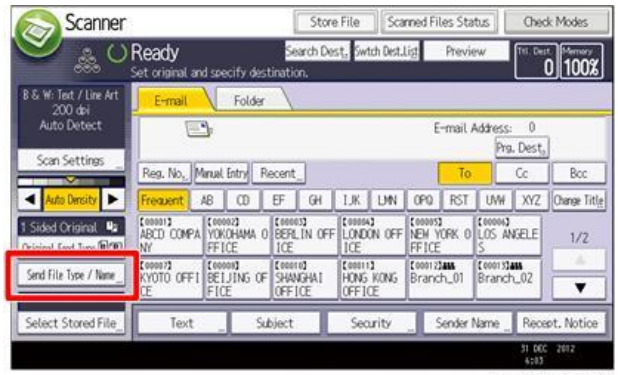
    Note

    - On the first run, SP5-878-004 links the SD card, and on the second run, copies dictionary data.
11. Turn OFF the main power, and remove the SD card from the SD card slot.

    Note

    - Keep the SD card in a safe place. The original SD card is needed in the event of an HDD malfunction.
12. Reattach the controller cover.
13. Turn ON the main power.

14. Press [Send File Type / Name] on the scanner screen.



w_d1351739

15. Check if [OCR Settings] is displayed on the Send File Type / Name screen.

w_d1351740

Note

- After installation, the OCR setting can be changed on the "OCR setting" screen.
- When setting 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 on the SD card is saved in the NVRAM. Therefore, when replacing the HDD and/or NVRAM, this option must be reinstalled.

When storing the original SD card

- When only the HDD is replaced
  Reinstall using the original SD card.
- When only the NVRAM is replaced
  When uploading or downloading the NVRAM data, reinstall using the original SD card.
  When not uploading or downloading the 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.

If the original SD card is lost

Order and reinstall a new SD card (service part).

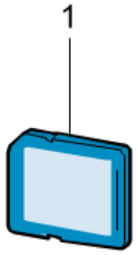
Note

- Perform reinstallation in the same way as installation.

PostScript3 Unit Type M40 (IM 550F/600F/600SRF)

Accessory Check

No.	Description	Q'ty
1	PostScript3 SD card	1
-	PS3 Decal	1
-	Caution sheet (EU only)	1



d255a1297

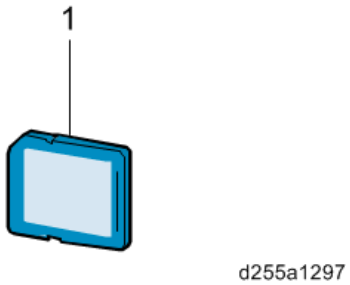
Installation Procedure

PostScript3 Unit Type M40 is installed by the end user. For instructions on installing, please refer to the operating instructions "Setup".

PostScript3 Unit Type P19 (P 800/801)

Accessory Check

No.	Description	Q'ty
1	PostScript3 SD card	1
-	PS3 Decal	1
-	Sheet: Notes	1
-	Caution sheet (EU only)	1



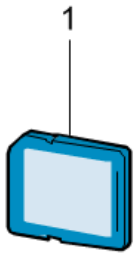
Installation Procedure

PostScript3 Unit Type P19 is installed by the end user. For instructions on installing, please refer to the operating instructions "Setup".

XPS Direct Print Option Type M40

Accessory Check

No.	Description	Q'ty
1	XPS Direct Print SD card	1
-	EMC address sheet	1
-	RoHS sheet	1
-	RoHS decal	1



d255a1297

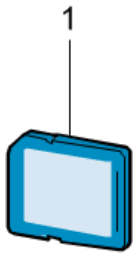
Installation Procedure

XPS Direct Print Option Type M40 is installed by the end user. For instructions on installing, please refer to the operating instructions "Setup".

IPDS Unit Type M40

Accessory Check

No.	Description	Q'ty
1	IPDS Emulation SD card	1
-	Decal	1
-	EULA sheet (NA only)	1
-	Caution sheet	1
-	CD-ROM	1
-	RoHS sheet (AP only)	1
-	RoHS decal (AP only)	1



d255a1297

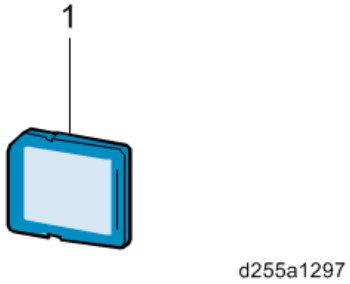
Installation Procedure

IPDS Unit Type M40 is installed by the end user. For instructions on installing, please refer to the operating instructions "Setup".

VM CARD Type M37

Accessory Check

No.	Description	Q'ty
1	VM SD card	1
-	Caution sheet (EU only)	1



Installation Procedure

VM CARD Type M37 is installed by the end user. For instructions on installing, please refer to the operating instructions "Setup".

DataOverwriteSecurity Unit Type M19 (D3BS-03) (IM 550F/600F/600SRF Only)

Overview

The machine's hard disk stores all document data from the Copier, Printer, and Scanner functions. 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).

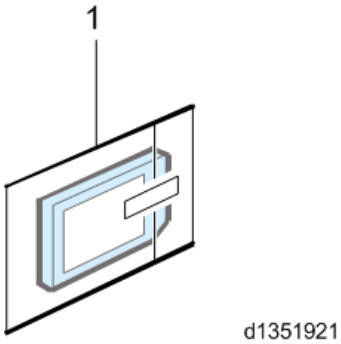
The function of this option is exactly the same as the Data Overwrite Security in Security Functions, which is standard on this machine. (Data Overwrite Security (IM 550F/600F/600SRF))

This option should be installed only for the customer who requires the **CC certified Data Overwrite Security function**.

Accessory Check

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



Before You Begin the Procedure

1. Confirm that the DataOverwriteSecurity 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 are at their factory default values, tell the customer that these settings must be changed before you do the installation procedure.

3. Make sure that "Admin. Authentication" is ON.

[Settings] -> [Machine Features Settings] -> [System Settings] -> [Administrator Tools] -> [Administrator Authentication Management] -> [Admin. Authentication]

If this setting is OFF, tell the customer that this setting must be ON before you do the installation procedure.

4. Make sure that "Administrator Tools" is enabled (selected).

[Settings] -> [Machine Features Settings] -> [System Settings] -> [Administrator Tools] -> [Administrator Authentication Management] -> [Available Settings]

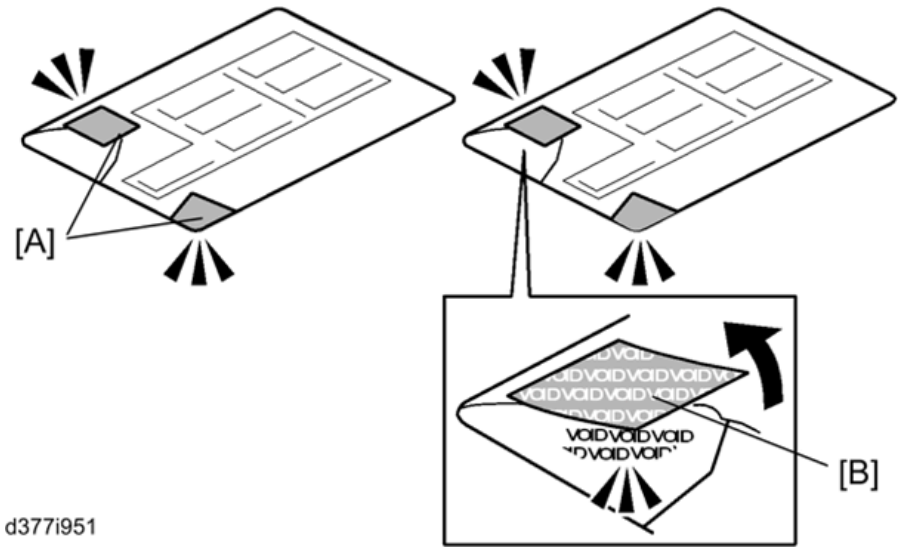
If this setting is disabled (not selected), tell the customer that this setting must be enabled (selected) before you do the installation procedure.

Note

- See the operating instructions "Security" for the factory default values.

Seal Check and Removal

The package comes with tamper-proof seals. Before opening it make sure that the seals have not been peeled off or broken. The seals will leave "VOID" marks on the package once peeled off (even partially) and will be considered as defective on arrival.



Important

- Check the seals and make sure they are NOT broken.

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 tapes must be blank. If you see "VOID" on the tapes, do not install the components in the box.

2. If the surfaces of the tapes do not show "VOID", remove them from the corners of the box.

3. Once seals are peeled, "VOID" marks can be seen easily [B] and, they will not stick back to the package.

Installation Procedure

1. Turn OFF the main power, and then remove the power plug and cables that are connected.
2. Open the rear upper cover [A].

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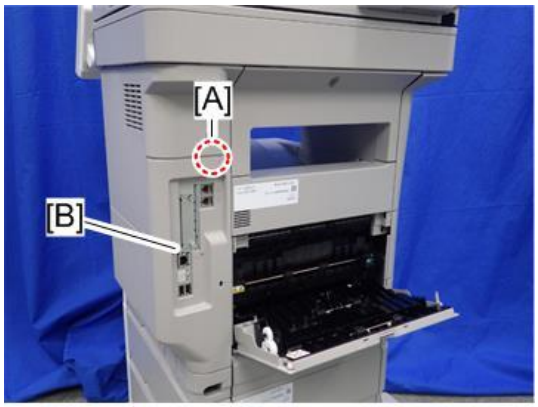
3. **IM 550F/600F:** Insert a flathead screwdriver into [A] to release the hook on the inside of the controller cover [B].



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4. Release the hook by opening the right side of the cover, and then remove the cover [A] by rotating

it in the direction of the blue arrow.

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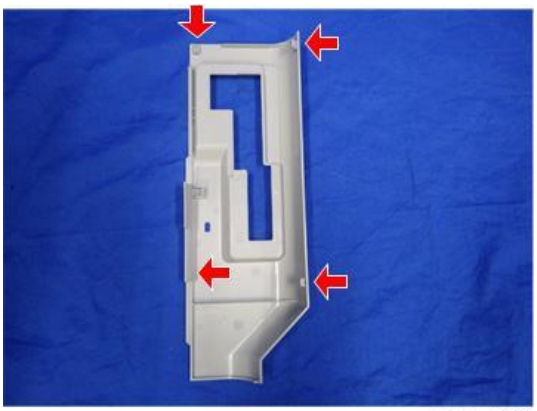
Note

- Be careful not to damage the hooks on the inside of the controller cover when you remove or install the controller cover.



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5. Insert the DataOverwriteSecurity Unit Type M19 SD card in SD Card Slot 1 [A] (upper slot).

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6. Reattach the controller cover.

7. Insert the power cord into the outlet and turn ON the main power.

Note

- When installing more than one SD card, perform the merge operation.

8. Enter the SP mode.
9. 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 the customer wishes to** replace the hard disk with a new one, execute SP5-801-014 only.

Important

- If the customer continues using the same hard disk, the overwriting of the data stored on the disk before the option is installed cannot be guaranteed. It is highly recommended to replace the hard disk with a new one.

10. Set SP5-836-001 (Capture Function (0:Off 1:On)) to a value of 0 (Disable).
11. Execute SP5-878-001 (Option Setup: Data Overwrite Security).
    If the installation fails, "Installation failed" is displayed when this SP is executed.
12. Print out the System Settings List and make sure that the option was installed successfully.
13. Reconnect the network cable.
14. Execute SP5-990-005 (SP print mode Diagnostic Report).
15. 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)

1. Log in as the machine administrator from the operation panel.
2. Press the [Settings] icon.
3. Press [Machine Features Settings].
4. Press [System Settings].
5. Press the [Administrator Tools] tab.
6. Press [Auto Erase Memory Setting].
7. Press [On].
8. Select the method of overwriting.
   If you select [NSA] or [DoD], proceed to Step 11.
   If you select [Random Numbers], proceed to Step 9.
9. Press [Change].

10. Enter the number of times that you want to overwrite using the ten keys, and then press [#].
The Random Numbers method overwrites the data using random numbers. You can set the overwrite to be performed anywhere from 1-9 times, with a default of 3 times.

11. Press [OK].

12. Log out.

13. Check the display and make sure that the Data Overwrite icon appears.
When Auto Erase Memory is enabled, the Data Overwrite icon will be indicated at the bottom of the panel display.

14. Take a test copy, and then make sure that the Data Overwrite icon changes from "Dirty" (solid) to "Dirty" (blinking), and then to "Clear".

- If the Data Overwrite icon does not change to Clear, check to see if there are any active Sample Print or Locked Print jobs. A Sample Print or Locked Print job can only be overwritten after it has been executed.
- The Dirty icon blinks while the overwrite is in progress.
- If you use your machine for a while with Auto Erase Memory disabled, and then suddenly enable it, the overwrite process may take 10 or more hours depending on HDD usage.

Data Overwrite icon:

Icon	Icon name	Explanation
	Dirty	This icon is displayed when there is temporary data to be overwritten, and flashes during overwriting.
	Clear	This icon is displayed when there is no temporary data to be overwritten.

Security Setting

Security Function Installation

The machine contains the Security functions (Data Overwrite Security and HDD Encryption unit) in the controller board (PCB15).

If you are installing a new machine, it is recommended that you activate Data Overwrite Security and HDD Encryption by selecting the following on the operation panel.

- IM 550F/600F/600SRF: [Settings] -> [Machine Features Settings] -> [System Settings] -> [Administrator Tools] -> [Machine Data Encryption Settings] -> [Encrypt] -> [Format All Data]
- P 800/801: [Security Options] -> [Machine Data Encryption] -> [Encrypt] -> [Format All Data]

Note

- This method is recommended because there is no user data on the HDD yet (Address Book data, image data, etc.).

If the customer wishes to activate the Data Overwrite Security and HDD Encryption unit on a machine that is already running, it is recommended that you activate the unit by selecting the following on the operation panel.

- IM 550F/600F/600SRF: [Settings] -> [Machine Features Settings] -> [System Settings] -> [Administrator Tools] -> [Machine Data Encryption Settings] -> [Encrypt] -> [All Data]
- P 800/801: [Security Options] -> [Machine Data Encryption] -> [Encrypt] -> [Carry Over All Data]

Important

- Selecting the setting above will preserve the data that has already been saved to the HDD. (If "Format All Data" is selected, all user data saved to the HDD up to that point will be erased).

Immediately after encryption is enabled, the encryption setting process will take several minutes to complete before you can begin using the machine.

Note

- If encryption is enabled after data has been stored on the HDD, or of 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.

Make sure that the machine's main power is not turned OFF 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 and keep the encryption key (paper sheet) in a safe place. If the encryption key is lost when you need it, the controller board (PCB15), HDD and NVRAM must all be replaced at the same time.

Note

- "NVRAM" mentioned here means the NVRAM on the controller board (PCB15). It has no relation to the "NVRAM" or EEPROM on the BiCU (PCB16).

Please use the following procedure when the Data Overwrite Security and HDD Encryption are reinstalled.

Data Overwrite Security (IM 550F/600F/600SRF)

Before You Enable the Auto Erase Memory Setting

1. Make sure that the following settings from 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 are at a factory default value, tell the customer these settings must be changed.

2. Make sure that "Admin. Authentication" is "ON".
   "Settings" icon -> "Machine Features Settings" -> "System Settings" -> "Administrator Tools" -> "Administrator Authentication Management" -> "Admin. Authentication"
   If this setting is OFF, tell the customer this setting must be ON.

3. Make sure that "Administrator Tools" is enabled (selected).
   "Settings" icon -> "Machine Features Settings" -> "System Settings" -> "Administrator Tools" -> "Administrator Authentication Management" -> "Available Settings"
   If this setting is disabled (not selected), tell the customer this setting must be enabled (selected).

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 the [Settings] icon.

3. Press [Machine Features Settings].

4. Press [System Settings].

5. Press [Administrator Tools].

6. Press [Auto Erase Memory Setting].

7. Press [On].

8. Select the method of overwriting.
   If you select [NSA] or [DoD], proceed to step 11.
   If you select [Random Numbers], proceed to step 9.

9. Press [Change].

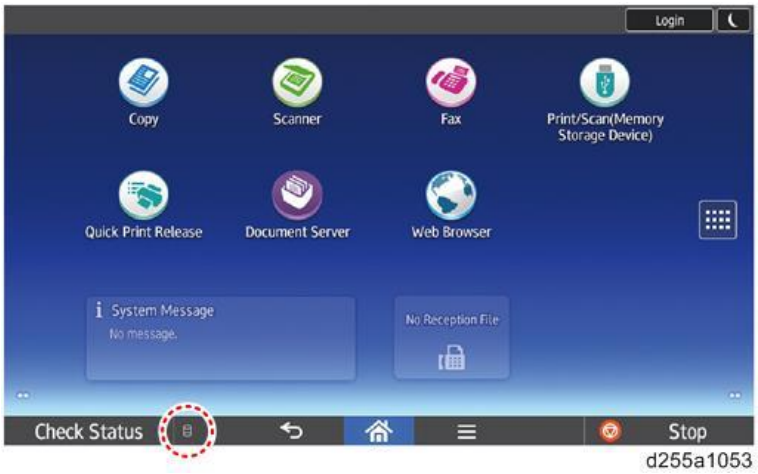
10. Enter the number of times that you want to overwrite using the number keys, and then press [#].

11. Press [OK]. Auto Erase Memory is set.

12. Log out.

13. Check the display and make sure that the Data Overwrite icon appears.
   When Auto Erase Memory is enabled, the Data Overwrite icon will be indicated in the bottom left of

the panel display.



Icon	Icon name	Explanation
	Dirty	This icon is displayed when there is temporary data to be overwritten, and flashes during overwriting.
	Clear	This icon is displayed when there is no temporary data to be overwritten.

Data Overwrite Security (P 800/801)

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 are at their factory default values, tell the customer that these settings must be changed before you do the installation procedure.

2. Make sure that "Administrator Authentication Management" is on.

1. Log in as the administrator from Web Image Monitor.
2. [Device Management] -> [Configuration] -> [Device Settings] -> [Administrator Authentication Management]
3. From [User Administrator Authentication], [Machine Administrator Authentication], [Network Administrator Authentication], and [File Administrator Authentication], set the administrator authentication setting to [On].

If this setting is off, tell the customer that this setting must be on before you do 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 control panel.
2. Select [Security Options] -> Press [OK]
3. Select [Auto Erase Memory Setting] -> Press [OK]
4. Select [On] -> Select [HDDErase]
5. Select the method of erasing the data from [NSA], [DoD], or [Random Numbers]. -> Press [OK]
   If you select [Random Numbers], enter the number of times that you want to overwrite. Then press [OK].
6. Press [OK].
7. Press [Menu].
8. Log out.

Checking the Auto Erase Memory Status

If Auto Erase Memory is enabled, you can use the "Memory Erase Status" screen to find out whether there is any data to be erased in the memory.

1. Press the [Menu] key -> Select [Memory Erase Status] ->Press [OK]
   The Memory Erase status appears.

HDD Encryption (IM 550F/600F/600SRF)

Before You Begin the Procedure

1. Make sure that the following settings (1) to (3) are not at the factory default settings.
   (1) Supervisor login password
   (2) Administrator login name
   (3) Administrator login password
   If any of these settings are at the factory default value, tell the customer these settings must be changed before you do the installation procedure.
2. Confirm that "Admin. Authentication" is on:
   [Settings] icon - [Machine Features Settings] - [System Settings] - [Administrator Tools] - [Administrator Authentication Management] - [Admin. Authentication] - [On]
   If this setting is off, tell the customer that this setting must be on before you can do the installation procedure.
3. Confirm that "Administrator Tools" is selected and enabled.
   [Settings] icon - [Machine Features Settings] - [System Settings] - [Administrator Tools] - [Administrator Authentication Management] - [Available Settings]
   "Available Settings" is not displayed until step 2 is done.
   If this setting is not selected, tell the customer that this setting must be selected before you can do the installation procedure.

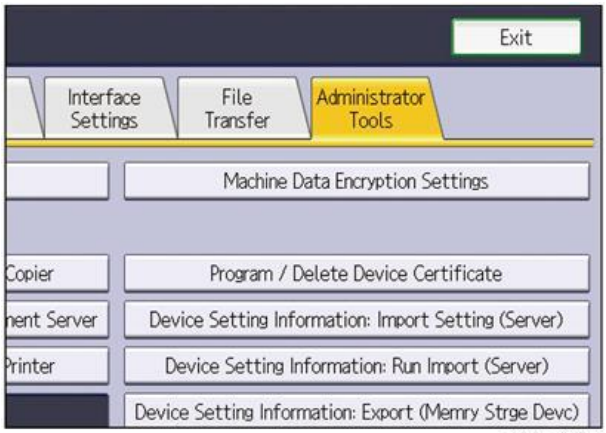
Enable Encryption Setting

Machine Data Encryption Settings can be enabled by the following procedure.

Important

- 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 control panel.
3. Press the [Settings] icon.
4. Press [Machine Features Settings].
5. Press [System Settings].
6. Press [Administrator Tools].
7. Press [Next] three times.
8. Press [Machine Data Encryption Settings].



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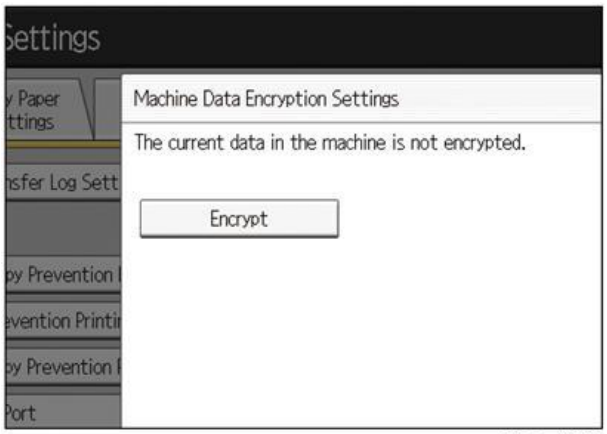
9. Press [Encrypt].



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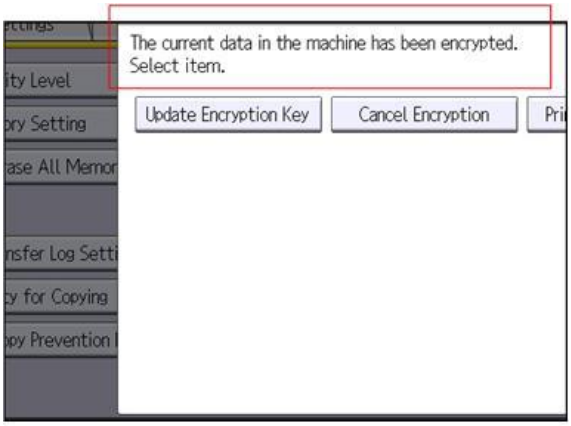
10. Select the data to be carried over to the HDD and not be reset.
    - To carry all of the data over to the HDD, select [All Data].
    - To carry over only the machine settings data, select [File System Data Only].
    - To reset all of the data, select [Format All Data].
11. Select the backup method.

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] to back up the machine's data encryption key.
If you have selected [Print on Paper], press the [Start] key. Print out the machine's data encryption key.

12. Press [OK].
13. Press [Exit].
14. Press [Exit].
15. Log out.
16. 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 main power. Wait until the message "Memory conversion complete. Turn the main power switch off." appears, and then turn OFF the main power.

Check the Encryption Settings

1. Log in as the machine administrator from the operation panel.
2. Press the [Settings] icon.
3. Press [Machine Features Settings].
4. Press [System Settings].
5. Press [Administrator Tools].
6. Press [Machine Data Encryption Settings].
7. Confirm whether the encryption has been completed or not on this display.



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Print the encryption key

Use the following procedure to print the key again if it has been lost or misplaced.

1. Log in as the machine administrator from the operation panel.
2. Press the [Settings] icon.
3. Press [Machine Features Settings].
4. Press [System Settings].
5. Press [Administrator Tools].
6. Press [Machine Data Encryption Settings].

If this item is not visible, press [Next] to display more settings.

7. Press [Print Encryption Key].

Encryption key sample

Machine Data Encryption Key

This is an encryption key which allows you to protect confidential data stored in the machine.
It is essential that the safekeeping and destruction of this encryption key be under your direct responsibility.
Data saved and programmed on the machine (documents, image data, setting values, address book contents etc.) can be encrypted/decrypted with this encryption key.
If this machine breaks down, saved and programmed data in the machine can only be restored by entering this encryption key.
(Please note that it may not be possible to restore data in certain machine breakdown cases.)
This machine data encryption key will remain valid as long as the encryption is not cancelled or the encryption key is not changed.
After changing or cancelling the encryption key, please shred this document to destroy confidential data.

Output Date/Time:September 03,2010 08:55:25 AM
Machine Type:Aficio MP C400SR
Machine ID:S7500717004
Machine Data Encryption Key:
6pF!FFGH#EBiYkPafBJz6YE$wYXk

d1420100

The encryption key is printed out as a sheet of paper like the example shown above.

Please instruct the customer to keep it in a safe place.

Backing Up the Encryption Key

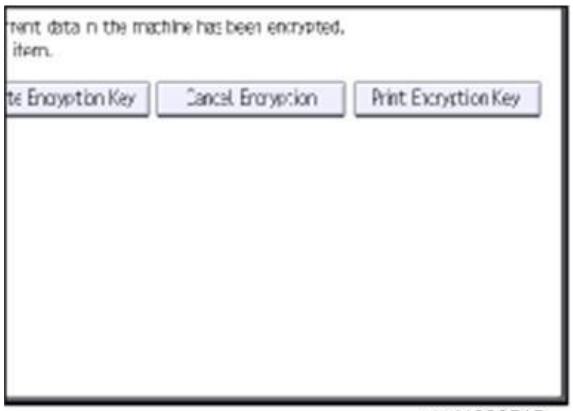
The encryption key can be backed up. Select whether to save it to an SD card or to print it.

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. Log in as the machine administrator from the operation panel.
2. Press the [Settings] icon.
3. Press [Machine Features Settings].
4. Press [System Settings].
5. Press [Administrator Tools].
6. Press [Next] three times.
7. Press [Machine Data Encryption Settings].

8. Press [Print Encryption Key].



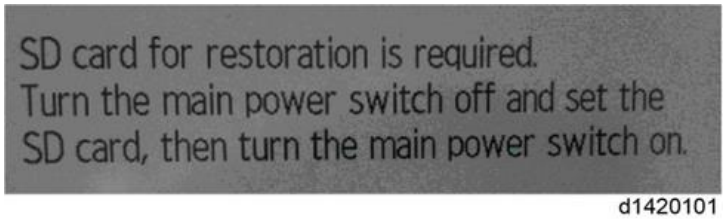
w_d1822515

9. 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]; once the machine's data encryption key is backed up, press [Exit].
   If you have selected [Print on Paper], press the [Start] key. Print out the machine's data encryption key.
10. Press [Exit].
11. Log out.

Encryption Key Restoration

How to restore the old encryption key to the machine

The following message appears after the controller board (PCB15) is replaced. In such a case, it is necessary to restore the encryption key to the new controller board (PCB15).



d1420101

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, "xxxxxxxxxxx" (11 digits).
4. Create a text file called "key_xxxxxxxxxxx.txt" and save it in the "xxxxxxxxxxx" folder. Write the encryption key in the text file.
   /restore_key/xxxxxxxxxxx/key_xxxxxxxxxxx.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_xxxxxxxxxxx.txt" file. (The function of back-up the encryption key to the SD card directly is provided 11A products or later.)

5. Turn ON the machine's 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 (PCB15).
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 startup with no encryption key

If the encryption key back-up 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.
   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-xxx (Exclude SP-5-801-001: All Clear and SP-5-801-002: Engine), and

clear SP5-846-046: an address book.

12. Set necessary user settings in the "Settings" menu.

SP descriptions

- **SP5-878-002 (Option Setup: HDD Encryption)**
  Executes the setup for encryption.
- **SP5-990-005 (SP Print Mode: Diagnostic Report)**
  Prints the configuration sheets of the system and user settings: SMC.
  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.
- **SP5-801-001 (Memory Clear: All Clear)**
  Resets all correction data for process control and all software counters, and returns all modes and adjustments to their default values.
- **SP5-801-002 (Memory Clear: Engine)**
  Clears non-volatile memory of engine.
- **SP5-846-046 (UCS Setting: Addr Book Media)**
  Displays the slot number where an address book data is in.
  0: Unconfirmed
  1: SD Slot 1
  2: SD Slot 2
  3: SD Slot 3
  4: USB Flash ROM
  10: SD Slot 10
  20: HDD
  30: Nothing

HDD Encryption (P 800/801)

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 are at their factory default values, tell the customer that these settings must be changed before you do the installation procedure.

2. Make sure that "Administrator Authentication Management" is on.
1. Log in as the administrator from Web Image Monitor.
2. [Device Management] -> [Configuration] -> [Device Settings] -> [Administrator Authentication Management]
3. From [User Administrator Authentication], [Machine Administrator Authentication], [Network

Administrator Authentication], and [File Administrator Authentication], set the administrator authentication setting to [On].

If this setting is off, tell the customer that this setting must be on before you do the installation procedure.

Enable Encryption Setting

Machine Data Encryption Settings can be enabled by the following procedure.

Important

- 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.
- When the Machine Data Encryption Settings is enabled;
- If the HDD is replaced, HDD data will be deleted. After installing the new HDD, the data in the new HDD will be automatically encrypted.
- If the NVRAMs, on the controller board (PCB15), are replaced, Machine Data Encryption Settings will be automatically enabled after installing the new NVRAMs.
- If the controller board (PCB15) is replaced, the restore key will be required after installing the new controller board (PCB15).
  - If you have the restore key, you will be able to continue using the HDD data.
- If the restore key has been lost, the HDD will be formatted and you need to reset NVRAM data to the default settings after the forced start-up. (HDD data will be deleted) Refer to "How to do a forced startup with no encryption key" in "Encryption Key Restoration" (Encryption Key Restoration).
- If the controller board (PCB15) and the NVRAMs are replaced together, HDD data will be deleted since all the encryption information is deleted.

1. Turn ON the main power.
2. Log in as the machine administrator from the control panel.
3. Select [Security Options] -> Press [OK]
4. Select [Machine Data Encryption] -> Press [OK]
5. Make sure [Encrypt] is displayed on the control panel -> Press [OK]
6. Select the data to be carried over to the hard disk and not be reset -> Press [OK]
   - To carry all of the data over to the hard disk, select [Carry Over All Data].
   - To carry over only the printer settings data, select [CarryOver FileSys DataOnly].
   - To reset all of the data, select [Format All Data].
7. Select [PrtOnPpr] -> [Print] -> [Continue]
8. Select [OK].
9. Press [Menu].
10. Log out.
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 main power. Wait

until the message "Memory conversion complete. Turn the power switch off." appears, and then turn OFF the main power again.

Backing Up the Encryption Key

You can back up the encryption key by printing it.

Important

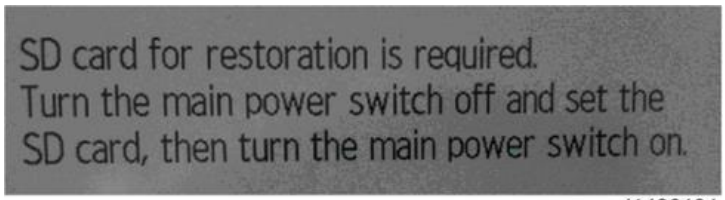
- The encryption key is required for data recovery if the printer malfunctions. Be sure to store the encryption key safely for retrieving backup data.

1. Log in as the machine administrator from the control panel.
2. Select [Security Options] -> Press [OK]
3. Select [Machine Data Encryption] -> Press [OK]
4. Select [Back Up Encryption Key] -> Press [OK]
5. Select [PrtOnPpr] -> [Print]
6. Press [Menu].
7. Log out.

Encryption Key Restoration

How to restore the old encryption key to the machine

The following message appears after the controller board (PCB15) is replaced. In such a case, it is necessary to restore the encryption key to the new controller board (PCB15).



d1420101

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, "xxxxxxxxxxx" (11 digits).
4. Create a text file called "key_xxxxxxxxxxx.txt" and save it in the "xxxxxxxxxxx" folder. Write the encryption key in the text file.
   /restore_key/xxxxxxxxxxx/key_xxxxxxxxxxx.txt

   Note

   - Ask the administrator to enter the encryption key. The key has already printed out by the user and may have saved in the "key_xxxxxxxxxxx.txt" file. (The function of back-up the encryption key to the SD card directly is provided 11A products or later.)
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 (PCB15).
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 startup with no encryption key

If the encryption key back-up 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.
8. Turn ON the main power, the machine automatically clears the HDD encryption.
9. Turn OFF the main power when the machine has returned to normal status.
10. Remove the SD card from SD Card Slot 2.
11. Turn ON the main power.
12. Execute SP5-801-xx (Exclude SP5-801-001: All Clear and SP5-801-002: Engine) to resets NVRAM data to the default settings.
13. Execute SP5-846-046 to clear the address book information.
14. Set necessary user settings from the [Menu] key.

Network Settings (IM550F/600F/600SRF)

Specifying Network Settings According to Customer's Environment

Specifying Network Settings

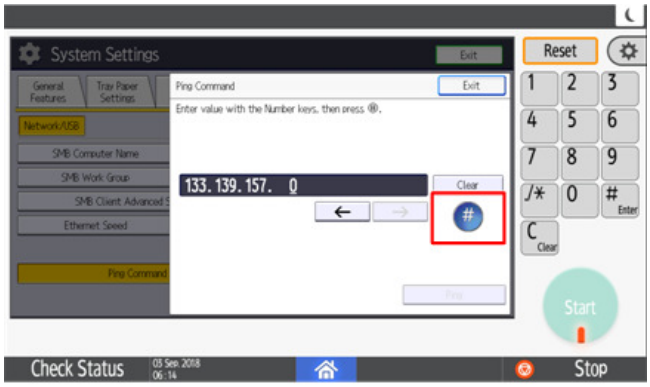
Check the customer’s network environment and specify network settings according to the functions to be used (such as a scanner, printer, and Document Server setting).

1. Press the "Settings" icon.
2. Press "Machine Features Settings" > "System Settings".
3. On the [Interface Settings] and [File Transfer] tabs, specify the necessary settings.
   For the settings to be specified, see the user manual.

Checking Communication by the Ping Command

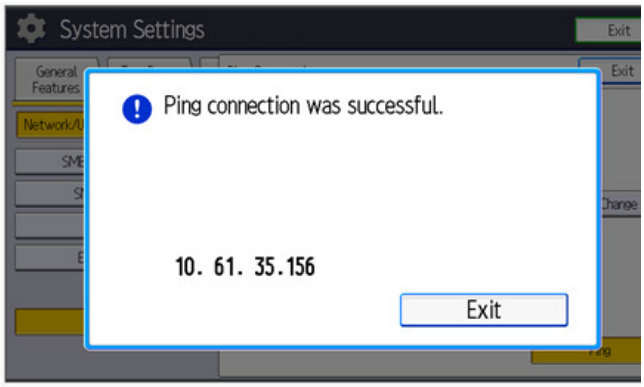
Check whether a network connection between the machine and the client computer has been established.

1. Press the "Settings" icon.
2. Press "Machine Features Settings" > "System Settings" > "Interface Settings" tab.
3. Press "Ping Command".
4. Enter the client PC's IP address and press "#".



d0bqm0380

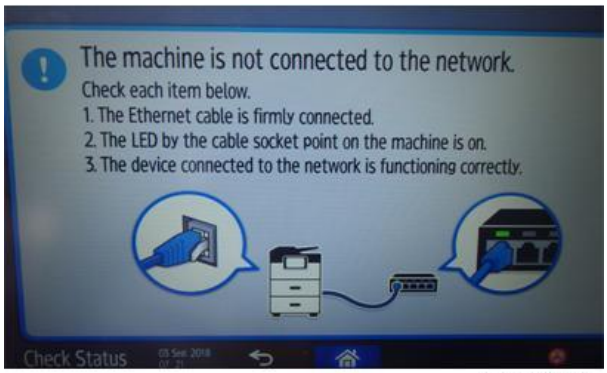
5. If a network connection has been established correctly, the following message appears.



d0bqm0381

Settings on Displaying an Alert When the Ethernet Cable is Broken or Disconnected

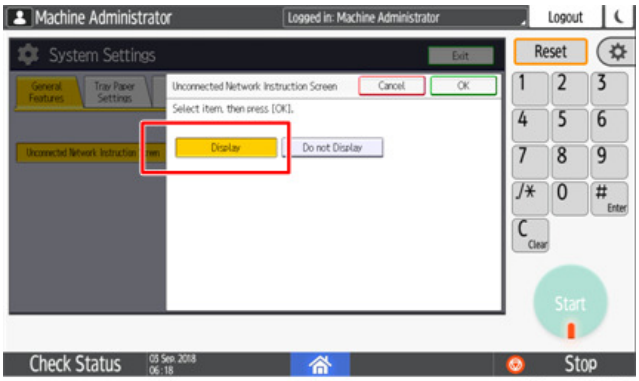
Display an alert if Ethernet cable disconnection occurs while operating the machine.



d0bqm0383

By default, this setting is set to [OFF] and the interval to display the alert is set to 10 minutes. Specify the setting according to the customer's request. For customers who do not want to connect the machine to the network, set this setting to [OFF].

1. Press the "Settings" icon.
2. Press "Machine Features Setting" > "System Settings" > "General Settings" tab.
3. Set [Unconnected Network Instruction Screen] to [Display].



d0bqm0382

This setting can be specified also by SP5-080-003 (UI Display Selection: Network Connection Status).

0: Do not display

1: Display

@Remote Settings

Note

- Prepare and check the following checkpoints before you visit the customer site. For details, ask the @Remote key person.

Checkpoints before making @Remote settings

1. The setting of SP5-816-201 in the mainframe must be "0".
2. Print the SMC with SP5-990-002 and then check if a device ID2 (SP5-811-003) must be correctly programmed.
   - 6 spaces must be put between the 3-digit prefix and the following 8-digit number (e.g. xxx_____xxxxxxxx).
   - ID2 (SP5-811-003) and the serial number (SP5-811-001) must be the same (e.g. ID2: A01_____23456789 = serial No. A0123456789)
   - 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.
3. The following settings must be correctly programmed.
   - Proxy server IP address (SP5-816-063)
   - Proxy server Port number (SP5-816-064)
   - Proxy User ID (SP5-816-065)Settings
   - Proxy Password (SP5-816-066)
4. Get a Request Number

Execute the @Remote Settings

1. Enter the SP mode.
2. Input the Request number which you have obtained from @Remote Center GUI, and then enter [OK] with SP5-816-202.
3. Confirm the Request number, and then click [EXECUTE] with SP5-816-203.
4. Check the confirmation result with SP5-816-204.

Value	Meaning	Solution/ Workaround
0	Succeeded	-
3	Communication error (proxy enabled)	Check the network condition.
4	Communication error (proxy disabled)	Check the network condition.
5	Proxy error (authentication error)	Check Proxy username and password.
6	Communication error	Check the network condition.
8	Other error	See "SP5816-208 Error Codes" below this.
9	Request number confirmation executing	Processing… Please wait.
11	Already registered	-

Value	Meaning	Solution/ Workaround
12	Parameter error	-
20	Dial-up authentication error	* These errors occur only in the modems that support @Remote.
21	Answer tone detection error	
22	Carrier detection error	
23	Invalid setting value (modem)	
24	Low power supply current	
25	unplugged modem	
26	Busy line	

5. Make sure that the screen displays the Location Information with SP5-816-205 only when it has been input at the Center GUI.

6. Click [EXECUTE] to execute the registration with SP5-816-206.

7. Check the registration result with SP5-816-207.

Value	Meaning	Solution/ Workaround
0	Succeeded	-
1	Request number error	Check the request number again.
2	Already registered	Check the registration status.
3	Communication error (proxy enabled)	Check the network condition.
4	Communication error (proxy disabled)	Check the network condition.
5	Proxy error (Authentication error)	Check Proxy username and password.
8	Other error	See "SP5-816-208 Error Codes" below this.
9	Request number confirmation executing	Processing… Please wait.
11	Already registered	-
12	Parameter error	-
20	Dial-up authentication error	* These errors occur only in the modems that support @Remote.
21	Answer tone detection error	
22	Carrier detection error	
23	Invalid setting value (modem)	
24	Low power supply current	
25	unplugged modem	
26	Busy line	

8. Exit the SP mode.

SP5-816-208 Error Codes

Caused by Operation Error, Incorrect Setting

Code	Meaning	Solution/ Workaround
-12002	Inquiry registration attempted without acquiring Request No.	Obtain a Request Number before attempting the Inquiry or Registration.
-12003	Attempted registration without executing a confirmation and no previous registration.	Perform Confirmation before attempting the Registration.
-12004	Attempted setting with illegal entries for certification and ID2.	Check ID2 of the mainframe.
-12005	@Remote communication is prohibited. The device has an Embedded RC gate-related problem.	Make sure that "Remote Service" in Settings is set to "Do not prohibit".
-12006	A confirmation request was made after the confirmation had been already completed.	Execute registration.
-12007	The request number used at registration was different from the one used at confirmation.	Check Request No.
-12008	Update certification failed because mainframe was in use.	Check the mainframe condition. If the mainframe is in use, try again later.
-12009	The ID2 in the NVRAM does not match the ID2 in the individual certification.	Check ID2 of the mainframe.
-12010	The certification area is not initialized.	Initialize the certification area.

Error Caused by Response from GW URL

Code	Meaning	Solution/ Workaround
-2385	Other error	
-2387	Not supported at the Service Center	
-2389	Database out of service	
-2390	Program out of service	
-2391	Two registrations for the same mainframe	Check the registration condition of the mainframe
-2392	Parameter error	
-2393	External RCG not managed	
-2394	Mainframe not managed	
-2395	Box ID for external RCG is illegal.	
-2396	Mainframe ID for external RCG is illegal.	
-2397	Incorrect ID2 format	Check the ID2 of the mainframe.
-2398	Incorrect request number format	Check Request No.

SP descriptions

- **SP5-816-201 (Remote Service: Regist Status DFU(SSP))**

  Displays a number that indicates the status of the @Remote service device.

  0: Neither the registered device by the external nor embedded RCG device is set.

1: The embedded RCG device is being set. Only Box registration is completed. In this status, this unit cannot answer a polling request from the external RCG.
2: The embedded RCG device is set. In this status, the external RCG unit cannot answer a polling request.
3: The registered device by the external RCG is being set. In this status, the embedded RCG device cannot be set.
4: The registered module by the external RCG has not started.

- **SP5-990-002 (SP Print Mode: SP(Mode Data List)**
  Prints the configuration sheets of the system and user settings: SMC.
  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.
- **SP5-811-003 (Machine No. Setting: ID2 Code Display)**
  Sets the ID-2 code used to identify the @remote device at installation.
- **SP5-816-063 (Remote Service: Proxy server IP address)**
  This SP sets the address of the proxy server used for communication between the RCG device and the gateway. Use this SP to set up or display the customer proxy server address.
  The address is necessary to set up the embedded RCG-N.
  The address display is limited to 127 characters. Characters beyond the 127 characters are ignored.
  This address is customer information and is not printed in the SMC report.
- **SP5-816-064 (Remote Service: Proxy server Port number)**
  This SP sets the port number of the proxy server used for communication between the embedded RCG-N and the gateway. This setting is necessary to set up the embedded RC Gate-N.
  This port number is customer information and is not printed in the SMC report.
- **SP5-816-065 (Remote Service: Proxy User ID)**
  This SP sets the HTTP proxy certification username.
  The length of the name is limited to 31 characters. Any character beyond the 31st character is ignored.
  This name is customer information and is not printed in the SMC report.
- **SP5-816-066 (Remote Service: Proxy Password)**
  This SP sets the HTTP proxy certification password.
  The length of the password is limited to 31 characters. Any character beyond the 31st character is ignored.
  This name is customer information and is not printed in the SMC report.
- **SP5-816-202 (Remote Service: Letter Number DFU(SSP))**
  Allows entry of the number of the request needed for the RCG-N device.
- **SP5-816-203 (Remote Service: Confirm Execute)**
  Executes the inquiry request to the @Remote GW URL.
- **SP5-816-204 (Remote Service: Confirm Result DFU(SSP))**

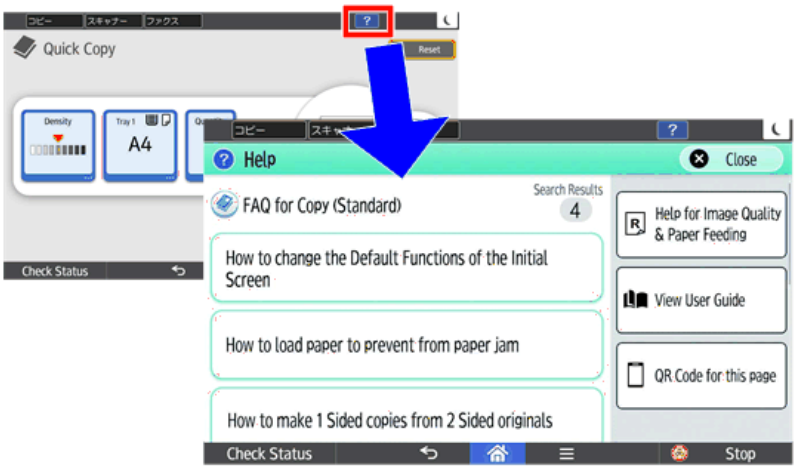
Displays a number that indicates the result of the inquiry executed with SP5816 203.

- **SP5-816-205 (Remote Service: Confirm Place DFU(SSP))**
  Displays the installed section informed from G/W for the response of request number inquiry if the section is enrolled on the G/W.
- **SP5-816-206 (Remote Service: Register Execute)**
  Executes "Embedded RCG Registration".
- **SP5-816-207 (Remote Service: Register Result DFU(SSP)**
  Displays a number that indicates the registration result.

"Web Help Support" Settings (MF Model Only)

Overview

Press [?] on the operation panel to browse the operation manual and the operation panel related FAQ's.



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The displayed manual not only be printed but also can be browsed on a smart device after scanning its QR code; so you can browse the help online while using the operation panel.

Online help menu:

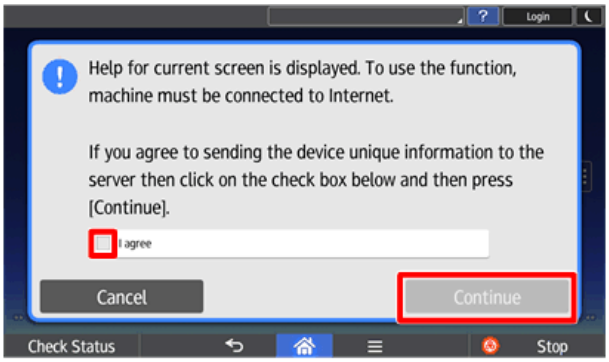
When the machine is connected to the Internet, the following online help screen is displayed.

d0apc7948

Note

The guidance screen below opens the first time Help is used in an environment where the machine is connected to the Internet. The online Help will not open until the "I agree" box has been checked.

2.Installation



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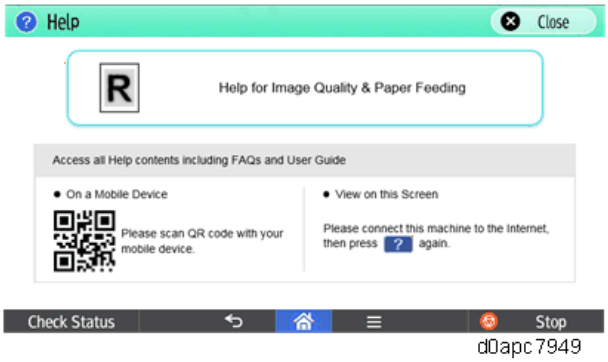
Important

If the online Help menu cannot be opened, check the following points.

- Some clients may require proxy server settings at their work sites.
  For proxy settings, refer to User's manual "Settings" > Screen Features > Wireless and Network > Proxy Settings.
- The settings of some operation panel browsers require that cookies be enabled (Default: Enable).
  Open the browser: Browser > (Menu) key > Settings > Privacy & Security > Accept cookies, and then confirm that “Accept Cookies” is checked.

Offline help menu:

When the machine is not connected to the Internet, the following offline help screen is displayed. When the machine is offline, only Help for Image Quality & Paper Feeding information can be browsed, and FAQ’s etc. cannot be displayed.



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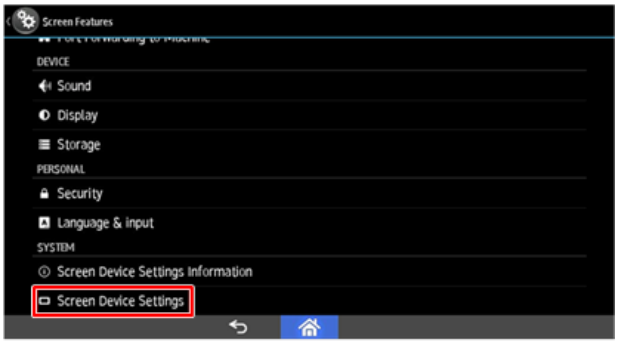
How to Enable/Disable Web Help Support

If a customer does not want to connect the internet, the function can be disabled via UP and SP as follows:

Item		Value (Default)	Descriptions
UP	Help Functions	ON/OFF (**ON**)	Press the [?] button on the Home screen to switch the display on/off. The menu will not open if the function is switched off with the SP code.
	Display Online Help Preferentially	ON/OFF (**ON**)	Allows settings with the Help function switched on. Press the [?] button to select the Help preference (Online or Offline Help). The menu will not open if Online Help is switched off with the SP code.
SP	Help Functions	ON/OFF (**ON**)	Press the [?] button on the Home screen to switch the display on/off.
	Online Help	ON/OFF (**ON**)	Switches the settings for the UP "Display Online Help Preferentially" display on/off.
	Display Online Help Preferentially	ON/OFF (**ON**)	Press the [?] button to select the Help preference (Online or Offline Help).

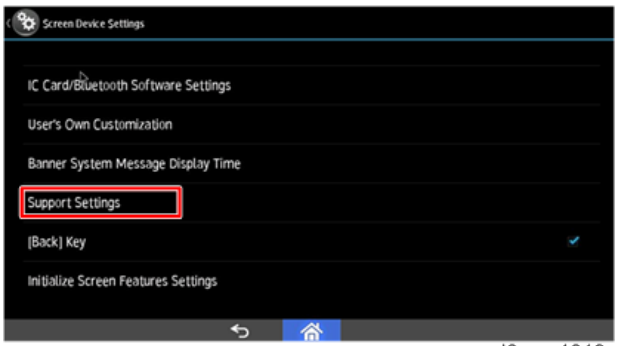
UP Setting

1. Log in as administrator.
2. Select the "User Tools" icon.
3. Select [Screen Features].
4. Select [Screen Device Settings].



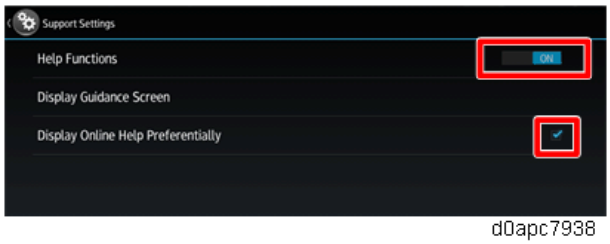
d0acm1018

5. Select [Support Settings].



d0acm1019

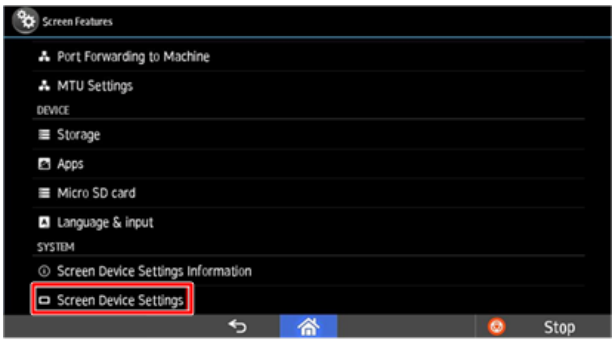
6. Enable or disable "Help Functions" and "Display Online Help Preferentially".



d0apc7938

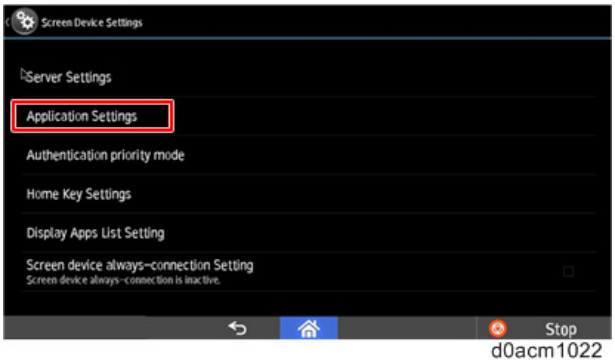
SP Setting

1. Log in to Screen SP mode.
2. Select [Screen Device Settings].



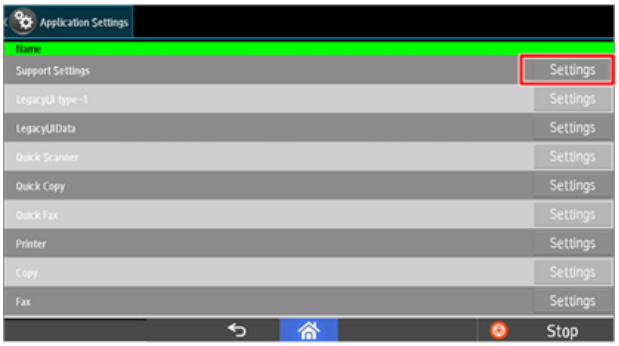
d0acm1021

3. >Select [Application Settings].



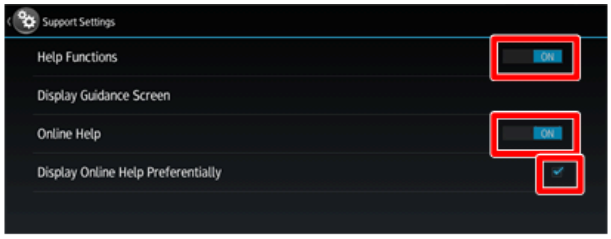
d0acm1022

4. Select [Settings] for “Support Settings”.



d0acm1023

5. Enable or disable "Help Functions", "Online Help", and "Display Online Help Preferentially".



d0apc7939

Help for Image Quality & Paper Feeding

If a user encounters any trouble when operating the machine, the solution is displayed on the operation panel and the user can resolve the problem on his or her own.

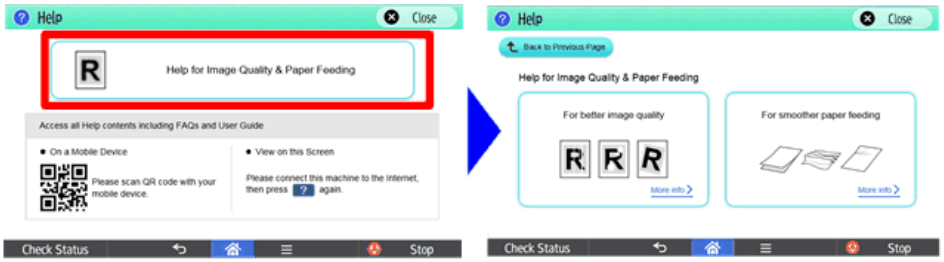
MF Model

On the MF model, the operation panel Help functions can be browsed from How to Enable/Disable Web Help Support. The initial menu is different, depending on whether the machine is connected to the Internet or not, but either initial menu allows entry to Built-in Help Content.

Online Help when connected to the Internet

d0apc7950

Offline Help when not connected to the Internet



d0apc7951

Help Menu

The menu item is as follows:

Trouble		Actions
For better image quality	Lines visible / dirt on image	• Cleaning the auto document feeder (ADF) • Setting the fixing temperature
	The print contains spots	Setting the fixing temperature
	Horizontal lines are blurred	Setting scattered toner image prevention

Trouble		Actions
	Image skewed / shifted	• Confirm whether the side fence and end fence are set correctly • Cleaning the paper feeding section • Confirm whether the side fence is set correctly
For smoother paper feeding	Multiple sheets fed	• Checking the loaded paper • Cleaning the paper feeding section
	Misfeed occurs	• Checking the loaded paper • Cleaning the paper feeding section
	Paper becomes creased	Checking the loaded paper, paper type, and thickness settings
	Paper curls	Checking the loaded paper, paper type, and thickness settings
	Stack/Bookbinding failures (Finisher model only)	Checking the loaded paper, paper type, and thickness settings
	A paper size error has occurred	Checking the paper tray's settings
	Original double feed/misfeed (MF model only)	• Checking the original • Cleaning the automatic document feeder (ADF)

"RemoteConnect Support" Settings (MF Model Only)

Overview

The RemoteConnect Support function allows monitoring and remote control of the customer's machine's operation panel.

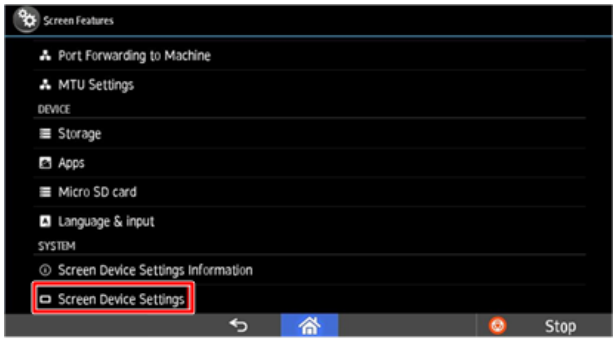
- Allows a customer support operator to remotely connect with the client's machine equipped with the Smart Operation panel (SOP-G2.5), or PC over the internet.
- Enables the support center to diagnose and resolve the issue through real-time screen sharing, remote guidance, and operation.

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.

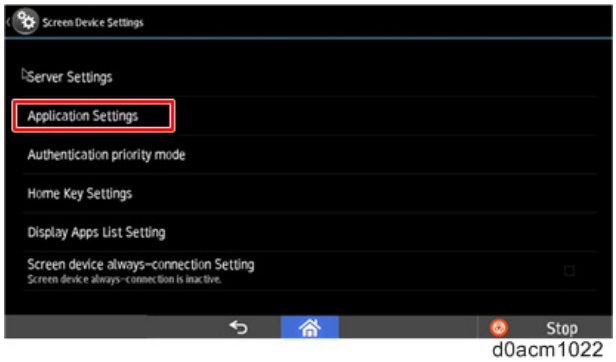
How to Enable/Disable RemoteConnect Support

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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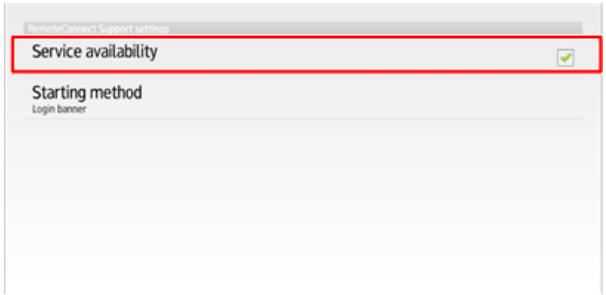

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Note

- 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.

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If the 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.

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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.

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Note

- If a webpage cannot be connected to via the web browser, check the general network configuration settings, such as the 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:

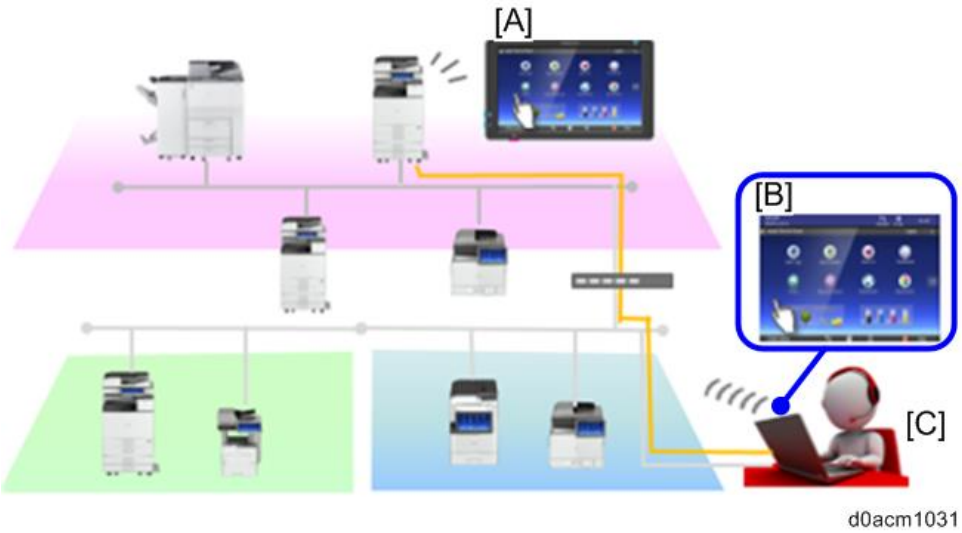
1. Log in to Screen SP mode.
2. Select Apps > Install.
3. Select Uninstall for the following two applications:

Firmware Type	Part Number
RemoteConnectSupport	D0BQ1499
RemoteSupportService	D0BQ1498

"Remote Panel Operation" Settings (MF Model Only)

Overview

Remote Panel Operation will be pre-installed in models that have Smart Operation Panel G2.5. This is a built-in function.
Using Web Image Monitor, you can view on your computer screen the operation panels of devices on the same network as well as remotely control such devices. 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

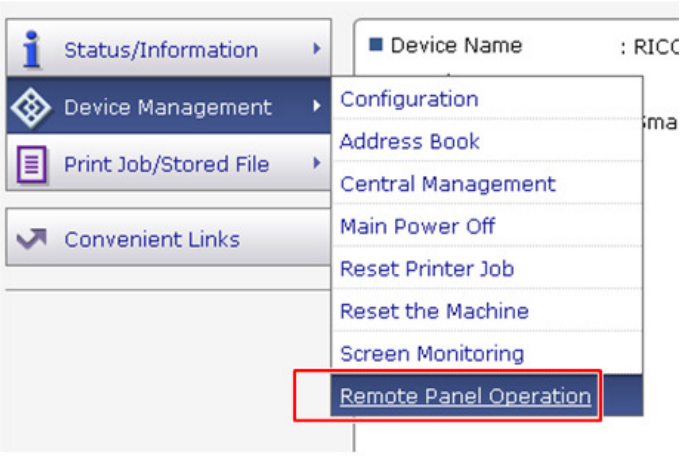
Usage

- Remote Panel Operation enables the IT manager or in-house help desk staff to remotely view and operate the Smart Operation Panel G2.5 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]



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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 "Basic Settings for Extended Devices".

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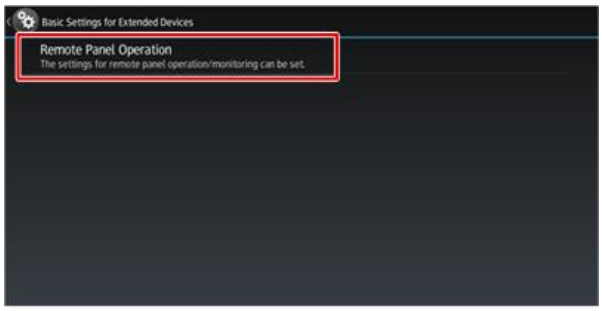
4. Press "Remote Panel Operation".



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5. Enable “Remote Operation/Monitoring Functions”.

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Note

- “Remote Operation/Monitoring” Functions is disabled at default. When it is disabled, Remote Panel Operation is not displayed in the Web Image Monitor.

Operation Guidance for Users

Provide guidance for the following operations.

Important

IM 550F/600F/600SRF only: Be sure to explain that the user can always check the Help using the Web Help Support function by pressing [?] on the operation panel. The user can refer to FAQs while the machine is connected to the Internet. If the machine is not connected to the Internet, the user can only refer to [Help for Image Quality & Paper Feeding].

Function/Operation	Instruction to provide
Basic machine functions, operations	• How to load and replace the toner cartridge and the waste toner bottle • How to load paper • How to turn ON/OFF the main power • How to clear paper jams • How to program, modify, and delete Address Book entries • How to customize the UI and home screen • Overview of machine options/peripherals • How to take the proper action for SC errors (clearing the error, contacting service and support, etc.), how to interpret @Remote notifications • Important notes to keep in mind whenever moving the machine • Product limitations
Copier (IM 550F/600F/600SRF Only)	• Basic Copier operations • How to load an original in the DF or place it on the exposure glass for scanning • How to use thick paper and other specialized paper/media • How to configure the Copier main screen (duplex/simplex, User Codes, etc.) • Basic Document Server operations
Fax (IM 550F/600F/600SRF Only)	• How to send a fax (Memory Transmission, Direct Transmission)
Printer	• How to install printer drivers (using the recommended method) • How to connect to a PC (performing the port settings) • How to print out a test page • Overview of various settings inside each tab in the printer driver (e.g. duplex printing)
Scanner (IM 550F/600F/600SRF Only)	• How to install printer drivers (using the recommended method) • How to connect to a PC and perform a test scan

3. Preventive Maintenance

Preventive Maintenance Tables

See "Appendices" for the following information:

- Preventive Maintenance Tables

Yield Parts Settings

Yield Parts Replacement Procedure

The parts mentioned in the table have a target yield. However, the total copy/print volume made by the machine will not reach the target yield within the machine's targeted lifetime if the machine is used under the target usage conditions (ACV, color ratio, P/J, and C/O). So, these parts are not categorized as PM parts but as yield parts (EM parts).

1. Enter the SP mode.
2. Output the SMC logging data with SP5-990-004.
3. Set the SP corresponding to the part to be replaced to "1".

Item	SP
Drum unit	SP7-622-002
Development unit	SP7-622-003
Transfer roller	SP7-622-093
Fusing unit	SP7-622-115
Paper feed roller	SP7-622-146
Pickup roller	SP7-622-147
Separation roller	SP7-622-148
Feed roller assy (DF)*1	SP7-622-206
Separation pad (DF) *1	SP7-622-207

*1 Only for IM 550F/600F/600SRF

Important

Make sure you set the SP to "1" before you replace the part. If you set it to "1" after replacing the part, the counter for the previous unit will not be stored.

4. Exit the SP mode.
5. Turn OFF the main power.
6. Replace the yield parts and turn ON the main power.
   The machine will reset the PM counter.

After installing the new yield parts

1. Turn ON the main power.
2. Output the SMC logging data with SP5-990-004 and check the counter value.
3. Check the corresponding SP to make sure that the PM counter is "0".

Item	SP
Drum unit	SP7-621-002
Development unit	SP7-621-003
Transfer roller	SP7-621-093
Fusing unit	SP7-621-115

Item	SP
Paper feed roller	SP7-621-146
Pickup roller	SP7-621-147
Separation roller	SP7-621-148
Feed roller assy (DF)*1	SP7-621-206
Separation pad (DF) *1	SP7-621-207

Operation check

Check if the sample image has been copied normally.

4. Replacement and Adjustment

Notes on the Main Power 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 the main power 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 (PCB15), the operation unit, and other modules even when the main power is turned OFF. When replacing the controller board (PCB15) and the operation unit in this state, not only these boards, it will damage 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 blow a fuse or cause memory failure.
--How to discharge the residual charge inside the machine--
After you unplug the power cord from the AC wall outlet, be sure to press the main power switch in order to discharge the residual charge from inside the machine. 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.

Shutdown Method

1. Press the main power switch [A] on the left side of the machine.

IM 550F/600F/600SRF	P 800/801
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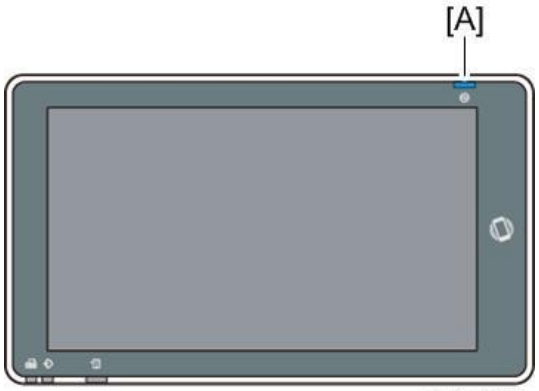
2. The shutdown message appears. After the shutdown process, the main power is turned off automatically. The LED on the operation panel is turned off when the machine completes the shutdown.

Important

MF models: Even after the shutdown message disappears, do not disconnect the power cord while the main power indicator [A] is flashing to indicate that the machine is still shutting down.



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⚠CAUTION

Before attempting to remove or adjust any boards, follow the procedure below to obviate the need for replacing the board which may get damaged by the residual charge.

1. After shutdown, unplug the power cord.
2. Press and hold the power button for a second to discharge the residual charge.

How to start from shutdown

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

In case normal shutdown does not complete for some reason, the machine has a forced shutdown function.
To force shutdown the machine, press and hold the main power switch for 6 seconds.
Normally, do not execute a forced shutdown.

Important

- Forced shutdown can damage the HDD, the memory, and the machine. Use the force shutdown only if it is unavoidable.

Beforehand

⚠CAUTION

- **Before you begin a procedure, please do the following:**
  For IM 550F/600F/600SRF, which have fax features, print out all messages stored in the memory, the lists of user-programmed items, and the system parameter list.
  If there are printer jobs in the machine, print out all jobs in the printer buffer.
  Turn OFF the main power. Disconnect the power cord and network cable. For IM 550F/600F/600SRF, disconnect the telephone line.

Important

- Always touch a grounded surface to discharge static electricity from your hands before you handle SD cards, printed circuit boards, or memory boards.

Note

- Before you start to remove components from the machine, do the following:
- Turn OFF the main power.
- Make sure that the shutdown process has finished and that the LED on the operation panel has turned OFF.
- Unplug the power cord.
- After the main power of the machine has been turned OFF, the power is supplied to the controller board until the HDD unit has been shut down safely.

Special Tools

The following special tools should be prepared for the maintenance of this machine in the field.

U: Unique for this machine

C: Common with listed machine

No.	Part Number	Description	Q'ty	Unique or Common
1	B6455030	SD Card 2GB	1	C (General)
2	B6455040	SD Card 8GB	1	C (General)
3	B6455060	SD Card 16GB	1	C (General)

Note

- A PC is required for creating the Encryption key file on an SD card when replacing the controller board (PCB15) for a model in which HDD encryption has been enabled.

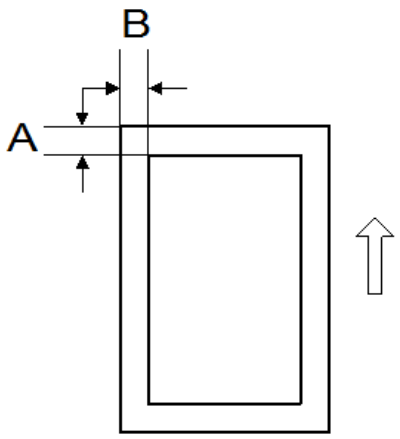
Image Adjustment

Printing

Note

- Make sure the paper is set correctly in each paper tray before you start these adjustments.
- Use Trimming Area Pattern (SP2-109-003, No.14) to print the test pattern for the following procedures.
- Set SP2-109-003 to "0" again after completing these printing adjustments.

Registration: Leading Edge/Side-to-Side



A: Leading Edge Registration (4 ± 2.5 mm)

B: Side-to-side Registration (4 ± 2.5 mm)

1. Check the leading edge registration [A] for each paper feed station, and adjust them using SP1-001.

Paper Feed Station	SP No.	Adjustment Range
Tray 1 (Main unit)	SP1-001-001	4±2.5 mm
Tray 2 (Optional tray)	SP1-001-002	
Tray 3 (Optional tray)	SP1-001-003	
Tray 4 (Optional tray)	SP1-001-004	
Tray 5 (Optional tray)	SP1-001-005	
Bypass Tray	SP1-001-006	
Duplex Tray	SP1-001-007	

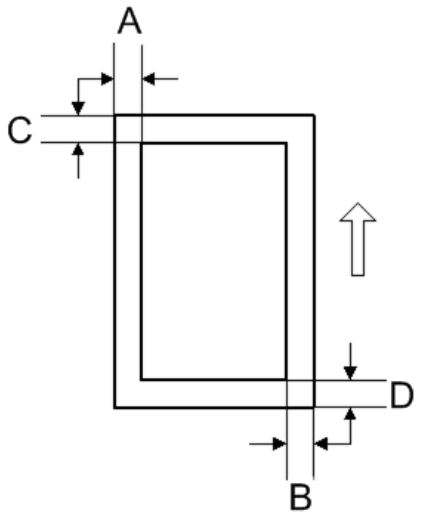
2. Check the side-to-side registration [B] for each paper feed station, and adjust them using SP1-002.

Paper Feed Station	SP No.	Adjustment Range
Tray 1 (Main unit)	SP1-002-001	4±2.5 mm
Tray 2 (Optional tray)	SP1-002-002	
Tray 3 (Optional tray)	SP1-002-003	
Tray 4 (Optional tray)	SP1-002-004	

Paper Feed Station	SP No.	Adjustment Range
Tray 5 (Optional tray)	SP1-002-005	
Bypass Tray	SP1-002-006	
Duplex Tray	SP1-002-007	

Blank Margin

If the leading edge/side-to-side registration cannot be adjusted within the specifications, adjust the leading/left side edge blank margin.



A: Left Edge Blank Margin

B: Right Edge Blank Margin

C: Leading Edge Blank Margin

D: Trailing Edge Blank Margin

1. Check the trailing edge [A], right edge [B], leading edge [C], left edge [D] blank margins, and adjust them using the following SP modes.

Edge	SP No.	Adjustment Range
Left Edge	SP2-103-001	4±2.5 mm
Right Edge	SP2-103-002	
Leading Edge	SP2-103-003	
Trailing Edge	SP2-103-004	

Main Scan Magnification

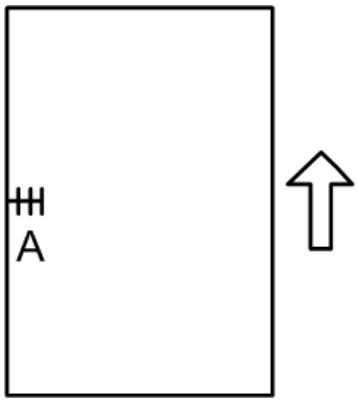
1. Use SP2-109-003, No.5 (Grid Pattern) to print the single-dot grid pattern.
2. Check the magnification, and adjust the magnification using SP2-102-001 (Magnification Adjustment Main Scan) if necessary. The specification is ± 1%.

Scanning (IM 550F/600F/600SRF Only)

Note

- Before doing the following scanner adjustments, perform or check the printing registration/side-to-side adjustment and the blank margin adjustment.

Registration: Platen Mode



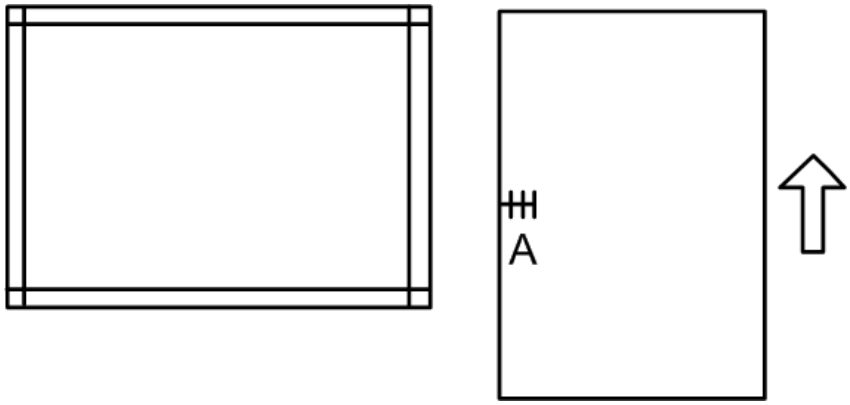
A: Side-to-side Registration (Main Scan Reg)

1. Place the test chart on the exposure glass and make a copy from one of the feed stations.
2. Check the side-to-side registration, and adjust it using the following SP mode if necessary.

SP No.	SP Name	Adjustment Range
SP4-011-001	Main Scan Reg	±2.5 mm

DF Image Adjustment (IM 550F/600F/600SRF Only)

Registration



A: Side-to-side Registration

1. Place the temporary test chart on the DF and make a copy from one of the feed stations.
2. Check the registration, and adjust them using the following SP modes if necessary.

SP No.	SP Name	Adjustment Range
SP6-006-001	ADF Adjustment Side-to-Side Regist: Front	±3.0 mm

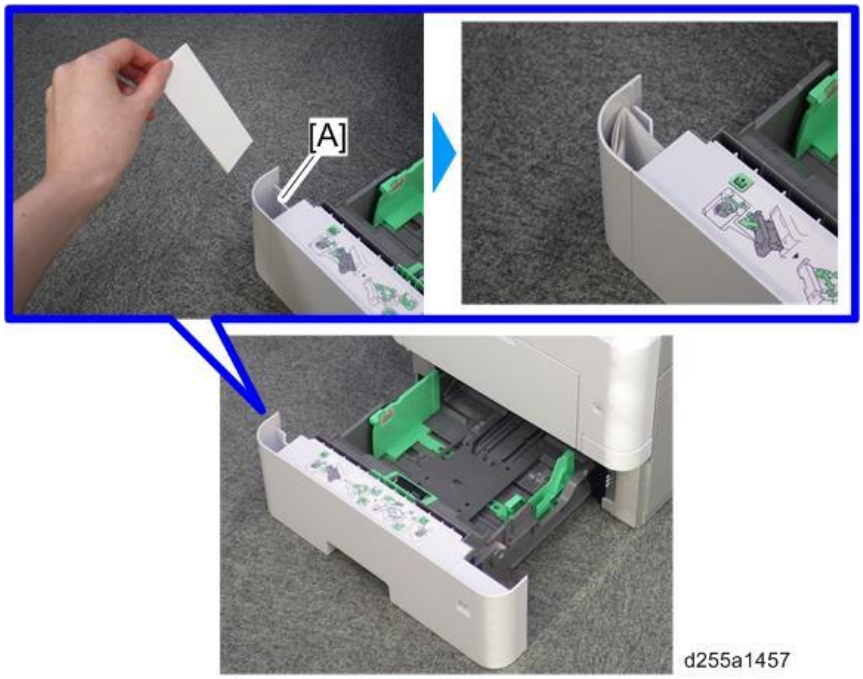
SP No.	SP Name	Adjustment Range
SP6-006-002	ADF Adjustment Side-to-Side Regist: Rear	

SMC Storage

The SMC report provided with the machine needs to be stored with the machine.

The factory SP settings are recorded in the SMC report. This report may be required after replacing the NVRAMs to set the SP settings to factory default.

The SMC report is stored in the storage space [A] inside the paper feed tray.



Factory SP Settings

This section provides the factory SP settings.

You can check the factory SP settings with the SMC report provided with the machine. The SMC report is stored in the paper feed tray. (For details, see SMC Storage)

If the SMC report is not stored with the machine, refer to the tables in this section.

IM 550F/600F/600SRF

SP No.	SP Name	Default Value	Factory Setting
SP1-001-001	Registration Correct: Main	+0.0 mm	-- mm*1
SP1-001-006	Registration Correct: By-Pass Tray	+0.0 mm	-- mm*1
SP1-001-007	Registration Correct: Duplex	+0.0 mm	-- mm*1
SP1-002-001	Registration Correct: Main	+0.0 mm	-- mm*1
SP1-002-006	Registration Correct: By-Pass Tray	+0.0 mm	-- mm*1
SP1-002-007	Registration Correct: Duplex	+0.0 mm	-- mm*1
SP4-011-001	S-to-S Regist Adjustment	+0.0 mm	-- mm*1
SP4-108-001	Sub Scan Speed.Adjustment	+0.0 %	-- %*1
SP4-110-001	L-Edge Timing Adjustment	+0 pulse	-- pulse*1
SP4-609-	Gray Balance Set: R: Book Scan	-100 digit	-- digit*1

SP No.	SP Name	Default Value	Factory Setting
001			
SP4-609-002	Gray Balance Set: R: DF Scan	-100 digit	-- digit*1
SP4-610-001	Gray Balance Set: G: Book Scan	-100 digit	-- digit*1
SP4-610-002	Gray Balance Set: G: DF Scan	-100 digit	-- digit*1
SP4-610-003	Gray Balance Set: BW: Book Scan	-100 digit	-- digit*1
SP4-610-004	Gray Balance Set: BW: DF Scan	-100 digit	-- digit*1
SP4-611-001	Gray Balance Set: B: Book Scan	-100 digit	-- digit*1
SP4-611-002	Gray Balance Set: B: DF Scan	-100 digit	-- digit*1
SP5-101-107	Auto Logout Timer: Auto Logout Time	1: Enable	0: Disable
SP5-305-101	Auto-Off Set: Set Function	1: Enable	0: Disable
SP5-748-201	OpePanel Setting: Cheetah Panel Connect Setting	0: Not connected	1: Connected
SP5-805-002	Drum Heater	NA/EU :0 (Off) AP: 1 (ON)	NA/EU :0 (Off) AP: 1 (ON)
SP5-875-	SC Auto Reboot: Reboot Setting	0: The machine reboots automatically when the machine	1: The machine does not reboot when an

SP No.	SP Name	Default Value	Factory Setting
001		issues an SC error and logs the SC error code.	SC error occurs.
SP5-907-001	Plug&Play Maker/Model Name	0	0 or 9 (Set the appropriate setting for the model)
SP5-985-001	Device Setting: On Board NIC	0: Disable	1: Enable
SP5-985-002	Device Setting: On Board USB	0: Disable	1: Enable
SP6-006-001	ADF Adjustment: Side-to-Side Regist: Front	+0.0 mm	-- mm*1
SP6-006-002	ADF Adjustment: Side-to-Side Regist: Rear	+0.0 mm	-- mm*1
SP6-026-001	ADF Timing Adjustment: Leading Edge Start Timing: Front	+0 pulse	-- pulse*1
SP6-026-002	ADF Timing Adjustment: Leading Edge Start Timing: Rear	+0 pulse	-- pulse*1
SP6-026-003	ADF Timing Adjustment: Leading Edge End Timing: Front	-16 pulse	-- pulse*1
SP6-026-004	ADF Timing Adjustment: Leading Edge End Timing: Rear	-16 pulse	-- pulse*1
SP6-027-001	ADF Adjustment Scan Speed: Simplex Mode	+0.0 %	-- %*1
SP6-027-003	ADF Adjustment Scan Speed: Duplex Mode: Rear	+0.0 %	-- %*1

*1: This setting is specific to the machine type.

P 800/801

SP No.	SP Name	Default Value	Factory Setting
SP1-001-001	Registration Correct: Main	+0.0 mm	-- mm*1
SP1-001-006	Registration Correct: By-Pass Tray	+0.0 mm	-- mm*1
SP1-001-007	Registration Correct: Duplex	+0.0 mm	-- mm*1
SP1-002-001	Registration Correct: Main	+0.0 mm	-- mm*1
SP1-002-006	Registration Correct: By-Pass Tray	+0.0 mm	-- mm*1
SP1-002-007	Registration Correct: Duplex	+0.0 mm	-- mm*1
SP5-101-107	Auto Logout Timer: Auto Logout Time	1: Enable	0: Disable
SP5-305-101	Auto-Off Set: Set Function	1: Enable	0: Disable
SP5-875-001	SC Auto Reboot: Reboot Setting	0: The machine reboots automatically when the machine issues an SC error and logs the SC error code.	1: The machine does not reboot when an SC error occurs.
SP5-805-002	Drum Heater	0 (Off)	NA/EU :0 (Off) AP: 1 (ON)
SP5-907-001	Plug&Play Maker/Model Name	0	0 or 9 (Set the appropriate setting for the model)

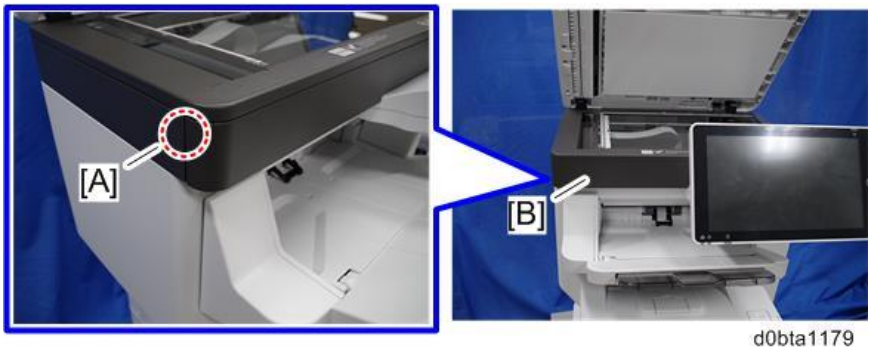
*1: This setting is specific to the machine type.

Exterior Covers (IM 550F/600F/600SRF)

Scanner Front Cover

Scanner Front Cover (IM 600SRF)

1. Insert a flathead screwdriver at [A] to release the hook of the scanner front cover [B].



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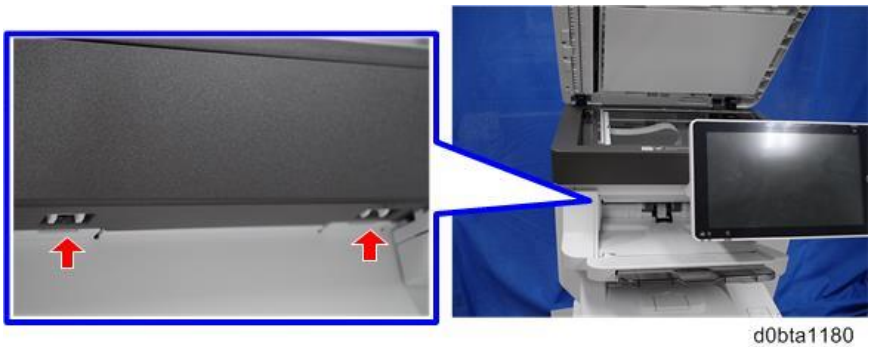
2. Release the two hooks of the scanner front cover [A].



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3. Insert a flathead screwdriver at [A] to release the hook, and then remove the scanner front cover [B].

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Note

- Be careful not to damage the hooks on the inside of the scanner front cover when you remove

or install the scanner front cover.

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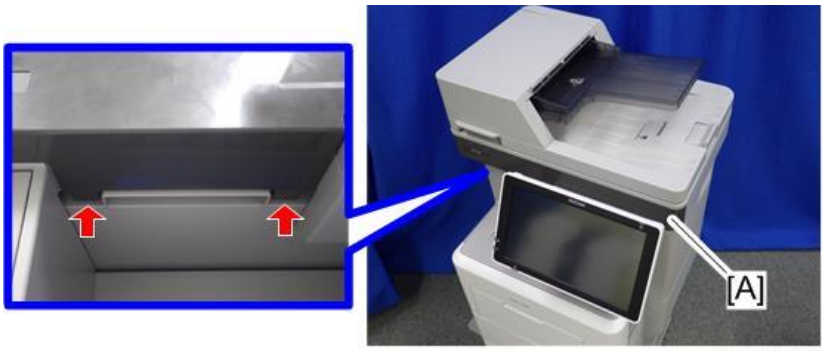
Scanner Front Cover (IM 550F/600F)

1. Insert a flathead screwdriver at [A] to release the hook of the scanner front cover [B].

d255a1177

2. Release the two hooks of the scanner front cover [A].



d255a1178

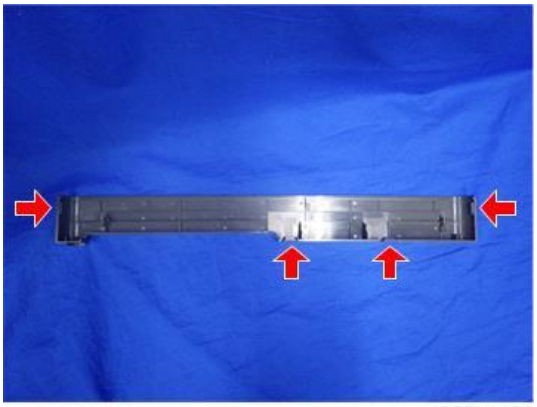
3. Insert a flathead screwdriver at [A] to release the hook, and then remove the scanner front cover

[B].

d255a1179

Note

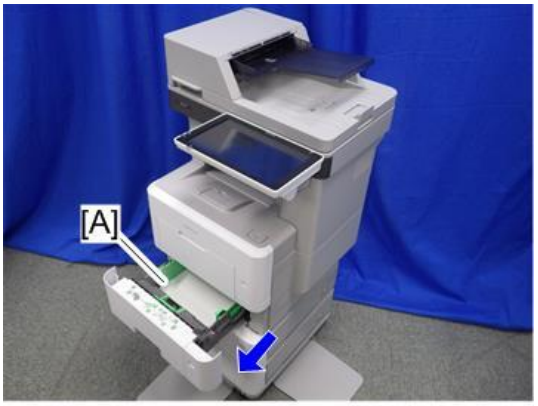
- Be careful not to damage the hooks on the inside of the scanner front cover when you remove or install the scanner front cover.



d255a1186

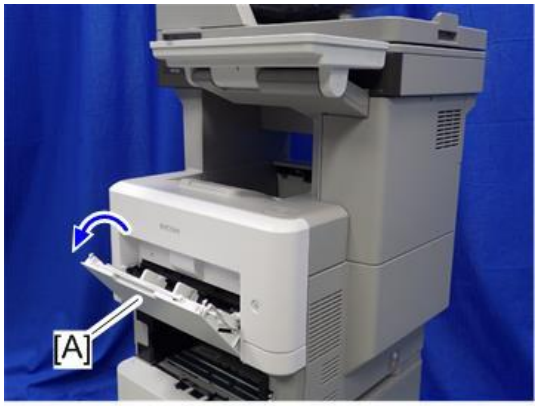
Front Cover

1. Remove the paper feed tray [A] by pulling it out.



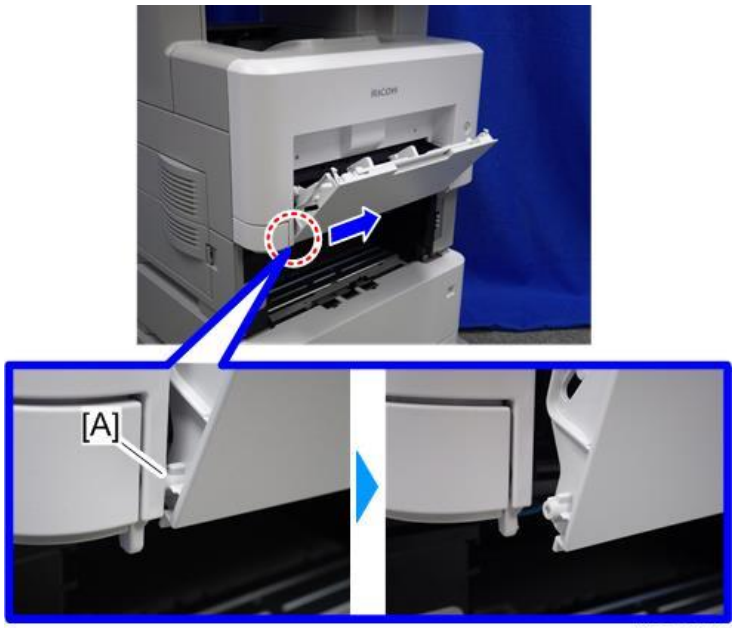
d255a1115

2. Open the bypass tray [A].



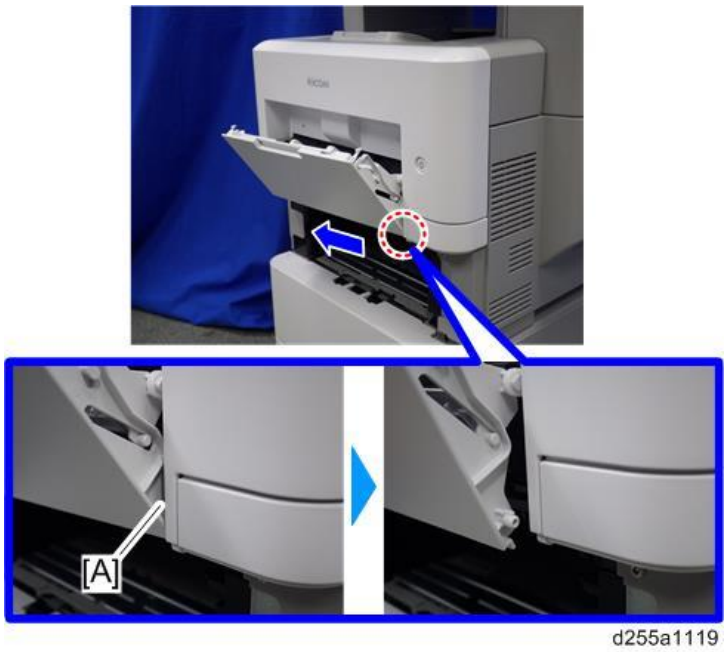
d255a1116

3. Release the left hinge [A] of the bypass tray with a flathead screwdriver by slightly bending the bypass tray inward.



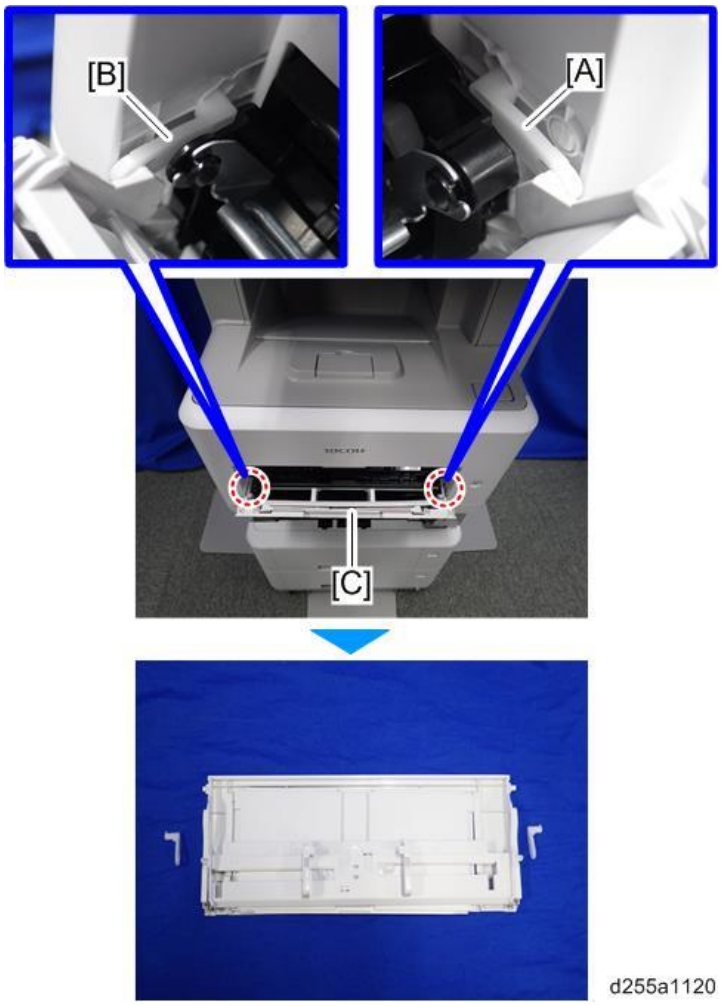
d255a1118

4. Release the right hinge [A] of the bypass tray by sliding it to the left.

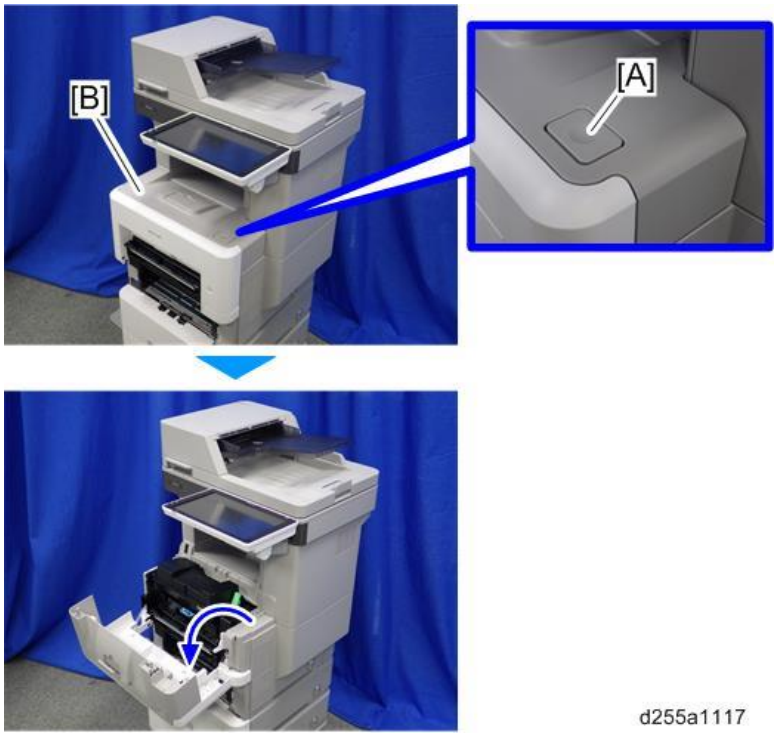


5. Remove the right connecting arm [A] and left connecting arm [B] of the bypass tray [C].

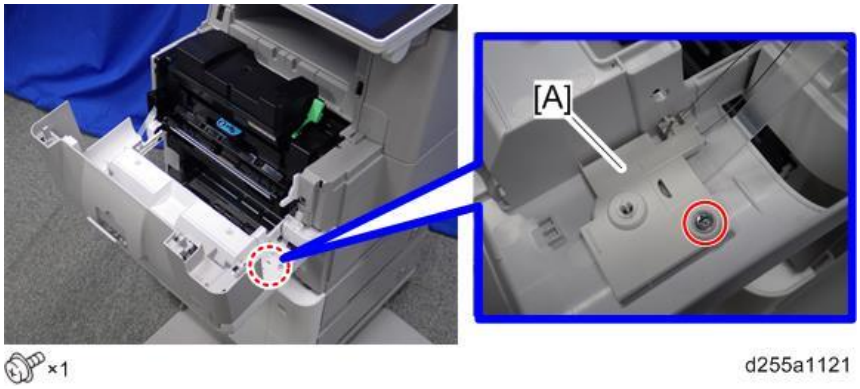
6. Remove the bypass tray [C].



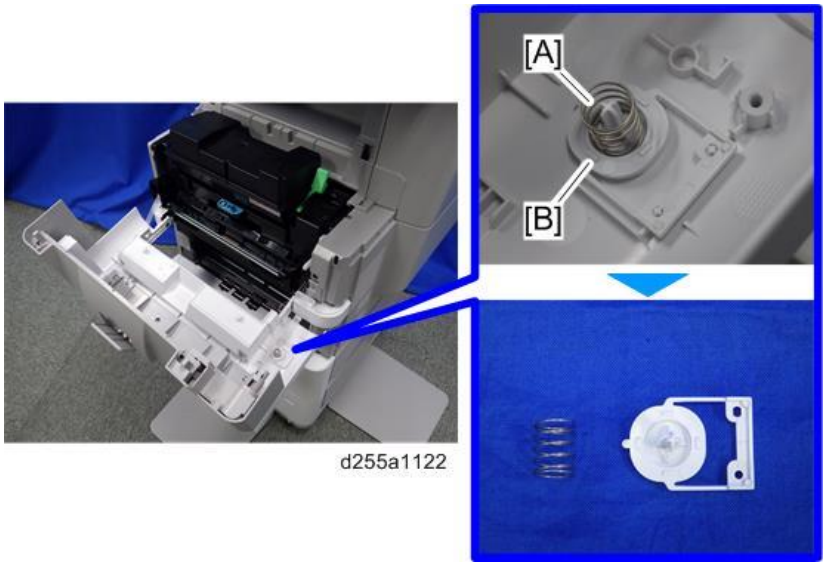
7. Push the button [A] and open the front cover [B].



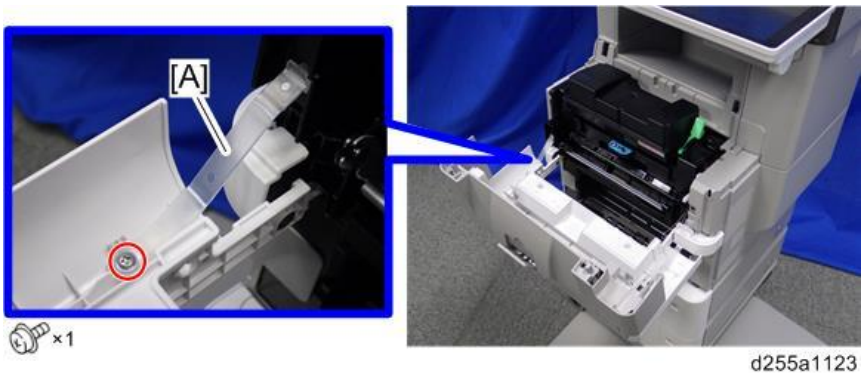
8. Remove the switch cover [A].



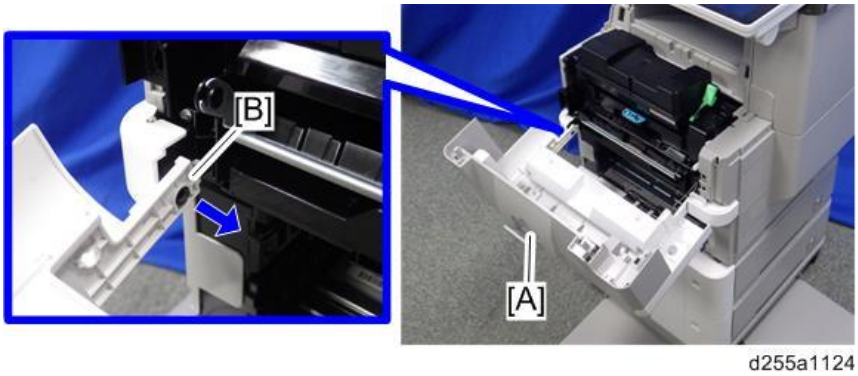
9. Remove the spring [A] and power switch [B].



10. Remove the belt [A].



11. Remove the front cover [A] by releasing the left hinge [B].

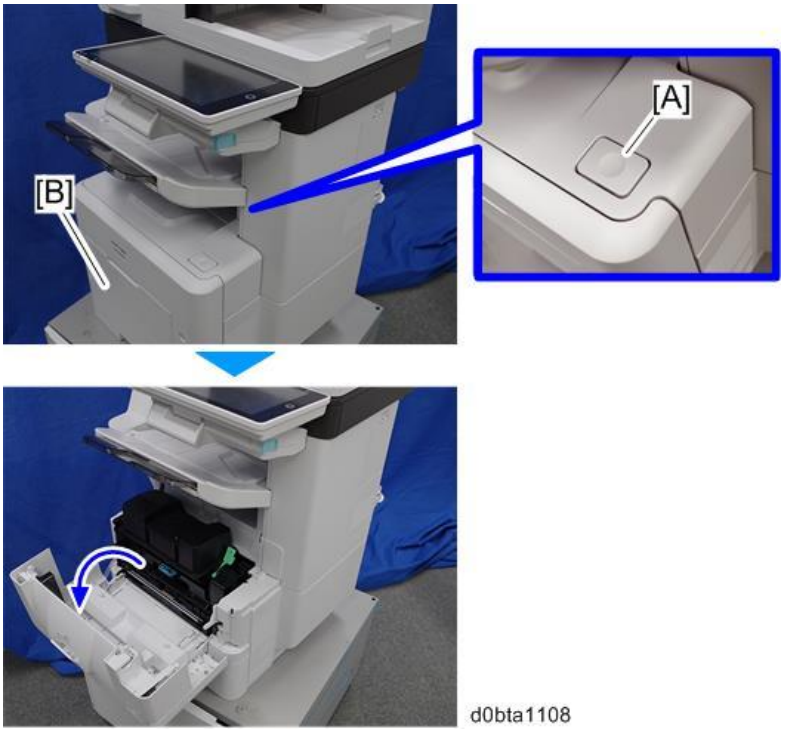


Right Upper Cover

Right Upper Cover (IM 600SRF)

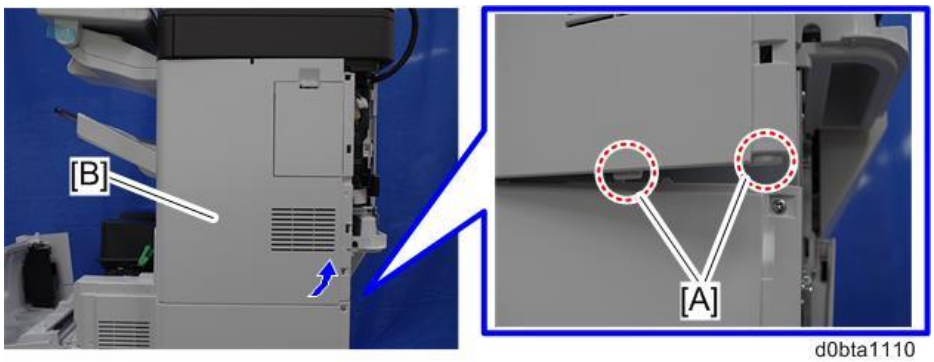
1. Remove the rear right stay. (Rear Right Stay (IM 600SRF))

2. Push the button [A] and open the front cover [B].



3. Release the hook [A] of the right upper cover [B] by opening the cover in the direction of the arrow.

4. Release the hooks [A] of the right upper cover [B] by lifting the bottom right of the cover, and then remove the cover.



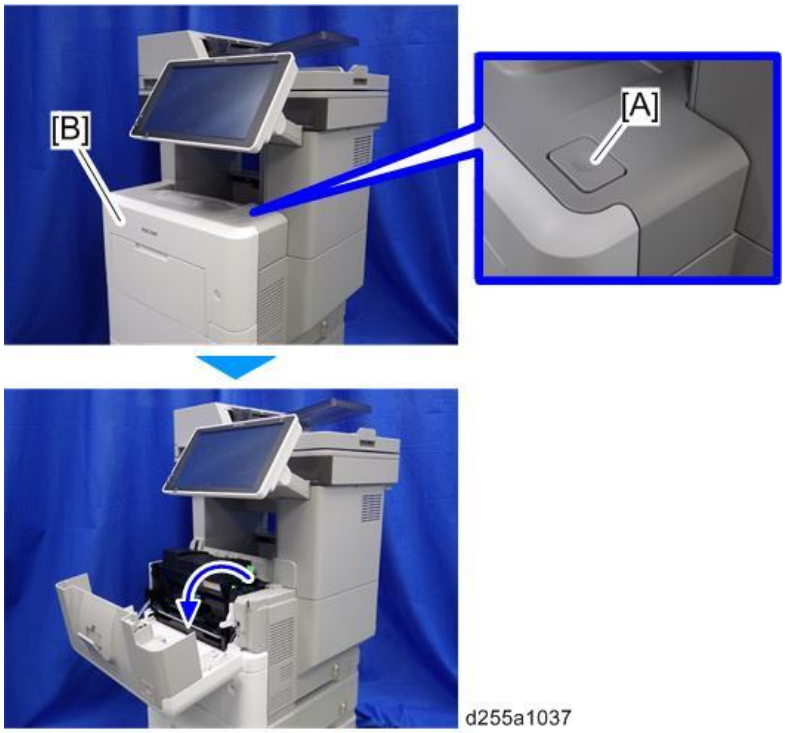
Note

- Be careful not to damage the hooks on the inside of the right upper cover when you remove or install the right upper cover.

Right Upper Cover (IM 550F/600F)

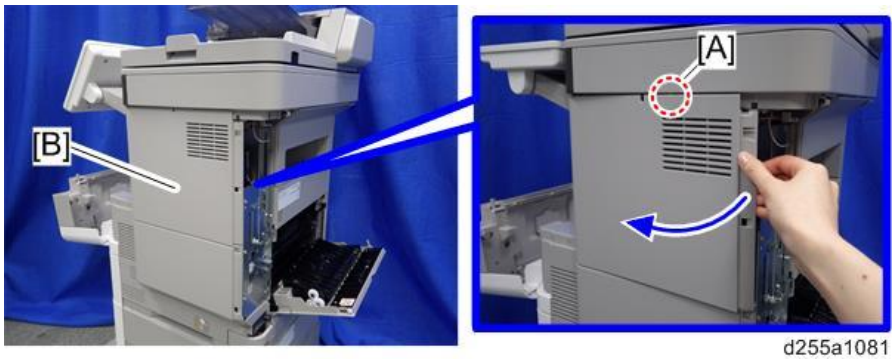
1. Remove the rear right stay. (Rear Right Stay (IM 550F/600F))

2. Push the button [A] and open the front cover [B].



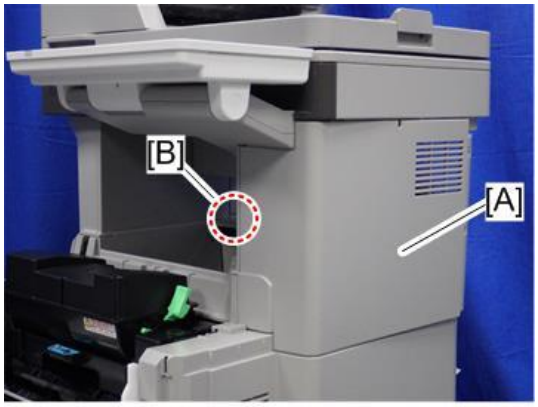
d255a1037

3. Release the hook [A] of the right upper cover [B] by opening the cover in the direction of the arrow.



d255a1081

4. Remove the right upper cover [A] by inserting a flathead screwdriver into [B].



d255a1039

Note

- Be careful not to damage the hooks on the inside of the right upper cover when you remove or

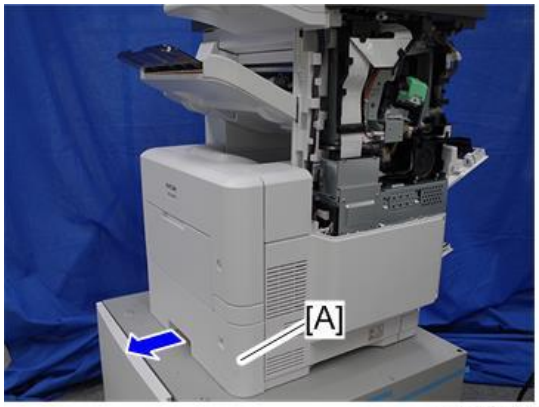
install the right upper cover.

d255a1040

Right Lower Cover

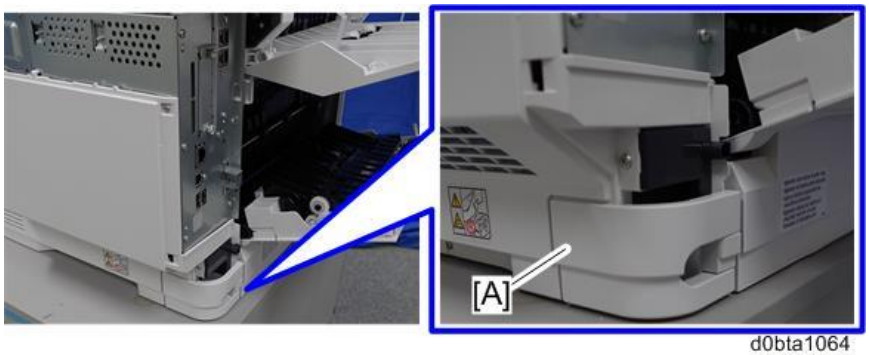
Right Lower Cover (IM 600SRF)

1. Remove the right upper cover. (Right Upper Cover (IM 600SRF))
2. Remove the paper feed tray [A] by pulling it out.



d0bta1063

3. Remove the power connector cover [A].



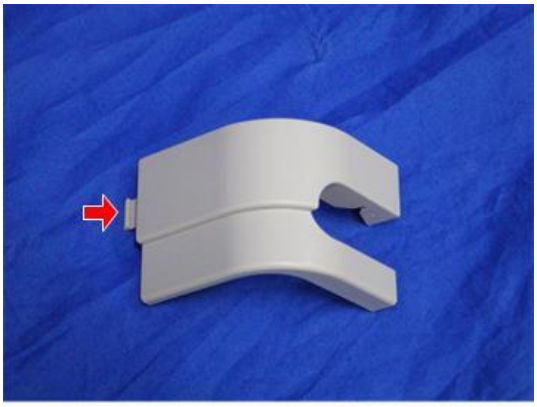
d0bta1064

Note

- When removing the power connector cover, pull it in the direction of the arrow.

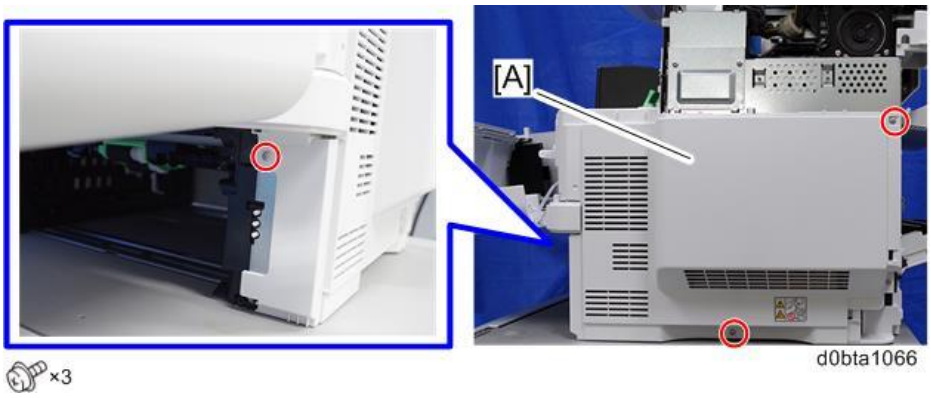
d0bta1065

- Be careful not to damage the hook on the power connector cover when you remove or install the power connector cover.



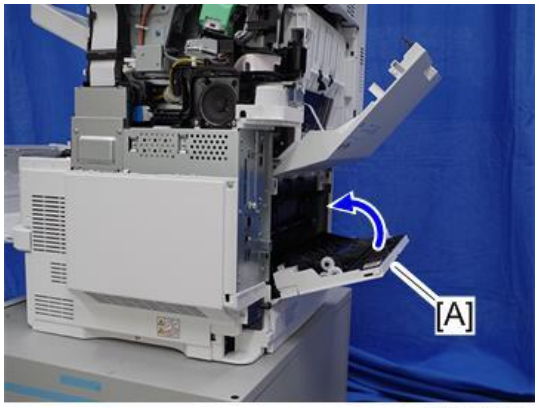
d255a1078

4. Remove the three screws from the right lower cover [A].



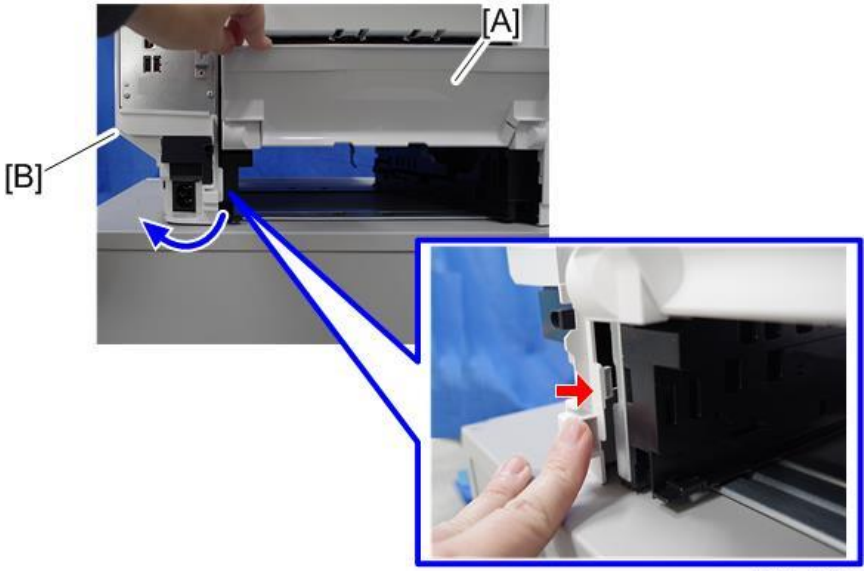
d0bta1066

5. Close the rear upper cover [A].



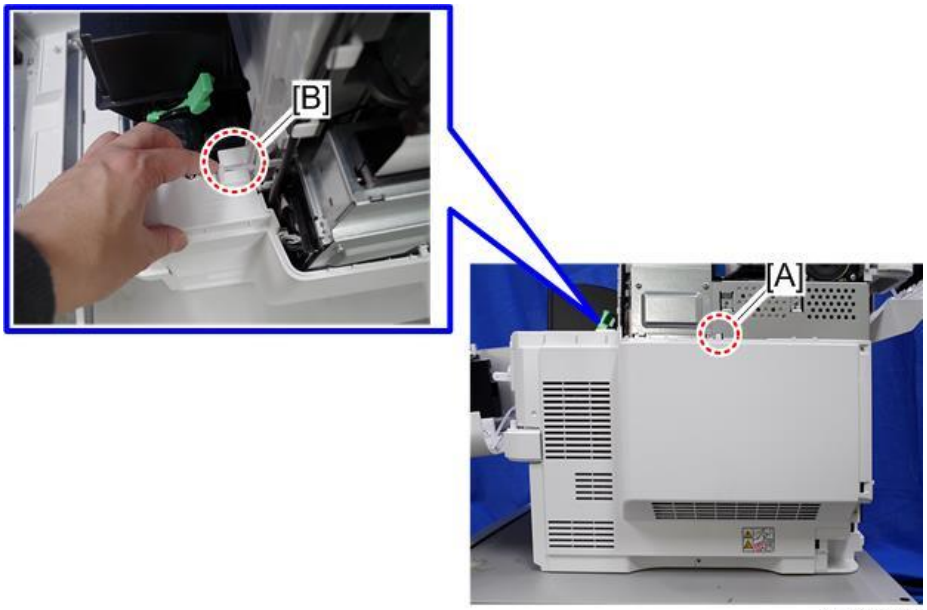
d0bta1067

6. Open the rear lower cover [A], and then release the hook of the right lower cover [B] by rotating it in the direction of the blue arrow.



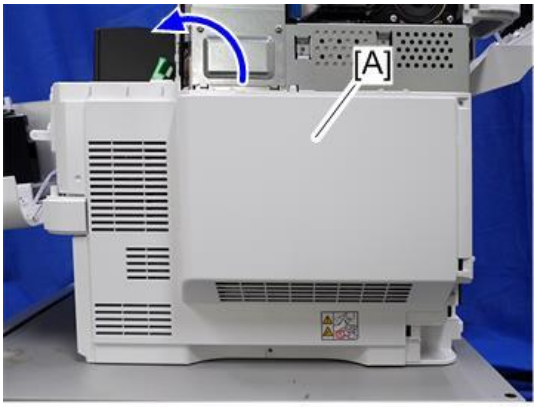
d0bta1068

7. Release the hooks [A] and [B].



d0bta1069

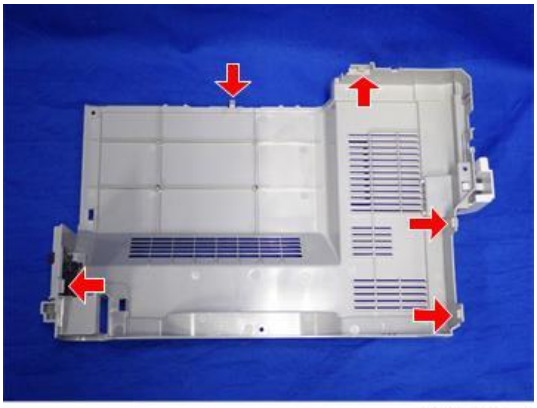
8. Remove the right lower cover [A] by rotating it in the direction of the arrow.



d0bta1070

Note

- Be careful not to damage the hooks on the inside of the right lower cover when you remove or install the right lower cover.



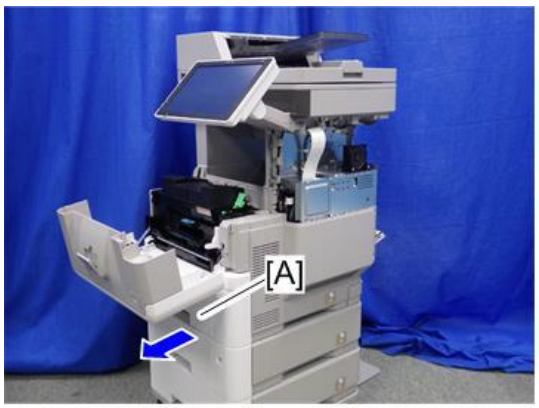
d255a1079

- Do not remove the screw [A] when removing the right lower cover [B].

d0bta1098

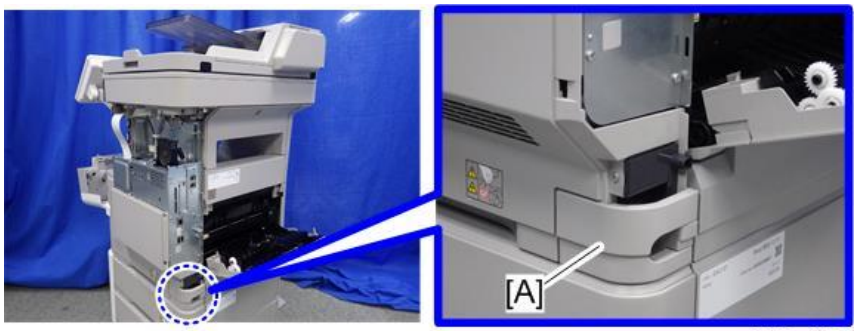
Right Lower Cover (IM 550F/600F)

1. Remove the right upper cover. (Right Upper Cover (IM 550F/600F))
2. Remove the paper feed tray [A] by pulling it out.



d255a1071

3. Remove the power connector cover [A].



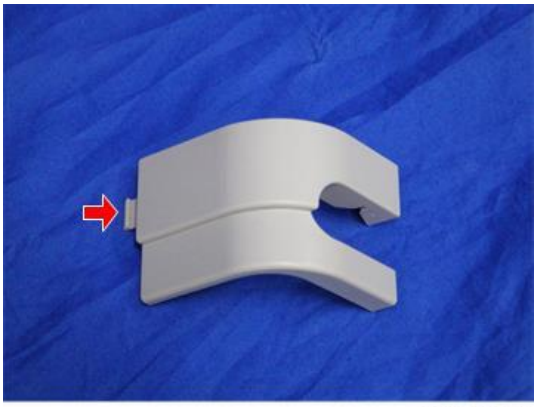
d255a1072

Note

- When removing the power connector cover, pull it in the direction of the arrow.

d255a1073

- Be careful not to damage the hook on the power connector cover when you remove or install the power connector cover.



d255a1078

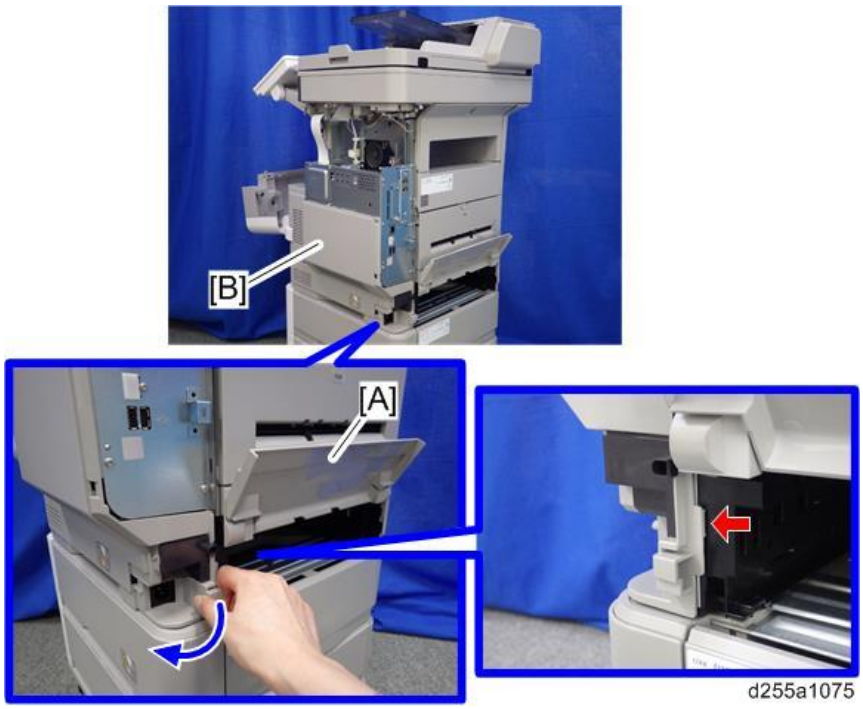
4. Remove the four screws from the right lower cover [A].

d255a1074

5. Close the rear upper cover [A].

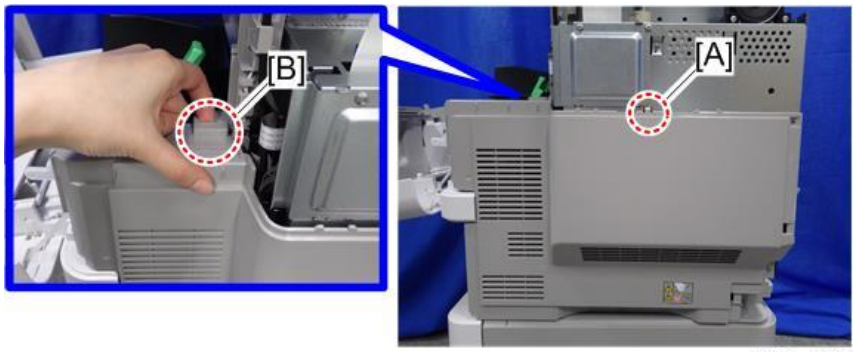
d255a1471

6. Open the rear lower cover [A], and then release the hook of the right lower cover [B] by rotating it in the direction of the blue arrow.



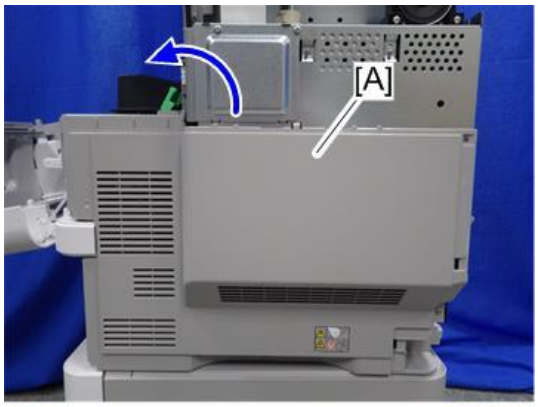
d255a1075

7. Release the hooks [A] and [B].



d255a1077

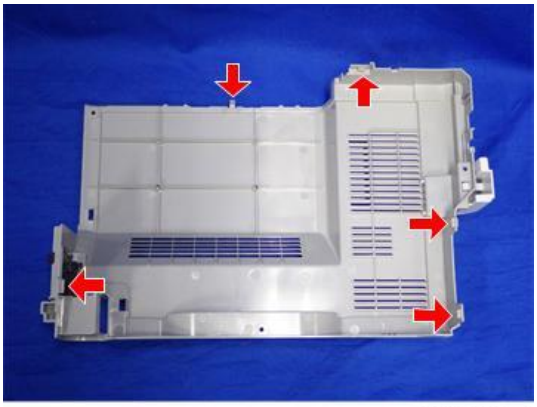
8. Remove the right lower cover [A] by rotating it in the direction of the arrow.



d255a1076

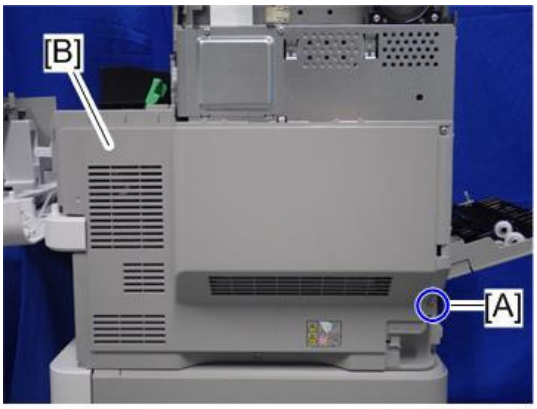
Note

- Be careful not to damage the hooks on the inside of the right lower cover when you remove or install the right lower cover.



d255a1079

- Do not remove the screw [A] when removing the right lower cover [B].



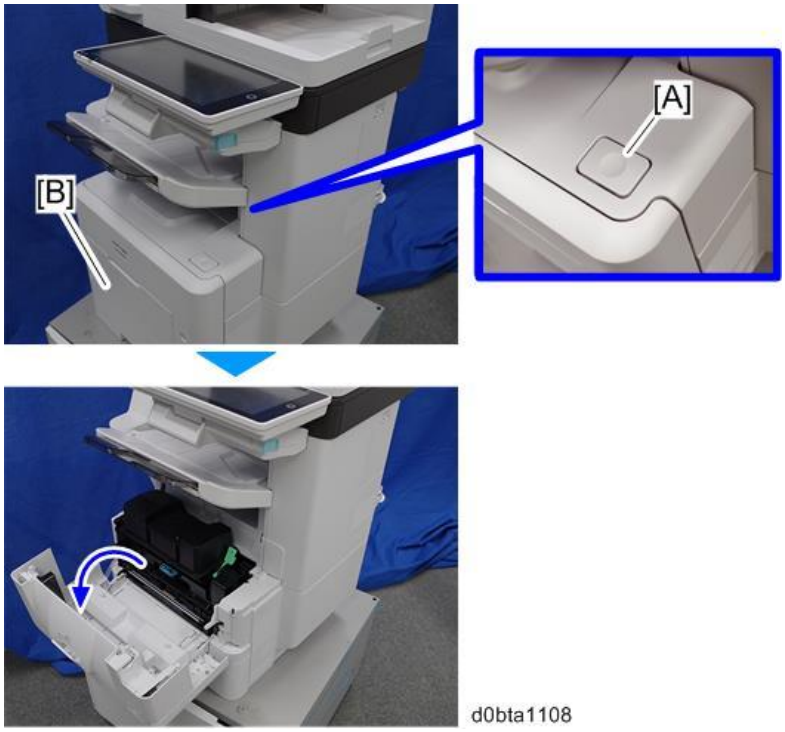
d255a1530

Left Upper Cover

Left Upper Cover (IM 600SRF)

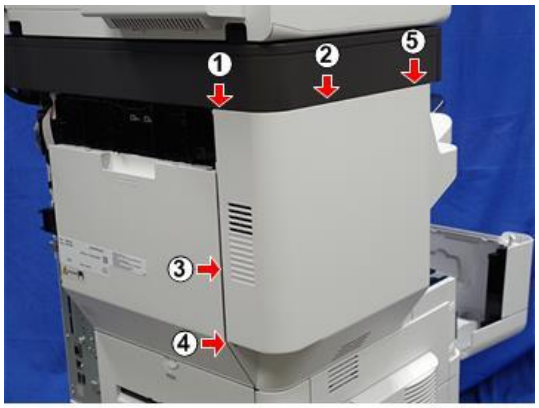
1. Remove the rear fan cover. (Rear Fan Cover (IM 600SRF Only))

2. Push the button [A] and open the front cover [B].



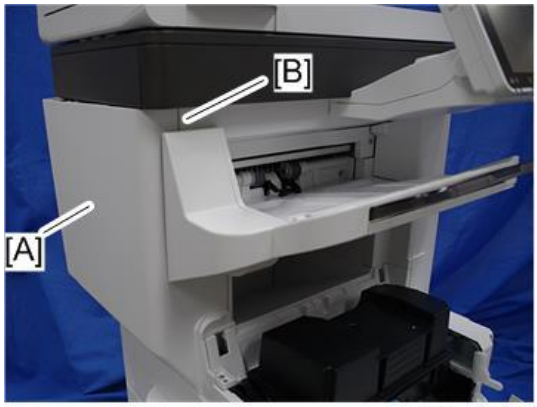
d0bta1108

3. Insert a flathead screwdriver into ①, ②, ③, ④, and ⑤ in order to release the three hooks of the left upper cover [A].



d0bta1183

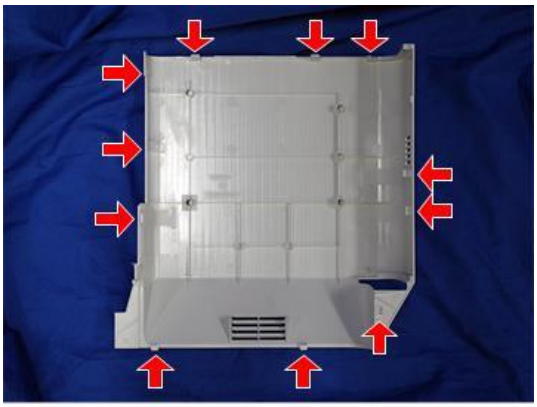
4. Remove the left upper cover [A] by inserting a flathead screwdriver into [B].



d0bta1184

Note

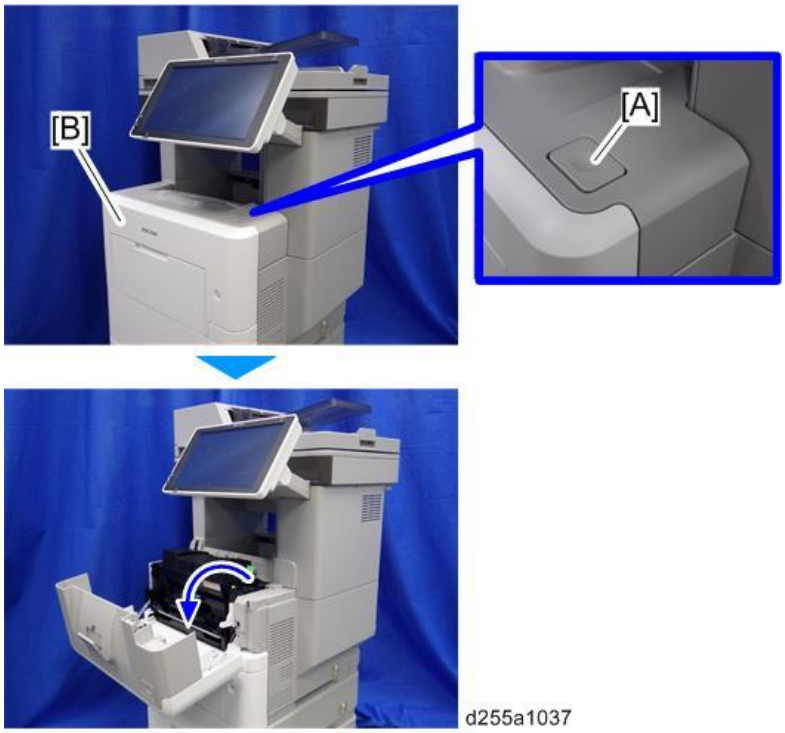
- Be careful not to damage the hooks on the inside of the left upper cover when you remove or install the left upper cover.



d0bta1071

Left Upper Cover (IM 550F/600F)

1. Push the button [A] and open the front cover [B].



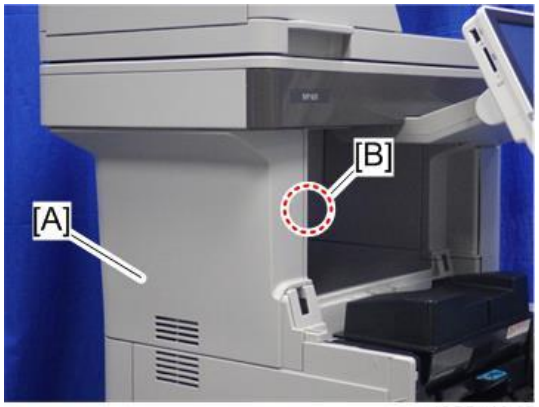
d255a1037

2. Insert a flathead screwdriver into ①, ②, and ③ in order to release the three hooks of the left

upper cover [A].

d255a1348

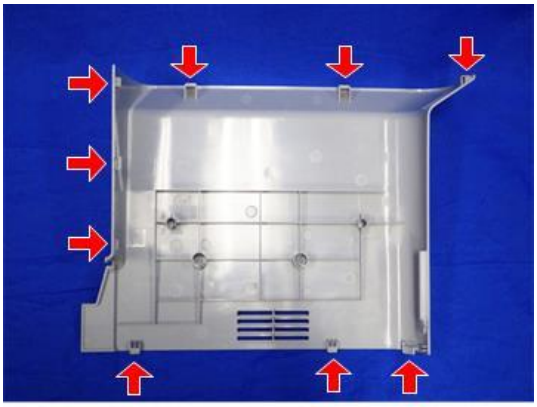
3. Remove the left upper cover [A] by inserting a flathead screwdriver into [B].



d255a1349

Note

- Be careful not to damage the hooks on the inside of the left upper cover when you remove or install the left upper cover.


d255a1157

Left Middle Cover

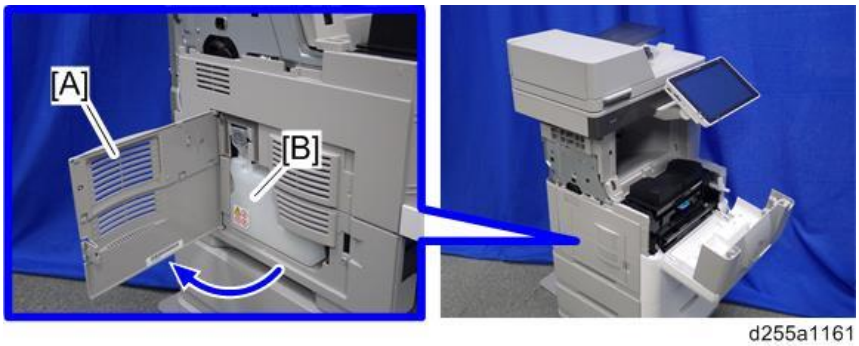
1. Remove the following covers.

- Left upper cover (Left Upper Cover (IM 550F/600F))
- Left rear cover (Left Rear Cover)

2. Remove the paper feed tray [A] by pulling it out.

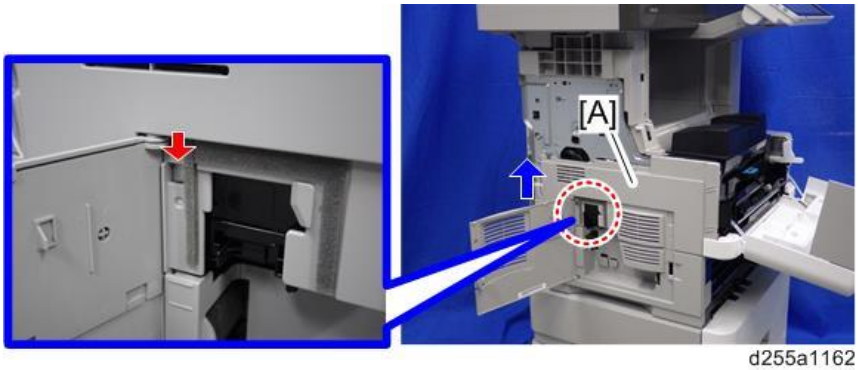
d255a1160

3. Open the waste toner bottle cover [A], and then remove the waste toner bottle [B].



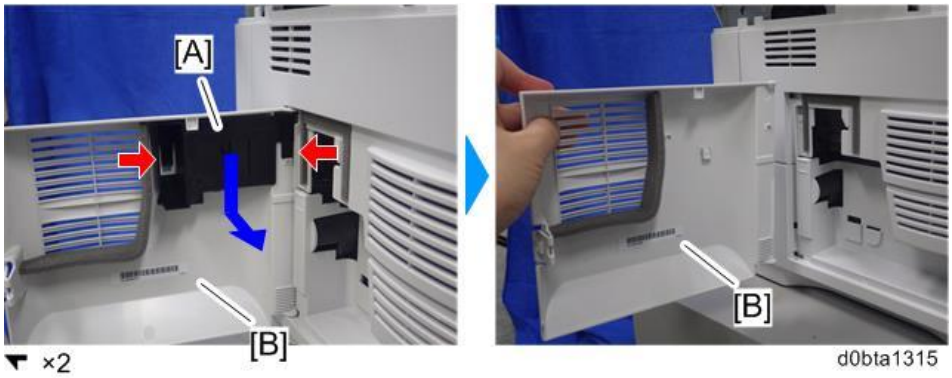
d255a1161

4. IM 550F: Release the hook by lifting the left middle cover [A] upward.



d255a1162

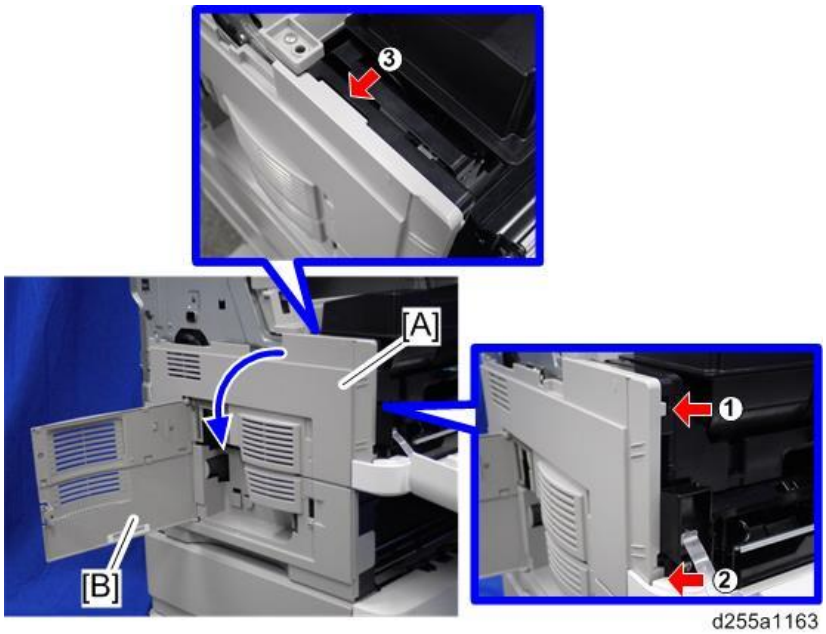
IM 600F/600SRF: Remove the inner cover [A] while holding the left middle cover [B], and then remove the left middle cover [B].



d0bta1315

5. Release the hooks in the order of ①, ②, and ③.

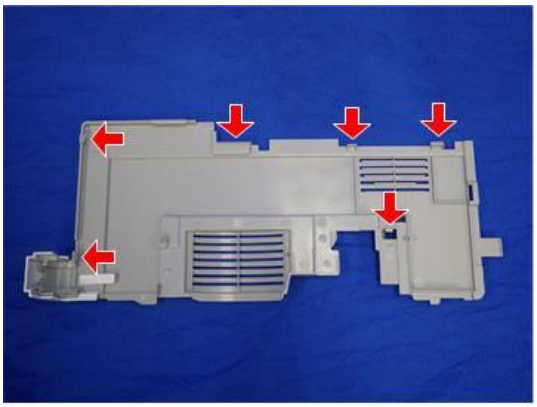
6. Remove the left middle cover [A] and waste toner bottle cover [B].



d255a1163

Note

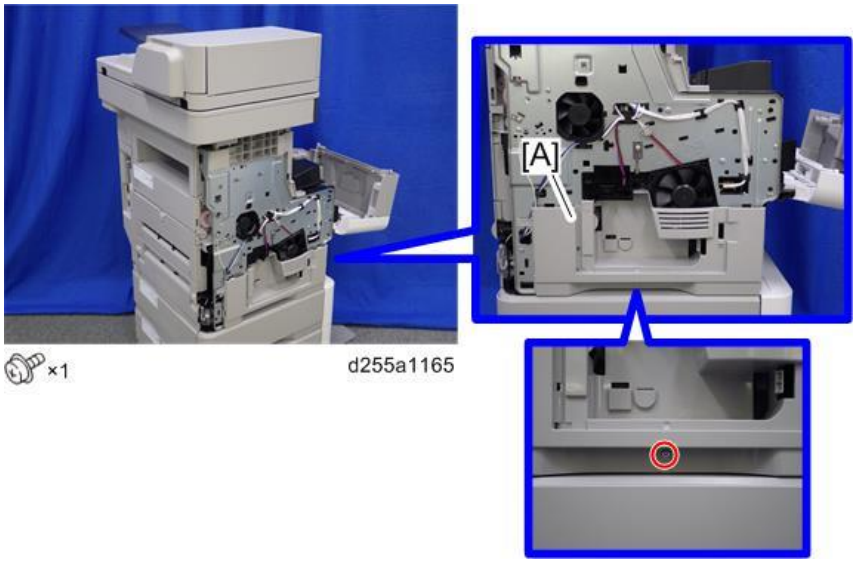
- Be careful not to damage the hooks on the inside of the left middle cover when you remove or install the left middle cover.


d255a1164

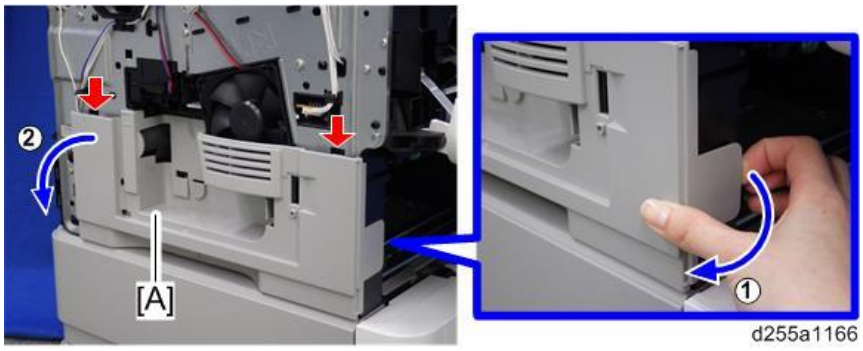
Left Lower Cover

1. Remove the left middle cover. (Left Middle Cover)

2. Remove the screw holding the left lower cover [A].

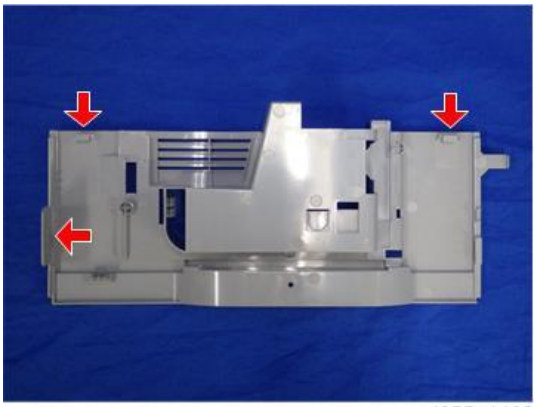


3. Release the hook by opening the right side of the left lower cover as shown below, and then remove the left lower cover [A]. (hook×3)



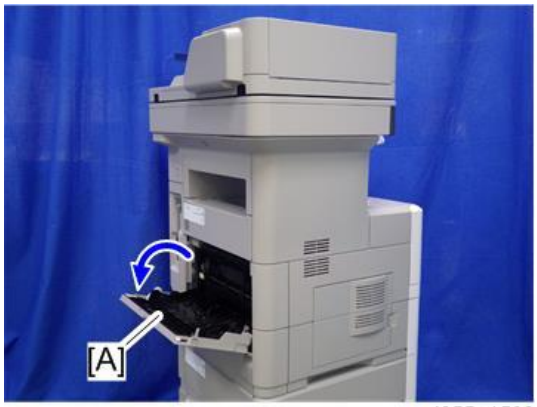
Note

- Be careful not to damage the hooks on the inside of the left lower cover when you remove or install the left lower cover.



Left Rear Cover

1. Open the rear upper cover [A].



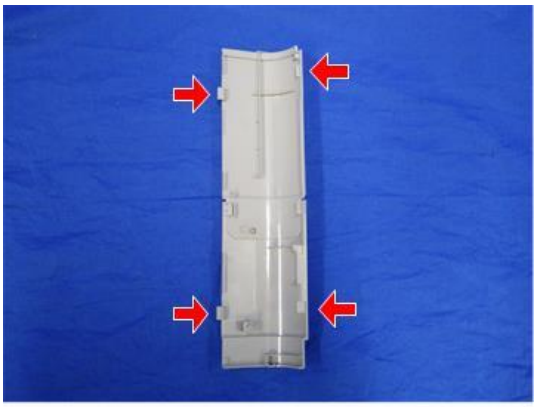
d255a1509

2. Remove the left rear cover [A] by rotating it in the direction of the arrow. (hook×2)

d255a1510

Note

- Be careful not to damage the hooks on the inside of the left rear cover when you remove or install the left rear cover.

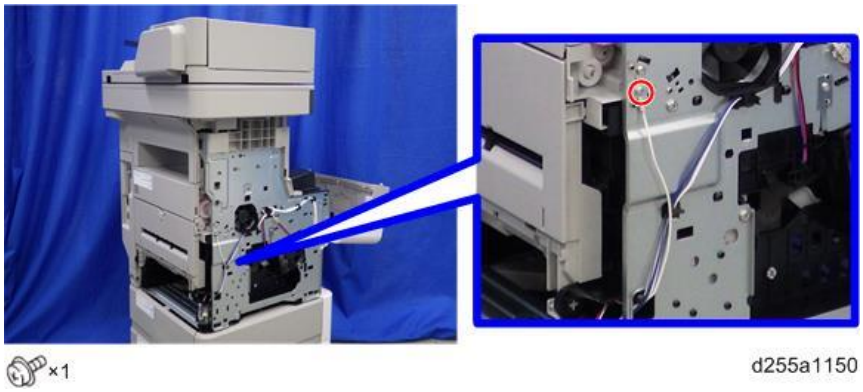


d255a1159

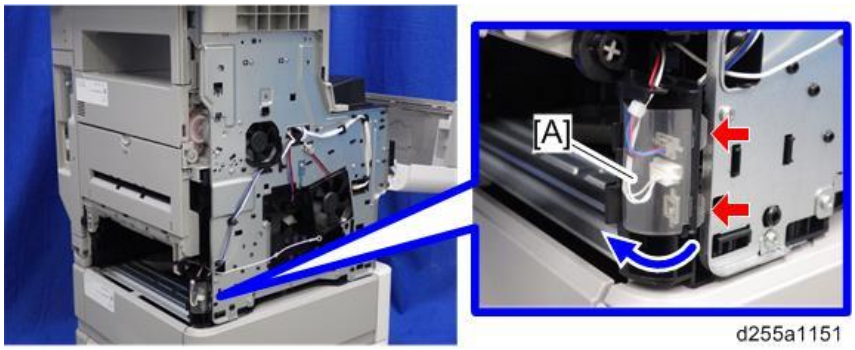
Rear Upper Cover

1. Remove the following covers.
   - Left lower cover (Left Lower Cover)
   - Rear middle cover (Rear Middle Cover)

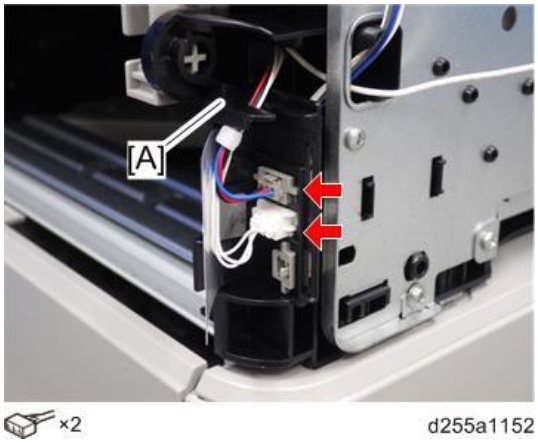
2. Remove the ground screw from the left side of the machine.



3. Open the transparent film [A]. (hook×2)

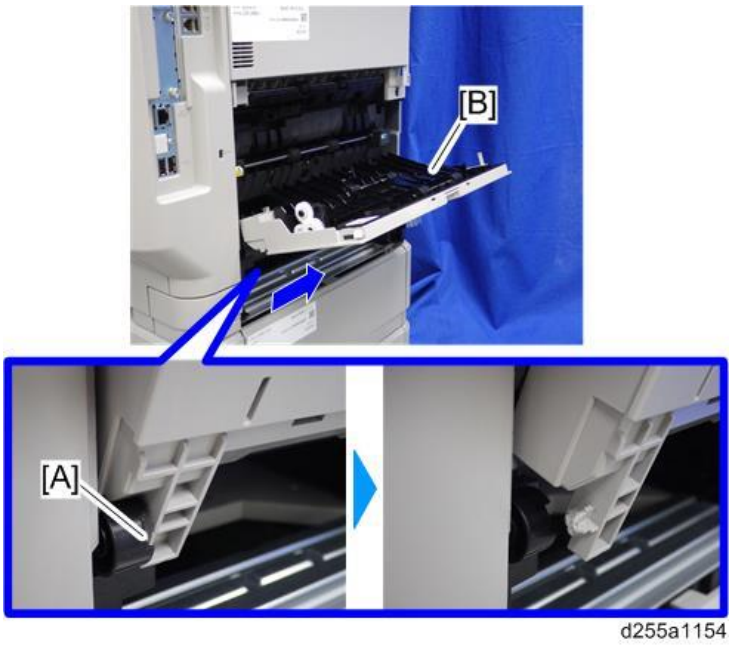


4. Disconnect two connectors, and then release them from the harness guide [A].



5. Open the rear upper cover [A].

6. Release the left hinge [A] of the rear upper cover [B] by slightly bending the rear upper cover inward.



d255a1154

7. Remove the rear upper cover [A] by sliding it to the left.

d255a1155

Note

- When removing the rear upper cover, release the harness [A] from the mainframe.

d255a1156

Rear Middle Cover

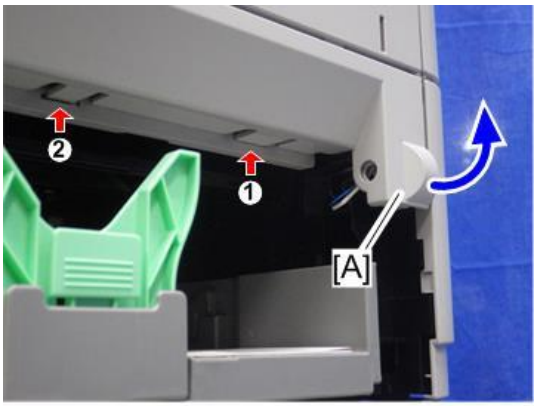
1. Remove the rear lower cover. (Rear Lower Cover)

2. Release three hooks of the rear middle cover [A] in the order of ①, ②, and ③.

d255a1143

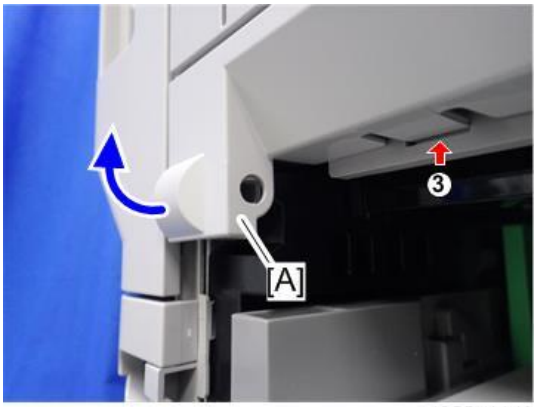
Note

- When releasing the hooks at ① and ②, pull the right side [A] of the rear middle cover while pressing each hook upward.



d255a1145

- When releasing the hook at ③, pull the left side [A] of the rear middle cover while pressing the hook upward.



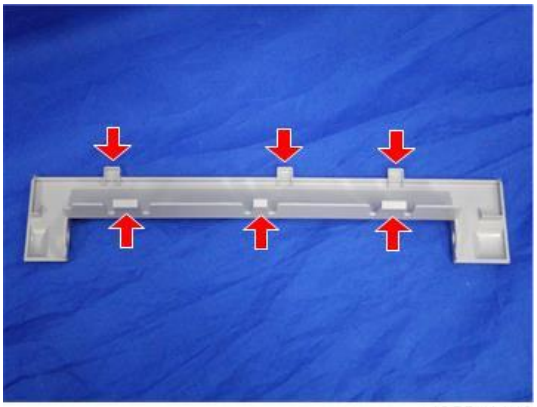
d255a1146

3. Remove the rear middle cover [A] by rotating in the direction of the arrow.

d255a1147

Note

- Be careful not to damage the hooks on the inside of the rear middle cover when you remove or install the rear middle cover.

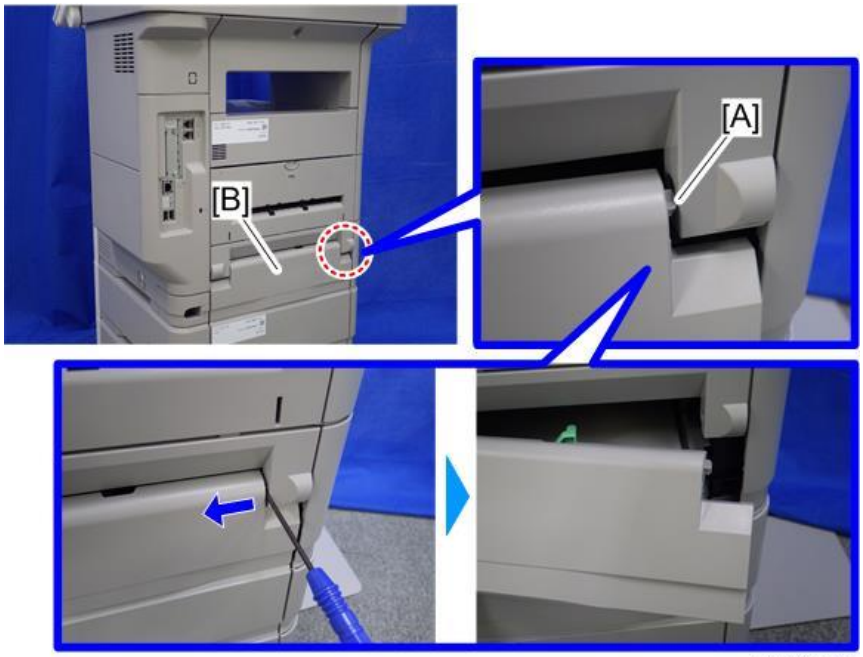


d255a1149

Rear Lower Cover

1. Release the right hinge [A] of the rear lower cover [B] by pushing the rear lower cover inward with a

flathead screwdriver.



d255a1141

2. Remove the rear lower cover [A] by sliding it to the right.

d255a1142

Rear Center Stay (IM 550F/600F Only)

1. Remove the following covers.

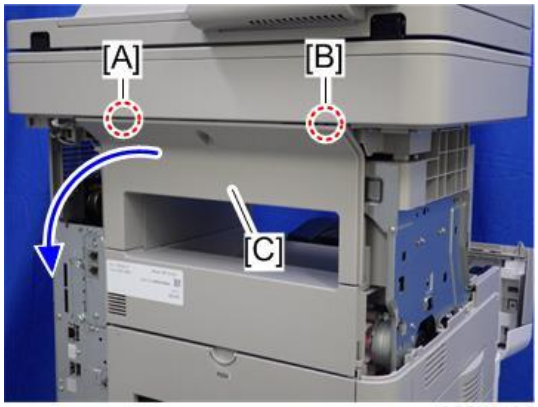
- Rear right stay (Rear Right Stay (IM 550F/600F))
- Left upper cover (Left Upper Cover (IM 550F/600F))

2. Remove the screw from the rear center stay [A].

×1 d255a1138

3. Insert a flathead screwdriver into [A] and [B] to release the hooks of the rear center stay [C].

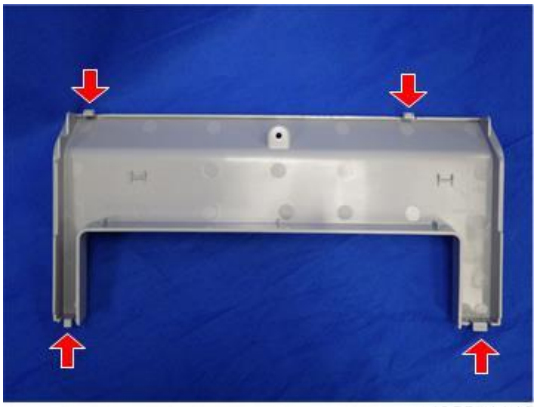
4. Remove the rear center stay [C].



d255a1139

Note

- Be careful not to damage the hooks on the inside of the rear center stay when you remove or install the rear center stay.



d255a1148

Rear Fan Cover (IM 600SRF Only)

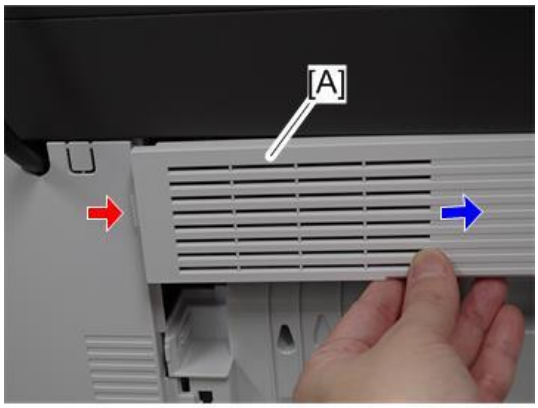
1. Open the finisher rear cover [A].

d0bta1072

2. Release the hook [A].

d0bta1073

3. Slide the cover [A] to release the hook, and then remove the cover [A].



×1

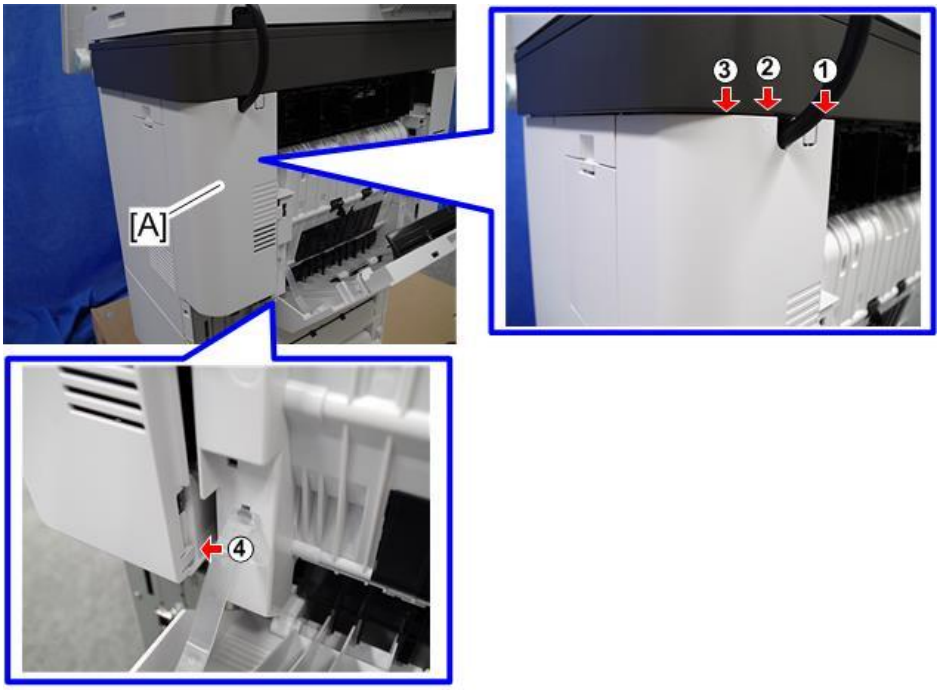
d0bta1074

Rear Right Stay

Rear Right Stay (IM 600SRF)

1. Remove the controller cover. (Controller Cover (IM600SRF))
2. Insert a flathead screwdriver in the order of ①, ②, and ③ to release three hooks of the rear right stay [A].

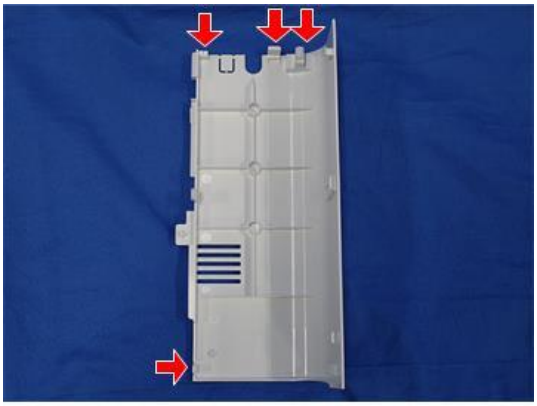
3. Release the hook ④ and remove the rear right stay [A].



d0bta1075

Note

- Be careful not to damage the hooks on the inside of the rear right stay when you remove or install the rear right stay.



d0bta1076

Rear Right Stay (IM 550F/600F)

1. Remove the controller cover. (Controller Cover (IM550F/600F))

2. Insert a flathead screwdriver in the order of ①, ②, and ③ to release three hooks of the rear right stay [A].

3. Remove the rear right stay [A].

d0bta1114

Note

- Be careful not to damage the hooks on the inside of the rear right stay when you remove or install the rear right stay.

d0bta1115

Paper Exit Cover (IM 550F/600F Only)

1. Remove the rear center stay. (Rear Center Stay (IM 550F/600F Only))

2. Remove the two screws from the paper exit cover [A].

×2 d255a1345

3. Remove the paper exit cover [A] from the right side. (hook×1)

d255a1346

Note

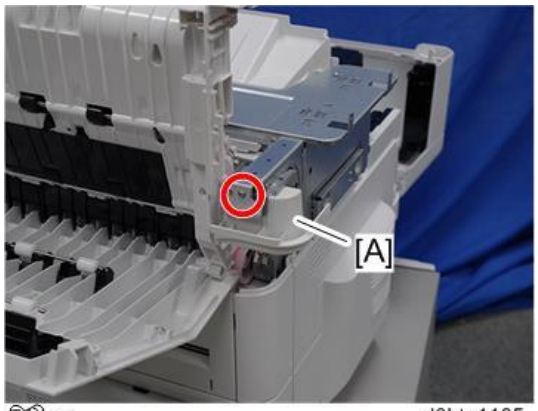
- Be careful not to damage the hook at the rear of the paper exit cover when you remove or install the paper exit cover.

d255a1347

Paper Exit Tray

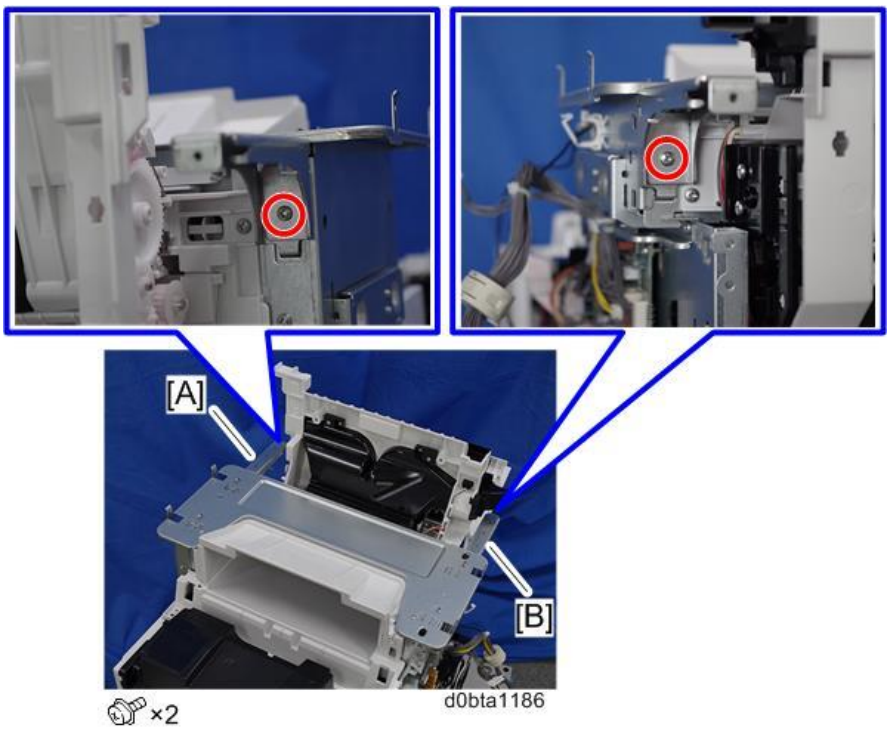
Paper Exit Tray (IM 600SRF)

1. Remove the internal finisher. (Internal Finisher)
2. Remove the controller box. (Controller Box (IM 550F/600F/600SRF))
3. Remove the bracket [A].

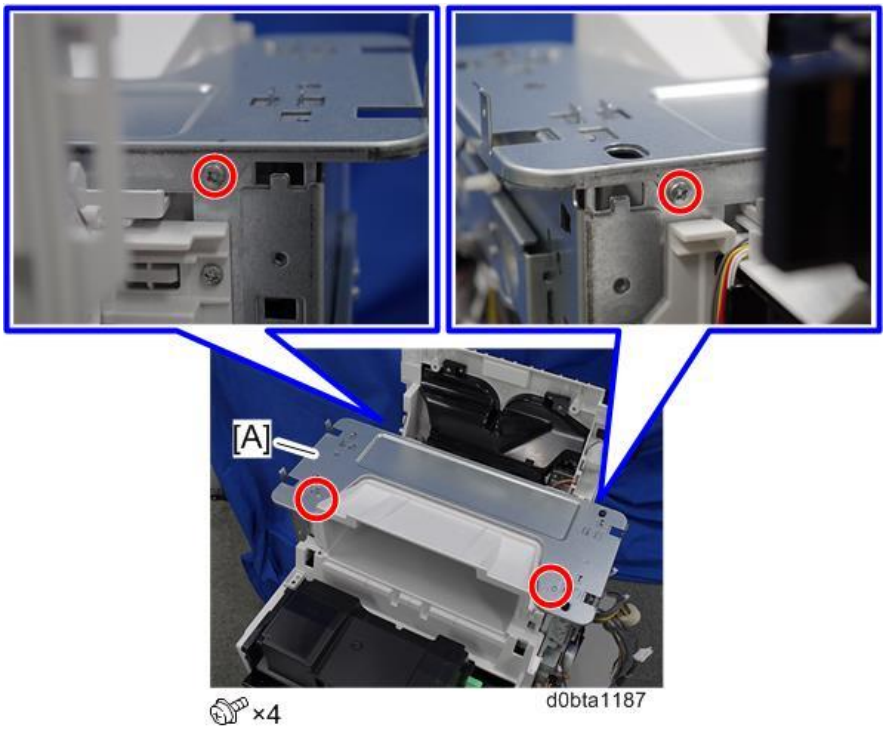


×1 d0bta1185

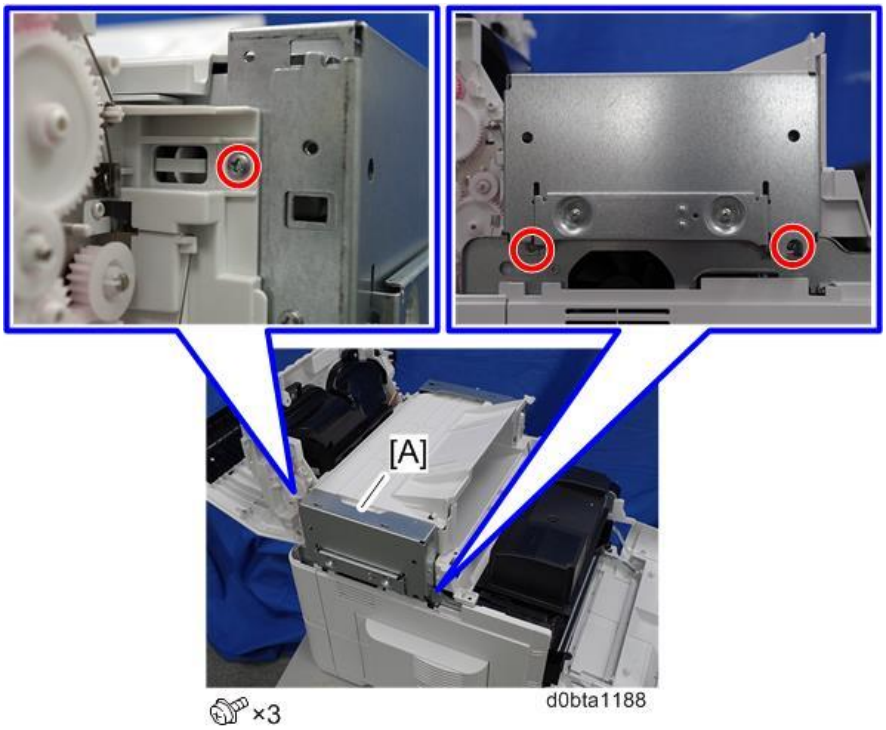
4. Remove the brackets [A] [B].



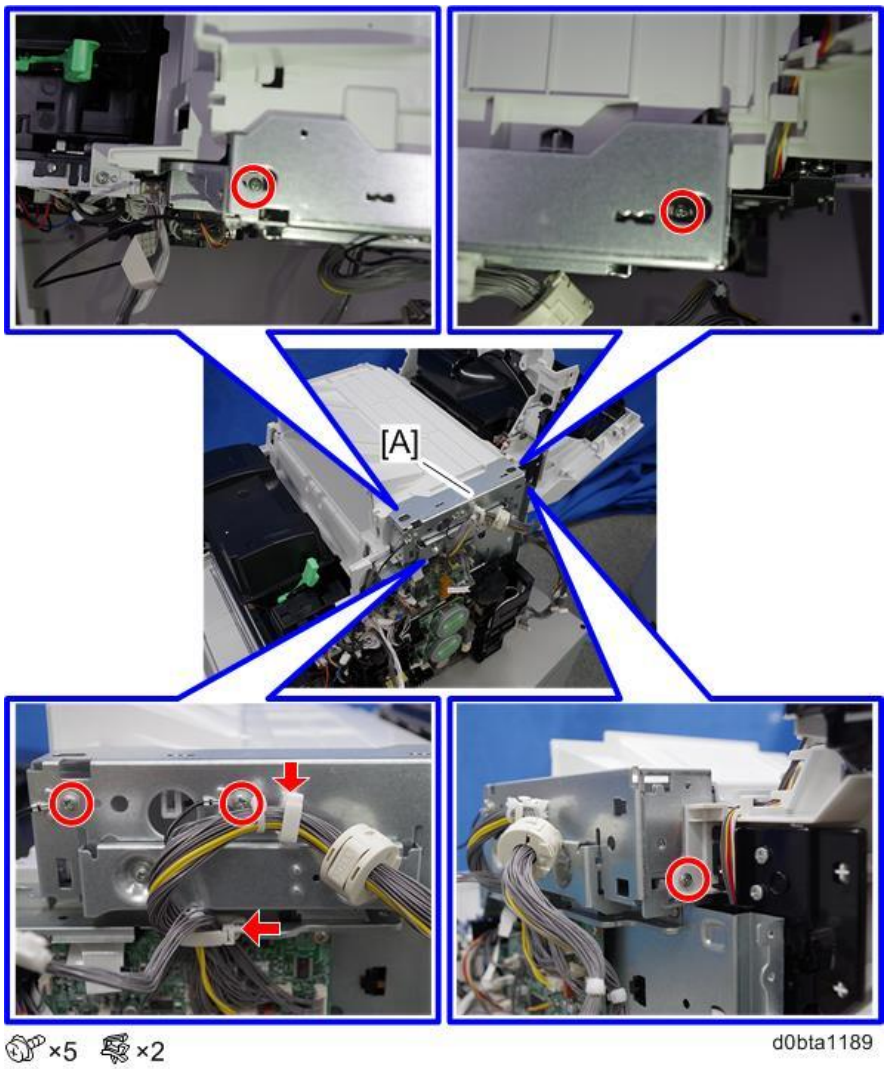
5. Remove the plate [A].



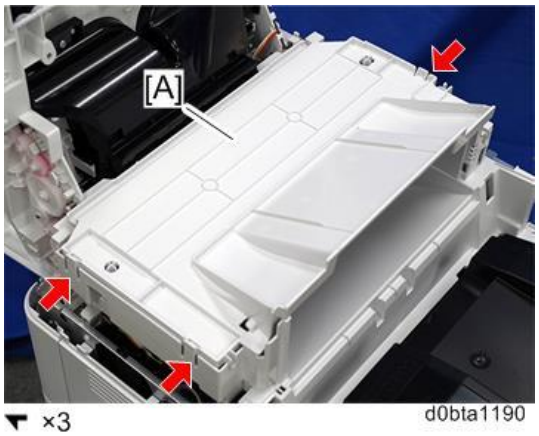
6. Remove the left cover [A].



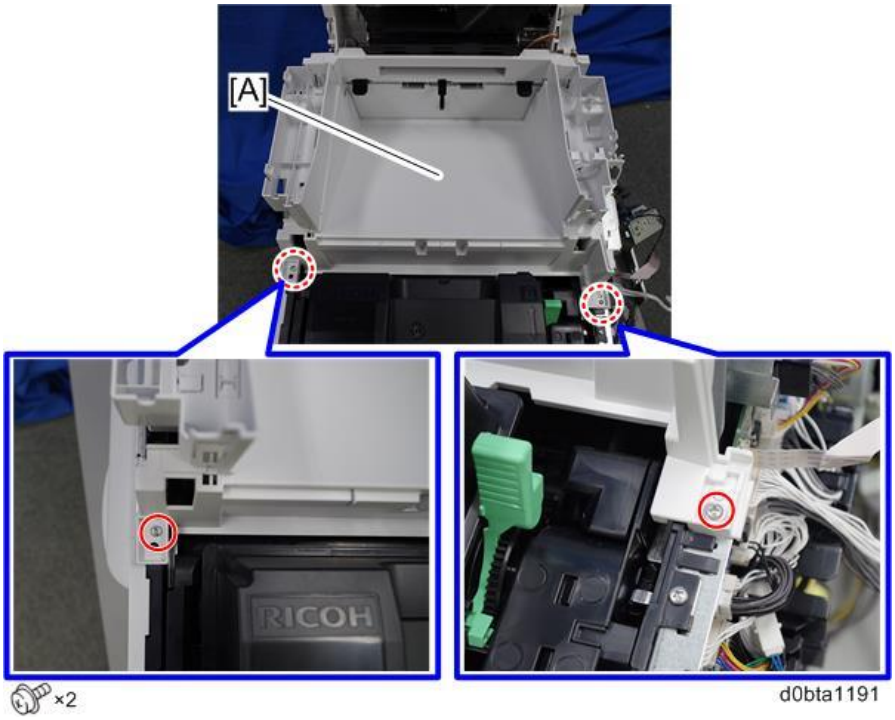
7. Remove the right cover [A].



8. Remove the cover [A].

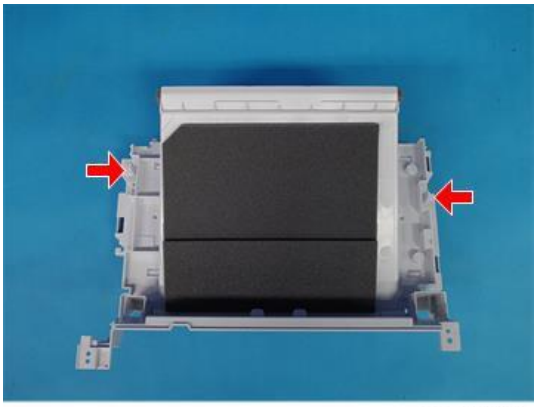


9. Remove the paper exit tray [A].



Note

- The screw [B] is a sems screw. Be careful not to use the wrong screw when installing the paper exit tray.
- Be careful not to damage the hooks on the paper exit tray when removing or installing.



d0bta1192

Paper Exit Tray (IM 550F/600F)

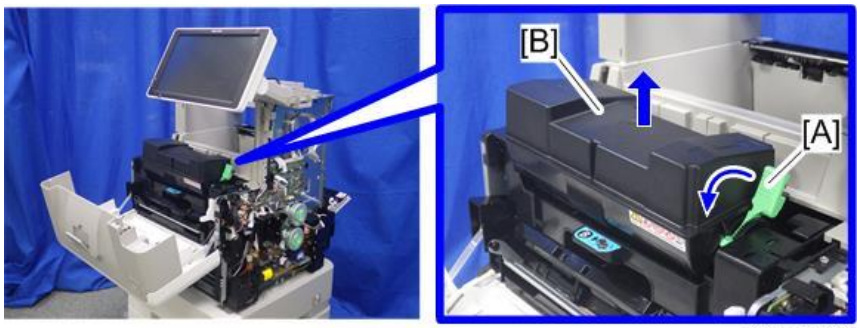
1. Remove the scanner unit. (Scanner Unit)

2. Remove the controller box. (Controller Box (IM 550F/600F/600SRF))

3. Remove the following covers.

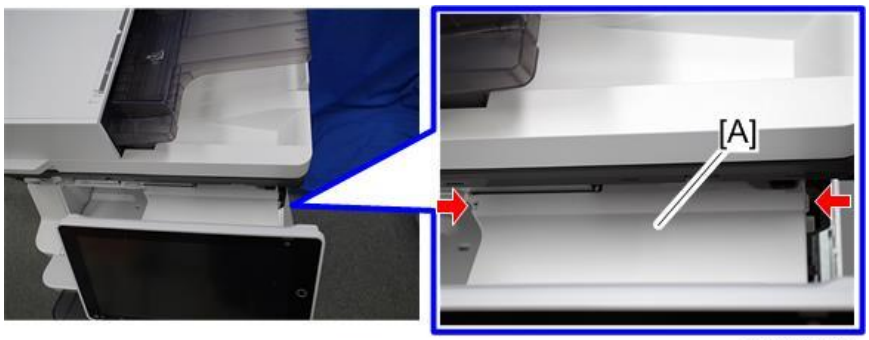
- Left lower cover (Left Lower Cover)
- Paper exit cover (Paper Exit Cover (IM 550F/600F Only))

4. Release the lock lever [A] by rotating it towards you, and then remove the toner cartridge [B].



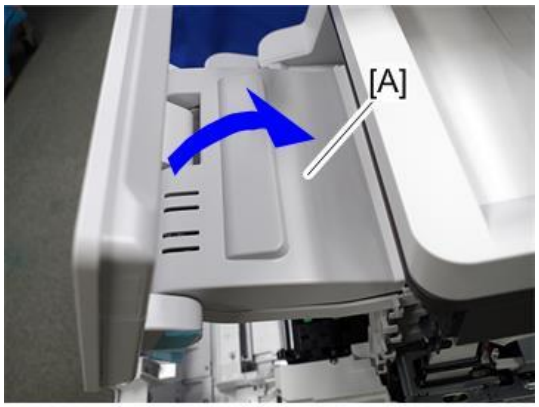
d255a1187

5. Release the two hooks from the operation panel arm upper cover [A].



d0bta1157

6. Remove the operation panel arm upper cover [B].



d0bta1158

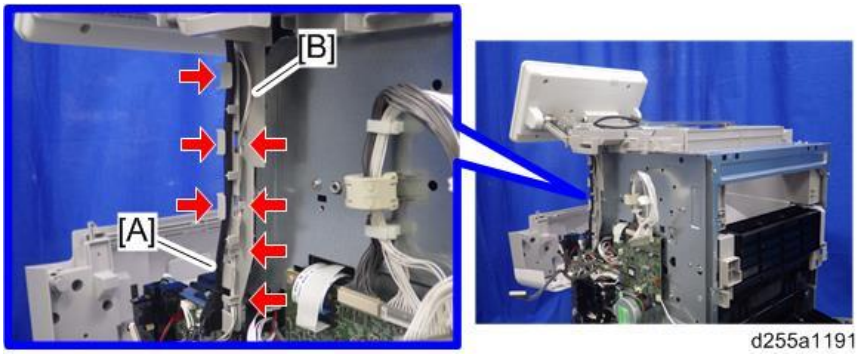
Note

- Be careful not to damage the hooks on the inside of the operation panel arm upper cover

when you remove or install the operation panel arm upper cover.

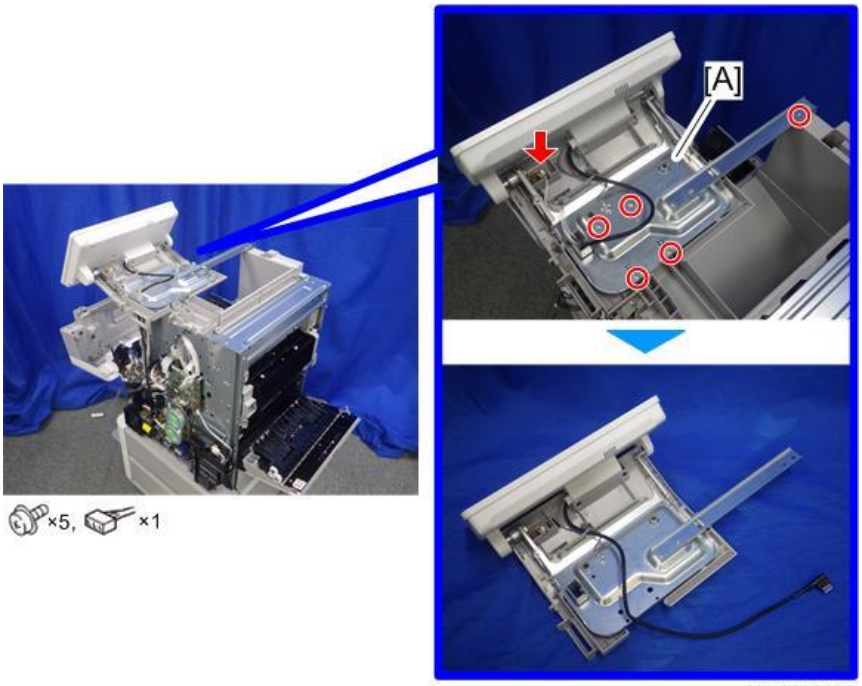
d0bta1159

7. Release the USB cable [A] and harness [B] of the operation panel from the harness guides.



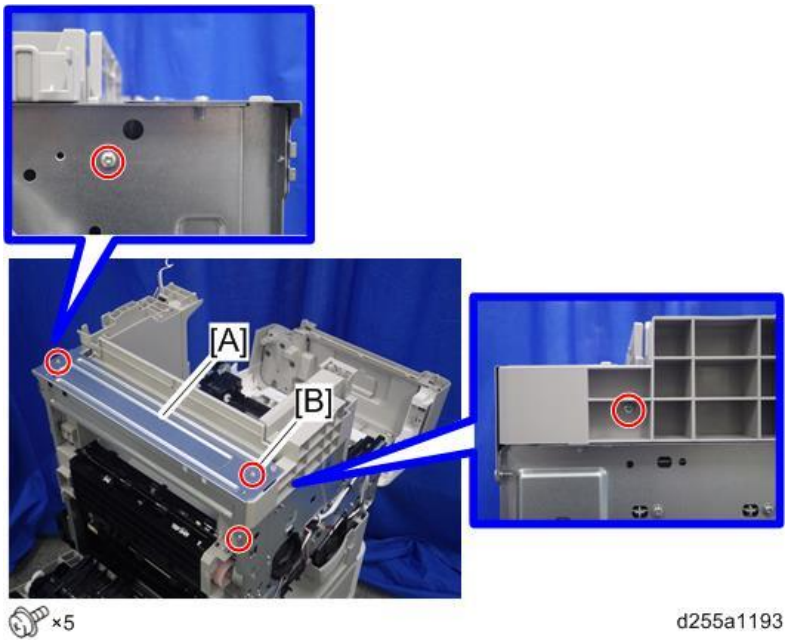
d255a1191

8. Remove the operation panel unit with the bracket [A].



d255a1192

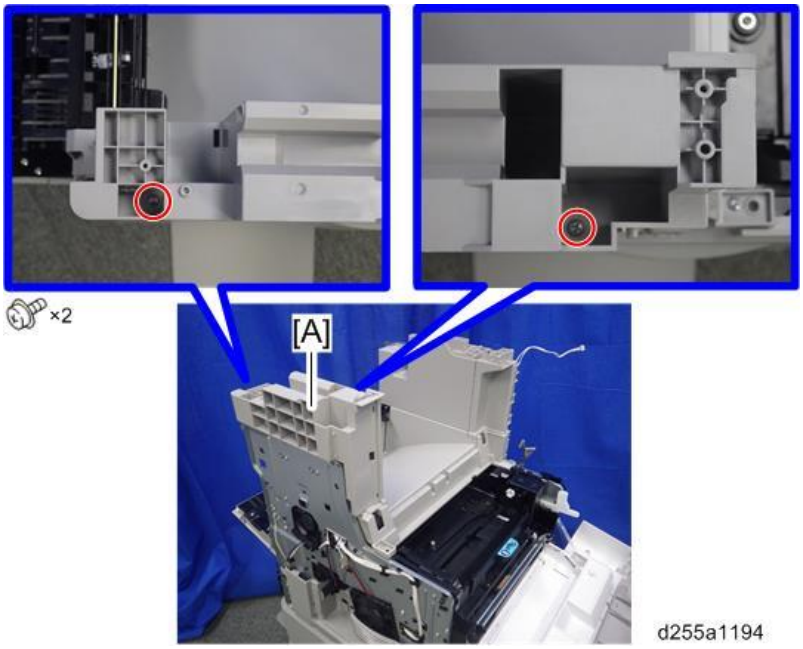
9. Remove the bracket [A].



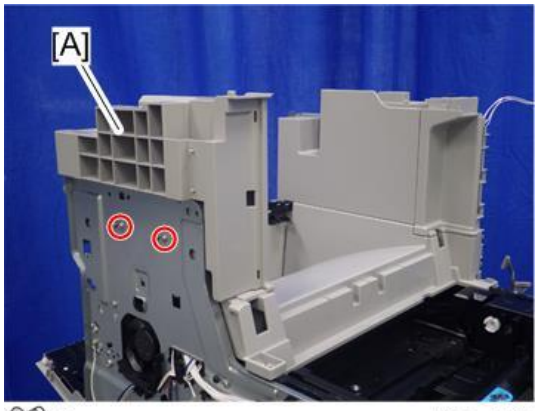
Note

- The screw [B] is a sems screw. Be careful not to use the wrong screw when installing the paper exit tray.

10. Remove the two screws from the left side cover [A].



11. Remove the left side cover [A].

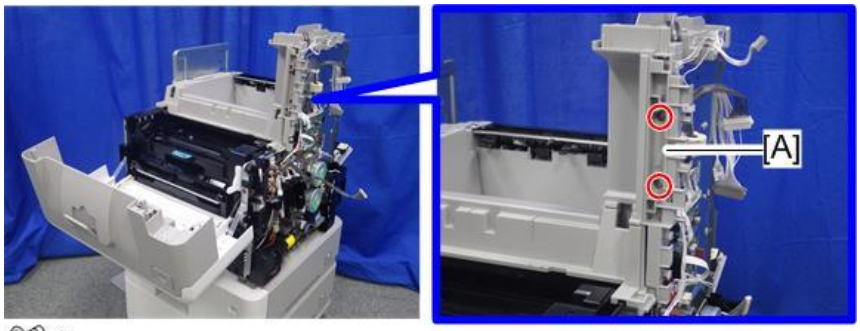


×2 d255a1195

Note

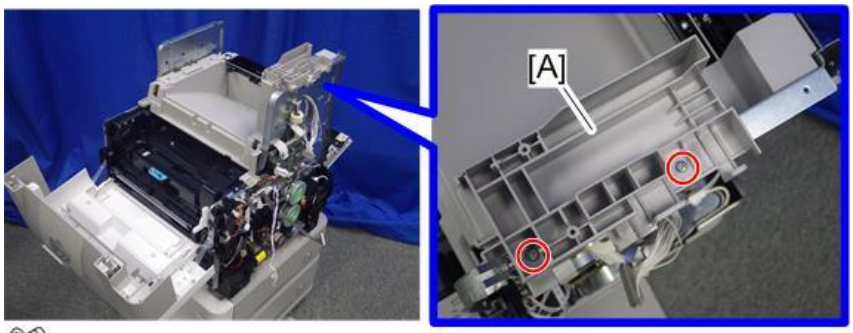
- These two screws are tapping screws. Be careful not to use the wrong screws when installing the paper exit tray.

12. Remove the front right cover [A].



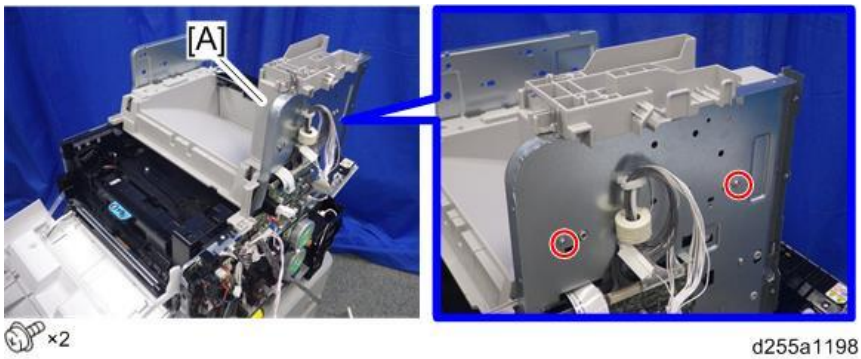
×2 d255a1196

13. Remove the two screws from the right side cover [A].



×2 d255a1197

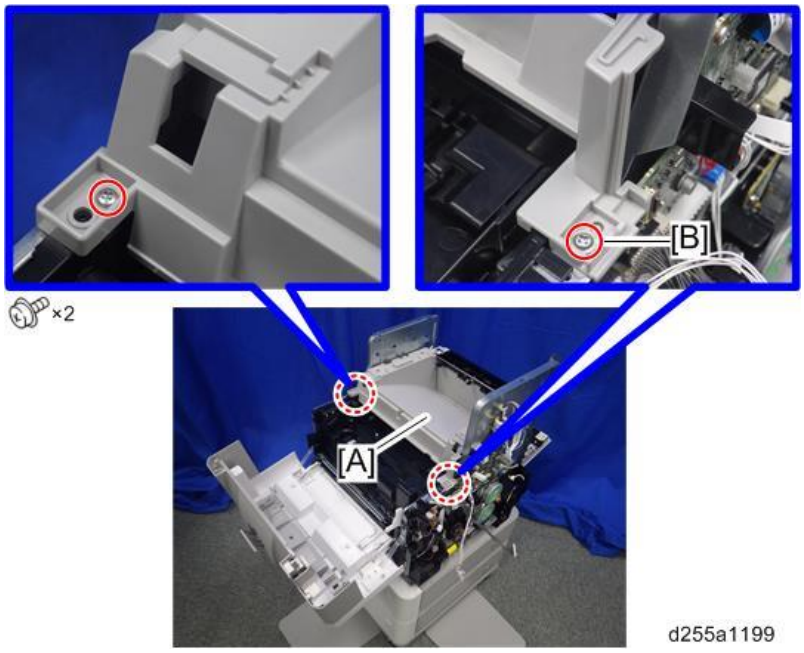
14. Remove the right side cover [A].



Note

- These two screws are tapping screws. Be careful not to use the wrong screws when installing the paper exit tray.

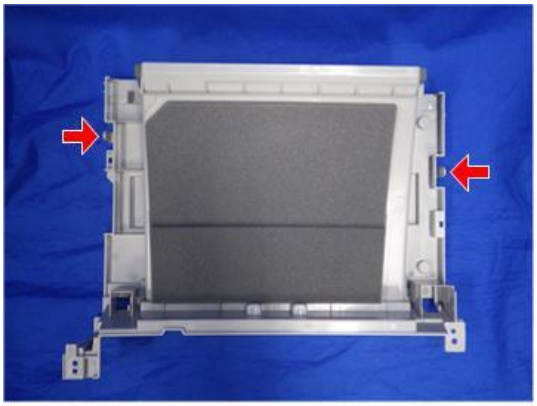
15. Remove the paper exit tray [A].



Note

- The screw [B] is a sems screw. Be careful not to use the wrong screw when installing the paper exit tray.
- Be careful not to damage the hooks on the inside of the paper exit tray when you remove

or install the paper exit tray.

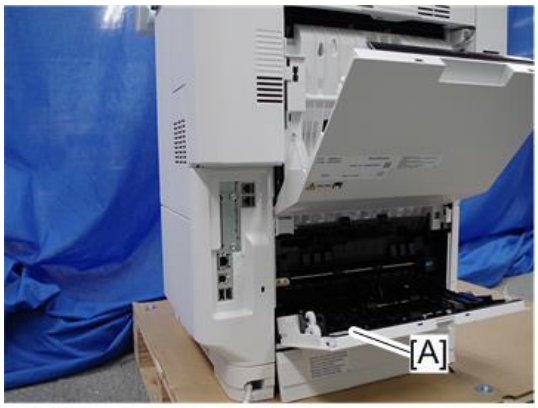


d255a1250

Controller Cover

Controller Cover (IM600SRF)

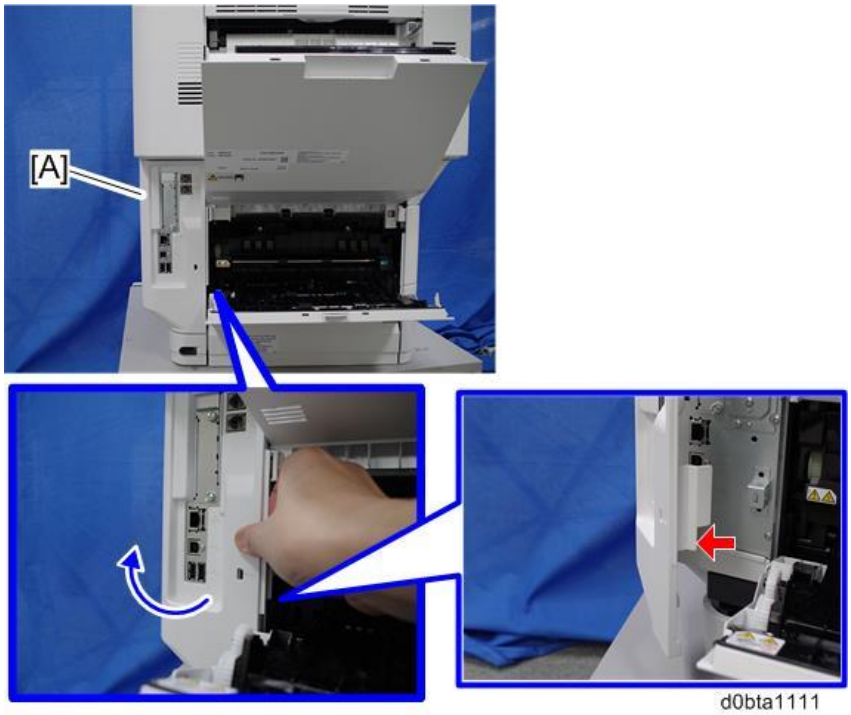
1. Open the rear upper cover [A].



d0bta1252

2. Release the hook by opening the right side of the cover, and then remove the cover [A] by rotating

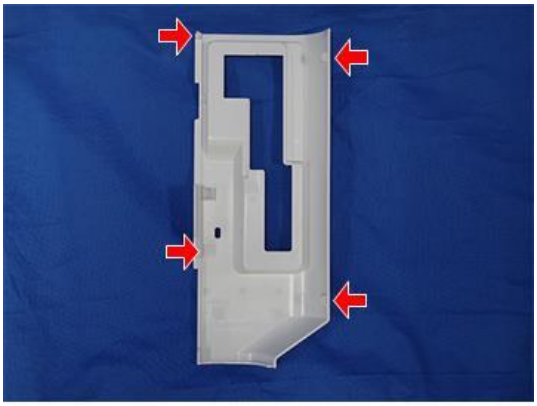
it in the direction of the blue arrow.



d0bta1111

Note

- Be careful not to damage the hooks on the inside of the controller cover when you remove or install the controller cover.



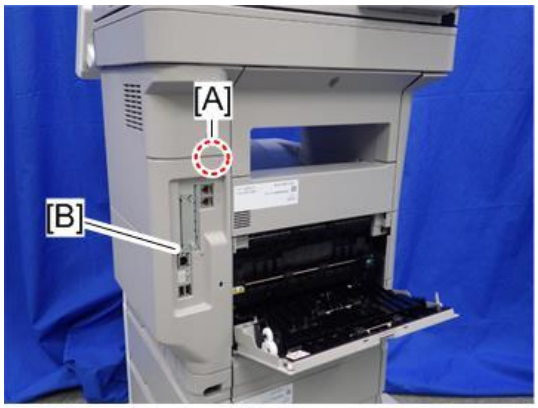
d0bta1080

Controller Cover (IM550F/600F)

1. Open the rear upper cover [A].

d255a1030

2. Insert a flathead screwdriver into [A] to release the hook of the controller cover [B].



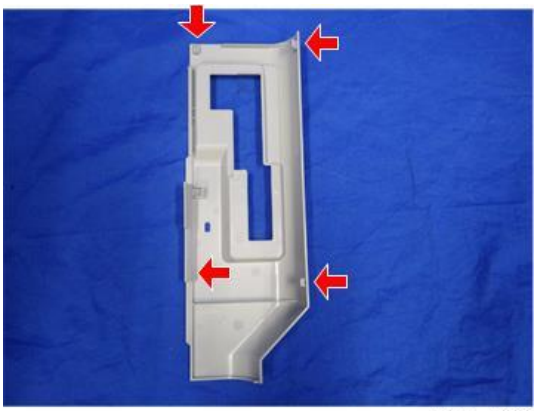
d255a1080

3. Release the hook by opening the right side of the cover, and then remove the cover [A] by rotating it in the direction of the blue arrow.

d255a1032

Note

- Be careful not to damage the hooks on the inside of the controller cover when you remove or install the controller cover.

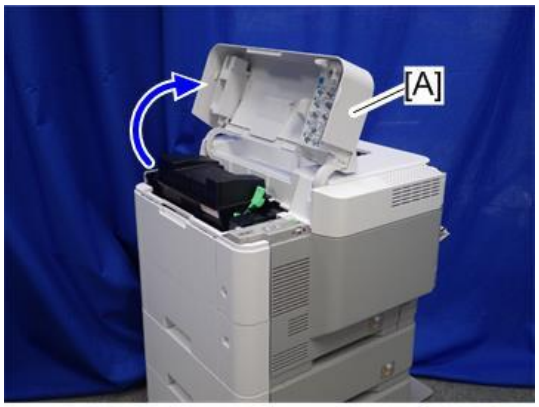


d255a1033

Exterior Covers (P 800/801)

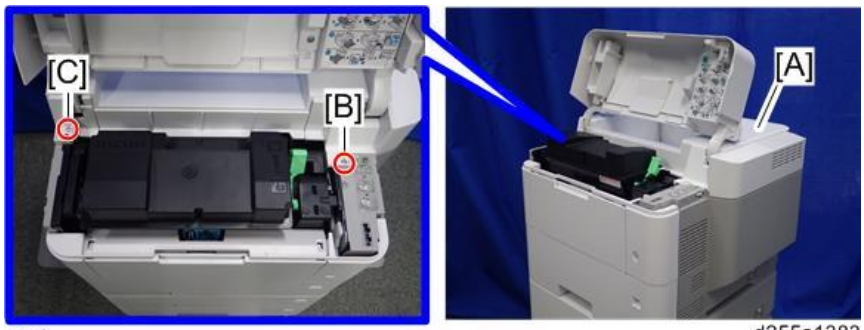
Upper Cover

1. Remove the controller cover. (Controller Cover)
2. Open the upper cover [A].



d255a1382

3. Remove the two screws from the upper cover [A].



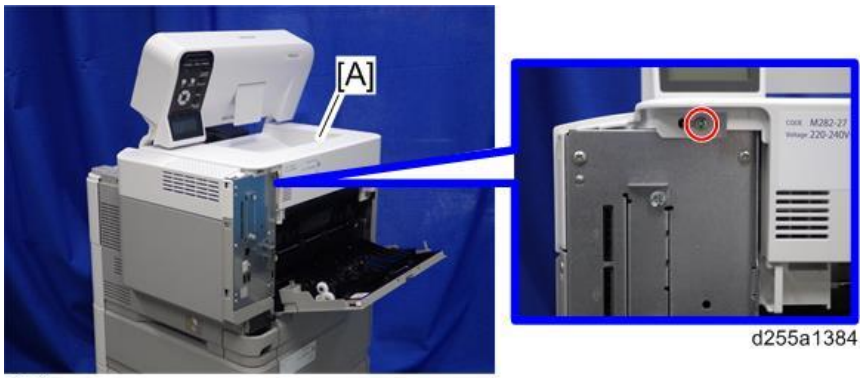
×2

d255a1383

Note

- The screw [B] is a sems screw. The screw [C] is a tapping screw. Be careful not to use the wrong screws when installing the upper cover.

4. Remove the screw from the rear side of the upper cover [A].



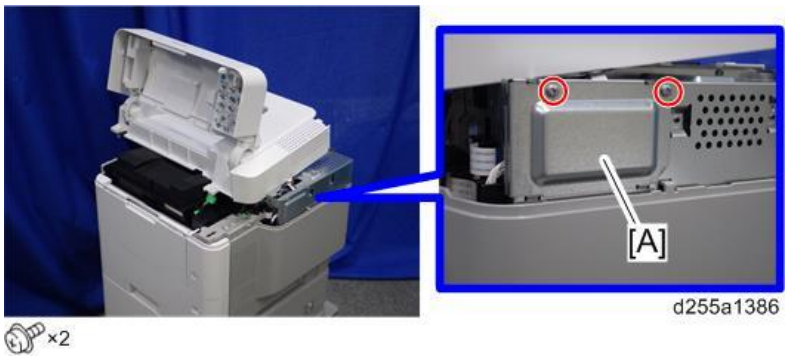
d255a1384

×1

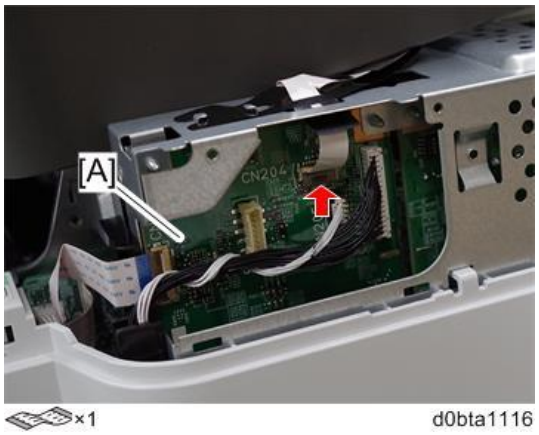
5. Lift the upper cover [A] by releasing the two hooks, and then put it on the mainframe so that you

can access the bracket [B] on the right side of the machine.

6. Remove the bracket [A].



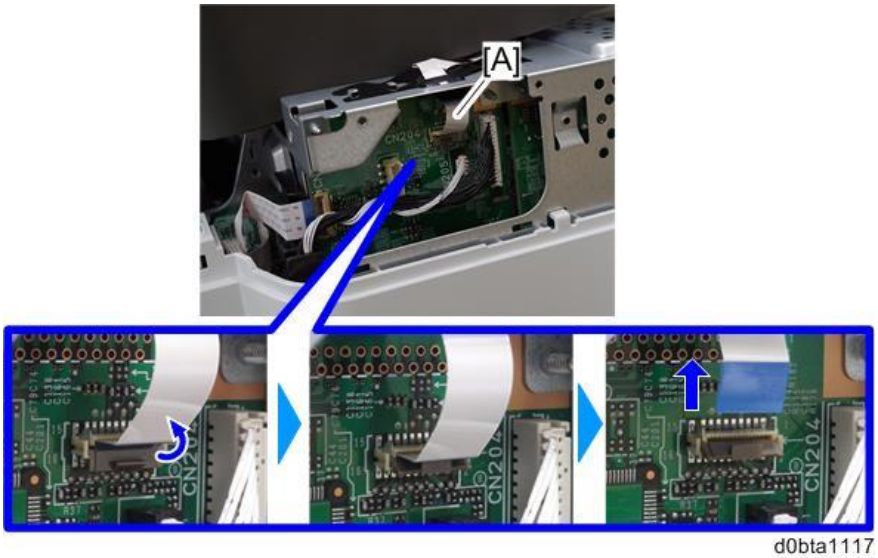
7. Disconnect the flat cable from the BiCU (PCB16) [A].



Note

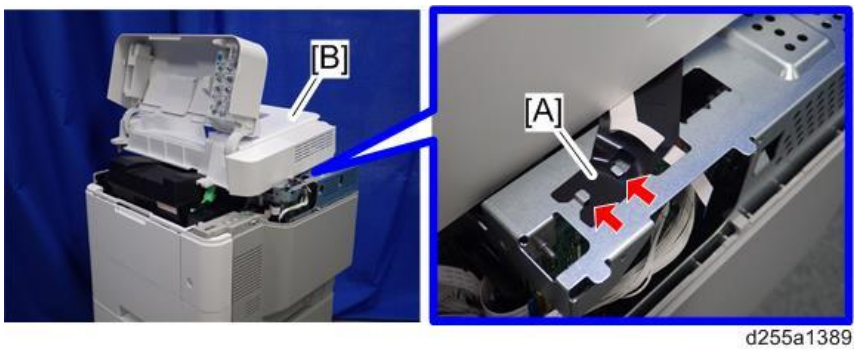
- Make sure to open the flap before disconnecting the flat cable [A], as shown in the

following pictures. Otherwise, the connector may be damaged.



d0bta1117

8. Remove the plastic sheet [A] from the mainframe (hook×2), and then remove the upper cover [A].



d255a1389

Note

- Be careful not to damage the hooks on the inside of the upper cover when you remove or install the upper cover.

d255a1390

Front Cover

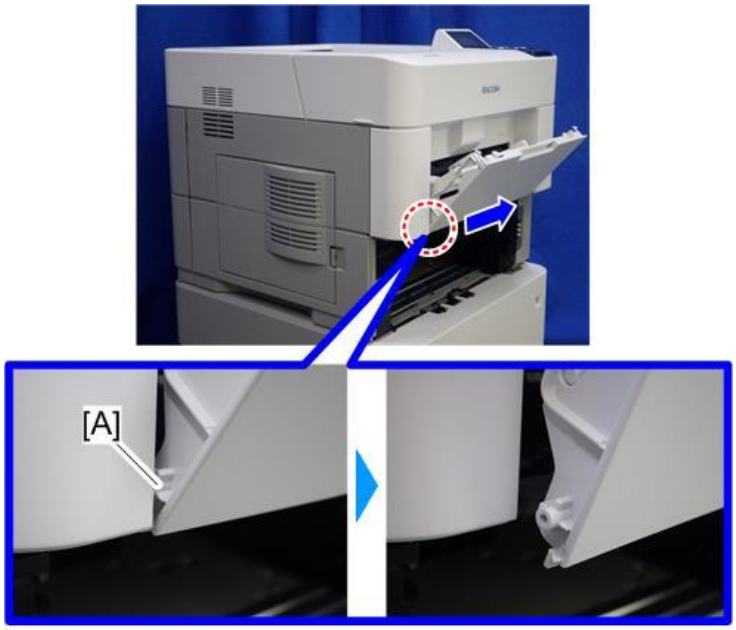
1. Remove the paper feed tray [A] by pulling it out.

d255a1421

2. Open the bypass tray [A].

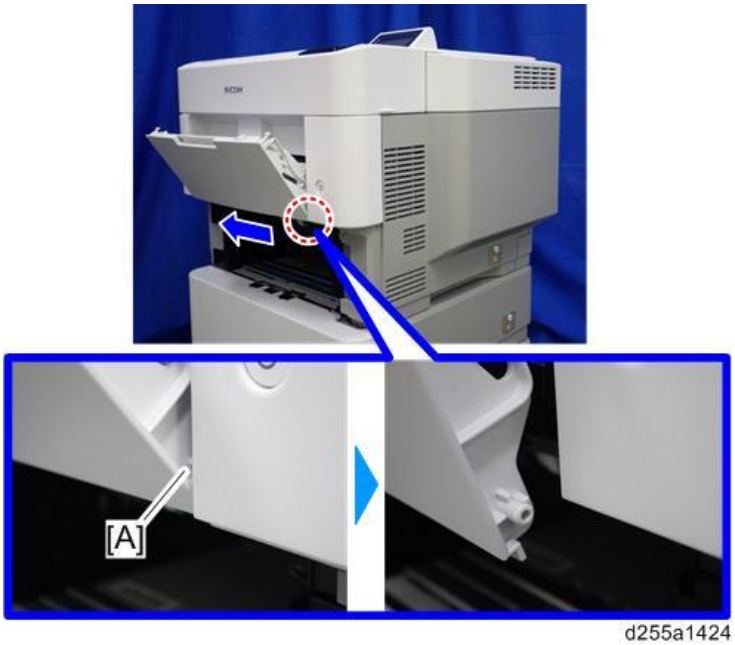
d255a1422

3. Release the left hinge [A] of the bypass tray with a flathead screwdriver by slightly bending the bypass tray inward.



d255a1423

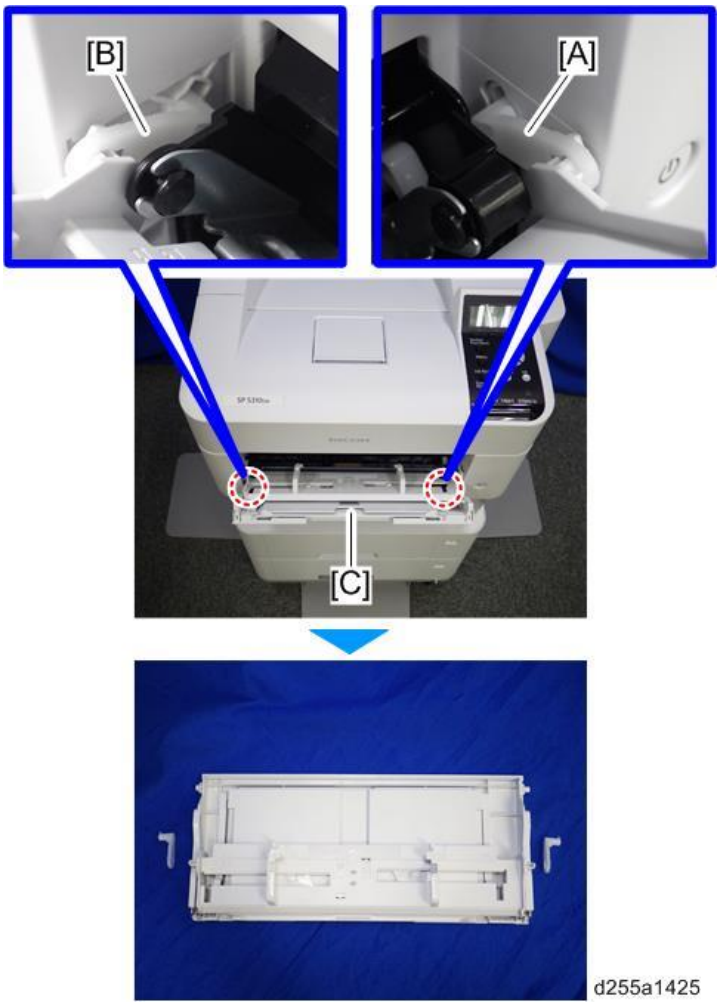
4. Release the right hinge [A] of the bypass tray by sliding it to the left.



d255a1424

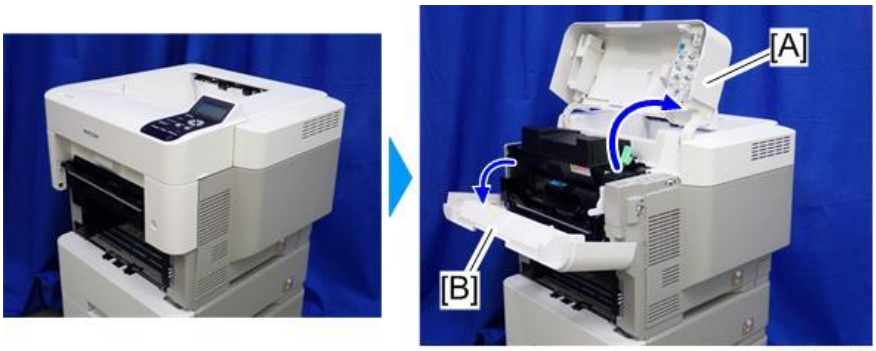
5. Remove the right connecting arm [A] and left connecting arm [B] of the bypass tray [C].

6. Remove the bypass tray [C].



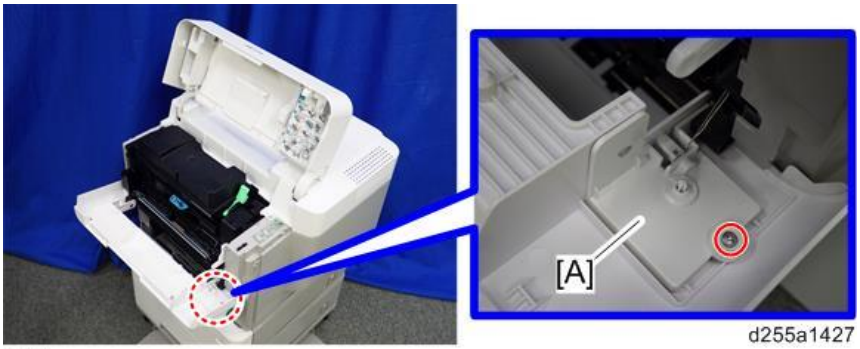
d255a1425

7. Open the upper cover [A], and then open the front cover [B].



d255a1426

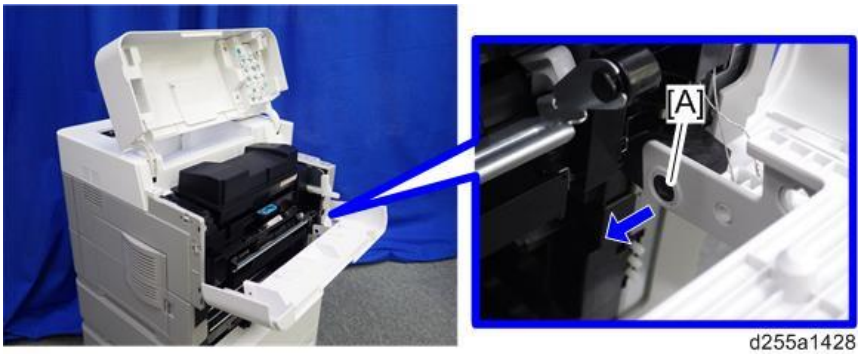
8. Remove the screw from the switch cover [A].



d255a1427

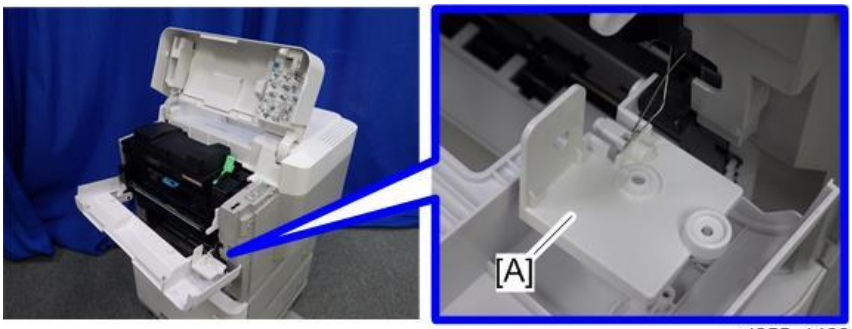
×1

9. Release the right hinge [A] of the front cover.



d255a1428

10. Remove the switch cover [A].

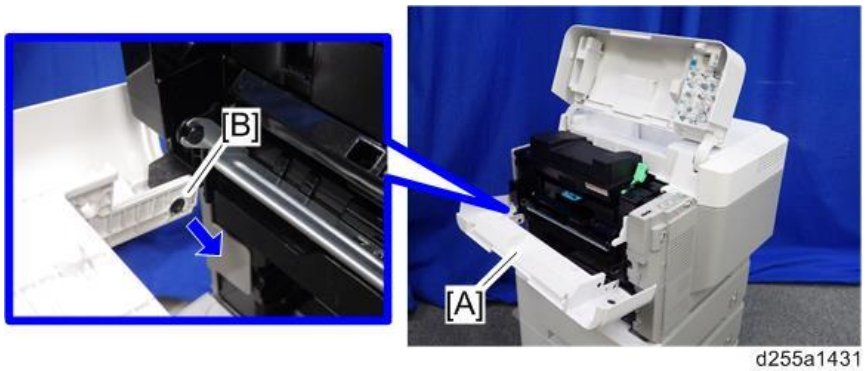


d255a1429

11. Remove the spring [A] and power switch [B].

d255a1430

12. Remove the front cover [A] by releasing the left hinge [B].

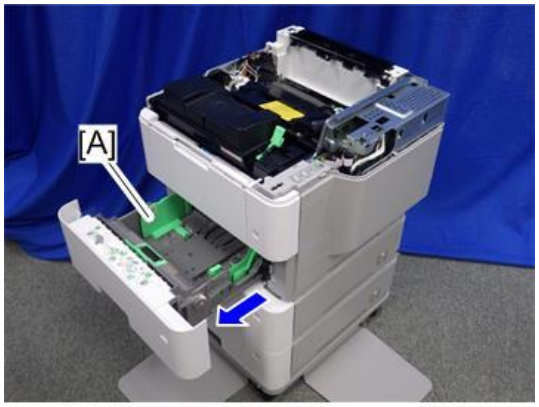


d255a1431

Right Cover

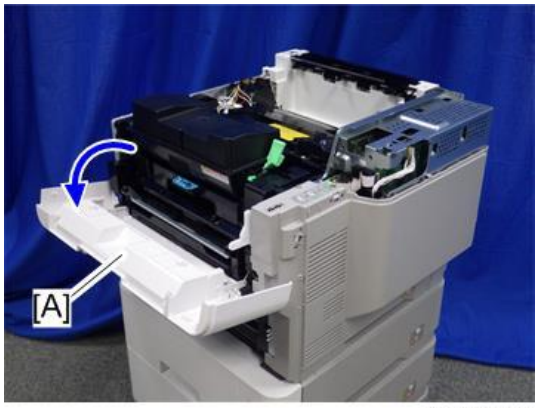
1. Remove the upper cover. (Upper Cover)

2. Remove the paper feed tray [A] by pulling it out.



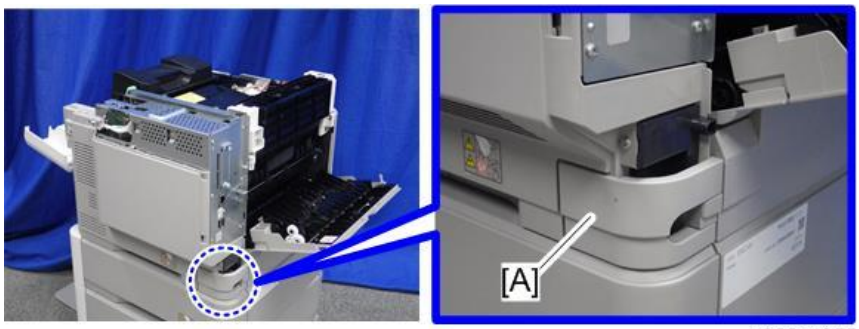
d255a1353

3. Open the front cover [A].



d255a1354

4. Remove the power connector cover [A].



d255a1355

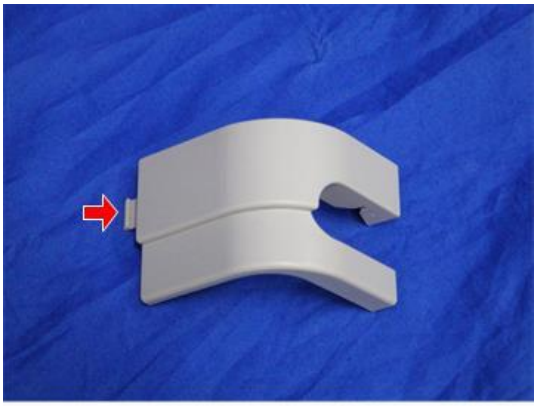
Note

- When removing the power connector cover, pull it in the direction of the arrow.

d255a1356

- Be careful not to damage the hook on the power connector cover when you remove or

install the power connector cover.



d255a1078

5. Remove four screws from the right cover [A].

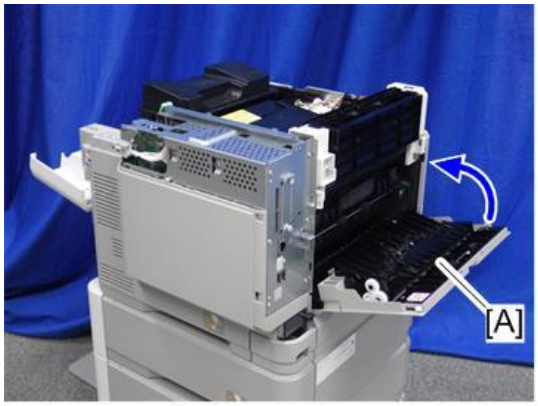
×4

d0bta1354

Note

- The screw [B] is a long screw. Be careful not to use the wrong screws when installing the right cover.

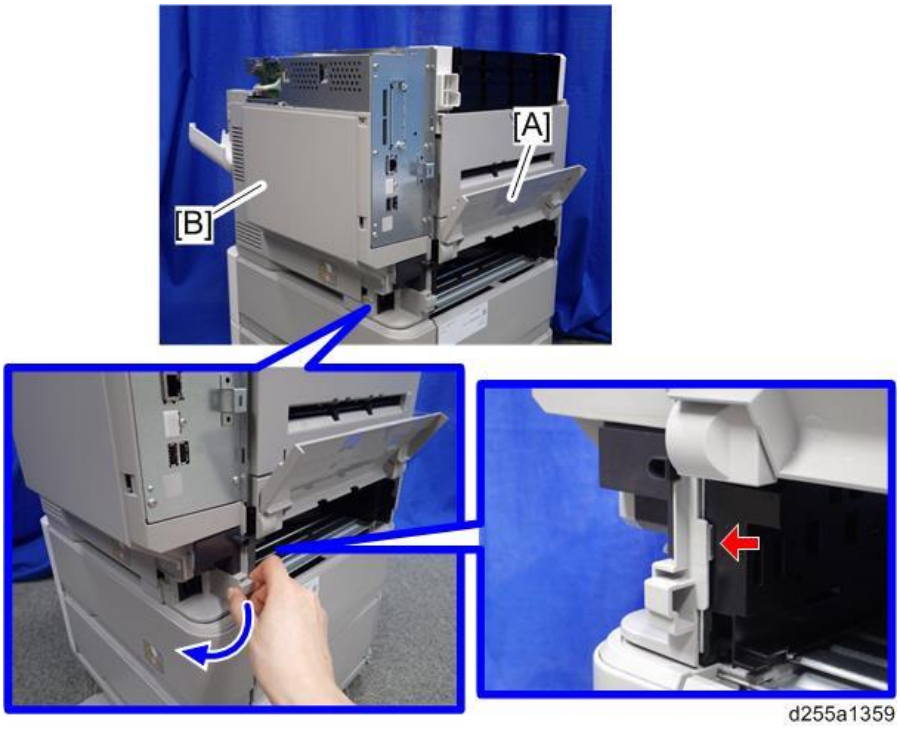
6. Close the rear upper cover [A].



d255a1358

7. Open the rear lower cover [A], and then release the hook of the right cover [B] by rotating it in the

direction of the blue arrow.



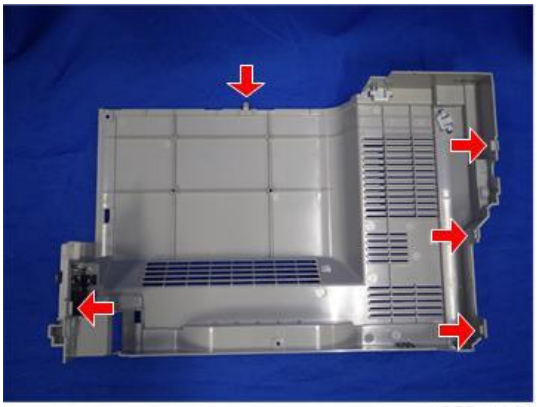
d255a1359

8. Release the four hooks, and then remove the right cover [A].

d255a1360

Note

- Be careful not to damage the hooks on the inside of the right cover when you remove or install the right cover.


d255a1361

Left Upper Cover

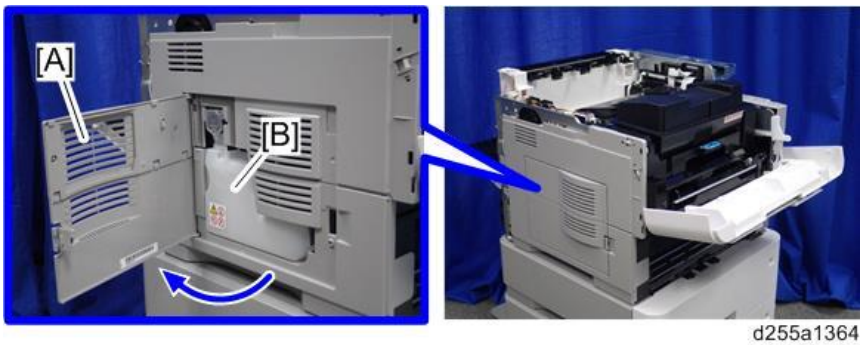
1. Remove the following covers.

- Upper cover (Upper Cover)
- Left rear cover (Left Rear Cover)

2. Remove the paper feed tray [A] by pulling it out.

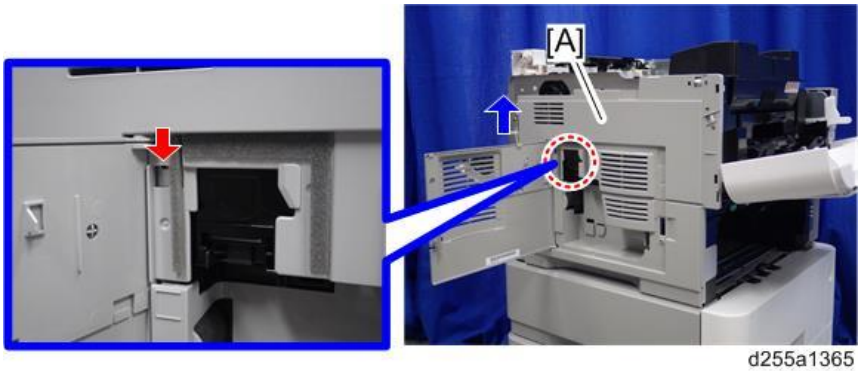
d255a1363

3. Open the waste toner bottle cover [A], and then remove the waste toner bottle [B].



d255a1364

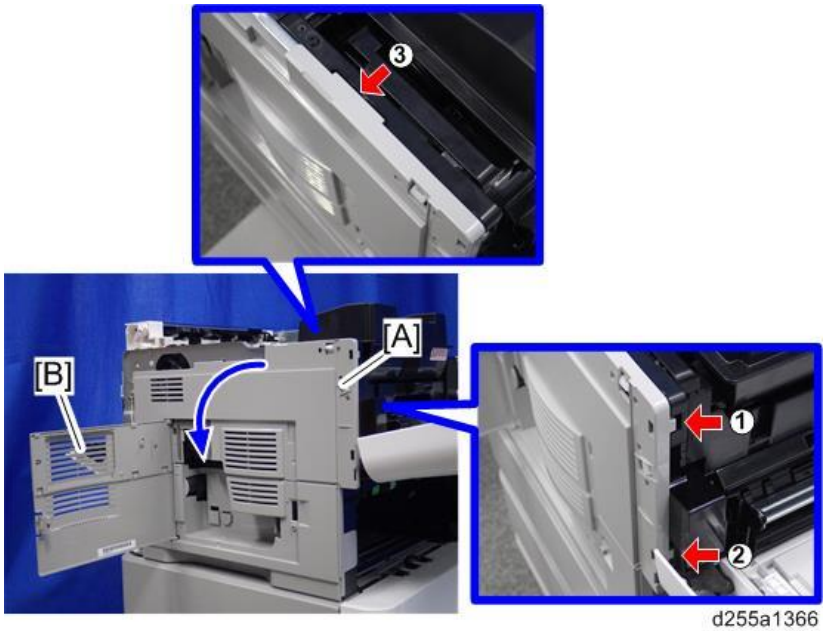
4. Release the hook by lifting the left upper cover [A] upward.



d255a1365

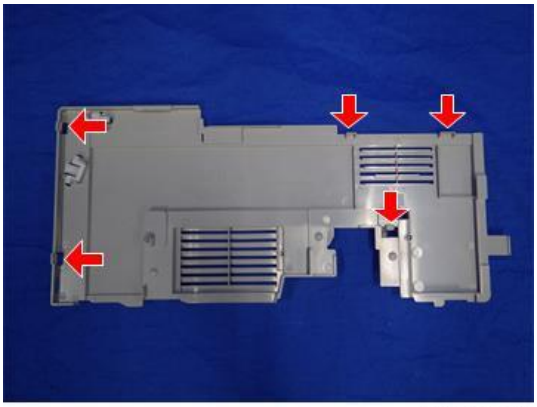
5. Release the hooks in the order of ①, ②, and ③.

6. Remove the left upper cover [A] and waste toner bottle cover [B].



Note

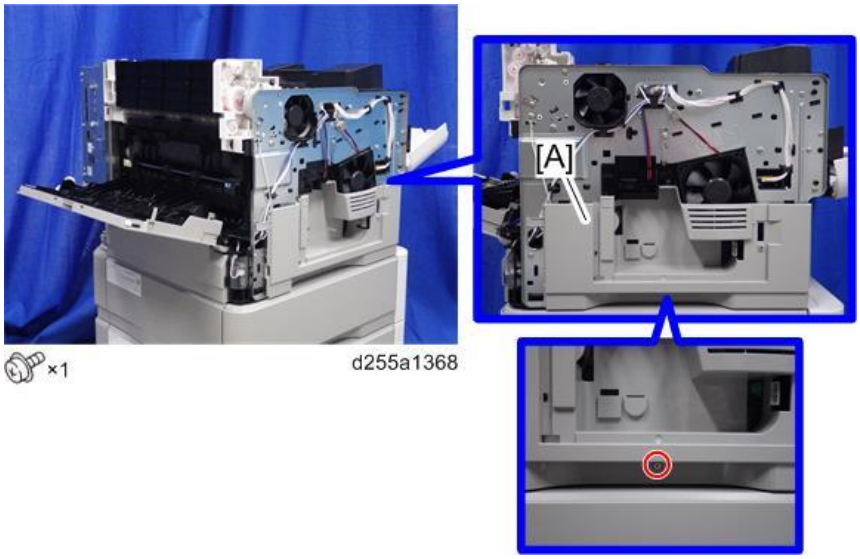
- Be careful not to damage the hooks on the inside of the left upper cover when you remove or install the left upper cover.



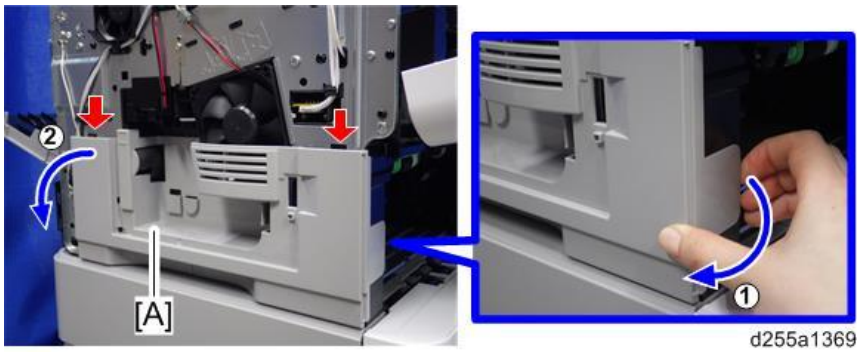
Left Lower Cover

1. Remove the left upper cover. (Left Upper Cover)

2. Remove the screw holding the left lower cover [A].

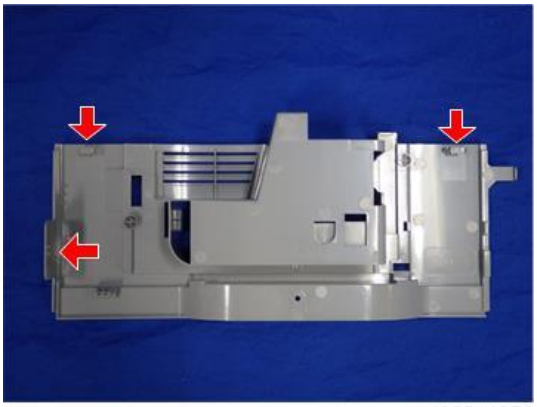


3. Release the hook by opening the right side of the left lower cover as shown below, and then remove the left lower cover [A]. (hook×3)



Note

- Be careful not to damage the hooks on the inside of the left lower cover when you remove or install the left lower cover.

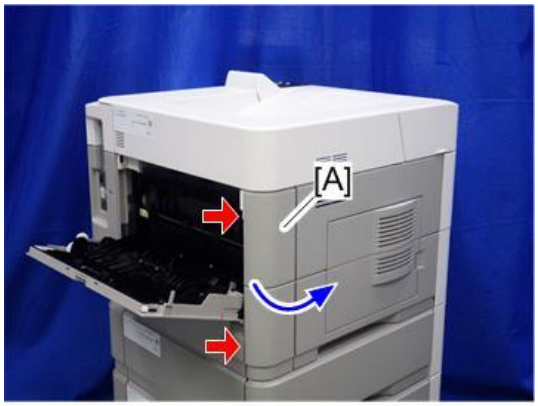


Left Rear Cover

1. Open the rear upper cover [A].

d255a1511

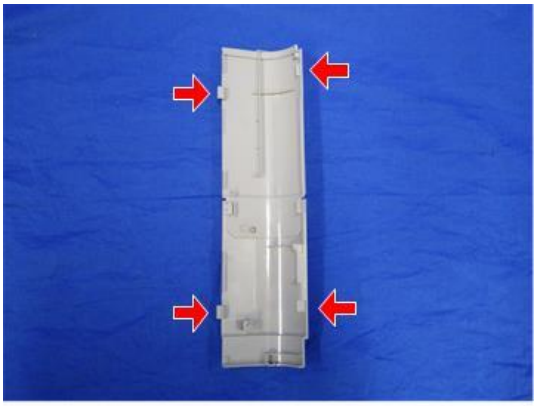
2. Remove the left rear cover [A] by rotating it in the direction of the arrow.



d255a1512

Note

- Be careful not to damage the hooks on the inside of the left rear cover when you remove or install the left rear cover.

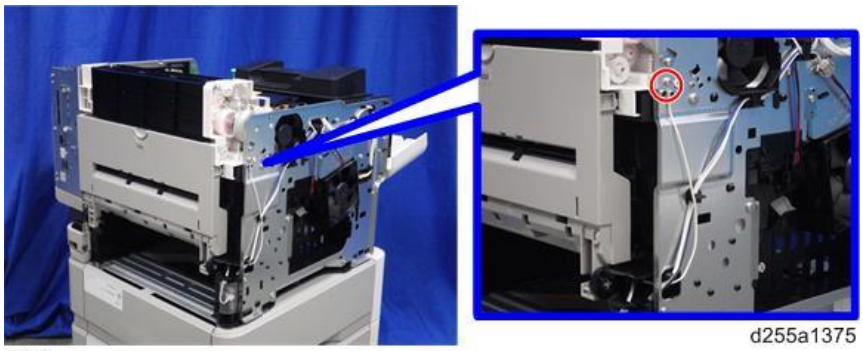


d255a1159

Rear Upper Cover

1. Remove the following covers.
   - Left lower cover (Left Lower Cover)
   - Rear middle cover (Rear Middle Cover)

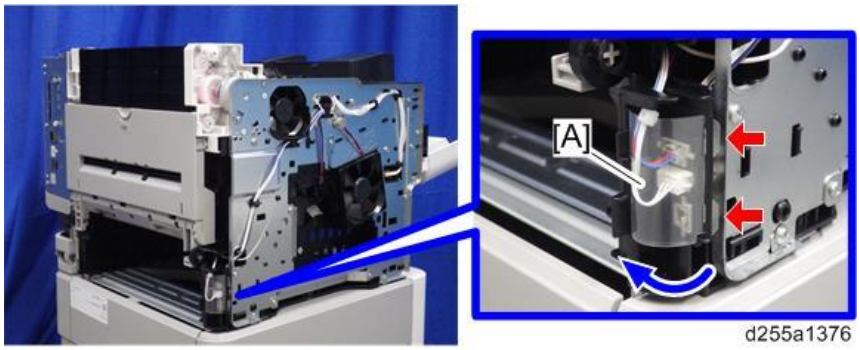
2. Remove the ground screw.



d255a1375

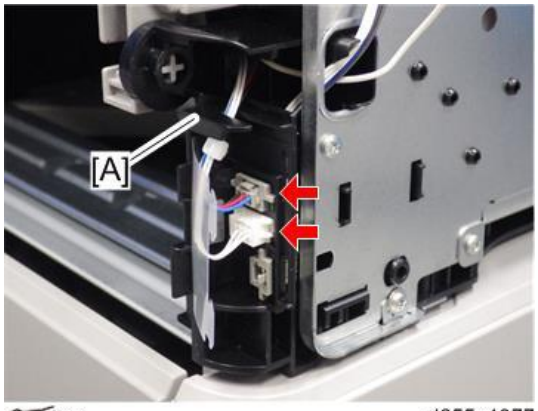
×1

3. Open the transparent film [A]. (hook×2)



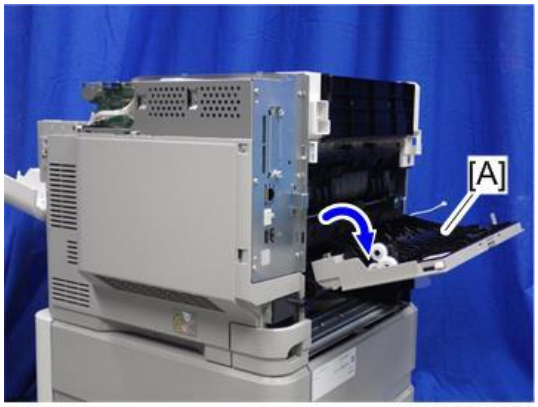
d255a1376

4. Disconnect the two connectors, and then release them from the harness guide [A].



×2 d255a1377

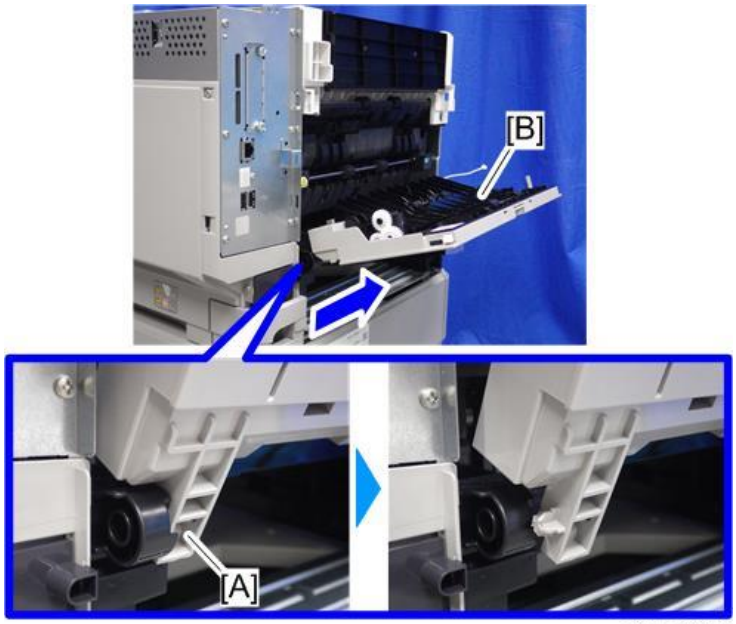
5. Open the rear upper cover [A].



d255a1378

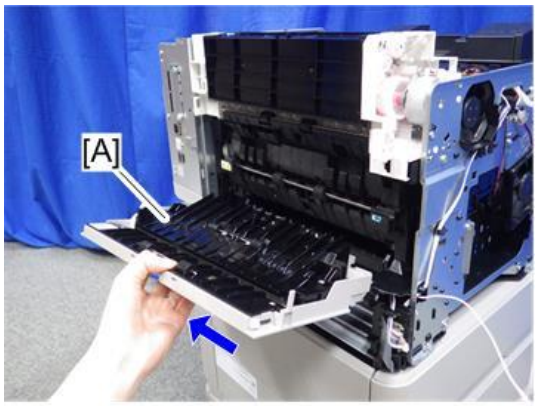
6. Release the left hinge [A] of the rear upper cover [B] by slightly bending the rear upper cover

inward.



d255a1379

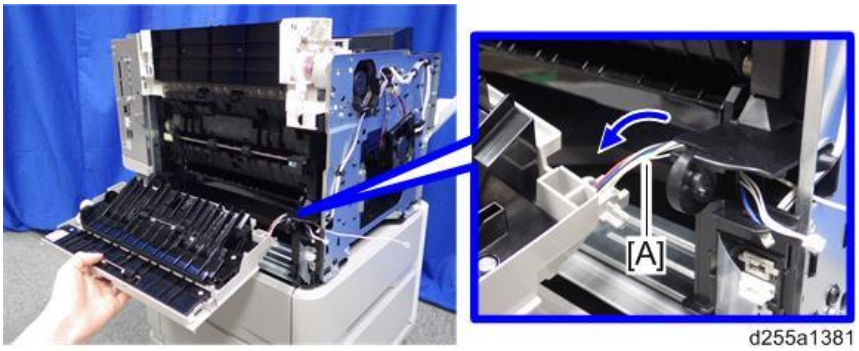
7. Remove the rear upper cover [A] by sliding it to the left.



d255a1380

Note

- When removing the rear upper cover, release the harness [A] from the mainframe.



d255a1381

Rear Middle Cover

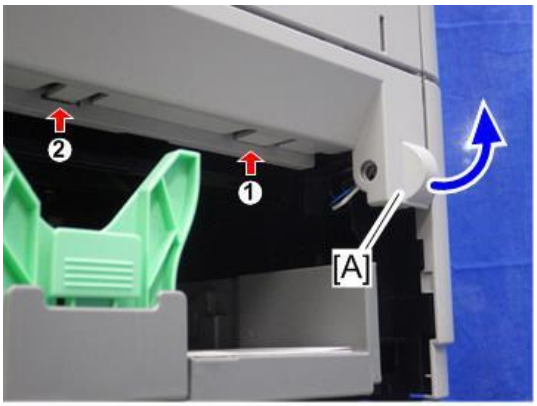
1. Remove the rear lower cover. (Rear Lower Cover)

2. Release three hooks of the rear middle cover [A] in the order of ①, ②, and ③.

d255a1373

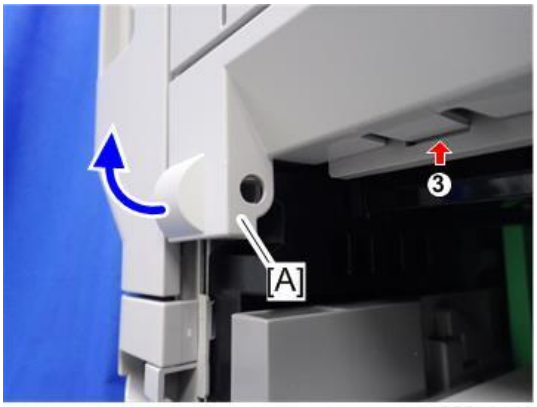
Note

- When releasing the hooks at ① and ②, pull the right side [A] of the rear middle cover while pressing each hook upward.



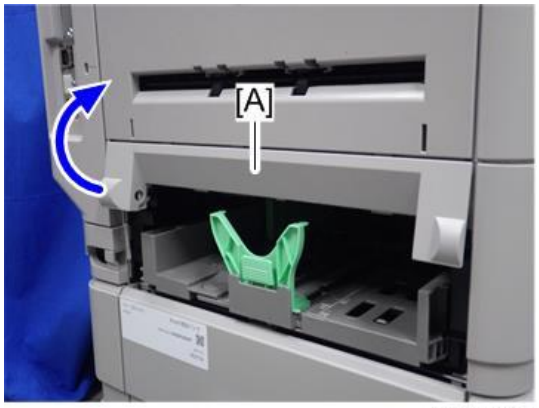
d255a1145

- When releasing the hook at ③, pull the left side [A] of the rear middle cover while pressing the hook upward.



d255a1146

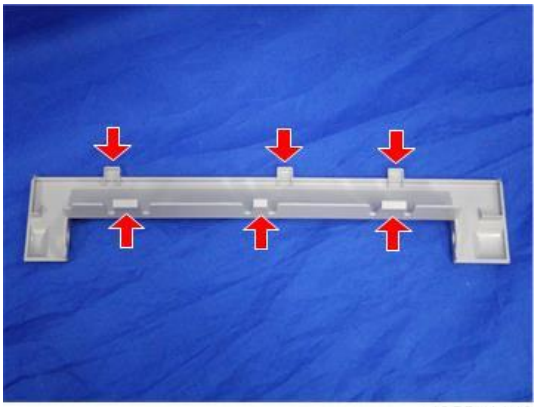
3. Remove the rear middle cover [A] by rotating in the direction of the arrow.



d255a1374

Note

- Be careful not to damage the hooks on the rear middle cover when removing or installing.

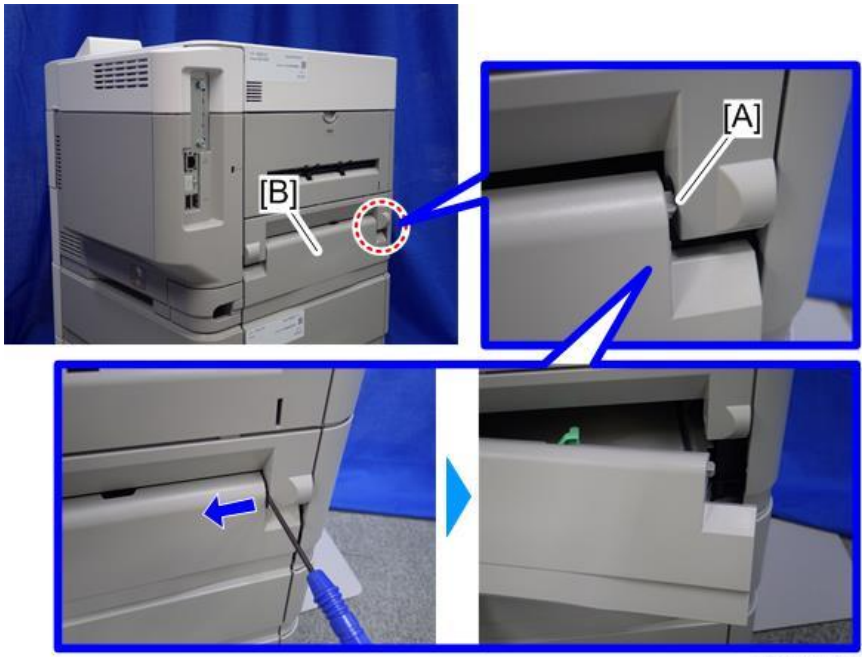


d255a1149

Rear Lower Cover

1. Release the right hinge [A] of the rear lower cover [B] by pushing the rear lower cover inward with a

flathead screwdriver.



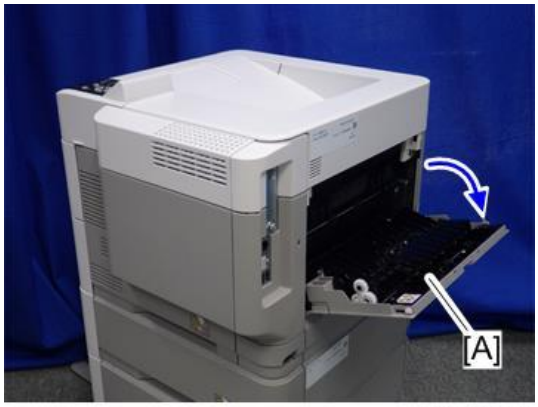
d255a1371

2. Remove the rear lower cover [A] by sliding it to the right.

d255a1372

Controller Cover

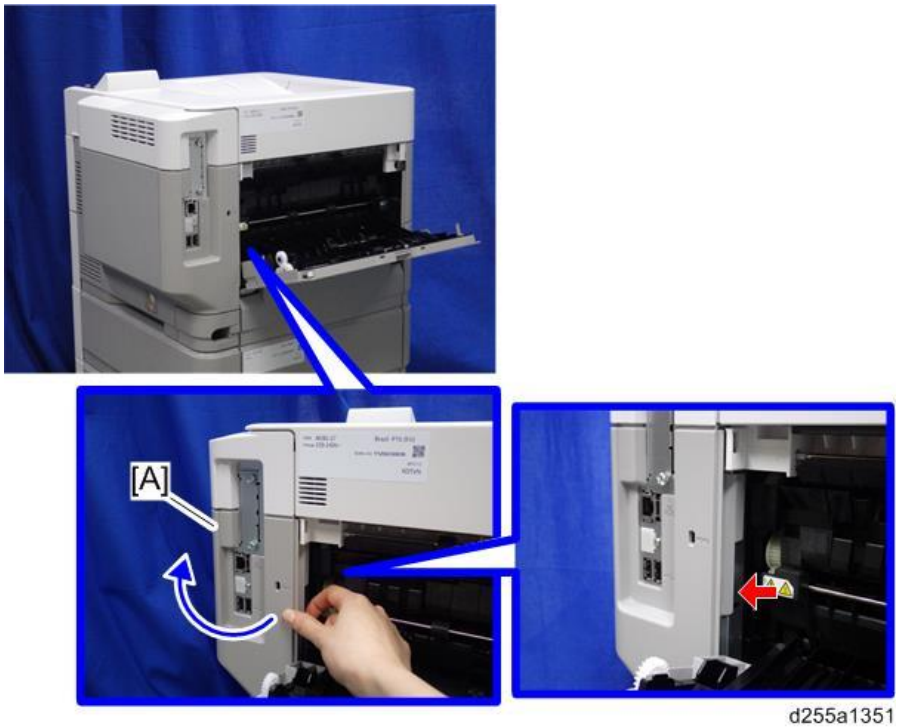
1. Open the rear upper cover [A].



d255a1350

2. Release the hook by opening the right side of the cover, and then remove the cover [A] by rotating

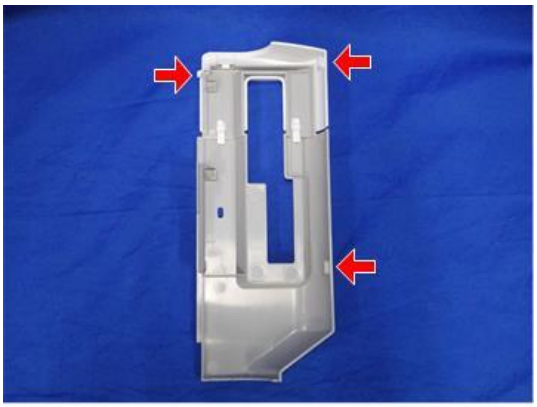
it in the direction of the blue arrow.



d255a1351

Note

- Be careful not to damage the hooks on the inside of the controller cover when you remove or install the controller cover.

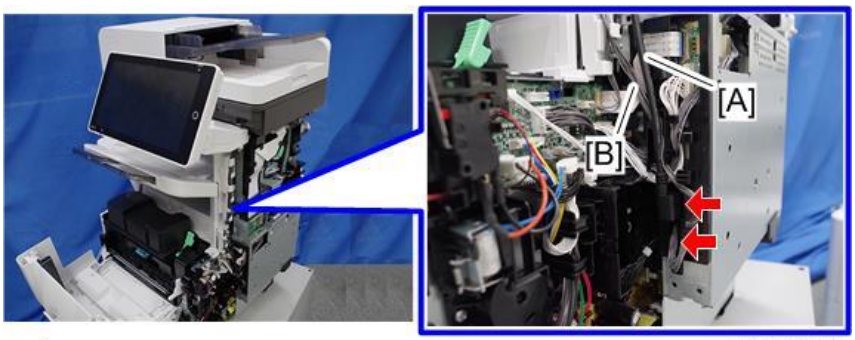


d255a1352

Operation Panel Unit (IM 550F/600F/600SRF)

Operation Panel Unit

1. Remove the following covers.
   - Scanner front cover (Scanner Front Cover (IM 550F/600F))
   - Right lower cover (Right Lower Cover (IM 550F/600F))
2. Disconnect the USB cable [A] and harness [B].



×2

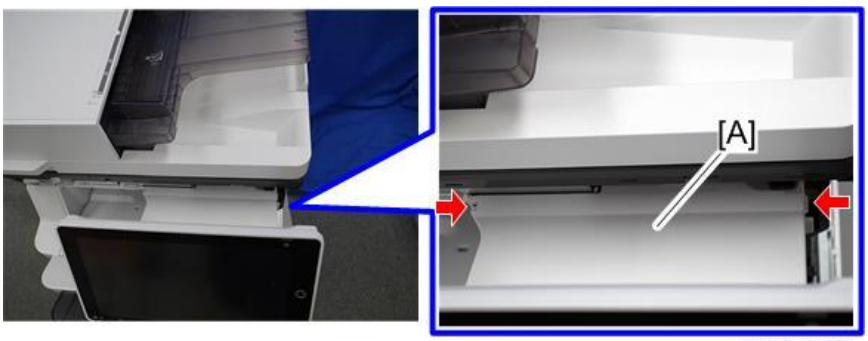
d0bta1193

3. Release the USB cable [A] and harness [B] from the harness guides.

×2

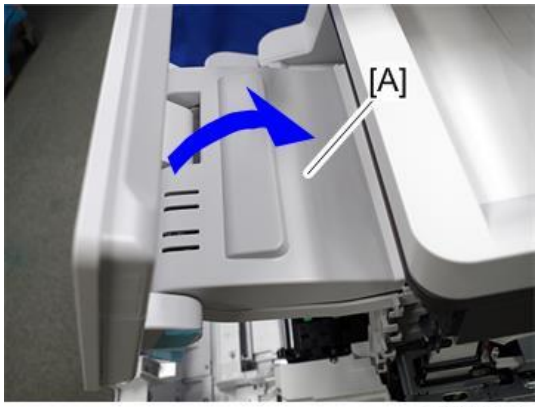
d0bta1194

4. Release the two hooks from the operation panel arm upper cover [A].



d0bta1157

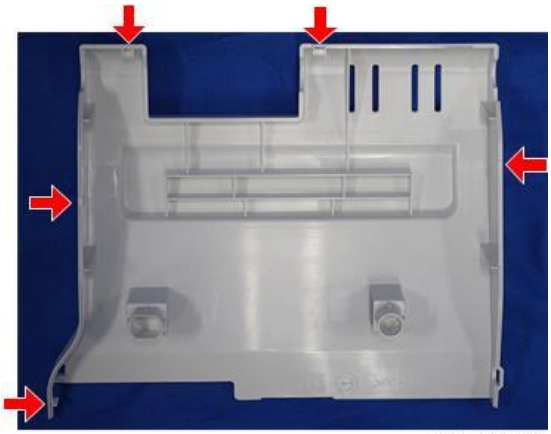
5. Remove the operation panel arm upper cover [B].



d0bta1158

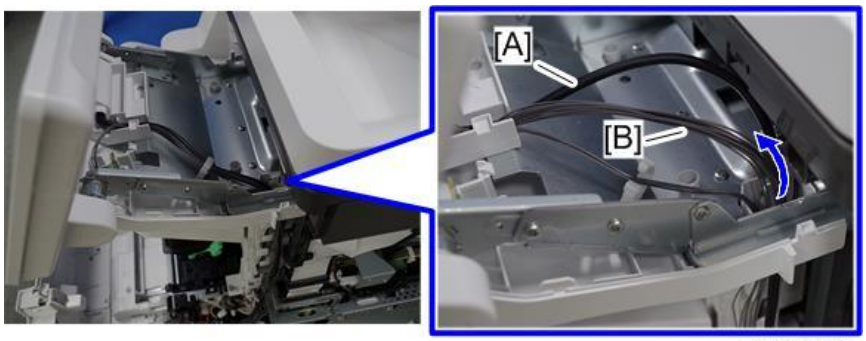
Note

- Be careful not to damage the hooks on the operation panel arm upper cover when you remove or install the operation panel arm upper cover.



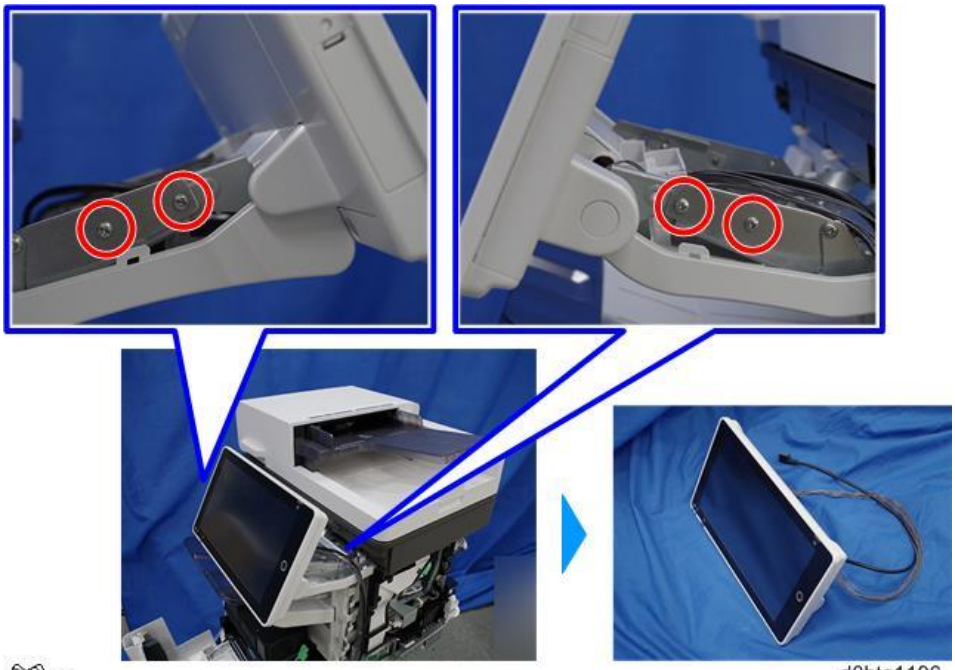
d0bta1159

6. Pull out the USB cable [A] and harness [B].



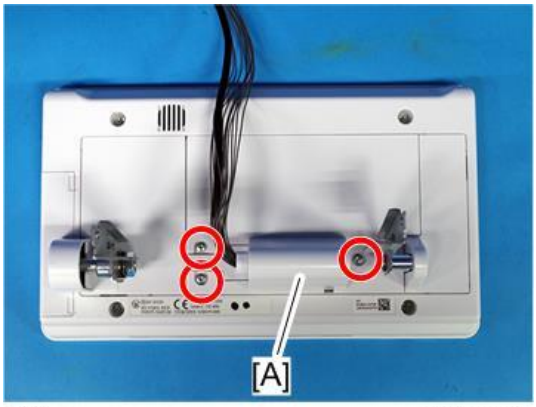
d0bta1195

7. Remove the operation panel [A] from the mainframe.



×4 d0bta1196

8. Remove the rear center cover [A].

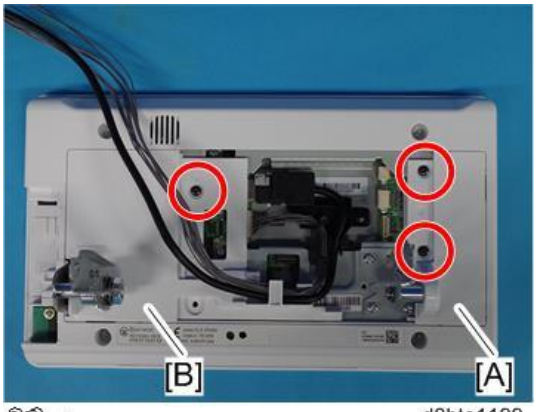


×3 d0bta1197

9. Remove the left hinge cover [A].

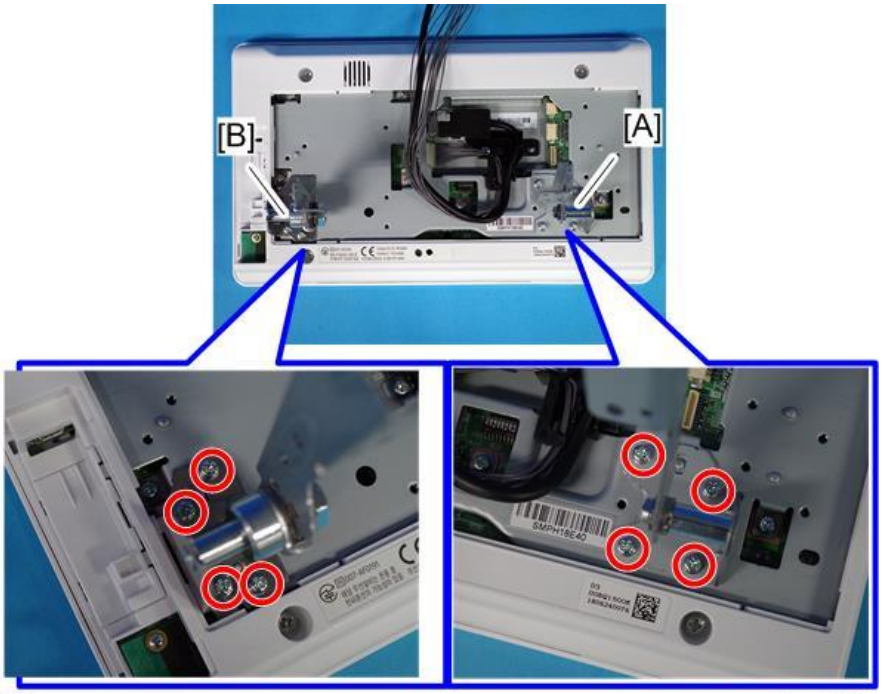
×2 d0bta1198

10. Remove the rear right cover [A] and rear left cover [B].



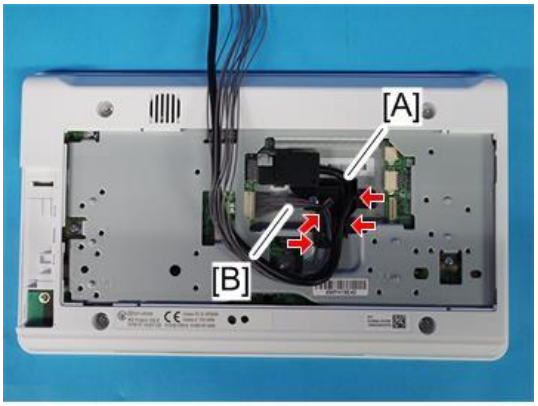
×3 d0bta1199

11. Remove the right hinge [A] and left hinge [B].



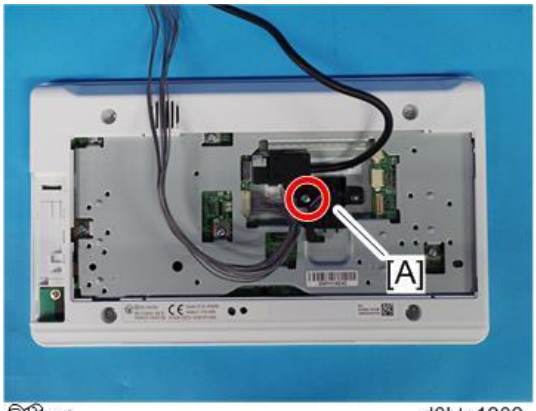
×8 d0bta1200

12. Release the USB cable [A] and harness [B] from the harness guides.



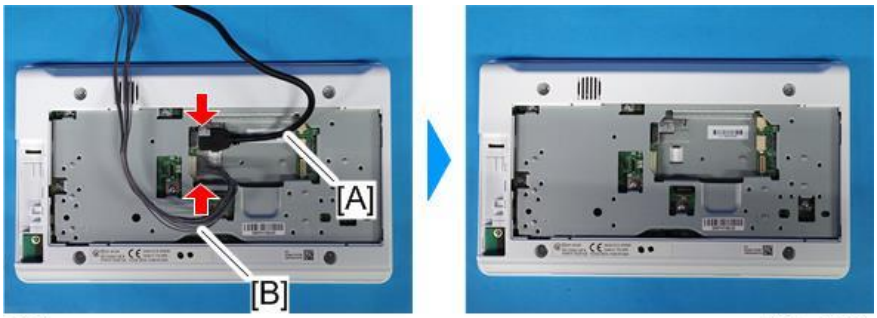
d0bta1201

13. Remove the harness guide bracket.



×1 d0bta1202

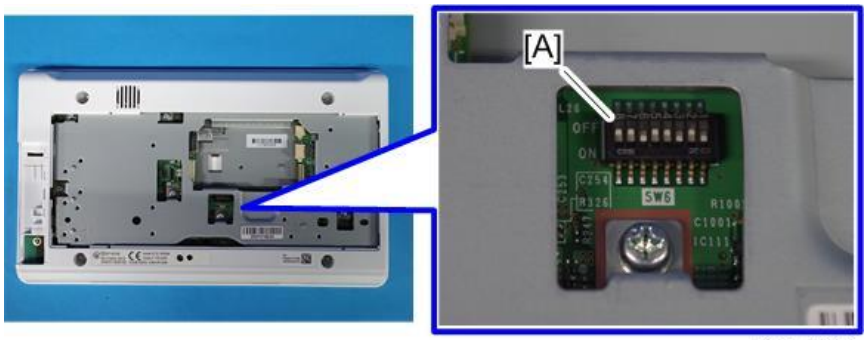
14. Remove the USB cable [A] and harness [B].



×2 d0bta1203

Before Installing the New Operation Panel

There is a DIP switch [A] on the sub-board of the operation panel.



d0bta1204

The switch setting to use depends on the model.

Make sure that only switch No. 1, 3, and 5 are ON. Otherwise, SC672-11 occurs when starting the machine.

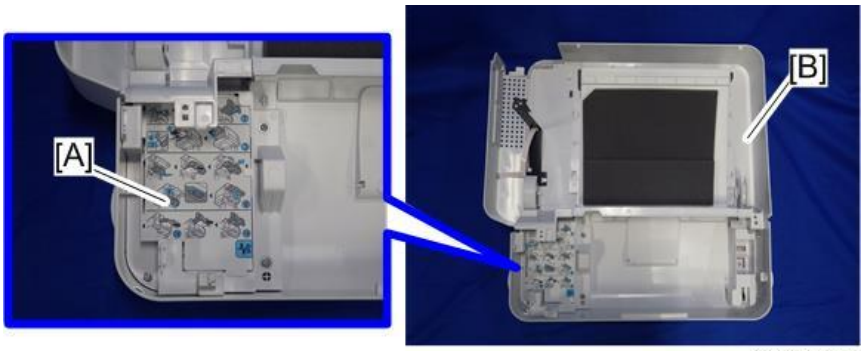
Internal Parts

Refer to Replacement and Adjustment.

Operation Panel (P 800/801)

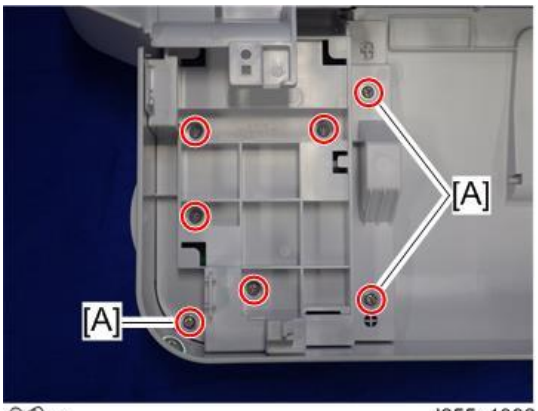
Operation Panel

1. Remove the upper cover. (Upper Cover)
2. Remove the sheet [A] from the back side of the upper cover [B].



d255a1391

3. Remove the seven screws.

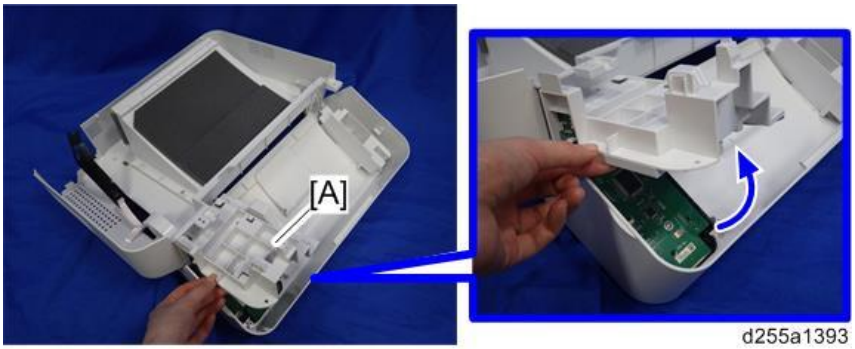


×7 d255a1392

Note

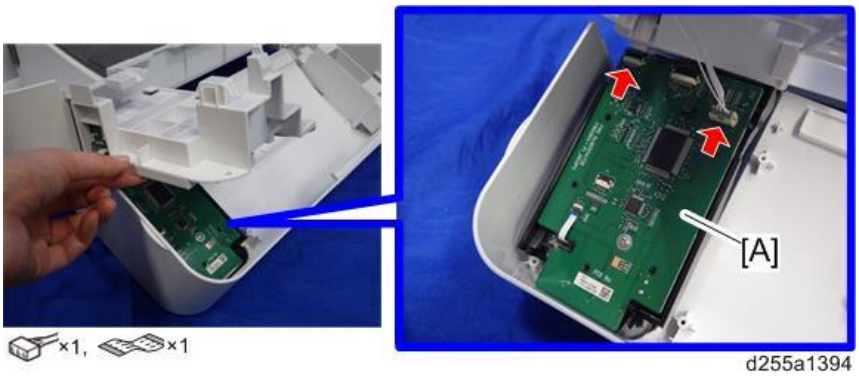
- The screws [A] are sems screws. Be careful not to use the wrong screws when installing the operation panel.

4. Open the bracket [A].



d255a1393

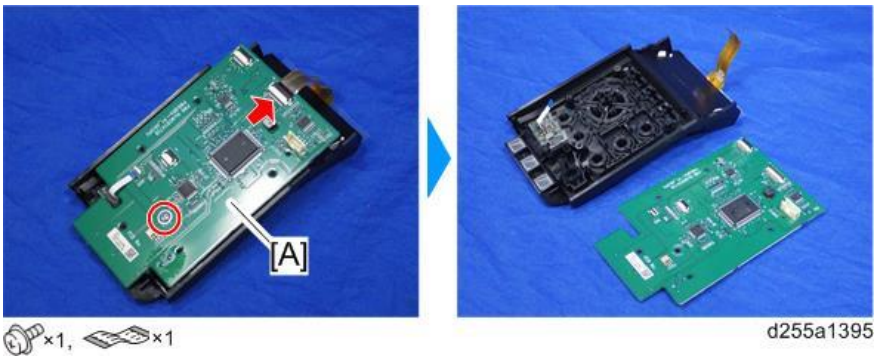
5. Remove the operation panel [A].



OPU Board (PCB2)

1. Remove the operation panel. (Operation Panel)

2. Remove the OPU board (PCB2) [A].



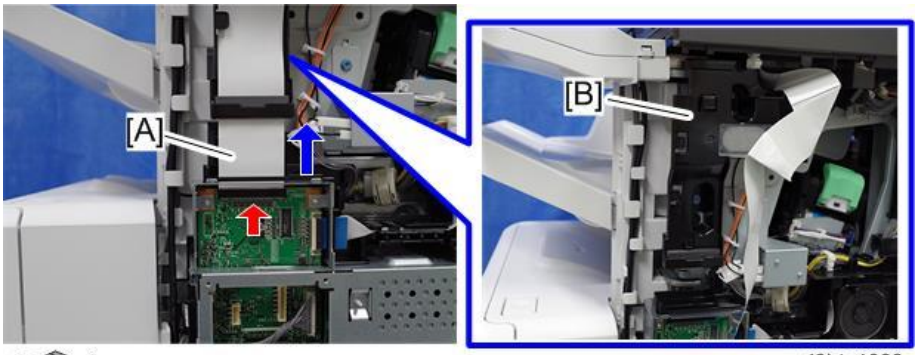
Scanner Unit (IM 550F/600F/600SRF Only)

Scanner Unit

1. Remove the following covers.
   - Scanner front cover (Scanner Front Cover (IM 600SRF))
   - Right upper cover (Right Upper Cover (IM 600SRF))
   - Left upper cover (Left Upper Cover (IM 600SRF))
   - Rear fan cover (Rear Fan Cover (IM 600SRF Only))
2. Remove the bracket [A].

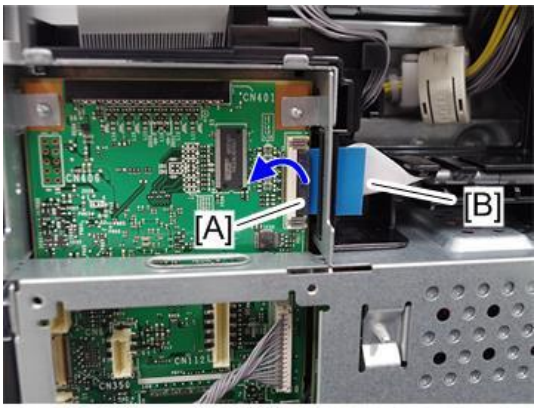
×2 d0bta1082

3. Disconnect the flat cable [A] and release it from the harness guide [B].



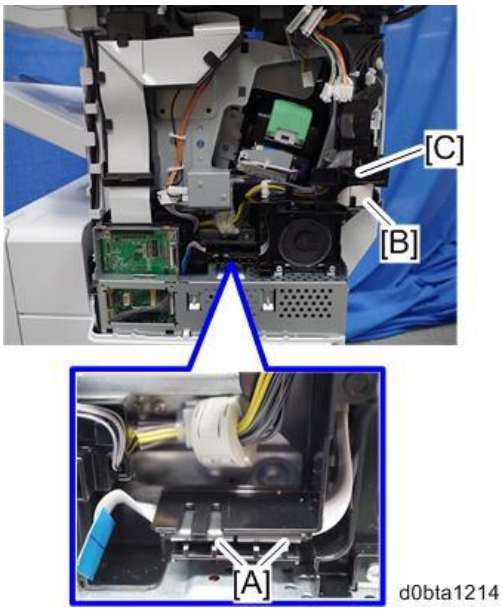
×1 d0bta1083

4. Open the lock [A] and disconnect the flat cable [B].

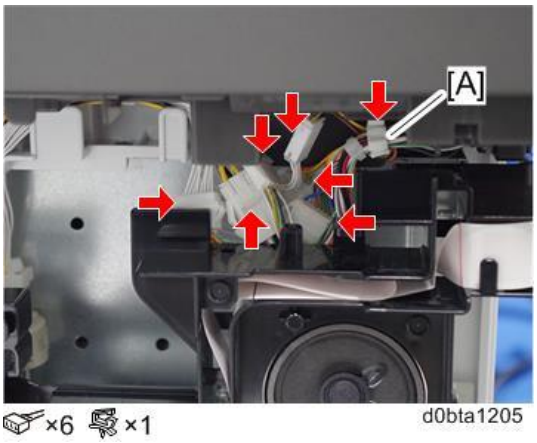


×1 d0bta1084

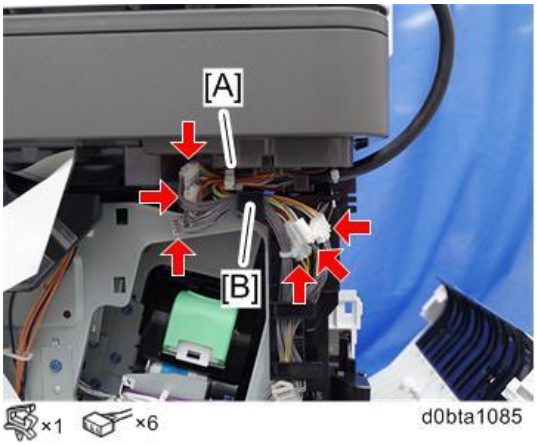
5. Release the flat cable [A] from the harness guide [B] and remove the cores [C].



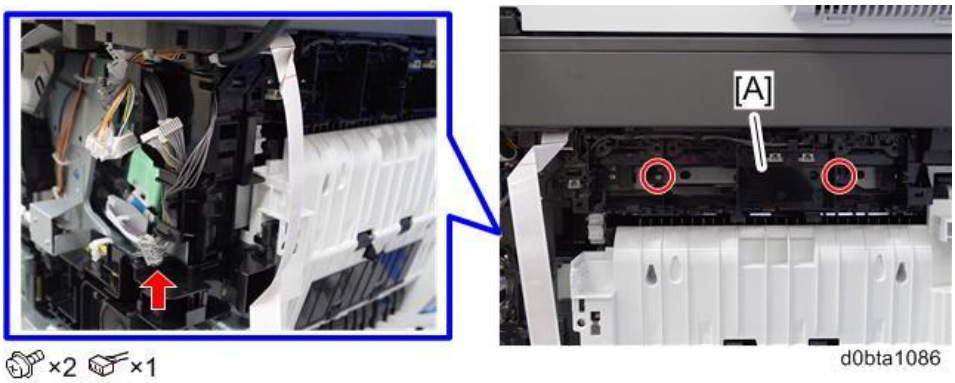
6. **IM 550F/600F:** Open the clamp [A] and disconnect the six connectors.



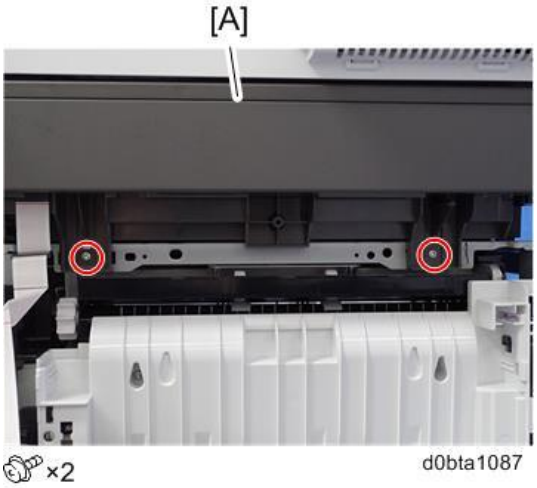
7. **IM 600SRF:** Open the clamp [A] and disconnect the six connectors. Then release the connectors from the harness guide [B].



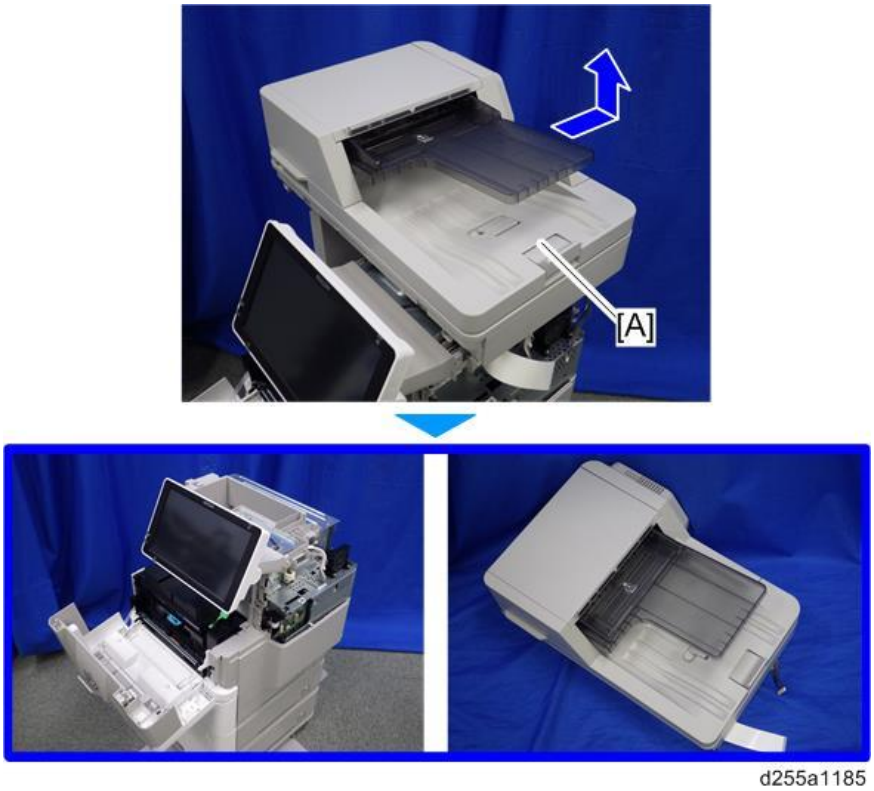
8. **IM 600SRF:** Remove the fan bracket [A].



9. Remove the two screws from the rear side of the scanner unit [A].



10. Remove the scanner unit [A].



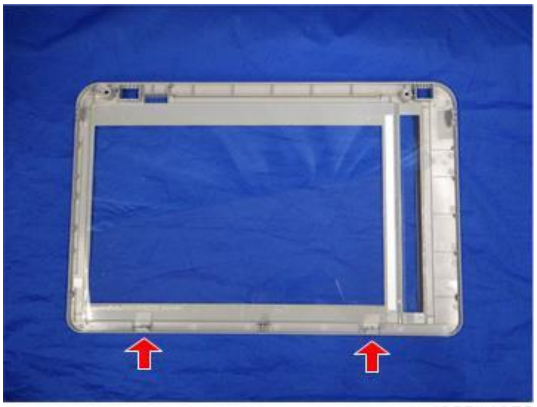
Scanner Carriage

1. Remove the SPDF unit. (SPDF Unit)
2. Remove the exposure glass [A].

d255a1274

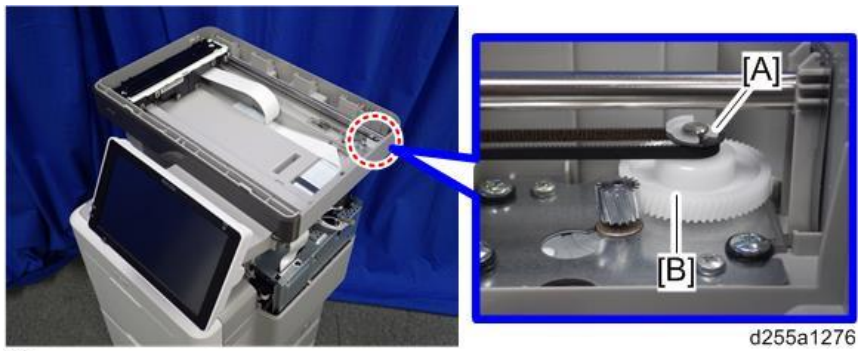
Note

- Be careful not to damage the hooks on the inside of the exposure glass when you remove or install the exposure glass.



d255a1275

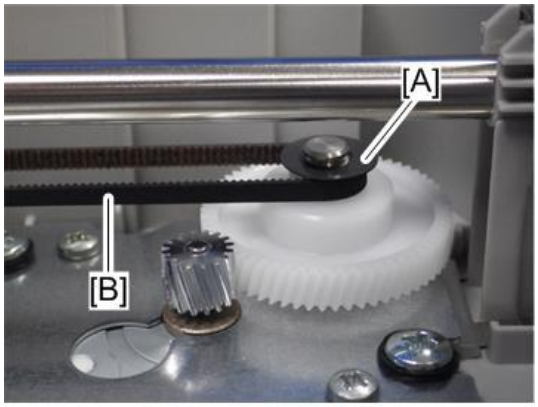
3. Remove the clip [A] from the pulley [B] on the right side.



d255a1276

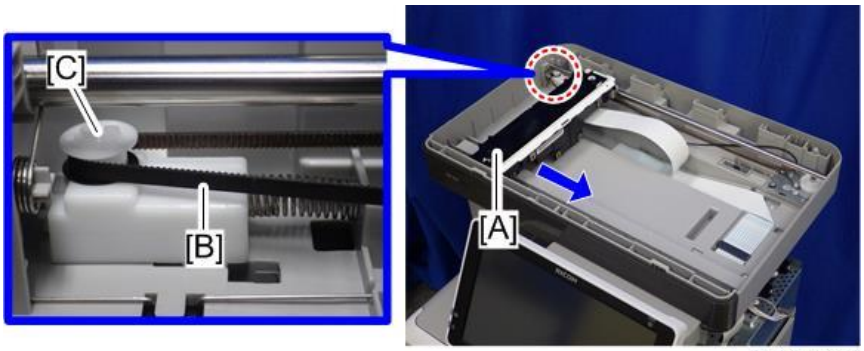
×1

4. Remove the plate [A] and carriage belt [B].



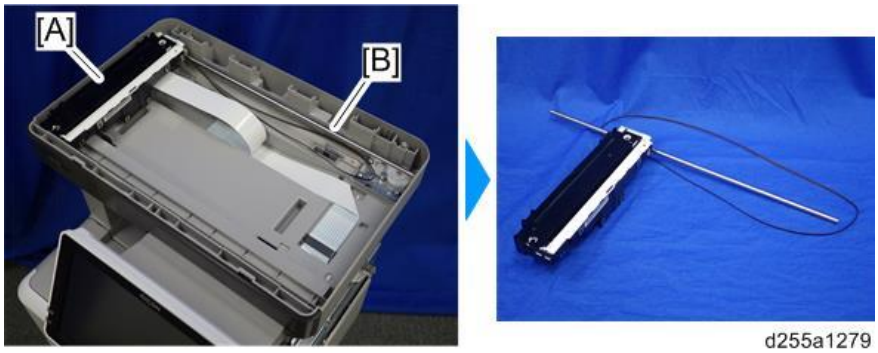
d255a1277

5. Move the scanner carriage [A] to the right, and then remove the carriage belt [B] from the pulley [C] on the left side.



d255a1278

6. Remove the scanner carriage [A] and shaft [B] with the carriage belt from the mainframe.

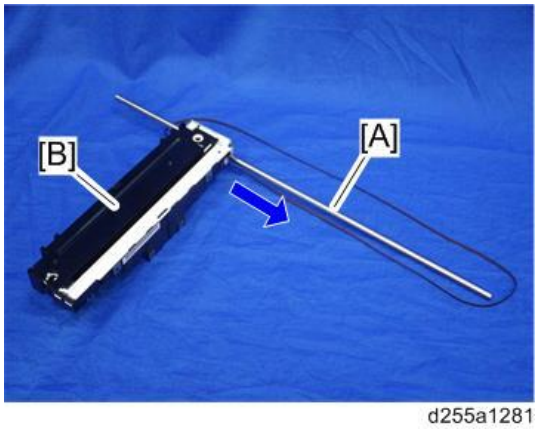


d255a1279

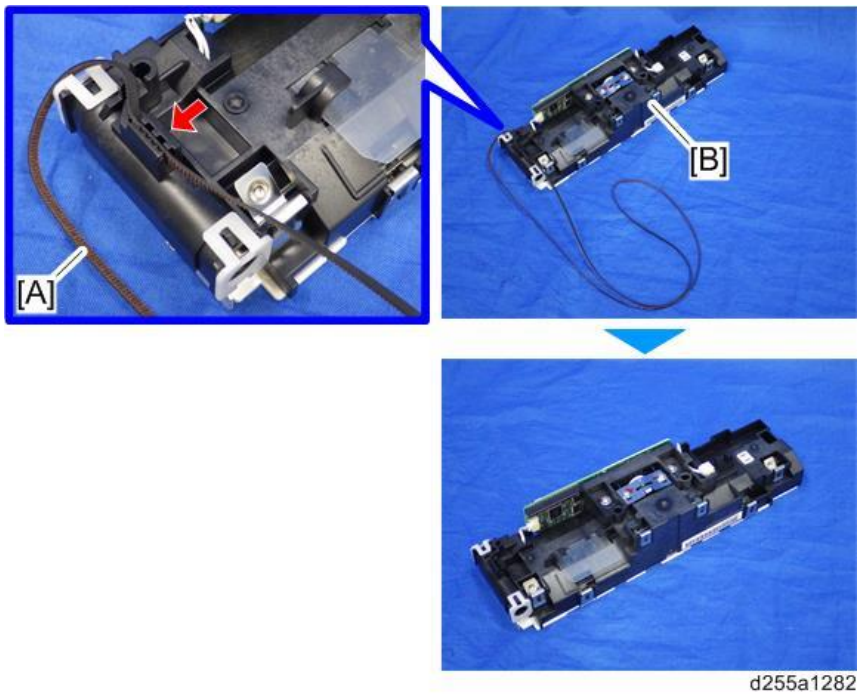
Note

- When removing the scanner carriage [A] from the mainframe, disconnect the flat cable [B] and release it from the harness guides at the back of the scanner carriage [A].

7. Remove the shaft [A] from the scanner carriage [B].



8. Remove the carriage belt [A] from the scanner carriage [B]. (hook×1)



Laser Unit (IM 550F/600F/600SRF)

⚠CAUTION

- Turn OFF the main power and unplug the machine before beginning any of the procedures in this section. Laser beams can cause serious eye injury.

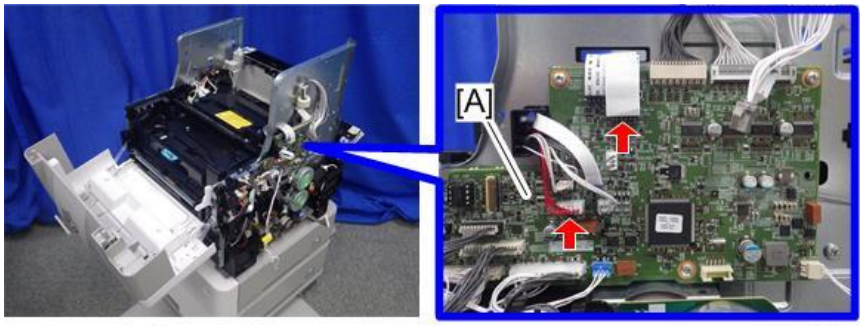
Caution Decal Location

The caution decal is attached as shown below.

d255a1206

Laser Unit

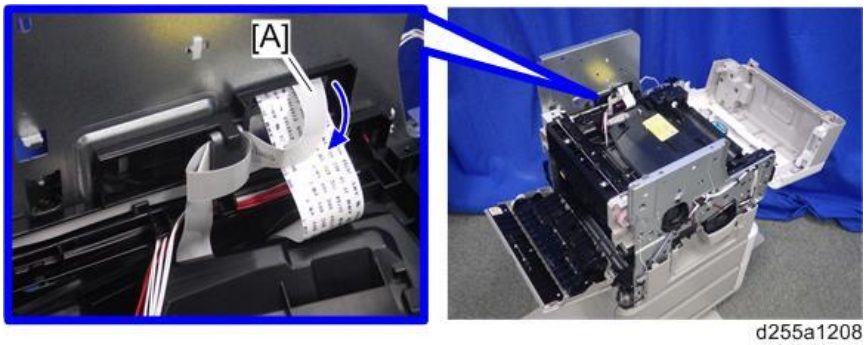
1. Remove the paper exit tray. (Paper Exit Tray)
2. Disconnect the red connector and flat cable from IOB (PCB17) [A].



×1, ×1

d255a1207

3. Pull the flat cable [A] out through the apertures.

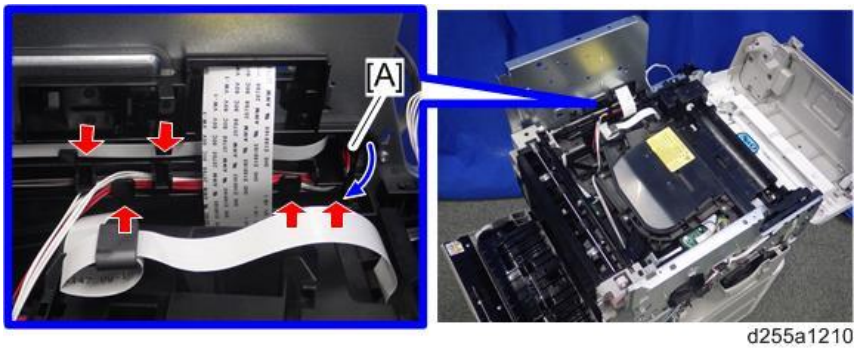


d255a1208

4. Remove the flat cable with the bracket [A] by sliding it to the rear while pushing the hook [B].

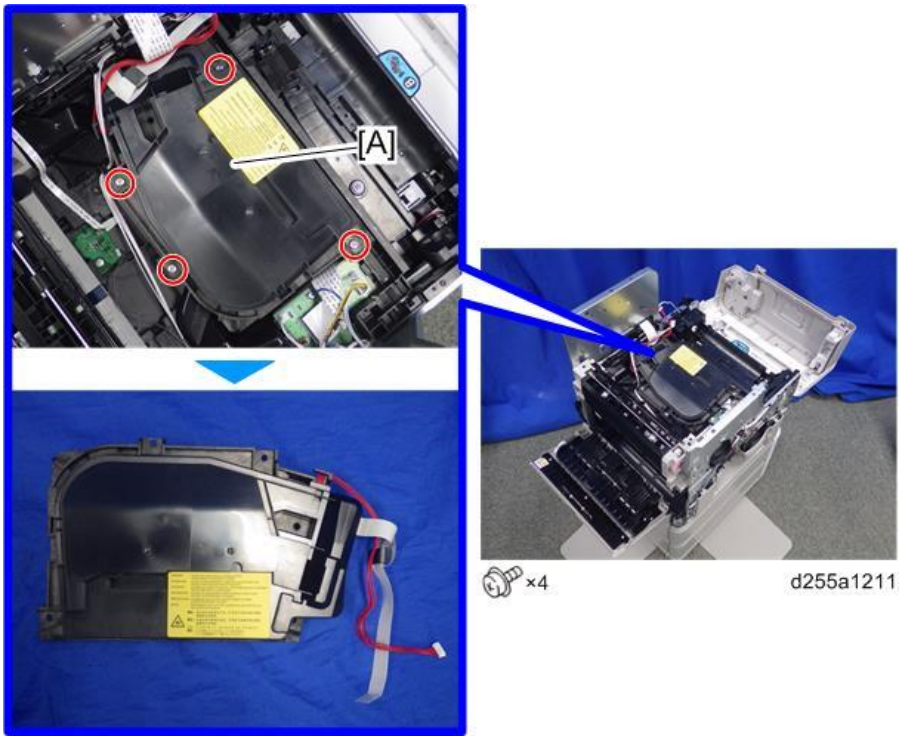
d255a1209

5. Pull the red harness [A] out through the apertures, and then release it from the harness guides.



d255a1210

6. Remove the laser unit [A].



Laser Unit (P 800/801)

⚠CAUTION

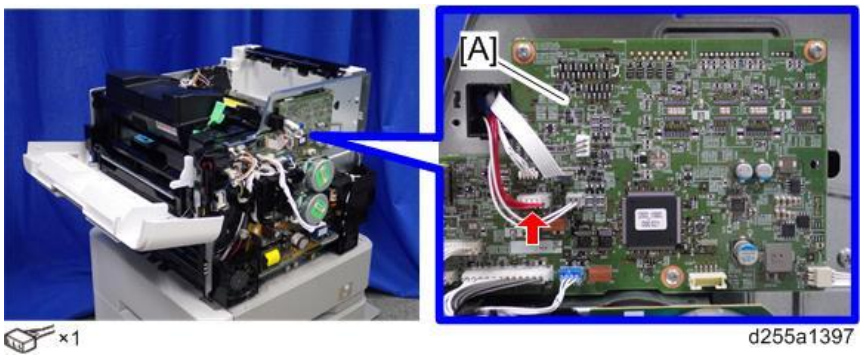
- Turn OFF the main power and unplug the machine before beginning any of the procedures in this section. Laser beams can cause serious eye injury.

Caution Decal Location

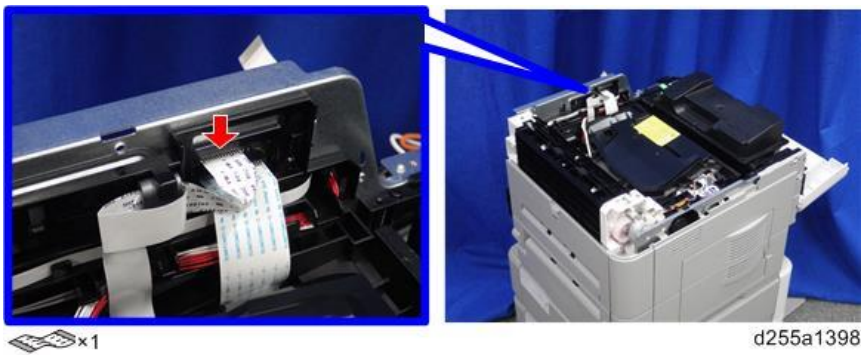
The caution decal is attached as shown below.

Laser Unit

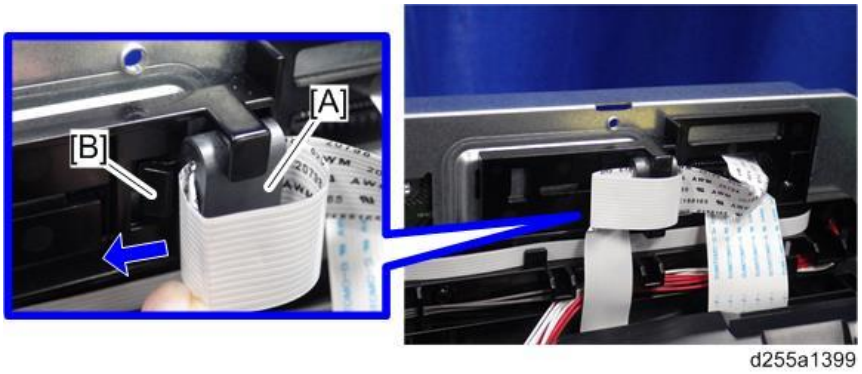
1. Remove the controller box. (Controller Box (P 800/801))
2. Disconnect the red connector from IOB (PCB17) [A].



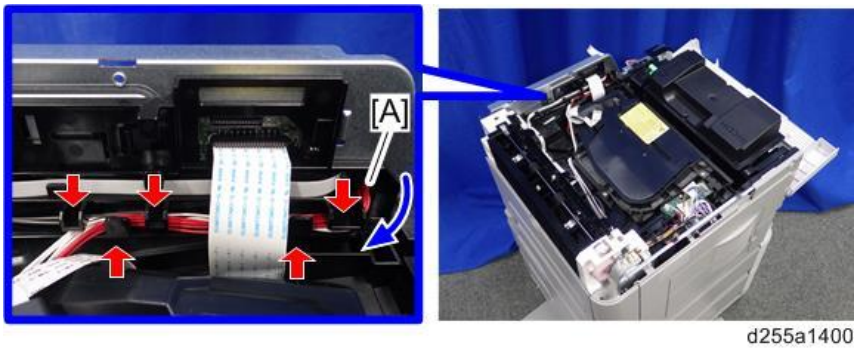
3. Disconnect the flat cable.



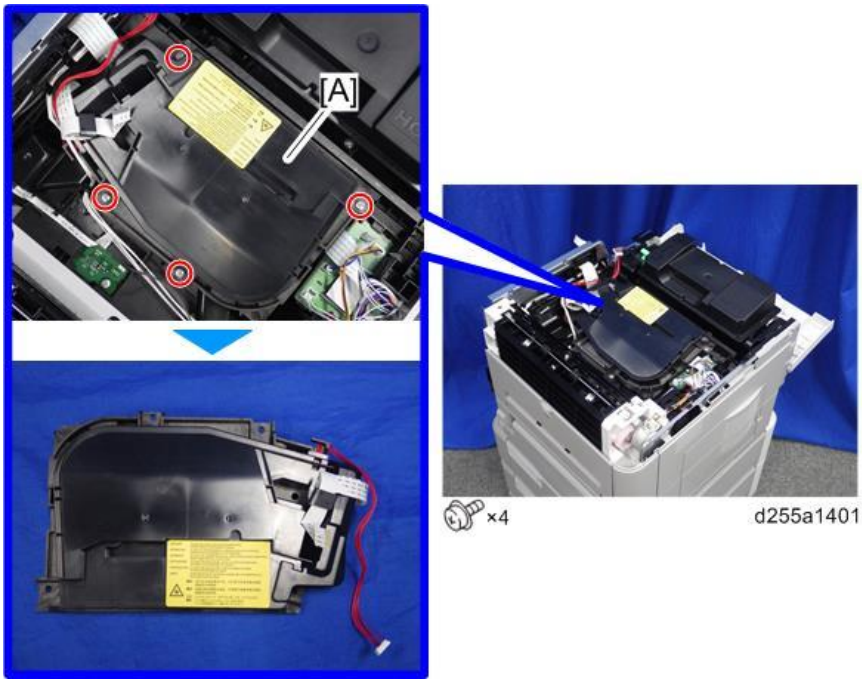
4. Remove the flat cable with the bracket [A] by sliding it to the rear while pushing the hook [B].



5. Pull the red harness [A] out through the apertures, and then release it from the harness guides.



6. Remove the laser unit [A].

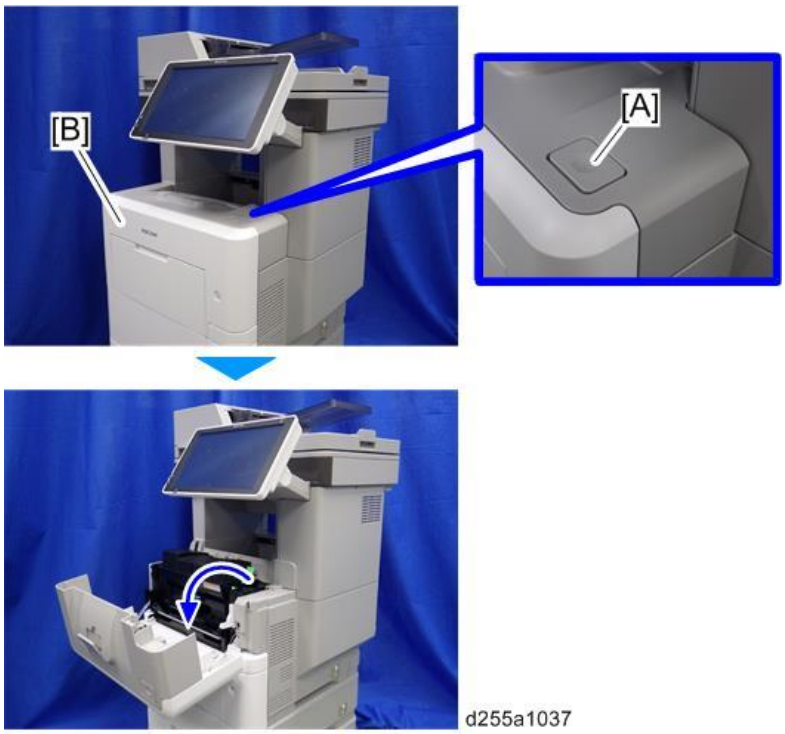


Development Unit

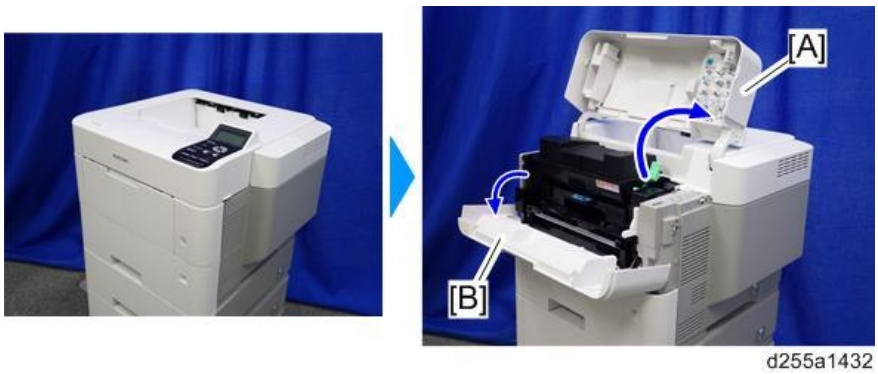
Development Unit

1. Open the front cover.

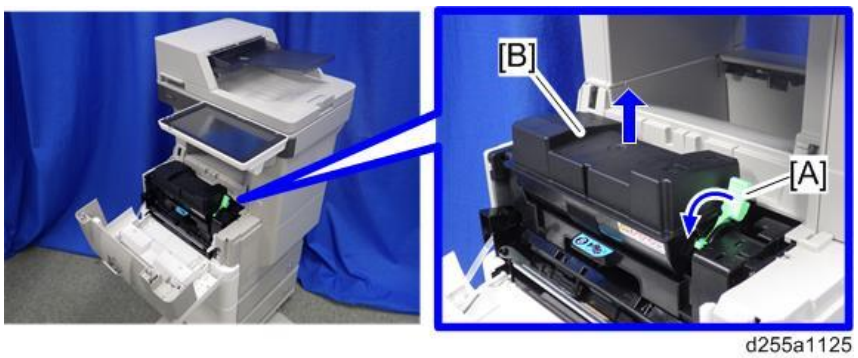
IM 550F/600F/600SRF: Push the button [A] and open the front cover [B].



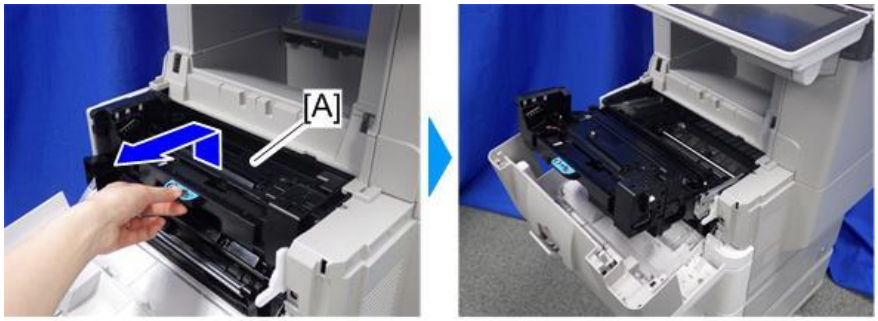
P 800/801: Open the upper cover [A], and then open the front cover [B].



2. Release the lock lever [A] by rotating it towards you, and then remove the toner cartridge [B].

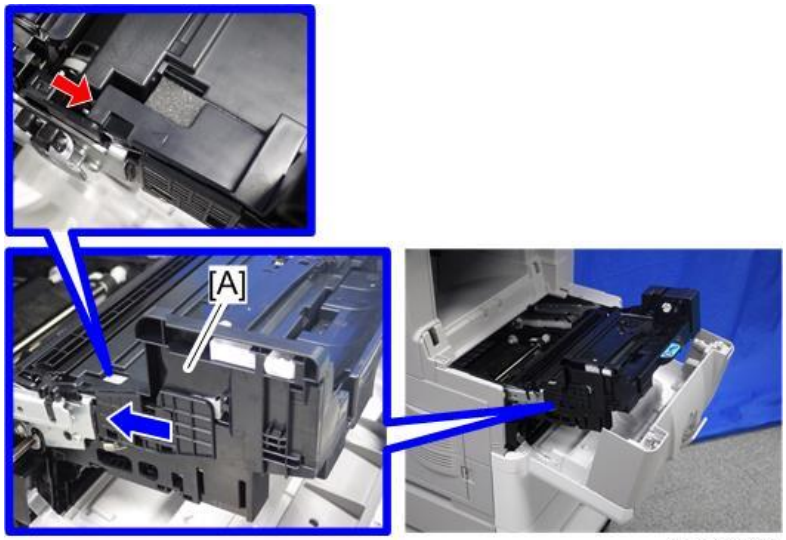


3. Pull out the PCDU [A].



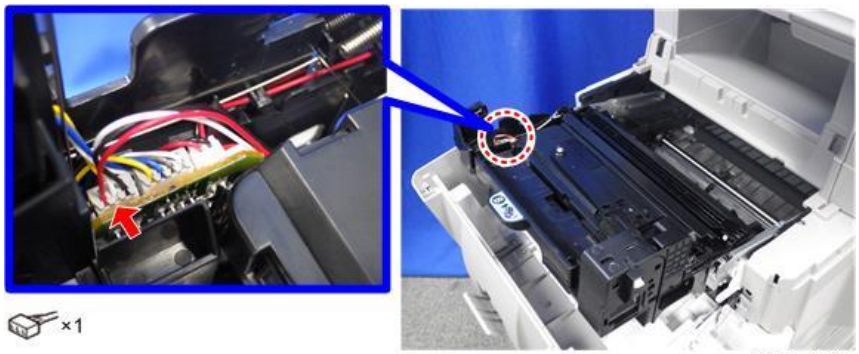
d255a1126

4. Release the hook, and then remove the container guide [A] by sliding it to the rear. (hook×1)



d255a1127

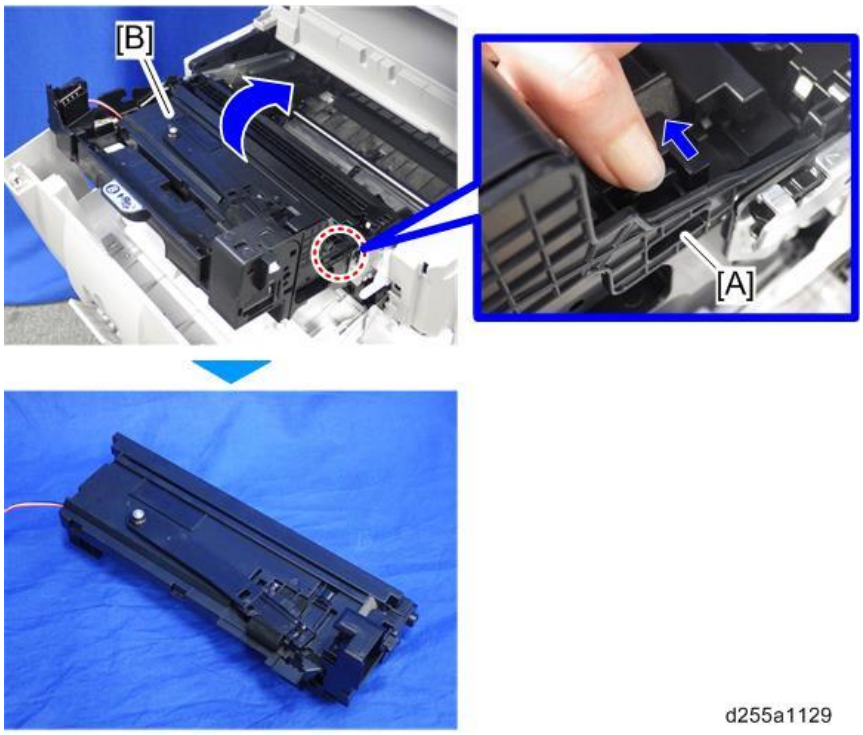
5. Disconnect the connector.



d255a1128

6. Release the hook [A] by pressing the lock lever, and then remove the development unit [B].

(hook×1)



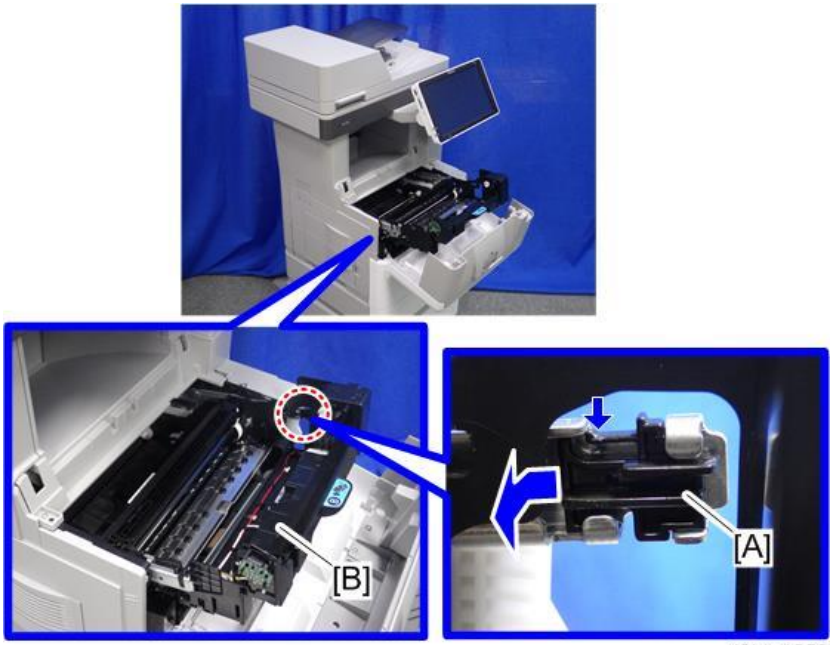
After replacement of development unit:

1. Execute SP3-900-001 to supply toner to the development unit.

Drum Unit

Drum Unit

1. Remove the development unit. (Development Unit)
2. Remove the right lock lever [A] from the drum unit [B].



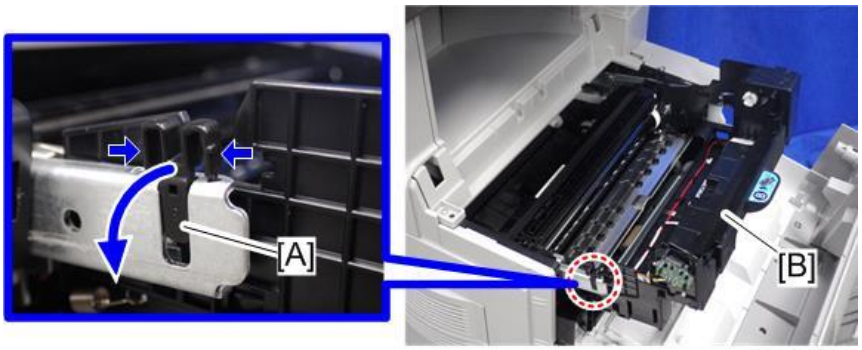
×1

d0bta1353

Note

- Be careful not to lose the right lock lever [A]. The right lock lever is not included in the drum unit as a service part.

3. Remove the left lock lever [A] from the drum unit [B].

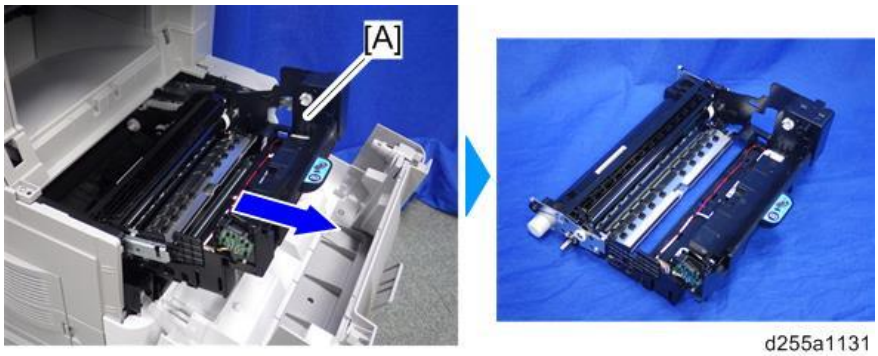


d255a1463

Note

- Be careful not to lose the left lock lever [A]. The left lock lever is not included in the drum unit as a service part.

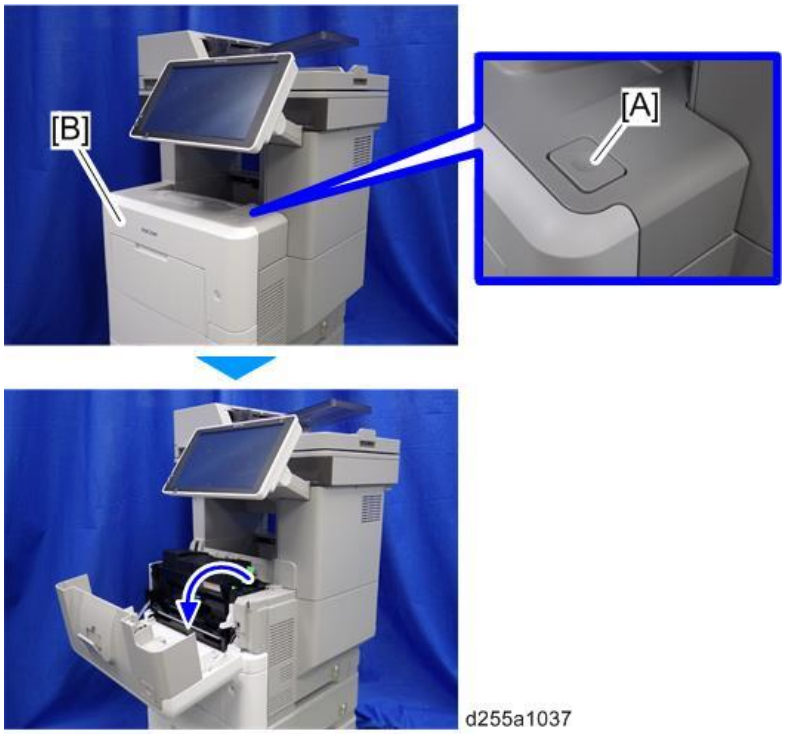
4. Remove the drum unit [A] by pulling it out.



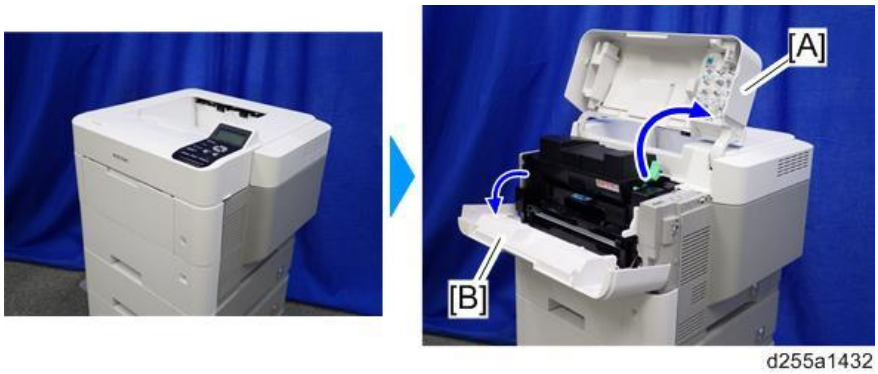
Charge Roller

1. Open the front cover.

IM 550F/600F/600SRF: Push the button [A] and open the front cover [B].

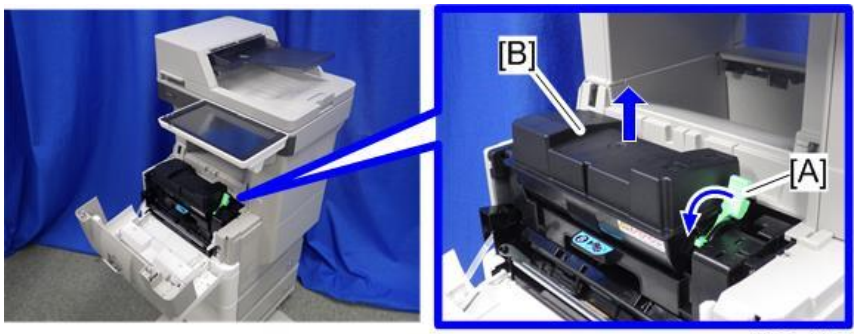


P 800/801: Open the upper cover [A], and then open the front cover [B].



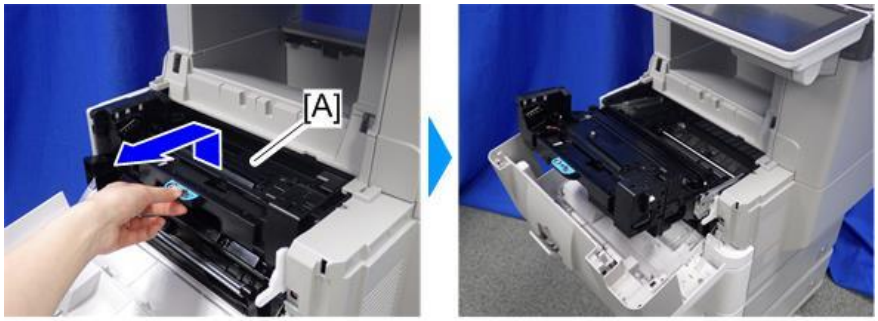
2. Unlock the toner cartridge by pulling the lock lever [A] towards the unlock position, and then

remove the toner cartridge [B].



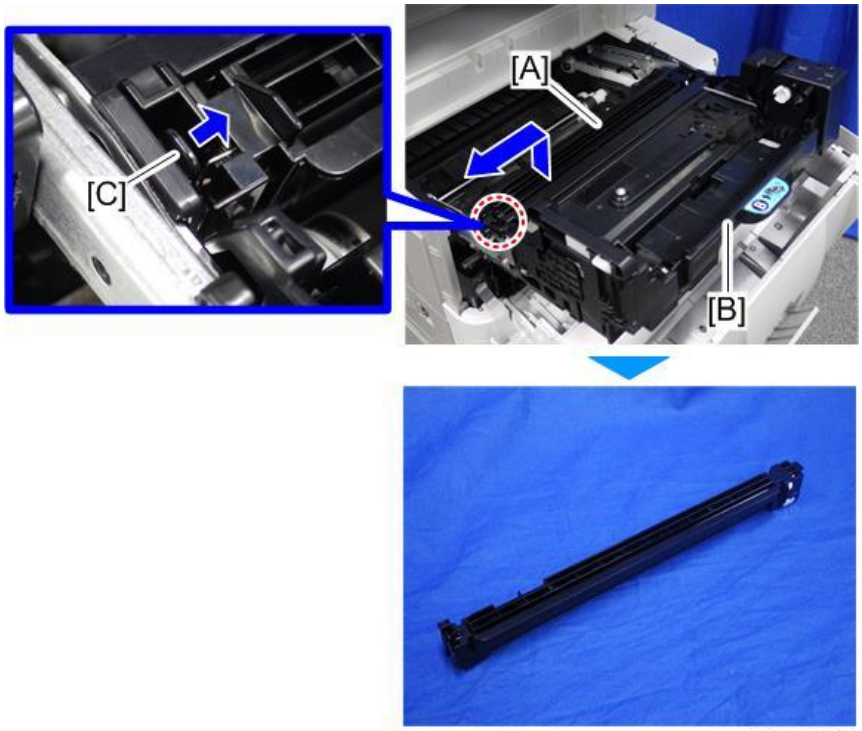
d255a1125

3. Pull out the PCDU [A].



d255a1126

4. Remove the charge roller [A] from the PCDU [B] by pressing the lock lever [C].

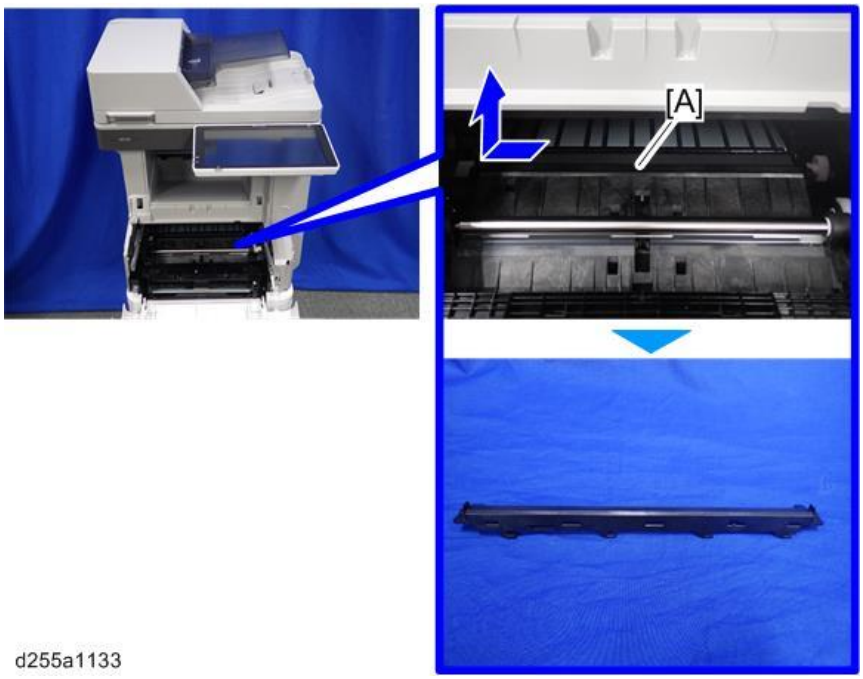


d255a1132

Transfer Unit

Transfer Roller

1. Remove the drum unit. (Drum Unit)
2. Remove the transfer guide plate [A] by sliding it to the left.



d255a1133

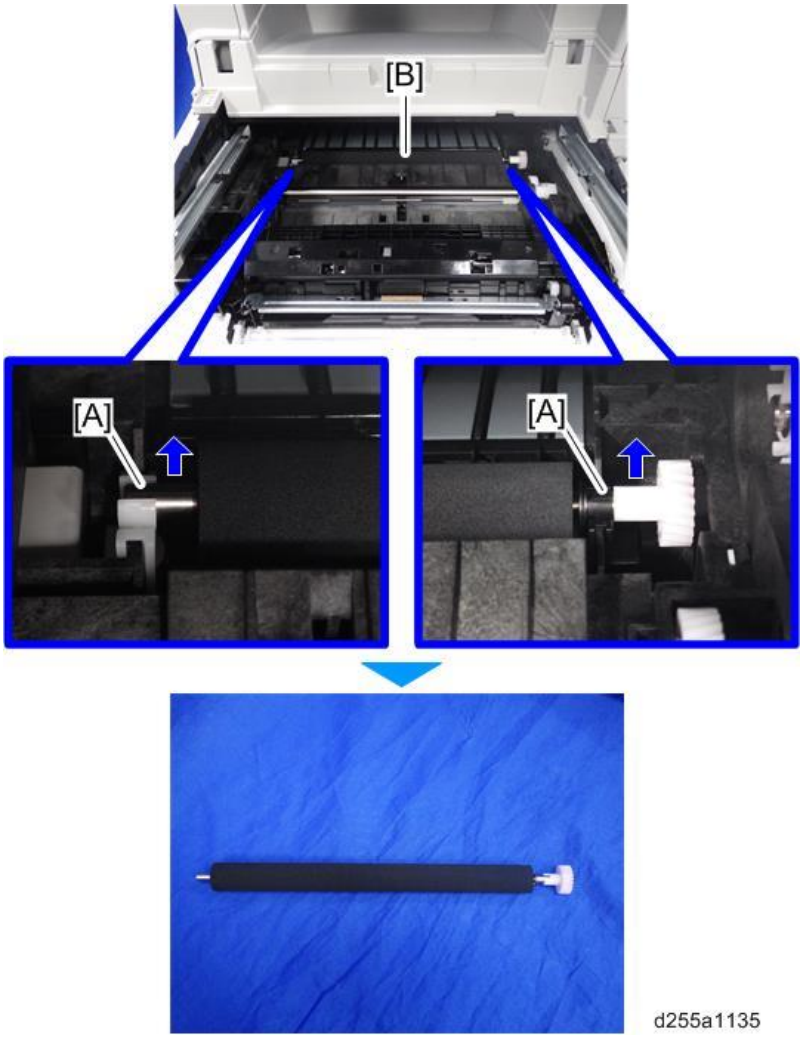
Note

- Be careful not to damage the hooks on the transfer guide plate when you remove or install the transfer guide plate.

d255a1134

3. Remove the shaft [A] of the transfer roller [B] from the bearings on the right and left sides with a flathead screwdriver.

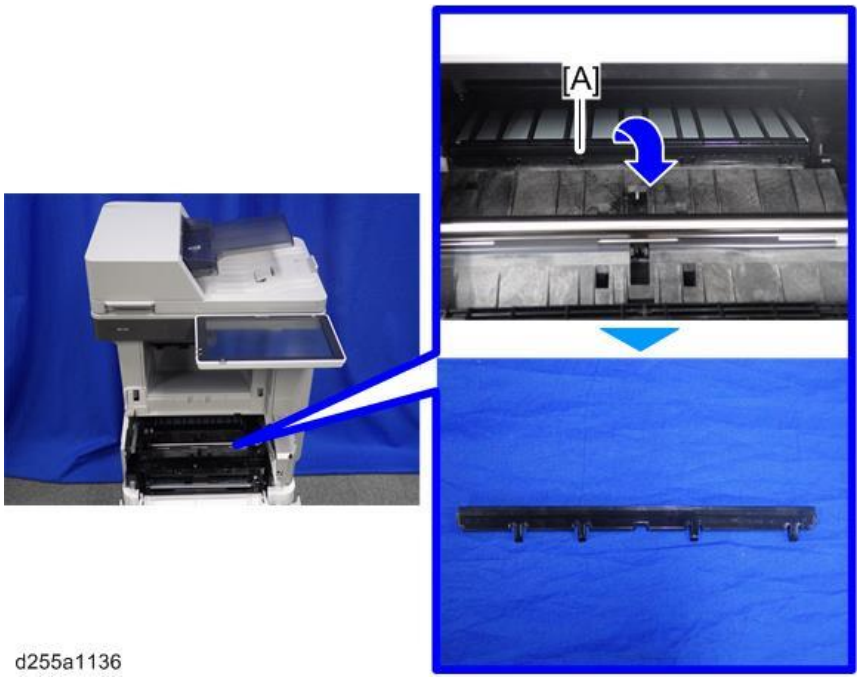
4. Remove the transfer roller [B].



Discharge Plate Unit

1. Remove the transfer roller. (Transfer Roller)

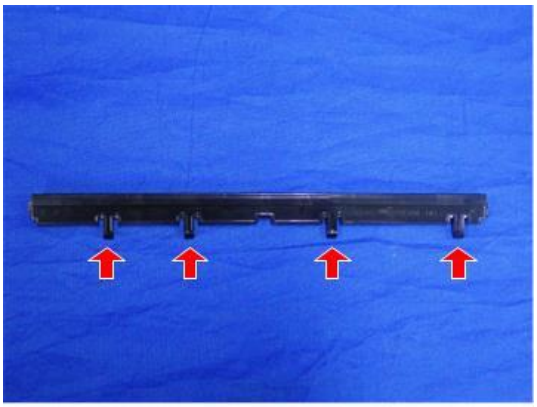
2. Remove the discharge plate unit [A] by rotating it towards you.



d255a1136

Note

- Be careful not to damage the hooks on the discharge plate unit when you remove or install the discharge plate unit.



d255a1137

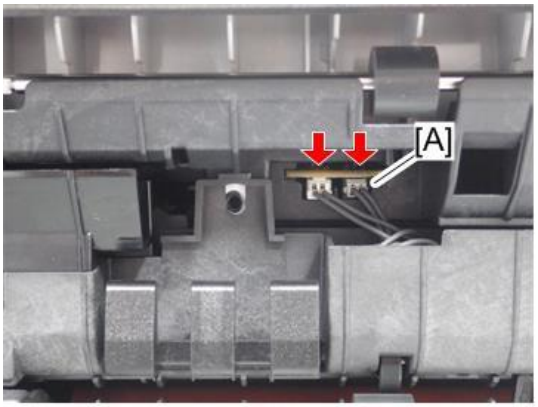
Fusing Unit

Fusing Unit

1. Remove the following covers.
   - IM 550F/600F/600SRF: Left upper cover (Left Upper Cover), Controller cover (Controller Cover)
   - P 800/801: Rear upper cover (Rear Upper Cover), Controller cover (Controller Cover)
2. Remove the connector cover [A] from the rear side of the machine.

×1 d255a1167

3. Disconnect the two connectors.

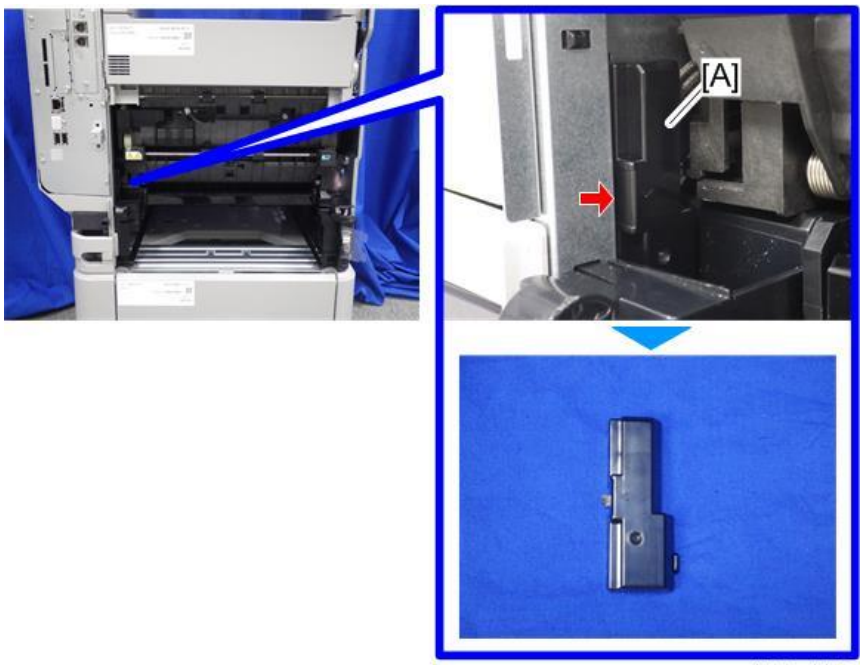


×2 d255a1168

Note

- The connector [A] is gray. Be careful not to connect the wrong connector when installing the fusing unit.

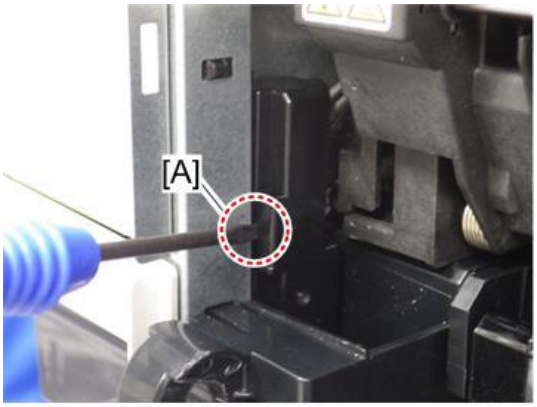
4. Remove the connector cover [A]. (hook×1)



d255a1169

Note

- When removing the connector cover, insert the flathead screwdriver into [A] and release the hook of the connector cover.



d255a1170

5. Remove the power connector cover [A].

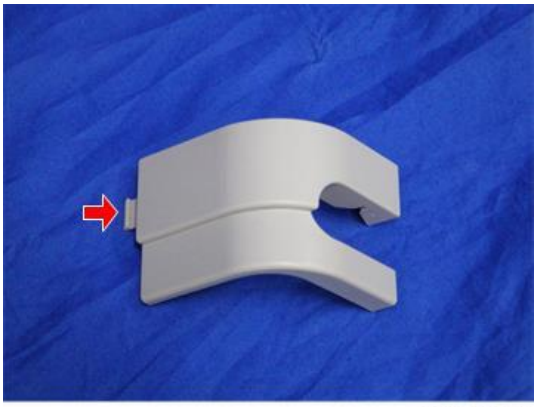
d255a1459

Note

- When removing the power connector cover, pull it in the direction of the arrow.

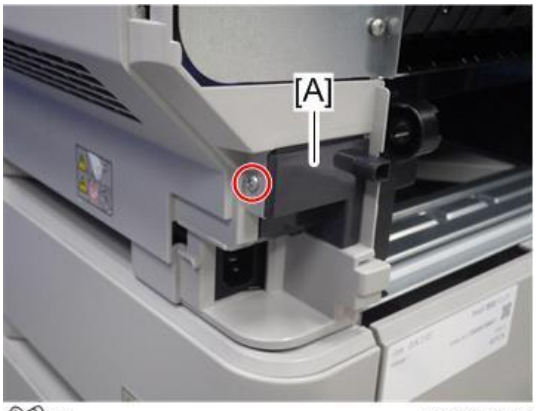
d255a1460

- Be careful not to damage the hook on the power connector cover when you remove or install the power connector cover.



d255a1078

6. Remove the screw from the connector cover [A].

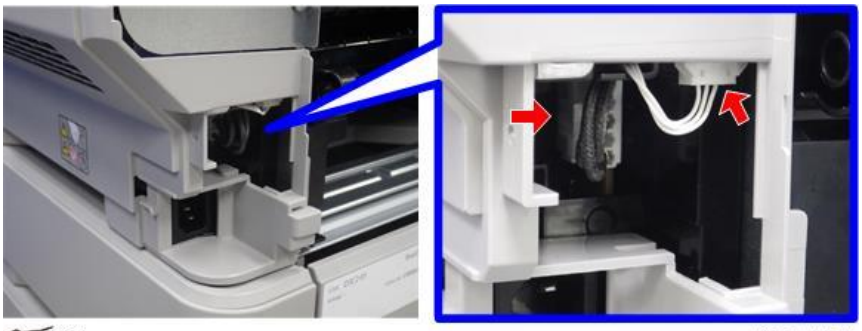


×1 d255a1172

7. Release the hook, and then remove the connector cover [A].

d255a1173

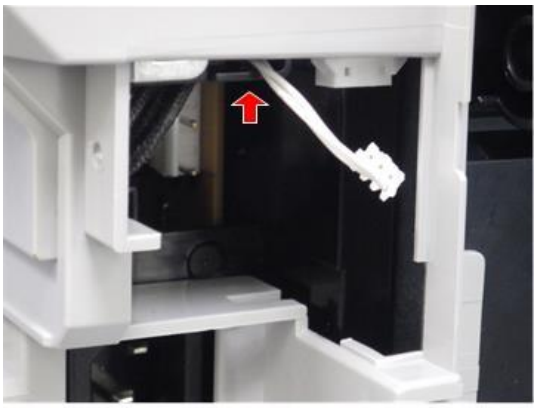
8. Disconnect the two connectors.



×2

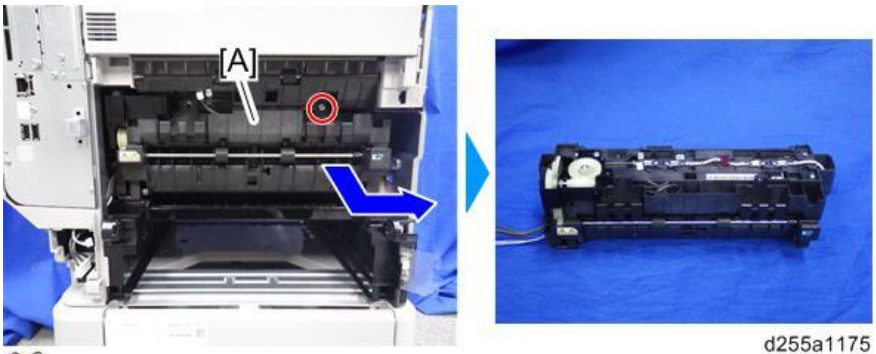
d255a1174

9. Release the connector from the harness guide.



d255a1461

10. Remove the fusing unit [A].

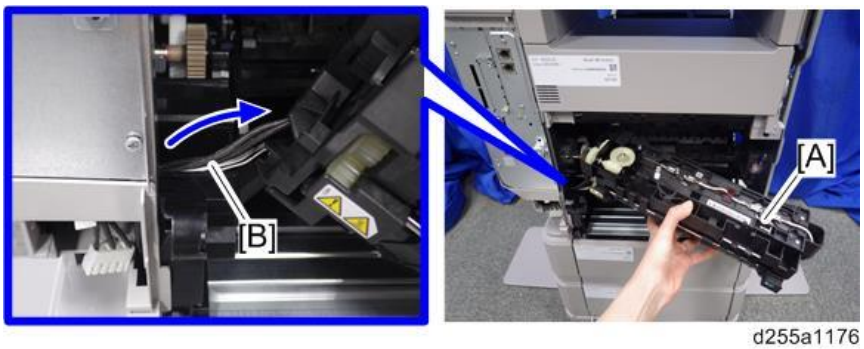


d255a1175

×1

Note

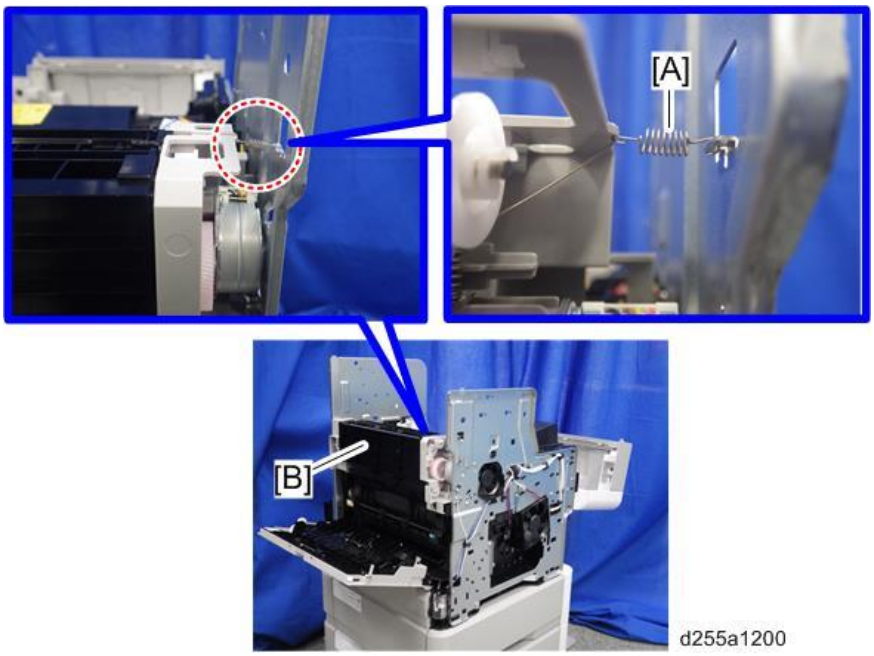
- When removing the fusing unit [A], release the harness [B] from the mainframe.



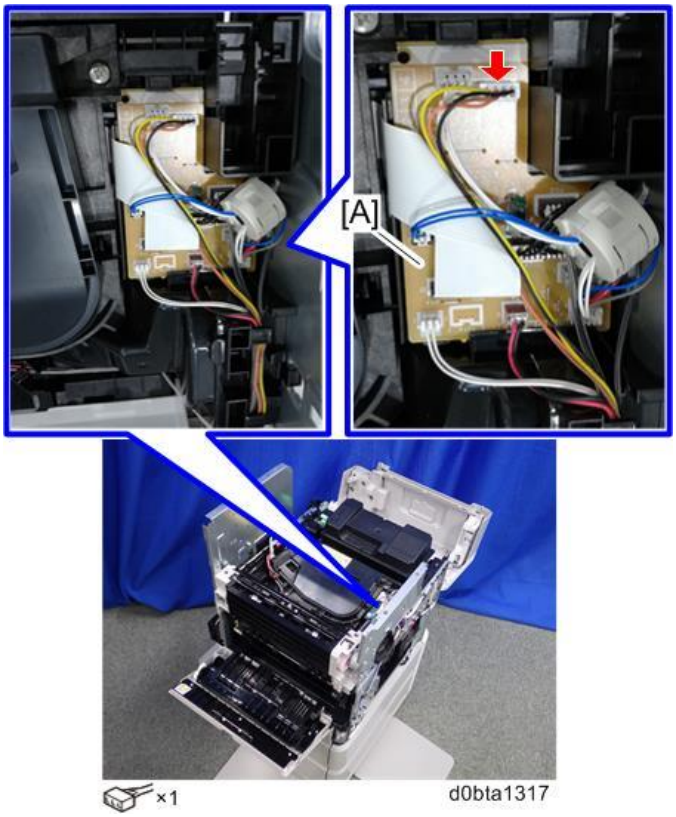
Paper Exit Unit (IM 550F/600F/600SRF)

Paper Exit Unit

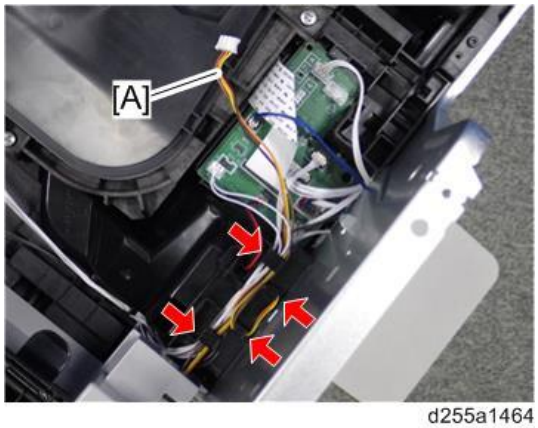
1. Remove the paper exit tray. (Paper Exit Tray (IM 550F/600F))
2. Remove the spring [A] from the right side of the paper exit unit [B].



3. Disconnect the connector from the Connect-Left PCB (PCB20) [A].

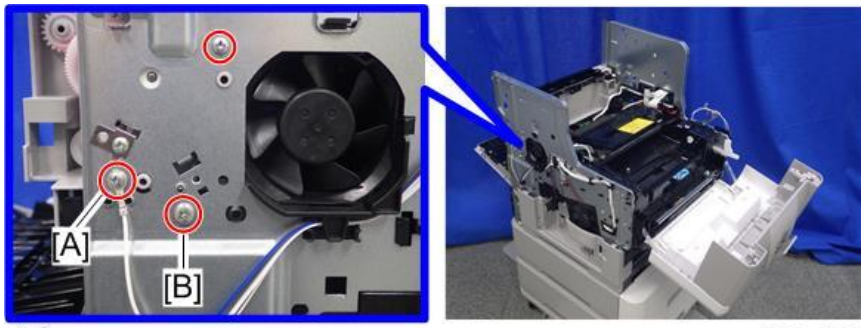


4. Release the harness [A] from the harness guides.



d255a1464

5. Remove the three screws from the left side of the machine.



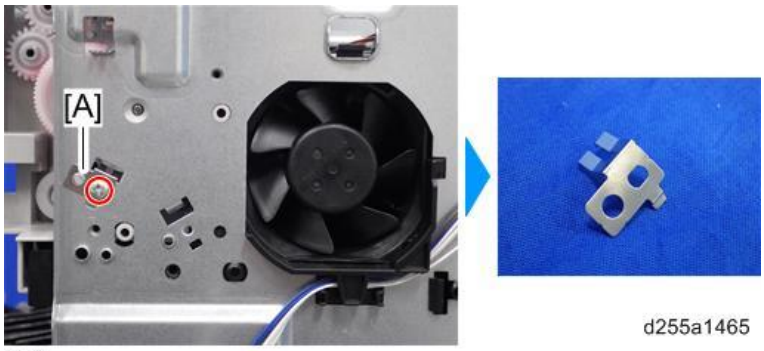
×3

d255a1202

Note

- The screw [A] is a ground screw and [B] is a big screw. Be careful not to use the wrong screws when installing the paper exit unit.

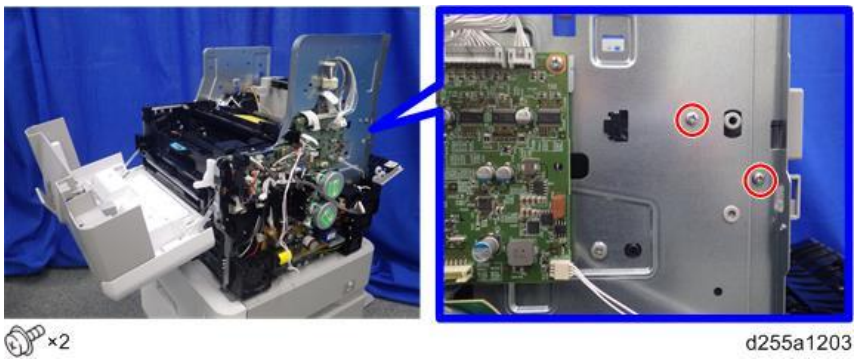
6. Remove the bracket [A].



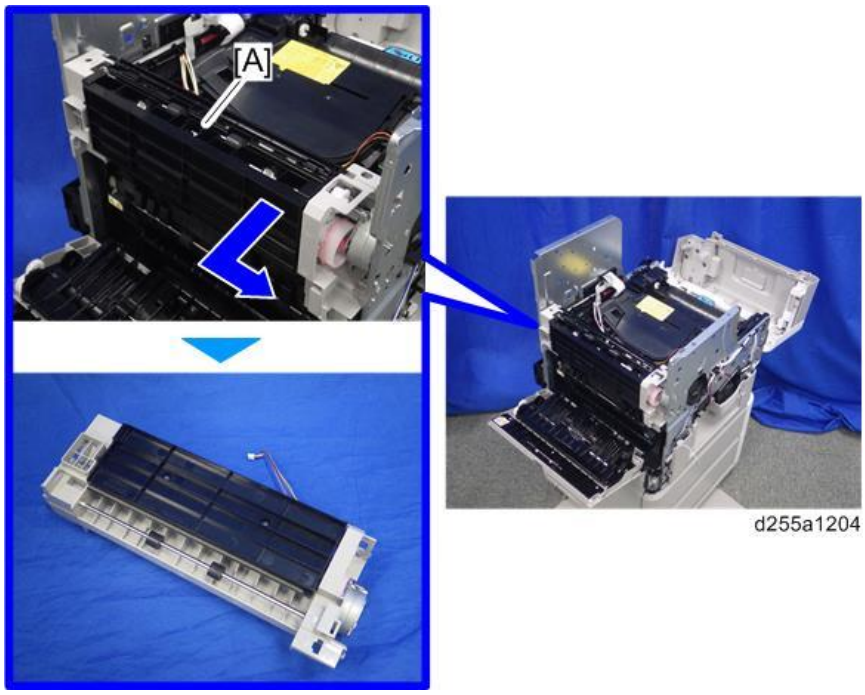
d255a1465

×1

7. Remove the two screws from the right side of the machine.



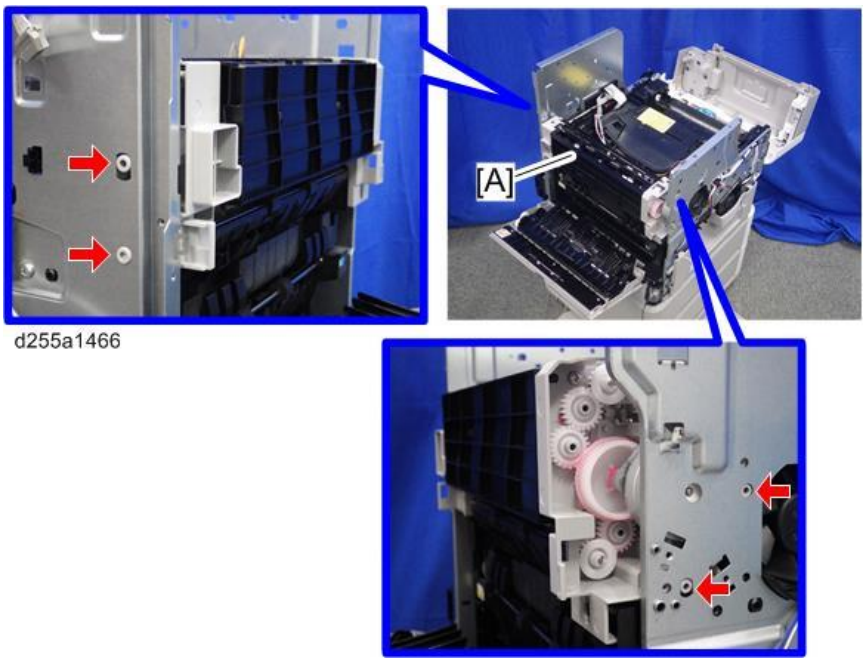
8. Remove the paper exit unit [A].



Note

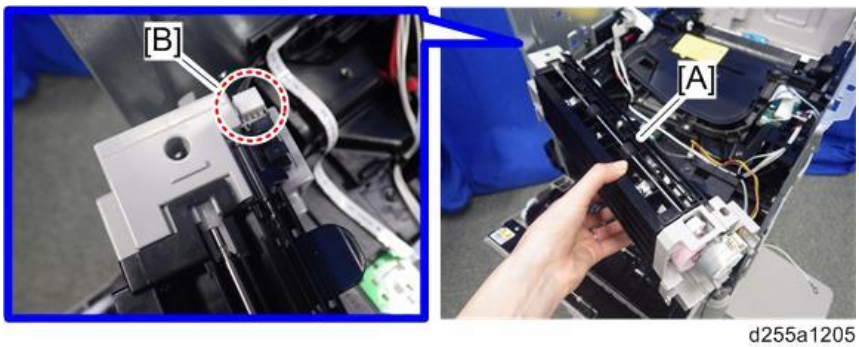
- When removing the paper exit unit [A], release the four hooks from both sides of the

paper exit unit.



d255a1466

- When removing the paper exit unit [A], disconnect the connector [B] from the paper exit unit.

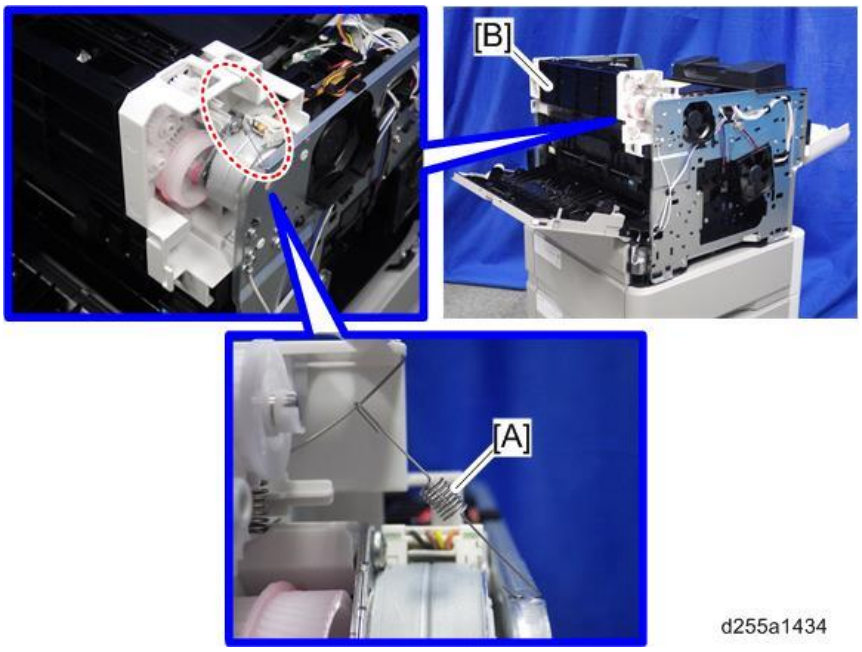


d255a1205

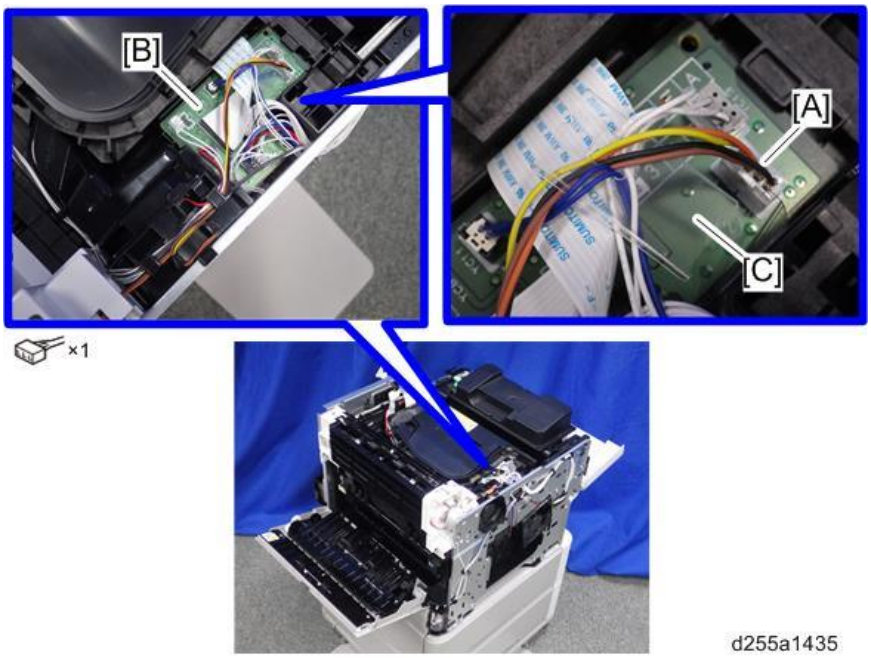
Paper Exit Unit (P 800/801)

Paper Exit Unit

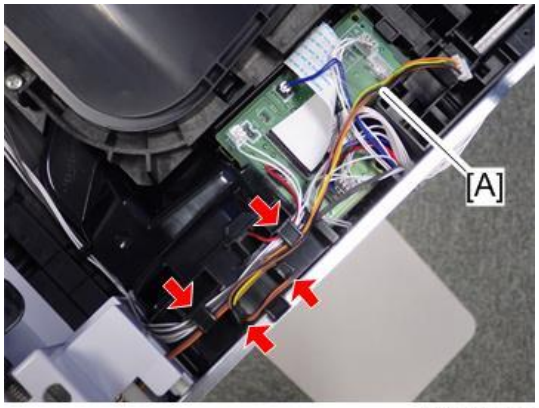
1. Remove the following covers.
   - Left lower cover (Left Lower Cover)
   - Controller box (Controller Box (P 800/801))
2. Remove the spring [A] from the paper exit unit [B].



3. Disconnect the connector [A] from the Connect-Left PCB (PCB20) [B], and then release it from the plastic harness guide [C].

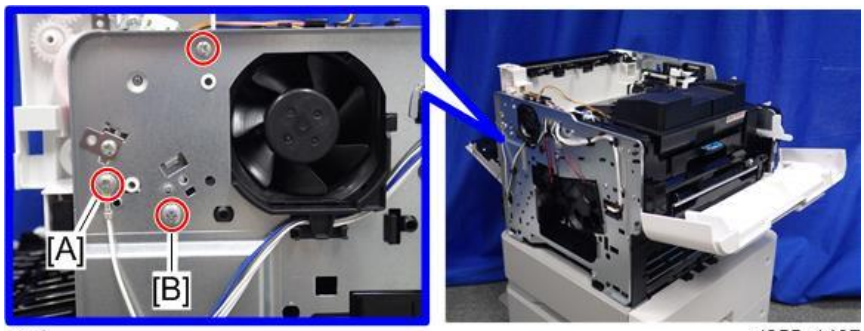


4. Release the harness [A], disconnected in the previous step, from the harness guides.



d255a1436

5. Remove the three screws from the left side of the machine.



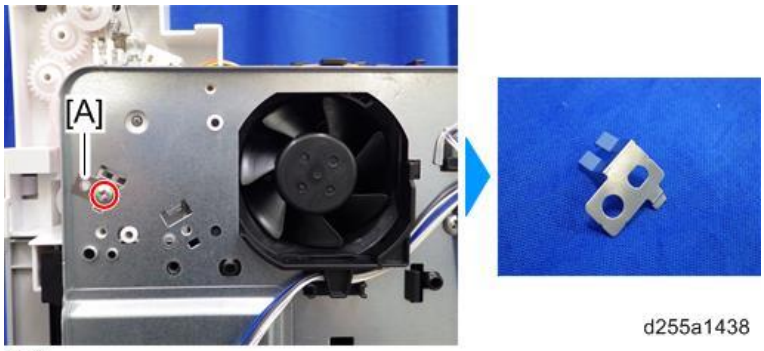
×3

d255a1437

Note

- The screw [A] is a ground screw and [B] is a big screw. Be careful not to use the wrong screws when installing the paper exit unit.

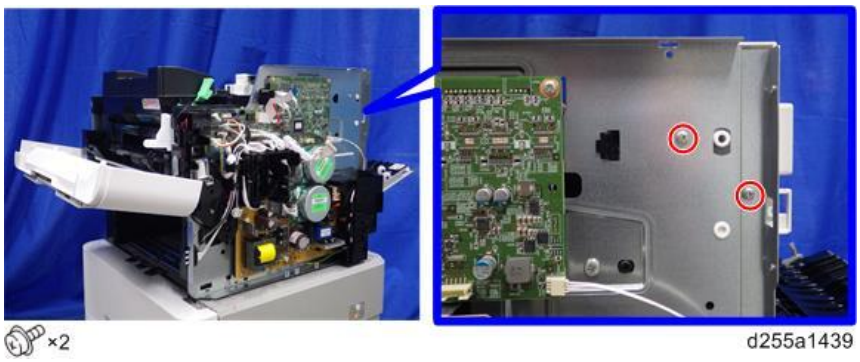
6. Remove the bracket [A].



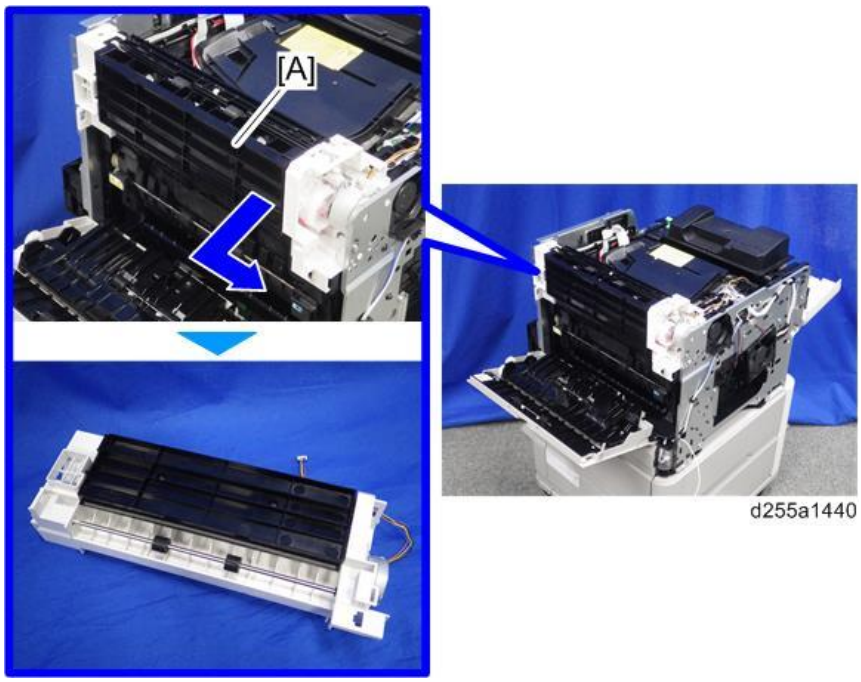
d255a1438

×1

7. Remove the two screws from the right side of the machine.



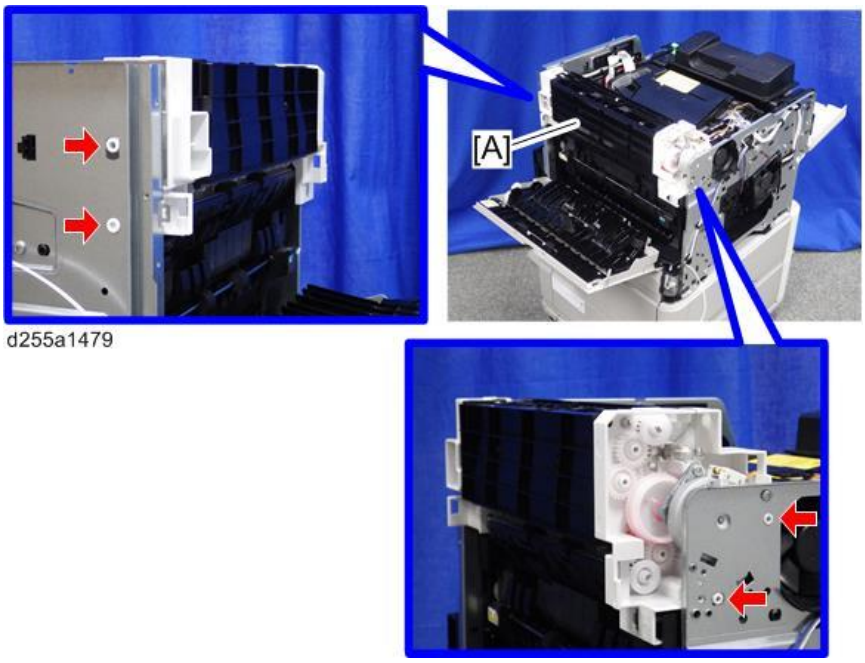
8. Remove the paper exit unit [A].



Note

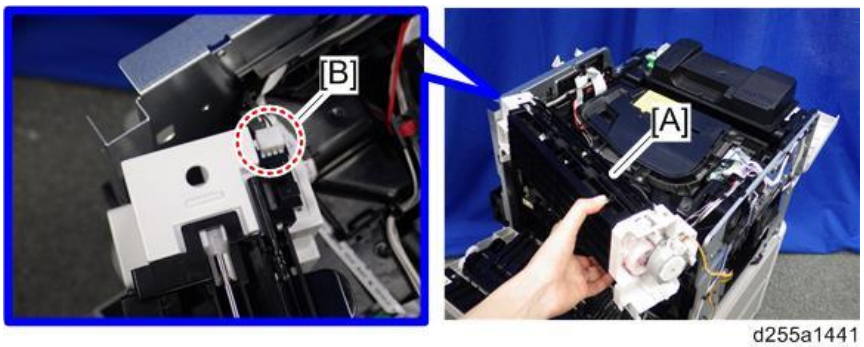
- When removing the paper exit unit [A], release the four hooks from both sides of the

paper exit unit.



d255a1479

- When removing the paper exit unit [A], disconnect the connector [B] from the paper exit unit.

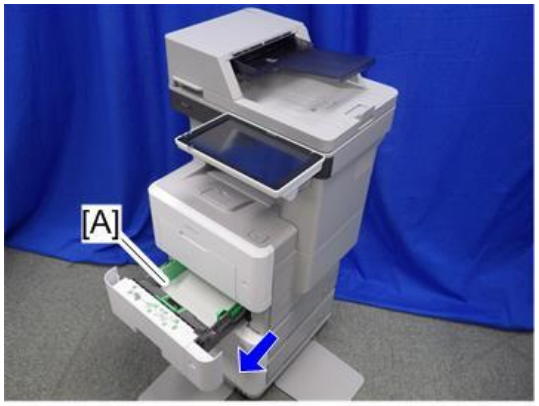


d255a1441

Paper Feed Unit

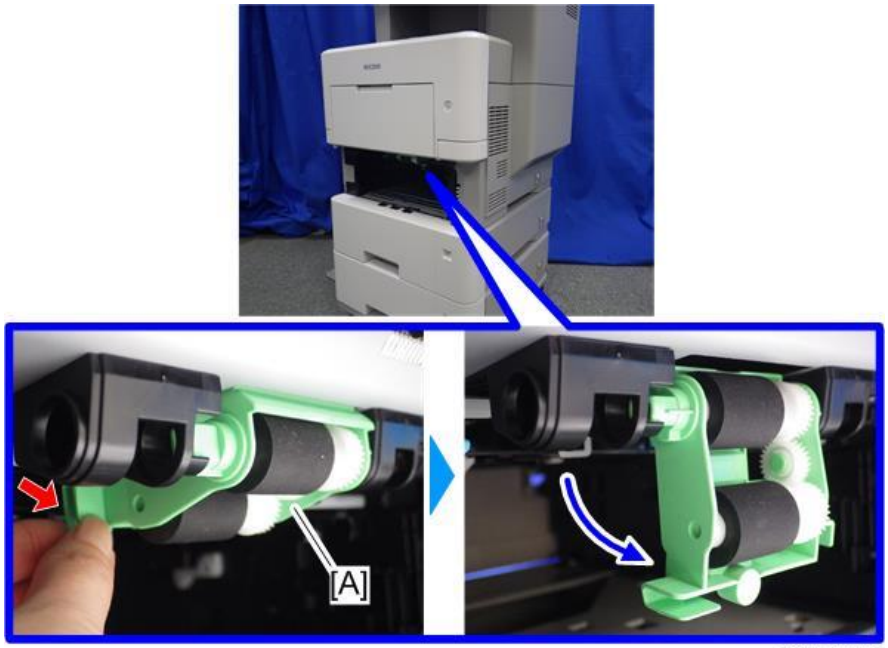
Paper Feed Roller, Pickup Roller

1. Remove the paper feed tray [A] by pulling it out.



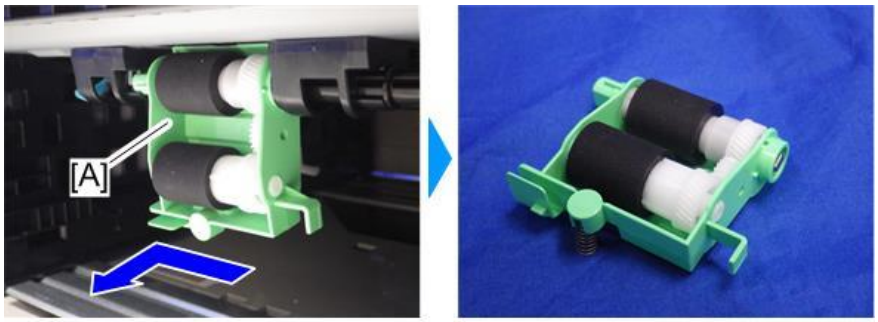
d255a1115

2. Release the lock of the feed roller holder [A] by releasing the lever.



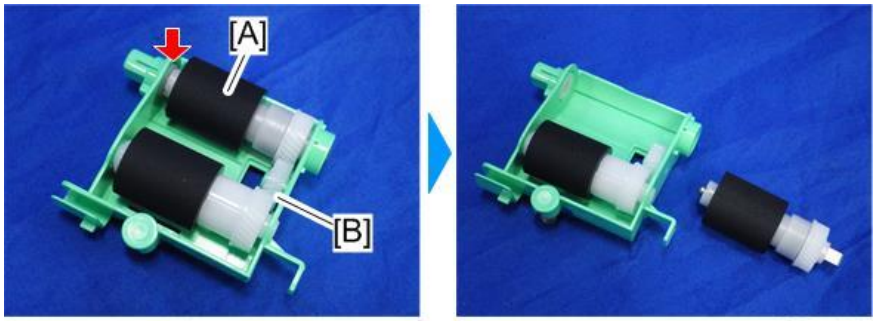
d255a1225

3. Remove the paper roller holder [A] by pushing it to the left.



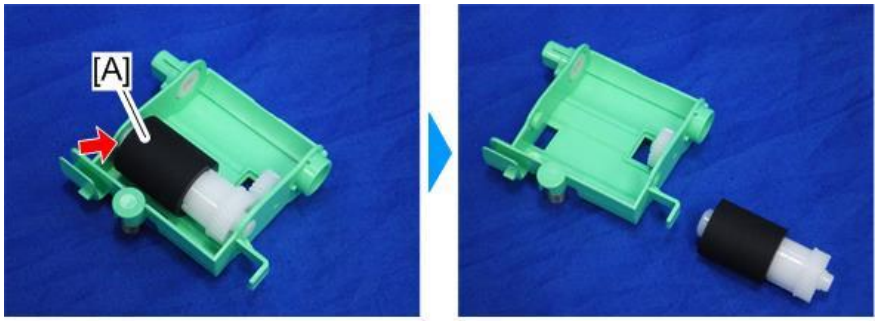
d255a1226

4. Remove the paper feed roller [A] from the feed roller holder [B]. (hook×1)



d255a1419

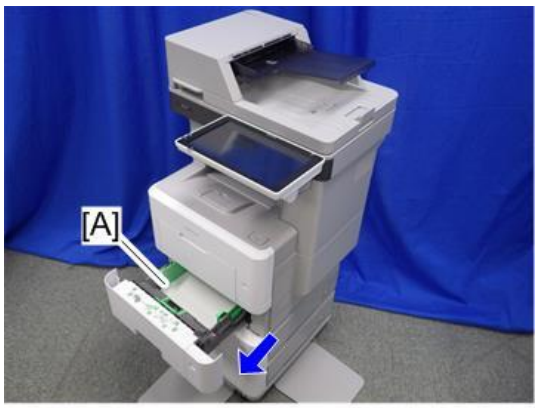
5. Remove the pickup roller [A]. (hook×1)



d255a1420

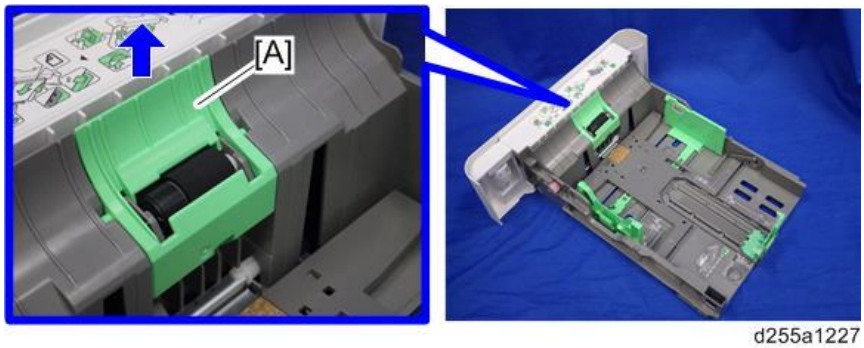
Separation Roller

1. Remove the paper feed tray [A] by pulling it out.



d255a1115

2. Remove the separation roller holder [A].

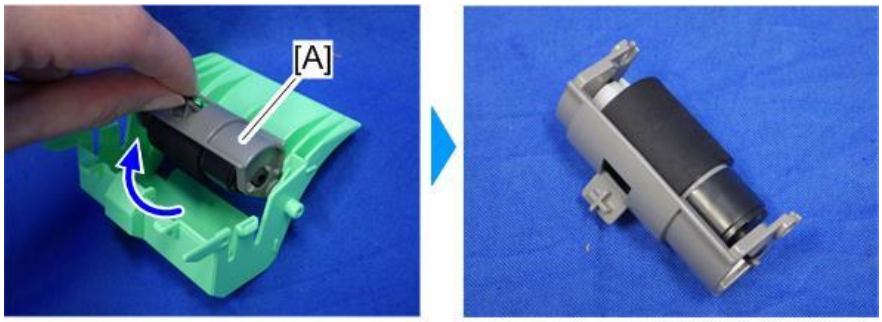


d255a1227

3. Remove the spring [A].

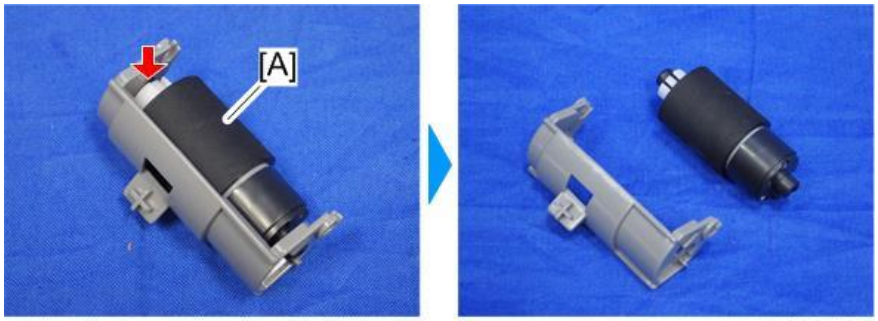
×1 d255a1228

4. Remove the separation roller unit [A] by rotating it as shown below.



d255a1229

5. Remove the separation roller [A]. (hook×1)

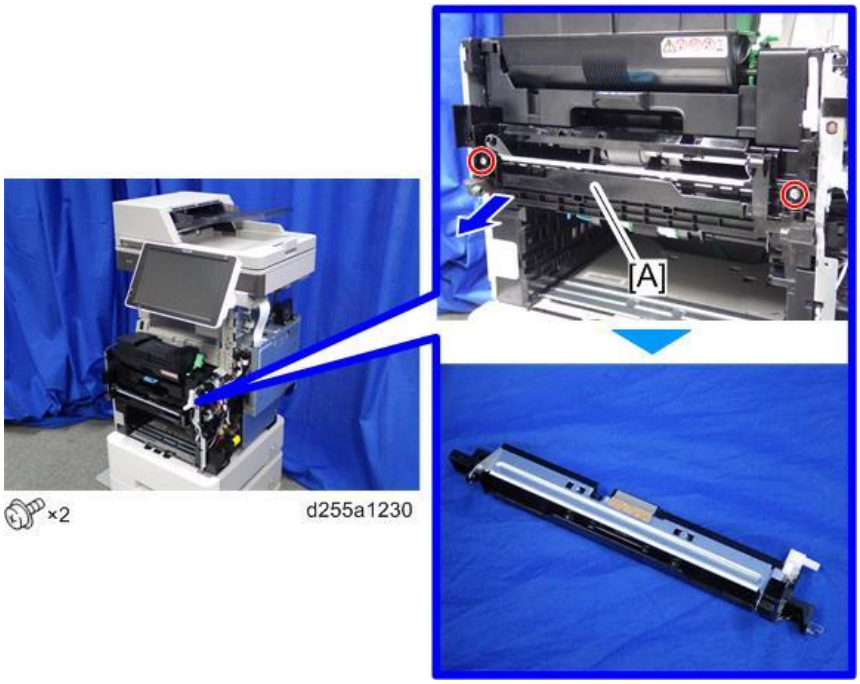


d255a1472

Bypass Tray Unit

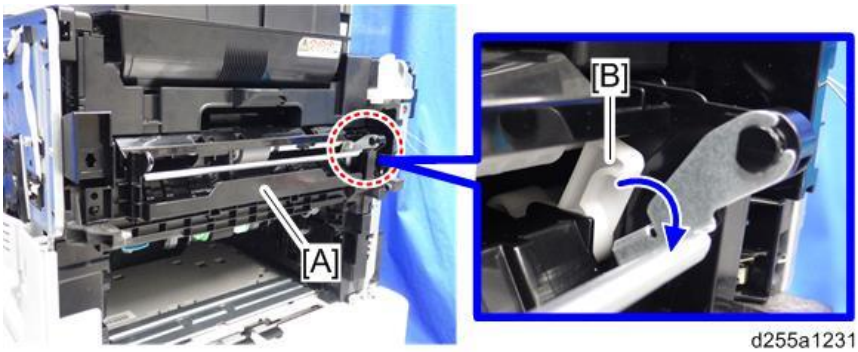
Bypass Paper Feed Roller

1. Remove the following covers.
   - IM 550F/600F/600SRF: Front cover (Front Cover), Right lower cover (Right Lower Cover (IM 550F/600F)), Left middle cover (Left Middle Cover)
   - P 800/801: Front cover (Front Cover)
2. Remove the bypass bottom plate unit [A].

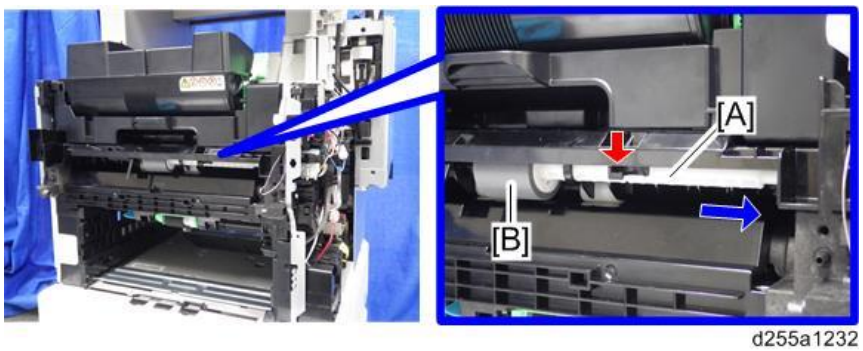


Note

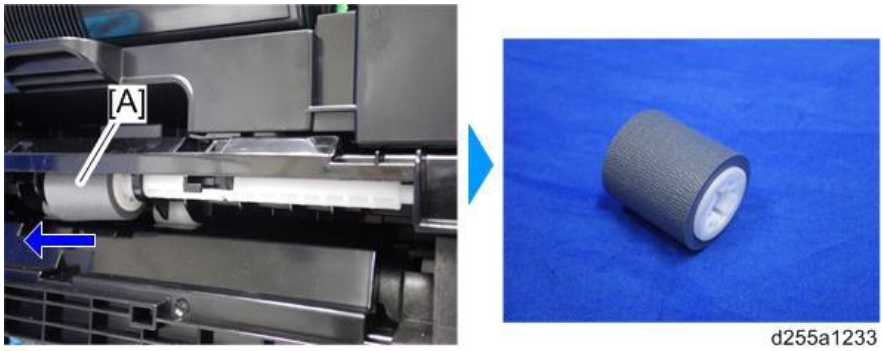
- When removing the bypass bottom plate unit [A], rotate the lever [B].



3. Slide the shaft [A] of the bypass tray paper feed roller [B] to the right while releasing the hook.



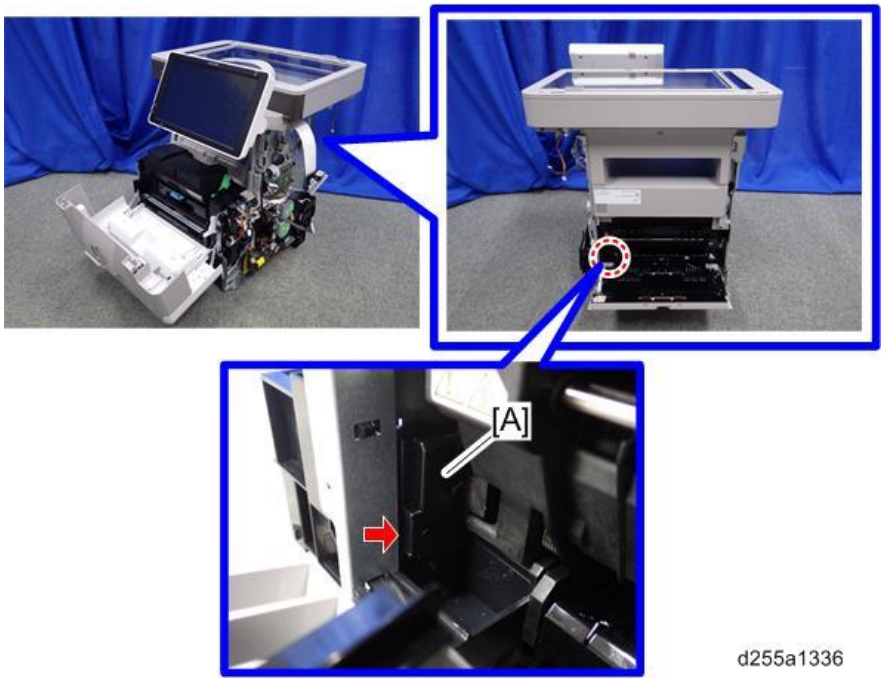
4. Remove the bypass tray paper feed roller [A].



Duplex Unit

Duplex unit

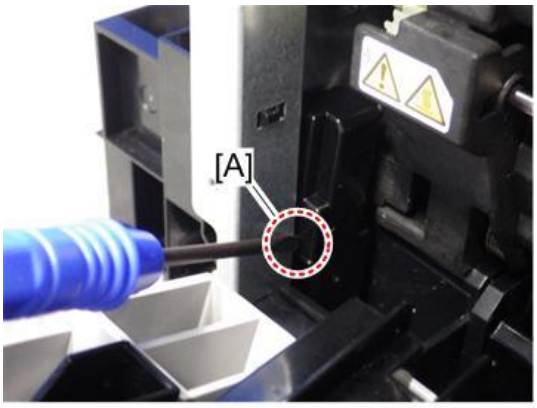
1. (IM 550F/600F/600SRF only) Remove the SPDF unit. (SPDF Unit)
2. Remove the left lower cover. (IM 550F/600F/600SRF: Left Lower Cover, P 800/801: Left Lower Cover)
3. Remove the controller box. (IM 550F/600F/600SRF: Controller Box (IM 550F/600F/600SRF), P 800/801: Controller Box (P 800/801))
4. Remove the PSU fan (FAN3). (PSU Fan (FAN3))
5. Remove the connector cover [A] from the rear side of the machine. (hook×1)



d255a1336

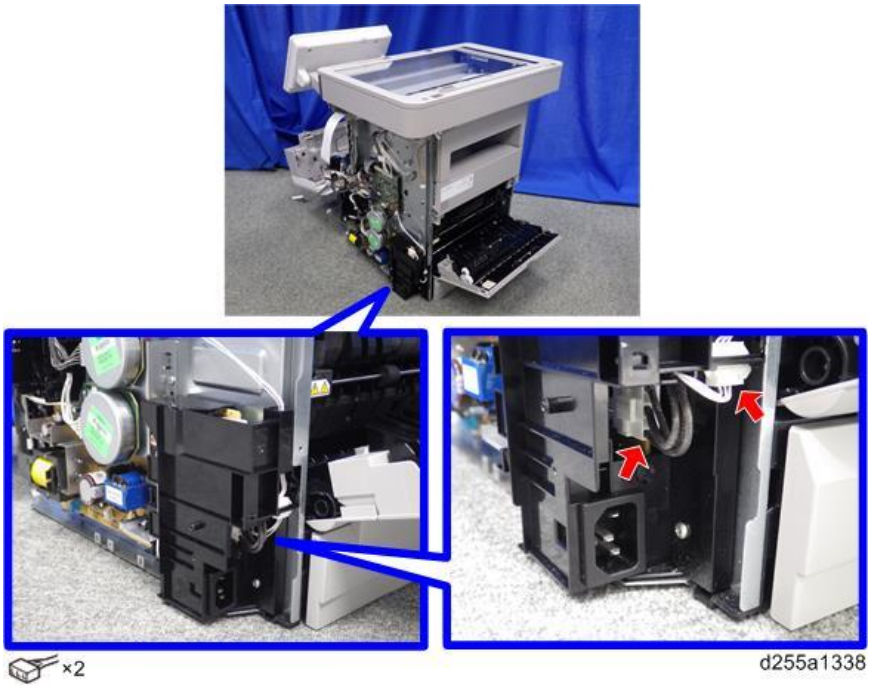
Note

- When removing the connector cover, insert the flathead screwdriver into [A] and release the hook of the connector cover.

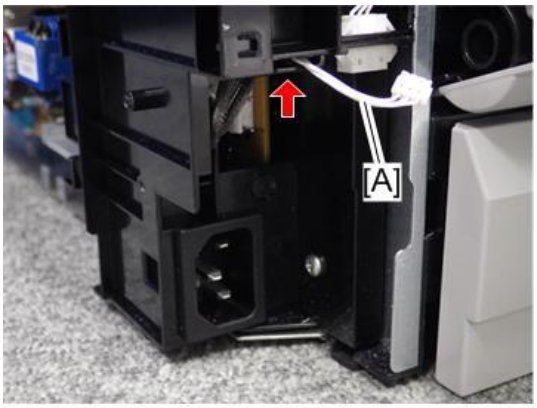


d255a1337

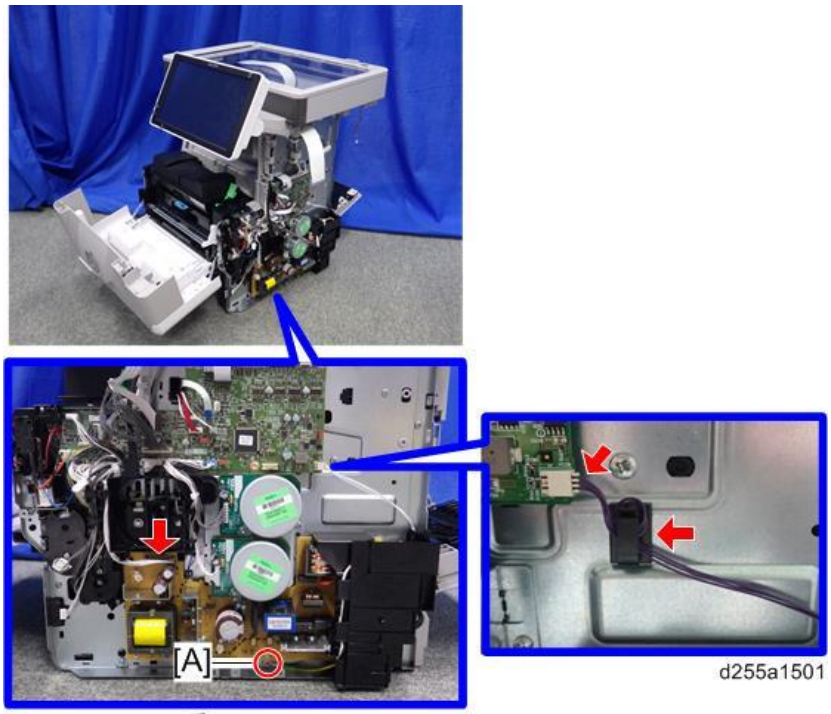
6. Disconnect the two connectors.



7. Release the harness [A] from the harness guide.



8. Remove the ground screw [A] and disconnect the two connectors.



d255a1501

×1, ×2, ×1

Note

- When installing, wind the harness [A] around the clamp [B] twice, as shown below.

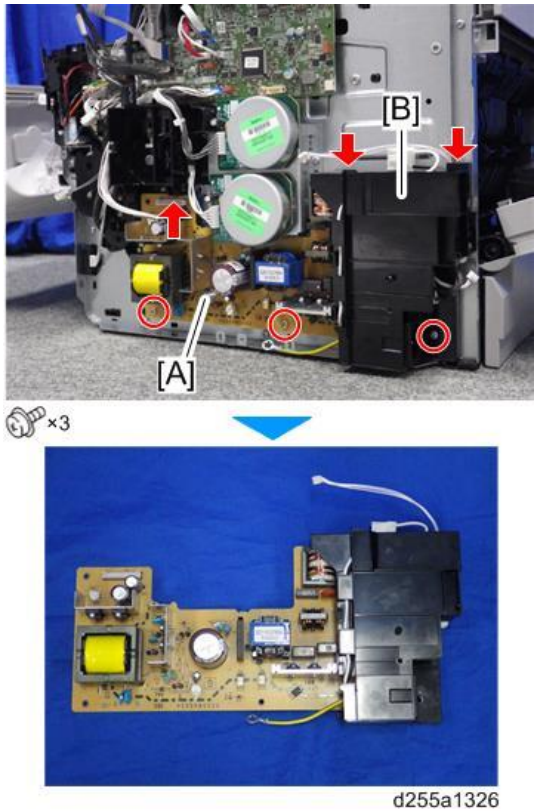
d255a1502

9. Disconnect the connector.

d255a1340

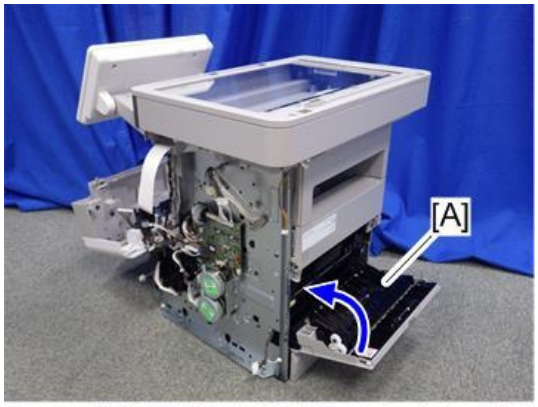
×1

10. Remove the PSU (PCB18) [A] and bracket [B] from the mainframe. (hook×3)



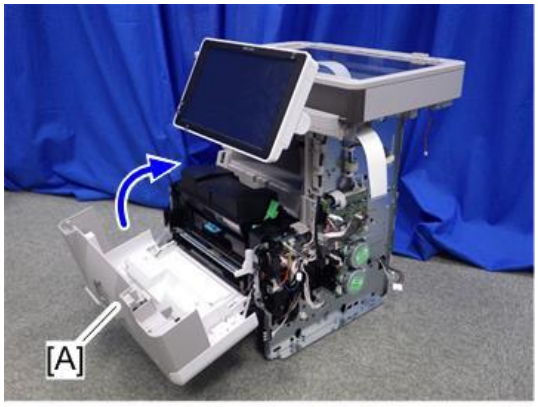
d255a1326

11. Close the rear upper cover [A].



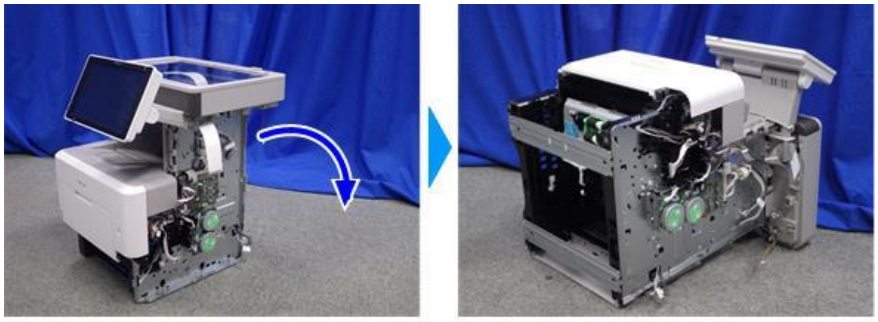
d255a1327

12. Close the front cover [A].



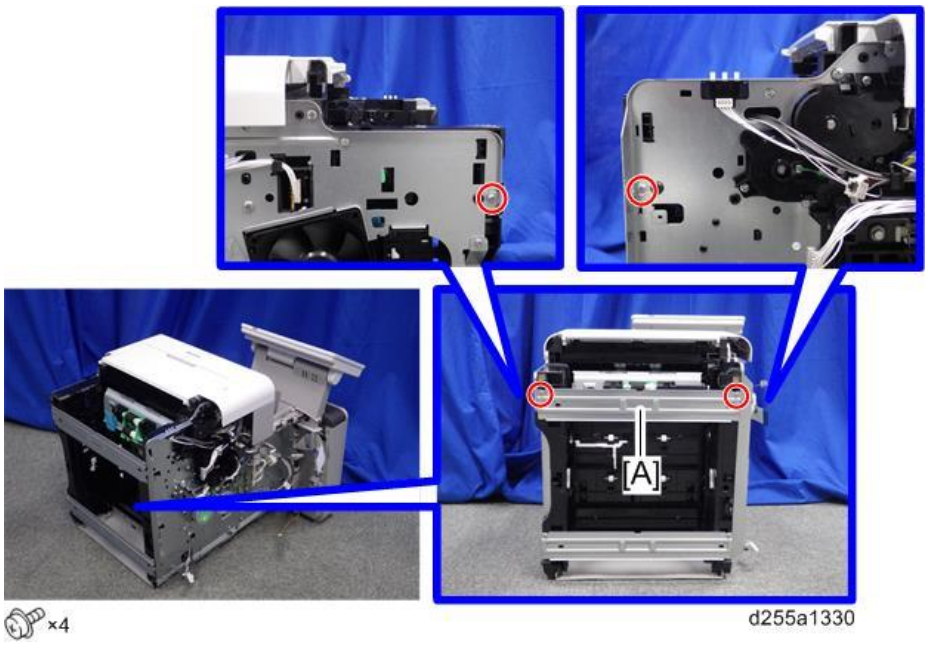
d255a1328

13. Stand the main unit front side up.



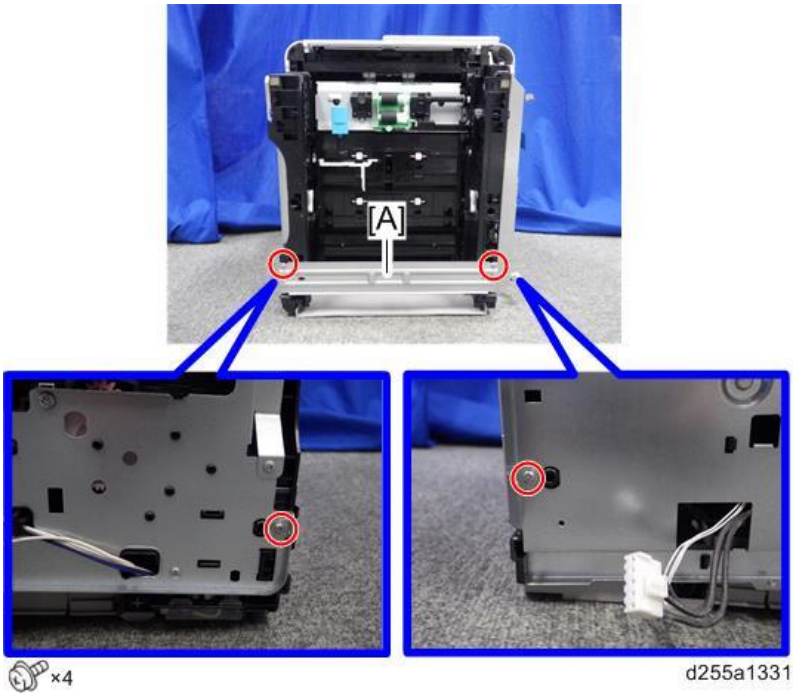
d255a1329

14. Remove the bottom plate [A].

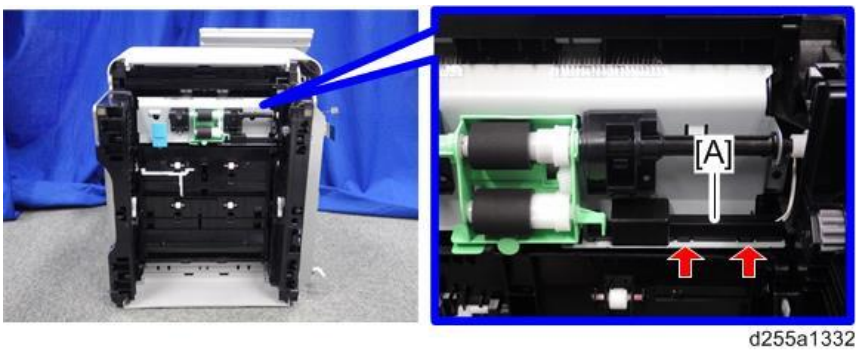


d255a1330

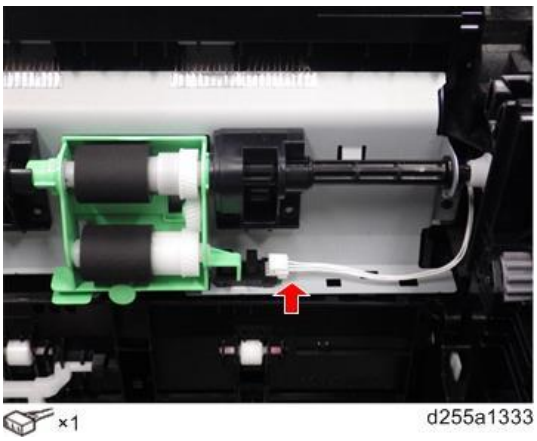
15. Remove the bottom plate [A].



16. Remove the wire cover [A]. (hook×2)

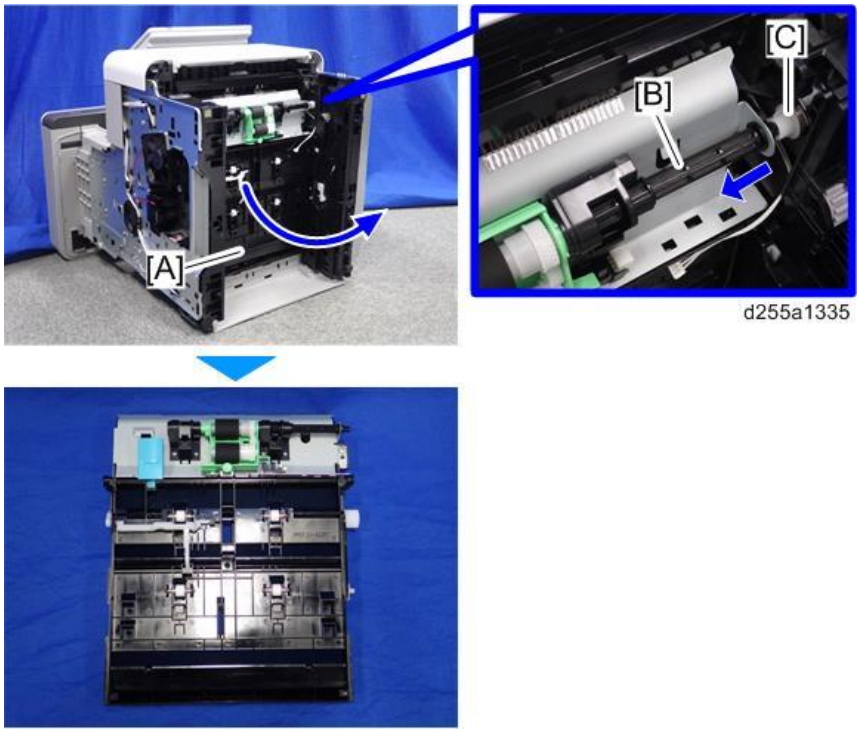


17. Disconnect the connector.



18. Remove the seven screws from the duplex unit [A].

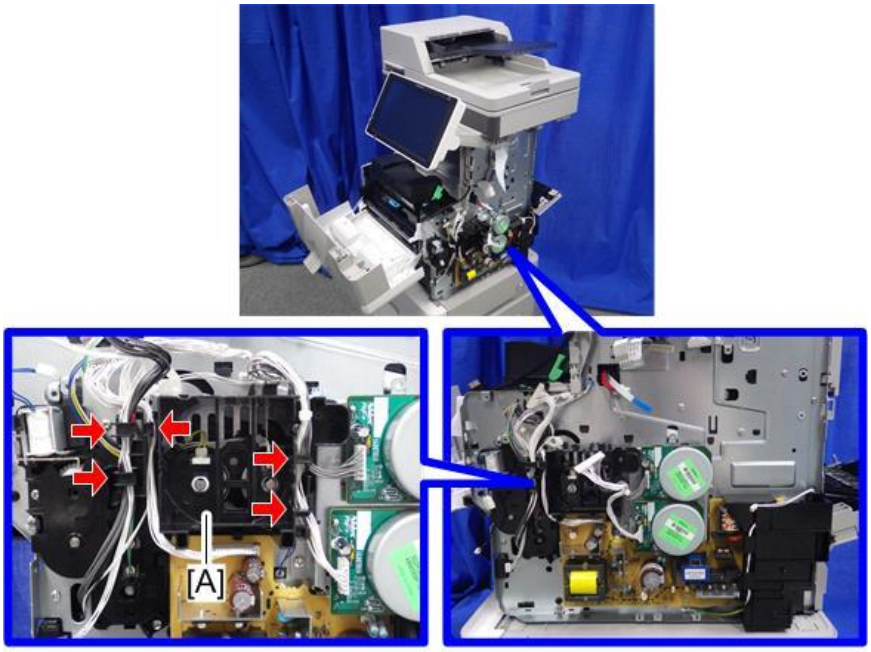
19. Remove the duplex unit [A] while removing the shaft [B] from the coupling [C].



Drive Unit

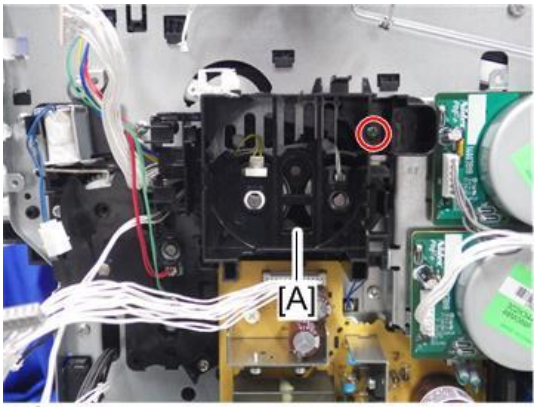
Paper Feed Motor

1. Remove the IOB (PCB17). (IM 550F/600F/600SRF: IOB (PCB17) (IM 550F/600F/600SRF), P 800/801: IOB (PCB17) (P 800/801))
2. Remove the PSU fan (FAN3). (PSU Fan (FAN3))
3. Remove the harness from the harness guides of the bracket [A].



d255a1219

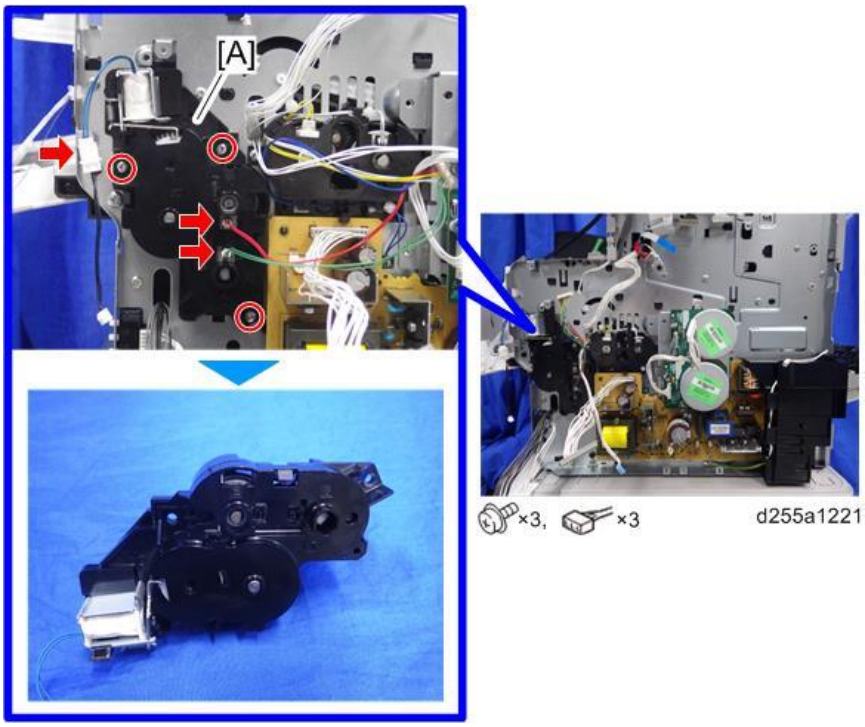
4. Remove the bracket [A].



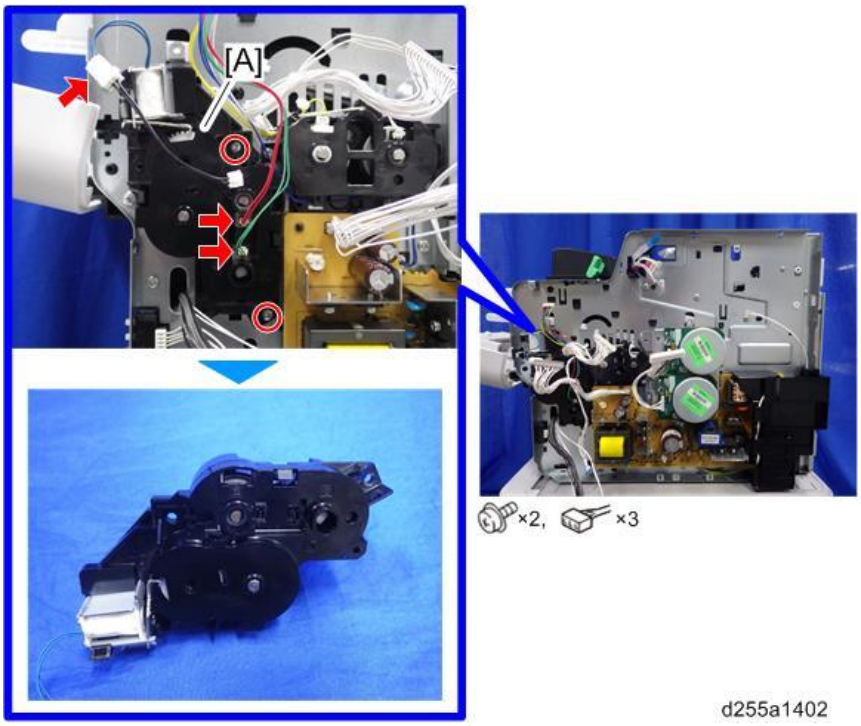
×1 d255a1220

5. Remove the paper feed motor [A].

IM 550F/600F/600SRF



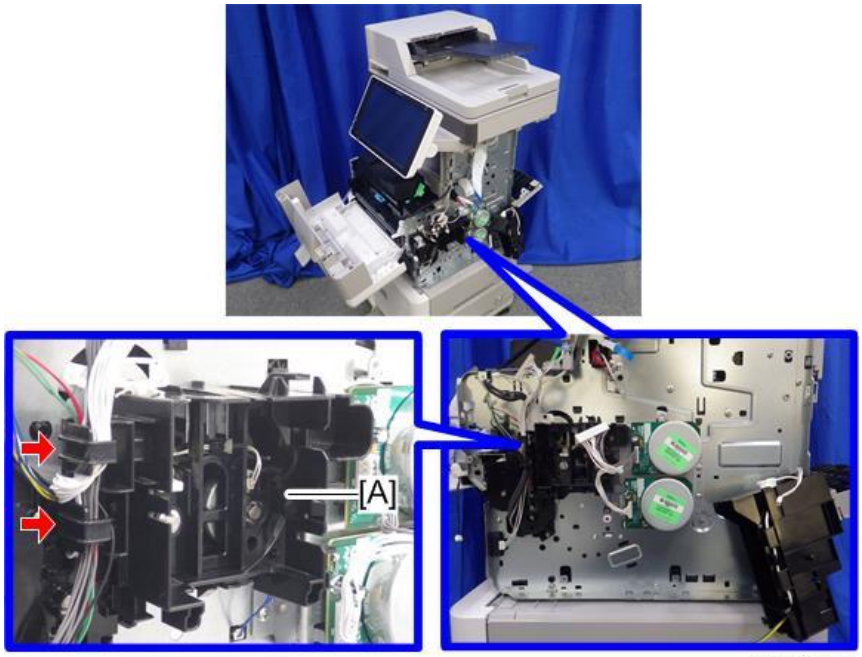
P 800/801



Main Drive Unit

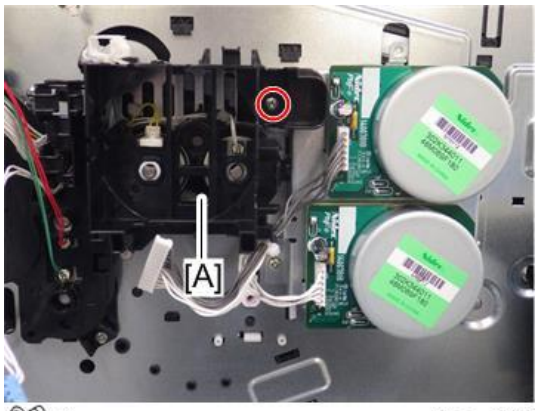
1. Remove the IOB (PCB17). (IM 550F/600F/600SRF: IOB (PCB17) (IM 550F/600F/600SRF), P 800/801: IOB (PCB17) (P 800/801))
2. Remove the PSU (PCB18). (PSU (PCB18))

3. Remove the harness from the harness guide of the bracket [A].



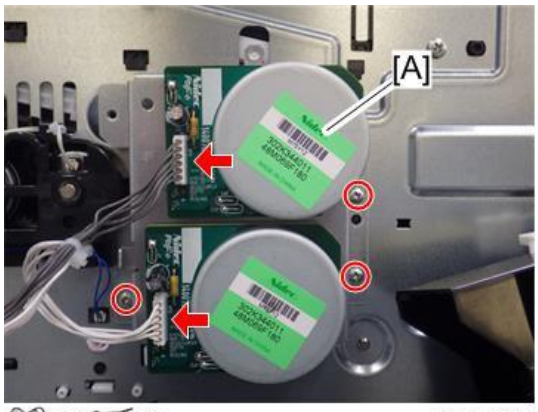
d255a1222

4. Remove the bracket [A].



×1 d255a1223

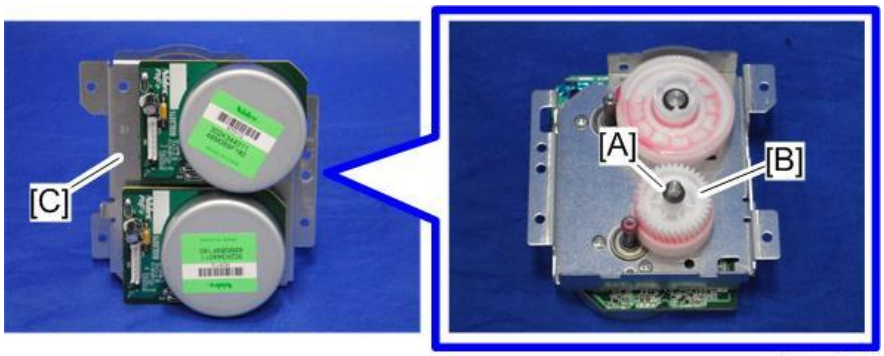
5. Remove the main drive unit [A].



×3, ×2 d255a1224

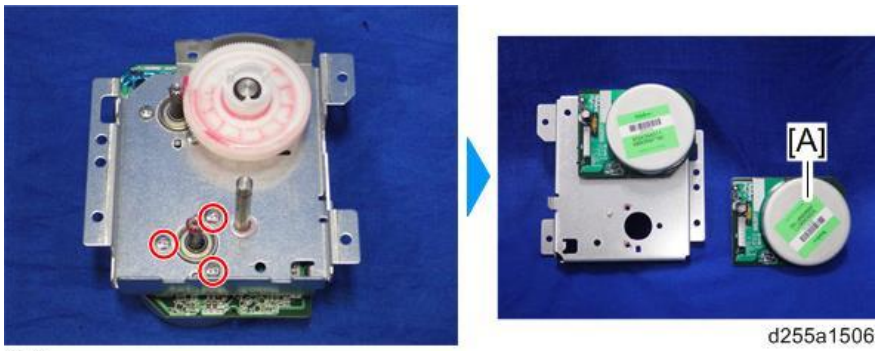
Main Motor (M11)

1. Remove the main drive unit. (Main Drive Unit)
2. Remove the clip [A] and gear [B] from the backside of the main drive unit [C].



d255a1505

3. Remove the main motor (M11) [A].

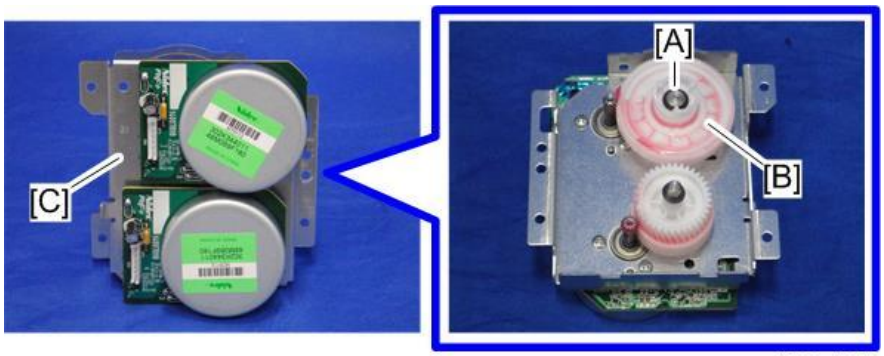


d255a1506

×3

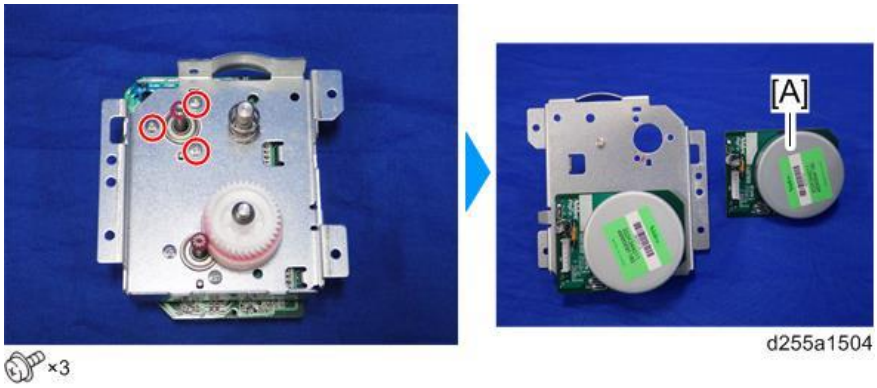
Drum Motor (M6)

1. Remove the main drive unit. (Main Drive Unit)
2. Remove the clip [A] and gear [B] from the backside of the main drive unit [C].



d255a1503

3. Remove the drum motor (M6) [A].



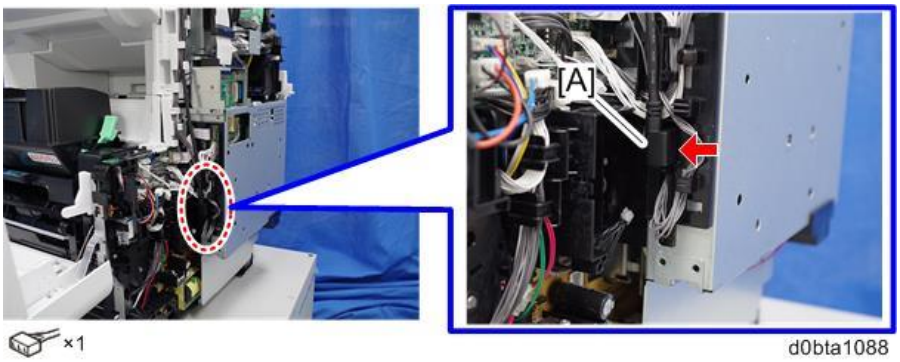
Electrical Components

Controller Box

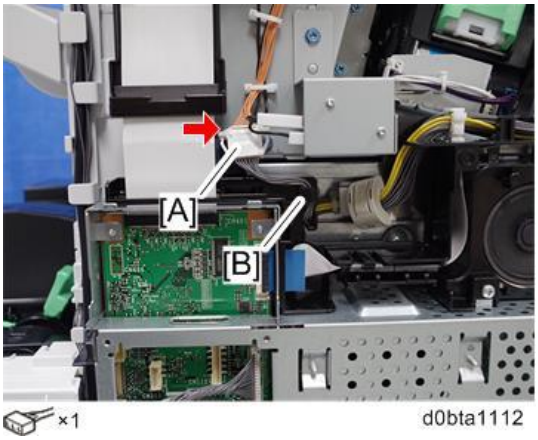
Controller Box (IM 550F/600F/600SRF)

1. Remove the right lower cover. (Right Lower Cover)
2. Remove the bracket [A].

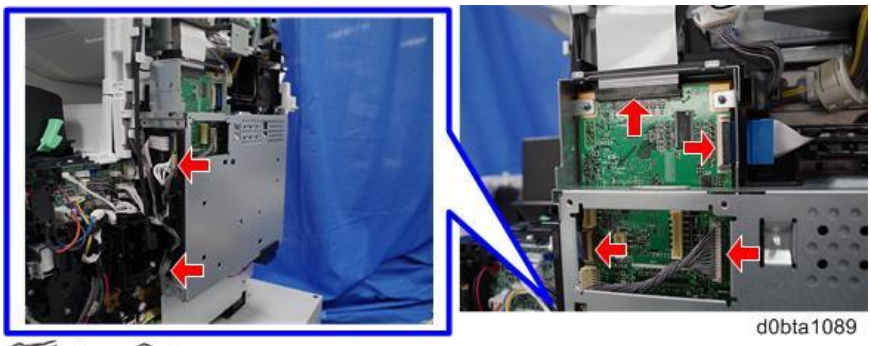
3. Disconnect the USB connector [A] of the operation panel.



4. **IM 600SRF**: Disconnect the connector [A] and release the harness from the harness guide [B].



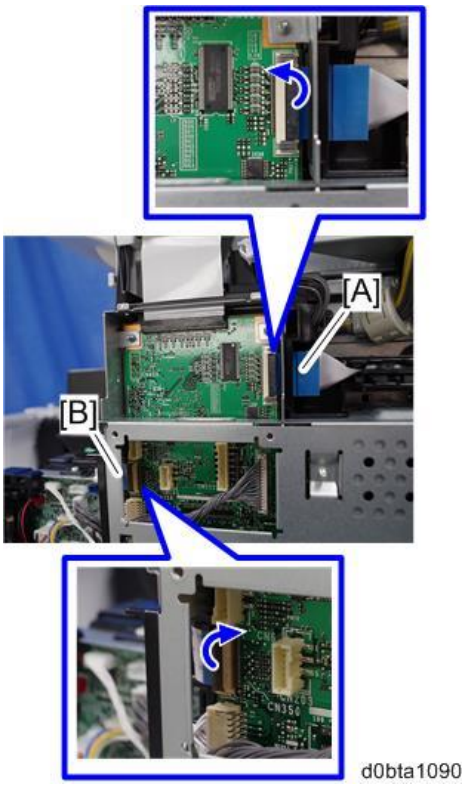
5. Disconnect the three flat cables and three connectors.



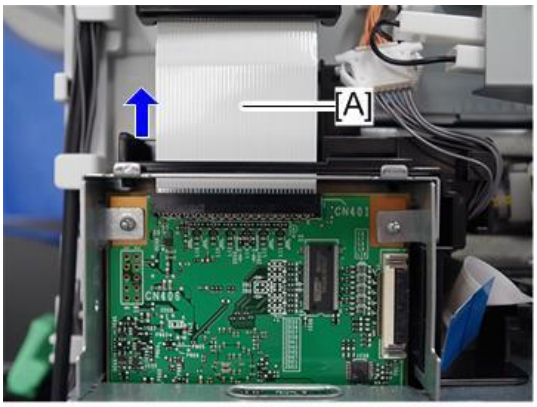
×3 ×3

Note

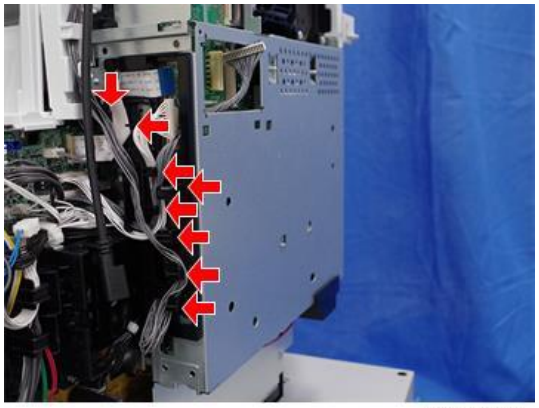
- Make sure to open the flap before disconnecting the flat cables [A] [B], as shown in the following pictures. Otherwise, the connector may be damaged.



- When disconnecting the flat cable [A], pull it out in the direction of the arrow.



6. Release the flat cable and harness from the harness guides.



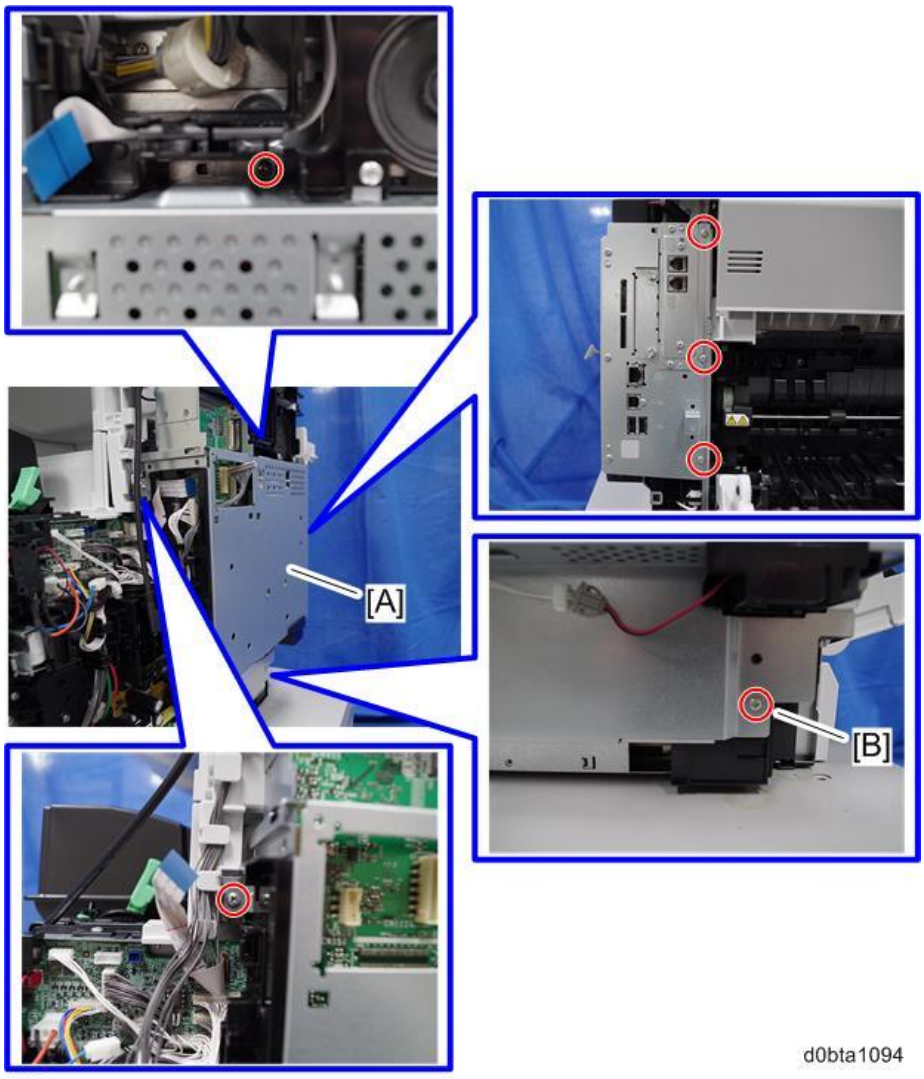
d0bta1092

7. **IM 600SRF**: Remove the cover [A].

×1

d0bta1093

8. Remove the six screws from the controller box [A].

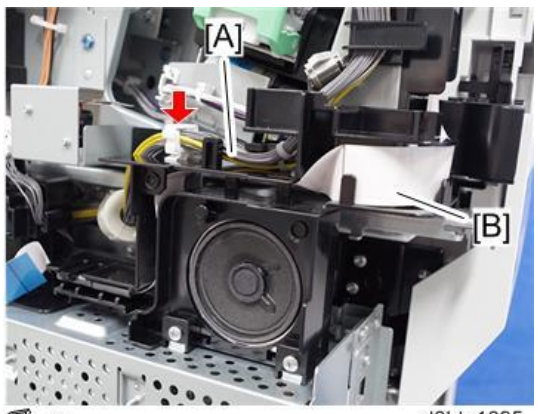


×6

Note

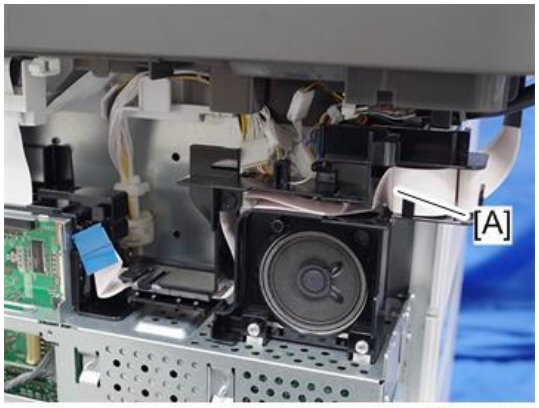
- The screw [B] is a tapping screw. Be careful not to use the wrong screw when installing the controller box.

9. **IM 600SRF**: Release the harnesses [A] and FFC [B] from the cable guides.



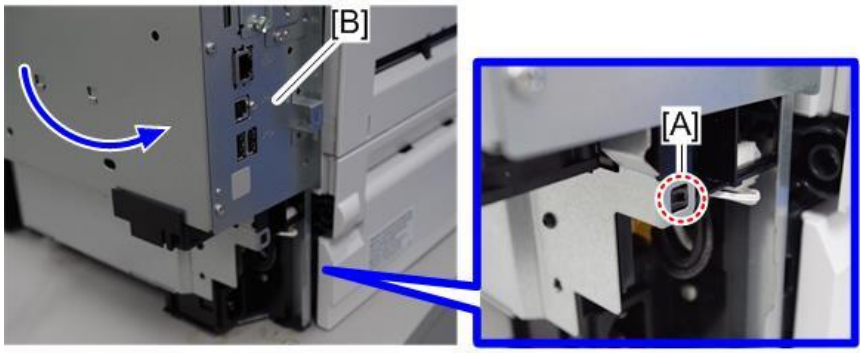
×1 d0bta1095

10. **IM 550F/600F**: Release the FFC [A] from the cable guides.

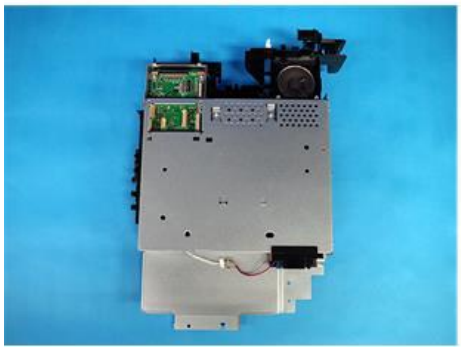


d0bta1113

11. Release the hook [A], and then remove the controller box [B] by rotating it counter-clockwise.

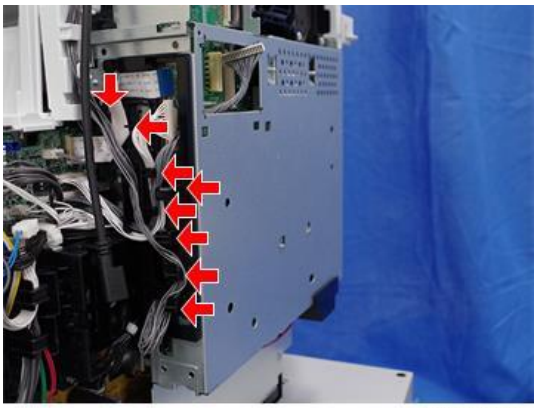


d0bta1096



Note

- When installing the controller box [A], make sure to secure the harness and flat cable to the harness guides, as shown below.

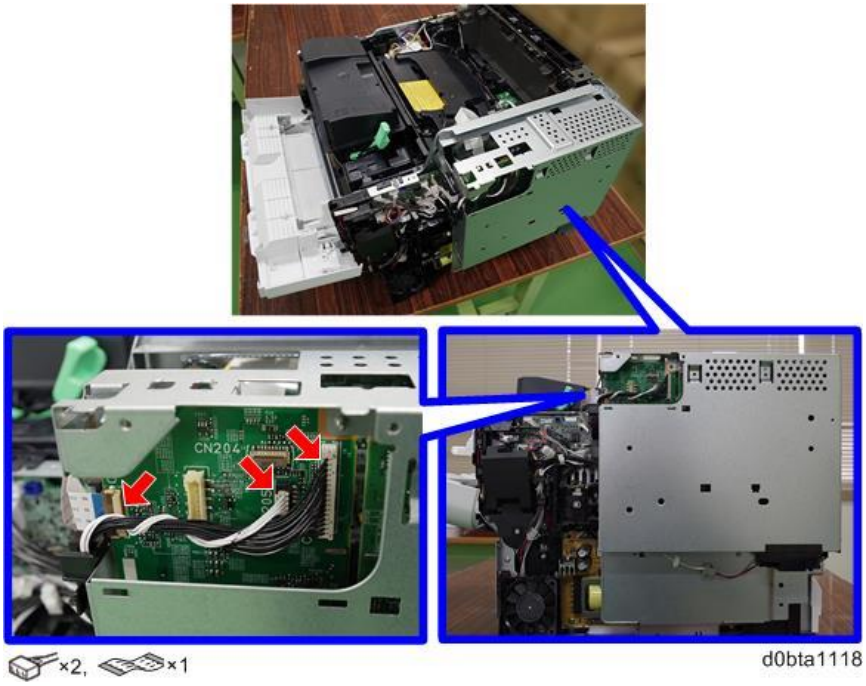


d0bta1092

- When installing the bracket [A] of the controller box [B], do not interpose the harness and the flat cable between the bracket and the controller box.

Controller Box (P 800/801)

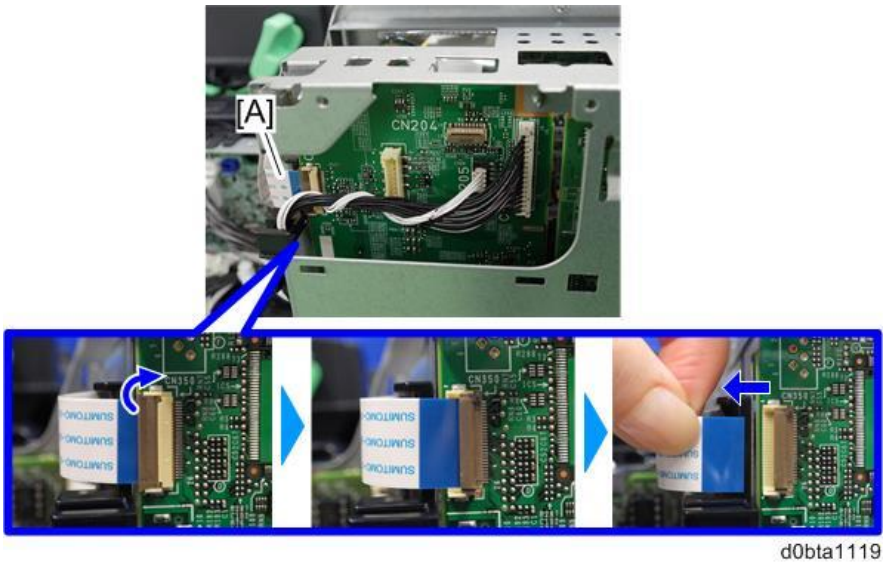
1. Remove the right cover. (Right Cover)
2. Disconnect the flat cable and two connectors.



Note

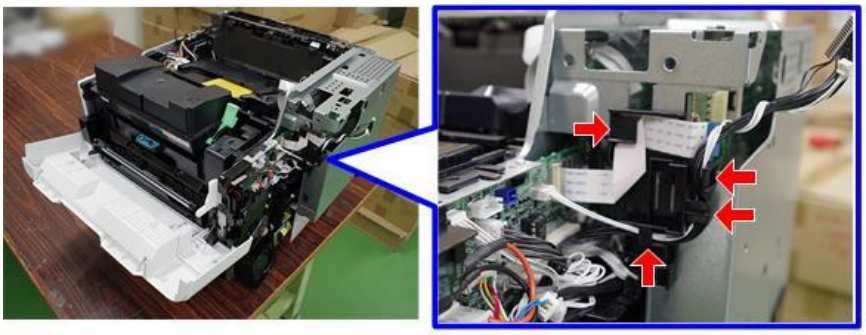
- Make sure to open the flap before disconnecting the flat cable [A], as shown in the

following pictures. Otherwise, the connector may be damaged.



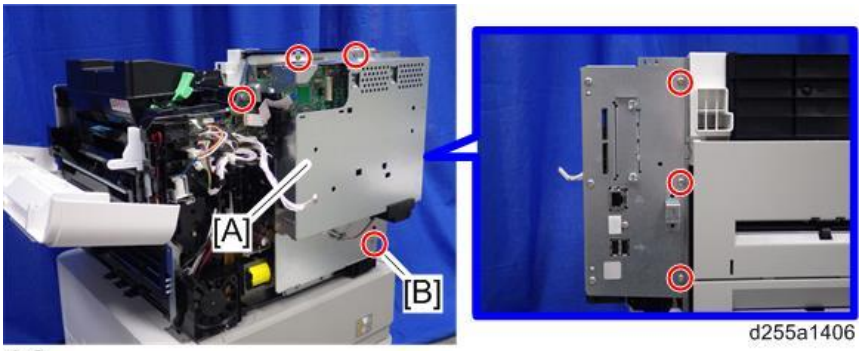
d0bta1119

3. Release the flat cable and harness from the harness guides.



d0bta1120

4. Remove the seven screws from the controller box [A].



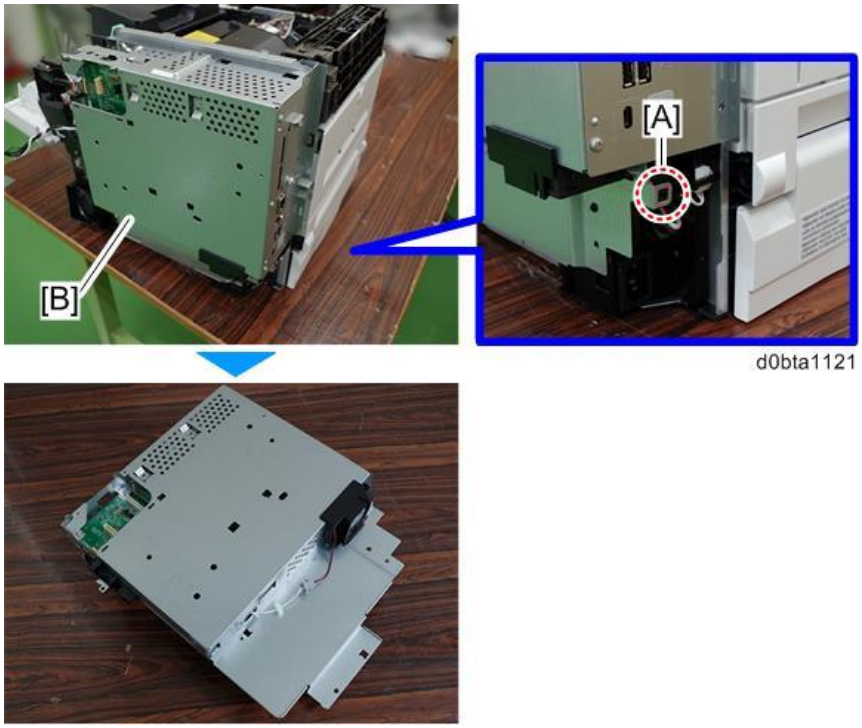
d255a1406

×7

Note

- The screw [B] is a tapping screw. Be careful not to use the wrong screws when installing the controller box.

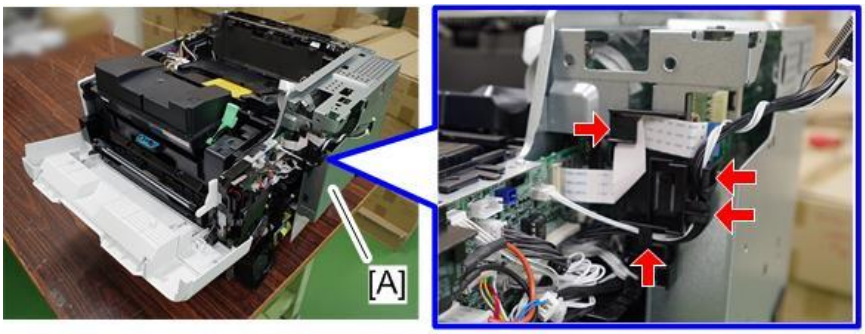
5. Release the hook [A], and then remove the controller box [B].



d0bta1121

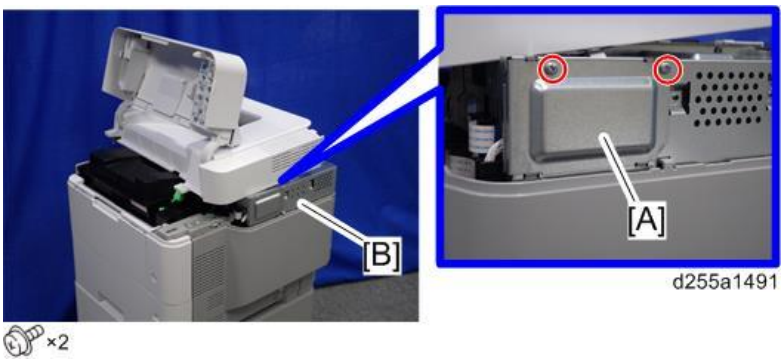
Note

- When installing the controller box [A], make sure to secure the harness and flat cable to the harness guides, as shown below.



d0bta1124

- When installing the bracket [A] of the controller box [B], do not interpose the harness and the flat cable between the bracket and the controller box.



d255a1491

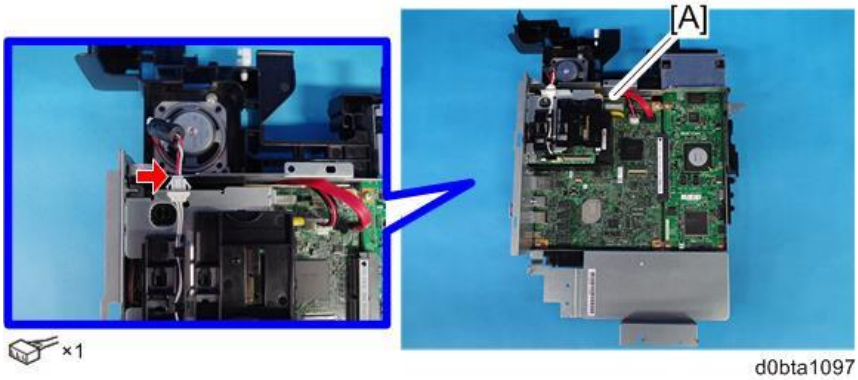
Controller Board (PCB15)

Controller Board (PCB15) (IM 550F/600F/600SRF)

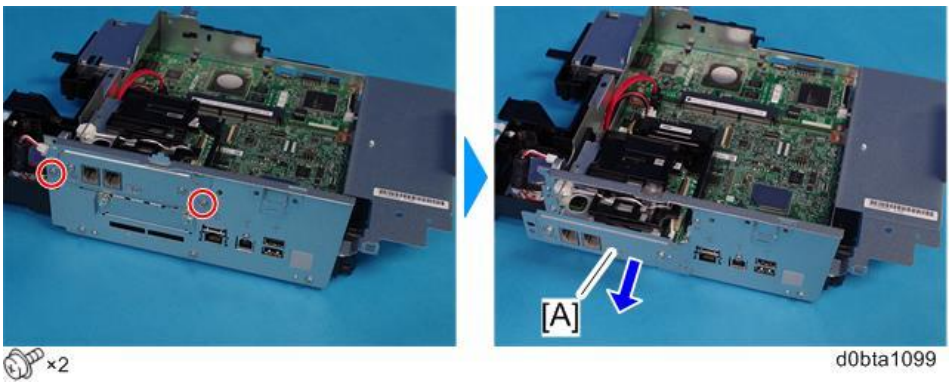
Important

- Keep NVRAMs away from any objects that can cause static electricity. Static electricity can damage NVRAM data.

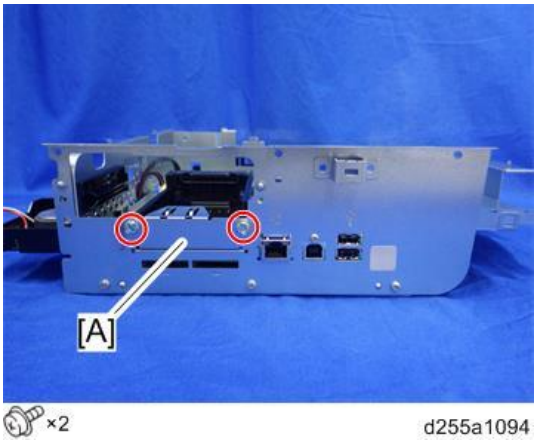
1. Remove the controller box. (Controller Box (IM 550F/600F/600SRF))
2. Disconnect the connector on the controller box [A].



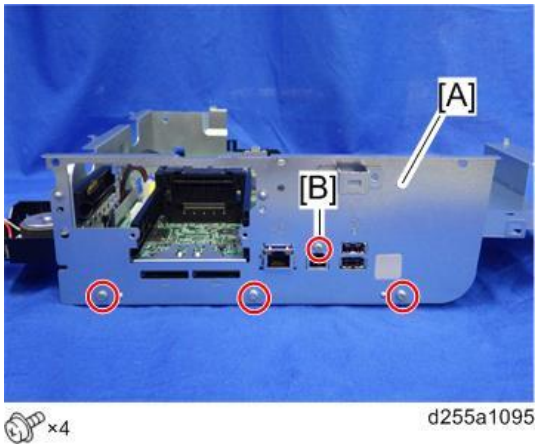
3. Remove the fax unit [A].



4. Remove the slot cover [A].



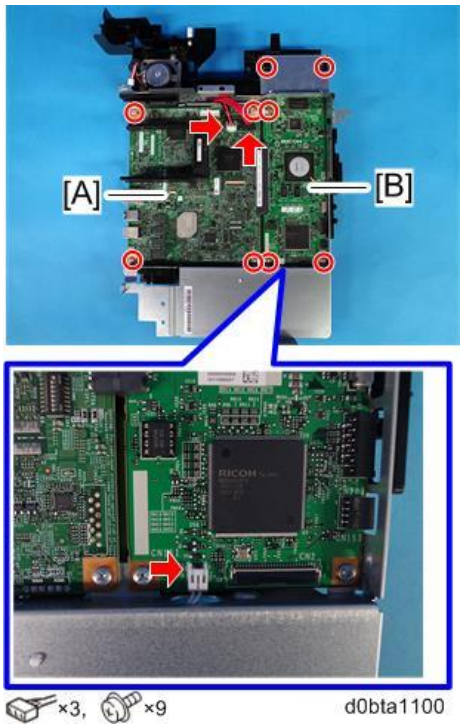
5. Remove the controller box cover [A].



Note

- The screw [B] is smaller than the other screws. Be careful not to use the wrong screw when installing the controller box cover.

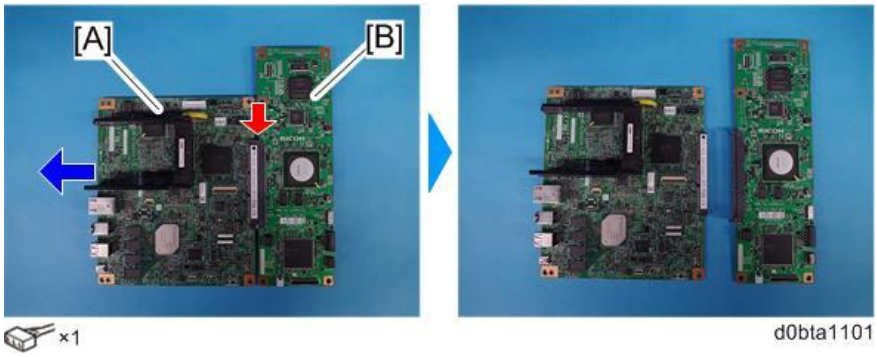
6. Remove the controller board [A] with the BiCU [B].



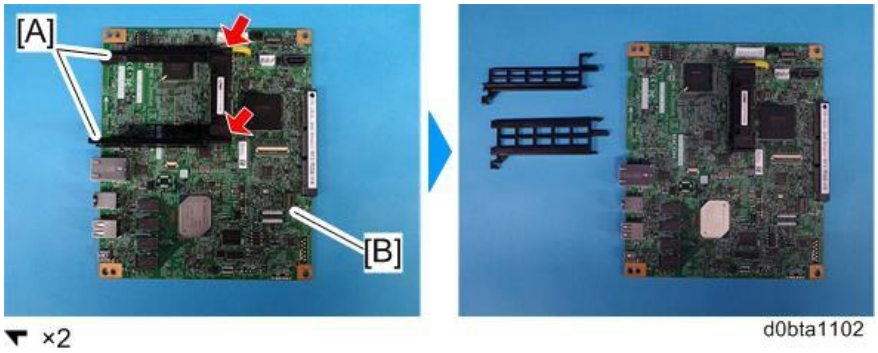
Note

- Be careful not to damage any components of the controller board [A] and the BiCU [B].

7. Separate the controller board [A] from the BiCU [B].



8. Remove the two guide rails [A] from the controller board [B].



9. Remove the NVRAM [A] from the old controller board and install them on the new controller board.

Important

- Make sure the NVRAM [A] is installed in the correct mounting location and orientation. Install the NVRAM so that the indentation on the NVRAM corresponds with the mark [B] on the controller board.
- Incorrect installation of the NVRAM will damage both the controller board and NVRAM.

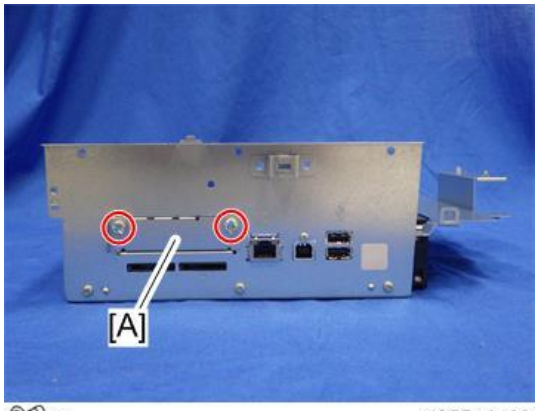
Controller Board (PCB15) (P 800/801)

Important

- Keep NVRAMs away from any objects that can cause static electricity. Static electricity can damage NVRAM data.

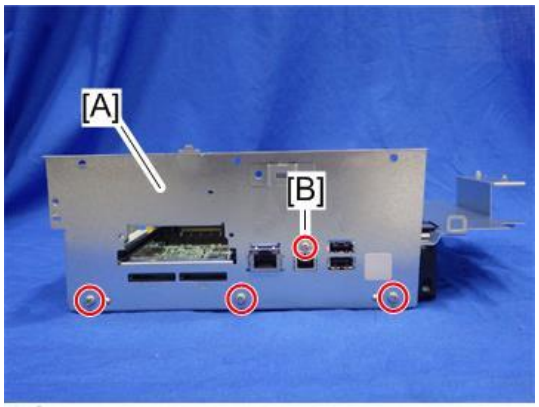
1. Remove the controller box. (Controller Box (P 800/801))

2. Remove the slot cover [A].



×2 d255a1409

3. Remove the controller box cover [A].

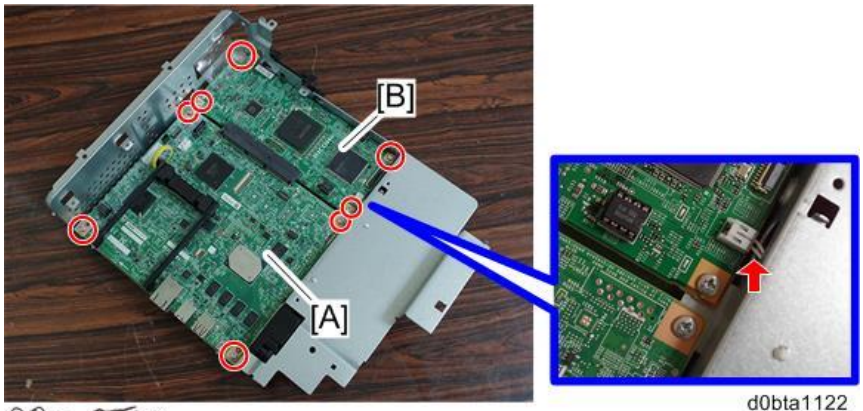


×4 d255a1410

Note

- The screw [B] is a small screw. Be careful not to use the wrong screw when installing the controller box cover.

4. Remove the controller board [A] with the BiCU [B].

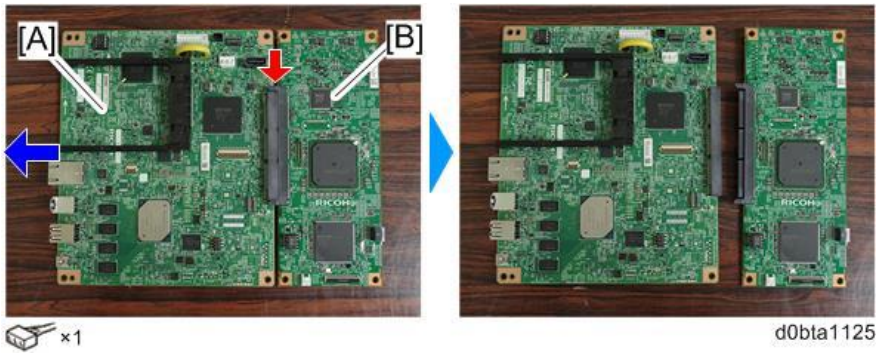


×8, ×1 d0bta1122

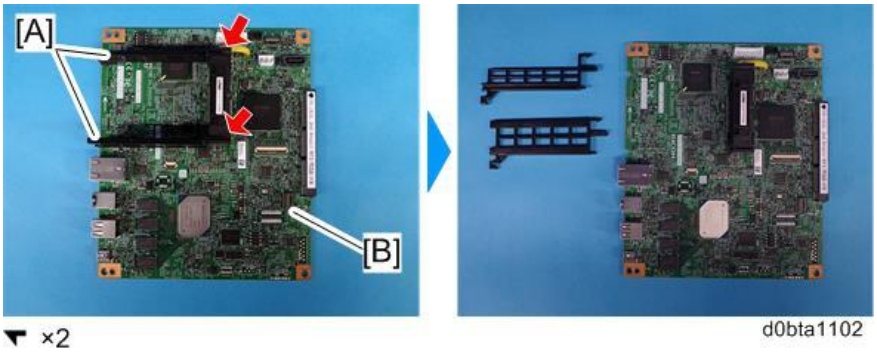
Note

- Be careful not to damage any components of the controller board [A] and the BiCU [B].

5. Remove the controller board [A] from the BiCU [B].



6. Remove the two guide rails [A] from the controller board [B].



7. Remove the NVRAM [A] from the old controller board and install them on the new controller board.

Important

- Make sure the NVRAM [A] is installed at the correct mounting location and orientation. Install the NVRAM so that the indentation on the NVRAM corresponds with the mark [B] on the controller board.
- Incorrect installation of the NVRAM will damage both the controller board and NVRAM.

NVRAM on the controller board (PCB15)

Important

- SC195 (Machine serial number error) will be displayed if you forget to install the NVRAM.
- If you install the NVRAM in the incorrect direction, it will cause a short circuit in the controller board and the NVRAM, and each component will need to be replaced.
- Installing a new NVRAM initializes SPs and issues an SC. Reset the SC with the procedure

below.

1. Make sure that you have the SMC report (Factory SP Settings). This report comes with the machine. (SMC Storage)
   If you do not have the SMC report, enter the factory settings while referring to the "Factory SP Settings" (Factory SP Settings).
2. Output the SMC log using one of the following methods:
   To print SMC log data, execute SP5-990-001.
   To save SMC log data to an SD card, execute SP5-992-001 (SMC List Card Save Function).
3. Turn OFF the main power.
4. Insert a blank SD card in the SD Card Slot 2, and then turn ON the main power.
5. Use SP5-824-001 to upload the NVRAM data from the controller board.
6. Make sure the customer has a backup of their address book data. If not, obtain the backup by referring to SP5-846-051.

   Important

   - The address data stored in the machine will be discarded later during this procedure. So be sure to obtain a backup of the customer's address book data.
   - Note that the counters for the user will be reset when doing the backup/restore of the address book data.
   - If the customer has a backup of the address book data, use their own backup data for restoring. This is because there is a risk that the data cannot be backed up properly depending on the NVRAM's condition.
7. For IM 550F/600F/600SRF, do the following steps.
   1. Print the Box List with the User Tools.
      - [User Tools] -> [Machine Features] -> [Facsimile Features] -> [General Settings] -> [Box Setting: Print List]
   2. Print the Special Sender List by pressing these buttons in the following order.
      - [User Tools] -> [Machine Features] -> [Reception Settings] -> [Program Special Sender: Print List]
   3. Write down the following fax settings.
      - [Receiver] in [User Tools] -> [Machine Features] -> [Facsimile Features] -> [Reception Settings] -> [Reception File Settings] -> [Forwarding].
      - [Notify Destination] in [User Tools] -> [Machine Features] -> [Facsimile Features] -> [Reception Settings] -> [Reception File Settings] -> [Store].
      - [Specify User] in [User Tools] -> [Machine Features] -> [Facsimile Features] -> [Reception Settings] -> [Stored Reception File User Setting].
      - [Notify Destination] in [User Tools] -> [Machine Features] -> [Facsimile Features] -> [Reception Settings] -> [Folder Transfer Result Report].
      - Specified folder in [User Tools] -> [Machine Features] -> [Facsimile Features] -> [Send Settings] -> [Backup File TX Setting].

- [Receiver] in [User Tools] -> [Machine Features] -> [Facsimile Features] -> [Reception Settings] -> [Reception File Settings] -> [Output Mode Switch Timer].
- [Store: Notify Destination] in [User Tools] -> [Machine Features] -> [Facsimile Features] -> [Reception Settings] -> [Output Mode Switch Timer].
- All the destination information is shown on the display.

Note

- In the fax settings, address book data is stored with entry IDs, which the system internally assigns to each data. The entry IDs may be changed due to re-assigning in backup/restore operations.

4. Make sure that there is no transmission standby file. If any standby file exists, ask the customer to delete it or complete the transmission.

8. Turn OFF the main power and unplug the power cord.

9. Press the main power switch again to discharge the residual charge.

10. Replace the NVRAM with a new one.

11. Turn ON the main power.

Important

- For P 800/801, SC995 will be displayed after turning ON the main power.
- For IM 550F/600F/600SRF, SC995 might be internally issued after turning ON the main power.
- After turning ON the main power, SC870 will occur and the address book data will be cleared.

12. For IM 550F/600F/600SRF, change the following SP settings for the operation panel after turning ON the main power.

- SP5-748-101: (OpePanel Setting: Op Type Action Setting): Change bit 0 from "0" to "1".
- SP5-748-201: (OpePanel Setting: Cheetah Panel Connect Setting): Change the value from "0" to "1".

13. For IM 550F/600F/600SRF, change the Flair API SP values.

- SP5-752-001 (Copy FlairAPIFunction Setting): Change bit 0 from "0" to "1".
- SP1-041-001 (Scan:FlairAPI Setting) in Scanner SP: Change bit 0 from "0" to "1".
- SP3-301-001 (FAX:FlairAPI Setting) in Fax SP: Change bit 0 from "0" to "1".

14. Turn OFF/ON the main power with the SD card where the NV-RAM data has been uploaded in SD slot 2.

15. Download the NV-RAM data stored in the SD card to the brand-new NV-RAM using SP5-825-001 (NV-RAM Data Download).

Note

- The download will take a few minutes.

16. Turn OFF the main power and remove the SD card from SD Card Slot 2.

17. Turn ON the main power.

18. Restore the original settings of the following SPs, by referring to the SMC data obtained in step 2.

Note

- SP5-825-001 does not download the following SP data to the new NV-RAM. You must set them manually.
- SP5-985-001(Device Setting: On Board NIC) (IM 550F/600F/600SRF only)
- SP5-985-002(Device Setting: On Board USB) (IM 550F/600F/600SRF only)
- SP5-193-001 (External Controller Info. Settings)

19. For IM 550F/600F/600SRF, if the security functions (HDD Encryption and HDD Data Overwrite Security) were applied, set the functions again.

20. Ask the customer to restore their address book. Or restore the address book data using SP5-846-052 (UCS Setting: Restore All Addr Book), and ask the customer to ensure the address book data has been restored properly.

Important

- If you have obtained a backup of the customer's address book data, delete the backup immediately after the NVRAM replacement to avoid accidentally taking out the customer's data.

21. Output the SMC log using one of the following methods:
To print SMC log data, execute SP5-990-001.
To save SMC log data to an SD card, execute SP5-992-001 (SMC List Card Save Function).

Note

- Check that the counters are reset.

22. For IM 550F/600F/600SRF, make sure that the list output in steps 7-1 through steps 7-3 matches the destination information in the machine. If not, set it to the setting before replacement.

Important

- Try the following if NVRAM upload (SP5-824-001) or download (SP5-825-001) cannot be done.
- Check the SP values that changed on the SMC you printed out in step 2. Adjust the values manually. Make sure that the values of SP5-045-001 (IM 550F/600F/600SRF only) and SP5-302-002 are the same as before replacing.

Note

- If a message displayed that an SD card is needed to restore displays after the NVRAM replacement, create an "SD card for restoration" and restore with the SD card. Refer to the following.
- IM 550F/600F/600SRF: Encryption Key Restoration
- P 800/801: Encryption Key Restoration

BiCU (PCB16)

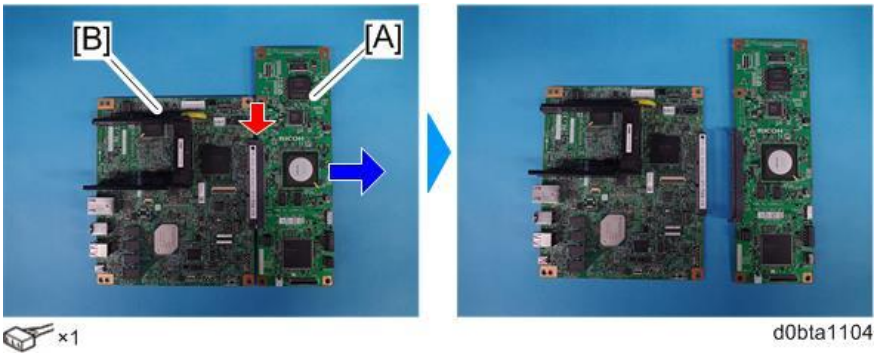
1. Remove the controller board (PCB15) with the BiCU (PCB16) from the controller box.

- IM 550F/600F/600SRF: (Controller Board (PCB15) (IM 550F/600F/600SRF))

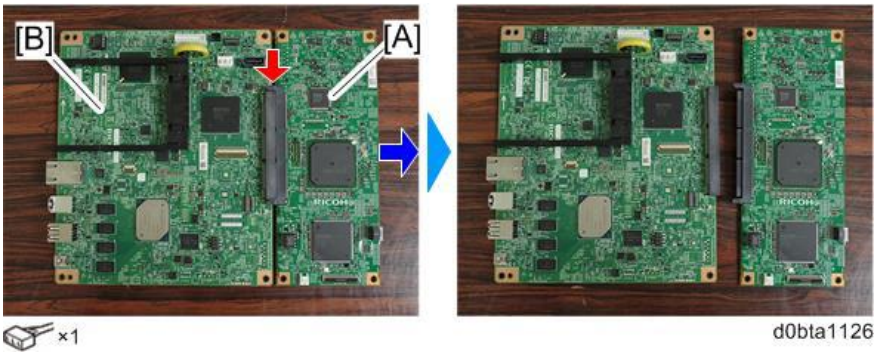
- P 800/801: (Controller Board (PCB15) (P 800/801))

2. Remove the BiCU (PCB16) [A] from the controller board (PCB15) [B].

IM 550F/600F/600SRF:



P 800/801:



3. Remove the NVRAM [A] from the old BiCU and attach it to the new BiCU.

IM 550F/600F/600SRF:

P 800/801:

Note

- Attaching the used NVRAM to the new BiCU (PCB16) allows users to use old data such as SP settings.
- Make sure the serial number is input in the machine for the NVRAM data with SP5-811-004. If not, SC995-001 occurs. Install an NVRAM [A] so that the indentation [B] on the NVRAM corresponds with the mark on the BiCU (PCB16). Incorrect installation of the NVRAM will damage both the BiCU (PCB16) and NVRAM.

Replacing the NVRAM (EEPROM) on the BiCU (PCB16)

1. Make sure that you have the SMC report (Factory SP Settings). This report comes with the machine. (SMC Storage)
   If you do not have the SMC report, enter the factory settings while referring to the "Factory SP Settings" (Factory SP Settings).
2. Output the SMC data ("ALL") using SP5-990-001/SP5-992-001.
3. Turn OFF the main power.
4. Insert a blank SD card in the SD Card Slot 2, and then turn ON the main power.
5. Use SP5-824-001 to upload the NVRAM data from the BiCU (PCB16).
6. Turn OFF the main power and unplug the power cord.
7. Replace the NVRAM on the BiCU (PCB16) with a new one.

   Important

   - Install a new NVRAM [A] so that the indentation [B] on the NVRAM corresponds with the mark on the BiCU (PCB16). Incorrect installation of the NVRAM will damage both the BiCU (PCB16) and NVRAM.

     IM 550F/600F/600SRF:

d0bta1105

P 800/801:

d0bta1127

8. Plug in the power cord, and then turn ON the main power.

Note

- When the main power is turned ON, SC195-00 appears. Continue with the following steps.

Important

- After changing the EEPROM, some SPs do not have the correct values.
- Because of this, step 9 must be done.

9. Set the machine serial number SP5-811-001, area selection SP5-996-001, CPM set SP5-882-001.

Note

- For information on how to configure the above SPs, contact the supervisor in your branch office.

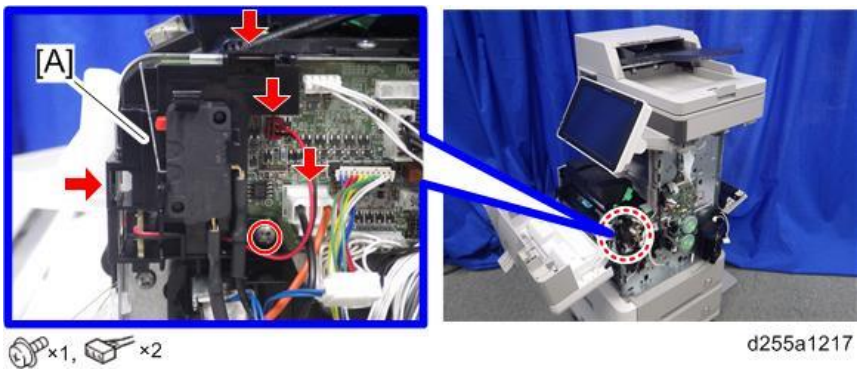
10. Turn the main power OFF/ON.
11. Execute SP5-801-002 "Memory Clear Engine".
12. Turn OFF the main power, and then turn it back ON.
13. From the SD card where you saved the NV-RAM data in step 5, download the NV-RAM data with SP5-825-001.
14. Turn OFF the main power, and then remove the SD card from SD slot 2.
15. Turn ON the main power.
16. Check the SMC report (Factory SP Settings) from step 1, and set the user tool and SP settings so they are the same as before.

IOB (PCB17)

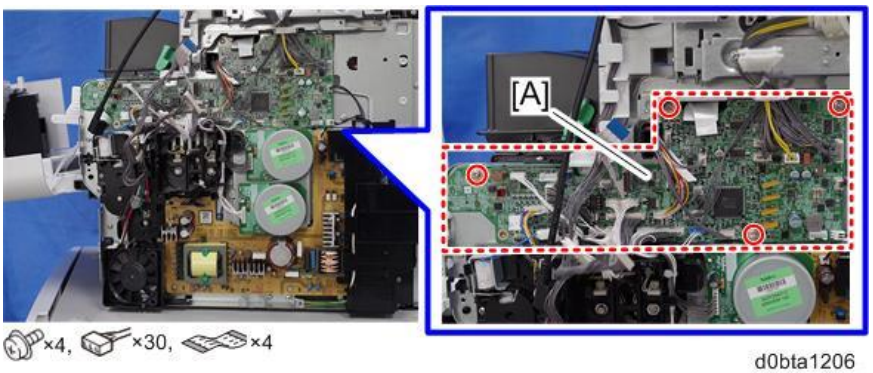
IOB (PCB17) (IM 550F/600F/600SRF)

1. Remove the controller box. (Controller Box (IM 550F/600F/600SRF))

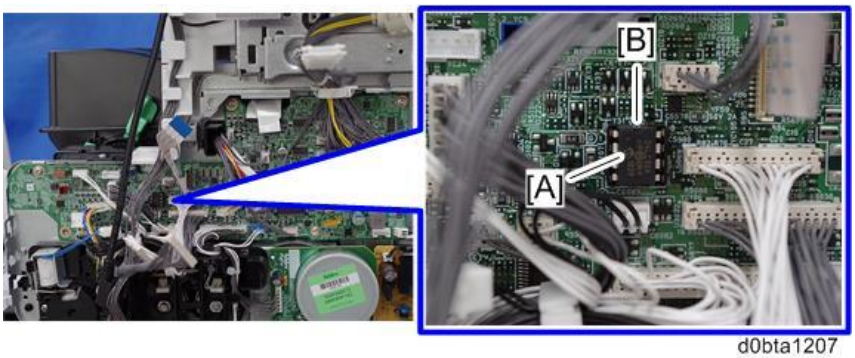
2. Remove the bracket [A]. (hook×2)



3. Remove the IOB (PCB17) [A].



4. Remove the NVRAM [A] from the old IOB (PCB17) and attach it to the new IOB (PCB17).



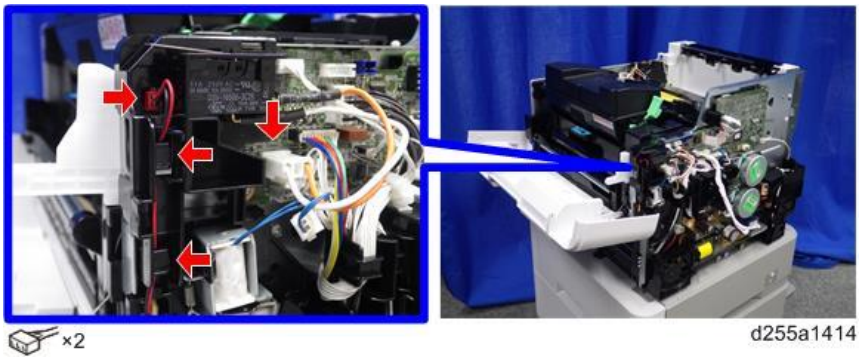
Important

- Install an NVRAM [A] so that the indentation [B] on the NVRAM corresponds with the mark on the IOB (PCB17). Incorrect installation of the NVRAM will damage both the IOB (PCB17) and NVRAM.

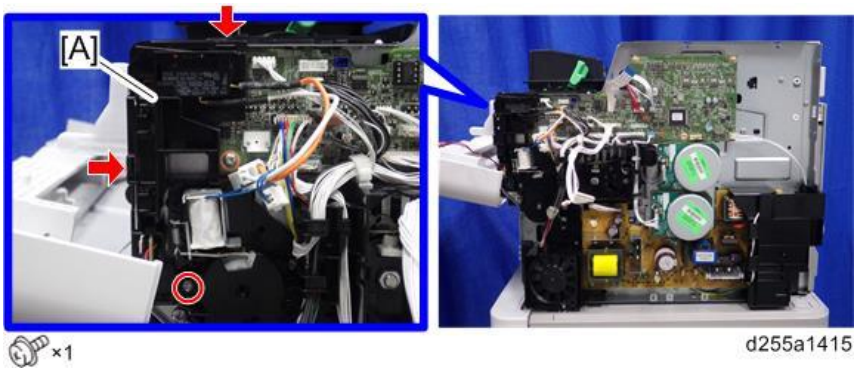
IOB (PCB17) (P 800/801)

1. Remove the controller box. (Controller Box (P 800/801))

2. Disconnect the two connectors, and then release them from the harness guides.

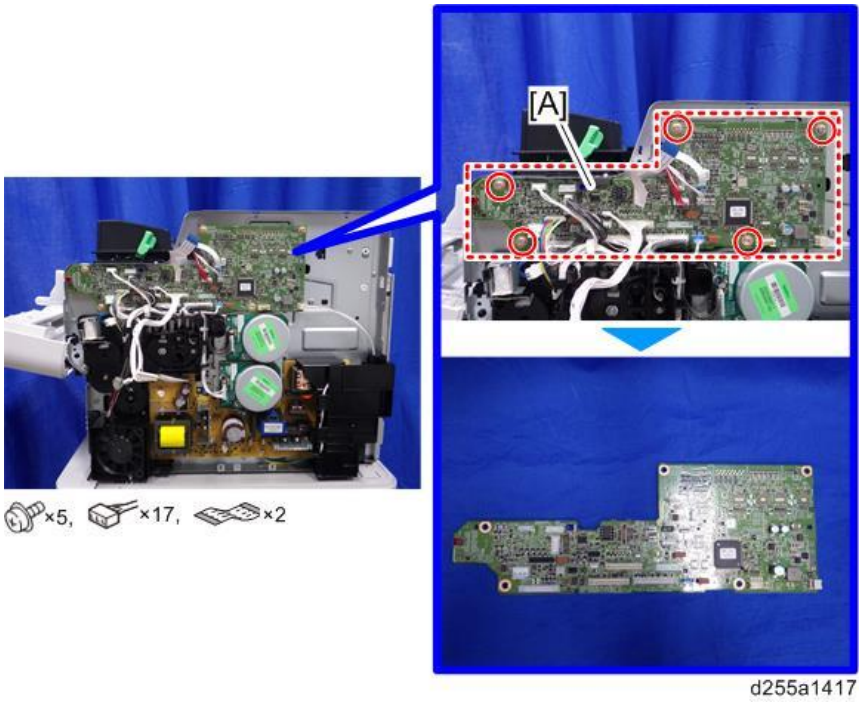


3. Remove the bracket [A]. (hook×2)

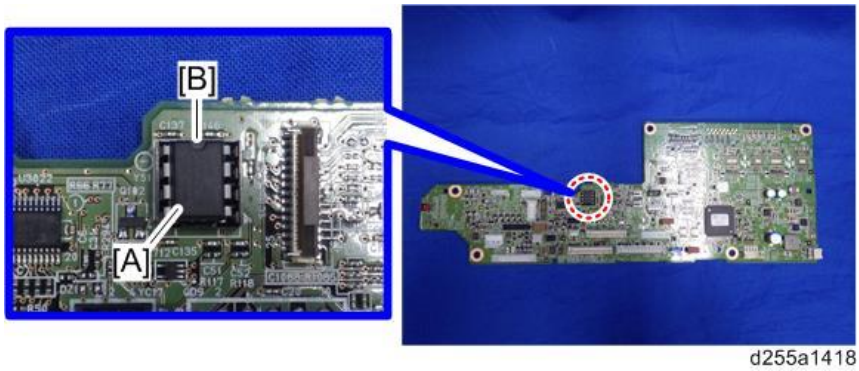


4. Disconnect the two flat cables.

5. Remove the IOB (PCB17) [A].



6. Remove the NVRAM [A] from the old IOB (PCB17) and attach it to the new IOB (PCB17).



Important

- Install the NVRAM [A] so that the indentation [B] on the NVRAM corresponds with the mark on the IOB (PCB17). Incorrect installation of the NVRAM will damage both the IOB (PCB17) and NVRAM.

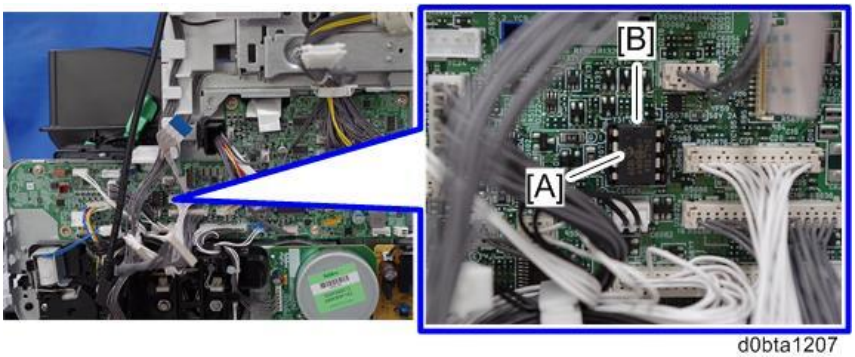
Replacing the NVRAM (EEPROM) on the IOB (PCB17)

1. Make sure that you have the SMC report (Factory SP Settings). This report comes with the machine.
   If you do not have the SMC report, enter the factory settings while referring to the "Factory SP Settings".
2. Output the SMC data ("ALL") using SP5-990-001/SP5-992-001.
3. Turn OFF the main power and unplug the power cord.

4. Replace the NVRAM on the IOB (PCB17) with a new one.

Important

- Install an NVRAM [A] so that the indentation [B] on the NVRAM corresponds with the mark on the IOB (PCB17). Incorrect installation of the NVRAM will damage both the IOB (PCB17) and NVRAM.



5. Plug in the power cord, and then turn ON the main power.
6. Execute SP5-901-00x "All Data Initialize".

Destination	SP
AA	SP5-901-008
NA/LA (120 V)	SP5-901-007
EU/LA (230 V)	SP5-901-006

Note

Do not use SP5-901-009 (Oceania).

7. Turn OFF the main power, then turn ON the main power again.
8. Set SP4-698-003 “Factory mode” to “1”.

Important

- Do not open the front cover, and do not turn OFF/ON the main power until step 11.

Note

- For information on how to configure the above SP, contact the supervisor in your branch office.
- The displayed number will be changed to “0” soon after setting SP4-698-003 to “1”. This is normal operation and the SP has been executed correctly.

9. Execute SP3-900-002 “Toner Install Mode: Off”.
10. Set the below SPs to see the SMC report (Factory SP Settings) from step 1 or 2.
    - SP4-108-001 “Sub Scan Speed Adjustment”,
    - SP4-110-001 “L-Edge Timing Adjustment”,
    - SP6-026-001 “ADF Timing Adjustment, Leading Edge Start Timing: Front”,
    - SP6-027-001 “ADF Adjustment Scan Speed, Simplex Mode”
11. Turn OFF the main power, then turn ON the main power again.
12. Check the SMC report (Factory SP Settings) from step 1 or 2, and set the user tool and SP settings

so they are the same as before.

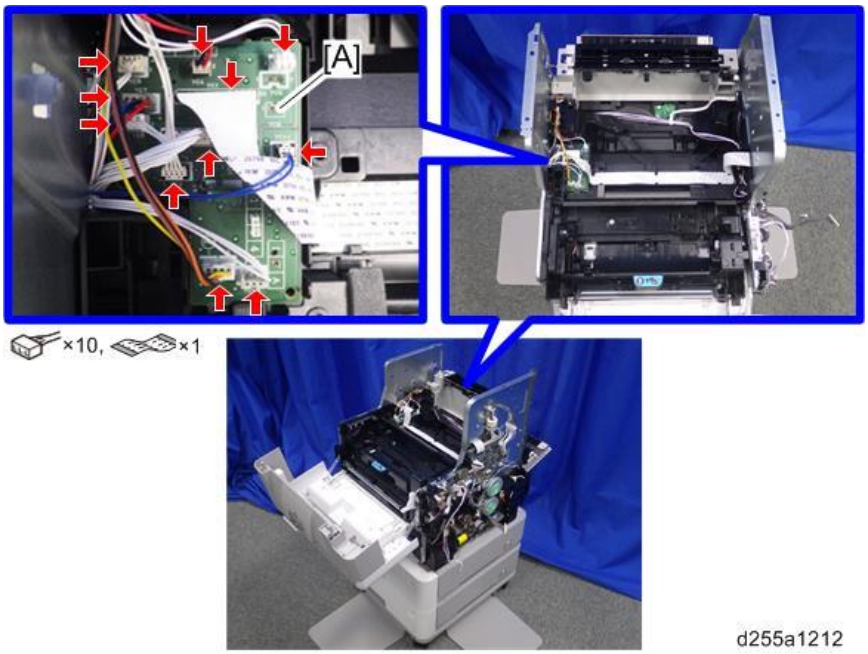
Note

Check the below SPs have correct values.

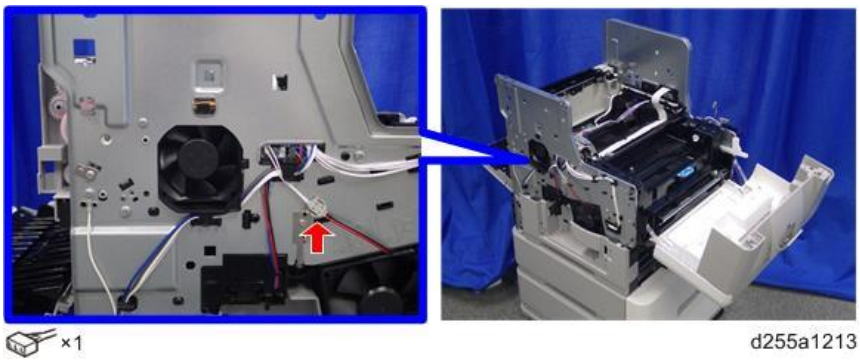
- SP6-026-003: 0
- SP6-026-004: 0
- SP6-027-002: -0.3

Connect-Left PCB (PCB20)

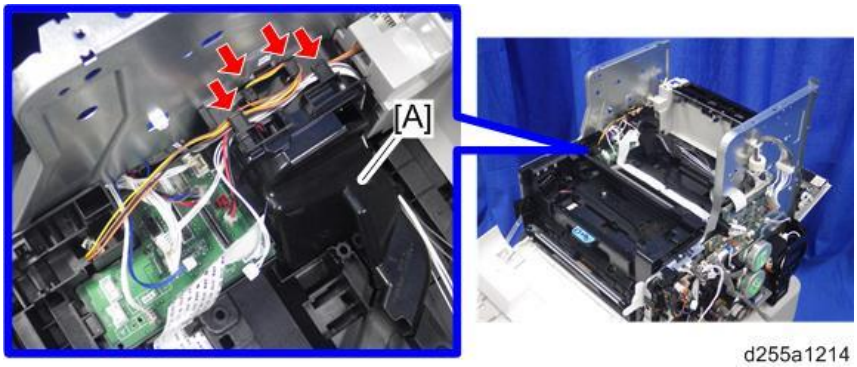
1. Remove the laser unit. (IM 550F/600F/600SRF: Laser Unit, P 800/801: (Laser Unit)
2. For P 800/801, remove the left upper cover. (Left Upper Cover)
3. Disconnect the flat cable and harness from the Connect-Left PCB (PCB20) [A].



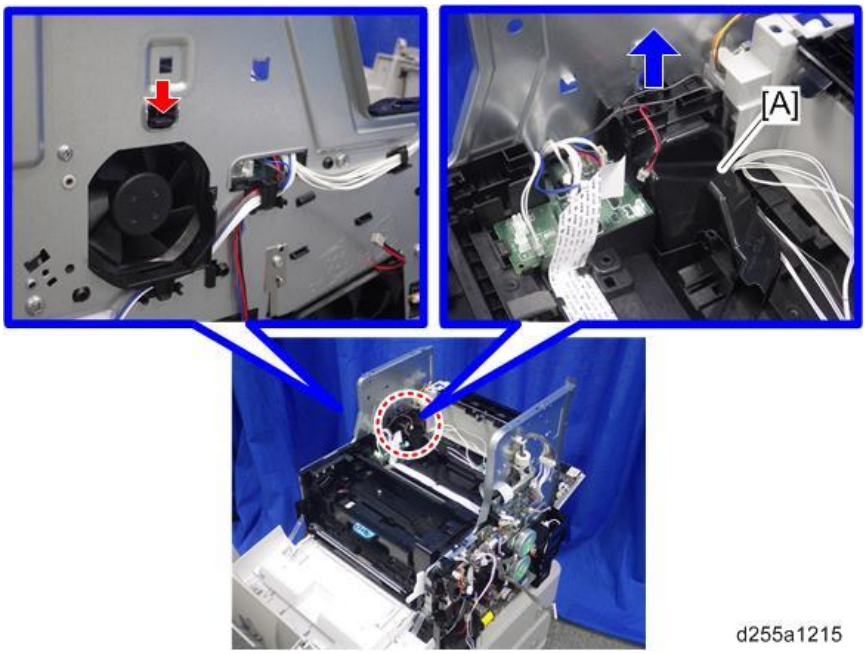
4. Disconnect the connector from the left side of the machine.



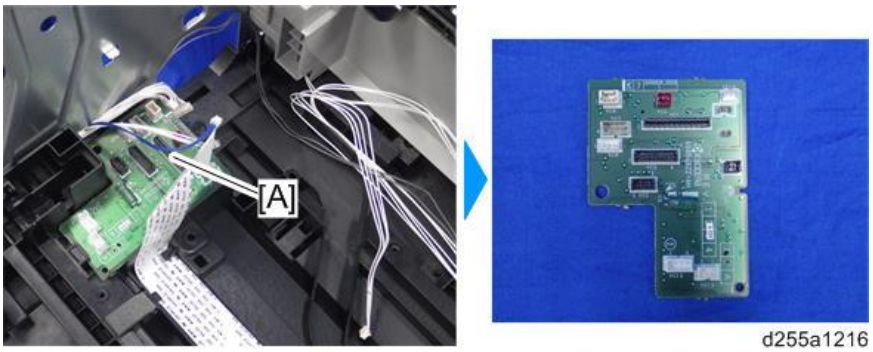
5. Release the harness from the harness guides of the laser fan unit [A].



6. Remove the laser fan unit [A]. (hook×1)



7. Remove the Connect-Left PCB (PCB20) [A].

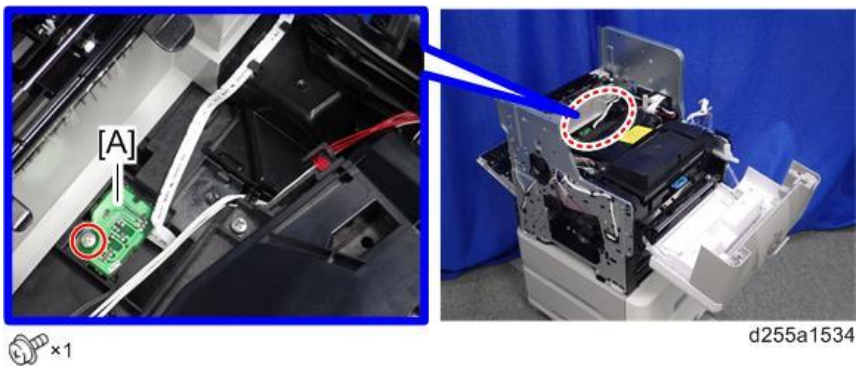


Fusing Thermistor Connection PCB

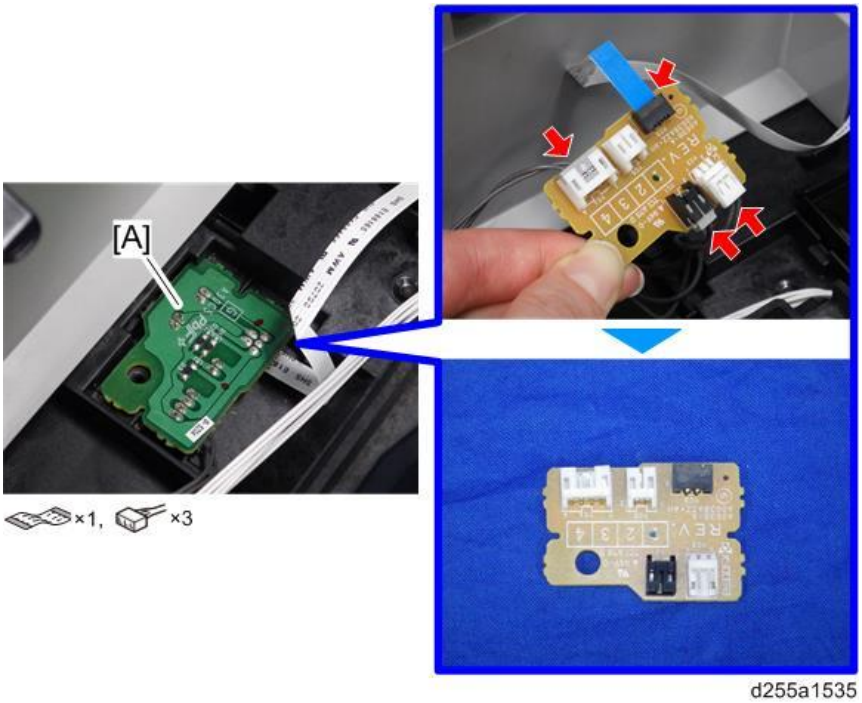
1. Remove the following covers.

- IM 550F/600F/600SRF: Paper exit tray (Paper Exit Tray (IM 550F/600F))
- P 800/801: Upper cover (Upper Cover)

2. Remove the screw which is fixing the fusing thermistor connection PCB [A].



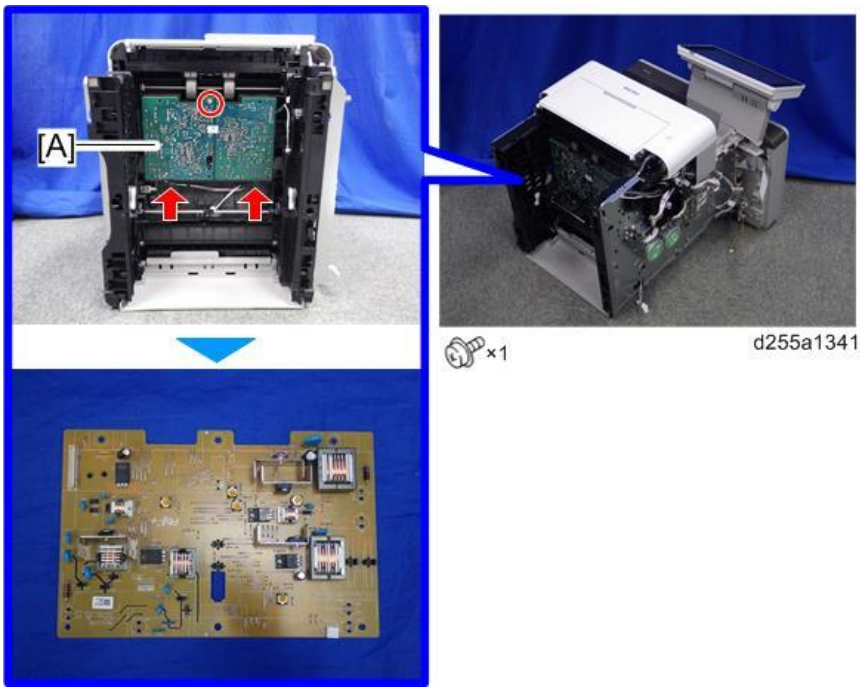
3. Turn over the fusing thermistor connection PCB [A], and then disconnect the flat cable and connectors.



Power Pack (PCB19)

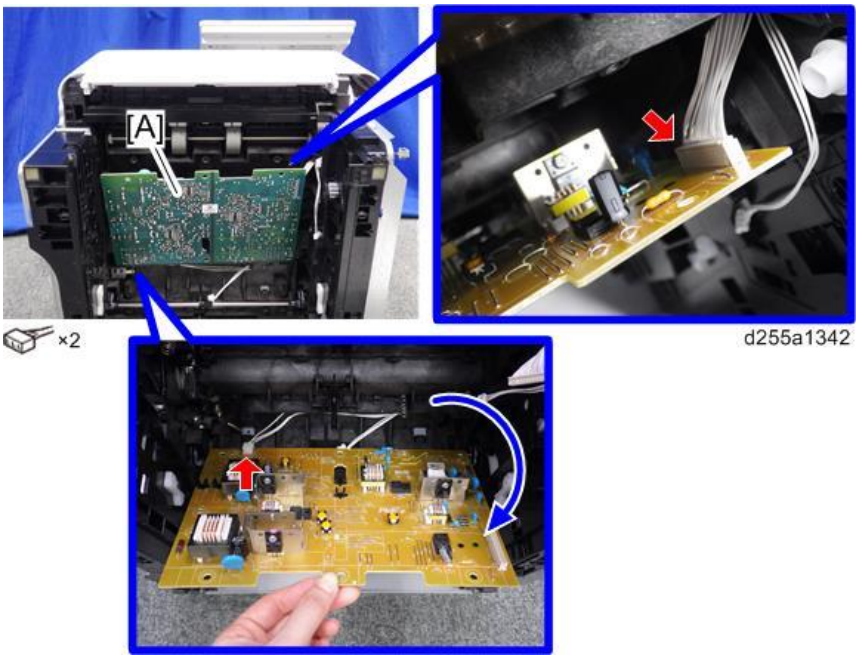
1. Remove the duplex unit. (Duplex unit)

2. Remove the power pack (PCB19) [A]. (hook×2)



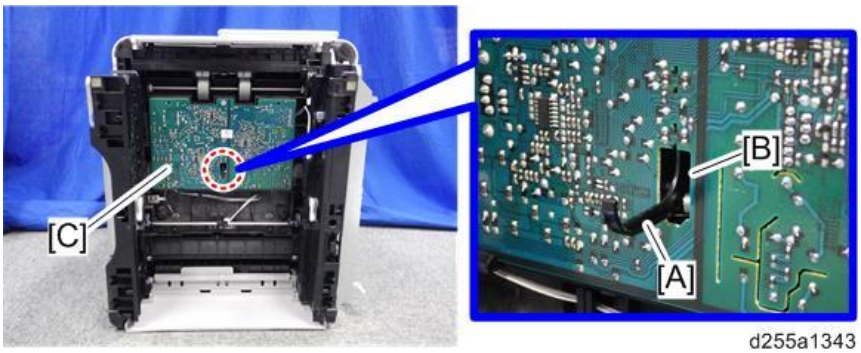
Note

- When removing the power pack (PCB19), disconnect two connectors from the back side of the power pack (PCB19) [A].



- When installing the power pack (PCB19), insert the actuator [A] through the hole [B] of the

power pack (PCB19) [C].

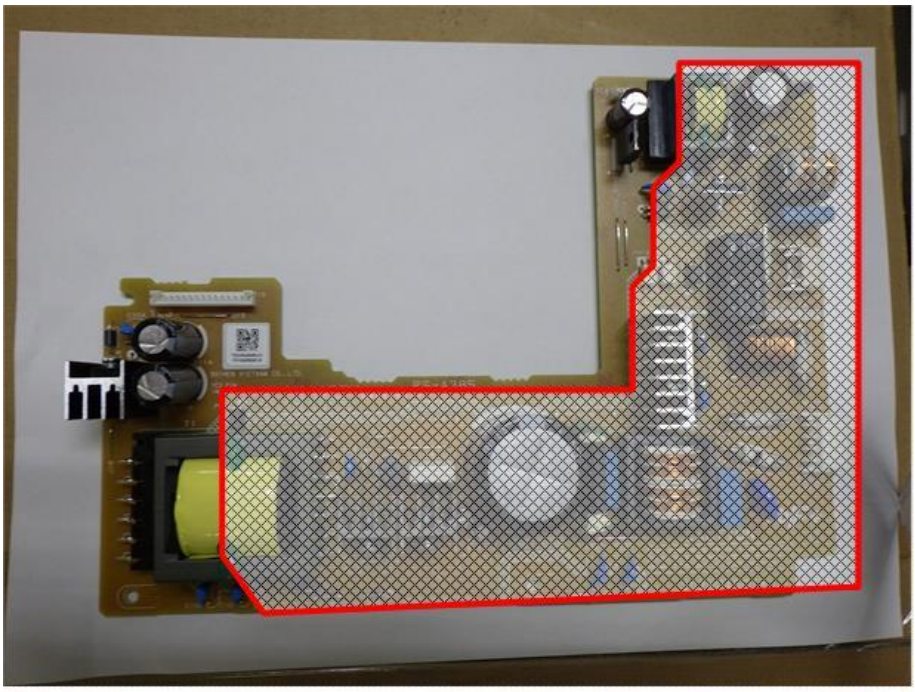


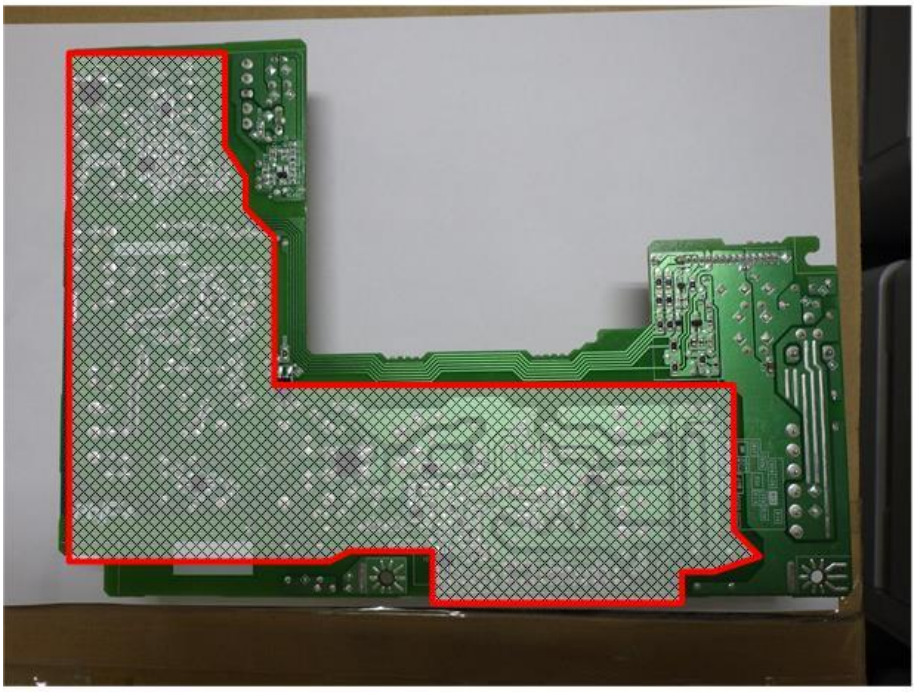
PSU (PCB18)

⚠CAUTION

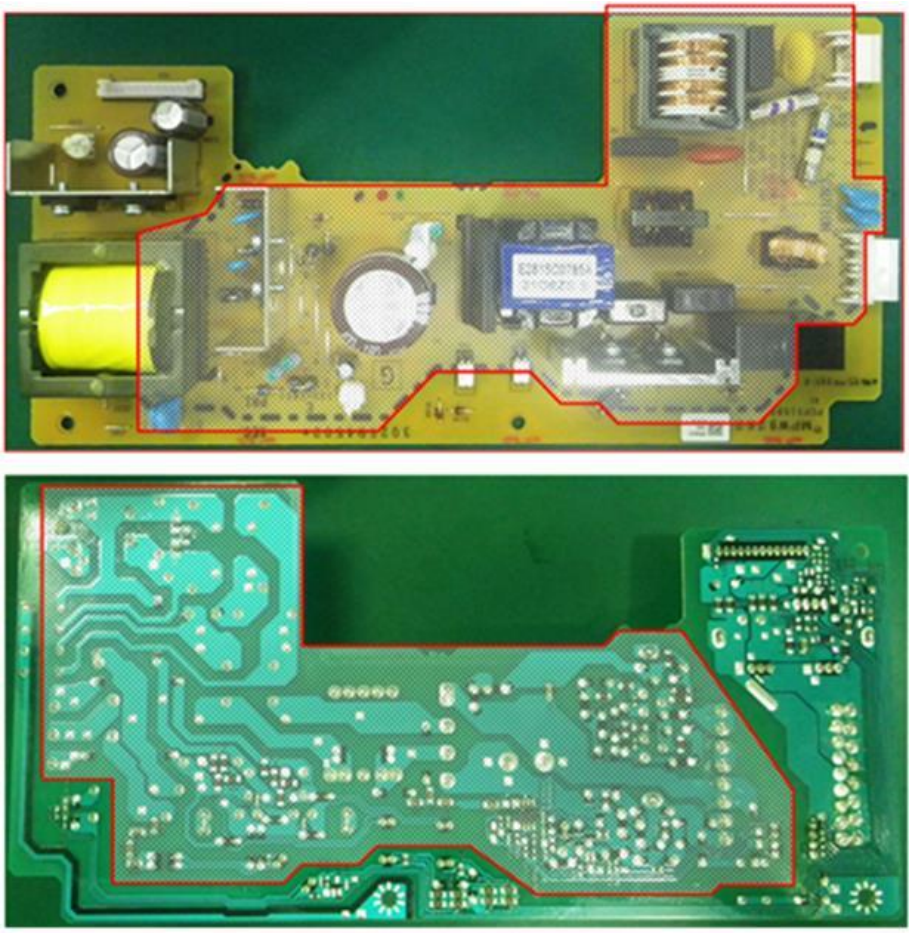
- Turn off the main power switch and unplug the power cord before replacing the PSU (PCB18).
- Do not touch the areas outlined in red in the following diagrams when replacing the PSU

(PCB18). Residual charge on the board may cause electric shock.



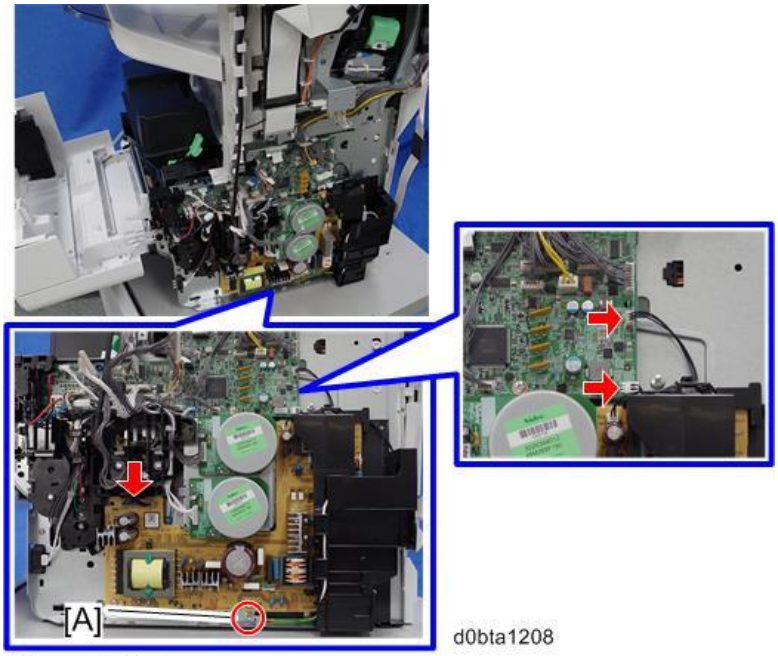


d0bta1352



d0bta1310

1. Remove the controller box (IM 550F/600F/600SRF: Controller Box (IM 550F/600F/600SRF), P 800/801: Controller Box (P 800/801))
2. Remove the PSU fan. (PSU Fan (FAN3))
3. Remove the ground screw [A] and release the three connectors.

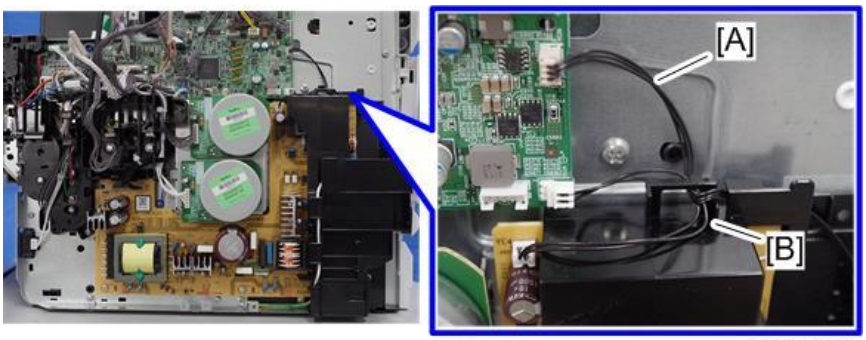


d0bta1208

×1 ×3

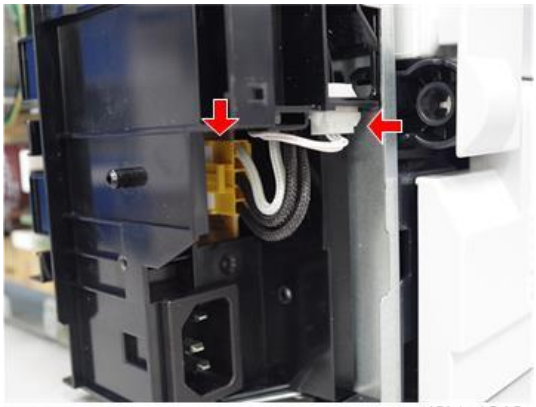
Note

- When installing, route the harnesses [A] and [B] through the hole in the bracket as shown below.



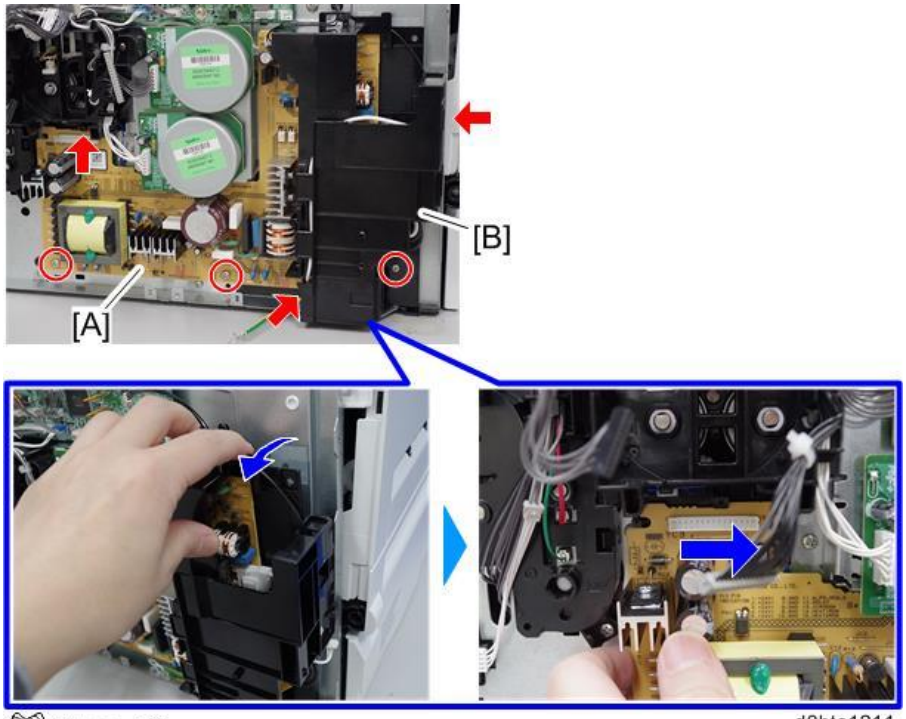
d0bta1209

4. Disconnect the two connectors.



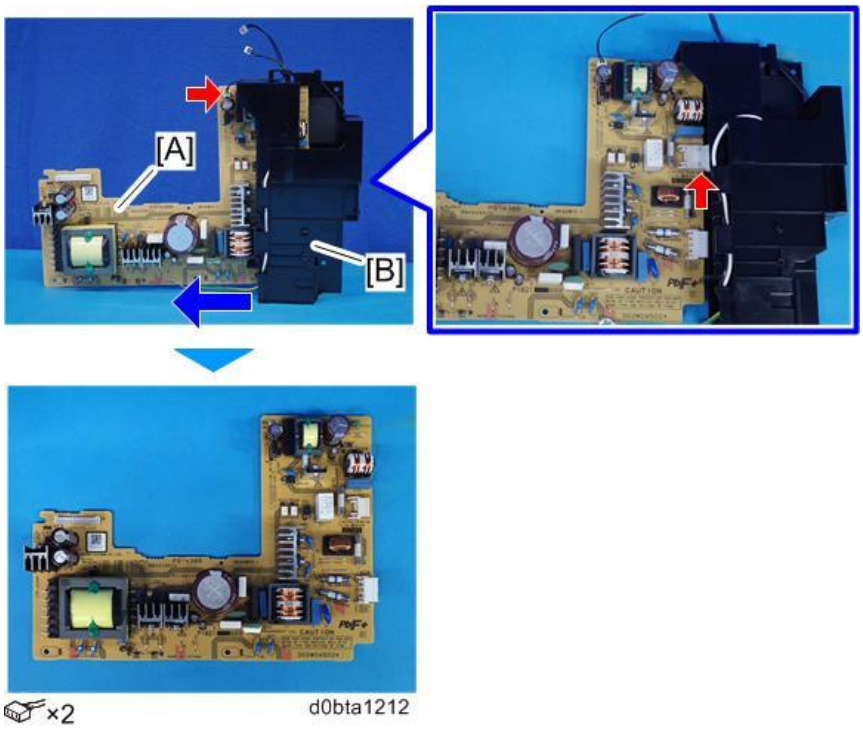
×2 d0bta1210

5. Remove the PSU (PCB18) [A] and bracket [B] from the mainframe.



×3 ×3 d0bta1211

6. Remove the PSU (PCB18) [A] from the bracket [B].



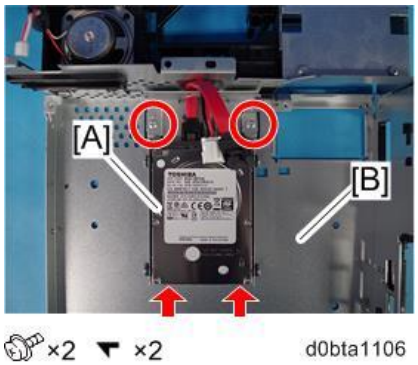
HDD (OT2) (IM 550F/600F/600SRF Only)

Note

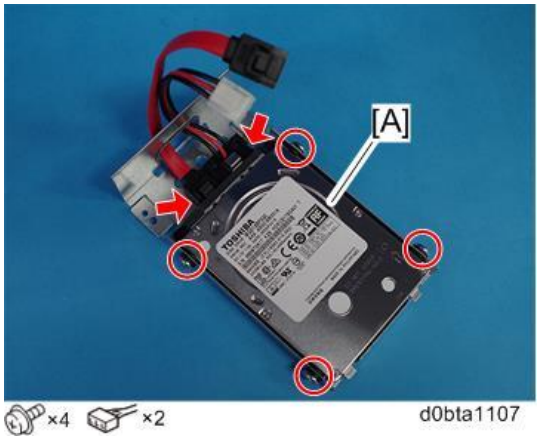
- Before replacing the HDD (OT2), copy the address book data to an SD card with SP5-846-051 if possible.
- If the customer uses the DataOverwriteSecurity Unit Type M19, NFC Card Reader Type M24, or OCR Unit Type M13, these applications must be installed again.

1. Remove the controller board with the BiCU (PCB16) (Controller Board (PCB15) (IM 550F/600F/600SRF))

2. Remove the HDD (OT2) with the bracket [A] from the controller box [B]. (hook×2)



3. Remove the HDD (OT2) [A] from the HDD bracket.



Adjustment after Replacement

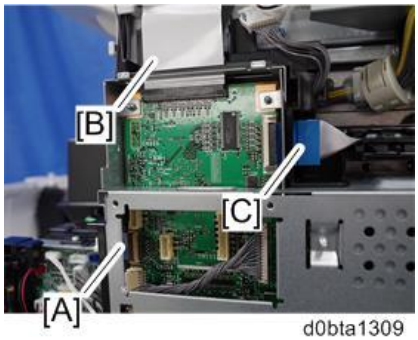
1. Execute SP5-832-001 to initialize the HDD (OT2).
Initialization should be performed for the HDD (OT2) which has already been formatted before.

2. If applicable, execute SP5-846-052 to restore the address data from SD card to the HDD (OT2).

3. Turn the main power OFF/ON.

When Installing the Flat Cable

Follow the instructions when installing the flat cable.



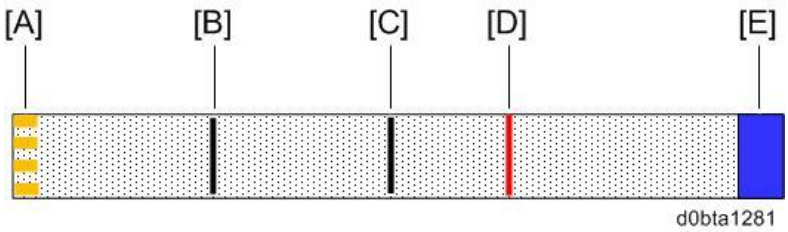
[A]: Flat cable between engine board and BiCU (PCB16)

[B]: Flat cable between scanner and BiCU (PCB16) (IM 550F/600F/600SRF only)

[C]: Flat cable between DF and BiCU (PCB16) (IM 550F/600F/600SRF only)

Flat Cable between IOB (PCB17) and BiCU (PCB16)

When installing a new flat cable, fold it as shown below.



[A] Terminals

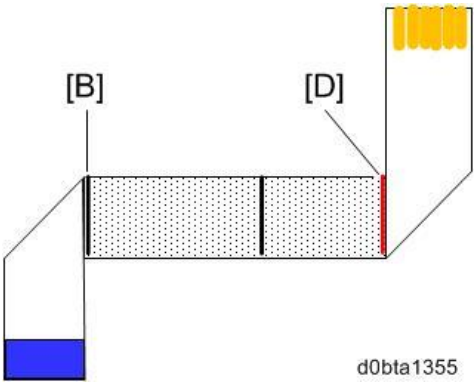
[B] Black line 1

[C] Black line 2

[D] Red line

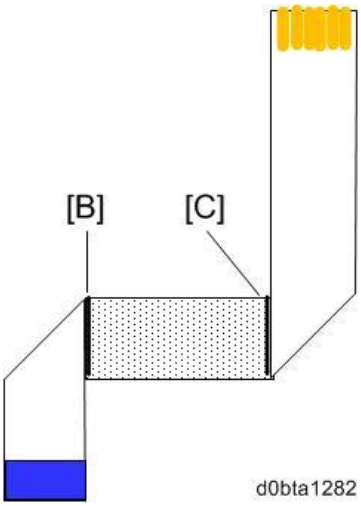
[E] Stiffener

IM 550F/600F/600SRF



1. Align the edge of the cable with the black line 1 [B].
2. Align the edge of the cable with the red line [D].

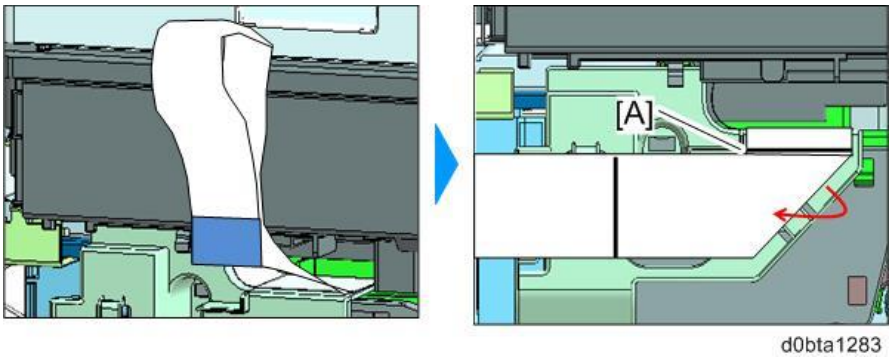
P800/801



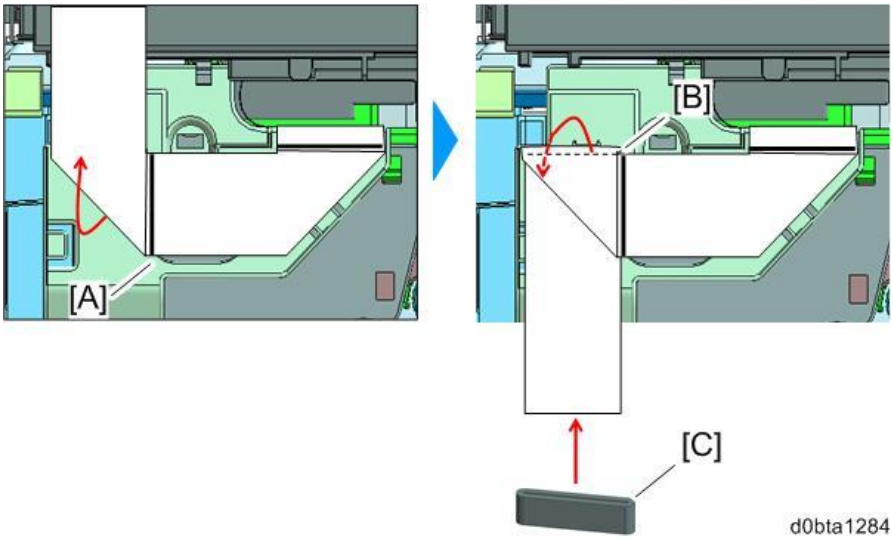
1. Align the edge of the cable with the black line 1 [B].
2. Align the edge of the cable with the black line 2 [C].

Flat Cable between Scanner and BiCU (PCB16) (IM 600SRF)

1. Fold the flat cable by aligning its edge with the black line [A].

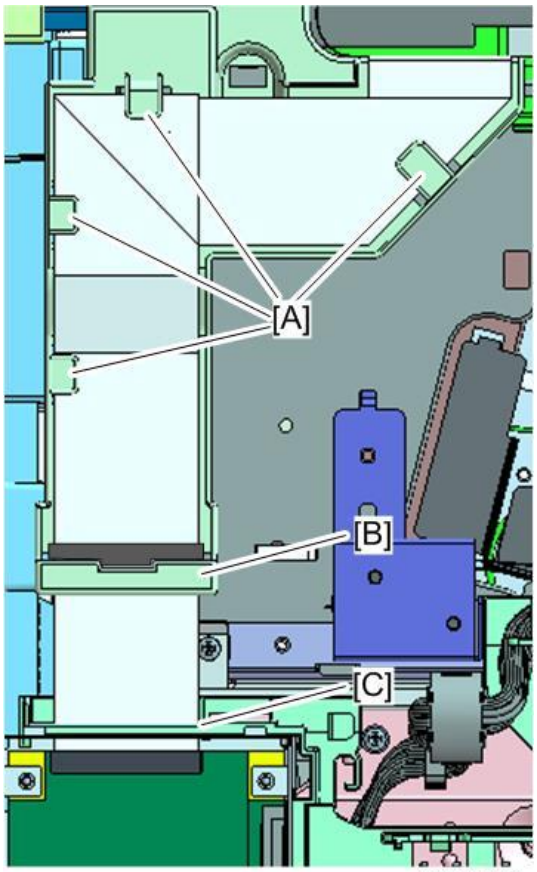


2. Fold the flat cable by aligning its edge with the black line [A].
3. Fold the flat cable along the edge [B].
4. Pass the flat cable through the core [C].



5. Pass the flat cable behind cable guide hooks [A].
6. Pass the flat cable through the hole [B] and place the core in this position.

7. Pass the flat cable through the hole [C] and connect it to the BiCU (PCB16).

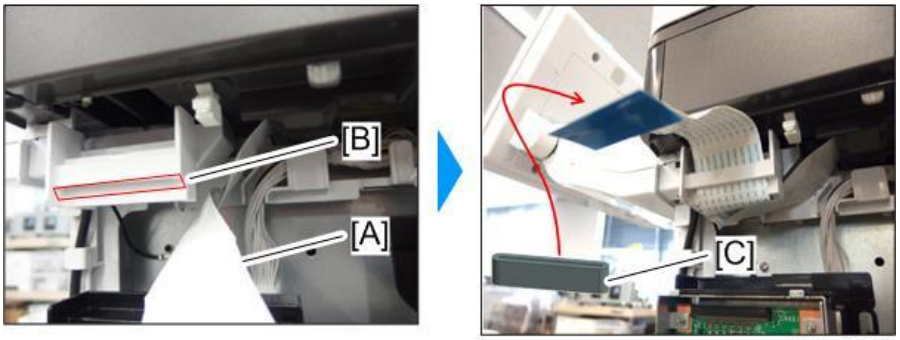


d0bta1285

Flat Cable between Scanner and BiCU (PCB16) (IM 550F/600F)

1. Pass the flat cable [A] through the hole [B].

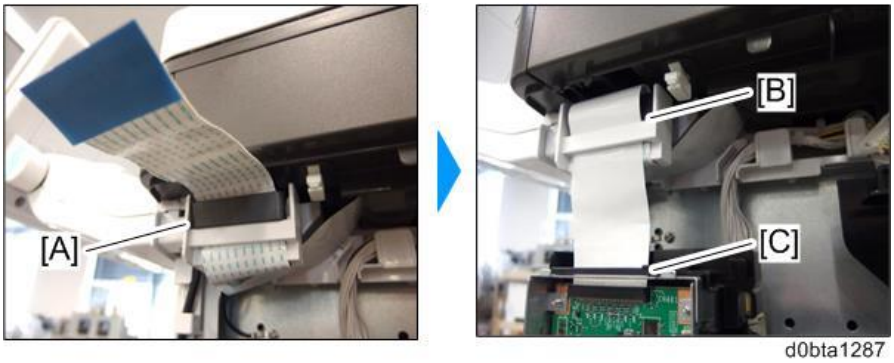
2. Pass the flat cable through the core [C].



d0bta1286

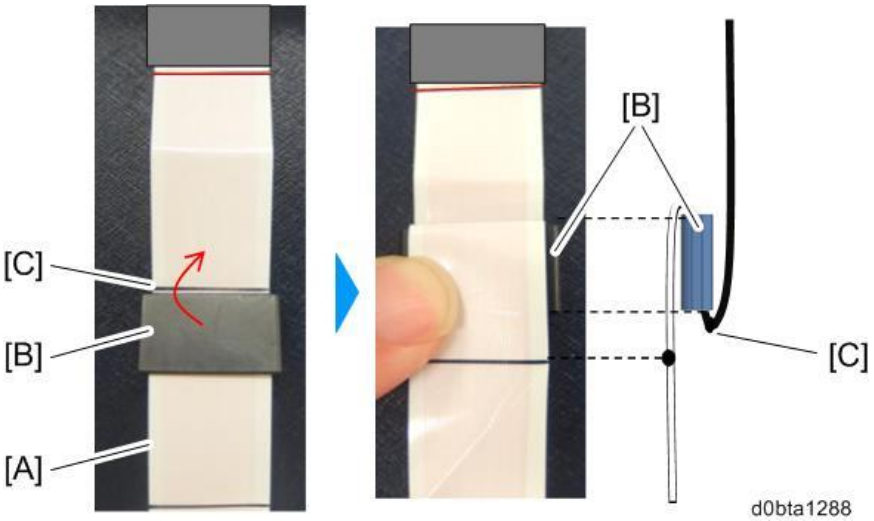
3. Set the core [A] in the bracket.

4. Pass the flat cable through the holes [B] and [C], and then connect it to the BiCU (PCB16).



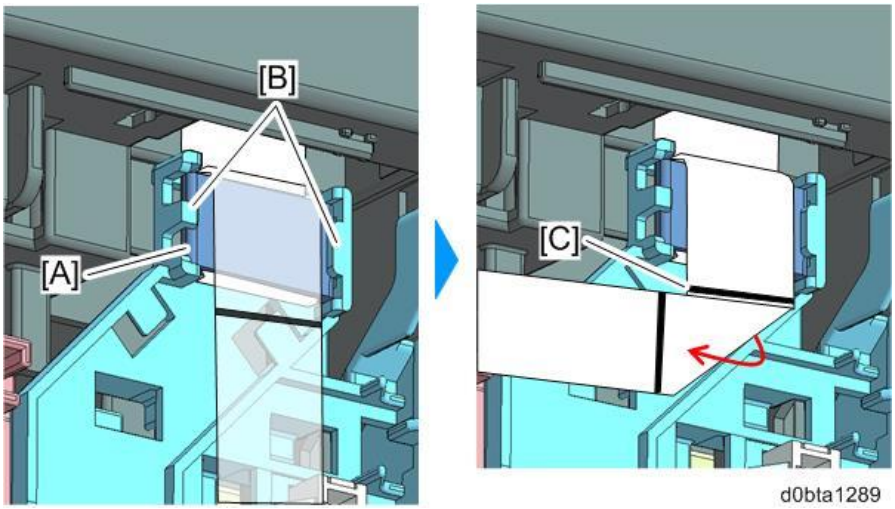
Flat Cable between DF and BiCU (PCB16) (IM 600SRF)

1. Pass the flat cable [A] through the core [B] and fold it along the black line [C].



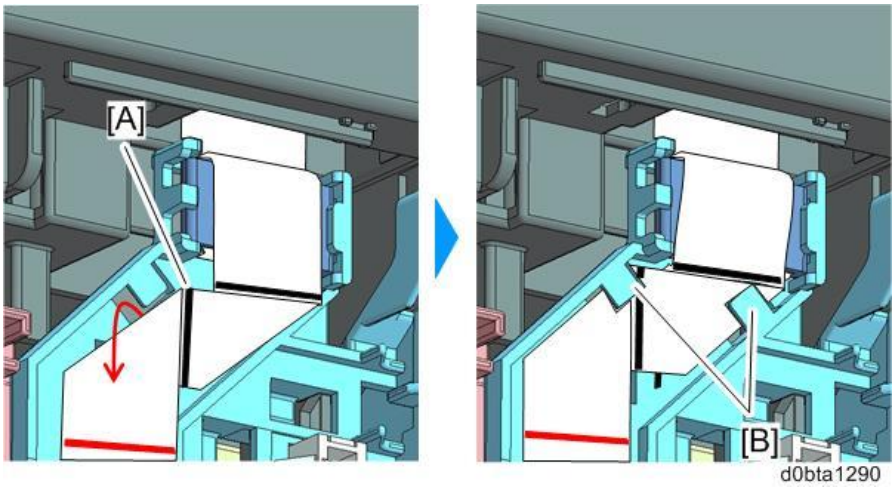
2. Fix the core [A] to the bracket using the hooks [B].

3. Fold the flat cable by aligning the edge of the cable with the black line [C].



4. Fold the flat cable by aligning the edge of the cable with the black line [A].

5. Pass the flat cable behind cable guide hooks [B].

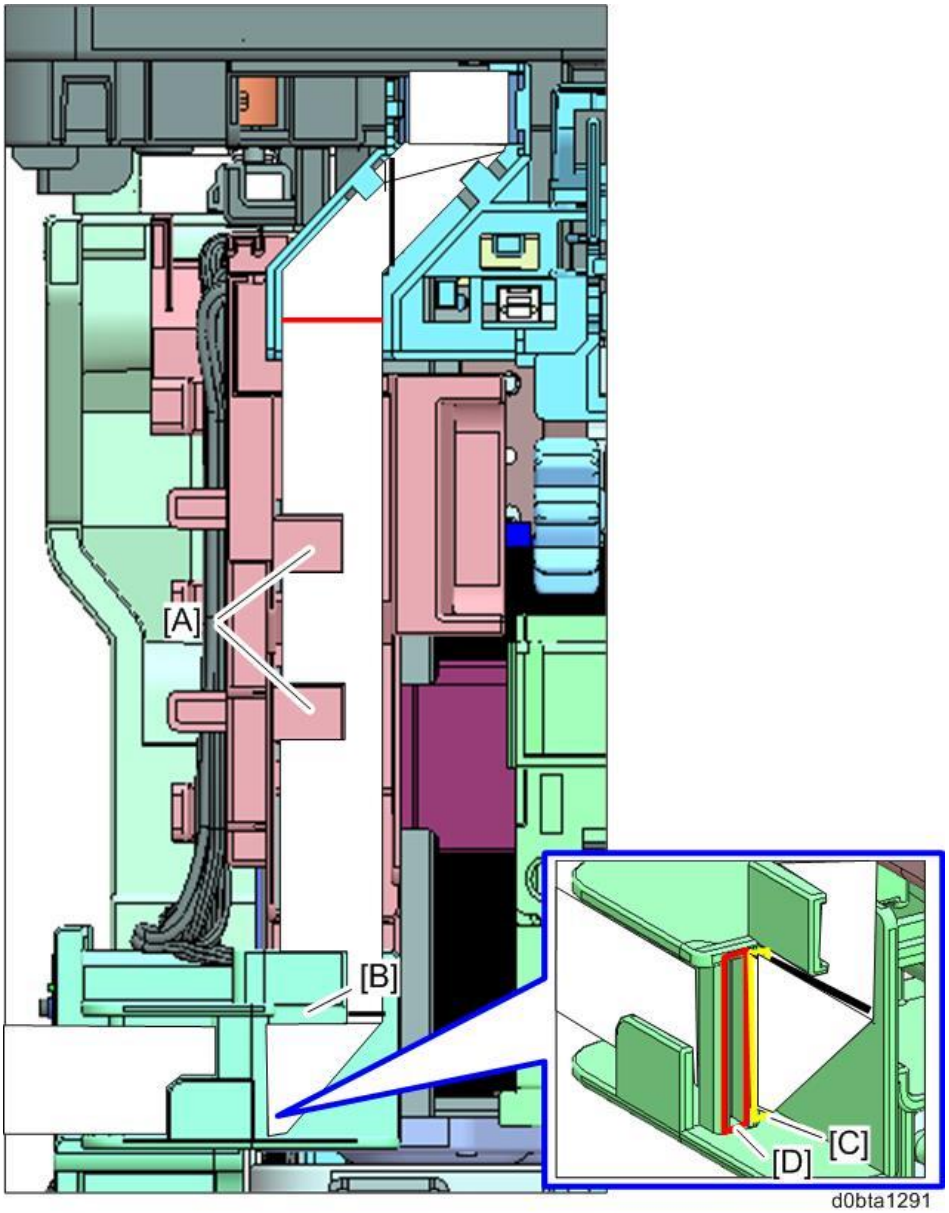


6. Pass the flat cable behind cable guide hooks [A].

7. Fold the flat cable by aligning the edge of the cable with the black line [B].

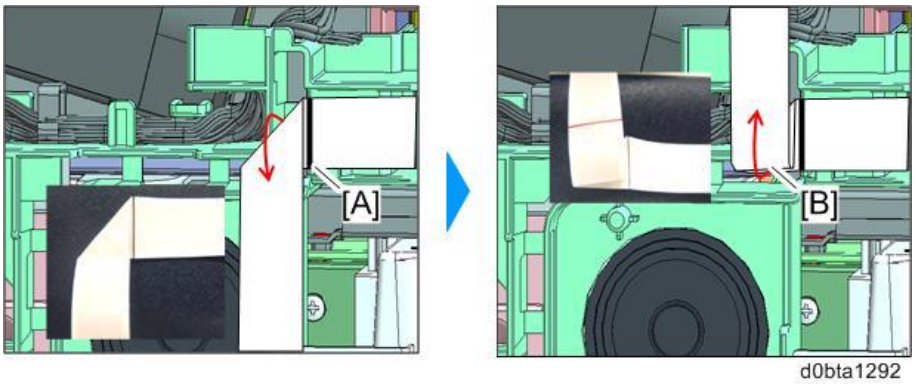
8. Pass the flat cable through the hole [C].

Do not pass it through the hole [D].



9. Fold the flat cable by aligning the edge of the cable with the black line [A].

10. Fold the flat cable along the edge [B].

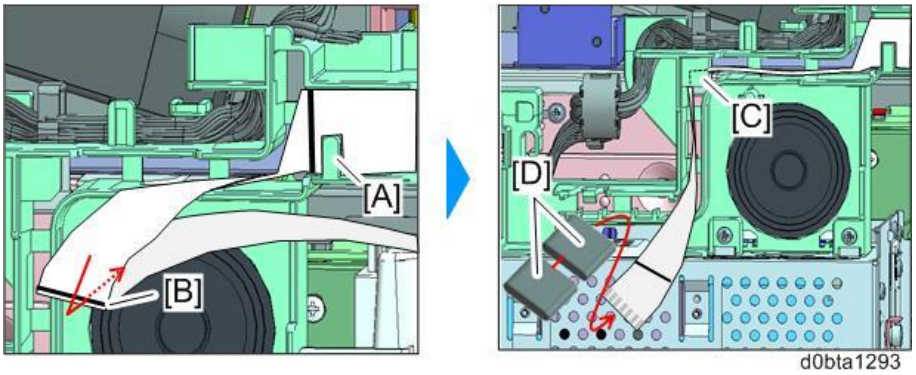


11. Pass the flat cable behind cable guide hook [A].

12. Fold the flat cable along the black line [B].

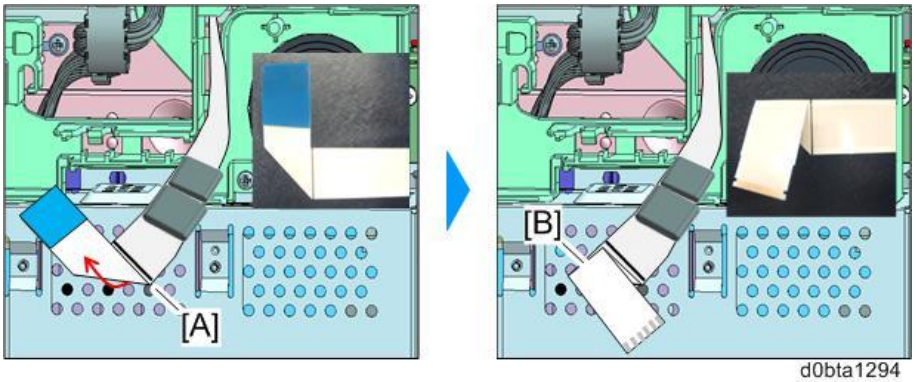
13. Pass the flat cable behind cable guide hook [C].

14. Pass the flat cable [A] through the cores [D].

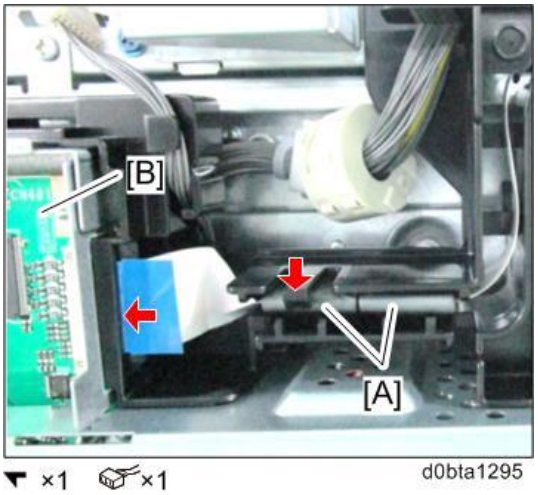


15. Fold the flat cable by aligning the edge of the cable with the black line [A].

16. Fold the flat cable along the edge [B].



17. Set the cores [A] in the holder and connect the flat cable to the BiCU (PCB16) [B].



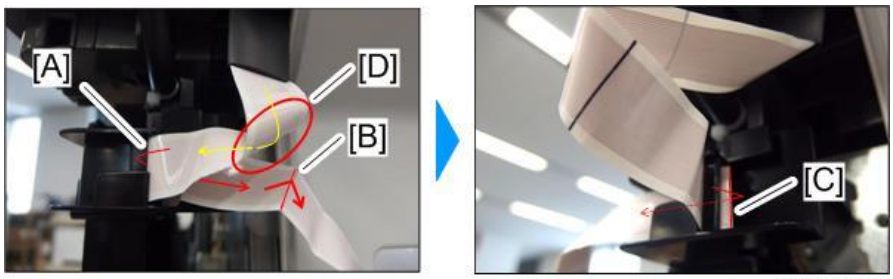
Flat Cable between DF and BiCU (PCB16) (IM 550F/600F)

1. Pass the flat cable through the hole [A].

2. Fold the flat cable along the red line [B].

3. Pass the flat cable through the hole [C].

Do not fold the flat cable in the [D] area.



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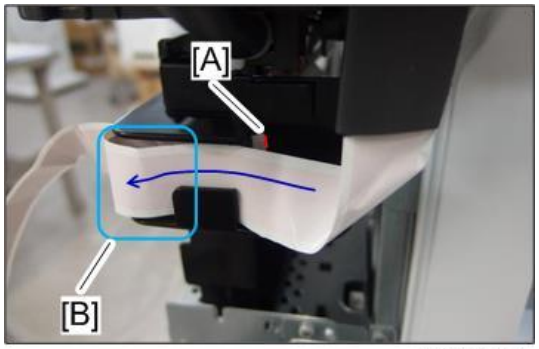
4. While keeping the red line in the [A] position, pull the flat cable in the direction of the arrow and loosen the [B] point.



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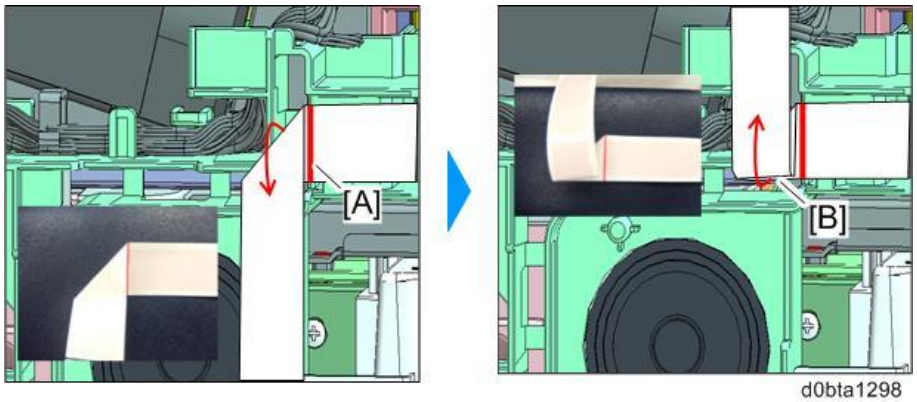
5. Fold the flat cable by aligning the edge of the cable with the red line [A].

6. Fold the flat cable along the edge [B].



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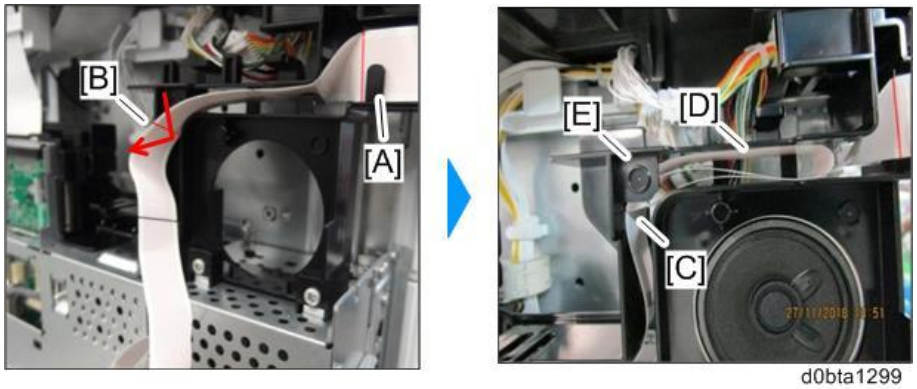
7. Pass the flat cable behind the hook [A].

8. Fold the flat cable along the red line [B].

9. While keeping the red line in the [C] position, make the flat cable into a Z-shape [D] and pass the

flat cable behind the hook [E].



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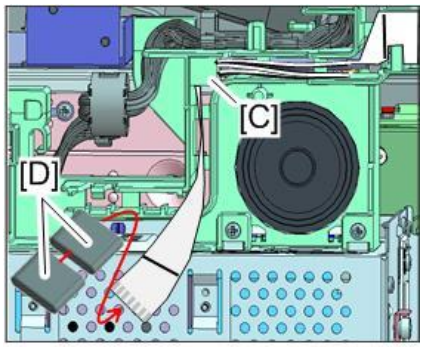
10. Pass the flat cable behind cable guide hook [C].

11. Pass the flat cable [A] through the cores [D].



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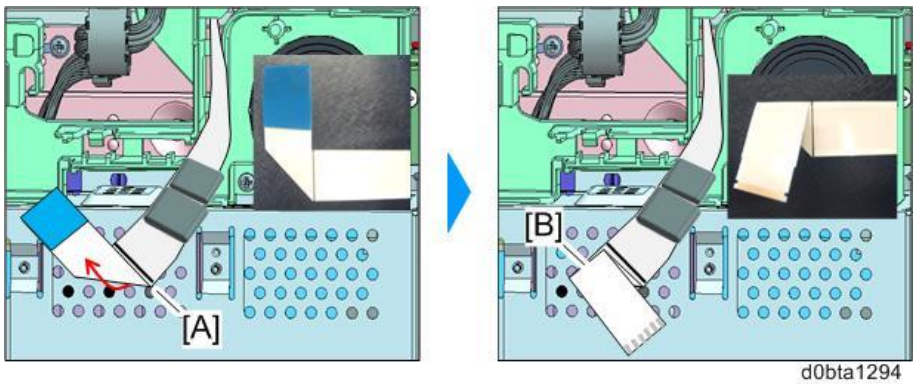
12. Fold the flat cable by aligning the edge of the cable with the black line [A].

13. Fold the flat cable along the edge [B].



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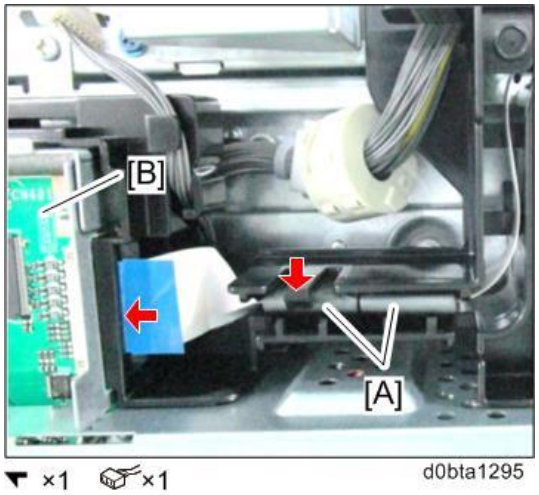
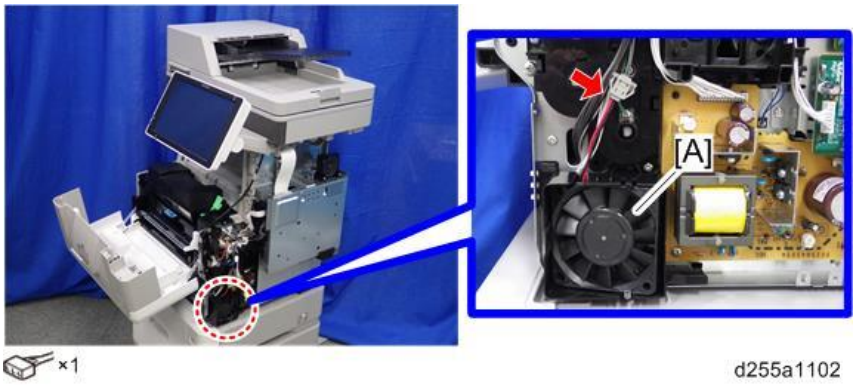
14. Set the cores [A] in the holder and connect the flat cable to the BiCU (PCB16) [B].



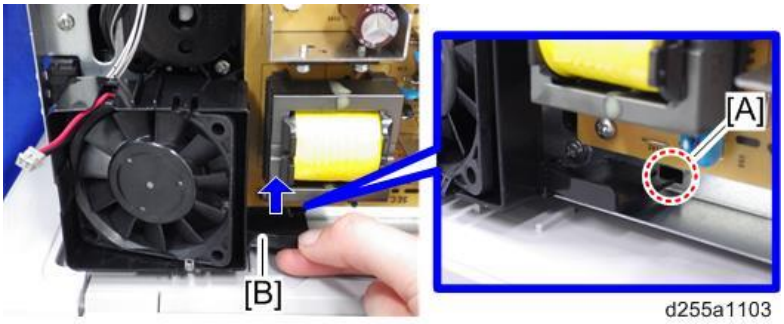
Fans

PSU Fan (FAN3)

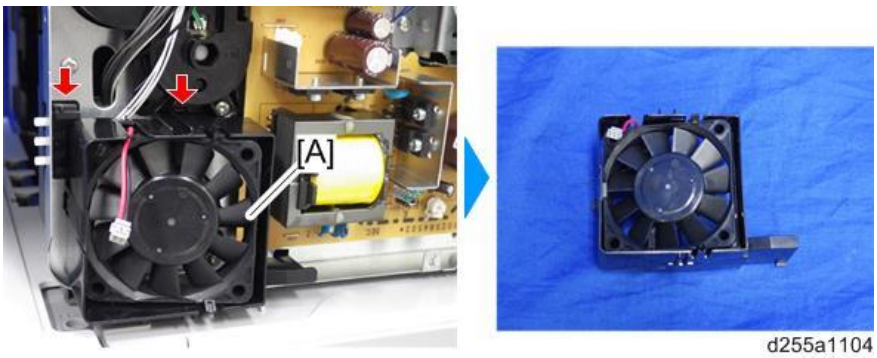
1. IM 550F/600F/600SRF: Remove the right lower cover. (Right Lower Cover)
   P 800/801: Remove the right cover. (Right Cover)
2. Disconnect the connector of the PSU fan (FAN3) [A] from the right side of the machine.



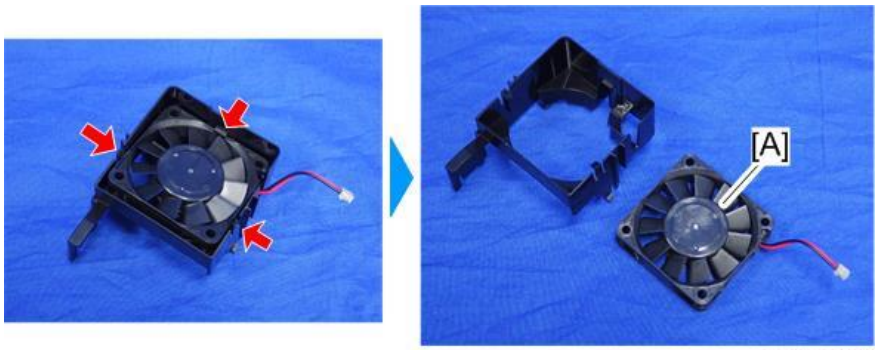
3. Release the hook [A] by lifting the fan bracket [B]. (hook×1)



4. Remove the PSU fan (FAN3) with the bracket [A]. (hook×2)



5. Remove the PSU fan (FAN3) [A] from the bracket. (hook×3)



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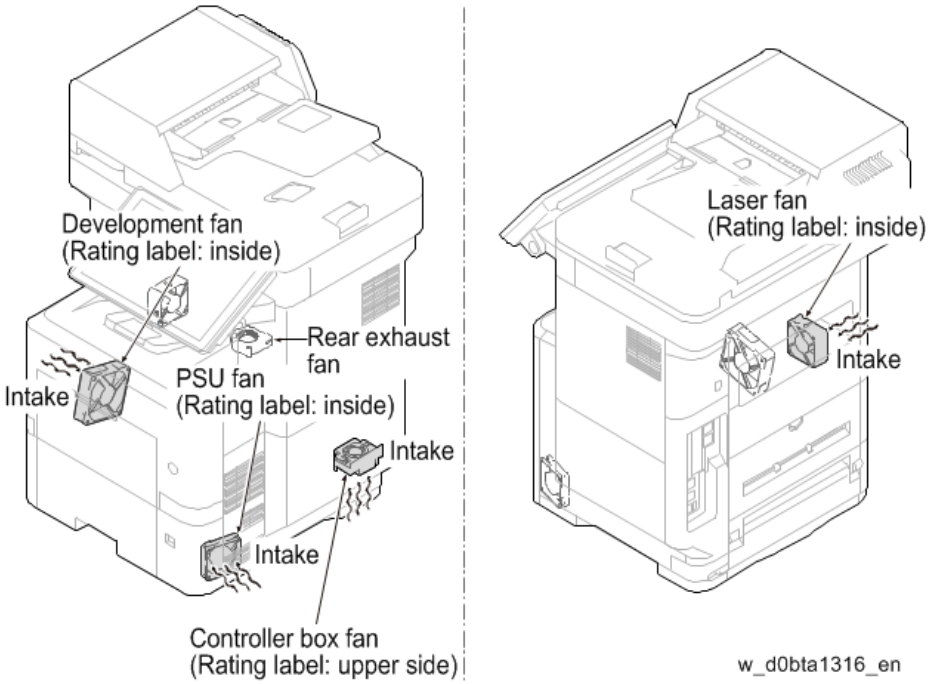
Direction of Installing the Fans



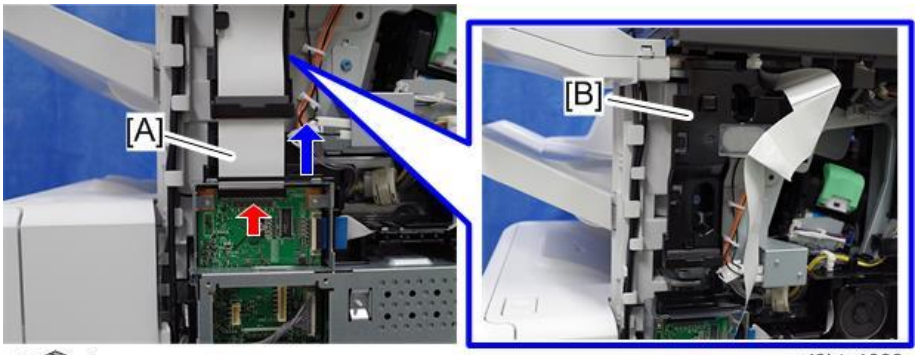
DF (IM 550F/600F/600SRF Only)

SPDF Unit

1. Remove the following covers.
   - Scanner front cover (Scanner Front Cover (IM 600SRF))
   - Right upper cover (Right Upper Cover (IM 600SRF))
   - Left upper cover (Left Upper Cover (IM 600SRF))
   - Rear fan cover (Rear Fan Cover (IM 600SRF Only))
2. Remove the bracket [A].

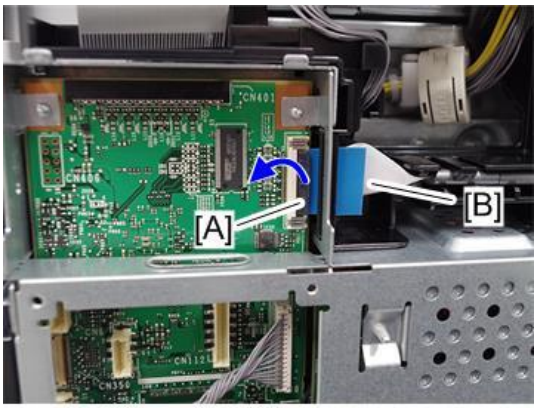
×2 d0bta1082

3. Disconnect the flat cable [A] and release it from the harness guide [B].



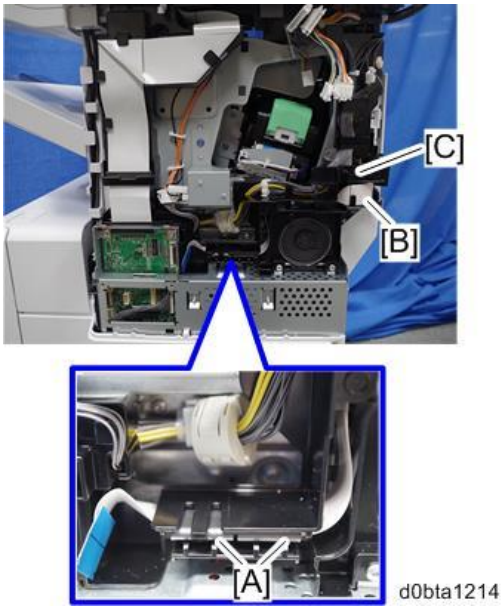
×1 d0bta1083

4. Open the lock [A] and disconnect the flat cable [B].

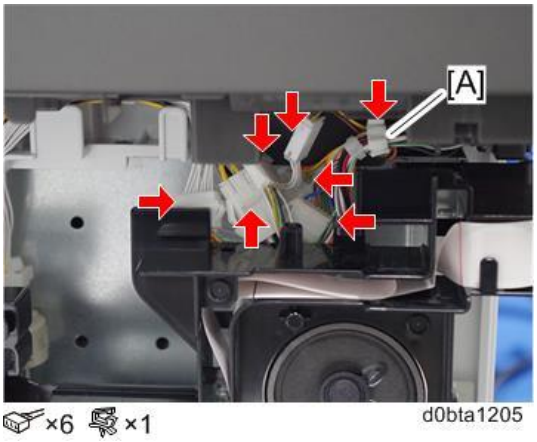


×1 d0bta1084

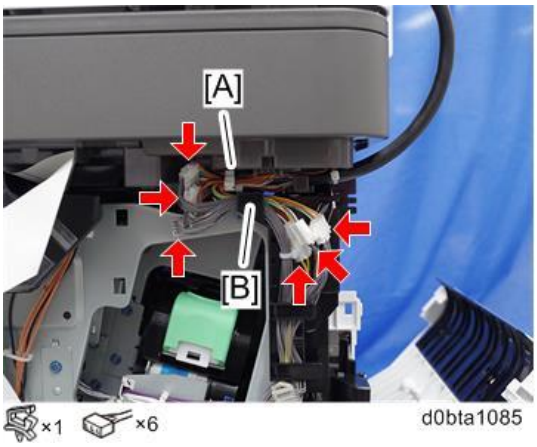
5. Release the flat cable [A] from the harness guide [B] and remove the cores [C].



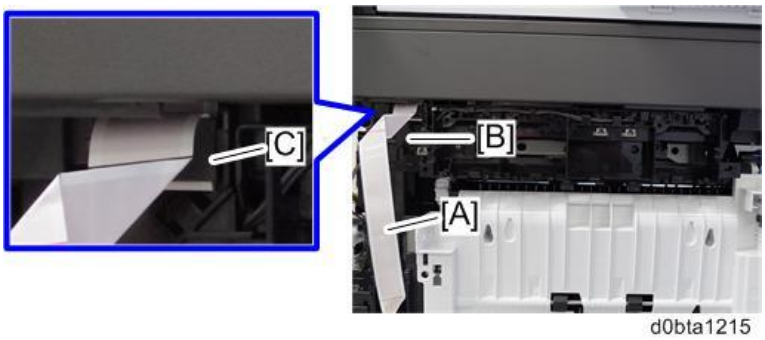
6. **IM 550F/600F:** Open the clamp [A] and disconnect the six connectors.



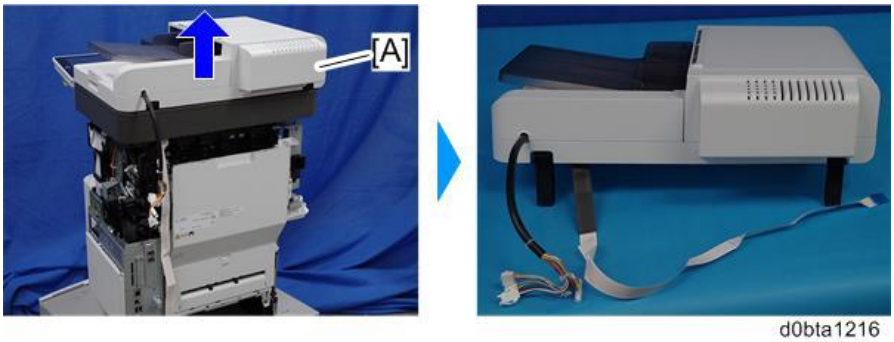
7. **IM 600SRF:** Open the clamp [A] and disconnect the six connectors. Then release the connectors from the harness guide [B].



8. Release the flat cable [A] from the harness guide [B] and remove the core [C].



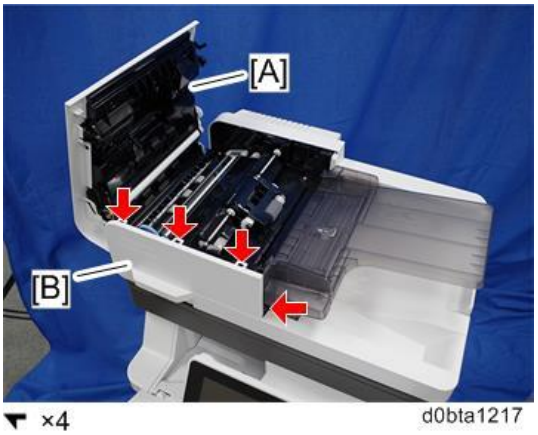
9. Remove the SPDF unit.



DF Front Cover

1. Open the DF top cover [A].

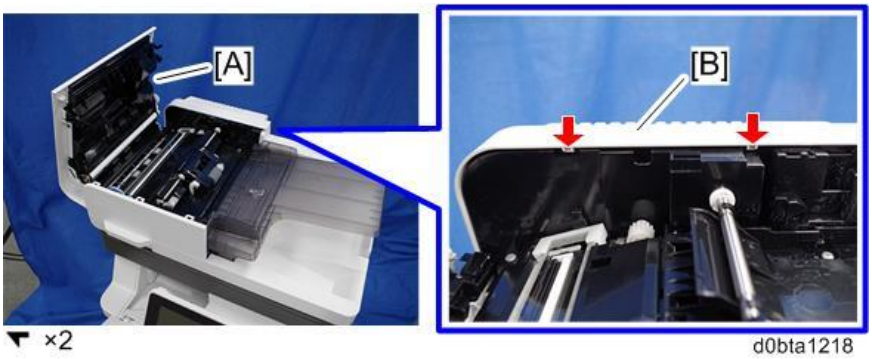
2. Remove the DF front cover [B].



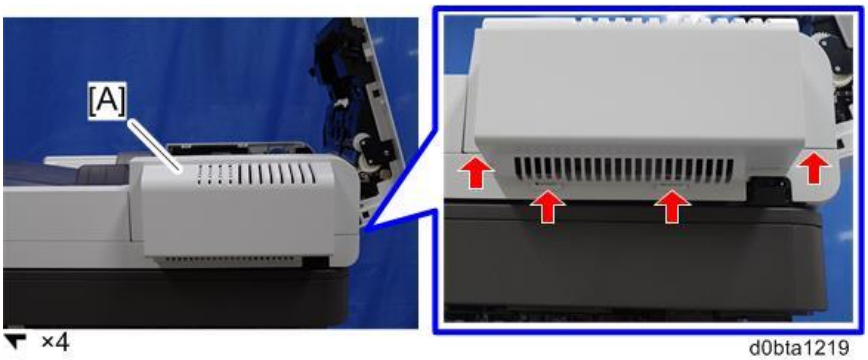
DF Rear Left Cover

1. Open the DF top cover [A].

2. Twist the DF rear left cover [B] to release two hooks.

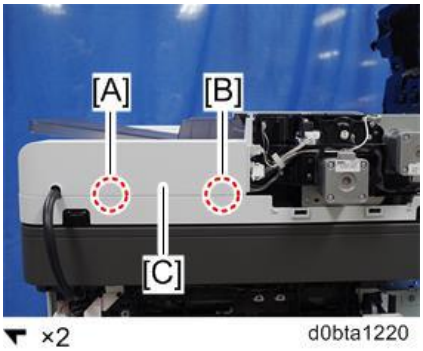


3. Remove the DF rear left cover [A].



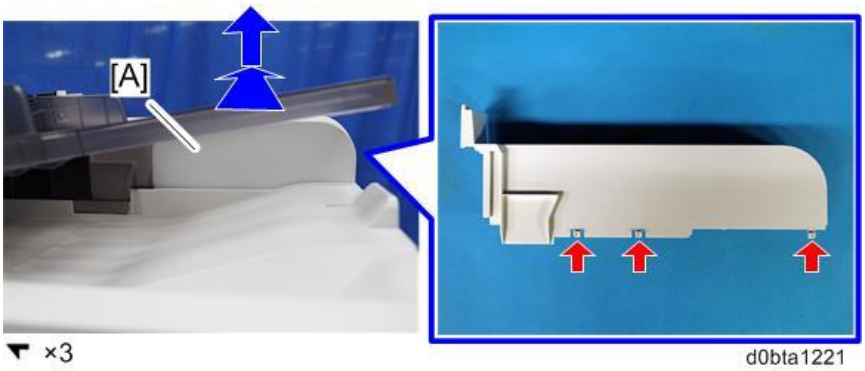
DF Rear Right Cover

1. Remove the DF rear left cover. (DF Rear Left Cover)
2. Insert a flathead screwdriver into [A] and [B] to release the hooks on the inside of the DF rear right cover [C].



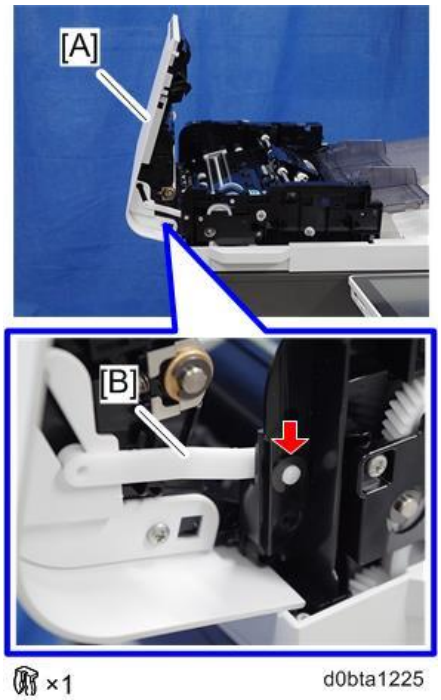
3. Push the DF rear right cover [A] towards the machine rear side to release three hooks, and then

pull it upward to remove it.

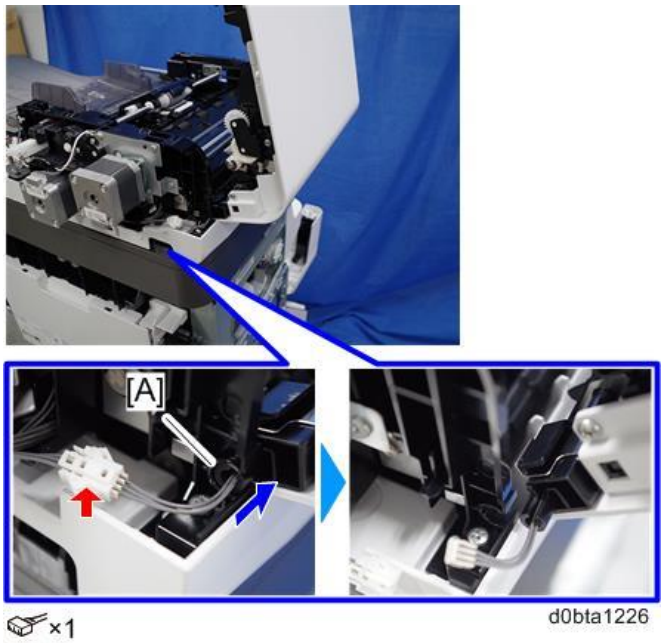


DF Top Cover

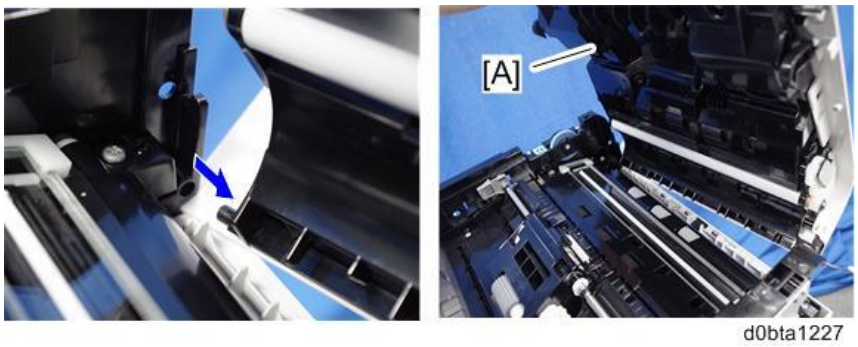
1. Remove the DF front cover. (DF Front Cover)
2. Remove the DF rear right cover. (DF Rear Right Cover)
3. Release the strap [B].
4. Open the DF top cover [A] further.



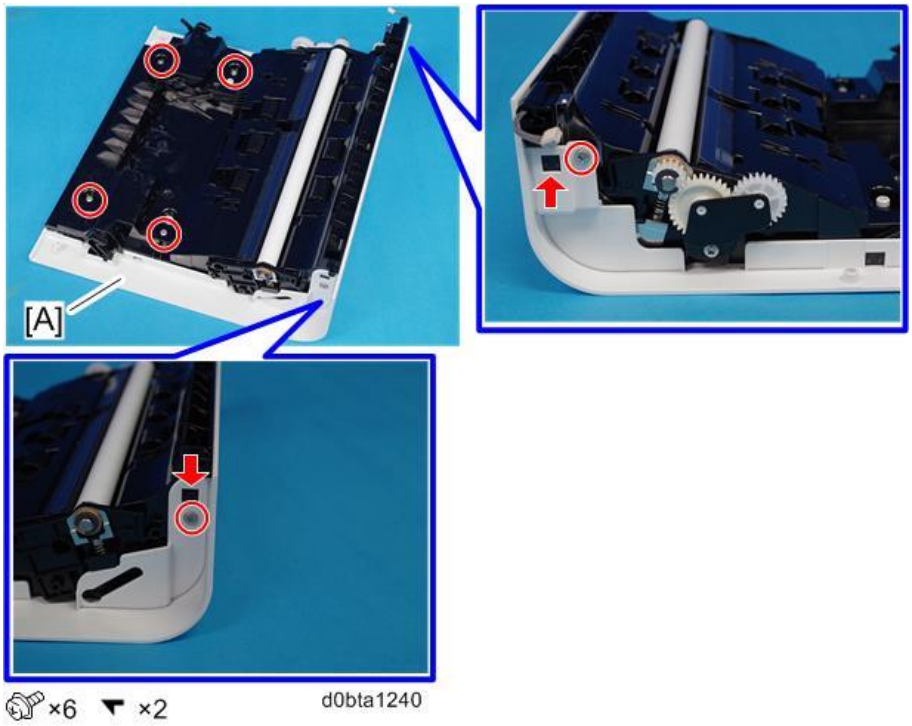
5. Release the rear fulcrum shaft [A].



6. Remove the DF top cover assembly [A].



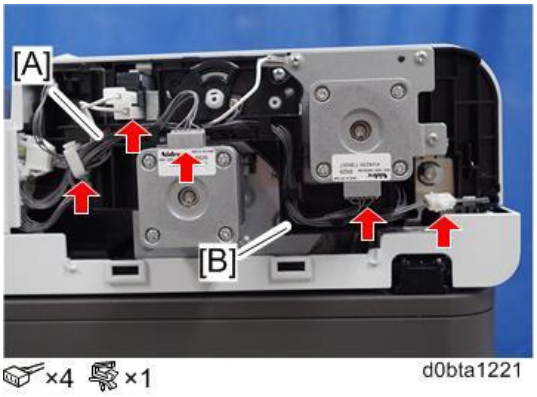
7. Remove the DF top cover [A].



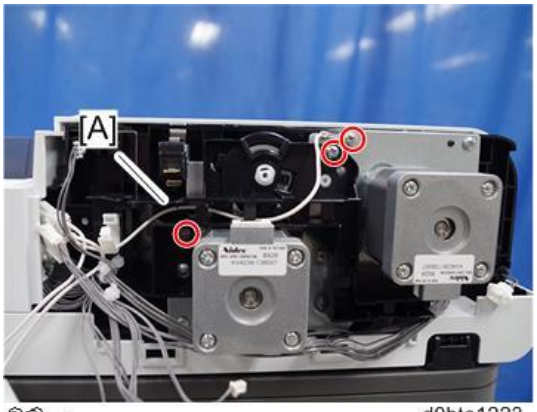
DF Drive Unit

1. Remove the DF rear left cover. (DF Rear Left Cover)

2. Remove the harnesses [A] from the harness guide [B].

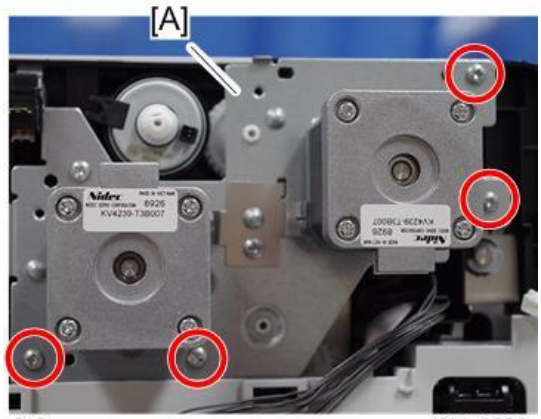


3. Remove the harness guide [A].



×3 d0bta1223

4. Remove the DF drive unit [A].



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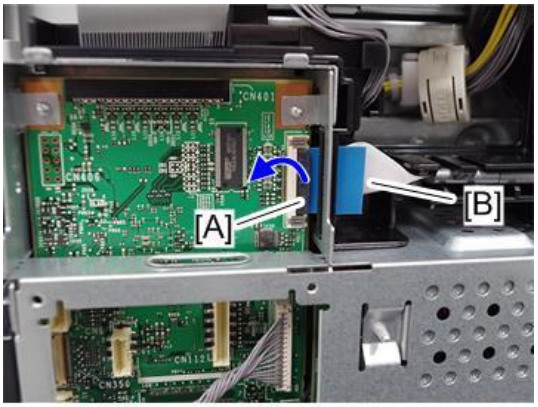
CIS

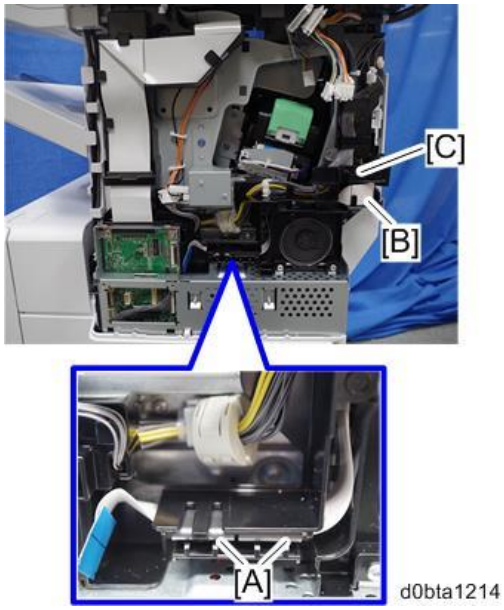
1. Remove the right upper cover. (Right Upper Cover)

2. Open the lock [A] and disconnect the flat cable [B].

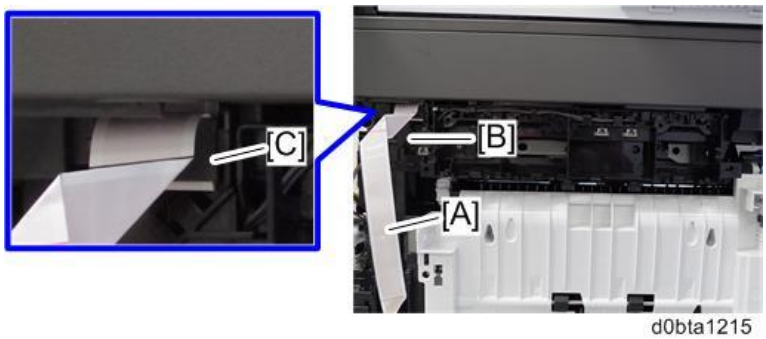


×1 d0bta1084

3. Release the flat cable [A] from the harness guide [B] and remove the cores [C].

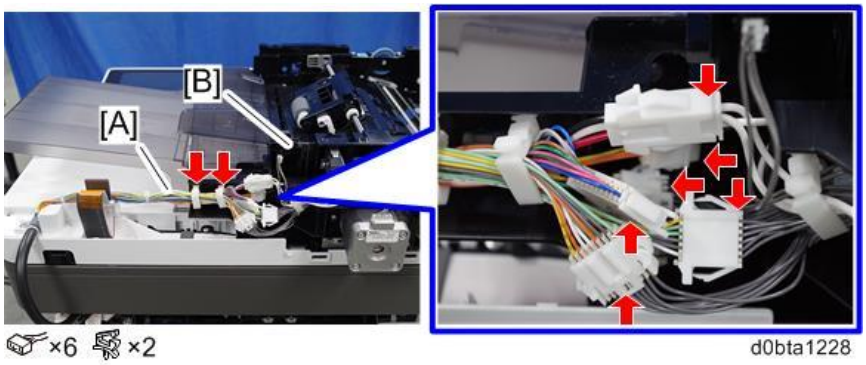


4. Release the flat cable [A] from the harness guide [B] and remove the core [C].



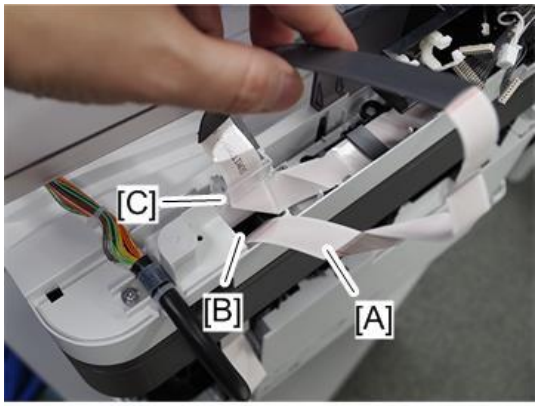
5. Remove the DF top cover assembly. (DF Top Cover)

6. Remove the harness [A] from the DF conveying unit [B].



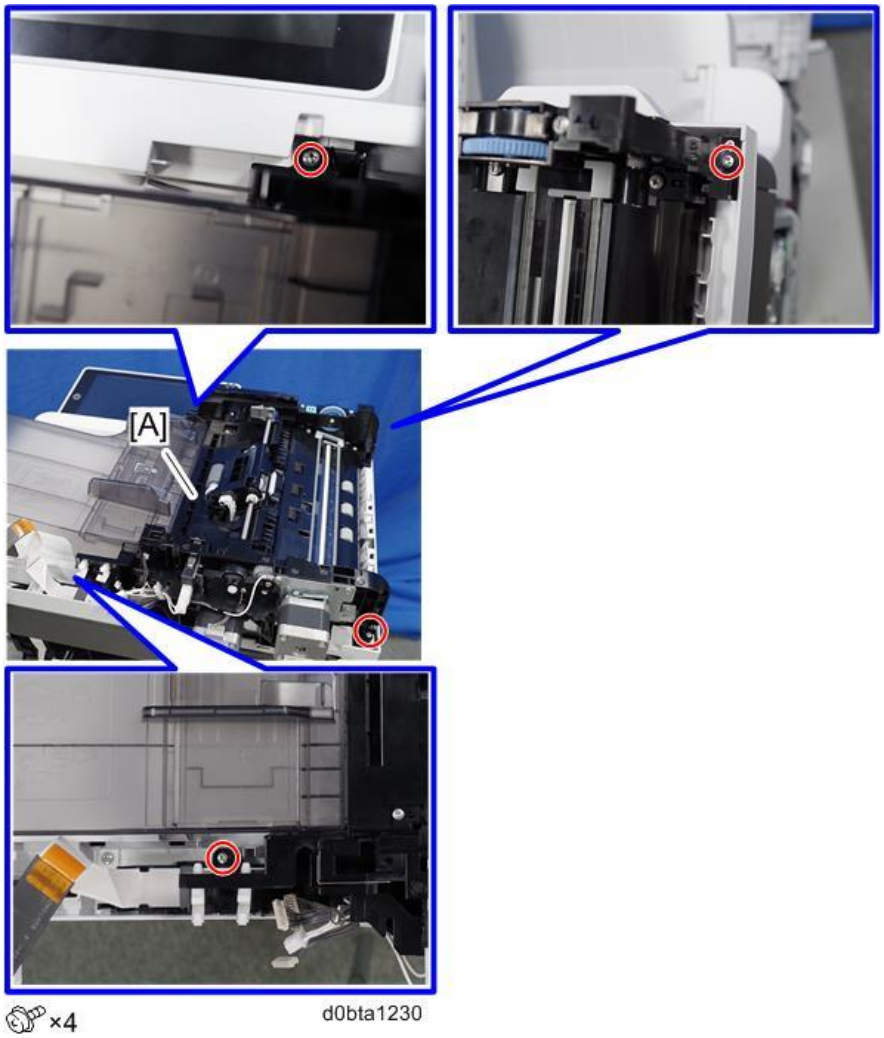
7. Pull out the flat cable [A] from the hole [B].

8. Remove the cover [C] and release the flat cable [A].



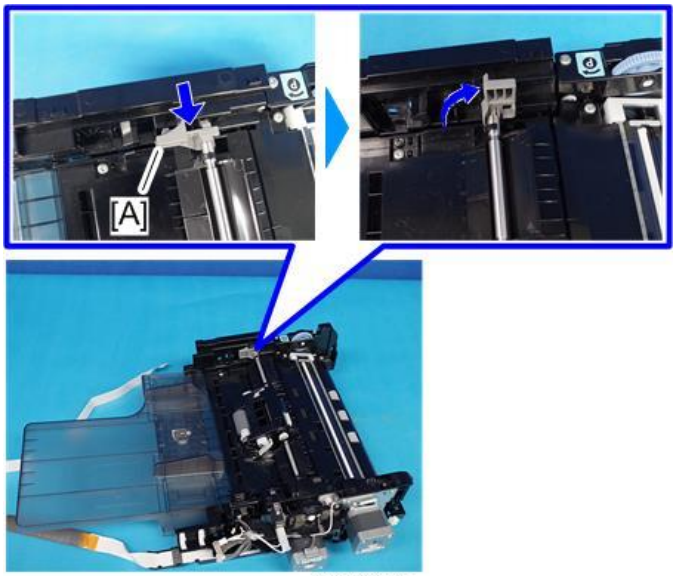
d0bta1229

9. Remove the DF conveying unit [A].



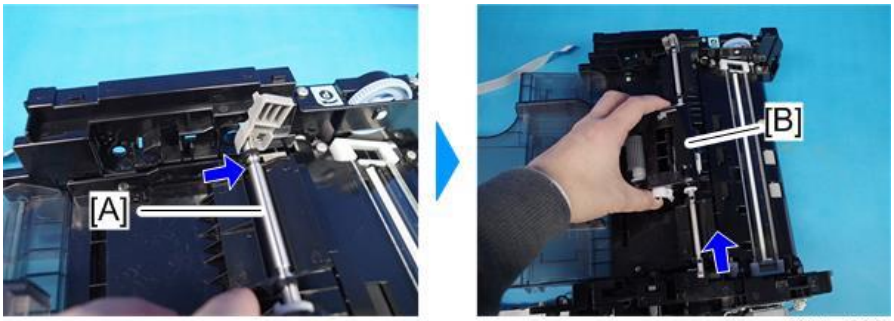
d0bta1230

10. Push the lock lever [A] and rotate it to the release position.



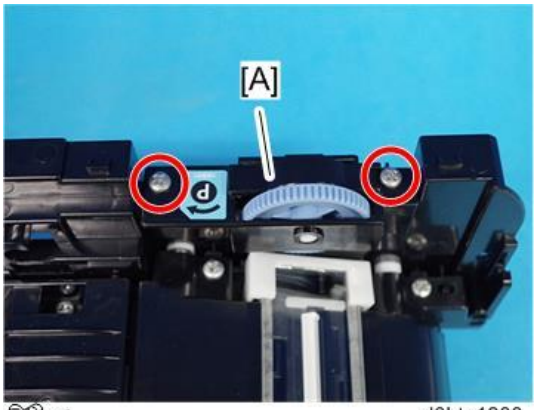
d0bta1231

11. Slide the machine front side of the DF feed roller shaft [A] toward the machine left side, and then pull out the DF paper feed roller unit [B].



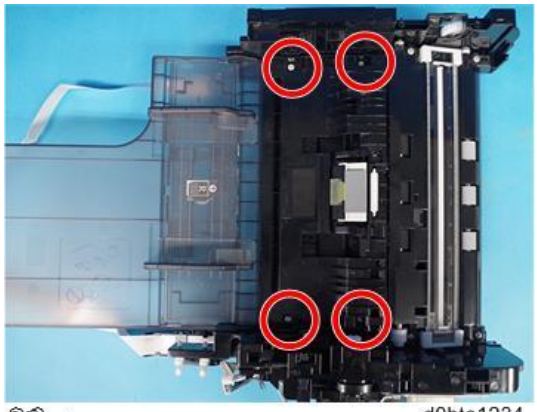
d0bta1232

12. Remove the jam release dial [A].



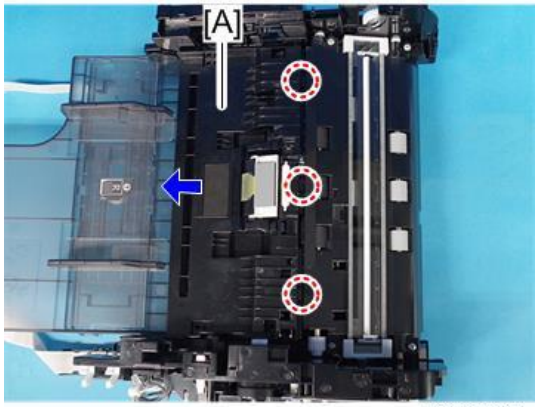
×2 d0bta1233

13. Remove four screws.



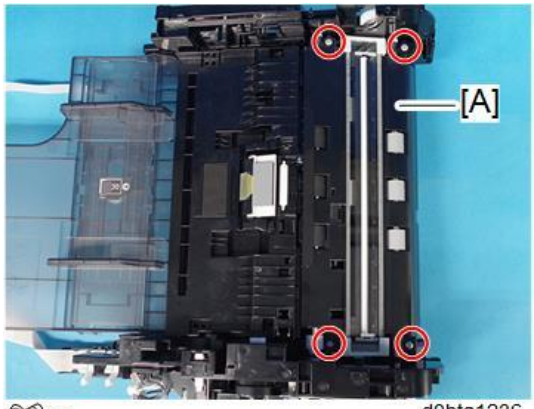
×4 d0bta1234

14. Slide the conveying guide [A] in the direction of the arrow to release three hooks.



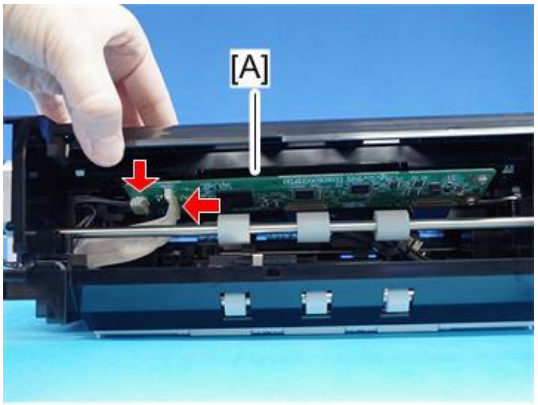
d0bta1235

15. Detach the CIS assembly [A].



×4 d0bta1236

16. Disconnect two connectors from the CIS assembly [A].



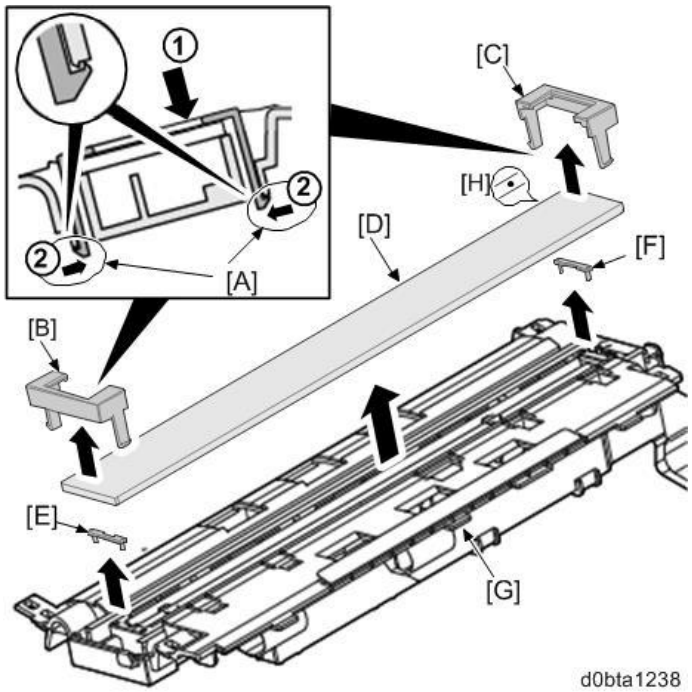
d0bta1237

17. Release both two hooks [A] of the front glass holder [B] and rear glass holder [C] in the direction of the arrow and detach them.

18. Detach the CIS glass [D] and the front spacer [E] and rear spacer [F] from the CIS assembly [G]. Since the front and rear spacers are not fixed, take care not to lose them.

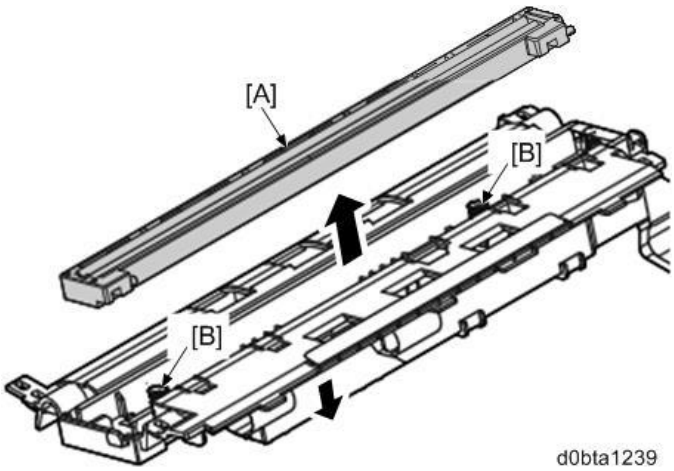
Important

Check the position of black marking for the distinction of the front / back side of the glass.
Also, make sure not to touch the glass surface.
If it is dirty, wipe it off with a dry cloth.



d0bta1238

19. Detach the CIS [A] in the direction of the arrow.
Take care not to lose two springs [B].

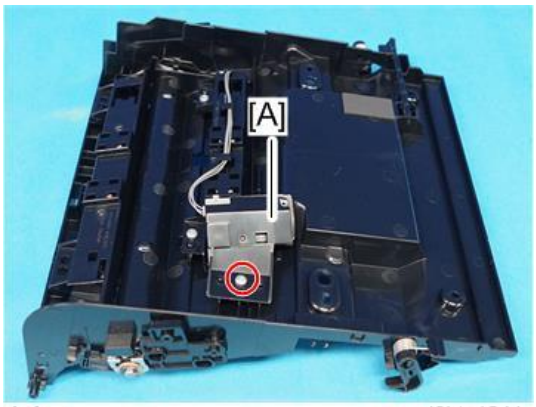


Important

When reassembling, check that the spring is inserted on the boss of the CIS assembly.

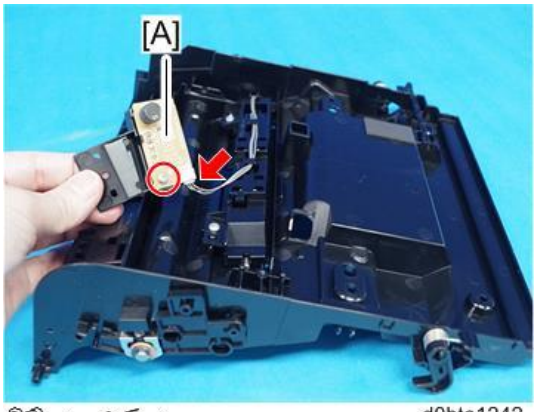
DF double feed detector TX PCB (PCB25)

1. Remove the DF top cover. (DF Top Cover)
2. Remove the Bracket [A].



×1

3. Remove the DF double feed detector TX PCB (PCB25) [A].



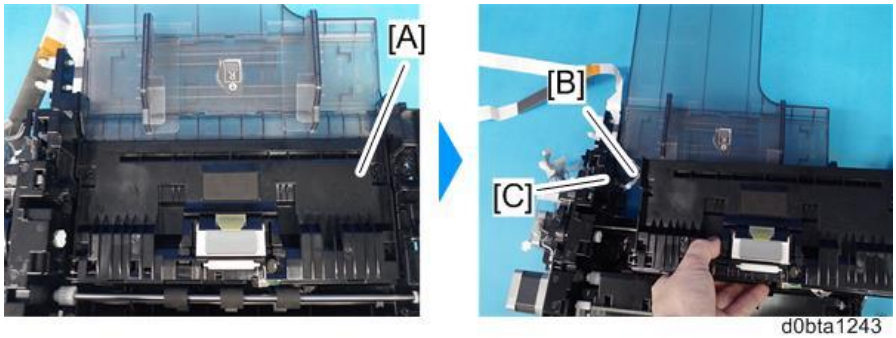
×1 ×1 d0bta1242

DF double feed detector RX PCB (PCB26)

1. Remove the CIS assembly. (CIS)

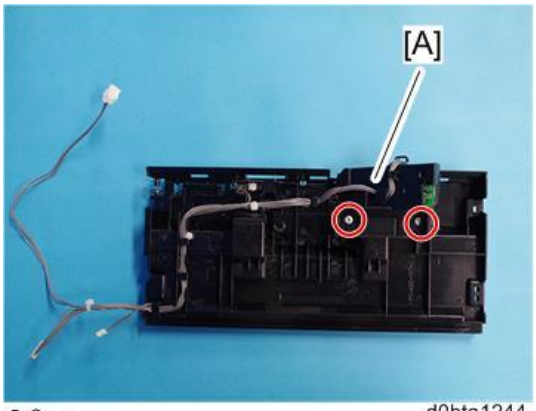
2. Remove the conveying guide [A].

Pull out the harness [B] through the hole [C].



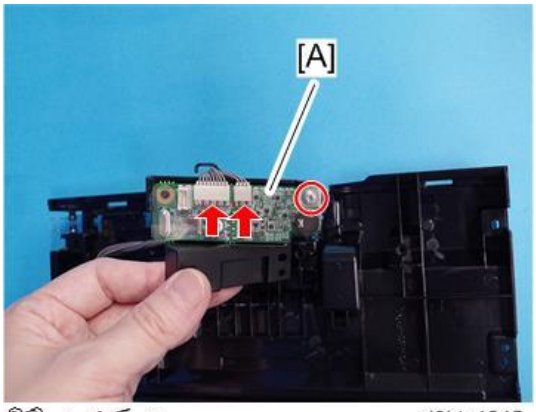
d0bta1243

3. Remove the bracket [A].



×2 d0bta1244

4. Remove the DF double feed detector RX PCB (PCB26) [A].

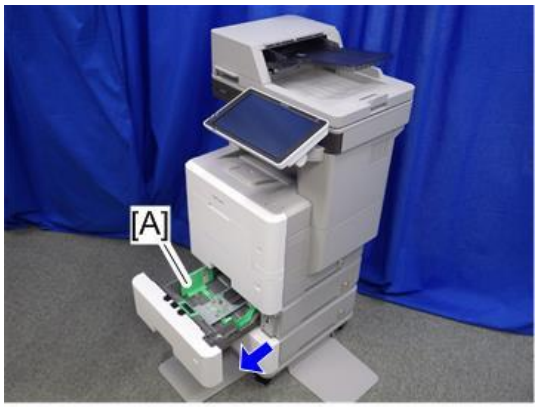


×1 ×2 d0bta1245

Paper Feed Unit (Paper Feed Unit PB1160)

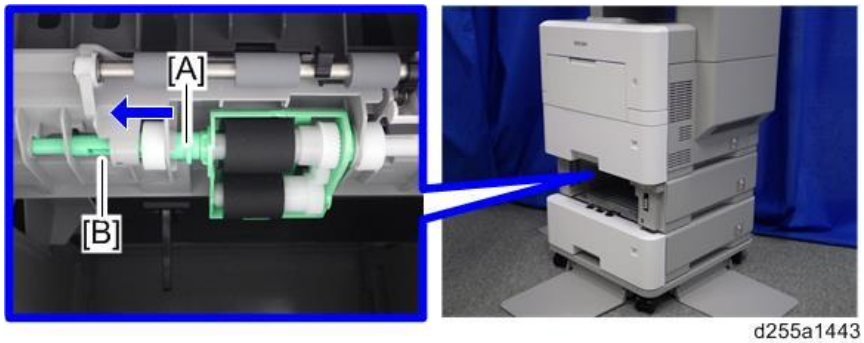
Paper Feed Roller, Pickup Roller

1. Remove the paper feed tray [A] of the optional paper feed unit by pulling it out.



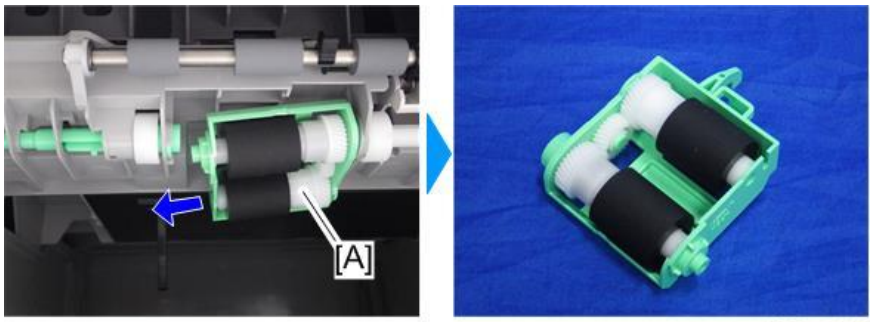
d255a1442

2. Slide the shaft [A] to the left while pushing the release lever [B].



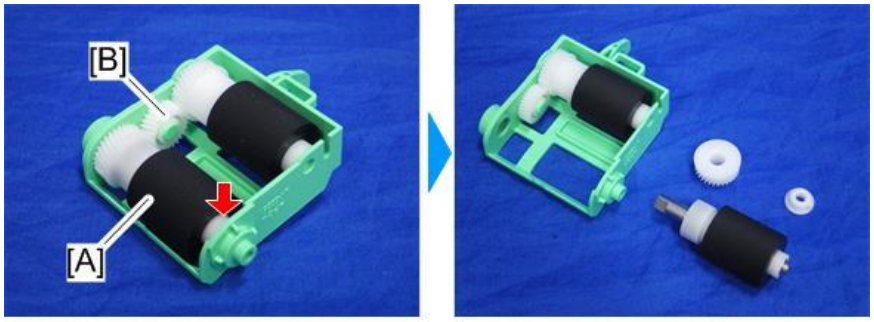
d255a1443

3. Remove the feed roller holder [A] by sliding it to the left.



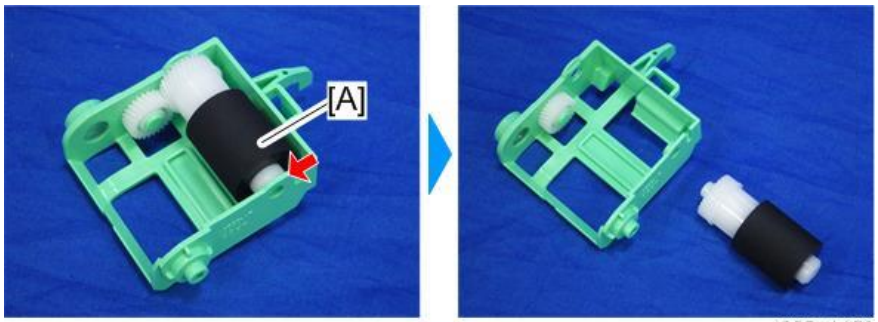
d255a1444

4. Remove the paper feed roller [A] from the feed roller holder [B]. (hook×1)



d255a1445

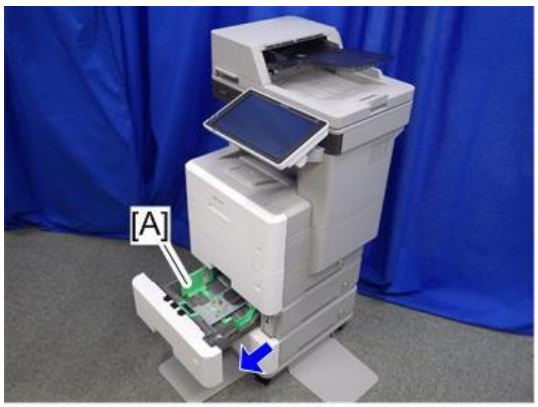
5. Remove the pickup roller [A]. (hook×1)



d255a1458

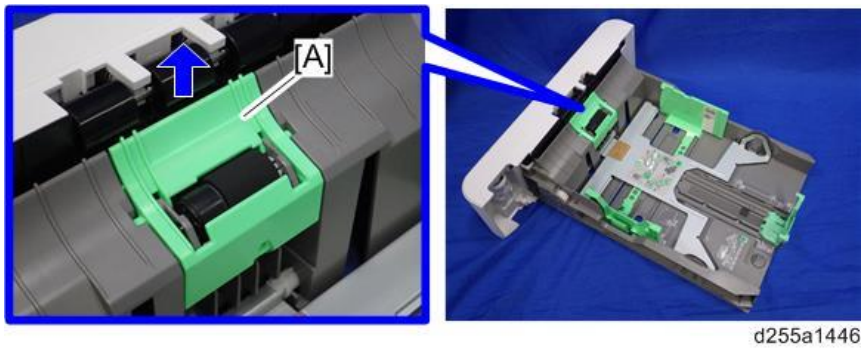
Separation Roller

1. Remove the paper feed tray [A] of the optional paper feed unit by pulling it out.



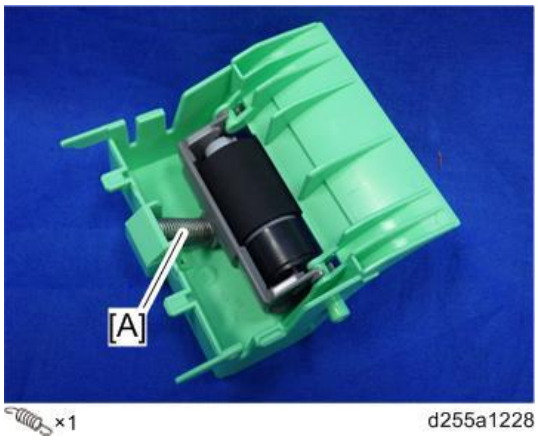
d255a1442

2. Remove the separation roller holder [A].

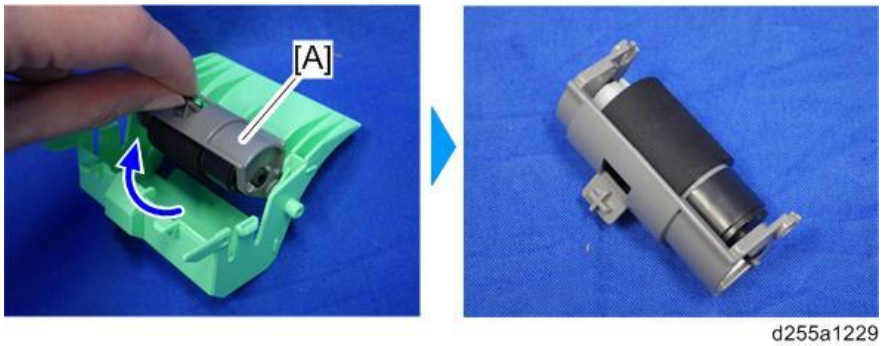


d255a1446

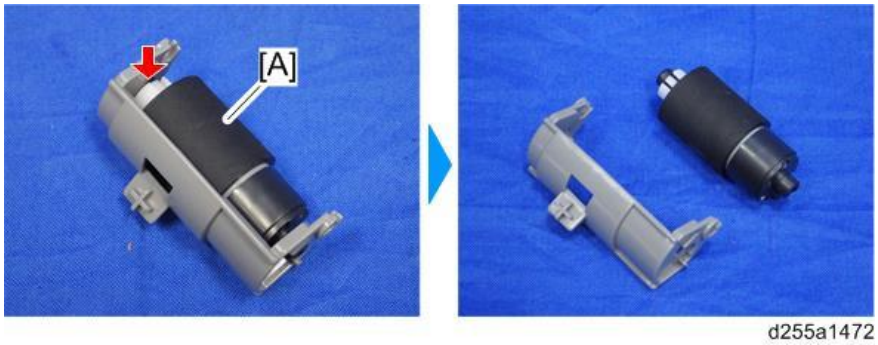
3. Remove the spring [A].



4. Remove the separation roller [A] by rotating it as shown below.



5. Remove the separation roller [A]. (hook×1)

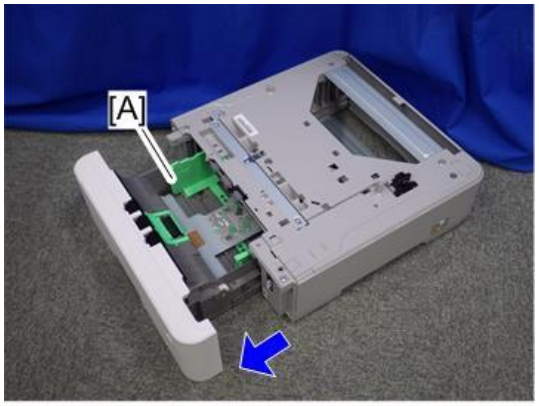


Main Board

1. Remove the optional paper feed unit from the main machine.

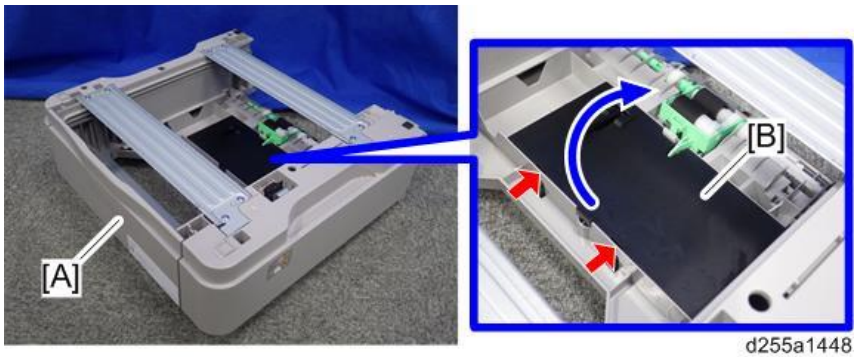
2. If the optional paper feed unit is installed on the caster table, remove it from the caster table.

3. Remove the paper feed tray [A] of the optional paper feed unit by pulling it out.



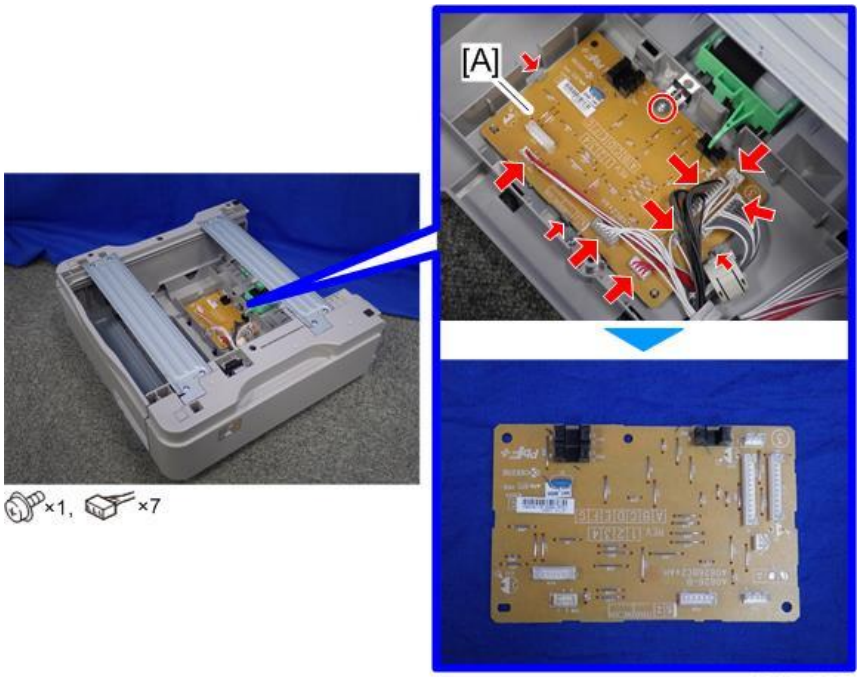
d255a1447

4. Turn over the optional paper feed unit [A], and then remove the board cover [B]. (hook×2)



d255a1448

5. Remove the mainboard [A]. (hook×3)



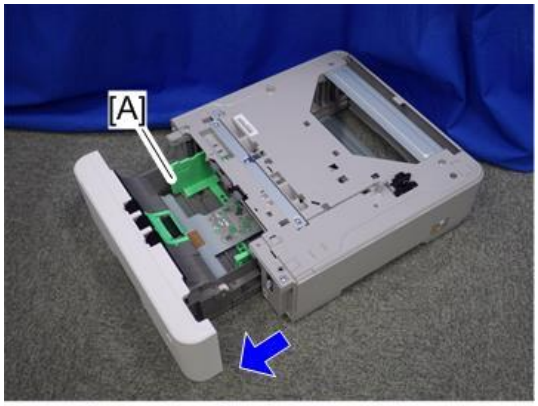
d255a1449

Drive Unit

1. Remove the optional paper feed unit from the main machine.

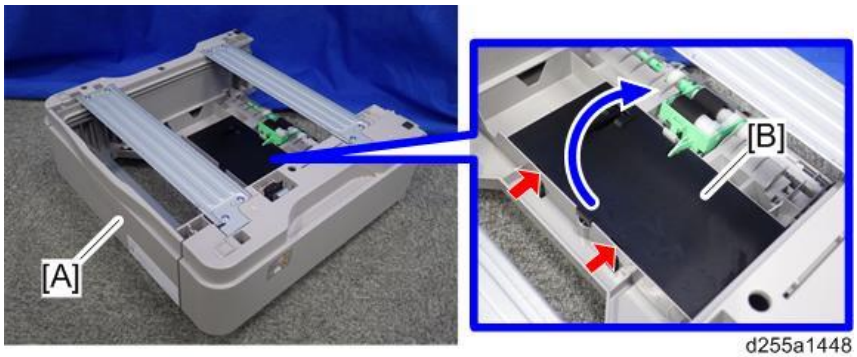
2. If the optional paper feed unit is installed on the caster table, remove it from the caster table.

3. Remove the paper feed tray [A] of the optional paper feed unit by pulling it out.



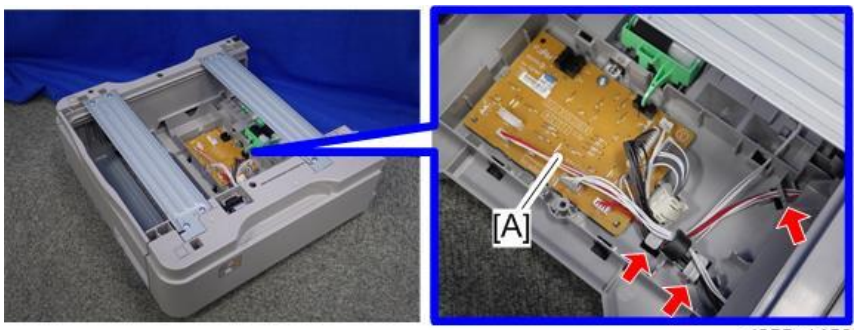
d255a1447

4. Turn over the optional paper feed unit [A], and then remove the board cover [B]. (hook×2)



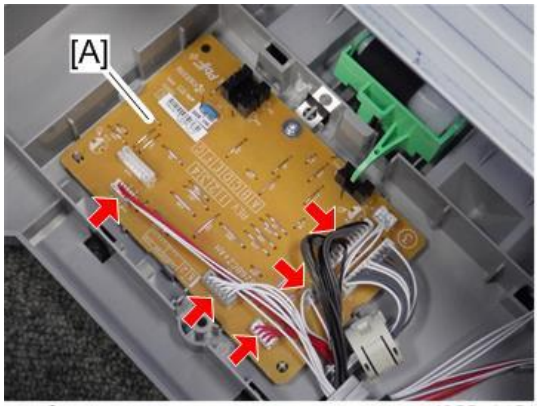
d255a1448

5. Release the harness of the mainboard [A] from the harness guides.



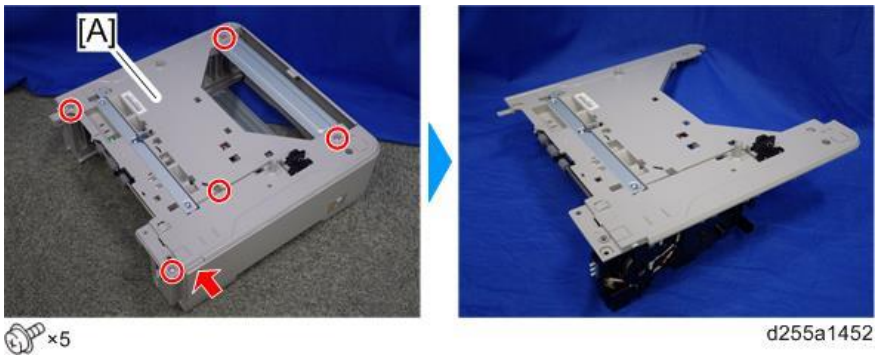
d255a1450

6. Disconnect the five connectors from the main board [A].

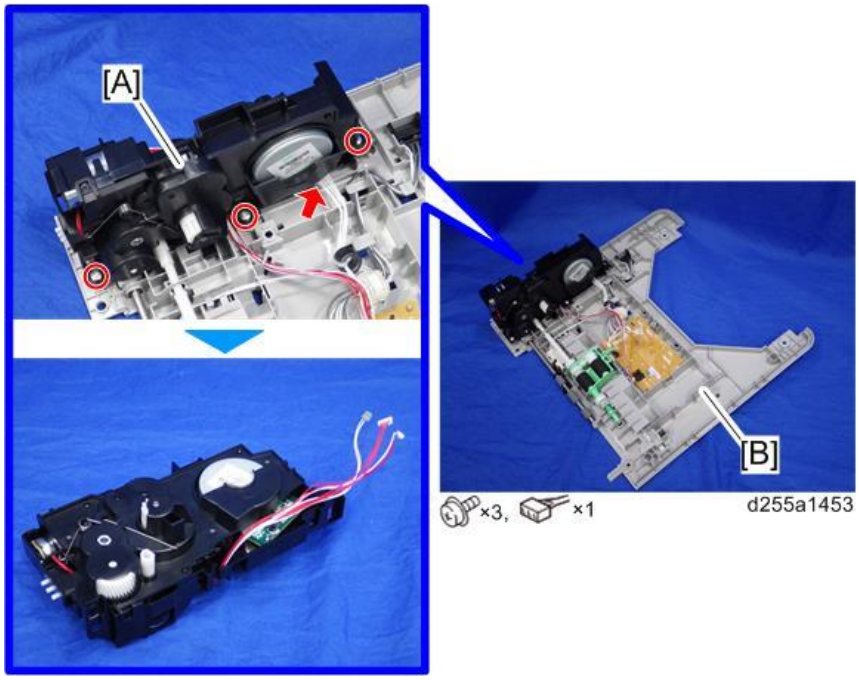


×5 d255a1451

7. Turn over the optional paper feed unit again, and then remove the upper cover [A]. (hook×1)

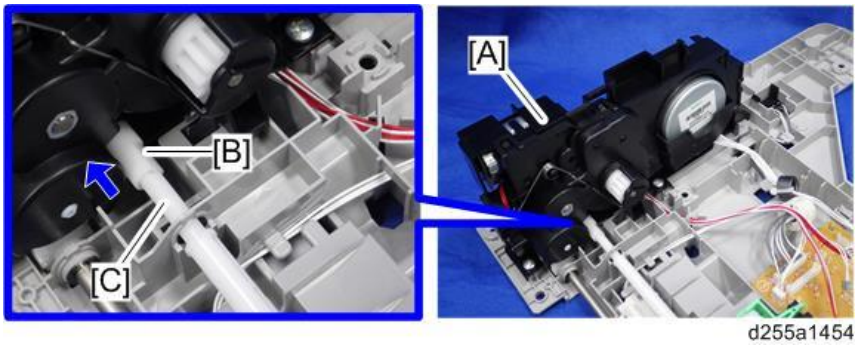


8. Remove the drive unit [A] from the upper cover [B].



Note

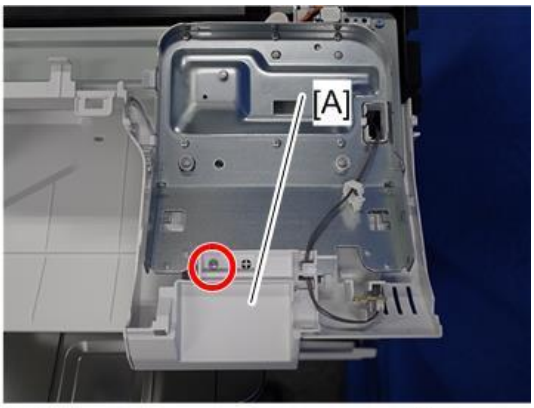
- When removing the drive unit [A], remove the coupling [B] from the shaft [C].



Internal Finisher

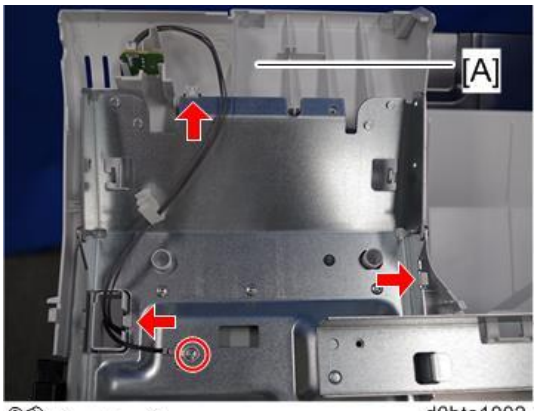
Internal Finisher

1. Remove the scanner unit. (Scanner Unit)
2. Remove the controller box. (Controller Box)
3. Remove the operation panel. (Operation Panel Unit (IM 550F/600F/600SRF))
4. Remove the operation panel arm inner cover [A].



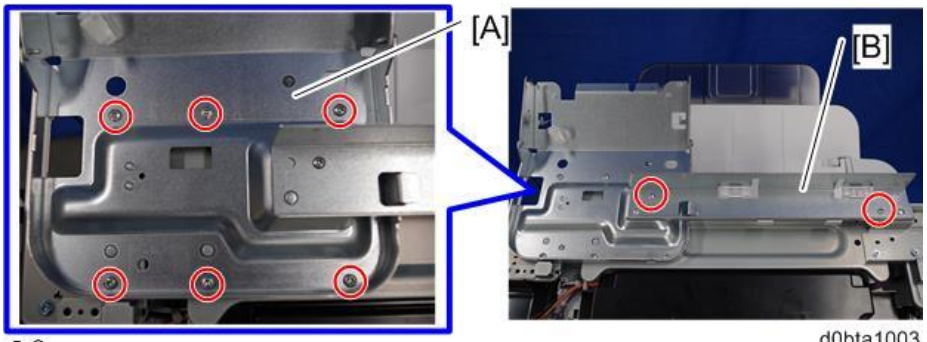
×1 d0bta1001

5. Remove the operation panel arm lower cover [A].



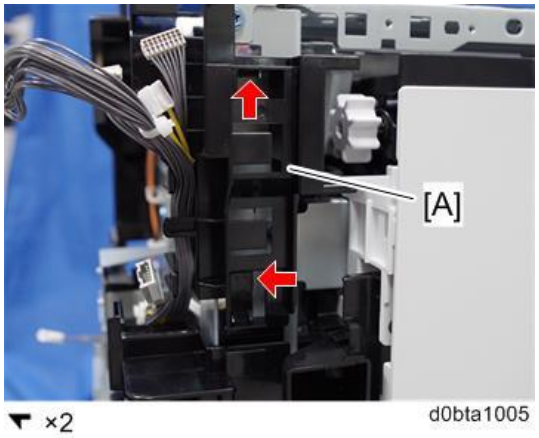
×1 ×3 d0bta1002

6. Remove the stays [A] and [B] together.

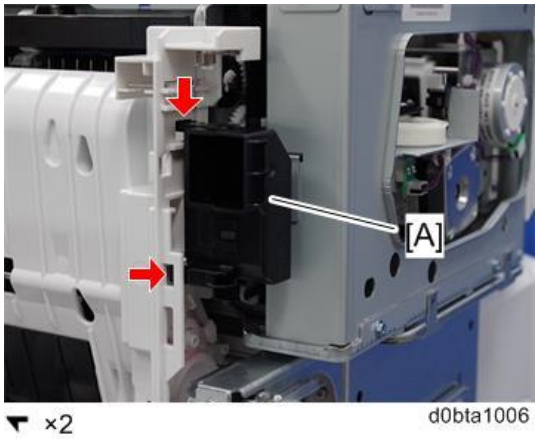


×6 d0bta1003

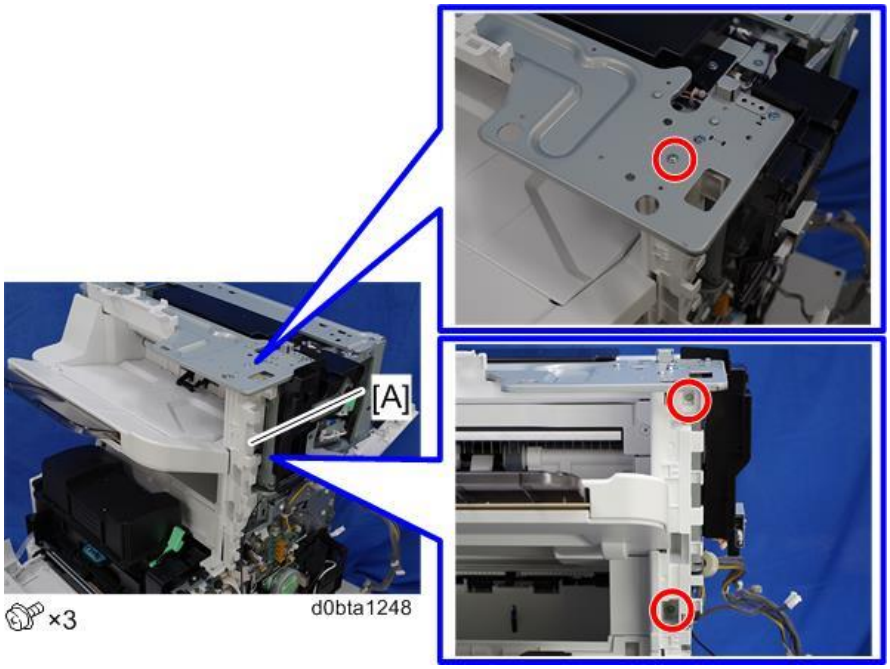
7. Remove the harness guide [A].



8. Remove the air duct [A].

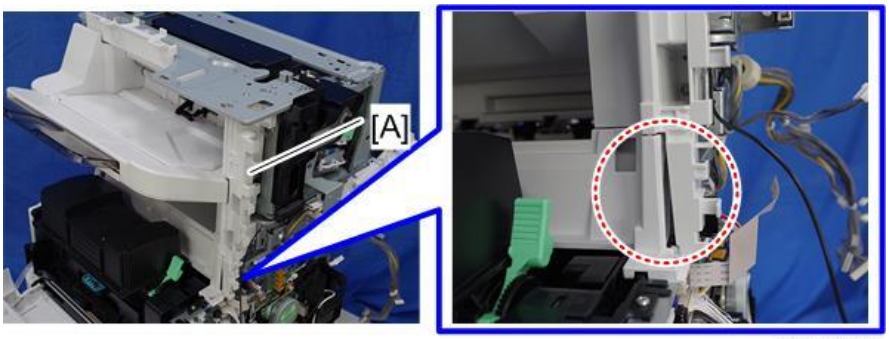


9. Remove the harness guide [A].



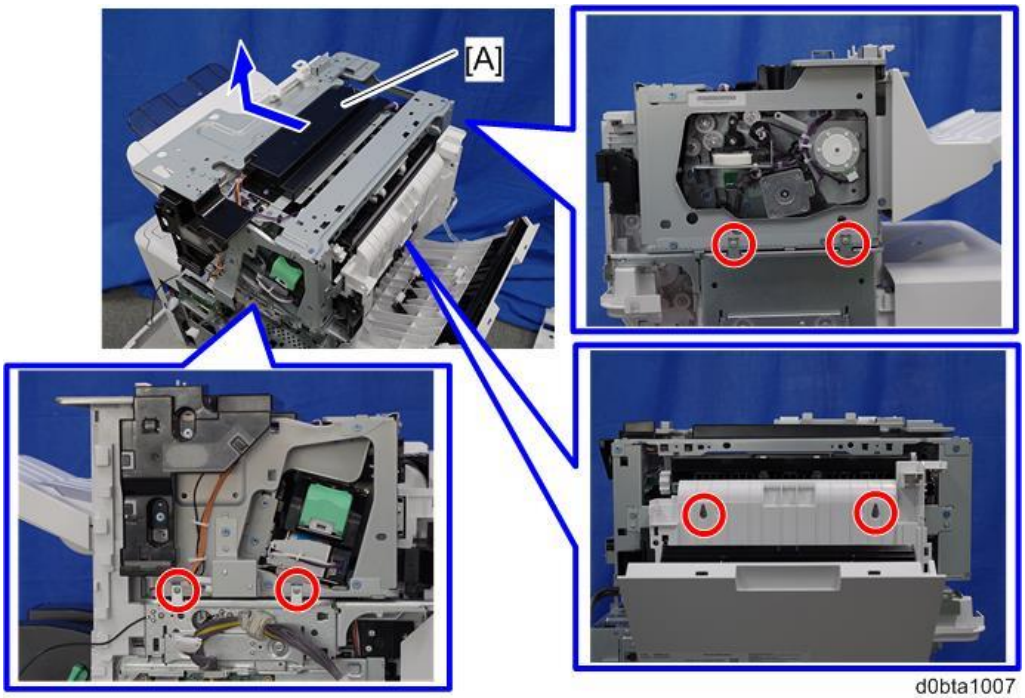
Note

- When reinstalling the harness guide, a gap appears as shown below.



d0bta1249

10. Remove the internal finisher [A].



d0bta1007

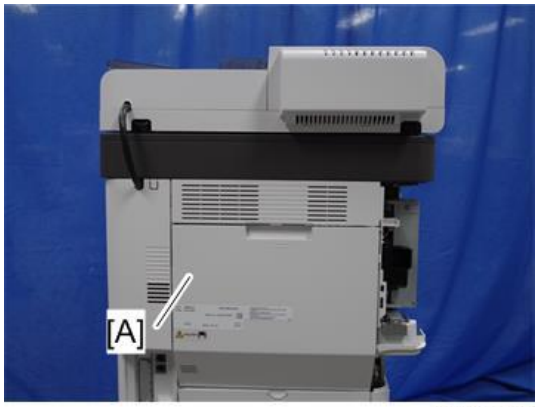
×6

Finisher Output Tray Unit

1. Remove the right upper cover. (Right Upper Cover (IM 600SRF))

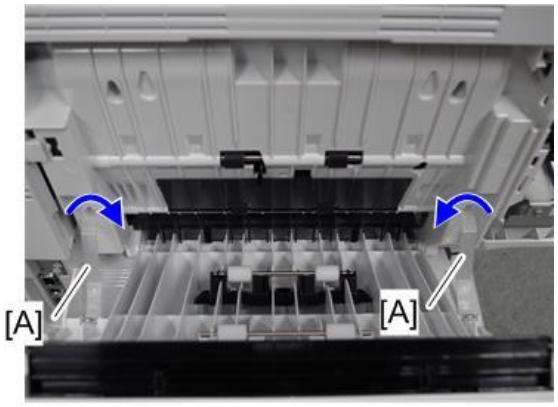
2. Remove the left upper cover. (Left Upper Cover (IM 600SRF))

3. Open the finisher rear cover [A].



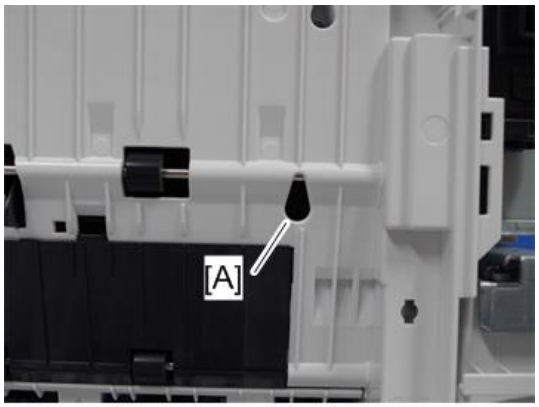
d0bta1052

4. Release the belts [A] from the mainframe by twisting the ends.



d0bta1053

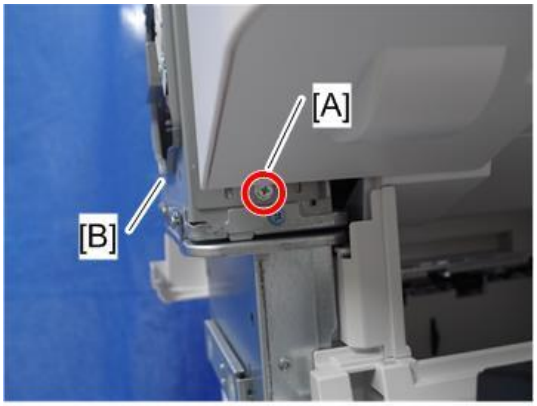
5. Put a screwdriver through the hole [A] and loosen the screw that fixes the finisher.



d0bta1055

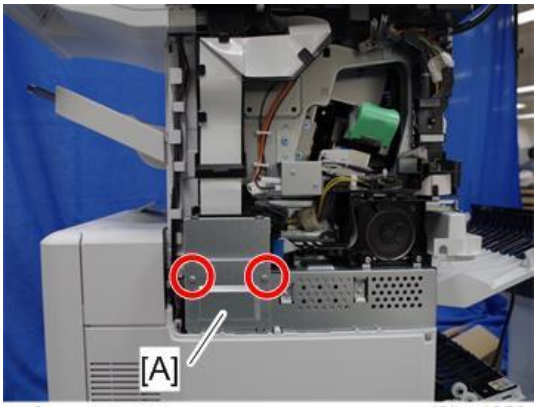
6. Make a note of the position of screw [A], and then remove it. Then, slide the finisher [B] to the left

as far as it goes.



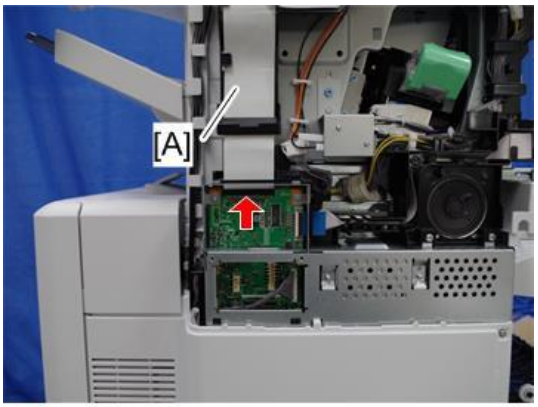
×1 d0bta1056

7. Remove the bracket [A].



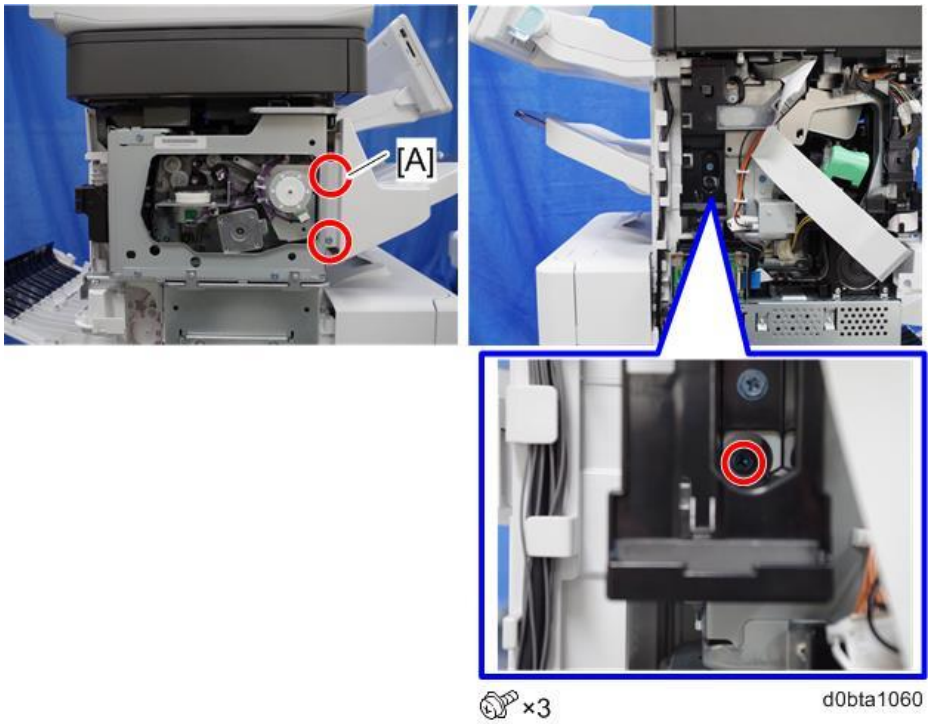
×2 d0bta1058

8. Disconnect the flat cable [A].



×1 d0bta1059

9. Remove three screws.

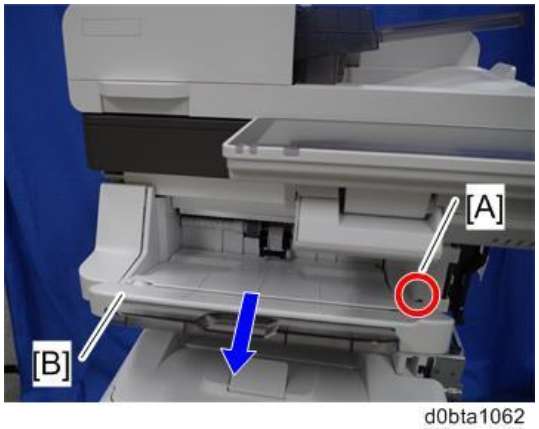


Note

Depending on the machine, the screw [A] may not be present.

10. Release the hook of the finisher output tray unit [A].

11. Release the overlapping part [A] and remove the finisher output tray unit [B].

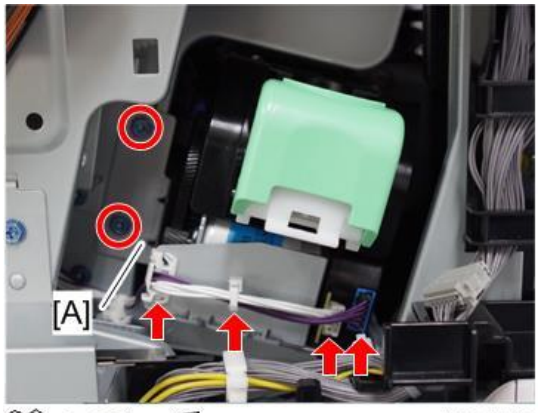


Note

When reassembling, return the finisher to the previous position by sliding the finisher until the screw removed in step 6 can be inserted in the same position as before.

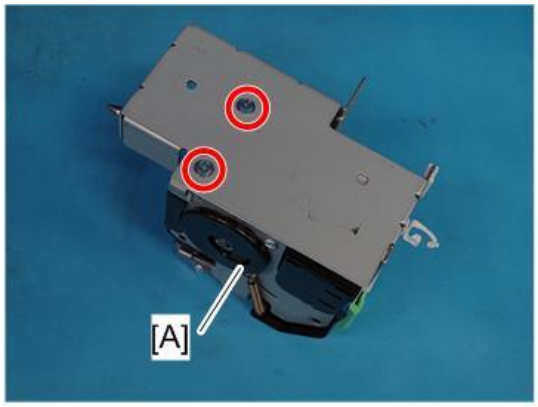
Stapler Unit

1. Remove the right upper cover. (Right Upper Cover (IM 550F/600F))
2. Remove the stapler unit bracket [A].



×2 ×2 ×2 d0bta1009

3. Remove the stapler unit [A].

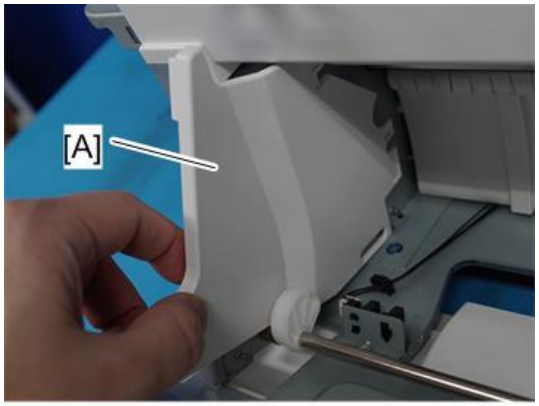


×2 d0bta1010

Finisher Frames

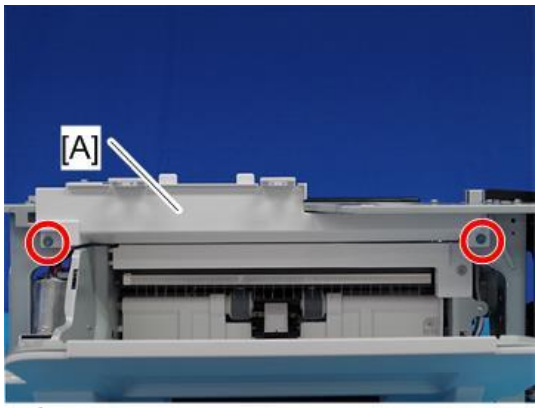
1. Remove the internal finisher. (Internal Finisher)
2. Remove the finisher output tray unit. (Finisher Output Tray Unit)

3. Remove the side fence [A].



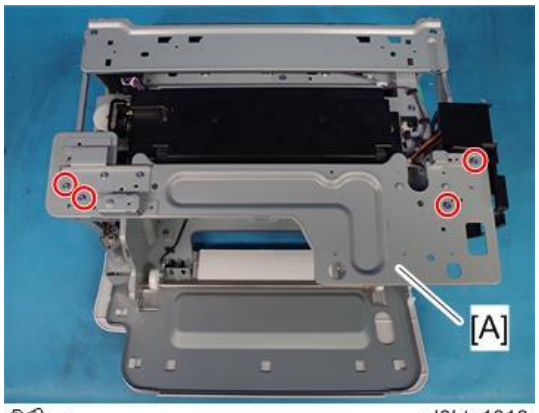
d0bta1016

4. Remove the cover [A].



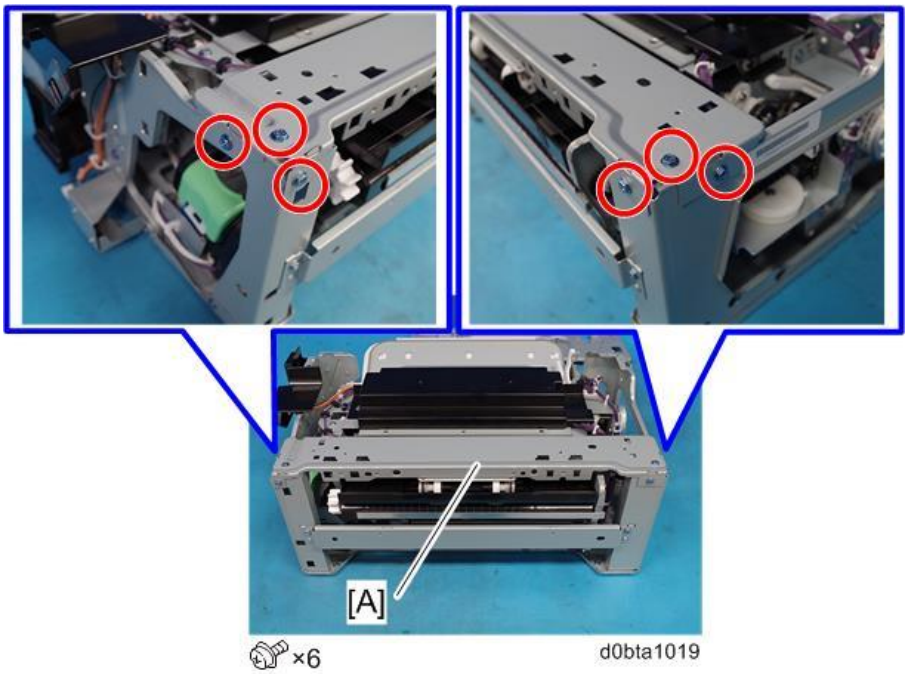
×2 d0bta1017

5. Remove the top plate (front) [A].

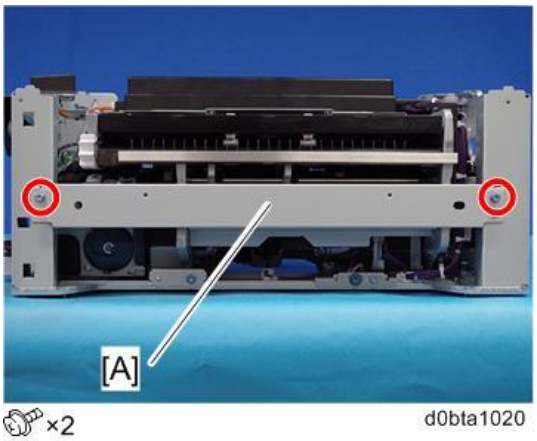


×4 d0bta1018

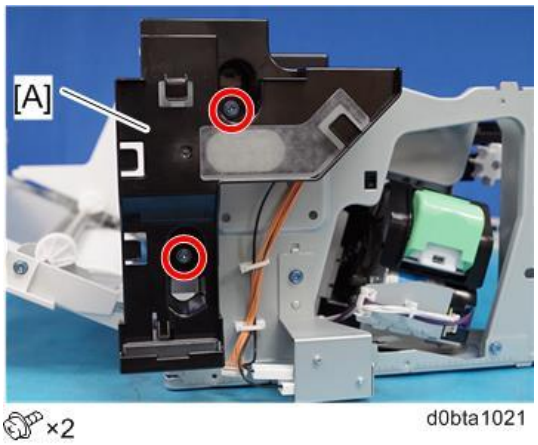
6. Remove the top plate (rear) [A].



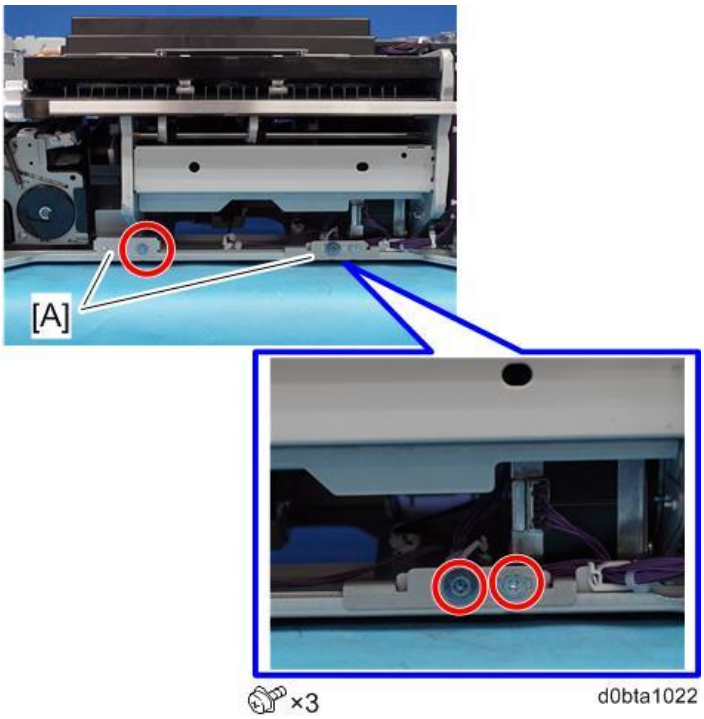
7. Remove the stay [A].



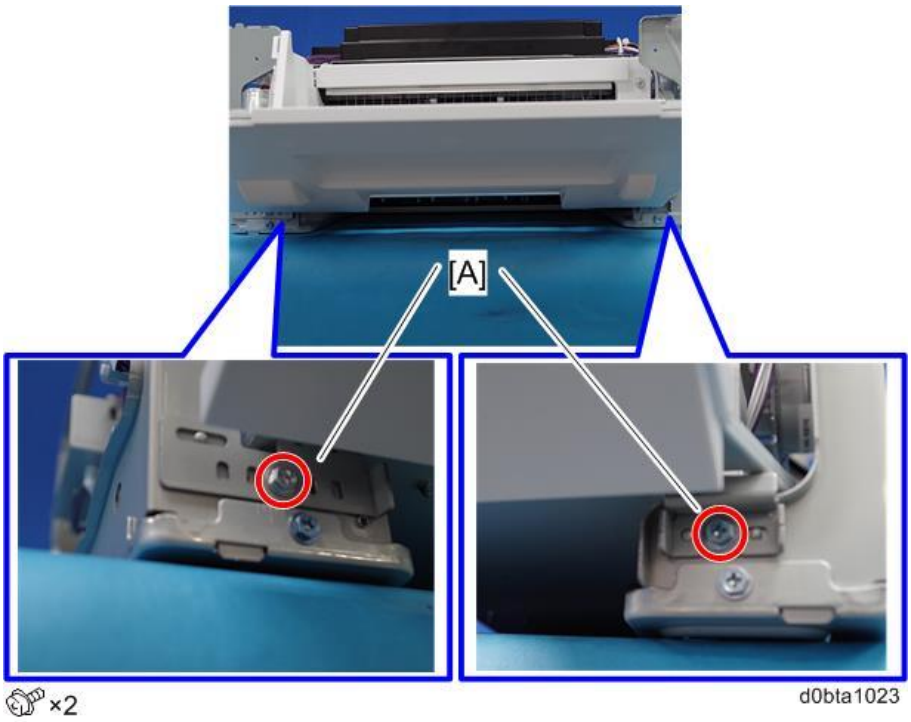
8. Remove the harness guide [A].



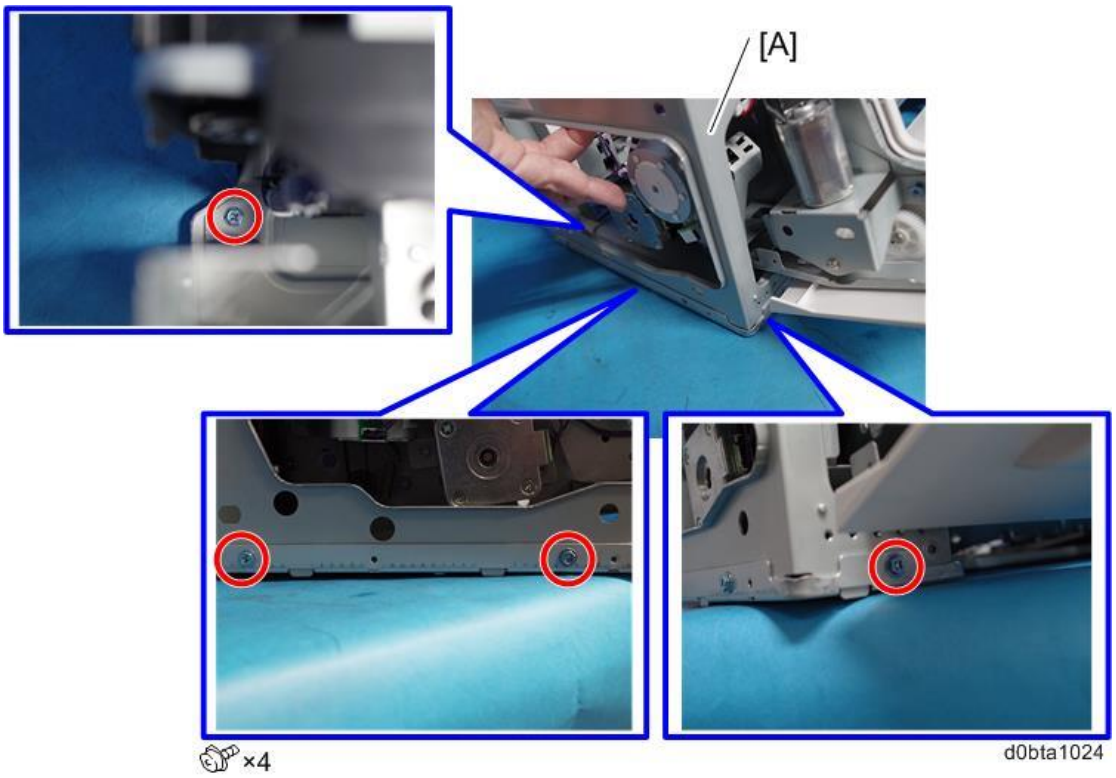
9. Remove the brackets [A] from the back side.



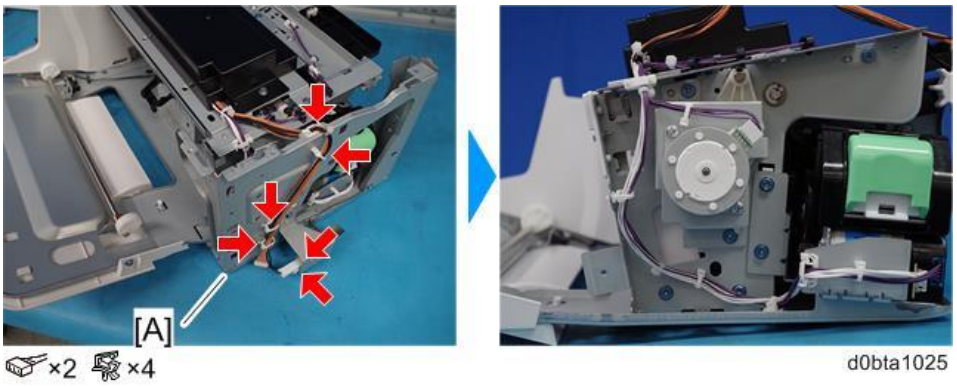
10. Remove the brackets [A] from the front side.



11. Remove the left frame [A] while slightly lifting the finisher.



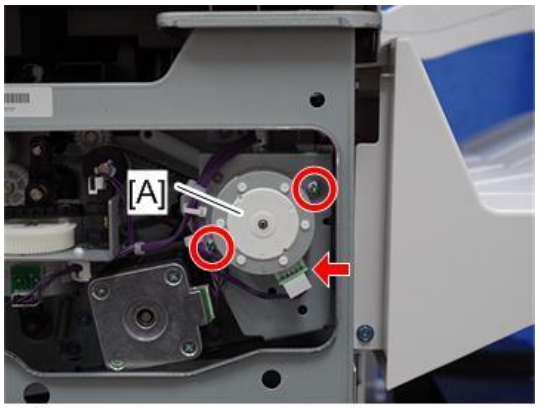
12. Remove the right frame and bottom plate [A].



Finisher Gathering Roller Motor (M14)

1. Remove the left upper cover. (Left Upper Cover (IM 550F/600F))

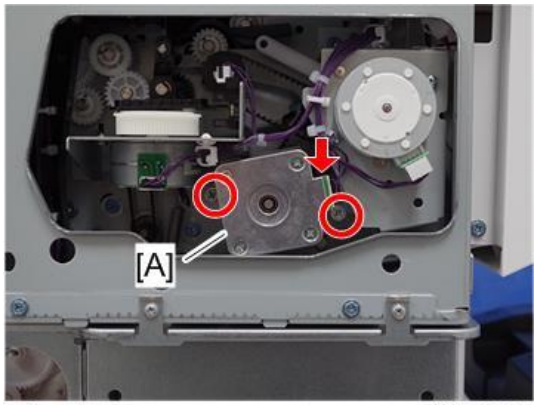
2. Remove the finisher gathering roller motor (M14) [A].



×2 ×1 d0bta1011

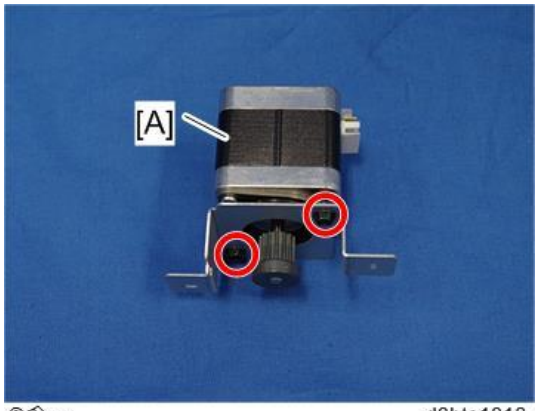
Finisher Paper Exit Motor (M13)

1. Remove the left upper cover. (Left Upper Cover (IM 550F/600F))
2. Remove the finisher paper exit motor bracket [A].



×2 ×1 d0bta1012

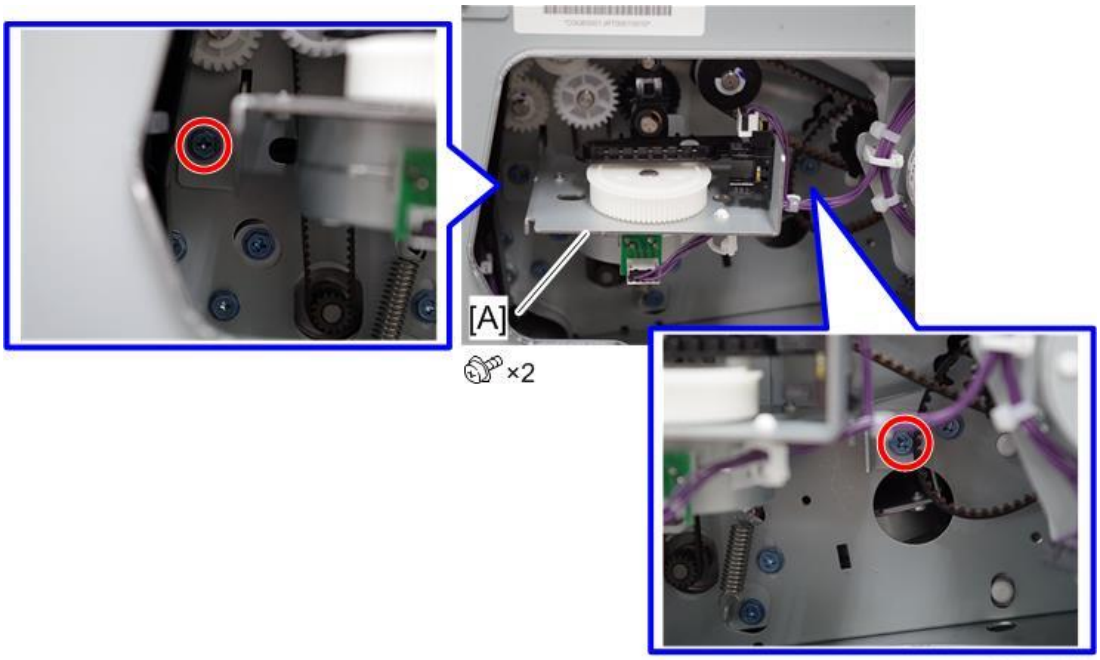
3. Remove the finisher paper exit motor (M13) [A].



×2 d0bta1013

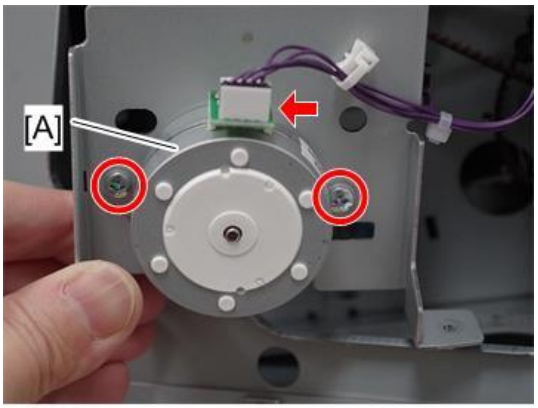
Finisher Shift Roller Motor (M15)

1. Remove the finisher paper exit motor bracket. (Finisher Paper Exit Motor (M13))
2. Remove the finisher shift roller motor bracket [A].



d0bta1014

3. Remove the finisher shift roller motor (M15) [A].

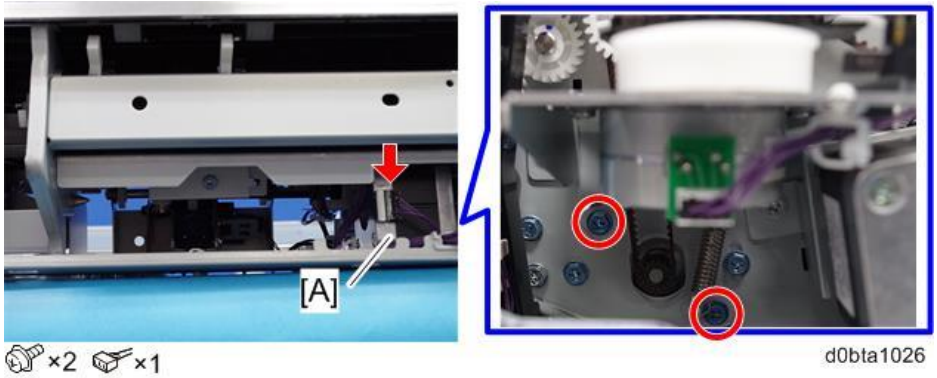


×2 ×1 d0bta1015

Finisher Transport Motor (M12)

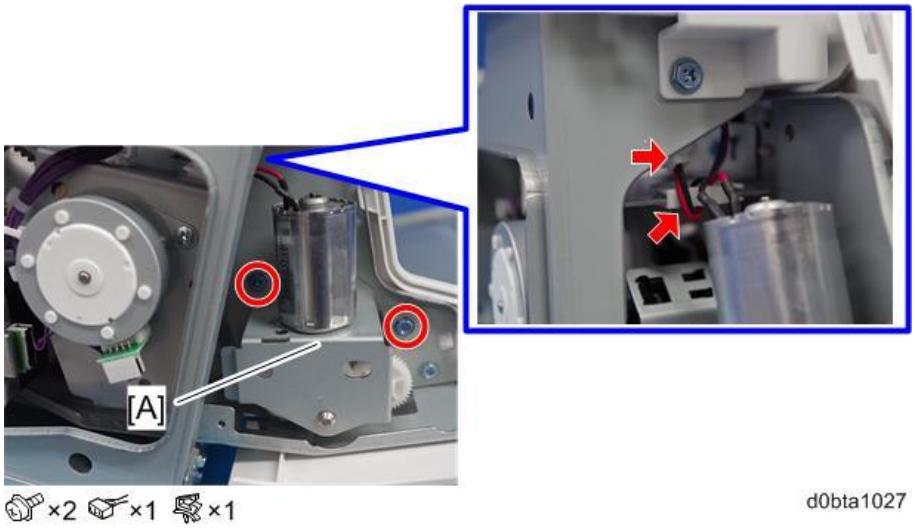
1. Remove the finisher frames. (Finisher Frames)

2. Remove the finisher transport motor (M12) [A].



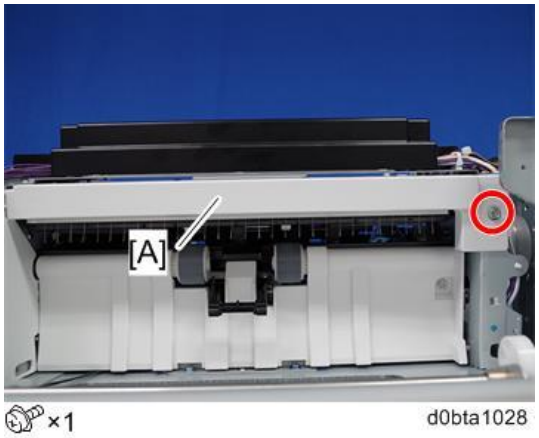
Finisher Tray Lift Motor (M18)

1. Remove the finisher output tray unit. (Finisher Output Tray Unit)
2. Remove the finisher tray lift motor bracket [A].



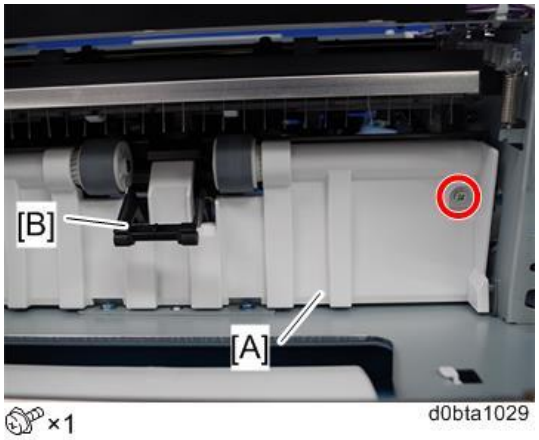
Finisher Jogger Fence HP Sensor (S24)

1. Remove the finisher output tray unit. (Finisher Output Tray Unit)
2. Remove the finisher top front cover [A].



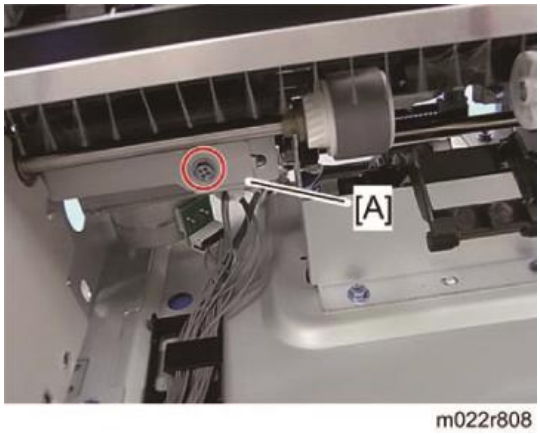
3. Remove the paper exit cover [A].

Pull up the finisher paper sensor actuator [B] when removing the guide plate.

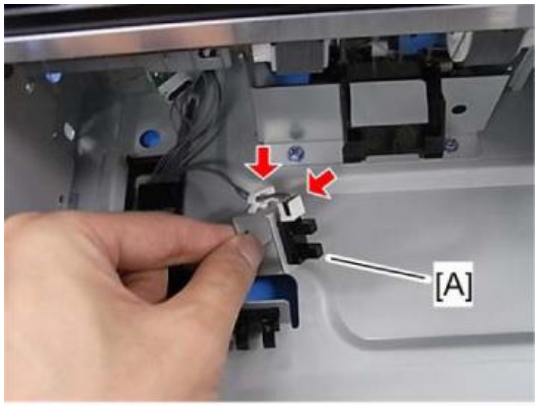


4. Move the left jogger [A] to the center.

5. Remove the finisher jogger fence HP sensor bracket [A] (x 1).



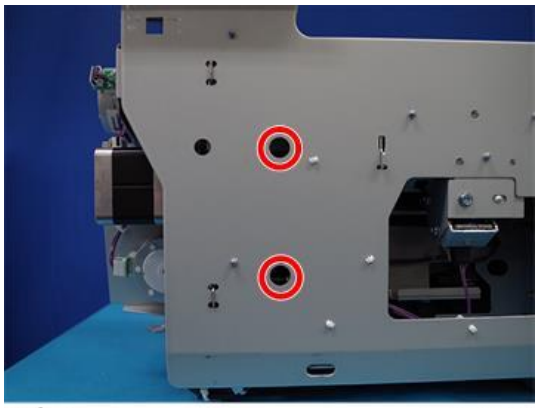
6. Remove the finisher jogger fence HP sensor bracket [A] (x 1, x 1, hooks).



m022r809

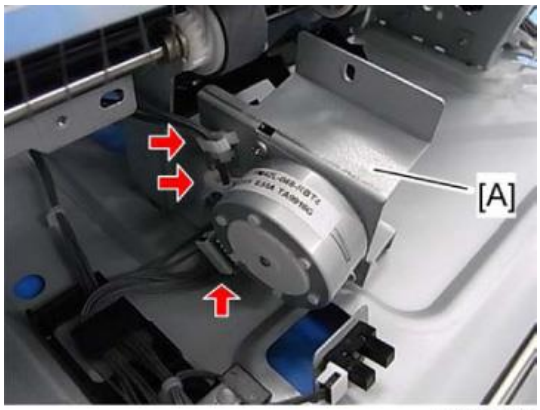
Finisher Jogger Motor (M16)

1. Remove the finisher frames. (Finisher Frames)
2. Remove the finisher transport motor (M12). (Finisher Transport Motor (M12))
3. Remove the finisher jogger fence HP sensor bracket (Finisher Jogger Fence HP Sensor (S24))
4. Remove the two screws.



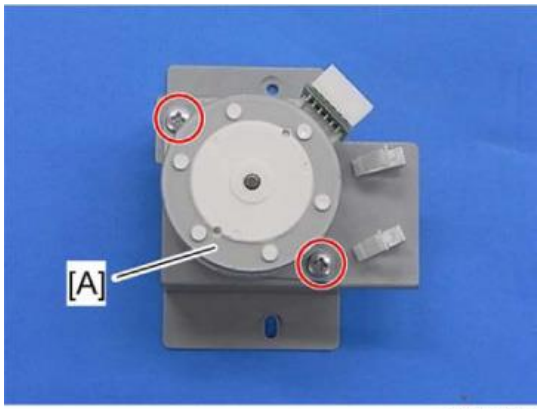
×2 d0bta1030

5. Remove the finisher jogger motor bracket [A] (x 1, x 2)



m022r812

6. Remove the finisher jogger motor (M16) [A](x 2)

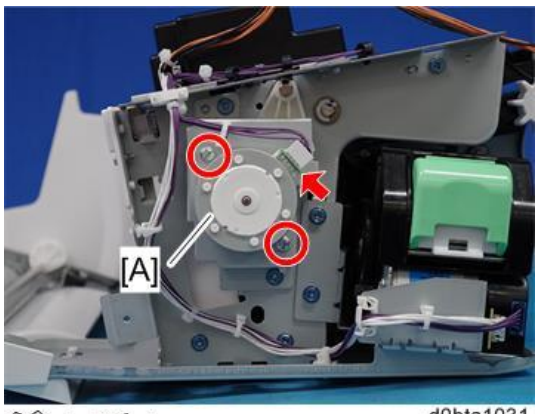


m022r813

Finisher Exit Guide Plate Motor (M17)

1. Remove the finisher frames. (Finisher Frames)

2. Remove the finisher exit guide plate motor (M17) [A].



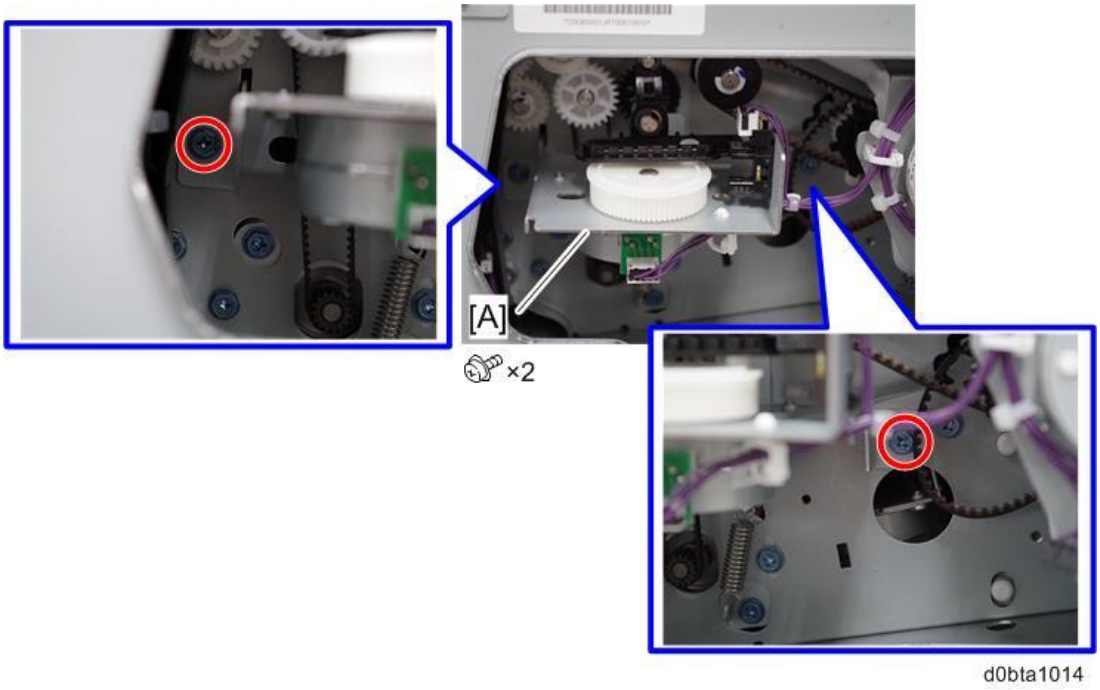
×2 ×1

d0bta1031

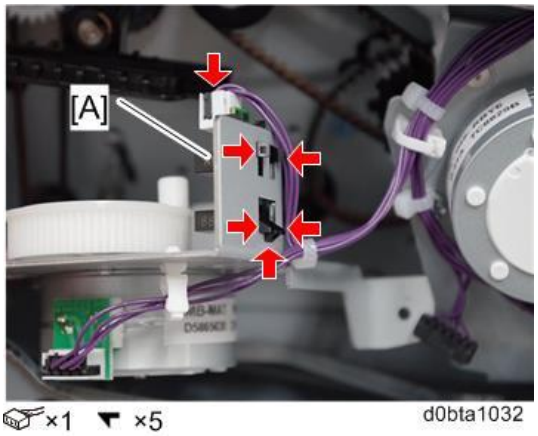
Finisher Shift Roller HP Sensor (S20)

1. Remove the finisher paper exit motor bracket. (Finisher Paper Exit Motor (M13))

2. Remove the finisher shift roller motor bracket [A].



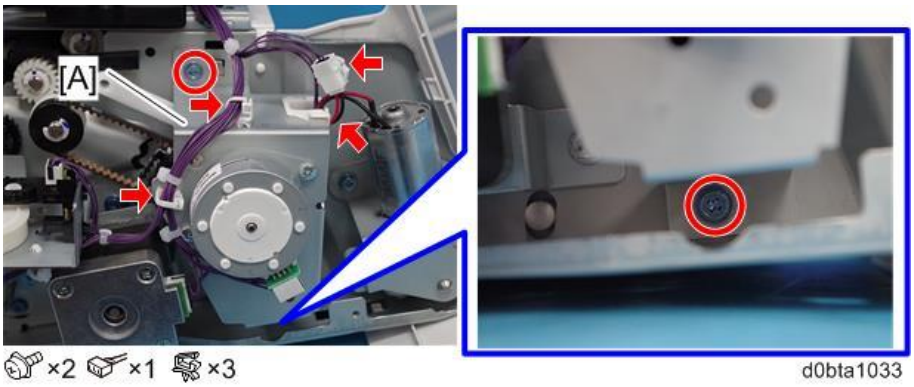
3. Remove the finisher shift roller HP sensor (S20) [A].



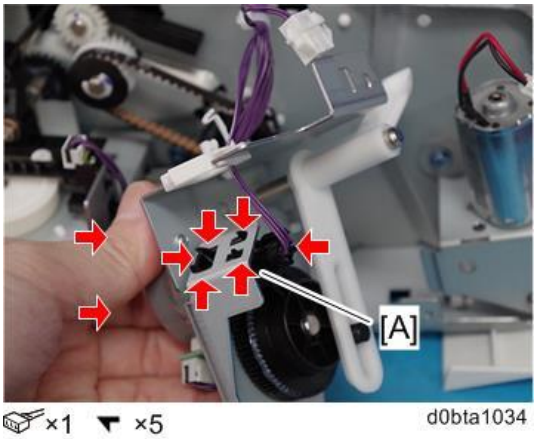
Finisher Gathering Roller HP Sensor (S21)

1. Remove the finisher frames. (Finisher Frames)

2. Remove the finisher gathering roller motor bracket [A].



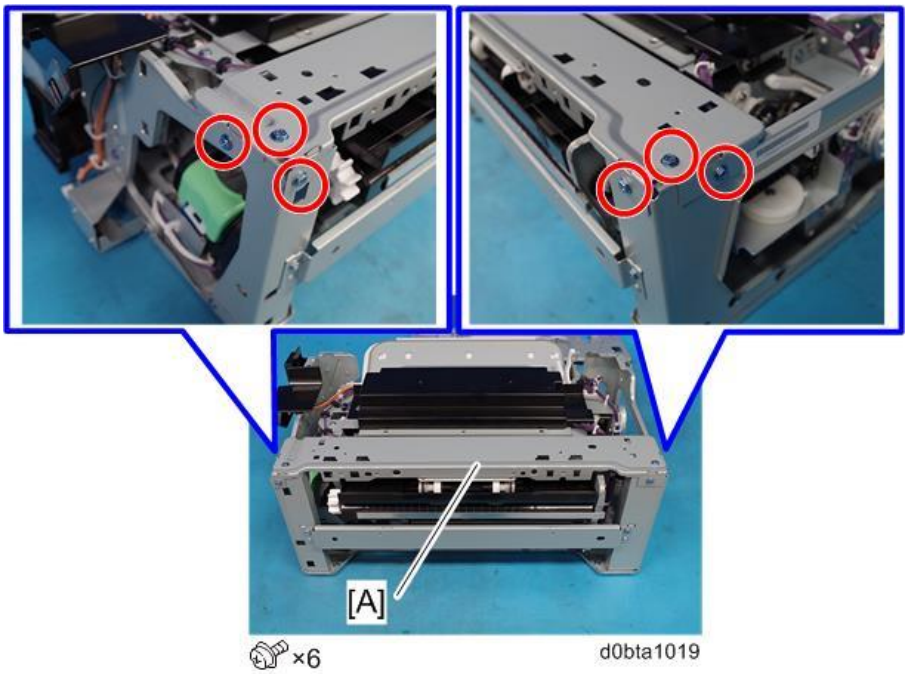
3. Remove the finisher gathering roller HP sensor (S21) [A].



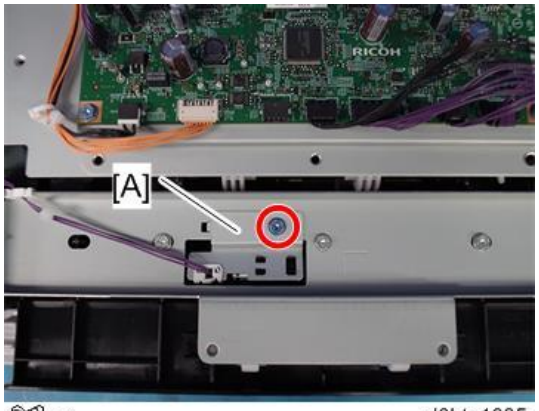
Finisher Entrance Sensor (S28)

1. Remove the internal finisher. (Internal Finisher)

2. Remove the top plate (rear) [A].

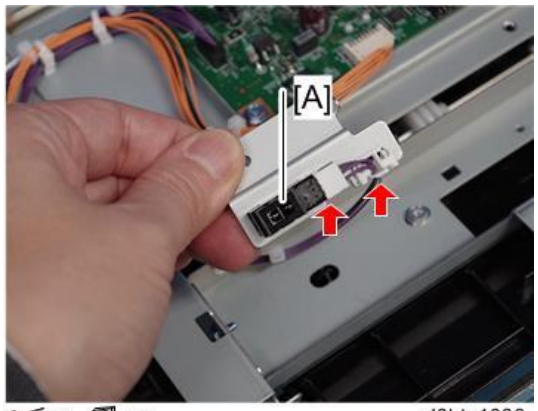


3. Remove the finisher entrance sensor bracket [A].



×1 d0bta1035

4. Remove the finisher entrance sensor (S28) [A].



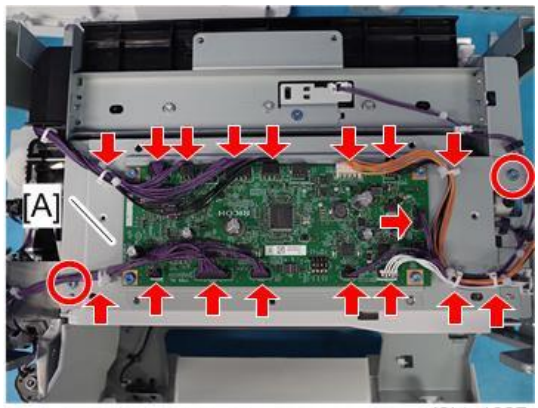
×1 ×1 d0bta1036

Finisher Paper Exit Sensor (S26)

1. Remove the finisher frames. (Finisher Frames)

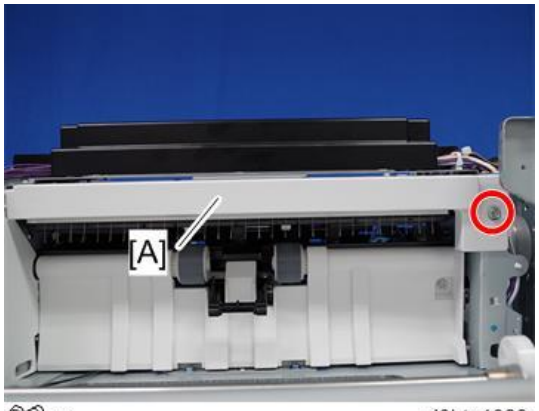
2. Remove the finisher main board cover. (Finisher Main Board (PCB29))

3. Remove the finisher main board bracket [A].



×2 ×12 ×5 d0bta1037

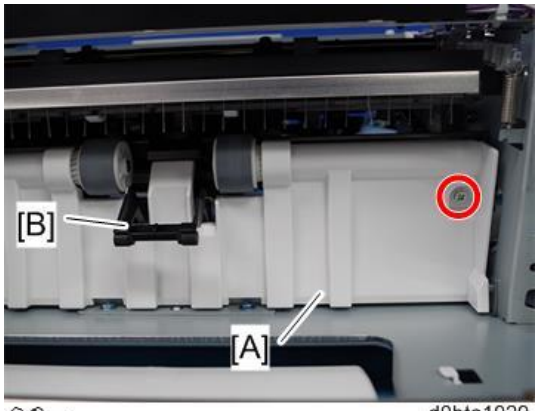
4. Remove the finisher top front cover [A].



×1 d0bta1028

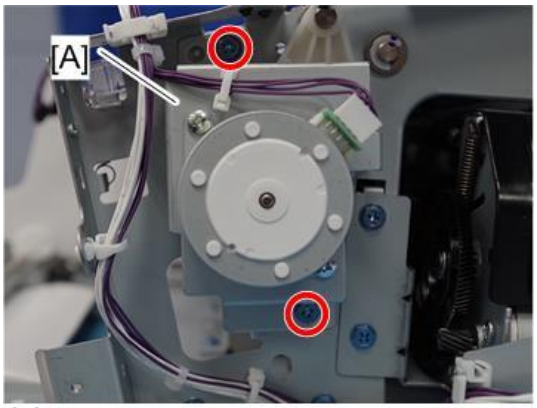
5. Remove the paper exit cover [A].

Pull up the finisher paper sensor actuator [B] when removing the guide plate.



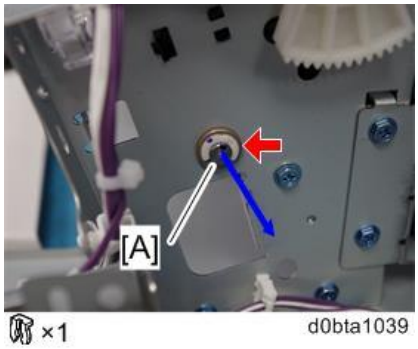
×1 d0bta1029

6. Remove the finisher exit guide plate motor bracket [A].

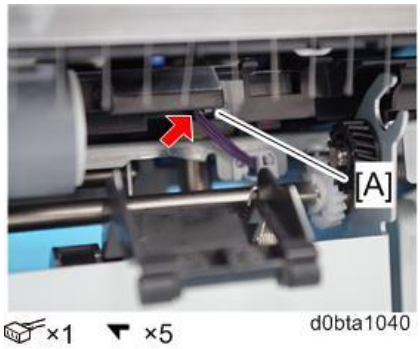


×2 d0bta1038

7. Remove the paper exit roller shaft [A] (bushing x 2).

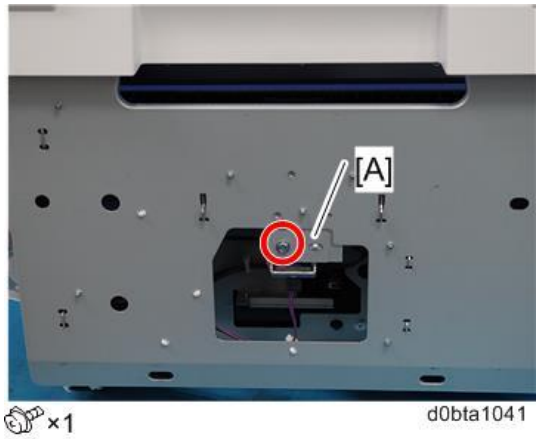


8. Remove the finisher paper exit sensor (S26) [A].

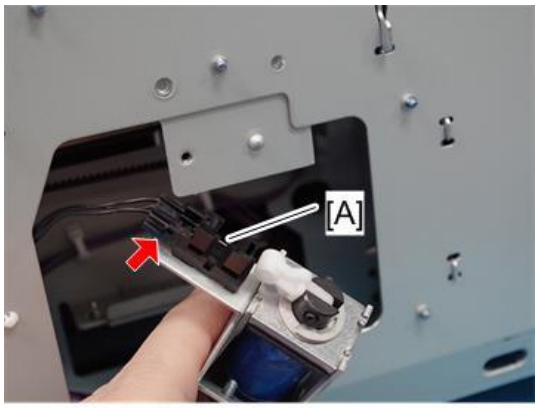


Finisher Paper Sensor (S23)

1. Remove the finisher frames. (Finisher Frames)
2. Remove the finisher paper sensor bracket [A].



3. Remove the finisher paper sensor (S23) [A].

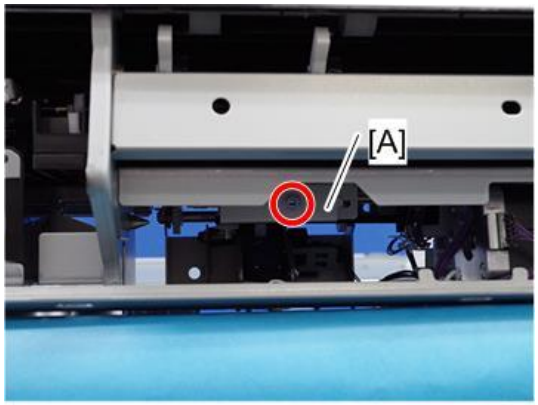


×1 ×5 d0bta1042

Finisher Staple Tray Paper Sensor (S25)

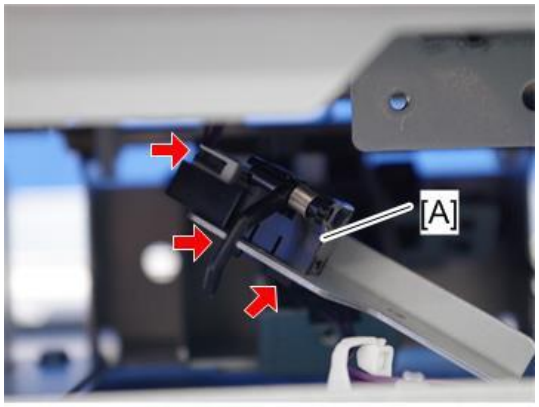
1. Remove the finisher frames. (Finisher Frames)

2. Remove the finisher staple tray paper sensor bracket [A].



×1 d0bta1043

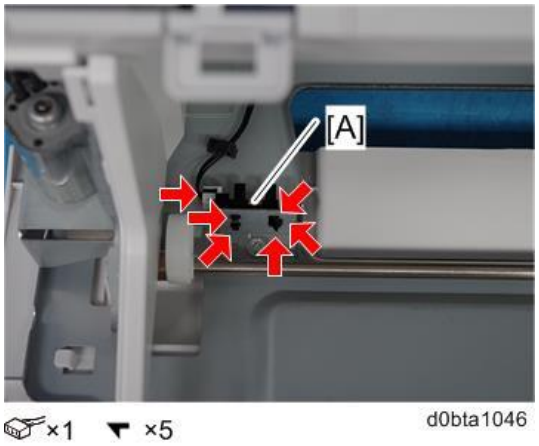
3. Remove the finisher staple tray paper sensor (S25) [A].



×1 ×5 d0bta1044

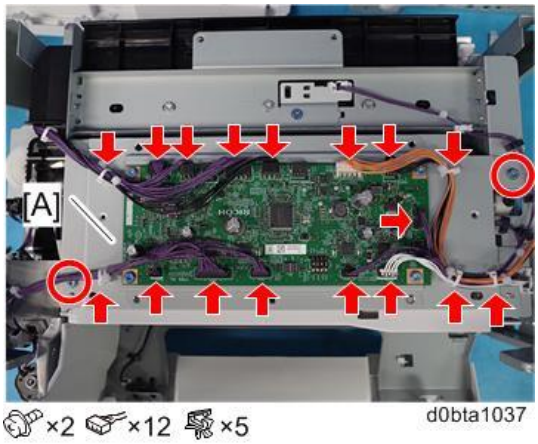
Finisher Tray Lower Limit Sensor (S22)

1. Remove the finisher output tray unit. (Finisher Output Tray Unit)
2. Remove the finisher tray lower limit sensor (S22) [A].

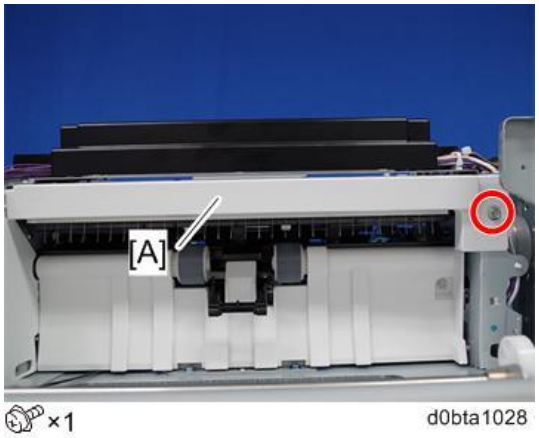


Finisher Exit Guide Plate HP Sensor (S27)

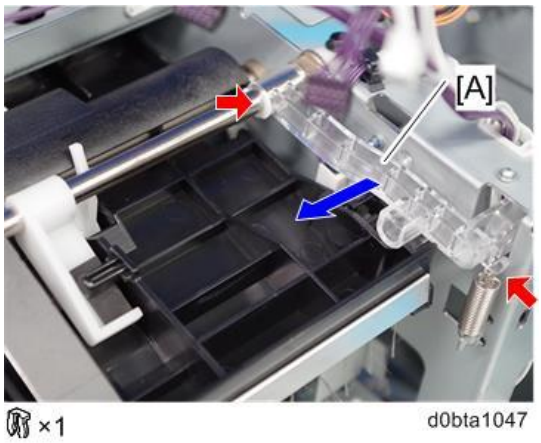
1. Remove the finisher frames. (Finisher Frames)
2. Remove the finisher main board cover. (Finisher Main Board (PCB29))
3. Remove the finisher main board bracket [A].



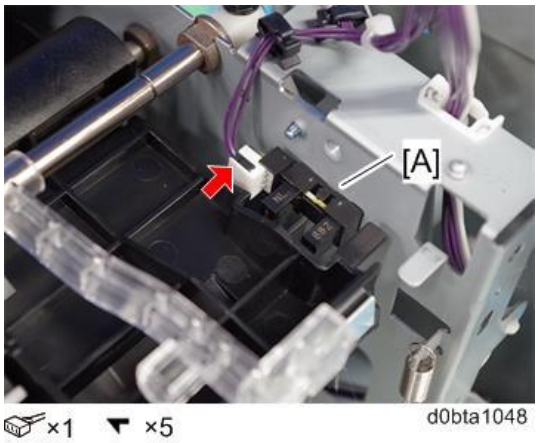
4. Remove the finisher top front cover [A].



5. Slide the exit guide plate stopper [A] to the left (spring x 1).



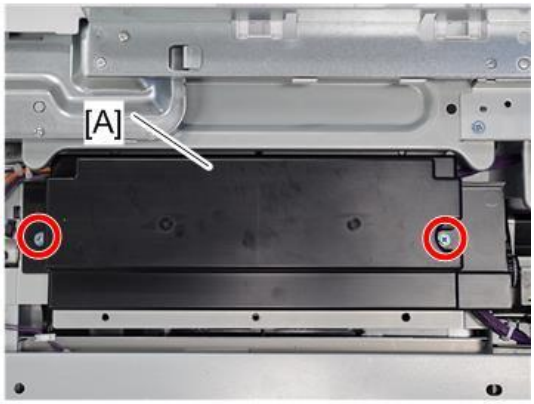
6. Remove the finisher exit guide plate HP sensor (S27) [A].



Finisher Main Board (PCB29)

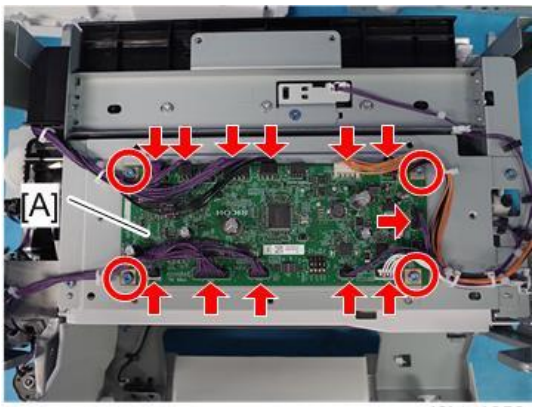
1. Remove the scanner unit. (Scanner Unit)

2. Remove the finisher main board cover.



×2 d0bta1049

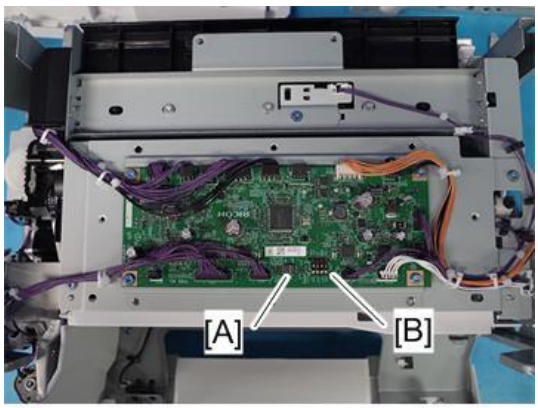
3. Remove the finisher main board (PCB29).



×4 ×12 d0bta1050

When reinstalling a new finisher main board

Check the DIP switches (SW1: [A], SW2: [B]) on the old main board. If the settings on the new finisher main board are different from the old finisher main board, change the settings on the new board (they must be the same as the settings on the old board).



d0bta1051

Finisher Side-to-Side Registration Adjustment

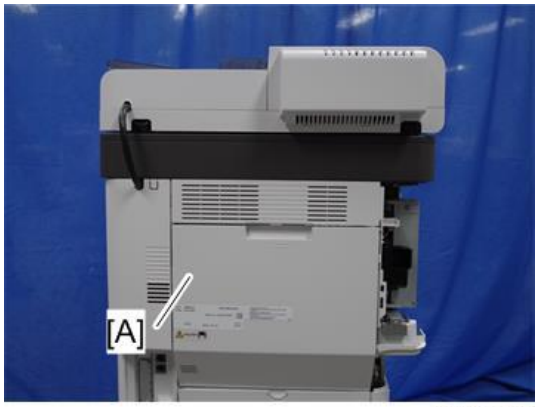
When the stapled prints are not aligned adequately, it may be because the finisher side-to-side

registration is inaccurate. Adjust the finisher side-to-side registration in the following way.

1. Enter SP mode.
2. Set SP6-138-001 to "1" (default: 0).

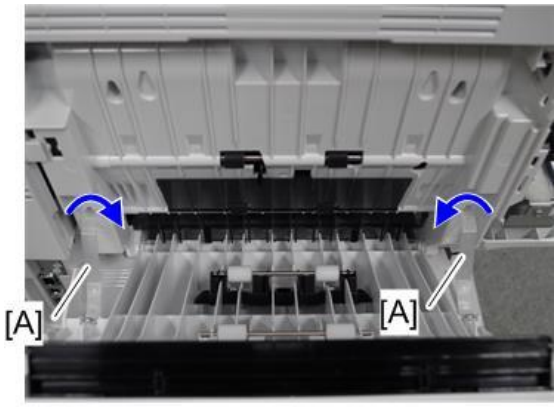
   This configures the machine to stop the fed sheet at the finisher entrance.
3. Execute a print job using A4 or LT paper with the finisher selected as the paper output tray.

   The printed sheet stops at the finisher entrance.
4. Remove the right upper cover. (Right Upper Cover (IM 600SRF))
5. Remove the left upper cover. (Left Upper Cover (IM 550F/600F))
6. Open the rear upper cover [A].



d0bta1052

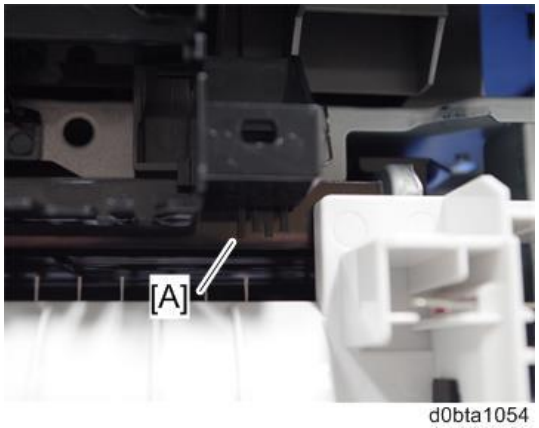
7. Release the belts [A] from the mainframe by twisting the ends.

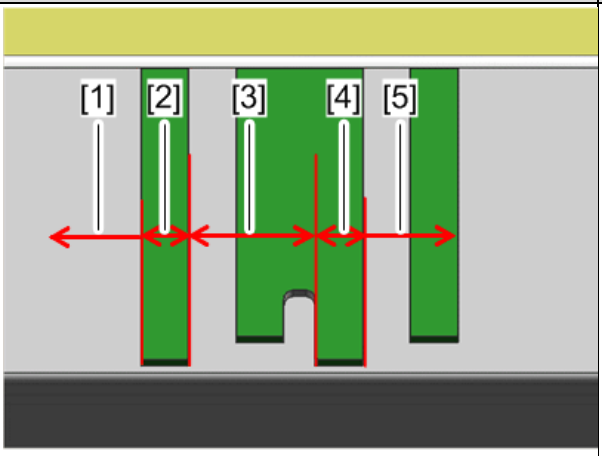
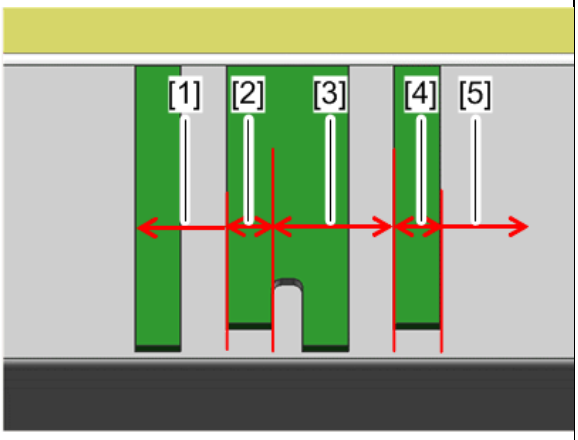


d0bta1053

8. Remove the rear fan cover. (Rear Fan Cover (IM 600SRF Only))
9. Compare the edge of the paper and the guidelines [A] to determine the required amount of

adjustment.



When using A4 sheet	When using LT sheet
	

[1] Move the finisher to the right by 3 mm.

[2] Move the finisher to the right by 1.5 mm.

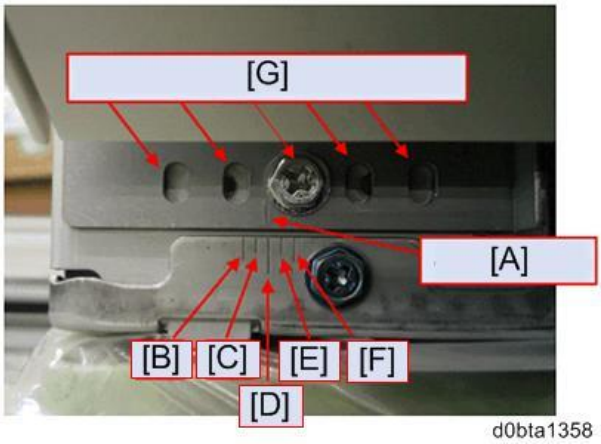
[3] No adjustment required.

[4] Move the finisher to the left by 1.5 mm.

[5] Move the finisher to the left by 3 mm.

* "Left" and "right" indicate the directions when seen from the front of the machine.

See below for how to determine the finisher position.



1. Align the line [A] with one of the lines that matches the required distance.

[B]: 3 mm to the left

[C]: 1.5 mm to the left

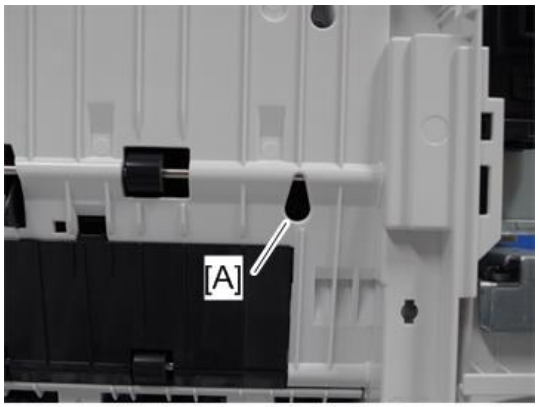
[D]: Center position

[E]: 1.5 mm to the right

[F]: 3 mm to the right

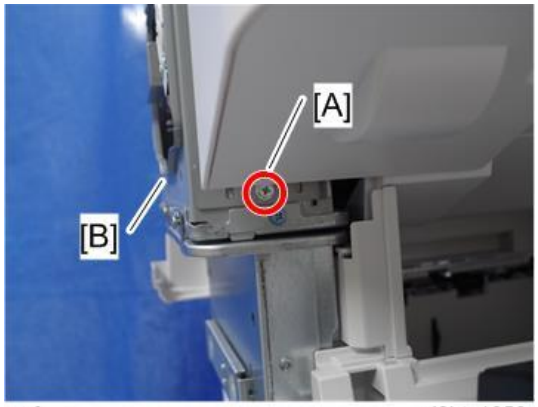
2. Insert the screw to one of the five slits [G] which is aligned with a screw hole.

10. Put a screwdriver through the hole [A] and loosen the screw that fixes the finisher.



d0bta1055

11. Remove the screw and slide the finisher [A] to the left or right according to the explanation in step 7.



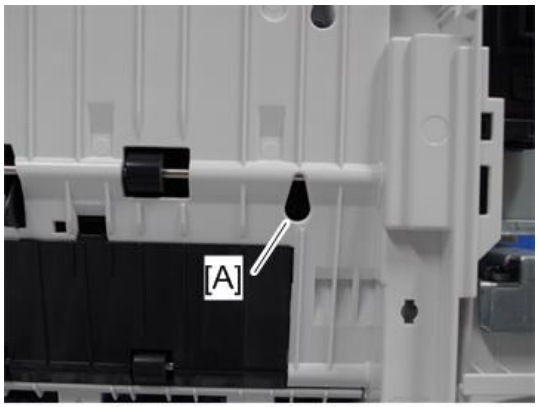
×1 d0bta1056

12. After moving the finisher, reattach the screw in a new position according to the explanation in step

7.

×1 d0bta1057

13. Put a screwdriver through the hole [A] and retighten the screw to fix the finisher.



d0bta1055

5. System Maintenance

Service Program Mode

SP Tables

See "Appendices" for the following information:

- SP Mode Tables

Firmware Update (IM 550F/600F/600SRF Only)

Overview of Firmware Update

Difference from Previous Machine

- In addition to an SD card, a USB flash drive can be used for the firmware update. Firmware update from a USB flash drive can only be performed using the slot on the operation panel.
- When using the slot on the operation panel for the firmware update from removable media (SD card or USB flash drive), it is no longer necessary to turn the machine's main power off and then back on.
- Firmware update from removable media can be executed at the programmed date and time via the package file read from the removable media in advance.
- Firmware update by the module alone is no longer available.

Overview

Note

- The firmware is basically supplied as a package. However, an individual firmware module may be provided on special occasions, such as for correcting a problem.

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 four ways to update using the firmware package.

- Removable media
  By downloading the firmware package to an SD card or USB flash drive in advance, you can update the firmware when there is no network connection.
- RFU (Remote Firmware Update)
  You can have the firmware package sent from the call center to the machine over the network for the automatic firmware update.
- SFU (Smart Firmware Update)
  Operate the machine to download the firmware package from the server, either immediately or at the programmed date and time.
- ARFU (Automatic Remote Firmware Update)
  The machine automatically checks the server for firmware packages every 76 hours. If there is a newer package than that on the machine, it will be downloaded for installation.

Types of firmware update files and supported update methods:

	SFU	Removable media	RFU	ARFU
Individual firmware*1	N/A	Available	Available	N/A
Firmware package	Available	Available	Available	Available

*1 Not available for this machine.

Firmware Included in the Firmware Package

Firmware Location	Firmware Type	Message Displayed
Controller Board (PCB15)	System/Copy	BRMF2s_syslem
	RemoteFax	BRMF2a_fax2
	Scanner	BRMF2a_scn
	NetworkDocBox	BRMF2a_netfile
	Network Support	BRZMF2a_net
	Printer	BRZMF2e_printer
	PCL	BRMF2e_prt_PCL
	PDF (IRIPS PDF)	BRMF2e_prt_IPDF
	PS (IRIPS PS)	BRMF2e_prt_IPS3
	Web Support	BRZMF2a_web
	Web Uapl	BRZMF2a_webua
	RPCS	BRMF2e_prt_RPCS
	FONT(Font EXP)	GW13e_prt_SAMf
	MediaPrint:JPEG	BRZMF2e_printer
	MediaPrint:TIFF	BRZMF2e_printer
	HDD Format Option	GW2a_zoffyxonb
	FONT2 (PS3 Font)	GW2e_prt_psfnt8
	PowerSaving Sys	BRZMF2e_subcpu
	Fax	BRMF2a_fax
Smart Operation Panel	BRMF2a_Graphlc	BRMF2a_Graphlc
	BRMF2a_HelpData	BRMF2a_HelpData
	BRZMF2e_subcpu	BRZMF2e_subcpu
	M2a_System	M2a_System
	M2a_BLEPlugin	M2a_BLEPlugin
	M2a_BluetoothSe	M2a_BluetoothSe
	M2a_CAP	M2a_CAP
	M2a_CAPjavaP	M2a_CAPjavaP
	M2a_CAPnfcP	M2a_CAPnfcP
	M2a_CAPumaP	M2a_CAPumaP
	M2a_CAPuser	M2a_CAPuser
	M2a_cspf	M2a_cspf
	M2a_DeviceHub	M2a_DeviceHub
	M2a_ELPNX	M2a_ELPNX
	M2a_HelpService	M2a_HelpService

Firmware Location	Firmware Type	Message Displayed
	M2a_ICCdDisptch	M2a_ICCdDisptch
	M2a_InstSetting	M2a_InstSetting
	M2a_iWnn	M2a_iWnn
	M2a_iWnn_Hang	M2a_iWnn_Hang
	M2a_iWnn_Hans	M2a_iWnn_Hans
	M2a_iWnn_Hant	M2a_iWnn_Hant
	M2a_KrbServ	M2a_KrbServ
	M2a_MeidaPrtScn	M2a_MeidaPrtScn
	M2a_NFCPlugIn	M2a_NFCPlugIn
	M2a_PrinterInfo	M2a_PrinterInfo
	M2a_PrinterSJob	M2a_PrinterSJob
	M2a_ProgramInfo	M2a_ProgramInfo
	M2a_ORCode_SDC	M2a_ORCode_SDC
	M2a_OuickCdAuth	M2a_OuickCdAuth
	M2a_RemAssist	M2a_RemAssist
	M2a_RemPnlOpe	M2a_RemPnlOpe
	M2a_RemSptSvc	M2a_RemSptSvc
	M2a_SimpleWFD	M2a_SimpleWFD
	M2a_SmartCopy	M2a_SmartCopy
	M2a_SmartFAX	M2a_SmartFAX
	M2a_SmartScan	M2a_SmartScan
	M2a_SmartScanEx	M2a_SmartScanEx
	M2a_USBCdPlugin	M2a_USBCdPlugin
	M2a_VoiceServ	M2a_VoiceServ
	M2a_WEcoinfo	M2a_WEcoinfo
	M2a_WFaxInfo	M2a_WFaxInfo
	M2a_WLanguage	M2a_WLanguage
	M2a_WStopKey	M2a_WStopKey
	M2a_WTonner	M2a_WTonner
	M2a_WTray	M2a_WTray
	M2a zoo	M2a zoo
FCU	FCU	GW1a efax fcu2G
IOB (PCB17)	Engine	BRMF2a_eplot
BiCU (PCB16)	Engine(IPU)	BRMF2a_eipu
Finisher	Finisher_BLOCK-C	BLOCK-C_efin

Firmware not included in the firmware package

Firmware Location	Firmware Type	Message Displayed
Smart Operation Panel	Animation	BRMF2a_animat
	BRMF2a_Movie	BRMF2a_Movie
	BRMF2a_Movie2	BRMF2a_Movie2
	BRMF2a_Movie3	BRMF2a_Movie3

Note

- Like the previous model, the animation is updated by inserting the SD card into the SD card slot (bottom) at the back of the main unit.

Firmware Update (Removable Media)

Overview

Important

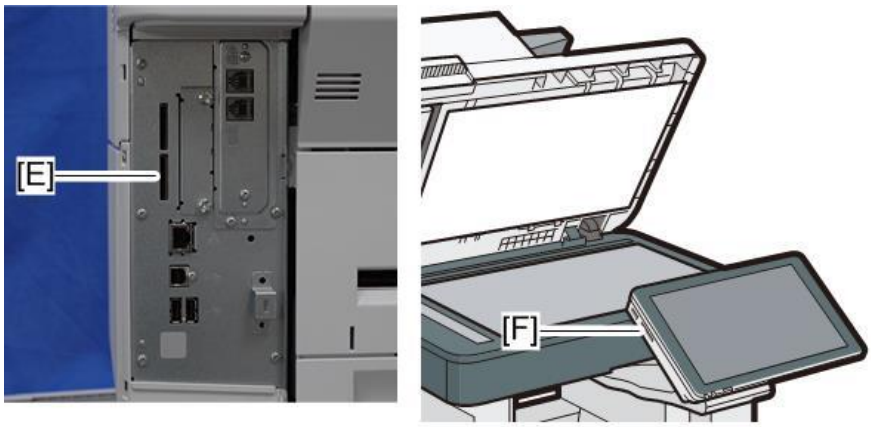
- Removable media (such as SD cards or USB flash drives) are precision devices, so when you handle them, respect the following.
- When the power is switched ON, do not insert or remove the removable media.
- During installations, do not switch the power OFF.
- Since the removable media is manufactured with high precision, do not store it in a hot or humid location, or in direct sunlight.
- Do not bend the removable media, scratch it, or give it a strong shock.
- Before downloading firmware to an SD card, check whether write-protection of the SD card is removed. If write-protection is locked, an error code (error code 44, etc.) will be displayed during download, and the download will fail.
- Before updating the firmware, disconnect network cables and interface cables, remove wireless boards, etc., (so that they are not accessed during the update).

Using the SD card for Updating

Use SD Card Slot 2 [E: Lower Slot] on the back of the machine or the SD card slot [F] on the left side of the operation panel.

Note

- When inserting into the slot, push the SD card until it clicks.
- Check whether the card is properly in the SD card slot. When an SD card is inserted, a click is heard, and it is locked.
- To remove the card, release it by pushing it once.



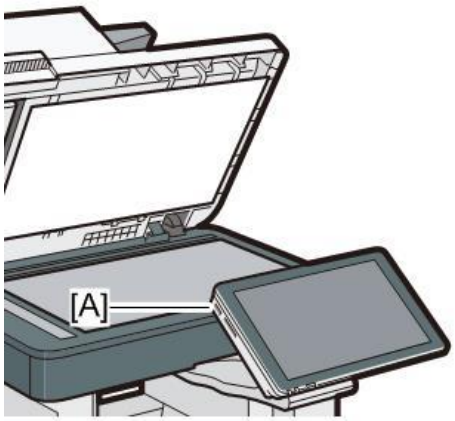
d0bta1258

To use the SD card slot [E], remove the controller cover [G]. (Controller Cover)

d0bta1259

Using the USB Flash Drive for Updating

Use the USB slot [A] on the left side of the operation panel.



d0bta1260

Update Procedure

Preparation

Download the latest version firmware to the removable media in advance.

Create a folder called “package” on the removable media, and then download the package firmware (xxxxxxxx.pkg) to it.

Note

- Do not put multiple machine firmware programs on the same SD card. Copy the only model firmware you want.
- If you download the firmware package to the “romdata” folder, which is the one normally used, the firmware package cannot be updated.
- When updating the firmware package of the same model, be sure to download each version separately. If you download multiple versions for the same model, only one of these versions is displayed on the machine’s operation panel, but which version is displayed is unpredictable.

Note for Update

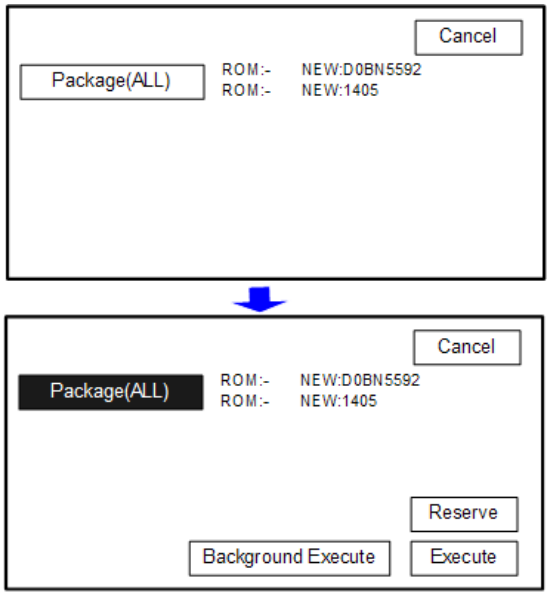
Note

- When the power supply is switched OFF during firmware update, the 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 the update is successful.
  In this case, insert the removable media again, switch the power ON, and continue download of firmware from the removable media 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.

Using the Slot on the Back of the Machine

1. Turn OFF the main power.
2. Insert the SD card into the SD card slot on the back of the machine.
3. Turn ON the main power. Wait until the update screen starts (about 30 seconds). When it appears, "Please Wait" is displayed.

4. Select the package, and then press [Execute].

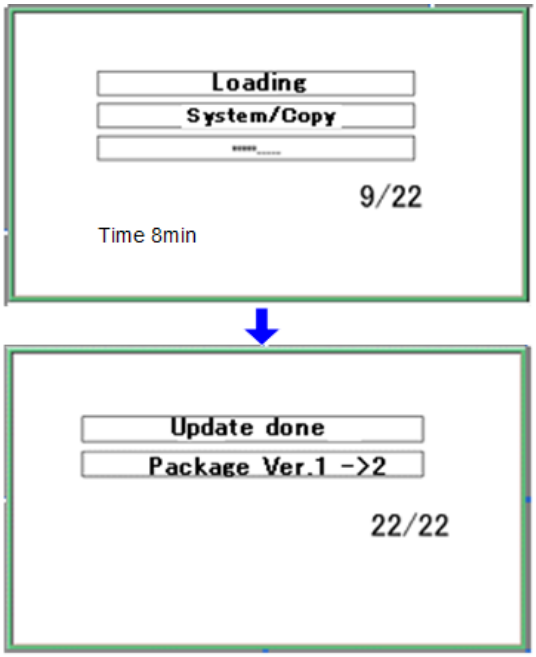


d0bqm2058a

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.

5. After the data waiting screen is displayed, the update is automatically started. When the firmware update is complete, "Update done" is displayed.



d0bqm2068

Note

The figures at the lower right of the display indicate "Number of updated items/ All items to be updated".

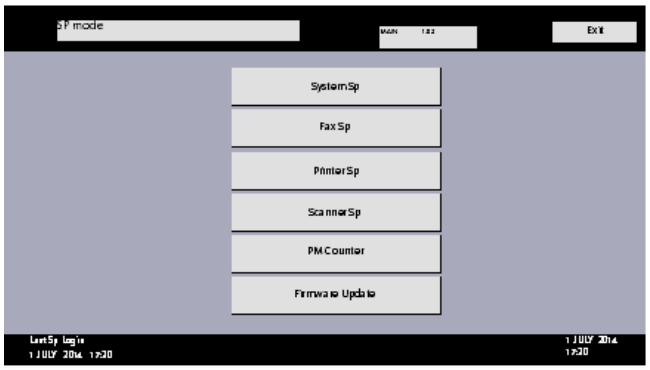
6. Turn the main power OFF.
7. Remove the SD card.
8. Turn the main power ON again, and check whether the machine is operating normally.
9. Return the SD card slot cover to the original position.

Using the Slot on the Operation Panel (Immediate Update)

Note

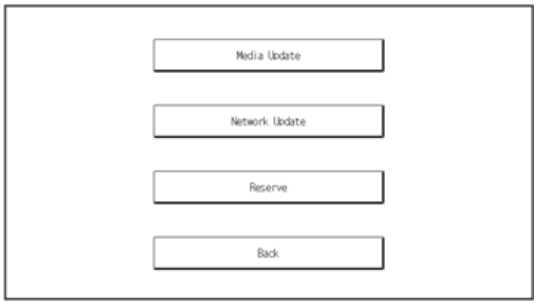
The update may fail if the machine's System/Copy version is V1.04 or an older version. If this happens, use the update procedure described in "Using the Slot on the Back of the Machine" above.

1. Enter the SP mode.
2. Touch [Firmware Update].



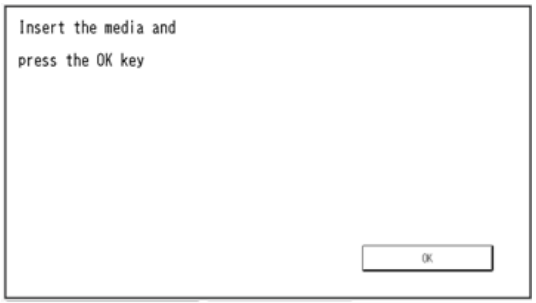
d197f0507

3. Touch [Media Update].



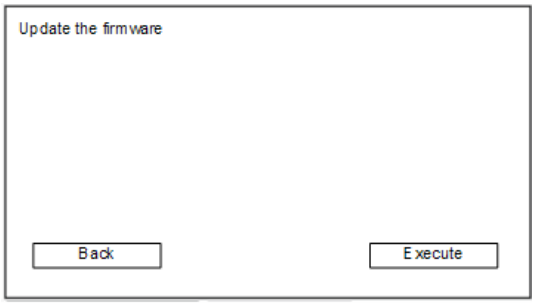
d0bqm2220

4. When the following screen is displayed, insert the removable media into the slot on the operation panel and touch [OK].



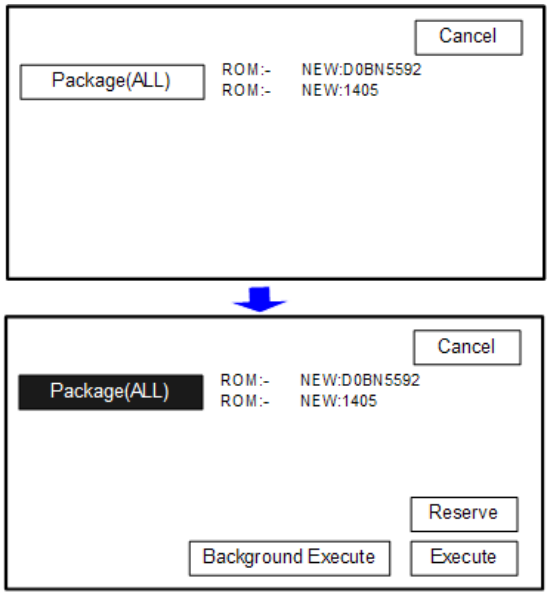
d0bqm2221

5. Touch [Execute].



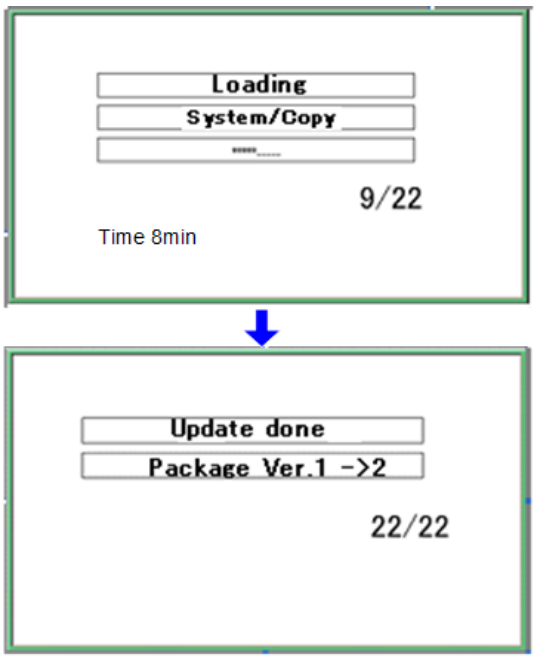
d0bqm2223

6. Select the package, and then press [Execute].



d0bqm2058a

7. After the data waiting screen is displayed, the update is automatically started. When the firmware update is complete, "Update done" is displayed.



d0bqm2068

Note

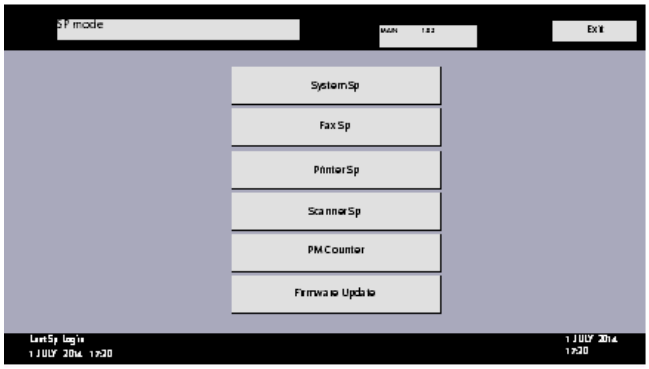
The figures at the lower right of the display indicate "Number of updated items/ All items to be updated".

8. Turn the main power OFF.
9. Remove the removable media from the slot on the operation panel.
10. Turn the main power ON again, and check whether the machine is operating normally.

Using the Slot on the Operation Panel (Reserve)

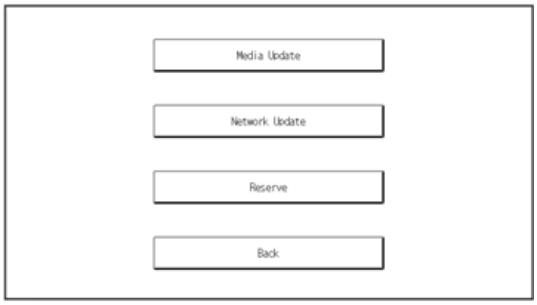
Firmware update can be executed at the programmed date and time.

1. Enter the SP mode.
2. Touch [Firmware Update].



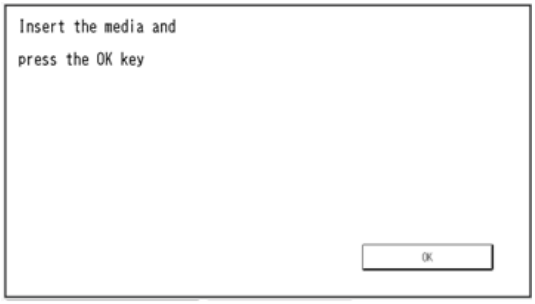
d197f0507

3. Touch [Media Update].



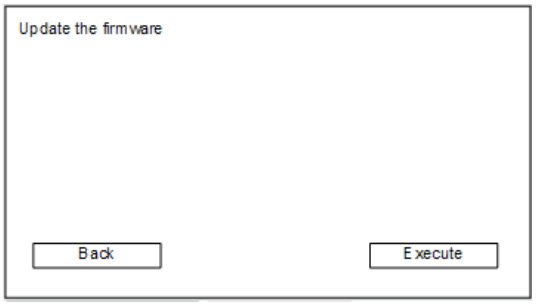
d0bqm2220

4. When the following screen is displayed, insert the removable media into the slot on the operation panel and touch [OK].



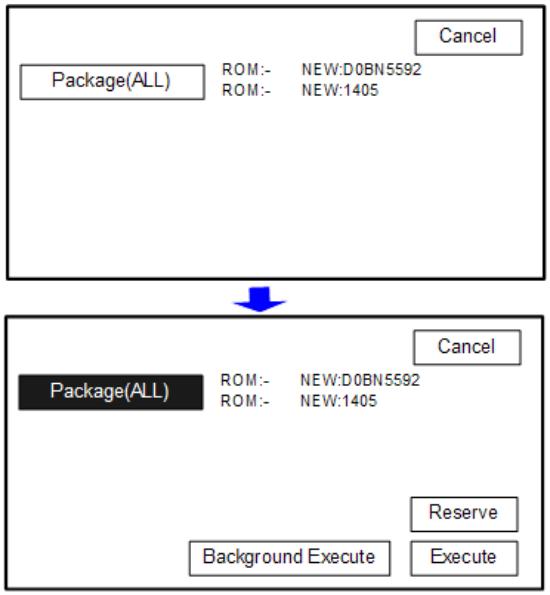
d0bqm2221

5. Touch [Execute].



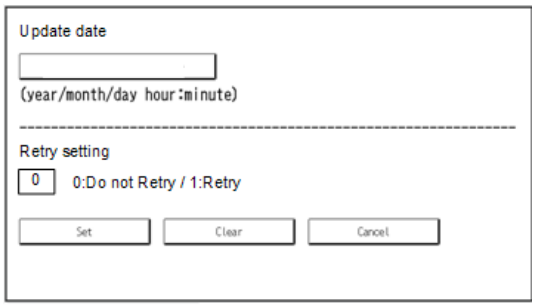
d0bqm2223

6. Select the package, and then press [Execute].



d0bqm2058a

7. Enter update date and time and specify the Retry Setting, then touch [Set].

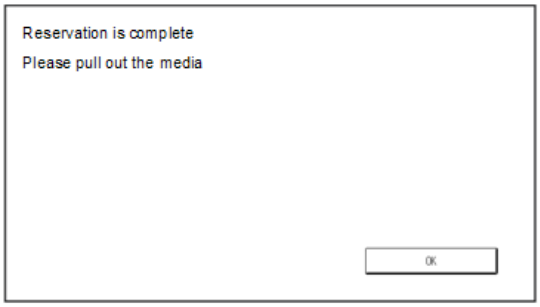


d0bqm2224

In "Retry setting", it is set whether or not to retry when updating cannot be started depending on the state of the machine.

8. When the following screen is displayed, pull out the removable media from the slot on the

operation panel, and then touch [OK].



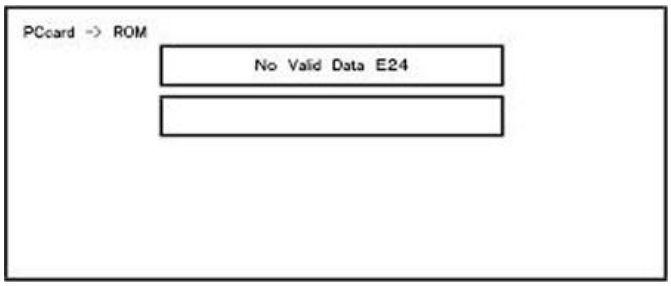
d0bqm2225

Firmware update is executed at the programmed date and time.

Note

Whether updating is possible or not depends on ARFU setting. However, whether to start updating does not depend on SP5-886-111 (automatic update setting) setting.

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 removable media to reboot it. • Replace the controller board (PCB15) 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 (PCB15) 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 removable media used for the update. • Replace the controller board (PCB15) if the

Code	Contents	Solutions
		above solutions do not solve the problem.
24	Removable media access error	• Re-insert the removable media. • Switch the main power supply off and on to try again. • Replace the removable media used for the update. • Replace the controller board (PCB15) if the above solutions do not solve the problem.
32	The removable media used after download suspension is incorrect. Removable media is different between the one which was inserted before power interruption and the one which was inserted after the power interruption.	• Insert the removable media 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 removable media is damaged if the update cannot be done after the correct removable media has been inserted. In this case, try again with a different removable media. • Replace the controller board (PCB15) if the above solutions do not solve the problem. Replace all relevant boards if the update is done for the BiCU (PCB16) and FCU. Replace the operation panel unit if the update is done for the operation panel. • After replacing the unit, update it using the same removable media. If the update is successful, this error code disappears.
33	Removable media version error. The wrong removable media version is downloaded.	• Install the correct ROM update data for each version in the removable media.
34	Destination error. A removable media for the wrong destination is inserted.	• Install the correct ROM update data for each destination (JPN/ EXP/ OEM) in the removable media.
35	Model error. A removable media for the wrong model is inserted.	• Install the correct ROM update data for each model in the removable media.
36	Module error. The program to be downloaded does not exist on the main machine.	• Install the program to be updated in advance. • There is a possibility that the removable media containing the program to be updated has not

Code	Contents	Solutions
	The download destination specified by the removable media does not match up to the destination for the main machine's program.	been mounted. Check to confirm that the removable media has been correctly mounted. • The removable media is incorrect if the program to be updated has been correctly installed. In this case, insert the correct removable media.
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 this error occurs while using the media slot on the left side of the operation panel, perform a retry using the media slot on the back of the machine. • If the download fails again, replace the controller board (PCB15) and the BiCU (PCB16). • After replacing the unit, update it using the same removable media. If the update is successful, this error code disappears.
41	Fax download fails.	• Switch the main power supply off and on to try again. • If the download fails again, replace the controller board (PCB15) and the FCU board. • After replacing the unit, update it using the same removable media. If the update is successful, this error code disappears.
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 (PCB15) and the operation panel unit. • After replacing the unit, update it using the same removable media. If the update is successful, this error code disappears.
43	Printing download fails.	• Switch the main power supply off and on to try

Code	Contents	Solutions
		again. • The removable media is damaged if the update fails again. Replace the removable media.
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 removable media. • Replace the controller board (PCB15) if the data to be overwritten is contained on the controller board (PCB15).
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 removable media.
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	• Update is to be done automatically when the

Code	Contents	Solutions
	of the machine at the reserved date/time of the remote firmware update from the network.	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 the reserved date/time of the remote firmware update from the network.	• Check that the network is connected correctly.
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 the Administrator Tools 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 (PCB15). If it persists, replace the hard disk.

Code	Contents	Solutions
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 (100 minutes).	• Check the network connection.

Firmware Update (Smart Firmware Update)

Overview

Smart firmware update (SFU) is a system to download a firmware package. Since downloading the package takes time, SFU lets you schedule the download to take place when the machine is not in use, such as at night or at the weekend.

There are the following methods of updating using SFU.

1. Immediate Update: To download and update the firmware when visiting.
2. Update on the next visit: To set the date and time for firmware downloading. The firmware will be automatically downloaded beforehand and updated at the following visit.
   "Update on 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.

Immediate Update

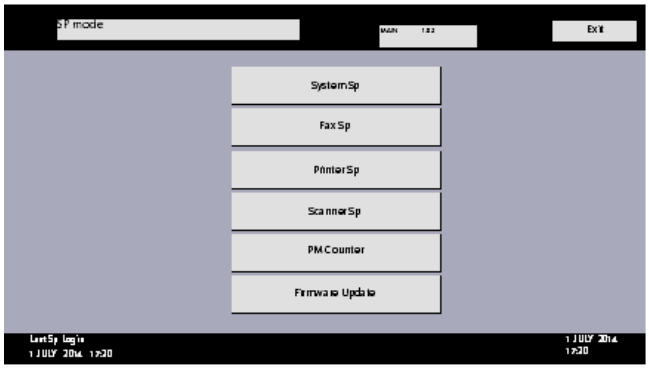
Enter the [Firmware Update] menu in the SP mode and update the package firmware.

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.

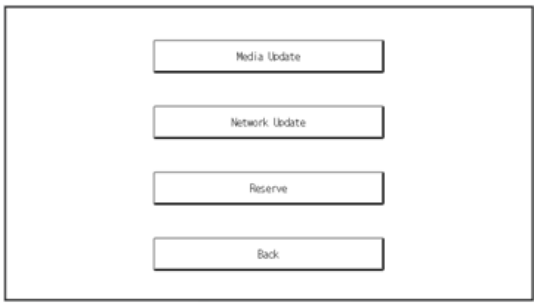
1. Enter the SP mode.

2. Touch [Firmware Update].



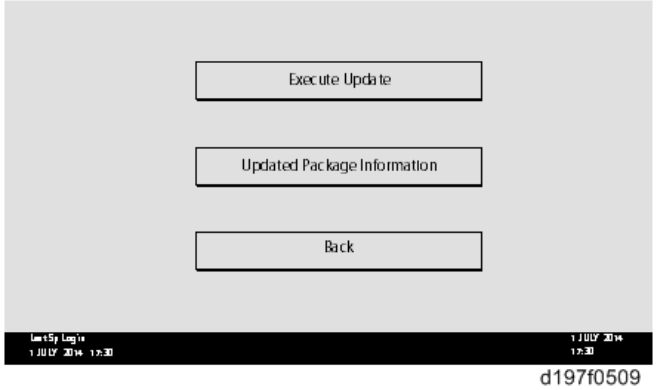
d197f0507

3. Touch [Network Update].



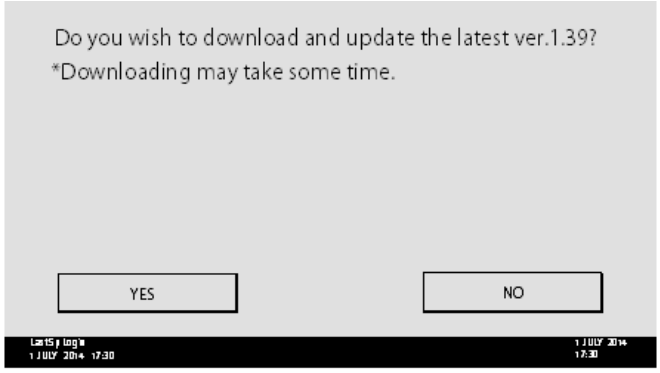
d0bqm2220

4. Touch [Execute Update].



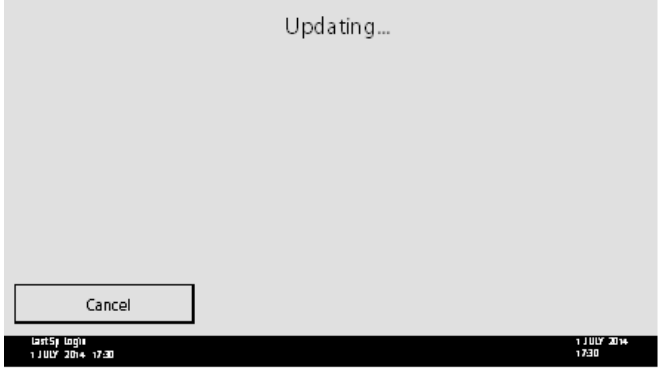
d197f0509

5. Touch [YES].



d197f0514

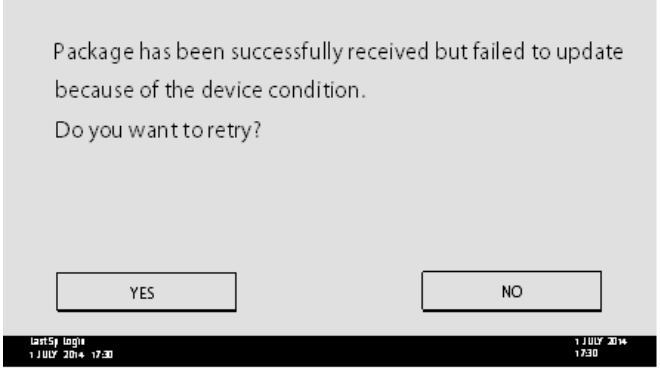
6. The following will be displayed.



d197f0513

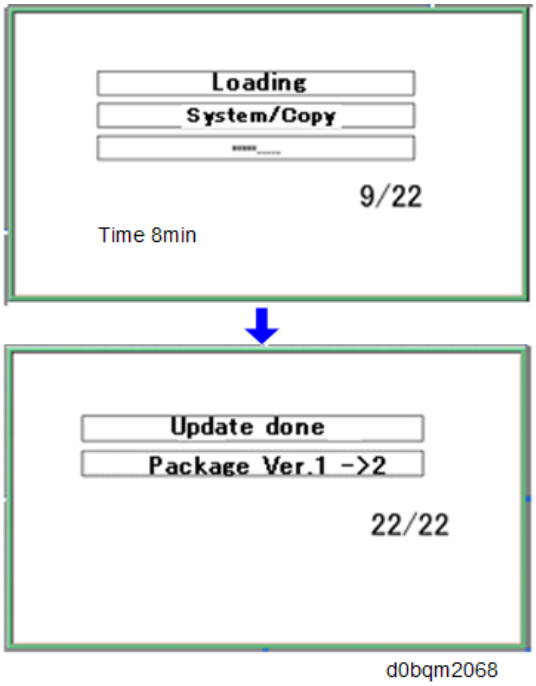
Note

- If the error code E66, which indicates that the download of the firmware has failed, is displayed, go back to step 1.
- The 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] button on the display, shown below, to restart updating.



d197f0515

7. [Update done] is displayed. The machine will automatically reboot itself.



Note

- The figures at the lower right of the display indicate "Number of updated items/ All items to be updated".

Update on the Next Visit (Reserve)

It is possible to set the machine to download the package firmware which is necessary 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)

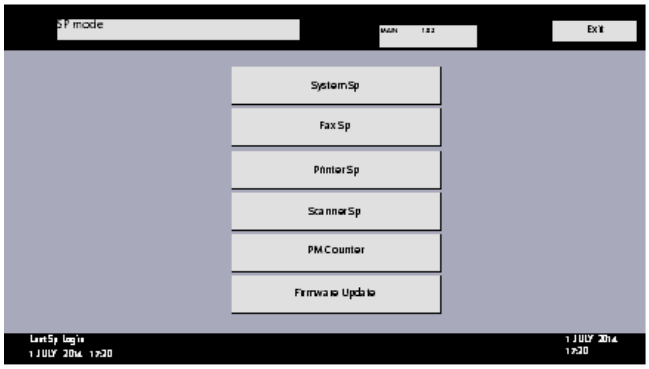
Enter the [Firmware Update] menu in the SP mode and update the package firmware.

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 .

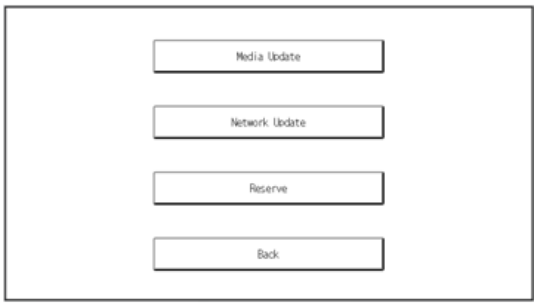
1. Enter the SP mode.

2. Touch [Firmware Update].



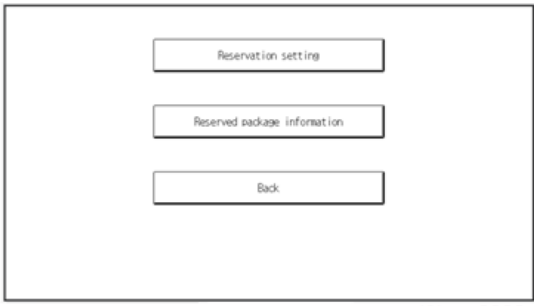
d197f0507

3. Touch [Reserve].



d0bqm2220

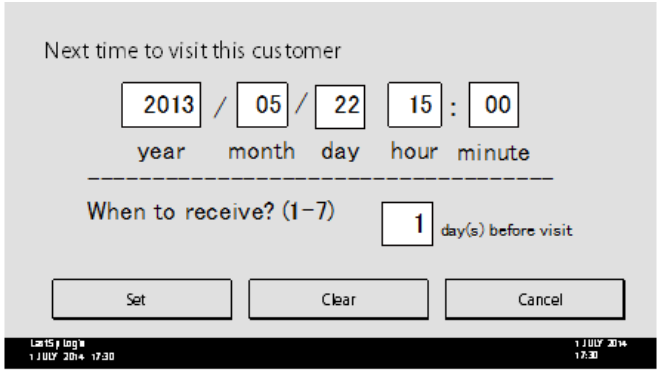
4. Touch [Reservation setting].



d0bqm2222

5. Enter the dates and times of the next visit and the start of receiving data.

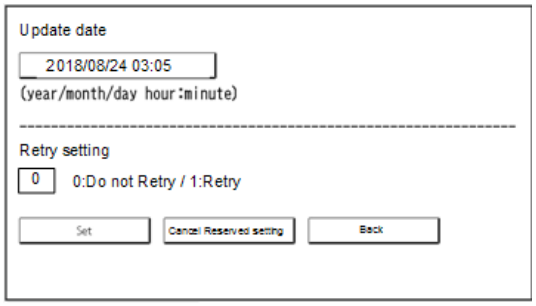
- "Next time to visit this customer": The package firmware will be automatically downloaded by this time/date.
- "When to receive? (1-7)": The download of the package firmware will begin this number of days before the next visit.



d197f0512

Note

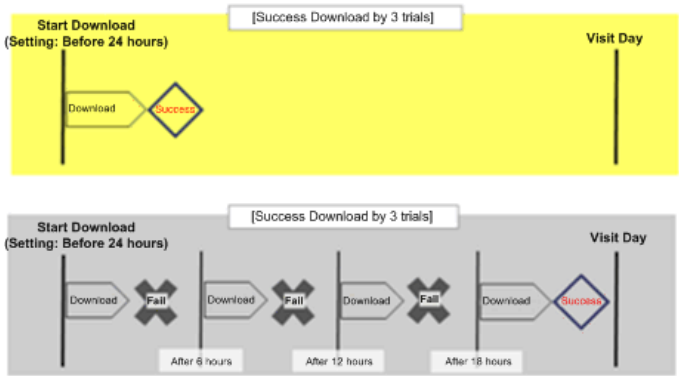
When a reservation update by the media device is set, the update date and time is displayed.



d0bqm2226

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.



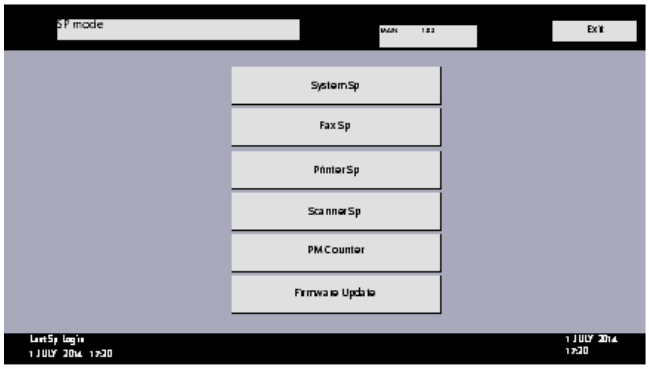
w_d197f0507_en

- 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.

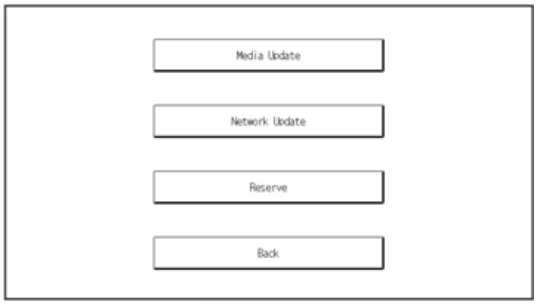
How to Check if the Firmware Downloaded with Reserve

1. Enter the SP mode.
2. Touch [Firmware Update].



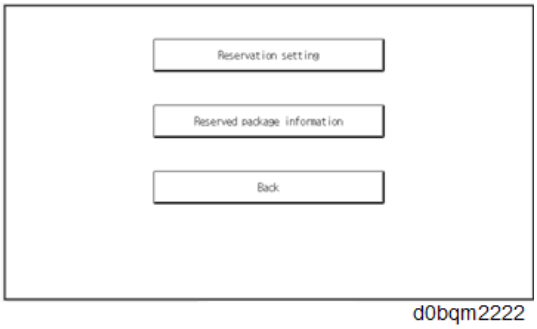
d197f0507

3. Touch [Reserve].



d0bqm2220

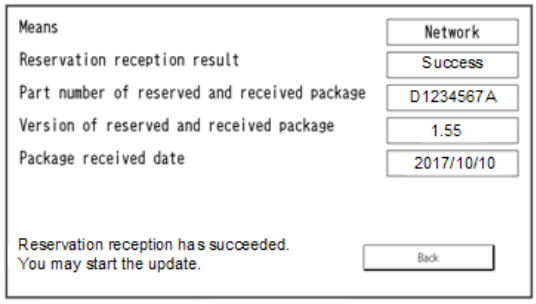
4. Touch [Reserved package information].



d0bqm2222

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.



d0bqm2227

Note

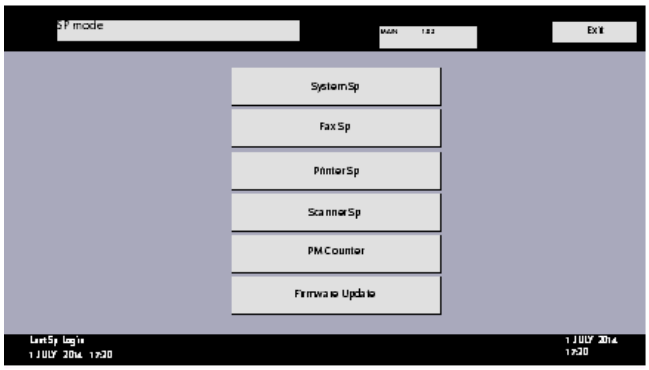
- This information will only be displayed if the reserved firmware has already been downloaded. If not, all the data items are indicated with "-".
- When reservation update by the media device is set, the package firmware information reserved from the media device is displayed.

d0bqm2228

How to Install Firmware Downloaded with Reserve

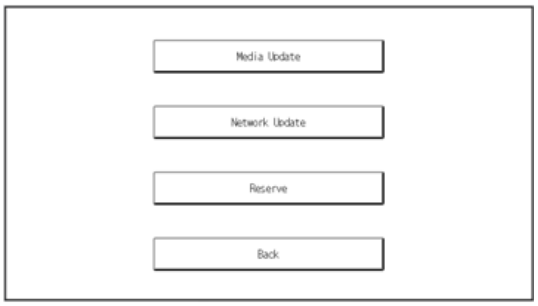
1. Enter the SP mode.

2. Touch [Firmware Update].



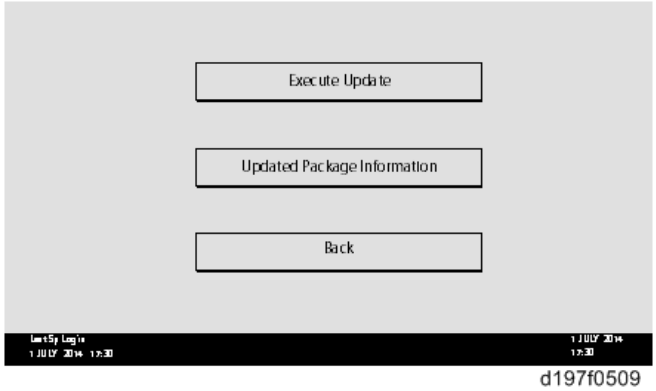
d197f0507

3. Touch [Network Update].



d0bqm2220

4. Touch [Execute Update].



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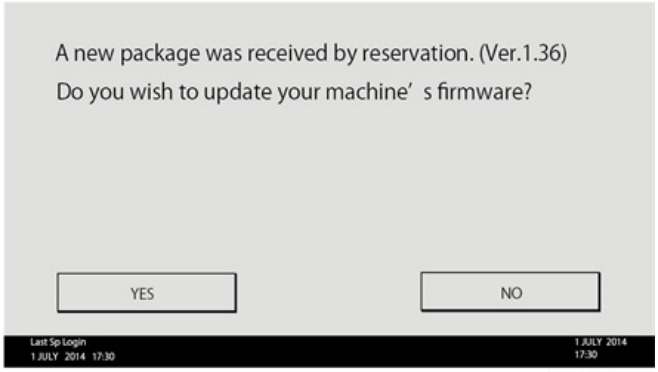
5. Check the version of the received package firmware, and then touch [YES].

- The update is started.



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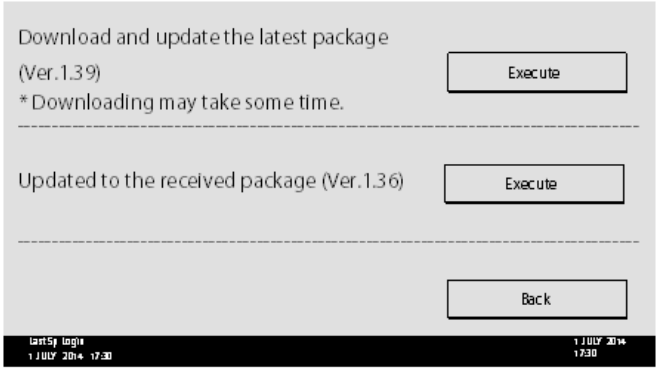
Note

- 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.



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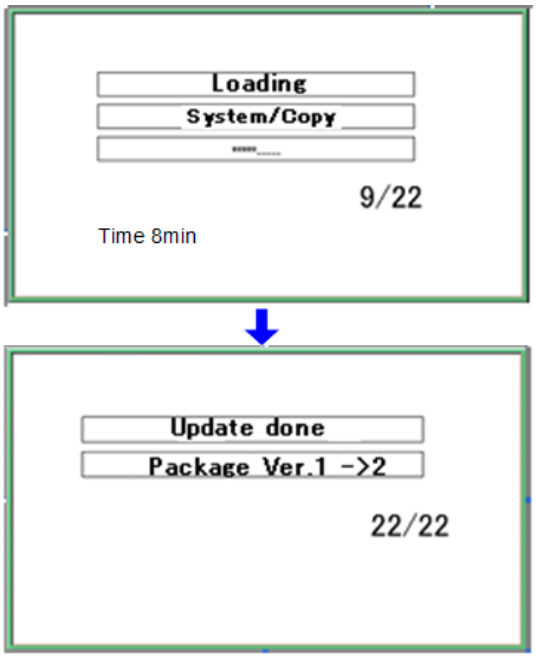
- If you wish to download the latest version, touch [Execute] beside the message "Download and update the latest package." Then the update of the package firmware will be started.
- If you wish to update using the firmware in the HDD (old version), touch [Execute] beside the message "Update to the received package."

6. [Update done] is displayed.

- The machine will automatically reboot itself.



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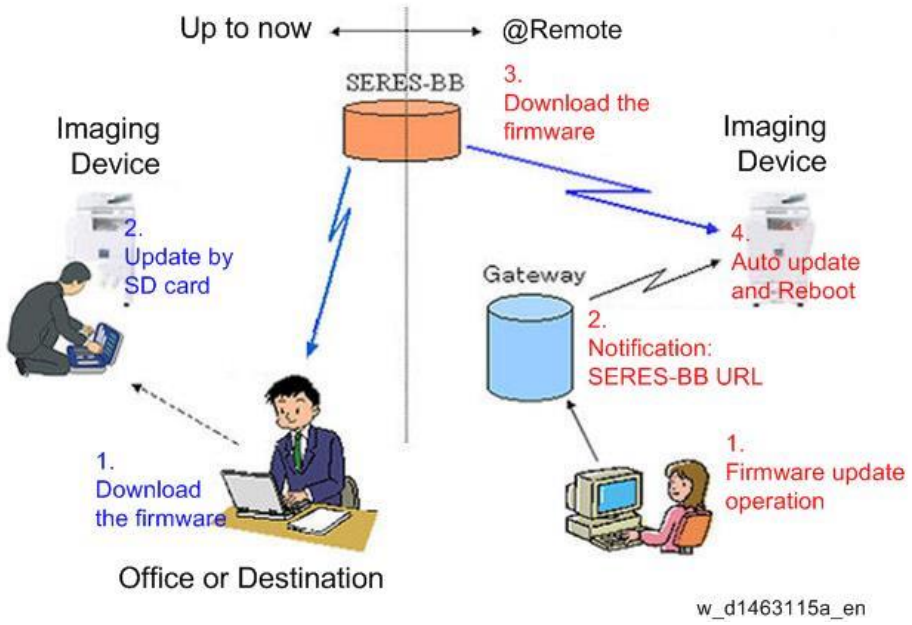
Note

- The figures at the lower right of the display indicate "Number of updated items/ All items to be updated".

Firmware Update (Remote Firmware Update)

In this machine, the software can be updated by remote control using @Remote.



RFU Performable Condition

RFU is performable for a device which meets 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 (Auto Remote Firmware Update)

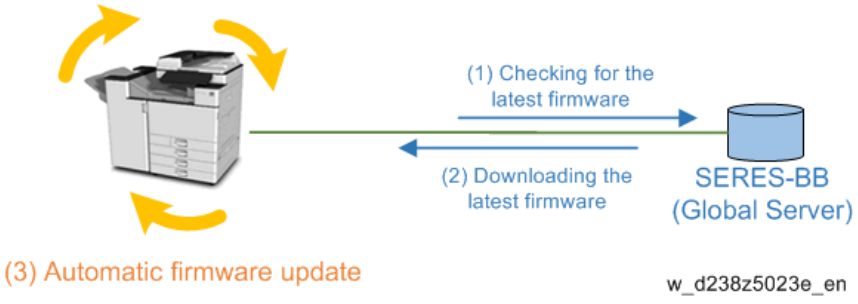
Note

- Auto remote firmware update (ARFU) requires a connection to an external network. Be sure to get permission from the customer before setting.
- Internet connection is needed.

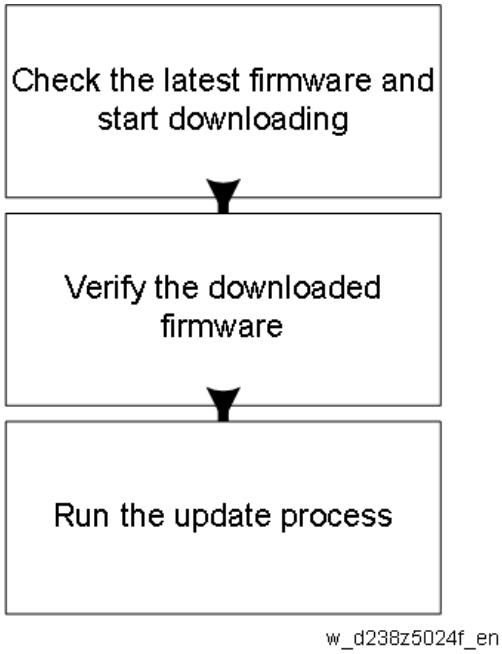
Overview

Using Auto Remote Firmware Update (ARFU), the machine checks package firmware files on the global server every 76 hours. If there is a version available newer than the one on the machine, the machine downloads the file to update the machine's package firmware.

Function Overview



Downloading and Updating Process



Downloads the Latest Package

The machine accesses the server to check for the 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.

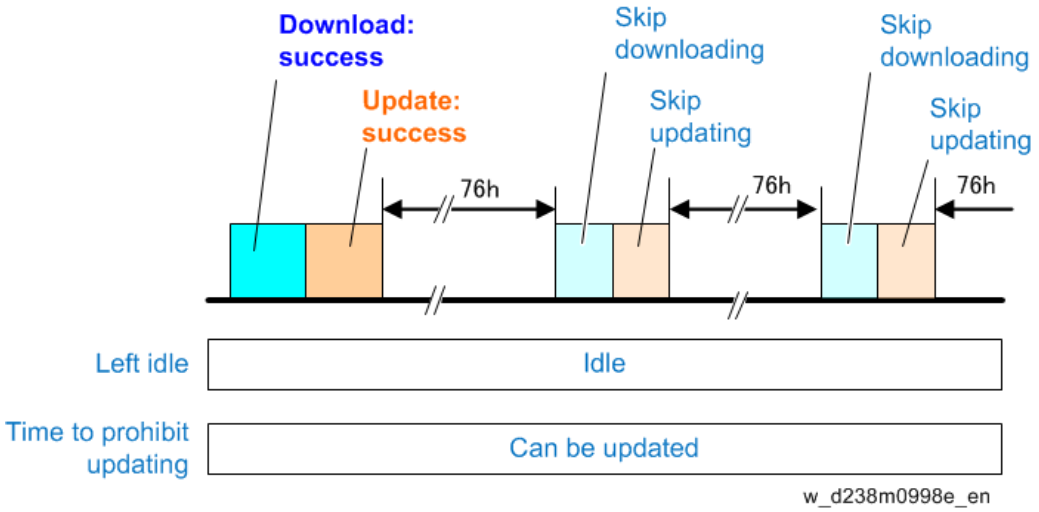
When the machine connects to the server where the package files are stored, the DNS settings and the name solution by DNS is needed. The machine will still try to download the package even if the name cannot be resolved, but will fail as the name is not resolved.

The time and date to send the next inquiry to the global server can be checked with SP5-886-116 (Farm Update Setting: Auto Update Next Date).

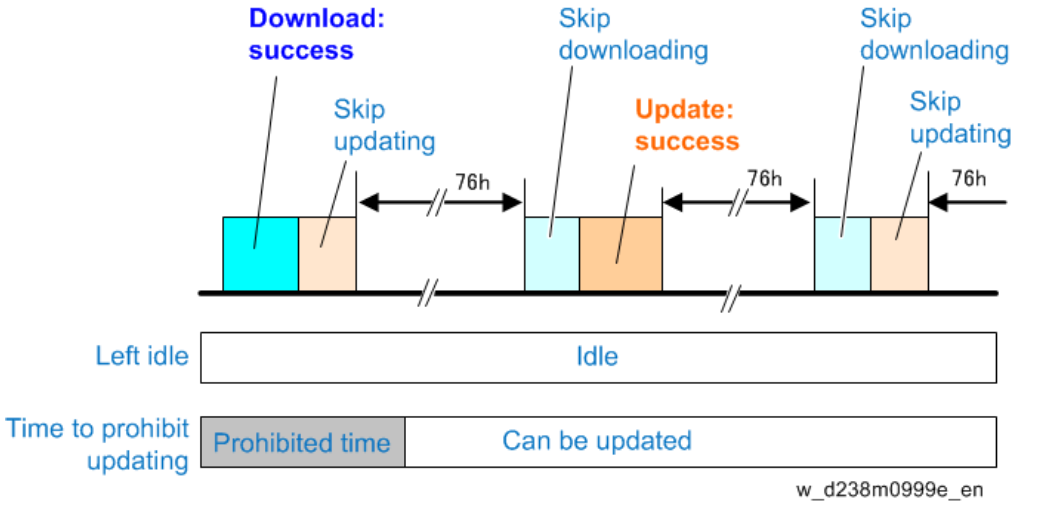
The auto remote firmware update is executed every 76 hours.

ARFU Update Determination

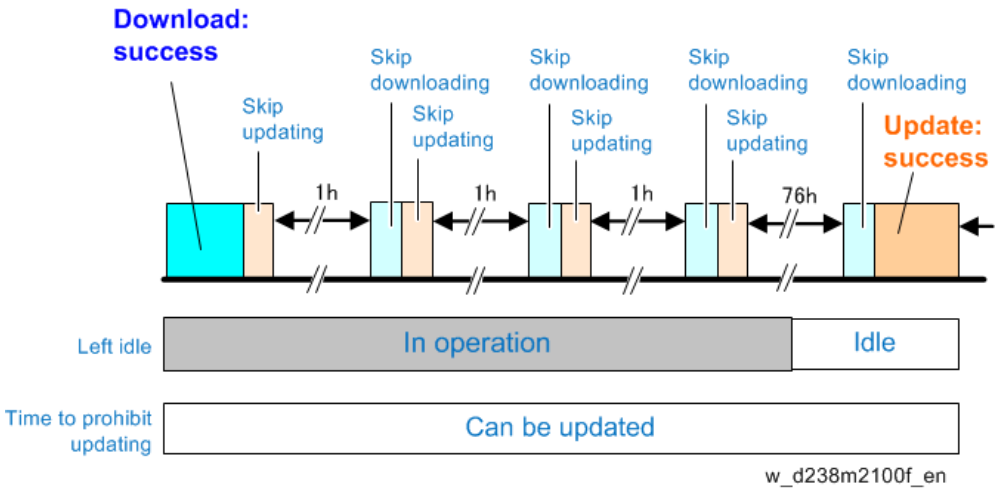
When the machine has successfully downloaded the latest package firmware file, or if the file has already been downloaded, the machine verifies whether a firmware update is necessary.



If the timing of determination is within the update prohibition period or day set in the SP configuration or Web Image Monitor, the machine will retry the firmware update determination 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.



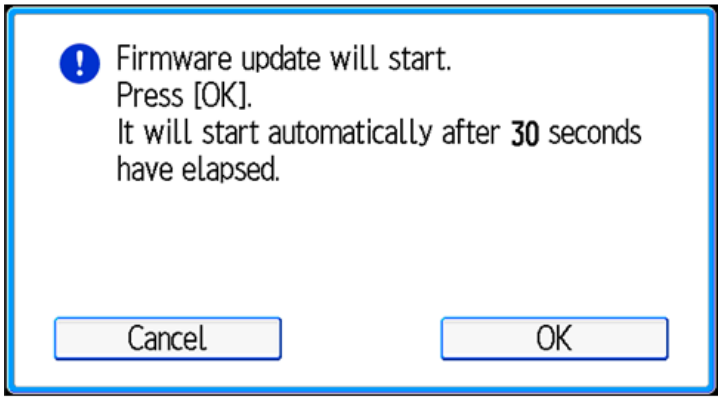
Situations in which the machine is determined to be in use

No.	Situations in which the machine is determined to be in use
1	When the operation panel is used within 30 seconds
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 the network
7	While initial setting ([Settings] icon) or SP is being set
8	While fax is transferring data
9	During on-hook/on the handset
10	During the PC-FAX process (from PC to machine data transfer to the end of the job)
11	While switching to/from the energy saving mode
12	When not being able to run the 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
22	While shutting down

No.	Situations in which the machine is determined to be in use
23	While importing/exporting SP settings
24	The interval between changing settings that require a reboot and actually rebooting (A reboot notification message pops up after changing the settings.)
25	While verifying the operation panel (smart panel)

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. The 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 the 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.

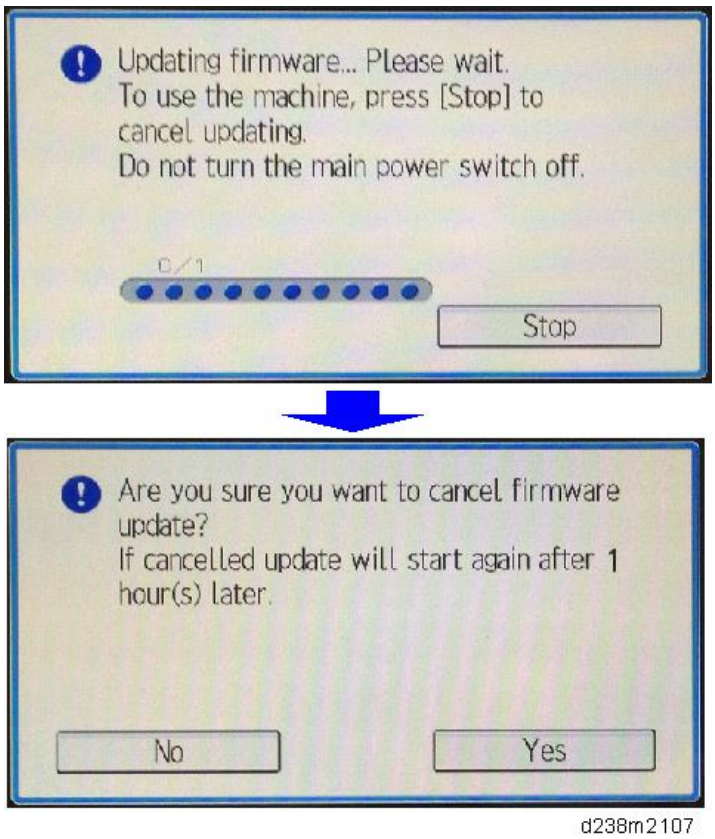
Device and corresponding SC number

Device name	SC number
Engine board	SC845-01
Controller board (PCB15)	SC845-02
Operation panel (normal panel)*1	SC845-03
Operation panel (smart panel)	SC845-04
FCU	SC845-05

*1 Not available for this machine

Cancellation of update by user

Using the operation panel, the user can cancel the update (including update through the retry process) being performed by Auto Remote Firmware Update (ARFU).



However, while the firmware of the operation panel is being updated, cancellation is not possible because the keys are disabled.
(Since the update of the operation panel firmware is performed at the end, you cannot cancel the update at this point.)
If the update is canceled, the machine will reboot when the firmware update of all modules included in the following parts is complete.

1. Engine Board
2. FCU
3. Controller Board (PCB15)
4. Operation Panel

For example, if the first firmware update for the Controller Board (PCB15) is canceled, the machine will reboot when the firmware update of all modules included in the Controller Board (PCB15) is complete.
The firmware configuration contained in the package is listed in the accompanying SERES release note.
If the update is canceled, it will be performed again 76 hours later. If there is a difference in version between the package obtained at that time and the one already stored (in other words, the one canceled), the old package will be discarded and the latest one will be received.

Related SP

SP Number	Selection **Def.**	Overview
SP5-886-111	0: OFF **1: ON**	Sets auto update ON/OFF by ARFU.
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 auto 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.
SP5-886-120	**0x00**	The update will not run if the corresponding bit for each day below is set to 1. • prohibited:bit7 • 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 affected by the prohibited time setting. e.g.) Prohibited on Mon., Fri., Sat., and Sun. : 0x47 (01000111)
SP7-520-011 to 015	Display only	History of date and time when the update has started. The five most recent are recorded, the lowest number being the most recent. If the last update failed, this is not recorded.
SP7-520-021 to 025	Display only	History of date and time when the update has finished. The five most recent are recorded, the lowest number being the most

SP Number	Selection **Def.**	Overview
		recent. The record is created when the update has successfully finished. When the update is canceled, no record is created.
SP7-520-031 to 035	Display only	History of the package number (including suffix) for which update has completed. The five most recent are recorded, the lowest number being the most recent. The record is created when the update has successfully finished. When the update is canceled, no record is created.
SP7-520-041 to 045	Display only	History of the package version for which update has completed. The five most recent are recorded, the lowest number being the most recent. The record is created when the update has successfully finished. When the update is canceled, no record is created.

Firmware Update (P 800/801 Only)

Overview

In order to update the firmware of this machine, download the latest firmware file and save on an SD card. Once saved, insert the SD card in the SD Card Slot 2.

Firmware Types

Firmware Location	Firmware Type	Message Displayed
Controller Board (PCB15)	System/Copy	BRZP2a_system
	NetworkDocBox	BRP2a_netfile
	Network Support	BRZP2a_net
	Printer	BRZP2e_printer
	PCL	BRP2e_prt_PCL
	PDF (IRIPS PDF)	BRP2e_prt_IPDF
	PS (IRIPS PS)	BRP2e_prt_IPS3
	Web Support	BRZP2a_web
	RPCS	BRP2e_prt_RPCS
	FONT(Font EXP)	GW14e_prt_SAMf
	MediaPrint:TIFF	BRZP2e_printer
	HDD Format Option	GW2a_zoffyxonb
	PowerSaving Sys	BRZP2e_subcpu
IOB (PCB17)	Engine	BRP2a_eplot
BiCU (PCB16)	Engine(IPU)	BRP2a_eipu

Note

- Even when not using an RPCS driver, the XPS driver requires RPCS firmware.

Procedure

Important

- An SD card is a precision device, so when you handle an SD card, respect the following.
- 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 a firmware file on an SD card, check if the write-protection of the card is disabled or not. If write-protection is enabled, an error code (error code 44, etc.) will be displayed during download, and the download will fail.

- Before updating the firmware, disconnect the network cable from the machine.
- If SC818 is generated during the software update, switch the power OFF -> ON, and complete the update which was interrupted.
- During software update, remove interface cables, network cables, wireless boards, etc., (so that they are not accessed during the update).

1. First, download the software to be updated to the SD card.
2. Turn OFF the main power.
3. Remove the controller cover. (Controller Cover)
   Insert the SD card [A] straight in the SD Card Slot 2 (lower).

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Note

- If the customer has used all of the slots, you have to keep an empty slot for this procedure. Ask the customer to temporarily remove the SD card in SD Card Slot 2.
- Check whether the card is properly in the SD Card Slot. When an SD card is inserted, a click is heard, and it is locked.
- To remove the card, release by pressing once in the set state.

4. Turn ON the main power.
5. Wait until a firmware name is shown on the display (about 1 minute).

Note

- The firmware name is read from inside the firmware. The firmware name is not changed even if you change the file name on your PC.

6. If the necessary firmware name is shown on the display, check the firmware version with the left-arrow or right-arrow keys. Pressing the left or right-arrow key shows the firmware name, version, and serial number in order.
7. To use a different firmware file, push the up-arrow key or the down-arrow key to find the necessary file.
8. To select the firmware, push the OK key. Make sure that the selected firmware is highlighted.
9. If you update more than one firmware program at the same time, find each of them and select each of them. Make sure that the selected firmware is highlighted.
10. To start the firmware update, push the "UpDate" key. While each firmware is downloaded, the

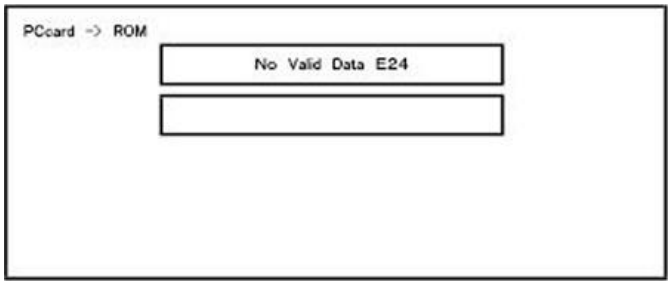
underscores on the operation panel are replaced by stars.

11. Wait until the message "Update done" is shown.
12. After turning OFF the main power, remove the SD card.
13. Again, turn ON the main power, and check whether the machine is operating normally.
14. Print the Configuration Page to check that the firmware is correctly updated:
    List/Test Print > Config. Page
15. Reassemble the machine.

Note

- An error code is shown if an error occurs during the download. Error codes have the letter "E" and a number. If an error occurs, the firmware is not correctly downloaded; see the error code table (Error Screens During Updating) and do the necessary steps. After this, download the firmware again.
- If the firmware update is interrupted by a power failure, the firmware is not correctly downloaded. In this condition, machine operation is not guaranteed. You have to download the firmware again.

Error Screens During Updating



EXX shows an error code.

(This error is generated if the update was performed when a printer application startup card is removed after system startup. An error indicating failure of card access is displayed on the screen.)

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 (PCB15) 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 (PCB15) if the updating cannot be done by switching the

Code	Contents	Solutions
		power off and on.
23	An error occurred when the ROM update program started	Controller program abnormal. If the second attempt fails, replace the controller board (PCB15).
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 (PCB15) 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 (PCB15) if the above solutions do not solve the problem.
31	Data incorrect for continuous download	Insert the SD card with the remaining data required for the download, then restart the procedure.
32	The SD card used after download suspension is incorrect. SD cards are different between the one which was inserted before power interruption and the one which was 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 (PCB15) if the above solutions do not solve the problem. Replace all relevant boards if the update is done for the BiCU (PCB16) 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 downloaded.	• Install the correct ROM update data for each version in the SD card.
34	Destination error. A card for the wrong destination is inserted.	• Install the correct ROM update data for each location (JPN/ EXP/ OEM) in the SD card.
35	Model error.	• Install the correct ROM update data for each

Code	Contents	Solutions
	A card for the wrong model is inserted.	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 up to 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 (PCB15) and the BiCU (PCB16).
41	Fax download fails.*1	• Switch the main power supply off and on to try again. • If the download fails again, replace the controller board (PCB15) and the FCU board.
42	Control panel / language download fails.*1	• Switch the main power supply off and on to try again. • If the download fails again, replace the controller board (PCB15) and the operation panel unit.
43	Printing download fails.*1	• Switch the main power supply off and on to try again. • The SD card media is damaged if the update fails again. Replace the SD card media.
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 (PCB15) if the data to be overwritten is contained on the controller board (PCB15).

Code	Contents	Solutions
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. *1	• Check the @Remote connection.
58	Update cannot be done due to a reception route problem. *1	• Check the @Remote connection.
59	HDD is not mounted. *1	• Check the HDD connection.
60	HDD could not be used during the package firmware update. *1	• Try again. • Replace the HDD if the download fails again.
61	The module ID for the package firmware update is incorrect. *1	• Prepare the correct package files.
62	The configuration of the package firmware update files is incorrect. *1	• 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. *1	• 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. *1	• 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. *1	• 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. *1	• Reset the reservation date/time for the remote update.
67	Acquisition of the latest version information from the Gateway fails at the reserved date/time of the remote firmware update from the network. *1	• Check that the network is connected correctly.

Code	Contents	Solutions
68	Acquisition of the latest version information from the Gateway fails. *1	• Check that the network is connected correctly.
69	Download fails at the reserved date/time of the remote firmware update from the network.*1	• Check that the network is connected correctly.
70	Package firmware download from the network fails.*1	• 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.*1	• 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.*1	• Set the setting of @Remote Service in the Administrator Tools to [Do not Prohibit].

*1 The error occurs in IM 550F/600F/600SRF only

Note

- The PDF firmware installed as standard contains a program required to print PS3 data as a 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.

RFU Updating the Firmware

See Firmware Update (Remote Firmware Update).

Updating JavaVM

Updating Java VM is performed with PC using the update tool.

- **Prepare the following items in advance.**
  - SD memory card reader/writer
  - PC
- **Updating flow is as follows.**
  1. Deactivate the SDK applications with Web Image Monitor.
  2. Remove the VM CARD Type M37 from the main machine.
  3. Update Java VM with PC using the update tool.
  4. Install the VM CARD Type M37 to the main machine.
  5. Activate the SDK applications with Web Image Monitor.

Deactivating SDK Applications

1. Log in as the administrator from Web Image Monitor.

2. Take 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.

   "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 controller cover. (Controller Cover)

7. Remove VM CARD Type M37 from the SD Card Slot 1 [A].

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Updating JavaVM

1. Insert VM CARD Type M37 into 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 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 a 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 Type M37 from SD memory card reader/writer of your PC.

10. Insert VM CARD Type M37 into SD Card Slot 1 [A] of the machine.

11. Reassemble the machine.

Activating SDK Applications

1. Turn the main power ON.

2. Log in as the administrator from Web Image Monitor.

3. Change the setting for "Auto Start" to "On" for each SDK application.

1. Display the [Startup Setting] menu.
   - [Device Management] -> [Configuration] -> [Extended Feature Settings] -> [Startup Setting]
2. Click the [Details] icon ( ) for each SDK application.
3. Make sure that "Auto Start" is set to "On". (Default: On)

4. Reconfigure the heap size setting in [Heap / Stack Size Settings].

- [Device Management] -> [Configuration] -> [Extended Feature Settings] -> [Administrator Tools] -> [Heap / Stack Size Settings]

Capturing the Debug Logs

Overview

Important

- **This function is not available on models without a hard disk.**
- **Log related to FAX like FCU debug log is stored only when a machine has FAX.**

With this feature, you can save debug logs that are stored in the machine (HDD or operation panel) on an SD card. It allows the service representative to save and retrieve error information for analysis.

The Capturing Log feature saves debug logs for the following four.

- Controller debug log
- Engine debug log
- FCU debug log (IM 550F/600F/600SRF only)
- Operation panel debug log

Important

- On older models, logging tool enabled by a service representative when a problem occurred. Once the problem reoccurred, the service representative was able to retrieve the debug log.
- With this new feature, debug logs are saved at the moment any problem occurs and then can be copied to an SD card.
- SD card is an option to retrieve the debug logs when there is no network.
- Analyzing the debug log is a good way to figure out software issues, but it is not an effective way to find defective parts, if there are any, or detect problems caused by hardware.

Types of debug logs that can be saved

Type	Storage Timing	Destination (maximum storage capacity)
Controller debug log (GW debug log)	• Saved at all times	HDD (4 GB) Compressed when written to an SD card from the HDD (from 4 GB to about 300 MB)
Engine debug log	• When an engine SC occurs • When paper feeding/output stop by jams • When the machine covers are opened during normal operation	HDD (Up to 300 times)
Operation panel debug log	• When a controller SC occurs • When saving by manual operation with the Number keys and the Reset key (Press [Reset], [0], [1] and [C] (hold for 3 seconds)) • When the operation unit detects an error	The operation panel (400 MB /Up to 30 times) When updating the firmware for the operation panel, the debug logs are erased.

Type	Storage Timing	Destination (maximum storage capacity)
	• When the operation panel detects an error	

Note

- Debug logs are not saved in the following conditions.
- When there is no HDD.
- While erasing all memory
- While data encryption equipment is installed
- While changing the firmware configuration
- Forced power OFF (accidentally disconnecting the outlet)
- Engine debug log in shutdown
- When the power supply to the HDD is off because of energy saving (engine OFF mode /STR mode)

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

Also, the following operation logs are not saved.

- Soft keyboard on the touch panel display
- External keyboard

Retrieving the Debug Logs

Important

- Retrieve the debug logs to identify the time and date of the problem occurred and to learn the details of the issues; e.g. at 8:00am on March 10, an engine stall occurred. The operation panel is not responding. Turn the main power OFF/ON.
- You need to retrieve the debug logs dating back three days from the date of the problem, because the software development department needs the logs from three days ago to determine what lead up to the problem.
- Analyzing the debug log is a good way to figure out software issues, but it is not an effective way to find defective parts, if there are any, or detect problems caused by hardware.

Procedure for Retrieving the Debug Log

1. Insert the SD card into the SD card slot.

   IM 550F/600F/600SRF:

   Insert an SD card into the media slot on the side of the operation panel.

   P 800/801:

   1. Remove the controller cover. (Controller Cover)
   2. Insert the SD card into the SD Card Slot 2 (lower) [A].

2. Enter SP mode.
3. Set the start date of the log with SP5-858-101 (Start date of debug log output)

   e.g.: March 28, 2013: input 20130328 (yyyymmdd)

   - Be sure to confirm the date when the problem occurred before obtaining the logs.
4. Set the end date of the log with 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.
5. Execute SP5-858-111 (Acquire All Info & Logs) to write the debug log to the SD card.
6. If the transfer is finished successfully, "completed" is displayed.

   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. (It is recommended that you format the SD card using the Panasonic SD Formatter (freeware)).
   - Controller debug log (GW debug log): 2 - 20 minutes
   - Engine debug log: 2 minutes
   - Operation panel log: 2 - 20 minutes
7. Make sure that the SD card access LED is off, then remove the SD card.

Note

- If "failed" appears on the operation panel, turn the main power OFF, and then recover from step 1 again.

The debug logs are saved with the following file names.

Controller debug log (GW debug log)	/LogTrace/machine number/watching/yyyymmdd_hhmmss_unique identification number.gz
Engine debug log	/LogTrace/machine number/engine/yyyymmdd_hhmmss.gz
FCU debug log (IM 550F/600F/600SRF only)	/LogTrace/machine number/fculog/yyyymmdd_hhmmss.gz
Operation panel og	/LogTrace/machine number/opepanel/yyyymmdd_hhmmss.tar.gz

Communication log (network packet)	/LogTrace/machine number/packet_log/yyyymmdd_hhmmss.gz
Configuration page	/LogTrace/machine number/gps/ConfigrationPage/ConfigrationPage_yyyymmdd_hhmmss.csv
Printer setting list	• /LogTrace/machine number /gps/PrintSettingList/PrintSettingList_RPGL_yyyymmdd_hhmmss.txt • /LogTrace/machine number/gps/PrintSettingList/PrintSettingList_RTIFF_yyyymmdd_hhmmss.csv
Font list	• /LogTrace/machine number/gps/FontPage/FontPage_PCL_the page number_yyyymmdd_hhmmss.jpg • /LogTrace/machine number/gps/FontPage/FontPage_PDF_the page number_yyyymmdd_hhmmss.jpg • /LogTrace/machine number/gps/FontPage/FontPage_PS_the page number_yyyymmdd_hhmmss.jpg
Error log	/LogTrace/machine number/gps/ErrorLog/yyyymmdd_hhmmss.csv
Fax information (IM 550F/600F/600SRF only)	/LogTrace/machine number/faxreport/yyyymmdd_hhmmss.csv
SMC	/LogTrace/machine number/smc/machine number_5992XXX_yyyymmdd_hhmmss.csv

SP5-858-111 (Acquire All Info & Logs)

NVRAM Data Upload/Download

Uploading Contents 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. Execute SP5-990-001 (SP Print Mode: All (Data List)) before you turn OFF the main power. You will need a record of the NVRAM settings if the upload fails.
2. Turn OFF the main power.
3. Remove the controller cover. (IM 550F/600F/600SRF: Controller Cover (IM550F/600F), P 800/801: Controller Cover)
4. Insert the SD card into SD Card Slot 2 (lower) [A].

   IM 550F/600F/600SRF

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   P 800/801

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5. Turn ON the main power.
6. Press [Execute] in SP5-824-001 (NVRAM Data Upload).
7. The following files are copied 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 Contents from the 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 (PCB16) is defective.
- Repeat the download process again if it fails.
- If the second attempt fails, do the following procedure:
- 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 controller cover. (IM 550F/600F/600SRF: Controller Cover (IM550F/600F), P 800/801: Controller Cover)
3. Insert the SD card into SD Card Slot 2 (lower) [A].

IM 500F/600F/600SRF

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4. Turn ON the main power.
5. Press [Execute] with SP5-825-001 (NVRAM Data Download).

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 (IM 550F/600F/600SRF only)

UP/SP Data Import/Export

UP Data Import/Export (IM 550F/600F/600SRF)

Data that can be imported and exported

- Copier / Document Server Features
- Printer Features
- Scanner Features
- Facsimile Features
- Browser Features
- Program (Document Server)
- Program (Copier)
- Program (Scanner)
- Web Image Monitor Setting
- Web Service Settings
- System Settings
- Screen Features
- Home screen customization settings *1

*1 Wallpaper cannot be exported if "Live Wallpapers" is selected.

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.

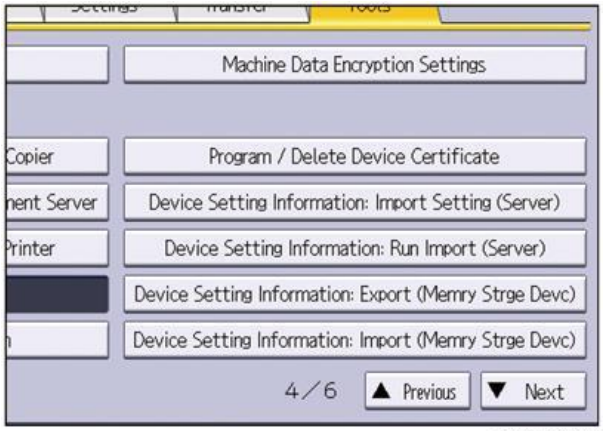
  *2 Settings only for executing functions and settings only for viewing cannot be imported or exported.
- Extended Feature Settings
- Address book
- Programs (fax function)
- Programs (printer function)
- Settings that can be specified via telnet
- @Remote-related data
- Counters
- Settings that can only 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 operation panel.
2. Log in from the operation panel as an administrator with all privileges.
3. Press [System Settings].
4. Press [Administrator Tools].
5. Press [Next] three times.
6. Press [Device Setting Information: Export (Memry Strge Devc)].



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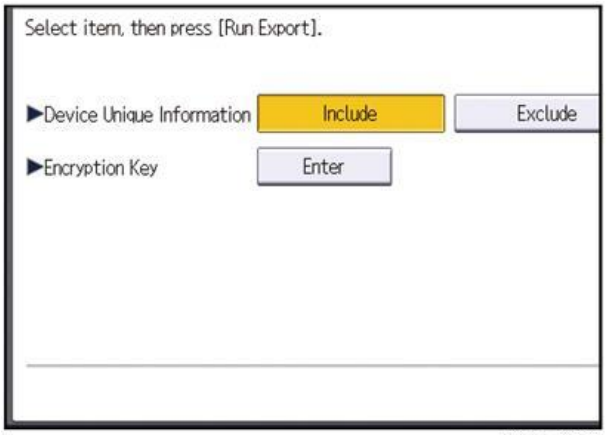
7. Set the export conditions.



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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.

8. Press [Run Export].
9. Press [OK].
10. Press [Exit].
11. 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 operation panel.
2. Log in from the operation panel as an administrator with all privileges.
3. Press [System Settings].
4. Press [Administrator Tools].
5. Press [Next] three times.
6. Press [Device Setting Information: Import (Memry Strge Devc)].
7. Configure the import conditions.

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- Press [Select] of the "Device Setting Info. File" to select the file(s) to import.
- 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.

8. Press [Run Import].
9. Press [OK].
10. Press [Exit].

   The machine restarts.

Note

- If import or export fails, you can check the log for the error. The log is stored in the same location as the exported device setting information file.

UP Data Import/Export (P 800/801)

Data that can be imported and exported

- Paper Input
- Maintenance
- System
- Print Settings
- Security Options
- Remote Services

- Host Interface
- Web Image Monitor Setting
- Web Service Settings

Data that cannot be imported or exported

- Address book
- Programs (printer function)
- Settings that can be specified via telnet
- RICOH @Remote-related data
- Counters
- Settings that can only be specified via Web Image Monitor or Web Service (for example, Bonjour, SSDP setting)
- Settings for the date and time
- Settings that require the device certificate
- Settings that need to be adjusted for each printer (for example, image adjustment settings)
- Settings exclusively for executing functions and settings exclusively for viewing

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. Remove the controller cover. (Controller Cover)
2. Insert the SD card into the SD Card Slot 2 (lower) [A].

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3. Turn the main power ON.
4. Press the [Menu] key.
5. Log in from the control panel as an administrator with all privileges.
6. Select [Device Setting Information] -> Press [OK]
7. Select [DevSettgInfo: Exp (MemDev)] -> Press [OK]
8. Select [Device Unique Information] -> Press [OK]
9. Select [Include] or [Exclude] -> Press [OK]

   If [Include] is selected, the device unique information (IP address, host name, fax number, etc) is included in the exporting device information.

10. Select [Enter Encryption Key] -> Press [OK]
11. Select [Yes] -> Press [OK]
12. Select [Enter] -> Enter an encryption key. -> Select [Accept]
13. Select [Enter] -> Re-enter the encryption key. -> Select [Accept]
14. Select [Export] -> [Export]
15. When the confirmation screen appears, select [Yes].
16. Make sure the message regarding that the exporting process being successfully completed appears. -> Select [Exit]
17. 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. Remove the controller cover. (Controller Cover)
2. Insert the SD card into the SD Card Slot 2 (lower) [A].

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3. Turn the main power ON.
4. Press the [Menu] key.
5. Log in from the control panel as an administrator with all privileges.
6. Select [Device Setting Information] -> Press [OK]
7. Select [DevSettgInfo: Exp (MemDev)] -> Press [OK]
8. Select [Device Unique Information] -> Press [OK]
9. Select [Include] or [Exclude] -> Press [OK]
   If [Include] is selected, the device unique information (IP address, host name, fax number, etc) is included in the importing device information.
10. Select [Enter Encryption Key] -> Press [OK]
11. Select [Yes] -> Press [OK]
12. Select [Enter] -> Enter an encryption key. -> Select [Accept]

13. Select [Enter] -> Re-enter the encryption key. -> Select [Accept]
14. Select [Export] -> [Export]
15. When the confirmation screen appears, select [Yes].
16. Make sure the message regarding that the exporting process being successfully completed appears. -> Select [Exit]
17. Log out.

Note

- If import or export fails, you can check the log for the error. The log is stored in the same location as the exported device setting information file.

SP Data Import/Export (IM 550F/600F/600SRF)

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 operation 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 that are to be used to identify the machine. Example: Network Information/Hostname/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

Item	Specification	Note
		Example: Time and date/Counter information/Installation date #3. Setting values for the Engine
Secret	Secret information is exported if you select the "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 Example: MAC address / Network parameters

* The IP address is exported when both 'Unique' and 'Secret' are selected.

6. Select "Crypt 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, the 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 operation 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.

SP Data Import/Export (P 800/801)

Data that can be imported and exported

- Service SP
- Engine SP

Exporting Device Information

When exporting SP device information from the control panel, the data is saved on an SD card.

1. Remove the controller cover. (Controller Cover)
2. Insert the SD card into the SD Card Slot 2 (lower) [A].

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3. Turn the main power ON.
4. Enter SP mode.
5. Select SP5-749-001 (Import/Export: Export).
6. If you want to include the unique information in the exported file, select [Unique].
7. Select [Encryption] -> Enter an encryption key. -> Select [Accept]
8. Press [EXECUTE].
9. 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. Remove the controller cover. (Controller Cover)

2. Insert the SD card into the SD Card Slot 2 (lower) [A].

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3. Turn the main power ON.
4. Enter SP mode.
5. Select SP5-749-101 (Import/Export: Import).
6. If you want to include the unique information in the imported file, select [Unique].
7. Select [Encryption] -> Enter an encryption key. -> Select [Accept]
8. Press [EXECUTE].
9. Press [OK].

Note

- If data import 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

```
"1.0.0"
"ExecType", "Date", "SerialNo",PnP", "Model", "Destinaion","IP","Host","Storage","FileNam
e","FileID","TotalItem","NumOfOkItem","ResultCode","ResultName","Identifier"
"IMPORT"
"2012-07-05T15:29:16+09:00"
"3C35-7M0014"
"Brand Name"
"Product Name"
"0"
"10"
"10.250.155.125"
"RNP00267332582D"
"SD"
"201207051519563C35-710220.csv"
"201207051519563C35-710220"
"    0"
"    2"
"INVALID REQUEST"
"TargetID","ModuleID","PrefID","Item","NgCode","NgName"
```

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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. 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	The encryption key is not valid.	Use the correct encryption key.

Result Code	Cause	Solutions
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.

Address Book Upload/Download

Information List

The following information is possible to be uploaded and downloaded.

IM 550F/600F/600SRF

- 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

P 800/801

- Registration No.
- User Code
- Local Authentication/ Authentication Lock-out
- Account ACL
- New Document Initial ACL
- LDAP Authentication
- Group Entry Number
- Group Name

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 controller cover. (IM 550F/600F/600SRF : Controller Cover (IM550F/600F), P 800/801: Controller Cover)
5. Insert the SD card into SD Card Slot 2 (lower) [A].

   IM 550F/600F/600SRF

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P 800/801

d255a1062

6. Turn ON the main power.
7. Enter the SP mode.
8. Execute SP5-846-051 (Backup All Addr Book).
9. Exit the SP mode, and then turn OFF the main power.
10. Remove the SD card from the SD Card Slot 2 (lower).
11. Reassemble the machine.

Note

- If the capacity of SD card is not enough to store the local user information, an error message is displayed.
- Carefully handle the SD card, which contains the user information. Do not take it back to your location.

Upload

1. Turn OFF the main power.
2. Remove the controller cover. (IM 550F/600F/600SRF : Controller Cover (IM550F/600F), P 800/801: Controller Cover)
3. Install the SD card, which has already been uploaded, into the SD Card Slot 2 (lower) [A].

   IM 550F/600F/600SRF

d255a1061

P 800/801

d255a1062

4. Turn ON the main power.
5. Enter the SP mode.
6. Execute SP5-846-052 (Restore All Addr Book).
7. Exit the SP mode, and then turn OFF the main power.
8. Remove the SD card from the SD Card Slot 2 (lower).
9. Reassemble the machine.

Note

- The counter in the user code information is initialized after uploading.
- The information of an administrator and supervisor cannot be downloaded or uploaded.
- If there is no data of address book information in the SD card, an error message is displayed.

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.

Procedure

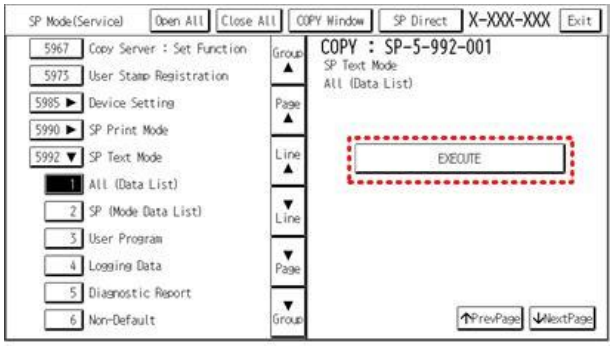
IM 550F/600F/600SRF

1. Turn OFF the main power.
2. Insert the SD card into the operation panel SD card slot. Then turn ON the main power.
3. Enter SP mode.
4. Select [System SP].
5. Select SP5-992 (SP Text Mode).
6. Select a detail SP number shown below to save data on the SD card.

   SP5-992-xxx (SP Text Mode)

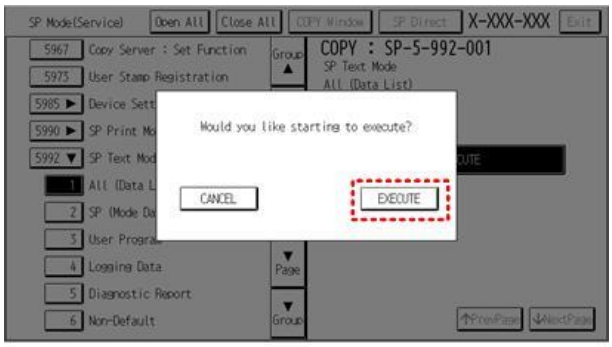
Detail No.	SMC Categories to Save
001	All (Data List)
002	SP (Mode Data List)
003	User Program
004	Logging Data
005	Diagnostic Report
006	Non-Default
007	NIB Summary
008	Capture Log
021	Copier User Program
022	Scanner SP
023	Scanner User Program
024	SDK/J Summary
025	SDK/J Application Info
026	Printer SP
027	SmartOperationPanel SP
028	SmartOperationPanel UP

7. Press [EXECUTE].



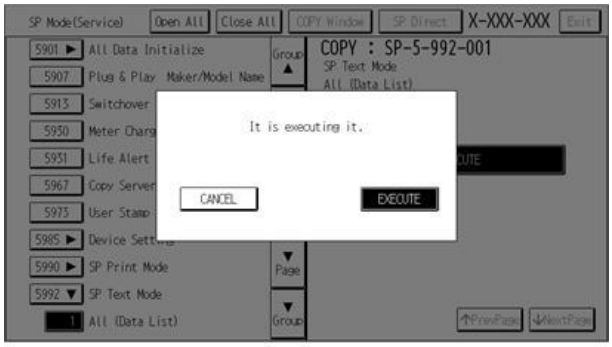
d255a1065

8. Press [EXECUTE] again to start. Press [CANCEL] to cancel the saving.



d255a1066

9. "It is executing it" is shown on the screen while executing.

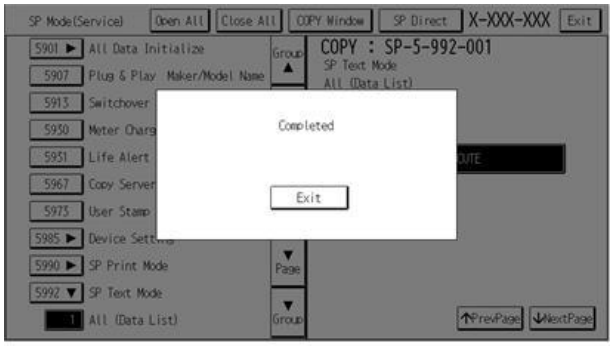


d255a1067

10. Wait for 2 to 3 minutes until "Completed" is shown.

Note

- The SMC list saving may take from 2 to 3 minutes to complete.
- Press [CANCEL] to abort executing.



d255a1070

11. Press [Exit] to exit from SP mode.

P 800/801

1. Turn OFF the main power.

2. Insert the SD card into the SD Card Slot 2 (lower). Then turn ON the main power.

3. Enter the [Engine] in the SP mode (Service).

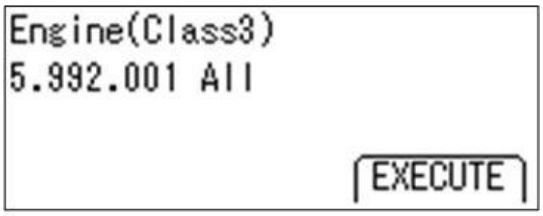
4. Select SP5-992 (SP Text Mode).

5. Select a detail SP number shown below to save data on the SD card and press [OK].

SP5-992-xxx (SP Text Mode)

Detail No.	SMC Categories to Save
001	All (Data List)
002	SP (Mode Data List)
003	User Program
004	Logging Data
005	Diagnostic Report
006	Non-Default
007	NIB Summary
024	SDK/J Summary
025	SDK/J Application Info
026	Printer SP

6. Press [EXECUTE].



m257z0027

7. Press [EXECUTE] again to start. Press [CANCEL] to cancel the saving.

m257z0028

8. Wait for 2 to 3 minutes until "Completed" is shown.

Note

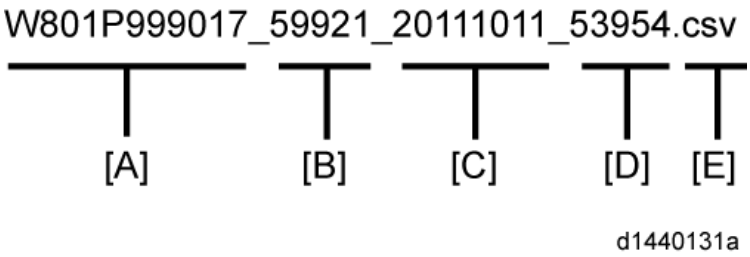
- The SMC list saving may take from 2 to 3 minutes to complete.
- Press [CANCEL] to abort executing.

9. Press [End] 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.

Test Pattern Printing

Printing Test pattern: SP2-109

Some of these test patterns are used for copy image adjustments but most are used primarily for design testing.

Note

- Do not operate the machine until the test pattern is printed out completely. Otherwise, SC will occur.

IM 550F/600F/600SRF

1. Enter the SP mode and select SP2-109-003 (Pattern Selection).
2. Select the test pattern for print from the list then press [OK].
3. To change the density of the test pattern, select the density with SP2-109-006, then press [#].

   Note

   - If select "0" with SP2-109-006, the color adjusted so will not show up in the test pattern.
4. To print, touch [Copy Window], then set settings within the following window for test print (paper size, etc.).
5. Press [Start] to start test print.
6. After checking the test pattern, press [SP Mode] to return to SP mode display.
7. Reset all settings to the default values (SP2-109-003, SP2-109-006).
8. Exit SP mode.

No.	Pattern	No.	Pattern
0	None	12	Independent Pattern (2 dots)
1	Vertical Line (1 dot)	13	Independent Pattern (4dot)
2	Vertical Line (2 dots)	14	Trimming Area
3	Horizontal Line (1 dot)	15	Hound's Tooth Check (Horizontal)
4	Horizontal Line (2 dots)	16	Hound's Tooth Check (Vertical)
5	Grid Vertical Line	17	Black Band (Horizontal)
6	Grid Horizontal Line	18	Black Band (Vertical)
7	Grid Pattern Small	19	Checker Flag Pattern
8	Grid Pattern Large	20	Grayscale (Vertical)
9	Argyle Pattern Small	21	Grayscale (Horizontal)
10	Argyle Pattern Large	22	Two Beam Density Pattern
11	Independent Pattern (1 dot)	23	Full Dot Pattern

P 800/801

1. Enter the SP mode and select SP2-109-003 (Test Pattern).
2. Enter the number for the test pattern that you want to print -> Press [OK].

   SP2-109-003 (Test Pattern)

No.	Pattern	No.	Pattern
0	None	12	Independent Pattern (2 dots)
1	Vertical Line (1 dot)	13	Independent Pattern (4dot)
2	Vertical Line (2 dots)	14	Trimming Area
3	Horizontal Line (1 dot)	15	Hound's Tooth Check (Horizontal)
4	Horizontal Line (2 dots)	16	Hound's Tooth Check (Vertical)
5	Grid Vertical Line	17	Black Band (Horizontal)
6	Grid Horizontal Line	18	Black Band (Vertical)
7	Grid Pattern Small	19	Checker Flag Pattern
8	Grid Pattern Large	20	Grayscale (Vertical)
9	Argyle Pattern Small	21	Grayscale (Horizontal)
10	Argyle Pattern Large	22	Two Beam Density Pattern
11	Independent Pattern (1 dot)	23	Full Dot Pattern

3. To change the density of the test pattern, select the density with SP2-109-006.

Note

- If select "0" with SP2-109-006, the color adjusted so will not show up in the test pattern.

4. Enter SP5-990-001, and then press [EXECUTE] to start printing the test pattern.

5. Check the test pattern.

6. Exit SP mode.

6. Troubleshooting

Self-Diagnostic Mode

Service Call Codes

Service Call Conditions

Pattern	Display	How to reset	SC call or SC alarm in customer support system
A	The SC is displayed on the operation panel, and the machine cannot be used (safety-related SC).	Execute CE reset SP mode, and switch main power from OFF to ON.	Occurrence & alarm count ↓ Immediate alarm
B	When a function is selected, the SC is displayed on the operation panel, and the machine cannot be used (downtime mitigation).	Switch main power from OFF to ON.	Occurrence & alarm count ↓ Power OFF → ON ↓ Alarm count and alarm only if recurrence
C	No display on the operation panel and use is permitted.	Count only logging.	Occurrence ↓ Logging count & alarm count
D	The SC is displayed on the operation panel, and the machine cannot be used (machine-error SC).	Switch main power from OFF to ON.	Occurrence & alarm count ↓ Power OFF → 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, a 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.

- The automatic reboot can be enabled or disabled with SP5-875-001 (SC automatic reboot setting) (default value: ON).

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 (IM 550F/600F/600SRF)

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: 0 "Automatic reboot").
When a type D occurs, the 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 canceled by pressing the [OK] key (display is not canceled 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

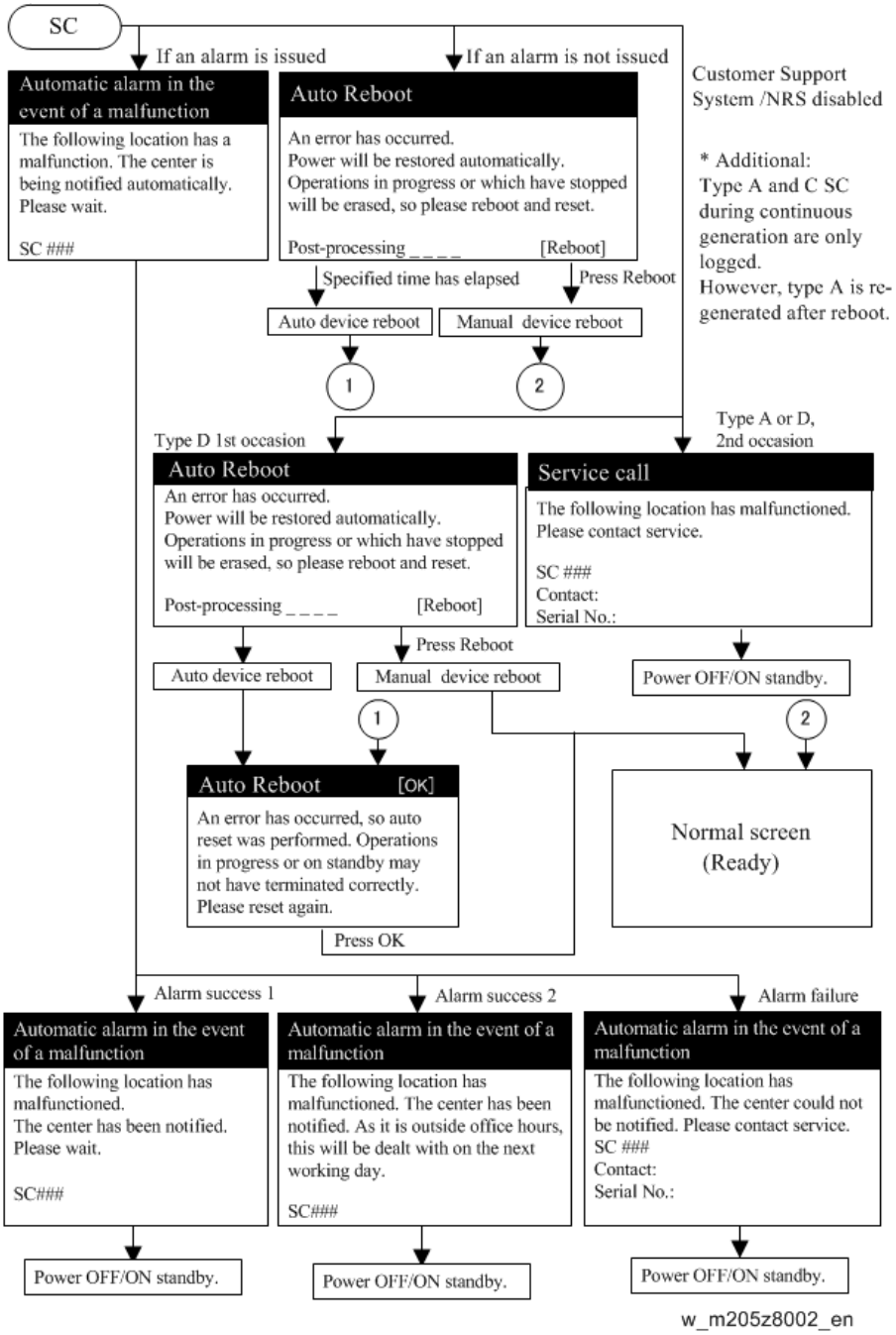
    □□□□□□□□□□
- Reset key (Reboot key)

  Key to perform the reboot

  # Cancel key is not displayed.
- Turn on spanner LED (same as when an SC is generated).

Operation during SC reboot

- The timing of SC reboot
  When @Remote is enabled, and when an 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 machine is operating. The engine does not start process control when a reboot is possible.
- Automatic reboot
  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 ###
Auto Reboot
An error has occurred. Power will be restored automatically. Operations in progress or which have stopped will be erased, so please reboot and reset.
Post-processing _ _ _ _ [Reboot]
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.
Specified time has elapsed
Press Reboot
Auto device reboot
Manual device reboot
1
2
Type D 1st occasion
Type A or D, 2nd occasion
Auto Reboot
An error has occurred. Power will be restored automatically. 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
Auto device reboot
Manual device reboot
Power OFF/ON standby.
1
2
Auto Reboot [OK]
An error has occurred, so auto reset was performed. Operations in progress or on standby may not have terminated correctly. Please reset again.
Normal screen (Ready)
Press OK
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_m205z8002_en

Service Call 101-195

SC100 (Engine: Scanning) (IM 550F/600F/600SRF Only)

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC101-01	D	Lamp Error (Scanning)
		The white level peak did not reach the prescribed threshold when the white guide plate was scanned. Error detection timing; • During a scan from the exposure glass: When the scanning of the white guide plate is completed. • During a scan from DF: During the shading operation. When the scanning of the white guide plate is completed.
		• Condensation in the scanner unit • Connector disconnected • Scanner Carriage defective • BiCU (PCB16) defective • Harness defective • White Guide Plate dirty or defective • IOB (PCB17) defective
		Check if the SC occurs by turning the main 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. Reconnect the connector. Reconnect the following connectors; • Scanner Carriage – BiCU (PCB16) connector • BiCU (PCB16) – IOB (PCB17) connector 2. Check the white guide plate (exposure glass). Check the white guide plate attached to the exposure glass. If the white guide plate is in an unusual state, replace the white guide plate. 3. Scanner carriage defective Replace the scanner carriage. 4. BiCU (PCB16) defective Replace the BiCU (PCB16). 5. Harness defective Replace the following harnesses. • Scanner Carriage – BiCU (PCB16) harness

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		• BiCU (PCB16) – IOB (PCB17) harness 6. IOB (PCB17) defective Replace the IOB (PCB17).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC101-02	D	Lamp Error (Detecting the lighting error)
		The white level peak did not reach the prescribed threshold when the white guide plate was scanned. Error detection timing; During the scanner adjustment (detecting the lighting error) at the time of turning on the scanner (when the main power is turned ON).
		• Condensation in the scanner unit • Connector disconnected • Scanner Carriage defective • BiCU (PCB16) defective • Harness defective • White Guide Plate dirty or attachment fault • IOB (PCB17) defective
		Check if the SC occurs by turning the main 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. Reconnect the connector. Reconnect the following connectors; • Scanner Carriage – BiCU (PCB16) connector • SBU (PCB3) – LEDB connector (SBU (PCB3) side connector on the scanner carriage) • BiCU (PCB16) – IOB (PCB17) harness 2. Check the white guide plate (exposure glass). Check the white guide plate attached to the exposure glass. If the white guide plate is in an unusual state, replace the white guide plate. 3. Scanner carriage defective Replace the scanner carriage. 4. BiCU (PCB16) defective Replace the BiCU (PCB16). 5. Harness defective Replace the following harnesses. • Scanner Carriage – BiCU (PCB16) harness • BiCU (PCB16) – IOB (PCB17) harness

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		6. IOB (PCB17) defective Replace the IOB (PCB17).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC102-00	D	LED Light Quantity Error
		The white level peak exceeded the prescribed threshold when the white guide plate was scanned. Error detection timing; During the scanner adjustment (detecting the lighting error) at the time of turning on the scanner (when the main power is turned ON).
		• Connector disconnected • Scanner Carriage defective • BiCU (PCB16) defective • Harness defective • IOB (PCB17) defective
		Check if the SC occurs by turning the main 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. Reconnect the connector. Reconnect the following connectors; • Scanner Carriage – BiCU (PCB16) connector • SBU (PCB3) – LEDB connector (SBU (PCB3) side connector on the scanner carriage) • BiCU (PCB16) – IOB (PCB17) harness 2. Check the white guide plate (exposure glass). Check the white guide plate attached to the exposure glass. If the white guide plate is in an unusual state, replace the white guide plate. 3. Scanner carriage defective Replace the scanner carriage. 4. BiCU (PCB16) defective Replace the BiCU (PCB16). 5. Harness defective Replace the following harnesses. • Scanner Carriage – BiCU (PCB16) harness • BiCU (PCB16) – IOB (PCB17) harness 6. IOB (PCB17) defective Replace the IOB (PCB17).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC111-01	D	Lamp Error (Scanning)
		The white level peak of the DF did not reach the prescribed threshold when lamp error was detected. Error detection timing; • During a scan from DF: During white level peak confirmation. When the scanning of the white guide plate is completed.
		• DF White Guide Plate dirty or defective • Connector disconnected • CIS defective • Harness defective • BiCU (PCB16) defective • CIS CONNECT PCB (PCB28) defective
		Check if the SC occurs by turning the main 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. Check the white guide plate (DF). Check the white guide plate attached to the exposure glass. If the white guide plate is in an unusual state, replace the white guide plate. 2. Reconnect the connector. Reconnect the following connectors; • Scanner Carriage – BiCU (PCB16) connector • BiCU (PCB16) – IOB (PCB17) connector 3. BiCU (PCB16) defective Replace the BiCU (PCB16). 4. CIS defective Replace the CIS. 5. Harness defective Replace the following harnesses. • CIS CONNECT PCB (PCB28)– BiCU (PCB16) harness • CIS – CIS CONNECT PCB (PCB28) harness 6. CIS CONNECT PCB (PCB28) defective Replace the CIS CONNECT PCB (PCB28).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC112-00	D	LED Light Quantity Error (back side)
		The white level peak of the DF white guide plate cannot be adjusted to reach the

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		prescribed threshold when the light error was detected during startup. Error detection timing; During scanner startup (main power was turned on or the machine returned from energy saving mode)
		• DF White Guide Plate dirty or defective • Connector disconnected • CIS defective • Harness defective • BiCU (PCB16) defective • CIS CONNECT PCB (PCB28) defective
		Check if the SC occurs by turning the main 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. Check the white guide plate (DF). Check the white guide plate attached to the exposure glass. If the white guide plate is in an unusual state, replace the white guide plate. 2. Reconnect the connector. Reconnect the following connectors; • Scanner Carriage – BiCU (PCB16) connector • BiCU (PCB16) – IOB (PCB17) connector 3. BiCU (PCB16) defective Replace the BiCU (PCB16). 4. CIS defective Replace the CIS. 5. Harness defective Replace the following harnesses. • CIS CONNECT PCB (PCB28)– BiCU (PCB16) harness • CIS – CIS CONNECT PCB (PCB28) harness 6. CIS CONNECT PCB (PCB28) defective Replace the CIS CONNECT PCB (PCB28).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC120-00	D	Scanner Home Position error
		The home position is not correct when the main power is turned ON, at the end of a reading process from the exposure glass and DF.
		• Scanner motor (M4) defective • Scanner HP sensor (S6) defective • SBU (PCB3) defective

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		• BiCU (PCB16) defective • Controller board (PCB15) defective
		• Scanner Motor (M4) defective 1. Move the scanner carriage by hand to check whether it is unusually difficult to move. 2. Check that the scanner driving belt is not disengaged. 3. Reconnect the following connector. Scanner Motor (M4) – Controller Board connector 4. If the connector is broken, shorted, or grounded, replace the connector. 5. Replace the Scanner Motor (M4).
		• Scanner HP Sensor (S6) defective 1. Check that the Scanner HP Sensor (S6) is correctly positioned. 2. Reconnect the following connectors. • Scanner HP Sensor (S6) – SBU (PCB3) connector • SBU (PCB3) – Controller board (PCB15) connector 3. Replace the Scanner HP Sensor (S6). • SBU (PCB3) defective Replace the scanner unit. • BiCU (PCB16) defective Replace the BiCU (PCB16). • Controller board (PCB15) defective Replace the Controller board (PCB15).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC141-00	D	Black level detection error
		The black level cannot be adjusted to the target level at the time of turning on the scanner (when the main power is turned ON).
		• Scanner Carriage defective • BiCU (PCB16) defective • Harness defective • IOB (PCB17) defective
		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. Reconnect the following connectors. • Scanner Carriage – BiCU (PCB16) connector • BiCU (PCB16) – IOB (PCB17) connector 2. Scanner carriage defective

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		Replace the scanner carriage. 3. BiCU (PCB16) defective Replace the BiCU (PCB16). 4. Harness defective Replace the following harnesses. • Scanner Carriage – BiCU (PCB16) harness • BiCU (PCB16) – IOB (PCB17) harness 5. IOB (PCB17) defective Replace the IOB (PCB17).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC142-00	D	White level detection error
		The white level cannot be adjusted to the target level during auto gain control.
		• Condensation in the scanner unit • Scanner Carriage defective • BiCU (PCB16) defective • Harness defective • Connector disconnected • White Guide Plate dirty or attachment fault
		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. Reconnect the following connectors. • Scanner Carriage – BiCU (PCB16) connector • SBU (PCB3) – LEDB connector (SBU (PCB3) side connector which is on the scanner carriage) • BiCU (PCB16) – IOB (PCB17) connector 2. Check the white guide plate (exposure glass). Check the white guide plate attached to the exposure glass. If the white guide plate is in an unusual state, replace the white guide plate. 3. Scanner carriage defective Replace the scanner carriage. 4. BiCU (PCB16) defective Replace the BiCU (PCB16). 5. Harness defective Replace the following harnesses. • Scanner Carriage – BiCU (PCB16) harness • BiCU (PCB16) – IOB (PCB17) harness

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		6. IOB (PCB17) defective Replace the IOB (PCB17).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC144-00	D	SBU (PCB3) Communication Error
		• The machine cannot detect that the Scanner Carriage is connected. • The machine cannot communicate with the Scanner Carriage, or the communication data is incorrect. • The configuration of FPGA is not completed. Error detection timing: At the time of turning on the scanner (when the main power is turned ON or when the machine returns from energy saving mode)
		• Scanner Carriage defective • BiCU (PCB16) defective • IOB (PCB17) defective • Harness defective
		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. Reconnect the following connectors. • Scanner Carriage – BiCU (PCB16) connector • BiCU (PCB16) – IOB (PCB17) connector 2. Scanner carriage defective Replace the scanner carriage. 3. BiCU (PCB16) defective Replace the BiCU (PCB16). 4. IOB (PCB17) defective Replace the IOB (PCB17). 5. Harness defective Replace the following harnesses. • Scanner Carriage – BiCU (PCB16) harness • BiCU (PCB16) – IOB (PCB17) harness

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC151-00	D	Black level detection error (back side)
		The black level cannot be adjusted to the target level. Error detection timing; • During a scan from DF

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		• When confirming the lowest black level
		• Connector disconnected • CIS defective • Harness defective • BiCU (PCB16) defective • CIS CONNECT PCB (PCB28) defective
		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. Reconnect the connector. Reconnect the following connectors; • Scanner Carriage – BiCU (PCB16) connector • BiCU (PCB16) – IOB (PCB17) connector 2. BiCU (PCB16) defective Replace the BiCU (PCB16). 3. CIS defective Replace the CIS. 4. Harness defective Replace the following harnesses. • CIS CONNECT PCB (PCB28)– BiCU (PCB16) harness • CIS – CIS CONNECT PCB (PCB28) harness 5. CIS CONNECT PCB (PCB28) defective Replace the CIS CONNECT PCB (PCB28).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC152-00	D	White level adjustment error (back side)
		The white level cannot be adjusted to the target level during auto gain control.
		• DF white guide Plate dirty or attachment fault • Connector disconnected • CIS defective • Harness defective • BiCU (PCB16) defective • CIS CONNECT PCB (PCB28) defective
		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. Check the white guide plate (DF). Check the DF white guide plate. If the white guide plate is in an unusual state, replace the white guide plate. 2. Reconnect the following connectors.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		• Scanner Carriage – BiCU (PCB16) connector • SBU (PCB3) – LEDB connector (SBU (PCB3) side connector which is on the scanner carriage) • BiCU (PCB16) – IOB (PCB17) connector 3. CIS defective Replace the CIS. 4. Harness defective Replace the following harnesses. • CIS CONNECT PCB (PCB28)– BiCU (PCB16) harness • CIS – CIS CONNECT PCB (PCB28) harness 5. BiCU (PCB16) defective Replace the BiCU (PCB16). 6. CIS CONNECT PCB (PCB28) defective Replace theCIS CONNECT PCB (PCB28).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC154-01	D	Scanner communication error (back side)
		• CIS connection cannot be confirmed • Cannot communicate with CIS or other scanning device, or communication is abnormal Error detection timing; • During scanner startup (main power was turned on or the machine returned from energy saving mode) • During a scan
		• Connector disconnected • CIS defective • Harness defective • BiCU (PCB16) defective • CIS CONNECT PCB (PCB28) defective
		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. Reconnect the following connectors. • Scanner Carriage – BiCU (PCB16) connector • SBU (PCB3) – LEDB connector (SBU (PCB3) side connector which is on the scanner carriage) • BiCU (PCB16) – IOB (PCB17) connector 2. CIS defective Replace the CIS.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		3. Harness defective Replace the following harnesses. • CIS CONNECT PCB (PCB28)– BiCU (PCB16) harness • CIS – CIS CONNECT PCB (PCB28) harness 4. BiCU (PCB16) defective Replace the BiCU (PCB16). 5. CIS CONNECT PCB (PCB28) defective Replace theCIS CONNECT PCB (PCB28).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC154-02	D	Scanner communication error (FPGA)
		• Cannot communicate with scanning device (FPGA), or communication is abnormal • Cannot complete FPGA configuration Error detection timing; • During scanner startup (main power was turned on or the machine returned from energy saving mode) • During a scan
		• BiCU (PCB16) defective
		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. BiCU (PCB16) defective Replace the BiCU (PCB16).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC161-20	D	Scanner communication error (FPGA)
		Error occured while initializing DDR-PHY and/or TRAINING status confirmation. Error detection timing; • When the machine was turned on or the machine returned from energy saving mode
		• BiCU (PCB16) defective • DRAM device defective
		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. Reconnect all connectors.

SC100 (Engine: Others)

SC No.	Type	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.

Service Call 202-270

SC200 (Engine: Image Writing)

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC202-00	D	Polygon Motor (M5) Error
		After Polygon motor (M5) is stabilized, the ready signal is at the H level for 20 seconds consecutively.
		• Polygon motor (M5) defective • IOB (PCB17) defective
		• Polygon motor (M5) defective 1. Confirm that the connector between the laser unit and IOB (PCB17) is firmly connected. If necessary, connect the connector all the way in. 2. If the connector is broken, shorted, or grounded, replace the connector. 3. Replace the laser unit. • IOB (PCB17) defective 1. Update the engine software to the latest version. 2. Replace the IOB (PCB17).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC220-00	D	Leading Edge: LD synchronization detection error
		The leading edge LD synchronization detection signal did not output within the specified time (sec.) while the polygon mirror motor was operating at normal speed. Error detection timing; During the startup operation of the machine or during printing.
		• Laser unit defective (Synchronization optical system defective, LDB (PCB5) defective, LD defective) • BiCU (PCB16) defective (Image writing ASIC defective) • IOB (PCB17) defective • LDB (PCB5) – IOB (PCB17), IOB (PCB17) – BiCU (PCB16) harness broken, or connector disconnected
		1. Turn the main power OFF/ON. 2. Check for condensation on the mirrors and lenses. 3. Reconnect the connectors between LDB (PCB5) and IOB (PCB17), and between IOB (PCB17) and BiCU (PCB16). 4. Replace the laser unit. 5. Replace the BiCU (PCB16). 6. Replace the harness between LDB (PCB5) and IOB (PCB17), and between

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		IOB (PCB17) and BiCU (PCB16). 7. Replace the IOB (PCB17).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC270-00	D	GAVD Communication Error
		The communication is not performed normally between CPU and image writing ASIC. Error detection timing; Only when the initial setting is executed.
		• Image writing ASIC defective • Interface circuit between CPU and image writing ASIC defective
		1. Turn the main power OFF/ON. 2. Replace the BiCU (PCB16).

Service Call 302-396

SC300 (Engine: Imaging 1: Charge, Development)

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC302-00 SC303-00	D C	Charger Current Error
		When the charging voltage is applied by changing the voltage in three levels, the current value is less than 20μA in one of three levels.
		• Connector defective or disconnected • Power pack (PCB19) defective • IOB (PCB17) defective

		• Connector defective or disconnected
		Reconnect the following connectors. Then perform a conduction inspection. If there is no conduction, replace the connector.
		  • Drum Unit – Power Pack (PCB19) connector
		  • Power Pack (PCB19) – IOB (PCB17) connector
		• Power Pack (PCB19) defective
		Replace the Power Pack (PCB19).
		• IOB (PCB17) defective
		Replace the IOB (PCB17).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC321-00 SC322-00	C D	Development Unit Non-Installing Error
		The sensor output value is 31 or less continuously for 5 seconds.
		• Connector defective or disconnected • Toner density sensor defective • Connect-Left PCB (PCB20) defective • IOB (PCB17) defective

		• Connector defective or disconnected
		Reconnect the following connectors. Then perform a conduction inspection. If there is no conduction, replace the connector.
		  • Development Unit – Drum PCB (PCB10) connector
		  • Drum PCB (PCB10) – Drum Connection PCB (PCB11) connector
		  • Drum Connection PCB (PCB11) – Connect-Left PCB (PCB20) connector
		  • Connect-Left PCB (PCB20) – IOB (PCB17) connector
		• Toner density sensor defective
		Replace the toner density sensor.
		• Connect-Left PCB (PCB20) defective
		Replace the Connect-Left PCB (PCB20).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		• IOB (PCB17) defective Replace the IOB (PCB17).

SC300 (Engine: Imaging 2: Around the Drum)

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC396-01	D	Drum Motor (M6) Error 1
		The drum motor (M6) is not stabilized within 2 seconds after the motor is activated.
		• Connector disconnected or defective • Drive transmission of the Drum motor (M6) defective • Drum motor (M6) defective • IOB (PCB17) defective
		• Connector disconnected or defective Reconnect the following connector. Then perform a conduction inspection. If there is no conduction, replace the connector. • IOB (PCB17) – Drum motor (M6) connector • Drive transmission of the Drum motor (M6) defective Check the gears. If any gears are damaged, replace them. • Drum motor (M6) defective Replace the Drum motor (M6). • IOB (PCB17) defective Replace the IOB (PCB17).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC396-02	D	Drum Motor (M6) Error 2
		After the drum motor (M6) is stabilized, the stable OFF signal is detected for 2 seconds consecutively.
		• Connector disconnected or defective • Drive transmission of the Drum motor (M6) defective • Drum motor (M6) defective • IOB (PCB17) defective
		• Connector disconnected or defective Reconnect the following connector. Then perform a conduction inspection. If there is no conduction, replace the connector. • IOB (PCB17) – Drum motor (M6) connector • Drive transmission of the Drum motor (M6) defective Check the gears. If any gears are damaged, replace them.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		• Drum motor (M6) defective Replace the Drum motor (M6). • IOB (PCB17) defective Replace the IOB (PCB17).

Service Call 490-491

SC400 (Engine: Imaging 3: Around the Drum)

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC490-00	D	Toner Density Sensor Error
		The sensor output value is 930 or more continuously for 5 seconds.
		• Toner density sensor defective • Toner motor defective • Connect-Left PCB (PCB20) defective • IOB (PCB17) defective
		• Toner density sensor defective 1. Reconnect the following connectors. • Toner Density Sensor – Drum PCB (PCB10) connector • Drum PCB (PCB10) – Drum Connection PCB (PCB11) connector • Drum Connection PCB (PCB11) – Connect-Left PCB (PCB20) connector • Connect-Left PCB (PCB20) – IOB (PCB17) connector 2. If the connector is broken, shorted, or grounded, replace the connector. 3. Check that the gears and rollers of the development unit are not damaged and rotate smoothly. 4. Replace the development unit.
		• Toner motor defective 1. Check the drive gears can rotate or they are not unusually loaded. If necessary, replace the drive gear. 2. Reconnect the following connectors. • Toner Density Sensor – Drum PCB (PCB10) connector • Drum PCB (PCB10) – Drum Connection PCB (PCB11) connector • Drum Connection PCB (PCB11) – Connect-Left PCB (PCB20) connector • Connect-Left PCB (PCB20) – IOB (PCB17) connector 3. If the connector is broken, shorted, or grounded, replace the connector. 4. Replace the drum unit.
		• Connect-Left PCB (PCB20) defective Replace the Connect-Left PCB (PCB20). • IOB (PCB17) defective 1. Update the engine software to the latest version. 2. Replace the IOB (PCB17).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC491-01	D	Drum Unit Type Mismatch Error
		• Cannot communicate with the EEPROM of the drum PCB (PCB10) normally. • An incompatible drum unit is installed.
		• Connector defective or disconnected • Drum PCB (PCB10) defective • Connect-Left PCB (PCB20) defective • IOB (PCB17) defective

		• Connector defective or disconnected
		Reconnect the following connectors. Then perform a conduction inspection. If there is no conduction, replace the connector.
		  • Drum Unit – Drum Connection PCB (PCB11) connector
		  • Drum Connection PCB (PCB11) – Connect-Left PCB (PCB20) connector
		  • Connect-Left PCB (PCB20) – IOB (PCB17) connector
		• Drum PCB (PCB10) defective
		Replace the Drum PCB (PCB10).
		• Connect-Left PCB (PCB20) defective
		Replace the Connect-Left PCB (PCB20).
		• IOB (PCB17) defective
		Replace the IOB (PCB17).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC491-02	D	Drum Unit Error
		• No response from the device in reading/writing for 5 ms or more and this problem is repeated 5 times consecutively. • The reading data of 2 locations do not match 8 times consecutively. • The writing data and reading date do not match 8 times consecutively.
		• Drum PCB (PCB10) defective • Connect-Left PCB (PCB20) defective • IOB (PCB17) defective

		• Drum PCB (PCB10) defective
		  1. Reconnect the following connectors.
		  • Drum PCB (PCB10) – Drum Connection PCB (PCB11) connector
		  • Drum Connection PCB (PCB11) – Connect-Left PCB (PCB20) connector
		  • Connect-Left PCB (PCB20) – IOB (PCB17) connector
		  2. If the connector is broken, shorted, or grounded, replace the connector.
		  3. Replace the drum unit.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		• Connect-Left PCB (PCB20) defective Replace the Connect-Left PCB (PCB20). • IOB (PCB17) defective 1. Update the engine software to the latest version. 2. Replace the IOB (PCB17).

Service Call 501-584

SC500 (Engine: Paper Transport 1: Paper Feed, Duplex, Transport)

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC501-01	D	Paper Feed Tray Lift Motor (M8) Error (Tray 1)
		After the paper feed tray 1 is set, the paper feed tray lift sensor does not turn on within 10 seconds. This SC is issued if a problem is detected four times consecutively.
		• The bottom plate of the paper feed tray defective • Connector disconnected or defective • Drive transmission of the Paper feed tray lift motor (M8) defective • Paper feed tray lift motor (M8) defective • IOB (PCB17) defective
		• The bottom plate of the paper feed tray defective Check the bottom plate of the paper feed tray. If the bottom plate does not move smoothly, repair or replace the paper feed tray. • Connector disconnected or defective Reconnect the following connector. Then perform a conduction inspection. If there is no conduction, replace the connector. • Paper Feed Tray Lift Motor (M8) – IOB (PCB17) connector
		• Drive transmission of the Paper feed tray lift motor (M8) defective Check the gears. If any gears are damaged, replace them. • Paper feed tray lift motor (M8) defective Replace the Paper feed tray lift motor (M8). • Engine board defective Replace the engine board.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC502-01	D	Paper Feed Tray Lift Motor (M8) Error (Tray 2)
		After the paper feed tray 2 is set, the paper feed tray lift sensor does not turn on within 10 seconds. This SC is issued if a problem is detected four times consecutively.
		• The bottom plate of the paper feed tray defective • Connector disconnected or defective • Drive transmission of the Paper feed tray lift motor (M8) defective • Paper feed tray lift motor (M8) defective • Mainboard defective
		• The bottom plate of the paper feed tray defective

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		Check the bottom plate of the paper feed tray. If the bottom plate does not move smoothly, repair or replace the paper feed tray. • Connector disconnected or defective Reconnect the following connector. Then perform a conduction inspection. If there is no conduction, replace the connector. • Paper Feed Tray Lift Motor (M8) – Main Board connector
		• Drive transmission of the Paper feed tray lift motor (M8) defective Check the gears. If any gears are damaged, replace them. • Paper feed tray lift motor (M8) defective Replace the Paper feed tray lift motor (M8). • Mainboard defective Replace the main board.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC502-02	D	Paper Feed Tray Error (Tray 2)
		The error signal is detected for 2 seconds consecutively after the paper feed motor is activated.
		• Connector defective or disconnected • Drive transmission of the paper feed motor defective • Paper feed motor defective • Mainboard defective
		• Connector defective or disconnected Reconnect the following connector. Then perform a conduction inspection. If there is no conduction, replace the connector. • Paper Feed Tray Lift Motor (M8) – Main Board connector • Drive transmission of the paper feed motor defective Check the gears. If any gears are damaged, replace them. • Paper feed motor defective Replace the paper feed motor. • Mainboard defective Replace the main board.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC503-01	D	Paper Feed Tray Lift Motor (M8) Error (Tray 3)
		After the paper feed tray 3 is set, the paper feed tray lift sensor does not turn on within 10 seconds. This SC is issued if a problem is detected four times consecutively.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		• The bottom plate of the paper feed tray defective • Connector disconnected or defective • Drive transmission of the Paper feed tray lift motor (M8) defective • Paper feed tray lift motor (M8) defective • Mainboard defective
		• The bottom plate of the paper feed tray defective Check the bottom plate of the paper feed tray. If the bottom plate does not move smoothly, repair or replace the paper feed tray. • Connector disconnected or defective Reconnect the following connector. Then perform a conduction inspection. If there is no conduction, replace the connector. • Paper Feed Tray Lift Motor (M8) – Main Board connector
		• Drive transmission of the Paper feed tray lift motor (M8) defective Check the gears. If any gears are damaged, replace them. • Paper feed tray lift motor (M8) defective Replace the Paper feed tray lift motor (M8). • Mainboard defective Replace the main board.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC503-02	D	Paper Feed Tray Error (Tray 3)
		The error signal is detected for 2 seconds consecutively after the paper feed motor is activated.
		• Connector defective or disconnected • Drive transmission of the paper feed motor defective • Paper feed motor defective • Mainboard defective
		• Connector defective or disconnected Reconnect the following connector. Then perform a conduction inspection. If there is no conduction, replace the connector. • Paper Feed Motor – Main Board connector • Drive transmission of the paper feed motor defective Check the gears. If any gears are damaged, replace them. • Paper feed motor defective Replace the paper feed motor. • Mainboard defective Replace the main board.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC504-01	D	Paper Feed Tray Lift Motor (M8) Error (Tray 4)
		After the paper feed tray 4 is set, paper feed tray lift sensor does not turn on within 10 seconds. This SC is issued if a problem is detected four times consecutively.
		• The bottom plate of the paper feed tray defective • Connector disconnected or defective • Drive transmission of the Paper feed tray lift motor (M8) defective • Paper feed tray lift motor (M8) defective • Mainboard defective
		• The bottom plate of the paper feed tray defective Check the bottom plate of the paper feed tray. If the bottom plate does not move smoothly, repair or replace the paper feed tray. • Connector disconnected or defective Reconnect the following connector. Then perform a conduction inspection. If there is no conduction, replace the connector. • Paper Feed Tray Lift Motor (M8) – Main Board connector
		• Drive transmission of the Paper feed tray lift motor (M8) defective Check the gears. If any gears are damaged, replace them. • Paper feed tray lift motor (M8) defective Replace the Paper feed tray lift motor (M8). • Mainboard defective Replace the main board.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC504-02	D	Paper Feed Tray Error (Tray 4)
		The error signal is detected for 2 seconds consecutively after the paper feed motor is activated.
		• Connector defective or disconnected • Drive transmission of the paper feed motor defective • Paper feed motor defective • Mainboard defective
		• Connector defective or disconnected Reconnect the following connector. Then perform a conduction inspection. If there is no conduction, replace the connector. • Paper Feed Motor – Main Board connector • Drive transmission of the paper feed motor defective Check the gears. If any gears are damaged, replace them.
		• Paper feed motor defective Replace the paper feed motor.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		• Mainboard defective Replace the main board.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC505-01	D	Paper Feed Tray Lift Motor (M8) Error (Tray 5)
		After the paper feed tray 5 is set, the paper feed tray lift sensor does not turn on within 10 seconds. This SC is issued if a problem is detected four times consecutively.
		• The bottom plate of the paper feed tray defective • Connector disconnected or defective • Drive transmission of the Paper feed tray lift motor (M8) defective • Paper feed tray lift motor (M8) defective • Mainboard defective
		• The bottom plate of the paper feed tray defective Check the bottom plate of the paper feed tray. If the bottom plate does not move smoothly, repair or replace the paper feed tray. • Connector disconnected or defective Reconnect the following connector. Then perform a conduction inspection. If there is no conduction, replace the connector. • Paper Feed Tray Lift Motor (M8) – Main Board connector
		• Drive transmission of the Paper feed tray lift motor (M8) defective Check the gears. If any gears are damaged, replace them. • Paper feed tray lift motor (M8) defective Replace the Paper feed tray lift motor (M8). • Mainboard defective Replace the main board.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC505-02	D	Paper Feed Tray Error (Tray 5)
		The error signal is detected for 2 seconds consecutively after the paper feed motor is activated.
		• Connector defective or disconnected • Drive transmission of the paper feed motor defective • Paper feed motor defective • Mainboard defective
		• Connector defective or disconnected Reconnect the following connector. Then perform a conduction inspection. If

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		there is no conduction, replace the connector. • Paper Feed Motor – Main Board connector • Drive transmission of the paper feed motor defective Check the gears. If any gears are damaged, replace them. • Paper feed motor defective Replace the paper feed motor. • Mainboard defective Replace the main board.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC520-01	D	Main Motor (M11) Error 1
		The main motor (M11) is not stabilized within 2 seconds after the motor is activated.
		• Main motor (M11) defective • IOB (PCB17) defective
		• Main motor (M11) defective 1. Reconnect the following connector. Then perform a conduction inspection. If there is no conduction, replace the connector. • IOB (PCB17) – Main motor (M11) connector 2. Replace the Main motor (M11). • IOB (PCB17) defective 1. Update the engine software to the latest version. 2. Replace the IOB (PCB17).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC520-02	D	Main Motor (M11) Error 2
		After the main motor (M11) is stabilized, the stable OFF signal is detected for 2 seconds consecutively.
		• Main motor (M11) defective • IOB (PCB17) defective
		• Main motor (M11) defective 1. Check if the gears rotate smoothly. If any gears are damaged, replace them. 2. Reconnect the following connector. Then perform a conduction inspection. If there is no conduction, replace the connector. • IOB (PCB17) – Main motor (M11) connector 3. Replace the Main motor (M11).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		• IOB (PCB17) defective 1. Update the engine software to the latest version. 2. Replace the IOB (PCB17).

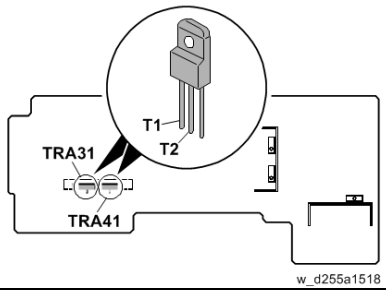
SC500 (Engine: Paper Transport 2: Fusing, Others)

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC540-01	D	Fusing Pressure Release Motor (M9) Error 1
		The over-current detection signal of the fusing pressure release motor (M9) is detected 20 times consecutively.
		• Connector disconnected or defective • Drive transmission of the Fusing pressure release motor (M9) defective • Fusing pressure release motor (M9) defective • Connect-Left PCB (PCB20) defective • IOB (PCB17) defective
		• Connector disconnected or defective Reconnect the following connectors. Then perform a conduction inspection. If there is no conduction, replace the connector. • Fusing Pressure Release Motor (M9) – Connect-Left PCB (PCB20) connector • Connect-Left PCB (PCB20) – IOB (PCB17) connector
		• Drive transmission of the Fusing pressure release motor (M9) defective Check the gears. If any gears are damaged, replace them. • Fusing pressure release motor (M9) defective Replace the Fusing pressure release motor (M9). • Connect-Left PCB (PCB20) defective Replace the Connect-Left PCB (PCB20). • IOB (PCB17) defective Replace the IOB (PCB17).

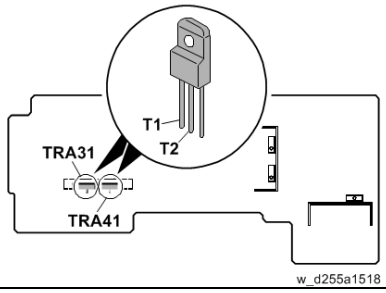
SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC540-02	D	Fusing Pressure Release Motor (M9) Error 2
		The position detection sensor is not detected for 30 seconds consecutively after the fusing pressure release motor (M9) is activated.
		• Connector defective or disconnected • Drive transmission of the Fusing pressure release motor (M9) defective • Fusing pressure release motor (M9) defective • Connect-Left PCB (PCB20) defective

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		• IOB (PCB17) defective
		• Connector defective or disconnected Reconnect the following connectors. Then perform a conduction inspection. If there is no conduction, replace the connector. • Fusing Pressure Release Motor (M9) – Connect-Left PCB (PCB20) connector • Connect-Left PCB (PCB20) – IOB (PCB17) connector
		• Drive transmission of the Fusing pressure release motor (M9) defective Check the gears. If any gears are damaged, replace them. • Fusing pressure release motor (M9) defective Replace the Fusing pressure release motor (M9). • Connect-Left PCB (PCB20) defective Replace the Connect-Left PCB (PCB20). • IOB (PCB17) defective Replace the IOB (PCB17).

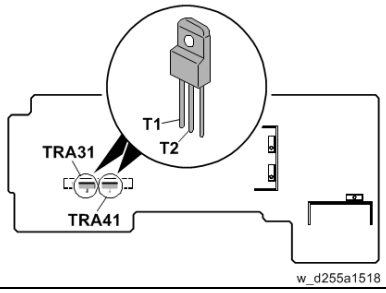
SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC541-00	D	Fusing Thermistor (Center) Disconnected Error
		Input from fusing thermistor (center) (TS2) is 1019 or more (A/D value) continuously for 4 seconds.
		• Connector pin defective • Triac defective • Fusing unit defective • Fusing thermistor connection PCB defective • IOB (PCB17) defective • Fusing thermistor (center) defective • Fusing thermostat defective • PSU (PCB18) defective
		• Connector pin defective If the I/F connector pins of the fuser unit and the main unit are deformed owing to foreign materials, replace the connectors or the units including the connectors.
		• Triac defective Disconnect the power cord and check that the resistance between terminals T1 and T2 of the triac TRA31 and triac TRA41 on the PSU (PCB18) are several Mega-Ohms and not shorted. If failed, replace the PSU (PCB18).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		
		• Fusing unit defective 1. Check that no paper jam is present. 2. Reconnect the following connectors. • Fusing Unit – Fusing Thermistor Connection PCB connector • Fusing Thermistor Connection PCB – IOB (PCB17) connector 3. If the connector is broken, shorted, or grounded, replace the connector. 4. Replace the fusing unit. • Fusing thermistor connection PCB defective Replace the fusing thermistor connection PCB.
		• IOB (PCB17) defective 1. Update the engine software to the latest version. 2. Replace the IOB (PCB17). • Fusing thermistor (center) defective Replace the fusing unit. • Fusing thermostat defective 1. Reconnect the following connector. • Fusing Unit – PSU (PCB18) connector 2. If the connector is broken, shorted, or grounded, replace the connector. 3. Replace the fusing unit. • PSU (PCB18) defective Replace the PSU (PCB18).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC543-00	D	Fusing Thermistor (Center) High Temperature
		• The fusing thermistor (center) (TS2) detects the temperature that exceeds 245 degrees C. • The fusing thermistor (center) (TS2) detects the temperature that exceeds 195 degrees C in a heater-off state after the fusing thermistor (center) (TS2) detects the temperature of 155 degrees C or less.
		• Connector pin defective • Triac defective • Fusing thermistor defective

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		• IOB (PCB17) defective
		• Connector pin defective If the I/F connector pins of the fuser unit and the main unit are deformed owing to foreign materials, replace the connectors or the units including the connectors.
		• Triac defective Disconnect the power cord and check that the resistance between terminals T1 and T2 of the triac TRA31 and triac TRA41 on the PSU (PCB18) are several Mega-Ohms and not shorted. If failed, replace the PSU (PCB18). 
		• Fusing thermistor defective Replace the fusing unit. • IOB (PCB17) defective Replace the IOB (PCB17).

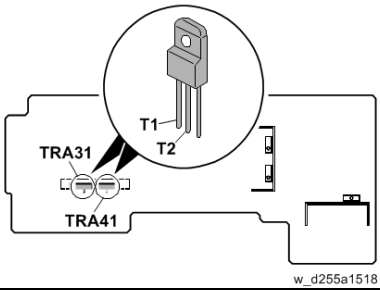
SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC549-00	D	Fusing Lamp Disconnected Error
		The fusing thermistor (center) (TS2) temperature does not reach a temperature of 100 degrees C within 30 seconds after the machine starts warming up.
		• Connector pin defective • Triac defective • Fusing unit defective • Fusing thermistor connection PCB defective • IOB (PCB17) defective • PSU (PCB18) defective • Fusing lamp defective
		• The fusing thermistor (center) (TS2) detects the temperature that exceeds 235 degrees C. • The fusing thermistor (center) (TS2) detects the temperature that exceeds 195 degrees C in a heater-off state after the fusing thermistor (center) (TS2) detects the temperature of 155 degrees C or less.
		• Connector pin defective If the I/F connector pins of the fuser unit and the main unit are deformed owing

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		to foreign materials, replace the connectors or the units including the connectors. • Triac defective Disconnect the power cord and check that the resistance between terminals T1 and T2 of the triac TRA31 and triac TRA41 on the PSU (PCB18) are several Mega-Ohms and not shorted. If failed, replace the PSU (PCB18). 
		• Fusing unit defective 1. Check that no paper jam is present. 2. Reconnect the following connectors. • Fusing Unit – Fusing Thermistor Connection PCB connector • Fusing Thermistor Connection PCB – IOB (PCB17) connector 3. If the connector is broken, shorted, or grounded, replace the connector. 4. Replace the fusing unit.
		• Fusing thermistor connection PCB defective Replace the fusing thermistor connection PCB. • IOB (PCB17) defective 1. Update the engine software to the latest version. 2. Replace the IOB (PCB17). • PSU (PCB18) defective 1. Reconnect the following connector. • PSU (PCB18) – IOB (PCB17) connector 2. Replace the PSU (PCB18). • Fusing lamp defective Replace the fusing unit.

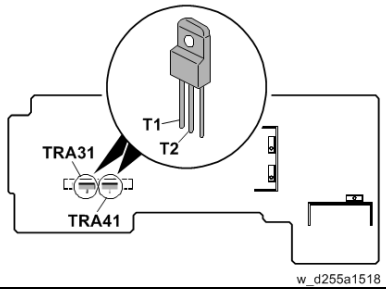
SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC551-00	D	Fusing Thermistor (End) Disconnected Error
		Input from fusing thermistor (end) (TS1) is 1019 or more (A/D value) continuously for 4 seconds.
		• Connector defective or disconnected • Connector pin defective • Triac defective

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		• Fusing thermistor defective • Fusing thermistor connection PCB defective • IOB (PCB17) defective

		• Connector defective or disconnected
		Reconnect the following connectors.
		  • Fusing Thermistor – Fusing Thermistor Connection PCB connector
		  • Fusing Thermistor Connection PCB – IOB (PCB17) connector
		• Connector pin defective
		If the I/F connector pins of the fuser unit and the main unit are deformed owing to foreign materials, replace the connectors or the units including the connectors.

		• Triac defective Disconnect the power cord and check that the resistance between terminals T1 and T2 of the triac TRA31 and triac TRA41 on the PSU (PCB18) are several Mega-Ohms and not shorted. If failed, replace the PSU (PCB18). 
		• Fusing thermistor defective Replace the fusing unit. • Fusing thermistor connection PCB defective Replace the fusing thermistor connection PCB. • IOB (PCB17) defective Replace the IOB (PCB17).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC553-00	D	Fusing Thermistor (End) High Temperature
		• The fusing thermistor (end) (TS1) detects the temperature that exceeds 245 degrees C. • The fusing thermistor (end) (TS1) detects the temperature that exceeds 195 degrees C in a heater-off state after the fusing thermistor (end) (TS1) detects the temperature of 155 degrees C or less.
		• Connector pin defective • Triac defective • Fusing thermistor defective

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		• IOB (PCB17) defective
		• Connector pin defective If the I/F connector pins of the fuser unit and the main unit are deformed owing to foreign materials, replace the connectors or the units including the connectors.
		• Triac defective Disconnect the power cord and check that the resistance between terminals T1 and T2 of the triac TRA31 and triac TRA41 on the PSU (PCB18) are several Mega-Ohms and not shorted. If failed, replace the PSU (PCB18). 
		• Fusing thermistor defective Replace the fusing unit. • IOB (PCB17) defective Replace the IOB (PCB17).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC581-00	C	Temperature Sensor Disconnected Error
		• The average of the output from the temperature sensor is 1019 or more for 160 ms. • The average of the output from the temperature sensor is 930 or more for 5 seconds.
		• Temperature sensor defective • IOB (PCB17) defective
		• Temperature sensor defective 1. Reconnect the following connector. • Temperature Sensor – IOB (PCB17) connector 2. If the connector is broken, shorted, or grounded, replace the connector. 3. Replace the temperature sensor. • IOB (PCB17) defective 1. Update the engine software to the latest version. 2. Replace the IOB (PCB17).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC582-00 SC584-00	C D	Temperature Sensor Shorted Error
		The average of the output from the temperature sensor is 31 or less for 5 seconds.
		• Temperature sensor defective • IOB (PCB17) defective
		• Temperature sensor defective 1. Reconnect the following connector. • Temperature Sensor – IOB (PCB17) connector 2. If the connector is broken, shorted, or grounded, replace the connector. 3. Replace the temperature sensor. • IOB (PCB17) defective 1. Update the engine software to the latest version. 2. Replace the IOB (PCB17).

SC500 (Engine: Paper Transport 3: Paper Feed, Duplex, Transport, Fusing)

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC547-00	D	Zero Cross Signal Error
		While fusing lamp ON/OFF control is performed, the zero cross signal is not inputted within 2 seconds consecutively.
		• Fusing unit defective • PSU (PCB18) defective • IOB (PCB17) defective
		• Fusing unit defective 1. Reconnect the following connectors. • PSU (PCB18) – IOB (PCB17) connector 2. If the connector is broken, shorted, or grounded, replace the connector. • PSU (PCB18) defective Replace the PSU (PCB18). • IOB (PCB17) defective Replace the IOB (PCB17).

Service Call 622-691

SC600 (Engine: Communication and Others)

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC622-01	D	Paper Feed Unit Communication Error (Tray 2)
		A communication error is detected from the paper feed unit 2, 10 times consecutively.
		• Paper feed tray 2 defective • Connector disconnected or defective • Main board defective • IOB (PCB17) defective
		• Paper feed tray 2 defective Check the connection between the main machine and paper feed tray 2. • Connector disconnected or defective Reconnect the following connector. • IOB (PCB17) – Main Board connector • Replace the main board. • Replace the IOB (PCB17).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC622-02	D	Paper Feed Unit Communication Error (Tray 3)
		A communication error is detected from the paper feed unit 3, 10 times consecutively.
		• Paper feed tray 3 defective • Main board defective • IOB (PCB17) defective

		• Paper feed tray 3 defective
		Check the connection between the main machine and paper feed tray 3.
		• Mainboard defective
		  1. Reconnect the following connector.
		  • IOB (PCB17) – Main Board connector
		  2. If the connector is broken, shorted, or grounded, replace the connector.
		  3. Replace the main board.
		• IOB (PCB17) defective
		  1. Update the engine software to the latest version.
		  2. Replace the IOB (PCB17).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC622-03	D	Paper Feed Unit Communication Error (Tray 4)
		A communication error is detected from the paper feed unit 4, 10 times consecutively.
		• Paper feed tray 4 defective • Main board defective • IOB (PCB17) defective
		• Paper feed tray 4 defective Check the connection between the main machine and paper feed tray 4. • Main board defective 1. Reconnect the following connector. • IOB (PCB17) – Main Board connector 2. If the connector is broken, shorted, or grounded, replace the connector. 3. Replace the main board. • IOB (PCB17) defective 1. Update the engine software to the latest version. 2. Replace the IOB (PCB17).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC622-04	D	Paper Feed Unit Communication Error (Tray 5)
		A communication error is detected from the paper feed unit 4, 10 times consecutively.
		• Paper feed tray 4 defective • Main board defective • IOB (PCB17) defective
		• Paper feed tray 4 defective Check the connection between the main machine and paper feed tray 4. • Main board defective 1. Reconnect the following connector. • IOB (PCB17) – Main Board connector 2. If the connector is broken, shorted, or grounded, replace the connector. 3. Replace the main board. • IOB (PCB17) defective 1. Update the engine software to the latest version. 2. Replace the IOB (PCB17).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC665-	D	BiCU (PCB16) – IOB (PCB17) Connection Error

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
02		FFC connection error (connector disconnected) between BiCU (PCB16) and IOB (PCB17) is detected during the startup operation of the engine (when the main power is turned on or when the machine returns from energy save mode)
		• FFC defective or disconnected • BiCU (PCB16) defective • IOB (PCB17) defective
		1. Turn the main power OFF/ON. 2. Reconnect the FFC between BiCU (PCB16) and IOB (PCB17). 3. Replace the FFC between BiCU (PCB16) and IOB (PCB17). 4. Replace the BiCU (PCB16). 5. Replace the IOB (PCB17).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC665-21	D	MACARON Connection Error (IM 550F/600F/600SRF) / BREIT Connection Error (P 800/801)
		The signal connection error is detected between CPU and MACARON (IM 550F/600F/600SRF) / BREIT (P 800/801) during the startup operation of the engine (when the main power is turned on or when the machine returns from energy save mode).
		BiCU (PCB16) defective
		1. Turn the main power OFF/ON. 2. Replace the BiCU (PCB16).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC665-71	D	IPUASIC1 Connection Error
		Communication error between the CPU and IPUASIC1 is detected.
		BiCU (PCB16) defective
		1. Turn the main power OFF/ON. 2. Replace the BiCU (PCB16).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC667-01	D	Master Device Operating Mode Setting Error
		The mode setting error of CPU is detected during the startup operation of the engine (when the main power is turned on or when the machine returns from energy save mode).
		BiCU (PCB16) defective

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		1. Turn the main power OFF/ON. 2. Replace the BiCU (PCB16).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC667-20	D	MACARON Operating Mode Setting Error (IM 550F/600F/600SRF) / BREIT Operating Mode Setting Error (P 800/801)
		The mode setting error of MACARON (IM 550F/600F/600SRF) / BREIT (P 800/801) is detected during the startup operation of the engine (when the main power is turned on or when the machine returns from energy save mode).
		BiCU (PCB16) defective
		1. Turn the main power OFF/ON. 2. Replace the BiCU (PCB16).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC668-01	D	IOB (PCB17) Startup Error
		The signal to indicate the IOB (PCB17) has started up was not detected within 4 seconds.
		• FFC defective or disconnected • IOB (PCB17) defective • IPU defective
		1. Turn the main power OFF/ON. 2. Reconnect the FFC between IPU and IOB (PCB17). 3. Replace the FFC between IPU and IOB (PCB17). 4. Replace the IOB (PCB17). 5. Replace the IPU.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC668-02	D	IOB (PCB17)Communication Error: Reset Error
		Communication reset control and error recovery control does not complete properly.
		• FFC not properly connected • FFC defective • IOB (PCB17) defective • BiCU (PCB16) defective
		1. Turn the main power OFF/ON. 2. Turn the main power OFF, reconnect the FFC between BiCU (PCB16) and IOB (PCB17), and then turn the main power ON.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		3. Turn the main power OFF, replace the FFC between BiCU (PCB16) and IOB (PCB17), and then turn the main power ON. 4. Turn the main power OFF, replace the IOB (PCB17), and then turn the main power ON. 5. Turn the main power OFF, replace theBiCU (PCB16), and then turn the main power ON.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC668-03	D	IOB (PCB17) Communication Error: Retry Timeout Error
		Operation does not resume in 10 seconds after an error occurs.
		• IOB (PCB17) defective • BiCU (PCB16) defective • FFC defective
		1. Turn the main power OFF/ON. 2. Turn the main power OFF, replace the IOB (PCB17), and then turn the main power ON. 3. Turn the main power OFF, replace theBiCU (PCB16), and then turn the main power ON. 4. Turn the main power OFF, replace the FFC between BiCU (PCB16) and IOB (PCB17), and then turn the main power ON.

SC No.	Type	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

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC669-08	D	EEPROM OPEN: No error code
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-	D	EEPROM Data read: No error code

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
26		
SC669-36	D	Verification error
SC669-37	D	Error Detection
		The toner density sensor cannot be recovered after retrying **N**[*1] times for EEPROM communication error. (*1 SC669-01 to 26: 3, SC669-36: 2, SC669-37: 1)
		• Electrical noise • EEPROM not installed correctly • EEPROM defective • BiCU (PCB16) defective
		1. Turn the main power OFF/ON. 2. Reinstall the EEPROM on the BiCU (PCB16). 3. Replace the EEPROM on the BiCU (PCB16). 4. Replace the BiCU (PCB16).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC687-00	D	PER Not Received Error
		RAPI-PER command was not received from the controller within the specified time (120 sec.) after RAPI-PES (preparation request for image transmission) is issued.
		• Electrical noise • Controller board (PCB15) defective
		Check if the SC occurs by turning the main power OFF then ON for ten times. If the SC occurs again, do the following steps. Check if the SC reoccurs by cycling the power after each step. 1. Check the engine and controller firmware, and update the firmware to the latest version. 2. If the SC is issued during printing or during receiving fax documents, replace the controller board (PCB15). If the SC is issued during copying, check the DF and IOB (PCB17) connection.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC689-01	D	EEPROM Communication Error 1
		• No response from the device in reading/writing for 5 seconds or more and this problem is repeated 5 times. • The reading data of 2 locations do not match 8 times consecutively.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		• The writing data and reading data do not match 8 times consecutively.
		EEPROM on the controller board (PCB15) defective
		1. Turn the main power OFF and wait for 5 seconds. Then turn ON the main power. 2. Check whether the EEPROM on the controller board (PCB15) is installed correctly. If necessary, reinstall it. 3. Replace the controller board (PCB15). 4. If the EEPROM on the controller board (PCB15) is damaged, replace the EEPROM.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC689-02	D	EEPROM Communication Error 1
		IOB (PCB17) defective
		Controller board (PCB15) defective
		Replace the controller board (PCB15).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC690-00	C	EEPROM Data Error
		Reading data from EEPROM is abnormal.
		EEPROM on the controller board (PCB15) defective
		1. Turn the main power OFF and wait for 5 seconds. Then turn the main power ON. 2. Replace the IOB (PCB17). 3. If the EEPROM on the controller board (PCB15) is damaged, replace the EEPROM.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC691-00	D	Image Processing Error
		Paper jam (J010, J011, J012, J013, J014, J015) is detected twice.
		Controller board (PCB15) defective
		Replace the controller board (PCB15).

SC600 (Controller)

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC670-	D	Engine does not startup during the starting up

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
01		• /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. • EC/PC/SC response was not received within the specified time from power on. • Writing to Rapi driver failed (the other party not found through PCI). • Connection defect between controller board (PCB15) and BiCU (PCB16). • BiCU (PCB16) is down/unstable
		Engine board does not startup.
		Refer to SC670 (engine startup error) is displayed.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC670-02	D	Engine does not start up after the starting up
		• CPU reset by software • CPU reset by anomaly CPU • CPU reset by hardware defect/noise • Hardware defect
		Engine board reset unexpectedly.
		Refer to SC670 (engine startup error) is displayed.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC670-03	D	IPU start up error when the machine boots up
		VDET_EPCI signal was not asserted when the machine was turned on.
		• IPU, PSU (PCB18), and/or controller board (PCB15) defective • Incorrect connection between controller board (PCB15) and IPU. • Harness of IPU disconnected
		Refer to SC670 (engine startup error) is displayed.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC670-04	D	Communication error between the engine and controller
		Communication could not linked up.
		• IPU and/or controller board (PCB15) defective • Incorrect connection between controller board (PCB15) and IPU.
		Refer to SC670 (engine startup error) is displayed.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC670-05	C	Link up error
		Communication could not linked up.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		• CTL board defective • BiCU (PCB16) defective • Incorrect connection between CTL and BiCU (PCB16).
		Logging only.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC672-00	D	Controller startup error
		After the machine was powered on, communication between the controller and the operation panel was not established.
		• Controller stalled • Board installed incorrectly • Controller board (PCB15) defective • Operation panel connector loose, broken, or defective • Controller late
		1. Turn the main power OFF/ON. 2. Check the connection of the operation panel. 3. Check the connection of the controller board (PCB15). 4. Replace the controller board (PCB15).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC672-10	D	Controller startup error
		After the machine was powered on, communication between the controller and the operation panel was not established.
		• Controller stalled • Board installed incorrectly • Controller board (PCB15) defective • Operation panel connector loose, broken, or defective • Controller late
		1. Turn the main power OFF/ON. 2. Check the connection of the operation panel. 3. Check the connection of the controller board (PCB15). 4. Replace the controller board (PCB15).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC672-11	D	Controller startup error
		After the machine was powered on, communication between the controller and the operation panel was not established, or communication with the controller was

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		interrupted after a normal startup.
		• Controller stalled • Board installed incorrectly • Controller board (PCB15) defective • Operation panel connector loose, broken, or defective • Controller late
		1. Turn the main power OFF/ON. 2. Check the connection of the operation panel. 3. Check the connection of the controller board (PCB15). 4. Replace the controller board (PCB15).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC672-12	D	Controller startup error
		Communication with the controller was interrupted after a normal startup.
		• Controller stalled • Board installed incorrectly • Controller board (PCB15) defective • Operation panel connector loose, broken, or defective • Controller late
		1. Turn the main power OFF/ON. 2. Check the connection of the operation panel. 3. Check the connection of the controller board (PCB15). 4. Replace the controller board (PCB15).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC672-13	D	Controller startup error
		The operation panel detects that the controller is down due to other reason, shown in SC672-10, SC672-11, and SC672-12.
		• Controller stalled • Board installed incorrectly • Controller board (PCB15) defective • Operation panel connector loose, broken, or defective • Controller late
		1. Turn the main power OFF/ON. 2. Check the connection of the operation panel. 3. Check the connection of the controller board (PCB15). 4. Replace the controller board (PCB15).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC672-99	D	Controller startup error
		The operation panel software ended abnormally.
		• Controller stalled • Board installed incorrectly • Controller board (PCB15) defective • Operation panel connector loose, broken, or defective • Controller late
		1. Turn the main power OFF/ON. 2. Check the connection of the operation panel. 3. Check the connection of the controller board (PCB15). 4. Replace the controller board (PCB15).

Service Call 700

SC700 (Engine: Peripherals) (IM 600SRF Only)

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC724-03	B	Finisher protection device cutoff error 1
		Power has not been supplied beyond the main PCB fuse for 2 seconds.
		• Blown fuse • Defective solenoid • Connection error
		Check if the SC occurs by turning the main 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. Check the harnesses between PCB and solenoid/switch. Replace if necessary. 2. Check the solenoid for abnormalities. Replace if necessary. 3. Replace the finisher main board (PCB29).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC724-04	B	Finisher protection device cutoff error 2
		The fault signal of the sensor's protection device (high-side switch) has been detected for 2 seconds.
		• Blown fuse • Defective solenoid • Connection error
		Check if the SC occurs by turning the main 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. Check the harnesses between PCB and sensors. Replace if necessary. 2. Check the sensors for abnormalities. Replace if necessary. 3. Replace the finisher main board (PCB29).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC724-30	B	Finisher jogger motor (M16) error
		The finisher jogger fences move out of the home position but the finisher jogger fence HP sensor (S24) output does not change within the specified number of pulses. The 1st failure issues a jam error, and the 2nd failure issues this SC code.
		• Finisher jogger fence HP sensor (S24) disconnected, defective

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		• Finisher jogger motor (M16) disconnected, defective • Finisher jogger fence HP sensor (S24) disconnected, defective • Finisher main board (PCB29) and Finisher jogger motor (M16)
		• Check the connections and cables for the components mentioned above. • Check for blockages in the finisher jogger motor (M16) mechanism. • Replace the finisher jogger fence HP sensor (S24) and/or finisher jogger motor (M16). • Replace the finisher main board (PCB29).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC724-44	B	Finisher stapler motor (M19) error
		The 1st failure issues a jam error, and the 2nd failure issues this SC code. • The finisher stapler motor (M19) does not switch off within the prescribed time after operating. • The HP sensor of the staple unit does not detect the home position after the staple unit moves to its home position. • The HP sensor of the staple unit detects the home position after the staple unit moves from its home position.
		• Staple jam • Motor overload • Defective finisher stapler motor (M19)
		• Check the connections and cables for the components mentioned above. • Replace the HP sensor and/or finisher stapler motor (M19) • Replace the finisher main board (PCB29).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC724-80	B	Finisher gathering roller motor (M14) error
		• Motor overload • Loose connection of the finisher gathering roller motor (M14) • Defective finisher gathering roller motor (M14)
		• Check the connections to the finisher gathering roller motor (M14). • Replace the finisher gathering roller motor (M14).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC724-81	B	Finisher exit guide plate motor (M17) error
		• Motor overload • Loose connection of the finisher exit guide plate motor (M17)

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		• Defective finisher exit guide plate motor (M17)
		• Check the connections to the finisher exit guide plate motor (M17). • Replace the finisher exit guide plate motor (M17).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC724-82	B	Finisher shift roller motor (M15) error
		• Motor overload • Loose connection of the finisher shift roller motor (M15) • Defective finisher shift roller motor (M15)
		• Check the connections to the finisher shift roller motor (M15). • Replace the finisher shift roller motor (M15).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC724-83	B	Finisher tray lift motor (M18) error
		• Motor overload • Loose connection of the tray lift motor • Defective finisher tray lift motor (M18)
		• Check the connections to the tray lift motor. • Replace the finisher tray lift motor (M18).

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC724-85	B	Finisher stack height lever solenoid error
		Finisher stack height lever sensor does not turn on when the finisher stack height lever solenoid turns off. The 1st failure issues a jam error, and the 2nd failure issues this SC code.
		• Loose connection of the finisher stack height lever solenoid • Defective finisher stack height lever solenoid • Defective finisher stack height lever sensor
		• Check the connections to the finisher stack height lever solenoid. • Replace the finisher stack height lever solenoid. • Replace the finisher stack height lever sensor.

Service Call 816-899

SC800 (Controller)

No.	Type	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
SC 816-98	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 (PCB15) error (non-response).

No.	Type	Error Name/Error Condition/Major Cause/Solution
		• An error was detected during preparation for the transition to STR. • SC816-99 occurs as a subsystem error except for any error from -06 to 96.
		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 following firmware and the other system firmware to the latest version. • IM 550F/600F/600SRF: "System/Copy" firmware • P 800/801: "System" firmware 2. Disable the STR shift function by SP5-191-001 (Power Str Set). 3. Replace the controller board (PCB15).

No.	Type	Error Name/Error Condition/Major Cause/Solution
SC819-00	C	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 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 (PCB15). • Fix the software
	[0x5245]	Link up error
		Link up transaction between Engine ASIC and Veena was not completed within 100 ms.
		Either one of the following messages appears on console if Link up error occurs.

No.	Type	Error Name/Error Condition/Major Cause/Solution
		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 (PCB15) or the BiCU (PCB16).
	[0x5355]	L2 status time out
		L2 status register between Engine ASIC and Veena has not reached the target value within 1 sec.
		Engine ASIC during the 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 the console. 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 (PCB15) or the BiCU (PCB16).
	[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"

No.	Type	Error Name/Error Condition/Major Cause/Solution
		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, CPU)
		• Replace with a larger capacity RAM, or flash memory. • Replace the controller board (PCB15). • Replace the connected controller option with a new one.

No.	Type	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
		-

No.	Type	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.
		-

No.	Type	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.

No.	Type	Error Name/Error Condition/Major Cause/Solution
SC842-01	C	Insufficient Nand-Flash blocks (threshold exceeded)
		At startup, or when the machine returned from energy save mode, the Nand-Flash status was read and judged that the number of unusable blocks had exceeded the threshold, and then SCS generated the SC code.
		Number of unusable blocks exceeded the threshold for Nand-Flash

No.	Type	Error Name/Error Condition/Major Cause/Solution
		Replace the controller board (PCB15).

No.	Type	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 energy save mode, the Nand-Flash was read and judged that the number of deleted blocks had exceeded the threshold, and then SCS generated this SC code.
		Number of blocks deleted exceeded threshold for Nand-Flash.
		Replace the controller board (PCB15).

No.	Type	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 (PCB15)
SC845-03	D	Operation Panel (Normal)
SC845-04	D	Operation Panel (Smart 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
		Replace the target board. For SC845-02, HDD and memory may cause the problem. Replace the HDD or memory if the SC cannot be recovered by replacing the controller board (PCB15).

No.	Type	Error Name/Error Condition/Major Cause/Solution
SC845-50	D	DMM 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.

No.	Type	Error Name/Error Condition/Major Cause/Solution
		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 (PCB15). 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 (PCB15). **3.** If the problem persists after replacing the DIMM, replace the hard disk.

No.	Type	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 wireless LAN board

No.	Type	Error Name/Error Condition/Major Cause/Solution
SC855-02	B	Wireless LAN board error (driver initialization 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 wireless LAN board

No.	Type	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.)

No.	Type	Error Name/Error Condition/Major Cause/Solution
		Replace the controller board (PCB15).

No.	Type	Error Name/Error Condition/Major Cause/Solution
SC860-00	B	HDD startup error at main power on (HDD error)
		• 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. 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.

No.	Type	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. • 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 the main power on for the operation panel to become

No.	Type	Error Name/Error Condition/Major Cause/Solution
		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.

No.	Type	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 the 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.

No.	Type	Error Name/Error Condition/Major Cause/Solution
SC864-01	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 an area that does not belong to a partition, such as the disk label area.)
		• Format the HDD. • Replace the HDD.

No.	Type	Error Name/Error Condition/Major Cause/Solution
SC864-02	D	HDD data CRC error

No.	Type	Error Name/Error Condition/Major Cause/Solution
to 23		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.

No.	Type	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.

No.	Type	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.

No.	Type	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 SC864 (CRC error). (An error occurred in partition "a" (SC865-02) to partition "v" (SC865-23)).
		Replace the HDD.

No.	Type	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 (PCB15)

No.	Type	Error Name/Error Condition/Major Cause/Solution
		and HDD. • Replace the HDD.

No.	Type	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.

No.	Type	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.

No.	Type	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.

No.	Type	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 /mnt/sd2).
		Turn the main power OFF/ON.

No.	Type	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-	D	The SD controller returned an error during operation.

No.	Type	Error Name/Error Condition/Major Cause/Solution
02		(An error occurred at the mount point of /mnt/sd1)
		• SD card defective • SD controller defective
		Slot number is displayed on the sub code. Detail code is described in SMC print can confirm 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 (PCB15). **SD card for users** **1.** In 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 (PCB15).

* 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 service representative.

No.	Type	Error Name/Error Condition/Major Cause/Solution
SC871-01	D	FCU error
		An error occurred when FCS 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.

No.	Type	Error Name/Error Condition/Major Cause/Solution
SC871-02	D	FCU job error (Recovery possible)
		This SC occurs when the FCU has detected a job error (failure to start or complete

No.	Type	Error Name/Error Condition/Major Cause/Solution
		a job) that may be recovered by the auto reboot.
		-
		1. Turn the main power OFF/ON. **2.** Update the firmware if more recent firmware was released.

No.	Type	Error Name/Error Condition/Major Cause/Solution
SC871-03	D	FCU job error (Recovery not possible)
		This SC occurs when the FCU has detected a job error (failure to start or complete a job) that will not be recovered by the auto reboot.
		-
		1. Turn the main power OFF/ON. **2.** Update the firmware if more recent firmware was released.

No.	Type	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 **(IM 550F/600F/600SRF Only)**
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 HDD data delete program

No.	Type	Error Name/Error Condition/Major Cause/Solution
		• Error detected in NVRAM data delete program • The "Delete All" option was not set
		• Turn the main power OFF and back on, and then execute "Erase All Memory" under UP mode again. (However, if there is a defective sector or 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.

No.	Type	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.

No.	Type	Error Name/Error Condition/Major Cause/Solution
SC877-00	B	Data Overwrite Security card error
		The "Auto Erase Memory" function of the Data Overwrite Security is set to on but it cannot be done.
		• Data Overwrite Security option SD card is broken. • Data Overwrite Security option SD card has been removed.
		• If the SD card is broken, prepare a new Data Overwrite Security option SD card and replace the NVRAM. • If the SD card has been removed, turn the main power off and reinstall a working Data Overwrite Security option SD card.

No.	Type	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 (PCB15).

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).

No.	Type	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 (PCB15).

No.	Type	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 (PCB15).

No.	Type	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 • A file required by TPM is missing
		Replace the controller board (PCB15).

No.	Type	Error Name/Error Condition/Major Cause/Solution
SC878-20	D	Random number generator self check error
		The unusual status is detected during the self test of generated random number seed.
		TPM defective. (The random number seed is generated by TPM)
		1. Turn ON the main power. 2. Replace the controller board (PCB15).

No.	Type	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.

No.	Type	Error Name/Error Condition/Major Cause/Solution
		In the case of a software error • Turn the main power OFF/ON. • Try updating the firmware.

Service Call 900-998

SC900 (Engine: Others)

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC940-81	D	Load SW overcurrent detection
		Current limiting to the load SW has been detected.
		Shortcircuit of the following harnesses • The harness between BiCU (PCB16) and optional counter interface board • The harness between optional counter interface board and optional counter device
		Disconnect CN112 of the BiCU (PCB16) and turn on the machine. • If SC940-81 does not occur, there is a short circuit in the harnesses, optional counter interface board or the optional counter device. Replace the harness, optional counter interface board or the optional counter device. • If SC940-81 occurs, there may be a short circuit in the BiCU (PCB16). Replace the BiCU (PCB16).

SC No.	Type	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 (PCB16) replacement or malfunctioning. • Machine serial number cannot be identified because of NV-RAM replacement.
		Machine serial number (11 digits) or machine identification code does not match.
		1. Enter the machine serial number using SP5-811 (MachineSerial), and then turn the main power ON/OFF. 2. Attach the NV-RAM that was installed previously.

SC No.	Type	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.
		Machine serial number (11 digits) or machine identification code does not match.
		• Attach the NV-RAM that was installed previously.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		• Download data on the NV-RAM using SP5-825-001 (NV-RAM Data Download).

SC No.	Type	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 the machine identification code because the controller was replaced incorrectly or is malfunctioning.
		Machine serial number (11 digits) or machine identification code does not match.
		Replace it with a specified controller.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC995-04	D	CPM setting error 4
		Comparison of machine serial number (11 digits) and machine identification code.
		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. An error is detected when increasing the total counter.
		• Unexpected NV-RAM is attached. • NV-RAM defective • NV-RAM data corrupted. • Data was written to an 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
SC920-02	B	Printer error (WORK memory not acquired)
		When an error is detected in the application, which makes continued operation impossible.
		• Software bug • Unexpected hardware configuration (such as insufficient memory)

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
		• Turn the main power off/on. • Increase the memory storage capacity.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC920-04	B	Printer error (Filter process not started)
		When an error is detected in the application, which makes continued operation impossible.
		• Software bug • Unexpected hardware configuration (such as insufficient memory)
		• Turn the main power off/on.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC921-00	B	Printer error (Resident font not found)
		Resident font was not found at printer startup
		Preinstalled font files not found.
		Turn the main power off/on.

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/ON. • Reinstall the software of the controller board (PCB15) and BiCU (PCB16).

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 to CS990.
		• Parameter error • 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/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
		• No response to the predetermined command from SCS to the same application program 4 times consecutively. **Cases when SC997-00 occur;** 1. SCS sends a command to the copy application. 2. There has been no response from the copy application for 30 sec. (Error count value: 1) 3. Step1-2 is repeatedly performed 3 times. (Error count value: 4) 4. SC997-00 occur.
		Cases when SC997-00 does not occur; 1. SCS sends a command to the copy application. 2. There has been no response from the copy application for 30 sec. (Error count value: 1) Step1-2 is repeatedly performed 2 times. (Error count value: 4) 3. SCS sends a command to the copy application. There has been a response from the copy application. (Error count value: 1) • The application ended by an unusual process.
		A software bug (mainly the application)
		• Check the optional RAM/DIMM/boards required by the application program. • Check if the combination of downloaded programs is correct.

SC No.	Type	Error Name/Error Condition/Major Cause/Solution
SC998-00	D	Application start error
		• No application was registered to the system within a specified time after the main power was turned ON. (No application starts/All applications have been terminated abnormally) • The application started but cannot be drawn now for some reason.
		• A software bug (mainly the application) • The optional RAM/DIMM/boards, required by the application program, are not installed correctly.
		• Check the optional RAM/DIMM/boards required by the application program. • Check if the combination of downloaded programs is correct. • Replace the controller board (PCB15).

Jam Detection

Paper Jam Display

SP7-507 shows paper jam history.

```
CODE :011
SIZE  :05h
TOTAL:000034
DATE  :Fri Feb 15 11:44:50 2006
```

- CODE: Indicates the jam code.
- SIZE: Indicates the paper Size Code.
- TOTAL: Indicates the total counter (SP8-381-001).
- DATE: indicates the date when the jam occurred.

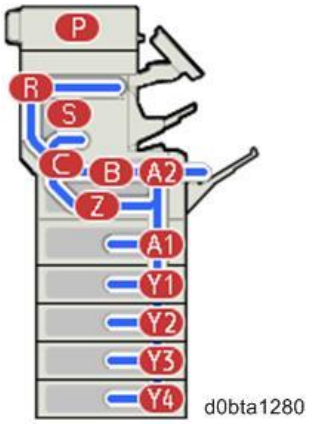
Note

- The 10 latest printer jams are displayed.
- Initial jams are not recorded.

Jam Codes and Display Codes

- IM 550F/600F/600SRF

  When a jam occurs, the location is displayed on the operation panel.



- P 800/801

  An error message appears if a paper misfeed occurs. The error message indicates where the misfeed occurs.

SP7-504 and SP7-505 (for DF) show how many jams occurred at each location.

SP No	Jam Code	Description	Indication on the operation panel
SP7-504	001	Bypass paper end sensor (S9)	A2
		Paper feed sensor 1 (Tray 1)	A1

SP No	Jam Code	Description	Indication on the operation panel
		Paper feed sensor 2 (Tray 2)	Y1
		Paper end sensor 3 (Tray 3)	Y2
		Paper end sensor 4 (Tray 4)	Y3
		Paper end sensor 5 (Tray 5)	Y4
		Registration sensor 1 (S13)	B
		Registration sensor 2 (S14)	B
		Duplex sensor 1 (S16)	Z
		Duplex sensor 2 (S17)	Z
		Rear cover switch (SW1)	C
		Finisher entrance sensor (S28)*1	R
		Finisher paper exit sensor (S26)*1	R
	010	Unit package won’t become ready.	A1
	011	Transfer unit not ready.	A1
	012	Drive does not stop.	A1
	013	Duplex printing signal doesn't come.	A1
	014	Fuser unit not ready.	A1
	015	Tray 2 feeding signal doesn't come.	A1
	025	Rear cover open jam	A1
	026	Upper cover open jam	A1
	027	More pages than the duplex unit can contain.	A1
	028	Tray 1: No feed	A1
	029	Duplex unit: No feed	Z
	030	Bypass tray: No feed	A2, B
	031	Tray 1: Multiple feed	B
	032	Tray 2: Multiple feed	Y1
	033	Tray 3: Multiple feed	Y2
	034	Tray 4: Multiple feed	Y3
	035	Tray 5: Multiple feed	Y4
	036	Duplex unit: Multiple feed	B
	037	Bypass tray: Multiple feed	B
	038	Paper feed sensor 2: Late jam (When paper feed from Tray 3)	Y1
	039	Paper feed sensor 2: Late jam (When paper feed from Tray 4)	Y1
	040	Paper feed sensor 2: Late jam (When paper feed from Tray 5)	Y1

SP No	Jam Code	Description	Indication on the operation panel
	041	Paper feed sensor 2: Lag jam (When paper feed from Tray 3)	Y1
	042	Paper feed sensor 2: Lag jam (When paper feed from Tray 4)	Y1
	043	Paper feed sensor 2: Lag jam (When paper feed from Tray 5)	Y1
	044	Paper feed sensor 3: Late jam (When paper feed from Tray 4)	Y2
	045	Paper feed sensor 3: Late jam (When paper feed from Tray 5)	Y2
	046	Paper feed sensor 3: Lag jam (When paper feed from Tray 4)	Y2
	047	Paper feed sensor 3: Lag jam (When paper feed from Tray 5)	Y2
	048	Paper feed sensor 4: Late jam (When paper feed from Tray 5)	Y3
	049	Paper feed sensor 4: Lag jam (When paper feed from Tray 5)	Y3
	050	Registration sensor 1 (S13): Late jam (When paper feed from Tray 2)	B
	051	Registration sensor 1 (S13): Late jam (When paper feed from Tray 3)	B
	052	Registration sensor 1 (S13): Late jam (When paper feed from Tray 4)	B
	053	Registration sensor 1 (S13): Late jam (When paper feed from Tray 5)	B
	054	Registration sensor 1 (S13): Lag jam (When paper feed from Tray 2)	B
	055	Registration sensor 1 (S13): Lag jam (When paper feed from Tray 3)	B
	056	Registration sensor 1 (S13): Lag jam (When paper feed from Tray 4)	B
	057	Registration sensor 1 (S13): Lag jam (When paper feed from Tray 5)	B
	058	Registration sensor 2 (S14): Late jam (When paper feed from Tray 1)	B

SP No	Jam Code	Description	Indication on the operation panel
	059	Registration sensor 2 (S14): Late jam (When paper feed from Tray 2)	B
	060	Registration sensor 2 (S14): Late jam (When paper feed from Tray 3)	B
	061	Registration sensor 2 (S14): Late jam (When paper feed from Tray 4)	B
	062	Registration sensor 2 (S14): Late jam (When paper feed from Tray 5)	B
	063	Registration sensor 2 (S14): Late jam (When paper feed from duplex unit)	B
	064	Registration sensor 2 (S14): Late jam (When paper feed from bypass tray unit)	B
	065	Registration sensor 2 (S14): Lag jam (When paper feed from Tray 1)	B
	066	Registration sensor 2 (S14): Lag jam (When paper feed from Tray 2)	B
	067	Registration sensor 2 (S14): Lag jam (When paper feed from Tray 3)	B
	068	Registration sensor 2 (S14): Lag jam (When paper feed from Tray 4)	B
	069	Registration sensor 2 (S14): Lag jam (When paper feed from Tray 5)	B
	70	Registration sensor 2 (S14): Lag jam (When paper feed from duplex unit)	B
	071	Registration sensor 2 (S14): Lag jam (When paper feed from bypass tray unit)	B
	072	Paper exit full sensor (S8): Late jam (When paper feed from Tray 1)	B
	073	Paper exit full sensor (S8): Late jam (When paper feed from Tray 2)	B
	074	Paper exit full sensor (S8): Late jam (When paper feed from Tray 3)	B
	075	Paper exit full sensor (S8): Late jam (When paper feed from Tray 4)	B
	076	Paper exit full sensor (S8): Late jam (When paper feed from Tray 5)	B

SP No	Jam Code	Description	Indication on the operation panel
	077	Paper exit full sensor (S8): Late jam (When paper feed from duplex unit)	B
	078	Paper exit full sensor (S8): Late jam (When paper feed from bypass tray unit)	B
	079	Paper exit full sensor (S8): Lag jam (When paper feed from Tray 1)	C
	080	Paper exit full sensor (S8): Lag jam (When paper feed from Tray 2)	C
	081	Paper exit full sensor (S8): Lag jam (When paper feed from Tray 3)	C
	082	Paper exit full sensor (S8): Lag jam (When paper feed from Tray 4)	C
	083	Paper exit full sensor (S8): Lag jam (When paper feed from Tray 5)	C
	084	Paper exit full sensor (S8): Lag jam (When paper feed from duplex unit)	C
	085	Paper exit full sensor (S8): Lag jam (When paper feed from bypass tray unit)	C
	086	Duplex sensor 1 (S16): Late jam (When paper feed from Tray 1)	C
	087	Duplex sensor 1 (S16): Late jam (When paper feed from Tray 2)	C
	088	Duplex sensor 1 (S16): Late jam (When paper feed from Tray 3)	C
	089	Duplex sensor 1 (S16): Late jam (When paper feed from Tray 4)	C
	090	Duplex sensor 1 (S16): Late jam (When paper feed from Tray 5)	C
	091	Duplex sensor 1 (S16): Late jam (When paper feed from bypass tray unit)	C
	092	Duplex sensor 2 (S17): Late jam (When paper feed from Tray 1)	Z
	093	Duplex sensor 2 (S17): Late jam (When paper feed from Tray 2)	Z
	094	Duplex sensor 2 (S17): Late jam (When paper feed from Tray 3)	Z

SP No	Jam Code	Description	Indication on the operation panel
	095	Duplex sensor 2 (S17): Late jam (When paper feed from Tray 4)	Z
	096	Duplex sensor 2 (S17): Late jam (When paper feed from Tray 5)	Z
	097	Duplex sensor 2 (S17): Late jam (When paper feed from bypass tray unit)	Z
	098	Duplex sensor 2 (S17): Lag jam (When paper feed from duplex unit)	B
	099	Tray 2: No feed	Y1
	100	Tray 3: No feed	Y2
	101	Tray 4: No feed	Y3
	102	Tray 5: No feed	Y4
	103*1	Relay sensor: Late jam (When paper feed from Tray 1)	R
	104*1	Relay sensor: Late jam (When paper feed from Tray 2)	R
	105*1	Relay sensor: Late jam (When paper feed from Tray 3)	R
	106*1	Relay sensor: Late jam (When paper feed from Tray 4)	R
	107*1	Relay sensor: Late jam (When paper feed from Tray 5)	R
	108*1	Relay sensor: Late jam (When paper feed from bypass tray unit)	R
	109*1	Relay sensor: Lag jam (When paper feed from Tray 1)	R
	110*1	Relay sensor: Lag jam (When paper feed from Tray 2)	R
	111*1	Relay sensor: Lag jam (When paper feed from Tray 3)	R
	112*1	Relay sensor: Lag jam (When paper feed from Tray 4)	R
	113*1	Relay sensor: Lag jam (When paper feed from Tray 5)	R
	114*1	Relay sensor: Lag jam (When paper feed from duplex unit)	R
	115*1	Relay sensor: Lag jam (When paper feed from bypass tray unit)	R
	230*1	No response from finisher	R
	241*1	Finisher entrance sensor (S28): Late jam	R
	242*1	Finisher entrance sensor (S28): Lag jam	R

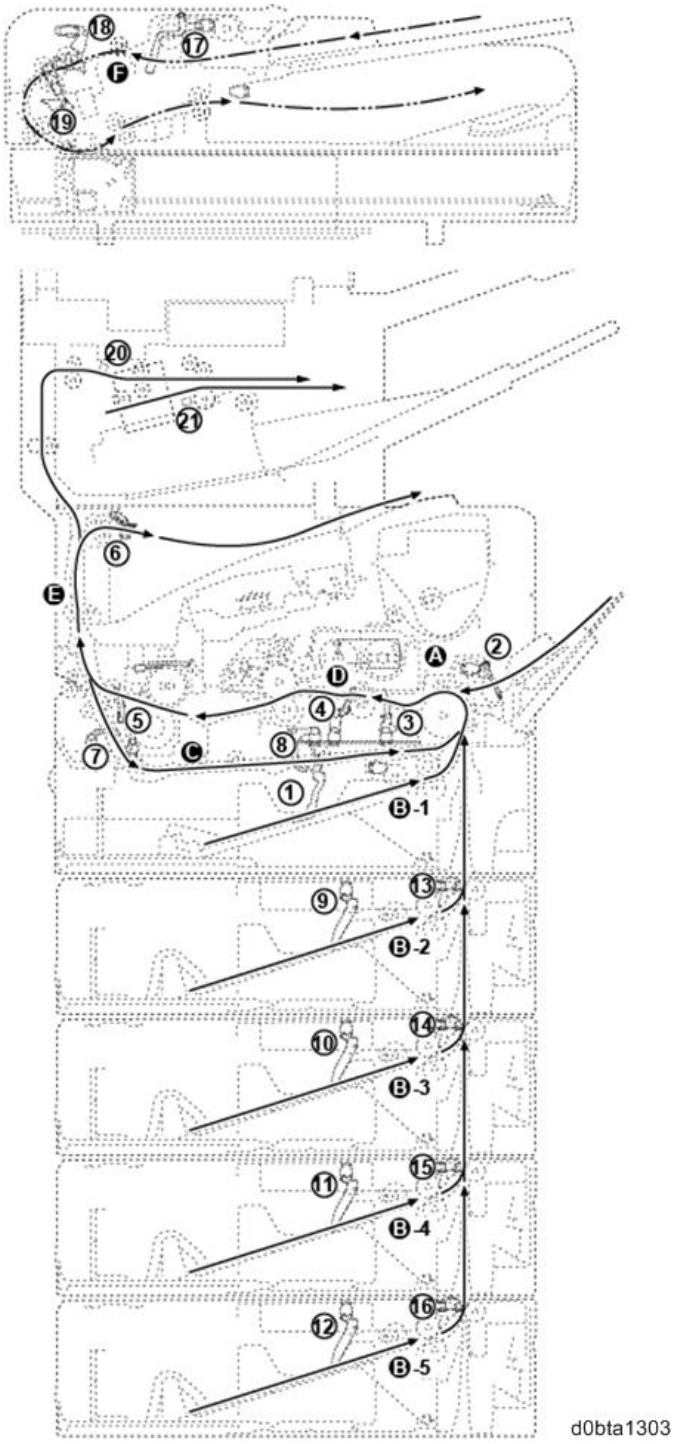
SP No	Jam Code	Description	Indication on the operation panel
	243*1	Finisher exit sensor: Lag jam	R
	244*1	Finisher shift roller motor (M15) jam	R
	245*1	Finisher gathering roller motor (M14) jam	R
	246*1	Finisher exit guide plate motor (M17) jam	R
	247*1	Finisher tray lift motor (M18) jam	R
	248*1	Finisher stapler motor (M19) jam	S
	249*1	Finisher stack height lever solenoid jam	R
	250*1	Invalid data jam	R
SP7-505	001*2	DF Initial jam	P
	033*2	DF registration sensor (S2): Late jam	P
	034*2	DF CIS timing sensor: Late jam	P
	035*2	DF CCD timing sensor: Late jam	P
	036*2	DF exit sensor (S4): Late jam	P
	083*2	DF registration sensor (S2): Lag jam	P
	084*2	DF CIS timing sensor: Lag jam	P
	085*2	DF CCD timing sensor: Lag jam	P
	086*2	DF exit sensor (S4): Lag jam	P
	094*2	Original is too short	P
	099*2	Original double-feeding jam	P

*1 IM 600SRF only

*2 IM 550F/600F/600SRF only

Sensor Layout

IM 550F/600F/600SRF

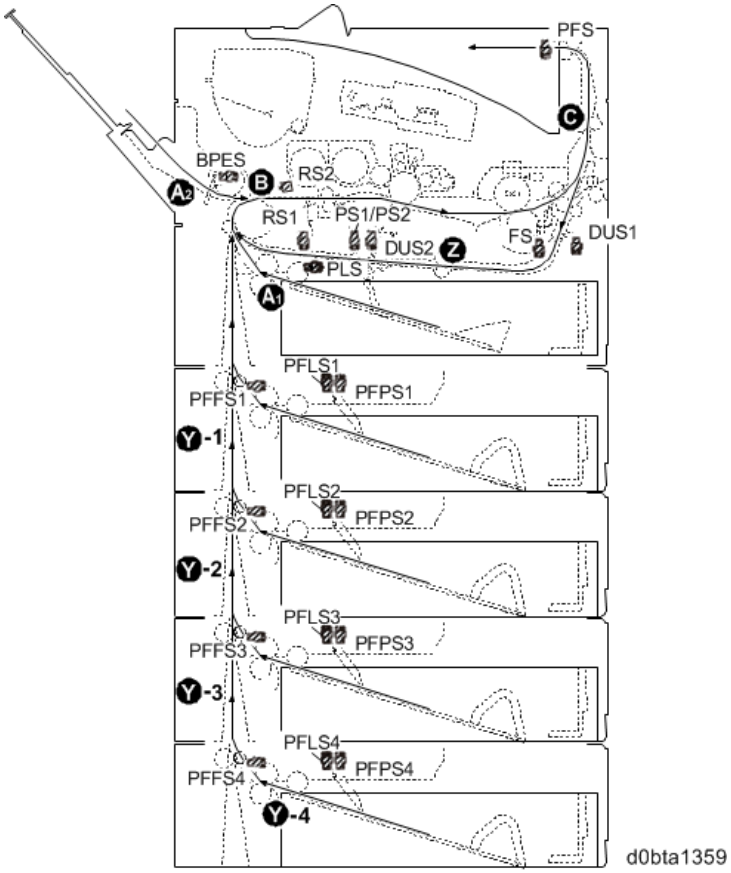


No.	Name	No.	Name
1	Paper sensor	12	PF Paper sensor 4*1
2	MP paper sensor	13	PF conveying sensor 1*1
3	Registration sensor 3	14	PF conveying sensor 2*1
4	Registration sensor 2 (S14)	15	PF conveying sensor 3*1

No.	Name	No.	Name
5	Exit sensor	16	PF conveying sensor 4*1
6	Paper full sensor	17	DF original sensor (S1)
7	Duplex sensor 1 (S16)	18	DF timing sensor
8	Duplex sensor 2 (S17)	19	DF registration sensor (S2)
9	PF paper sensor 1*1	20	Finisher entrance Sensor
10	PF paper sensor 2*1	21	Finisher paper exit sensor (S26)
11	PF paper sensor 3*1		

*1 Optional paper feed unit

P 800/801



Abbreviation	Name	Abbreviation	Name
BPES	Bypass paper end sensor (S9)	PFLS4	Paper feed tray limit sensor 4 (S7)*1
DUS1	Duplex sensor 1 (S16)	PFPS1	Paper end sensor 1 (S11)*1
DUS2	Duplex sensor 2 (S17)	PFPS2	Paper end sensor 2 (S12)*1
FS	Fusing sensor (S15)	PFPS3	Paper end sensor 3*1
PFFS1	Paper feed sensor 1*1	PFPS4	Paper end sensor 4*1
PFFS2	Paper feed sensor 2*1	PFS	Paper exit full sensor (S8)

Abbreviation	Name	Abbreviation	Name
PFFS3	Paper feed sensor 3*1	PLS	Paper feed tray limit sensor (S7)
PFFS4	Paper feed sensor 4*1	PS1	Paper end sensor 1 (S11)
PFLS1	Paper feed tray limit sensor 1 (S7)*1	PS2	Paper end sensor 2 (S12)
PFLS2	Paper feed tray limit sensor 2 (S7)*1	RS1	Registration sensor 1 (S13)
PFLS3	Paper feed tray limit sensor 3 (S7)*1	RS2	Registration sensor 2 (S14)

*1 Optional paper feed unit

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
133(85H)	A4	SEF	2100	2970
134(86H)	A5	SEF	1480	2100
006(06H)	A5	LEF	2100	1480
135(87H)	A6	SEF	1050	1480
142(8EH)	B5	SEF	1820	2570
143(8FH)	B6	SEF	1280	1820
164(A4H)	8 1/2"x14"(LG)	SEF	2159	3556
165(A5H)	8 1/2"x13"(Foolscap)	SEF	2159	3302
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
173(ADH)	7 1/4"x10 1/2"(Executive)	SEF	1842	2667
172(ACH)	5 1/2"x8 1/2"(HLT)	SEF	1397	2159
044(2CH)	5 1/2"x8 1/2"(HLT)	LEF	2159	1397
208(D0H)	No.10 (Com10)	SEF	1048	2413
209(D1H)	No.7 (Monarch)	SEF	984	1905
211(D3H)	C5 Envelope	SEF	1620	2290
212(D4H)	C6 Envelope	SEF	1140	1620
213(D5H)	DL	SEF	1100	2200
195(C3H)	16K	SEF	1950	2670

Size Code	Paper Size Name	Orientation	Main Scan Length	Sub Scan Length
200(C8H)	8.5"x13.4"(Oficio)	SEF	2159	3404

Troubleshooting Guide

Image Quality

Skewed image

Symptom

Images are skewed.

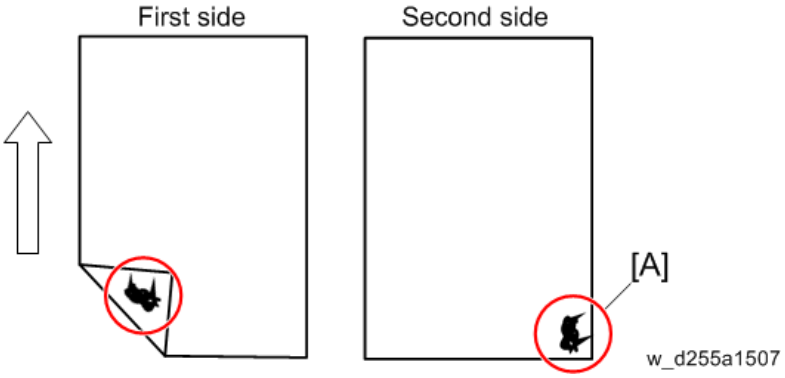
Solution

Check whether the side fences in the paper feed tray are set properly. They must tightly fit the paper without space.

Toner sticking to the right side area on the second side of the paper

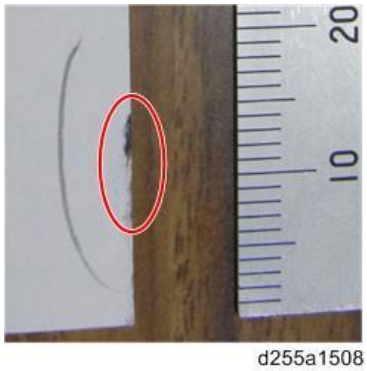
Symptom

Toner sticking to the right side area [A] on the second side of the paper.



* The arrow indicates the paper feed direction.

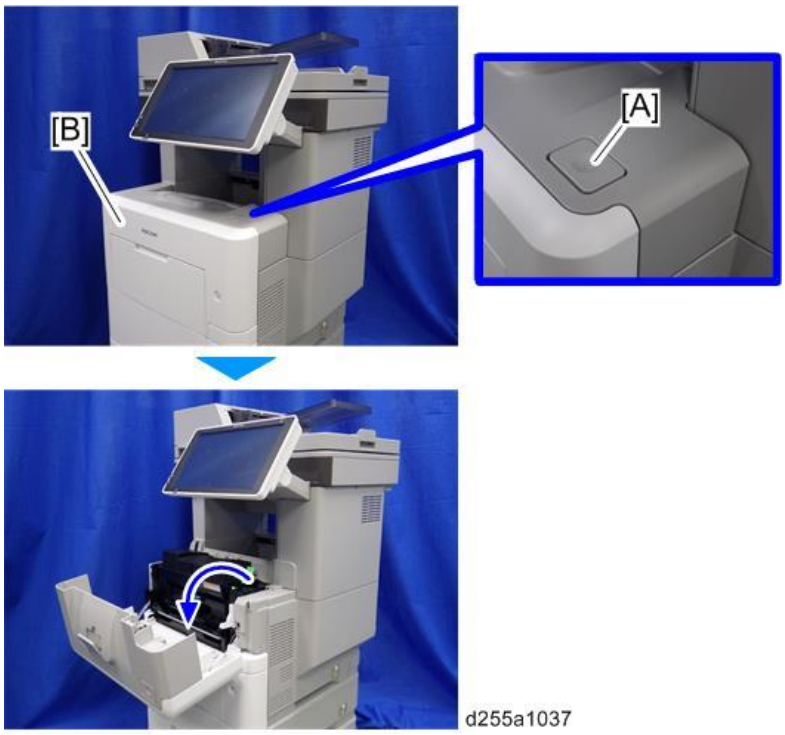
The toner sticking image:



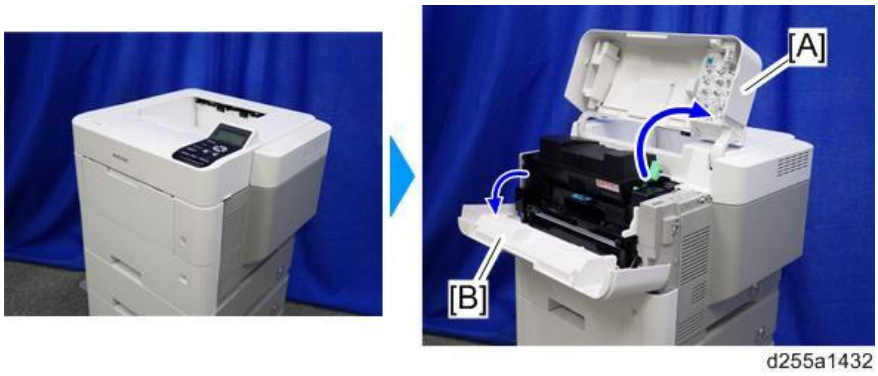
Solution

1. Open the front cover.

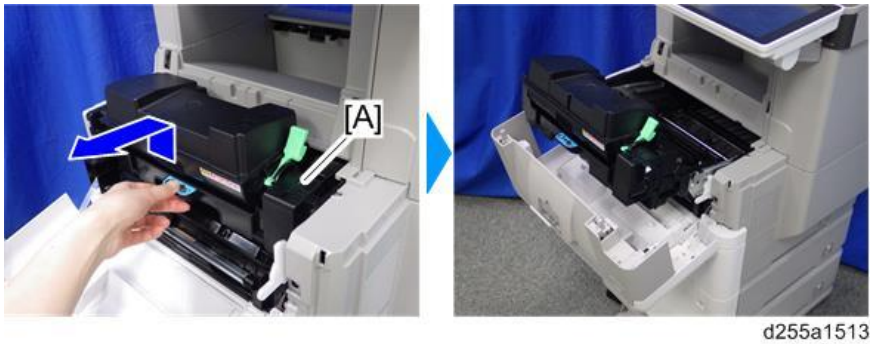
   IM 550F/600F/600SRF: Push the button [A] and open the front cover [B].



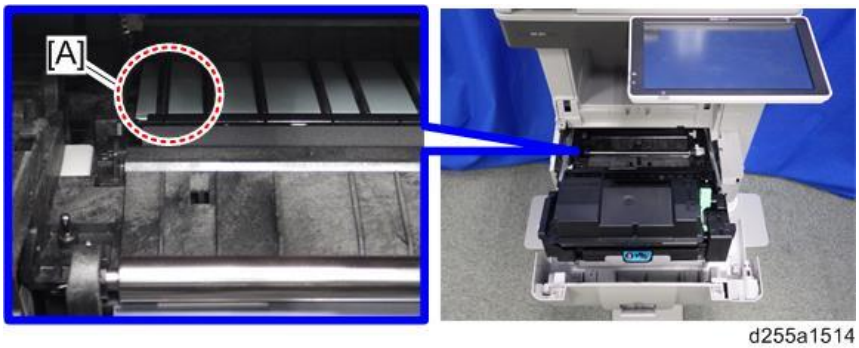
P 800/801: Open the upper cover [A], and then open the front cover [B].



2. Pull out the PCDU [A].



3. Clean the [A] area with a dry cloth.



d255a1514

Image quality failure due to the fixing failure

Symptom

The following image quality failure occurs due to the fixing failure.

- Backside partial stains
- Toner peeling
- Black spots caused by the toner fixation

Solution 1

Change the Fusing temperature using SP1-892-001 (Pressure Roller Dirt control).

0: Default

1: Raises the fusing temperature by 5 °C.

2: Raises the fusing temperature by 15 °C.

3: Raises the fusing temperature by 25 °C.

Note

- When both SP1-892-001 and SP1-893-001 (Hot offset control) are set at the same time, SP1-892-001 has priority.
- This SP takes effect when the paper type is Plain Paper, Plain Paper 2, or Middle Thick.
- This SP setting is reflected to all trays.

1. Set SP 1-892-001 (Pressure Roller Dirt Control) to “1”.
2. Set SP 1-892-001 to ”2” if the symptom is not solved in step 1.
3. Set SP 1-892-001 to “3” if the symptom is not solved in step 2.

Solution 2

Change the paper type setting to thicker with the procedure below.

- IM 550F/600F/600SRF
  1. Press the [User Tools] icon on the operation panel.
  2. Press [Tray Paper Settings].
  3. Press [Next].
  4. Select the tray from [Tray Paper Size: Tray 1] to [Tray Paper Size: Tray 5] for which you want

to change the paper type.

5. Change the paper type setting to thicker in [Paper Thickness].

- P 800/801
  1. Press the [Menu] key on the control panel.
  2. Select [Paper Input] -> Press [OK]
  3. Select the tray from [Tray Paper Size: Tray 1] to [Tray Paper Size: Tray 5] for which you want to change the paper type -> Press [OK]
  4. Change the paper type setting to thicker -> Press [OK] The setting is complete when specifying the following types of paper: Thin Paper, Plain Paper, Plain Paper 2, Middle Thick, Thick Paper 1, Thick Paper 2, Thick Paper 3, Special Paper 1, Special Paper 2, Special Paper 3
  5. If you have selected [Recycled Paper], [Color Paper], [Letterhead], [Label Paper], [Envelope], or [Preprinted Paper] for the paper type, press [Escape].
  6. Select [Maintenance] -> Press [OK]
  7. Select [General Settings] -> Press [OK]
  8. Select the paper thickness setting for the specified paper type -> Press [OK]
  9. Select the tray where the specified type of paper is loaded -> Press [OK] If you selected [Letterhead Setting], [Label Paper Setting], or [Envelope Setting] in Step 8, you can specify the paper thickness for each tray separately. For other paper types, the specified paper thickness is applied to all trays.
  10. Change the paper type setting to thicker -> Press [OK].

Toner scattering

Symptom

The toner spreads under the horizontal lines.

Solution 1

Enable the scattered toner prevention function with SP1-891-xxx (Scattering Control).
Change the value of the tray which you want to adjust.

SP No.	SP Name	Adjustment Range
SP1-891-001	Scattering Control: Main	0 to 2 (0: Disable, 1: Scattering Control mode 1, 2: Scattering Control mode 2)
SP1-891-002	Scattering Control: Option Tray 1	
SP1-891-003	Scattering Control: Option Tray 2	
SP1-891-004	Scattering Control: Option Tray 3	

SP No.	SP Name	Adjustment Range
SP1-891-005	Scattering Control: Option Tray 4	
SP1-891-006	Scattering Control: By-Pass Tray	

Note

This SP takes effect when the paper type is Plain Paper, Plain Paper 2, or Middle Thick.

1. Set SP 1-891 (Scattering Control) to “1”.
2. Set SP 1-891 to ”2” if the symptom is not solved in step 1.

Note

- You can also enable the scattered toner prevention function with the UP mode.
- IM 550F/600F/600SRF: [Settings] -> [Machine Features Settings] -> [Scattered Toner Image Prevention]
- P 800/801: [Menu] -> [Maintenance] -> [Quality Maintenance] -> [Scattered Toner Prevention]

Related information

When you change the paper type setting or enable the scattered toner prevention function, the transfer current is changed.

Solution 2

Change the paper type setting to thicker with the procedure below.

- IM 550F/600F/600SRF
  1. Press the [Settings] icon on the operation panel.
  2. Press [Tray Paper Settings].
  3. Press [Next].
  4. Select the tray from [Tray Paper Size: Tray 1] to [Tray Paper Size: Tray 5] for which you want to change the paper type.
  5. Change the paper type setting to thicker in [Paper Thickness].
- P 800/801
  1. Press the [Menu] key on the control panel.
  2. Select [Paper Input] -> Press [OK]
  3. Select the tray from [Tray Paper Size: Tray 1] to [Tray Paper Size: Tray 5] for which you want to change the paper type -> Press [OK]
  4. Change the paper type setting to thicker -> Press [OK] The setting is complete when specifying the following types of paper: Thin Paper, Plain Paper, Plain Paper 2, Middle Thick, Thick Paper 1, Thick Paper 2, Thick Paper 3, Special Paper 1, Special Paper 2, Special Paper 3
  5. If you have selected [Recycled Paper], [Color Paper], [Letterhead], [Label Paper], [Envelope], or [Preprinted Paper] for the paper type, press [Escape].
  6. Select [Maintenance] -> Press [OK]

7. Select [General Settings] -> Press [OK]
8. Select the paper thickness setting for the specified paper type -> Press [OK]
9. Select the tray where the specified type of paper is loaded -> Press [OK] If you selected [Letterhead Setting], [Label Paper Setting], or [Envelope Setting] in Step 8, you can specify the paper thickness for each tray separately. For other paper types, the specified paper thickness is applied to all trays.
10. Change the paper type setting to thicker -> Press [OK]

Paper Transport

Paper jam occurred in the paper path between Tray 1 and around the registration roller

Symptom

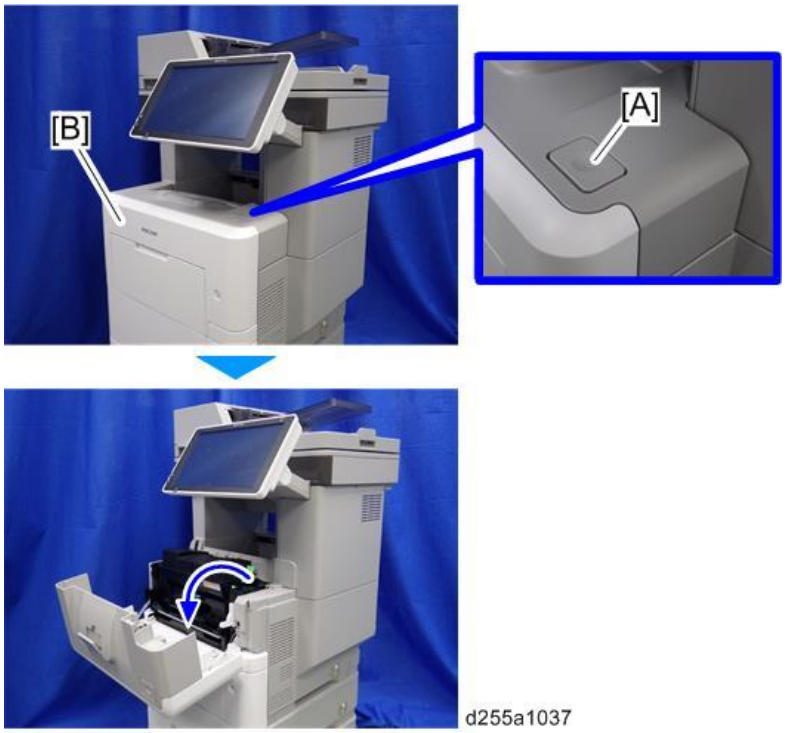
The paper jam (such as J031, J054, J057, J069) occur in the paper path between Tray 1 and around the registration.

Solution

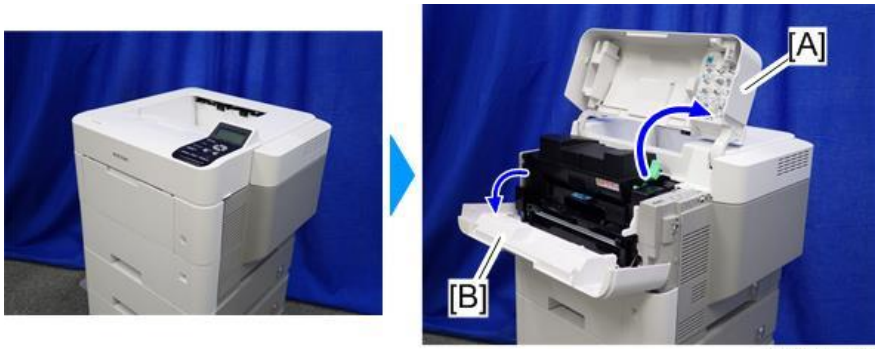
Clean the registration sensor 1 (S13) and the opposing part.

1. Open the front cover.

   IM 550F/600F/600SRF: Push the button [A] and open the front cover [B].

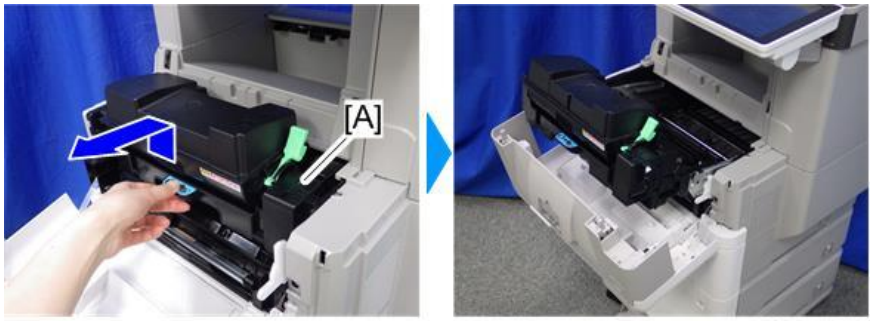


   P 800/801: Open the upper cover [A], and then open the front cover [B].



d255a1432

2. Pull out the PCDU [A].

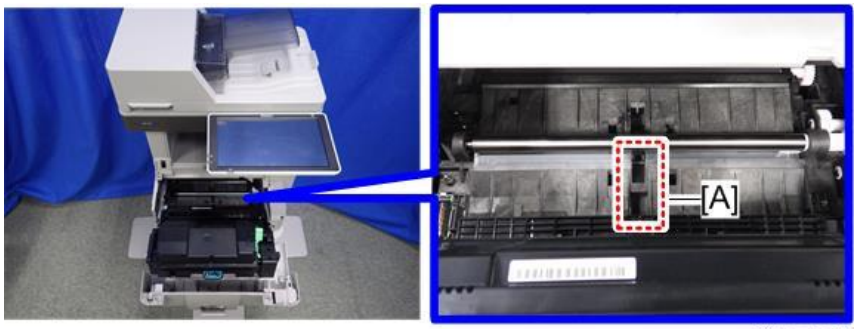


d255a1513

3. Clean the registration sensor 1 (S13) [A] with a damp cloth from the backside of the PCDU [B].

d255a1515

4. Clean the opposing part [A] of the registration sensor 1 (S13) with the damp cloth.



d255a1516

Paper jam (J001) occurred after removing the jammed paper from the registration section

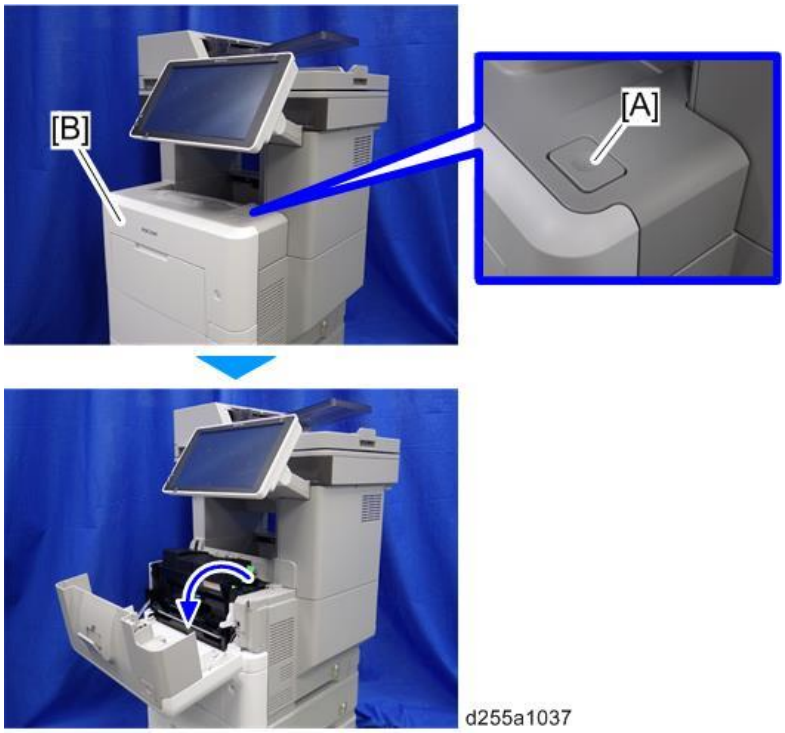
Symptom

Paper jam (J001) occur after removing the paper which was jammed between the fusing section and registration section. This is because the registration filler has got under the registration roller when removing the jammed paper.

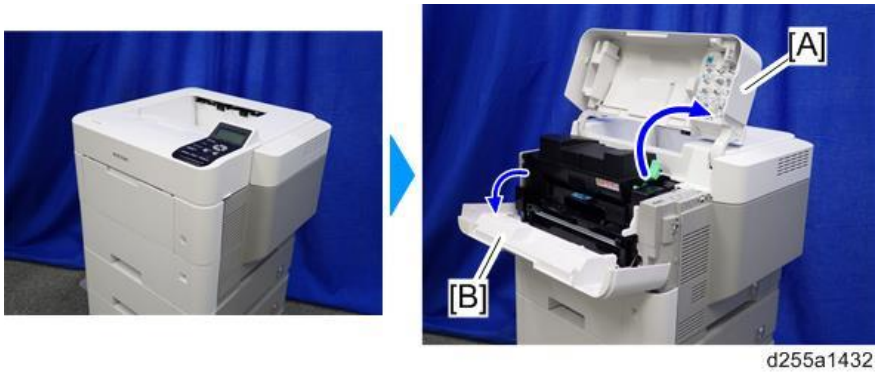
Solution

1. Open the front cover.

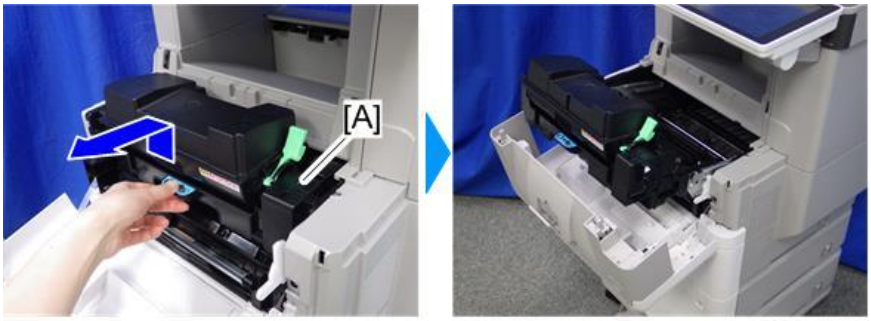
   IM 550F/600F/600SRF: Push the button [A] and open the front cover [B].



   P 800/801: Open the upper cover [A], and then open the front cover [B].

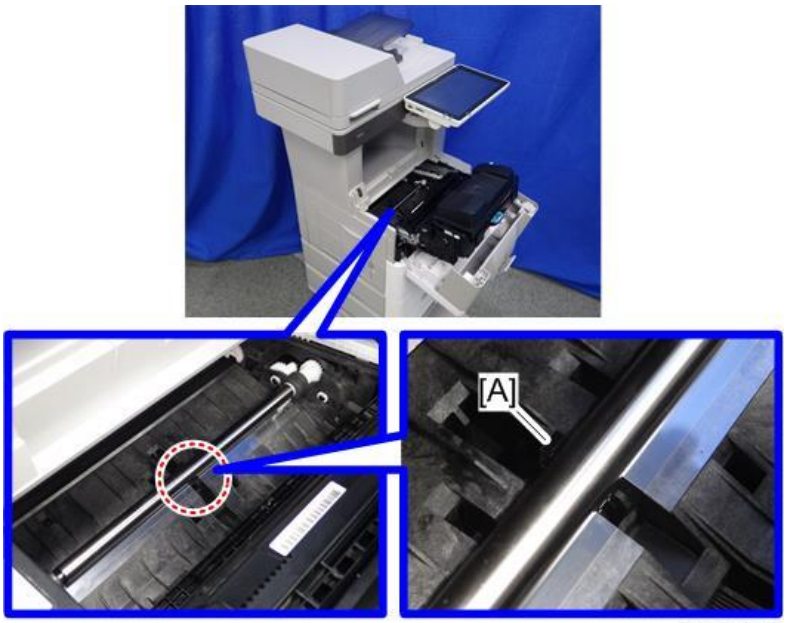


2. Pull out the PCDU [A].



d255a1513

3. Check whether the registration filler [A] moves smoothly.



d255a1517

Non-feed jam in DF (IM 550F/600F/600SRF Only)

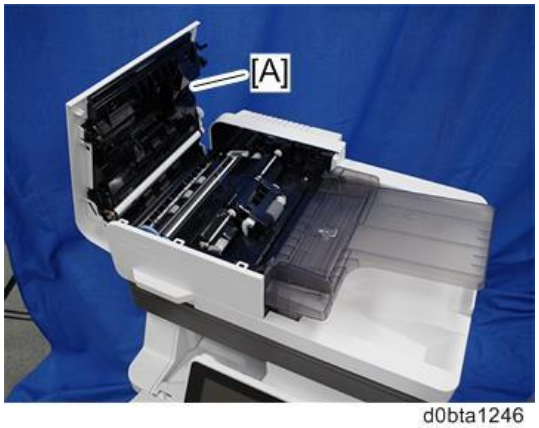
Symptom

Non-feed jam occurs when 60 or more originals are strongly pushed into the DF.

Solution

- Open the DF upper cover [A] and remove the originals. Then place the originals into the DF. When

placing the originals, do not push them into the DF.



d0bta1246

- Instruct users to reduce the number of originals loaded into the DF.

Others

Problems which can be solved by executing drum refresh mode

Execute the drum refresh mode when the following image quality failure occur.

- Background stains appear as bands perpendicular to the paper feed direction
- Vertical white streaks with about 1mm width in the form of a dotted line appear 15mm to the left of the paper center

Drum refresh procedure

Note

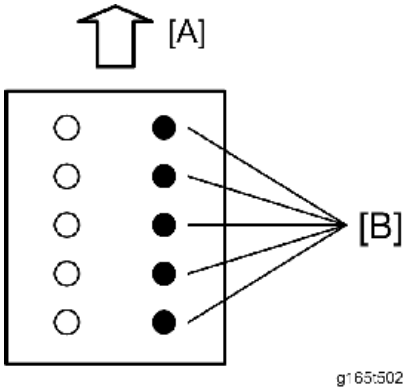
- It takes approximately 3 minutes to refresh the drum.
- If sheets of paper are loaded in the bypass tray, first remove them, and then refresh the drum.

- IM 550F/600F/600SRF
  1. Press the [User Tools] icon on the operation panel.
  2. Press [Maintenance Features].
  3. Press [Maintenance].
  4. Press [Drum Refresh]
  5. Press [Start].
  6. Press [Exit].
- P 800/801
  1. Press the [Menu] key on the control panel.
  2. Select [Quality Maintenance] -> Press [OK]
  3. Select [Drum Refresh] -> Press [OK]
  4. Select [OK].

Problem at regular intervals

Image problems may appear at regular intervals that depend on the circumference of certain components.

The following diagram shows the possible symptoms (black or white dots at regular intervals).



[A]: Paper feed direction

[B]: Problems at regular intervals

- 29.9 mm intervals: Charge roller
- 36.8 mm intervals: Registration roller
- 44.9 mm intervals: Development roller
- 58.0 mm intervals: Transfer roller
- 94.2 mm intervals: Drum
- 94.2 mm intervals: Pressure roller
- 109.9 mm intervals: Hot roller

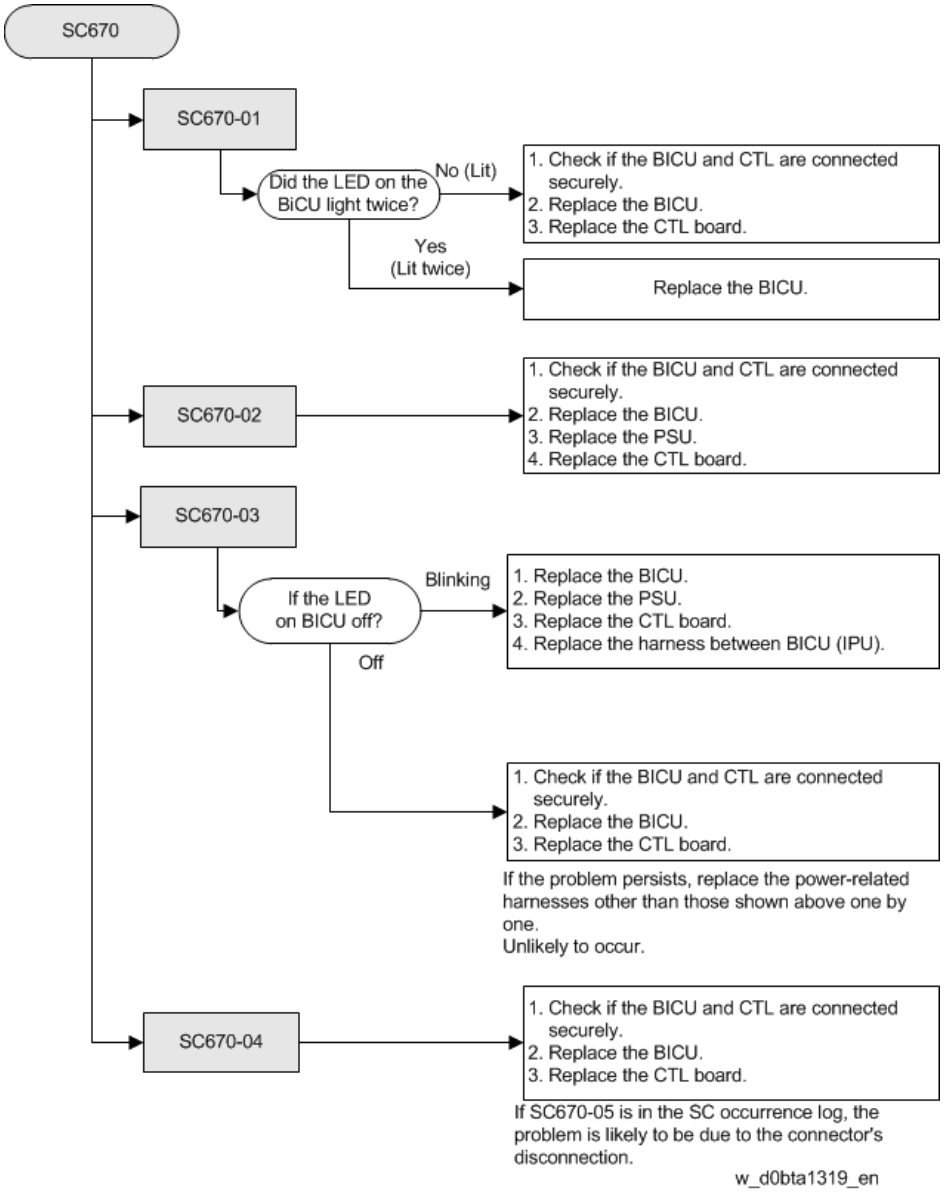
SC670 (engine startup error) is displayed

Cause

The engine board resets at an unexpected time and does not start up again.

This occurs in the priority order of SC670-03 > 04 > 05 >01 > 02.

Solution



Smell issue (IM 600SRF)

Symptom

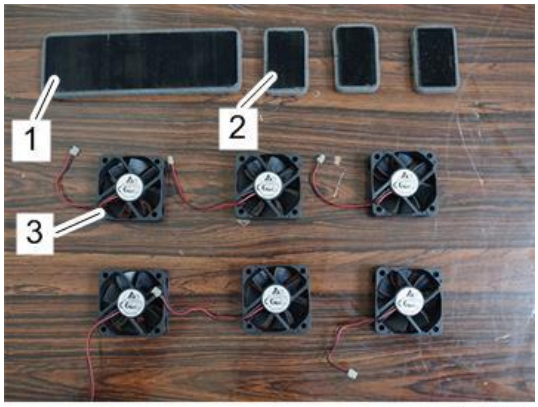
The machine sometimes gives off an unpleasant, chemical smell.

Solution

Install the smell reduction fan (FAN5).

Accessory Check

No.	Description	Q'ty
1	Filter (large)	1
2	Filters (small)	3
3	Fans	6



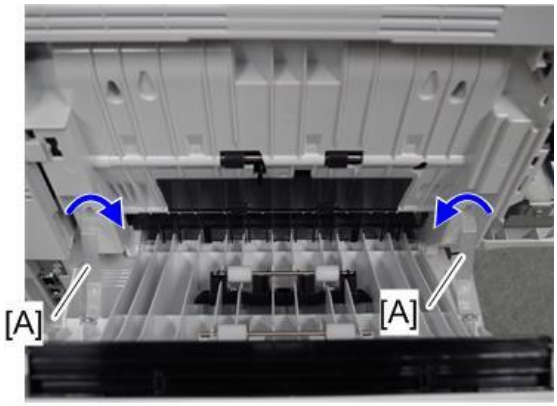
d0bta1128

Installation Procedure

1. Open the finisher rear cover [A].

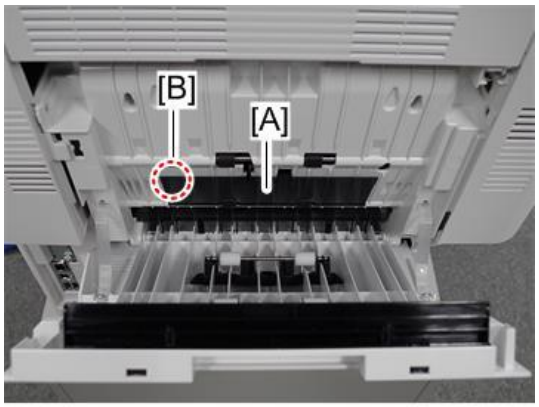
d0bta1072

2. Release the belts [A] from the mainframe by twisting the ends.



d0bta1053

3. Remove the cover [A] by inserting a flathead screwdriver into [B].

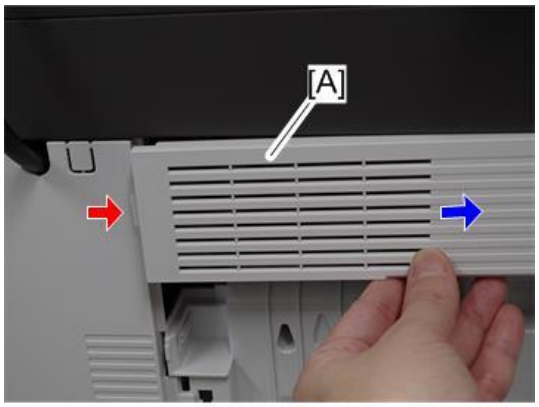


d0bta1129

4. Release the hook [A].

d0bta1073

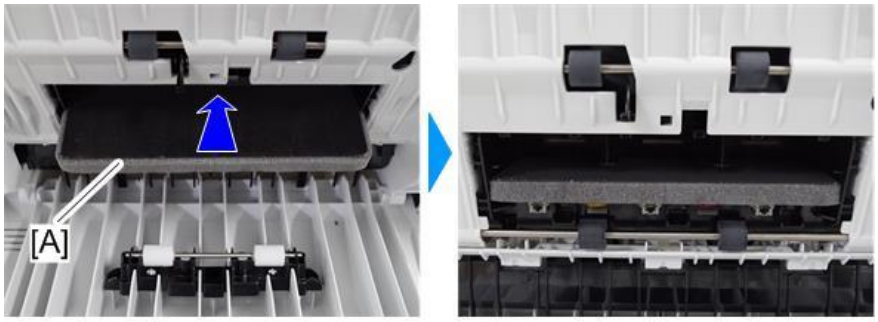
5. Slide the cover [A] to release the hook, and then remove the cover [A].



×1

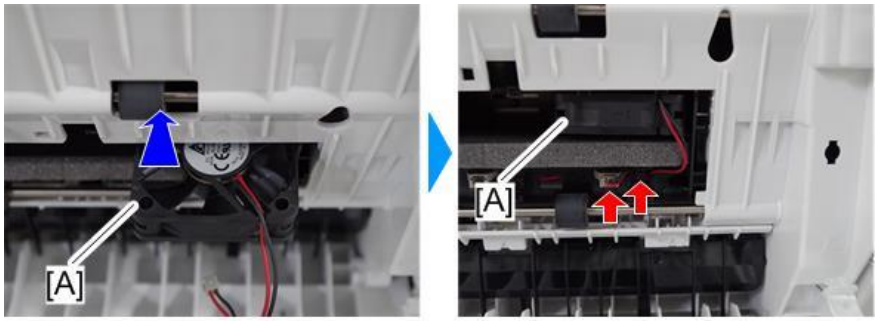
d0bta1074

6. Insert the filter (large) [A] into the slot.



d0bta1130

7. Insert the fan [A] into the slot with the label facing upward, and then connect the connector and pass the cables through the harness guide.

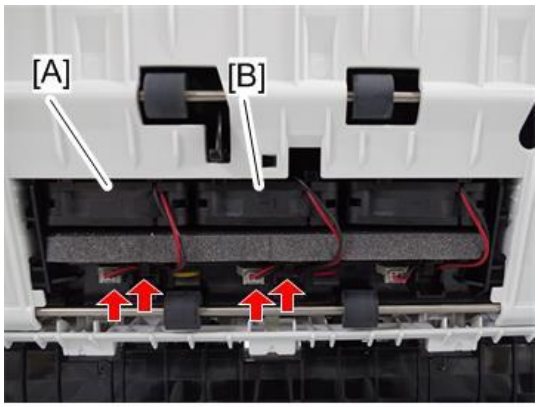


d0bta1131

8. Install the fans [A] and [B] in the same way.

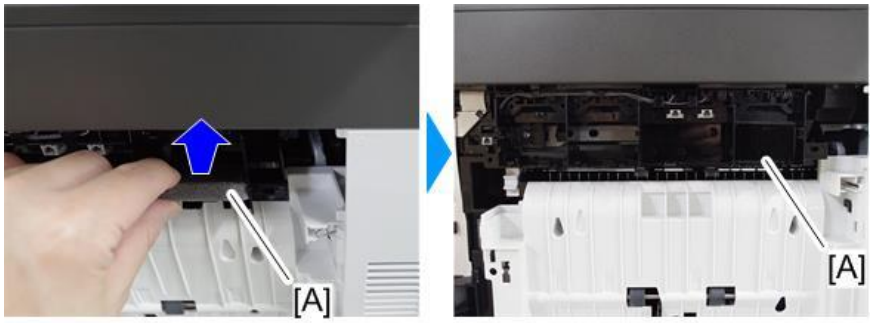
Important

The labels of these fans must also face upward.



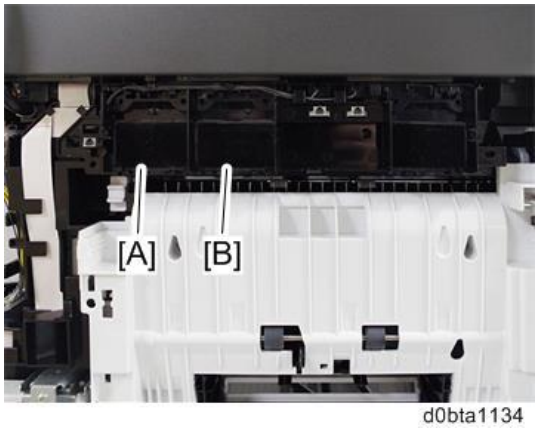
d0bta1132

9. Insert the filter (small) [A] into the slot.



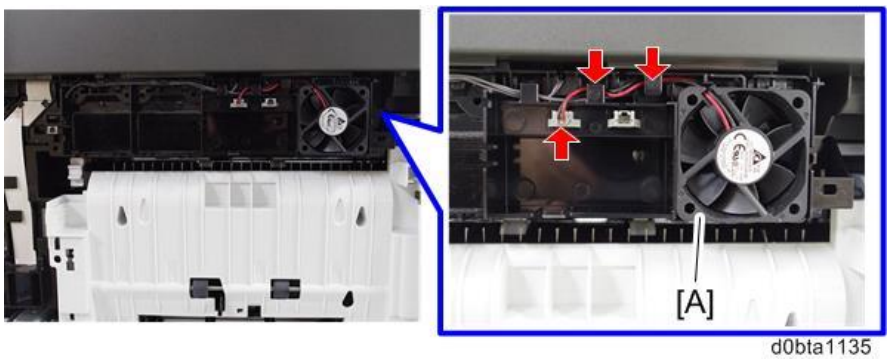
d0bta1133

10. Install the filters [A] and [B] in the same way.



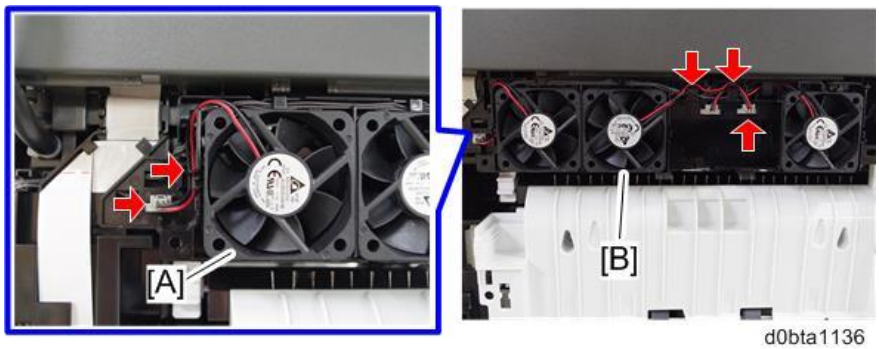
d0bta1134

11. Insert the fan [A] into the slot with the label facing outward, and then connect the connector and pass the cables through the harness guides.



d0bta1135

12. Install the fans [A] and [B] in the same way.



d0bta1136

13. Reattach the covers.

Note

By default, the smell reduction fan (FAN5) stops operating 15 seconds after printing operation finishes. If further smell reduction is necessary, use SP3-906-001 to configure the time it takes for the fan to stop.

- SP3-906-001 (Range: 15 - 240 (seconds), default: 15)

Smell issue (IM 550F/600F/P 800/801)

Symptom

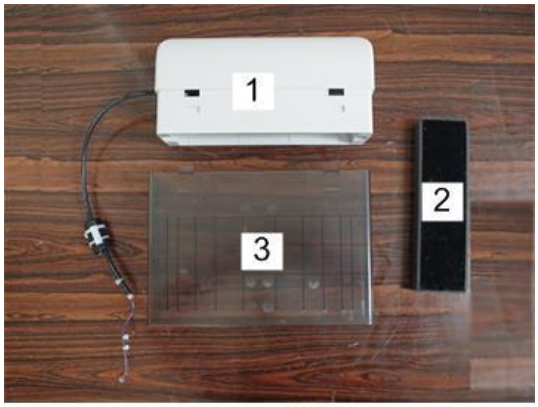
The machine sometimes gives off an unpleasant, chemical smell.

Solution

Install the smell reduction fan (FAN5).

Accessory Check

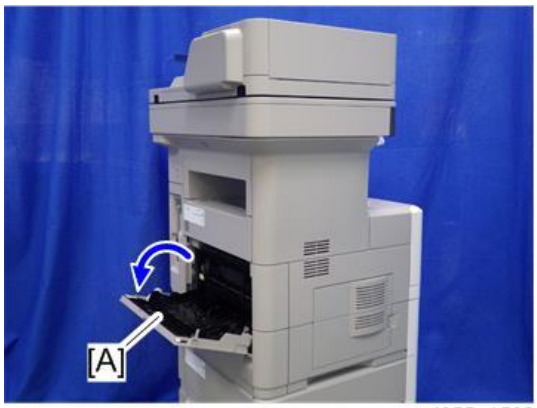
No.	Description	Description
1	Deodorant fan	1
2	Filter	1
3	Cover (only for P 800/801)	1



d0bta1137

Installation Procedure

1. Open the rear upper cover [A].



d255a1509

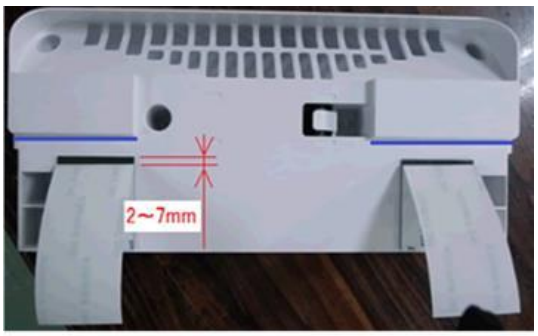
2. Remove the left rear cover [A] by rotating it in the direction of the arrow. (hook×2)

d255a1510

3. Set the filter into the deodorant fan.

d0bta1138

4. Detach 2-7 mm of the tape and fold them as shown below.



d0bta1139

5. IM 550F/600F: Place the fan in the location of where the blue line on the fan and red line on the mainframe is located.

FAN (Underside):

d0bta1140

Mainframe (Rear side):

d0bta1141

6. Place the fan in the location of where the blue line on the fan (shown in Step 4) and red circle on

the mainframe are located. Also attach the cover as align onto the green circle.

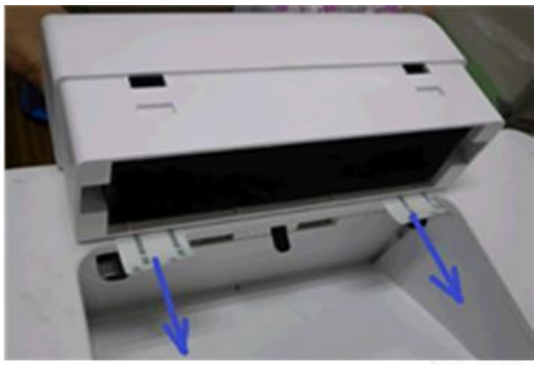
d0bta1142

7. Pull the tapes slowly from the front of the machine.

IM 550F/600F:

d0bta1143

P 800/801:



d0bta1144

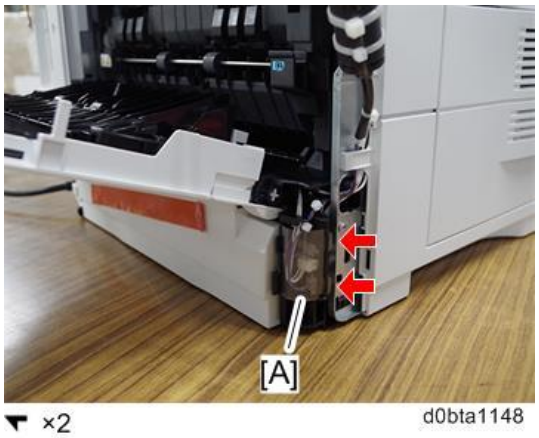
8. Route the harnesses as shown below.

d0bta1145

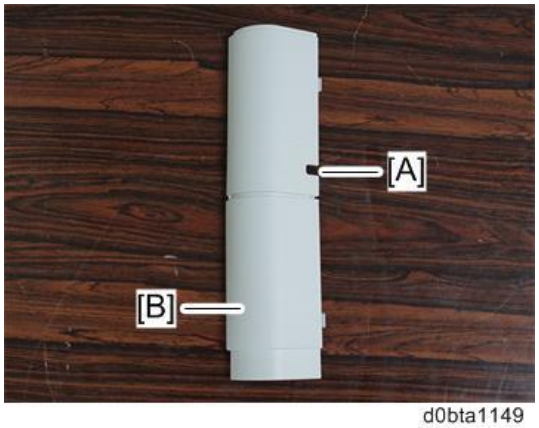
9. Open the harness alignment film [A].

10. Connect the connector of the deodorant fan.

11. Close the harness alignment film [A].



12. Remove the knockout [A] of the left rear cover [B] with a pair of nippers.



d0bta1149

13. Pass the harness as shown below and reattach the left rear cover.

d0bta1150

Note

By default, the smell reduction fan (FAN5) stops operating 15 seconds after printing operation finishes. If further smell reduction is necessary, use SP3-906-001 to configure the time it takes for the fan to stop.

- SP3-906-001 (Range: 15 - 240 (seconds), default: 15)

Adjusting the Finisher Side-to-Side Registration

See Finisher Side-to-Side Registration Adjustment.

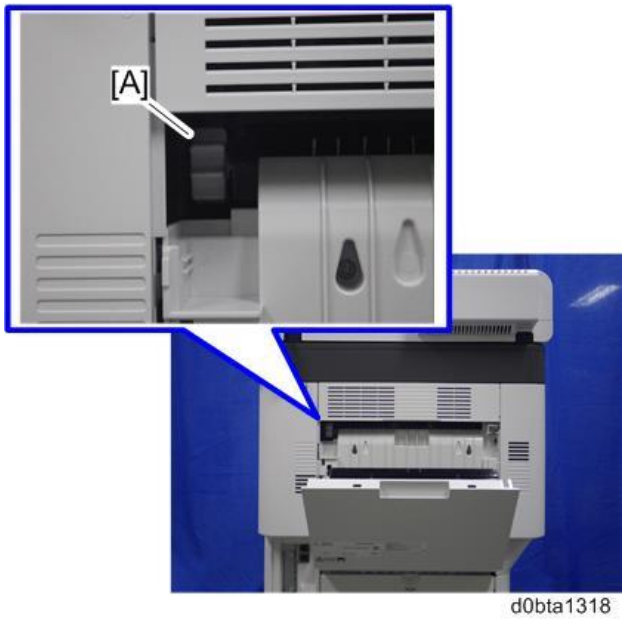
Small sized jammed paper cannot be removed (jam code: 001) (IM 600SRF only)

Symptom

A sheet of A5 LEF-, A6 SEF-, or B6 SEF-size paper is jammed inside the internal finisher (jam code: 001) and it cannot be removed from the finisher output tray or from the rear cover side.

Solution

Rotate the paper removal knob [A] to move the jammed paper.



When SC672 (Controller start up error) is displayed

Symptom

The following occur:

SC672-00	Communication error between operation panel and controller board (PCB15) after machine is powered on.
SC672-10	Communication error (receive) between operation panel and controller board (PCB15) after machine is powered on.
SC672-11	Communication error (send) between operation panel and controller board (PCB15) after machine is powered on.
SC672-12	Communication error between operation panel and controller board (PCB15) after normal start-up.
SC672-13	Communication error between operation panel and controller board (PCB15) after normal start-up; Operation panel not detected.

Note

- SC672 does not appear on the SMC report, as it is not logged.
- The Smart Operation Panel communicates with the controller via a USB cable and BiCU (PCB16). SC672 is triggered when the panel cannot communicate with the controller.

Cause

Possible causes of SC672 include:

- USB communication path failure (USB cable, BiCU (PCB16))
- Controller board (PCB15) boot up error and/or operation panel boot up error due to abnormal break in operations of Controller board (PCB15).

Possible causes of operation panel cannot light include:

- USB communication path failure (USB cable, BiCU (PCB16))
- Operation panel cannot communicate with controller board (PCB15) due to controller board (PCB15) boot-up error

Solution

Do the following.

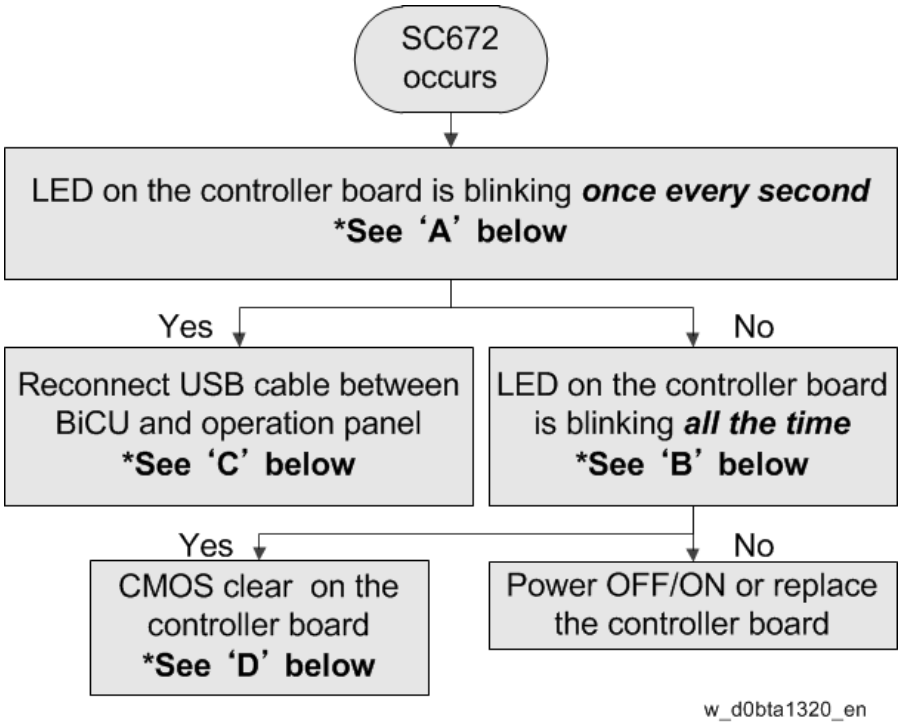
1. Turn the machine power OFF/ON.
2. Do the action in the flowchart below to determine the cause and best course of action when SC672 occurs.

Note

If the SC recurs after you do the action in this flowchart, do the following.

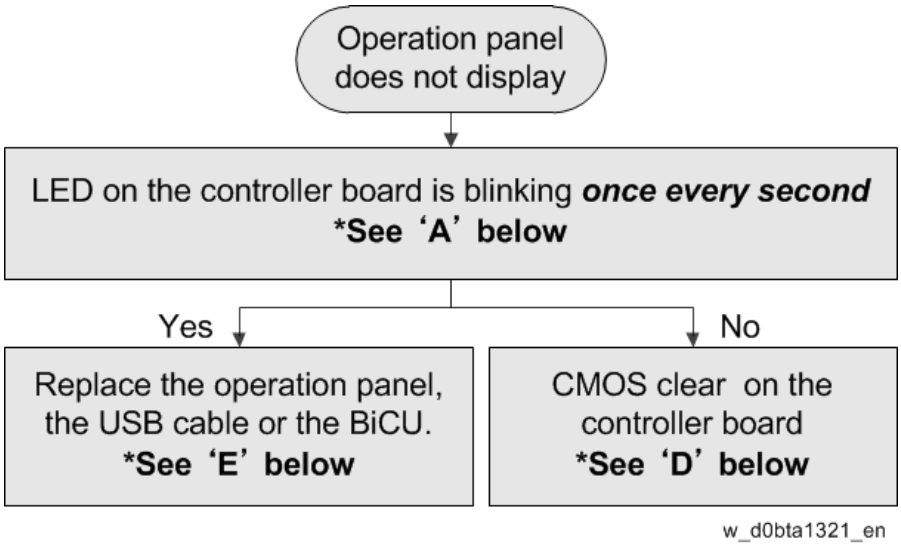
- If SC819 (cache error) appears in the SC history, replace the controller board (PCB15).
- If SC991 (SCS: scs time count level c') appears in the SC history, replace the controller board (PCB15) and USB cable.

Flowchart to determine parts to replace when SC672 occurs



Parts	How to determine the cause
USB cable	LED on controller board (PCB15) blinks **once every second**
Operation panel	LED on controller board (PCB15) blinks **once every second**
Controller board (PCB15)	LEDs on Controller board (PCB15) blink constantly

Flowchart to determine parts to replace when no display on operation panel

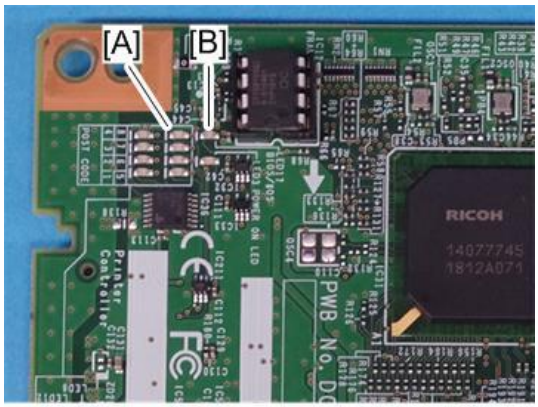


Parts	How to determine the cause
USB cable	LED on controller board (PCB15) blinks **once every second**
Operation panel	LED on controller board (PCB15) blinks **once every second**
BiCU (PCB16)	-
Controller board (PCB15)	LED on Controller board (PCB15) does not blink

[A]: LEDs on the controller board (PCB15)

Check the condition (lit, off, blinking) of the LED on the controller board (PCB15).

Normal situation: POSTCODE LED 8 [A] and BIOS LED [B] blinking **once every second**.



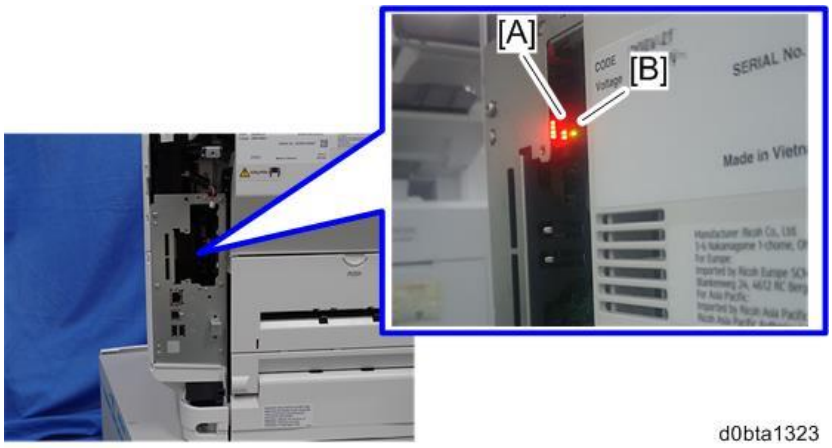
d0bta1322

No.	Note
LED	For CPU • POSTCODE 8 and BIOS LED **blink** when the CPU is operating normally. • POSTCODE 8 and BIOS LED are lit or off when there is a problem with the CPU.

Confirmation procedure:

1. Remove the FCU unit. (Refer to FAX unit FSM.)
2. Remove the I/F slot.

3. Turn On the machine and check the LED from the rear-right side of the machine.



[A]: POSTCODE LED8

[B]: BIOS LED

[B]: Abnormal mode: LEDs on the controller board (PCB15)

LEDs 1 to 8 blink constantly.

Example:

No.	Note
POSTCODE 1-8	1. For self-diagnosis code (BIOS). 2. After the BIOS starts up, LEDs 4,5,7 **turn off** and LEDs 1,2,3 ,6 **turn on** and LED 8 **blinks**. LED 8 is **lit or off** when there is a problem with the CPU.
BIOS LED	• LED is **lit** when the BIOS is running. • LED **blinks** when the OS is running.

[C]: Reconnecting and replacing the USB cable

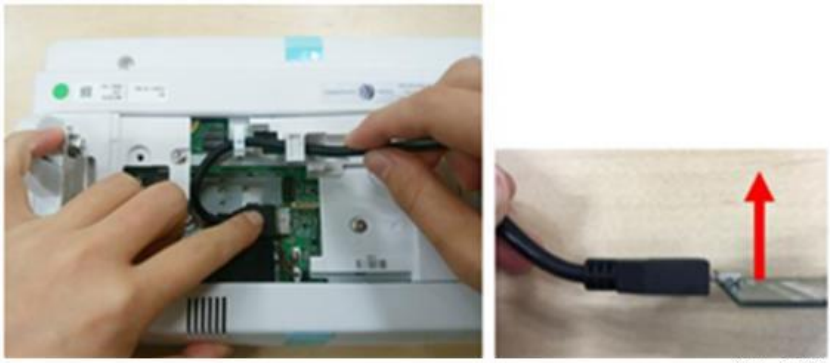
- Reconnecting the USB cable

  USB connector at the operation panel:

d0bta1325

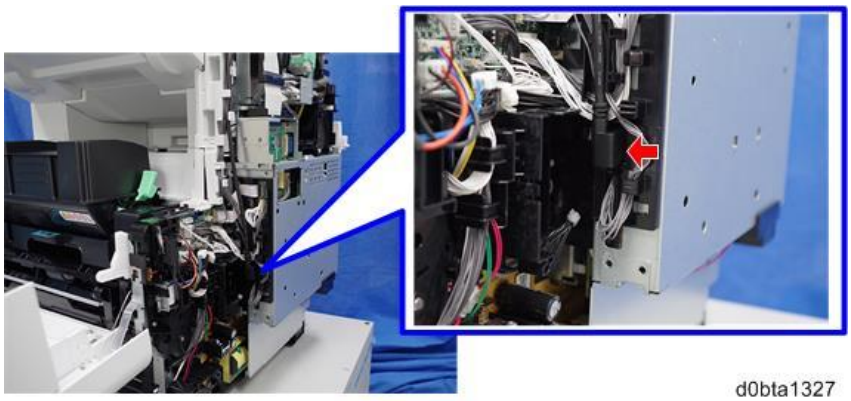
Note

When connecting the cable, hold the molded part of the cable as shown below so as not to apply excessive force on the connector part. Applying excessive force toward the upper direction on the connector may cause connection failure.



d0bta1326

USB connector at the BiCU (PCB16):



d0bta1327

- Replacing the USB cable
  Refer to "Operation Panel Unit".

[D]: CMOS clear

1. Turn the machine power OFF.
2. Turn Dip switch 1-3 ON for 10 seconds.
3. Turn Dip switch 1-3 OFF.
4. Turn the machine power ON.
   Dip switch on the controller board (PCB15):

d0bta1328

[E]: Replacing the operation panel, the USB cable or the BiCU (PCB16)

Refer to "Operation Panel Unit" or "BiCU (PCB16)".

Prints are not stapled correctly

Symptom

- Prints were made in staple mode but some sheets are not stapled.
  Example: Two sheets were printed but only one sheet was stapled.
- The first sheet was unexpectedly rotated clockwise while being pulled back, which causes the two sheets to be misaligned.

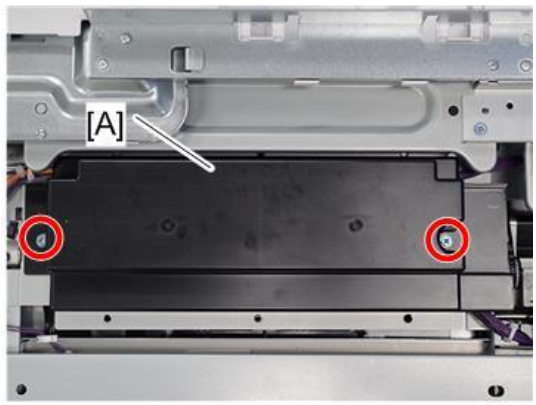
Cause

The bushing at the right end of the shift roller has been scraped, which makes it unable for the rollers to apply pressure, preventing the sheets from being transported to the staple tray correctly.

Solution

Replace the bushing.

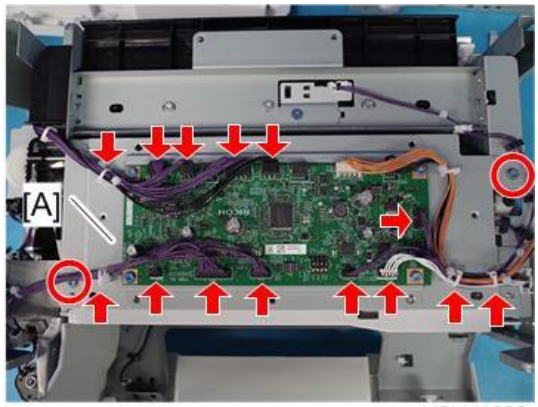
1. Remove the internal finisher. (Internal Finisher)
2. Remove the finisher main board cover.



×2 d0bta1049

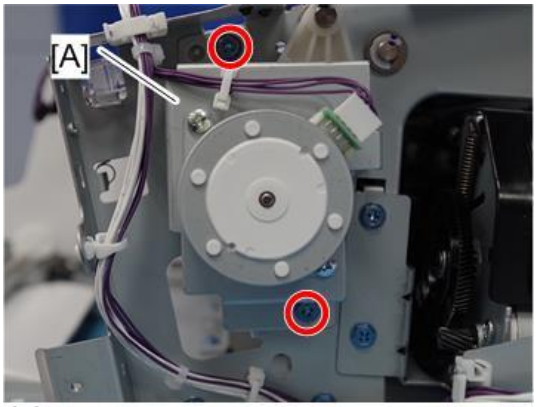
3. Remove the finisher frames. (Finisher Frames)

4. Remove the finisher main board bracket [A].



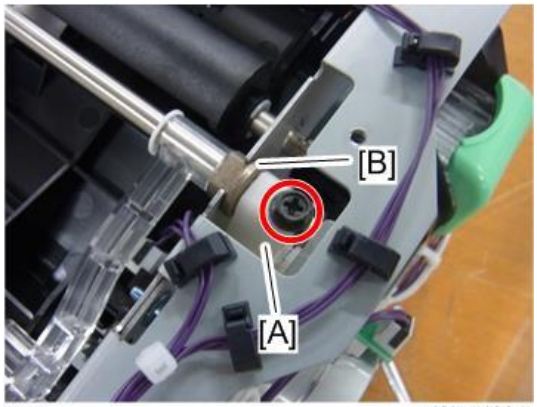
×2 ×10 ×4 d0bta1333

5. Remove the finisher exit guide plate motor bracket [A].



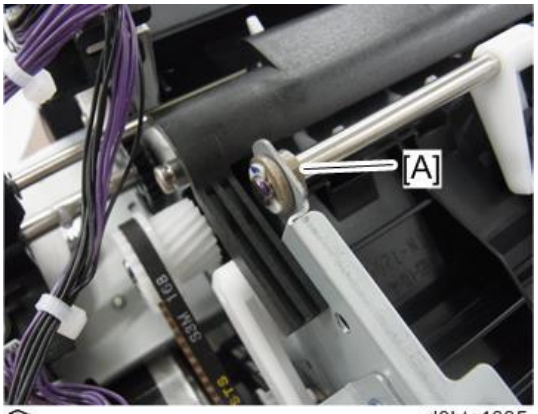
×2 d0bta1038

6. Remove the gear [A] and bushing [B] from the right end of the exit open/close pawl.



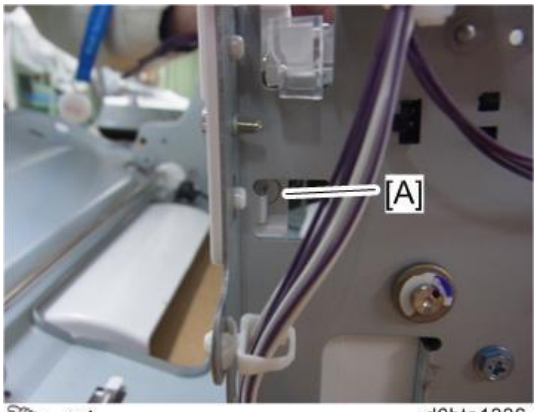
×1 d0bta1334

7. Remove the bushing [A] from the left end of the exit open/close pawl.



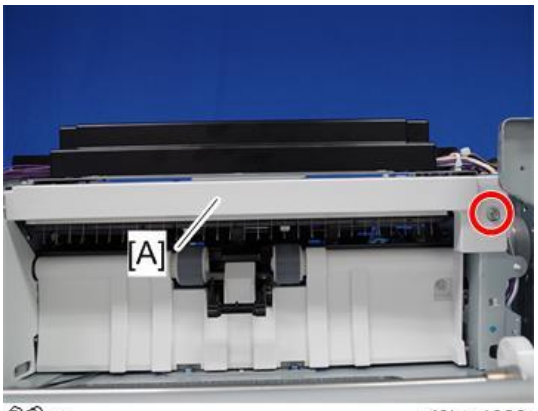
×1 d0bta1335

8. Remove the spring [A] from the right end of the exit open/close pawl.



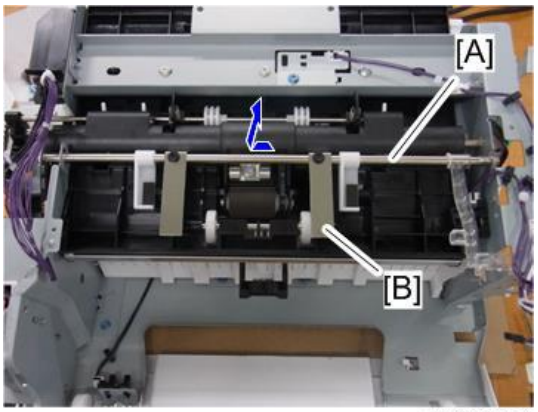
×1 d0bta1336

9. Remove the finisher top front cover [A].



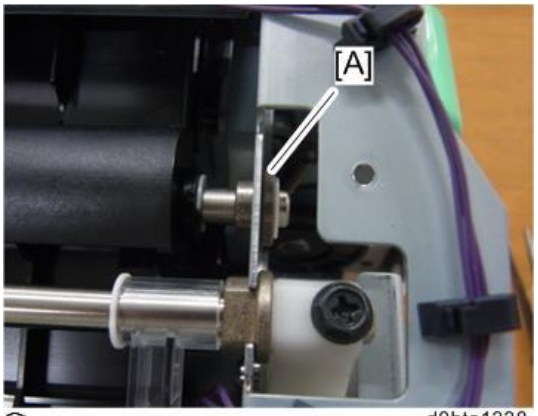
×1 d0bta1028

10. Remove the exit open/close pawl [A] by sliding it to the left and then lifting it.
Lift the spring plate [B] to prevent it from being obstructed by the exit roller.



d0bta1337

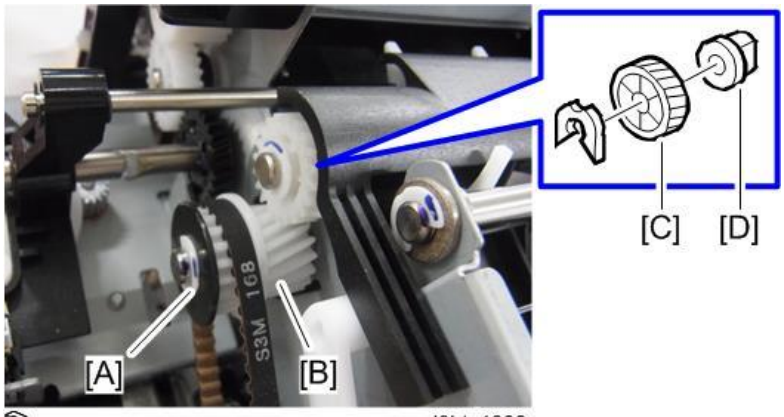
11. Remove the bushing [A] from the right end of the gathering roller.



×1 d0bta1338

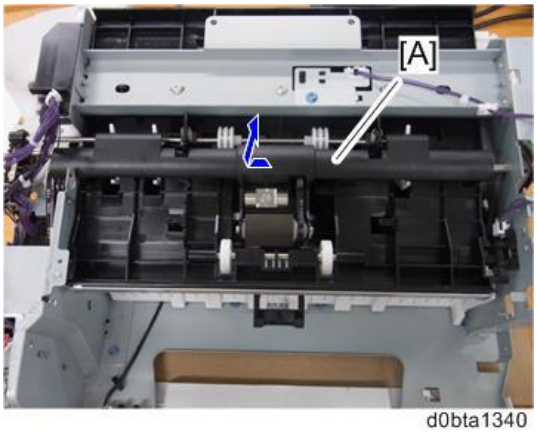
12. Remove the clip ring [A] and slide the pulley [B] to the left.

13. Remove the gear [C] and bushing [D].



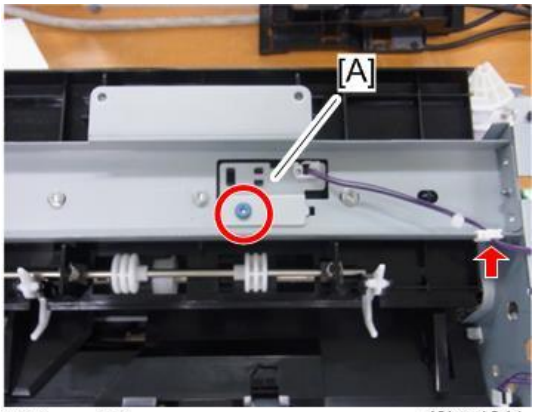
×2 d0bta1339

14. Remove the gathering roller [A] by sliding it to the left and then lifting it.



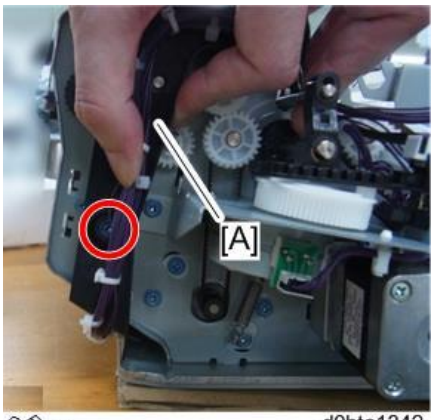
d0bta1340

15. Remove the finisher entrance sensor bracket [A].



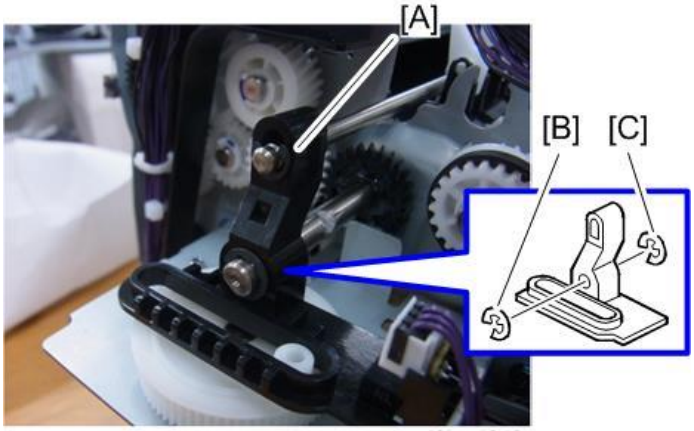
×1 ×1 d0bta1341

16. Remove the harness guide [A].



×1 d0bta1342

17. Remove three retaining rings [A] [B] [C].

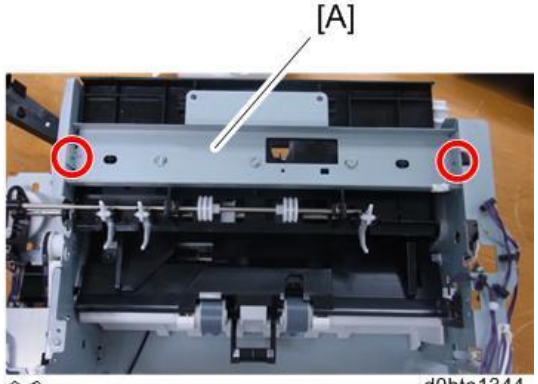


d0bta1343

Note

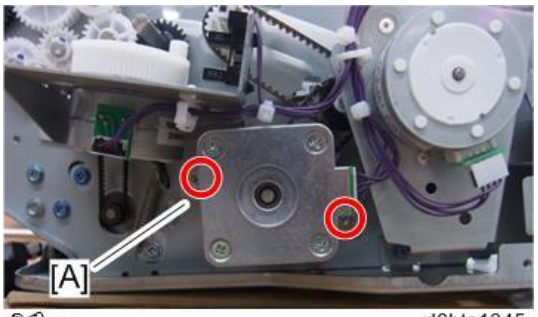
Replace these retaining rings with new ones when reassembling the finisher.

18. Remove the stay [A].



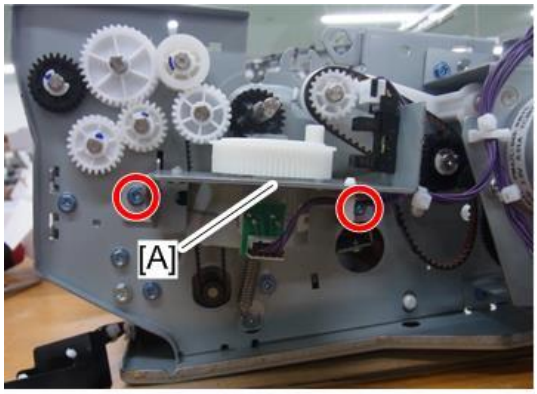
×2 d0bta1344

19. Remove the finisher paper exit motor bracket [A].



×2 d0bta1345

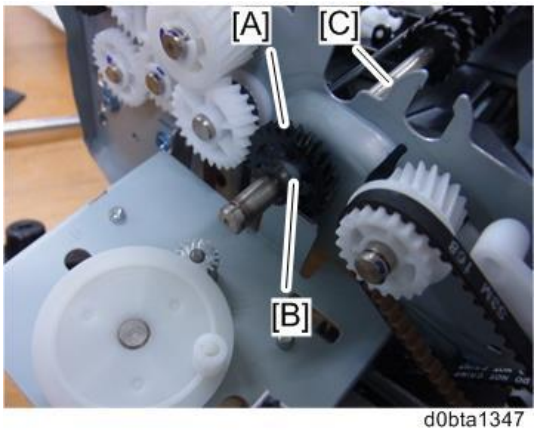
20. Remove the finisher shift roller motor bracket [A].



×2 d0bta1346

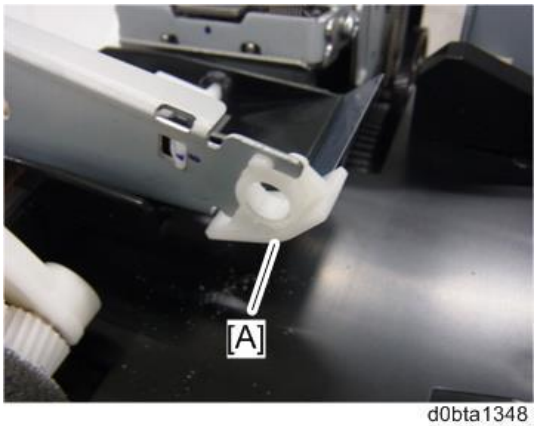
21. Remove the gear [A] and bushing [B] from the shift roller.

22. Remove the shift roller [C].



d0bta1347

23. Replace the bushing [A] with a new one.



d0bta1348

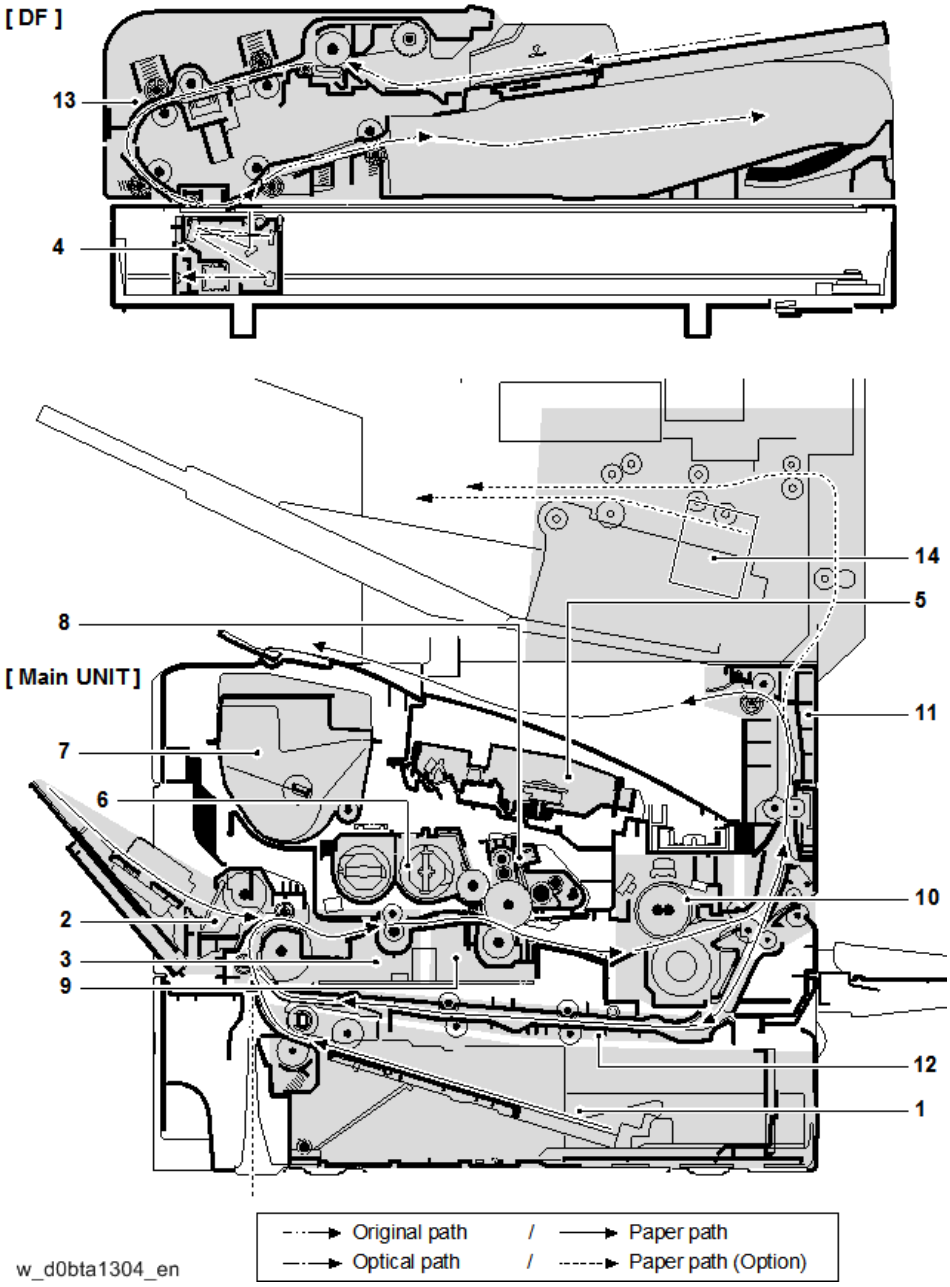
24. Reassemble the machine.

7. Detailed Descriptions

Product Overview

Component Layout/Paper Path

IM 550F/600F/600SRF



No.	Name	No.	Name
1	Paper feed tray	8	Drum unit
2	Bypass tray unit	9	Transfer unit
3	Transportation section	10	Fusing unit

No.	Name	No.	Name
4	Scanner unit	11	Paper exit unit
5	Laser unit	12	Duplex unit
6	Development unit	13	DF
7	Toner cartridge	14	Internal Finisher*1

*1 IM 600SRF only.

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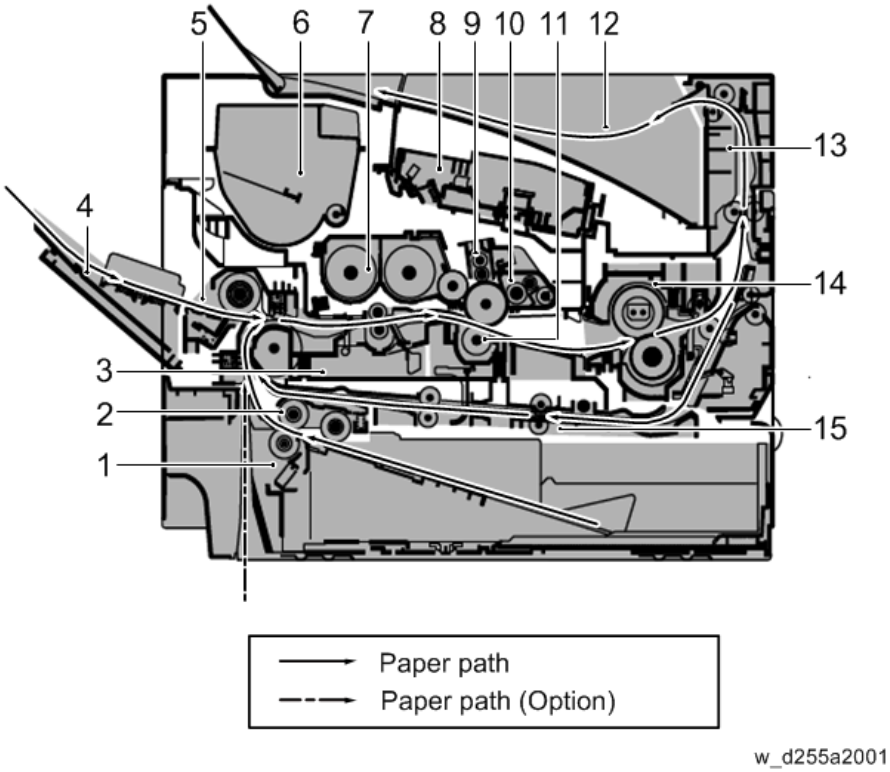
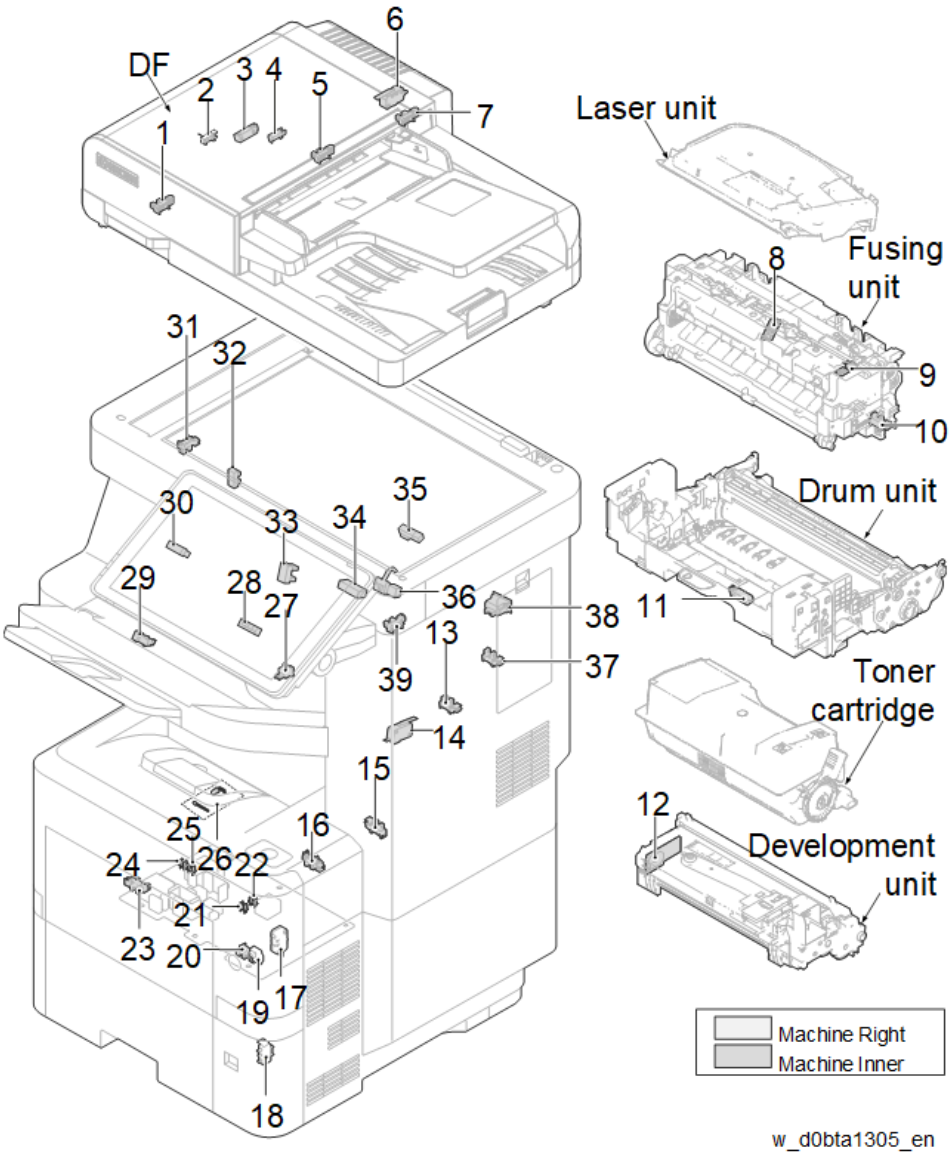


No.	Name	No.	Name
1	Paper feed tray	9	Charge roller
2	Paper feed unit	10	Drum unit
3	Transportation section	11	Transfer unit
4	Bypass tray	12	Paper exit tray
5	Bypass tray unit	13	Paper exit unit
6	Toner cartridge	14	Fusing unit
7	Development unit	15	Duplex unit
8	Laser unit		

Parts Layout

Switches and sensors

IM 550F/600F/600SRF



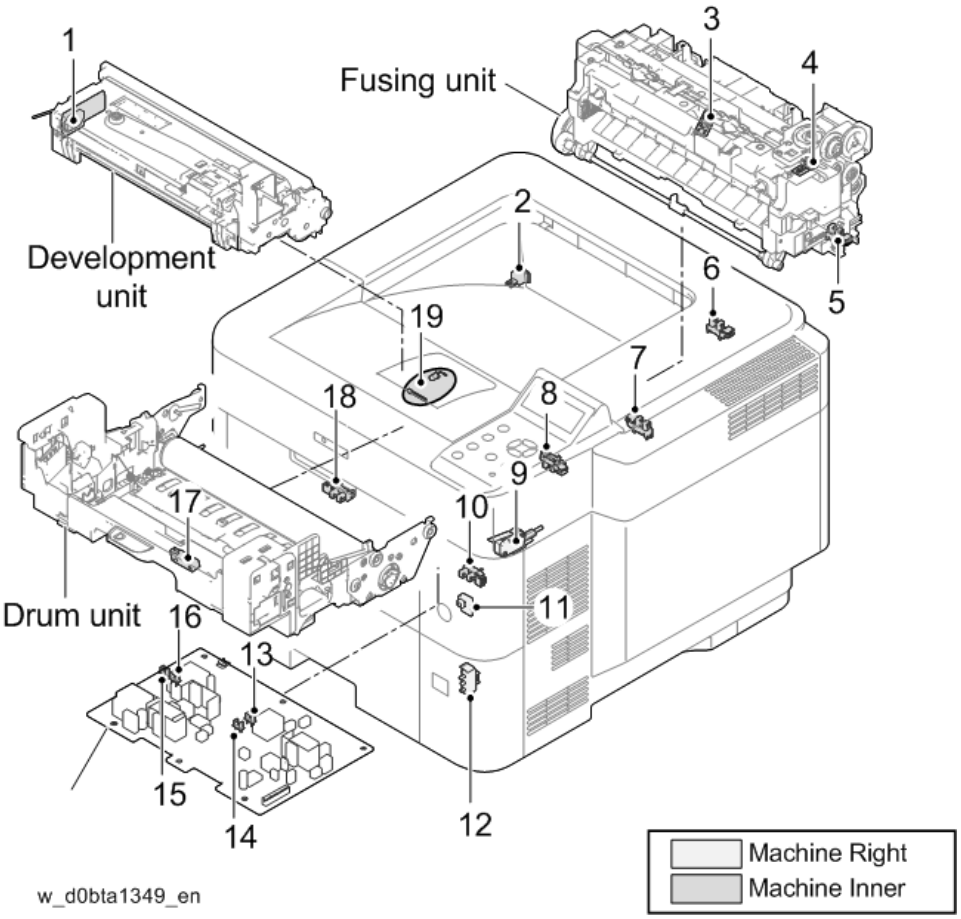
No.	Name	No.	Name
1	DF open/close sensor (S3)	21	Registration sensor 2 (S14)
2	DF original timing sensor (S5)	22	Duplex sensor 2 (S17)
3	DF registration sensor (S2)	23	Bypass paper end sensor (S9)
4	DF original back-side timing sensor (S19)	24	Paper end sensor 2 (S12)
5	DF exit sensor (S4)	25	Paper end sensor 1 (S11)
6	DF Interlock switch (SW4)	26	Waste toner full sensor (S18)
7	DF original sensor (S1)	27	Rear cover switch (SW1)*2
8	Fusing thermistor 2 (Center) (TS2)	28	Finisher paper sensor (S23)*1

No.	Name	No.	Name
9	Fusing thermistor 1 (End) (TS1)	29	Finisher tray lower limit sensor (S22)*1
10	Fusing sensor (S15)	30	Finisher gathering roller HP sensor (S21)*1
11	Registration sensor 1 (S13)	31	Scanner HP sensor (S6)
12	Toner sensor	32	Finisher shift roller HP sensor (S20)*1
13	Paper exit full sensor (S8)	33	Finisher jogger fence HP sensor (S24)*1
14	Finisher interlock switch (SW6)*1	34	Finisher paper exit sensor (S26)*1
15	Duplex sensor 1 (S16)	35	Finisher entrance sensor (S28)*1
16	Envelope sensor (S10)	36	Finisher staple tray paper sensor (S25)*1
17	Interlock switch (SW3)	37	Relay sensor*1
18	Paper feed tray size switch (SW2)	38	Rear cover switch (SW5)*1
19	Main power switch PCB (PCB1)	39	Finisher Exit Guide Plate HP Sensor (S27)*1
20	Paper feed tray limit sensor (S7)	-	-

*1 IM 600SRF only.

*2 IM 550F/600F only.

P 800/801

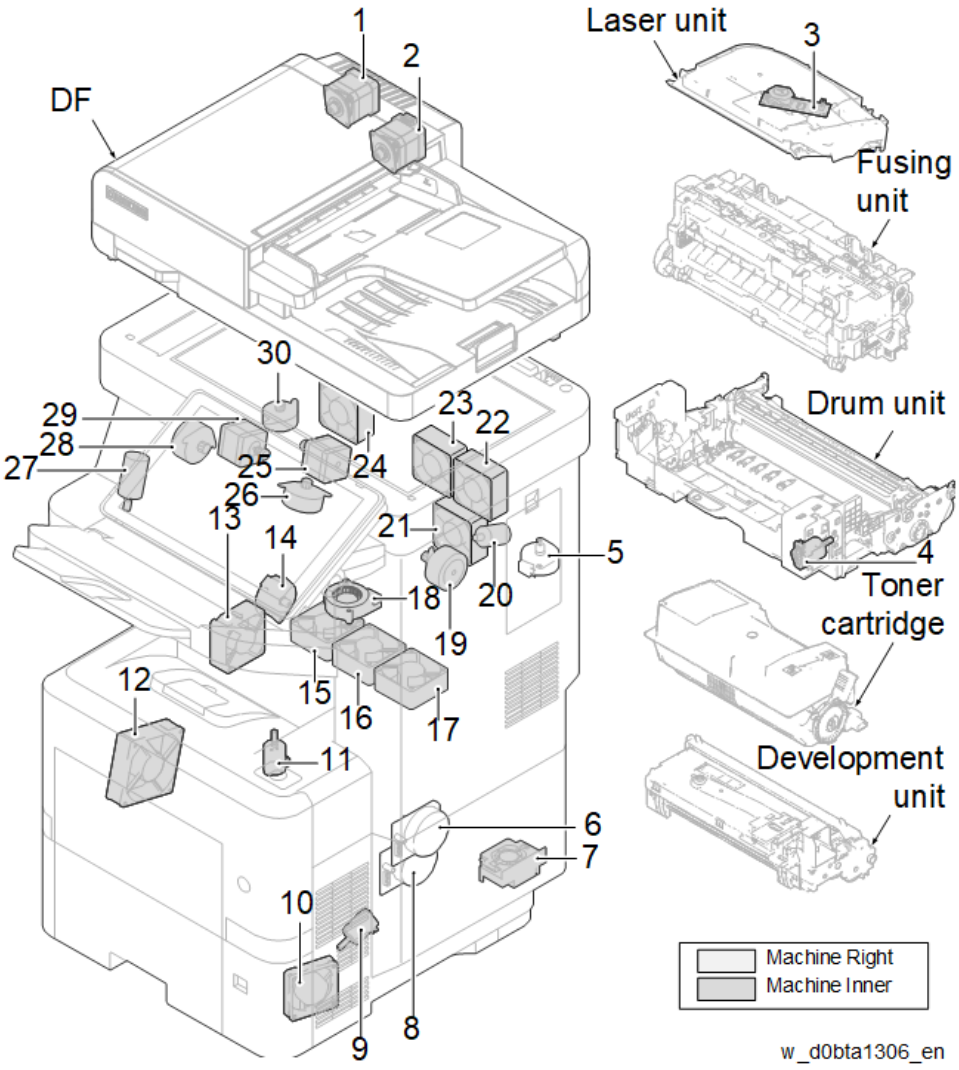


No.	Name	No.	Name
1	Toner density sensor PCB (PCB8)	11	Main power switch PCB (PCB1)

No.	Name	No.	Name
2	Rear cover switch (SW1)	12	Paper feed tray size switch (SW2)
3	Fusing thermistor 1 (End) (TS1)	13	Duplex sensor 2 (S17)
4	Fusing thermistor 2 (Center) (TS2)	14	Registration sensor 2 (S14)
5	Fusing sensor (S15)	15	Paper end sensor 2 (S12)
6	Paper exit full sensor (S8)	16	Paper end sensor 1 (S11)
7	Duplex sensor 1 (S16)	17	Registration sensor 1 (S13)
8	Envelope sensor (S10)	18	Bypass paper end sensor (S9)
9	Interlock switch (SW3)	19	Waste toner full sensor (S18)
10	Paper feed tray limit sensor (S7)		

Drive unit, Fans

IM 550F/600F/600SRF



No.	Name	No.	Name
1	DF paper feed motor (M3)	16	Smell Reduction Fan (FAN5)*1
2	DF paper conveying motor (M1)	17	Smell Reduction Fan (FAN5)*1
3	Polygon motor (M5)	18	Center Fan (FAN6)
4	Toner supply motor (M7)	19	Finisher exit guide plate motor (M17)*1
5	Scanner motor (M4)	20	Finisher stapler motor (M19)*1
6	Drum motor (M6)	21	Smell Reduction Fan (FAN5)*2
7	Controller box fan (FAN4)	22	Smell Reduction Fan (FAN5)*1
8	Main motor (M11)	23	Smell Reduction Fan (FAN5)*1
9	Paper feed tray lift motor (M8)	24	Smell Reduction Fan (FAN5)*1
10	PSU fan (FAN3)	25	Finisher transport motor (M12)*1
11	Fusing pressure release motor (M9)	26	Finisher jogger motor (M16)*1
12	Development fan (FAN2)	27	Finisher tray lift motor (M18)*1
13	Laser fan (FAN1)	28	Finisher gathering roller motor (M14)*1
14	Paper exit motor (M10)	29	Finisher paper exit motor (M13)*1
15	Smell Reduction Fan (FAN5)*1	30	Finisher shift roller motor (M15)*1

*1 IM 600SRF only.

*2 IM 550F/600F only.

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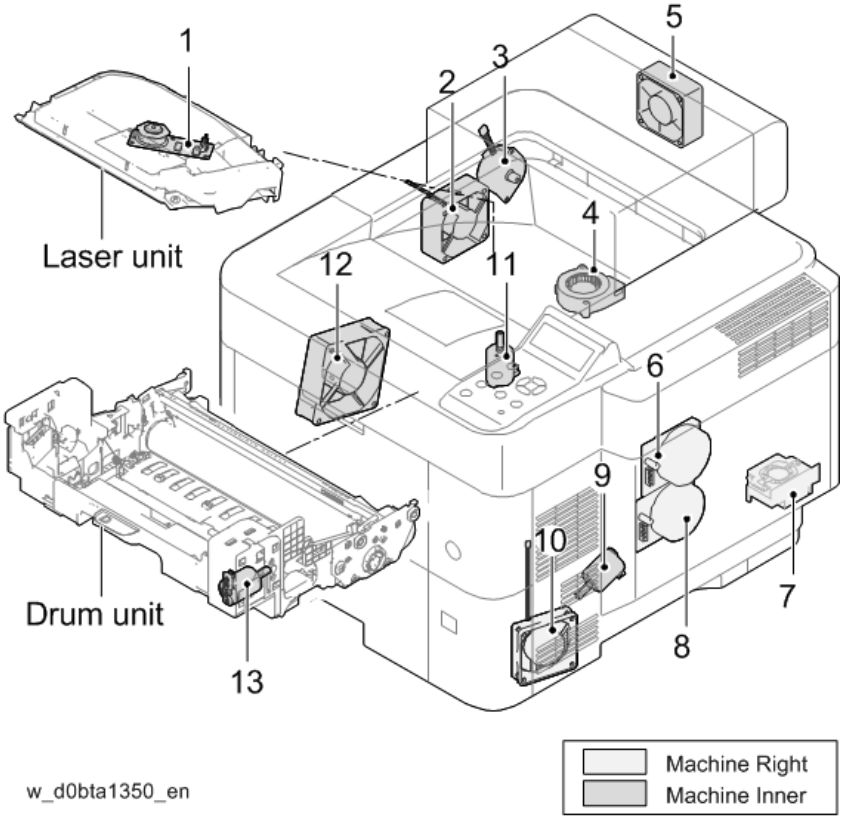
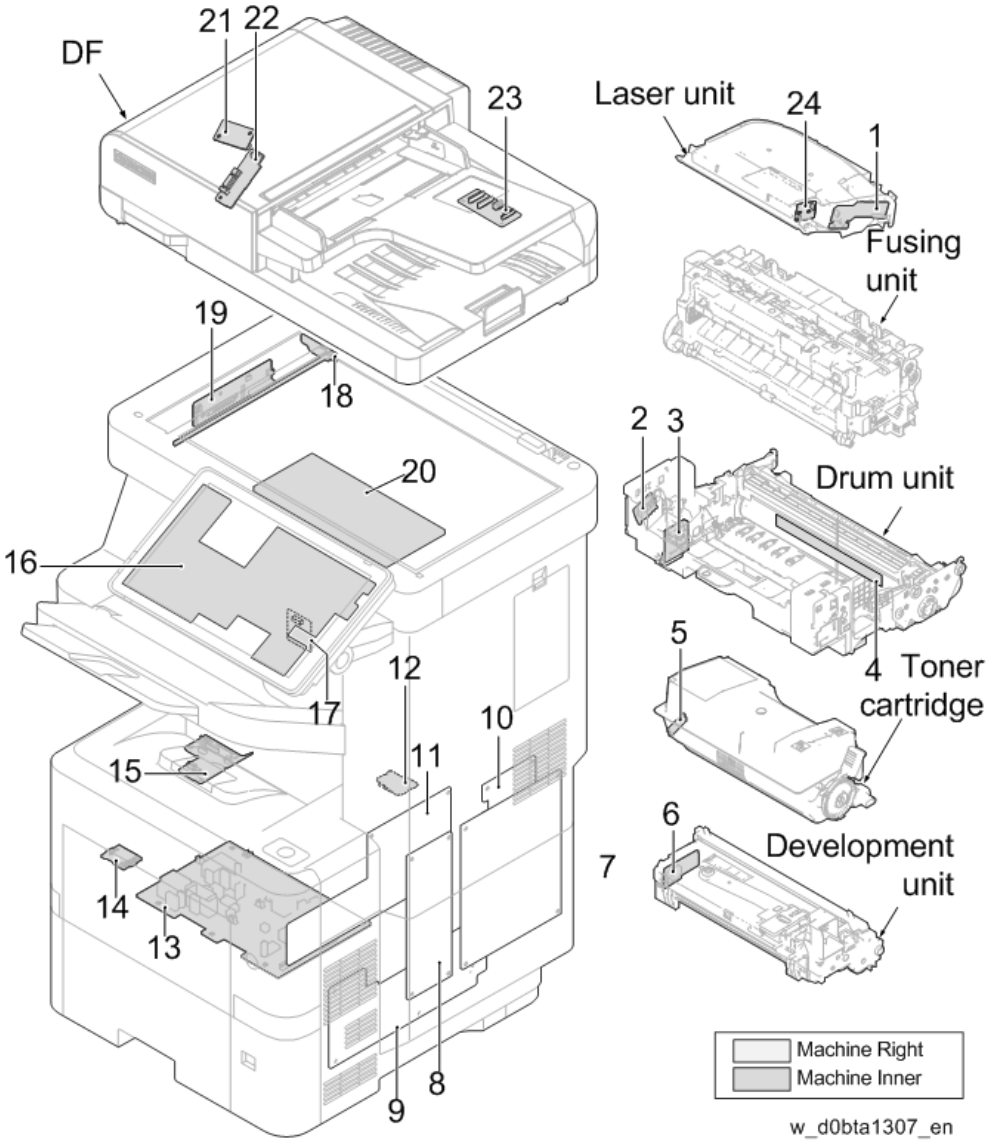


No.	Name	No.	Name
1	Polygon motor (M5)	8	Main motor (M11)
2	Laser fan (FAN1)	9	Paper feed tray lift motor (M8)
3	Paper exit motor (M10)	10	PSU fan (FAN3)
4	Rear exhaust fan (FAN6)	11	Fusing pressure release motor (M9)
5	Smell Reduction Fan (FAN5)	12	Development fan (FAN2)
6	Drum motor (M6)	13	Toner supply motor (M7)
7	Controller box fan (FAN4)		

Electrical Components

IM 550F/600F/600SRF

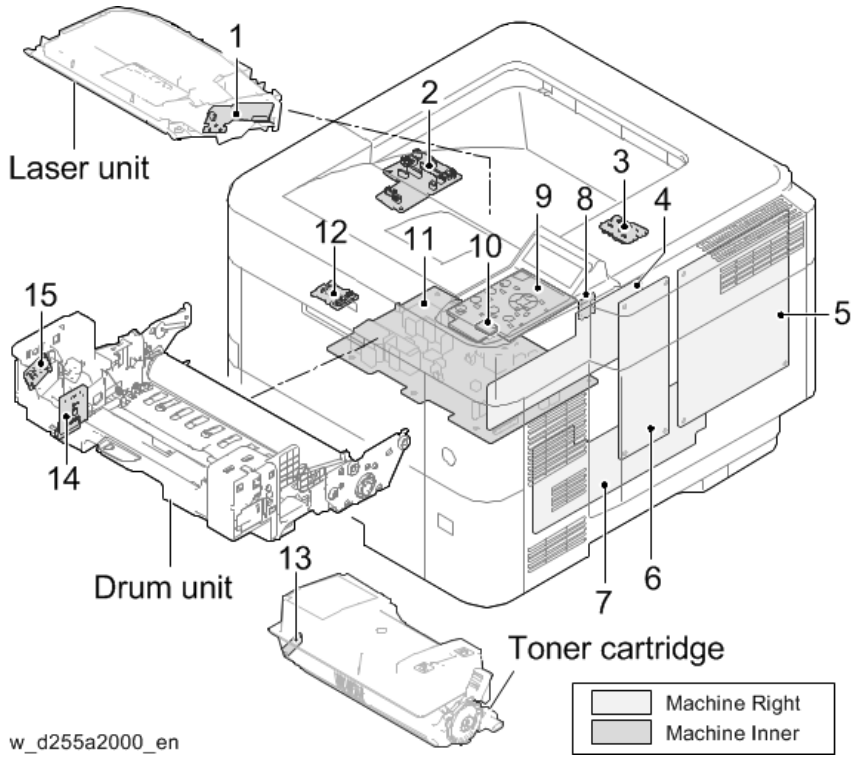


No.	Name	No.	Name
1	LDB (PCB5)	13	Power pack (PCB19)
2	Toner cartridge connection PCB (PCB7)	14	Drum connection PCB (PCB11)
3	Drum PCB (PCB10)	15	Connect-Left PCB (PCB20)
4	Drum heater PCB (Asia Only) (PCB12)	16	OPU board (PCB2)
5	Toner cartridge PCB (PCB6)	17	Thermistor connection PCB (PCB14)
6	Toner density sensor PCB (PCB8)	18	LED PCB (PCB4)
7	Controller board (PCB15)	19	SBU (PCB3)
8	BiCU (PCB16)	20	Finisher main board (PCB29)*1
9	PSU (PCB18)	21	DF double feed detector TX PCB (PCB25)*2
10	Fax board (PCB21)	22	DF double feed detector RX PCB (PCB26)*2
11	IOB (PCB17)	23	CIS connection PCB (PCB28)
12	Thermostat connection PCB (PCB13)	24	Synchronizing detector board

*1 IM 600SRF only.

*2 IM 600F/600SRF only.

P 800/801

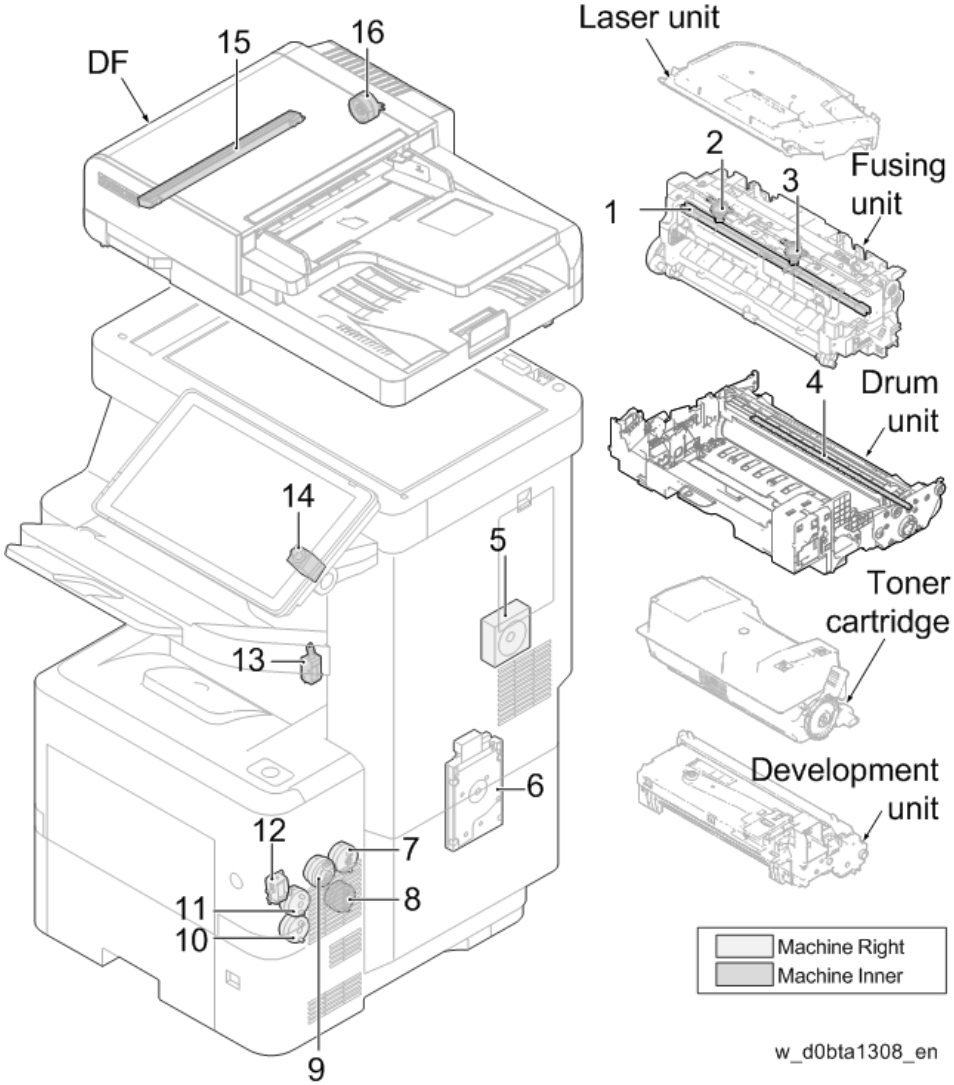


No.	Name	No.	Name
1	LDB (PCB5)	9	OPU Board (PCB2)
2	Connect-Left PCB (PCB20)	10	Sensor PCB
3	Thermostat connection PCB (PCB13)	11	Power pack (PCB19)
4	IOB (PCB17)	12	Drum connection PCB (PCB11)

No.	Name	No.	Name
5	Controller board (PCB15)	13	Toner cartridge PCB (PCB6)
6	BiCU (PCB16)	14	Drum PCB (PCB10)
7	PSU (PCB18)	15	Toner cartridge connection PCB (PCB7)
8	Thermistor connection PCB (PCB14)		

Others

IM 550F/600F/600SRF

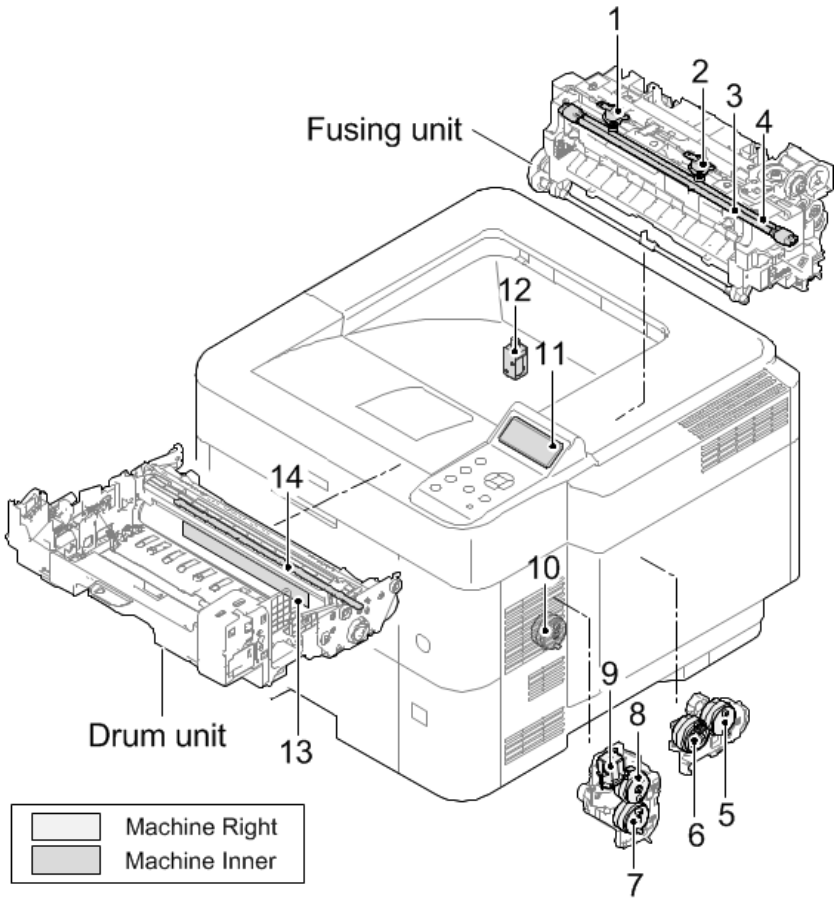


No.	Name	No.	Name
1	Fusing lamps	9	Registration clutch (CL3)
2	Fusing thermostat 1 (End) (TS1)	10	Paper feed clutch (CL4)
3	Fusing thermostat 2 (Center) (TS2)	11	Transport clutch (CL2)
4	Quenching lamp	12	Bypass solenoid (SOL2)

No.	Name	No.	Name
5	Speaker (OT1)	13	Inverter solenoid (SOL1)
6	HDD (OT2)	14	Finisher pick-up solenoid (SOL3)*1
7	Development clutch (CL5)	15	DF CIS (PCB27)
8	Duplex clutch (CL1)	16	DF paper feed clutch (CL6)

*1 IM 600SRF only.

P 800/801



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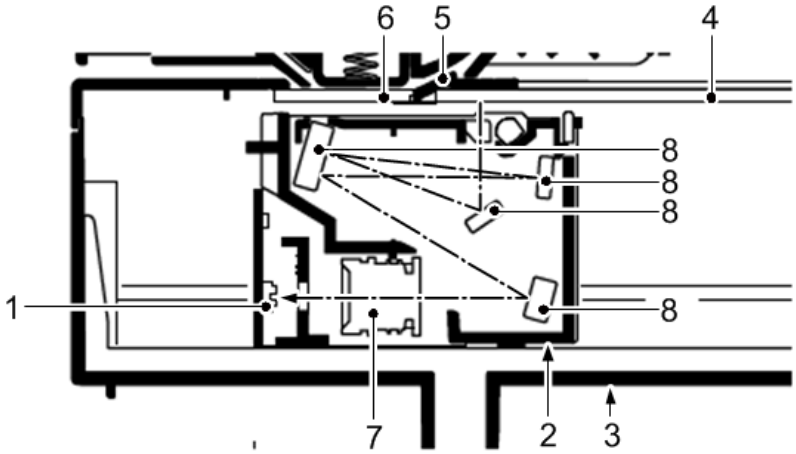
No.	Name	No.	Name
1	Fusing thermostat 1 (End) (TS1)	8	Transport clutch (CL2)
2	Fusing thermostat 2 (Center) (TS2)	9	Bypass solenoid (SOL2)
3	Fusing lamp 1	10	Duplex clutch (CL1)
4	Fusing lamp 2	11	Control panel
5	Development clutch (CL5)	12	Inverter solenoid (SOL1)
6	Registration clutch (CL3)	13	Drum heater PCB (AP Only) (PCB12)
7	Paper feed clutch (CL4)	14	Quenching lamp

Scanner Unit (IM 550F/600F/600SRF Only)

The original image is illuminated by the exposure lamp and scanned by the CCD, the reflected light is converted to an electrical signal.

If a document feeder is used, the image scanner unit stops at the position of the slit glass and scans sequentially one row of the image on the original in synchronization with the moving timing of the original in the sub scan direction by driving the DF.

No.	Name	No.	Name
1	CCD	5	Original size indicator plate
2	Carriage	6	Exposure glass (for DF)
3	Scanner frame	7	Lens
4	Exposure glass	8	Mirrors



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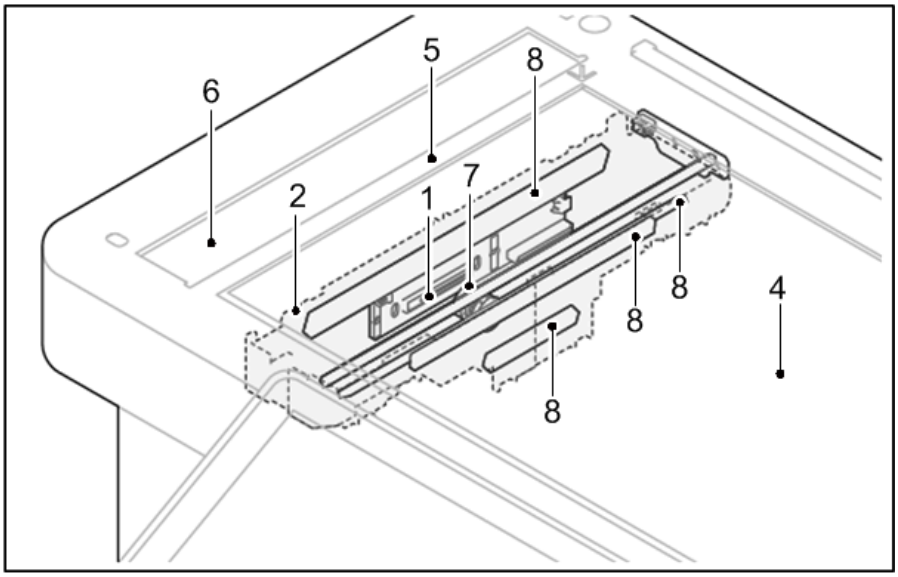
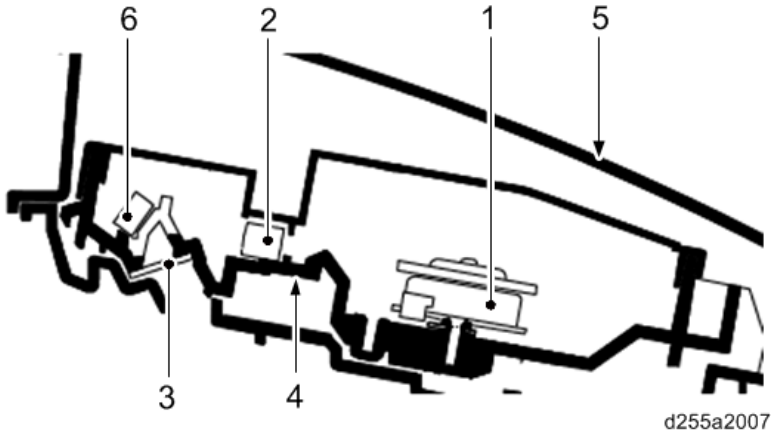


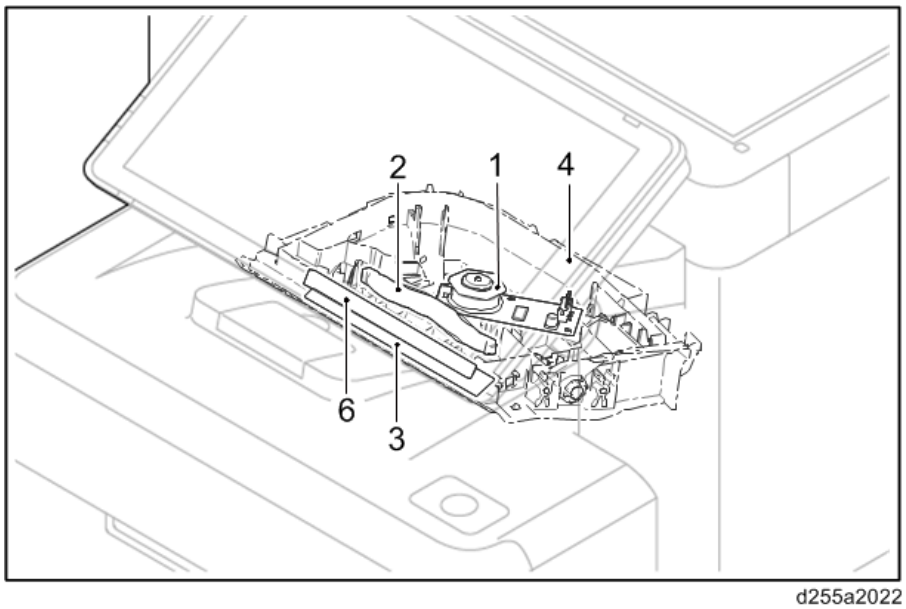
d255a2021

Laser Unit

The charged surface of the drum is scanned by the laser beam from the laser unit. The polygon motor (M5) rotates to reflect the laser beam over the drum. Various lenses and mirrors are housed in the laser unit, to adjust the diameter of the laser beam, and focus it on the drum surface.

No.	Name	No.	Name
1	Polygon motor (M5)	4	Unit base
2	f-theta main lens	5	Unit cover
3	Dust shield glass	6	Mirror

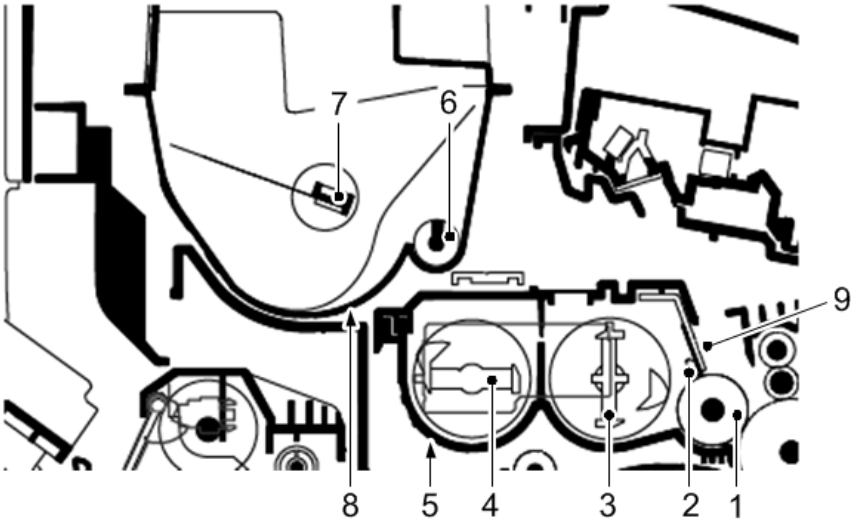




Development Unit

The development unit consists of the development roller that forms the magnetic brush, the development blade and the development agitators that agitate the toner in the development unit. The toner sensor checks whether or not toner remains in the development unit.

No.	Name	No.	Name
1	Development roller	6	Toner supply roller
2	Development blade	7	Toner agitator
3	Development agitator A	8	Toner cartridge
4	Development agitator B	9	Development blade
5	Development case		



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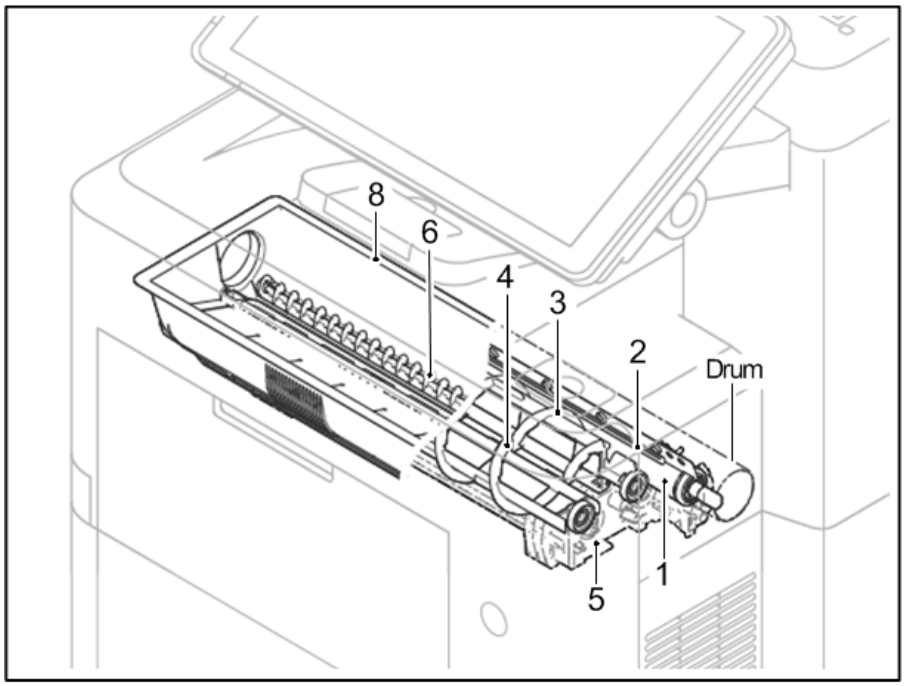

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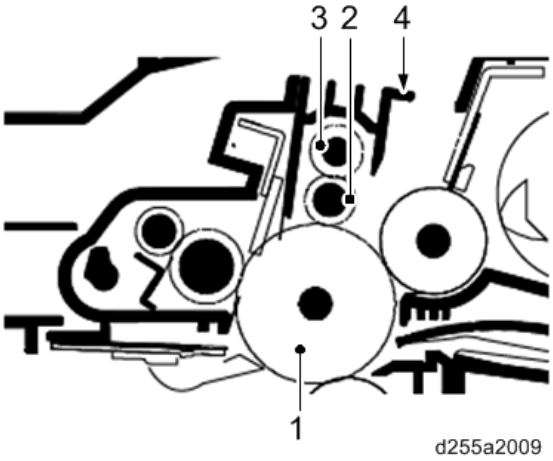
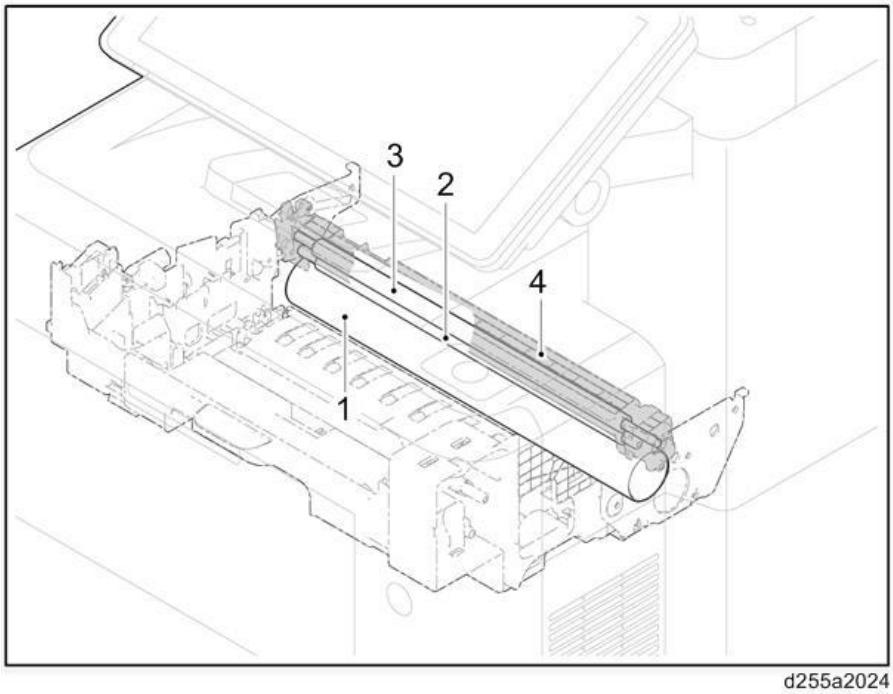
Drum Unit

Drum

The drum section consists of the drum, the charge roller unit, and the cleaning unit. The drum surface is uniformly charged in preparation for formation of the residual image by the laser beam.
After the transfer is complete, the toner remaining on the drum surface is removed with the cleaning blade and is sent to the waste toner bottle with the drum coil. The quenching lamp consists of LEDs and removes residual charge on the drum before main charging for the next image.

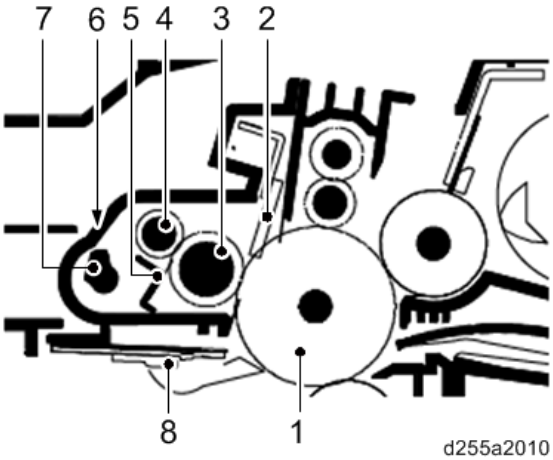
No.	Name	No.	Name
1	Drum	3	Cleaning roller (for charge roller)
2	Charge roller	4	Charge roller case

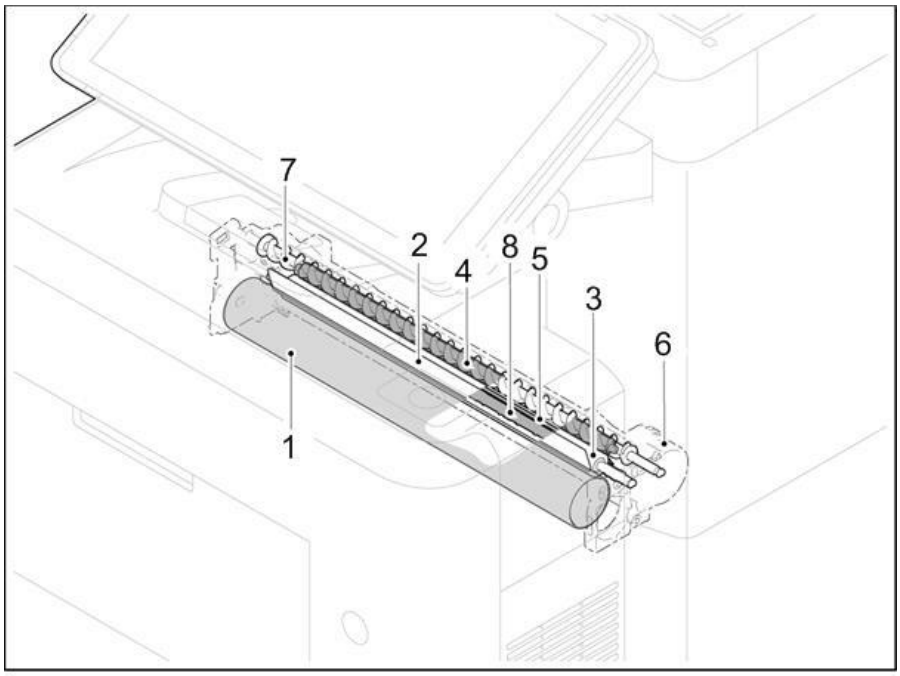




Cleaning Unit

No.	Name	No.	Name
1	Drum	5	Scraper
2	Cleaning blade	6	Drum frame
3	Cleaning roller	7	Waste toner removal coil (drum coil)
4	Control roller	8	Quenching lamp





d255a2025

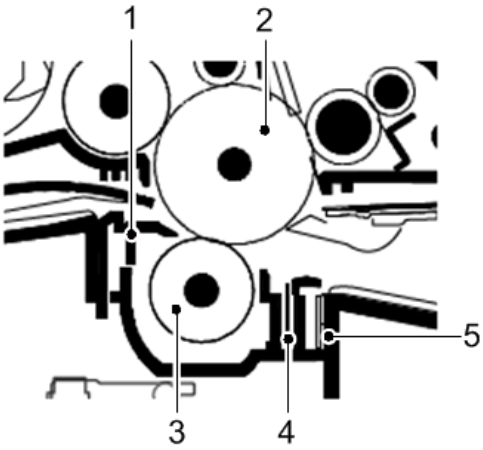
Transfer Unit

The transfer unit consists mainly of the transfer roller, the discharge plate, and drum separation claws.

A high voltage generated by the power pack (PCB19) is applied to the transfer roller for transfer charging.

Paper after the transfer is separated from the drum by applying the separation charge that is output from the power pack (PCB19) to the discharge plate.

No.	Name	No.	Name
1	Transfer guide plate	4	Discharge plate
2	Drum	5	Drum heater (Asia Only)
3	Transfer roller		



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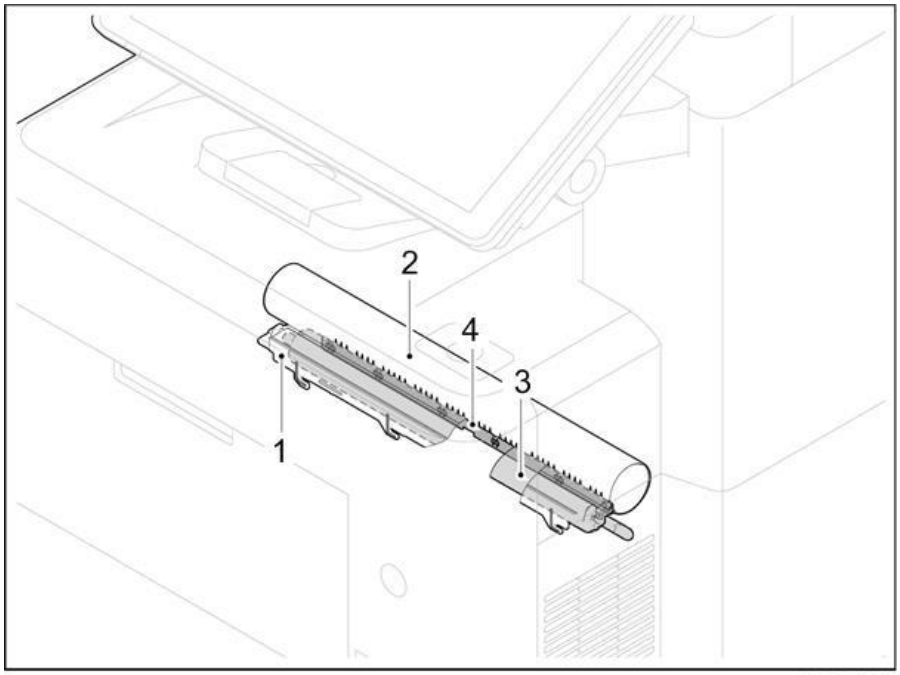


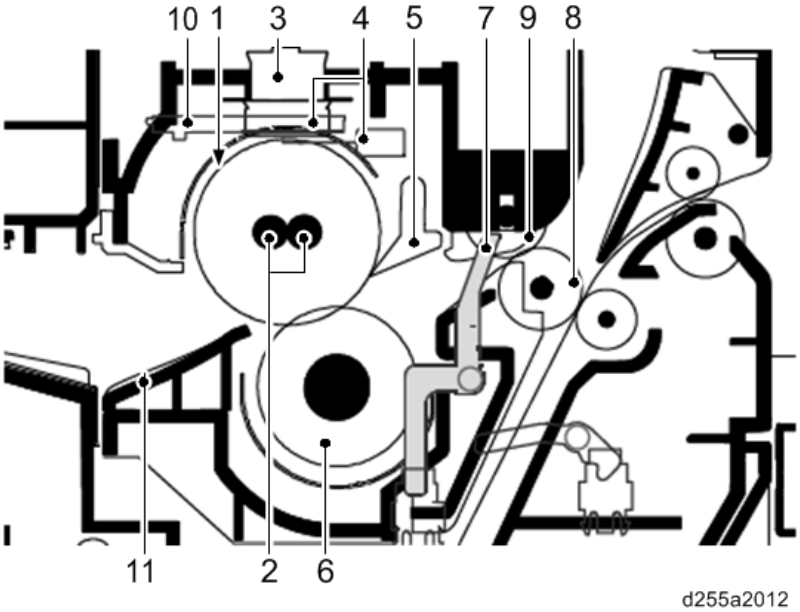
d255a2026

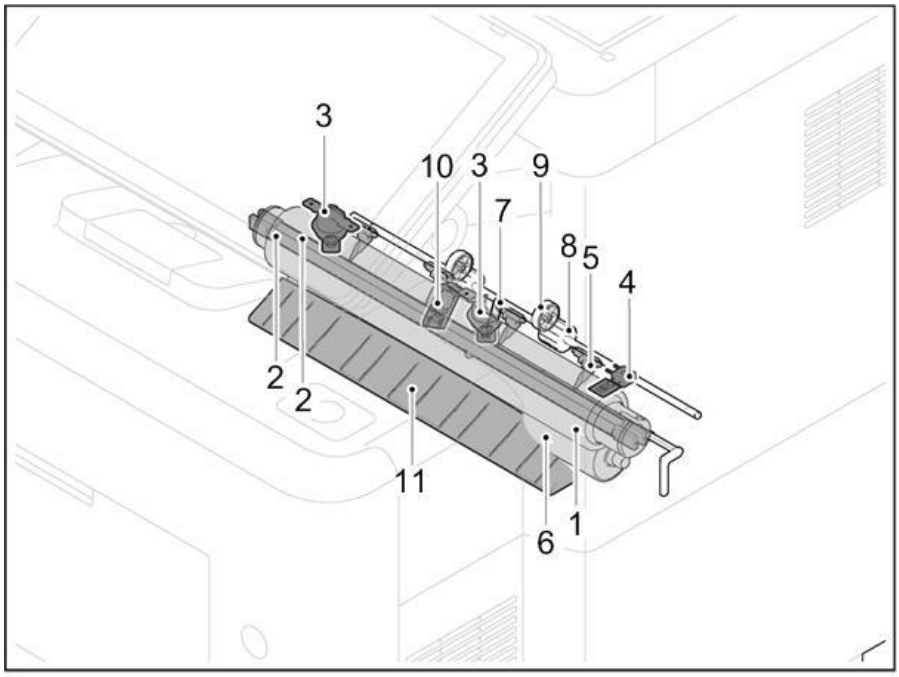
Fusing Unit

The paper sent from the transfer unit is fed between the hot roller and the pressure roller.

The hot roller is heated by the fusing lamps, and the toner is fused by heat and pressure and fixed onto the paper. The pressure roller is pressed by the fusing pressure spring. The surface temperature of the hot roller is detected by the fusing thermistor and controlled by the controller board (PCB15). If the fusing unit reaches extremely high temperatures, the power line will be shut off and the fusing lamp is forced to turn off.

No.	Name	No.	Name
1	Hot roller	7	Actuator (fusing sensor (S15))
2	Fusing lamps	8	Fusing exit roller
3	Fusing thermostat	9	Fusing exit pulley
4	Fusing thermistor	10	Fusing thermistor
5	Separators	11	Fusing entrance guide
6	Pressure roller		





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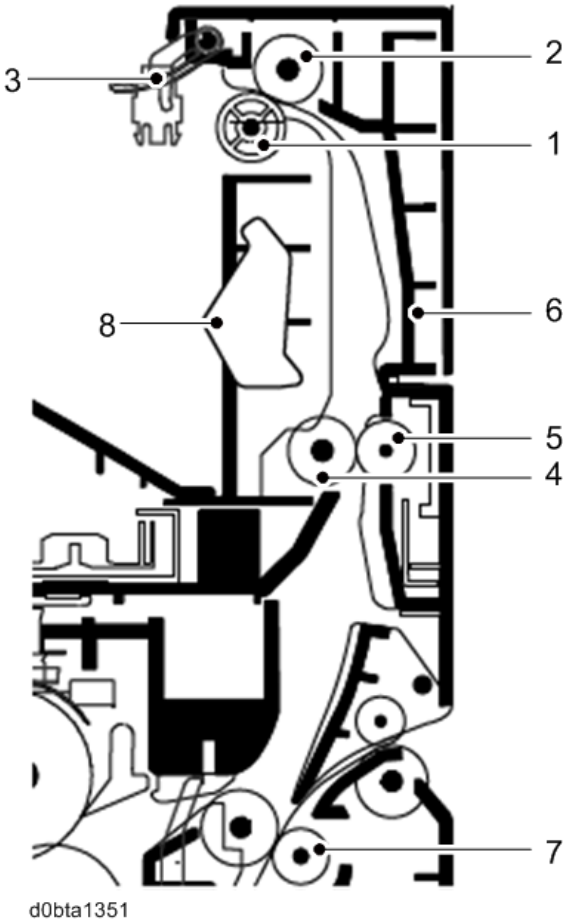
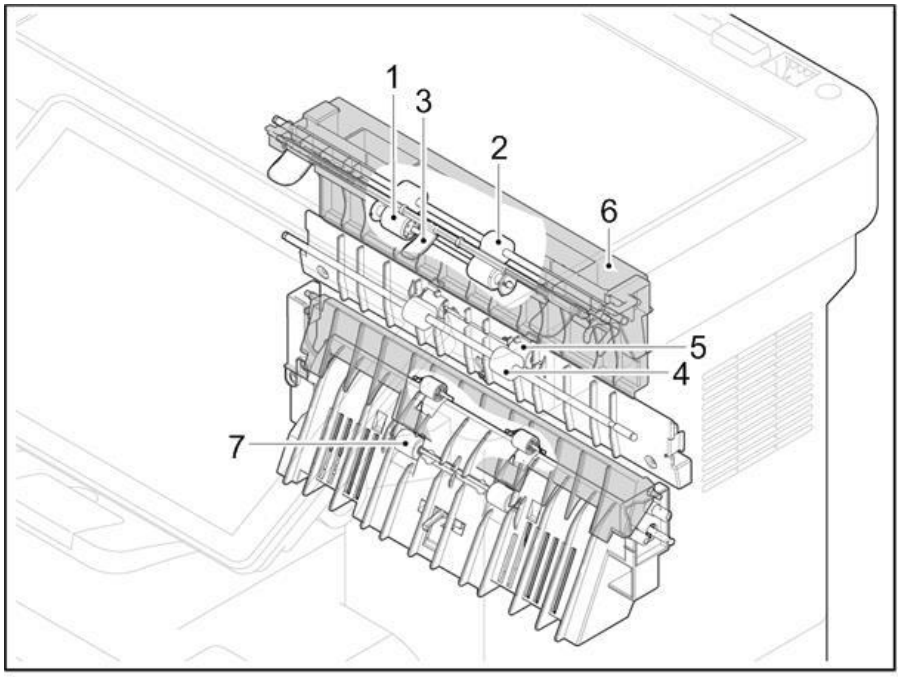
Paper Exit Unit

The paper exit unit consists of the transport path which sends the paper from the fusing unit to the paper exit tray, and the transport path which sends the paper to the duplex unit when duplex printing.

No.	Name	No.	Name
1	Upper paper exit pulley	5	Lower paper exit pulley
2	Upper paper exit roller	6	IM 550F/600F: Paper exit cover P 800/801: Upper cover
3	Actuator (paper tray full sensor) (IM 550F/600F, P 800/801)	7	Duplex feed pulley
4	Lower paper exit roller	8	Actuator (paper tray full sensor) (IM 600SRF)





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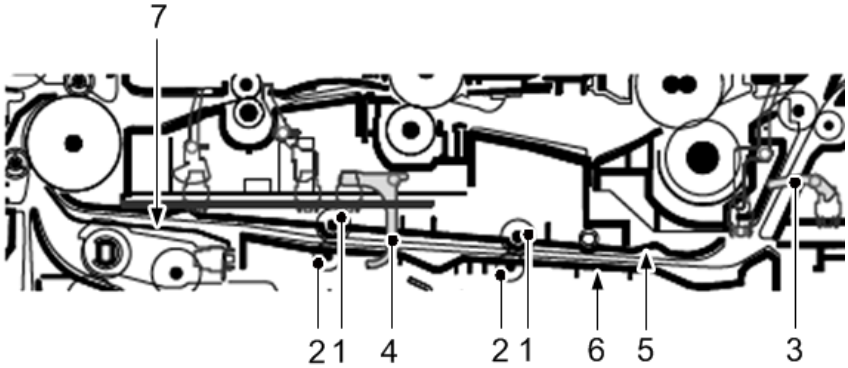
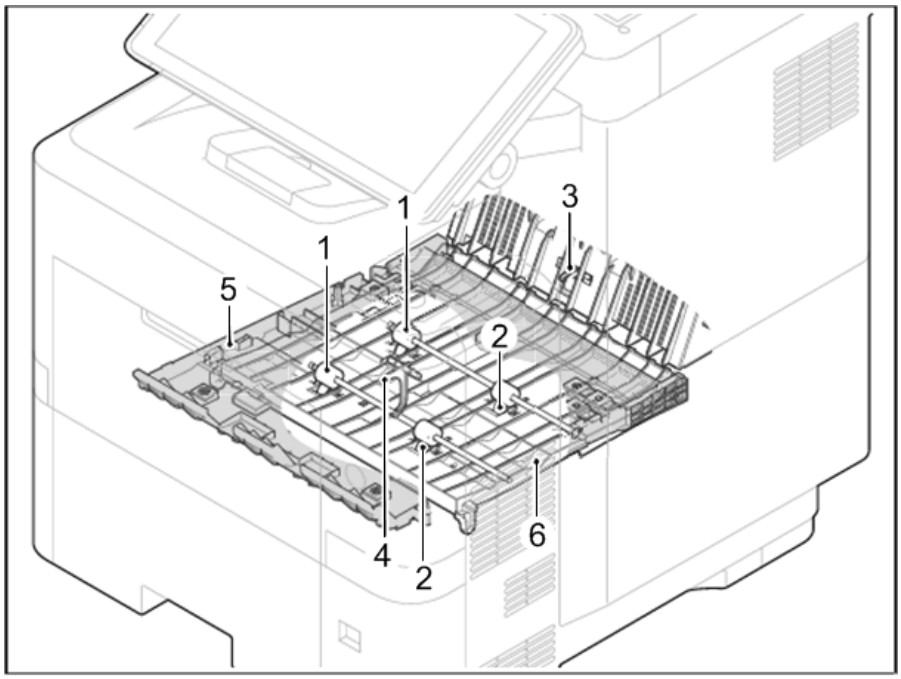
Duplex Unit

The duplex unit consists of the transport path which sends the paper from the paper exit unit to the transportation section when duplex printing.

No.	Name	No.	Name
1	Duplex rollers	5	Duplex base
2	Duplex idle rollers	6	Duplex lower guide
3	Actuator (duplex sensor 1 (S16))	7	Feed upper guide
4	Actuator (duplex sensor 2 (S17))		



d255a2014

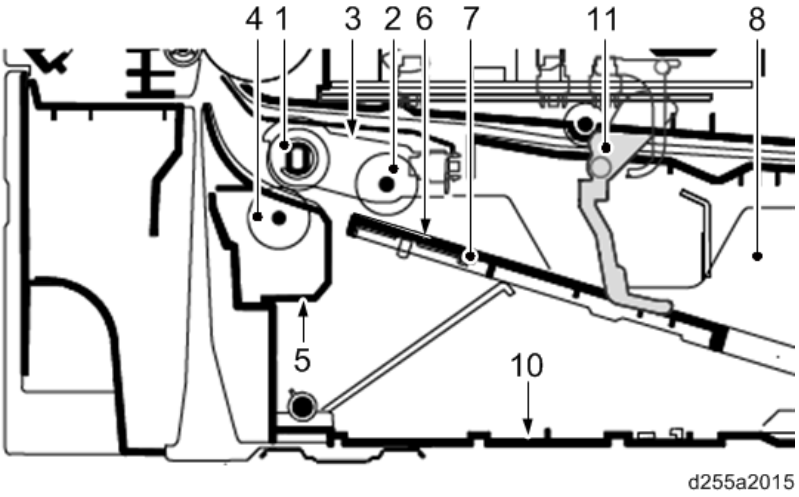


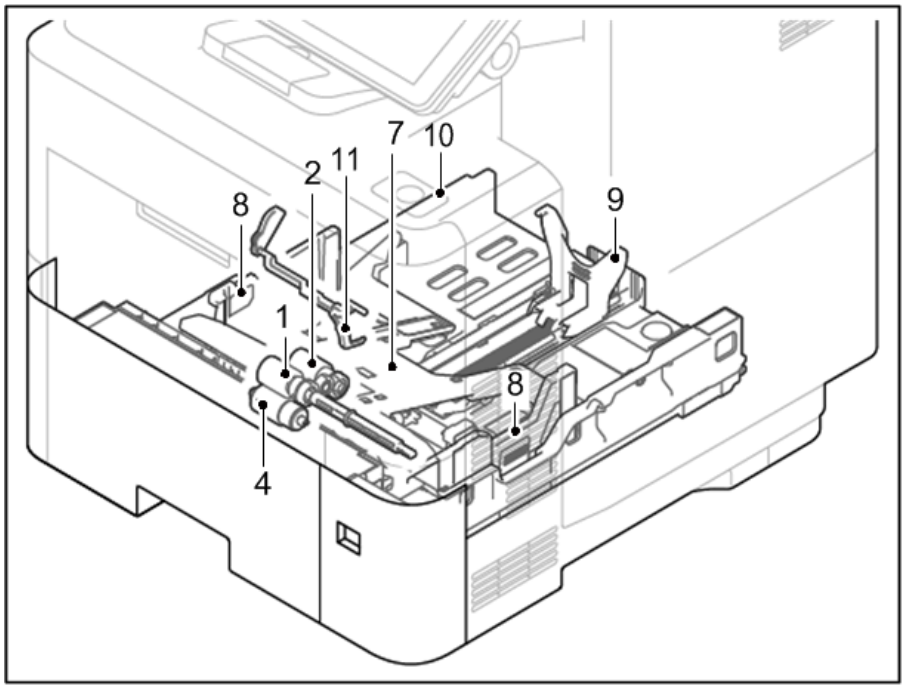
d255a2029

Paper Feed Unit

The paper feed unit consists of the paper feed section that feeds paper from the cassette, the bypass tray, and the paper transport section that conveys the fed paper to the transportation section.
The cassette can contain 500 sheets. The sheet from the cassette is pulled out by rotation of the pickup roller and sent to the transportation section by rotation of the paper feed roller. The separation roller prevents double feeding.

No.	Name	No.	Name
1	Paper feed roller	7	Bottom plate
2	Pickup roller	8	Paper width guide
3	Feed roller holder	9	Paper length guide
4	Separation roller	10	Cassette base
5	Separation roller holder	11	Actuator (paper end sensor)
6	Friction pad		



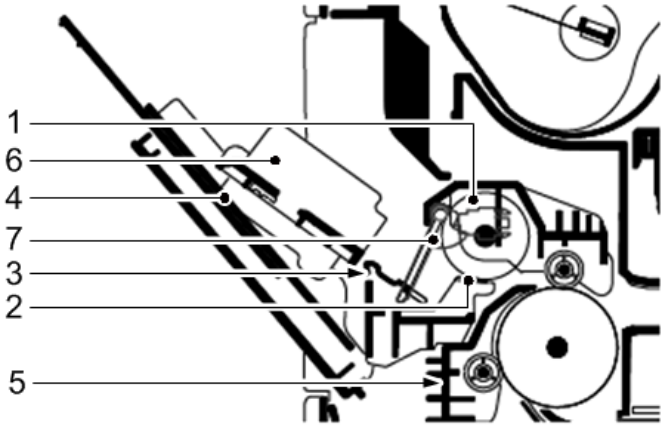


d255a2030

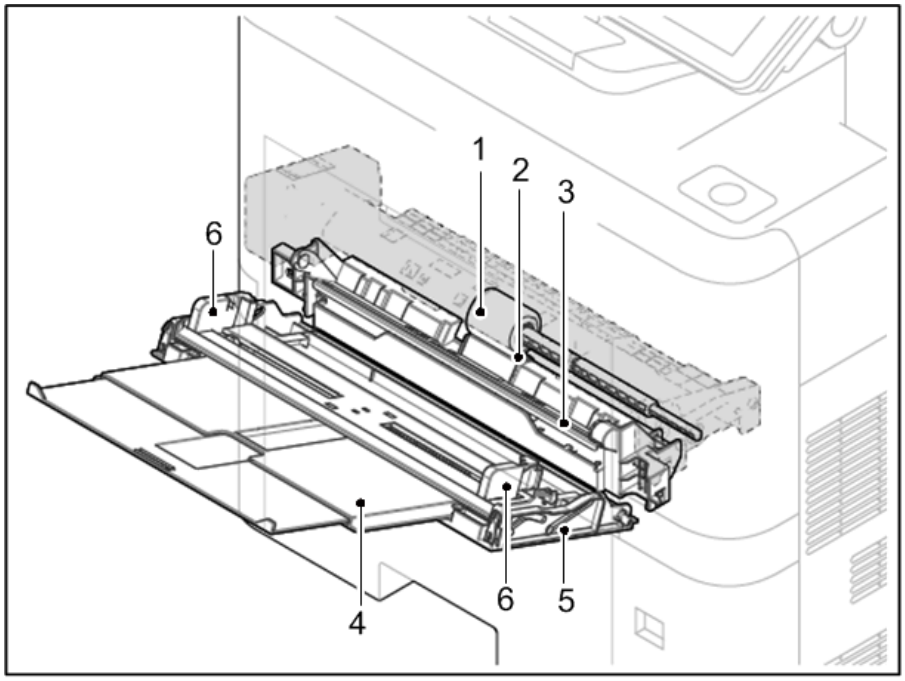
Bypass Tray Unit

The bypass tray can contain 100 sheets. Feeding from the bypass tray is performed by the rotation of the bypass paper feed roller. The bypass separation pad prevents paper from double feeding.

No.	Name	No.	Name
1	Bypass paper feed roller	5	Bypass frame
2	Bypass separation pad	6	Bypass paper width guide
3	Bypass bottom plate	7	Actuator (bypass paper end sensor (S9))
4	Bypass tray		



d255a2016



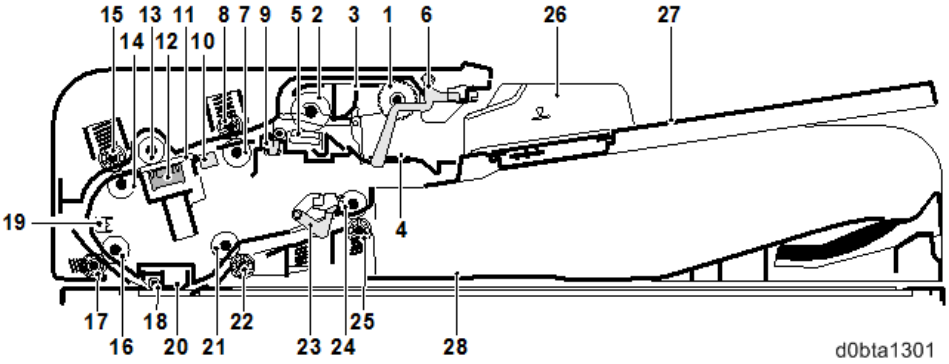
d255a2031

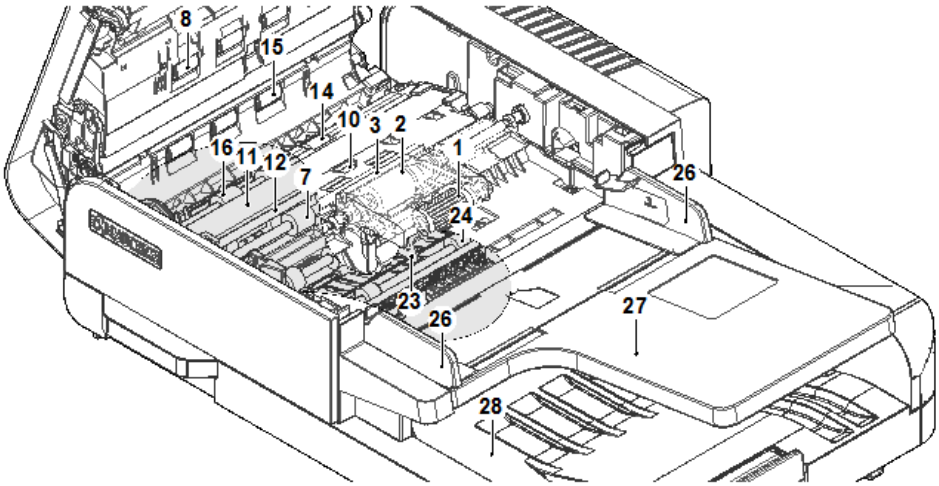
DF (IM 550F/600F/600SRF Only)

The original feed section consisting of the parts shown in the figure feeds and conveys the original on the original tray to the original conveying section by the rotation of the DF forwarding pulley and DF feed roller. The 2nd side of the conveyed original is scanned when passing the CIS and the 1st side at the optical section (CIS) in the main unit when passing the DF slit glass. The original already scanned is ejected to the original exit tray by the exit roller.

IM 600F/600SRF only: Double-feed check signals, which are emitted by the DF double feed detector TX PCB (PCB25) and received by the DF double feed detector RX PCB (PCB26), are used to detect original double-feeding.

No.	Name	No.	Name
1	DF pickup pulley	15	DF conveying pulley B
2	DF feed roller	16	DF conveying roller C
3	DF pickup holder	17	DF conveying pulley C
4	DF friction pad	18	DF reading pulley
5	DF separation pad	19	DF original timing sensor (S5)
6	DF actuator (DF original sensor (S1))	20	DF scanning guide
7	DF registration roller A	21	DF conveying roller D
8	DF registration pulley A	22	DF conveying pulley D
9	DF registration sensor (S2)	23	DF actuator (DF exit sensor (S4))
10	DF backside original timing sensor	24	DF exit roller
11	DF CIS contact glass	25	DF exit pulley
12	DF CIS (PCB27)	26	DF original width guide
13	CIS roller	27	DF original tray
14	DF conveying roller B	28	DF exit tray





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Internal Finisher

Specifications

Number of sheets in the stapled set

- Paper length less than 300 mm: 50 sheets
- Paper length 300 mm or more: 30 sheets

Size of paper that can be stapled

- Width: 182.0 mm to 215.9 mm
- Length: 257.0 mm to 355.6 mm

Weights of paper that can be stapled

- 64 to 90 g/m^2

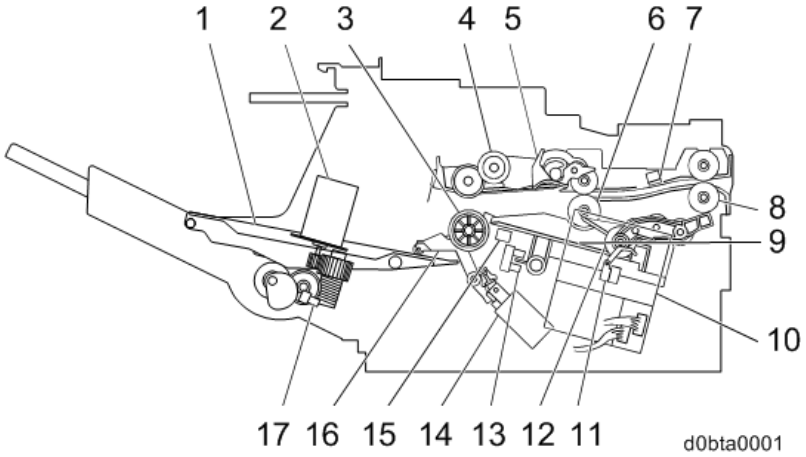
Number of stapling positions

- 1 position

Tray Capacity: 250 sheets (80 g/m^2)

Component Layout

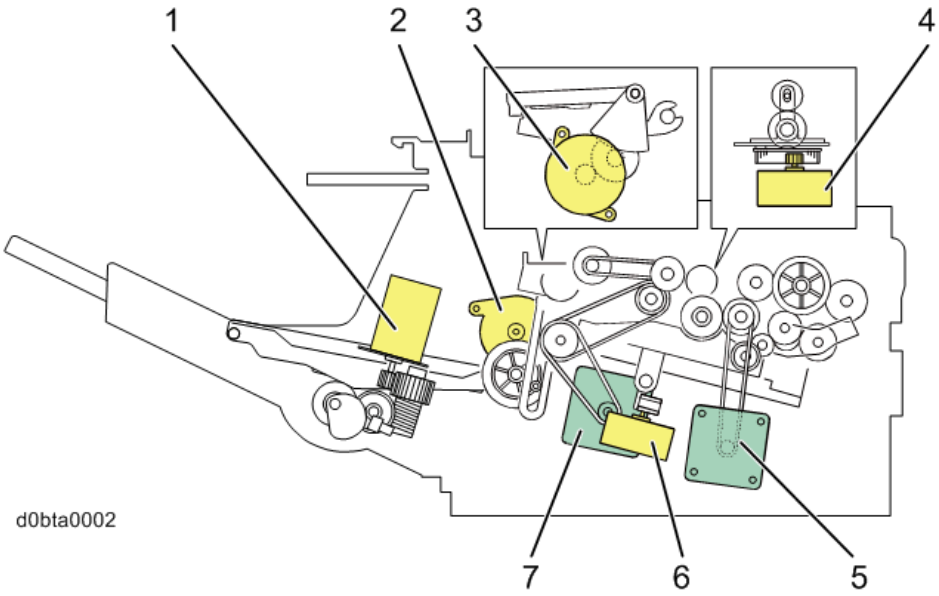
Mechanical Component Layout



No.	Name	No.	Name
1	Finisher Output Tray	10	Stapler
2	Finisher Tray Lift Motor (M18)	11	Finisher Staple Tray Paper Sensor (S25)
3	Finisher Paper Exit Roller	12	Finisher Reverse Roller
4	Finisher Gathering Roller	13	Finisher Jogger Fence Sensor
5	Finisher Paper Trailing Edge Guide	14	Finisher Pick-up Solenoid (SOL3)
6	Finisher Shift Roller	15	Finisher Paper Exit Sensor (S26)
7	Finisher Entrance Sensor (S28)	16	Finisher Stack Height Detection Lever

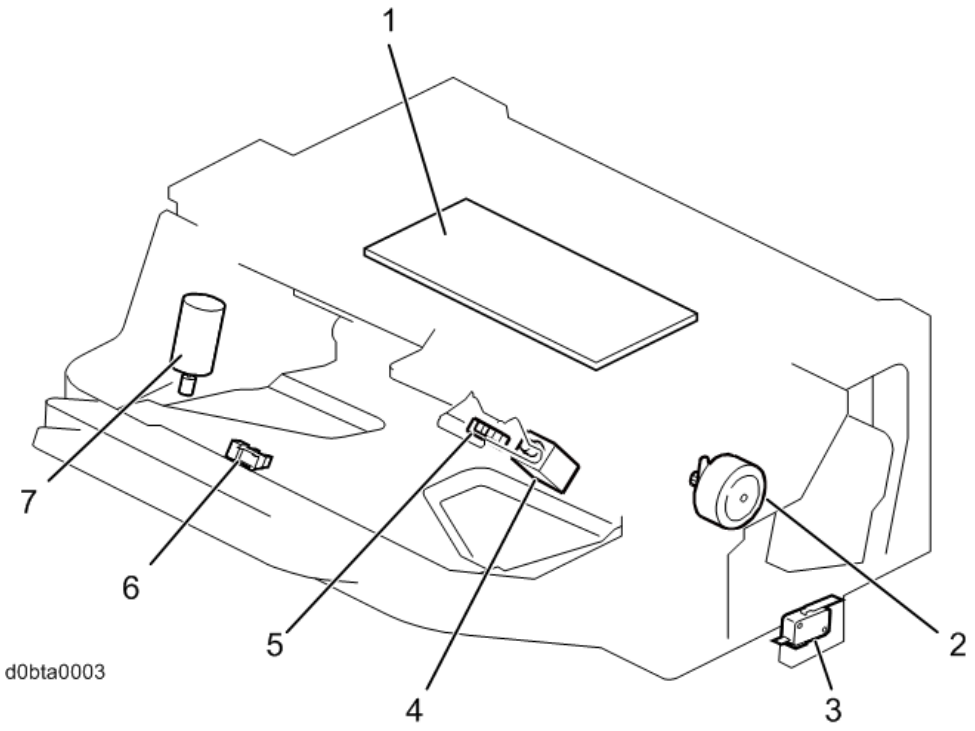
No.	Name	No.	Name
8	Finisher Entrance Roller	17	Finisher Tray Lower Limit Sensor (S22)
9	Finisher Staple Tray		

Drive Layout

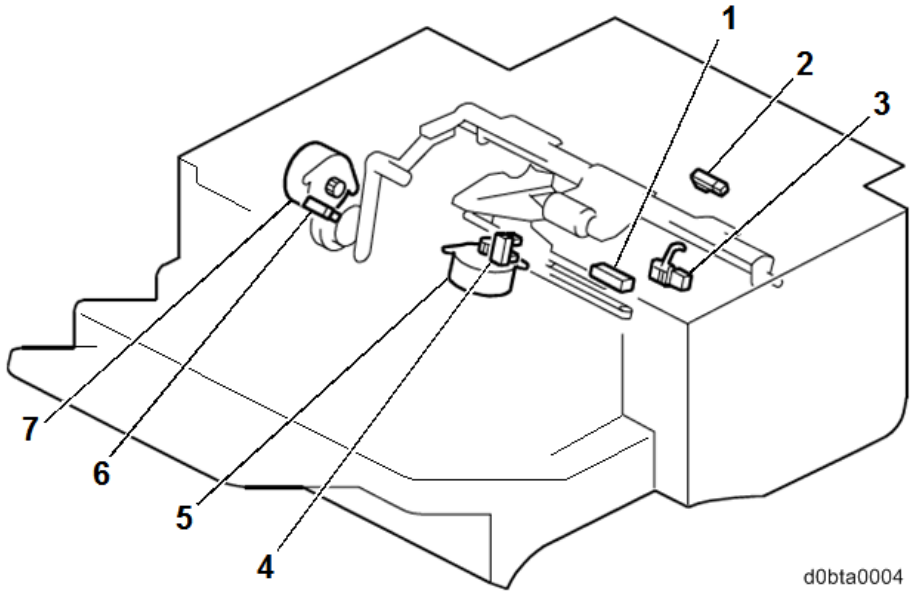


No.	Name	No.	Name
1	Finisher Tray Lift Motor (M18)	5	Finisher Transport Motor (M12)
2	Finisher Gathering Roller Motor (M14)	6	Finisher Jogger Motor (M16)
3	Finisher Exit Guide Plate Motor (M17)	7	Finisher Paper Exit Motor (M13)
4	Finisher Shift Roller Motor (M15)		

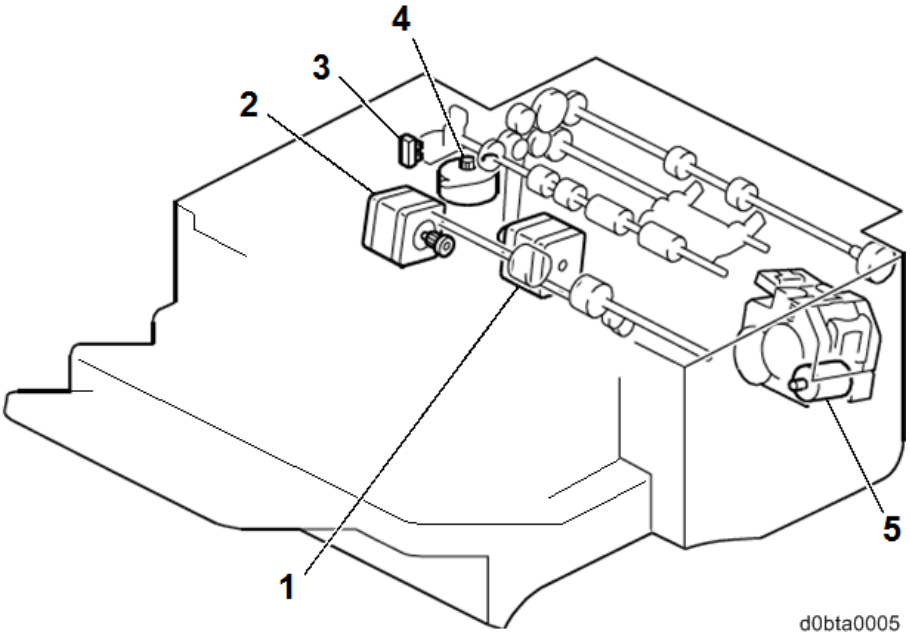
Electrical Component Layout



No.	Name	No.	Name
1	Finisher Main Board (PCB29)	5	Finisher Paper Sensor (S23)
2	Finisher Exit Guide Plate Motor (M17)	6	Finisher Tray Lower Limit Sensor (S22)
3	Finisher Interlock Switch (SW6)	7	Finisher Tray Lift Motor (M18)
4	Finisher Pick-up Solenoid (SOL3)		

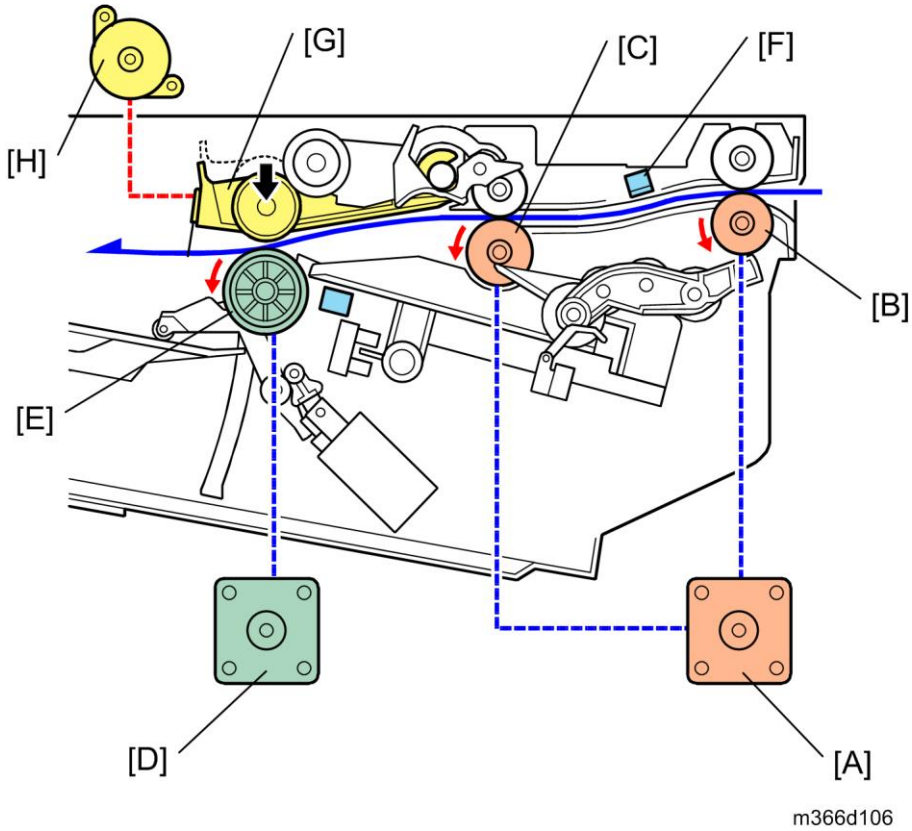


No.	Name	No.	Name
1	Finisher Paper Exit Sensor (S26)	5	Finisher Jogger Motor (M16)
2	Finisher Entrance Sensor (S28)	6	Finisher Gathering Roller HP Sensor (S21)
3	Finisher Staple Tray Paper Sensor (S25)	7	Finisher Gathering Roller Motor (M14)
4	Finisher Jogger Fence HP Sensor (S24)		



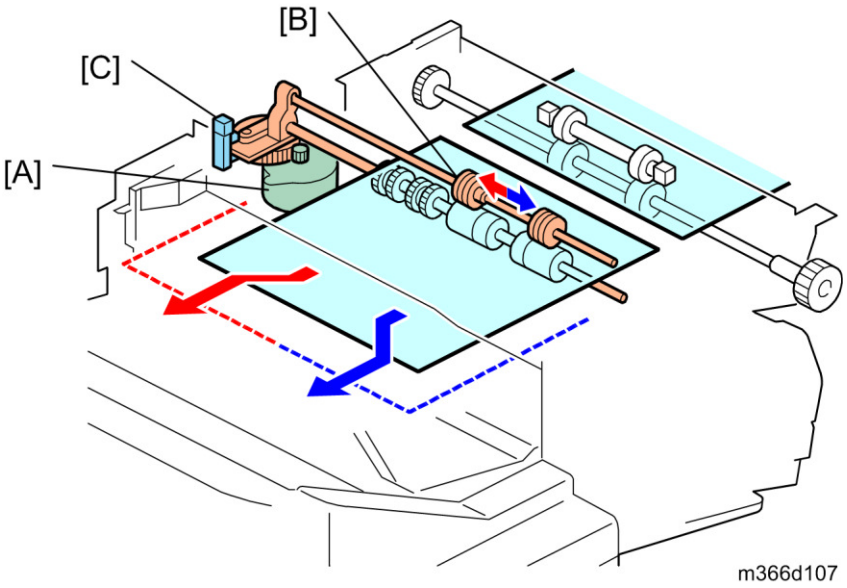
No.	Name	No.	Name
1	Finisher Transport Motor (M12)	4	Finisher Shift Roller Motor (M15)
2	Finisher Paper Exit Motor (M13)	5	Finisher Stapler Motor (M19)
3	Finisher Shift Roller HP Sensor (S20)		

Paper Feed



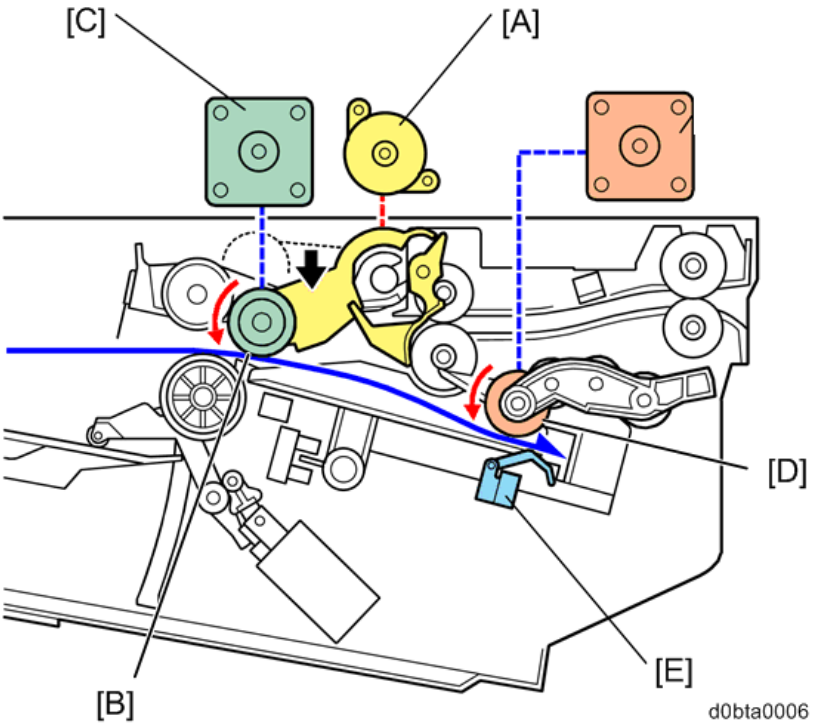
- Finisher transport motor (M12) [A] drives the finisher entrance roller [B] and finisher shift roller [C].
- Finisher paper exit motor (M13) [D] drives the finisher paper exit roller [E].
- When the finisher entrance sensor (S28) [F] detects the leading edge of the paper, the finisher exit guide plate unit [G] is lowered from its home position by the finisher exit guide plate motor (M17) [H].
- Finisher paper exit roller [E] feeds the paper to the output tray.

Shift



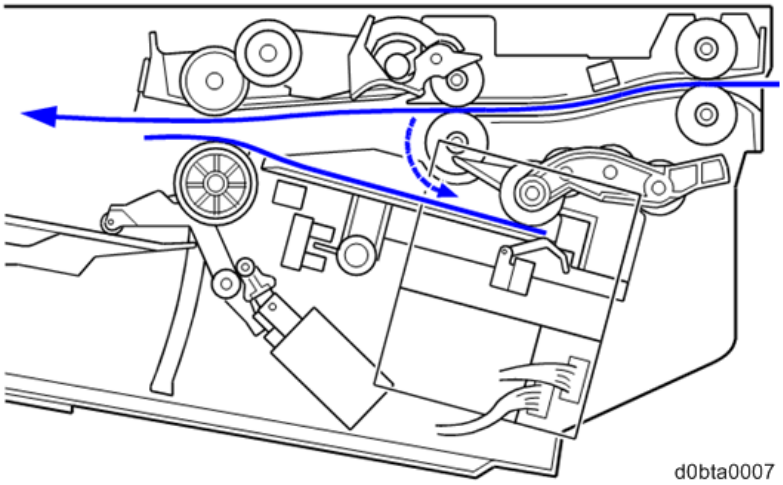
- Finisher shift roller motor (M15) [A] moves the finisher shift roller [B].
- Finisher shift roller HP sensor (S20) [C] detects when the finisher shift roller [B] is at the home position again after jogging.

Stapling

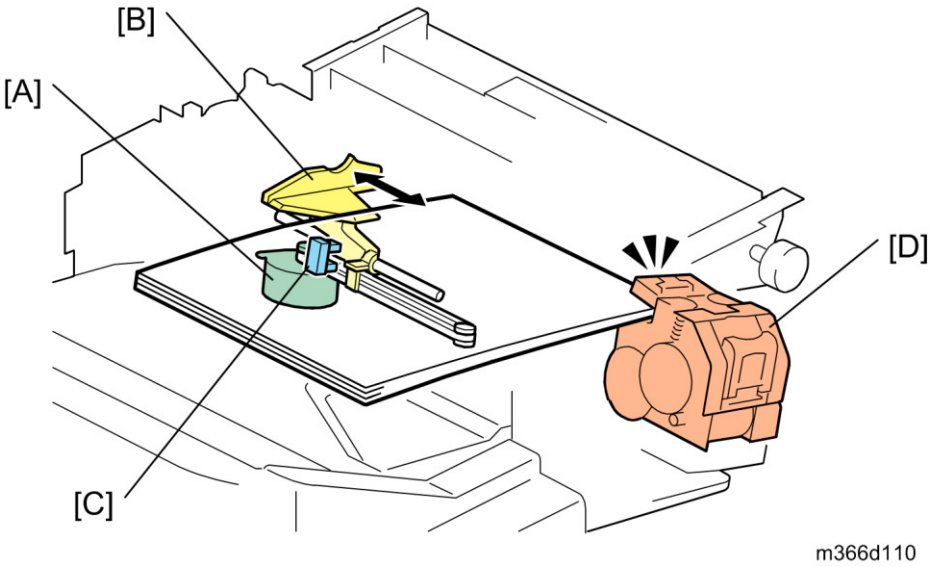


- The finisher gathering roller motor (M14) [A] drops the finisher gathering roller [B] onto the paper.
- The finisher paper exit motor (M13) [C] turns the finisher gathering roller [B] to reverse the paper into the finisher staple tray.
- The reverse roller [D] aligns the paper in the finisher staple tray.

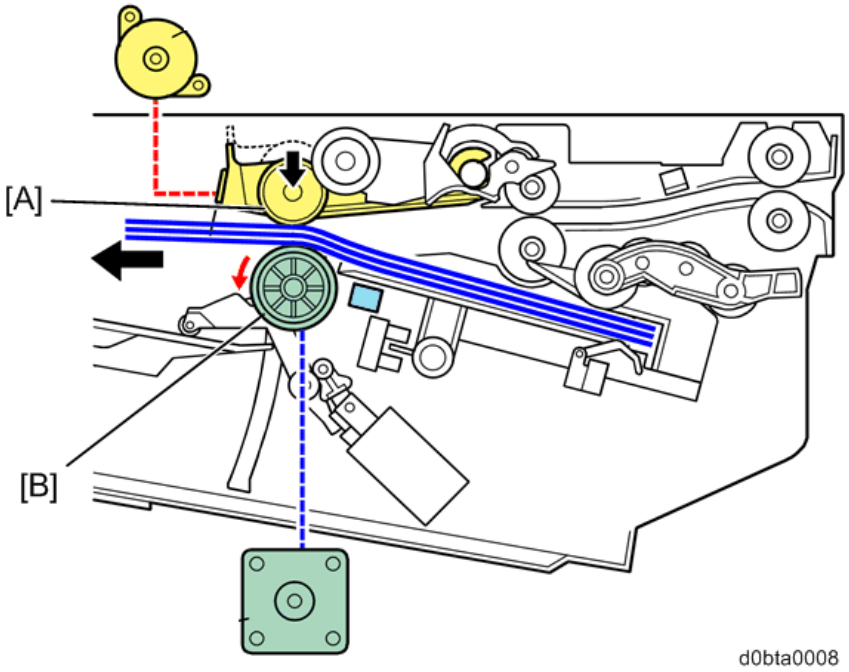
- The finisher staple tray paper sensor (S25) [E] detects the presence or absence of paper.



- The finisher gathering roller motor (M14) raises the finisher gathering roller.
- Then the next sheet is fed into the finisher and reversed into the finisher stapler tray.



- The finisher jogger motor (M16) [A] drives the jogger [B].
- Finisher jogger HP sensor [C] detects when the finisher jogger fence [B] is at the home position again after jogging.
- Stapler [D] is driven by the finisher stapler motor (M19) in stapler.



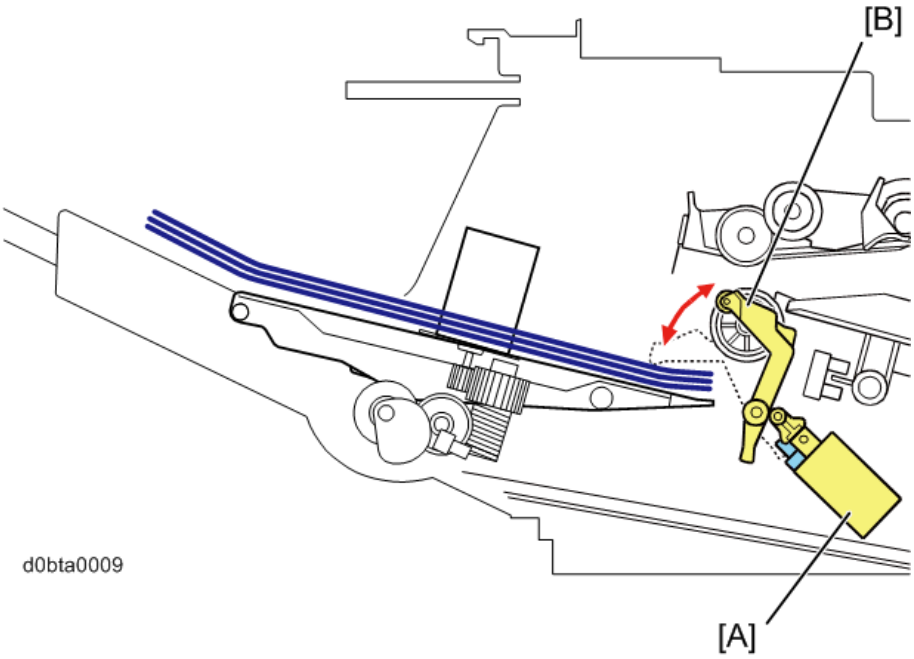
- After stapling, the finisher exit guide plate roller [A] drops onto the top of the stack.
- The finisher paper exit roller [B] feeds out the stack.

Finisher Jogger Fence Fine Adjustment

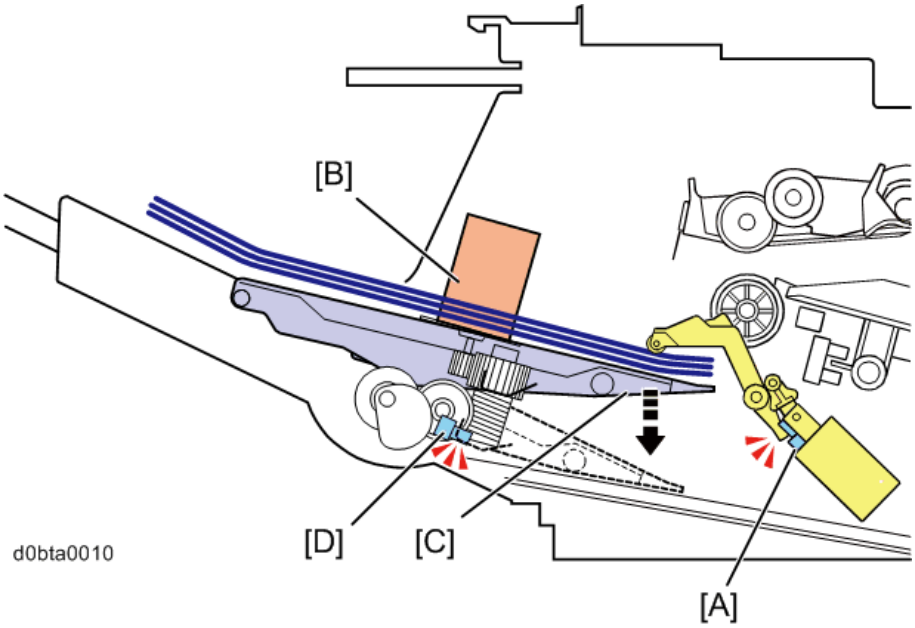
You can adjust the jogging position of the finisher jogger fence with the following SPs (from -1.0 mm to 1.0 mm).

- A4: SP6-132-003
- B5: SP6-132-005
- Legal: SP6-132-008
- Letter: SP6-132-009
- Other: SP6-132-012

Tray Full Detection



The paper sensor solenoid [A] moves the actuator [B] until it touches the top of the stack.



- When the paper sensor [A] detects the actuator, the finisher tray lift motor (M18) [B] lowers the end of the tray [C] nearest the exit. This makes room for more paper on the tray.
- If the finisher tray lower limit sensor (S22) [D] is activated, the tray cannot be lowered any more.

Finisher Free Run

You can make a finisher free run with the following SPs. No paper is required when executing these SPs.

- SP6-137-001: Free Run 1 (Shift mode)
- SP6-137-002: Free Run 2 (Staple mode)
- SP6-137-003: Free Run 3 (Packing mode: Output tray descends to the lowest position.)

- SP6-137-004: Free Run 4 (Not assigned)

Replacing the Finisher Main Board (PCB29)

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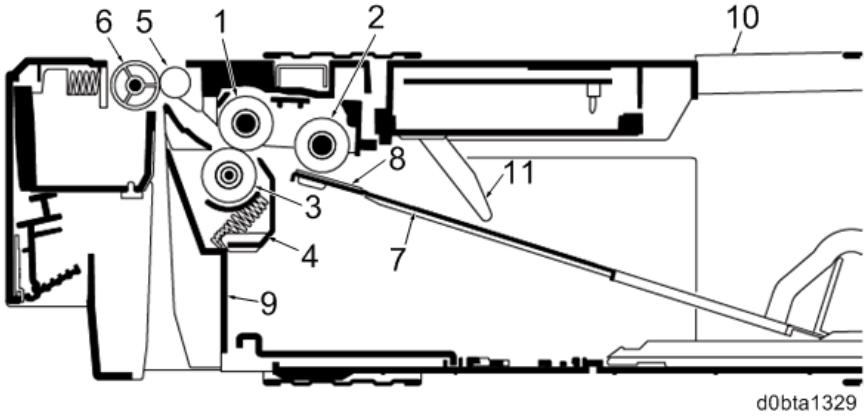
Check the DIP switch on the old main board. If the settings on the new main board are different from the old main board, change the settings on the new board (they must be the same as the settings on the old board).

Paper Feeder Unit PB1160

The paper feeder conveys paper from the cassette to the printer. Cassette can hold up to 500 sheets of paper.

Paper is fed from the paper feeder by the rotation of the pickup roller and paper feed roller. The retard roller prevents multiple sheets from being fed at one time, via the torque limiter.

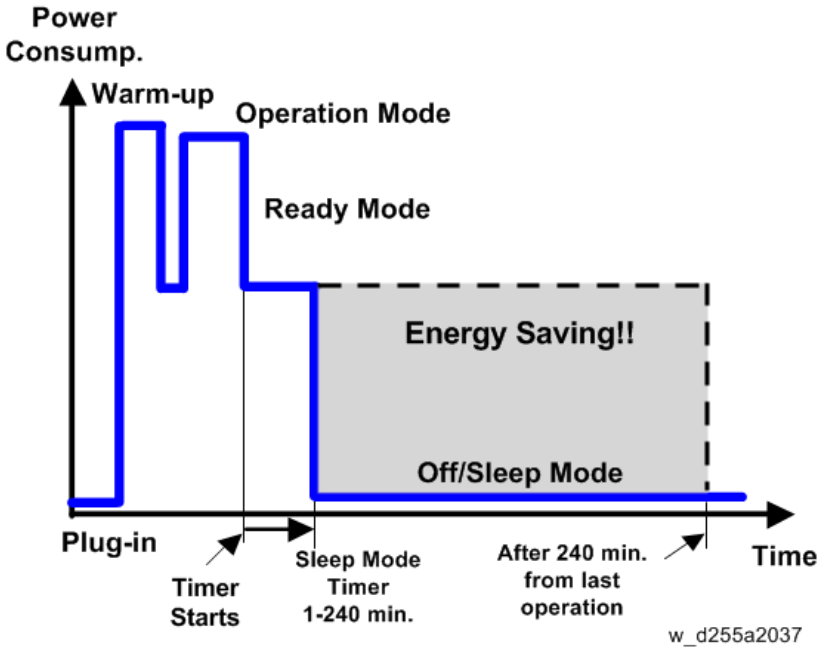
No.	Name	No.	Name
1	Paper feed roller	7	Bottom plate
2	Pickup roller	8	Bottom pad
3	Retard roller	9	Cassette base
4	Retard roller guide	10	Upper cover
5	Conveying roller	11	Paper gauge sensor (actuator)
6	Conveying pulley		



Energy Save

Energy Saver Modes

Customers should use energy saver modes properly, to save energy and protect the environment.



The area shaded grey in this diagram represents the amount of energy that is saved when the timers are at the default settings. If the timers are changed, then the energy saved will be different. For example, if the timers are all set to 240 min., the grey area will disappear, and no energy is saved before 240 min. expires.

Timer Settings

The user can set these timers in the following menu.

- IM 550F/600F/600SRF: User Tools > System settings > Timer Settings
- P 800/801: System > Low Power Mode Timer

Auto-off timer (1 – 240 min): Off/Sleep Mode. Default setting: 1 min.

Return to Stand-by Mode

Recovery time from off/sleep mode: 10 sec.

Warm-up time: 25.4 sec.

Recommendation

We recommend that the default settings should be kept.

- If the customer requests that these settings should be changed, please explain that their energy costs could increase and that they should consider the effects on the environment of extra energy use.
- If it is necessary to change the settings, please try to make sure that the Auto-off timer is not too

long. Try with a shorter setting first, such as 30 min., then go to a longer one (such as 60 min.) if the customer is not satisfied.

- If the timers are all set to the maximum value, the machine will not begin saving energy until 240 minutes has expired after the last job. This means that after the customer has finished using the machine for the day, energy will be consumed that could otherwise be saved.
- If you change the settings, the energy consumed can be measured using SP8-941 (Machine Status), as explained below.

Energy Save Effectiveness

SP 8-941 (Machine Status) keeps a record of the amount of time that the machine spends in each mode.

- SP8-941-001: Operating mode
- SP 8-941-002: Standby mode
- SP 8-941-003: Panel off mode (Not used in this model)
- SP 8-941-004: Low power mode (Not used in this model)
- SP 8-941-005: Sleep mode

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)

Here is an example calculation.

Machine Condition	SP8-941: Machine Status	Time at Start (min.) ①	Time at End (min.) ②	Running time (hour) (②-①)/60=③	Power consumption Spec. (W) ④	Power consumption (KWH) (③×④)/1000=⑤
Operating	001: Operating Time	21089.0	21386.0	4.95	898	4.45
Standby	002:	306163.0	308046.0	31.38	179	5.62

(Ready)	Standby Time					
Energy save (Panel off)	003: Energy Save Time	74000	75111.0	18.52	148.09	2.74
Low power	004: Low Power Time	148000	150333	38.88	111	4.32
Sleep	005: Off Mode Time	508776.0	520377.0	193.35	1.8	0.35
Total						17.47

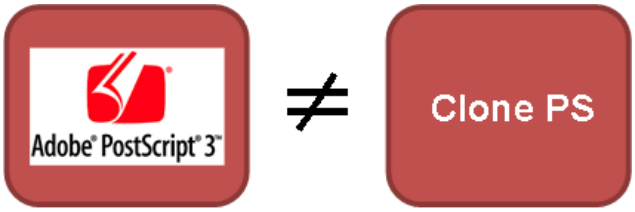
New Functions

PS3/PDF Direct Emulation (Clone PS)

Overview

This machine is equipped with a clone program for emulating Adobe PostScript/PDF (hereafter “Clone PS”) as a standard feature. So, by default, it can perform printing using PostScript 3 and PDF Direct Print, in addition to RPCS.

- What is Clone PS?
  Based on the specifications of PostScript/PDF languages developed by Adobe, clone programs for interpretation of PostScript and PDF documents have been created by various companies other than Adobe. While the original program sold by the developer of the language is named Adobe PS, compatible programs made by other manufacturers are called clones. Strictly speaking, these clones must be fully compatible with the original program; however, they are called clones even if they have some differences because they cannot completely imitate the original.
  Clone PS is basically designed to perform similar functions to Adobe PS, except for several differences such as the inability to use Adobe fonts.



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- Adobe PS, previously offered as an optional product for past models, is available again as an option. (SD card option.)
- Clone PS and Adobe PS cannot be run simultaneously.
- The same printer driver can be used for Clone PS and Adobe PS.
- Clone PS emulates Adobe PostScript 3 version 3017. (The version of Adobe PS used in the SD card option is v. 3018.)
- For the PDF Direct Print function, Clone PS emulates Adobe PDF version 1.7.

How to Distinguish Adobe PS from Clone PS

In the operation panel screen, it is difficult to tell whether Adobe PS or Clone PS is in use.
Both "PS3" and "PDF" are shown on the screen, regardless of whether Adobe PS or Clone PS is used.
Identification can be done as follows:

- **Configuration Page**
  The description of the Firmware Version listed on the page varies as shown below:

PS type	Description of Firmware Version
Adobe PS	RPCS [x.xx.xx] Adobe PostScript 3 [x.xx], Adobe PDF [x.xx]
Clone PS	RPCS [x.xx.xx] PS3 [x.xx], PDF [x.xx]

The manufacturer's name "Adobe" is shown in the list if Adobe PS is used.

- **Configuration Page**

  The description of the Firmware Version listed on the page varies as shown below:

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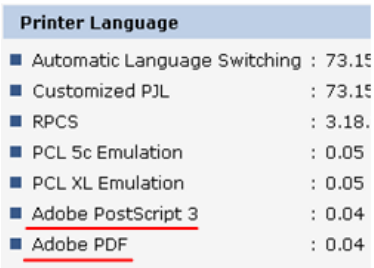
- **Web Image Monitor**

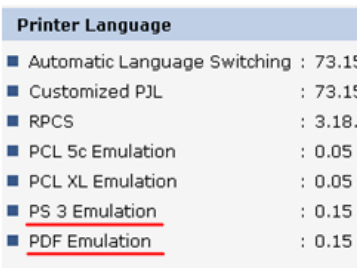
  Go to Status/Information > Device Info, and open the Printer Language menu.

  If Adobe PS is used, the screen shows the program name "Adobe PostScript 3" and "Adobe PDF".

Adobe PS



Clone PS



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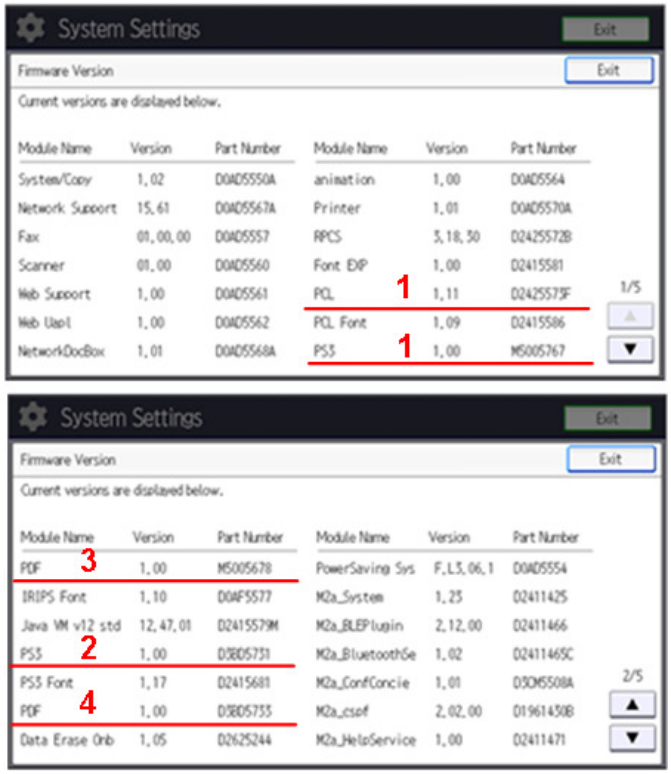
- **Operation Panel: Firmware Version**

  Settings > Machine Features Settings > System Settings > Administrator Tools > Firmware Version

  When PostScript3 Unit Type M40/P19 (Adobe PS) is installed:



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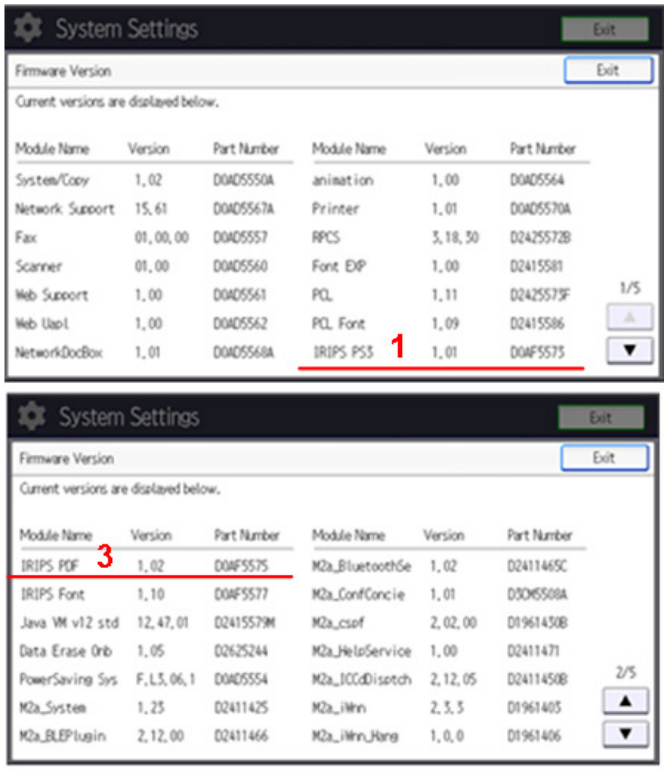
When Clone PS only:



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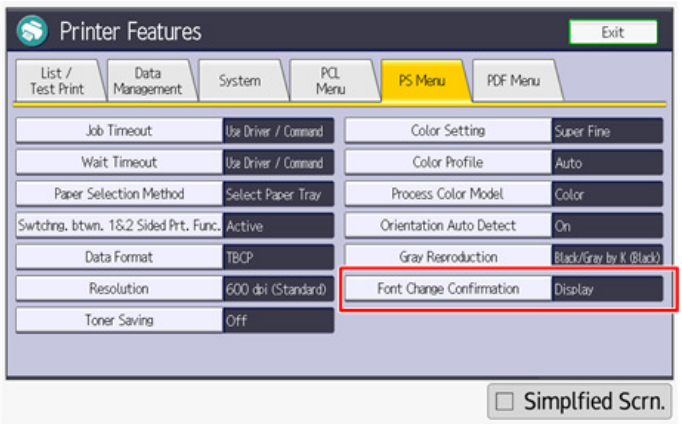
No.	Module Name	Description
1	PS3 / IRIPS PS3	The Clone PS firmware number appears. The clone PS firmware number starts with "D0AF".

No.	Module Name	Description
2	PS3	The Adobe PS firmware number starts with " D3BD " appears. This module name appears in the firmware list only if PostScript3 Unit Type M37 is installed.
3	PDF / IRIPS PDF	The Clone PS firmware number appears. The clone PS firmware number starts with "D0AF".
4	PDF	The Adobe PS firmware number starts with "D3BD". This module name appears in the firmware list only if PostScript3 Unit Type M37 is installed.

- **Font Change Confirmation screen**

  The "Font Change Confirmation" screen is accessible only when Clone PS is used.

  On the Home screen, select the Settings icon > Machine Features Settings > Printer Settings > PS Menu > Font Change Confirmation.



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Difference in Device Fonts

The variety and number of built-in fonts (device fonts) differ between Adobe PS and Clone PS.

PS type	Number of European fonts
Adobe PS	136 fonts
Clone PS	93 fonts

For license reasons, the device fonts for Adobe PS cannot be handled by Clone PS. Instead, Clone PS is equipped with fonts similar to Adobe device fonts under different names; when an Adobe PS font is specified in the data to be printed, Clone PS will replace it with a similar font.

Use of a substitute font sometimes leads to different printing results, as shown in the table below.

Example 1

PS type	Helvetica
Adobe PS	Helvetica findfont: Change before you have to!

PS type	Helvetica
Clone PS	Helvetica findfont: Change before you have to!
	When Helvetica is used in the original document, Clone PS applies a substitute font named NimbusSans-Regular, maintaining almost the same appearance as the original data.

Example 2

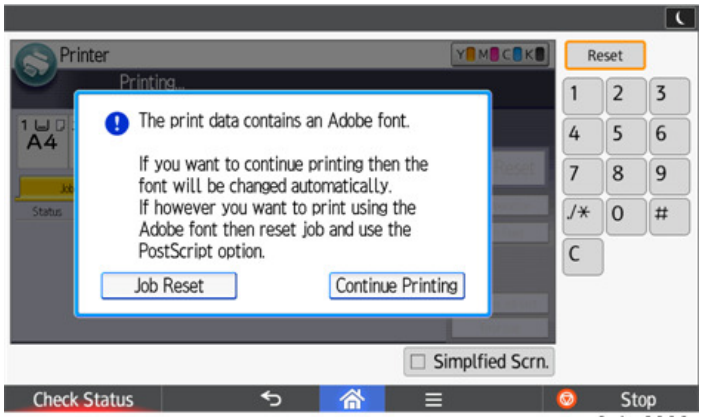
PS type	LetterGothic
Adobe PS	LetterGothic: Change before you have to!
Clone PS	LetterGothic: Change before you have to!
	When LetterGothic is originally used, Clone PS substitutes it with LetterGothic-Regular. In this case, the character spacing differs from that in the original data.

Example 3

PS type	Chicago
Adobe PS	Chicago: Change before you have to!
Clone PS	Chicago: Change before you have to!
	Clone PS does not support alternative fonts for Chicago; instead, the Courier font (*) is used. (The font shape differs significantly from Chicago.) * Since Courier itself is named among the Adobe PS device fonts, Clone PS substitutes it with an alternative font, NimbusMonoPS-Regular.

Font Change Confirmation Screen

Clone PS itself incorporates no Adobe fonts in it, and therefore replaces them with similar fonts when Adobe PS fonts are specified in the print data output to the printer.
However, there is a possibility that a substitute font not desired by the customer may be used; to cope with this issue, the operation panel shows a confirmation screen whenever an Adobe font is to be replaced by a similar font.



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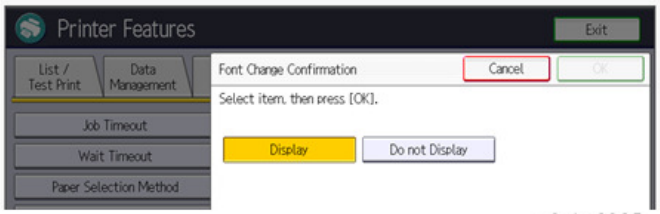
If the customer often prints data containing Adobe fonts that are almost the same in terms of spacing and shape as their substitutes, the confirmation screen appears every time printing is performed, making the printing operation cumbersome. In such a case, the font change confirmation screen can be hidden.

- "Settings" icon on Home screen > Machine Features Settings > Printer Settings > PS Menu > Font Change Confirmation



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List of fonts and their replacements (Adobe PS -> Clone PS)

No.	Adobe PS	Clone PS
1	Courier	NimbusMonoPS-Regular
2	Courier-Bold	NimbusMonoPS-Bold
3	Courier-BoldOblique	NimbusMonoPS-BoldItalic
4	Courier-Oblique	NimbusMonoPS-Italic
5	Helvetica	NimbusSans-Regular
6	Helvetica-Bold	NimbusSans-Bold
7	Helvetica-BoldOblique	NimbusSans-BoldOblique
8	Helvetica-Oblique	NimbusSans-Oblique
9	Symbol	StandardSymL
10	Times-Bold	NimbusRoman-Bold
11	Times-BoldItalic	NimbusRoman-BoldItalic
12	Times-Italic	NimbusRoman-Italic
13	Times-Roman	NimbusRoman-Regular
14	AlbertusMT	NimbusMonoPS-Regular
15	AlbertusMT-Italic	NimbusMonoPS-Regular

16	AlbertusMT-Light	NimbusMonoPS-Regular
17	AntiqueOlive-Roman	NimbusMonoPS-Regular
18	AntiqueOlive-Italic	AntiqueOlive-Italic
19	AntiqueOlive-Bold	AntiqueOlive-Bold
20	AntiqueOlive-Compact	NimbusMonoPS-Regular
22	Apple-Chancery	NimbusMonoPS-Regular
22	ArialMT	NimbusSansNo2-Regular
23	Arial-ItalicMT	NimbusSansNo2-Italic
24	Arial-BoldMT	NimbusSansNo2-Bold
25	Arial-BoldItalicMT	NimbusSansNo2-BoldItalic
26	AvantGarde-Book	URWGothic-Book
27	AvantGarde-BookOblique	URWGothic-BookOblique
28	AvantGarde-Demi	URWGothic-Demi
29	AvantGarde-DemiOblique	URWGothic-DemiOblique
30	Bodoni	NimbusMonoPS-Regular
31	Bodoni-Italic	NimbusMonoPS-Regular
32	Bodoni-Bold	NimbusMonoPS-Regular
33	Bodoni-BoldItalic	NimbusMonoPS-Regular
34	Bodoni-Poster	NimbusMonoPS-Regular
35	Bodoni-PosterCompressed	NimbusMonoPS-Regular
36	Bookman-Light	URWBookman-Light
37	Bookman-LightItalic	URWBookman-LightItalic
38	Bookman-Demi	URWBookman-Demi
39	Bookman-DemiItalic	URWBookman-DemiItalic
40	Carta	NimbusMonoPS-Regular
41	Chicago	NimbusMonoPS-Regular
42	Clarendon	NimbusMonoPS-Regular
43	Clarendon-Light	NimbusMonoPS-Regular
44	Clarendon-Bold	NimbusMonoPS-Regular
45	CooperBlack	NimbusMonoPS-Regular
46	CooperBlack-Italic	NimbusMonoPS-Regular
47	Copperplate-ThirtyTwoBC	NimbusMonoPS-Regular
48	Copperplate-ThirtyThreeBC	NimbusMonoPS-Regular
49	Coronet-Regular	NimbusMonoPS-Regular
50	Eurostile	NimbusMonoPS-Regular
51	Eurostile-Bold	NimbusMonoPS-Regular
52	Eurostile-ExtendedTwo	NimbusMonoPS-Regular
53	Eurostile-BoldExtendedTwo	NimbusMonoPS-Regular

54	Geneva	NimbusMonoPS-Regular
55	GillSans	NimbusMonoPS-Regular
56	GillSans-Italic	NimbusMonoPS-Regular
57	GillSans-Bold	NimbusMonoPS-Regular
58	GillSans-BoldItalic	NimbusMonoPS-Regular
59	GillSans-Condensed	NimbusMonoPS-Regular
60	GillSans-BoldCondensed	NimbusMonoPS-Regular
61	GillSans-Light	NimbusMonoPS-Regular
62	GillSans-LightItalic	NimbusMonoPS-Regular
63	GillSans-ExtraBold	NimbusMonoPS-Regular
64	Goudy	NimbusMonoPS-Regular
65	Goudy-Italic	NimbusMonoPS-Regular
66	Goudy-Bold	NimbusMonoPS-Regular
67	Goudy-BoldItalic	NimbusMonoPS-Regular
68	Goudy-ExtraBold	NimbusMonoPS-Regular
69	Helvetica-Condensed	NimbusMonoPS-Regular
70	Helvetica-Condensed-Oblique	NimbusMonoPS-Regular
71	Helvetica-Condensed-Bold	NimbusMonoPS-Regular
72	Helvetica-Condensed-BoldObl	NimbusMonoPS-Regular
73	Helvetica-Narrow	NimbusSansNarrow-Regular
74	Helvetica-Narrow-Oblique	NimbusSansNarrow-Oblique
75	Helvetica-Narrow-Bold	NimbusSansNarrow-Bold
76	Helvetica-Narrow-BoldOblique	NimbusSansNarrow-BoldOblique
77	HoeflerText-Regular	NimbusMonoPS-Regular
78	HoeflerText-Italic	NimbusMonoPS-Regular
79	HoeflerText-Black	NimbusMonoPS-Regular
80	HoeflerText-BlackItalic	NimbusMonoPS-Regular
81	HoeflerText-Ornaments	NimbusMonoPS-Regular
82	JoannaMT	NimbusMonoPS-Regular
83	JoannaMT-Italic	NimbusMonoPS-Regular
84	JoannaMT-Bold	NimbusMonoPS-Regular
85	JoannaMT-BoldItalic	NimbusMonoPS-Regular
86	LetterGothic	LetterGothic-Regular
87	LetterGothic-Slanted	NimbusMonoPS-Regular
88	LetterGothic-Bold	LetterGothic-Bold
89	LetterGothic-BoldSlanted	NimbusMonoPS-Regular
90	LubalinGraph-Book	NimbusMonoPS-Regular
91	LubalinGraph-BookOblique	NimbusMonoPS-Regular

92	LubalinGraph-Demi	NimbusMonoPS-Regular
93	LubalinGraph-DemiOblique	NimbusMonoPS-Regular
94	Marigold	Mauritius-Regular
95	Monaco	NimbusMonoPS-Regular
96	MonaLisa-Recut	NimbusMonoPS-Regular
97	NewCenturySchlbk-Roman	URWCenturySchoolbook-Roman
98	NewCenturySchlbk-Italic	URWCenturySchoolbook-Italic
99	NewCenturySchlbk-Bold	URWCenturySchoolbook-Bold
100	NewCenturySchlbk-BoldItalic	URWCenturySchoolbook-BdIta
101	NewYork	NimbusMonoPS-Regular
102	Optima	NimbusMonoPS-Regular
103	Optima-Italic	NimbusMonoPS-Regular
104	Optima-Bold	NimbusMonoPS-Regular
105	Optima-BoldItalic	NimbusMonoPS-Regular
106	Oxford	NimbusMonoPS-Regular
107	Palatino-Roman	Palladio-Roman
108	Palatino-Italic	Palladio-Italic
109	Palatino-Bold	Palladio-Bold
110	Palatino-BoldItalic	Palladio-BoldItalic
111	StempelGaramond-Roman	NimbusMonoPS-Regular
112	StempelGaramond-Italic	NimbusMonoPS-Regular
113	StempelGaramond-Bold	NimbusMonoPS-Regular
114	StempelGaramond-BoldItalic	NimbusMonoPS-Regular
115	Tekton	NimbusMonoPS-Regular
116	TimesNewRomanPSMT	NimbusRomanNo9-Regular
117	TimesNewRomanPS-ItalicMT	NimbusRomanNo9-Italic
118	TimesNewRomanPS-BoldMT	NimbusRomanNo9-Bold
119	TimesNewRomanPS-BoldItalicMT	NimbusRomanNo9-BoldItalic
120	Univers	NimbusMonoPS-Regular
121	Univers-Oblique	NimbusMonoPS-Regular
122	Univers-Bold	URWClassicSans-Bold
123	Univers-BoldOblique	NimbusMonoPS-Regular
124	Univers-Light	NimbusMonoPS-Regular
125	Univers-LightOblique	NimbusMonoPS-Regular
126	Univers-Condensed	NimbusMonoPS-Regular
127	Univers-CondensedOblique	NimbusMonoPS-Regular
128	Univers-CondensedBold	NimbusMonoPS-Regular
129	Univers-CondensedBoldOblique	NimbusMonoPS-Regular

130	Univers-Extended	NimbusMonoPS-Regular
131	Univers-ExtendedObl	NimbusMonoPS-Regular
132	Univers-BoldExt	NimbusMonoPS-Regular
133	Univers-BoldExtObl	NimbusMonoPS-Regular
134	Wingdings-Regular	URWDingbats
135	ZapfChancery-MediumItalic	URWChancery-MediumItalic
136	ZapfDingbats	Dingbats

Differences in Driver Functions

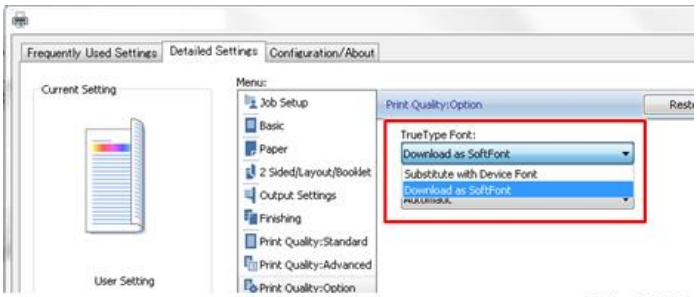
As shown below, there are differences in available driver functions between Adobe PS and Clone PS.

1. **Font Substitution Table (Applicable only to the driver for Windows OS)**

   Start > Device and Printer > Printer Properties > Device Settings

   For Clone PS, the Font Substitution Table under the Device Settings menu will not be displayed. Clone PS has font substitution table data similar to that of Adobe PS and performs font replacement as appropriate.

   To disable font replacement, go to Printing Preferences > Detailed Settings > “Print Quality: Option” > “True Type Font:” option, and select “Download as SoftFont”.



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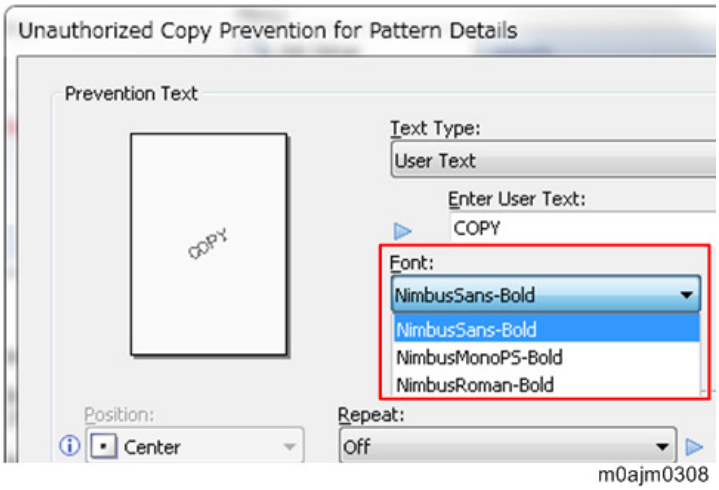
2. **Fonts used for unauthorized copy prevention (Common to drivers for Windows OS and Mac OS X)**

   The watermark text used for unauthorized copy prevention consists of a device font. The range of available fonts varies between Adobe PS and Clone PS because of the difference in available device fonts.

   Adobe PS provides a choice from 136 fonts while 3 fonts are selectable for Clone PS.



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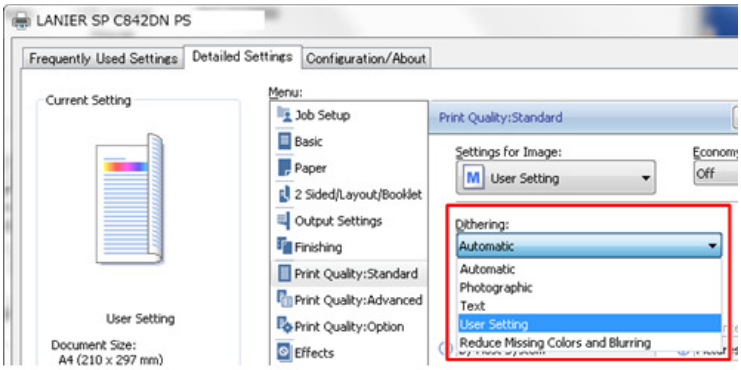
3. **"User Setting" for dithering (Common to drivers for Windows OS and Mac OS X)**

   Clone PS ignores the "User Setting" option for dithering and performs dithering in the same manner as when the "Automatic" setting (*) is selected.



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   * "Text Priority" is selected for text, and "Photo" for graphics and images.

   In the driver menu for Mac OS X, the "User Setting" option is shown at half brightness and cannot be selected.

"Web Help Support" Settings

Refer to "Web Help Support" Settings (MF Model Only).

"RemoteConnect Support" and "Remote Panel Operation"

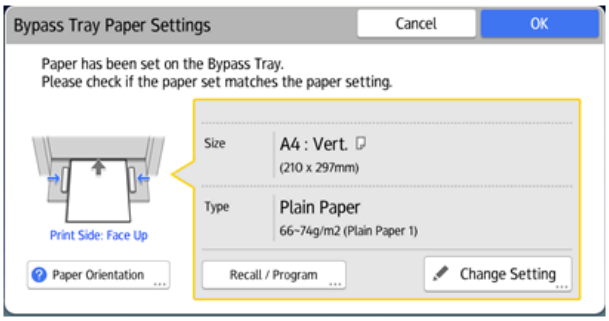
Refer to the following pages:

- "RemoteConnect Support" Settings (MF Model Only)
- "Remote Panel Operation" Settings (MF Model Only)

Bypass Tray Assist Function (MF Model Only)

A Bypass Tray setting has been added to make it easier to do the tray settings and avoid problems.

When the paper is loaded in the Bypass Tray, the Bypass Tray Paper Settings screen pops-up.



d0apc7940

Pop-ups appear in the Bypass Tray settings assistant:

- After pressing the Bypass Tray setting button on the Copier (Classic), Easy Copy, Quick Copy, and Document Server screens.
- If the pop-up displays have been enabled to open for Copier (Classic), Easy Copy, Quick Copy, and Document Server screens when the paper is set in the bypass tray. *1
- When the [Delete] button is pressed on the paper size mismatch screen

Note

*1: Whether the pop-ups are enabled/disabled to appear when the paper is set in the tray depends on the following setting: Home > Settings > Machine Features Settings > Copier/Document Server Features > General Features tab > Paper Settings Screen for Bypass (Default: Display Automtcly.)

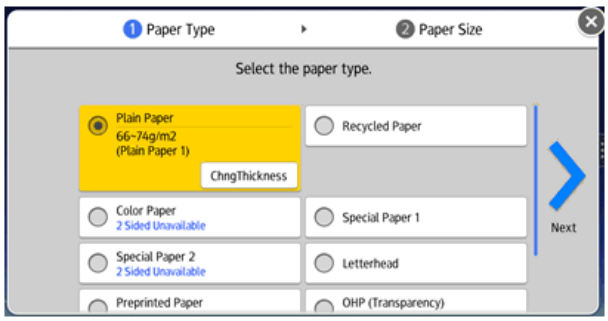
However, the pop-ups do not appear when:

- A copy job is in progress
- A system dialog screen is open
- A machine status check screen is open
- A job stop screen is open

Setting the paper by the Bypass Tray Assist Paper Function

The Bypass Paper Setting screen opens when you select the paper setting for the bypass tray with the copy application, or after pressing the [Change Setting] button on the Settings screen when the paper is loaded in the Bypass Tray.

1. Select the paper type, and then press [Next].



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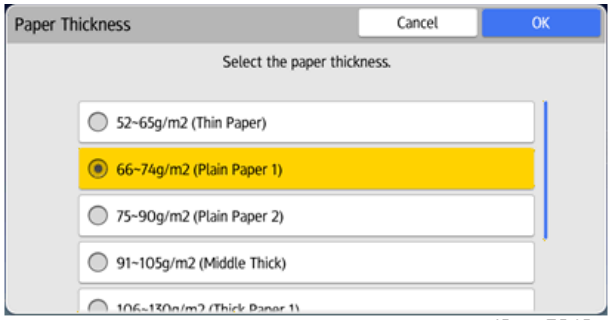
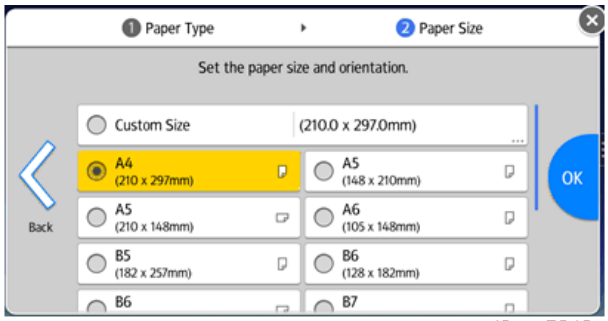
When changing the paper thickness in Plain Paper, select the paper thickness.



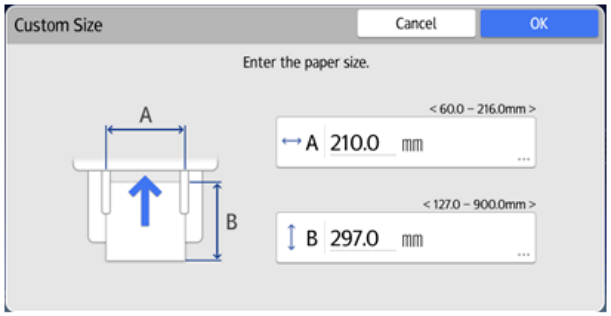
d0apc7942

2. Select the paper size and orientation, and then press [OK].



d0apc7943

When using a custom size, select the [Custom Size] and then input the paper size.



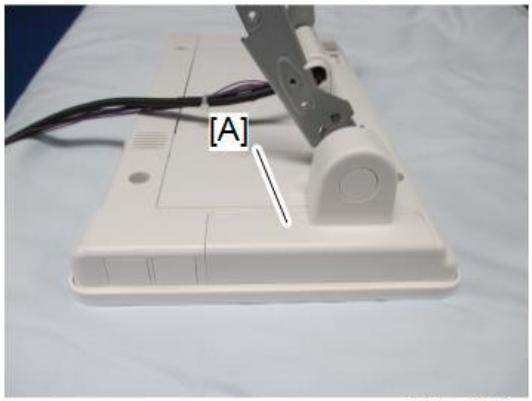
d0apc7944

8. Smart Operation Panel G2.5

Replacement and Adjustment

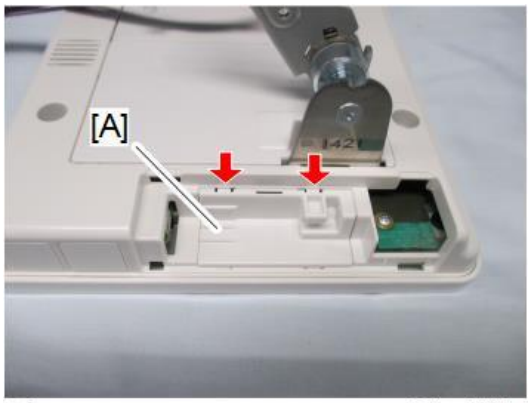
NFC Board

1. Remove the operation panel unit. (Refer to "Operation Panel (PCB13)", "Replacement and Adjustment" in Main Chapters.)
2. Remove the hinge cover [A].



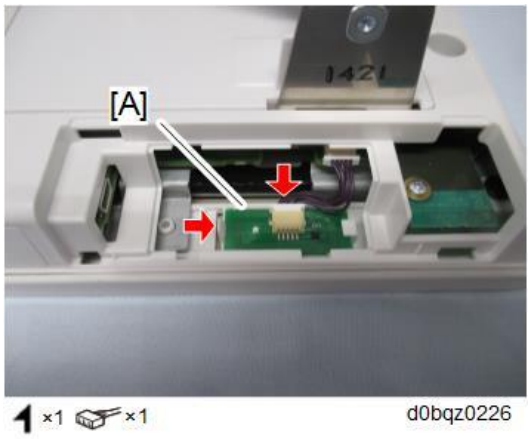
d0bqz0224

3. Remove the cover of the NFC board [A].



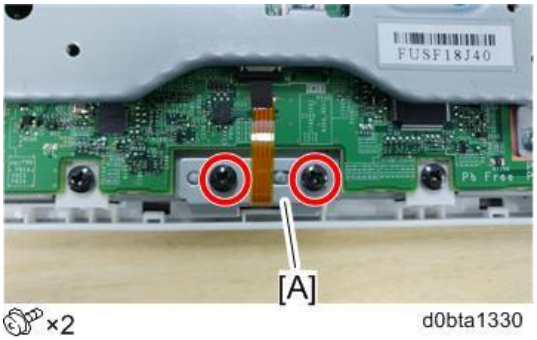
×2 d0bqz0225

4. Remove the NFC board [A].

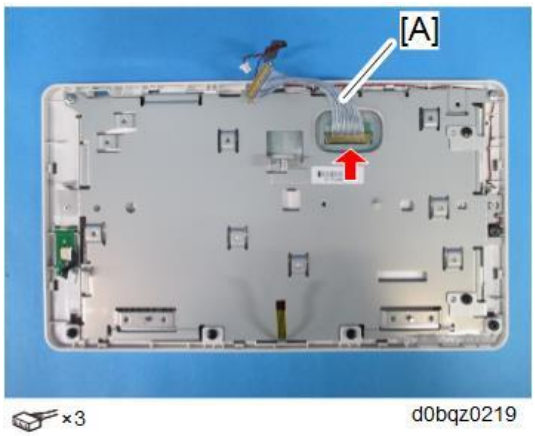


LCD

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 bracket [A].

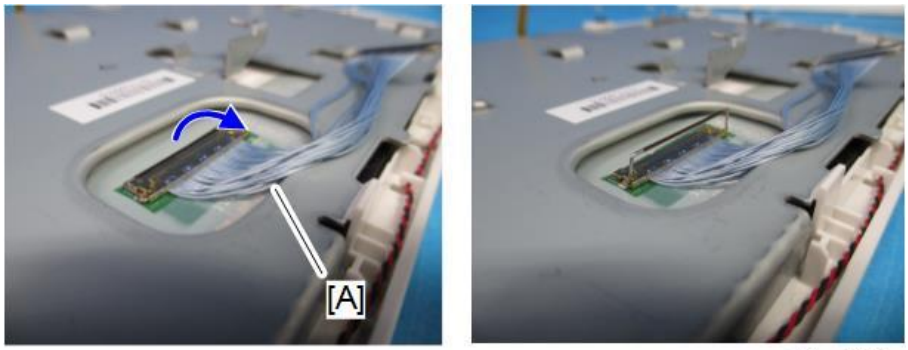


4. Remove the connector of the LCD I/F cable [A].



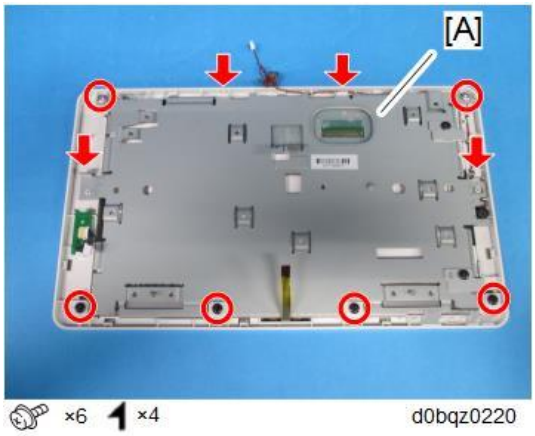
Note

Lift the fastener of the LCD I/F cable [A].

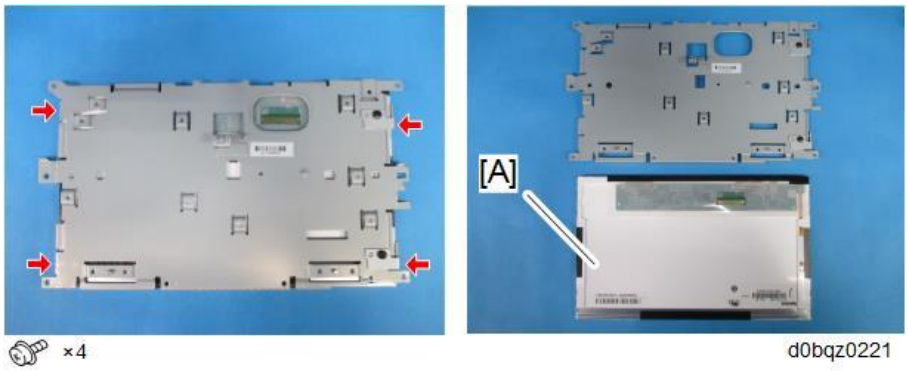


d0bqz0218

5. Remove the LCD unit [A].



6. Remove the LCD [A].



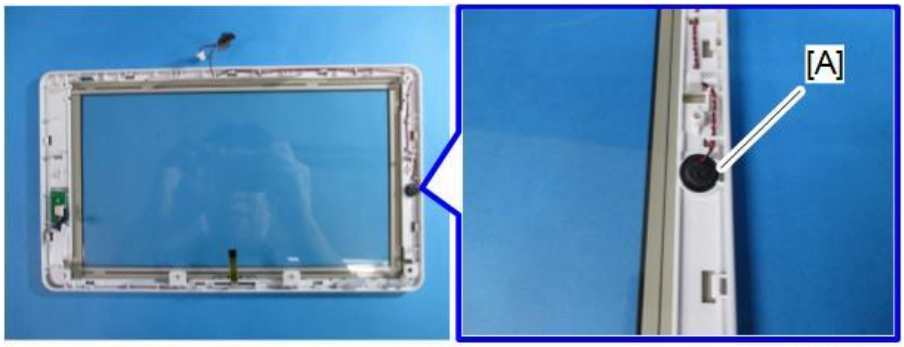
Note

- 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).

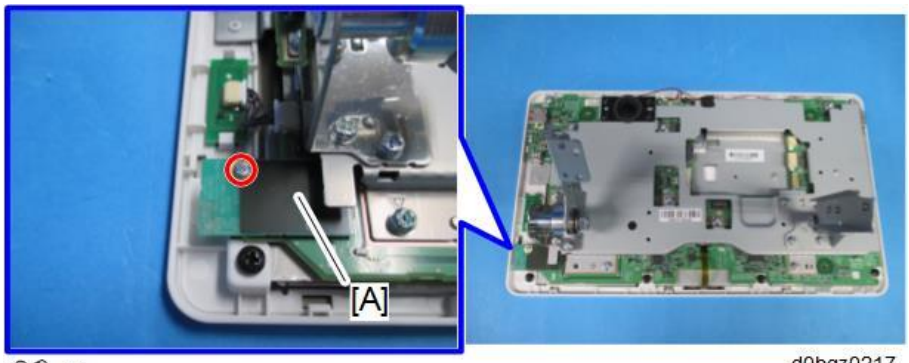
3. Remove the LCD unit (LCD).
4. Remove the microphone [A].



d0bqz0222

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].



×1

d0bqz0217

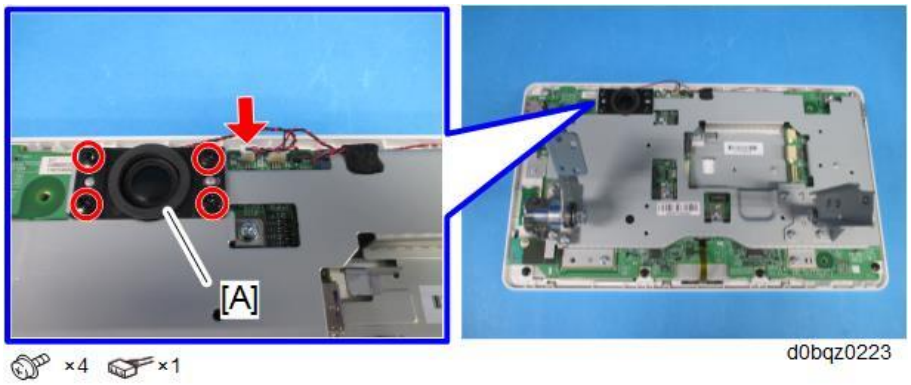
Note

- After replacing the Wi-Fi module, perform the following checks:
  - Wireless LAN Check (Wireless LAN Check)
  - Bluetooth Check (Bluetooth Check)

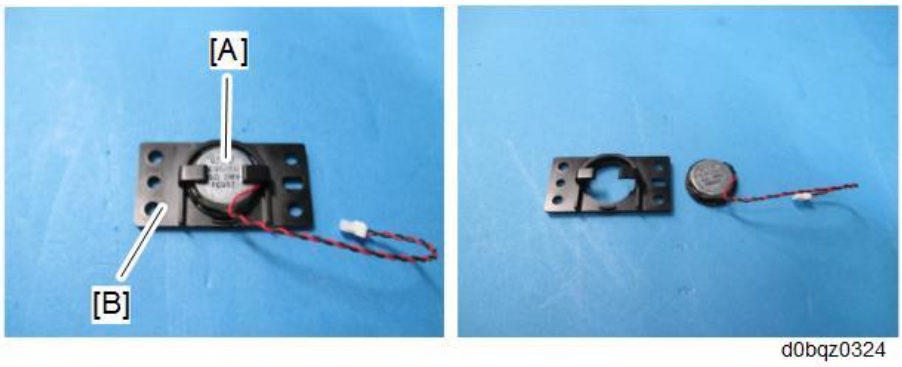
Speaker (OT1)

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 (OT1) [A] together with the speaker holder.



4. Remove the speaker (OT1) [A] from the speaker holder [B].



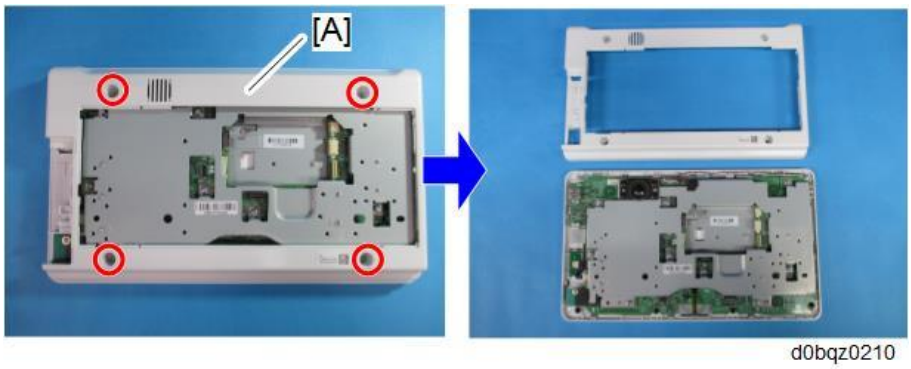
Note

- After replacing the Speaker (OT1), perform the following check.
  - Speaker (OT1) Check (Speaker (OT1) Check)

Main Controller Board

1. Remove the operation panel unit. (Refer to "Operation Panel (PCB13)", "Replacement and Adjustment" in Main Chapters.)

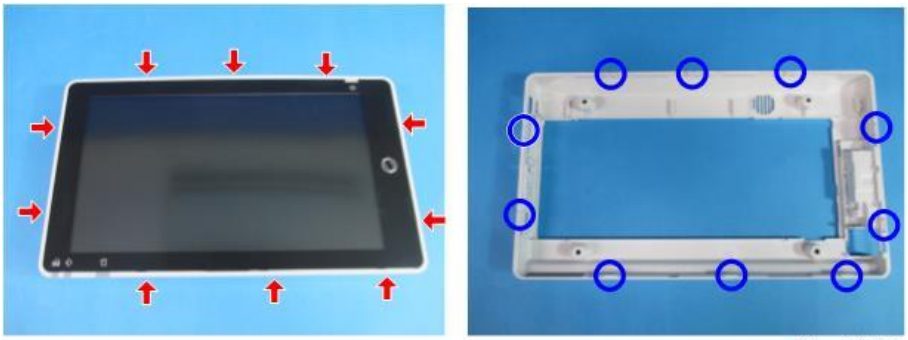
2. Remove the bottom cover [A] (×4).



Note

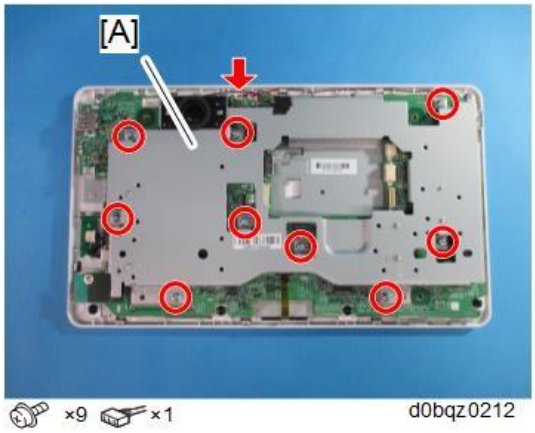
- There are ten hooks inside the operation panel unit. Before removing the operation panel

bottom cover, check the photos below.



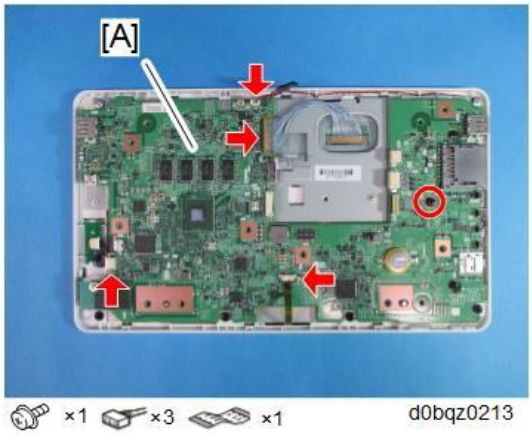
d0bqz0211

3. Remove the base bracket [A].



d0bqz0212

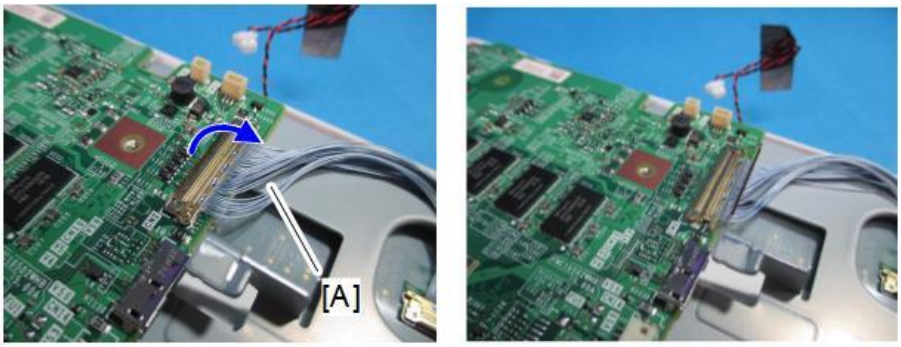
4. Remove the main controller board [A].



d0bqz0213

Note

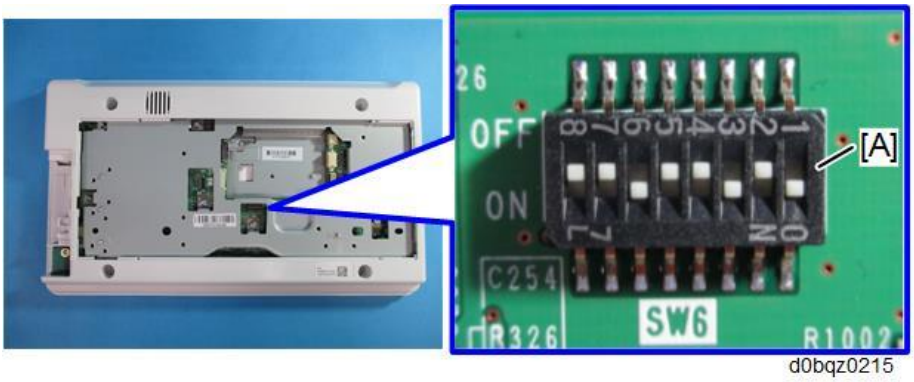
Lift the fastener of the LCD I/F cable [A] on the main controller board side.



d0bqz0214

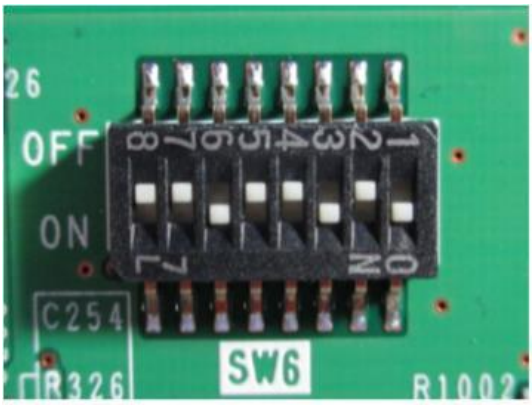
Note

- 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.



d0bqz0215

- 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).



d0bqz0216

- 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.

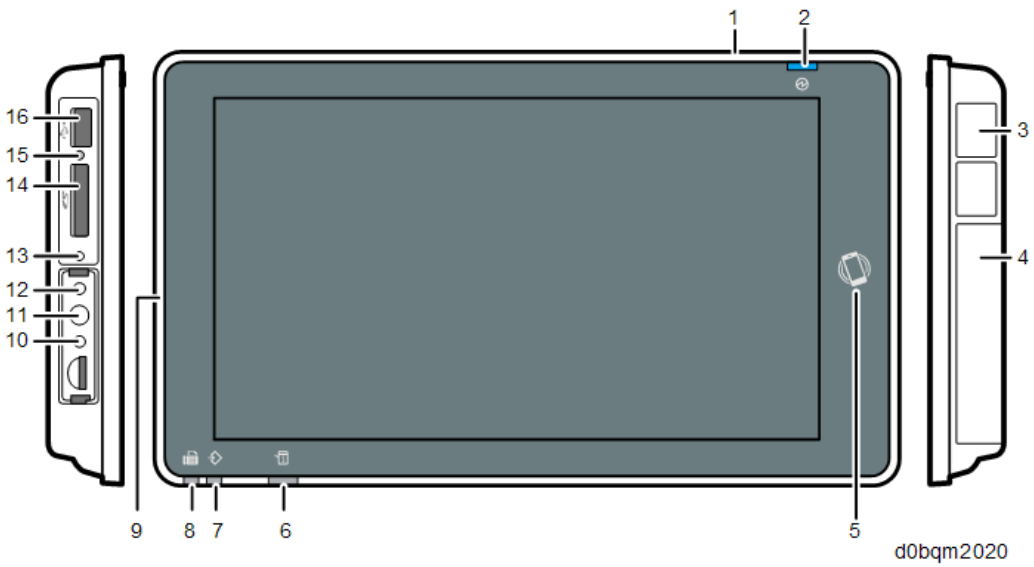
- After replacing the main controller board, perform the following checks:
  - LED Check (LED Check)
  - Key Check (Key Check)

Mechanism

System Components

Hardware Specifications

Components



No.	Name	No.	Name
1	Speaker (OT1)	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 the 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

8.Smart Operation Panel G2.5

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

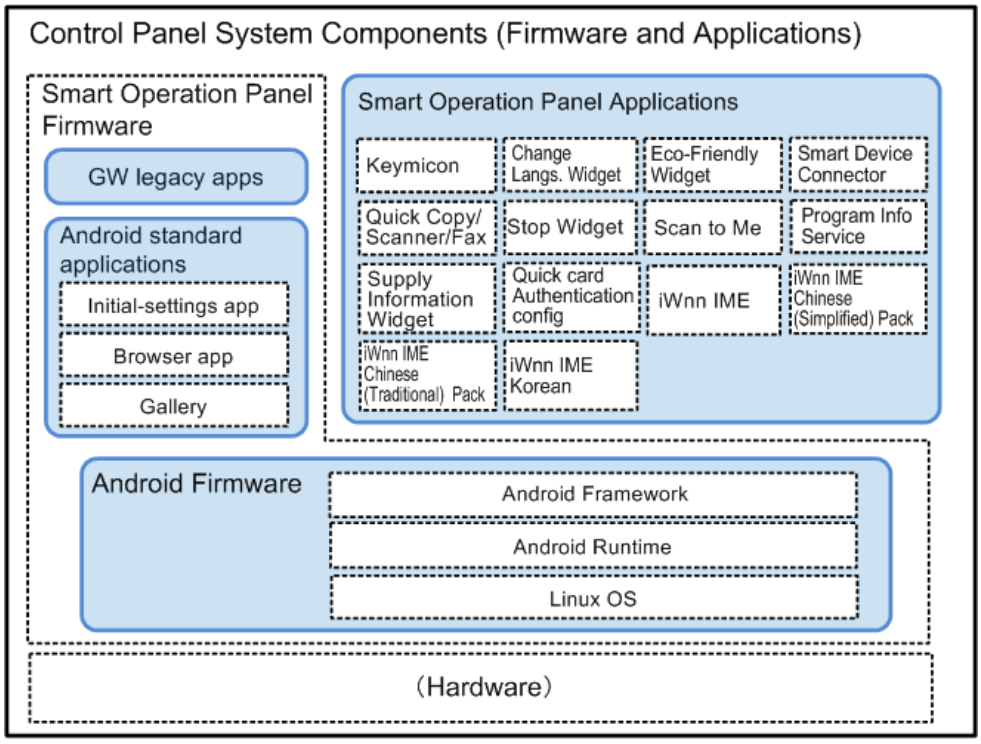
Available languages

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.



w_d238a2004a_en

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 (PCB15) 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.

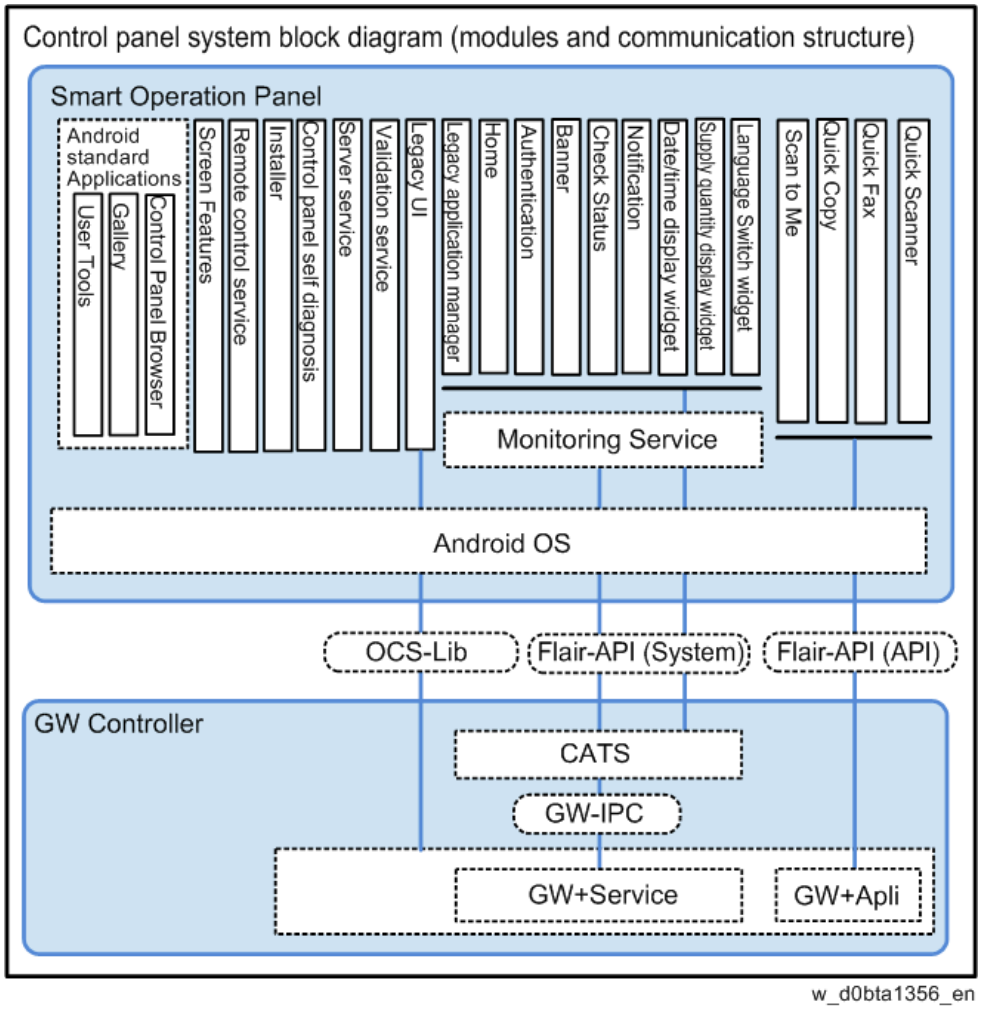
Applications that can be installed

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.

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)”.

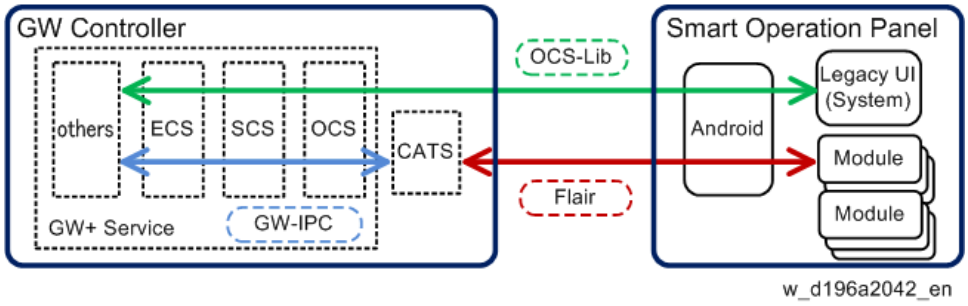
System block diagram



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.

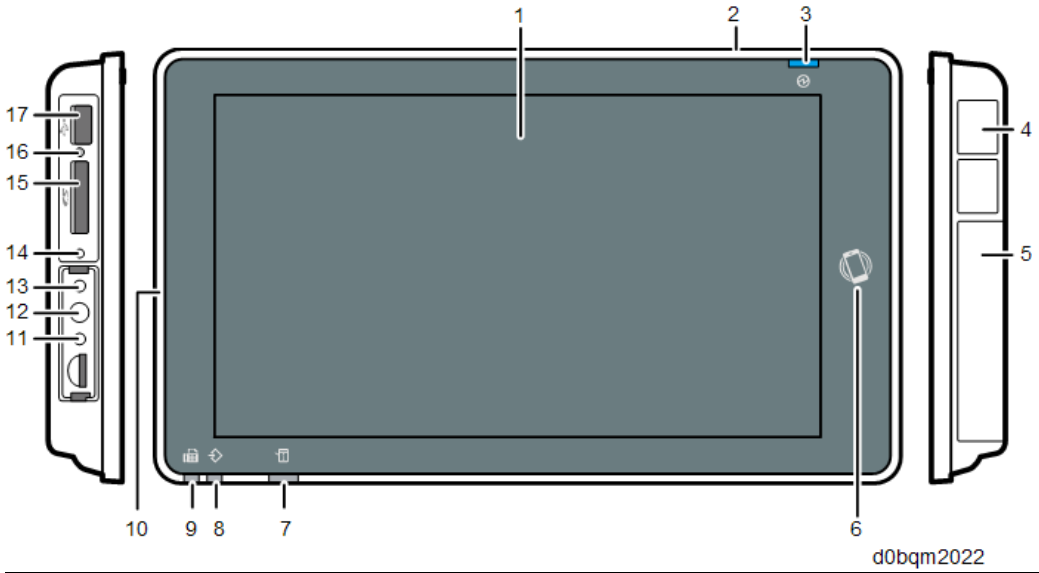


Note

- 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

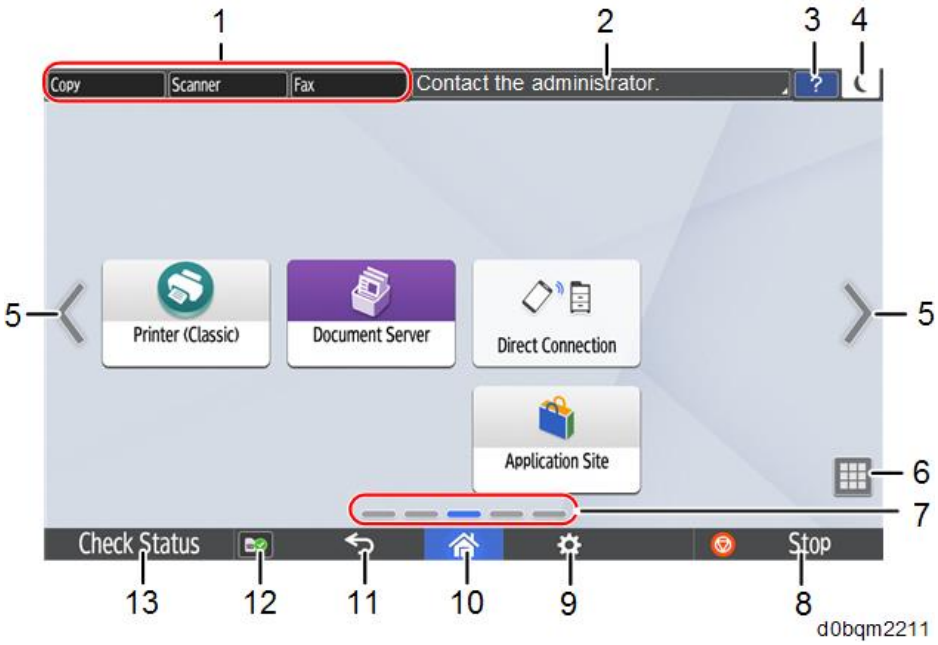


No.	Name	Description
1	Display panel	Displays icons for functions and applications. Displays the operation screens, operation keys, and other information.
2	Speaker (OT1)	Produces the operation and warning sounds.
3	Main power indicator	Indicates power OFF/ON, and energy saving status.
4	USB slot for digital cameras	You can connect the optional keyboards 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)

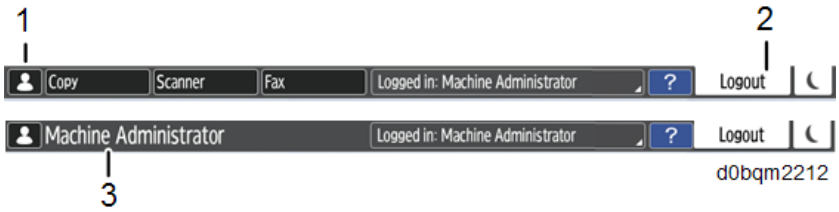


No.	Name	Description
1	[Function] keys	Users can assign shortcuts for each application. Up to three applications can be assigned as shortcuts. When an application is assigned as a function key, users can call the application from any screen. The function keys are disabled by default. Users must enable 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 to the 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. USB icon (key) SD card icon (key) USB/SD icon (key)
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.

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.)

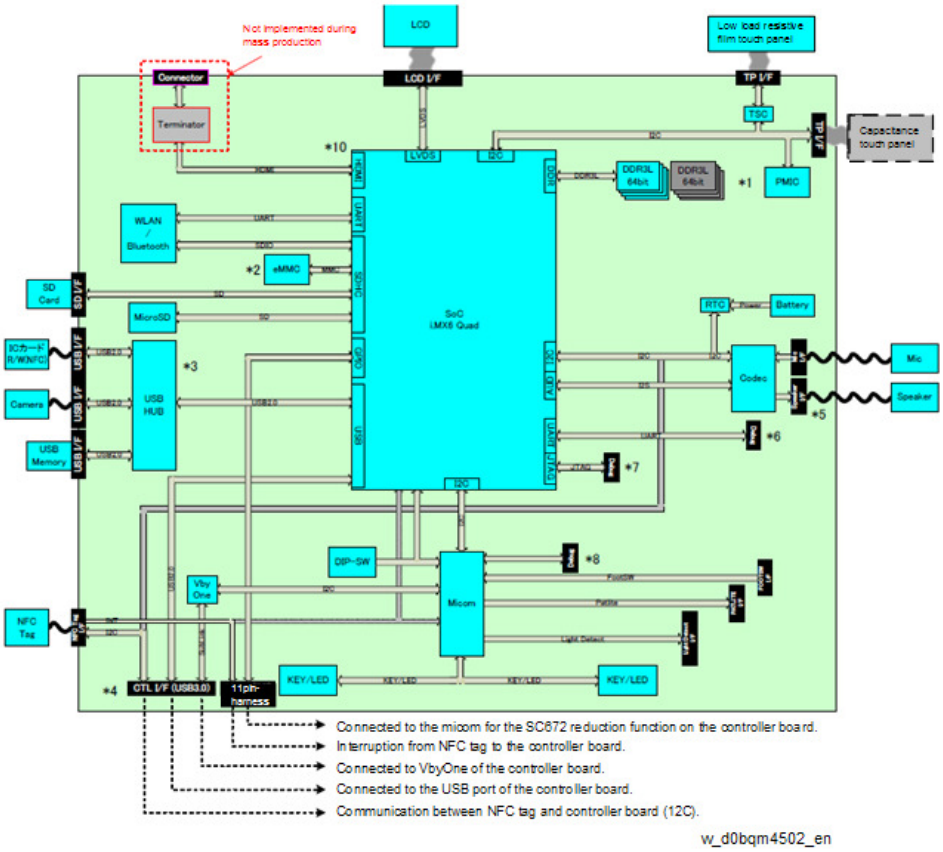
Items that Appear According to the Security Setting

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

8.Smart Operation Panel G2.5



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.

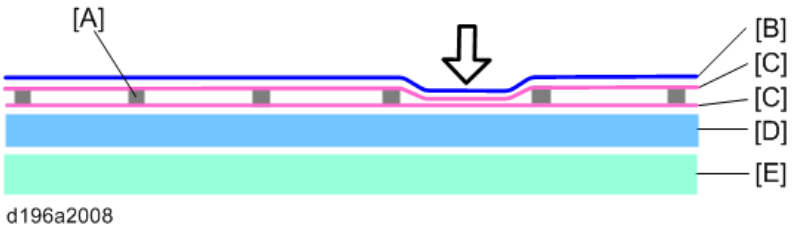
Basic Structure

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.



[A]: Spacing dot

[B]: PET film

[C]: Transparent conductive film

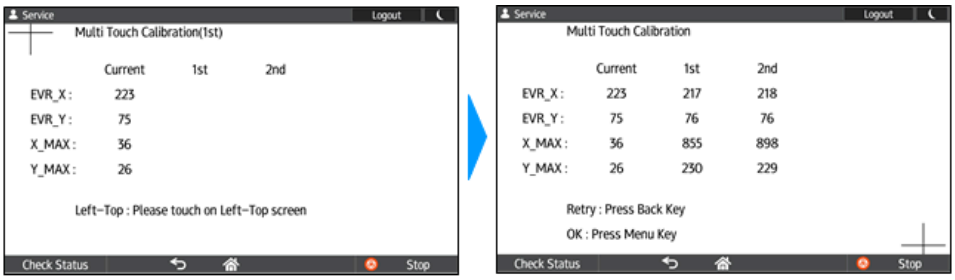
[D]: Base glass

[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.

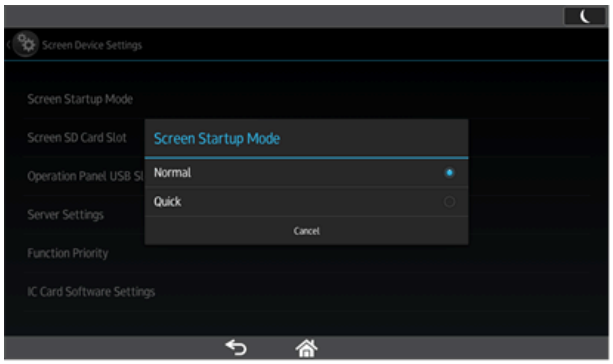
2. Quick

   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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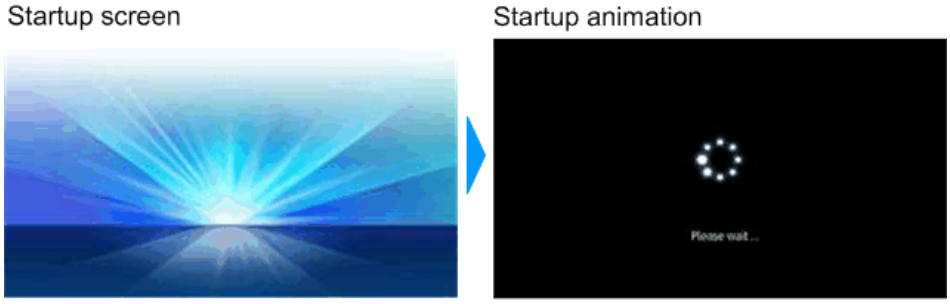
Note

- 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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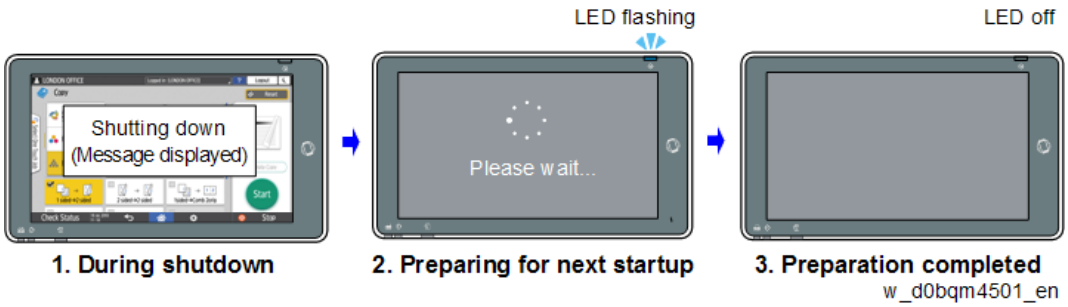
In Quick mode

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 preparing 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 the 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 in order to:

- 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 the 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. The 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 • Updating Keymicon	-

Login to/Logout from Control Panel Service Mode

Login

In the same way as you log in to the SP Mode on the MFP, you use the soft keys to enter a combination of numbers in order to login to the service mode of the control panel.

Note

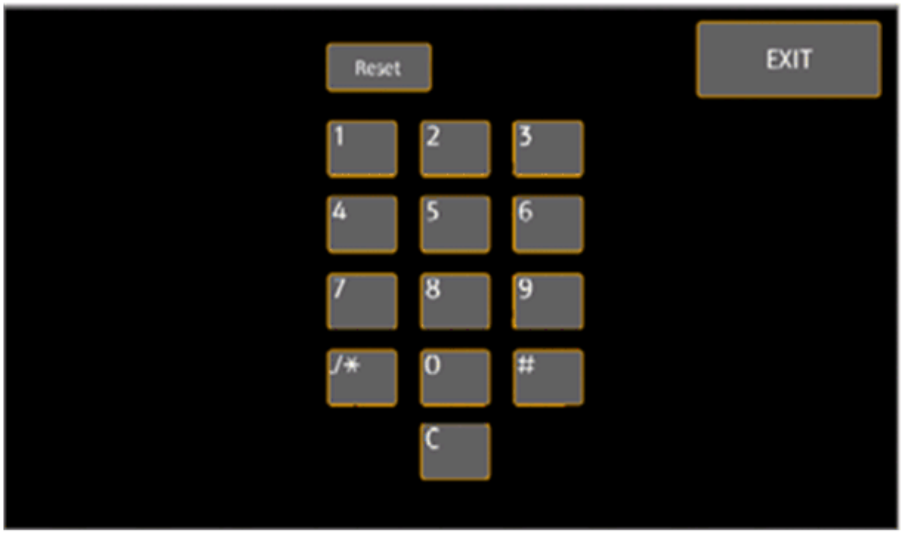
- You cannot log in to the service mode of the control panel when one of the following screens is displayed.
  - Stop All Jobs
  - Settings
  - Address Book Management

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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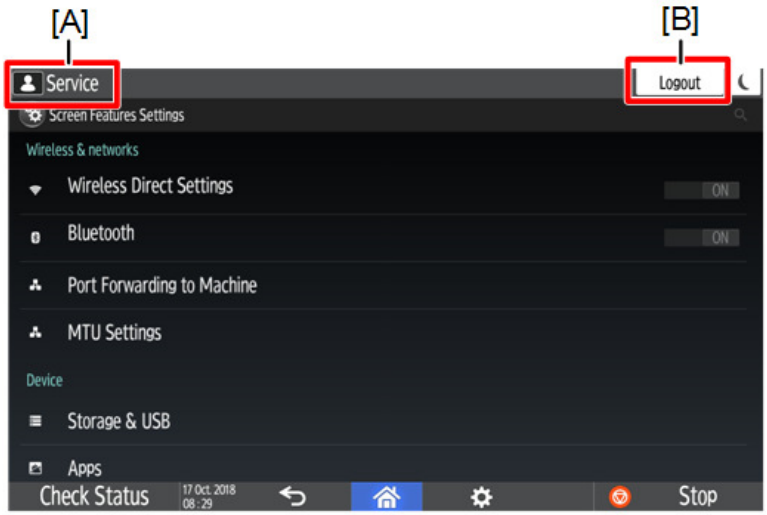
Login Status Indicator

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 [Service Mode Lock] in [System Settings].
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. There will be beeping sounds to indicate login failure.

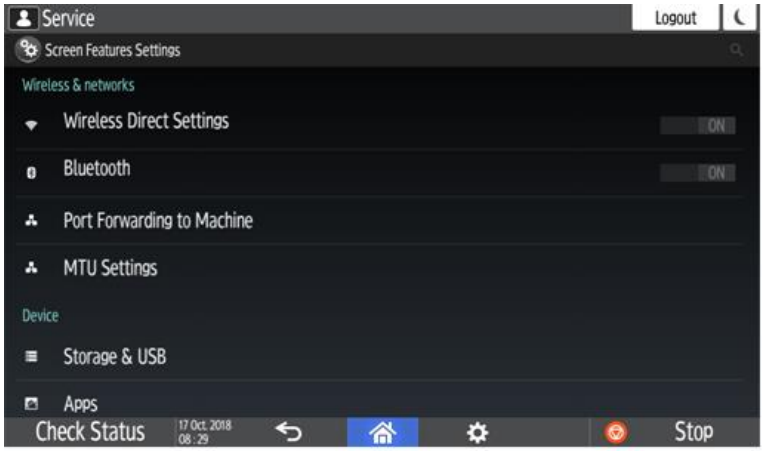
Note

- The machine can enter the recovery mode even if [Service Mode Lock] is enabled.

Service Mode Menu

There are four menus of settings.

- 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.

Menu level			Description
1st level	2nd level	3rd level	
	Connection Password		You can only view the setting.
	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.
		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.
		Application Site	Start up Application Site.
		Activate Applications	Activate applications that have been installed from the server.
		Update Applications	Update applications that have been installed.
		Uninstall	Uninstall applications.
		Check Server Connect	Check if you can connect to the Server.

*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	
Screen Device Settings Information	Status		Displays the following: • Wireless LAN MAC address • Bluetooth address • Interface Settings • Wi-Fi settings (ON/OFF)

Menu level			Description
1st level	2nd level	3rd level	
	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 copyright 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"
			2nd digit: LCD vendor • 0: AUO • 1: INNOLUX • 2: Dongbond • 6: Giantplus
			3rd digit: eMMC version • 7: Version 5.00 • 8: Version 5.10
			4th digit: PCB vendor • N: NEC • R: RICOH
Screen Device Settings	Use of External Interface	Screen SD Card Slot (Active/Inactive)	Activates or deactivates the screen SD card slot. When set to [Inactive], power is not supplied to the screen SD card slot. When this setting is changed from [Active] to [Inactive], the following settings are automatically changed to disable the use of the screen SD card slot. User menu: Screen Feature Settings > System > Screen Device Settings > Screen

Menu level			Description
1st level	2nd level	3rd level	
			SD Card Slot Service menu: System > Screen Device Settings > Prohibit Use of External Interface > Screen SD Card Slot When this setting is changed from [Inactive] to [Active], however, the settings above will not be changed. You must change the settings manually to enable the use of the screen SD card slot.
		Screen USB Port (Active/Inactive)	Activates or deactivates the screen USB port. When set to [Inactive], power is not supplied to the screen USB port. When this setting is changed from [Active] to [Inactive], the following settings are automatically changed to disable the use of the screen USB port. User menu: Screen Feature Settings > System > Screen Device Settings > Screen USB Memory Slot Service menu: System > Screen Device Settings > Prohibit Use of External Interface > Screen USB Port When this setting is changed from [Inactive] to [Active], however, the settings above will not be changed. You must change the settings manually to enable the use of the screen USB port.
		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 in [Screen Features Settings] is hidden. If you select [Do not prohibit] for this setting, the Wi-Fi function setting in [Screen Features Settings] is displayed. The setting remains unchanged.

Menu level			Description
1st level	2nd level	3rd level	
			• 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 in [Screen Features Settings] is hidden. If you select [Do not prohibit] for this setting, the Wireless Direct function setting in [Screen Features Settings] is displayed. The setting remains unchanged. • Bluetooth (Do not Prohibit/Prohibit) If you select [Prohibit] for this setting, the Bluetooth function is automatically set to off and the Bluetooth function setting in [Screen Features Settings] is hidden. If you select [Do not prohibit] for this setting, the Bluetooth function setting in [Screen Features Settings] 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 the Screen SD Card Slot function setting in [Screen Features Settings] is hidden. If you select [Do not prohibit] for this setting, the Screen SD Card Slot function setting in [Screen Features Settings] is displayed. The setting remains unchanged. • Screen USB Port (Do not Prohibit/Prohibit)

Menu level			Description
1st level	2nd level	3rd level	
			If you select [Prohibit] for this setting, the Screen USB Memory Slot function is automatically set to [OFF] and the Screen USB Memory Slot function setting in [Screen Features Settings] is hidden. If you select [Do not prohibit] for this setting, the Screen USB Memory Slot function setting in [Screen Features Settings] is displayed. The setting remains unchanged.
	Server Settings	Port number	Input a port number for communication with the import/export and RFU server. 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 log out 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.

Menu level			Description
1st level	2nd level	3rd level	
		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 above because of high brightness.
	Backup/Restore Settings		See "Backup/Restore for Smart Operation Panel Application/Settings Function".
	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.
	Screen device always-connection Setting		This setting prevents the operation panel from entering Sleep mode so that Bluetooth 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.
	Panel Self Check		Starts self-diagnosis of the operation panel.

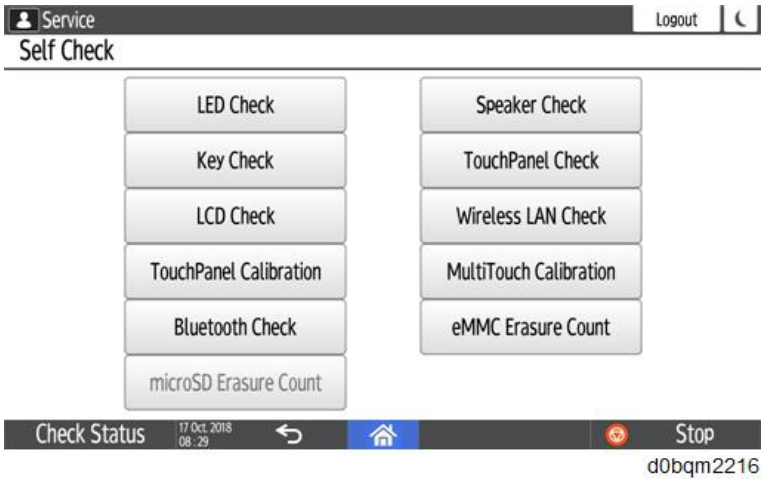
Menu level			Description
1st level	2nd level	3rd level	
			(Panel Self Check)

*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 (OT1) Check
- TouchPanel Check
- Wireless LAN Check
- MultiTouch Calibration
- eMMC Erasure Count



* 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 the [Change Language] button on 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

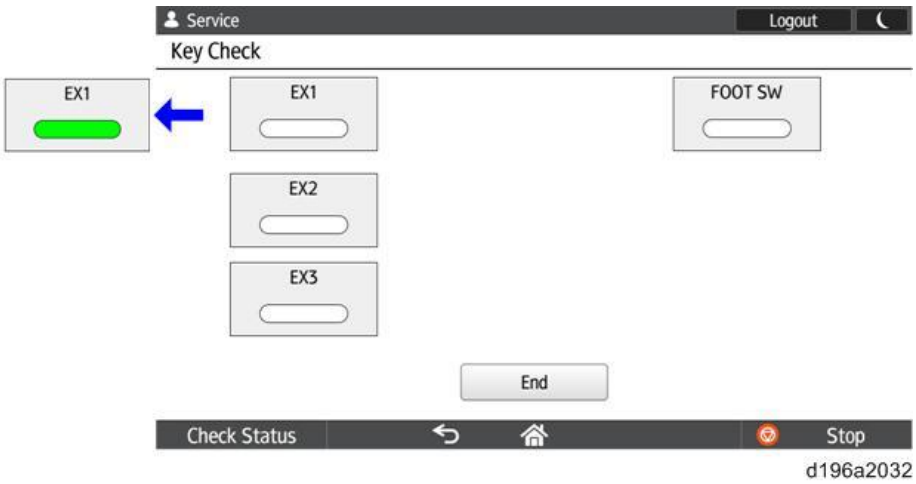
Select the [All Light On] checkbox, and make sure the following LEDs light:

- 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

Note

Calibration should be done when the touch panel does not recognize the touched area correctly, or when you have replaced the LCD only. When you replace the panel assy as a whole instead of replacing the LCD only, calibration is not necessary because the panel assy has already been calibrated at the factory.

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].
- To save the calibration settings and return to the [Self Check] menu, press the [EX3] key.

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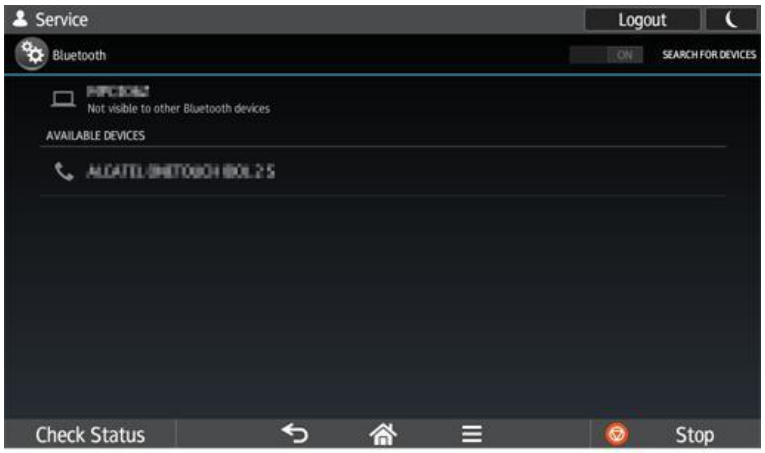
Bluetooth Check

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 (OT1) Check

Tests the speaker (OT1) by playing the sound samples.

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

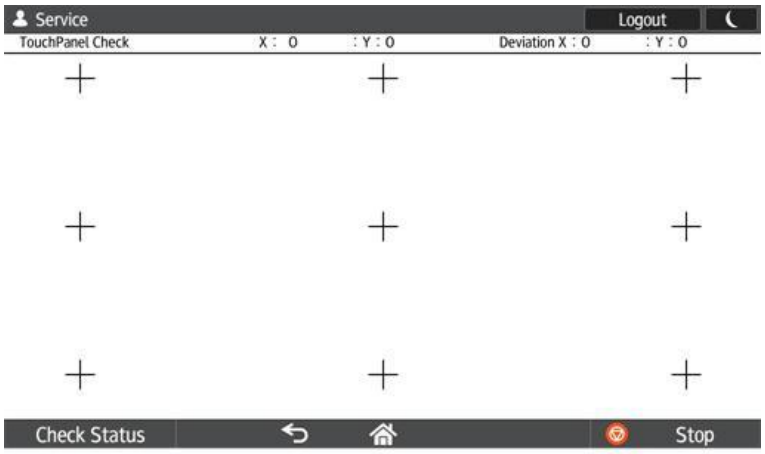
For each of the nine reference points on the screen, the distance between the detected pressed position and the nearest reference point is displayed. The last detected distance remains displayed near each reference point.

To complete the check, press the five reference points (four corners and the center).

If the distance between the detected pressed position and the reference point is within ±12 px for each of the five points, 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 G2.5



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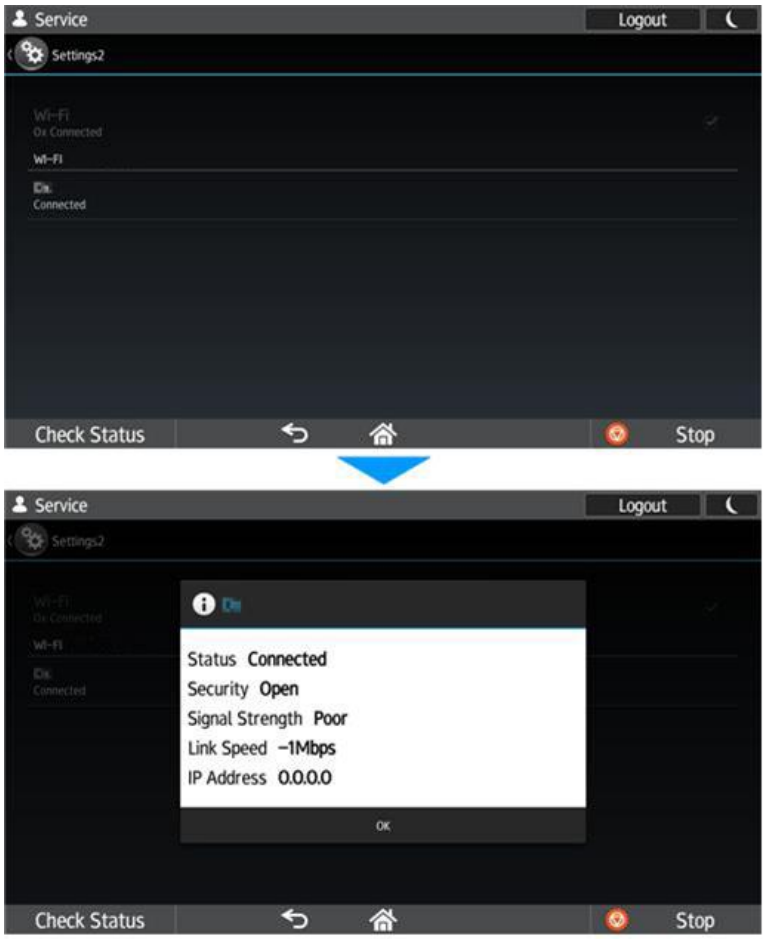
If you press the [OK] button, SP5-971-001 (Operation Panel Coordinates Adjustment) switches from "0: Not Adjusted" to "1: Adjusted" and the screen returns to the self-inspection menu.

If you press the [Back] key, SP5-971-001 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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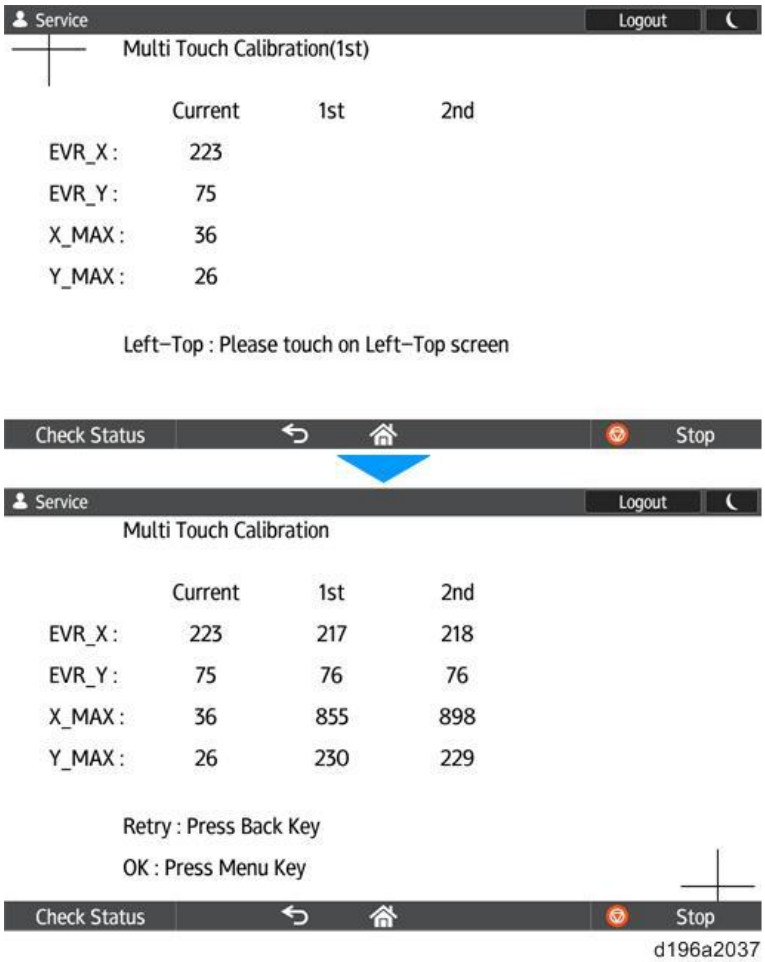
When the check is completed, press [Back] to return to the top menu of [Self Check].

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 the eMMC Erasure Count and the current number of times of rewriting.

8.Smart Operation Panel G2.5

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 sdcard	Updates the Cheetah System firmware by specifying the folder path.
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 [System Settings] > [Administrator Tools] > [Extended Security] > [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

- 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 2:00 AM.
- A backup cannot be performed under any of the conditions below and will retry 1 hour later.
  - During ARFU, firmware updating from the 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.

In Cheetah SP mode, select [Screen Device Settings] > [Backup/Restore Settings] In Cheetah SP mode.

Restore

Note

  - If the machine doesn’t have any backup data, the restore function cannot be used.

1. Execute [Cheetah SP mode] > [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 the restore fails and 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 (Removable Media)”.

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 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 (Removable Media)”. 3. Firmware The operation panel firmware can be updated from the Service Mode Menu or from recovery mode.	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	No	Yes

Update method	Features	Control panel firmware	Applications
	already released.		
Installation/update from Application Site	Installation and Updating of applications and firmware update can be done from the Application Site. When administrator authentication is enabled, an administrator privilege is required to start the 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. Create a folder named “romdata” in the root directory of the media.
3. Put the zip file of the application in the “romdata” folder.

   Note

   Do not unzip the zip file.

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 [System Settings] > [Administrator Tools] > [Extended Security] > [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”.

Updating the Operation Panel Firmware

Creating a media card for update

1. Download the update modules from the Firmware Download Center.
   A self-extracting file "(part number).exe" is downloaded.
2. Execute the downloaded file.
   A folder named after the part number is created, and the following two files are created in the folder.
   - Readme.txt
   - (part number+suffix).zip

   Note
   - Do not extract the zip file.
   - The file name may be "M2a_system.zip" instead.
3. Put the zip file of the application in the “romdata” folder.
   Because you can specify the directory/file by operating the keys, updating is possible even if the file is not in the root directory of the SD card.

Update procedure

The firmware can be updated in the following two ways.

1. Service Mode Menu
   Log in to the control panel in service mode. Insert the SD card into the SD card slot of the control panel. Select [Device] > [Apps] > [Install] > [Firmware update] and follow the instructions. The operation panel automatically restarts in recovery mode and updates the firmware, and then restarts in normal mode again. See "Service Mode Menu".
2. Recovery Mode
   Insert the SD card into the SD card slot of the control panel. Enter recovery mode. Select [apply

update from sdcard] and follow the instructions. See "Recovery Mode".

Installation/Update from the eDC Server

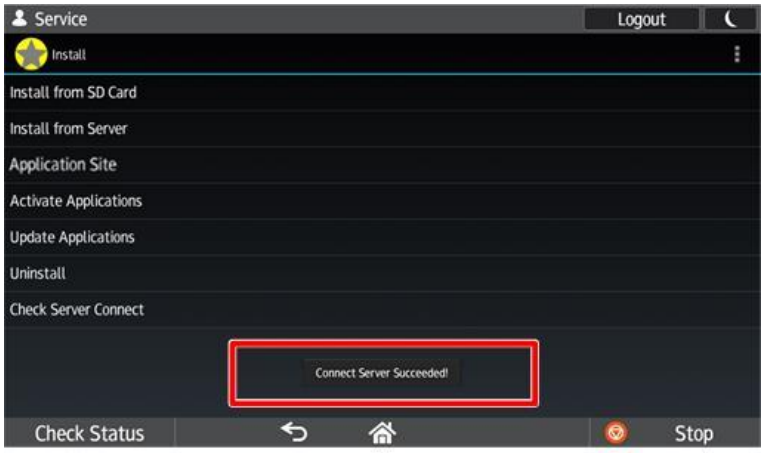
Downloads applications from the eDC Server, and installs or updates them.

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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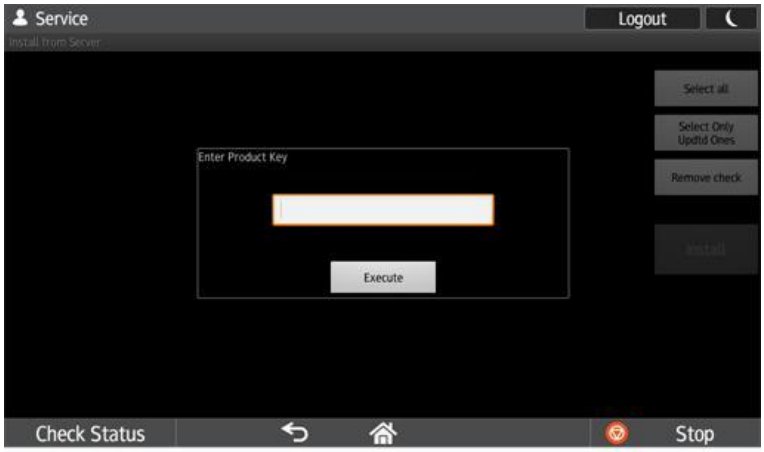
Note

- 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 the 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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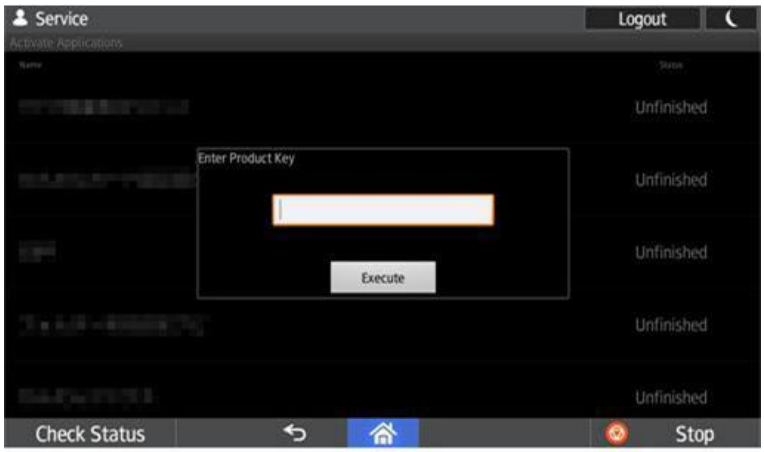
5. Follow the instructions shown on the screen.

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

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. • 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.

Symptom	Solution
	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.
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

Preinstalled 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 preinstalled 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 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 the 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

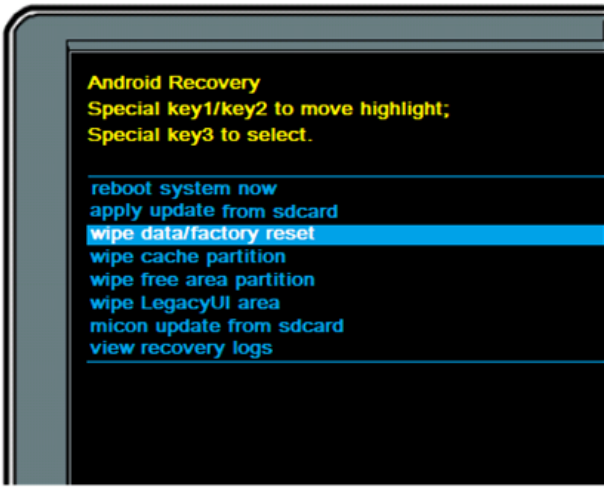
Before executing Factory Reset, be sure to obtain the package firmware and copy it to the SD card.

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.



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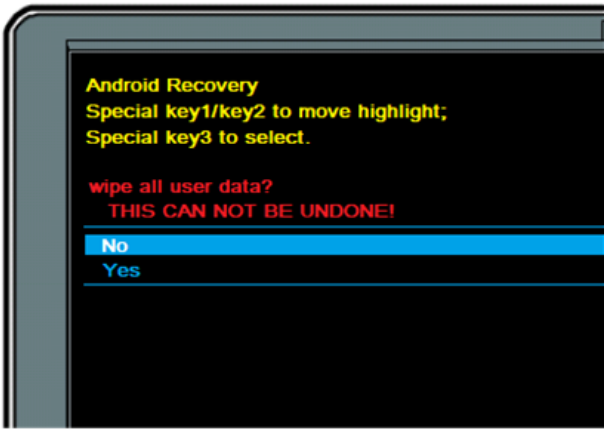
3. A reconfirmation screen is displayed. Select [Yes].



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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 Legacy UI 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 use. • The application is corrupted.	Restart the control panel and repeat the update procedure.
- (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. *

Error Code	Explanation
215-04	Installation of an application that cannot be installed for the 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/version information of the correct firmware and that of the 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

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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.
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 (PCB16) and the Smart Operation Panel. **2.** Replace the USB

No.	Symptom		Cause	Solution
				cable. **3.** Replace the main controller board. **4.** Replace the BiCU (PCB16).
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.
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.

IM 550F/600F/600SRF
P 800/801
Machine Code:
D0BT/D0BV/D0BW/M0CG/M0CH
Appendices
Ver 1.0

Latest Release: June, 2019
Initial Release: June, 2019
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1. Specifications

General Specifications (MF)

Mainframe

Item		Spec.
Configuration:		Desktop
Color Supported:		Black and White
CPU:		Intel® Atom™ Processor ApolloLake 1.3 GHz
RAM:		Standard: 2 GB
HDD:		320 GB
Scanning Element:		One-dimensional solid scanning through CCD
Printing process:		Laser beam scanning and electro-photographic printing
Development:		Monocomponent jumping development system
Fusing System:		Roller fusing system
Recommended Paper Size:	Tray 1 (Standard Tray):	A4 SEF, A5 SEF/LEF, A6 SEF, B5 SEF, B6 SEF, 8.5" × 14"(LG) SEF, 8.5" × 13"(Foolscap) SEF, 8.5" × 11"(LT) SEF, 8.25" × 14"(Government LG) SEF, 8.25" × 13"(Folio) SEF, 8" × 13"(F/GL) SEF, 8" × 10"(Eng Quatro) SEF, 7.25" × 10.5"(Executive) SEF, 5.5" × 8.5" (Half Letter) SEF, 16K SEF, 8.5" × 13.4" SEF <Custom Size Paper> Width: 105.0 mm (4.14 inch) - 216.0 mm (8.50 inch) Length: 148.0 mm (5.83 inch) - 356.0 mm (14.0 inch)
Recommended Paper Size:	Tray 2 to 5 (Optional Paper Feed Tray):	A4 SEF, A5 SEF, B5 SEF, B6 SEF, 8.5" × 14"(LG) SEF, 8.5" × 13"(Foolscap) SEF, 8.5" × 11"(LT) SEF, 8.25" × 14"(Government LG) SEF, 8.25" × 13"(Folio) SEF, 8" × 13"(F/GL) SEF, 8" × 10"(Eng Quatro) SEF, 7.25" × 10.5"(Executive) SEF, 5.5" × 8.5" (Half Letter) SEF, Com10 SEF, Monarch SEF, C5 SEF, C6 SEF, DL Env SEF, 16K SEF, 8.5" × 13.4" SEF <Custom Size Paper> Width: 92.0 mm (3.63 inch) - 216.0 mm (8.50 inch) Length: 162.0 mm (6.83 inch) - 356.0 mm (14.0 inch)
Recommended Paper Size:	Bypass Tray:	A4 SEF, A5 SEF/LEF, A6 SEF, B5 SEF, B6 SEF, 8.5" × 14"(LG) SEF, 8.5" × 13"(Foolscap) SEF, 8.5" × 11"(LT) SEF,

Item		Spec.
		8.25" × 14"(Government LG) SEF, 8.25" × 13"(Folio) SEF, 8" × 13"(F/GL) SEF, 8" × 10"(Eng Quatro) SEF, 7.25" × 10.5"(Executive) SEF, 5.5" × 8.5" (Half Letter) SEF, Com10 SEF, Monarch SEF, C5 SEF, C6 SEF, DL Env SEF, 16K SEF, 8.5" × 13.4" SEF <Custom Size Paper> Width: 70.0 mm (2.76 inch) - 216.0 mm (8.50 inch) Length: 148.0 mm (5.83 inch) - 356.0 mm (14.0 inch)
Paper Feeding Capacity (LT/A4: 80gsm paper):	Standard:	600 sheets (500 sheets + 100 sheets/ bypass)
	Option:	Paper Feed Unit: 500 sheets
	Max:	2,600 sheets (500 sheets × 5 trays + 100 sheets/bypass)
Paper Output Capacity (LT/A4: 80gsm paper):	Max:	500 sheets
Paper Type Capacity:	Tray 1 (Standard Tray):	**Paper Type:** Plain Paper (Not Displayed as Paper Type), Recycle Paper, Color Paper, Letterhead, Preprinted Paper, Bond Paper **Thickness:** Plain Paper 1, Plain Paper 2, Middle Thick, Thick Paper 1
	Tray 2 to 5 (Optional Paper Feed Tray):	**Paper Type:** Plain Paper (Not Displayed as Paper Type), Recycle Paper, Color Paper, Letterhead, Preprinted Paper, Bond Paper, Envelope **Thickness:** Plain Paper 1, Plain Paper 2, Middle Thick, Thick Paper 1, Thick Paper 2, Thick Paper 3
	Bypass Tray:	**Paper Type:** Plain Paper (Not Displayed as Paper Type), Recycle Paper, Color Paper, Special Paper, Letterhead, Preprinted Paper, Bond Paper, OHP, Label, Envelope **Thickness:** Thin Paper, Plain Paper 1, Plain Paper 2, Middle Thick, Thick Paper 1, Thick Paper 2, Thick Paper 3
Paper Weight:	Tray 1 (Standard Tray):	64 - 120 g/m^2 (17 - 44 lb. Bond)
	Tray 2-5 (Optional	64 - 120 g/m^2 (17 - 44 lb. Bond) * Envelope: 64 - 220 g/m^2 (17 - 80 lb. Bond)

Item		Spec.
	paper feed tray):	
	Bypass Tray:	60 - 220 g/m^2 (16 - 80 lb. Bond)
Max. Imageable Area:		216 × 356 mm (8.5 × 14.0 inches)
First Copy Time (LT/A4 SEF, Tray 1):		7 seconds
First Print Time		6 seconds
Warm-up Time:		25.4 seconds * The warm-up time may differ depending on the conditions and environment of the machine.
Power Source:		NA: 120 - 127 V, 11 A, 60 Hz EU/AP: 220 - 240 V, 6 A, 50/60 Hz
Max Power Consumption (Complete System):		1.5 kW or less (The complete system consists of the main unit, four optional paper feed units, and wireless LAN board)
Noise emission (Sound Power Level) (Complete System):		**IM 550F:** Stand-by: 30.8 dB (A) Printing: 73.6 dB (A) **IM 600F:** Stand-by: 30.9 dB (A) Printing: 73.8 dB (A) **IM 600SRF:** Stand-by: 31.0 dB (A) Printing: 74.5 dB (A) (The complete system consists of the main unit, four optional paper feed units, and caster table)
Target Monthly ACV:		IM 550F: 5.0K IM 600F/600SRF: 6.5K
Reliability:	Max Monthly CV (5 years):	15K
	PM Cycle:	DF: 200K, Optics: 500K, Mainframe: 500K
	MCBC (Mean Copy Between Calls):	0.15 or less
Dimensions (W x D x H):		**IM 550F/600F:** 480 × 539 × 644 mm (18.9 × 21.3 × 25.4 inches)

Item	Spec.
	IM 600SRF: 480 × 543 × 740 mm (18.9 × 21.4 × 29.2 inches)
Weight:	**IM 550F/600F:** Less than 28 kg (62 lb.) **IM 600SRF:** Less than 39 kg (86 lb.)

Copier Specifications

Item		Spec.
CPM:		IM 550F: 55 cpm (A4 SEF), 57 cpm (LT SEF) IM 600F/600SRF: 60 cpm (A4 SEF), 62 cpm (LT SEF)
Copy Resolution:		600 dpi/bit
Maximum Continuous Copy Run:		999 sheets
Reproduction Ratio:	NA:	155%, 129%, 100%, 93%, 78%, 65%
	EU/AP:	200%, 141%, 100%, 93%, 71%, 50%
Zoom:		From 25% to 400% in 1% step
Number of Copy Reservations:		8 jobs
Image Density:		Auto Density Selection Manual: 9 levels
Copy Mode:		Text Text/Photo Photo Pale Generation Copy (Default: Text)
Paper Selection:		Tray 1 Tray 2 (optional paper feed tray) Tray 3 (optional paper feed tray) Tray 4 (optional paper feed tray) Tray 5 (optional paper feed tray) Bypass Tray (Default: Tray 1)
Auto Tray Switch:		Yes
Duplex:		1 sided to 2 sided, 2sided to 2 sided, Book to 2 sided, Front and Back to 2 sided
Book:	Booklet:	Yes

Item		Spec.
	Magazine:	
	Layout & Booklet:	
Series:	Book to simplex:	Yes
	2 sided original to simplex:	
Combine (Layout):		The following combinations are supported: 2 into 1 simplex 4 into 1 simplex 8 into 1 simplex 1 duplex into 1 simplex 2 duplex into 1 simplex 4 duplex into 1 simplex 4 into 1 duplex 8 into 1 duplex 16 into 1 duplex 2 duplex into 1 duplex 4 duplex into 1 duplex 8 duplex into 1 duplex
Shift/Erase/ Margin Adjustment:	Centering:	Yes
	Cornering:	No
	Margin Adjustment:	1mm step (0-30mm) (Default: 0mm)
	Scan Position Adjustment:	No
	Creep Adjustment:	No
	Erase Center:	1mm step (2-99mm) (Default:10mm)
	Erase Border:	1mm step (2-99mm) (Default: 10mm)
Cover Sheet Chapter Slip Sheets:	Front Cover:	Copy or Blank (Default: Copy)
	Front and Back Cover:	
	Chapter:	Yes (Up to 20 chapters)
	Slip Sheets:	Yes
Image Rotation:		No
Electronic Sort:	Without Shift Sort:	Yes
	Rotate Sort:	No
	Shift Sort:	No
Electronic Stack:		No
Stapling:		No
Image Creation:	Repeat:	Yes
	Double Copy:	No

Item		Spec.
	Mirror:	No
	Positive/Negative:	No
	Erase Inside:	No
	Erase Outside:	No
Stamp/ Numbering:	Preset Stamp:	Yes (8 Stamps / 2 sizes) * Not from the By-pass tray
	User Stamp:	Yes (4 Stamps / 1 sizes) * Not from the By-pass tray
	Date Stamp:	Yes (5 Stamps) * Not from the By-pass tray
	Page Number:	Yes (6 Stamps) * Not from the By-pass tray
	Bates Numbering:	Yes * Not from the By-pass tray
	Printing copy prevention pattern:	Yes
Sharp/Soft:		7 levels
Contrast:		9 levels
Background Density Adjustment:		9 levels
Job Programs:		Mode: 25 Program Default: 1 Program
User Code:		8 digits / 1000 user codes
Interrupt Copy:		Yes
Auto Start:		Yes
Job Preset:		Yes (8 jobs)
Sample Copy:		Yes

Printer Specifications

Item	Spec.
Printer Language:	**Standard:** RPCS, PCL 5e/6, PostScript 3 Emulation, PDF Emulation, MediaPrint (JPEG, TIFF) **Option:** Adobe PostScript 3, Adobe PDF, IPDS, XPS
Print Resolution:	1200 × 1200 dpi, 600 × 600 dpi, 300 × 300 dpi
Font:	PostScript 3 Emulation, PDF Emulation, PCL 5e/6: 93 fonts Adobe PostScript 3, Adobe PDF: 136 fonts
Host Interfaces:	**Standard:** Ethernet (1000BASE-T/ 100BASE-TX/ 10BASE-T), SD card slot, USB2.0 Host, USB2.0 device **Option:** IEEE 1284 parallel interface, IEEE 802.11a/b/g/n wireless LAN interface,

Item	Spec.
	Device server
Network Protocol:	TCP/IP (IPv4, IPv6)
USB interface: Supported operating system	Windows Vista/7/8/8.1/10, Windows Server 2008/2008 R2/2012/2012 R2/2016/2019, OS X 10.11 or later

Scan Specifications

Item		Spec.
Color Scan:		Standard
Scanning Speed:	BW:	60 pages/minute (A4 SEF, 300dpi) 62 pages/minute (LT SEF, 300dpi)
	Color:	40 pages/minute (A4 SEF, 300dpi) 42 pages/minute (LT SEF, 300dpi)
Scanning Resolution:		100 / 200 (default) / 300 / 400 / 600 dpi
Original sizes that can be scanned:		Length: 10 - 216 mm (0.4 - 8.5 inches) Width: 10 - 356 mm (0.4 - 14.0 inches)
Scan Area	Main:	216 mm (8.5 inches)
	Sub:	356 mm (14.0 inches)
sRGB Supported:		Yes
Network Interface:		**Standard:** Ethernet interface (1000BASE-T/100BASE-TX/10BASE-T) **Option:** IEEE 802.11a/b/g/n wireless LAN interface
Protocol:		Network: TCP/IP Sending E-mail: SMTP Scan to Folder: SMB, FTP Web Services on Devices for Scanning
Compression Type:		TIFF (MH, MR, MMR, JBIG2), JPEG
Scan Mode:		BW: Text, Text / Line Art, Text / Photo, Photo, Grey Scale Color: Text / Photo, Glossy Photo, Auto Color Select
Image Density:		Auto Density Selection Manual: 7 levels
Image Rotation:		Yes
SADF/Batch Mode:		Yes
Mixed Size Mode:		Mixed LT/LG Size only.
Reduce and Enlarge:		Yes
Split scan from Booklet type Original:		Yes

Item		Spec.
Digital Signature for PDF:		Yes
Single Page TIFF:	Compression On	BW 1bit / (MH, MR or MMR)
	Compression Off	BW 1bit, BW Grayscale or Full Color
Multi Page TIFF:	Compression On	BW 1bit /(MH, MR or MMR)
	Compression Off	BW 1bit, BW Grayscale or Full Color
Single Page JPEG:	Compression On	BW Grayscale or Full Color / (JPEG)
	Compression Off	-
Single Page PDF:	Compression On	BW 1bit / (MH, MR, MMR or JBIG2), BW Grayscale / (JPEG), Full Color / (JPEG)
	Compression Off	BW 1bit, BW Grayscale or Full Color
Multi Page PDF:	Compression On	BW 1bit / (MH, MR, MMR or JBIG2), BW Grayscale / (JPEG), Full Color / (JPEG)
	Compression Off	BW 1bit, BW Grayscale or Full Color
Single Page High Compression PDF:	Compression On	BW Grayscale / (JPEG or JPEG2000), Full Color / (JPEG or JPEG2000)
	Compression Off	-
Multi Page High Compression PDF:	Compression On	BW Grayscale / (JPEG or JPEG2000), Full Color / (JPEG or JPEG2000)
	Compression Off	-

Scan to Email

Item	Spec.
Requirement (Mail Protocol, Transmission Protocol, Protocol):	SMTP (Mail Server) Gateway and TCP/IP
Authorization Function:	SMTP authentication, POP before SMTP authentication
Resolution:	100, 200 (Default), 300, 400, 600
Max Email Address in	2,000

Item	Spec.
HDD:	
Register Group Address in HDD:	Max. 100 Group (Max. 500 addresses in one group address)
Input of Destination E-mail Address via Soft Key:	Possible, Max. 100 destinations per job
Search methods of Email Address in HDD:	By name and E-mail address
LDAP Search:	Yes
Max Address Numbers Per Send:	Max. 500 addresses per send
Attention:	To, cc, bcc
Email Size:	With Restriction: 128 – 102,400 KB Without Restriction: 700 MB
Input Subject:	Manual: Max. 128 Characters via soft key User Pre-register: Max. 20 Characters via soft key
Input Main body text:	Manual: Max. 80 Characters via soft key User Pre-register: Max. 400 Characters via soft key (80 characters × 5 lines) Preset: -
Input File Name:	Yes
File Type:	Single Page: TIFF/JPEG, PDF, High Compression PDF, Secure PDF, Digital Signature PDF, PDF/A Multi Page: TIFF, PDF, High Compression PDF, Secure PDF, Digital Signature PDF, PDF/OCR* *Option required
Program User Settings:	Up to 25 programs
Divide and send Email (If the file size exceed the max size.):	Yes (By page or size) / No (Default: Yes (By size)*) *If the sent file size exceeded the maximum E-mail size, it would be divided to multiple sending. In addition, the sent files might not be accepted by the receiving side due to the limitation in the receiving capacity at the receiver SMTP server or E-mail software setting.
Resend:	Yes / No (Default: Yes)

Scan to Folder

Item	Spec.
Protocol Support:	SMB, FTP
Security:	Client folder log-in (log-in name and password), Encryption of

Item	Spec.
	log-in name and password during transmission
Resolution:	100 dpi, 200 dpi, 300 dpi, 400 dpi, 600 dpi (Default: 200 dpi)
Register client folder address in HDD:	Max. 2,000 folders
Maintain client folder address in HDD:	Direct input on operation panel, Web Image Monitor, Smart Device Monitor
Direct addressing of destination client folder via soft key:	Yes SMB: Network path -> Client folder -> Password FTP: Server -> Network path -> User account -> Password
Search client folder:	SMB: Browsing directly to the designated folders FTP: By client folder name
Max. client folder numbers per send:	Max. 50 client folders / PCs per send
Simultaneous Transmission:	Max. 550
Group address:	Max group:100 Max member per group:500
Input File Name:	Yes
Scan to File size	2,000 MB per file
File Size when combined Scan to Folder & Scan to E-mail:	128 - 102, 400 KB Default = 2,048 KB (With restriction), 725MB (Without restriction), (Scan to E-mail file size applied).
File Type:	Single Page: TIFF/JPEG, PDF, High Compression PDF, Secure PDF, Digital Signature PDF Multi Page: TIFF, PDF, High Compression PDF, Secure PDF, Digital Signature PDF
Program User Settings:	Up to 25 programs
Resend:	Yes / No (Default: Yes)

Network TWAIN Driver

Item		Spec.
OS:		Windows Vista/7/8/8.1/10, Windows Server 2008/2008 R2/2012/2012 R2/2016/2019 (Operates in 32-bit compatibility mode on 64-bit operating systems)
Resolution:	BW:	100 – 1200 dpi (Black and White / Grayscale)
	Color:	100 – 1200 dpi (Black and White / Grayscale)
Scan Mode:		Standard / Photo / OCR / Filing
Image Adjustment:		Brightness / Contrast / Threshold /Gamma Adjustment / Halftone Pattern
Endorser:		Supported
Stamp:		Date / Page Number / Text

General Specifications (P)

Mainframe

Item		Spec.
Configuration:		Desktop
Color Supported:		Black and White
CPU:		Intel® Atom™ Processor ApolloLake 1.3 GHz
RAM:		Standard: 2 GB
Printing process:		Laser beam scanning and electro-photographic printing
Development:		Monocomponent jumping development system
Fusing System:		Roller fusing system
Printer Language:		**Standard:** PCL 5e/6, PostScript 3 Emulation, PDF Emulation **Option:** Adobe PostScript 3, Adobe PDF, XPS, IPDS
Print Resolution:		1200 × 1200 dpi, 600 × 600 dpi, 300 × 300 dpi
Font:		PostScript 3 Emulation, PDF Emulation, PCL 5e/6: 93 fonts Adobe PostScript 3, Adobe PDF: 136 fonts
Host Interfaces:		**Standard:** Ethernet (10BASE-T/100BASE-TX/1000BASE-T), USB2.0 host, USB2.0 device **Option:** IEEE 1284 parallel interface, IEEE 802.11a/b/g/n wireless LAN interface, Device server
Network Protocol:		TCP/IP (IPv4, IPv6)
Network/Operating System:		Windows Vista/7/8/8.1/10, Windows Server 2008/2008 R2/2012/2012 R2/2016/2019, OS X 10.11 or later
Recommended Paper Size:	Tray 1 (Standard Tray):	A4 SEF, A5 SEF/LEF, A6 SEF, B5 SEF, B6 SEF, 8.5" × 14"(LG) SEF, 8.5" × 13"(Foolscap) SEF, 8.5" × 11"(LT) SEF, 8.25" × 14"(Government LG) SEF, 8.25" × 13"(Folio) SEF, 8" × 13"(F/GL) SEF, 8" × 10"(Eng Quatro) SEF, 7.25" × 10.5"(Executive) SEF, 5.5" × 8.5" (Half Letter) SEF, 16K SEF, 8.5" × 13.4" SEF <Custom Size Paper> Width: 105.0 mm (4.14 inch) - 216.0 mm (8.50 inch) Length: 148.0 mm (5.83 inch) - 356.0 mm (14.0 inch)
Recommended	Tray 2 to 5	A4 SEF, A5 SEF, B5 SEF, B6 SEF, 8.5" × 14"(LG) SEF, 8.5" ×

Item		Spec.
Paper Size:	(Optional Paper Feed Tray):	13"(Foolscap) SEF, 8.5" × 11"(LT) SEF, 8.25" × 14"(Government LG) SEF, 8.25" × 13"(Folio) SEF, 8" × 13"(F/GL) SEF, 8" × 10"(Eng Quatro) SEF, 7.25" × 10.5"(Executive) SEF, 5.5" × 8.5" (Half Letter) SEF, Com10 SEF, Monarch SEF, C5 SEF, C6 SEF, DL Env SEF, 16K SEF, 8.5" × 13.4" SEF <Custom Size Paper> Width: 92.0 mm (3.63 inch) - 216.0 mm (8.50 inch) Length: 162.0 mm (6.83 inch) - 356.0 mm (14.0 inch)
Recommended Paper Size:	Bypass Tray:	A4 SEF, A5 SEF/LEF, A6 SEF, B5 SEF, B6 SEF, 8.5" × 14"(LG) SEF, 8.5" × 13"(Foolscap) SEF, 8.5" × 11"(LT) SEF, 8.25" × 14"(Government LG) SEF, 8.25" × 13"(Folio) SEF, 8" × 13"(F/GL) SEF, 8" × 10"(Eng Quatro) SEF, 7.25" × 10.5"(Executive) SEF, 5.5" × 8.5" (Half Letter) SEF, Com10 SEF, Monarch SEF, C5 SEF, C6 SEF, DL Env SEF, 16K SEF, 8.5" × 13.4" SEF <Custom Size Paper> Width: 70.0 mm (2.76 inch) - 216.0 mm (8.50 inch) Length: 148.0 mm (5.83 inch) - 356.0 mm (14.0 inch)
Paper Feeding Capacity (LT/A4: 80gsm paper):	Standard:	600 sheets (500 sheets + 100 sheets/ bypass)
	Option:	Paper Feed Unit: 500 sheets
	Max:	2,600 sheets (500 sheets × 5 trays + 100 sheets/bypass)
Paper Output Capacity (LT/A4: 80gsm paper):	Max:	500 sheets
Paper Type Capacity:	Tray 1 (Standard Tray):	Plain Paper, Plain Paper 2, Middle Thick Paper, Thick Paper 1, Recycled Paper, Color Paper, Special Paper 1, Special Paper 2, Special Paper 3, Letterhead Paper, Preprinted Paper, Bond Paper
	Tray 2 to 5 (Optional Paper Feed Tray):	Plain Paper, Plain Paper 2, Middle Thick Paper, Thick Paper 1, Recycled Paper, Color Paper, Special Paper 1, Special Paper 2, Special Paper 3, Letterhead Paper, Preprinted Paper, Bond Paper, Envelope
	Bypass Tray:	Thin Paper, Plain Paper, Plain Paper 2, Middle Thick Paper, Thick Paper 1, Thick Paper 2, Thick Paper 3, Recycled Paper, Color Paper, Special Paper 1, Special Paper 2, Special Paper 3, Letterhead Paper, Preprinted Paper, Bond Paper, OHP, Label Paper, Envelope

Item		Spec.
Paper Weight:	Tray 1 (Standard Tray):	64 - 135 g/m^2 (17 - 36 lb. Bond)
	Tray 2-5 (Optional paper feed tray):	64 - 220 g/m^2 (17 - 80 lb. Bond)
	Bypass Tray:	60 - 220 g/m^2 (16 - 80 lb. Bond)
First Print Time		6 seconds
Warm-up Time:		25.4 seconds * The warm-up time may differ depending on the conditions and environment of the machine.
Power Source:		NA: 120 - 127 V, 11 A, 60 Hz EU/AP: 220 - 240 V, 6 A, 50/60 Hz
Max Power Consumption (Complete System):		1.4 kW or less (The complete system consists of the main unit, four optional paper feed units, and wireless LAN board)
Noise emission (Sound Power Level) (Complete System):		**P 800:** Stand-by: 48.0 dB (A) Printing: 76.0 dB (A) **P 801:** Stand-by: 51.0 dB (A) Printing: 76.0 dB (A) (The complete system consists of the main unit, four optional paper feed units, and caster table)
Target Monthly ACV:		P 800: 4.0K P 801: 5.5K
Reliability:	Max Monthly CV (5 years):	15K
	PM Cycle:	500K
	MCBC (Mean Copy Between Calls):	0.15 or less
Dimensions (W x D x H):		**P 800:** 420 × 410 × 346 mm (16.6 × 16.2 × 13.7 inches) **P 801:**

Item	Spec.
	443 × 410 × 366 mm (17.5 × 16.2 × 14.5 inches)
Weight:	**P 800:** Less than 18 kg (40 lb.) **P 801:** Less than 17 kg (38 lb.)

Supported Paper Sizes

Paper Feed

Remarks:

C	Supported: Select the paper size using the paper size dial on the tray.
D	Supported: Set the paper size dial on the tray to "Asterisk", and select the paper size with the control panel.
E	Supported: Select the paper size using the control panel.
-	Not supported.
*	The duplex function cannot be used with envelopes.

Paper	Size	Tray 1 (Main Paper Feed Tray)	Tray 2 to 5 (Optional Paper Feed Tray)	Bypass Tray
A4 SEF	210 × 297 mm	C	C	E
A5 SEF	148 × 210 mm	C	C	E
A5 LEF	210 × 148 mm	D	-	E
A6 SEF	105 × 148 mm	C	-	E
B5 SEF	182 × 257 mm	D	D	E
B6 SEF	128 × 182 mm	D	D	E
Legal SEF	8.5 × 14 inch	C	C	E
Foolscap SEF	8.5 × 13 inch	D	D	E
Letter SEF	8.5 × 11 inch	C	C	E
GovernmentLG SEF	8.25 × 14 inch	D	D	E
Folio SEF	8.25 × 13 inch	D	D	E
F/GL SEF	8 × 13 inch	D	D	E
Eng Quatro SEF	8 × 10 inch	D	D	E
Executive SEF	7.25 × 10.5 inch	D	D	E
Half Letter SEF	5.5 × 8.5 inch	C	C	E
Half Letter LEF	8.5 × 5.5 inch	D	-	E
Com10 Env. SEF	4.125 × 9.5 inch	-	D	E*
Monarch Env. SEF	3.875 × 7.5 inch	-	D	E*
C5 Env. SEF	162 × 229 mm	-	D	E*
C6 Env. SEF	114 × 162 mm	-	D	E*

Paper	Size	Tray 1 (Main Paper Feed Tray)	Tray 2 to 5 (Optional Paper Feed Tray)	Bypass Tray
DL Env. SEF	110 × 220 mm	-	D	E*
16K SEF	195 × 267 mm	D	D	E
8 1/2 × 13 2/5 SEF	8.5 × 13.4 inch	D	D	E

Custom:

	Tray 1 (Main Tray)	Tray 2 to 5 (Optional Paper Feed Tray)	Bypass Tray
Width	105.0 - 216.0 mm 4.14 - 8.50 inch	92.0 - 216.0 mm 3.63 - 8.50 inch	70.0 - 216.0 mm 2.76 - 8.50 inch
Length	148.0 - 356.0 mm 5.83 - 14.0 inch	162.0 - 356.0 mm 6.38 - 14.0 inch	148.0 - 356.0 mm 5.83 - 14.0 inch

Software Accessories

The printer drivers and utility software are provided on one CD-ROM. An auto-run installer allows you to select which components to install.

Printer Drivers

Windows

OS	Type	PCL6	PS3
Windows 7	Starter	-	-
	Home Basic	-	-
	Home Premium	✓	✓
	Professional	✓	✓
	Ultimate	✓	✓
	Enterprise	✓	✓
Windows 8.1	Windows 8.1	✓	✓
	Pro	✓	✓
	Enterprise	✓	✓
	RT	-	-
Windows 10	Home	✓	✓
	Mobile	-	-
	Pro	✓	✓
	Enterprise	✓	✓
	Education	✓	✓
	Mobile Enterprise	-	-
	IoT Core	-	-
Windows Server 2008/R2	Standard Edition	✓	✓
	Enterprise Edition	✓	✓
	Standard without Hyper-V	✓	✓
	Enterprise without Hyper-V	✓	✓
	Datacenter Edition	-	-
	Web Edition	-	-
Windows Server 2012/R2	Foundation	✓	✓
	Essentials	✓	✓
	Standard	✓	✓
	Datacenter	-	-
Windows Server 2016	Standard	✓	✓
	Essentials	✓	✓
	Datacenter	✓	✓

OS	Type	PCL6	PS3
	MultiPoint Premium Server	✓	✓
Windows Server 2019	Standard	✓	✓
	Essentials	✓	✓
	Datacenter	✓	✓

✓: Supported

-: Not supported

* RPCS driver has been discontinued.

*1: SP1 or later is recommended

*2: SP2 or later is Recommended

*3: SP1 or later is recommended

Mac OS Environment

OS	PS3	Printer Utility for Mac
Mac OS 8.6 or later, Mac OS X classic	-	-
Mac OS X Native: v.10.11 or later	✓	-

✓: Supported

-: Not supported

UNIX Environment

UNIX Platforms	Version
Sun Solaris	9, 10
HP-UX	11.x, 11i v2, 11i v3
Red Hat Linux	Enterprise V4, V5, V6
SCO OpenServer	5.0.7, 6.0
IBM AIX	V 5L, V5.3, V6.1, V7.1

SAP R/3 Environment (Device Type / Barcode & OCR Package)

Device Type will be provided from SAP itself in SAP Printer Vendor Program.

For the detailed specification, please refer to another announcement to be issued in the future.

Supported Barcode & OCR Fonts	Barcode Fonts	Code 128, Code 39, Code 93, Codabar, 2 of 5 interleaved/Industrial/Matrix, MSI, USPS, UPC/EAN
	OCR Fonts	OCR A, OCR B

Note

- A PPD file for each operating system is provided with the driver.

Scanner and LAN Fax drivers

Operating system for TWAIN driver:

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 it with 32-bit applications.)

Operating system for WIA driver:

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.)

Operating system for LAN FAX driver:

Windows 7/8.1/10, Windows Server 2008/2008 R2/2012/2012 R2/2016/2019

Note

- The LAN Fax driver lets you fax documents directly from your PC. Address Book Editor and Cover Sheet Editor are to be installed as well.
- The Network TWAIN driver operates in 32-bit compatibility mode on 64-bit operating systems

Optional Equipment

Paper Feed Unit PB1160

Item	Spec.
Paper Size:	Half Letter SEF – A4 SEF
Paper Weight:	64 – 120 g/m^2 (17 – 44 lb.)
Paper Capacity:	500 sheets (500 sheets × 1 tray with 80 g/m^2 paper)
Power Consumption:	Less than 13 W (Average)
Dimension (W × D × H):	380 × 410 × 121 mm (15.0 × 16.2 × 4.8 inches)
Weight:	4.0 kg (8.9 lb.)

2. Preventive Maintenance Tables

Maintenance Tables

Note

- The amounts mentioned as the PM interval indicate the number of prints.

Preventive Maintenance Items

Chart: A4 (LT)/6%

Mode: 3 prints/job

Environment: Normal temperature and humidity

Yield may change depending on circumstances and print conditions.

Symbol keys: C: Clean, R: Replace, L: Lubricant, I: Inspect

Note

- Yield Parts: The parts mentioned in these tables have a target yield. However, the total copy/print volume made by the machine will not reach the target yield within the machine's targeted lifetime if the machine is used under the target usage conditions (ACV, color ratio, and P/J). So, these parts are categorized not as PM parts but as yield parts (EM parts). The parts with "(R)" in this table are yield parts.

Mainframe

SPDF (IM 550F/600F/600SRF Only)

Item	200K	EM	Life	Note
DF pickup roller	(R)	-	200K	
DF paper feed roller	(R)	-	200K	
DF friction pad	(R)	-	200K	

Optics (IM 550F/600F/600SRF Only)

Item	500K	EM	Life	Note
Exposure glass	-	C	-	Wipe with a soft cloth infiltrated with alcohol or neutral detergent.
Exposure glass (for SPDF)	-	C	-	Wipe with a dry cloth.

Mainframe

Item	400K	500K	EM	Life	Note
Transfer roller	-	(R)	-	-	
Drum unit	-	(R)	-	-	
Development Unit	-	(R)	-	-	
Fusing Unit	(R)	-	-	-	

2.Preventive Maintenance Tables

Item	400K	500K	EM	Life	Note
Paper feed roller Assy	-	(R)	C	-	Wipe with a soft cloth infiltrated with alcohol or water.
Pickup roller	-	(R)	C	-	Wipe with a soft cloth infiltrated with alcohol or water.
Separation roller Assy	-	(R)	C	-	Wipe with a soft cloth infiltrated with alcohol or water.
Registration sensor	-	C	C	-	Wipe with a soft cloth infiltrated with alcohol or water. Refer to the FSM for the cleaning procedure.
Registration roller	-	-	C	-	Wipe with a soft dry cloth.
Vent	-	-	C	-	Wipe with a soft dry cloth.

Finisher (IM 600SRF Only)

Item	500K	EM	Life	Note
Driving roller	-	C	-	Wipe with a soft cloth infiltrated with alcohol or water.
Driven roller	-	C	-	Wipe with a soft cloth infiltrated with alcohol or water.
Gathering roller bearing	-	C	-	Apply silicone oil when there is abnormal noise.
Fusing Unit	-	C	-	Clean with blower brush.
Stapler	-	-	300K staples	

Paper Feed Unit PB1160

Item	500K	EM	Life	Note
Paper feed roller Assy	R	C	-	Wipe with a soft cloth infiltrated with alcohol or water.
Separation roller Assy	R	C	-	Wipe with a soft cloth infiltrated with alcohol or water.

3. SP Mode Tables (Common for both MF Model and Printer Model)

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.

Enabling and Disabling Service Program Mode

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

- IM 550F/600F/600SRF: Press [Exit] on the operation panel twice to return to the copy window.
- P 800/801: Select [End] from the service mode main menu, and then press [OK].

Types of SP Modes

Select one of the Service Program modes from the diagram below after you access the SP mode.

IM 550F/600F/600SRF

- 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

Note

- This section explains the functions of the System/Printer/Scanner SP modes. Refer to the Fax service manual for the Fax SP modes.

P 800/801

- Service SP: SP modes related to the controller/printer functions
- Engine SP: SP modes related to the engine functions

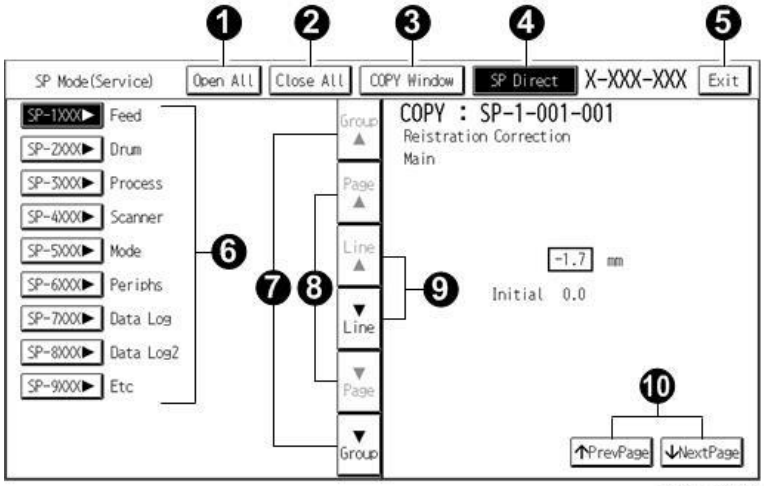
SP Mode Button Summary

IM 550F/600F/600SRF

Select one of the Service Program modes (Service, or Engine) from the touch panel.

d255a4000

Here is a short summary of the touch-panel buttons.



d255a4001

No.	Description
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).

No.	Description
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.

P 800/801

Select one of the Service Program modes (Service, or Engine) with [▲/▼] keys, and then press the [OK] key.

```
[SP mode(Service)]
 Service
 Engine
 End
```

Switching Between SP Mode and Copy Mode for Test Printing (IM 550F/600F/600SRF Only)

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 (IM 550F/600F/600SRF Only)

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.

   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 service representative 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 as the machine administrator, and then set "Service Mode Lock" to OFF:

   IM 550F/600F/600SRF: Settings -> Machine Features Settings -> System Settings -> Administrator Tools -> Service Mode Lock -> OFF

   P 800/801: Security Options -> Service Mode Lock -> Off

   - This unlocks the machine and lets you get access to all the SP codes.
   - The service representative 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 SP5-169-001 to "1" if you must use the printer bit switches.
3. After machine servicing is completed:
   - Change SP5-169-001 from "1" to "0".
   - Turn the main power 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 Operation Panel Screen

The maximum number of characters which can show on the operation panel screen is limited. 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.

Item	Description
Paper Weight	Thin Paper: 60-63 g/m^2, 16lb. Plain Paper 1: 64-74 g/m^2, 17-20lb. Plain Paper 2: 75-90 g/m^2, 20-24lb. Middle Thick: 91-105 g/m^2, 24-28lb. Thick Paper 1: 106-135 g/m^2, 28-36lb. Thick Paper 2: 136-170 g/m^2, 36-63lb. Thick Paper 3: 171-220 g/m^2, 63-80lb.
Paper Type	N: Normal paper MTH: Middle thick paper TH: Thick paper
Paper Feed Station	P: Paper tray B: By-pass table
Print Mode	S: Simplex

Item	Description
	D: Duplex

Notes on the LCD

Since the IM 550F/600F/600SRF (touch panel model) and P 800/801 (4-line panel model) have different types of operation panel, characters are displayed differently. In this manual, characters are shown as they appear on the IM 550F/600F/600SRF (touch panel model).

Others

The following symbols are used in the SP mode tables.

- 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 the numbers.
- An asterisk (*) to the right hand side of the mode number column means that this mode is stored in the NVRAM and EEPROM. 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: EEPROM on the BiCU
  - CTL: NVRAM on the controller board
- A sharp (#) to the right hand side of the mode number column means that the main power must be turned OFF and ON to effect the setting change.
- **FA**: Factory setting

  Data may be adjusted from the default setting at the factory. Refer to the factory setting sheets enclosed.

Input and Output Check

Input Check Table (SP5-803)

When entering the Input Check mode, 8 digits display the result for a section. Each digit corresponds to a different device as shown in the table.

Bit No.	7	6	5	4	3	2	1	0
Result	0 or 1	0 or 1	0 or 1	0 or 1	0 or 1	0 or 1	0 or 1	0 or 1

SP	Description	Reading	
		0	1
5-803-001	Exit Full Sensor	Paper detected	Paper not detected
5-803-016	Key Card Set	Set	Not set
5-803-017	Key Counter Set	Set	Not set
5-803-018	IPU Version	-	-

Note

- SP5-803-200 and SP5-803-201 do not work.

Output Check Table (SP5-804)

Activates the electrical components for functional check.

It is not possible to activate more than one component at the same time.

SP	Display
5-804-001	CTLFAN Motor
5-804-101	FAN:LSU/DLP/CENTER/REAR
5-804-102	FAN:LVU
5-804-103	Toner Motor
5-804-202	Scanner Lamp
5-804-203	ADF Motor

Printer Service Mode

Printer Service Mode

1001	[Bit Switch]		Values	
1-001-001	Bit Switch 1		0	1
	bit 0	DFU	-	-
	bit 1	**sysName Value** This BitSw can switch the value of the sysName of the standard MIB.	**Model name (PnP name)**	Hostname
	bit 2	DFU	-	-
	bit 3	**I/O Timeout** 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.	**Enabled**	Disabled
	bit 4	**SD Card Save Mode** 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"	**Disabled**	Enabled
	bit 5	**Paper Size Error Margin** 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.	**±5pt**	±10pt
	bit 6	DFU	-	-
	bit 7	**Printable Area Frame Border** Prints all RPCS and PCL jobs with a border around the printable area. Note:This is available for PCL, RPCS only.	**Disabled**	Enabled

1001	[Bit Switch]		Values	
1-001-002	Bit Switch 2		0	1
	bit	DFU	-	-

1001	[Bit Switch]		Values	
	0			
	bit 1	DFU	-	-
	bit 2	**Collation Type** The type of collation will be applied to a job when the job does not explicitly define a collation type. (IM 600SRF only) Note: If #5-0 is enabled, this BitSw has no effect.	**Shift Collation**	Normal Collation
	bit 3	**PDL Auto Switching** Enables/Disables the MFPs ability to switch the PDL processor when receiving a job which contains both PS andPCL5e/c.	**Enabled**	Disabled
	bit 4	DFU	-	-
	bit 5	DFU	-	-
	bit 6	DFU	-	-
	bit 7	DFU	-	-

1001	[Bit Switch]		Values	
1-001-003	Bit Switch 3		0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	**Legacy HP Compatibility** 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	**Disabled**	Enabled

1001	[Bit Switch]		Values	
		Note • This is available for PCL5e/c only.		
	bit 3	DFU	-	-
	bit 4	DFU	-	-
	bit 5	DFU	-	-
	bit 6	DFU	-	-
	bit 7	DFU	-	-

1001	[Bit Switch]		Values	
1-001-004	Bit Switch 4		0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	DFU	-	-
	bit 3	**Paper Path for IPDS Simplex Pages** This setting enables you to route the IPDS simplex job through the duplex unit. Note • When this BitSw is set to duplex paper path, the simplex page might be printed on the reverse side.	**Simplex paper path**	Duplex paper path
	bit 4	DFU	-	-
	bit 5	DFU	-	-
	bit 6	**Bypass tray paper direction** 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. (P 800/801 only)	LEF	**SEF**
	bit	DFU	-	-

1001	[Bit Switch]		Values	
	7			

1001	[Bit Switch]		Values	
1-001-005	Bit Switch 5		0	1
	bit 0	**Display Finishing 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. (IM 600SRF only) After enabling this BitSw, the settings will appear under: "User Tools > Machine Features >Printer Features > System"	**Hide settings**	Display settings
	bit 1	**Number of Copies with Paper Mismatch** If a paper size or type mismatch occurs while printing multiple copies, only a single copy is output by default. Using this BitSw, the device can be configured to print all copies even if a paper mismatch occurs.	**Print Single Copy**	Print All Copies
	bit 2	**GPS Filter** 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.	**Enabled**	Disabled
	bit 3	**PS Trigger for PDL Switching** 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.	**Standard pattern**	Pattern1
	bit 4	**Increase Max. Number of Stored Jobs.** 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.	**Disabled (100)**	Enabled (XXX)

1001	[Bit Switch]		Values	
	bit 5	DFU	-	-
	bit 6	**Change Imposition 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.	**Standard specification**	Old model specification
	bit 7	**Paper Path for Letterhead Simplex Job** This setting enables the simplex job to be routed through the duplex unit. Only affects jobs specified as letterhead.	**Simplex paper path**	Duplex paper path

1001	[Bit Switch]			
1-001-006	Bit Switch 6		0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	DFU	-	-
	bit 3	DFU	-	-
	bit 4	DFU	-	-
	bit 5	DFU	-	-
	bit 6	DFU	-	-
	bit 7	DFU	-	-

1001	[Bit Switch]			
1-001-007	Bit Switch 7		0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-

1001	[Bit Switch]			
	bit 2	DFU	-	-
	bit 3	DFU	-	-
	bit 4	DFU	-	-
	bit 5	DFU	-	-
	bit 6	DFU	-	-
	bit 7	DFU	-	-

1001	[Bit Switch]			
1-001-008	Bit Switch 8		0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	DFU	-	-
	bit 3	DFU	-	-
	bit 4	DFU	-	-
	bit 5	DFU	-	-
	bit 6	DFU	-	-
	bit 7	DFU	-	-

1001	[Bit Switch]			
1-001-009	Bit Switch 9		0	1
	bit 0	**PDL Auto Detection timeout of jobs submitted via USB or Parallel Port (IEEE 1284).** To be used if PDL auto-detection fails. A failure of PDL autodetection doesn't necessarily mean that the job can't be printed. This bit switch tells the device whether to time-out immediately (default) upon failure or to wait 10 seconds.	**Disabled (Immediately)**	Enabled (10 seconds)
	bit 1	DFU	-	-
	bit 2	**Job Cancel after Jam** This setting enables it to be specified 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	**Not cancelled**	Cancelled

1001	[Bit Switch]			
		when jobs exceeding the number guaranteed by the job monitor are continuously printed.)		
	bit 3	DFU	-	-
	bit 4	**Timing of the PJL Status ReadBack (JOB END) when printing multiple collated copies.** 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.	**Mode 0**	Mode 1
	bit 5	**UTF-8 Mode** 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).	**Enabled**	Disabled
	bit 6	**Print Option Configuration (rsh, rcp, ftp)** This BitSw enables the specification of the configuration of the print option using rcp/rsh/ftp.	**Enabled**	Disabled
	bit 7	**Enable/Disable Print from USB/SD's Preview function** 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. (IM 550F/600F/600SRF only)	**Enabled**	Disabled

1001	[Bit Switch]			
1-001-	Bit Switch A		0	1
	bit	DFU	-	-

1001	[Bit Switch]			
010	0			
	bit 1	DFU	-	-
	bit 2	DFU	-	-
	bit 3	DFU	-	-
	bit 4	DFU	-	-
	bit 5	**Store and Skip Error Job locks the queue** If this is 1, then after a job is stored using Store and Skip error Job (SSEJ), new jobs cannot be added to the queue until the stored job has been completely printed. (IM 550F/600F/600SRF only)	**Queue is not locked after SSEJ**	Queue locked after SSEJ
	bit 6	**Allow use of Store and Skip error Job if connected to an external charge device.** If this is 0, Store and Skip error Job (SSEJ) will be automatically disabled if an external charge device is connected. Note: We do not officially support enabling this bitsw (1). Use it at your own risk. (IM 550F/600F/600SRF only)	**Does not allow SSEJ with ECD**	Allows SSEJ with ECD
	bit 7	**Job cancels remaining pages when the paid-for pages have been printed on an external charge device** 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. (IM 550F/600F/600SRF only)	**Job does not cancel**	Job cancels

1001	[Bit Switch]			
1-001-011	Bit Switch B		0	1
	bit 0	**Show Menu List** If this is 0, the Menu List button will be removed from Printer Features. (IM 550F/600F/600SRF only)	**Hide Menu List**	Show Menu List
	bit 1	**Print job interruption**	**Does not allow**	Allow interruption

1001		[Bit Switch]		
		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 and start printing immediately.	**interruption**	
	bit 2	**Limitless Paper Feeding for the Bypass Tray** When the Bypass Tray is the target of the "Auto Tray Select", and "Machine Setting(s): Any Type" is configured for the "Tray Setting Priority" of the Bypass Tray, this BitSw can switch the behavior whether or not Limitless Paper Feeding is applied to the Bypass Tray. Enabled (=0: Default): Limitless Paper Feeding is applied to the Bypass Tray. If a tray other than the Bypass Tray matches the job's paper size and type but has run out of paper, printing will occur from the Bypass Tray. Disabled (=1): Limitless Paper Feeding is not applied to the Bypass Tray. If a tray other than the Bypass Tray matches the job's paper size and type but has run out of paper, printing will stop and an alert will appear on the LCD screen, stating that the tray has run out of paper. This prevents unexpected use of the Bypass Tray. Limitations when this BitSw is set to "1": - Jobs that contain more than one paper size cannot be printed. - The "Paper Tray Priority: Printer" setting must be configured to a tray other than the Bypass Tray.	**Enabled**	Disabled
	bit 3	DFU	-	-
	bit 4	**"Apply Auto Paper Select" to Override Paper Size or Paper Type of the Device** 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	**Disabled**	Enabled

1001	[Bit Switch]			
		settings)		
	bit 5	DFU	-	-
	bit 6	**Tray Selection when a Paper Mismatch Occurs.** This BitSw enables the inactive auto paper select tray to be unselectable when a paper size/type mismatch occurs.	**Disabled**	Enabled
	bit 7	Paper Type Mismatch Display When this BitSw is enabled, an error dialog appears when a custom/IMSS user setting paper type name mismatch occurs. (P 800/801 only)	**Disabled**	Enabled

1001	[Bit Switch]			
1-001-012	Bit Switch C		0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	DFU	-	-
	bit 3	**Switching paper discharge operation when the limit number of sheets stapled is exceeded** Switching paper discharge operation when the limit number of sheets stapled is exceeded (IM 600SRF only)	**one by one**	Upper limit number
	bit 4	DFU	-	-
	bit 5	**Change User ID type Displayed on Operation Panel** 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.	**Login User Name**	User ID
	bit 6	**AirPrint** -	**Enabled**	Disabled
	bit 7	**AirPrint PDF** -	**Enabled**	Disabled

1002	[Bit Switch2]		
1-002-001	Bit Switch (2) 1 Settings	0	1

1002	[Bit Switch2]			
	bit 0	Paper Size Mismatch Display	**Enabled**	Disabled
		Display warning screen (40909) of paper size mismatch.		
	bit 1 to 3	DFU	-	-
	bit 4	Input tray mask	**Enabled**	Disabled
		Enable / disable input tray mask		
	bit 1 to 7	DFU	-	-

1002	[Bit Switch2]			
1-002-002	Bit Switch (2) 2 Settings		0	1
	bit 0 to 7	DFU	-	-

1002	[Bit Switch2]			
1-002-003	Bit Switch (2) 3 Settings		0	1
	bit 0 to 7	DFU	-	-

1002	[Bit Switch2]			
1-002-004	Bit Switch (2) 4 Settings		0	1
	bit 0 to 7	DFU	-	-

1002	[Bit Switch2]			
1-002-005	Bit Switch (2) 5 Settings		0	1
	bit 0	PDF speeding printing operation	**Enabled**	Disabled
		PDF speeding printing operation		
	bit 1 to 7	DFU	-	-

1002	[Bit Switch2]			
1-002-006	Bit Switch (2) 6 Settings		0	1
	bit 0 to 7	DFU	-	-

1002	[Bit Switch2]			
1-002-007	Bit Switch (2) 7 Settings		0	1
	bit 0 to 7	DFU	-	-

1002	[Bit Switch2]			
1-002-008	Bit Switch (2) 8 Settings		0	1
	bit 0 to 7	DFU	-	-

1002	[Bit Switch2]			
1-002-009	Bit Switch (2) 9 Settings		0	1
	bit 0 to 7	DFU	-	-

1002	[Bit Switch2]			
1-002-010	Bit Switch (2) A Settings		0	1
	bit 0 to 7	DFU	-	-

1002	[Bit Switch2]			
1-002-011	Bit Switch (2) B Settings		0	1
	bit 0 to 7	DFU	-	-

1002	[Bit Switch2]			
1-002-012	Bit Switch (2) C Settings		0	1
	bit 0 to 7	DFU	-	-

1003	[Clear Setting]		
1-003-001	Initialize System	*CTL	[- / **-** / -] [Execute]
	Initializes settings in the "System" menu of the user mode.		
1-003-003	Delete Program	*CTL	[- / **-** / -] [Execute]

1004	[Print Summary]		
	Prints the service summary sheet (a summary of all the controller settings).		
1-004-001	Print Summary	*CTL	[- / **-** / -] [Execute]
1-004-002	Print Summary2	*CTL	[- / **-** / -] [Execute]

1110 (IM 550F/600F/600SRF only)	[Media Print Device Setting]		
	Selects the setting for the media print device.		
1-110-002	0: Disable 1: Enable	*CTL	[0 or 1 / **1** / 1 / step]

1111 (IM 550F/600F/600SRF only)	**[All Job Delete Mode]**		
1-111-001	0:excluding New Job 1:including New Job	*CTL	[0 or 1 / **0** / 1 / step]
	Selects whether to include an image processing job in jobs subject to full cancellation from the SCS job list.		

1121 (P 800/801 only)	**[Introduction Setting Boot Mode]**		
1-121-001	0:Off 1:On	*CTL	[0 or 1 / **0** / 1 / step]
	Selects whether to display the introduction setting menu at startup.		

4. SP Mode Tables (for Printer Model)

SP1-XXX (Feed)

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
1-001-001	Reistration Correct	Main	ENG*	[-0.99 to 0.99/0/0.1mm]
1-001-002	Reistration Correct	Option Tray 1	ENG*	[-0.99 to 0.99/0/0.1mm]
1-001-003	Reistration Correct	Option Tray 2	ENG*	[-0.99 to 0.99/0/0.1mm]
1-001-004	Reistration Correct	Option Tray 3	ENG*	[-0.99 to 0.99/0/0.1mm]
1-001-005	Reistration Correct	Option Tray 4	ENG*	[-0.99 to 0.99/0/0.1mm]
1-001-006	Reistration Correct	By-Pass Tray	ENG*	[-0.99 to 0.99/0/0.1mm]
1-001-007	Reistration Correct	Duplex	ENG*	[-0.99 to 0.99/0/0.1mm]
1-002-001	Reistration Correct	Main	ENG*	[-0.99 to 0.99/0/0.1mm]
1-002-002	Reistration Correct	Option Tray 1	ENG*	[-0.99 to 0.99/0/0.1mm]
1-002-003	Reistration Correct	Option Tray 2	ENG*	[-0.99 to 0.99/0/0.1mm]
1-	Reistration Correct	Option	ENG*	[-0.99 to 0.99/0/0.1mm]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
002-004		Tray 3		
1-002-005	Reistration Correct	Option Tray 4	ENG*	[-0.99 to 0.99/0/0.1mm]
1-002-006	Reistration Correct	By-Pass Tray	ENG*	[-0.99 to 0.99/0/0.1mm]
1-002-007	Reistration Correct	Duplex	ENG*	[-0.99 to 0.99/0/0.1mm]
1-885-002	Tray1 narrow width paper mode	ON/OFF	ENG*	[0 to 1/0/1]
1-890-001	Archive mode	ON/OFF	ENG*	[0 to 1/0/1]
1-891-001	Scattering Control	Main	ENG*	[0 to 2/0/1] 0: OFF 1: Scattering Control 1 ON 2: Scattering Control 2 OFF
1-891-002	Scattering Control	Option Tray 1	ENG*	[0 to 2/0/1] 0: OFF 1: Scattering Control 1 ON 2: Scattering Control 2 OFF
1-891-003	Scattering Control	Option Tray 2	ENG*	[0 to 2/0/1] 0: OFF 1: Scattering Control 1 ON 2: Scattering Control 2 OFF
1-891-004	Scattering Control	Option Tray 3	ENG*	[0 to 2/0/1] 0: OFF 1: Scattering Control 1 ON 2: Scattering Control 2 OFF
1-891-005	Scattering Control	Option Tray 4	ENG*	[0 to 2/0/1] 0: OFF 1: Scattering Control 1 ON

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
				2: Scattering Control 2 OFF
1-891-006	Scattering Control	By-Pass Tray	ENG*	[0 to 2/0/1] 0: OFF 1: Scattering Control 1 ON 2: Scattering Control 2 OFF
1-892-001	Pressure Roller Dirt control	Main	ENG*	[0 to 3/0/1] 0: OFF 1: Pressure Roller Dirt control 1 ON 2: Pressure Roller Dirt control 2 ON 3: Pressure Roller Dirt control 3 ON
1-892-002	Pressure Roller Dirt control	Option Tray 1	ENG*	[0 to 3/0/1] 0: OFF 1: Pressure Roller Dirt control 1 ON 2: Pressure Roller Dirt control 2 ON 3: Pressure Roller Dirt control 3 ON
1-892-003	Pressure Roller Dirt control	Option Tray 2	ENG*	[0 to 3/0/1] 0: OFF 1: Pressure Roller Dirt control 1 ON 2: Pressure Roller Dirt control 2 ON 3: Pressure Roller Dirt control 3 ON
1-892-004	Pressure Roller Dirt control	Option Tray 3	ENG*	[0 to 3/0/1] 0: OFF 1: Pressure Roller Dirt control 1 ON 2: Pressure Roller Dirt control 2 ON 3: Pressure Roller Dirt control 3 ON
1-892-005	Pressure Roller Dirt control	Option Tray 4	ENG*	[0 to 3/0/1] 0: OFF 1: Pressure Roller Dirt control 1 ON 2: Pressure Roller Dirt control 2 ON 3: Pressure Roller Dirt control 3 ON
1-892-006	Pressure Roller Dirt control	By-Pass Tray	ENG*	[0 to 3/0/1] 0: OFF 1: Pressure Roller Dirt control 1 ON 2: Pressure Roller Dirt control 2 ON 3: Pressure Roller Dirt control 3 ON
1-	Hot offset Control		ENG*	[0 to 1/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
893-001				0: OFF 1: ON (Lowers the fusing temperature for the first three sheets of a job by 5 °C.) Note • When printing 1P/J jobs at short intervals, the fusing roller becomes hot, causing the coating to deteriorate, leading to shortened fusing roller life. Activating this SP lowers the fusing temperature for the first three sheets of a job, which prevents the coating from deteriorating. • When both this SP and SP1-892-001 (Pressure Roller Dirt control) are set at the same time, SP1-892-001 (Pressure Roller Dirt control has priority.
1-901-001	Fuser Type Setting		ENG*	[0 to 1/0/1] 0: Early 1: Late
1-998-001	Reserve SP	reserve01	ENG*	[0 to 255/0/1]
1-998-002	Reserve SP	reserve02	ENG*	[0 to 255/0/1]
1-998-003	Reserve SP	reserve03	ENG*	[0 to 255/0/1]
1-998-004	Reserve SP	reserve04	ENG*	[0 to 255/0/1]
1-998-005	Reserve SP	reserve05	ENG*	[0 to 255/0/1]
1-998-	Reserve SP	reserve06	ENG*	[0 to 255/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
006				
1-998-007	Reserve SP	reserve07	ENG*	[0 to 255/0/1]
1-998-008	Reserve SP	reserve08	ENG*	[0 to 255/0/1]
1-998-009	Reserve SP	reserve09	ENG*	[0 to 255/0/1]
1-998-010	Reserve SP	reserve10	ENG*	[0 to 255/0/1]
1-998-011	Reserve SP	reserve11	ENG*	[0 to 255/0/1]
1-998-012	Reserve SP	reserve12	ENG*	[0 to 255/0/1]
1-998-013	Reserve SP	reserve13	ENG*	[0 to 255/0/1]
1-998-014	Reserve SP	reserve14	ENG*	[0 to 255/0/1]
1-998-015	Reserve SP	reserve15	ENG*	[0 to 255/0/1]
1-998-016	Reserve SP	reserve16	ENG*	[0 to 255/0/1]
1-998-017	Reserve SP	reserve17	ENG*	[0 to 65535/0/1]
1-	Reserve SP	reserve18	ENG*	[0 to 65535/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
998-018				
1-998-019	Reserve SP	reserve19	ENG*	[0 to 65535/0/1]
1-998-020	Reserve SP	reserve20	ENG*	[0 to 65535/0/1]
1-998-021	Reserve SP	reserve21	ENG*	[0 to 65535/0/1]
1-998-022	Reserve SP	reserve22	ENG*	[0 to 65535/0/1]
1-998-023	Reserve SP	reserve23	ENG*	[0 to 65535/0/1]
1-998-024	Reserve SP	reserve24	ENG*	[0 to 65535/0/1]
1-998-025	Reserve SP	reserve25	ENG*	[0 to 4294967295/0/1]
1-998-026	Reserve SP	reserve26	ENG*	[0 to 4294967295/0/1]
1-998-027	Reserve SP	reserve27	ENG*	[0 to 4294967295/0/1]
1-998-028	Reserve SP	reserve28	ENG*	[0 to 4294967295/0/1]
1-998-029	Reserve SP	reserve29	ENG*	[0 to 4294967295/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
1-998-030	Reserve SP	reserve30	ENG*	[0 to 4294967295/0/1]
1-998-031	Reserve SP	reserve31	ENG*	[0 to 4294967295/0/1]
1-998-032	Reserve SP	reserve32	ENG*	[0 to 4294967295/0/1]
1-998-033	Reserve SP	reserve33	ENG*	[0 to 255/0/1]
1-998-034	Reserve SP	reserve34	ENG*	[0 to 255/0/1]

SP2-XXX (Drum)

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
2-102-001	Magnification Adjust	Main Mag.	ENG*	[-0.1 to 0.1/0/0.1%]
2-103-001	Erase Margin Adjust	Left Edge Width	ENG*	[0 to 0.99/4/0.1mm]
2-103-002	Erase Margin Adjust	Right Edge Width	ENG*	[0 to 0.99/4/0.1mm]
2-103-003	Erase Margin Adjust	Lead Edge Width	ENG*	[0 to 0.99/4/0.1mm]
2-103-004	Erase Margin Adjust	Trail Edge Width	ENG*	[0 to 0.99/4/0.1mm]
2-107-001	Image Parameter	Image Gamma Flag	ENG*	[0 to 1/1/1] 0: OFF 1: ON
2-107-130	Image Parameter	Normal	ENG	[0 to 255/0/1]
2-107-131	Image Parameter	Thick	ENG	[0 to 255/0/1]
2-109-003	Test Pattern	Pattern Selection	ENG	[0 to 24/0/1] 1: Vertical Line (1dot) 2: Vertical Line (2dot) 3: Horizontal Line (1dot) 4: Horizontal Line (2dot) 5: Grid Vertical Line 6: Grid Horizontal Line 7: Grid Pattern Small 8: Grid Pattern Large 9: Argyle Pattern Small 10: Argyle Pattern Large 11: Independent Pattern (1dot) 12: Independent Pattern (2dot) 13: Independent Pattern (4dot) 14: Trimming Area 15: Hound's Tooth Check (Horizontal) 16: Hound's Tooth Check

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
				(Vertical) 17: Black Band (Horizontal) 18: Black Band (Vertical) 19: Checker Flag Pattern 20: Grayscale (Vertical) 21: Grayscale (Horizontal) 22: Two Beam Density Pattern 23: Full Dot Pattern
2-109-006	Test Pattern	Density	ENG	[0 to 15/15/1]

SP3-XXX (Process)

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
3-900-001	Toner Install Mode	On	ENG	[0 to 1/0/1]
3-900-002	Toner Install Mode	Off	ENG	[0 to 1/0/1]
3-904-001	MainCharger Output		ENG*	[1 to 7/4/1] 1: ChargeBias -75V 2: ChargeBias -50V 3: ChargeBias -25V 4: Normal 5: ChargeBias +25V 6: ChargeBias +50V 7: ChargeBias +75V
3-905-001	Center Fan Control (*Rear-Exhaust Fan)		ENG*	[0 to 1/0/1] 0: Disable 1: Enable
3-906-001	Odor Fan	Rotation Time	ENG*	[15 to 240/15/1 sec]

Note

SP3-905-001: Center Fan Control enables/disables the rear exhaust fan.

SP5-XXX (Mode) - Engine

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-186-001	RK4: Setting		ENG*	[0 to 1/0/1] 0: Jam 1: Do nothing
5-801-002	Memory Clear	Engine	ENG	[0 to 1/0/1]
5-802-001	All Data Initialize	Result	ENG	[0 to 1/0/1] 0: Active 1: End
5-803-001	INPUT Check	Exit Full Sensor	ENG	[0 to 1/0/1]
5-803-016	INPUT Check	Key Card Set	ENG	[0 to 1/0/1]
5-803-017	INPUT Check	Key Counter Set	ENG	[0 to 3/0/1]
5-803-018	INPUT Check	IPU Version	ENG	[0 to 7/0/1]
5-803-200	INPUT Check	Scanner HP Sensor	ENG	[0 to 1/0/1]
5-803-201	INPUT Check	Platen Cover Sensor	ENG	[0 to 1/0/1]
5-804-001	OUTPUT Check	CTLFAN Motor	ENG	[0 to 1/0/1]
5-804-101	OUTPUT Check	FAN:LSU/DLP/CENTER/REAR	ENG	[0 to 1/0/1] 0: Off 1: On
5-804-102	OUTPUT Check	FAN:LVU	ENG	[0 to 1/0/1] 0: Off 1: On
5-804-103	OUTPUT Check	Toner Motor	ENG	[0 to 1/0/1] 0: Off 1: On
5-804-202	OUTPUT Check	Scanner Lamp	ENG	[0 to 1/0/1]
5-804-203	OUTPUT Check	ADF Motor	ENG	[0 to 1/0/1] 0: Stop

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
				1: Start
5-805-002	Drum Heater		ENG	[0 to 1/0/1] 0: Stop 1: Start
5-810-001	SC Reset	Fusing SC Reset	ENG	[0 to 1/0/1]
5-811-002	Machine Serial	Display	ENG*	[0 to 255/0/1]
5-811-004	Machine Serial	IPU	ENG	[0 to 255/0/1]
5-811-021	Machine Serial	Latest Update Date	ENG*	[0 to 1/0/1]
5-811-022	Machine Serial	Previous Update Date	ENG*	[0 to 1/0/1]
5-811-023	Machine Serial	Previous Serial	ENG*	[0 to 255/0/1]
5-811-024	Machine Serial	Latest Update Date (IPU)	ENG*	[0 to 1/0/1]
5-811-025	Machine Serial	Previous Update Date (IPU)	ENG*	[0 to 1/0/1]
5-811-026	Machine Serial	Previous Serial(IPU)	ENG*	[0 to 255/0/1]
5-894-001	ExternalCountSet	SW Charge Mode	ENG*	[0 to 2/0/1]
5-900-001	Engine Log Upload	Pattern	ENG*	[0 to 4/0/1]
5-900-002	Engine Log Upload	Trigger	ENG*	[0 to 3/0/1]
5-901-005	All Data Initialize	China	ENG	[0 to 1/0/1]
5-901-006	All Data Initialize	EU(230V)	ENG	[0 to 1/0/1]
5-901-007	All Data Initialize	NA(120V)	ENG	[0 to 1/0/1]
5-901-008	All Data Initialize	Asia	ENG	[0 to 1/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-901-009	All Data Initialize	Oceania	ENG	[0 to 1/0/1]
5-930-001	Meter Charge	Setting	ENG*	[0 to 1/1/1] 0: No 1: Yes
5-931-001	Life Alert Disp.	Mentenance Kit	ENG*	[0 to 1/0/1] 0: No 1: Yes
5-995-001	Self Diagnostic		ENG	[0 to 1/0/1] 0: NORMAL_MODE 1: LINE_SETTING_MODE

SP5-XXX (Mode) - Controller

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-001-001	All Indicators On		CTL	[0 to 0/0/0]
5-024-001	mm/inch Selection	0:mm 1:inch	CTL*	[0 to 1/*/1] NA: 1 EU/AP: 0
5-051-001	Refill Toner Disp		CTL*	[0 to 1/0/1] 0: Enable 1: Disable
5-055-001	DisplayIPaddress		CTL*	[0 to 1/0/1] 0: Enable 1: Disable
5-083-001	LED Light Switch		CTL*	[0 to 1/0/1] 0: Enable 1: Disable
5-083-002	LED Light Switch		CTL*	[0 to 1/0/1] 0: Enable 1: Disable
5-085-001	Keybord Setting	CH/TW SoftKeybord Setting	CTL*	[0 to 2/0/1] 0: Disable 1: Simplified Chinese 2: Traditional Chinese
5-150-001	Length Setting	Bypass(0:OFF 1:Long)	CTL	[0 to 1/0/1]
5-169-001	CE Login		CTL	[0 to 1/0/1] 0: Disable 1: Enable
5-191-001	Power Setting	Power Str	CTL*	[0 to 1/1/1]
5-195-002	Force User Stamp		CTL	[0 to 1/1/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-302-002	Set Time	Time Difference	CTL*	[-1440 to 1440/*/1] NA: -300 EU: 60 AP: 480
5-305-101	Auto Off Set	Auto Off Limit Set	CTL*	[0 to 1/0/1]
5-307-001	Daylight Saving Time	ON/OFF	CTL*	[0 to 1/*/1] NA/EU: 1 AP: 0
5-307-003	Daylight Saving Time	Start	CTL*	[0 to 0xffffffff/*/1] NA: 0x03200210 EU: 0x03500010 AP: 0x10500010
5-307-004	Daylight Saving Time	End	CTL*	[0 to 0xffffffff/*/1] NA: 0x11100200 EU: 0x10500100 AP: 0x03100000
5-401-104	Access Control	Authentication Time	CTL*	[0 to 255/0/1sec]
5-401-162	Access Control	Extend Certification Detail	CTL*	[0 to 0xff/0/1]
5-401-200	Access Control	SDK1 UniqueID	CTL*	[0 to 0xFFFFFFFF/0/1]
5-401-201	Access Control	SDK1 Certification Method	CTL*	[0 to 0xFF/0/1]
5-401-210	Access Control	SDK2 UniqueID	CTL*	[0 to 0xFFFFFFFF/0/1]
5-401-211	Access Control	SDK2 Certification Method	CTL*	[0 to 0xFF/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-401-220	Access Control	SDK3 UniqueID	CTL*	[0 to 0xFFFFFFFF/0/1]
5-401-221	Access Control	SDK3 Certification Method	CTL*	[0 to 0xFF/0/1]
5-401-230	Access Control	SDK Cert	CTL*	[0 to 0xff/0/1]
5-401-240	Access Control	Detail Option	CTL*	[0 to 0xff/0/1]
5-402-101	Access Control	SDKJ1 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-102	Access Control	SDKJ2 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-103	Access Control	SDKJ3 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-104	Access Control	SDKJ4 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-105	Access Control	SDKJ5 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-106	Access Control	SDKJ6 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-107	Access Control	SDKJ7 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-108	Access Control	SDKJ8 Limit Setting	CTL*	[0 to 0xFF/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-402-109	Access Control	SDKJ9 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-110	Access Control	SDKJ10 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-111	Access Control	SDKJ11 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-112	Access Control	SDKJ12 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-113	Access Control	SDKJ13 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-114	Access Control	SDKJ14 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-115	Access Control	SDKJ15 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-116	Access Control	SDKJ16 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-117	Access Control	SDKJ17 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-118	Access Control	SDKJ18 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-119	Access Control	SDKJ19 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-120	Access Control	SDKJ20 Limit Setting	CTL*	[0 to 0xFF/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-402-121	Access Control	SDKJ21 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-122	Access Control	SDKJ22 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-123	Access Control	SDKJ23 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-124	Access Control	SDKJ24 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-125	Access Control	SDKJ25 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-126	Access Control	SDKJ26 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-127	Access Control	SDKJ27 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-128	Access Control	SDKJ28 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-129	Access Control	SDKJ29 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-130	Access Control	SDKJ30 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-141	Access Control	SDKJ1 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-142	Access Control	SDKJ2 ProductID	CTL*	[0 to 0xffffffff/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-402-143	Access Control	SDKJ3 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-144	Access Control	SDKJ4 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-145	Access Control	SDKJ5 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-146	Access Control	SDKJ6 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-147	Access Control	SDKJ7 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-148	Access Control	SDKJ8 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-149	Access Control	SDKJ9 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-150	Access Control	SDKJ10 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-151	Access Control	SDKJ11 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-152	Access Control	SDKJ12 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-153	Access Control	SDKJ13 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-154	Access Control	SDKJ14 ProductID	CTL*	[0 to 0xffffffff/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-402-155	Access Control	SDKJ15 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-156	Access Control	SDKJ16 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-157	Access Control	SDKJ17 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-158	Access Control	SDKJ18 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-159	Access Control	SDKJ19 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-160	Access Control	SDKJ20 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-161	Access Control	SDKJ21 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-162	Access Control	SDKJ22 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-163	Access Control	SDKJ23 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-164	Access Control	SDKJ24 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-165	Access Control	SDKJ25 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-166	Access Control	SDKJ26 ProductID	CTL*	[0 to 0xffffffff/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-402-167	Access Control	SDKJ27 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-168	Access Control	SDKJ28 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-169	Access Control	SDKJ29 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-170	Access Control	SDKJ30 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-404-001	User Code Clear	UsrCodeCtrClr	CTL	[0 to 0/0/0]
5-411-004	LDAP-Certification	Simplified Authentication	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-411-005	LDAP-Certification	Password Null Not Permit	CTL*	[0 to 1/1/1] 0: Permt 1: Not Permit
5-411-006	LDAP-Certification	Detail Option	CTL*	[0 to 0xff/0/1]
5-412-100	Krb-Certification	Encrypt Mode	CTL*	[0 to 0xFF/0x1F/1]
5-413-001	Lockout Setting	Lockout On/Off	CTL*	[0 to 1/0/1] 0: Off 1: On
5-413-002	Lockout Setting	Lockout Threshold	CTL*	[1 to 10/5/1]
5-413-003	Lockout Setting	Cancel On/Off	CTL*	[0 to 1/0/1] 0: Off 1: On

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-413-004	Lockout Setting	Cancel Time	CTL*	[1 to 9999/60/1min]
5-414-001	Access Mitigation	Mitigation On/Off	CTL*	[0 to 1/0/1] 0: Off 1: On
5-414-002	Access Mitigation	Mitigation Time	CTL*	[0 to 60/15/1min]
5-415-001	Password Attack	Permission Number	CTL*	[0 to 100/30/1]
5-415-002	Password Attack	Detect Time	CTL*	[1 to 10/5/1]
5-416-001	Access Info	User Max Num	CTL*	[50 to 200/200/1]
5-416-002	Access Info	Password Max Num	CTL*	[50 to 200/200/1]
5-416-003	Access Info	Monitor Interval	CTL*	[1 to 10/3/1]
5-417-001	Access Attack	Permission Num	CTL*	[0 to 500/100/1]
5-417-002	Access Attack	Attack DetectTime	CTL*	[10 to 30/10/1sec]
5-417-003	Access Attack	Cert Waite	CTL*	[0 to 9/3/1sec]
5-417-004	Access Attack	Attack Max Num	CTL*	[50 to 200/200/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-420-041	User Auth	Printer	CTL*	[0 to 1/0/1] 0: Enable 1: Disable
5-420-051	User Auth	SDK1	CTL*	[0 to 1/0/1] 0: Enable 1: Disable
5-420-061	User Auth	SDK2	CTL*	[0 to 1/0/1] 0: Enable 1: Disable
5-420-071	User Auth	SDK3	CTL*	[0 to 1/0/1] 0: Enable 1: Disable
5-481-001	Auth. Error Code	System Log Disp	CTL*	[0 to 1/0/1] 0: Disable 1: Enable
5-490-001	MF KeyCard	Job Permit Setting	CTL*	[0 to 1/0/1] 0: Permit 1: Not permit
5-501-001	PM Alarm Interval	Printout	CTL*	[0 to 9999/0/1]
5-504-001	Jam Alarm		CTL*	[0 to 3/3/1] 0: Z 1: L 2: M 3: H
5-504-002	Jam Alarm	Threshold	CTL*	[1 to 99/10/1]
5-505-001	Error Alarm		CTL*	[0 to 255/*/1] P 800: 20 P 801: 27
5-505-002	Error Alarm	Threshold	CTL*	[1 to 99/5/1]
5-	Supply/CC Alarm	Paper Size	CTL*	[0 to 1/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
507-001				0: Disable 1: Enable
5-507-003	Supply/CC Alarm	Toner	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-507-006	Supply/CC Alarm	WasteTonerBottle	CTL*	[0 to 1/0/1] 0: Disable 1: Enable
5-507-080	Supply/CC Alarm	Toner Call Timing	CTL*	[0 to 1/0/1] 0: Call when toner replaced 1: Call when thres. is lower than the value in SP5-507-081
5-507-081	Supply/CC Alarm	Toner Call Thresh	CTL*	[10 to 90/10/10%]
5-507-128	Supply/CC Alarm	Interval: Others	CTL*	[250 to 10000/1000/1]
5-507-133	Supply/CC Alarm	Interval: A4	CTL*	[250 to 10000/1000/1]
5-507-134	Supply/CC Alarm	Interval: A5	CTL*	[250 to 10000/1000/1]
5-507-142	Supply/CC Alarm	Interval: B5	CTL*	[250 to 10000/1000/1]
5-507-164	Supply/CC Alarm	Interval: LG	CTL*	[250 to 10000/1000/1]
5-507-166	Supply/CC Alarm	Interval: LT	CTL*	[250 to 10000/1000/1]
5-	Supply/CC Alarm	Interval: HLT	CTL*	[250 to 10000/1000/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
507-172				
5-515-001	SC/Alarm Setting	SC Call	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-515-002	SC/Alarm Setting	Service Parts Near End Call	CTL*	[0 to 1/0/1] 0: Disable 1: Enable
5-515-003	SC/Alarm Setting	Service Parts End Call	CTL*	[0 to 1/0/1] 0: Disable 1: Enable
5-515-004	SC/Alarm Setting	User Call	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-515-006	SC/Alarm Setting	Communication Test Call	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-515-007	SC/Alarm Setting	Machine Information Notice	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-515-008	SC/Alarm Setting	Alarm Notice	CTL*	[0 to 1/0/1] 0: Disable 1: Enable
5-515-009	SC/Alarm Setting	Non Genuine Tonner Ararm	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-515-010	SC/Alarm Setting	Supply Automatic Ordering Call	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-515-011	SC/Alarm Setting	Supply Management Report Call	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-515-012	SC/Alarm Setting	Jam/Door Open Call	CTL*	[0 to 1/0/1] 0: Disable 1: Enable

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-515-050	SC/Alarm Setting	Timeout:Manual Call	CTL*	[1 to 255/5/1min]
5-515-051	SC/Alarm Setting	Timeout:Other Call	CTL*	[1 to 255/10/1min]
5-517-061	Get Machine Info	AD exec setting	CTL	[0 to 1/0/1] 0: Disable 1: Enable
5-517-062	Get Machine Info	AD exec interval	CTL	[0 to 1/0/1] 0: Daily 1: Weekly
5-517-063	Get Machine Info	AD exec weekday	CTL	[0 to 6/0/1] 0: Sunday 1: Monday 2: Tuesday 3: Wednesday 4: Thursday 5: Friday 6: Saturday
5-517-064	Get Machine Info	AD exec hour	CTL	[0 to 23/0/1]
5-517-065	Get Machine Info	AD exec min	CTL	[0 to 59/0/1]
5-517-066	Get Machine Info	AD SNMP Community	CTL	[0 to 0/0/0]
5-728-001	Network Setting	NAT Machine Port1	CTL*	[1 to 65535/49101/1]
5-728-002	Network Setting	NAT UI Port1	CTL*	[1 to 65535/55101/1]
5-	Network Setting	NAT Machine Port2	CTL*	[1 to 65535/49102/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
728-003				
5-728-004	Network Setting	NAT UI Port2	CTL*	[1 to 65535/55102/1]
5-728-005	Network Setting	NAT Machine Port3	CTL*	[1 to 65535/49103/1]
5-728-006	Network Setting	NAT UI Port3	CTL*	[1 to 65535/55103/1]
5-728-007	Network Setting	NAT Machine Port4	CTL*	[1 to 65535/49104/1]
5-728-008	Network Setting	NAT UI Port4	CTL*	[1 to 65535/55104/1]
5-728-009	Network Setting	NAT Machine Port5	CTL*	[1 to 65535/49105/1]
5-728-010	Network Setting	NAT UI Port5	CTL*	[1 to 65535/55105/1]
5-728-011	Network Setting	NAT Machine Port6	CTL*	[1 to 65535/49106/1]
5-728-012	Network Setting	NAT UI Port6	CTL*	[1 to 65535/55106/1]
5-728-013	Network Setting	NAT Machine Port7	CTL*	[1 to 65535/49107/1]
5-728-014	Network Setting	NAT UI Port7	CTL*	[1 to 65535/55107/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-728-015	Network Setting	NAT Machine Port8	CTL*	[1 to 65535/49108/1]
5-728-016	Network Setting	NAT UI Port8	CTL*	[1 to 65535/55108/1]
5-728-017	Network Setting	NAT Machine Port9	CTL*	[1 to 65535/49109/1]
5-728-018	Network Setting	NAT UI Port9	CTL*	[1 to 65535/55109/1]
5-728-019	Network Setting	NAT Machine Port10	CTL*	[1 to 65535/49110/1]
5-728-020	Network Setting	NAT UI Port10	CTL*	[1 to 65535/55110/1]
5-728-101	Network Setting	PacketCapture	CTL	[0 to 1/0/1] 0: Disable 1: Enable
5-728-102	Network Setting	PacketCapture:mode	CTL	[0 to 1/0/1] 0: Header only 1: All data
5-728-103	Network Setting	PacketCapture:interface	CTL	[0 to 3/0/1] 0: Auto Select from I/F for External Connection 1: I/F for Operation Panel 2: I/F for Wired 3: I/F for Wireless
5-728-104	Network Setting	PacketCapture:length	CTL	[54 to 65535/128/1]
5-728-	Network Setting	PacketCapture:broadcast	CTL	[0 to 1/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
105				
5-728-106	Network Setting	PacketCapture:specify port	CTL	[0 to 1/0/1] 0: Disable 1: Enable
5-728-107	Network Setting	PacketCapture:portnumber	CTL	[0 to 65535/0/1]
5-728-108	Network Setting	PacketCapture:time	CTL	[0 to 0xffffffff/0/1]
5-729-013	Print Server	Active IPv6 Link Local Address	CTL	[0 to 0/0/0]
5-729-014	Print Server	IPv6 Stateless Auto Setting	CTL*	[0 to 1/1/1]
5-729-015	Print Server	Active IPv6 Stateless Address 1	CTL	[0 to 0/0/0]
5-729-016	Print Server	Active IPv6 Stateless Address 2	CTL	[0 to 0/0/0]
5-729-019	Print Server	IPv6 Manual Address	CTL*	[0 to 0/0/0]
5-729-020	Print Server	IPv6 Gateway Address	CTL*	[0 to 0/0/0]
5-730-010	Extended Function Setting	Expiration Prior Alarm Set	CTL*	[0 to 999/20/1days]
5-731-001	Counter Effect	Mk1 Paper>Combine	CTL*	[0 to 1/0/1] 0: Disable 1: Enable
5-	PDF Setting	PDF/A Fixed	CTL*	[0 to 1/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
734-001				
5-745-211	DeemedPowerConsumption	Controller Standby	CTL*	[0 to 9999/0/1]
5-745-212	DeemedPowerConsumption	STR	CTL*	[0 to 9999/0/1]
5-745-213	DeemedPowerConsumption	Main Power Off	CTL*	[0 to 9999/0/1]
5-745-214	DeemedPowerConsumption	Scanning and Printing	CTL*	[0 to 9999/0/1]
5-745-215	DeemedPowerConsumption	Printing	CTL*	[0 to 9999/0/1]
5-745-216	DeemedPowerConsumption	Scanning	CTL*	[0 to 9999/0/1]
5-745-217	DeemedPowerConsumption	Engine Standby	CTL*	[0 to 9999/0/1]
5-745-218	DeemedPowerConsumption	Low Power Consumption	CTL*	[0 to 9999/0/1]
5-745-219	DeemedPowerConsumption	Silent condition	CTL*	[0 to 9999/0/1]
5-745-220	DeemedPowerConsumption	Heater Off	CTL*	[0 to 9999/0/1]
5-749-001	Import/Export	Export	CTL	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-749-101	Import/Export	Import	CTL	[0 to 0/0/0]
5-764-001	NFC	GuestNW	CTL*	[0 to 1/0/1]
5-764-002	NFC	EncryptCom	CTL*	[0 to 1/0/1]
5-764-003	NFC	Port1	CTL*	[0 to 65535/8081/1]
5-764-004	NFC	Port2	CTL*	[0 to 65535/8080/1]
5-764-005	NFC	Port3	CTL*	[0 to 65535/80/1]
5-767-001	Screen USB host port	Port1	CTL*	[0 to 1/0/1]
5-767-002	Screen USB host port	Port2	CTL*	[0 to 1/0/1]
5-767-101	Screen USB host port	Screen USB memory	CTL*	[0 to 1/0/1]
5-801-001	Memory Clear	All Clear	CTL	[0 to 0/0/0]
5-801-003	Memory Clear	SCS	CTL	[0 to 0/0/0]
5-801-004	Memory Clear	IMH	CTL	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-801-005	Memory Clear	MCS	CTL	[0 to 0/0/0]
5-801-008	Memory Clear	Printer	CTL	[0 to 0/0/0]
5-801-010	Memory Clear	GWWS	CTL	[0 to 0/0/0]
5-801-011	Memory Clear	NCS	CTL	[0 to 0/0/0]
5-801-014	Memory Clear	Clear DCS Setting	CTL	[0 to 0/0/0]
5-801-015	Memory Clear	Clr UCS Setting	CTL	[0 to 0/0/0]
5-801-016	Memory Clear	MIRS Setting	CTL	[0 to 0/0/0]
5-801-017	Memory Clear	CCS	CTL	[0 to 0/0/0]
5-801-018	Memory Clear	SRM Memory Clr	CTL	[0 to 0/0/0]
5-801-019	Memory Clear	LCS	CTL	[0 to 0/0/0]
5-801-021	Memory Clear	ECS	CTL	[0 to 0/0/0]
5-801-025	Cleae Memory	websys	CTL	[0 to 0/0/0]

4.SP Mode Tables (for Printer Model)

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-801-027	Memory Clear	SAS	CTL	[0 to 0/0/0]
5-801-028	Memory Clear	RWS	CTL	[0 to 0/0/0]
5-812-001	Service TEL	Telephone	CTL*	[0 to 0/0/0]
5-812-002	Service TEL	Facsimile	CTL*	[0 to 0/0/0]
5-816-001	NRS Function	I/F Setting	CTL*	[0 to 2/2/1] 0: Off 1: CSS Remote Diag On 2: Network Remote Diag On
5-816-002	NRS Function	CE Call	CTL*	[0 to 1/0/1] 0: Start 1: End
5-816-003	NRS Function	Function Flag	CTL*	[0 to 1/0/1] 0: Disable 1: Enable
5-816-007	NRS Function	SSL Disable	CTL*	[0 to 1/0/1]
5-816-008	NRS Function	RCG Connect T/O	CTL*	[1 to 90/30/1sec]
5-816-009	NRS Function	RCG Write Timeout	CTL*	[0 to 100/60/1sec]
5-816-010	NRS Function	RCG Read Timeout	CTL*	[0 to 100/60/1sec]
5-	NRS Function	Port 80	CTL*	[0 to 1/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
816-011				0: Not permit 1: Permit
5-816-013	Remote Service	RFU Timing	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-816-014	Remote Service	RCG Error Cause	CTL	[0 to 2/0/1]
5-816-063	Remote Service	HTTP Proxy Host	CTL*	[0 to 0/0/0]
5-816-064	Remote Service	HTTP Proxy Port	CTL*	[0 to 0xffff/0/1]
5-816-065	Remote Service	HTTP Prox AutUsr	CTL*	[0 to 0/0/0]
5-816-066	Remote Service	HTTP Prox AutPass	CTL*	[0 to 0/0/0]
5-816-102	Remote Service	CERT:Encrypt Lv	CTL*	[1 to 2/1/1] 1: 512 bit 2: 2048 bit
5-816-103	Remote Service	ClientCommMethod	CTL*	[0 to 3/0/1] 0: Not connected 1: IPv4 2: IPv6 3: Host name
5-816-104	Remote Service	Client Comm Limit	CTL*	[1 to 7/7/1]
5-816-115	Remote Service	NetInfoWaitTimer	CTL*	[5 to 255/5/1sec]
5-816-	Remote Service	3G DongleID	CTL*	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
190				
5-816-209	Remote Service	Instl Clear	CTL	[0 to 1/0/1]
5-821-002	RCG Setting	RCG IPv4Addr	CTL*	[0 to 0xffffffff/0/1]
5-821-003	RCG Setting	RCG Port	CTL*	[0 to 65535/443/1]
5-821-004	RCG Setting	RCG IPv4URLPath	CTL*	[0 to 0/0/0]
5-821-005	RCG Setting	RCG IPv6Addr	CTL*	[0 to 0/0/0]
5-821-006	RCG Setting	RCG IPv6URLPath	CTL*	[0 to 0/0/0]
5-821-007	RCG Setting	RCG HostName	CTL*	[0 to 0/0/0]
5-821-008	RCG Setting	RCG HostURLPath	CTL*	[0 to 0/0/0]
5-824-001	NVRAM Upload		CTL	[0 to 0/0/0]
5-825-001	NVRAM Download		CTL	[0 to 0/0/0]
5-828-039	Network Setting	User Class	CTL*	[0 to 0/0/0]
5-	Network Setting	Class Id	CTL*	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
828-040				
5-828-050	Network Setting	1284 Compatiblity (Centro)	CTL*	[0 to 1/1/1] 0: Not permit 1: Permit
5-828-052	Network Setting	ECP (Centro)	CTL*	[0 to 1/1/1] 0: Not permit 1: Permit
5-828-065	Network Setting	Job Spooling	CTL*	[0 to 1/0/1] 0: Disable 1: Enable
5-828-066	Network Setting	Job Spooling Clear: Start Time	CTL*	[0 to 1/1/1] 0: Job Clear 1: Print
5-828-069	Network Setting	Job Spooling (Protocol)	CTL*	[0x00 to 0xff/0x7f/0]
5-828-087	Network Setting	Protocol usage	CTL*	[0x00000000 to 0xffffffff/0x00000000/1]
5-828-090	Network Setting	TELNET(0:OFF 1:ON)	CTL*	[0 to 1/1/1] 0: Enable 1: Disable
5-828-091	Network Setting	Web(0:OFF 1:ON)	CTL*	[0 to 1/1/1] 0: Enable 1: Disable
5-828-145	Network Setting	Active IPv6 Link Local Address	CTL	[0 to 0/0/0]
5-828-147	Network Setting	Active IPv6 Stateless Address 1	CTL	[0 to 0/0/0]
5-828-149	Network Setting	Active IPv6 Stateless Address 2	CTL	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-828-151	Network Setting	Active IPv6 Stateless Address 3	CTL	[0 to 0/0/0]
5-828-153	Network Setting	Active IPv6 Stateless Address 4	CTL	[0 to 0/0/0]
5-828-155	Network Setting	Active IPv6 Stateless Address 5	CTL	[0 to 0/0/0]
5-828-156	Network Setting	IPv6 Manual Address	CTL*	[0 to 0/0/0]
5-828-158	Network Setting	IPv6 Gateway Address	CTL*	[0 to 0/0/0]
5-828-161	Network Setting	IPv6 Stateless Auto Setting	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-828-219	Network Setting	IPsec Aggressive Mode Setting	CTL*	[0 to 1/0/1] 0: Permit 1: Prohibited
5-828-236	Network Setting	Web Item visible	CTL*	[0x0000 to 0xffff/0xffff/1]
5-828-237	Network Setting	Web shop Link	CTL*	[0 to 1/1/1] 0: Not display 1: Display
5-828-238	Network Setting	Web Supplies Link visible	CTL*	[0 to 1/1/1] 0: Not display 1: Display
5-828-239	Network Setting	Web Link1 Name	CTL*	[0 to 0/0/0]
5-828-240	Network Setting	Web Link1 URL	CTL*	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-828-241	Network Setting	Web Link1 visible	CTL*	[0 to 1/1/1] 0: Not display 1: Display
5-828-242	Network Setting	Web Link2 Name	CTL*	[0 to 0/0/0]
5-828-243	Network Setting	Web Link2 URL	CTL*	[0 to 0/0/0]
5-828-244	Network Setting	Web Link2 visible	CTL*	[0 to 1/1/1] 0: Not display 1: Display
5-828-249	Network Setting	DHCPv6 DUID	CTL	[0 to 0/0/0]
5-832-001	HDD	Formatting(ALL)	CTL	[0 to 0/0/0]
5-840-006	IEEE 802.11	Channel MAX	CTL*	[1 to 14/14/1]
5-840-007	IEEE 802.11	Channel MIN	CTL*	[1 to 14/1/1]
5-840-011	IEEE 802.11	WEP Key Select	CTL*	[0x00 to 0x11/0x00/0]
5-840-045	IEEE 802.11	WPA Debug Lvl	CTL*	[1 to 3/3/1]
5-840-046	IEEE 802.11	11w	CTL*	[0 to 2/0/1]
5-840-047	IEEE 802.11	PSK Set Type	CTL*	[0 to 1/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-842-001	GWWS Analysis	Setting 1	CTL*	[0x00 to 0xFF/0/1]
5-842-002	GWWS Analysis	Setting 2	CTL*	[0x00 to 0xFF/0/1]
5-844-001	USB	Transfer Rate	CTL*	[1 to 4/4/0]
5-844-002	USB	Vendor ID	CTL*	[0x0000 to 0xffff/0x05ca/0]
5-844-003	USB	Product ID	CTL*	[0x0000 to 0xffff/0x0403/0]
5-844-004	USB	Device Release Number	CTL*	[0 to 9999/100/1]
5-844-005	USB	Fixed USB Port	CTL*	[0 to 2/0/1]
5-844-006	USB	PnP Model Name	CTL*	[0 to 0/0/0]
5-844-007	USB	PnP Serial Number	CTL*	[0 to 0/0/0]
5-844-008	USB	Mac Supply Level	CTL*	[0 to 1/1/1]
5-844-009	USB	USB Toggle Clear Mode	CTL*	[0 to 1/0/1]
5-844-100	USB	Notify Unsupport	CTL*	[0 to 1/1/1] 0: Disable 1: Enable

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-845-001	Delivery Server Setting	FTP Port No.	CTL*	[1 to 65535/3670/1]
5-845-002	Delivery Server Setting	IP Address (Primary)	CTL*	[0 to 0xffffffff/0x00/]
5-845-006	Delivery Server Setting	Delivery Error Display Time	CTL*	[0 to 999/300/1sec]
5-845-008	Delivery Server Setting	IP Address (Secondary)	CTL*	[0 to 0xffffffff/0x00/]
5-845-009	Delivery Server Setting	Delivery Server Model	CTL*	[0 to 4/0/1]
5-845-010	Delivery Server Setting	Delivery Svr. Capability	CTL*	[0 to 255/0/1]
5-845-011	Delivery Server Setting	Delivery Svr. Capability (Ext)	CTL*	[0 to 255/0/1]
5-845-013	Delivery Server Setting	Server Scheme(Primary)	CTL*	[0 to 0/0/0]
5-845-014	Delivery Server Setting	Server Port Number(Primary)	CTL*	[1 to 65535/80/1]
5-845-015	Delivery Server Setting	Server URL Path(Primary)	CTL*	[0 to 0/0/0]
5-845-016	Delivery Server Setting	Server Scheme(Secondary)	CTL*	[0 to 0/0/0]
5-845-017	Delivery Server Setting	Server Port Number(Secondary)	CTL*	[1 to 65535/80/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-845-018	Delivery Server Setting	Server URL Path(Secondary)	CTL*	[0 to 0/0/0]
5-845-022	Delivery Server Setting	Rapid Sending Control	CTL*	[0 to 1/1/1]
5-846-010	UCS Setting	LDAP Search TOut	CTL*	[1 to 255/60/1]
5-846-041	UCS Setting	AddrB Acl Info	CTL	[0 to 0/0/0]
5-846-043	UCS Setting	AddrB Media	CTL*	[0 to 30/0/1]
5-846-047	UCS Setting	Ini Local AddrB	CTL	[0 to 0/0/0]
5-846-049	UCS Setting	Ini LDAP AddrB	CTL	[0 to 0/0/0]
5-846-050	UCS Setting	Ini All AddrB	CTL	[0 to 0/0/0]
5-846-051	UCS Setting	Bkup All AddrB	CTL	[0 to 0/0/0]
5-846-052	UCS Setting	Restr All AddrB	CTL	[0 to 0/0/0]
5-846-053	UCS Setting	Clear Backup Info	CTL	[0 to 0/0/0]
5-846-060	UCS Setting	Search option	CTL*	[0x00 to 0xff/0x0f/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-846-062	UCS Setting	Compl Opt1	CTL*	[0 to 32/0/1]
5-846-063	UCS Setting	Compl Opt2	CTL*	[0 to 32/0/1]
5-846-064	UCS Setting	Compl Opt3	CTL*	[0 to 32/0/1]
5-846-065	UCS Setting	Compl Opt4	CTL*	[0 to 32/0/1]
5-846-094	UCS Setting	Encryption Stat	CTL*	[0 to 255/0/0]
5-846-100	UCS Setting	Init Supervisor	CTL	[0 to 0/0/0]
5-848-004	Web Service	ac:UD	CTL*	[0x00 to 0xFF/0x00/0]
5-848-009	Web Service	ac:Job Ctrl	CTL*	[0x00 to 0xFF/0x00/0]
5-848-011	Web Service	ac:Dev Mng	CTL*	[0x00 to 0xFF/0x00/0]
5-848-022	Web Service	ac:Uadmin	CTL*	[0x00 to 0xFF/0x00/0]
5-848-024	Web Service	ac:Log	CTL*	[0x00 to 0xFF/0x00/0]
5-848-025	Web Service	ac:Rest	CTL*	[0x00 to 0xFF/0x00/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-848-045	Web Service	ReverseProxy	CTL*	[0x00 to 0xFF/0/1]
5-848-046	Web Service	PortOpenTime	CTL*	[0 to 300/60/1]
5-848-150	WebService	LogOpeMode	CTL*	[0 to 2/0/1]
5-848-217	LogTrans	Timing	CTL*	[0 to 2/0/1] 0: Off 1: Sequential 2: Specified time
5-848-218	SysLogTrans	Timing	CTL	[0 to 1/0/1]
5-848-220	SysLogTrans	port	CTL	[1 to 65535/80/1]
5-848-221	SysLogTrans	Check	CTL	[0 to 1/0/1]
5-849-001	Installation Date	Display	CTL*	[0 to 0/0/0]
5-849-002	Installation Date	Print	CTL*	[0 to 1/0/1] 0: Not print 1: Print
5-849-003	Installation Date	Total Counter	CTL*	[0 to 99999999/1/1]
5-851-001	Bluetooth	Mode	CTL*	[0x00 to 0x01/0x00/1]
5-856-	Remote ROM Update	Local Port	CTL	[0 to 1/0/1] 0: Not permit

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
002				1: Permit
5-858-001	Save Machine Info	0:OFF 1:ON	CTL*	[0 to 1/1/1]
5-858-002	Save Machine Info	Target 0:HDD 1:SD	CTL*	[0 to 1/0/1]
5-858-003	Save Machine Info	Make LogTrace Dir	CTL*	[0 to 1/0/0]
5-858-101	Save Machine Info	Start Date	CTL*	[0 to 20371212/0/1]
5-858-102	Save Machine Info	Days	CTL*	[1 to 180/2/1day]
5-858-103	Save Machine Info	Fax Mask	CTL*	[0 to 1/0/1] 0: Mask 1: Not mask
5-858-111	Save Machine Info	All Info & Logs	CTL*	[0 to 1/0/0]
5-858-121	Save Machine Info	ConfigurationPage	CTL*	[0 to 1/0/0]
5-858-122	Save Machine Info	FontPage	CTL*	[0 to 1/0/0]
5-858-123	Save Machine Info	PrintSettingList	CTL*	[0 to 1/0/0]
5-858-124	Save Machine Info	ErrorLog	CTL*	[0 to 1/0/0]
5-	Save Machine Info	FaxInfo	CTL*	[0 to 1/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
858-131				
5-858-141	Save Machine Info	All Logs	CTL*	[0 to 1/0/0]
5-858-142	Save Machine Info	ControllerLogs	CTL*	[0 to 1/0/0]
5-858-143	Save Machine Info	EngineDebugLogs	CTL*	[0 to 1/0/0]
5-858-144	Save Machine Info	OpepanelDebugLogs	CTL*	[0 to 1/0/0]
5-858-145	Save Machine Info	FCU DebugLogs	CTL*	[0 to 1/0/0]
5-858-146	Save Machine Info	Network Packets	CTL*	[0 to 1/0/0]
5-860-020	SMTP/POP3/IMAP4	Partial Mail Receive Timeout	CTL*	[1 to 168/72/1hour]
5-860-021	SMTP/POP3/IMAP4	MDN Response RFC2298 Compliance	CTL*	[0 to 1/1/1]
5-860-022	SMTP/POP3/IMAP4	SMTP Auth. From Field Replacement	CTL*	[0 to 1/0/1]
5-860-025	SMTP/POP3/IMAP4	SMTP Auth. Direct Setting	CTL*	[0 to 0xff/0x0/1]
5-860-026	SMTP/POP3/IMAP4	S/MIME:MIME Header Setting	CTL*	[0 to 2/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-860-028	SMTP/POP3/IMAP4	S/MIME: Authentication Check	CTL*	[0 to 1/0/1]
5-860-029	SMTP/POP3/IMAP4	SMTP Server 3G Line IP Address	CTL*	[0 to 0xffffffff/0x00/]
5-861-201	Account Setting	Send Domain1	CTL	[0 to 0/0/0]
5-861-202	Account Setting	Send Domain2	CTL	[0 to 0/0/0]
5-861-203	Account Setting	Send Domain3	CTL	[0 to 0/0/0]
5-866-001	E-Mail Report	Report Validity	CTL	[0 to 1/0/1] 0: Enable 1: Disable
5-866-005	E-Mail Report	Add Date Field	CTL*	[0 to 1/0/1] 0: Not add 1: Add
5-866-109	E-Mail Report	CounterE-Mail:3G Line Validity	CTL*	[0 to 1/0/1]
5-866-110	E-Mail Report	CounterE-Mail:Validity	CTL*	[0 to 1/0/1]
5-866-111	E-Mail Report	CounterE-Mail:Destination Registration	CTL*	[0 to 0/0/0]
5-866-112	E-Mail Report	CounterE-Mail:Send Test	CTL*	[0 to 0/0/0]
5-866-113	E-Mail Report	CounterE-Mail:Next Send Date	CTL*	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-866-114	E-Mail Report	CounterE-Mail:Send Date Setting	CTL*	[0 to 31/0/1]
5-866-115	E-Mail Report	CounterE-Mail:Send Time Setting	CTL*	[0 to 2359/0/1]
5-866-121	E-Mail Report	CounterE-Mail:Destination1	CTL*	[0 to 0/0/0]
5-866-122	E-Mail Report	CounterE-Mail:Destination2	CTL*	[0 to 0/0/0]
5-866-123	E-Mail Report	CounterE-Mail:Destination3	CTL*	[0 to 0/0/0]
5-869-001	RAM Disk Setting	Mail Function	CTL*	[0 to 1/0/1]
5-870-001	Common KeyInfo Writing	Writing	CTL	[0 to 1/0/1]
5-870-003	Common KeyInfo Writing	Initialize	CTL	[0 to 1/0/1]
5-870-004	Com Key Info WR	Writing: 2048bit	CTL	[0 to 1/0/1]
5-873-001	SDCardAppliMove	MoveExec	CTL	[0 to 0/0/1]
5-873-002	SDCardAppliMove	UndoExec	CTL	[0 to 0/0/1]
5-875-001	SC Auto Reboot	Reboot Mode	CTL*	[0 to 1/0/1] 0: Reboot 1: Not reboot

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-875-002	SC Auto Reboot	Reboot Method	CTL*	[0 to 1/0/1] 0: Manually reboot 1: Auto reboot
5-878-001	Option Setup	DataOverwriteSec.	CTL	[0 to 0/0/0]
5-878-002	Option Setup	HDD Encryption	CTL	[0 to 0/0/0]
5-885-205	Set WIM Function	MonitorDisable	CTL*	[0 to 1/0/1] 0: Not prohibited 1: Prohibited
5-887-001	SD GetCounter		CTL	[0 to 0/0/0]
5-888-001	Person. InfoProt.		CTL*	[0 to 1/0/1] 0: Disable 1: Enable
5-893-001	SDK Apli Cnt Name	SDK-1	CTL	[0 to 0/0/0]
5-893-002	SDK Apli Cnt Name	SDK-2	CTL	[0 to 0/0/0]
5-893-003	SDK Apli Cnt Name	SDK-3	CTL	[0 to 0/0/0]
5-893-004	SDK Apli Cnt Name	SDK-4	CTL	[0 to 0/0/0]
5-893-005	SDK Apli Cnt Name	SDK-5	CTL	[0 to 0/0/0]
5-893-006	SDK Apli Cnt Name	SDK-6	CTL	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-893-007	SDK Apli Cnt Name	SDK-7	CTL	[0 to 0/0/0]
5-893-008	SDK Apli Cnt Name	SDK-8	CTL	[0 to 0/0/0]
5-893-009	SDK Apli Cnt Name	SDK-9	CTL	[0 to 0/0/0]
5-893-010	SDK Apli Cnt Name	SDK-10	CTL	[0 to 0/0/0]
5-893-011	SDK Apli Cnt Name	SDK-11	CTL	[0 to 0/0/0]
5-893-012	SDK Apli Cnt Name	SDK-12	CTL	[0 to 0/0/0]
5-907-001	Plug & Play		CTL*	[0 to 255/0/1]
5-985-002	Device Setting	On Board USB	CTL	[0 to 1/0/1]
5-990-001	SP Print Mode	All	CTL	[0 to 255/0/0]
5-990-002	SP Print Mode	SP	CTL	[0 to 255/0/0]
5-990-004	SP Print Mode	Logging Data	CTL	[0 to 255/0/0]
5-990-005	SP Print Mode	Diagnostic Report	CTL	[0 to 255/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-990-006	SP Print Mode	Non-Default	CTL	[0 to 255/0/0]
5-990-007	SP Print Mode	NIB Summary	CTL	[0 to 0/0/0]
5-990-024	SP Print Mode	SDK/J Summary	CTL	[0 to 0/0/0]
5-990-025	SP Print Mode	SDK/J Appli. Info	CTL	[0 to 0/0/0]
5-990-026	SP Print Mode	Printer SP	CTL	[0 to 255/0/0]
5-992-001	SP Text Mode	All	CTL	[0 to 255/0/0]
5-992-002	SP Text Mode	SP	CTL	[0 to 255/0/0]
5-992-004	SP Text Mode	Logging Data	CTL	[0 to 255/0/0]
5-992-005	SP Text Mode	Diagnostic Report	CTL	[0 to 255/0/0]
5-992-006	SP Text Mode	Non-Default	CTL	[0 to 255/0/0]
5-992-007	SP Text Mode	NIB Summary	CTL	[0 to 0/0/0]
5-992-024	SP Text Mode	SDK/J Summary	CTL	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-992-025	SP Text Mode	SDK/J Appli. Info	CTL	[0 to 0/0/0]
5-992-026	SP Text Mode	Printer SP	CTL	[0 to 255/0/0]

SP7-XXX (Data Log) - Engine

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
7-621-002	PM Counter Pages	#Drum Unit K	ENG*	[0 to 99999999/0/1page]
7-621-003	PM Counter Pages	#Development Unit K	ENG*	[0 to 99999999/0/1page]
7-621-093	PM Counter Pages	#Paper Transfer Roller	ENG*	[0 to 99999999/0/1page]
7-621-115	PM Counter Pages	#Fusing Unit	ENG*	[0 to 99999999/0/1page]
7-621-146	PM Counter Pages	#Paper Feed Roller	ENG*	[0 to 99999999/0/1sheet]
7-621-147	PM Counter Pages	#Pickup Roller	ENG*	[0 to 99999999/0/1sheet]
7-621-148	PM Counter Pages	#Separation Roller	ENG*	[0 to 99999999/0/1sheet]
7-621-206	PM Counter Pages	#DF Paper Feed Roller Unit	ENG*	[0 to 99999999/0/1sheet]
7-621-207	PM Counter Pages	#DF Separation Pad Unit	ENG*	[0 to 99999999/0/1sheet]
7-622-002	PM Counter Clear	#Drum Unit K	ENG	[0 to 1/0/1]
7-622-003	PM Counter Clear	#Development Unit K	ENG	[0 to 1/0/1]
7-622-093	PM Counter Clear	#Paper Transfer Roller	ENG	[0 to 1/0/1]
7-622-115	PM Counter Clear	#Fusing Unit	ENG	[0 to 1/0/1]
7-622-146	PM Counter Clear	#Paper Feed Roller	ENG	[0 to 1/0/1]
7-622-147	PM Counter Clear	#Pickup Roller	ENG	[0 to 1/0/1]
7-622-148	PM Counter Clear	#Separation Roller	ENG	[0 to 1/0/1]
7-622-206	PM Counter Clear	#DF Paper Feed Roller Unit	ENG	[0 to 1/0/1]
7-622-	PM Counter Clear	#DF Separation Pad Unit	ENG	[0 to 1/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
207				
7-625-002	PreCounter1 Pages	#Drum Unit K	ENG*	[0 to 99999999/0/1page]
7-625-003	PreCounter1 Pages	#Development Unit K	ENG*	[0 to 99999999/0/1page]
7-625-093	PreCounter1 Pages	#Paper Transfer Roller	ENG*	[0 to 99999999/0/1page]
7-625-115	PreCounter1 Pages	#Fusing Unit	ENG*	[0 to 99999999/0/1page]
7-625-146	PreCounter1 Pages	#Paper Feed Roller	ENG*	[0 to 99999999/0/1sheet]
7-625-147	PreCounter1 Pages	#Pickup Roller	ENG*	[0 to 99999999/0/1sheet]
7-625-148	PreCounter1 Pages	#Separation Roller	ENG*	[0 to 99999999/0/1sheet]
7-625-206	PreCounter1 Pages	#DF Paper Feed Roller Unit	ENG*	[0 to 99999999/0/1sheet]
7-625-207	PreCounter1 Pages	#DF Separation Pad Unit	ENG*	[0 to 99999999/0/1sheet]
7-626-002	PreCounter2 Pages	#Drum Unit K	ENG*	[0 to 99999999/0/1page]
7-626-003	PreCounter2 Pages	#Development Unit K	ENG*	[0 to 99999999/0/1page]
7-626-093	PreCounter2 Pages	#Paper Transfer Roller	ENG*	[0 to 99999999/0/1page]
7-626-115	PreCounter2 Pages	#Fusing Unit	ENG*	[0 to 99999999/0/1page]
7-626-146	PreCounter2 Pages	#Paper Feed Roller	ENG*	[0 to 99999999/0/1sheet]
7-626-147	PreCounter2 Pages	#Pickup Roller	ENG*	[0 to 99999999/0/1sheet]
7-626-148	PreCounter2 Pages	#Separation Roller	ENG*	[0 to 99999999/0/1sheet]
7-626-206	PreCounter2 Pages	#DF Paper Feed Roller Unit	ENG*	[0 to 99999999/0/1sheet]
7-626-	PreCounter2	#DF Separation Pad Unit	ENG*	[0 to 99999999/0/1sheet]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
207	Pages			
7-801-002	ROM Info Display	P/#: Engine	ENG	[0 to 0/0/0]
7-801-007	ROM Info Display	P/#: Finisher	ENG	[0 to 0/0/0]
7-801-009	ROM Info Display	P/#: PFU1	ENG	[0 to 0/0/0]
7-801-015	ROM Info Display	P/#: IPU	ENG	[0 to 0/0/0]
7-801-019	ROM Info Display	P/#: PFU2	ENG	[0 to 0/0/0]
7-801-040	ROM Info Display	P/#: PFU3	ENG	[0 to 0/0/0]
7-801-041	ROM Info Display	P/#: PFU4	ENG	[0 to 0/0/0]
7-801-102	ROM Info Display	Version: Engine	ENG	[0 to 0/0/0]
7-801-107	ROM Info Display	Version: Finisher	ENG	[0 to 0/0/0]
7-801-109	ROM Info Display	Version:PFU1	ENG	[0 to 0/0/0]
7-801-115	ROM Info Display	Version: IPU	ENG	[0 to 0/0/0]
7-801-119	ROM Info Display	Version:PFU2	ENG	[0 to 0/0/0]
7-801-140	ROM Info Display	Version:PFU3	ENG	[0 to 0/0/0]
7-801-141	ROM Info Display	Version:PFU4	ENG	[0 to 0/0/0]
7-853-002	Replace Counter	#Drum Unit K	ENG*	[0 to 255/0/1]
7-853-003	Replace Counter	#Development Unit K	ENG*	[0 to 255/0/1]
7-853-093	Replace Counter	#Paper Transfer Roller	ENG*	[0 to 255/0/1]
7-853-	Replace Counter	#Fusing Unit	ENG*	[0 to 255/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
115				
7-853-146	Replace Counter	#Paper Feed Roller	ENG*	[0 to 255/0/1]
7-853-147	Replace Counter	#Pickup Roller	ENG*	[0 to 255/0/1]
7-853-148	Replace Counter	#Separation Roller	ENG*	[0 to 255/0/1]
7-853-206	Replace Counter	#DF Paper Feed Roller Unit	ENG*	[0 to 255/0/1]
7-853-207	Replace Counter	#DF Separation Pad Unit	ENG*	[0 to 255/0/1]
7-935-001	Toner Bottle Log	SerialNo.	ENG*	[0 to 255/0/1]
7-954-002	Counter: Pages(%)	#Drum Unit K	ENG*	[0 to 255/0/1%]
7-954-003	Counter: Pages(%)	#Development Unit K	ENG*	[0 to 255/0/1%]
7-954-093	Counter: Pages(%)	#Paper Transfer Roller	ENG*	[0 to 255/0/1%]
7-954-115	Counter: Pages(%)	#Fusing Unit	ENG*	[0 to 255/0/1%]
7-954-146	Counter: Pages(%)	#Paper Feed Roller	ENG*	[0 to 255/0/1%]
7-954-147	Counter: Pages(%)	#Pickup Roller	ENG*	[0 to 255/0/1%]
7-954-148	Counter: Pages(%)	#Separation Roller	ENG*	[0 to 255/0/1%]
7-954-206	Counter: Pages(%)	#DF Paper Feed Roller Unit	ENG*	[0 to 255/0/1%]
7-954-207	Counter: Pages(%)	#DF Separation Pad Unit	ENG*	[0 to 255/0/1%]
7-979-001	CPU Reset Log	Data1	ENG*	[0x00 to 0xFF/0x00/1]
7-979-002	CPU Reset Log	Data2	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-	CPU Reset Log	Data3	ENG*	[0x0000 to

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
003				0xFFFF/0x0000/1]
7-979-004	CPU Reset Log	Data4	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-005	CPU Reset Log	Data5	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-006	CPU Reset Log	Data6	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-007	CPU Reset Log	Data7	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-008	CPU Reset Log	Data8	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-009	CPU Reset Log	Data9	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-010	CPU Reset Log	Data10	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-011	CPU Reset Log	Data11	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-012	CPU Reset Log	Data12	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-013	CPU Reset Log	Data13	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-014	CPU Reset Log	Data14	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-015	CPU Reset Log	Data15	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-016	CPU Reset Log	Data16	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-017	CPU Reset Log	Data17	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-018	CPU Reset Log	Data18	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-019	CPU Reset Log	Data19	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-020	CPU Reset Log	Data20	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-	CPU Reset Log	Data21	ENG*	[0x0000 to

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
021				0xFFFF/0x0000/1]

SP7-XXX (Data Log) - Controller

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
7-401-001	Total SC	SC Counter	CTL*	[0 to 65535/0/0]
7-401-002	Total SC	Total SC Counter	CTL*	[0 to 65535/0/0]
7-403-001	SC History	Latest	CTL*	[0 to 0/0/0]
7-403-002	SC History	Latest 1	CTL*	[0 to 0/0/0]
7-403-003	SC History	Latest 2	CTL*	[0 to 0/0/0]
7-403-004	SC History	Latest 3	CTL*	[0 to 0/0/0]
7-403-005	SC History	Latest 4	CTL*	[0 to 0/0/0]
7-403-006	SC History	Latest 5	CTL*	[0 to 0/0/0]
7-403-007	SC History	Latest 6	CTL*	[0 to 0/0/0]
7-403-008	SC History	Latest 7	CTL*	[0 to 0/0/0]
7-403-009	SC History	Latest 8	CTL*	[0 to 0/0/0]
7-403-010	SC History	Latest 9	CTL*	[0 to 0/0/0]
7-404-001	SW Error History	Latest	CTL*	[0 to 0/0/0]
7-404-002	SW Error History	Latest 1	CTL*	[0 to 0/0/0]
7-404-003	SW Error History	Latest 2	CTL*	[0 to 0/0/0]
7-404-004	SW Error History	Latest 3	CTL*	[0 to 0/0/0]
7-404-005	SW Error History	Latest 4	CTL*	[0 to 0/0/0]
7-404-006	SW Error History	Latest 5	CTL*	[0 to 0/0/0]
7-404-007	SW Error History	Latest 6	CTL*	[0 to 0/0/0]
7-404-008	SW Error History	Latest 7	CTL*	[0 to 0/0/0]
7-404-009	SW Error History	Latest 8	CTL*	[0 to 0/0/0]
7-404-010	SW Error History	Latest 9	CTL*	[0 to 0/0/0]
7-502-001	Total Paper Jam	Jam Counter	CTL*	[0 to 65535/0/0]
7-502-002	Total Paper Jam	Total Jam Counter	CTL*	[0 to 65535/0/0]
7-504-001	Paper Jam Loc	At Power On	CTL*	[0 to 65535/0/0]
7-504-010	Paper Jam Loc	ProcPkgNotReady	CTL*	[0 to 65535/0/0]
7-504-011	Paper Jam Loc	TransPkgNotReady	CTL*	[0 to 65535/0/0]
7-504-012	Paper Jam Loc	DrvConstantlyOn	CTL*	[0 to 65535/0/0]
7-504-013	Paper Jam Loc	NoDupFdReqFrCTL	CTL*	[0 to 65535/0/0]
7-504-014	Paper Jam Loc	FusPkgNotReady	CTL*	[0 to 65535/0/0]
7-504-015	Paper Jam Loc	2ndPaperFeedTO	CTL*	[0 to 65535/0/0]
7-504-025	Paper Jam Loc	Rear Cover Open	CTL*	[0 to 65535/0/0]
7-504-026	Paper Jam Loc	Top Cover Open	CTL*	[0 to 65535/0/0]
7-504-027	Paper Jam Loc	DupCircSht:LmtOV	CTL*	[0 to 65535/0/0]
7-504-028	Paper Jam Loc	Tray 1: On	CTL*	[0 to 65535/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
7-504-029	Paper Jam Loc	Duplex: On	CTL*	[0 to 65535/0/0]
7-504-030	Paper Jam Loc	Bypass: On	CTL*	[0 to 65535/0/0]
7-504-031	Paper Jam Loc	DblFeedTray1	CTL*	[0 to 65535/0/0]
7-504-032	Paper Jam Loc	DblFeedTray2	CTL*	[0 to 65535/0/0]
7-504-033	Paper Jam Loc	DblFeedTray3	CTL*	[0 to 65535/0/0]
7-504-034	Paper Jam Loc	DblFeedTray4	CTL*	[0 to 65535/0/0]
7-504-035	Paper Jam Loc	DblFeedTray5	CTL*	[0 to 65535/0/0]
7-504-036	Paper Jam Loc	DblFeedDup	CTL*	[0 to 65535/0/0]
7-504-037	Paper Jam Loc	DblFeedBypass	CTL*	[0 to 65535/0/0]
7-504-038	Paper Jam Loc	Fd2SnsOn:Cass3	CTL*	[0 to 65535/0/0]
7-504-039	Paper Jam Loc	Fd2SnsOn:Cass4	CTL*	[0 to 65535/0/0]
7-504-040	Paper Jam Loc	Fd2SnsOn:Cass5	CTL*	[0 to 65535/0/0]
7-504-041	Paper Jam Loc	Fd2SnsOff:Cass3	CTL*	[0 to 65535/0/0]
7-504-042	Paper Jam Loc	Fd2SnsOff:Cass4	CTL*	[0 to 65535/0/0]
7-504-043	Paper Jam Loc	Fd2SnsOff:Cass5	CTL*	[0 to 65535/0/0]
7-504-044	Paper Jam Loc	Fd3SnsOn:Cass4	CTL*	[0 to 65535/0/0]
7-504-045	Paper Jam Loc	Fd3SnsOn:Cass5	CTL*	[0 to 65535/0/0]
7-504-046	Paper Jam Loc	Fd3SnsOff:Cass4	CTL*	[0 to 65535/0/0]
7-504-047	Paper Jam Loc	Fd3SnsOff:Cass5	CTL*	[0 to 65535/0/0]
7-504-048	Paper Jam Loc	Fd4SnsOn:Cass5	CTL*	[0 to 65535/0/0]
7-504-049	Paper Jam Loc	Fd4SnsOff:Cass5	CTL*	[0 to 65535/0/0]
7-504-050	Paper Jam Loc	RegSnsOn:Cass2	CTL*	[0 to 65535/0/0]
7-504-051	Paper Jam Loc	RegSnsOn:Cass3	CTL*	[0 to 65535/0/0]
7-504-052	Paper Jam Loc	RegSnsOn:Cass4	CTL*	[0 to 65535/0/0]
7-504-053	Paper Jam Loc	RegSnsOn:Cass5	CTL*	[0 to 65535/0/0]
7-504-054	Paper Jam Loc	RegSnsOff:Cass2	CTL*	[0 to 65535/0/0]
7-504-055	Paper Jam Loc	RegSnsOff:Cass3	CTL*	[0 to 65535/0/0]
7-504-056	Paper Jam Loc	RegSnsOff:Cass4	CTL*	[0 to 65535/0/0]
7-504-057	Paper Jam Loc	RegSnsOff:Cass5	CTL*	[0 to 65535/0/0]
7-504-058	Paper Jam Loc	R-RegSnsOn:Cass1	CTL*	[0 to 65535/0/0]
7-504-059	Paper Jam Loc	R-RegSnsOn:Cass2	CTL*	[0 to 65535/0/0]
7-504-060	Paper Jam Loc	R-RegSnsOn:Cass3	CTL*	[0 to 65535/0/0]
7-504-061	Paper Jam Loc	R-RegSnsOn:Cass4	CTL*	[0 to 65535/0/0]
7-504-062	Paper Jam Loc	R-RegSnsOn:Cass5	CTL*	[0 to 65535/0/0]
7-504-063	Paper Jam Loc	R-RegSnsOn:Dup	CTL*	[0 to 65535/0/0]
7-504-064	Paper Jam Loc	R-RegSnsOn:Byps	CTL*	[0 to 65535/0/0]
7-504-065	Paper Jam Loc	R-RegSnsOff:Cass1	CTL*	[0 to 65535/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
7-504-066	Paper Jam Loc	R-RegSnsOff:Cass2	CTL*	[0 to 65535/0/0]
7-504-067	Paper Jam Loc	R-RegSnsOff:Cass3	CTL*	[0 to 65535/0/0]
7-504-068	Paper Jam Loc	R-RegSnsOff:Cass4	CTL*	[0 to 65535/0/0]
7-504-069	Paper Jam Loc	R-RegSnsOff:Cass5	CTL*	[0 to 65535/0/0]
7-504-070	Paper Jam Loc	R-RegSnsOff:Dup	CTL*	[0 to 65535/0/0]
7-504-071	Paper Jam Loc	R-RegSnsOff:Byps	CTL*	[0 to 65535/0/0]
7-504-072	Paper Jam Loc	O/PSnsOn:Cass	CTL*	[0 to 65535/0/0]
7-504-073	Paper Jam Loc	O/PSnsOn:Cass	CTL*	[0 to 65535/0/0]
7-504-074	Paper Jam Loc	O/PSnsOn:Cass	CTL*	[0 to 65535/0/0]
7-504-075	Paper Jam Loc	O/PSnsOn:Cass	CTL*	[0 to 65535/0/0]
7-504-076	Paper Jam Loc	O/PSnsOn:Cass	CTL*	[0 to 65535/0/0]
7-504-077	Paper Jam Loc	O/PSnsOn:Dup	CTL*	[0 to 65535/0/0]
7-504-078	Paper Jam Loc	O/PSnsOn:Bypss	CTL*	[0 to 65535/0/0]
7-504-079	Paper Jam Loc	O/PSnsOff:Cass	CTL*	[0 to 65535/0/0]
7-504-080	Paper Jam Loc	O/PSnsOff:Cass	CTL*	[0 to 65535/0/0]
7-504-081	Paper Jam Loc	O/PSnsOff:Cass	CTL*	[0 to 65535/0/0]
7-504-082	Paper Jam Loc	O/PSnsOff:Cass	CTL*	[0 to 65535/0/0]
7-504-083	Paper Jam Loc	O/PSnsOff:Cass	CTL*	[0 to 65535/0/0]
7-504-084	Paper Jam Loc	O/PSnsOff:Dup	CTL*	[0 to 65535/0/0]
7-504-085	Paper Jam Loc	O/PSnsOff:Byps	CTL*	[0 to 65535/0/0]
7-504-086	Paper Jam Loc	DTSns1On:Cass1	CTL*	[0 to 65535/0/0]
7-504-087	Paper Jam Loc	DTSns1On:Cass2	CTL*	[0 to 65535/0/0]
7-504-088	Paper Jam Loc	DTSns1On:Cass3	CTL*	[0 to 65535/0/0]
7-504-089	Paper Jam Loc	DTSns1On:Cass4	CTL*	[0 to 65535/0/0]
7-504-090	Paper Jam Loc	DTSns1On:Cass5	CTL*	[0 to 65535/0/0]
7-504-091	Paper Jam Loc	DTSns1On:Byps	CTL*	[0 to 65535/0/0]
7-504-092	Paper Jam Loc	DTSns2On:Cass1	CTL*	[0 to 65535/0/0]
7-504-093	Paper Jam Loc	DTSns2On:Cass2	CTL*	[0 to 65535/0/0]
7-504-094	Paper Jam Loc	DTSns2On:Cass3	CTL*	[0 to 65535/0/0]
7-504-095	Paper Jam Loc	DTSns2On:Cass4	CTL*	[0 to 65535/0/0]
7-504-096	Paper Jam Loc	DTSns2On:Cass5	CTL*	[0 to 65535/0/0]
7-504-097	Paper Jam Loc	DTSns2On:Byps	CTL*	[0 to 65535/0/0]
7-504-098	Paper Jam Loc	DTSns2Off:Dup	CTL*	[0 to 65535/0/0]
7-504-099	Paper Jam Loc	Tray 2: On	CTL*	[0 to 65535/0/0]
7-504-100	Paper Jam Loc	Tray 3: On	CTL*	[0 to 65535/0/0]
7-504-101	Paper Jam Loc	Tray 4: On	CTL*	[0 to 65535/0/0]
7-504-102	Paper Jam Loc	Tray 5: On	CTL*	[0 to 65535/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
7-504-103	Paper Jam Loc	BTSnsOn:Cass1	CTL*	[0 to 65535/0/0]
7-504-104	Paper Jam Loc	BTSnsOn:Cass2	CTL*	[0 to 65535/0/0]
7-504-105	Paper Jam Loc	BTSnsOn:Cass3	CTL*	[0 to 65535/0/0]
7-504-106	Paper Jam Loc	BTSnsOn:Cass4	CTL*	[0 to 65535/0/0]
7-504-107	Paper Jam Loc	BTSnsOn:Cass5	CTL*	[0 to 65535/0/0]
7-504-108	Paper Jam Loc	BTSnsOn:Byps	CTL*	[0 to 65535/0/0]
7-504-109	Paper Jam Loc	BTSnsOff:Cass1	CTL*	[0 to 65535/0/0]
7-504-110	Paper Jam Loc	BTSnsOff:Cass2	CTL*	[0 to 65535/0/0]
7-504-111	Paper Jam Loc	BTSnsOff:Cass3	CTL*	[0 to 65535/0/0]
7-504-112	Paper Jam Loc	BTSnsOff:Cass4	CTL*	[0 to 65535/0/0]
7-504-113	Paper Jam Loc	BTSnsOff:Cass5	CTL*	[0 to 65535/0/0]
7-504-114	Paper Jam Loc	BTSnsOff:Dup	CTL*	[0 to 65535/0/0]
7-504-115	Paper Jam Loc	BTSnsOff:Byps	CTL*	[0 to 65535/0/0]
7-504-230	Paper Jam Loc	NoFinsherResp	CTL*	[0 to 65535/0/0]
7-504-240	Paper Jam Loc	EntSns:On	CTL*	[0 to 65535/0/0]
7-504-241	Paper Jam Loc	EntSns:Off	CTL*	[0 to 65535/0/0]
7-504-242	Paper Jam Loc	Paper Exit	CTL*	[0 to 65535/0/0]
7-504-243	Paper Jam Loc	Jogger Mtr	CTL*	[0 to 65535/0/0]
7-504-244	Paper Jam Loc	ShiftRollerMtr	CTL*	[0 to 65535/0/0]
7-504-245	Paper Jam Loc	PosRollerMtr	CTL*	[0 to 65535/0/0]
7-504-246	Paper Jam Loc	ExGuidePlateMtr	CTL*	[0 to 65535/0/0]
7-504-247	Paper Jam Loc	Tray Lift Mtr	CTL*	[0 to 65535/0/0]
7-504-248	Paper Jam Loc	Staple Mtr	CTL*	[0 to 65535/0/0]
7-504-249	Paper Jam Loc	PaperStopperMtr	CTL*	[0 to 65535/0/0]
7-504-250	Paper Jam Loc	InvMainM/CDataSet	CTL*	[0 to 65535/0/0]
7-506-006	Paper Jam/Size	A5 LEF	CTL*	[0 to 65535/0/0]
7-506-044	Paper Jam/Size	HLT LEF	CTL*	[0 to 65535/0/0]
7-506-133	Paper Jam/Size	A4 SEF	CTL*	[0 to 65535/0/0]
7-506-134	Paper Jam/Size	A5 SEF	CTL*	[0 to 65535/0/0]
7-506-142	Paper Jam/Size	B5 SEF	CTL*	[0 to 65535/0/0]
7-506-164	Paper Jam/Size	LG SEF	CTL*	[0 to 65535/0/0]
7-506-166	Paper Jam/Size	LT SEF	CTL*	[0 to 65535/0/0]
7-506-172	Paper Jam/Size	HLT SEF	CTL*	[0 to 65535/0/0]
7-506-255	Paper Jam/Size	Other	CTL*	[0 to 65535/0/0]
7-507-001	Dsply-P Jam Hist	Latest	CTL*	[0 to 0/0/0]
7-507-002	Dsply-P Jam Hist	Latest 1	CTL*	[0 to 0/0/0]
7-507-003	Dsply-P Jam Hist	Latest 2	CTL*	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
7-507-004	Dsply-P Jam Hist	Latest 3	CTL*	[0 to 0/0/0]
7-507-005	Dsply-P Jam Hist	Latest 4	CTL*	[0 to 0/0/0]
7-507-006	Dsply-P Jam Hist	Latest 5	CTL*	[0 to 0/0/0]
7-507-007	Dsply-P Jam Hist	Latest 6	CTL*	[0 to 0/0/0]
7-507-008	Dsply-P Jam Hist	Latest 7	CTL*	[0 to 0/0/0]
7-507-009	Dsply-P Jam Hist	Latest 8	CTL*	[0 to 0/0/0]
7-507-010	Dsply-P Jam Hist	Latest 9	CTL*	[0 to 0/0/0]
7-514-001	Paper Jam Cnt Loc	At Power On	CTL*	[0 to 65535/0/0]
7-514-010	Paper Jam Cnt Loc	ProcPkgNotReady	CTL*	[0 to 65535/0/0]
7-514-011	Paper Jam Cnt Loc	TransPkgNotReady	CTL*	[0 to 65535/0/0]
7-514-012	Paper Jam Cnt Loc	DrvConstantlyOn	CTL*	[0 to 65535/0/0]
7-514-013	Paper Jam Cnt Loc	NoDupFdReqFrCTL	CTL*	[0 to 65535/0/0]
7-514-014	Paper Jam Cnt Loc	FusPkgNotReady	CTL*	[0 to 65535/0/0]
7-514-015	Paper Jam Cnt Loc	2ndPaperFeedTO	CTL*	[0 to 65535/0/0]
7-514-025	Paper Jam Cnt Loc	Rear Cover Open	CTL*	[0 to 65535/0/0]
7-514-026	Paper Jam Cnt Loc	Top Cover Open	CTL*	[0 to 65535/0/0]
7-514-027	Paper Jam Cnt Loc	DupCircSht:LmtOV	CTL*	[0 to 65535/0/0]
7-514-028	Paper Jam Cnt Loc	Tray 1: On	CTL*	[0 to 65535/0/0]
7-514-029	Paper Jam Cnt Loc	Duplex: On	CTL*	[0 to 65535/0/0]
7-514-030	Paper Jam Cnt Loc	Bypass: On	CTL*	[0 to 65535/0/0]
7-514-031	Paper Jam Cnt Loc	DblFeedTray1	CTL*	[0 to 65535/0/0]
7-514-032	Paper Jam Cnt Loc	DblFeedTray2	CTL*	[0 to 65535/0/0]
7-514-033	Paper Jam Cnt Loc	DblFeedTray3	CTL*	[0 to 65535/0/0]
7-514-034	Paper Jam Cnt Loc	DblFeedTray4	CTL*	[0 to 65535/0/0]
7-514-035	Paper Jam Cnt Loc	DblFeedTray5	CTL*	[0 to 65535/0/0]
7-514-036	Paper Jam Cnt Loc	DblFeedDup	CTL*	[0 to 65535/0/0]
7-514-037	Paper Jam Cnt Loc	DblFeedBypass	CTL*	[0 to 65535/0/0]
7-514-038	Paper Jam Cnt Loc	Fd2SnsOn:Cass3	CTL*	[0 to 65535/0/0]
7-514-039	Paper Jam Cnt Loc	Fd2SnsOn:Cass4	CTL*	[0 to 65535/0/0]
7-514-040	Paper Jam Cnt Loc	Fd2SnsOn:Cass5	CTL*	[0 to 65535/0/0]
7-514-041	Paper Jam Cnt Loc	Fd2SnsOff:Cass3	CTL*	[0 to 65535/0/0]
7-514-042	Paper Jam Cnt Loc	Fd2SnsOff:Cass4	CTL*	[0 to 65535/0/0]
7-514-043	Paper Jam Cnt Loc	Fd2SnsOff:Cass5	CTL*	[0 to 65535/0/0]
7-514-044	Paper Jam Cnt Loc	Fd3SnsOn:Cass4	CTL*	[0 to 65535/0/0]
7-514-045	Paper Jam Cnt Loc	Fd3SnsOn:Cass5	CTL*	[0 to 65535/0/0]
7-514-046	Paper Jam Cnt Loc	Fd3SnsOff:Cass4	CTL*	[0 to 65535/0/0]
7-514-047	Paper Jam Cnt Loc	Fd3SnsOff:Cass5	CTL*	[0 to 65535/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
7-514-048	Paper Jam Cnt Loc	Fd4SnsOn:Cass5	CTL*	[0 to 65535/0/0]
7-514-049	Paper Jam Cnt Loc	Fd4SnsOff:Cass5	CTL*	[0 to 65535/0/0]
7-514-050	Paper Jam Cnt Loc	RegSnsOn:Cass2	CTL*	[0 to 65535/0/0]
7-514-051	Paper Jam Cnt Loc	RegSnsOn:Cass3	CTL*	[0 to 65535/0/0]
7-514-052	Paper Jam Cnt Loc	RegSnsOn:Cass4	CTL*	[0 to 65535/0/0]
7-514-053	Paper Jam Cnt Loc	RegSnsOn:Cass5	CTL*	[0 to 65535/0/0]
7-514-054	Paper Jam Cnt Loc	RegSnsOff:Cass2	CTL*	[0 to 65535/0/0]
7-514-055	Paper Jam Cnt Loc	RegSnsOff:Cass3	CTL*	[0 to 65535/0/0]
7-514-056	Paper Jam Cnt Loc	RegSnsOff:Cass4	CTL*	[0 to 65535/0/0]
7-514-057	Paper Jam Cnt Loc	RegSnsOff:Cass5	CTL*	[0 to 65535/0/0]
7-514-058	Paper Jam Cnt Loc	R-RegSnsOn:Cass1	CTL*	[0 to 65535/0/0]
7-514-059	Paper Jam Cnt Loc	R-RegSnsOn:Cass2	CTL*	[0 to 65535/0/0]
7-514-060	Paper Jam Cnt Loc	R-RegSnsOn:Cass3	CTL*	[0 to 65535/0/0]
7-514-061	Paper Jam Cnt Loc	R-RegSnsOn:Cass4	CTL*	[0 to 65535/0/0]
7-514-062	Paper Jam Cnt Loc	R-RegSnsOn:Cass5	CTL*	[0 to 65535/0/0]
7-514-063	Paper Jam Cnt Loc	R-RegSnsOn:Dup	CTL*	[0 to 65535/0/0]
7-514-064	Paper Jam Cnt Loc	R-RegSnsOn:Byps	CTL*	[0 to 65535/0/0]
7-514-065	Paper Jam Cnt Loc	R-RegSnsOff:Cass1	CTL*	[0 to 65535/0/0]
7-514-066	Paper Jam Cnt Loc	R-RegSnsOff:Cass2	CTL*	[0 to 65535/0/0]
7-514-067	Paper Jam Cnt Loc	R-RegSnsOff:Cass3	CTL*	[0 to 65535/0/0]
7-514-068	Paper Jam Cnt Loc	R-RegSnsOff:Cass4	CTL*	[0 to 65535/0/0]
7-514-069	Paper Jam Cnt Loc	R-RegSnsOff:Cass5	CTL*	[0 to 65535/0/0]
7-514-070	Paper Jam Cnt Loc	R-RegSnsOff:Dup	CTL*	[0 to 65535/0/0]
7-514-071	Paper Jam Cnt Loc	R-RegSnsOff:Byps	CTL*	[0 to 65535/0/0]
7-514-072	Paper Jam Cnt Loc	O/PSnsOn:Cass	CTL*	[0 to 65535/0/0]
7-514-073	Paper Jam Cnt Loc	O/PSnsOn:Cass	CTL*	[0 to 65535/0/0]
7-514-074	Paper Jam Cnt Loc	O/PSnsOn:Cass	CTL*	[0 to 65535/0/0]
7-514-075	Paper Jam Cnt Loc	O/PSnsOn:Cass	CTL*	[0 to 65535/0/0]
7-514-076	Paper Jam Cnt Loc	O/PSnsOn:Cass	CTL*	[0 to 65535/0/0]
7-514-077	Paper Jam Cnt Loc	O/PSnsOn:Dup	CTL*	[0 to 65535/0/0]
7-514-078	Paper Jam Cnt Loc	O/PSnsOn:Bypss	CTL*	[0 to 65535/0/0]
7-514-079	Paper Jam Cnt Loc	O/PSnsOff:Cass	CTL*	[0 to 65535/0/0]
7-514-080	Paper Jam Cnt Loc	O/PSnsOff:Cass	CTL*	[0 to 65535/0/0]
7-514-081	Paper Jam Cnt Loc	O/PSnsOff:Cass	CTL*	[0 to 65535/0/0]
7-514-082	Paper Jam Cnt Loc	O/PSnsOff:Cass	CTL*	[0 to 65535/0/0]
7-514-083	Paper Jam Cnt Loc	O/PSnsOff:Cass	CTL*	[0 to 65535/0/0]
7-514-084	Paper Jam Cnt Loc	O/PSnsOff:Dup	CTL*	[0 to 65535/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
7-514-085	Paper Jam Cnt Loc	O/PSnsOff:Byps	CTL*	[0 to 65535/0/0]
7-514-086	Paper Jam Cnt Loc	DTSns1On:Cass1	CTL*	[0 to 65535/0/0]
7-514-087	Paper Jam Cnt Loc	DTSns1On:Cass2	CTL*	[0 to 65535/0/0]
7-514-088	Paper Jam Cnt Loc	DTSns1On:Cass3	CTL*	[0 to 65535/0/0]
7-514-089	Paper Jam Cnt Loc	DTSns1On:Cass4	CTL*	[0 to 65535/0/0]
7-514-090	Paper Jam Cnt Loc	DTSns1On:Cass5	CTL*	[0 to 65535/0/0]
7-514-091	Paper Jam Cnt Loc	DTSns1On:Byps	CTL*	[0 to 65535/0/0]
7-514-092	Paper Jam Cnt Loc	DTSns2On:Cass1	CTL*	[0 to 65535/0/0]
7-514-093	Paper Jam Cnt Loc	DTSns2On:Cass2	CTL*	[0 to 65535/0/0]
7-514-094	Paper Jam Cnt Loc	DTSns2On:Cass3	CTL*	[0 to 65535/0/0]
7-514-095	Paper Jam Cnt Loc	DTSns2On:Cass4	CTL*	[0 to 65535/0/0]
7-514-096	Paper Jam Cnt Loc	DTSns2On:Cass5	CTL*	[0 to 65535/0/0]
7-514-097	Paper Jam Cnt Loc	DTSns2On:Byps	CTL*	[0 to 65535/0/0]
7-514-098	Paper Jam Cnt Loc	DTSns2Off:Dup	CTL*	[0 to 65535/0/0]
7-514-099	Paper Jam Cnt Loc	Tray 2: On	CTL*	[0 to 65535/0/0]
7-514-100	Paper Jam Cnt Loc	Tray 3: On	CTL*	[0 to 65535/0/0]
7-514-101	Paper Jam Cnt Loc	Tray 4: On	CTL*	[0 to 65535/0/0]
7-514-102	Paper Jam Cnt Loc	Tray 5: On	CTL*	[0 to 65535/0/0]
7-514-103	Paper Jam Cnt Loc	BTSnsOn:Cass1	CTL*	[0 to 65535/0/0]
7-514-104	Paper Jam Cnt Loc	BTSnsOn:Cass2	CTL*	[0 to 65535/0/0]
7-514-105	Paper Jam Cnt Loc	BTSnsOn:Cass3	CTL*	[0 to 65535/0/0]
7-514-106	Paper Jam Cnt Loc	BTSnsOn:Cass4	CTL*	[0 to 65535/0/0]
7-514-107	Paper Jam Cnt Loc	BTSnsOn:Cass5	CTL*	[0 to 65535/0/0]
7-514-108	Paper Jam Cnt Loc	BTSnsOn:Byps	CTL*	[0 to 65535/0/0]
7-514-109	Paper Jam Cnt Loc	BTSnsOff:Cass1	CTL*	[0 to 65535/0/0]
7-514-110	Paper Jam Cnt Loc	BTSnsOff:Cass2	CTL*	[0 to 65535/0/0]
7-514-111	Paper Jam Cnt Loc	BTSnsOff:Cass3	CTL*	[0 to 65535/0/0]
7-514-112	Paper Jam Cnt Loc	BTSnsOff:Cass4	CTL*	[0 to 65535/0/0]
7-514-113	Paper Jam Cnt Loc	BTSnsOff:Cass5	CTL*	[0 to 65535/0/0]
7-514-114	Paper Jam Cnt Loc	BTSnsOff:Dup	CTL*	[0 to 65535/0/0]
7-514-115	Paper Jam Cnt Loc	BTSnsOff:Byps	CTL*	[0 to 65535/0/0]
7-514-230	Paper Jam Cnt Loc	NoFinsherResp	CTL*	[0 to 65535/0/0]
7-514-240	Paper Jam Cnt Loc	EntSns:On	CTL*	[0 to 65535/0/0]
7-514-241	Paper Jam Cnt Loc	EntSns:Off	CTL*	[0 to 65535/0/0]
7-514-242	Paper Jam Cnt Loc	Paper Exit	CTL*	[0 to 65535/0/0]
7-514-243	Paper Jam Cnt Loc	Jogger Mtr	CTL*	[0 to 65535/0/0]
7-514-244	Paper Jam Cnt Loc	ShiftRollerMtr	CTL*	[0 to 65535/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
7-514-245	Paper Jam Cnt Loc	PosRollerMtr	CTL*	[0 to 65535/0/0]
7-514-246	Paper Jam Cnt Loc	ExGuidePlateMtr	CTL*	[0 to 65535/0/0]
7-514-247	Paper Jam Cnt Loc	Tray Lift Mtr	CTL*	[0 to 65535/0/0]
7-514-248	Paper Jam Cnt Loc	Staple Mtr	CTL*	[0 to 65535/0/0]
7-514-249	Paper Jam Cnt Loc	PaperStopperMtr	CTL*	[0 to 65535/0/0]
7-514-250	Paper Jam Cnt Loc	InvMainM/CDataSet	CTL*	[0 to 65535/0/0]
7-516-006	PaperSize Jam Cnt	A5 LEF	CTL*	[0 to 65535/0/0]
7-516-044	PaperSize Jam Cnt	HLT LEF	CTL*	[0 to 65535/0/0]
7-516-133	PaperSize Jam Cnt	A4 SEF	CTL*	[0 to 65535/0/0]
7-516-134	PaperSize Jam Cnt	A5 SEF	CTL*	[0 to 65535/0/0]
7-516-142	PaperSize Jam Cnt	B5 SEF	CTL*	[0 to 65535/0/0]
7-516-164	PaperSize Jam Cnt	LG SEF	CTL*	[0 to 65535/0/0]
7-516-166	PaperSize Jam Cnt	LT SEF	CTL*	[0 to 65535/0/0]
7-516-172	PaperSize Jam Cnt	HLT SEF	CTL*	[0 to 65535/0/0]
7-516-255	PaperSize Jam Cnt	Other	CTL*	[0 to 65535/0/0]
7-520-001	Update Log	Record1	CTL*	[0 to 255/0/1]
7-520-002	Update Log	Record2	CTL*	[0 to 255/0/1]
7-520-003	Update Log	Record3	CTL*	[0 to 255/0/1]
7-520-004	Update Log	Record4	CTL*	[0 to 255/0/1]
7-520-005	Update Log	Record5	CTL*	[0 to 255/0/1]
7-520-006	Update Log	Record6	CTL*	[0 to 255/0/1]
7-520-007	Update Log	Record7	CTL*	[0 to 255/0/1]
7-520-008	Update Log	Record8	CTL*	[0 to 255/0/1]
7-520-009	Update Log	Record9	CTL*	[0 to 255/0/1]
7-520-010	Update Log	Record10	CTL*	[0 to 255/0/1]
7-617-001	PM Parts Counter Display	Normal	CTL*	[0 to 9999999/0/0]
7-617-002	PM Parts Counter Display	Df	CTL*	[0 to 9999999/0/0]
7-618-001	PM Parts Counter Reset	Normal	CTL	[0 to 0/0/0]
7-618-002	PM Parts Counter Reset	Df	CTL	[0 to 0/0/0]
7-801-255	Memory/Version/PN		CTL	[0 to 0/0/0]
7-803-001	PM Counter	Paper	CTL*	[0 to 9999999/0/0]
7-804-001	PM Count.Reset	Paper	CTL	[0 to 0/0/0]
7-807-001	Reset-SC/Jam		CTL	[0 to 0/0/0]
7-832-001	Display-Self-Diag		CTL	[0 to 0/0/0]
7-836-001	Resident Memory		CTL	[0 to 0xffffffff/0/0MB]
7-901-001	Assert Info.	File Name	CTL*	[0 to 0/0/0]
7-901-002	Assert Info.	Number of Lines	CTL*	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
7-901-003	Assert Info.	Location	CTL*	[0 to 0/0/0]
7-910-001	ROM No	System	CTL	[0 to 0/0/0]
7-910-002	ROM No	Engine	CTL	[0 to 0/0/0]
7-910-009	ROM No	Bank	CTL	[0 to 0/0/0]
7-910-015	ROM No	Engine(IPU)	CTL	[0 to 0/0/0]
7-910-018	ROM No	NetworkSupport	CTL	[0 to 0/0/0]
7-910-019	ROM No	Bank2	CTL	[0 to 0/0/0]
7-910-022	ROM No	BIOS	CTL	[0 to 0/0/0]
7-910-023	ROM No	HDD Format Option	CTL	[0 to 0/0/0]
7-910-040	ROM No	Bank3	CTL	[0 to 0/0/0]
7-910-041	ROM No	Bank4	CTL	[0 to 0/0/0]
7-910-150	ROM No	RPCS	CTL	[0 to 0/0/0]
7-910-151	ROM No	PS	CTL	[0 to 0/0/0]
7-910-158	ROM No	PCL	CTL	[0 to 0/0/0]
7-910-159	ROM No	PCLXL	CTL	[0 to 0/0/0]
7-910-162	ROM No	PDF	CTL	[0 to 0/0/0]
7-910-165	ROM No	PJL	CTL	[0 to 0/0/0]
7-910-166	ROM No	IPDS	CTL	[0 to 0/0/0]
7-910-168	ROM No	MediaPrint:TIFF	CTL	[0 to 0/0/0]
7-910-169	ROM No	XPS	CTL	[0 to 0/0/0]
7-910-180	ROM No	FONT	CTL	[0 to 0/0/0]
7-910-181	ROM No	FONT1	CTL	[0 to 0/0/0]
7-910-182	ROM No	FONT2	CTL	[0 to 0/0/0]
7-910-183	ROM No	FONT3	CTL	[0 to 0/0/0]
7-910-184	ROM No	FONT4	CTL	[0 to 0/0/0]
7-910-185	ROM No	FONT5	CTL	[0 to 0/0/0]
7-910-186	ROM No	FONT6	CTL	[0 to 0/0/0]
7-910-187	ROM No	FONT7	CTL	[0 to 0/0/0]
7-910-200	ROM No	Factory	CTL	[0 to 0/0/0]
7-910-202	ROM No	NetworkDocBox	CTL	[0 to 0/0/0]
7-910-204	ROM No	Printer	CTL	[0 to 0/0/0]
7-910-210	ROM No	MIB	CTL	[0 to 0/0/0]
7-910-211	ROM No	Websupport	CTL	[0 to 0/0/0]
7-910-213	ROM No	SDK1	CTL	[0 to 0/0/0]
7-910-214	ROM No	SDK2	CTL	[0 to 0/0/0]
7-910-215	ROM No	SDK3	CTL	[0 to 0/0/0]
7-911-001	Firmware Version	System	CTL	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
7-911-002	Firmware Version	Engine	CTL	[0 to 0/0/0]
7-911-009	Firmware Version	Bank	CTL	[0 to 0/0/0]
7-911-015	Firmware Version	Engine(IPU)	CTL	[0 to 0/0/0]
7-911-018	Firmware Version	NetworkSupport	CTL	[0 to 0/0/0]
7-911-019	Firmware Version	Bank2	CTL	[0 to 0/0/0]
7-911-022	Firmware Version	BIOS	CTL	[0 to 0/0/0]
7-911-023	Firmware Version	HDD Format Option	CTL	[0 to 0/0/0]
7-911-040	Firmware Version	Bank3	CTL	[0 to 0/0/0]
7-911-041	Firmware Version	Bank4	CTL	[0 to 0/0/0]
7-911-150	Firmware Version	RPCS	CTL	[0 to 0/0/0]
7-911-151	Firmware Version	PS	CTL	[0 to 0/0/0]
7-911-158	Firmware Version	PCL	CTL	[0 to 0/0/0]
7-911-159	Firmware Version	PCLXL	CTL	[0 to 0/0/0]
7-911-162	Firmware Version	PDF	CTL	[0 to 0/0/0]
7-911-165	Firmware Version	PJL	CTL	[0 to 0/0/0]
7-911-166	Firmware Version	IPDS	CTL	[0 to 0/0/0]
7-911-168	Firmware Version	MediaPrint:TIFF	CTL	[0 to 0/0/0]
7-911-169	Firmware Version	XPS	CTL	[0 to 0/0/0]
7-911-180	Firmware Version	FONT	CTL	[0 to 0/0/0]
7-911-181	Firmware Version	FONT1	CTL	[0 to 0/0/0]
7-911-182	Firmware Version	FONT2	CTL	[0 to 0/0/0]
7-911-183	Firmware Version	FONT3	CTL	[0 to 0/0/0]
7-911-184	Firmware Version	FONT4	CTL	[0 to 0/0/0]
7-911-185	Firmware Version	FONT5	CTL	[0 to 0/0/0]
7-911-186	Firmware Version	FONT6	CTL	[0 to 0/0/0]
7-911-187	Firmware Version	FONT7	CTL	[0 to 0/0/0]
7-911-200	Firmware Version	Factory	CTL	[0 to 0/0/0]
7-911-202	Firmware Version	NetworkDocBox	CTL	[0 to 0/0/0]
7-911-204	Firmware Version	Printer	CTL	[0 to 0/0/0]
7-911-210	Firmware Version	MIB	CTL	[0 to 0/0/0]
7-911-211	Firmware Version	Websupport	CTL	[0 to 0/0/0]
7-911-213	Firmware Version	SDK1	CTL	[0 to 0/0/0]
7-911-214	Firmware Version	SDK2	CTL	[0 to 0/0/0]
7-911-215	Firmware Version	SDK3	CTL	[0 to 0/0/0]

SP8-XXX (Data Log 2) - Controller

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
8-071-001	T:Jobs/PGS	1 Page	CTL*	[0 to 99999999/0/1]
8-071-002	T:Jobs/PGS	2 Pages	CTL*	[0 to 99999999/0/1]
8-071-003	T:Jobs/PGS	3 Pages	CTL*	[0 to 99999999/0/1]
8-071-004	T:Jobs/PGS	4 Pages	CTL*	[0 to 99999999/0/1]
8-071-005	T:Jobs/PGS	5 Pages	CTL*	[0 to 99999999/0/1]
8-071-006	T:Jobs/PGS	6~10 Pages	CTL*	[0 to 99999999/0/1]
8-071-007	T:Jobs/PGS	11~20 Pages	CTL*	[0 to 99999999/0/1]
8-071-008	T:Jobs/PGS	21~50 Pages	CTL*	[0 to 99999999/0/1]
8-071-009	T:Jobs/PGS	51~100 Pages	CTL*	[0 to 99999999/0/1]
8-071-010	T:Jobs/PGS	101~300 Pages	CTL*	[0 to 99999999/0/1]
8-071-011	T:Jobs/PGS	301~500 Pages	CTL*	[0 to 99999999/0/1]
8-071-012	T:Jobs/PGS	501~700 Pages	CTL*	[0 to 99999999/0/1]
8-071-013	T:Jobs/PGS	701~1000 Pages	CTL*	[0 to 99999999/0/1]
8-071-014	T:Jobs/PGS	1001~ Pages	CTL*	[0 to 99999999/0/1]
8-074-001	P:Jobs/PGS	1 Page	CTL*	[0 to 99999999/0/1]
8-074-002	P:Jobs/PGS	2 Pages	CTL*	[0 to 99999999/0/1]
8-074-003	P:Jobs/PGS	3 Pages	CTL*	[0 to 99999999/0/1]
8-074-	P:Jobs/PGS	4 Pages	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
004				
8-074-005	P:Jobs/PGS	5 Pages	CTL*	[0 to 99999999/0/1]
8-074-006	P:Jobs/PGS	6~10 Pages	CTL*	[0 to 99999999/0/1]
8-074-007	P:Jobs/PGS	11~20 Pages	CTL*	[0 to 99999999/0/1]
8-074-008	P:Jobs/PGS	21~50 Pages	CTL*	[0 to 99999999/0/1]
8-074-009	P:Jobs/PGS	51~100 Pages	CTL*	[0 to 99999999/0/1]
8-074-010	P:Jobs/PGS	101~300 Pages	CTL*	[0 to 99999999/0/1]
8-074-011	P:Jobs/PGS	301~500 Pages	CTL*	[0 to 99999999/0/1]
8-074-012	P:Jobs/PGS	501~700 Pages	CTL*	[0 to 99999999/0/1]
8-074-013	P:Jobs/PGS	701~1000 Pages	CTL*	[0 to 99999999/0/1]
8-074-014	P:Jobs/PGS	1001~ Pages	CTL*	[0 to 99999999/0/1]
8-077-001	O:Jobs/PGS	1 Page	CTL*	[0 to 99999999/0/1]
8-077-002	O:Jobs/PGS	2 Pages	CTL*	[0 to 99999999/0/1]
8-077-003	O:Jobs/PGS	3 Pages	CTL*	[0 to 99999999/0/1]
8-077-004	O:Jobs/PGS	4 Pages	CTL*	[0 to 99999999/0/1]
8-077-005	O:Jobs/PGS	5 Pages	CTL*	[0 to 99999999/0/1]
8-077-006	O:Jobs/PGS	6~10 Pages	CTL*	[0 to 99999999/0/1]
8-077-007	O:Jobs/PGS	11~20 Pages	CTL*	[0 to 99999999/0/1]
8-077-	O:Jobs/PGS	21~50 Pages	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
008				
8-077-009	O:Jobs/PGS	51~100 Pages	CTL*	[0 to 99999999/0/1]
8-077-010	O:Jobs/PGS	101~300 Pages	CTL*	[0 to 99999999/0/1]
8-077-011	O:Jobs/PGS	301~500 Pages	CTL*	[0 to 99999999/0/1]
8-077-012	O:Jobs/PGS	501~700 Pages	CTL*	[0 to 99999999/0/1]
8-077-013	O:Jobs/PGS	701~1000 Pages	CTL*	[0 to 99999999/0/1]
8-077-014	O:Jobs/PGS	1001~ Pages	CTL*	[0 to 99999999/0/1]
8-081-001	T:Smart Device	Smart Device	CTL*	[0 to 99999999/0/1]
8-084-001	P:Smart Device	Smart Device	CTL*	[0 to 99999999/0/1]
8-381-001	T:Total PrtPGS	Field Number	CTL*	[0 to 99999999/0/1]
8-384-001	P:Total PrtPGS	Field Number	CTL*	[0 to 99999999/0/1]
8-387-001	O:Total PrtPGS	Field Number	CTL*	[0 to 99999999/0/1]
8-391-001	LSize PrtPGS	A3/DLT, Larger	CTL*	[0 to 99999999/0/1]
8-411-001	Prints/Duplex		CTL*	[0 to 99999999/0/1]
8-421-001	T:PrtPGS/Dup Comb	Simplex> Duplex	CTL*	[0 to 99999999/0/1]
8-421-004	T:PrtPGS/Dup Comb	Simplex Combine	CTL*	[0 to 99999999/0/1]
8-421-005	T:PrtPGS/Dup Comb	Duplex Combine	CTL*	[0 to 99999999/0/1]
8-421-006	T:PrtPGS/Dup Comb	2in1	CTL*	[0 to 99999999/0/1]
8-421-	T:PrtPGS/Dup Comb	4in1	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
007				
8-421-008	T:PrtPGS/Dup Comb	6in1	CTL*	[0 to 99999999/0/1]
8-421-009	T:PrtPGS/Dup Comb	8in1	CTL*	[0 to 99999999/0/1]
8-421-010	T:PrtPGS/Dup Comb	9in1	CTL*	[0 to 99999999/0/1]
8-421-011	T:PrtPGS/Dup Comb	16in1	CTL*	[0 to 99999999/0/1]
8-421-012	T:PrtPGS/Dup Comb	Booklet	CTL*	[0 to 99999999/0/1]
8-421-013	T:PrtPGS/Dup Comb	Magazine	CTL*	[0 to 99999999/0/1]
8-421-014	T:PrtPGS/Dup Comb	2in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-421-015	T:PrtPGS/Dup Comb	4in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-421-016	T:PrtPGS/Dup Comb	6in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-421-017	T:PrtPGS/Dup Comb	8in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-421-018	T:PrtPGS/Dup Comb	9in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-421-019	T:PrtPGS/Dup Comb	2in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-421-020	T:PrtPGS/Dup Comb	4in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-421-021	T:PrtPGS/Dup Comb	6in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-421-022	T:PrtPGS/Dup Comb	8in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-421-023	T:PrtPGS/Dup Comb	9in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-421-024	T:PrtPGS/Dup Comb	16in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-424-	P:PrtPGS/Dup	Simplex> Duplex	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
001	Comb			
8-424-004	P:PrtPGS/Dup Comb	Simplex Combine	CTL*	[0 to 99999999/0/1]
8-424-005	P:PrtPGS/Dup Comb	Duplex Combine	CTL*	[0 to 99999999/0/1]
8-424-006	P:PrtPGS/Dup Comb	2in1	CTL*	[0 to 99999999/0/1]
8-424-007	P:PrtPGS/Dup Comb	4in1	CTL*	[0 to 99999999/0/1]
8-424-008	P:PrtPGS/Dup Comb	6in1	CTL*	[0 to 99999999/0/1]
8-424-009	P:PrtPGS/Dup Comb	8in1	CTL*	[0 to 99999999/0/1]
8-424-010	P:PrtPGS/Dup Comb	9in1	CTL*	[0 to 99999999/0/1]
8-424-011	P:PrtPGS/Dup Comb	16in1	CTL*	[0 to 99999999/0/1]
8-424-012	P:PrtPGS/Dup Comb	Booklet	CTL*	[0 to 99999999/0/1]
8-424-013	P:PrtPGS/Dup Comb	Magazine	CTL*	[0 to 99999999/0/1]
8-424-014	P:PrtPGS/Dup Comb	2in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-424-015	P:PrtPGS/Dup Comb	4in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-424-016	P:PrtPGS/Dup Comb	6in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-424-017	P:PrtPGS/Dup Comb	8in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-424-018	P:PrtPGS/Dup Comb	9in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-424-019	P:PrtPGS/Dup Comb	2in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-424-020	P:PrtPGS/Dup Comb	4in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-424-	P:PrtPGS/Dup	6in1 + Magazine	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
021	Comb			
8-424-022	P:PrtPGS/Dup Comb	8in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-424-023	P:PrtPGS/Dup Comb	9in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-424-024	P:PrtPGS/Dup Comb	16in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-427-001	O:PrtPGS/Dup Comb	Simplex> Duplex	CTL*	[0 to 99999999/0/1]
8-427-004	O:PrtPGS/Dup Comb	Simplex Combine	CTL*	[0 to 99999999/0/1]
8-427-005	O:PrtPGS/Dup Comb	Duplex Combine	CTL*	[0 to 99999999/0/1]
8-427-006	O:PrtPGS/Dup Comb	2in1	CTL*	[0 to 99999999/0/1]
8-427-007	O:PrtPGS/Dup Comb	4in1	CTL*	[0 to 99999999/0/1]
8-427-008	O:PrtPGS/Dup Comb	6in1	CTL*	[0 to 99999999/0/1]
8-427-009	O:PrtPGS/Dup Comb	8in1	CTL*	[0 to 99999999/0/1]
8-427-010	O:PrtPGS/Dup Comb	9in1	CTL*	[0 to 99999999/0/1]
8-427-011	O:PrtPGS/Dup Comb	16in1	CTL*	[0 to 99999999/0/1]
8-427-012	O:PrtPGS/Dup Comb	Booklet	CTL*	[0 to 99999999/0/1]
8-427-013	O:PrtPGS/Dup Comb	Magazine	CTL*	[0 to 99999999/0/1]
8-427-014	O:PrtPGS/Dup Comb	2in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-427-015	O:PrtPGS/Dup Comb	4in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-427-016	O:PrtPGS/Dup Comb	6in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-427-	O:PrtPGS/Dup	8in1 + Booklet	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
017	Comb			
8-427-018	O:PrtPGS/Dup Comb	9in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-427-019	O:PrtPGS/Dup Comb	2in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-427-020	O:PrtPGS/Dup Comb	4in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-427-021	O:PrtPGS/Dup Comb	6in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-427-022	O:PrtPGS/Dup Comb	8in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-427-023	O:PrtPGS/Dup Comb	9in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-427-024	O:PrtPGS/Dup Comb	16in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-441-001	T:PrtPGS/Ppr Size	A3	CTL*	[0 to 99999999/0/1]
8-441-002	T:PrtPGS/Ppr Size	A4	CTL*	[0 to 99999999/0/1]
8-441-003	T:PrtPGS/Ppr Size	A5	CTL*	[0 to 99999999/0/1]
8-441-004	T:PrtPGS/Ppr Size	B4	CTL*	[0 to 99999999/0/1]
8-441-005	T:PrtPGS/Ppr Size	B5	CTL*	[0 to 99999999/0/1]
8-441-006	T:PrtPGS/Ppr Size	DLT	CTL*	[0 to 99999999/0/1]
8-441-007	T:PrtPGS/Ppr Size	LG	CTL*	[0 to 99999999/0/1]
8-441-008	T:PrtPGS/Ppr Size	LT	CTL*	[0 to 99999999/0/1]
8-441-009	T:PrtPGS/Ppr Size	HLT	CTL*	[0 to 99999999/0/1]
8-441-010	T:PrtPGS/Ppr Size	Full Bleed	CTL*	[0 to 99999999/0/1]
8-441-	T:PrtPGS/Ppr Size	Other (Standard)	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
254				
8-441-255	T:PrtPGS/Ppr Size	Other (Custom)	CTL*	[0 to 99999999/0/1]
8-444-001	P:PrtPGS/Ppr Size	A3	CTL*	[0 to 99999999/0/1]
8-444-002	P:PrtPGS/Ppr Size	A4	CTL*	[0 to 99999999/0/1]
8-444-003	P:PrtPGS/Ppr Size	A5	CTL*	[0 to 99999999/0/1]
8-444-004	P:PrtPGS/Ppr Size	B4	CTL*	[0 to 99999999/0/1]
8-444-005	P:PrtPGS/Ppr Size	B5	CTL*	[0 to 99999999/0/1]
8-444-006	P:PrtPGS/Ppr Size	DLT	CTL*	[0 to 99999999/0/1]
8-444-007	P:PrtPGS/Ppr Size	LG	CTL*	[0 to 99999999/0/1]
8-444-008	P:PrtPGS/Ppr Size	LT	CTL*	[0 to 99999999/0/1]
8-444-009	P:PrtPGS/Ppr Size	HLT	CTL*	[0 to 99999999/0/1]
8-444-010	P:PrtPGS/Ppr Size	Full Bleed	CTL*	[0 to 99999999/0/1]
8-444-254	P:PrtPGS/Ppr Size	Other (Standard)	CTL*	[0 to 99999999/0/1]
8-444-255	P:PrtPGS/Ppr Size	Other (Custom)	CTL*	[0 to 99999999/0/1]
8-447-001	O:PrtPGS/Ppr Size	A3	CTL*	[0 to 99999999/0/1]
8-447-002	O:PrtPGS/Ppr Size	A4	CTL*	[0 to 99999999/0/1]
8-447-003	O:PrtPGS/Ppr Size	A5	CTL*	[0 to 99999999/0/1]
8-447-004	O:PrtPGS/Ppr Size	B4	CTL*	[0 to 99999999/0/1]
8-447-	O:PrtPGS/Ppr Size	B5	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
005				
8-447-006	O:PrtPGS/Ppr Size	DLT	CTL*	[0 to 99999999/0/1]
8-447-007	O:PrtPGS/Ppr Size	LG	CTL*	[0 to 99999999/0/1]
8-447-008	O:PrtPGS/Ppr Size	LT	CTL*	[0 to 99999999/0/1]
8-447-009	O:PrtPGS/Ppr Size	HLT	CTL*	[0 to 99999999/0/1]
8-447-010	O:PrtPGS/Ppr Size	Full Bleed	CTL*	[0 to 99999999/0/1]
8-447-254	O:PrtPGS/Ppr Size	Other (Standard)	CTL*	[0 to 99999999/0/1]
8-447-255	O:PrtPGS/Ppr Size	Other (Custom)	CTL*	[0 to 99999999/0/1]
8-451-001	PrtPGS/Ppr Tray	Bypass Tray	CTL*	[0 to 99999999/0/1]
8-451-002	PrtPGS/Ppr Tray	Tray 1	CTL*	[0 to 99999999/0/1]
8-451-003	PrtPGS/Ppr Tray	Tray 2	CTL*	[0 to 99999999/0/1]
8-451-004	PrtPGS/Ppr Tray	Tray 3	CTL*	[0 to 99999999/0/1]
8-451-005	PrtPGS/Ppr Tray	Tray 4	CTL*	[0 to 99999999/0/1]
8-451-006	PrtPGS/Ppr Tray	Tray 5	CTL*	[0 to 99999999/0/1]
8-451-007	PrtPGS/Ppr Tray	Tray 6	CTL*	[0 to 99999999/0/1]
8-451-008	PrtPGS/Ppr Tray	Tray 7	CTL*	[0 to 99999999/0/1]
8-451-009	PrtPGS/Ppr Tray	Tray 8	CTL*	[0 to 99999999/0/1]
8-451-010	PrtPGS/Ppr Tray	Tray 9	CTL*	[0 to 99999999/0/1]
8-451-	PrtPGS/Ppr Tray	Tray 10	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
011				
8-451-012	PrtPGS/Ppr Tray	Tray 11	CTL*	[0 to 99999999/0/1]
8-451-013	PrtPGS/Ppr Tray	Tray 12	CTL*	[0 to 99999999/0/1]
8-451-014	PrtPGS/Ppr Tray	Tray 13	CTL*	[0 to 99999999/0/1]
8-451-015	PrtPGS/Ppr Tray	Tray 14	CTL*	[0 to 99999999/0/1]
8-451-016	PrtPGS/Ppr Tray	Tray 15	CTL*	[0 to 99999999/0/1]
8-451-101	PrtPGS/Ppr Tray	LC Inserter	CTL*	[0 to 99999999/0/1]
8-451-102	PrtPGS/Ppr Tray	3rd Vendor	CTL*	[0 to 99999999/0/1]
8-461-001	T:PrtPGS/Ppr Type	Normal	CTL*	[0 to 99999999/0/1]
8-461-002	T:PrtPGS/Ppr Type	Recycled	CTL*	[0 to 99999999/0/1]
8-461-003	T:PrtPGS/Ppr Type	Special	CTL*	[0 to 99999999/0/1]
8-461-004	T:PrtPGS/Ppr Type	Thick	CTL*	[0 to 99999999/0/1]
8-461-005	T:PrtPGS/Ppr Type	Normal (Back)	CTL*	[0 to 99999999/0/1]
8-461-006	T:PrtPGS/Ppr Type	Thick (Back)	CTL*	[0 to 99999999/0/1]
8-461-007	T:PrtPGS/Ppr Type	OHP	CTL*	[0 to 99999999/0/1]
8-461-008	T:PrtPGS/Ppr Type	Other	CTL*	[0 to 99999999/0/1]
8-464-001	P:PrtPGS/Ppr Type	Normal	CTL*	[0 to 99999999/0/1]
8-464-002	P:PrtPGS/Ppr Type	Recycled	CTL*	[0 to 99999999/0/1]
8-464-	P:PrtPGS/Ppr Type	Special	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
003				
8-464-004	P:PrtPGS/Ppr Type	Thick	CTL*	[0 to 99999999/0/1]
8-464-005	P:PrtPGS/Ppr Type	Normal (Back)	CTL*	[0 to 99999999/0/1]
8-464-006	P:PrtPGS/Ppr Type	Thick (Back)	CTL*	[0 to 99999999/0/1]
8-464-007	P:PrtPGS/Ppr Type	OHP	CTL*	[0 to 99999999/0/1]
8-464-008	P:PrtPGS/Ppr Type	Other	CTL*	[0 to 99999999/0/1]
8-521-001	T:PrtPGS/FIN	Sort	CTL*	[0 to 99999999/0/1]
8-521-002	T:PrtPGS/FIN	Stack	CTL*	[0 to 99999999/0/1]
8-521-003	T:PrtPGS/FIN	Staple	CTL*	[0 to 99999999/0/1]
8-521-004	T:PrtPGS/FIN	Booklet	CTL*	[0 to 99999999/0/1]
8-521-005	T:PrtPGS/FIN	Z-Fold	CTL*	[0 to 99999999/0/1]
8-521-006	T:PrtPGS/FIN	Punch	CTL*	[0 to 99999999/0/1]
8-521-007	T:PrtPGS/FIN	Other	CTL*	[0 to 99999999/0/1]
8-521-008	T:PrtPGS/FIN	Inside-Fold	CTL*	[0 to 99999999/0/1]
8-521-009	T:PrtPGS/FIN	Three-IN-Fold	CTL*	[0 to 99999999/0/1]
8-521-010	T:PrtPGS/FIN	Three-OUT-Fold	CTL*	[0 to 99999999/0/1]
8-521-011	T:PrtPGS/FIN	Four-Fold	CTL*	[0 to 99999999/0/1]
8-521-012	T:PrtPGS/FIN	KANNON-Fold	CTL*	[0 to 99999999/0/1]
8-521-	T:PrtPGS/FIN	Perfect-Bind	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
013				
8-521-014	T:PrtPGS/FIN	Ring-Bind	CTL*	[0 to 99999999/0/1]
8-521-015	T:PrtPGS/FIN	3rd Vendor	CTL*	[0 to 99999999/0/1]
8-521-016	T:PrtPGS/FIN	TwinLoop-Bind	CTL*	[0 to 99999999/0/1]
8-524-001	P:PrtPGS/FIN	Sort	CTL*	[0 to 99999999/0/1]
8-524-002	P:PrtPGS/FIN	Stack	CTL*	[0 to 99999999/0/1]
8-524-003	P:PrtPGS/FIN	Staple	CTL*	[0 to 99999999/0/1]
8-524-004	P:PrtPGS/FIN	Booklet	CTL*	[0 to 99999999/0/1]
8-524-005	P:PrtPGS/FIN	Z-Fold	CTL*	[0 to 99999999/0/1]
8-524-006	P:PrtPGS/FIN	Punch	CTL*	[0 to 99999999/0/1]
8-524-007	P:PrtPGS/FIN	Other	CTL*	[0 to 99999999/0/1]
8-524-008	P:PrtPGS/FIN	Inside-Fold	CTL*	[0 to 99999999/0/1]
8-524-009	P:PrtPGS/FIN	Three-IN-Fold	CTL*	[0 to 99999999/0/1]
8-524-010	P:PrtPGS/FIN	Three-OUT-Fold	CTL*	[0 to 99999999/0/1]
8-524-011	P:PrtPGS/FIN	Four-Fold	CTL*	[0 to 99999999/0/1]
8-524-012	P:PrtPGS/FIN	KANNON-Fold	CTL*	[0 to 99999999/0/1]
8-524-013	P:PrtPGS/FIN	Perfect-Bind	CTL*	[0 to 99999999/0/1]
8-524-014	P:PrtPGS/FIN	Ring-Bind	CTL*	[0 to 99999999/0/1]
8-524-	P:PrtPGS/FIN	3rd Vendor	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
015				
8-524-016	P:PrtPGS/FIN	TwinLoop-Bind	CTL*	[0 to 99999999/0/1]
8-551-001	T:FIN Books	Perfect-Bind	CTL*	[0 to 99999999/0/1]
8-551-002	T:FIN Books	Ring-Bind	CTL*	[0 to 99999999/0/1]
8-551-003	T:FIN Books	TwinLoop-Bind	CTL*	[0 to 99999999/0/1]
8-554-001	P:FIN Books	Perfect-Bind	CTL*	[0 to 99999999/0/1]
8-554-002	P:FIN Books	Ring-Bind	CTL*	[0 to 99999999/0/1]
8-554-003	P:FIN Books	TwinLoop-Bind	CTL*	[0 to 99999999/0/1]
8-561-001	T:A Sheet Of Paper	Total: Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-561-002	T:A Sheet Of Paper	Total: Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-561-003	T:A Sheet Of Paper	Duplex: Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-561-004	T:A Sheet Of Paper	Duplex: Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-564-001	P:A Sheet Of Paper	Total: Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-564-002	P:A Sheet Of Paper	Total: Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-564-003	P:A Sheet Of Paper	Duplex: Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-564-004	P:A Sheet Of Paper	Duplex: Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-567-001	O:A Sheet Of Paper	Total: Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-567-002	O:A Sheet Of Paper	Total: Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-567-	O:A Sheet Of Paper	Duplex: Over A3/DLT	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
003				
8-567-004	O:A Sheet Of Paper	Duplex: Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-581-001	T:Counter	Total	CTL*	[0 to 99999999/0/1]
8-581-032	T:Counter	Total(A3)	CTL*	[0 to 99999999/0/1]
8-584-011	P:Counter	B/W:Simplex:Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-584-012	P:Counter	B/W:Simplex:Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-584-013	P:Counter	B/W:Duplex:Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-584-014	P:Counter	B/W:Duplex:Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-587-011	O:Counter	B/W:Simplex:Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-587-012	O:Counter	B/W:Simplex:Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-587-013	O:Counter	B/W:Duplex:Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-587-014	O:Counter	B/W:Duplex:Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-591-001	O:Counter	A3/DLT	CTL*	[0 to 99999999/0/1]
8-591-002	O:Counter	Duplex	CTL*	[0 to 99999999/0/1]
8-601-001	T:CvgCounter	Cvg: BW %	CTL*	[0 to 2147483647/0/1%]
8-601-011	T:CvgCounter	Cvg: BW Pages	CTL*	[0 to 99999999/0/1]
8-604-001	P:CvgCounter	Cvg: B/W %	CTL*	[0 to 2147483647/0/1%]
8-617-001	SDK Apli Counter	SDK-1	CTL*	[0 to 99999999/0/1]
8-617-	SDK Apli Counter	SDK-2	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
002				
8-617-003	SDK Apli Counter	SDK-3	CTL*	[0 to 99999999/0/1]
8-617-004	SDK Apli Counter	SDK-4	CTL*	[0 to 99999999/0/1]
8-617-005	SDK Apli Counter	SDK-5	CTL*	[0 to 99999999/0/1]
8-617-006	SDK Apli Counter	SDK-6	CTL*	[0 to 99999999/0/1]
8-617-007	SDK Apli Counter	SDK-7	CTL*	[0 to 99999999/0/1]
8-617-008	SDK Apli Counter	SDK-8	CTL*	[0 to 99999999/0/1]
8-617-009	SDK Apli Counter	SDK-9	CTL*	[0 to 99999999/0/1]
8-617-010	SDK Apli Counter	SDK-10	CTL*	[0 to 99999999/0/1]
8-617-011	SDK Apli Counter	SDK-11	CTL*	[0 to 99999999/0/1]
8-617-012	SDK Apli Counter	SDK-12	CTL*	[0 to 99999999/0/1]
8-621-001	Func Use Counter	Function-001	CTL*	[0 to 99999999/0/1]
8-621-002	Func Use Counter	Function-002	CTL*	[0 to 99999999/0/1]
8-621-003	Func Use Counter	Function-003	CTL*	[0 to 99999999/0/1]
8-621-004	Func Use Counter	Function-004	CTL*	[0 to 99999999/0/1]
8-621-005	Func Use Counter	Function-005	CTL*	[0 to 99999999/0/1]
8-621-006	Func Use Counter	Function-006	CTL*	[0 to 99999999/0/1]
8-621-007	Func Use Counter	Function-007	CTL*	[0 to 99999999/0/1]
8-621-	Func Use Counter	Function-008	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
008				
8-621-009	Func Use Counter	Function-009	CTL*	[0 to 99999999/0/1]
8-621-010	Func Use Counter	Function-010	CTL*	[0 to 99999999/0/1]
8-621-011	Func Use Counter	Function-011	CTL*	[0 to 99999999/0/1]
8-621-012	Func Use Counter	Function-012	CTL*	[0 to 99999999/0/1]
8-621-013	Func Use Counter	Function-013	CTL*	[0 to 99999999/0/1]
8-621-014	Func Use Counter	Function-014	CTL*	[0 to 99999999/0/1]
8-621-015	Func Use Counter	Function-015	CTL*	[0 to 99999999/0/1]
8-621-016	Func Use Counter	Function-016	CTL*	[0 to 99999999/0/1]
8-621-017	Func Use Counter	Function-017	CTL*	[0 to 99999999/0/1]
8-621-018	Func Use Counter	Function-018	CTL*	[0 to 99999999/0/1]
8-621-019	Func Use Counter	Function-019	CTL*	[0 to 99999999/0/1]
8-621-020	Func Use Counter	Function-020	CTL*	[0 to 99999999/0/1]
8-621-021	Func Use Counter	Function-021	CTL*	[0 to 99999999/0/1]
8-621-022	Func Use Counter	Function-022	CTL*	[0 to 99999999/0/1]
8-621-023	Func Use Counter	Function-023	CTL*	[0 to 99999999/0/1]
8-621-024	Func Use Counter	Function-024	CTL*	[0 to 99999999/0/1]
8-621-025	Func Use Counter	Function-025	CTL*	[0 to 99999999/0/1]
8-621-	Func Use Counter	Function-026	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
026				
8-621-027	Func Use Counter	Function-027	CTL*	[0 to 99999999/0/1]
8-621-028	Func Use Counter	Function-028	CTL*	[0 to 99999999/0/1]
8-621-029	Func Use Counter	Function-029	CTL*	[0 to 99999999/0/1]
8-621-030	Func Use Counter	Function-030	CTL*	[0 to 99999999/0/1]
8-621-031	Func Use Counter	Function-031	CTL*	[0 to 99999999/0/1]
8-621-032	Func Use Counter	Function-032	CTL*	[0 to 99999999/0/1]
8-621-033	Func Use Counter	Function-033	CTL*	[0 to 99999999/0/1]
8-621-034	Func Use Counter	Function-034	CTL*	[0 to 99999999/0/1]
8-621-035	Func Use Counter	Function-035	CTL*	[0 to 99999999/0/1]
8-621-036	Func Use Counter	Function-036	CTL*	[0 to 99999999/0/1]
8-621-037	Func Use Counter	Function-037	CTL*	[0 to 99999999/0/1]
8-621-038	Func Use Counter	Function-038	CTL*	[0 to 99999999/0/1]
8-621-039	Func Use Counter	Function-039	CTL*	[0 to 99999999/0/1]
8-621-040	Func Use Counter	Function-040	CTL*	[0 to 99999999/0/1]
8-621-041	Func Use Counter	Function-041	CTL*	[0 to 99999999/0/1]
8-621-042	Func Use Counter	Function-042	CTL*	[0 to 99999999/0/1]
8-621-043	Func Use Counter	Function-043	CTL*	[0 to 99999999/0/1]
8-621-	Func Use Counter	Function-044	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
044				
8-621-045	Func Use Counter	Function-045	CTL*	[0 to 99999999/0/1]
8-621-046	Func Use Counter	Function-046	CTL*	[0 to 99999999/0/1]
8-621-047	Func Use Counter	Function-047	CTL*	[0 to 99999999/0/1]
8-621-048	Func Use Counter	Function-048	CTL*	[0 to 99999999/0/1]
8-621-049	Func Use Counter	Function-049	CTL*	[0 to 99999999/0/1]
8-621-050	Func Use Counter	Function-050	CTL*	[0 to 99999999/0/1]
8-621-051	Func Use Counter	Function-051	CTL*	[0 to 99999999/0/1]
8-621-052	Func Use Counter	Function-052	CTL*	[0 to 99999999/0/1]
8-621-053	Func Use Counter	Function-053	CTL*	[0 to 99999999/0/1]
8-621-054	Func Use Counter	Function-054	CTL*	[0 to 99999999/0/1]
8-621-055	Func Use Counter	Function-055	CTL*	[0 to 99999999/0/1]
8-621-056	Func Use Counter	Function-056	CTL*	[0 to 99999999/0/1]
8-621-057	Func Use Counter	Function-057	CTL*	[0 to 99999999/0/1]
8-621-058	Func Use Counter	Function-058	CTL*	[0 to 99999999/0/1]
8-621-059	Func Use Counter	Function-059	CTL*	[0 to 99999999/0/1]
8-621-060	Func Use Counter	Function-060	CTL*	[0 to 99999999/0/1]
8-621-061	Func Use Counter	Function-061	CTL*	[0 to 99999999/0/1]
8-621-	Func Use Counter	Function-062	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
062				
8-621-063	Func Use Counter	Function-063	CTL*	[0 to 99999999/0/1]
8-621-064	Func Use Counter	Function-064	CTL*	[0 to 99999999/0/1]
8-771-001	Dev Counter	Total	CTL*	[0 to 99999999/0/1]
8-781-001	Toner_Botol_Info.	BK	CTL*	[0 to 99999999/0/1]
8-801-001	Toner Remain	K	CTL*	[0 to 100/0/1%]
8-811-001	Eco Counter	Eco Total	CTL*	[0 to 99999999/0/1]
8-811-004	Eco Counter	Duplex	CTL*	[0 to 99999999/0/1]
8-811-005	Eco Counter	Combine	CTL*	[0 to 99999999/0/1]
8-811-008	Eco Counter	Duplex(%)	CTL*	[0 to 100/0/1%]
8-811-009	Eco Counter	Combine(%)	CTL*	[0 to 100/0/1%]
8-811-010	Eco Counter	Paper Cut(%)	CTL*	[0 to 100/0/1%]
8-811-051	Eco Counter	Sync Eco Total	CTL*	[0 to 99999999/0/1]
8-811-054	Eco Counter	Sync Duplex	CTL*	[0 to 99999999/0/1]
8-811-055	Eco Counter	Sync Combine	CTL*	[0 to 99999999/0/1]
8-811-058	Eco Counter	Sync Duplex(%)	CTL*	[0 to 100/0/1%]
8-811-059	Eco Counter	Sync Combine(%)	CTL*	[0 to 100/0/1%]
8-811-060	Eco Counter	Sync Paper Cut(%)	CTL*	[0 to 100/0/1%]
8-811-	Eco Counter	Eco Totalr:Last	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
101				
8-811-104	Eco Counter	Duplex:Last	CTL*	[0 to 99999999/0/1]
8-811-105	Eco Counter	Combine:Last	CTL*	[0 to 99999999/0/1]
8-811-108	Eco Counter	Duplex(%):Last	CTL*	[0 to 100/0/1%]
8-811-109	Eco Counter	Combine(%):Last	CTL*	[0 to 100/0/1%]
8-811-110	Eco Counter	Paper Cut(%):Last	CTL*	[0 to 100/0/1%]
8-811-151	Eco Counter	Sync Eco Totalr:Last	CTL*	[0 to 99999999/0/1]
8-811-154	Eco Counter	Sync Duplex:Last	CTL*	[0 to 99999999/0/1]
8-811-155	Eco Counter	Sync Combine:Last	CTL*	[0 to 99999999/0/1]
8-811-158	Eco Counter	Sync Duplex(%):Last	CTL*	[0 to 100/0/1%]
8-811-159	Eco Counter	Sync Combine(%):Last	CTL*	[0 to 100/0/1%]
8-811-160	Eco Counter	Sync Paper Cut(%):Last	CTL*	[0 to 100/0/1%]
8-851-011	Cvr Cnt:0-10%	0~2%:BK	CTL*	[0 to 99999999/0/1]
8-851-021	Cvr Cnt:0-10%	3~4%:BK	CTL*	[0 to 99999999/0/1]
8-851-031	Cvr Cnt:0-10%	5~7%:BK	CTL*	[0 to 99999999/0/1]
8-851-041	Cvr Cnt:0-10%	8~10%:BK	CTL*	[0 to 99999999/0/1]
8-861-001	Cvr Cnt:11-20%	BK	CTL*	[0 to 99999999/0/1]
8-871-001	Cvr Cnt:21-30%	BK	CTL*	[0 to 99999999/0/1]
8-881-	Cvr Cnt:31%-	BK	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
001				
8-891-001	Page/Toner Bottle	BK	CTL*	[0 to 99999999/0/1]
8-901-001	Page/Ink_Prev1	BK	CTL*	[0 to 99999999/0/1]
8-911-001	Page/Ink_Prev2	BK	CTL*	[0 to 99999999/0/1]
8-921-001	Cvr Cnt/Total	Coverage(%):BK	CTL*	[0 to 2147483647/0/1%]
8-921-011	Cvr Cnt/Total	Coverage/P:BK	CTL*	[0 to 99999999/0/1]
8-941-001	Machine Status	Operation Time	CTL*	[0 to 99999999/0/1]
8-941-002	Machine Status	Standby Time	CTL*	[0 to 99999999/0/1]
8-941-003	Machine Status	Energy Save Time	CTL*	[0 to 99999999/0/1]
8-941-004	Machine Status	Low Power Time	CTL*	[0 to 99999999/0/1]
8-941-005	Machine Status	Off Mode Time	CTL*	[0 to 99999999/0/1]
8-941-006	Machine Status	SC	CTL*	[0 to 99999999/0/1]
8-941-007	Machine Status	PrtJam	CTL*	[0 to 99999999/0/1]
8-941-008	Machine Status	OrgJam	CTL*	[0 to 99999999/0/1]
8-941-009	Machine Status	Supply PM Unit End	CTL*	[0 to 99999999/0/1]
8-961-001	Electricity Status	Ctrl Standby Time	CTL*	[0 to 99999999/0/1]
8-961-002	Electricity Status	STR Time	CTL*	[0 to 99999999/0/1]
8-961-003	Electricity Status	Main Power Off Time	CTL*	[0 to 99999999/0/1]
8-961-	Electricity Status	Reading and Printing Time	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
004				
8-961-005	Electricity Status	Printing Time	CTL*	[0 to 99999999/0/1]
8-961-006	Electricity Status	Reading Time	CTL*	[0 to 99999999/0/1]
8-961-007	Electricity Status	Eng Waiting Time	CTL*	[0 to 99999999/0/1]
8-961-008	Electricity Status	Low Pawer State Time	CTL*	[0 to 99999999/0/1]
8-961-009	Electricity Status	Silent State Time	CTL*	[0 to 99999999/0/1]
8-961-010	Electricity Status	Heater Off State Time	CTL*	[0 to 99999999/0/1]
8-961-011	Electricity Status	LCD on Time	CTL*	[0 to 99999999/0/1]
8-961-101	Electricity Status	Silent Print	CTL*	[0 to 99999999/0/1]
8-971-001	Unit Control	Engine Off Recovery Count	CTL*	[0 to 99999999/0/1]
8-971-002	Unit Control	Power Off Count	CTL*	[0 to 99999999/0/1]
8-971-003	Unit Control	Force Power Off Count	CTL*	[0 to 99999999/0/1]
8-999-001	AdminCounter	Total	CTL*	[0 to 99999999/0/1]
8-999-007	AdminCounter	Printer:BW	CTL*	[0 to 99999999/0/1]
8-999-013	AdminCounter	Duplex	CTL*	[0 to 99999999/0/1]
8-999-027	AdminCounter	Printer:BW %	CTL*	[0 to 2147483647/0/1]
8-999-116	AdminCounter	T:BW Simplex Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-999-118	AdminCounter	T:BW Duplex Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-999-	AdminCounter	P:BW Simplex Under	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
156		A3/DLT		
8-999-158	AdminCounter	P:BW Duplex Under A3/DLT	CTL*	[0 to 99999999/0/1]

5. SP Mode Tables (for MF Model)

SP1-XXX (Feed)

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
1-001-001	Reistration Correct	Main	ENG*	[-0.99 to 0.99/0/0.1mm]
1-001-002	Reistration Correct	Option Tray 1	ENG*	[-0.99 to 0.99/0/0.1mm]
1-001-003	Reistration Correct	Option Tray 2	ENG*	[-0.99 to 0.99/0/0.1mm]
1-001-004	Reistration Correct	Option Tray 3	ENG*	[-0.99 to 0.99/0/0.1mm]
1-001-005	Reistration Correct	Option Tray 4	ENG*	[-0.99 to 0.99/0/0.1mm]
1-001-006	Reistration Correct	By-Pass Tray	ENG*	[-0.99 to 0.99/0/0.1mm]
1-001-007	Reistration Correct	Duplex	ENG*	[-0.99 to 0.99/0/0.1mm]
1-002-001	Reistration Correct	Main	ENG*	[-0.99 to 0.99/0/0.1mm]
1-002-002	Reistration Correct	Option Tray 1	ENG*	[-0.99 to 0.99/0/0.1mm]
1-002-	Reistration Correct	Option Tray 2	ENG*	[-0.99 to 0.99/0/0.1mm]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
003				
1-002-004	Reistration Correct	Option Tray 3	ENG*	[-0.99 to 0.99/0/0.1mm]
1-002-005	Reistration Correct	Option Tray 4	ENG*	[-0.99 to 0.99/0/0.1mm]
1-002-006	Reistration Correct	By-Pass Tray	ENG*	[-0.99 to 0.99/0/0.1mm]
1-002-007	Reistration Correct	Duplex	ENG*	[-0.99 to 0.99/0/0.1mm]
1-885-002	Tray1 narrow width paper mode	ON/OFF	ENG*	[0 to 1/0/1]
1-890-001	Archive mode	ON/OFF	ENG*	[0 to 1/0/1]
1-891-001	Scattering Control	Main	ENG*	[0 to 2/0/1] 0: OFF 1: Scattering Control 1 ON 2: Scattering Control 2 OFF
1-891-002	Scattering Control	Option Tray 1	ENG*	[0 to 2/0/1] 0: OFF 1: Scattering Control 1 ON 2: Scattering Control 2 OFF
1-891-003	Scattering Control	Option Tray 2	ENG*	[0 to 2/0/1] 0: OFF 1: Scattering Control 1 ON 2: Scattering Control 2 OFF
1-891-004	Scattering Control	Option Tray 3	ENG*	[0 to 2/0/1] 0: OFF 1: Scattering Control 1 ON 2: Scattering Control 2 OFF
1-	Scattering Control	Option	ENG*	[0 to 2/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
891-005		Tray 4		0: OFF 1: Scattering Control 1 ON 2: Scattering Control 2 OFF
1-891-006	Scattering Control	By-Pass Tray	ENG*	[0 to 2/0/1] 0: OFF 1: Scattering Control 1 ON 2: Scattering Control 2 OFF
1-892-001	Pressure Roller Dirt control	Main	ENG*	[0 to 3/0/1] 0: OFF 1: Pressure Roller Dirt control 1 ON 2: Pressure Roller Dirt control 2 ON 3: Pressure Roller Dirt control 3 ON
1-892-002	Pressure Roller Dirt control	Option Tray 1	ENG*	[0 to 3/0/1] 0: OFF 1: Pressure Roller Dirt control 1 ON 2: Pressure Roller Dirt control 2 ON 3: Pressure Roller Dirt control 3 ON
1-892-003	Pressure Roller Dirt control	Option Tray 2	ENG*	[0 to 3/0/1] 0: OFF 1: Pressure Roller Dirt control 1 ON 2: Pressure Roller Dirt control 2 ON 3: Pressure Roller Dirt control 3 ON
1-892-004	Pressure Roller Dirt control	Option Tray 3	ENG*	[0 to 3/0/1] 0: OFF 1: Pressure Roller Dirt control 1 ON 2: Pressure Roller Dirt control 2 ON 3: Pressure Roller Dirt control 3 ON
1-892-005	Pressure Roller Dirt control	Option Tray 4	ENG*	[0 to 3/0/1] 0: OFF 1: Pressure Roller Dirt control 1 ON 2: Pressure Roller Dirt control 2 ON 3: Pressure Roller Dirt control 3 ON
1-892-006	Pressure Roller Dirt control	By-Pass Tray	ENG*	[0 to 3/0/1] 0: OFF 1: Pressure Roller Dirt control 1 ON 2: Pressure Roller Dirt control 2 ON

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
				3: Pressure Roller Dirt control 3 ON
1-893-001	Hot offset Control		ENG*	[0 to 1/0/1] 0: OFF 1: ON (Lowers the fusing temperature for the first three sheets of a job by 5 °C.) Note • When printing 1P/J jobs at short intervals, the fusing roller becomes hot, causing the coating to deteriorate, leading to shortened fusing roller life. Activating this SP lowers the fusing temperature for the first three sheets of a job, which prevents the coating from deteriorating. • When both this SP and SP1-892-001 (Pressure Roller Dirt control) are set at the same time, SP1-892-001 (Pressure Roller Dirt control has priority.
1-901-001	Fuser Type Setting		ENG*	[0 to 1/0/1] 0: Early 1: Late
1-998-001	Reserve SP	reserve01	ENG*	[0 to 255/0/1]
1-998-002	Reserve SP	reserve02	ENG*	[0 to 255/0/1]
1-998-003	Reserve SP	reserve03	ENG*	[0 to 255/0/1]
1-998-004	Reserve SP	reserve04	ENG*	[0 to 255/0/1]
1-998-005	Reserve SP	reserve05	ENG*	[0 to 255/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
1-998-006	Reserve SP	reserve06	ENG*	[0 to 255/0/1]
1-998-007	Reserve SP	reserve07	ENG*	[0 to 255/0/1]
1-998-008	Reserve SP	reserve08	ENG*	[0 to 255/0/1]
1-998-009	Reserve SP	reserve09	ENG*	[0 to 255/0/1]
1-998-010	Reserve SP	reserve10	ENG*	[0 to 255/0/1]
1-998-011	Reserve SP	reserve11	ENG*	[0 to 255/0/1]
1-998-012	Reserve SP	reserve12	ENG*	[0 to 255/0/1]
1-998-013	Reserve SP	reserve13	ENG*	[0 to 255/0/1]
1-998-014	Reserve SP	reserve14	ENG*	[0 to 255/0/1]
1-998-015	Reserve SP	reserve15	ENG*	[0 to 255/0/1]
1-998-016	Reserve SP	reserve16	ENG*	[0 to 255/0/1]
1-998-017	Reserve SP	reserve17	ENG*	[0 to 65535/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
1-998-018	Reserve SP	reserve18	ENG*	[0 to 65535/0/1]
1-998-019	Reserve SP	reserve19	ENG*	[0 to 65535/0/1]
1-998-020	Reserve SP	reserve20	ENG*	[0 to 65535/0/1]
1-998-021	Reserve SP	reserve21	ENG*	[0 to 65535/0/1]
1-998-022	Reserve SP	reserve22	ENG*	[0 to 65535/0/1]
1-998-023	Reserve SP	reserve23	ENG*	[0 to 65535/0/1]
1-998-024	Reserve SP	reserve24	ENG*	[0 to 65535/0/1]
1-998-025	Reserve SP	reserve25	ENG*	[0 to 4294967295/0/1]
1-998-026	Reserve SP	reserve26	ENG*	[0 to 4294967295/0/1]
1-998-027	Reserve SP	reserve27	ENG*	[0 to 4294967295/0/1]
1-998-028	Reserve SP	reserve28	ENG*	[0 to 4294967295/0/1]
1-998-029	Reserve SP	reserve29	ENG*	[0 to 4294967295/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
1-998-030	Reserve SP	reserve30	ENG*	[0 to 4294967295/0/1]
1-998-031	Reserve SP	reserve31	ENG*	[0 to 4294967295/0/1]
1-998-032	Reserve SP	reserve32	ENG*	[0 to 4294967295/0/1]
1-998-033	Reserve SP	reserve33	ENG*	[0 to 255/0/1]
1-998-034	Reserve SP	reserve34	ENG*	[0 to 255/0/1]

SP2-XXX (Drum)

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
2-102-001	Magnification Adjust	Main Mag.	ENG*	[-0.1 to 0.1/0/0.1%]
2-103-001	Erase Margin Adjust	Left Edge Width	ENG*	[0 to 0.99/4/0.1mm]
2-103-002	Erase Margin Adjust	Right Edge Width	ENG*	[0 to 0.99/4/0.1mm]
2-103-003	Erase Margin Adjust	Lead Edge Width	ENG*	[0 to 0.99/4/0.1mm]
2-103-004	Erase Margin Adjust	Trail Edge Width	ENG*	[0 to 0.99/4/0.1mm]
2-107-001	Image Parameter	Image Gamma Flag	ENG*	[0 to 1/1/1] 0: OFF 1: ON
2-107-130	Image Parameter	Normal	ENG	[0 to 255/0/1]
2-107-131	Image Parameter	Thick	ENG	[0 to 255/0/1]
2-109-003	Test Pattern	Pattern Selection	ENG	[0 to 24/0/1] 1: Vertical Line (1dot) 2: Vertical Line (2dot) 3: Horizontal Line (1dot) 4: Horizontal Line (2dot) 5: Grid Vertical Line 6: Grid Horizontal Line 7: Grid Pattern Small 8: Grid Pattern Large 9: Argyle Pattern Small 10: Argyle Pattern Large 11: Independent Pattern (1dot) 12: Independent Pattern (2dot) 13: Independent Pattern (4dot) 14: Trimming Area 15: Hound's Tooth Check (Horizontal) 16: Hound's Tooth Check

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
				(Vertical) 17: Black Band (Horizontal) 18: Black Band (Vertical) 19: Checker Flag Pattern 20: Grayscale (Vertical) 21: Grayscale (Horizontal) 22: Two Beam Density Pattern 23: Full Dot Pattern
2-109-006	Test Pattern	Density	ENG	[0 to 15/15/1]

SP3-XXX (Process)

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
3-900-001	Toner Install Mode	On	ENG	[0 to 1/0/1]
3-900-002	Toner Install Mode	Off	ENG	[0 to 1/0/1]
3-904-001	MainCharger Output		ENG*	[1 to 7/4/1] 1: ChargeBias -75V 2: ChargeBias -50V 3: ChargeBias -25V 4: Normal 5: ChargeBias +25V 6: ChargeBias +50V 7: ChargeBias +75V
3-905-001	Center Fan Control (*Rear-Exhaust Fan)		ENG*	[0 to 1/0/1] 0: Disable 1: Enable
3-906-001	Odor Fan	Rotation Time	ENG*	[15 to 240/15/1 sec]

Note

SP3-905-001: Center Fan Control enables/disables the rear exhaust fan.

SP4-XXX (Scanner)

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
4-011-001	S-to-S Regist Adjustment		ENG*	[-0.3 to 0.3/0/0.1mm]
4-012-001	Scanner Erase Margin: Scale	Book: Leading Edge	ENG*	[0 to 0.3/1/0.1mm]
4-012-002	Scanner Erase Margin: Scale	Book: Trailing Edge	ENG*	[0 to 0.3/1/0.1mm]
4-012-003	Scanner Erase Margin: Scale	Book: Left	ENG*	[0 to 0.3/1/0.1mm]
4-012-004	Scanner Erase Margin: Scale	Book: Right	ENG*	[0 to 0.3/1/0.1mm]
4-013-002	Scanner Free run	Book mode :Lamp On	ENG	[0 to 1/0/1]
4-020-001	DF Dust Check	Dust Detect:On/Off	ENG	[0 to 1/0/1]
4-020-002	DF Dust Check	Dust Detect:Lvl	ENG	[0 to 8/4/1]
4-020-003	DF Dust Check	Dust Reject:Lvl	ENG	[0 to 4/0/1]
4-020-011	DF Dust Check	Dust Detect Level:Rear	ENG	[0 to 1/0/1]
4-020-012	DF Dust Check	Correction Level:Rear	ENG	[0 to 8/4/1]
4-108-001	Sub Scan Speed.Adjustment		ENG	[-0.25 to 0.25/0/0.1%]
4-110-001	L-Edge Timing Adjustment		ENG	[-45 to 45/0/1pulse]
4-400-001	Scanner Erase Margin	Book: Leading Edge	ENG*	[0 to 0.3/1/0.1mm]
4-400-002	Scanner Erase Margin	Book: Trailing Edge	ENG*	[0 to 0.3/1/0.1mm]
4-400-003	Scanner Erase Margin	Book: Left	ENG*	[0 to 0.3/1/0.1mm]
4-400-004	Scanner Erase Margin	Book: Right	ENG*	[0 to 0.3/1/0.1mm]
4-400-	Scanner Erase Margin	ADF:Trailing Edge	ENG*	[0 to 0.3/1.6/0.1mm]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
005				
4-400-007	Scanner Erase Margin	ADF:Left	ENG*	[0 to 0.3/1.6/0.1mm]
4-400-008	Scanner Erase Margin	ADF:Right	ENG*	[0 to 0.3/1.6/0.1mm]
4-417-001	IPU Test Pattern	Test Pattern	ENG	[0 to 9/0/1] 0: Scanned image 1: Gradation main scan A 2: Patch 16C 3: Grid pattern A 4: Slant grid pattern B 5: Slant grid pattern C 6: Slant grid pattern D 7: Scanned+Slant Grid C 8: Scanned+Slant Grid D 9: Scanned+Slant Grid B
4-429-001	Select Copy Data Security	Copying	ENG	[0 to 3/3/1]
4-429-002	Select Copy Data Security	Scanning	ENG	[0 to 3/3/1]
4-429-003	Select Copy Data Security	Fax Operation	ENG	[0 to 3/3/1]
4-460-001	Digital AE	Low Limit Value	ENG	[0 to 1023/364/1]
4-460-002	Digital AE	Background level	ENG	[512 to 1535/932/1]
4-550-005	Scan Apli:Txt/Print	MTF: 0(Off) 1-15 (Weak-Strong)	ENG	[0 to 15/8/1]
4-550-006	Scan Apli:Txt/Print	Smoothing: 0(x1) 1-7 (Weak-Strong)	ENG	[0 to 7/4/1]
4-550-007	Scan Apli:Txt/Print	Brightness: 1-255	ENG	[1 to 255/128/1]
4-550-008	Scan Apli:Txt/Print	Contrast: 1-255	ENG	[1 to 255/128/1]
4-550-009	Scan Apli:Txt/Print	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	ENG	[0 to 7/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
4-551-005	Scan Apli:Txt	MTF: 0(Off) 1-15 (Weak-Strong)	ENG	[0 to 15/8/1]
4-551-006	Scan Apli:Txt	Smoothing: 0(x1) 1-7 (Weak-Strong)	ENG	[0 to 7/4/1]
4-551-007	Scan Apli:Txt	Brightness: 1-255	ENG	[1 to 255/128/1]
4-551-008	Scan Apli:Txt	Contrast: 1-255	ENG	[1 to 255/128/1]
4-551-009	Scan Apli:Txt	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	ENG	[0 to 7/0/1]
4-552-005	Scan Apli:Txt Dropout	MTF: 0(Off) 1-15 (Weak-Strong)	ENG	[0 to 15/8/1]
4-552-006	Scan Apli:Txt Dropout	Smoothing: 0(x1) 1-7 (Weak-Strong)	ENG	[0 to 7/4/1]
4-552-007	Scan Apli:Txt Dropout	Brightness: 1-255	ENG	[1 to 255/128/1]
4-552-008	Scan Apli:Txt Dropout	Contrast: 1-255	ENG	[1 to 255/128/1]
4-552-009	Scan Apli:Txt Dropout	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	ENG	[0 to 7/0/1]
4-553-005	Scan Apli:Txt/Photo	MTF: 0(Off) 1-15 (Weak-Strong)	ENG	[0 to 15/8/1]
4-553-006	Scan Apli:Txt/Photo	Smoothing: 0(x1) 1-7 (Weak-Strong)	ENG	[0 to 7/4/1]
4-553-007	Scan Apli:Txt/Photo	Brightness: 1-255	ENG	[1 to 255/128/1]
4-553-008	Scan Apli:Txt/Photo	Contrast: 1-255	ENG	[1 to 255/128/1]
4-553-009	Scan Apli:Txt/Photo	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	ENG	[0 to 7/0/1]
4-554-005	Scan Apli:Photo	MTF: 0(Off) 1-15 (Weak-Strong)	ENG	[0 to 15/8/1]
4-554-006	Scan Apli:Photo	Smoothing: 0(x1) 1-7 (Weak-Strong)	ENG	[0 to 7/4/1]
4-554-007	Scan Apli:Photo	Brightness: 1-255	ENG	[1 to 255/128/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
4-554-008	Scan Apli:Photo	Contrast: 1-255	ENG	[1 to 255/128/1]
4-554-009	Scan Apli:Photo	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	ENG	[0 to 7/0/1]
4-565-005	Scan Apli:GrayScale	MTF: 0(Off) 1-15 (Weak-Strong)	ENG	[0 to 15/8/1]
4-565-006	Scan Apli:GrayScale	Smoothing: 0(x1) 1-7 (Weak-Strong)	ENG	[0 to 7/4/1]
4-565-007	Scan Apli:GrayScale	Brightness: 1-255	ENG	[1 to 255/128/1]
4-565-008	Scan Apli:GrayScale	Contrast: 1-255	ENG	[1 to 255/128/1]
4-565-009	Scan Apli:GrayScale	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	ENG	[0 to 7/0/1]
4-570-005	Scan Apli:Col Txt/Photo	MTF: 0(Off) 1-15 (Weak-Strong)	ENG	[0 to 15/8/1]
4-570-006	Scan Apli:Col Txt/Photo	Smoothing: 0(x1) 1-7 (Weak-Strong)	ENG	[0 to 7/4/1]
4-570-007	Scan Apli:Col Txt/Photo	Brightness: 1-255	ENG	[1 to 255/128/1]
4-570-008	Scan Apli:Col Txt/Photo	Contrast: 1-255	ENG	[1 to 255/128/1]
4-570-009	Scan Apli:Col Txt/Photo	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	ENG	[0 to 7/0/1]
4-571-005	Scan Apli:Col Gloss Photo	MTF: 0(Off) 1-15 (Weak-Strong)	ENG	[0 to 15/8/1]
4-571-006	Scan Apli:Col Gloss Photo	Smoothing: 0(x1) 1-7 (Weak-Strong)	ENG	[0 to 7/4/1]
4-571-007	Scan Apli:Col Gloss Photo	Brightness: 1-255	ENG	[1 to 255/128/1]
4-571-008	Scan Apli:Col Gloss Photo	Contrast: 1-255	ENG	[1 to 255/128/1]
4-571-009	Scan Apli:Col Gloss Photo	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	ENG	[0 to 7/0/1]
4-572-005	Scan Apli:AutoCol	MTF: 0(Off) 1-15 (Weak-Strong)	ENG	[0 to 15/8/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
4-572-006	Scan Apli:AutoCol	Smoothing: 0(x1) 1-7 (Weak-Strong)	ENG	[0 to 7/4/1]
4-572-007	Scan Apli:AutoCol	Brightness: 1-255	ENG	[1 to 255/128/1]
4-572-008	Scan Apli:AutoCol	Contrast: 1-255	ENG	[1 to 255/128/1]
4-572-009	Scan Apli:AutoCol	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	ENG	[0 to 7/0/1]
4-580-005	Fax Apli:Txt/Chart	MTF: 0(Off) 1-15 (Weak-Strong)	ENG	[0 to 15/8/1]
4-580-006	Fax Apli:Txt/Chart	Smoothing: 0(x1) 1-7 (Weak-Strong)	ENG	[0 to 7/4/1]
4-580-007	Fax Apli:Txt/Chart	Brightness: 1-255	ENG	[1 to 255/128/1]
4-580-008	Fax Apli:Txt/Chart	Contrast: 1-255	ENG	[1 to 255/128/1]
4-580-009	Fax Apli:Txt/Chart	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	ENG	[0 to 7/0/1]
4-580-010	Fax Apli:Txt/Chart	Texture Erase: 0	ENG	[0 to 2/0/1] 0: Fix 1 or 2: Variable
4-581-005	Fax Apli:Txt	MTF: 0(Off) 1-15 (Weak-Strong)	ENG	[0 to 15/8/1]
4-581-006	Fax Apli:Txt	Smoothing: 0(x1) 1-7 (Weak-Strong)	ENG	[0 to 7/4/1]
4-581-007	Fax Apli:Txt	Brightness: 1-255	ENG	[1 to 255/128/1]
4-581-008	Fax Apli:Txt	Contrast: 1-255	ENG	[1 to 255/128/1]
4-581-009	Fax Apli:Txt	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	ENG	[0 to 7/0/1]
4-582-005	Fax Apli:Txt/Photo	MTF: 0(Off) 1-15 (Weak-Strong)	ENG	[0 to 15/8/1]
4-582-006	Fax Apli:Txt/Photo	Smoothing: 0(x1) 1-7 (Weak-Strong)	ENG	[0 to 7/4/1]
4-582-	Fax Apli:Txt/Photo	Brightness: 1-255	ENG	[1 to 255/128/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
007				
4-582-008	Fax Apli:Txt/Photo	Contrast: 1-255	ENG	[1 to 255/128/1]
4-582-009	Fax Apli:Txt/Photo	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	ENG	[0 to 7/0/1]
4-582-010	Fax Apli:Txt/Photo	Texture Erase: 0	ENG	[0 to 2/0/1] 0: Fix 1 or 2: Variable
4-583-005	Fax Apli:Photo	MTF: 0(Off) 1-15 (Weak-Strong)	ENG	[0 to 15/8/1]
4-583-006	Fax Apli:Photo	Smoothing: 0(x1) 1-7 (Weak-Strong)	ENG	[0 to 7/4/1]
4-583-007	Fax Apli:Photo	Brightness: 1-255	ENG	[1 to 255/128/1]
4-583-008	Fax Apli:Photo	Contrast: 1-255	ENG	[1 to 255/128/1]
4-583-009	Fax Apli:Photo	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	ENG	[0 to 7/0/1]
4-583-010	Fax Apli:Photo	Texture Erase: 0	ENG	[0 to 2/0/1]
4-584-005	Fax Apli:Original 1	MTF: 0(Off) 1-15 (Weak-Strong)	ENG	[0 to 15/8/1]
4-584-006	Fax Apli:Original 1	Smoothing: 0(x1) 1-7 (Weak-Strong)	ENG	[0 to 7/4/1]
4-584-007	Fax Apli:Original 1	Brightness: 1-255	ENG	[1 to 255/128/1]
4-584-008	Fax Apli:Original 1	Contrast: 1-255	ENG	[1 to 255/128/1]
4-584-009	Fax Apli:Original 1	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	ENG	[0 to 7/0/1]
4-585-005	Fax Apli:Original 2	MTF: 0(Off) 1-15 (Weak-Strong)	ENG	[0 to 15/8/1]
4-585-006	Fax Apli:Original 2	Smoothing: 0(x1) 1-7 (Weak-Strong)	ENG	[0 to 7/4/1]
4-585-007	Fax Apli:Original 2	Brightness: 1-255	ENG	[1 to 255/128/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
4-585-008	Fax Apli:Original 2	Contrast: 1-255	ENG	[1 to 255/128/1]
4-585-009	Fax Apli:Original 2	Independent Dot Erase (0)/ 1-7 (Strong)	ENG	[0 to 7/0/1]
4-609-001	Gray Balance Set	R: Book Scan	ENG*	[-384 to 255/-100/1digit]
4-609-002	Gray Balance Set	R: DF Scan	ENG*	[-384 to 255/-100/1digit]
4-610-001	Gray Balance Set	G: Book Scan	ENG*	[-384 to 255/-100/1digit]
4-610-002	Gray Balance Set	G: DF Scan	ENG*	[-384 to 255/-100/1digit]
4-610-003	Gray Balance Set	BW: Book Scan	ENG*	[-384 to 255/-100/1digit]
4-610-004	Gray Balance Set	BW: Book Scan	ENG*	[-384 to 255/-100/1digit]
4-611-001	Gray Balance Set	B: Book Scan	ENG*	[-384 to 255/-100/1digit]
4-611-002	Gray Balance Set	B: DF Scan	ENG*	[-384 to 255/-100/1digit]
4-646-001	Scan Adjust Error	White level	ENG*	[0 to 65535/0/1]
4-646-002	Scan Adjust Error	Black level	ENG*	[0 to 65535/0/1]
4-647-001	Scanner Hard Error	Power-ON	ENG	[0 to 65535/0/1]
4-688-002	DF Density Adjustment	1-Pass	ENG*	[80 to 120/104/1%]
4-699-001	SBU Test Pattern Change		ENG	[0 to 255/0/1] 0: Scanned Image 2: Main Scan Gradation
4-712-001	Back GB Adj. Value: R		ENG*	[0 to 2047/940/1digit]
4-713-001	Back GB Adj. Value: G		ENG*	[0 to 2047/940/1digit]
4-714-	Back GB Adj. Value: B		ENG*	[0 to 2047/940/1digit]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
001				
4-718-001	Back Sub Scan Magnification		ENG*	[-0.2 to 0.2/0/0.1%]
4-723-001	Back OUTPUT Check	Scanner Lamp: Color	ENG	[0 to 1/0/1] 0: Off 1: On
4-725-001	ADF Free run	with paper	ENG	[0 to 1/0/1]
4-725-002	ADF Free run	without paper	ENG	[0 to 1/0/1]
4-745-001	Back Scan Adjust Error	White level	ENG	[0 to 65535/0/1]
4-747-001	Back Scanner Hard Error	Error 1	ENG	[0 to 65535/0/1]
4-747-002	Back Scanner Hard Error	Error 2	ENG	[0 to 65535/0/1]
4-785-001	Back White Level Peak Target		ENG*	[0 to 1023/840/1digit]
4-796-001	Low Density Color Correction	Front Side	ENG*	[0 to 3/0/1] 0: OFF 1: WEAK 2: MEDIUM 3: STRONG
4-796-002	Low Density Color Correction	Rear Side	ENG*	[0 to 3/0/1] 0: OFF 1: WEAK 2: MEDIUM 3: STRONG
4-797-001	Rear Side: Digital AE	Low Limit Setting	ENG	[0 to 1023/364/1]
4-797-002	Rear Side: Digital AE	Background Erase Level	ENG	[512 to 1535/932/1]
4-799-001	Back Test Pattern Change		ENG	[0 to 255/0/1]
4-903-001	Filter Setting	Ind Dot Erase: Text	ENG	[0 to 7/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
4-903-002	Filter Setting	Ind Dot Erase: Generation Copy	ENG	[0 to 7/0/1]
4-905-001	Select Gradation Level		ENG	[0 to 255/0/1]
4-907-001	Gamma Correction	Stamp Entry	ENG	[0 to 2/1/1]
4-918-009	Man Gamma Adj		ENG	[0 to 0/0/0]
4-938-005	ACS:Edge Mask	Scan:Sub LEdge	ENG	[0 to 31/15/1mm]
4-938-006	ACS:Edge Mask	Scan:Sub TEdge	ENG	[0 to 31/15/1mm]
4-938-007	ACS:Edge Mask	Scan:Main LEdge	ENG	[0 to 31/15/1mm]
4-938-008	ACS:Edge Mask	Scan:Main TEdge	ENG	[0 to 31/15/1mm]
4-939-001	ACS:Color Range		ENG	[-2 to 2/0/1]
4-993-001	High Light Correction	Sensitivity Selection	ENG	[0 to 9/4/1]
4-993-002	High Light Correction	Range Selection	ENG	[0 to 9/4/1]
4-994-001	Adj Txt/Photo Recog Level	High Compression PDF	ENG	[0 to 2/1/1] 0: Text 1: Standard 2: Photo
4-996-001	White Paper Detection Level	strength(fax)	ENG	[0 to 6/3/1]
4-997-001	White Paper count conditions	conditions 1	ENG	[0 to 255/255/1]
4-997-002	White Paper count conditions	conditions 2	ENG	[0 to 255/255/1]
4-997-003	White Paper count conditions	conditions 3	ENG	[0 to 255/80/1]
4-997-004	White Paper count conditions	conditions 4	ENG	[0 to 16777215/16777215/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
4-998-001	White Paper Binary thresh	strength 0:up side	ENG	[0 to 255/20/1]
4-998-002	White Paper Binary thresh	strength 1:up side	ENG	[0 to 255/36/1]
4-998-003	White Paper Binary thresh	strength 2:up side	ENG	[0 to 255/52/1]
4-998-004	White Paper Binary thresh	strength 3:up side	ENG	[0 to 255/68/1]
4-998-005	White Paper Binary thresh	strength 4:up side	ENG	[0 to 255/84/1]
4-998-006	White Paper Binary thresh	strength 5:up side	ENG	[0 to 255/100/1]
4-998-007	White Paper Binary thresh	strength 6:up side	ENG	[0 to 255/116/1]
4-998-008	White Paper Binary thresh	strength 0:down side	ENG	[0 to 255/20/1]
4-998-009	White Paper Binary thresh	strength 1:down side	ENG	[0 to 255/36/1]
4-998-010	White Paper Binary thresh	strength 2:down side	ENG	[0 to 255/52/1]
4-998-011	White Paper Binary thresh	strength 3:down side	ENG	[0 to 255/68/1]
4-998-012	White Paper Binary thresh	strength 4:down side	ENG	[0 to 255/84/1]
4-998-013	White Paper Binary thresh	strength 5:down side	ENG	[0 to 255/100/1]
4-998-014	White Paper Binary thresh	strength 6:down side	ENG	[0 to 255/116/1]

SP5-XXX (Mode) - Engine

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-186-001	RK4: Setting		ENG*	[0 to 1/0/1] 0: Jam 1: Do nothing
5-801-002	Memory Clear	Engine	ENG	[0 to 1/0/1]
5-802-001	All Data Initialize	Result	ENG	[0 to 1/0/1] 0: Active 1: End
5-803-001	INPUT Check	Exit Full Sensor	ENG	[0 to 1/0/1]
5-803-016	INPUT Check	Key Card Set	ENG	[0 to 1/0/1]
5-803-017	INPUT Check	Key Counter Set	ENG	[0 to 3/0/1]
5-803-018	INPUT Check	IPU Version	ENG	[0 to 7/0/1]
5-803-200	INPUT Check	Scanner HP Sensor	ENG	[0 to 1/0/1]
5-803-201	INPUT Check	Platen Cover Sensor	ENG	[0 to 1/0/1]
5-804-001	OUTPUT Check	CTLFAN Motor	ENG	[0 to 1/0/1]
5-804-101	OUTPUT Check	FAN:LSU/DLP/CENTER/REAR	ENG	[0 to 1/0/1] 0: Off 1: On
5-804-102	OUTPUT Check	FAN:LVU	ENG	[0 to 1/0/1] 0: Off 1: On
5-804-103	OUTPUT Check	Toner Motor	ENG	[0 to 1/0/1] 0: Of 1: On
5-804-202	OUTPUT Check	Scanner Lamp	ENG	[0 to 1/0/1]
5-804-203	OUTPUT Check	ADF Motor	ENG	[0 to 1/0/1] 0: Stop

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
				1: Start
5-805-002	Drum Heater		ENG	[0 to 1/0/1] 0: Stop 1: Start
5-810-001	SC Reset	Fusing SC Reset	ENG	[0 to 1/0/1]
5-811-002	Machine Serial	Display	ENG*	[0 to 255/0/1]
5-811-004	Machine Serial	IPU	ENG	[0 to 255/0/1]
5-811-021	Machine Serial	Latest Update Date	ENG*	[0 to 1/0/1]
5-811-022	Machine Serial	Previous Update Date	ENG*	[0 to 1/0/1]
5-811-023	Machine Serial	Previous Serial	ENG*	[0 to 255/0/1]
5-811-024	Machine Serial	Latest Update Date (IPU)	ENG*	[0 to 1/0/1]
5-811-025	Machine Serial	Previous Update Date (IPU)	ENG*	[0 to 1/0/1]
5-811-026	Machine Serial	Previous Serial(IPU)	ENG*	[0 to 255/0/1]
5-894-001	ExternalCountSet	SW Charge Mode	ENG*	[0 to 2/0/1]
5-900-001	Engine Log Upload	Pattern	ENG*	[0 to 4/0/1]
5-900-002	Engine Log Upload	Trigger	ENG*	[0 to 3/0/1]
5-901-005	All Data Initialize	China	ENG	[0 to 1/0/1]
5-901-006	All Data Initialize	EU(230V)	ENG	[0 to 1/0/1]
5-901-007	All Data Initialize	NA(120V)	ENG	[0 to 1/0/1]
5-901-008	All Data Initialize	Asia	ENG	[0 to 1/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-901-009	All Data Initialize	Oceania	ENG	[0 to 1/0/1]
5-930-001	Meter Charge	Setting	ENG*	[0 to 1/1/1] 0: No 1: Yes
5-931-001	Life Alert Disp.	Mentenance Kit	ENG*	[0 to 1/0/1] 0: No 1: Yes
5-995-001	Self Diagnostic		ENG	[0 to 1/0/1] 0: NORMAL_MODE 1: LINE_SETTING_MODE

SP5-XXX (Mode) - Controller

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-009-201	Add display language	1-8	CTL*	[0 to 255/0/1]
5-009-202	Add display language	9-16	CTL*	[0 to 255/0/1]
5-009-203	Add display language	17-24	CTL*	[0 to 255/0/1]
5-009-204	Add display language	25-32	CTL*	[0 to 255/0/1]
5-009-205	Add display language	33-40	CTL*	[0 to 255/0/1]
5-009-206	Add display language	41-48	CTL*	[0 to 255/0/1]
5-009-207	Add display language	49-56	CTL*	[0 to 255/0/1]
5-024-001	mm/inch Display Selection	0:mm 1:inch	CTL*	[0 or 1 / * / 1] NA: 1 EU, AP: 0
5-045-001	Accounting counter	Counter Method	CTL*	[0 to 7/0/1]
5-051-001	TonerRefillDetectionDisplay		CTL*	[0 to 1/0/1]
5-055-001	Display IP address		CTL*	[0 to 1/0/1] 0: Enable 1: Disable
5-	Part Replacement Alert	#Drum Unit:K	CTL*	[0 to 1/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
062-002	Display			0: Not display 1: Display
5-062-003	Part Replacement Alert Display	#Development Unit:K	CTL*	[0 to 1/0/1] 0: Not display 1: Display
5-062-093	Part Replacement Alert Display	#Paper Transfer Roller	CTL*	[0 to 1/0/1] 0: Not display 1: Display
5-062-115	Part Replacement Alert Display	#Fusing Unit	CTL*	[0 to 1/0/1] 0: Not display 1: Display
5-062-146	Part Replacement Alert Display	#Paper Feed Roller	CTL*	[0 to 1/0/1] 0: Not display 1: Display
5-062-147	Part Replacement Alert Display	#Pickup Roller	CTL*	[0 to 1/0/1] 0: Not display 1: Display
5-062-148	Part Replacement Alert Display	#Separation Roller	CTL*	[0 to 1/0/1] 0: Not display 1: Display
5-062-206	Part Replacement Alert Display	#DF Paper Feed Roller Unit	CTL*	[0 to 1/0/1] 0: Not display 1: Display
5-062-207	Part Replacement Alert Display	#DF Separation Pad Unit	CTL*	[0 to 1/0/1] 0: Not display 1: Display
5-071-001	Set Bypass Paper Size Display		CTL*	[0 to 1/0/1] 0: Disable 1: Enable
5-073-002	Supply Part Replacement Operation Type	Intermediate Transfer Unit	CTL*	[0 to 1/0/1] 0: CE 1: User
5-073-003	Supply Part Replacement Operation Type	Fuser Unit	CTL*	[0 to 1/0/1] 0: CE 1: User

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-073-004	Supply Part Replacement Operation Type	Transfer Unit	CTL*	[0 to 1/0/1] 0: CE 1: User
5-074-002	Home Key Customization	Login Setting	CTL*	[0 to 255/0/1]
5-074-050	Home Key Customization	Show Home Edit Menu	CTL	[0 to 2/0/1] 0: Auto 1: Display 2: Not display
5-074-091	Home Key Customization	Function Setting	CTL*	[0 to 2/0/1] 0: Disable 1: SDK App 2: MFP browser App
5-074-092	Home Key Customization	Product ID	CTL*	[0 to 0xffffffff/0/1]
5-074-093	Home Key Customization	Application Screen ID	CTL*	[0 to 255/0/1]
5-076-001	Copy:LT/LG Mixed Sizes Setting	0:OFF 1:ON	CTL*	[0 or 1 / * / 1] NA: 1 EU, AP: 0
5-081-001	ServiceSP Entry Code Setting		CTL*	[0 to 0/0/0]
5-083-001	LED Light Switch Setting	Toner Near End	CTL*	[0 to 1/0/1] 0: OFF 1: ON
5-083-002	LED Light Switch Setting	Waste Toner Near End	CTL*	[0 to 1/0/1]
5-085-001	Keybord Setting	CH/TW SoftKeybord Setting	CTL*	[0 to 2/0/1] 0: Disable 1: Simplified Chinese 2: Traditional Chinese

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-101-202	Copy Auto Clear Setting	Auto Clear Timer Setting (0:ON 1:OFF)	CTL*	[0 to 1/0/1]
5-113-001	Optional Counter Type	Default Optional Counter Type	CTL*	[0 to 12/0/1]
5-113-002	Optional Counter Type	External Optional Counter Type	CTL*	[0 to 3/0/1]
5-114-001	Optional Counter I/F	MF Key Card Extension	CTL*	[0 to 1/0/1] 0: Not Installed 1: Installed
5-118-001	Disable Copying		CTL*	[0 to 1/0/1]
5-118-003	Copy mode setting	DocumentServer:Printed File Auto Delete	CTL*	[0 to 1/0/1]
5-118-004	Copy mode setting	Print Limit Warning Display Setting	CTL	[0 to 1/1/1]
5-120-001	Mode Clear Opt. Counter Removal	0:Yes 1:StandBy 2:No	CTL*	[0 to 2/0/1]
5-121-001	Counter Up Timing	0:Feed 1:Exit	CTL*	[0 to 1/0/1]
5-127-001	APS Mode		CTL*	[0 to 1/0/1] 0: Enable 1: Disable
5-150-001	Length Setting	Bypass(0:OFF 1:Long)	CTL	[0 to 1/0/1]
5-167-001	Fax Printing Mode at Optional Counter Off		CTL*	[0 to 1/0/1] 0: Auto printing 1: Manual printing

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-169-001	CE Login		CTL*	[0 to 1/0/1] 0: Disable 1: Enable
5-188-001	Copy Nv Version		CTL*	[0 to 0/0/0]
5-191-001	Mode Set	Power Str Set	CTL*	[0 to 1/1/1] 0: Off 1: On
5-195-002	Force User Stamp		CTL*	[0 to 1/1/1]
5-212-003	Page Numbering	Duplex Printout Left/Right Position of Left/Right Facing	CTL*	[-1000 to 1000/0/0.01mm]
5-212-004	Page Numbering	Duplex Printout Top/Bottom Position of Left/Right Facing	CTL*	[-1000 to 1000/0/0.01mm]
5-212-018	Page Numbering	Duplex Printout Left/Right Position of Top/Bottom Facing	CTL*	[-1000 to 1000/0/0.01mm]
5-212-019	Page Numbering	Duplex Printout Top/Bottom Position of Top/Bottom Facing	CTL*	[-1000 to 1000/0/0.01mm]
5-227-201	Page Numbering	Allow Page No. Entry	CTL*	[2 to 9/9/1]
5-227-202	Page Numbering	Zero Surplus Setting	CTL*	[0 to 1/0/1] 0: Off 1: On
5-302-002	Set Time	Time Difference	CTL*	[-1440 to 1440/*/1] NA: -300 EU, AP: 60
5-305-101	Auto Off Set	Auto Off Limit Set	CTL*	[0 to 1/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-307-001	Daylight Saving Time	Setting	CTL*	[0 to 1/0/1] NA/EU: 1 AP: 0
5-307-003	Daylight Saving Time	Rule Set(Start)	CTL*	[0 to 0xffffffff/*/1] NA: 0x03200210 EU: 0x03500010 AP: 0x10500010
5-307-004	Daylight Saving Time	Rule Set(End)	CTL*	[0 to 0xffffffff/*/1] NA: 0x11100200 EU: 0x10500100 AP: 0x03100000
5-401-103	Access Control	Default Document ACL	CTL*	[0 to 3/0/1]
5-401-104	Access Control	Authentication Time	CTL*	[0 to 255/0/1sec]
5-401-162	Access Control	Extend Certification Detail	CTL*	[0 to 0xff/0/1]
5-401-200	Access Control	SDK1 UniqueID	CTL*	[0 to 0xFFFFFFFF/0/1]
5-401-201	Access Control	SDK1 Certification Method	CTL*	[0 to 0xFF/0/1]
5-401-210	Access Control	SDK2 UniqueID	CTL*	[0 to 0xFFFFFFFF/0/1]
5-401-211	Access Control	SDK2 Certification Method	CTL*	[0 to 0xFF/0/1]
5-401-220	Access Control	SDK3 UniqueID	CTL*	[0 to 0xFFFFFFFF/0/1]
5-	Access Control	SDK3 Certification Method	CTL*	[0 to 0xFF/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
401-221				
5-401-230	Access Control	SDK Certification Device	CTL*	[0 to 0xff/0/1] 0-1: SDK authentication available 0-0: Disable all functions 1-1: SKB Display 1-0: Disable 2-1: Administrator login 2-0: Disable 3 to 7-0: Reserved (set “0” only)
5-401-240	Access Control	Detail Option	CTL*	[0 to 0xff/0/1]
5-402-101	Access Control	SDKJ1 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-102	Access Control	SDKJ2 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-103	Access Control	SDKJ3 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-104	Access Control	SDKJ4 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-105	Access Control	SDKJ5 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-106	Access Control	SDKJ6 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-	Access Control	SDKJ7 Limit Setting	CTL*	[0 to 0xFF/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
107				
5-402-108	Access Control	SDKJ8 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-109	Access Control	SDKJ9 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-110	Access Control	SDKJ10 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-111	Access Control	SDKJ11 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-112	Access Control	SDKJ12 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-113	Access Control	SDKJ13 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-114	Access Control	SDKJ14 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-115	Access Control	SDKJ15 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-116	Access Control	SDKJ16 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-117	Access Control	SDKJ17 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-118	Access Control	SDKJ18 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-	Access Control	SDKJ19 Limit Setting	CTL*	[0 to 0xFF/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
402-119				
5-402-120	Access Control	SDKJ20 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-121	Access Control	SDKJ21 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-122	Access Control	SDKJ22 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-123	Access Control	SDKJ23 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-124	Access Control	SDKJ24 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-125	Access Control	SDKJ25 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-126	Access Control	SDKJ26 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-127	Access Control	SDKJ27 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-128	Access Control	SDKJ28 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-129	Access Control	SDKJ29 Limit Setting	CTL*	[0 to 0xFF/0/1]
5-402-130	Access Control	SDKJ30 Limit Setting	CTL*	[0 to 0xFF/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-402-141	Access Control	SDKJ1 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-142	Access Control	SDKJ2 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-143	Access Control	SDKJ3 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-144	Access Control	SDKJ4 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-145	Access Control	SDKJ5 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-146	Access Control	SDKJ6 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-147	Access Control	SDKJ7 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-148	Access Control	SDKJ8 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-149	Access Control	SDKJ9 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-150	Access Control	SDKJ10 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-151	Access Control	SDKJ11 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-152	Access Control	SDKJ12 ProductID	CTL*	[0 to 0xffffffff/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-402-153	Access Control	SDKJ13 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-154	Access Control	SDKJ14 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-155	Access Control	SDKJ15 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-156	Access Control	SDKJ16 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-157	Access Control	SDKJ17 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-158	Access Control	SDKJ18 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-159	Access Control	SDKJ19 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-160	Access Control	SDKJ20 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-161	Access Control	SDKJ21 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-162	Access Control	SDKJ22 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-163	Access Control	SDKJ23 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-164	Access Control	SDKJ24 ProductID	CTL*	[0 to 0xffffffff/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-402-165	Access Control	SDKJ25 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-166	Access Control	SDKJ26 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-167	Access Control	SDKJ27 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-168	Access Control	SDKJ28 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-169	Access Control	SDKJ29 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-402-170	Access Control	SDKJ30 ProductID	CTL*	[0 to 0xffffffff/0/1]
5-404-001	User Code Count Clear	User Code Count Clear	CTL	[0 to 0/0/0]
5-411-004	LDAP-Certification	Simplified Authentication	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-411-005	LDAP-Certification	Password Null Not Permit	CTL*	[0 to 1/1/1] 0: Permit 1: Not Permit
5-411-006	LDAP-Certification	Detail Option	CTL*	[0 to 0xff/0/1]
5-412-100	Krb-Certification	Encrypt Mode	CTL*	[0 to 0xFF/0x1F/1]
5-413-001	Lockout Setting	Lockout On/Off	CTL*	[0 to 1/0/1] 0: Off 1: On

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-413-002	Lockout Setting	Lockout Threshold	CTL*	[1 to 10/5/1]
5-413-003	Lockout Setting	Cancelation On/Off	CTL*	[0 to 1/0/1] 0: Off 1: On
5-413-004	Lockout Setting	Cancelation Time	CTL*	[1 to 9999/60/1min]
5-414-001	Access Mitigation	Mitigation On/Off	CTL*	[0 to 1/0/1] 0: Off 1: On
5-414-002	Access Mitigation	Mitigation Time	CTL*	[0 to 60/15/1min]
5-415-001	Password Attack	Permissible Number	CTL*	[0 to 100/30/1]
5-415-002	Password Attack	Detect Time	CTL*	[1 to 10/5/1]
5-416-001	Access Information	Access User Max Num	CTL*	[50 to 200/200/1]
5-416-002	Access Information	Access Password Max Num	CTL*	[50 to 200/200/1]
5-416-003	Access Information	Monitor Interval	CTL*	[1 to 10/3/1]
5-417-001	Access Attack	Access Permissible Number	CTL*	[0 to 500/100/1]
5-417-002	Access Attack	Attack Detect Time	CTL*	[10 to 30/10/1sec]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-417-003	Access Attack	Productivity Fall Waite	CTL*	[0 to 9/3/1sec]
5-417-004	Access Attack	Attack Max Num	CTL*	[50 to 200/200/1]
5-420-001	User Authentication	Copy	CTL*	[0 to 1/0/1]
5-420-011	User Authentication	DocumentServer	CTL*	[0 to 1/0/1]
5-420-021	User Authentication	Fax	CTL*	[0 to 1/0/1]
5-420-031	User Authentication	Scanner	CTL*	[0 to 1/0/1]
5-420-041	User Authentication	Printer	CTL*	[0 to 1/0/1] 0: Enable 1: Disable
5-420-051	User Authentication	SDK1	CTL*	[0 to 1/0/1] 0: Enable 1: Disable
5-420-061	User Authentication	SDK2	CTL*	[0 to 1/0/1] 0: Enable 1: Disable
5-420-071	User Authentication	SDK3	CTL*	[0 to 1/0/1] 0: Enable 1: Disable
5-420-081	User Authentication	Browser	CTL*	[0 to 1/0/1] 0: Enable 1: Disable
5-430-001	Auth Dialog Message Change	Message Change On/Off	CTL*	[0 to 1/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-430-002	Auth Dialog Message Change	Message Text Download	CTL	[0 to 0/0/0]
5-430-003	Auth Dialog Message Change	Message Text ID	CTL	[0 to 0/0/0]
5-431-010	External Auth User Preset	Tag	CTL*	[0 to 1/1/1] 0: Off 1: On
5-431-011	External Auth User Preset	Entry	CTL*	[0 to 1/1/1] 0: Off 1: On
5-431-012	External Auth User Preset	Group	CTL*	[0 to 1/1/1] 0: Off 1: On
5-431-020	External Auth User Preset	Mail	CTL*	[0 to 1/1/1] 0: Off 1: On
5-431-030	External Auth User Preset	Fax	CTL*	[0 to 1/1/1] 0: Off 1: On
5-431-031	External Auth User Preset	FaxSub	CTL*	[0 to 1/1/1] 0: Off 1: On
5-431-032	External Auth User Preset	Folder	CTL*	[0 to 1/1/1] 0: Off 1: On
5-431-033	External Auth User Preset	ProtectCode	CTL*	[0 to 1/1/1] 0: Off 1: On
5-431-034	External Auth User Preset	SmtpAuth	CTL*	[0 to 1/1/1] 0: Off 1: On
5-431-035	External Auth User Preset	LdapAuth	CTL*	[0 to 1/1/1] 0: Off 1: On

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-431-036	External Auth User Preset	Smb Ftp Fldr Auth	CTL*	[0 to 1/1/1] 0: Off 1: On
5-431-037	External Auth User Preset	AcntAcl	CTL*	[0 to 1/1/1] 0: Off 1: On
5-431-038	External Auth User Preset	DocumentAcl	CTL*	[0 to 1/1/1] 0: Off 1: On
5-431-040	External Auth User Preset	CertCrypt	CTL*	[0 to 1/0/1] 0: Off 1: On
5-431-050	External Auth User Preset	UserLimitCount	CTL*	[0 to 1/1/1] 0: Off 1: On
5-481-001	Authentication Error Code	System Log Disp	CTL*	[0 to 1/0/1] 0: Off 1: On
5-481-002	Authentication Error Code	Panel Disp	CTL*	[0 to 1/1/1] 0: Off 1: On
5-490-001	MF KeyCard	Job Permit Setting	CTL*	[0 to 1/0/1] 0: Not permit 1: Permit
5-491-001	Optional Counter	Detail Option	CTL*	[0 to 0xff/0/1]
5-501-001	PM Alarm	PM Alarm Level	CTL*	[0 to 9999/0/1]
5-504-001	Jam Alarm		CTL*	[0 to 3/3/1]
5-504-002	Jam Alarm	Threshold	CTL*	[1 to 99/10/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-505-001	Error Alarm		CTL*	[0 to 255/*/1] IM 550F: 25 IM 600F: 32 IM 600SRF: 32
5-505-002	Error Alarm	Threshold	CTL*	[1 to 99/5/1]
5-507-001	Supply/CC Alarm	Paper Supply Alarm	CTL*	[0 to 1/0/1] 0: Off 1: On
5-507-002	Supply/CC Alarm	Staple Supply Alarm	CTL*	[0 to 1/1/1] 0: Off 1: On
5-507-003	Supply/CC Alarm	Toner Supply Alarm	CTL*	[0 to 1/1/1] 0: Off 1: On
5-507-006	Supply/CC Alarm	WasteTonerBottle Supply Alarm	CTL*	[0 to 1/0/1] 0: Off 1: On
5-507-080	Supply/CC Alarm	Toner Call Timing	CTL*	[0 to 1/0/1] 0: Off 1: On
5-507-081	Supply/CC Alarm	Toner Call Threshold	CTL*	[10 to 90/10/10%]
5-507-128	Supply/CC Alarm	Interval: Others	CTL*	[250 to 10000/1000/1]
5-507-133	Supply/CC Alarm	Interval: A4	CTL*	[250 to 10000/1000/1]
5-507-134	Supply/CC Alarm	Interval: A5	CTL*	[250 to 10000/1000/1]
5-507-	Supply/CC Alarm	Interval: B5	CTL*	[250 to 10000/1000/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
142				
5-507-164	Supply/CC Alarm	Interval: LG	CTL*	[250 to 10000/1000/1]
5-507-166	Supply/CC Alarm	Interval: LT	CTL*	[250 to 10000/1000/1]
5-507-172	Supply/CC Alarm	Interval: HLT	CTL*	[250 to 10000/1000/1]
5-508-001	CC Call	Jam Remains	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-508-002	CC Call	Continuous Jams	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-508-003	CC Call	Continuous Door Open	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-508-011	CC Call	Jam Detection: Time Length	CTL*	[3 to 30/10/1]
5-508-012	CC Call	Jam Detection: Continuous Count	CTL*	[2 to 10/5/1]
5-508-013	CC Call	Door Open: Time Length	CTL*	[3 to 30/10/1]
5-513-001	PartsAlermlevelCount	Normal	CTL*	[1 to 9999/300/1]
5-513-002	PartsAlermlevelCount	Df	CTL*	[1 to 9999/300/1]
5-	PartsAlermlev	Normal	CTL*	[0 to 1/1/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
514-001				0: OFF 1: ON
5-514-002	PartsAlermlev	Df	CTL*	[0 to 1/0/1] 0: OFF 1: ON
5-515-001	SC/Alarm Setting	SC Call	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-515-002	SC/Alarm Setting	Service Parts Near End Call	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-515-003	SC/Alarm Setting	Service Parts End Call	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-515-004	SC/Alarm Setting	User Call	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-515-006	SC/Alarm Setting	Communication Test Call	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-515-007	SC/Alarm Setting	Machine Information Notice	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-515-008	SC/Alarm Setting	Alarm Notice	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-515-009	SC/Alarm Setting	Non Genuine Tonner Ararm	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-515-010	SC/Alarm Setting	Supply Automatic Ordering Call	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-515-011	SC/Alarm Setting	Supply Management Report Call	CTL*	[0 to 1/1/1] 0: Disable 1: Enable

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-515-012	SC/Alarm Setting	Jam/Door Open Call	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-515-050	SC/Alarm Setting	Timeout:Manual Call	CTL*	[1 to 255/5/1min]
5-515-051	SC/Alarm Setting	Timeout:Other Call	CTL*	[1 to 255/10/1min]
5-517-061	Get Machine Information	AutoDiscovery Execution Setting	CTL	[0 to 1/0/1] 0: Disable 1: Enable
5-517-062	Get Machine Information	AutoDiscovery Execution Interval	CTL	[0 to 1/0/1] 0: Daily 1: Weekly
5-517-063	Get Machine Information	AutoDiscovery Execution Weekday	CTL	[0 to 6/0/1] 0: Sunday 1: Monday 2: Tuesday 3: Wednesday 4: Thursday 5: Friday 6: Saturday
5-517-064	Get Machine Information	AutoDiscovery Execution Hour	CTL	[0 to 23/0/1]
5-517-065	Get Machine Information	AutoDiscovery Execution Minute	CTL	[0 to 59/0/1]
5-517-066	Get Machine Information	AutoDiscovery SNMP Community Name	CTL	[0 to 0/0/0]
5-517-100	Get Machine Information	GetLog:NotificationSetting	CTL*	[0 to 1/0/1] 0: Not permit 1: Permit
5-	Network Setting	NAT Machine Port1	CTL*	[1 to 65535/49101/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
728-001				
5-728-002	Network Setting	NAT UI Port1	CTL*	[1 to 65535/55101/1]
5-728-003	Network Setting	NAT Machine Port2	CTL*	[1 to 65535/49102/1]
5-728-004	Network Setting	NAT UI Port2	CTL*	[1 to 65535/55102/1]
5-728-005	Network Setting	NAT Machine Port3	CTL*	[1 to 65535/49103/1]
5-728-006	Network Setting	NAT UI Port3	CTL*	[1 to 65535/55103/1]
5-728-007	Network Setting	NAT Machine Port4	CTL*	[1 to 65535/49104/1]
5-728-008	Network Setting	NAT UI Port4	CTL*	[1 to 65535/55104/1]
5-728-009	Network Setting	NAT Machine Port5	CTL*	[1 to 65535/49105/1]
5-728-010	Network Setting	NAT UI Port5	CTL*	[1 to 65535/55105/1]
5-728-011	Network Setting	NAT Machine Port6	CTL*	[1 to 65535/49106/1]
5-728-012	Network Setting	NAT UI Port6	CTL*	[1 to 65535/55106/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-728-013	Network Setting	NAT Machine Port7	CTL*	[1 to 65535/49107/1]
5-728-014	Network Setting	NAT UI Port7	CTL*	[1 to 65535/55107/1]
5-728-015	Network Setting	NAT Machine Port8	CTL*	[1 to 65535/49108/1]
5-728-016	Network Setting	NAT UI Port8	CTL*	[1 to 65535/55108/1]
5-728-017	Network Setting	NAT Machine Port9	CTL*	[1 to 65535/49109/1]
5-728-018	Network Setting	NAT UI Port9	CTL*	[1 to 65535/55109/1]
5-728-019	Network Setting	NAT Machine Port10	CTL*	[1 to 65535/49110/1]
5-728-020	Network Setting	NAT UI Port10	CTL*	[1 to 65535/55110/1]
5-728-101	Network Setting	PacketCapture	CTL	[0 to 1/0/1] 0: Disable 1: Enable
5-728-102	Network Setting	PacketCapture:mode	CTL	[0 to 1/0/1] 0: Header only 1: All data
5-728-103	Network Setting	PacketCapture:interface	CTL	[0 to 3/0/1] 0: Auto Select from I/F for External Connection 1: I/F for Operation Panel 2: I/F for Wired

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
				3: I/F for Wireless
5-728-104	Network Setting	PacketCapture:length	CTL	[54 to 65535/128/1]
5-728-105	Network Setting	PacketCapture:broadcast	CTL	[0 to 1/0/1]
5-728-106	Network Setting	PacketCapture:specify port	CTL	[0 to 1/0/1] 0: Disable 1: Enable
5-728-107	Network Setting	PacketCapture:portnumber	CTL	[0 to 65535/0/1]
5-728-108	Network Setting	PacketCapture:time	CTL	[0 to 0xffffffff/0/1]
5-729-013	Print Server	Active IPv6 Link Local Address	CTL	[0 to 0/0/0]
5-729-014	Print Server	IPv6 Stateless Auto Setting	CTL*	[0 to 1/1/1]
5-729-015	Print Server	Active IPv6 Stateless Address 1	CTL	[0 to 0/0/0]
5-729-016	Print Server	Active IPv6 Stateless Address 2	CTL	[0 to 0/0/0]
5-729-019	Print Server	IPv6 Manual Address	CTL*	[0 to 0/0/0]
5-729-020	Print Server	IPv6 Gateway Address	CTL*	[0 to 0/0/0]
5-	Extended Function Setting	Expiration Prior Alarm Set	CTL*	[0 to 999/20/1days]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
730-010				
5-731-001	Counter Effect	Change Mk1 Cnt(Paper->Combine)	CTL*	[0 to 1/0/1] 0: Disable 1: Enable
5-734-001	PDF Setting	PDF/A Fixed	CTL*	[0 to 1/0/1]
5-745-211	DeemedPowerConsumption	Controller Standby	CTL*	[0 to 9999/0/1]
5-745-212	DeemedPowerConsumption	STR	CTL*	[0 to 9999/0/1]
5-745-213	DeemedPowerConsumption	Main Power Off	CTL*	[0 to 9999/0/1]
5-745-214	DeemedPowerConsumption	Scanning and Printing	CTL*	[0 to 9999/0/1]
5-745-215	DeemedPowerConsumption	Printing	CTL*	[0 to 9999/0/1]
5-745-216	DeemedPowerConsumption	Scanning	CTL*	[0 to 9999/0/1]
5-745-217	DeemedPowerConsumption	Engine Standby	CTL*	[0 to 9999/0/1]
5-745-218	DeemedPowerConsumption	Low Power Consumption	CTL*	[0 to 9999/0/1]
5-745-219	DeemedPowerConsumption	Silent condition	CTL*	[0 to 9999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-745-220	DeemedPowerConsumption	Heater Off	CTL*	[0 to 9999/0/1]
5-748-101	OpePanel Setting	Op Type Action Setting	CTL	[0 to 255/0/1]
5-748-201	OpePanel Setting	Cheetah Panel Connect Setting	CTL	[0 to 1/0/1] 0: SOP not connected 1: SOP connected
5-749-001	Import/Export	Export	CTL	[0 to 0/0/0]
5-749-101	Import/Export	Import	CTL	[0 to 0/0/0]
5-752-001	Copy:WebAPI Setting	Copy:FlairAPI Setting	CTL*	[0 to 255/0/1]
5-755-001	Display Setting	Disp Administrator Password Change Scrn	CTL	[0 to 0/0/0]
5-755-002	Display Setting	Hide Administrator Password Change Scrn	CTL	[0 to 0/0/0]
5-758-001	RemoteUI Setting	Authentication	CTL*	[0 to 1/0/1] 0: Disable 1: Enable
5-759-001	Machine Limit Count	Machine Limit Count Setting	CTL*	[0 to 1/0/1] 0: Disable 1: Enable
5-759-051	Machine Limit Count	Limit Count	CTL*	[0 to 99999999/0/1]
5-761-001	SmartOperationPanel Setting	Restore the default Home screen	CTL	[0 to 255/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-761-007	SmartOperationPanel Setting	Introduction Setting Boot Mode	CTL	[0 to 255/0/1]
5-761-009	SmartOperationPanel Setting	SmartOperationPanel Font Setting	CTL	[0 to 255/0/1]
5-764-001	NFC Setting	GuestNetwork	CTL*	[0 to 1/0/1]
5-764-002	NFC Setting	Encrypted Communication Permission	CTL*	[0 to 1/0/1]
5-764-003	NFC Setting	Access Port1	CTL*	[0 to 65535/8081/1]
5-764-004	NFC Setting	Access Port2	CTL*	[0 to 65535/8080/1]
5-764-005	NFC Setting	Access Port3	CTL*	[0 to 65535/80/1]
5-767-001	Screen USB host port	Port1	CTL*	[0 to 1/0/1] 0: Enable 1: Disable
5-767-002	Screen USB host port	Port2	CTL*	[0 to 1/0/1] 0: Enable 1: Disable
5-767-101	Screen USB host port	Screen USB memory	CTL*	[0 to 1/0/1] 0: Enable 1: Disable
5-801-001	Memory Clear	All Clear	CTL	[0 to 0/0/0]
5-801-003	Memory Clear	SCS	CTL	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-801-004	Memory Clear	IMH Memory Clr	CTL	[0 to 0/0/0]
5-801-005	Memory Clear	MCS	CTL	[0 to 0/0/0]
5-801-006	Memory Clear	Copier application	CTL	[0 to 0/0/0]
5-801-007	Memory Clear	Fax Application	CTL	[0 to 0/0/0]
5-801-008	Memory Clear	Printer Application	CTL	[0 to 0/0/0]
5-801-009	Memory Clear	Scanner Application	CTL	[0 to 0/0/0]
5-801-010	Memory Clear	Web Service	CTL	[0 to 0/0/0]
5-801-011	Memory Clear	NCS	CTL	[0 to 0/0/0]
5-801-012	Memory Clear	R-FAX	CTL	[0 to 0/0/0]
5-801-014	Memory Clear	Clear DCS Setting	CTL	[0 to 0/0/0]
5-801-015	Memory Clear	Clear UCS Setting	CTL	[0 to 0/0/0]
5-801-016	Memory Clear	MIRS Setting	CTL	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-801-017	Memory Clear	CCS	CTL	[0 to 0/0/0]
5-801-018	Memory Clear	SRM Memory Clr	CTL	[0 to 0/0/0]
5-801-019	Memory Clear	LCS	CTL	[0 to 0/0/0]
5-801-020	Cleae Memory	Web Uapli	CTL	[0 to 0/0/0]
5-801-021	Memory Clear	ECS	CTL	[0 to 0/0/0]
5-801-023	Memory Clear	AICS	CTL	[0 to 0/0/0]
5-801-025	Cleae Memory	websys	CTL	[0 to 0/0/0]
5-801-027	Memory Clear	SAS	CTL	[0 to 0/0/0]
5-801-028	Memory Clear	Rest WebService	CTL	[0 to 0/0/0]
5-812-001	Service Tel. No. Setting	Service	CTL*	[0 to 0/0/0]
5-812-002	Service Tel. No. Setting	Facsimile	CTL*	[0 to 0/0/0]
5-812-003	Service Tel. No. Setting	Supply	CTL*	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-812-004	Service Tel. No. Setting	Operation	CTL*	[0 to 0/0/0]
5-812-101	Service Tel. No. Setting	Disp Inquiry	CTL*	[0 to 1/0/1]
5-816-001	Remote Service	I/F Setting	CTL*	[0 to 2/2/1] 0: Off 1: CSS Remote Diag On 2: Network Remote Diag On
5-816-002	Remote Service	CE Call	CTL*	[0 to 1/0/1] 0: Start 1: End
5-816-003	Remote Service	Function Flag	CTL*	[0 to 1/0/1] 0: Disable 1: Enable
5-816-007	Remote Service	SSL Disable	CTL*	[0 to 1/0/1]
5-816-008	Remote Service	RCG Connect Timeout	CTL*	[1 to 90/30/1sec]
5-816-009	Remote Service	RCG Write Timeout	CTL*	[0 to 100/60/1sec]
5-816-010	Remote Service	RCG Read Timeout	CTL*	[0 to 100/60/1sec]
5-816-011	Remote Service	Port 80 Enable	CTL*	[0 to 1/0/1] 0: Not permit 1: Permit
5-816-013	Remote Service	RFU Timing	CTL*	[0 to 1/1/1] 0: Disable 1: Enable

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-816-014	Remote Service	RCG Error Cause	CTL	[0 to 2/0/1]
5-816-063	Remote Service	Proxy Host	CTL*	[0 to 0/0/0]
5-816-064	Remote Service	Proxy PortNumber	CTL*	[0 to 0xffff/0/1]
5-816-065	Remote Service	Proxy User Name	CTL*	[0 to 0/0/0]
5-816-066	Remote Service	Proxy Password	CTL*	[0 to 0/0/0]
5-816-102	Remote Service	CERT:Encrypt Level	CTL*	[1 to 2/1/1] 1: 512 bit 2: 2048 bit
5-816-103	Remote Service	Client Communication Method	CTL*	[0 to 3/0/1] 0: Not connected 1: IPv4 2: IPv6 3: Host name
5-816-104	Remote Service	Client Communication Limit	CTL*	[1 to 7/7/1]
5-816-115	Remote Service	Network Information Waiting timer	CTL*	[5 to 255/5/1sec]
5-816-190	Remote Service	3G DongleID	CTL*	[0 to 0/0/0]
5-816-209	Remote Service	Instl Clear	CTL	[0 to 1/0/1]
5-	Remote Service RCG	RCG IPv4 Address	CTL*	[0 to 0xffffffff/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
821-002	Setting			
5-821-003	Remote Service RCG Setting	RCG Port	CTL*	[0 to 65535/443/1]
5-821-004	Remote Service RCG Setting	RCG IPv4 URL Path	CTL*	[0 to 0/0/0]
5-821-005	Remote Service RCG Setting	RCG IPv6 Address	CTL*	[0 to 0/0/0]
5-821-006	Remote Service RCG Setting	RCG IPv6 URL Path	CTL*	[0 to 0/0/0]
5-821-007	Remote Service RCG Setting	RCG Host Name	CTL*	[0 to 0/0/0]
5-821-008	Remote Service RCG Setting	RCG Host URL Path	CTL*	[0 to 0/0/0]
5-824-001	NV-RAM Data Upload		CTL	[0 to 0/0/0]
5-825-001	NV-RAM Data Download		CTL	[0 to 0/0/0]
5-828-039	Network Setting	User Class	CTL*	[0 to 0/0/0]
5-828-040	Network Setting	Class Id	CTL*	[0 to 0/0/0]
5-828-050	Network Setting	1284 Compatiblity (Centro)	CTL*	[0 to 1/1/1] 0: Not permit 1: Permit

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-828-052	Network Setting	ECP (Centro)	CTL*	[0 to 1/1/1] 0: Not permit 1: Permit
5-828-065	Network Setting	Job Spooling	CTL*	[0 to 1/0/1] 0: Disable 1: Enable
5-828-066	Network Setting	Job Spooling Clear: Start Time	CTL*	[0 to 1/1/1] 0: Job Clear 1: Print
5-828-069	Network Setting	Job Spooling (Protocol)	CTL*	[0x00 to 0xff/0x7f/0]
5-828-087	Network Setting	Protocol usage	CTL*	[0x00000000 to 0xffffffff/0x00000000/1]
5-828-090	Network Setting	TELNET(0:OFF 1:ON)	CTL*	[0 to 1/1/1]
5-828-091	Network Setting	Web(0:OFF 1:ON)	CTL*	[0 to 1/1/1]
5-828-145	Network Setting	Active IPv6 Link Local Address	CTL	[0 to 0/0/0]
5-828-147	Network Setting	Active IPv6 Stateless Address 1	CTL	[0 to 0/0/0]
5-828-149	Network Setting	Active IPv6 Stateless Address 2	CTL	[0 to 0/0/0]
5-828-151	Network Setting	Active IPv6 Stateless Address 3	CTL	[0 to 0/0/0]
5-828-153	Network Setting	Active IPv6 Stateless Address 4	CTL	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-828-155	Network Setting	Active IPv6 Stateless Address 5	CTL	[0 to 0/0/0]
5-828-156	Network Setting	IPv6 Manual Address	CTL*	[0 to 0/0/0]
5-828-158	Network Setting	IPv6 Gateway Address	CTL*	[0 to 0/0/0]
5-828-161	Network Setting	IPv6 Stateless Auto Setting	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-828-219	Network Setting	IPsec Aggressive Mode Setting	CTL*	[0 to 1/0/1] 0: Permit 1: Prohibited
5-828-236	Network Setting	Web Item visible	CTL*	[0x0000 to 0xffff/0xffff/1]
5-828-237	Network Setting	Web shopping link visible	CTL*	[0 to 1/1/1] 0: Not display 1: Display
5-828-238	Network Setting	Web Supplies Link visible	CTL*	[0 to 1/1/1] 0: Not display 1: Display
5-828-239	Network Setting	Web Link1 Name	CTL*	[0 to 0/0/0]
5-828-240	Network Setting	Web Link1 URL	CTL*	[0 to 0/0/0]
5-828-241	Network Setting	Web Link1 visible	CTL*	[0 to 1/1/1] 0: Not display 1: Display
5-828-242	Network Setting	Web Link2 Name	CTL*	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-828-243	Network Setting	Web Link2 URL	CTL*	[0 to 0/0/0]
5-828-244	Network Setting	Web Link2 visible	CTL*	[0 to 1/1/1] 0: Not display 1: Display
5-828-249	Network Setting	DHCPv6 DUID	CTL	[0 to 0/0/0]
5-832-001	HDD	HDD Formatting (ALL)	CTL	[0 to 0/0/0]
5-832-002	HDD	HDD Formatting (IMH)	CTL	[0 to 0/0/0]
5-832-003	HDD	HDD Formatting (Thumbnail/OCR)	CTL	[0 to 0/0/0]
5-832-004	HDD	HDD Formatting (Job Log)	CTL	[0 to 0/0/0]
5-832-005	HDD	HDD Formatting (Printer Fonts)	CTL	[0 to 0/0/0]
5-832-006	HDD	HDD Formatting (User Info)	CTL	[0 to 0/0/0]
5-832-007	HDD	Mail RX Data	CTL	[0 to 0/0/0]
5-832-008	HDD	Mail TX Data	CTL	[0 to 0/0/0]
5-832-009	HDD	HDD Formatting (Data for a Design)	CTL	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-832-010	HDD	HDD Formatting (Log)	CTL	[0 to 0/0/0]
5-832-011	HDD	HDD Formatting (Ridoc I/F)	CTL	[0 to 0/0/0]
5-832-012	HDD	HDD Formatting (Thumbnail)	CTL	[0 to 0/0/0]
5-836-001	Capture Setting	Capture Function (0:Off 1:On)	CTL*	[0 to 1/0/1] 0: Disable 1: Enable
5-836-011	Capture Setting	Capture Setting: Copy	CTL*	[0 to 1/0/1]
5-836-012	Capture Setting	Capture Setting: Doc. Svr.	CTL*	[0 to 1/0/1]
5-836-013	Capture Setting	Capture Setting: Fax RX Printer	CTL*	[0 to 1/0/1]
5-836-014	Capture Setting	Capture Setting: Fax TX	CTL*	[0 to 1/0/1]
5-836-015	Capture Setting	Capture Setting: Printer	CTL*	[0 to 1/0/1]
5-836-016	Capture Setting	Capture Setting: Scanner	CTL*	[0 to 1/0/1]
5-836-017	Capture Setting	Capture Setting: SDK	CTL*	[0 to 1/0/1]
5-836-061	Capture Setting	Captured File Resend (0:Off 1:On)	CTL*	[0 to 1/1/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-836-072	Capture Setting	Reduction for Copy B&W Text	CTL*	[0 to 6/0/1] 0: 1to-1 1: 1/2 2: 1/3 3: 1/4 6: 2/3
5-836-073	Capture Setting	Reduction for Copy B&W Other	CTL*	[0 to 6/0/1] 0: 1to-1 1: 1/2 2: 1/3 3: 1/4 6: 2/3
5-836-075	Capture Setting	Reduction for Printer B&W	CTL*	[0 to 6/0/1] 0: 1to-1 1: 1/2 2: 1/3 3: 1/4 6: 2/3
5-836-082	Capture Setting	Format for Copy B&W Text	CTL*	[0 to 3/1/1] 0: JFIF/JPEG 1: TIFF/MMR 2: TIFF/MH 3: TIFF/MR
5-836-083	Capture Setting	Format for Copy B&W Other	CTL*	[0 to 3/1/1] 0: JFIF/JPEG 1: TIFF/MMR 2: TIFF/MH 3: TIFF/MR
5-836-085	Capture Setting	Format for Printer B&W	CTL*	[0 to 3/1/1] 0: JFIF/JPEG 1: TIFF/MMR 2: TIFF/MH 3: TIFF/MR
5-836-091	Capture Setting	Default for JPEG	CTL*	[5 to 95/50/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-836-101	Capture Setting	Primary srv IP address	CTL*	[0 to 0xffffffff/0x00/0]
5-836-102	Capture Setting	Primary srv scheme	CTL*	[0 to 0/0/0]
5-836-103	Capture Setting	Primary srv port number	CTL*	[1 to 65535/80/1]
5-836-104	Capture Setting	Primary srv URL path	CTL*	[0 to 0/0/0]
5-836-111	Capture Setting	Secondary srv IP address	CTL*	[0 to 0xffffffff/0x00/0]
5-836-112	Capture Setting	Secondary srv scheme	CTL*	[0 to 0/0/0]
5-836-113	Capture Setting	Secondary srv port number	CTL*	[1 to 65535/80/1]
5-836-114	Capture Setting	Secondary srv URL path	CTL*	[0 to 0/0/0]
5-836-120	Capture Setting	Default Reso Rate Switch	CTL*	[0 to 1/0/1]
5-836-122	Capture Setting	Reso: Copy(Mono)	CTL*	[0 to 255/3/1]
5-836-124	Capture Setting	Reso: Print(Mono)	CTL*	[0 to 255/3/1]
5-836-125	Capture Setting	Reso: Fax(Color)	CTL*	[0 to 255/4/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-836-126	Capture Setting	Reso: Fax(Mono)	CTL*	[0 to 255/3/1]
5-836-127	Capture Setting	Reso: Scan(Color)	CTL*	[0 to 255/4/1]
5-836-128	Capture Setting	Reso: Scan(Mono)	CTL*	[0 to 255/3/1]
5-836-129	Capture Setting	Reso: SDK(Color)	CTL*	[0 to 255/4/1]
5-836-130	Capture Setting	Reso: SDK(Mono)	CTL*	[0 to 255/3/1]
5-836-141	Capture Setting	All Addr Info Switch	CTL*	[0 to 1/1/1]
5-836-142	Capture Setting	Stand-by Doc Max Number	CTL*	[10 to 10000/2000/1]
5-836-143	Capture Setting	ClearLightPDF Switch	CTL*	[0 to 1/0/1]
5-840-006	IEEE 802.11	Channel MAX	CTL*	[1 to 14/14/1]
5-840-007	IEEE 802.11	Channel MIN	CTL*	[1 to 14/1/1]
5-840-011	IEEE 802.11	WEP Key Select	CTL*	[0x00 to 0x11/0x00/0]
5-840-045	IEEE 802.11	WPA Debug Lvl	CTL*	[1 to 3/3/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-840-046	IEEE 802.11	11w	CTL*	[0 to 2/0/1]
5-840-047	IEEE 802.11	PSK Set Type	CTL*	[0 to 1/0/1]
5-841-001	Supply Name Setting	Toner Name Setting: Black	CTL*	[0 to 0/0/0]
5-841-011	Supply Name Setting	StapleStd1	CTL*	[0 to 0/0/0]
5-841-012	Supply Name Setting	StapleStd2	CTL*	[0 to 0/0/0]
5-841-013	Supply Name Setting	StapleStd3	CTL*	[0 to 0/0/0]
5-841-014	Supply Name Setting	StapleStd4	CTL*	[0 to 0/0/0]
5-842-001	GWWS Analysis	Setting 1	CTL*	[0x00 to 0xFF/0/1]
5-842-002	GWWS Analysis	Setting 2	CTL*	[0x00 to 0xFF/0/1]
5-844-001	USB	Transfer Rate	CTL*	[1 to 4/4/0]
5-844-002	USB	Vendor ID	CTL*	[0x0000 to 0xffff/0x05ca/0]
5-844-003	USB	Product ID	CTL*	[0x0000 to 0xffff/0x0403/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-844-004	USB	Device Release Number	CTL*	[0 to 9999/100/1]
5-844-005	USB	Fixed USB Port	CTL*	[0 to 2/0/1]
5-844-006	USB	PnP Model Name	CTL*	[0 to 0/0/0]
5-844-007	USB	PnP Serial Number	CTL*	[0 to 0/0/0]
5-844-008	USB	Mac Supply Level	CTL*	[0 to 1/1/1]
5-844-009	USB	USB Toggle Clear Mode	CTL*	[0 to 1/0/1]
5-844-100	USB	Notify Unsupport	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-845-001	Delivery Server Setting	FTP Port No.	CTL*	[1 to 65535/3670/1]
5-845-002	Delivery Server Setting	IP Address (Primary)	CTL*	[0 to 0xffffffff/0x00]
5-845-006	Delivery Server Setting	Delivery Error Display Time	CTL*	[0 to 999/300/1sec]
5-845-008	Delivery Server Setting	IP Address (Secondary)	CTL*	[0 to 0xffffffff/0x00]
5-845-009	Delivery Server Setting	Delivery Server Model	CTL*	[0 to 4/0/1] 0: Unknown 1: SG1 Provided

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
				2: SG1 Package 3: SG2 Provided 4: SG2 Package
5-845-010	Delivery Server Setting	Delivery Svr. Capability	CTL*	[0 to 255/0/1]
5-845-011	Delivery Server Setting	Delivery Svr. Capability (Ext)	CTL*	[0 to 255/0/1]
5-845-013	Delivery Server Setting	Server Scheme(Primary)	CTL*	[0 to 0/0/0]
5-845-014	Delivery Server Setting	Server Port Number(Primary)	CTL*	[1 to 65535/80/1]
5-845-015	Delivery Server Setting	Server URL Path(Primary)	CTL*	[0 to 0/0/0]
5-845-016	Delivery Server Setting	Server Scheme(Secondary)	CTL*	[0 to 0/0/0]
5-845-017	Delivery Server Setting	Server Port Number(Secondary)	CTL*	[1 to 65535/80/1]
5-845-018	Delivery Server Setting	Server URL Path(Secondary)	CTL*	[0 to 0/0/0]
5-845-022	Delivery Server Setting	Rapid Sending Control	CTL*	[0 to 1/1/1] 0: Disable 1: Enable
5-846-001	UCS Setting	Machine ID (for Delivery Server)	CTL*	[0 to 0/0/0]
5-846-002	UCS Setting	Machine ID Clear (for Delivery Server)	CTL*	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-846-003	UCS Setting	Maximum Entries	CTL*	[2000 to 20000/2000/1]
5-846-006	UCS Setting	Delivery Server Retry Timer	CTL*	[0 to 255/0/1]
5-846-007	UCS Setting	Delivery Server Retry Times	CTL*	[0 to 255/0/1]
5-846-008	UCS Setting	Delivery Server Maximum Entries	CTL*	[2000 to 20000/2000/1]
5-846-010	UCS Setting	LDAP Search Timeout	CTL*	[1 to 255/60/1]
5-846-020	UCS Setting	WSD Maximum Entries	CTL*	[50 to 250/250/1]
5-846-021	UCS Setting	Folder Auth Change	CTL*	[0 to 1/0/1] 0: Login User 1: Destination
5-846-040	UCS Setting	Addr Book Migration(USB->HDD)	CTL	[0 to 0/0/0]
5-846-041	UCS Setting	Fill Addr Acl Info	CTL	[0 to 0/0/0]
5-846-043	UCS Setting	Addr Book Media	CTL*	[0 to 30/0/1] 0: Unconfirmed 1: SD Slot 1 2: SD Slot 2 3: SD Slot 3 4: USB Flash ROM 10: SD Slot 10 20: HDD 30: Nothing

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-846-047	UCS Setting	Initialize Local Addr Book	CTL	[0 to 0/0/0]
5-846-048	UCS Setting	Initialize Delivery Addr Book	CTL	[0 to 0/0/0]
5-846-049	UCS Setting	Initialize LDAP Addr Book	CTL	[0 to 0/0/0]
5-846-050	UCS Setting	Initialize All Addr Book	CTL	[0 to 0/0/0]
5-846-051	UCS Setting	Backup All Addr Book	CTL	[0 to 0/0/0]
5-846-052	UCS Setting	Restore All Addr Book	CTL	[0 to 0/0/0]
5-846-053	UCS Setting	Clear Backup Info	CTL	[0 to 0/0/0]
5-846-060	UCS Setting	Search option	CTL*	[0x00 to 0xff/0x0f/1] 0: Checks both upper/lower case characters 1: Japan Only 2: Japan Only 3: Japan Only 4 to 7: Not Used
5-846-062	UCS Setting	Complexity option 1	CTL*	[0 to 32/0/1]
5-846-063	UCS Setting	Complexity option 2	CTL*	[0 to 32/0/1]
5-	UCS Setting	Complexity option 3	CTL*	[0 to 32/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
846-064				
5-846-065	UCS Setting	Complexity option 4	CTL*	[0 to 32/0/1]
5-846-091	UCS Setting	FTP Auth Port Setting	CTL*	[0 to 65535/3671/1]
5-846-094	UCS Setting	Encryption Stat	CTL*	[0 to 255/0/0]
5-846-100	UCS Setting	Initialize Suprvisor	CTL	[0 to 0/0/0]
5-847-002	Rep Resolution Reduction	Rate for Copy B&W Text	CTL*	[0 to 6/0/1]
5-847-003	Rep Resolution Reduction	Rate for Copy B&W Other	CTL*	[0 to 6/0/1]
5-847-005	Rep Resolution Reduction	Rate for Printer B&W	CTL*	[0 to 6/0/1]
5-847-007	Rep Resolution Reduction	Rate for Printer B&W 1200dpi	CTL*	[0 to 6/1/1]
5-847-021	Rep Resolution Reduction	Network Quality Default for JPEG	CTL*	[5 to 95/50/1]
5-848-002	Web Service	Access Ctrl: Repository(onlyLower4bits)	CTL*	[0x00 to 0xFF/0x02/0]
5-848-003	Web Service	Access Ctrl: Doc.Svr.Print (Lower 4bits)	CTL*	[0x00 to 0xFF/0x00/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-848-004	Web Service	Access Ctrl: udirectory (Lower 4bits)	CTL*	[0x00 to 0xFF/0x00/0]
5-848-007	Web Service	Access Ctrl: Comm. Log Fax(Lower 4bits)	CTL*	[0x00 to 0xFF/0x00/0]
5-848-009	Web Service	Access Ctrl: Job Ctrl (Lower 4bits)	CTL*	[0x00 to 0xFF/0x00/0]
5-848-011	Web Service	Access Ctrl: Devicemanagement(Lower 4bits)	CTL*	[0x00 to 0xFF/0x00/0]
5-848-021	Web Service	Access Ctrl: Delivery (Lower 4bits)	CTL*	[0x00 to 0xFF/0x00/0]
5-848-022	Web Service	Access Ctrl: uadministration (Lower 4bits)	CTL*	[0x00 to 0xFF/0x00/0]
5-848-024	Web Service	Access Ctrl: Log Service (Lower 4bits)	CTL*	[0x00 to 0xFF/0x00/0]
5-848-025	Web Service	Access Ctrl: Rest WebService (Lower 4bits)	CTL*	[0x00 to 0xFF/0x00/0]
5-848-045	Web Service	Reverse Proxy Server Setting(ESA Port)	CTL*	[0x00 to 0xFF/0/1]
5-848-046	Web Service	8080/51443 Port Open Time	CTL*	[0 to 300/60/1]
5-848-099	Web Service	Repository: Download Image Setting	CTL*	[0x00 to 0xFF/0x00/1]
5-848-100	Web Service	Repository: Download Image Max. Size	CTL*	[1 to 2048/2048/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-848-150	Web Service	Log Operation Mode	CTL*	[0 to 9/0/1]
5-848-217	LogTrans	Setting: Timing	CTL*	[0 to 2/0/1] 0: Off 1: Sequential 2: Specified time
5-848-218	SysLogTrans	Setting: Timing	CTL	[0 to 1/0/1]
5-848-220	SysLogTrans	Primary srv port number	CTL	[1 to 65535/80/1]
5-848-221	SysLogTrans	Check Cert	CTL	[0 to 1/0/1]
5-849-001	Installation Date	Display	CTL*	[0 to 0/0/0]
5-849-002	Installation Date	Switch to Print	CTL*	[0 to 1/1/1] 0: No print 1: Print
5-849-003	Installation Date	Total Counter	CTL*	[0 to 99999999/0/1]
5-850-003	Address Book Function	Replacement of Circuit Classifications	CTL	[0 to 0/0/0]
5-851-001	Bluetooth	Mode	CTL*	[0x00 to 0x01/0x00/1]
5-853-001	Stamp Data Download		CTL	[0 to 0/0/0]
5-856-	Remote ROM Update	Local Port	CTL	[0 to 1/0/1] 0: Not permit

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
002				1: Permit
5-858-001	Collect Machine Info	0:OFF 1:ON	CTL	[0 to 1/1/1]
5-858-002	Collect Machine Info	Save To (0:HDD 1:SD)	CTL	[0 to 1/0/1]
5-858-003	Collect Machine Info	Make Log Trace Dir	CTL	[0 to 1/0/0]
5-858-101	Collect Machine Info	Failure Occuring Date	CTL	[0 to 20371212/0/1]
5-858-102	Collect Machine Info	Tracing Days	CTL	[1 to 180/2/1day]
5-858-103	Collect Machine Info	Acquire Fax Address(0:OFF 1:ON)	CTL	[0 to 1/0/1]
5-858-111	Collect Machine Info	Acquire All Info & Logs	CTL	[0 to 1/0/0]
5-858-121	Collect Machine Info	Acquire Configuration Page	CTL	[0 to 1/0/0]
5-858-122	Collect Machine Info	Acquire Font Page	CTL	[0 to 1/0/0]
5-858-123	Collect Machine Info	Acquire Print Setting List	CTL	[0 to 1/0/0]
5-858-124	Collect Machine Info	Acquire Error Log	CTL	[0 to 1/0/0]
5-	Collect Machine Info	Acquire Fax Info	CTL	[0 to 1/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
858-131				
5-858-141	Collect Machine Info	Acquire All Debug Logs	CTL	[0 to 1/0/0]
5-858-142	Collect Machine Info	Acquire Controller Debug Logs Only	CTL	[0 to 1/0/0]
5-858-143	Collect Machine Info	Acquire Engine Debug Logs Only	CTL	[0 to 1/0/0]
5-858-144	Collect Machine Info	Acquire Opepanel Debug Logs Only	CTL	[0 to 1/0/0]
5-858-145	Collect Machine Info	Acquire FCU Debug Logs Only	CTL	[0 to 1/0/0]
5-858-146	Collect Machine Info	Acquire Only Network Packets	CTL	[0 to 1/0/0]
5-860-020	SMTP/POP3/IMAP4	Partial Mail Receive Timeout	CTL*	[1 to 168/72/1hour]
5-860-021	SMTP/POP3/IMAP4	MDN Response RFC2298 Compliance	CTL*	[0 to 1/1/1] 0: No 1: Yes
5-860-022	SMTP/POP3/IMAP4	SMTP Auth. From Field Replacement	CTL*	[0 to 1/0/1] 0: No 1: Yes
5-860-025	SMTP/POP3/IMAP4	SMTP Auth. Direct Setting	CTL*	[0 to 0xff/0x0/1]
5-860-026	SMTP/POP3/IMAP4	S/MIME:MIME Header Setting	CTL*	[0 to 2/0/1] 0: Microsoft Outlook Express standard 1: Internet Draft

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
				standard 2: RFC standard
5-860-028	SMTP/POP3/IMAP4	S/MIME: Authentication Check	CTL*	[0 to 1/0/1] 0: No (No Check) 1: Yes (Check)
5-860-029	SMTP/POP3/IMAP4	SMTP Server 3G Line IP Address	CTL*	[0 to 0xffffffff/0x00]
5-861-201	Account Setting	Send Domain1	CTL	[0 to 0/0/0]
5-861-202	Account Setting	Send Domain2	CTL	[0 to 0/0/0]
5-861-203	Account Setting	Send Domain3	CTL	[0 to 0/0/0]
5-866-001	E-Mail Report	Report Validity	CTL	[0 to 1/0/1] 0: Enable 1: Disable
5-866-005	E-Mail Report	Add Date Field	CTL*	[0 to 1/0/1] 0: Not add 1: Add
5-866-109	E-Mail Report	CounterE-Mail:3G Line Validity	CTL*	[0 to 1/0/1]
5-866-110	E-Mail Report	CounterE-Mail:Validity	CTL*	[0 to 1/0/1]
5-866-111	E-Mail Report	CounterE-Mail:Destination Registration	CTL*	[0 to 0/0/0]
5-866-112	E-Mail Report	CounterE-Mail:Send Test	CTL*	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-866-113	E-Mail Report	CounterE-Mail:Next Send Date	CTL*	[0 to 0/0/0]
5-866-114	E-Mail Report	CounterE-Mail:Send Date Setting	CTL*	[0 to 31/0/1]
5-866-115	E-Mail Report	CounterE-Mail:Send Time Setting	CTL*	[0 to 2359/0/1]
5-866-121	E-Mail Report	CounterE-Mail:Destination1	CTL*	[0 to 0/0/0]
5-866-122	E-Mail Report	CounterE-Mail:Destination2	CTL*	[0 to 0/0/0]
5-866-123	E-Mail Report	CounterE-Mail:Destination3	CTL*	[0 to 0/0/0]
5-870-001	Common KeyInfo Writing	Writing	CTL	[0 to 1/0/1]
5-870-003	Common KeyInfo Writing	Initialize	CTL	[0 to 1/0/1]
5-870-004	Common Key Info Writing	Writing: 2048bit	CTL	[0 to 1/0/1]
5-873-001	SDCardAppliMove	MoveExec	CTL	[0 to 0/0/1]
5-873-002	SDCardAppliMove	UndoExec	CTL	[0 to 0/0/1]
5-875-001	SC Auto Reboot	Reboot Setting	CTL*	[0 to 1/0/1] 0: Reboot 1: Not reboot

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-875-002	SC Auto Reboot	Reboot Type	CTL*	[0 to 1/1/1] 0: Manual reboot 1: Auto reboot
5-878-001	Option Setup	Data Overwrite Security	CTL	[0 to 0/0/0]
5-878-002	Option Setup	HDD Encryption	CTL	[0 to 0/0/0]
5-878-004	Option Setup	OCR Dictionary	CTL	[0 to 0/0/0]
5-881-001	Fixed Phrase Block Erasing		CTL	[0 to 0/0/0]
5-885-020	Set WIM Function	DocSvr Acc Ctrl	CTL*	[0x00 to 0xFF/0x00/0] 0: OFF 1: ON
5-885-050	Set WIM Function	DocSvr Format	CTL*	[0 to 2/0/1] 0: Thumbnail 1: Icon 2: Details
5-885-051	Set WIM Function	DocSvr Trans	CTL*	[5 to 20/10/1]
5-885-100	Set WIM Function	Set Signature	CTL*	[0 to 2/0/1] 0: Setting for each e-mail 1: Signature for all 2: No signature
5-885-101	Set WIM Function	Set Encrypsion	CTL*	[0 to 1/0/1]
5-885-200	Set WIM Function	Detect Mem Leak	CTL*	[0x00 to 0xFF/0x00/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-885-205	Set WIM Function	MonitorDisable	CTL*	[0 to 1/0/1] 0: Not prohibited 1: Prohibited
5-886-100	Farm Update Setting	Skip Version Check	CTL	[0 to 1/0/1]
5-886-101	Farm Update Setting	Skip LR Check	CTL	[0 to 1/0/1] 0: Not encrypted 1: Encryption
5-886-111	Farm Update Setting	Auto Update Setting	CTL*	[0 to 1/0/1]
5-886-112	Farm Update Setting	Auto Update Prohibit Term Setting	CTL*	[0 to 1/1/1]
5-886-113	Farm Update Setting	Auto Update Prohibit Start hour	CTL*	[0 to 23/9/1hour]
5-886-114	Farm Update Setting	Auto Update Prohibit End hour	CTL*	[0 to 23/17/1hour]
5-886-115	Farm Update Setting	SFU Auto Download Setting	CTL*	[0 to 1/0/1]
5-886-116	Farm Update Setting	Auto Update Next Date	CTL*	[0 to 0/0/0]
5-886-117	Farm Update Setting	Auto Update Retry Interval Hour	CTL*	[1 to 24/1/1hour]
5-886-120	Farm Update Setting	Auto Update Prohibit Day of Week Setting	CTL*	[0 to 255/0/1]
5-886-201	Farm Update Setting	Restore Date	CTL*	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-886-202	Farm Update Setting	Save Old Version List	CTL	[0 to 0/0/0]
5-887-001	SD GetCounter		CTL	[0 to 0/0/0]
5-888-001	Personal Information Protect		CTL*	[0 to 1/0/1] 0: Disable 1: Enable
5-893-001	SDK Application Counter	SDK-1	CTL	[0 to 0/0/0]
5-893-002	SDK Application Counter	SDK-2	CTL	[0 to 0/0/0]
5-893-003	SDK Application Counter	SDK-3	CTL	[0 to 0/0/0]
5-893-004	SDK Application Counter	SDK-4	CTL	[0 to 0/0/0]
5-893-005	SDK Application Counter	SDK-5	CTL	[0 to 0/0/0]
5-893-006	SDK Application Counter	SDK-6	CTL	[0 to 0/0/0]
5-893-007	SDK Application Counter	SDK-7	CTL	[0 to 0/0/0]
5-893-008	SDK Application Counter	SDK-8	CTL	[0 to 0/0/0]
5-893-009	SDK Application Counter	SDK-9	CTL	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-893-010	SDK Application Counter	SDK-10	CTL	[0 to 0/0/0]
5-893-011	SDK Application Counter	SDK-11	CTL	[0 to 0/0/0]
5-893-012	SDK Application Counter	SDK-12	CTL	[0 to 0/0/0]
5-895-001	Application invalidation	Printer	CTL	[0 to 1/0/0]
5-895-002	Application invalidation	Scanner	CTL	[0 to 1/0/0]
5-907-001	Plug & Play Maker/Model Name		CTL*	[0 to 255/0/1]
5-913-002	Switchover Permission Time	Print Application Timer	CTL*	[0 to 30/3/1]
5-967-001	Copy Server : Set Function	(0:ON 1:OFF)	CTL*	[0 to 1/0/1] 0: ON 1: OFF
5-973-101	User Stamp Registration	Frame deletion setting	CTL*	[0 to 3/0/1]
5-985-001	Device Setting	On Board NIC	CTL	[0 to 2/0/1] 0: Disable 1: Enable 2: Enable (Limited)
5-985-002	Device Setting	On Board USB	CTL	[0 to 1/0/1] 0: Disable 1: Enable
5-990-	SP Print Mode	All (Data List)	CTL	[0 to 255/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
001				
5-990-002	SP Print Mode	SP (Mode Data List)	CTL	[0 to 255/0/0]
5-990-003	SP Print Mode	User Program	CTL	[0 to 255/0/0]
5-990-004	SP Print Mode	Logging Data	CTL	[0 to 255/0/0]
5-990-005	SP Print Mode	Diagnostic Report	CTL	[0 to 255/0/0]
5-990-006	SP Print Mode	Non-Default	CTL	[0 to 255/0/0]
5-990-007	SP Print Mode	NIB Summary	CTL	[0 to 0/0/0]
5-990-008	SP Print Mode	Capture Log	CTL	[0 to 255/0/1]
5-990-021	SMC Print	Copier User Program	CTL	[0 to 0/0/0]
5-990-022	SP Print Mode	Scanner SP	CTL	[0 to 255/0/0]
5-990-023	SP Print Mode	Scanner User Program	CTL	[0 to 255/0/0]
5-990-024	SP Print Mode	SDK/J Summary	CTL	[0 to 0/0/0]
5-	SP Print Mode	SDK/J Application Info	CTL	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
990-025				
5-990-026	SP Print Mode	Printer SP	CTL	[0 to 255/0/0]
5-990-027	SP Print Mode	SmartOperationPanel SP	CTL	[0 to 255/0/0]
5-990-028	SP Print Mode	SmartOperationPanel UP	CTL	[0 to 255/0/0]
5-992-001	SP Text Mode	All (Data List)	CTL	[0 to 255/0/0]
5-992-002	SP Text Mode	SP (Mode Data List)	CTL	[0 to 255/0/0]
5-992-003	SP Text Mode	User Program	CTL	[0 to 255/0/0]
5-992-004	SP Text Mode	Logging Data	CTL	[0 to 255/0/0]
5-992-005	SP Text Mode	Diagnostic Report	CTL	[0 to 255/0/0]
5-992-006	SP Text Mode	Non-Default	CTL	[0 to 255/0/0]
5-992-007	SP Text Mode	NIB Summary	CTL	[0 to 0/0/0]
5-992-008	SP Text Mode	Capture Log	CTL	[0 to 255/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-992-021	SP Text Mode	Copier User Program	CTL	[0 to 0/0/0]
5-992-022	SP Text Mode	Scanner SP	CTL	[0 to 0/0/0]
5-992-023	SP Text Mode	Scanner User Program	CTL	[0 to 0/0/0]
5-992-024	SP Text Mode	SDK/J Summary	CTL	[0 to 0/0/0]
5-992-025	SP Text Mode	SDK/J Application Info	CTL	[0 to 0/0/0]
5-992-026	SP Text Mode	Printer SP	CTL	[0 to 255/0/0]
5-992-027	SP Text Mode	SmartOperationPanel SP	CTL	[0 to 255/0/0]
5-992-028	SP Text Mode	SmartOperationPanel UP	CTL	[0 to 255/0/0]
5-993-001	SP Text Mode(Privacy)	All (Data List)	CTL	[0 to 255/0/0]
5-993-002	SP Text Mode(Privacy)	SP (Mode Data List)	CTL	[0 to 255/0/0]
5-993-003	SP Text Mode(Privacy)	User Program	CTL	[0 to 255/0/0]
5-993-004	SP Text Mode(Privacy)	Logging Data	CTL	[0 to 255/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
5-993-005	SP Text Mode(Privacy)	Diagnostic Report	CTL	[0 to 255/0/0]
5-993-006	SP Text Mode(Privacy)	Non-Default	CTL	[0 to 255/0/0]
5-993-007	SP Text Mode(Privacy)	NIB Summary	CTL	[0 to 0/0/0]
5-993-008	SP Text Mode(Privacy)	Capture Log	CTL	[0 to 255/0/1]
5-993-021	SP Text Mode(Privacy)	Copier User Program	CTL	[0 to 0/0/0]
5-993-022	SP Text Mode(Privacy)	Scanner SP	CTL	[0 to 255/0/0]
5-993-023	SP Text Mode(Privacy)	Scanner User Program	CTL	[0 to 255/0/0]
5-993-024	SP Text Mode(Privacy)	SDK/J Summary	CTL	[0 to 0/0/0]
5-993-025	SP Text Mode(Privacy)	SDK/J Application Info	CTL	[0 to 0/0/0]
5-993-026	SP Text Mode(Privacy)	Printer SP	CTL	[0 to 255/0/0]
5-993-027	SP Text Mode(Privacy)	SmartOperationPanel SP	CTL	[0 to 255/0/0]
5-993-028	SP Text Mode(Privacy)	SmartOperationPanel UP	CTL	[0 to 255/0/0]

SP6-XXX (Peripherals)

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
6-006-001	ADF Adjustment	Side-to-Side Regist: Front	ENG*	[-0.3 to 0.3/0/0.1mm]
6-006-002	ADF Adjustment	Side-to-Side Regist: Rear	ENG*	[-0.3 to 0.3/0/0.1mm]
6-026-001	ADF Timing Adjustment	Leading Edge Start Timing: Front	ENG	[-32 to 32/0/1pulse]
6-026-002	ADF Timing Adjustment	Leading Edge Start Timing: Rear	ENG	[-32 to 32/0/1pulse]
6-026-003	ADF Timing Adjustment	Leading Edge End Timing: Front	ENG	[-32 to 32/0/1pulse]
6-026-004	ADF Timing Adjustment	Leading Edge End Timing: Rear	ENG	[-32 to 32/0/1pulse]
6-027-001	ADF Adjustment Scan Speed		ENG	[-0.25 to 0.25/0/0.1%]
6-132-003	Jogger Fence Fine Adj.	A4 SEF	ENG*	[-0.1 to 0.1/0/0.1mm]
6-132-005	Jogger Fence Fine Adj.	B5 SEF	ENG*	[-0.1 to 0.1/0/0.1mm]
6-132-008	Jogger Fence Fine Adj.	LG SEF	ENG*	[-0.1 to 0.1/0/0.1mm]
6-132-009	Jogger Fence Fine Adj.	LT SEF	ENG*	[-0.1 to 0.1/0/0.1mm]
6-132-012	Jogger Fence Fine Adj.	Other	ENG*	[-0.1 to 0.1/0/0.1mm]
6-137-001	Finisher Free Run	Free Run1	ENG	[0 to 1/0/1]
6-137-002	Finisher Free Run	Free Run2	ENG	[0 to 1/0/1]
6-137-003	Finisher Free Run	Free Run3	ENG	[0 to 1/0/1]
6-137-004	Finisher Free Run	Free Run4	ENG	[0 to 1/0/1]
6-138-001	FIN Stop Mode Setting		ENG	[0 to 1/0/1] 0: Disable 1: Enable

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
6-145-001	FIN Input Check	Entrance Sensor	ENG	[0 to 1/0/1]
6-145-002	FIN Input Check	Paper Exit Sensor	ENG	[0 to 1/0/1]
6-145-003	FIN Input Check	Jogger HP Sensor	ENG	[0 to 1/0/1]
6-145-004	FIN Input Check	Shift Roller HP SN	ENG	[0 to 1/0/1]
6-145-005	FIN Input Check	Positioning Roller HP SN	ENG	[0 to 1/0/1]
6-145-006	FIN Input Check	Ext Guide Plate HP SN	ENG	[0 to 1/0/1]
6-145-007	FIN Input Check	Staple Tray Paper SN	ENG	[0 to 1/0/1]
6-145-008	FIN Input Check	Tray Paper Height SN	ENG	[0 to 1/0/1]
6-145-009	FIN Input Check	Tray Overflow SN	ENG	[0 to 1/0/1]
6-145-010	FIN Input Check	Staple HP Sensor	ENG	[0 to 1/0/1]
6-145-011	FIN Input Check	Staple Near End SN	ENG	[0 to 1/0/1]
6-145-012	FIN Input Check	Self Priming Sensor	ENG	[0 to 1/0/1]
6-145-013	FIN Input Check	Front Door SW	ENG	[0 to 1/0/1]
6-146-001	FIN Output Check	Transport Motor	ENG	[0 to 1/0/1]
6-146-002	FIN Output Check	Paper Ext Motor	ENG	[0 to 1/0/1]
6-146-003	FIN Output Check	Jogger Motor	ENG	[0 to 1/0/1]
6-146-004	FIN Output Check	Shift Roller Motor	ENG	[0 to 1/0/1]
6-146-005	FIN Output Check	Positioning Motor	ENG	[0 to 1/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
6-146-006	FIN Output Check	Ext Guide Plate Motor	ENG	[0 to 1/0/1]
6-146-007	FIN Output Check	Tray Lift Motor	ENG	[0 to 1/0/1]
6-146-008	FIN Output Check	Stapler Motor	ENG	[0 to 1/0/1]
6-146-009	FIN Output Check	Paper Height SOL	ENG	[0 to 1/0/1]

SP7-XXX (Data Log) - Engine

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
7-621-002	PM Counter Pages	#Drum Unit K	ENG*	[0 to 99999999/0/1page]
7-621-003	PM Counter Pages	#Development Unit K	ENG*	[0 to 99999999/0/1page]
7-621-093	PM Counter Pages	#Paper Transfer Roller	ENG*	[0 to 99999999/0/1page]
7-621-115	PM Counter Pages	#Fusing Unit	ENG*	[0 to 99999999/0/1page]
7-621-146	PM Counter Pages	#Paper Feed Roller	ENG*	[0 to 99999999/0/1sheet]
7-621-147	PM Counter Pages	#Pickup Roller	ENG*	[0 to 99999999/0/1sheet]
7-621-148	PM Counter Pages	#Separation Roller	ENG*	[0 to 99999999/0/1sheet]
7-621-206	PM Counter Pages	#DF Paper Feed Roller Unit	ENG*	[0 to 99999999/0/1sheet]
7-621-207	PM Counter Pages	#DF Separation Pad Unit	ENG*	[0 to 99999999/0/1sheet]
7-622-002	PM Counter Clear	#Drum Unit K	ENG	[0 to 1/0/1]
7-622-003	PM Counter Clear	#Development Unit K	ENG	[0 to 1/0/1]
7-622-093	PM Counter Clear	#Paper Transfer Roller	ENG	[0 to 1/0/1]
7-622-115	PM Counter Clear	#Fusing Unit	ENG	[0 to 1/0/1]
7-622-146	PM Counter Clear	#Paper Feed Roller	ENG	[0 to 1/0/1]
7-622-147	PM Counter Clear	#Pickup Roller	ENG	[0 to 1/0/1]
7-622-148	PM Counter Clear	#Separation Roller	ENG	[0 to 1/0/1]
7-622-206	PM Counter Clear	#DF Paper Feed Roller Unit	ENG	[0 to 1/0/1]
7-622-	PM Counter Clear	#DF Separation Pad Unit	ENG	[0 to 1/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
207				
7-625-002	PreCounter1 Pages	#Drum Unit K	ENG*	[0 to 99999999/0/1page]
7-625-003	PreCounter1 Pages	#Development Unit K	ENG*	[0 to 99999999/0/1page]
7-625-093	PreCounter1 Pages	#Paper Transfer Roller	ENG*	[0 to 99999999/0/1page]
7-625-115	PreCounter1 Pages	#Fusing Unit	ENG*	[0 to 99999999/0/1page]
7-625-146	PreCounter1 Pages	#Paper Feed Roller	ENG*	[0 to 99999999/0/1sheet]
7-625-147	PreCounter1 Pages	#Pickup Roller	ENG*	[0 to 99999999/0/1sheet]
7-625-148	PreCounter1 Pages	#Separation Roller	ENG*	[0 to 99999999/0/1sheet]
7-625-206	PreCounter1 Pages	#DF Paper Feed Roller Unit	ENG*	[0 to 99999999/0/1sheet]
7-625-207	PreCounter1 Pages	#DF Separation Pad Unit	ENG*	[0 to 99999999/0/1sheet]
7-626-002	PreCounter2 Pages	#Drum Unit K	ENG*	[0 to 99999999/0/1page]
7-626-003	PreCounter2 Pages	#Development Unit K	ENG*	[0 to 99999999/0/1page]
7-626-093	PreCounter2 Pages	#Paper Transfer Roller	ENG*	[0 to 99999999/0/1page]
7-626-115	PreCounter2 Pages	#Fusing Unit	ENG*	[0 to 99999999/0/1page]
7-626-146	PreCounter2 Pages	#Paper Feed Roller	ENG*	[0 to 99999999/0/1sheet]
7-626-147	PreCounter2 Pages	#Pickup Roller	ENG*	[0 to 99999999/0/1sheet]
7-626-148	PreCounter2 Pages	#Separation Roller	ENG*	[0 to 99999999/0/1sheet]
7-626-206	PreCounter2 Pages	#DF Paper Feed Roller Unit	ENG*	[0 to 99999999/0/1sheet]
7-626-	PreCounter2	#DF Separation Pad Unit	ENG*	[0 to 99999999/0/1sheet]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
207	Pages			
7-801-002	ROM Info Display	P/#: Engine	ENG	[0 to 0/0/0]
7-801-007	ROM Info Display	P/#: Finisher	ENG	[0 to 0/0/0]
7-801-009	ROM Info Display	P/#: PFU1	ENG	[0 to 0/0/0]
7-801-015	ROM Info Display	P/#: IPU	ENG	[0 to 0/0/0]
7-801-019	ROM Info Display	P/#: PFU2	ENG	[0 to 0/0/0]
7-801-040	ROM Info Display	P/#: PFU3	ENG	[0 to 0/0/0]
7-801-041	ROM Info Display	P/#: PFU4	ENG	[0 to 0/0/0]
7-801-102	ROM Info Display	Version: Engine	ENG	[0 to 0/0/0]
7-801-107	ROM Info Display	Version: Finisher	ENG	[0 to 0/0/0]
7-801-109	ROM Info Display	Version:PFU1	ENG	[0 to 0/0/0]
7-801-115	ROM Info Display	Version: IPU	ENG	[0 to 0/0/0]
7-801-119	ROM Info Display	Version:PFU2	ENG	[0 to 0/0/0]
7-801-140	ROM Info Display	Version:PFU3	ENG	[0 to 0/0/0]
7-801-141	ROM Info Display	Version:PFU4	ENG	[0 to 0/0/0]
7-853-002	Replace Counter	#Drum Unit K	ENG*	[0 to 255/0/1]
7-853-003	Replace Counter	#Development Unit K	ENG*	[0 to 255/0/1]
7-853-093	Replace Counter	#Paper Transfer Roller	ENG*	[0 to 255/0/1]
7-853-	Replace Counter	#Fusing Unit	ENG*	[0 to 255/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
115				
7-853-146	Replace Counter	#Paper Feed Roller	ENG*	[0 to 255/0/1]
7-853-147	Replace Counter	#Pickup Roller	ENG*	[0 to 255/0/1]
7-853-148	Replace Counter	#Separation Roller	ENG*	[0 to 255/0/1]
7-853-206	Replace Counter	#DF Paper Feed Roller Unit	ENG*	[0 to 255/0/1]
7-853-207	Replace Counter	#DF Separation Pad Unit	ENG*	[0 to 255/0/1]
7-935-001	Toner Bottle Log	SerialNo.	ENG*	[0 to 255/0/1]
7-954-002	Counter: Pages(%)	#Drum Unit K	ENG*	[0 to 255/0/1%]
7-954-003	Counter: Pages(%)	#Development Unit K	ENG*	[0 to 255/0/1%]
7-954-093	Counter: Pages(%)	#Paper Transfer Roller	ENG*	[0 to 255/0/1%]
7-954-115	Counter: Pages(%)	#Fusing Unit	ENG*	[0 to 255/0/1%]
7-954-146	Counter: Pages(%)	#Paper Feed Roller	ENG*	[0 to 255/0/1%]
7-954-147	Counter: Pages(%)	#Pickup Roller	ENG*	[0 to 255/0/1%]
7-954-148	Counter: Pages(%)	#Separation Roller	ENG*	[0 to 255/0/1%]
7-954-206	Counter: Pages(%)	#DF Paper Feed Roller Unit	ENG*	[0 to 255/0/1%]
7-954-207	Counter: Pages(%)	#DF Separation Pad Unit	ENG*	[0 to 255/0/1%]
7-979-001	CPU Reset Log	Data1	ENG*	[0x00 to 0xFF/0x00/1]
7-979-002	CPU Reset Log	Data2	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-	CPU Reset Log	Data3	ENG*	[0x0000 to

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
003				0xFFFF/0x0000/1]
7-979-004	CPU Reset Log	Data4	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-005	CPU Reset Log	Data5	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-006	CPU Reset Log	Data6	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-007	CPU Reset Log	Data7	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-008	CPU Reset Log	Data8	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-009	CPU Reset Log	Data9	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-010	CPU Reset Log	Data10	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-011	CPU Reset Log	Data11	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-012	CPU Reset Log	Data12	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-013	CPU Reset Log	Data13	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-014	CPU Reset Log	Data14	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-015	CPU Reset Log	Data15	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-016	CPU Reset Log	Data16	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-017	CPU Reset Log	Data17	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-018	CPU Reset Log	Data18	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-019	CPU Reset Log	Data19	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-020	CPU Reset Log	Data20	ENG*	[0x0000 to 0xFFFF/0x0000/1]
7-979-	CPU Reset Log	Data21	ENG*	[0x0000 to

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
021				0xFFFF/0x0000/1]

SP7-XXX (Data Log) - Controller

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
7-334-001	Function Use Count	Original Orientation	CTL*	[0 to 0xffffffff/0/0]
7-334-002	Function Use Count	Reverse Orientation	CTL*	[0 to 0xffffffff/0/0]
7-334-003	Function Use Count	All Job Stop	CTL*	[0 to 0xffffffff/0/0]
7-334-004	Function Use Count	Copy Quality	CTL*	[0 to 0xffffffff/0/0]
7-334-005	Function Use Count	Mag. FixRatio	CTL*	[0 to 0xffffffff/0/0]
7-334-006	Function Use Count	Mag. Ratio	CTL*	[0 to 0xffffffff/0/0]
7-334-007	Function Use Count	Size Mag.	CTL*	[0 to 0xffffffff/0/0]
7-334-008	Function Use Count	Direct. Mag.	CTL*	[0 to 0xffffffff/0/0]
7-334-009	Function Use Count	Dir. Size Mag.	CTL*	[0 to 0xffffffff/0/0]
7-334-010	Function Use Count	Auto Reduce/Enlarge	CTL*	[0 to 0xffffffff/0/0]
7-334-011	Function Use Count	Create Margin	CTL*	[0 to 0xffffffff/0/0]
7-334-012	Function Use Count	OneSideDpx	CTL*	[0 to 0xffffffff/0/0]
7-334-013	Function Use Count	Cover	CTL*	[0 to 0xffffffff/0/0]
7-334-014	Function Use Count	Chapter	CTL*	[0 to 0xffffffff/0/0]
7-334-015	Function Use Count	SlipSheet	CTL*	[0 to 0xffffffff/0/0]
7-334-016	Function Use Count	EraseCenter	CTL*	[0 to 0xffffffff/0/0]
7-334-017	Function Use Count	EraseFrame	CTL*	[0 to 0xffffffff/0/0]
7-334-	Function Use Count	MarginAdj	CTL*	[0 to 0xffffffff/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
018				
7-334-019	Function Use Count	Centering	CTL*	[0 to 0xffffffff/0/0]
7-334-021	Function Use Count	Repeat	CTL*	[0 to 0xffffffff/0/0]
7-334-024	Function Use Count	NumBeringStmp	CTL*	[0 to 0xffffffff/0/0]
7-334-025	Function Use Count	Stmp	CTL*	[0 to 0xffffffff/0/0]
7-334-026	Function Use Count	UserStmp	CTL*	[0 to 0xffffffff/0/0]
7-334-027	Function Use Count	DateStmp	CTL*	[0 to 0xffffffff/0/0]
7-334-028	Function Use Count	PageStmp	CTL*	[0 to 0xffffffff/0/0]
7-334-029	Function Use Count	CharStmp	CTL*	[0 to 0xffffffff/0/0]
7-334-030	Function Use Count	CharNumStmp	CTL*	[0 to 0xffffffff/0/0]
7-334-032	Function Use Count	ReserveCopy	CTL*	[0 to 0xffffffff/0/0]
7-334-033	Function Use Count	IntCopy	CTL*	[0 to 0xffffffff/0/0]
7-334-034	Function Use Count	ProgrameCopy	CTL*	[0 to 0xffffffff/0/0]
7-334-035	Function Use Count	CheckCopy	CTL*	[0 to 0xffffffff/0/0]
7-334-036	Function Use Count	BackNum	CTL*	[0 to 0xffffffff/0/0]
7-334-042	Function Use Count	Accessibility	CTL*	[0 to 0xffffffff/0/0]
7-335-001	Total Job Count	LegacyCopy	CTL*	[0 to 0xffffffff/0/0]
7-335-002	Total Job Count	SmartCopy	CTL*	[0 to 0xffffffff/0/0]
7-335-	Total Job Count	SmartCopy FullHouse	CTL*	[0 to 0xffffffff/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
003				
7-335-004	Total Job Count	SimpleCopy	CTL*	[0 to 0xffffffff/0/0]
7-335-005	Total Job Count	OtherCopy	CTL*	[0 to 0xffffffff/0/0]
7-401-001	Total SC	SC Counter	CTL*	[0 to 65535/0/0]
7-401-002	Total SC	Total SC Counter	CTL*	[0 to 65535/0/0]
7-403-001	SC History	Latest	CTL*	[0 to 0/0/0]
7-403-002	SC History	Latest 1	CTL*	[0 to 0/0/0]
7-403-003	SC History	Latest 2	CTL*	[0 to 0/0/0]
7-403-004	SC History	Latest 3	CTL*	[0 to 0/0/0]
7-403-005	SC History	Latest 4	CTL*	[0 to 0/0/0]
7-403-006	SC History	Latest 5	CTL*	[0 to 0/0/0]
7-403-007	SC History	Latest 6	CTL*	[0 to 0/0/0]
7-403-008	SC History	Latest 7	CTL*	[0 to 0/0/0]
7-403-009	SC History	Latest 8	CTL*	[0 to 0/0/0]
7-403-010	SC History	Latest 9	CTL*	[0 to 0/0/0]
7-404-001	Software Error History	Latest	CTL*	[0 to 0/0/0]
7-404-002	Software Error History	Latest 1	CTL*	[0 to 0/0/0]
7-404-003	Software Error History	Latest 2	CTL*	[0 to 0/0/0]
7-404-	Software Error History	Latest 3	CTL*	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
004				
7-404-005	Software Error History	Latest 4	CTL*	[0 to 0/0/0]
7-404-006	Software Error History	Latest 5	CTL*	[0 to 0/0/0]
7-404-007	Software Error History	Latest 6	CTL*	[0 to 0/0/0]
7-404-008	Software Error History	Latest 7	CTL*	[0 to 0/0/0]
7-404-009	Software Error History	Latest 8	CTL*	[0 to 0/0/0]
7-404-010	Software Error History	Latest 9	CTL*	[0 to 0/0/0]
7-502-001	Total Paper Jam	Jam Counter	CTL*	[0 to 65535/0/0]
7-502-002	Total Paper Jam	Total Jam Counter	CTL*	[0 to 65535/0/0]
7-503-001	Total Original Jam	Original Jam Counter	CTL*	[0 to 65535/0/0]
7-503-002	Total Original Jam	Total Original Jam Counter	CTL*	[0 to 65535/0/0]
7-504-001	Paper Jam Location	At Power On	CTL*	[0 to 65535/0/0]
7-504-010	Paper Jam Location	Process Package Not Ready	CTL*	[0 to 65535/0/0]
7-504-011	Paper Jam Location	Transport Package Not Ready	CTL*	[0 to 65535/0/0]
7-504-012	Paper Jam Location	Drive Constantly On	CTL*	[0 to 65535/0/0]
7-504-013	Paper Jam Location	No Duplex Feed Request From CTL	CTL*	[0 to 65535/0/0]
7-504-014	Paper Jam Location	Fusing Package Not Ready	CTL*	[0 to 65535/0/0]
7-504-015	Paper Jam Location	2nd Paper Feed Timeout	CTL*	[0 to 65535/0/0]
7-504-	Paper Jam Location	Rear Cover Opened	CTL*	[0 to 65535/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
025				
7-504-026	Paper Jam Location	Top Cover Opened	CTL*	[0 to 65535/0/0]
7-504-027	Paper Jam Location	Dup. Circ. Sheet No. Limit Over	CTL*	[0 to 65535/0/0]
7-504-028	Paper Jam Location	Tray 1: On	CTL*	[0 to 65535/0/0]
7-504-029	Paper Jam Location	Duplex: On	CTL*	[0 to 65535/0/0]
7-504-030	Paper Jam Location	Bypass: On	CTL*	[0 to 65535/0/0]
7-504-031	Paper Jam Location	Double Feed Tray 1	CTL*	[0 to 65535/0/0]
7-504-032	Paper Jam Location	Double Feed Tray 2	CTL*	[0 to 65535/0/0]
7-504-033	Paper Jam Location	Double Feed Tray 3	CTL*	[0 to 65535/0/0]
7-504-034	Paper Jam Location	Double Feed Tray 4	CTL*	[0 to 65535/0/0]
7-504-035	Paper Jam Location	Double Feed Tray 5	CTL*	[0 to 65535/0/0]
7-504-036	Paper Jam Location	Double Feed Duplex	CTL*	[0 to 65535/0/0]
7-504-037	Paper Jam Location	Double Feed Bypass	CTL*	[0 to 65535/0/0]
7-504-038	Paper Jam Location	Feed 2 sensor: On (Cassette3)	CTL*	[0 to 65535/0/0]
7-504-039	Paper Jam Location	Feed 2 sensor: On (Cassette4)	CTL*	[0 to 65535/0/0]
7-504-040	Paper Jam Location	Feed 2 sensor: On (Cassette5)	CTL*	[0 to 65535/0/0]
7-504-041	Paper Jam Location	Feed 2 sensor: Off (Cassette3)	CTL*	[0 to 65535/0/0]
7-504-042	Paper Jam Location	Feed 2 sensor: Off (Cassette4)	CTL*	[0 to 65535/0/0]
7-504-	Paper Jam Location	Feed 2 sensor: Off	CTL*	[0 to 65535/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
043		(Cassette5)		
7-504-044	Paper Jam Location	Feed 3 sensor: On (Cassette4)	CTL*	[0 to 65535/0/0]
7-504-045	Paper Jam Location	Feed 3 sensor: On (Cassette5)	CTL*	[0 to 65535/0/0]
7-504-046	Paper Jam Location	Feed 3 sensor: Off (Cassette4)	CTL*	[0 to 65535/0/0]
7-504-047	Paper Jam Location	Feed 3 sensor: Off (Cassette5)	CTL*	[0 to 65535/0/0]
7-504-048	Paper Jam Location	Feed 4 sensor: On (Cassette5)	CTL*	[0 to 65535/0/0]
7-504-049	Paper Jam Location	Feed 4 sensor: Off (Cassette5)	CTL*	[0 to 65535/0/0]
7-504-050	Paper Jam Location	Regist Sensor: On (Cassette2)	CTL*	[0 to 65535/0/0]
7-504-051	Paper Jam Location	Regist Sensor: On (Cassette3)	CTL*	[0 to 65535/0/0]
7-504-052	Paper Jam Location	Regist Sensor: On (Cassette4)	CTL*	[0 to 65535/0/0]
7-504-053	Paper Jam Location	Regist Sensor: On (Cassette5)	CTL*	[0 to 65535/0/0]
7-504-054	Paper Jam Location	Regist Sensor: Off (Cassette2)	CTL*	[0 to 65535/0/0]
7-504-055	Paper Jam Location	Regist Sensor: Off (Cassette3)	CTL*	[0 to 65535/0/0]
7-504-056	Paper Jam Location	Regist Sensor: Off (Cassette4)	CTL*	[0 to 65535/0/0]
7-504-057	Paper Jam Location	Regist Sensor: Off (Cassette5)	CTL*	[0 to 65535/0/0]
7-504-058	Paper Jam Location	Rear Regist Sen: On (Cassette1)	CTL*	[0 to 65535/0/0]
7-504-059	Paper Jam Location	Rear Regist Sen: On (Cassette2)	CTL*	[0 to 65535/0/0]
7-504-060	Paper Jam Location	Rear Regist Sen: On (Cassette3)	CTL*	[0 to 65535/0/0]
7-504-	Paper Jam Location	Rear Regist Sen: On	CTL*	[0 to 65535/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
061		(Cassette4)		
7-504-062	Paper Jam Location	Rear Regist Sen: On (Cassette5)	CTL*	[0 to 65535/0/0]
7-504-063	Paper Jam Location	Rear Regist Sen: On (Duplex)	CTL*	[0 to 65535/0/0]
7-504-064	Paper Jam Location	Rear Regist Sen: On (Bypass)	CTL*	[0 to 65535/0/0]
7-504-065	Paper Jam Location	Rear Regist Sen: Off (Cassette1)	CTL*	[0 to 65535/0/0]
7-504-066	Paper Jam Location	Rear Regist Sen: Off (Cassette2)	CTL*	[0 to 65535/0/0]
7-504-067	Paper Jam Location	Rear Regist Sen: Off (Cassette3)	CTL*	[0 to 65535/0/0]
7-504-068	Paper Jam Location	Rear Regist Sen: Off (Cassette4)	CTL*	[0 to 65535/0/0]
7-504-069	Paper Jam Location	Rear Regist Sen: Off (Cassette5)	CTL*	[0 to 65535/0/0]
7-504-070	Paper Jam Location	Rear Regist Sen: Off (Duplex)	CTL*	[0 to 65535/0/0]
7-504-071	Paper Jam Location	Rear Regist Sen: Off (Bypass)	CTL*	[0 to 65535/0/0]
7-504-072	Paper Jam Location	Output Sensor: On (Cassette1)	CTL*	[0 to 65535/0/0]
7-504-073	Paper Jam Location	Output Sensor: On (Cassette2)	CTL*	[0 to 65535/0/0]
7-504-074	Paper Jam Location	Output Sensor: On (Cassette3)	CTL*	[0 to 65535/0/0]
7-504-075	Paper Jam Location	Output Sensor: On (Cassette4)	CTL*	[0 to 65535/0/0]
7-504-076	Paper Jam Location	Output Sensor: On (Cassette5)	CTL*	[0 to 65535/0/0]
7-504-077	Paper Jam Location	Output Sensor: On (Duplex)	CTL*	[0 to 65535/0/0]
7-504-078	Paper Jam Location	Output Sensor: On (Bypass)	CTL*	[0 to 65535/0/0]
7-504-	Paper Jam Location	Output Sensor: Off	CTL*	[0 to 65535/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
079		(Cassette1)		
7-504-080	Paper Jam Location	Output Sensor: Off (Cassette2)	CTL*	[0 to 65535/0/0]
7-504-081	Paper Jam Location	Output Sensor: Off (Cassette3)	CTL*	[0 to 65535/0/0]
7-504-082	Paper Jam Location	Output Sensor: Off (Cassette4)	CTL*	[0 to 65535/0/0]
7-504-083	Paper Jam Location	Output Sensor: Off (Cassette5)	CTL*	[0 to 65535/0/0]
7-504-084	Paper Jam Location	Output Sensor: Off (Duplex)	CTL*	[0 to 65535/0/0]
7-504-085	Paper Jam Location	Output Sensor: Off (Bypass)	CTL*	[0 to 65535/0/0]
7-504-086	Paper Jam Location	Duplex Trans1 Sen: On (Casse1)	CTL*	[0 to 65535/0/0]
7-504-087	Paper Jam Location	Duplex Trans1 Sen: On (Casse2)	CTL*	[0 to 65535/0/0]
7-504-088	Paper Jam Location	Duplex Trans1 Sen: On (Casse3)	CTL*	[0 to 65535/0/0]
7-504-089	Paper Jam Location	Duplex Trans1 Sen: On (Casse4)	CTL*	[0 to 65535/0/0]
7-504-090	Paper Jam Location	Duplex Trans1 Sen: On (Casse5)	CTL*	[0 to 65535/0/0]
7-504-091	Paper Jam Location	Duplex Trans1 Sen: On (Bypass)	CTL*	[0 to 65535/0/0]
7-504-092	Paper Jam Location	Duplex Trans2 Sen: On (Casse1)	CTL*	[0 to 65535/0/0]
7-504-093	Paper Jam Location	Duplex Trans2 Sen: On (Casse2)	CTL*	[0 to 65535/0/0]
7-504-094	Paper Jam Location	Duplex Trans2 Sen: On (Casse3)	CTL*	[0 to 65535/0/0]
7-504-095	Paper Jam Location	Duplex Trans2 Sen: On (Casse4)	CTL*	[0 to 65535/0/0]
7-504-096	Paper Jam Location	Duplex Trans2 Sen: On (Casse5)	CTL*	[0 to 65535/0/0]
7-504-	Paper Jam Location	Duplex Trans2 Sen: On	CTL*	[0 to 65535/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
097		(Bypass)		
7-504-098	Paper Jam Location	Duplex Trans2 Sen: Off (Duplex)	CTL*	[0 to 65535/0/0]
7-504-099	Paper Jam Location	Tray 2: On	CTL*	[0 to 65535/0/0]
7-504-100	Paper Jam Location	Tray 3: On	CTL*	[0 to 65535/0/0]
7-504-101	Paper Jam Location	Tray 4: On	CTL*	[0 to 65535/0/0]
7-504-102	Paper Jam Location	Tray 5: On	CTL*	[0 to 65535/0/0]
7-504-103	Paper Jam Location	Bridge Trans Sen: On (Casse1)	CTL*	[0 to 65535/0/0]
7-504-104	Paper Jam Location	Bridge Trans Sen: On (Casse2)	CTL*	[0 to 65535/0/0]
7-504-105	Paper Jam Location	Bridge Trans Sen: On (Casse3)	CTL*	[0 to 65535/0/0]
7-504-106	Paper Jam Location	Bridge Trans Sen: On (Casse4)	CTL*	[0 to 65535/0/0]
7-504-107	Paper Jam Location	Bridge Trans Sen: On (Casse5)	CTL*	[0 to 65535/0/0]
7-504-108	Paper Jam Location	Bridge Trans Sen: On (Bypass)	CTL*	[0 to 65535/0/0]
7-504-109	Paper Jam Location	Bridge Trans Sen: Off (Casse1)	CTL*	[0 to 65535/0/0]
7-504-110	Paper Jam Location	Bridge Trans Sen: Off (Casse2)	CTL*	[0 to 65535/0/0]
7-504-111	Paper Jam Location	Bridge Trans Sen: Off (Casse3)	CTL*	[0 to 65535/0/0]
7-504-112	Paper Jam Location	Bridge Trans Sen: Off (Casse4)	CTL*	[0 to 65535/0/0]
7-504-113	Paper Jam Location	Bridge Trans Sen: Off (Casse5)	CTL*	[0 to 65535/0/0]
7-504-114	Paper Jam Location	Bridge Trans Sen: Off (Duplex)	CTL*	[0 to 65535/0/0]
7-504-	Paper Jam Location	Bridge Trans Sen: Off	CTL*	[0 to 65535/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
115		(Bypass)		
7-504-230	Paper Jam Location	No Finsher Response	CTL*	[0 to 65535/0/0]
7-504-240	Paper Jam Location	Entrance Sensor: On	CTL*	[0 to 65535/0/0]
7-504-241	Paper Jam Location	Entrance Sensor: Off	CTL*	[0 to 65535/0/0]
7-504-242	Paper Jam Location	Paper Exit	CTL*	[0 to 65535/0/0]
7-504-243	Paper Jam Location	Jogger Motor	CTL*	[0 to 65535/0/0]
7-504-244	Paper Jam Location	Shift Roller Motor	CTL*	[0 to 65535/0/0]
7-504-245	Paper Jam Location	Positioning Roller Motor	CTL*	[0 to 65535/0/0]
7-504-246	Paper Jam Location	Exit Guide Plate Motor	CTL*	[0 to 65535/0/0]
7-504-247	Paper Jam Location	Tray Lift Motor	CTL*	[0 to 65535/0/0]
7-504-248	Paper Jam Location	Staple Motor	CTL*	[0 to 65535/0/0]
7-504-249	Paper Jam Location	Paper Stopper Motor	CTL*	[0 to 65535/0/0]
7-504-250	Paper Jam Location	Invalid Main Machine Data Set	CTL*	[0 to 65535/0/0]
7-505-001	Original Jam Detection	At Power On	CTL*	[0 to 65535/0/0]
7-505-033	Original Jam Detection	Regist Sensor: On	CTL*	[0 to 65535/0/0]
7-505-034	Original Jam Detection	CIS Timing Sensor: On	CTL*	[0 to 65535/0/0]
7-505-035	Original Jam Detection	CCD Timing Sensor: On	CTL*	[0 to 65535/0/0]
7-505-036	Original Jam Detection	Output Sensor: On	CTL*	[0 to 65535/0/0]
7-505-	Original Jam Detection	Regist Sensor: Off	CTL*	[0 to 65535/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
083				
7-505-084	Original Jam Detection	CIS Timing Sensor: Off	CTL*	[0 to 65535/0/0]
7-505-085	Original Jam Detection	CCD Timing Sensor: Off	CTL*	[0 to 65535/0/0]
7-505-086	Original Jam Detection	Output Sensor: Off	CTL*	[0 to 65535/0/0]
7-505-094	Original Jam Detection	Small Size Detection	CTL*	[0 to 65535/0/0]
7-505-099	Original Jam Detection	Double Feed Detection	CTL*	[0 to 65535/0/0]
7-506-006	Jam Count by Paper Size	A5 LEF	CTL*	[0 to 65535/0/0]
7-506-044	Jam Count by Paper Size	HLT LEF	CTL*	[0 to 65535/0/0]
7-506-133	Jam Count by Paper Size	A4 SEF	CTL*	[0 to 65535/0/0]
7-506-134	Jam Count by Paper Size	A5 SEF	CTL*	[0 to 65535/0/0]
7-506-142	Jam Count by Paper Size	B5 SEF	CTL*	[0 to 65535/0/0]
7-506-164	Jam Count by Paper Size	LG SEF	CTL*	[0 to 65535/0/0]
7-506-166	Jam Count by Paper Size	LT SEF	CTL*	[0 to 65535/0/0]
7-506-172	Jam Count by Paper Size	HLT SEF	CTL*	[0 to 65535/0/0]
7-506-255	Jam Count by Paper Size	Others	CTL*	[0 to 65535/0/0]
7-507-001	Plotter Jam History	Latest	CTL*	[0 to 0/0/0]
7-507-002	Plotter Jam History	Latest 1	CTL*	[0 to 0/0/0]
7-507-003	Plotter Jam History	Latest 2	CTL*	[0 to 0/0/0]
7-507-	Plotter Jam History	Latest 3	CTL*	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
004				
7-507-005	Plotter Jam History	Latest 4	CTL*	[0 to 0/0/0]
7-507-006	Plotter Jam History	Latest 5	CTL*	[0 to 0/0/0]
7-507-007	Plotter Jam History	Latest 6	CTL*	[0 to 0/0/0]
7-507-008	Plotter Jam History	Latest 7	CTL*	[0 to 0/0/0]
7-507-009	Plotter Jam History	Latest 8	CTL*	[0 to 0/0/0]
7-507-010	Plotter Jam History	Latest 9	CTL*	[0 to 0/0/0]
7-508-001	Original Jam History	Latest	CTL*	[0 to 0/0/0]
7-508-002	Original Jam History	Latest 1	CTL*	[0 to 0/0/0]
7-508-003	Original Jam History	Latest 2	CTL*	[0 to 0/0/0]
7-508-004	Original Jam History	Latest 3	CTL*	[0 to 0/0/0]
7-508-005	Original Jam History	Latest 4	CTL*	[0 to 0/0/0]
7-508-006	Original Jam History	Latest 5	CTL*	[0 to 0/0/0]
7-508-007	Original Jam History	Latest 6	CTL*	[0 to 0/0/0]
7-508-008	Original Jam History	Latest 7	CTL*	[0 to 0/0/0]
7-508-009	Original Jam History	Latest 8	CTL*	[0 to 0/0/0]
7-508-010	Original Jam History	Latest 9	CTL*	[0 to 0/0/0]
7-514-001	Paper Jam Count by Location	At Power On	CTL*	[0 to 65535/0/0]
7-514-	Paper Jam Count by	Process Package Not	CTL*	[0 to 65535/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
010	Location	Ready		
7-514-011	Paper Jam Count by Location	Transport Package Not Ready	CTL*	[0 to 65535/0/0]
7-514-012	Paper Jam Count by Location	Drive Constantly On	CTL*	[0 to 65535/0/0]
7-514-013	Paper Jam Count by Location	No Duplex Feed Request From CTL	CTL*	[0 to 65535/0/0]
7-514-014	Paper Jam Count by Location	Fusing Package Not Ready	CTL*	[0 to 65535/0/0]
7-514-015	Paper Jam Count by Location	2nd Paper Feed Timeout	CTL*	[0 to 65535/0/0]
7-514-025	Paper Jam Count by Location	Rear Cover Opened	CTL*	[0 to 65535/0/0]
7-514-026	Paper Jam Count by Location	Top Cover Opened	CTL*	[0 to 65535/0/0]
7-514-027	Paper Jam Count by Location	Dup. Circ. Sheet No. Limit Over	CTL*	[0 to 65535/0/0]
7-514-028	Paper Jam Count by Location	Tray 1: On	CTL*	[0 to 65535/0/0]
7-514-029	Paper Jam Count by Location	Duplex: On	CTL*	[0 to 65535/0/0]
7-514-030	Paper Jam Count by Location	Bypass: On	CTL*	[0 to 65535/0/0]
7-514-031	Paper Jam Count by Location	Double Feed Tray 1	CTL*	[0 to 65535/0/0]
7-514-032	Paper Jam Count by Location	Double Feed Tray 2	CTL*	[0 to 65535/0/0]
7-514-033	Paper Jam Count by Location	Double Feed Tray 3	CTL*	[0 to 65535/0/0]
7-514-034	Paper Jam Count by Location	Double Feed Tray 4	CTL*	[0 to 65535/0/0]
7-514-035	Paper Jam Count by Location	Double Feed Tray 5	CTL*	[0 to 65535/0/0]
7-514-036	Paper Jam Count by Location	Double Feed Duplex	CTL*	[0 to 65535/0/0]
7-514-	Paper Jam Count by	Double Feed Bypass	CTL*	[0 to 65535/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
037	Location			
7-514-038	Paper Jam Count by Location	Feed 2 sensor: On (Cassette3)	CTL*	[0 to 65535/0/0]
7-514-039	Paper Jam Count by Location	Feed 2 sensor: On (Cassette4)	CTL*	[0 to 65535/0/0]
7-514-040	Paper Jam Count by Location	Feed 2 sensor: On (Cassette5)	CTL*	[0 to 65535/0/0]
7-514-041	Paper Jam Count by Location	Feed 2 sensor: Off (Cassette3)	CTL*	[0 to 65535/0/0]
7-514-042	Paper Jam Count by Location	Feed 2 sensor: Off (Cassette4)	CTL*	[0 to 65535/0/0]
7-514-043	Paper Jam Count by Location	Feed 2 sensor: Off (Cassette5)	CTL*	[0 to 65535/0/0]
7-514-044	Paper Jam Count by Location	Feed 3 sensor: On (Cassette4)	CTL*	[0 to 65535/0/0]
7-514-045	Paper Jam Count by Location	Feed 3 sensor: On (Cassette5)	CTL*	[0 to 65535/0/0]
7-514-046	Paper Jam Count by Location	Feed 3 sensor: Off (Cassette4)	CTL*	[0 to 65535/0/0]
7-514-047	Paper Jam Count by Location	Feed 3 sensor: Off (Cassette5)	CTL*	[0 to 65535/0/0]
7-514-048	Paper Jam Count by Location	Feed 4 sensor: On (Cassette5)	CTL*	[0 to 65535/0/0]
7-514-049	Paper Jam Count by Location	Feed 4 sensor: Off (Cassette5)	CTL*	[0 to 65535/0/0]
7-514-050	Paper Jam Count by Location	Regist Sensor: On (Cassette2)	CTL*	[0 to 65535/0/0]
7-514-051	Paper Jam Count by Location	Regist Sensor: On (Cassette3)	CTL*	[0 to 65535/0/0]
7-514-052	Paper Jam Count by Location	Regist Sensor: On (Cassette4)	CTL*	[0 to 65535/0/0]
7-514-053	Paper Jam Count by Location	Regist Sensor: On (Cassette5)	CTL*	[0 to 65535/0/0]
7-514-054	Paper Jam Count by Location	Regist Sensor: Off (Cassette2)	CTL*	[0 to 65535/0/0]
7-514-	Paper Jam Count by	Regist Sensor: Off	CTL*	[0 to 65535/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
055	Location	(Cassette3)		
7-514-056	Paper Jam Count by Location	Regist Sensor: Off (Cassette4)	CTL*	[0 to 65535/0/0]
7-514-057	Paper Jam Count by Location	Regist Sensor: Off (Cassette5)	CTL*	[0 to 65535/0/0]
7-514-058	Paper Jam Count by Location	Rear Regist Sen: On (Cassette1)	CTL*	[0 to 65535/0/0]
7-514-059	Paper Jam Count by Location	Rear Regist Sen: On (Cassette2)	CTL*	[0 to 65535/0/0]
7-514-060	Paper Jam Count by Location	Rear Regist Sen: On (Cassette3)	CTL*	[0 to 65535/0/0]
7-514-061	Paper Jam Count by Location	Rear Regist Sen: On (Cassette4)	CTL*	[0 to 65535/0/0]
7-514-062	Paper Jam Count by Location	Rear Regist Sen: On (Cassette5)	CTL*	[0 to 65535/0/0]
7-514-063	Paper Jam Count by Location	Rear Regist Sen: On (Duplex)	CTL*	[0 to 65535/0/0]
7-514-064	Paper Jam Count by Location	Rear Regist Sen: On (Bypass)	CTL*	[0 to 65535/0/0]
7-514-065	Paper Jam Count by Location	Rear Regist Sen: Off (Cassette1)	CTL*	[0 to 65535/0/0]
7-514-066	Paper Jam Count by Location	Rear Regist Sen: Off (Cassette2)	CTL*	[0 to 65535/0/0]
7-514-067	Paper Jam Count by Location	Rear Regist Sen: Off (Cassette3)	CTL*	[0 to 65535/0/0]
7-514-068	Paper Jam Count by Location	Rear Regist Sen: Off (Cassette4)	CTL*	[0 to 65535/0/0]
7-514-069	Paper Jam Count by Location	Rear Regist Sen: Off (Cassette5)	CTL*	[0 to 65535/0/0]
7-514-070	Paper Jam Count by Location	Rear Regist Sen: Off (Duplex)	CTL*	[0 to 65535/0/0]
7-514-071	Paper Jam Count by Location	Rear Regist Sen: Off (Bypass)	CTL*	[0 to 65535/0/0]
7-514-072	Paper Jam Count by Location	Output Sensor: On (Cassette1)	CTL*	[0 to 65535/0/0]
7-514-	Paper Jam Count by	Output Sensor: On	CTL*	[0 to 65535/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
073	Location	(Cassette2)		
7-514-074	Paper Jam Count by Location	Output Sensor: On (Cassette3)	CTL*	[0 to 65535/0/0]
7-514-075	Paper Jam Count by Location	Output Sensor: On (Cassette4)	CTL*	[0 to 65535/0/0]
7-514-076	Paper Jam Count by Location	Output Sensor: On (Cassette5)	CTL*	[0 to 65535/0/0]
7-514-077	Paper Jam Count by Location	Output Sensor: On (Duplex)	CTL*	[0 to 65535/0/0]
7-514-078	Paper Jam Count by Location	Output Sensor: On (Bypass)	CTL*	[0 to 65535/0/0]
7-514-079	Paper Jam Count by Location	Output Sensor: Off (Cassette1)	CTL*	[0 to 65535/0/0]
7-514-080	Paper Jam Count by Location	Output Sensor: Off (Cassette2)	CTL*	[0 to 65535/0/0]
7-514-081	Paper Jam Count by Location	Output Sensor: Off (Cassette3)	CTL*	[0 to 65535/0/0]
7-514-082	Paper Jam Count by Location	Output Sensor: Off (Cassette4)	CTL*	[0 to 65535/0/0]
7-514-083	Paper Jam Count by Location	Output Sensor: Off (Cassette5)	CTL*	[0 to 65535/0/0]
7-514-084	Paper Jam Count by Location	Output Sensor: Off (Duplex)	CTL*	[0 to 65535/0/0]
7-514-085	Paper Jam Count by Location	Output Sensor: Off (Bypass)	CTL*	[0 to 65535/0/0]
7-514-086	Paper Jam Count by Location	Duplex Trans1 Sen: On (Casse1)	CTL*	[0 to 65535/0/0]
7-514-087	Paper Jam Count by Location	Duplex Trans1 Sen: On (Casse2)	CTL*	[0 to 65535/0/0]
7-514-088	Paper Jam Count by Location	Duplex Trans1 Sen: On (Casse3)	CTL*	[0 to 65535/0/0]
7-514-089	Paper Jam Count by Location	Duplex Trans1 Sen: On (Casse4)	CTL*	[0 to 65535/0/0]
7-514-090	Paper Jam Count by Location	Duplex Trans1 Sen: On (Casse5)	CTL*	[0 to 65535/0/0]
7-514-	Paper Jam Count by	Duplex Trans1 Sen: On	CTL*	[0 to 65535/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
091	Location	(Bypass)		
7-514-092	Paper Jam Count by Location	Duplex Trans2 Sen: On (Casse1)	CTL*	[0 to 65535/0/0]
7-514-093	Paper Jam Count by Location	Duplex Trans2 Sen: On (Casse2)	CTL*	[0 to 65535/0/0]
7-514-094	Paper Jam Count by Location	Duplex Trans2 Sen: On (Casse3)	CTL*	[0 to 65535/0/0]
7-514-095	Paper Jam Count by Location	Duplex Trans2 Sen: On (Casse4)	CTL*	[0 to 65535/0/0]
7-514-096	Paper Jam Count by Location	Duplex Trans2 Sen: On (Casse5)	CTL*	[0 to 65535/0/0]
7-514-097	Paper Jam Count by Location	Duplex Trans2 Sen: On (Bypass)	CTL*	[0 to 65535/0/0]
7-514-098	Paper Jam Count by Location	Duplex Trans2 Sen: Off (Duplex)	CTL*	[0 to 65535/0/0]
7-514-099	Paper Jam Count by Location	Tray 2: On	CTL*	[0 to 65535/0/0]
7-514-100	Paper Jam Count by Location	Tray 3: On	CTL*	[0 to 65535/0/0]
7-514-101	Paper Jam Count by Location	Tray 4: On	CTL*	[0 to 65535/0/0]
7-514-102	Paper Jam Count by Location	Tray 5: On	CTL*	[0 to 65535/0/0]
7-514-103	Paper Jam Count by Location	Bridge Trans Sen: On (Casse1)	CTL*	[0 to 65535/0/0]
7-514-104	Paper Jam Count by Location	Bridge Trans Sen: On (Casse2)	CTL*	[0 to 65535/0/0]
7-514-105	Paper Jam Count by Location	Bridge Trans Sen: On (Casse3)	CTL*	[0 to 65535/0/0]
7-514-106	Paper Jam Count by Location	Bridge Trans Sen: On (Casse4)	CTL*	[0 to 65535/0/0]
7-514-107	Paper Jam Count by Location	Bridge Trans Sen: On (Casse5)	CTL*	[0 to 65535/0/0]
7-514-108	Paper Jam Count by Location	Bridge Trans Sen: On (Bypass)	CTL*	[0 to 65535/0/0]
7-514-	Paper Jam Count by	Bridge Trans Sen: Off	CTL*	[0 to 65535/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
109	Location	(Casse1)		
7-514-110	Paper Jam Count by Location	Bridge Trans Sen: Off (Casse2)	CTL*	[0 to 65535/0/0]
7-514-111	Paper Jam Count by Location	Bridge Trans Sen: Off (Casse3)	CTL*	[0 to 65535/0/0]
7-514-112	Paper Jam Count by Location	Bridge Trans Sen: Off (Casse4)	CTL*	[0 to 65535/0/0]
7-514-113	Paper Jam Count by Location	Bridge Trans Sen: Off (Casse5)	CTL*	[0 to 65535/0/0]
7-514-114	Paper Jam Count by Location	Bridge Trans Sen: Off (Duplex)	CTL*	[0 to 65535/0/0]
7-514-115	Paper Jam Count by Location	Bridge Trans Sen: Off (Bypass)	CTL*	[0 to 65535/0/0]
7-514-230	Paper Jam Count by Location	No Finsher Response	CTL*	[0 to 65535/0/0]
7-514-240	Paper Jam Count by Location	Entrance Sensor: On	CTL*	[0 to 65535/0/0]
7-514-241	Paper Jam Count by Location	Entrance Sensor: Off	CTL*	[0 to 65535/0/0]
7-514-242	Paper Jam Count by Location	Paper Exit	CTL*	[0 to 65535/0/0]
7-514-243	Paper Jam Count by Location	Jogger Motor	CTL*	[0 to 65535/0/0]
7-514-244	Paper Jam Count by Location	Shift Roller Motor	CTL*	[0 to 65535/0/0]
7-514-245	Paper Jam Count by Location	Positioning Roller Motor	CTL*	[0 to 65535/0/0]
7-514-246	Paper Jam Count by Location	Exit Guide Plate Motor	CTL*	[0 to 65535/0/0]
7-514-247	Paper Jam Count by Location	Tray Lift Motor	CTL*	[0 to 65535/0/0]
7-514-248	Paper Jam Count by Location	Staple Motor	CTL*	[0 to 65535/0/0]
7-514-249	Paper Jam Count by Location	Paper Stopper Motor	CTL*	[0 to 65535/0/0]
7-514-	Paper Jam Count by	Invalid Main Machine Data	CTL*	[0 to 65535/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
250	Location	Set		
7-515-001	Original Jam Count by Detection	At Power On	CTL*	[0 to 65535/0/0]
7-515-033	Original Jam Count by Detection	Regist Sensor: On	CTL*	[0 to 65535/0/0]
7-515-034	Original Jam Count by Detection	CIS Timing Sensor: On	CTL*	[0 to 65535/0/0]
7-515-035	Original Jam Count by Detection	CCD Timing Sensor: On	CTL*	[0 to 65535/0/0]
7-515-036	Original Jam Count by Detection	Output Sensor: On	CTL*	[0 to 65535/0/0]
7-515-083	Original Jam Count by Detection	Regist Sensor: Off	CTL*	[0 to 65535/0/0]
7-515-084	Original Jam Count by Detection	CIS Timing Sensor: Off	CTL*	[0 to 65535/0/0]
7-515-085	Original Jam Count by Detection	CCD Timing Sensor: Off	CTL*	[0 to 65535/0/0]
7-515-086	Original Jam Count by Detection	Output Sensor: Off	CTL*	[0 to 65535/0/0]
7-515-094	Original Jam Count by Detection	Small Size Detection	CTL*	[0 to 65535/0/0]
7-515-099	Original Jam Count by Detection	Double Feed Detection	CTL*	[0 to 65535/0/0]
7-516-006	Paper Size Jam Count	A5 LEF	CTL*	[0 to 65535/0/0]
7-516-044	Paper Size Jam Count	HLT LEF	CTL*	[0 to 65535/0/0]
7-516-133	Paper Size Jam Count	A4 SEF	CTL*	[0 to 65535/0/0]
7-516-134	Paper Size Jam Count	A5 SEF	CTL*	[0 to 65535/0/0]
7-516-142	Paper Size Jam Count	B5 SEF	CTL*	[0 to 65535/0/0]
7-516-164	Paper Size Jam Count	LG SEF	CTL*	[0 to 65535/0/0]
7-516-	Paper Size Jam Count	LT SEF	CTL*	[0 to 65535/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
166				
7-516-172	Paper Size Jam Count	HLT SEF	CTL*	[0 to 65535/0/0]
7-516-255	Paper Size Jam Count	Others	CTL*	[0 to 65535/0/0]
7-520-001	Update Log	ErrorRecord1	CTL*	[0 to 255/0/1]
7-520-002	Update Log	ErrorRecord2	CTL*	[0 to 255/0/1]
7-520-003	Update Log	ErrorRecord3	CTL*	[0 to 255/0/1]
7-520-004	Update Log	ErrorRecord4	CTL*	[0 to 255/0/1]
7-520-005	Update Log	ErrorRecord5	CTL*	[0 to 255/0/1]
7-520-006	Update Log	ErrorRecord6	CTL*	[0 to 255/0/1]
7-520-007	Update Log	ErrorRecord7	CTL*	[0 to 255/0/1]
7-520-008	Update Log	ErrorRecord8	CTL*	[0 to 255/0/1]
7-520-009	Update Log	ErrorRecord9	CTL*	[0 to 255/0/1]
7-520-010	Update Log	ErrorRecord10	CTL*	[0 to 255/0/1]
7-520-011	Update Log	Auto:StartDate1	CTL*	[0 to 0/0/0]
7-520-012	Update Log	Auto:StartDate2	CTL*	[0 to 0/0/0]
7-520-013	Update Log	Auto:StartDate3	CTL*	[0 to 0/0/0]
7-520-014	Update Log	Auto:StartDate4	CTL*	[0 to 0/0/0]
7-520-015	Update Log	Auto:StartDate5	CTL*	[0 to 0/0/0]
7-520-	Update Log	Auto:EndDate1	CTL*	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
021				
7-520-022	Update Log	Auto:EndDate2	CTL*	[0 to 0/0/0]
7-520-023	Update Log	Auto:EndDate3	CTL*	[0 to 0/0/0]
7-520-024	Update Log	Auto:EndDate4	CTL*	[0 to 0/0/0]
7-520-025	Update Log	Auto:EndDate5	CTL*	[0 to 0/0/0]
7-520-031	Update Log	Auto:Piecemark1	CTL*	[0 to 0/0/0]
7-520-032	Update Log	Auto:Piecemark2	CTL*	[0 to 0/0/0]
7-520-033	Update Log	Auto:Piecemark3	CTL*	[0 to 0/0/0]
7-520-034	Update Log	Auto:Piecemark4	CTL*	[0 to 0/0/0]
7-520-035	Update Log	Auto:Piecemark5	CTL*	[0 to 0/0/0]
7-520-041	Update Log	Auto:Version1	CTL*	[0 to 0/0/0]
7-520-042	Update Log	Auto:Version2	CTL*	[0 to 0/0/0]
7-520-043	Update Log	Auto:Version3	CTL*	[0 to 0/0/0]
7-520-044	Update Log	Auto:Version4	CTL*	[0 to 0/0/0]
7-520-045	Update Log	Auto:Version5	CTL*	[0 to 0/0/0]
7-520-051	Update Log	Auto:Result1	CTL*	[0 to 255/0/1]
7-520-052	Update Log	Auto:Result2	CTL*	[0 to 255/0/1]
7-520-053	Update Log	Auto:Result3	CTL*	[0 to 255/0/1]
7-520-	Update Log	Auto:Result4	CTL*	[0 to 255/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
054				
7-520-055	Update Log	Auto:Result5	CTL*	[0 to 255/0/1]
7-520-056	Update Log	Auto:Result6	CTL*	[0 to 255/0/1]
7-520-057	Update Log	Auto:Result7	CTL*	[0 to 255/0/1]
7-520-058	Update Log	Auto:Result8	CTL*	[0 to 255/0/1]
7-520-059	Update Log	Auto:Result9	CTL*	[0 to 255/0/1]
7-520-060	Update Log	Auto:Result10	CTL*	[0 to 255/0/1]
7-617-001	PM Parts Counter Display	Normal	CTL*	[0 to 9999999/0/0]
7-617-002	PM Parts Counter Display	Df	CTL*	[0 to 9999999/0/0]
7-618-001	PM Parts Counter Reset	Normal	CTL	[0 to 0/0/0]
7-618-002	PM Parts Counter Reset	Df	CTL	[0 to 0/0/0]
7-624-002	Part Replacement Operation ON/OFF	#Drum Unit:K	CTL*	[0 to 1/1/1]
7-624-003	Part Replacement Operation ON/OFF	#Development Unit:K	CTL*	[0 to 1/1/1]
7-624-093	Part Replacement Operation ON/OFF	#Paper Transfer Roller	CTL*	[0 to 1/1/1]
7-624-115	Part Replacement Operation ON/OFF	#Fusing Unit	CTL*	[0 to 1/1/1]
7-624-146	Part Replacement Operation ON/OFF	#Paper Feed Roller	CTL*	[0 to 1/1/1]
7-624-147	Part Replacement Operation ON/OFF	#Pickup Roller	CTL*	[0 to 1/1/1]
7-624-148	Part Replacement Operation ON/OFF	#Separation Roller	CTL*	[0 to 1/1/1]
7-624-	Part Replacement Operation	#DF Paper Feed Roller	CTL*	[0 to 1/1/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
206	ON/OFF	Unit		
7-624-207	Part Replacement Operation ON/OFF	#DF Separation Pad Unit	CTL*	[0 to 1/1/1]
7-801-255	ROM No./ Firmware Version		CTL	[0 to 0/0/0]
7-803-001	PM Counter Display	Paper	CTL*	[0 to 9999999/0/0]
7-804-001	PM Counter Reset	Paper	CTL	[0 to 0/0/0]
7-807-001	SC/Jam Counter Reset		CTL	[0 to 0/0/0]
7-826-001	MF Error Counter	Error Total	CTL*	[0 to 9999999/0/0]
7-826-002	MF Error Counter	Error Staple	CTL*	[0 to 9999999/0/0]
7-827-001	MF Error Counter Clear		CTL	[0 to 0/0/0]
7-832-001	Self-Diagnose Result Display		CTL	[0 to 0/0/0]
7-836-001	Total Memory Size		CTL	[0 to 0xffffffff/0/0MB]
7-840-001	ServiceSP Entry Code Chg Hist	Change Time :Latest	CTL*	[0 to 0/0/0]
7-840-002	ServiceSP Entry Code Chg Hist	Change Time :Last1	CTL*	[0 to 0/0/0]
7-840-101	ServiceSP Entry Code Chg Hist	Initialize Time :Latest	CTL*	[0 to 0/0/0]
7-840-102	ServiceSP Entry Code Chg Hist	Initialize Time :Last1	CTL*	[0 to 0/0/0]
7-841-001	HddSmartInfoNrs	1-9	CTL	[0 to 0/0/0]
7-841-002	HddSmartInfoNrs	10-18	CTL	[0 to 0/0/0]
7-841-003	HddSmartInfoNrs	19-27	CTL	[0 to 0/0/0]
7-841-	HddSmartInfoNrs	28	CTL	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
004				
7-841-051	HddSmartInfoSc	1-9	CTL*	[0 to 0/0/0]
7-841-052	HddSmartInfoSc	10-18	CTL*	[0 to 0/0/0]
7-841-053	HddSmartInfoSc	19-27	CTL*	[0 to 0/0/0]
7-841-054	HddSmartInfoSc	28	CTL*	[0 to 0/0/0]
7-901-001	Assert Info.	File Name	CTL*	[0 to 0/0/0]
7-901-002	Assert Info.	Number of Lines	CTL*	[0 to 0/0/0]
7-901-003	Assert Info.	Location	CTL*	[0 to 0/0/0]
7-910-001	ROM No	System/Copy	CTL	[0 to 0/0/0]
7-910-002	ROM No	Engine	CTL	[0 to 0/0/0]
7-910-003	ROM No	Lcdc	CTL	[0 to 0/0/0]
7-910-007	ROM No	Finisher1	CTL	[0 to 0/0/0]
7-910-009	ROM No	Bank	CTL	[0 to 0/0/0]
7-910-012	ROM No	FCU	CTL	[0 to 0/0/0]
7-910-015	ROM No	Engine(IPU)	CTL	[0 to 0/0/0]
7-910-018	ROM No	NetworkSupport	CTL	[0 to 0/0/0]
7-910-019	ROM No	Bank2	CTL	[0 to 0/0/0]
7-910-022	ROM No	BIOS	CTL	[0 to 0/0/0]
7-910-	ROM No	HDD Format Option	CTL	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
023				
7-910-040	ROM No	Bank3	CTL	[0 to 0/0/0]
7-910-041	ROM No	Bank4	CTL	[0 to 0/0/0]
7-910-150	ROM No	RPCS	CTL	[0 to 0/0/0]
7-910-151	ROM No	PS	CTL	[0 to 0/0/0]
7-910-158	ROM No	PCL	CTL	[0 to 0/0/0]
7-910-159	ROM No	PCLXL	CTL	[0 to 0/0/0]
7-910-162	ROM No	PDF	CTL	[0 to 0/0/0]
7-910-165	ROM No	PJL	CTL	[0 to 0/0/0]
7-910-166	ROM No	IPDS	CTL	[0 to 0/0/0]
7-910-167	ROM No	MediaPrint:JPEG	CTL	[0 to 0/0/0]
7-910-168	ROM No	MediaPrint:TIFF	CTL	[0 to 0/0/0]
7-910-169	ROM No	XPS	CTL	[0 to 0/0/0]
7-910-180	ROM No	FONT	CTL	[0 to 0/0/0]
7-910-181	ROM No	FONT1	CTL	[0 to 0/0/0]
7-910-182	ROM No	FONT2	CTL	[0 to 0/0/0]
7-910-183	ROM No	FONT3	CTL	[0 to 0/0/0]
7-910-184	ROM No	FONT4	CTL	[0 to 0/0/0]
7-910-	ROM No	FONT5	CTL	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
185				
7-910-186	ROM No	FONT6	CTL	[0 to 0/0/0]
7-910-187	ROM No	FONT7	CTL	[0 to 0/0/0]
7-910-200	ROM No	Factory	CTL	[0 to 0/0/0]
7-910-201	ROM No	Copy	CTL	[0 to 0/0/0]
7-910-202	ROM No	NetworkDocBox	CTL	[0 to 0/0/0]
7-910-203	ROM No	Fax	CTL	[0 to 0/0/0]
7-910-204	ROM No	Printer	CTL	[0 to 0/0/0]
7-910-205	ROM No	Scanner	CTL	[0 to 0/0/0]
7-910-206	ROM No	RFax	CTL	[0 to 0/0/0]
7-910-210	ROM No	MIB	CTL	[0 to 0/0/0]
7-910-211	ROM No	Websupport	CTL	[0 to 0/0/0]
7-910-212	ROM No	WebUapl	CTL	[0 to 0/0/0]
7-910-213	ROM No	SDK1	CTL	[0 to 0/0/0]
7-910-214	ROM No	SDK2	CTL	[0 to 0/0/0]
7-910-215	ROM No	SDK3	CTL	[0 to 0/0/0]
7-910-250	ROM No	Package	CTL	[0 to 0/0/0]
7-911-001	Firmware Version	System/Copy	CTL	[0 to 0/0/0]
7-911-	Firmware Version	Engine	CTL	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
002				
7-911-003	Firmware Version	Lcdc	CTL	[0 to 0/0/0]
7-911-007	Firmware Version	Finisher1	CTL	[0 to 0/0/0]
7-911-009	Firmware Version	Bank	CTL	[0 to 0/0/0]
7-911-012	Firmware Version	FCU	CTL	[0 to 0/0/0]
7-911-015	Firmware Version	Engine(IPU)	CTL	[0 to 0/0/0]
7-911-018	Firmware Version	NetworkSupport	CTL	[0 to 0/0/0]
7-911-019	Firmware Version	Bank2	CTL	[0 to 0/0/0]
7-911-022	Firmware Version	BIOS	CTL	[0 to 0/0/0]
7-911-023	Firmware Version	HDD Format Option	CTL	[0 to 0/0/0]
7-911-040	Firmware Version	Bank3	CTL	[0 to 0/0/0]
7-911-041	Firmware Version	Bank4	CTL	[0 to 0/0/0]
7-911-150	Firmware Version	RPCS	CTL	[0 to 0/0/0]
7-911-151	Firmware Version	PS	CTL	[0 to 0/0/0]
7-911-158	Firmware Version	PCL	CTL	[0 to 0/0/0]
7-911-159	Firmware Version	PCLXL	CTL	[0 to 0/0/0]
7-911-162	Firmware Version	PDF	CTL	[0 to 0/0/0]
7-911-165	Firmware Version	PJL	CTL	[0 to 0/0/0]
7-911-	Firmware Version	IPDS	CTL	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
166				
7-911-167	Firmware Version	MediaPrint:JPEG	CTL	[0 to 0/0/0]
7-911-168	Firmware Version	MediaPrint:TIFF	CTL	[0 to 0/0/0]
7-911-169	Firmware Version	XPS	CTL	[0 to 0/0/0]
7-911-180	Firmware Version	FONT	CTL	[0 to 0/0/0]
7-911-181	Firmware Version	FONT1	CTL	[0 to 0/0/0]
7-911-182	Firmware Version	FONT2	CTL	[0 to 0/0/0]
7-911-183	Firmware Version	FONT3	CTL	[0 to 0/0/0]
7-911-184	Firmware Version	FONT4	CTL	[0 to 0/0/0]
7-911-185	Firmware Version	FONT5	CTL	[0 to 0/0/0]
7-911-186	Firmware Version	FONT6	CTL	[0 to 0/0/0]
7-911-187	Firmware Version	FONT7	CTL	[0 to 0/0/0]
7-911-200	Firmware Version	Factory	CTL	[0 to 0/0/0]
7-911-201	Firmware Version	Copy	CTL	[0 to 0/0/0]
7-911-202	Firmware Version	NetworkDocBox	CTL	[0 to 0/0/0]
7-911-203	Firmware Version	Fax	CTL	[0 to 0/0/0]
7-911-204	Firmware Version	Printer	CTL	[0 to 0/0/0]
7-911-205	Firmware Version	Scanner	CTL	[0 to 0/0/0]
7-911-	Firmware Version	RFax	CTL	[0 to 0/0/0]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
206				
7-911-210	Firmware Version	MIB	CTL	[0 to 0/0/0]
7-911-211	Firmware Version	Websupport	CTL	[0 to 0/0/0]
7-911-212	Firmware Version	WebUapl	CTL	[0 to 0/0/0]
7-911-213	Firmware Version	SDK1	CTL	[0 to 0/0/0]
7-911-214	Firmware Version	SDK2	CTL	[0 to 0/0/0]
7-911-215	Firmware Version	SDK3	CTL	[0 to 0/0/0]
7-911-250	Firmware Version	Package	CTL	[0 to 0/0/0]

SP8-XXX (Data Log 2) - Controller

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
8-001-001	T:Total Jobs		CTL*	[0 to 99999999/0/1]
8-002-001	C:Total Jobs		CTL*	[0 to 99999999/0/1]
8-003-001	F:Total Jobs		CTL*	[0 to 99999999/0/1]
8-004-001	P:Total Jobs		CTL*	[0 to 99999999/0/1]
8-005-001	S:Total Jobs		CTL*	[0 to 99999999/0/1]
8-006-001	L:Total Jobs		CTL*	[0 to 99999999/0/1]
8-011-001	T:Jobs/LS		CTL*	[0 to 99999999/0/1]
8-012-001	C:Jobs/LS		CTL*	[0 to 99999999/0/1]
8-013-001	F:Jobs/LS		CTL*	[0 to 99999999/0/1]
8-014-001	P:Jobs/LS		CTL*	[0 to 99999999/0/1]
8-015-001	S:Jobs/LS		CTL*	[0 to 99999999/0/1]
8-016-001	L:Jobs/LS		CTL*	[0 to 99999999/0/1]
8-017-001	O:Jobs/LS		CTL*	[0 to 99999999/0/1]
8-021-001	T:Pjob/LS		CTL*	[0 to 99999999/0/1]
8-022-001	C:Pjob/LS		CTL*	[0 to 99999999/0/1]
8-023-001	F:Pjob/LS		CTL*	[0 to 99999999/0/1]
8-024-001	P:Pjob/LS		CTL*	[0 to 99999999/0/1]
8-025-	S:Pjob/LS		CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
001				
8-026-001	L:Pjob/LS		CTL*	[0 to 99999999/0/1]
8-027-001	O:Pjob/LS		CTL*	[0 to 99999999/0/1]
8-031-001	T:Pjob/DesApl		CTL*	[0 to 99999999/0/1]
8-032-001	C:Pjob/DesApl		CTL*	[0 to 99999999/0/1]
8-033-001	F:Pjob/DesApl		CTL*	[0 to 99999999/0/1]
8-034-001	P:Pjob/DesApl		CTL*	[0 to 99999999/0/1]
8-035-001	S:Pjob/DesApl		CTL*	[0 to 99999999/0/1]
8-036-001	L:Pjob/DesApl		CTL*	[0 to 99999999/0/1]
8-037-001	O:Pjob/DesApl		CTL*	[0 to 99999999/0/1]
8-041-001	T:TX Jobs/LS		CTL*	[0 to 99999999/0/1]
8-042-001	C:TX Jobs/LS		CTL*	[0 to 99999999/0/1]
8-043-001	F:TX Jobs/LS		CTL*	[0 to 99999999/0/1]
8-044-001	P:TX Jobs/LS		CTL*	[0 to 99999999/0/1]
8-045-001	S:TX Jobs/LS		CTL*	[0 to 99999999/0/1]
8-046-001	L:TX Jobs/LS		CTL*	[0 to 99999999/0/1]
8-047-001	O:TX Jobs/LS		CTL*	[0 to 99999999/0/1]
8-051-001	T:TX Jobs/DesApl		CTL*	[0 to 99999999/0/1]
8-052-	C:TX Jobs/DesApl		CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
001				
8-053-001	F:TX Jobs/DesApl		CTL*	[0 to 99999999/0/1]
8-054-001	P:TX Jobs/DesApl		CTL*	[0 to 99999999/0/1]
8-055-001	S:TX Jobs/DesApl		CTL*	[0 to 99999999/0/1]
8-056-001	L:TX Jobs/DesApl		CTL*	[0 to 99999999/0/1]
8-057-001	O:TX Jobs/DesApl		CTL*	[0 to 99999999/0/1]
8-061-001	T:FIN Jobs	Sort	CTL*	[0 to 99999999/0/1]
8-061-002	T:FIN Jobs	Stack	CTL*	[0 to 99999999/0/1]
8-061-003	T:FIN Jobs	Staple	CTL*	[0 to 99999999/0/1]
8-061-004	T:FIN Jobs	Booklet	CTL*	[0 to 99999999/0/1]
8-061-005	T:FIN Jobs	Z-Fold	CTL*	[0 to 99999999/0/1]
8-061-006	T:FIN Jobs	Punch	CTL*	[0 to 99999999/0/1]
8-061-007	T:FIN Jobs	Other	CTL*	[0 to 99999999/0/1]
8-061-008	T:FIN Jobs	Inside-Fold	CTL*	[0 to 99999999/0/1]
8-061-009	T:FIN Jobs	Three-IN-Fold	CTL*	[0 to 99999999/0/1]
8-061-010	T:FIN Jobs	Three-OUT-Fold	CTL*	[0 to 99999999/0/1]
8-061-011	T:FIN Jobs	Four-Fold	CTL*	[0 to 99999999/0/1]
8-061-012	T:FIN Jobs	KANNON-Fold	CTL*	[0 to 99999999/0/1]
8-061-	T:FIN Jobs	Perfect-Bind	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
013				
8-061-014	T:FIN Jobs	Ring-Bind	CTL*	[0 to 99999999/0/1]
8-061-015	T:FIN Jobs	3rd Vendor	CTL*	[0 to 99999999/0/1]
8-061-016	T:FIN Jobs	TwinLoop-Bind	CTL*	[0 to 99999999/0/1]
8-062-001	C:FIN Jobs	Sort	CTL*	[0 to 99999999/0/1]
8-062-002	C:FIN Jobs	Stack	CTL*	[0 to 99999999/0/1]
8-062-003	C:FIN Jobs	Staple	CTL*	[0 to 99999999/0/1]
8-062-004	C:FIN Jobs	Booklet	CTL*	[0 to 99999999/0/1]
8-062-005	C:FIN Jobs	Z-Fold	CTL*	[0 to 99999999/0/1]
8-062-006	C:FIN Jobs	Punch	CTL*	[0 to 99999999/0/1]
8-062-007	C:FIN Jobs	Other	CTL*	[0 to 99999999/0/1]
8-062-008	C:FIN Jobs	Inside-Fold	CTL*	[0 to 99999999/0/1]
8-062-009	C:FIN Jobs	Three-IN-Fold	CTL*	[0 to 99999999/0/1]
8-062-010	C:FIN Jobs	Three-OUT-Fold	CTL*	[0 to 99999999/0/1]
8-062-011	C:FIN Jobs	Four-Fold	CTL*	[0 to 99999999/0/1]
8-062-012	C:FIN Jobs	KANNON-Fold	CTL*	[0 to 99999999/0/1]
8-062-013	C:FIN Jobs	Perfect-Bind	CTL*	[0 to 99999999/0/1]
8-062-014	C:FIN Jobs	Ring-Bind	CTL*	[0 to 99999999/0/1]
8-062-	C:FIN Jobs	3rd Vendor	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
015				
8-062-016	C:FIN Jobs	TwinLoop-Bind	CTL*	[0 to 99999999/0/1]
8-063-001	F:FIN Jobs	Sort	CTL*	[0 to 99999999/0/1]
8-063-002	F:FIN Jobs	Stack	CTL*	[0 to 99999999/0/1]
8-063-003	F:FIN Jobs	Staple	CTL*	[0 to 99999999/0/1]
8-063-004	F:FIN Jobs	Booklet	CTL*	[0 to 99999999/0/1]
8-063-005	F:FIN Jobs	Z-Fold	CTL*	[0 to 99999999/0/1]
8-063-006	F:FIN Jobs	Punch	CTL*	[0 to 99999999/0/1]
8-063-007	F:FIN Jobs	Other	CTL*	[0 to 99999999/0/1]
8-063-008	F:FIN Jobs	Inside-Fold	CTL*	[0 to 99999999/0/1]
8-063-009	F:FIN Jobs	Three-IN-Fold	CTL*	[0 to 99999999/0/1]
8-063-010	F:FIN Jobs	Three-OUT-Fold	CTL*	[0 to 99999999/0/1]
8-063-011	F:FIN Jobs	Four-Fold	CTL*	[0 to 99999999/0/1]
8-063-012	F:FIN Jobs	KANNON-Fold	CTL*	[0 to 99999999/0/1]
8-063-013	F:FIN Jobs	Perfect-Bind	CTL*	[0 to 99999999/0/1]
8-063-014	F:FIN Jobs	Ring-Bind	CTL*	[0 to 99999999/0/1]
8-063-015	F:FIN Jobs	3rd Vendor	CTL*	[0 to 99999999/0/1]
8-063-016	F:FIN Jobs	TwinLoop-Bind	CTL*	[0 to 99999999/0/1]
8-064-	P:FIN Jobs	Sort	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
001				
8-064-002	P:FIN Jobs	Stack	CTL*	[0 to 99999999/0/1]
8-064-003	P:FIN Jobs	Staple	CTL*	[0 to 99999999/0/1]
8-064-004	P:FIN Jobs	Booklet	CTL*	[0 to 99999999/0/1]
8-064-005	P:FIN Jobs	Z-Fold	CTL*	[0 to 99999999/0/1]
8-064-006	P:FIN Jobs	Punch	CTL*	[0 to 99999999/0/1]
8-064-007	P:FIN Jobs	Other	CTL*	[0 to 99999999/0/1]
8-064-008	P:FIN Jobs	Inside-Fold	CTL*	[0 to 99999999/0/1]
8-064-009	P:FIN Jobs	Three-IN-Fold	CTL*	[0 to 99999999/0/1]
8-064-010	P:FIN Jobs	Three-OUT-Fold	CTL*	[0 to 99999999/0/1]
8-064-011	P:FIN Jobs	Four-Fold	CTL*	[0 to 99999999/0/1]
8-064-012	P:FIN Jobs	KANNON-Fold	CTL*	[0 to 99999999/0/1]
8-064-013	P:FIN Jobs	Perfect-Bind	CTL*	[0 to 99999999/0/1]
8-064-014	P:FIN Jobs	Ring-Bind	CTL*	[0 to 99999999/0/1]
8-064-015	P:FIN Jobs	3rd Vendor	CTL*	[0 to 99999999/0/1]
8-064-016	P:FIN Jobs	TwinLoop-Bind	CTL*	[0 to 99999999/0/1]
8-065-001	S:FIN Jobs	Sort	CTL*	[0 to 99999999/0/1]
8-065-002	S:FIN Jobs	Stack	CTL*	[0 to 99999999/0/1]
8-065-	S:FIN Jobs	Staple	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
003				
8-065-004	S:FIN Jobs	Booklet	CTL*	[0 to 99999999/0/1]
8-065-005	S:FIN Jobs	Z-Fold	CTL*	[0 to 99999999/0/1]
8-065-006	S:FIN Jobs	Punch	CTL*	[0 to 99999999/0/1]
8-065-007	S:FIN Jobs	Other	CTL*	[0 to 99999999/0/1]
8-065-008	S:FIN Jobs	Inside-Fold	CTL*	[0 to 99999999/0/1]
8-065-009	S:FIN Jobs	Three-IN-Fold	CTL*	[0 to 99999999/0/1]
8-065-010	S:FIN Jobs	Three-OUT-Fold	CTL*	[0 to 99999999/0/1]
8-065-011	S:FIN Jobs	Four-Fold	CTL*	[0 to 99999999/0/1]
8-065-012	S:FIN Jobs	KANNON-Fold	CTL*	[0 to 99999999/0/1]
8-065-013	S:FIN Jobs	Perfect-Bind	CTL*	[0 to 99999999/0/1]
8-065-014	S:FIN Jobs	Ring-Bind	CTL*	[0 to 99999999/0/1]
8-065-015	S:FIN Jobs	3rd Vendor	CTL*	[0 to 99999999/0/1]
8-065-016	S:FIN Jobs	TwinLoop-Bind	CTL*	[0 to 99999999/0/1]
8-066-001	L:FIN Jobs	Sort	CTL*	[0 to 99999999/0/1]
8-066-002	L:FIN Jobs	Stack	CTL*	[0 to 99999999/0/1]
8-066-003	L:FIN Jobs	Staple	CTL*	[0 to 99999999/0/1]
8-066-004	L:FIN Jobs	Booklet	CTL*	[0 to 99999999/0/1]
8-066-	L:FIN Jobs	Z-Fold	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
005				
8-066-006	L:FIN Jobs	Punch	CTL*	[0 to 99999999/0/1]
8-066-007	L:FIN Jobs	Other	CTL*	[0 to 99999999/0/1]
8-066-008	L:FIN Jobs	Inside-Fold	CTL*	[0 to 99999999/0/1]
8-066-009	L:FIN Jobs	Three-IN-Fold	CTL*	[0 to 99999999/0/1]
8-066-010	L:FIN Jobs	Three-OUT-Fold	CTL*	[0 to 99999999/0/1]
8-066-011	L:FIN Jobs	Four-Fold	CTL*	[0 to 99999999/0/1]
8-066-012	L:FIN Jobs	KANNON-Fold	CTL*	[0 to 99999999/0/1]
8-066-013	L:FIN Jobs	Perfect-Bind	CTL*	[0 to 99999999/0/1]
8-066-014	L:FIN Jobs	Ring-Bind	CTL*	[0 to 99999999/0/1]
8-066-015	L:FIN Jobs	3rd Vendor	CTL*	[0 to 99999999/0/1]
8-066-016	L:FIN Jobs	TwinLoop-Bind	CTL*	[0 to 99999999/0/1]
8-067-001	O:FIN Jobs	Sort	CTL*	[0 to 99999999/0/1]
8-067-002	O:FIN Jobs	Stack	CTL*	[0 to 99999999/0/1]
8-067-003	O:FIN Jobs	Staple	CTL*	[0 to 99999999/0/1]
8-067-004	O:FIN Jobs	Booklet	CTL*	[0 to 99999999/0/1]
8-067-005	O:FIN Jobs	Z-Fold	CTL*	[0 to 99999999/0/1]
8-067-006	O:FIN Jobs	Punch	CTL*	[0 to 99999999/0/1]
8-067-	O:FIN Jobs	Other	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
007				
8-067-008	O:FIN Jobs	Inside-Fold	CTL*	[0 to 99999999/0/1]
8-067-009	O:FIN Jobs	Three-IN-Fold	CTL*	[0 to 99999999/0/1]
8-067-010	O:FIN Jobs	Three-OUT-Fold	CTL*	[0 to 99999999/0/1]
8-067-011	O:FIN Jobs	Four-Fold	CTL*	[0 to 99999999/0/1]
8-067-012	O:FIN Jobs	KANNON-Fold	CTL*	[0 to 99999999/0/1]
8-067-013	O:FIN Jobs	Perfect-Bind	CTL*	[0 to 99999999/0/1]
8-067-014	O:FIN Jobs	Ring-Bind	CTL*	[0 to 99999999/0/1]
8-067-015	O:FIN Jobs	3rd Vendor	CTL*	[0 to 99999999/0/1]
8-067-016	O:FIN Jobs	TwinLoop-Bind	CTL*	[0 to 99999999/0/1]
8-071-001	T:Jobs/PGS	1 Page	CTL*	[0 to 99999999/0/1]
8-071-002	T:Jobs/PGS	2 Pages	CTL*	[0 to 99999999/0/1]
8-071-003	T:Jobs/PGS	3 Pages	CTL*	[0 to 99999999/0/1]
8-071-004	T:Jobs/PGS	4 Pages	CTL*	[0 to 99999999/0/1]
8-071-005	T:Jobs/PGS	5 Pages	CTL*	[0 to 99999999/0/1]
8-071-006	T:Jobs/PGS	6~10 Pages	CTL*	[0 to 99999999/0/1]
8-071-007	T:Jobs/PGS	11~20 Pages	CTL*	[0 to 99999999/0/1]
8-071-008	T:Jobs/PGS	21~50 Pages	CTL*	[0 to 99999999/0/1]
8-071-	T:Jobs/PGS	51~100 Pages	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
009				
8-071-010	T:Jobs/PGS	101~300 Pages	CTL*	[0 to 99999999/0/1]
8-071-011	T:Jobs/PGS	301~500 Pages	CTL*	[0 to 99999999/0/1]
8-071-012	T:Jobs/PGS	501~700 Pages	CTL*	[0 to 99999999/0/1]
8-071-013	T:Jobs/PGS	701~1000 Pages	CTL*	[0 to 99999999/0/1]
8-071-014	T:Jobs/PGS	1001~ Pages	CTL*	[0 to 99999999/0/1]
8-072-001	C:Jobs/PGS	1 Page	CTL*	[0 to 99999999/0/1]
8-072-002	C:Jobs/PGS	2 Pages	CTL*	[0 to 99999999/0/1]
8-072-003	C:Jobs/PGS	3 Pages	CTL*	[0 to 99999999/0/1]
8-072-004	C:Jobs/PGS	4 Pages	CTL*	[0 to 99999999/0/1]
8-072-005	C:Jobs/PGS	5 Pages	CTL*	[0 to 99999999/0/1]
8-072-006	C:Jobs/PGS	6~10 Pages	CTL*	[0 to 99999999/0/1]
8-072-007	C:Jobs/PGS	11~20 Pages	CTL*	[0 to 99999999/0/1]
8-072-008	C:Jobs/PGS	21~50 Pages	CTL*	[0 to 99999999/0/1]
8-072-009	C:Jobs/PGS	51~100 Pages	CTL*	[0 to 99999999/0/1]
8-072-010	C:Jobs/PGS	101~300 Pages	CTL*	[0 to 99999999/0/1]
8-072-011	C:Jobs/PGS	301~500 Pages	CTL*	[0 to 99999999/0/1]
8-072-012	C:Jobs/PGS	501~700 Pages	CTL*	[0 to 99999999/0/1]
8-072-	C:Jobs/PGS	701~1000 Pages	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
013				
8-072-014	C:Jobs/PGS	1001~ Pages	CTL*	[0 to 99999999/0/1]
8-073-001	F:Jobs/PGS	1 Page	CTL*	[0 to 99999999/0/1]
8-073-002	F:Jobs/PGS	2 Pages	CTL*	[0 to 99999999/0/1]
8-073-003	F:Jobs/PGS	3 Pages	CTL*	[0 to 99999999/0/1]
8-073-004	F:Jobs/PGS	4 Pages	CTL*	[0 to 99999999/0/1]
8-073-005	F:Jobs/PGS	5 Pages	CTL*	[0 to 99999999/0/1]
8-073-006	F:Jobs/PGS	6~10 Pages	CTL*	[0 to 99999999/0/1]
8-073-007	F:Jobs/PGS	11~20 Pages	CTL*	[0 to 99999999/0/1]
8-073-008	F:Jobs/PGS	21~50 Pages	CTL*	[0 to 99999999/0/1]
8-073-009	F:Jobs/PGS	51~100 Pages	CTL*	[0 to 99999999/0/1]
8-073-010	F:Jobs/PGS	101~300 Pages	CTL*	[0 to 99999999/0/1]
8-073-011	F:Jobs/PGS	301~500 Pages	CTL*	[0 to 99999999/0/1]
8-073-012	F:Jobs/PGS	501~700 Pages	CTL*	[0 to 99999999/0/1]
8-073-013	F:Jobs/PGS	701~1000 Pages	CTL*	[0 to 99999999/0/1]
8-073-014	F:Jobs/PGS	1001~ Pages	CTL*	[0 to 99999999/0/1]
8-074-001	P:Jobs/PGS	1 Page	CTL*	[0 to 99999999/0/1]
8-074-002	P:Jobs/PGS	2 Pages	CTL*	[0 to 99999999/0/1]
8-074-	P:Jobs/PGS	3 Pages	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
003				
8-074-004	P:Jobs/PGS	4 Pages	CTL*	[0 to 99999999/0/1]
8-074-005	P:Jobs/PGS	5 Pages	CTL*	[0 to 99999999/0/1]
8-074-006	P:Jobs/PGS	6~10 Pages	CTL*	[0 to 99999999/0/1]
8-074-007	P:Jobs/PGS	11~20 Pages	CTL*	[0 to 99999999/0/1]
8-074-008	P:Jobs/PGS	21~50 Pages	CTL*	[0 to 99999999/0/1]
8-074-009	P:Jobs/PGS	51~100 Pages	CTL*	[0 to 99999999/0/1]
8-074-010	P:Jobs/PGS	101~300 Pages	CTL*	[0 to 99999999/0/1]
8-074-011	P:Jobs/PGS	301~500 Pages	CTL*	[0 to 99999999/0/1]
8-074-012	P:Jobs/PGS	501~700 Pages	CTL*	[0 to 99999999/0/1]
8-074-013	P:Jobs/PGS	701~1000 Pages	CTL*	[0 to 99999999/0/1]
8-074-014	P:Jobs/PGS	1001~ Pages	CTL*	[0 to 99999999/0/1]
8-075-001	S:Jobs/PGS	1 Page	CTL*	[0 to 99999999/0/1]
8-075-002	S:Jobs/PGS	2 Pages	CTL*	[0 to 99999999/0/1]
8-075-003	S:Jobs/PGS	3 Pages	CTL*	[0 to 99999999/0/1]
8-075-004	S:Jobs/PGS	4 Pages	CTL*	[0 to 99999999/0/1]
8-075-005	S:Jobs/PGS	5 Pages	CTL*	[0 to 99999999/0/1]
8-075-006	S:Jobs/PGS	6~10 Pages	CTL*	[0 to 99999999/0/1]
8-075-	S:Jobs/PGS	11~20 Pages	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
007				
8-075-008	S:Jobs/PGS	21~50 Pages	CTL*	[0 to 99999999/0/1]
8-075-009	S:Jobs/PGS	51~100 Pages	CTL*	[0 to 99999999/0/1]
8-075-010	S:Jobs/PGS	101~300 Pages	CTL*	[0 to 99999999/0/1]
8-075-011	S:Jobs/PGS	301~500 Pages	CTL*	[0 to 99999999/0/1]
8-075-012	S:Jobs/PGS	501~700 Pages	CTL*	[0 to 99999999/0/1]
8-075-013	S:Jobs/PGS	701~1000 Pages	CTL*	[0 to 99999999/0/1]
8-075-014	S:Jobs/PGS	1001~ Pages	CTL*	[0 to 99999999/0/1]
8-076-001	L:Jobs/PGS	1 Page	CTL*	[0 to 99999999/0/1]
8-076-002	L:Jobs/PGS	2 Pages	CTL*	[0 to 99999999/0/1]
8-076-003	L:Jobs/PGS	3 Pages	CTL*	[0 to 99999999/0/1]
8-076-004	L:Jobs/PGS	4 Pages	CTL*	[0 to 99999999/0/1]
8-076-005	L:Jobs/PGS	5 Pages	CTL*	[0 to 99999999/0/1]
8-076-006	L:Jobs/PGS	6~10 Pages	CTL*	[0 to 99999999/0/1]
8-076-007	L:Jobs/PGS	11~20 Pages	CTL*	[0 to 99999999/0/1]
8-076-008	L:Jobs/PGS	21~50 Pages	CTL*	[0 to 99999999/0/1]
8-076-009	L:Jobs/PGS	51~100 Pages	CTL*	[0 to 99999999/0/1]
8-076-010	L:Jobs/PGS	101~300 Pages	CTL*	[0 to 99999999/0/1]
8-076-	L:Jobs/PGS	301~500 Pages	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
011				
8-076-012	L:Jobs/PGS	501~700 Pages	CTL*	[0 to 99999999/0/1]
8-076-013	L:Jobs/PGS	701~1000 Pages	CTL*	[0 to 99999999/0/1]
8-076-014	L:Jobs/PGS	1001~ Pages	CTL*	[0 to 99999999/0/1]
8-077-001	O:Jobs/PGS	1 Page	CTL*	[0 to 99999999/0/1]
8-077-002	O:Jobs/PGS	2 Pages	CTL*	[0 to 99999999/0/1]
8-077-003	O:Jobs/PGS	3 Pages	CTL*	[0 to 99999999/0/1]
8-077-004	O:Jobs/PGS	4 Pages	CTL*	[0 to 99999999/0/1]
8-077-005	O:Jobs/PGS	5 Pages	CTL*	[0 to 99999999/0/1]
8-077-006	O:Jobs/PGS	6~10 Pages	CTL*	[0 to 99999999/0/1]
8-077-007	O:Jobs/PGS	11~20 Pages	CTL*	[0 to 99999999/0/1]
8-077-008	O:Jobs/PGS	21~50 Pages	CTL*	[0 to 99999999/0/1]
8-077-009	O:Jobs/PGS	51~100 Pages	CTL*	[0 to 99999999/0/1]
8-077-010	O:Jobs/PGS	101~300 Pages	CTL*	[0 to 99999999/0/1]
8-077-011	O:Jobs/PGS	301~500 Pages	CTL*	[0 to 99999999/0/1]
8-077-012	O:Jobs/PGS	501~700 Pages	CTL*	[0 to 99999999/0/1]
8-077-013	O:Jobs/PGS	701~1000 Pages	CTL*	[0 to 99999999/0/1]
8-077-014	O:Jobs/PGS	1001~ Pages	CTL*	[0 to 99999999/0/1]
8-081-	T:Smart Device	Smart Device	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
001				
8-082-001	C:Smart Device	Smart Device	CTL*	[0 to 99999999/0/1]
8-083-001	F:Smart Device	Smart Device	CTL*	[0 to 99999999/0/1]
8-084-001	P:Smart Device	Smart Device	CTL*	[0 to 99999999/0/1]
8-085-001	S:Smart Device	Smart Device	CTL*	[0 to 99999999/0/1]
8-091-001	T:Jobs/Driv	V3 RPCS	CTL*	[0 to 99999999/0/1]
8-091-002	T:Jobs/Driv	V3 RPCS Basic	CTL*	[0 to 99999999/0/1]
8-091-003	T:Jobs/Driv	V4 RPCS Inbox	CTL*	[0 to 99999999/0/1]
8-091-004	T:Jobs/Driv	V4 RPCS Generic	CTL*	[0 to 99999999/0/1]
8-091-005	T:Jobs/Driv	V4 RPCS	CTL*	[0 to 99999999/0/1]
8-091-006	T:Jobs/Driv	V3 XPS(RPCS)	CTL*	[0 to 99999999/0/1]
8-091-007	T:Jobs/Driv	V3 PS	CTL*	[0 to 99999999/0/1]
8-091-008	T:Jobs/Driv	V3 PS UD	CTL*	[0 to 99999999/0/1]
8-091-009	T:Jobs/Driv	V3 PS UD Generic	CTL*	[0 to 99999999/0/1]
8-091-010	T:Jobs/Driv	V4 PS UD	CTL*	[0 to 99999999/0/1]
8-091-011	T:Jobs/Driv	V4 PS UD Generic	CTL*	[0 to 99999999/0/1]
8-091-012	T:Jobs/Driv	V3 GL/GL2	CTL*	[0 to 99999999/0/1]
8-091-013	T:Jobs/Driv	V3 GL/GL2 Generic	CTL*	[0 to 99999999/0/1]
8-091-	T:Jobs/Driv	V4 GL/GL2	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
014				
8-091-015	T:Jobs/Driv	PDF Direct	CTL*	[0 to 99999999/0/1]
8-091-016	T:Jobs/Driv	V3 PCL5e/5c	CTL*	[0 to 99999999/0/1]
8-091-017	T:Jobs/Driv	V3 PCL5e/5c Generic	CTL*	[0 to 99999999/0/1]
8-091-018	T:Jobs/Driv	V3 PCL XL	CTL*	[0 to 99999999/0/1]
8-091-019	T:Jobs/Driv	V3 PCL XL UD	CTL*	[0 to 99999999/0/1]
8-091-020	T:Jobs/Driv	V3 PCL XL UD Generic	CTL*	[0 to 99999999/0/1]
8-091-021	T:Jobs/Driv	V4 PCL XL UD	CTL*	[0 to 99999999/0/1]
8-091-022	T:Jobs/Driv	V4 PCL XL UD Generic	CTL*	[0 to 99999999/0/1]
8-091-023	T:Jobs/Driv	XPS	CTL*	[0 to 99999999/0/1]
8-091-024	T:Jobs/Driv	V3 PC-Fax	CTL*	[0 to 99999999/0/1]
8-091-025	T:Jobs/Driv	V4 PC-Fax	CTL*	[0 to 99999999/0/1]
8-091-026	T:Jobs/Driv	Other	CTL*	[0 to 99999999/0/1]
8-094-001	P:Jobs/Driv	V3 RPCS	CTL*	[0 to 99999999/0/1]
8-094-002	P:Jobs/Driv	V3 RPCS Basic	CTL*	[0 to 99999999/0/1]
8-094-003	P:Jobs/Driv	V4 RPCS Inbox	CTL*	[0 to 99999999/0/1]
8-094-004	P:Jobs/Driv	V4 RPCS Generic	CTL*	[0 to 99999999/0/1]
8-094-005	P:Jobs/Driv	V4 RPCS	CTL*	[0 to 99999999/0/1]
8-094-	P:Jobs/Driv	V3 XPS(RPCS)	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
006				
8-094-007	P:Jobs/Driv	V3 PS	CTL*	[0 to 99999999/0/1]
8-094-008	P:Jobs/Driv	V3 PS UD	CTL*	[0 to 99999999/0/1]
8-094-009	P:Jobs/Driv	V3 PS UD Generic	CTL*	[0 to 99999999/0/1]
8-094-010	P:Jobs/Driv	V4 PS UD	CTL*	[0 to 99999999/0/1]
8-094-011	P:Jobs/Driv	V4 PS UD Generic	CTL*	[0 to 99999999/0/1]
8-094-012	P:Jobs/Driv	V3 GL/GL2	CTL*	[0 to 99999999/0/1]
8-094-013	P:Jobs/Driv	V3 GL/GL2 Generic	CTL*	[0 to 99999999/0/1]
8-094-014	P:Jobs/Driv	V4 GL/GL2	CTL*	[0 to 99999999/0/1]
8-094-015	P:Jobs/Driv	PDF Direct	CTL*	[0 to 99999999/0/1]
8-094-016	P:Jobs/Driv	V3 PCL5e/5c	CTL*	[0 to 99999999/0/1]
8-094-017	P:Jobs/Driv	V3 PCL5e/5c Generic	CTL*	[0 to 99999999/0/1]
8-094-018	P:Jobs/Driv	V3 PCL XL	CTL*	[0 to 99999999/0/1]
8-094-019	P:Jobs/Driv	V3 PCL XL UD	CTL*	[0 to 99999999/0/1]
8-094-020	P:Jobs/Driv	V3 PCL XL UD Generic	CTL*	[0 to 99999999/0/1]
8-094-021	P:Jobs/Driv	V4 PCL XL UD	CTL*	[0 to 99999999/0/1]
8-094-022	P:Jobs/Driv	V4 PCL XL UD Generic	CTL*	[0 to 99999999/0/1]
8-094-023	P:Jobs/Driv	XPS	CTL*	[0 to 99999999/0/1]
8-094-	P:Jobs/Driv	V3 PC-Fax	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
024				
8-094-025	P:Jobs/Driv	V4 PC-Fax	CTL*	[0 to 99999999/0/1]
8-094-026	P:Jobs/Driv	Other	CTL*	[0 to 99999999/0/1]
8-111-001	T:FAX TX Jobs	B/W(Tel)	CTL*	[0 to 99999999/0/1]
8-111-101	T:FAX TX Jobs	B/W(Cloud)	CTL*	[0 to 99999999/0/1]
8-113-001	F:FAX TX Jobs	B/W(Tel)	CTL*	[0 to 99999999/0/1]
8-113-101	F:FAX TX Jobs	B/W(Cloud)	CTL*	[0 to 99999999/0/1]
8-121-001	T:IFAX TX Jobs	B/W	CTL*	[0 to 99999999/0/1]
8-123-001	F:IFAX TX Jobs	B/W	CTL*	[0 to 99999999/0/1]
8-131-001	T:S-to-Email Jobs	B/W	CTL*	[0 to 99999999/0/1]
8-131-002	T:S-to-Email Jobs	Color	CTL*	[0 to 99999999/0/1]
8-131-003	T:S-to-Email Jobs	ACS	CTL*	[0 to 99999999/0/1]
8-135-001	S:S-to-Email Jobs	B/W	CTL*	[0 to 99999999/0/1]
8-135-002	S:S-to-Email Jobs	Color	CTL*	[0 to 99999999/0/1]
8-135-003	S:S-to-Email Jobs	ACS	CTL*	[0 to 99999999/0/1]
8-141-001	T:Deliv Jobs/Svr	B/W	CTL*	[0 to 99999999/0/1]
8-141-002	T:Deliv Jobs/Svr	Color	CTL*	[0 to 99999999/0/1]
8-141-003	T:Deliv Jobs/Svr	ACS	CTL*	[0 to 99999999/0/1]
8-145-	S:Deliv Jobs/Svr	B/W	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
001				
8-145-002	S:Deliv Jobs/Svr	Color	CTL*	[0 to 99999999/0/1]
8-145-003	S:Deliv Jobs/Svr	ACS	CTL*	[0 to 99999999/0/1]
8-151-001	T:Deliv Jobs/PC	B/W	CTL*	[0 to 99999999/0/1]
8-151-002	T:Deliv Jobs/PC	Color	CTL*	[0 to 99999999/0/1]
8-151-003	T:Deliv Jobs/PC	ACS	CTL*	[0 to 99999999/0/1]
8-155-001	S:Deliv Jobs/PC	B/W	CTL*	[0 to 99999999/0/1]
8-155-002	S:Deliv Jobs/PC	Color	CTL*	[0 to 99999999/0/1]
8-155-003	S:Deliv Jobs/PC	ACS	CTL*	[0 to 99999999/0/1]
8-161-001	T:PCFAX TX Jobs		CTL*	[0 to 99999999/0/1]
8-163-001	F:PCFAX TX Jobs		CTL*	[0 to 99999999/0/1]
8-171-001	T:Deliv Jobs/WSD/DSM	B/W	CTL*	[0 to 99999999/0/1]
8-171-002	T:Deliv Jobs/WSD/DSM	Color	CTL*	[0 to 99999999/0/1]
8-171-003	T:Deliv Jobs/WSD/DSM	ACS	CTL*	[0 to 99999999/0/1]
8-175-001	S:Deliv Jobs/WSD/DSM	B/W	CTL*	[0 to 99999999/0/1]
8-175-002	S:Deliv Jobs/WSD/DSM	Color	CTL*	[0 to 99999999/0/1]
8-175-003	S:Deliv Jobs/WSD/DSM	ACS	CTL*	[0 to 99999999/0/1]
8-181-001	T:Scan to Media Jobs	B/W	CTL*	[0 to 99999999/0/1]
8-181-	T:Scan to Media Jobs	Color	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
002				
8-181-003	T:Scan to Media Jobs	ACS	CTL*	[0 to 99999999/0/1]
8-185-001	S:Scan to Media Jobs	B/W	CTL*	[0 to 99999999/0/1]
8-185-002	S:Scan to Media Jobs	Color	CTL*	[0 to 99999999/0/1]
8-185-003	S:Scan to Media Jobs	ACS	CTL*	[0 to 99999999/0/1]
8-191-001	T:Total Scan PGS		CTL*	[0 to 99999999/0/1]
8-192-001	C:Total Scan PGS		CTL*	[0 to 99999999/0/1]
8-193-001	F:Total Scan PGS		CTL*	[0 to 99999999/0/1]
8-195-001	S:Total Scan PGS		CTL*	[0 to 99999999/0/1]
8-196-001	L:Total Scan PGS		CTL*	[0 to 99999999/0/1]
8-201-001	T:LSize Scan PGS	A3/DLT, Larger	CTL*	[0 to 99999999/0/1]
8-203-001	F:LSize Scan PGS	A3/DLT, Larger	CTL*	[0 to 99999999/0/1]
8-205-001	S:LSize Scan PGS	A3/DLT, Larger	CTL*	[0 to 99999999/0/1]
8-211-001	T:Scan PGS/LS		CTL*	[0 to 99999999/0/1]
8-212-001	C:Scan PGS/LS		CTL*	[0 to 99999999/0/1]
8-213-001	F:Scan PGS/LS		CTL*	[0 to 99999999/0/1]
8-215-001	S:Scan PGS/LS		CTL*	[0 to 99999999/0/1]
8-216-001	L:Scan PGS/LS		CTL*	[0 to 99999999/0/1]
8-221-	ADF Org Feeds	Front	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
001				
8-221-002	ADF Org Feeds	Back	CTL*	[0 to 99999999/0/1]
8-231-001	Scan PGS/Mode	Large Volume	CTL*	[0 to 99999999/0/1]
8-231-002	Scan PGS/Mode	SADF	CTL*	[0 to 99999999/0/1]
8-231-003	Scan PGS/Mode	Mixed Size	CTL*	[0 to 99999999/0/1]
8-231-004	Scan PGS/Mode	Custom Size	CTL*	[0 to 99999999/0/1]
8-231-005	Scan PGS/Mode	Platen	CTL*	[0 to 99999999/0/1]
8-231-006	Scan PGS/Mode	Mixed 1side/2side	CTL*	[0 to 99999999/0/1]
8-231-007	Scan PGS/Mode	ID card Feeder	CTL*	[0 to 99999999/0/1]
8-241-001	T:Scan PGS/Org	Text	CTL*	[0 to 99999999/0/1]
8-241-002	T:Scan PGS/Org	Text/Photo	CTL*	[0 to 99999999/0/1]
8-241-003	T:Scan PGS/Org	Photo	CTL*	[0 to 99999999/0/1]
8-241-004	T:Scan PGS/Org	GenCopy, Pale	CTL*	[0 to 99999999/0/1]
8-241-005	T:Scan PGS/Org	Map	CTL*	[0 to 99999999/0/1]
8-241-006	T:Scan PGS/Org	Normal/Detail	CTL*	[0 to 99999999/0/1]
8-241-007	T:Scan PGS/Org	Fine/Super Fine	CTL*	[0 to 99999999/0/1]
8-241-008	T:Scan PGS/Org	Binary	CTL*	[0 to 99999999/0/1]
8-241-009	T:Scan PGS/Org	Grayscale	CTL*	[0 to 99999999/0/1]
8-241-	T:Scan PGS/Org	Color	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
010				
8-241-011	T:Scan PGS/Org	Other	CTL*	[0 to 99999999/0/1]
8-242-001	C:Scan PGS/Org	Text	CTL*	[0 to 99999999/0/1]
8-242-002	C:Scan PGS/Org	Text/Photo	CTL*	[0 to 99999999/0/1]
8-242-003	C:Scan PGS/Org	Photo	CTL*	[0 to 99999999/0/1]
8-242-004	C:Scan PGS/Org	GenCopy, Pale	CTL*	[0 to 99999999/0/1]
8-242-005	C:Scan PGS/Org	Map	CTL*	[0 to 99999999/0/1]
8-242-011	C:Scan PGS/Org	Other	CTL*	[0 to 99999999/0/1]
8-243-001	F:Scan PGS/Org	Text	CTL*	[0 to 99999999/0/1]
8-243-002	F:Scan PGS/Org	Text/Photo	CTL*	[0 to 99999999/0/1]
8-243-003	F:Scan PGS/Org	Photo	CTL*	[0 to 99999999/0/1]
8-243-006	F:Scan PGS/Org	Normal/Detail	CTL*	[0 to 99999999/0/1]
8-243-007	F:Scan PGS/Org	Fine/Super Fine	CTL*	[0 to 99999999/0/1]
8-243-011	F:Scan PGS/Org	Other	CTL*	[0 to 99999999/0/1]
8-245-001	S:Scan PGS/Org	Text	CTL*	[0 to 99999999/0/1]
8-245-002	S:Scan PGS/Org	Text/Photo	CTL*	[0 to 99999999/0/1]
8-245-003	S:Scan PGS/Org	Photo	CTL*	[0 to 99999999/0/1]
8-245-004	S:Scan PGS/Org	GenCopy, Pale	CTL*	[0 to 99999999/0/1]
8-245-	S:Scan PGS/Org	Binary	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
008				
8-245-009	S:Scan PGS/Org	Grayscale	CTL*	[0 to 99999999/0/1]
8-245-010	S:Scan PGS/Org	Color	CTL*	[0 to 99999999/0/1]
8-245-011	S:Scan PGS/Org	Other	CTL*	[0 to 99999999/0/1]
8-246-001	L:Scan PGS/Org	Text	CTL*	[0 to 99999999/0/1]
8-246-002	L:Scan PGS/Org	Text/Photo	CTL*	[0 to 99999999/0/1]
8-246-003	L:Scan PGS/Org	Photo	CTL*	[0 to 99999999/0/1]
8-246-004	L:Scan PGS/Org	GenCopy, Pale	CTL*	[0 to 99999999/0/1]
8-246-005	L:Scan PGS/Org	Map	CTL*	[0 to 99999999/0/1]
8-246-011	L:Scan PGS/Org	Other	CTL*	[0 to 99999999/0/1]
8-251-001	T:Scan PGS/ImgEdt		CTL*	[0 to 99999999/0/1]
8-252-001	C:Scan PGS/ImgEdt		CTL*	[0 to 99999999/0/1]
8-255-001	S:Scan PGS/ImgEdt		CTL*	[0 to 99999999/0/1]
8-256-001	L:Scan PGS/ImgEdt		CTL*	[0 to 99999999/0/1]
8-257-001	O:Scan PGS/ImgEdt		CTL*	[0 to 99999999/0/1]
8-281-001	T:Scan PGS/TWAIN		CTL*	[0 to 99999999/0/1]
8-285-001	S:Scan PGS/TWAIN		CTL*	[0 to 99999999/0/1]
8-291-001	T:Scan PGS/Stamp		CTL*	[0 to 99999999/0/1]
8-293-	F:Scan PGS/Stamp		CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
001				
8-295-001	S:Scan PGS/Stamp		CTL*	[0 to 99999999/0/1]
8-301-001	T:Scan PGS/Size	A3	CTL*	[0 to 99999999/0/1]
8-301-002	T:Scan PGS/Size	A4	CTL*	[0 to 99999999/0/1]
8-301-003	T:Scan PGS/Size	A5	CTL*	[0 to 99999999/0/1]
8-301-004	T:Scan PGS/Size	B4	CTL*	[0 to 99999999/0/1]
8-301-005	T:Scan PGS/Size	B5	CTL*	[0 to 99999999/0/1]
8-301-006	T:Scan PGS/Size	DLT	CTL*	[0 to 99999999/0/1]
8-301-007	T:Scan PGS/Size	LG	CTL*	[0 to 99999999/0/1]
8-301-008	T:Scan PGS/Size	LT	CTL*	[0 to 99999999/0/1]
8-301-009	T:Scan PGS/Size	HLT	CTL*	[0 to 99999999/0/1]
8-301-010	T:Scan PGS/Size	Full Bleed	CTL*	[0 to 99999999/0/1]
8-301-254	T:Scan PGS/Size	Other (Standard)	CTL*	[0 to 99999999/0/1]
8-301-255	T:Scan PGS/Size	Other (Custom)	CTL*	[0 to 99999999/0/1]
8-302-001	C:Scan PGS/Size	A3	CTL*	[0 to 99999999/0/1]
8-302-002	C:Scan PGS/Size	A4	CTL*	[0 to 99999999/0/1]
8-302-003	C:Scan PGS/Size	A5	CTL*	[0 to 99999999/0/1]
8-302-004	C:Scan PGS/Size	B4	CTL*	[0 to 99999999/0/1]
8-302-	C:Scan PGS/Size	B5	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
005				
8-302-006	C:Scan PGS/Size	DLT	CTL*	[0 to 99999999/0/1]
8-302-007	C:Scan PGS/Size	LG	CTL*	[0 to 99999999/0/1]
8-302-008	C:Scan PGS/Size	LT	CTL*	[0 to 99999999/0/1]
8-302-009	C:Scan PGS/Size	HLT	CTL*	[0 to 99999999/0/1]
8-302-010	C:Scan PGS/Size	Full Bleed	CTL*	[0 to 99999999/0/1]
8-302-254	C:Scan PGS/Size	Other (Standard)	CTL*	[0 to 99999999/0/1]
8-302-255	C:Scan PGS/Size	Other (Custom)	CTL*	[0 to 99999999/0/1]
8-303-001	F:Scan PGS/Size	A3	CTL*	[0 to 99999999/0/1]
8-303-002	F:Scan PGS/Size	A4	CTL*	[0 to 99999999/0/1]
8-303-003	F:Scan PGS/Size	A5	CTL*	[0 to 99999999/0/1]
8-303-004	F:Scan PGS/Size	B4	CTL*	[0 to 99999999/0/1]
8-303-005	F:Scan PGS/Size	B5	CTL*	[0 to 99999999/0/1]
8-303-006	F:Scan PGS/Size	DLT	CTL*	[0 to 99999999/0/1]
8-303-007	F:Scan PGS/Size	LG	CTL*	[0 to 99999999/0/1]
8-303-008	F:Scan PGS/Size	LT	CTL*	[0 to 99999999/0/1]
8-303-009	F:Scan PGS/Size	HLT	CTL*	[0 to 99999999/0/1]
8-303-010	F:Scan PGS/Size	Full Bleed	CTL*	[0 to 99999999/0/1]
8-303-	F:Scan PGS/Size	Other (Standard)	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
254				
8-303-255	F:Scan PGS/Size	Other (Custom)	CTL*	[0 to 99999999/0/1]
8-305-001	S:Scan PGS/Size	A3	CTL*	[0 to 99999999/0/1]
8-305-002	S:Scan PGS/Size	A4	CTL*	[0 to 99999999/0/1]
8-305-003	S:Scan PGS/Size	A5	CTL*	[0 to 99999999/0/1]
8-305-004	S:Scan PGS/Size	B4	CTL*	[0 to 99999999/0/1]
8-305-005	S:Scan PGS/Size	B5	CTL*	[0 to 99999999/0/1]
8-305-006	S:Scan PGS/Size	DLT	CTL*	[0 to 99999999/0/1]
8-305-007	S:Scan PGS/Size	LG	CTL*	[0 to 99999999/0/1]
8-305-008	S:Scan PGS/Size	LT	CTL*	[0 to 99999999/0/1]
8-305-009	S:Scan PGS/Size	HLT	CTL*	[0 to 99999999/0/1]
8-305-010	S:Scan PGS/Size	Full Bleed	CTL*	[0 to 99999999/0/1]
8-305-254	S:Scan PGS/Size	Other (Standard)	CTL*	[0 to 99999999/0/1]
8-305-255	S:Scan PGS/Size	Other (Custom)	CTL*	[0 to 99999999/0/1]
8-306-001	L:Scan PGS/Size	A3	CTL*	[0 to 99999999/0/1]
8-306-002	L:Scan PGS/Size	A4	CTL*	[0 to 99999999/0/1]
8-306-003	L:Scan PGS/Size	A5	CTL*	[0 to 99999999/0/1]
8-306-004	L:Scan PGS/Size	B4	CTL*	[0 to 99999999/0/1]
8-306-	L:Scan PGS/Size	B5	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
005				
8-306-006	L:Scan PGS/Size	DLT	CTL*	[0 to 99999999/0/1]
8-306-007	L:Scan PGS/Size	LG	CTL*	[0 to 99999999/0/1]
8-306-008	L:Scan PGS/Size	LT	CTL*	[0 to 99999999/0/1]
8-306-009	L:Scan PGS/Size	HLT	CTL*	[0 to 99999999/0/1]
8-306-010	L:Scan PGS/Size	Full Bleed	CTL*	[0 to 99999999/0/1]
8-306-254	L:Scan PGS/Size	Other (Standard)	CTL*	[0 to 99999999/0/1]
8-306-255	L:Scan PGS/Size	Other (Custom)	CTL*	[0 to 99999999/0/1]
8-311-001	T:Scan PGS/Rez	1200dpi ~	CTL*	[0 to 99999999/0/1]
8-311-002	T:Scan PGS/Rez	600dpi~1199dpi	CTL*	[0 to 99999999/0/1]
8-311-003	T:Scan PGS/Rez	400dpi~599dpi	CTL*	[0 to 99999999/0/1]
8-311-004	T:Scan PGS/Rez	200dpi~399dpi	CTL*	[0 to 99999999/0/1]
8-311-005	T:Scan PGS/Rez	~199dpi	CTL*	[0 to 99999999/0/1]
8-315-001	S:Scan PGS/Rez	1200dpi ~	CTL*	[0 to 99999999/0/1]
8-315-002	S:Scan PGS/Rez	600dpi~1199dpi	CTL*	[0 to 99999999/0/1]
8-315-003	S:Scan PGS/Rez	400dpi~599dpi	CTL*	[0 to 99999999/0/1]
8-315-004	S:Scan PGS/Rez	200dpi~399dpi	CTL*	[0 to 99999999/0/1]
8-315-005	S:Scan PGS/Rez	~199dpi	CTL*	[0 to 99999999/0/1]
8-321-	T:Sacn Poster	2 Sheet	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
001				
8-321-002	T:Sacn Poster	4 Sheet	CTL*	[0 to 99999999/0/1]
8-321-003	T:Sacn Poster	9 Sheet	CTL*	[0 to 99999999/0/1]
8-322-001	C:Sacn Poster	2 Sheet	CTL*	[0 to 99999999/0/1]
8-322-002	C:Sacn Poster	4 Sheet	CTL*	[0 to 99999999/0/1]
8-322-003	C:Sacn Poster	9 Sheet	CTL*	[0 to 99999999/0/1]
8-326-001	L:Sacn Poster	2 Sheet	CTL*	[0 to 99999999/0/1]
8-326-002	L:Sacn Poster	4 Sheet	CTL*	[0 to 99999999/0/1]
8-326-003	L:Sacn Poster	9 Sheet	CTL*	[0 to 99999999/0/1]
8-381-001	T:Total PrtPGS	Field Number	CTL*	[0 to 99999999/0/1]
8-382-001	C:Total PrtPGS	Field Number	CTL*	[0 to 99999999/0/1]
8-383-001	F:Total PrtPGS	Field Number	CTL*	[0 to 99999999/0/1]
8-384-001	P:Total PrtPGS	Field Number	CTL*	[0 to 99999999/0/1]
8-385-001	S:Total PrtPGS	Field Number	CTL*	[0 to 99999999/0/1]
8-386-001	L:Total PrtPGS	Field Number	CTL*	[0 to 99999999/0/1]
8-387-001	O:Total PrtPGS	Field Number	CTL*	[0 to 99999999/0/1]
8-391-001	LSize PrtPGS	A3/DLT, Larger	CTL*	[0 to 99999999/0/1]
8-401-001	T:PrtPGS/LS		CTL*	[0 to 99999999/0/1]
8-402-	C:PrtPGS/LS		CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
001				
8-403-001	F:PrtPGS/LS		CTL*	[0 to 99999999/0/1]
8-404-001	P:PrtPGS/LS		CTL*	[0 to 99999999/0/1]
8-405-001	S:PrtPGS/LS		CTL*	[0 to 99999999/0/1]
8-406-001	L:PrtPGS/LS		CTL*	[0 to 99999999/0/1]
8-411-001	Prints/Duplex		CTL*	[0 to 99999999/0/1]
8-421-001	T:PrtPGS/Dup Comb	Simplex> Duplex	CTL*	[0 to 99999999/0/1]
8-421-002	T:PrtPGS/Dup Comb	Duplex> Duplex	CTL*	[0 to 99999999/0/1]
8-421-003	T:PrtPGS/Dup Comb	Book> Duplex	CTL*	[0 to 99999999/0/1]
8-421-004	T:PrtPGS/Dup Comb	Simplex Combine	CTL*	[0 to 99999999/0/1]
8-421-005	T:PrtPGS/Dup Comb	Duplex Combine	CTL*	[0 to 99999999/0/1]
8-421-006	T:PrtPGS/Dup Comb	2in1	CTL*	[0 to 99999999/0/1]
8-421-007	T:PrtPGS/Dup Comb	4in1	CTL*	[0 to 99999999/0/1]
8-421-008	T:PrtPGS/Dup Comb	6in1	CTL*	[0 to 99999999/0/1]
8-421-009	T:PrtPGS/Dup Comb	8in1	CTL*	[0 to 99999999/0/1]
8-421-010	T:PrtPGS/Dup Comb	9in1	CTL*	[0 to 99999999/0/1]
8-421-011	T:PrtPGS/Dup Comb	16in1	CTL*	[0 to 99999999/0/1]
8-421-012	T:PrtPGS/Dup Comb	Booklet	CTL*	[0 to 99999999/0/1]
8-421-	T:PrtPGS/Dup Comb	Magazine	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
013				
8-421-014	T:PrtPGS/Dup Comb	2in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-421-015	T:PrtPGS/Dup Comb	4in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-421-016	T:PrtPGS/Dup Comb	6in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-421-017	T:PrtPGS/Dup Comb	8in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-421-018	T:PrtPGS/Dup Comb	9in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-421-019	T:PrtPGS/Dup Comb	2in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-421-020	T:PrtPGS/Dup Comb	4in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-421-021	T:PrtPGS/Dup Comb	6in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-421-022	T:PrtPGS/Dup Comb	8in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-421-023	T:PrtPGS/Dup Comb	9in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-421-024	T:PrtPGS/Dup Comb	16in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-422-001	C:PrtPGS/Dup Comb	Simplex> Duplex	CTL*	[0 to 99999999/0/1]
8-422-002	C:PrtPGS/Dup Comb	Duplex> Duplex	CTL*	[0 to 99999999/0/1]
8-422-003	C:PrtPGS/Dup Comb	Book> Duplex	CTL*	[0 to 99999999/0/1]
8-422-004	C:PrtPGS/Dup Comb	Simplex Combine	CTL*	[0 to 99999999/0/1]
8-422-005	C:PrtPGS/Dup Comb	Duplex Combine	CTL*	[0 to 99999999/0/1]
8-422-006	C:PrtPGS/Dup Comb	2in1	CTL*	[0 to 99999999/0/1]
8-422-	C:PrtPGS/Dup Comb	4in1	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
007				
8-422-009	C:PrtPGS/Dup Comb	8in1	CTL*	[0 to 99999999/0/1]
8-422-012	C:PrtPGS/Dup Comb	Booklet	CTL*	[0 to 99999999/0/1]
8-422-013	C:PrtPGS/Dup Comb	Magazine	CTL*	[0 to 99999999/0/1]
8-422-014	C:PrtPGS/Dup Comb	2in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-422-015	C:PrtPGS/Dup Comb	4in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-422-017	C:PrtPGS/Dup Comb	8in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-422-019	C:PrtPGS/Dup Comb	2in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-422-020	C:PrtPGS/Dup Comb	4in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-422-022	C:PrtPGS/Dup Comb	8in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-423-001	F:PrtPGS/Dup Comb	Simplex> Duplex	CTL*	[0 to 99999999/0/1]
8-423-004	F:PrtPGS/Dup Comb	Simplex Combine	CTL*	[0 to 99999999/0/1]
8-423-005	F:PrtPGS/Dup Comb	Duplex Combine	CTL*	[0 to 99999999/0/1]
8-423-006	F:PrtPGS/Dup Comb	2in1	CTL*	[0 to 99999999/0/1]
8-423-007	F:PrtPGS/Dup Comb	4in1	CTL*	[0 to 99999999/0/1]
8-423-009	F:PrtPGS/Dup Comb	8in1	CTL*	[0 to 99999999/0/1]
8-423-011	F:PrtPGS/Dup Comb	16in1	CTL*	[0 to 99999999/0/1]
8-423-012	F:PrtPGS/Dup Comb	Booklet	CTL*	[0 to 99999999/0/1]
8-423-	F:PrtPGS/Dup Comb	Magazine	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
013				
8-423-014	F:PrtPGS/Dup Comb	2in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-423-015	F:PrtPGS/Dup Comb	4in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-423-017	F:PrtPGS/Dup Comb	8in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-423-019	F:PrtPGS/Dup Comb	2in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-423-020	F:PrtPGS/Dup Comb	4in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-423-022	F:PrtPGS/Dup Comb	8in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-423-024	F:PrtPGS/Dup Comb	16in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-424-001	P:PrtPGS/Dup Comb	Simplex> Duplex	CTL*	[0 to 99999999/0/1]
8-424-004	P:PrtPGS/Dup Comb	Simplex Combine	CTL*	[0 to 99999999/0/1]
8-424-005	P:PrtPGS/Dup Comb	Duplex Combine	CTL*	[0 to 99999999/0/1]
8-424-006	P:PrtPGS/Dup Comb	2in1	CTL*	[0 to 99999999/0/1]
8-424-007	P:PrtPGS/Dup Comb	4in1	CTL*	[0 to 99999999/0/1]
8-424-008	P:PrtPGS/Dup Comb	6in1	CTL*	[0 to 99999999/0/1]
8-424-009	P:PrtPGS/Dup Comb	8in1	CTL*	[0 to 99999999/0/1]
8-424-010	P:PrtPGS/Dup Comb	9in1	CTL*	[0 to 99999999/0/1]
8-424-011	P:PrtPGS/Dup Comb	16in1	CTL*	[0 to 99999999/0/1]
8-424-012	P:PrtPGS/Dup Comb	Booklet	CTL*	[0 to 99999999/0/1]
8-424-	P:PrtPGS/Dup Comb	Magazine	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
013				
8-424-014	P:PrtPGS/Dup Comb	2in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-424-015	P:PrtPGS/Dup Comb	4in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-424-016	P:PrtPGS/Dup Comb	6in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-424-017	P:PrtPGS/Dup Comb	8in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-424-018	P:PrtPGS/Dup Comb	9in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-424-019	P:PrtPGS/Dup Comb	2in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-424-020	P:PrtPGS/Dup Comb	4in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-424-021	P:PrtPGS/Dup Comb	6in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-424-022	P:PrtPGS/Dup Comb	8in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-424-023	P:PrtPGS/Dup Comb	9in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-424-024	P:PrtPGS/Dup Comb	16in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-425-001	S:PrtPGS/Dup Comb	Simplex> Duplex	CTL*	[0 to 99999999/0/1]
8-425-004	S:PrtPGS/Dup Comb	Simplex Combine	CTL*	[0 to 99999999/0/1]
8-425-005	S:PrtPGS/Dup Comb	Duplex Combine	CTL*	[0 to 99999999/0/1]
8-425-006	S:PrtPGS/Dup Comb	2in1	CTL*	[0 to 99999999/0/1]
8-425-007	S:PrtPGS/Dup Comb	4in1	CTL*	[0 to 99999999/0/1]
8-425-009	S:PrtPGS/Dup Comb	8in1	CTL*	[0 to 99999999/0/1]
8-425-	S:PrtPGS/Dup Comb	9in1	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
010				
8-425-011	S:PrtPGS/Dup Comb	16in1	CTL*	[0 to 99999999/0/1]
8-425-012	S:PrtPGS/Dup Comb	Booklet	CTL*	[0 to 99999999/0/1]
8-425-013	S:PrtPGS/Dup Comb	Magazine	CTL*	[0 to 99999999/0/1]
8-425-014	S:PrtPGS/Dup Comb	2in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-425-015	S:PrtPGS/Dup Comb	4in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-425-017	S:PrtPGS/Dup Comb	8in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-425-018	S:PrtPGS/Dup Comb	9in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-425-019	S:PrtPGS/Dup Comb	2in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-425-020	S:PrtPGS/Dup Comb	4in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-425-022	S:PrtPGS/Dup Comb	8in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-425-023	S:PrtPGS/Dup Comb	9in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-425-024	S:PrtPGS/Dup Comb	16in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-426-001	L:PrtPGS/Dup Comb	Simplex> Duplex	CTL*	[0 to 99999999/0/1]
8-426-004	L:PrtPGS/Dup Comb	Simplex Combine	CTL*	[0 to 99999999/0/1]
8-426-005	L:PrtPGS/Dup Comb	Duplex Combine	CTL*	[0 to 99999999/0/1]
8-426-006	L:PrtPGS/Dup Comb	2in1	CTL*	[0 to 99999999/0/1]
8-426-007	L:PrtPGS/Dup Comb	4in1	CTL*	[0 to 99999999/0/1]
8-426-	L:PrtPGS/Dup Comb	8in1	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
009				
8-426-011	L:PrtPGS/Dup Comb	16in1	CTL*	[0 to 99999999/0/1]
8-426-012	L:PrtPGS/Dup Comb	Booklet	CTL*	[0 to 99999999/0/1]
8-426-013	L:PrtPGS/Dup Comb	Magazine	CTL*	[0 to 99999999/0/1]
8-426-014	L:PrtPGS/Dup Comb	2in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-426-015	L:PrtPGS/Dup Comb	4in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-426-017	L:PrtPGS/Dup Comb	8in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-426-019	L:PrtPGS/Dup Comb	2in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-426-020	L:PrtPGS/Dup Comb	4in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-426-022	L:PrtPGS/Dup Comb	8in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-426-024	L:PrtPGS/Dup Comb	16in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-427-001	O:PrtPGS/Dup Comb	Simplex> Duplex	CTL*	[0 to 99999999/0/1]
8-427-002	O:PrtPGS/Dup Comb	Duplex> Duplex	CTL*	[0 to 99999999/0/1]
8-427-003	O:PrtPGS/Dup Comb	Book> Duplex	CTL*	[0 to 99999999/0/1]
8-427-004	O:PrtPGS/Dup Comb	Simplex Combine	CTL*	[0 to 99999999/0/1]
8-427-005	O:PrtPGS/Dup Comb	Duplex Combine	CTL*	[0 to 99999999/0/1]
8-427-006	O:PrtPGS/Dup Comb	2in1	CTL*	[0 to 99999999/0/1]
8-427-007	O:PrtPGS/Dup Comb	4in1	CTL*	[0 to 99999999/0/1]
8-427-	O:PrtPGS/Dup Comb	6in1	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
008				
8-427-009	O:PrtPGS/Dup Comb	8in1	CTL*	[0 to 99999999/0/1]
8-427-010	O:PrtPGS/Dup Comb	9in1	CTL*	[0 to 99999999/0/1]
8-427-011	O:PrtPGS/Dup Comb	16in1	CTL*	[0 to 99999999/0/1]
8-427-012	O:PrtPGS/Dup Comb	Booklet	CTL*	[0 to 99999999/0/1]
8-427-013	O:PrtPGS/Dup Comb	Magazine	CTL*	[0 to 99999999/0/1]
8-427-014	O:PrtPGS/Dup Comb	2in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-427-015	O:PrtPGS/Dup Comb	4in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-427-016	O:PrtPGS/Dup Comb	6in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-427-017	O:PrtPGS/Dup Comb	8in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-427-018	O:PrtPGS/Dup Comb	9in1 + Booklet	CTL*	[0 to 99999999/0/1]
8-427-019	O:PrtPGS/Dup Comb	2in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-427-020	O:PrtPGS/Dup Comb	4in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-427-021	O:PrtPGS/Dup Comb	6in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-427-022	O:PrtPGS/Dup Comb	8in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-427-023	O:PrtPGS/Dup Comb	9in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-427-024	O:PrtPGS/Dup Comb	16in1 + Magazine	CTL*	[0 to 99999999/0/1]
8-431-001	T:PrtPGS/ImgEdt	Cover/Slip Sheet	CTL*	[0 to 99999999/0/1]
8-431-	T:PrtPGS/ImgEdt	Series/Book	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
002				
8-431-003	T:PrtPGS/ImgEdt	User Stamp	CTL*	[0 to 99999999/0/1]
8-432-001	C:PrtPGS/ImgEdt	Cover/Slip Sheet	CTL*	[0 to 99999999/0/1]
8-432-002	C:PrtPGS/ImgEdt	Series/Book	CTL*	[0 to 99999999/0/1]
8-432-003	C:PrtPGS/ImgEdt	User Stamp	CTL*	[0 to 99999999/0/1]
8-434-001	P:PrtPGS/ImgEdt	Cover/Slip Sheet	CTL*	[0 to 99999999/0/1]
8-434-002	P:PrtPGS/ImgEdt	Series/Book	CTL*	[0 to 99999999/0/1]
8-434-003	P:PrtPGS/ImgEdt	User Stamp	CTL*	[0 to 99999999/0/1]
8-436-001	L:PrtPGS/ImgEdt	Cover/Slip Sheet	CTL*	[0 to 99999999/0/1]
8-436-002	L:PrtPGS/ImgEdt	Series/Book	CTL*	[0 to 99999999/0/1]
8-436-003	L:PrtPGS/ImgEdt	User Stamp	CTL*	[0 to 99999999/0/1]
8-437-001	O:PrtPGS/ImgEdt	Cover/Slip Sheet	CTL*	[0 to 99999999/0/1]
8-437-002	O:PrtPGS/ImgEdt	Series/Book	CTL*	[0 to 99999999/0/1]
8-437-003	O:PrtPGS/ImgEdt	User Stamp	CTL*	[0 to 99999999/0/1]
8-441-001	T:PrtPGS/Ppr Size	A3	CTL*	[0 to 99999999/0/1]
8-441-002	T:PrtPGS/Ppr Size	A4	CTL*	[0 to 99999999/0/1]
8-441-003	T:PrtPGS/Ppr Size	A5	CTL*	[0 to 99999999/0/1]
8-441-004	T:PrtPGS/Ppr Size	B4	CTL*	[0 to 99999999/0/1]
8-441-	T:PrtPGS/Ppr Size	B5	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
005				
8-441-006	T:PrtPGS/Ppr Size	DLT	CTL*	[0 to 99999999/0/1]
8-441-007	T:PrtPGS/Ppr Size	LG	CTL*	[0 to 99999999/0/1]
8-441-008	T:PrtPGS/Ppr Size	LT	CTL*	[0 to 99999999/0/1]
8-441-009	T:PrtPGS/Ppr Size	HLT	CTL*	[0 to 99999999/0/1]
8-441-010	T:PrtPGS/Ppr Size	Full Bleed	CTL*	[0 to 99999999/0/1]
8-441-254	T:PrtPGS/Ppr Size	Other (Standard)	CTL*	[0 to 99999999/0/1]
8-441-255	T:PrtPGS/Ppr Size	Other (Custom)	CTL*	[0 to 99999999/0/1]
8-442-001	C:PrtPGS/Ppr Size	A3	CTL*	[0 to 99999999/0/1]
8-442-002	C:PrtPGS/Ppr Size	A4	CTL*	[0 to 99999999/0/1]
8-442-003	C:PrtPGS/Ppr Size	A5	CTL*	[0 to 99999999/0/1]
8-442-004	C:PrtPGS/Ppr Size	B4	CTL*	[0 to 99999999/0/1]
8-442-005	C:PrtPGS/Ppr Size	B5	CTL*	[0 to 99999999/0/1]
8-442-006	C:PrtPGS/Ppr Size	DLT	CTL*	[0 to 99999999/0/1]
8-442-007	C:PrtPGS/Ppr Size	LG	CTL*	[0 to 99999999/0/1]
8-442-008	C:PrtPGS/Ppr Size	LT	CTL*	[0 to 99999999/0/1]
8-442-009	C:PrtPGS/Ppr Size	HLT	CTL*	[0 to 99999999/0/1]
8-442-010	C:PrtPGS/Ppr Size	Full Bleed	CTL*	[0 to 99999999/0/1]
8-442-	C:PrtPGS/Ppr Size	Other (Standard)	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
254				
8-442-255	C:PrtPGS/Ppr Size	Other (Custom)	CTL*	[0 to 99999999/0/1]
8-443-001	F:PrtPGS/Ppr Size	A3	CTL*	[0 to 99999999/0/1]
8-443-002	F:PrtPGS/Ppr Size	A4	CTL*	[0 to 99999999/0/1]
8-443-003	F:PrtPGS/Ppr Size	A5	CTL*	[0 to 99999999/0/1]
8-443-004	F:PrtPGS/Ppr Size	B4	CTL*	[0 to 99999999/0/1]
8-443-005	F:PrtPGS/Ppr Size	B5	CTL*	[0 to 99999999/0/1]
8-443-006	F:PrtPGS/Ppr Size	DLT	CTL*	[0 to 99999999/0/1]
8-443-007	F:PrtPGS/Ppr Size	LG	CTL*	[0 to 99999999/0/1]
8-443-008	F:PrtPGS/Ppr Size	LT	CTL*	[0 to 99999999/0/1]
8-443-009	F:PrtPGS/Ppr Size	HLT	CTL*	[0 to 99999999/0/1]
8-443-010	F:PrtPGS/Ppr Size	Full Bleed	CTL*	[0 to 99999999/0/1]
8-443-254	F:PrtPGS/Ppr Size	Other (Standard)	CTL*	[0 to 99999999/0/1]
8-443-255	F:PrtPGS/Ppr Size	Other (Custom)	CTL*	[0 to 99999999/0/1]
8-444-001	P:PrtPGS/Ppr Size	A3	CTL*	[0 to 99999999/0/1]
8-444-002	P:PrtPGS/Ppr Size	A4	CTL*	[0 to 99999999/0/1]
8-444-003	P:PrtPGS/Ppr Size	A5	CTL*	[0 to 99999999/0/1]
8-444-004	P:PrtPGS/Ppr Size	B4	CTL*	[0 to 99999999/0/1]
8-444-	P:PrtPGS/Ppr Size	B5	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
005				
8-444-006	P:PrtPGS/Ppr Size	DLT	CTL*	[0 to 99999999/0/1]
8-444-007	P:PrtPGS/Ppr Size	LG	CTL*	[0 to 99999999/0/1]
8-444-008	P:PrtPGS/Ppr Size	LT	CTL*	[0 to 99999999/0/1]
8-444-009	P:PrtPGS/Ppr Size	HLT	CTL*	[0 to 99999999/0/1]
8-444-010	P:PrtPGS/Ppr Size	Full Bleed	CTL*	[0 to 99999999/0/1]
8-444-254	P:PrtPGS/Ppr Size	Other (Standard)	CTL*	[0 to 99999999/0/1]
8-444-255	P:PrtPGS/Ppr Size	Other (Custom)	CTL*	[0 to 99999999/0/1]
8-445-001	S:PrtPGS/Ppr Size	A3	CTL*	[0 to 99999999/0/1]
8-445-002	S:PrtPGS/Ppr Size	A4	CTL*	[0 to 99999999/0/1]
8-445-003	S:PrtPGS/Ppr Size	A5	CTL*	[0 to 99999999/0/1]
8-445-004	S:PrtPGS/Ppr Size	B4	CTL*	[0 to 99999999/0/1]
8-445-005	S:PrtPGS/Ppr Size	B5	CTL*	[0 to 99999999/0/1]
8-445-006	S:PrtPGS/Ppr Size	DLT	CTL*	[0 to 99999999/0/1]
8-445-007	S:PrtPGS/Ppr Size	LG	CTL*	[0 to 99999999/0/1]
8-445-008	S:PrtPGS/Ppr Size	LT	CTL*	[0 to 99999999/0/1]
8-445-009	S:PrtPGS/Ppr Size	HLT	CTL*	[0 to 99999999/0/1]
8-445-010	S:PrtPGS/Ppr Size	Full Bleed	CTL*	[0 to 99999999/0/1]
8-445-	S:PrtPGS/Ppr Size	Other (Standard)	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
254				
8-445-255	S:PrtPGS/Ppr Size	Other (Custom)	CTL*	[0 to 99999999/0/1]
8-446-001	L:PrtPGS/Ppr Size	A3	CTL*	[0 to 99999999/0/1]
8-446-002	L:PrtPGS/Ppr Size	A4	CTL*	[0 to 99999999/0/1]
8-446-003	L:PrtPGS/Ppr Size	A5	CTL*	[0 to 99999999/0/1]
8-446-004	L:PrtPGS/Ppr Size	B4	CTL*	[0 to 99999999/0/1]
8-446-005	L:PrtPGS/Ppr Size	B5	CTL*	[0 to 99999999/0/1]
8-446-006	L:PrtPGS/Ppr Size	DLT	CTL*	[0 to 99999999/0/1]
8-446-007	L:PrtPGS/Ppr Size	LG	CTL*	[0 to 99999999/0/1]
8-446-008	L:PrtPGS/Ppr Size	LT	CTL*	[0 to 99999999/0/1]
8-446-009	L:PrtPGS/Ppr Size	HLT	CTL*	[0 to 99999999/0/1]
8-446-010	L:PrtPGS/Ppr Size	Full Bleed	CTL*	[0 to 99999999/0/1]
8-446-254	L:PrtPGS/Ppr Size	Other (Standard)	CTL*	[0 to 99999999/0/1]
8-446-255	L:PrtPGS/Ppr Size	Other (Custom)	CTL*	[0 to 99999999/0/1]
8-447-001	O:PrtPGS/Ppr Size	A3	CTL*	[0 to 99999999/0/1]
8-447-002	O:PrtPGS/Ppr Size	A4	CTL*	[0 to 99999999/0/1]
8-447-003	O:PrtPGS/Ppr Size	A5	CTL*	[0 to 99999999/0/1]
8-447-004	O:PrtPGS/Ppr Size	B4	CTL*	[0 to 99999999/0/1]
8-447-	O:PrtPGS/Ppr Size	B5	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
005				
8-447-006	O:PrtPGS/Ppr Size	DLT	CTL*	[0 to 99999999/0/1]
8-447-007	O:PrtPGS/Ppr Size	LG	CTL*	[0 to 99999999/0/1]
8-447-008	O:PrtPGS/Ppr Size	LT	CTL*	[0 to 99999999/0/1]
8-447-009	O:PrtPGS/Ppr Size	HLT	CTL*	[0 to 99999999/0/1]
8-447-010	O:PrtPGS/Ppr Size	Full Bleed	CTL*	[0 to 99999999/0/1]
8-447-254	O:PrtPGS/Ppr Size	Other (Standard)	CTL*	[0 to 99999999/0/1]
8-447-255	O:PrtPGS/Ppr Size	Other (Custom)	CTL*	[0 to 99999999/0/1]
8-451-001	PrtPGS/Ppr Tray	Bypass Tray	CTL*	[0 to 99999999/0/1]
8-451-002	PrtPGS/Ppr Tray	Tray 1	CTL*	[0 to 99999999/0/1]
8-451-003	PrtPGS/Ppr Tray	Tray 2	CTL*	[0 to 99999999/0/1]
8-451-004	PrtPGS/Ppr Tray	Tray 3	CTL*	[0 to 99999999/0/1]
8-451-005	PrtPGS/Ppr Tray	Tray 4	CTL*	[0 to 99999999/0/1]
8-451-006	PrtPGS/Ppr Tray	Tray 5	CTL*	[0 to 99999999/0/1]
8-451-007	PrtPGS/Ppr Tray	Tray 6	CTL*	[0 to 99999999/0/1]
8-451-008	PrtPGS/Ppr Tray	Tray 7	CTL*	[0 to 99999999/0/1]
8-451-009	PrtPGS/Ppr Tray	Tray 8	CTL*	[0 to 99999999/0/1]
8-451-010	PrtPGS/Ppr Tray	Tray 9	CTL*	[0 to 99999999/0/1]
8-451-	PrtPGS/Ppr Tray	Tray 10	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
011				
8-451-012	PrtPGS/Ppr Tray	Tray 11	CTL*	[0 to 99999999/0/1]
8-451-013	PrtPGS/Ppr Tray	Tray 12	CTL*	[0 to 99999999/0/1]
8-451-014	PrtPGS/Ppr Tray	Tray 13	CTL*	[0 to 99999999/0/1]
8-451-015	PrtPGS/Ppr Tray	Tray 14	CTL*	[0 to 99999999/0/1]
8-451-016	PrtPGS/Ppr Tray	Tray 15	CTL*	[0 to 99999999/0/1]
8-451-101	PrtPGS/Ppr Tray	LC Inserter	CTL*	[0 to 99999999/0/1]
8-451-102	PrtPGS/Ppr Tray	3rd Vendor	CTL*	[0 to 99999999/0/1]
8-461-001	T:PrtPGS/Ppr Type	Normal	CTL*	[0 to 99999999/0/1]
8-461-002	T:PrtPGS/Ppr Type	Recycled	CTL*	[0 to 99999999/0/1]
8-461-003	T:PrtPGS/Ppr Type	Special	CTL*	[0 to 99999999/0/1]
8-461-004	T:PrtPGS/Ppr Type	Thick	CTL*	[0 to 99999999/0/1]
8-461-005	T:PrtPGS/Ppr Type	Normal (Back)	CTL*	[0 to 99999999/0/1]
8-461-006	T:PrtPGS/Ppr Type	Thick (Back)	CTL*	[0 to 99999999/0/1]
8-461-007	T:PrtPGS/Ppr Type	OHP	CTL*	[0 to 99999999/0/1]
8-461-008	T:PrtPGS/Ppr Type	Other	CTL*	[0 to 99999999/0/1]
8-462-001	C:PrtPGS/Ppr Type	Normal	CTL*	[0 to 99999999/0/1]
8-462-002	C:PrtPGS/Ppr Type	Recycled	CTL*	[0 to 99999999/0/1]
8-462-	C:PrtPGS/Ppr Type	Special	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
003				
8-462-004	C:PrtPGS/Ppr Type	Thick	CTL*	[0 to 99999999/0/1]
8-462-005	C:PrtPGS/Ppr Type	Normal (Back)	CTL*	[0 to 99999999/0/1]
8-462-006	C:PrtPGS/Ppr Type	Thick (Back)	CTL*	[0 to 99999999/0/1]
8-462-007	C:PrtPGS/Ppr Type	OHP	CTL*	[0 to 99999999/0/1]
8-462-008	C:PrtPGS/Ppr Type	Other	CTL*	[0 to 99999999/0/1]
8-463-001	F:PrtPGS/Ppr Type	Normal	CTL*	[0 to 99999999/0/1]
8-463-002	F:PrtPGS/Ppr Type	Recycled	CTL*	[0 to 99999999/0/1]
8-463-003	F:PrtPGS/Ppr Type	Special	CTL*	[0 to 99999999/0/1]
8-463-004	F:PrtPGS/Ppr Type	Thick	CTL*	[0 to 99999999/0/1]
8-463-005	F:PrtPGS/Ppr Type	Normal (Back)	CTL*	[0 to 99999999/0/1]
8-463-006	F:PrtPGS/Ppr Type	Thick (Back)	CTL*	[0 to 99999999/0/1]
8-463-007	F:PrtPGS/Ppr Type	OHP	CTL*	[0 to 99999999/0/1]
8-463-008	F:PrtPGS/Ppr Type	Other	CTL*	[0 to 99999999/0/1]
8-464-001	P:PrtPGS/Ppr Type	Normal	CTL*	[0 to 99999999/0/1]
8-464-002	P:PrtPGS/Ppr Type	Recycled	CTL*	[0 to 99999999/0/1]
8-464-003	P:PrtPGS/Ppr Type	Special	CTL*	[0 to 99999999/0/1]
8-464-004	P:PrtPGS/Ppr Type	Thick	CTL*	[0 to 99999999/0/1]
8-464-	P:PrtPGS/Ppr Type	Normal (Back)	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
005				
8-464-006	P:PrtPGS/Ppr Type	Thick (Back)	CTL*	[0 to 99999999/0/1]
8-464-007	P:PrtPGS/Ppr Type	OHP	CTL*	[0 to 99999999/0/1]
8-464-008	P:PrtPGS/Ppr Type	Other	CTL*	[0 to 99999999/0/1]
8-466-001	L:PrtPGS/Ppr Type	Normal	CTL*	[0 to 99999999/0/1]
8-466-002	L:PrtPGS/Ppr Type	Recycled	CTL*	[0 to 99999999/0/1]
8-466-003	L:PrtPGS/Ppr Type	Special	CTL*	[0 to 99999999/0/1]
8-466-004	L:PrtPGS/Ppr Type	Thick	CTL*	[0 to 99999999/0/1]
8-466-005	L:PrtPGS/Ppr Type	Normal (Back)	CTL*	[0 to 99999999/0/1]
8-466-006	L:PrtPGS/Ppr Type	Thick (Back)	CTL*	[0 to 99999999/0/1]
8-466-007	L:PrtPGS/Ppr Type	OHP	CTL*	[0 to 99999999/0/1]
8-466-008	L:PrtPGS/Ppr Type	Other	CTL*	[0 to 99999999/0/1]
8-471-001	PrtPGS/Mag	~49%	CTL*	[0 to 99999999/0/1]
8-471-002	PrtPGS/Mag	50%~99%	CTL*	[0 to 99999999/0/1]
8-471-003	PrtPGS/Mag	100%	CTL*	[0 to 99999999/0/1]
8-471-004	PrtPGS/Mag	101%~200%	CTL*	[0 to 99999999/0/1]
8-471-005	PrtPGS/Mag	201% ~	CTL*	[0 to 99999999/0/1]
8-481-001	T:PrtPGS/TonSave		CTL*	[0 to 99999999/0/1]
8-484-	P:PrtPGS/TonSave		CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
001				
8-511-001	T:PrtPGS/Emul	RPCS	CTL*	[0 to 99999999/0/1]
8-511-002	T:PrtPGS/Emul	RPDL	CTL*	[0 to 99999999/0/1]
8-511-003	T:PrtPGS/Emul	PS3	CTL*	[0 to 99999999/0/1]
8-511-004	T:PrtPGS/Emul	R98	CTL*	[0 to 99999999/0/1]
8-511-005	T:PrtPGS/Emul	R16	CTL*	[0 to 99999999/0/1]
8-511-006	T:PrtPGS/Emul	GL/GL2	CTL*	[0 to 99999999/0/1]
8-511-007	T:PrtPGS/Emul	R55	CTL*	[0 to 99999999/0/1]
8-511-008	T:PrtPGS/Emul	RTIFF	CTL*	[0 to 99999999/0/1]
8-511-009	T:PrtPGS/Emul	PDF	CTL*	[0 to 99999999/0/1]
8-511-010	T:PrtPGS/Emul	PCL5e/5c	CTL*	[0 to 99999999/0/1]
8-511-011	T:PrtPGS/Emul	PCL XL	CTL*	[0 to 99999999/0/1]
8-511-012	T:PrtPGS/Emul	IPDL-C	CTL*	[0 to 99999999/0/1]
8-511-013	T:PrtPGS/Emul	BM-Links	CTL*	[0 to 99999999/0/1]
8-511-014	T:PrtPGS/Emul	Other	CTL*	[0 to 99999999/0/1]
8-511-015	T:PrtPGS/Emul	IPDS	CTL*	[0 to 99999999/0/1]
8-511-016	T:PrtPGS/Emul	XPS	CTL*	[0 to 99999999/0/1]
8-511-017	T:PrtPGS/Emul	IRIPS PS	CTL*	[0 to 99999999/0/1]
8-511-	T:PrtPGS/Emul	IRIPS PDF	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
018				
8-511-019	T:PrtPGS/Emul	PictBridge	CTL*	[0 to 99999999/0/1]
8-511-020	T:PrtPGS/Emul	MediaPrintTIFF	CTL*	[0 to 99999999/0/1]
8-511-021	T:PrtPGS/Emul	MediaPrintJPEG	CTL*	[0 to 99999999/0/1]
8-511-022	T:PrtPGS/Emul	GG PDF	CTL*	[0 to 99999999/0/1]
8-511-023	T:PrtPGS/Emul	GG PCL	CTL*	[0 to 99999999/0/1]
8-514-001	P:PrtPGS/Emul	RPCS	CTL*	[0 to 99999999/0/1]
8-514-002	P:PrtPGS/Emul	RPDL	CTL*	[0 to 99999999/0/1]
8-514-003	P:PrtPGS/Emul	PS3	CTL*	[0 to 99999999/0/1]
8-514-004	P:PrtPGS/Emul	R98	CTL*	[0 to 99999999/0/1]
8-514-005	P:PrtPGS/Emul	R16	CTL*	[0 to 99999999/0/1]
8-514-006	P:PrtPGS/Emul	GL/GL2	CTL*	[0 to 99999999/0/1]
8-514-007	P:PrtPGS/Emul	R55	CTL*	[0 to 99999999/0/1]
8-514-008	P:PrtPGS/Emul	RTIFF	CTL*	[0 to 99999999/0/1]
8-514-009	P:PrtPGS/Emul	PDF	CTL*	[0 to 99999999/0/1]
8-514-010	P:PrtPGS/Emul	PCL5e/5c	CTL*	[0 to 99999999/0/1]
8-514-011	P:PrtPGS/Emul	PCL XL	CTL*	[0 to 99999999/0/1]
8-514-012	P:PrtPGS/Emul	IPDL-C	CTL*	[0 to 99999999/0/1]
8-514-	P:PrtPGS/Emul	BM-Links	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
013				
8-514-014	P:PrtPGS/Emul	Other	CTL*	[0 to 99999999/0/1]
8-514-015	P:PrtPGS/Emul	IPDS	CTL*	[0 to 99999999/0/1]
8-514-016	P:PrtPGS/Emul	XPS	CTL*	[0 to 99999999/0/1]
8-514-017	P:PrtPGS/Emul	IRIPS PS	CTL*	[0 to 99999999/0/1]
8-514-018	P:PrtPGS/Emul	IRIPS PDF	CTL*	[0 to 99999999/0/1]
8-514-019	P:PrtPGS/Emul	PictBridge	CTL*	[0 to 99999999/0/1]
8-514-020	P:PrtPGS/Emul	MediaPrintTIFF	CTL*	[0 to 99999999/0/1]
8-514-021	P:PrtPGS/Emul	MediaPrintJPEG	CTL*	[0 to 99999999/0/1]
8-514-022	P:PrtPGS/Emul	GG PDF	CTL*	[0 to 99999999/0/1]
8-514-023	P:PrtPGS/Emul	GG PCL	CTL*	[0 to 99999999/0/1]
8-521-001	T:PrtPGS/FIN	Sort	CTL*	[0 to 99999999/0/1]
8-521-002	T:PrtPGS/FIN	Stack	CTL*	[0 to 99999999/0/1]
8-521-003	T:PrtPGS/FIN	Staple	CTL*	[0 to 99999999/0/1]
8-521-004	T:PrtPGS/FIN	Booklet	CTL*	[0 to 99999999/0/1]
8-521-005	T:PrtPGS/FIN	Z-Fold	CTL*	[0 to 99999999/0/1]
8-521-006	T:PrtPGS/FIN	Punch	CTL*	[0 to 99999999/0/1]
8-521-007	T:PrtPGS/FIN	Other	CTL*	[0 to 99999999/0/1]
8-521-	T:PrtPGS/FIN	Inside-Fold	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
008				
8-521-009	T:PrtPGS/FIN	Three-IN-Fold	CTL*	[0 to 99999999/0/1]
8-521-010	T:PrtPGS/FIN	Three-OUT-Fold	CTL*	[0 to 99999999/0/1]
8-521-011	T:PrtPGS/FIN	Four-Fold	CTL*	[0 to 99999999/0/1]
8-521-012	T:PrtPGS/FIN	KANNON-Fold	CTL*	[0 to 99999999/0/1]
8-521-013	T:PrtPGS/FIN	Perfect-Bind	CTL*	[0 to 99999999/0/1]
8-521-014	T:PrtPGS/FIN	Ring-Bind	CTL*	[0 to 99999999/0/1]
8-521-015	T:PrtPGS/FIN	3rd Vendor	CTL*	[0 to 99999999/0/1]
8-521-016	T:PrtPGS/FIN	TwinLoop-Bind	CTL*	[0 to 99999999/0/1]
8-522-001	C:PrtPGS/FIN	Sort	CTL*	[0 to 99999999/0/1]
8-522-002	C:PrtPGS/FIN	Stack	CTL*	[0 to 99999999/0/1]
8-522-003	C:PrtPGS/FIN	Staple	CTL*	[0 to 99999999/0/1]
8-522-004	C:PrtPGS/FIN	Booklet	CTL*	[0 to 99999999/0/1]
8-522-005	C:PrtPGS/FIN	Z-Fold	CTL*	[0 to 99999999/0/1]
8-522-006	C:PrtPGS/FIN	Punch	CTL*	[0 to 99999999/0/1]
8-522-007	C:PrtPGS/FIN	Other	CTL*	[0 to 99999999/0/1]
8-522-008	C:PrtPGS/FIN	Inside-Fold	CTL*	[0 to 99999999/0/1]
8-522-009	C:PrtPGS/FIN	Three-IN-Fold	CTL*	[0 to 99999999/0/1]
8-522-	C:PrtPGS/FIN	Three-OUT-Fold	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
010				
8-522-011	C:PrtPGS/FIN	Four-Fold	CTL*	[0 to 99999999/0/1]
8-522-012	C:PrtPGS/FIN	KANNON-Fold	CTL*	[0 to 99999999/0/1]
8-522-013	C:PrtPGS/FIN	Perfect-Bind	CTL*	[0 to 99999999/0/1]
8-522-014	C:PrtPGS/FIN	Ring-Bind	CTL*	[0 to 99999999/0/1]
8-522-015	C:PrtPGS/FIN	3rd Vendor	CTL*	[0 to 99999999/0/1]
8-522-016	C:PrtPGS/FIN	TwinLoop-Bind	CTL*	[0 to 99999999/0/1]
8-523-001	F:PrtPGS/FIN	Sort	CTL*	[0 to 99999999/0/1]
8-523-002	F:PrtPGS/FIN	Stack	CTL*	[0 to 99999999/0/1]
8-523-003	F:PrtPGS/FIN	Staple	CTL*	[0 to 99999999/0/1]
8-523-004	F:PrtPGS/FIN	Booklet	CTL*	[0 to 99999999/0/1]
8-523-005	F:PrtPGS/FIN	Z-Fold	CTL*	[0 to 99999999/0/1]
8-523-006	F:PrtPGS/FIN	Punch	CTL*	[0 to 99999999/0/1]
8-523-007	F:PrtPGS/FIN	Other	CTL*	[0 to 99999999/0/1]
8-523-008	F:PrtPGS/FIN	Inside-Fold	CTL*	[0 to 99999999/0/1]
8-523-009	F:PrtPGS/FIN	Three-IN-Fold	CTL*	[0 to 99999999/0/1]
8-523-010	F:PrtPGS/FIN	Three-OUT-Fold	CTL*	[0 to 99999999/0/1]
8-523-011	F:PrtPGS/FIN	Four-Fold	CTL*	[0 to 99999999/0/1]
8-523-	F:PrtPGS/FIN	KANNON-Fold	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
012				
8-523-013	F:PrtPGS/FIN	Perfect-Bind	CTL*	[0 to 99999999/0/1]
8-523-014	F:PrtPGS/FIN	Ring-Bind	CTL*	[0 to 99999999/0/1]
8-523-015	F:PrtPGS/FIN	3rd Vendor	CTL*	[0 to 99999999/0/1]
8-523-016	F:PrtPGS/FIN	TwinLoop-Bind	CTL*	[0 to 99999999/0/1]
8-524-001	P:PrtPGS/FIN	Sort	CTL*	[0 to 99999999/0/1]
8-524-002	P:PrtPGS/FIN	Stack	CTL*	[0 to 99999999/0/1]
8-524-003	P:PrtPGS/FIN	Staple	CTL*	[0 to 99999999/0/1]
8-524-004	P:PrtPGS/FIN	Booklet	CTL*	[0 to 99999999/0/1]
8-524-005	P:PrtPGS/FIN	Z-Fold	CTL*	[0 to 99999999/0/1]
8-524-006	P:PrtPGS/FIN	Punch	CTL*	[0 to 99999999/0/1]
8-524-007	P:PrtPGS/FIN	Other	CTL*	[0 to 99999999/0/1]
8-524-008	P:PrtPGS/FIN	Inside-Fold	CTL*	[0 to 99999999/0/1]
8-524-009	P:PrtPGS/FIN	Three-IN-Fold	CTL*	[0 to 99999999/0/1]
8-524-010	P:PrtPGS/FIN	Three-OUT-Fold	CTL*	[0 to 99999999/0/1]
8-524-011	P:PrtPGS/FIN	Four-Fold	CTL*	[0 to 99999999/0/1]
8-524-012	P:PrtPGS/FIN	KANNON-Fold	CTL*	[0 to 99999999/0/1]
8-524-013	P:PrtPGS/FIN	Perfect-Bind	CTL*	[0 to 99999999/0/1]
8-524-	P:PrtPGS/FIN	Ring-Bind	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
014				
8-524-015	P:PrtPGS/FIN	3rd Vendor	CTL*	[0 to 99999999/0/1]
8-524-016	P:PrtPGS/FIN	TwinLoop-Bind	CTL*	[0 to 99999999/0/1]
8-525-001	S:PrtPGS/FIN	Sort	CTL*	[0 to 99999999/0/1]
8-525-002	S:PrtPGS/FIN	Stack	CTL*	[0 to 99999999/0/1]
8-525-003	S:PrtPGS/FIN	Staple	CTL*	[0 to 99999999/0/1]
8-525-004	S:PrtPGS/FIN	Booklet	CTL*	[0 to 99999999/0/1]
8-525-005	S:PrtPGS/FIN	Z-Fold	CTL*	[0 to 99999999/0/1]
8-525-006	S:PrtPGS/FIN	Punch	CTL*	[0 to 99999999/0/1]
8-525-007	S:PrtPGS/FIN	Other	CTL*	[0 to 99999999/0/1]
8-525-008	S:PrtPGS/FIN	Inside-Fold	CTL*	[0 to 99999999/0/1]
8-525-009	S:PrtPGS/FIN	Three-IN-Fold	CTL*	[0 to 99999999/0/1]
8-525-010	S:PrtPGS/FIN	Three-OUT-Fold	CTL*	[0 to 99999999/0/1]
8-525-011	S:PrtPGS/FIN	Four-Fold	CTL*	[0 to 99999999/0/1]
8-525-012	S:PrtPGS/FIN	KANNON-Fold	CTL*	[0 to 99999999/0/1]
8-525-013	S:PrtPGS/FIN	Perfect-Bind	CTL*	[0 to 99999999/0/1]
8-525-014	S:PrtPGS/FIN	Ring-Bind	CTL*	[0 to 99999999/0/1]
8-525-015	S:PrtPGS/FIN	3rd Vendor	CTL*	[0 to 99999999/0/1]
8-525-	S:PrtPGS/FIN	TwinLoop-Bind	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
016				
8-526-001	L:PrtPGS/FIN	Sort	CTL*	[0 to 99999999/0/1]
8-526-002	L:PrtPGS/FIN	Stack	CTL*	[0 to 99999999/0/1]
8-526-003	L:PrtPGS/FIN	Staple	CTL*	[0 to 99999999/0/1]
8-526-004	L:PrtPGS/FIN	Booklet	CTL*	[0 to 99999999/0/1]
8-526-005	L:PrtPGS/FIN	Z-Fold	CTL*	[0 to 99999999/0/1]
8-526-006	L:PrtPGS/FIN	Punch	CTL*	[0 to 99999999/0/1]
8-526-007	L:PrtPGS/FIN	Other	CTL*	[0 to 99999999/0/1]
8-526-008	L:PrtPGS/FIN	Inside-Fold	CTL*	[0 to 99999999/0/1]
8-526-009	L:PrtPGS/FIN	Three-IN-Fold	CTL*	[0 to 99999999/0/1]
8-526-010	L:PrtPGS/FIN	Three-OUT-Fold	CTL*	[0 to 99999999/0/1]
8-526-011	L:PrtPGS/FIN	Four-Fold	CTL*	[0 to 99999999/0/1]
8-526-012	L:PrtPGS/FIN	KANNON-Fold	CTL*	[0 to 99999999/0/1]
8-526-013	L:PrtPGS/FIN	Perfect-Bind	CTL*	[0 to 99999999/0/1]
8-526-014	L:PrtPGS/FIN	Ring-Bind	CTL*	[0 to 99999999/0/1]
8-526-015	L:PrtPGS/FIN	3rd Vendor	CTL*	[0 to 99999999/0/1]
8-526-016	L:PrtPGS/FIN	TwinLoop-Bind	CTL*	[0 to 99999999/0/1]
8-531-001	Staple	Staples	CTL*	[0 to 99999999/0/1]
8-531-	Staple	Stapless	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
002				
8-551-001	T:PrtBooks/FIN	Perfect-Bind	CTL*	[0 to 99999999/0/1]
8-551-002	T:PrtBooks/FIN	Ring-Bind	CTL*	[0 to 99999999/0/1]
8-551-003	T:PrtBooks/FIN	TwinLoop-Bind	CTL*	[0 to 99999999/0/1]
8-552-001	C:PrtBooks/FIN	Perfect-Bind	CTL*	[0 to 99999999/0/1]
8-552-002	C:PrtBooks/FIN	Ring-Bind	CTL*	[0 to 99999999/0/1]
8-552-003	C:PrtBooks/FIN	TwinLoop-Bind	CTL*	[0 to 99999999/0/1]
8-554-001	P:PrtBooks/FIN	Perfect-Bind	CTL*	[0 to 99999999/0/1]
8-554-002	P:PrtBooks/FIN	Ring-Bind	CTL*	[0 to 99999999/0/1]
8-554-003	P:PrtBooks/FIN	TwinLoop-Bind	CTL*	[0 to 99999999/0/1]
8-556-001	L:PrtBooks/FIN	Perfect-Bind	CTL*	[0 to 99999999/0/1]
8-556-002	L:PrtBooks/FIN	Ring-Bind	CTL*	[0 to 99999999/0/1]
8-556-003	L:PrtBooks/FIN	TwinLoop-Bind	CTL*	[0 to 99999999/0/1]
8-561-001	T:A Sheet Of Paper	Total: Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-561-002	T:A Sheet Of Paper	Total: Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-561-003	T:A Sheet Of Paper	Duplex: Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-561-004	T:A Sheet Of Paper	Duplex: Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-562-001	C:A Sheet Of Paper	Total: Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-562-	C:A Sheet Of Paper	Total: Under A3/DLT	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
002				
8-562-003	C:A Sheet Of Paper	Duplex: Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-562-004	C:A Sheet Of Paper	Duplex: Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-563-001	F:A Sheet Of Paper	Total: Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-563-002	F:A Sheet Of Paper	Total: Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-563-003	F:A Sheet Of Paper	Duplex: Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-563-004	F:A Sheet Of Paper	Duplex: Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-564-001	P:A Sheet Of Paper	Total: Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-564-002	P:A Sheet Of Paper	Total: Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-564-003	P:A Sheet Of Paper	Duplex: Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-564-004	P:A Sheet Of Paper	Duplex: Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-566-001	L:A Sheet Of Paper	Total: Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-566-002	L:A Sheet Of Paper	Total: Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-566-003	L:A Sheet Of Paper	Duplex: Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-566-004	L:A Sheet Of Paper	Duplex: Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-567-001	O:A Sheet Of Paper	Total: Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-567-002	O:A Sheet Of Paper	Total: Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-567-003	O:A Sheet Of Paper	Duplex: Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-567-	O:A Sheet Of Paper	Duplex: Under A3/DLT	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
004				
8-581-001	T:Counter	Total	CTL*	[0 to 99999999/0/1]
8-581-032	T:Counter	Total(A3)	CTL*	[0 to 99999999/0/1]
8-582-011	C:Counter	B/W:Simplex:Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-582-012	C:Counter	B/W:Simplex:Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-582-013	C:Counter	B/W:Duplex:Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-582-014	C:Counter	B/W:Duplex:Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-583-011	F:Counter	B/W:Simplex:Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-583-012	F:Counter	B/W:Simplex:Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-583-013	F:Counter	B/W:Duplex:Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-583-014	F:Counter	B/W:Duplex:Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-584-011	P:Counter	B/W:Simplex:Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-584-012	P:Counter	B/W:Simplex:Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-584-013	P:Counter	B/W:Duplex:Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-584-014	P:Counter	B/W:Duplex:Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-585-001	S:Counter	Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-585-002	S:Counter	Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-586-011	L:Counter	B/W:Simplex:Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-586-	L:Counter	B/W:Simplex:Under A3/DLT	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
012				
8-586-013	L:Counter	B/W:Duplex:Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-586-014	L:Counter	B/W:Duplex:Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-587-011	O:Counter	B/W:Simplex:Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-587-012	O:Counter	B/W:Simplex:Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-587-013	O:Counter	B/W:Duplex:Over A3/DLT	CTL*	[0 to 99999999/0/1]
8-587-014	O:Counter	B/W:Duplex:Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-591-001	O:Counter	A3/DLT	CTL*	[0 to 99999999/0/1]
8-591-002	O:Counter	Duplex	CTL*	[0 to 99999999/0/1]
8-601-001	T:Coverage Counter	B/W	CTL*	[0 to 2147483647/0/1%]
8-601-011	T:Coverage Counter	B/W Printing Pages	CTL*	[0 to 99999999/0/1]
8-602-001	C:Coverage Counter	B/W	CTL*	[0 to 2147483647/0/1%]
8-603-001	F:Coverage Counter	B/W	CTL*	[0 to 2147483647/0/1%]
8-604-001	P:Coverage Counter	B/W	CTL*	[0 to 2147483647/0/1%]
8-606-001	L:Coverage Counter	B/W	CTL*	[0 to 2147483647/0/1%]
8-617-001	SDK Apli Counter	SDK-1	CTL*	[0 to 99999999/0/1]
8-617-002	SDK Apli Counter	SDK-2	CTL*	[0 to 99999999/0/1]
8-617-003	SDK Apli Counter	SDK-3	CTL*	[0 to 99999999/0/1]
8-617-	SDK Apli Counter	SDK-4	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
004				
8-617-005	SDK Apli Counter	SDK-5	CTL*	[0 to 99999999/0/1]
8-617-006	SDK Apli Counter	SDK-6	CTL*	[0 to 99999999/0/1]
8-617-007	SDK Apli Counter	SDK-7	CTL*	[0 to 99999999/0/1]
8-617-008	SDK Apli Counter	SDK-8	CTL*	[0 to 99999999/0/1]
8-617-009	SDK Apli Counter	SDK-9	CTL*	[0 to 99999999/0/1]
8-617-010	SDK Apli Counter	SDK-10	CTL*	[0 to 99999999/0/1]
8-617-011	SDK Apli Counter	SDK-11	CTL*	[0 to 99999999/0/1]
8-617-012	SDK Apli Counter	SDK-12	CTL*	[0 to 99999999/0/1]
8-621-001	Func Use Counter	Function-001	CTL*	[0 to 99999999/0/1]
8-621-002	Func Use Counter	Function-002	CTL*	[0 to 99999999/0/1]
8-621-003	Func Use Counter	Function-003	CTL*	[0 to 99999999/0/1]
8-621-004	Func Use Counter	Function-004	CTL*	[0 to 99999999/0/1]
8-621-005	Func Use Counter	Function-005	CTL*	[0 to 99999999/0/1]
8-621-006	Func Use Counter	Function-006	CTL*	[0 to 99999999/0/1]
8-621-007	Func Use Counter	Function-007	CTL*	[0 to 99999999/0/1]
8-621-008	Func Use Counter	Function-008	CTL*	[0 to 99999999/0/1]
8-621-009	Func Use Counter	Function-009	CTL*	[0 to 99999999/0/1]
8-621-	Func Use Counter	Function-010	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
010				
8-621-011	Func Use Counter	Function-011	CTL*	[0 to 99999999/0/1]
8-621-012	Func Use Counter	Function-012	CTL*	[0 to 99999999/0/1]
8-621-013	Func Use Counter	Function-013	CTL*	[0 to 99999999/0/1]
8-621-014	Func Use Counter	Function-014	CTL*	[0 to 99999999/0/1]
8-621-015	Func Use Counter	Function-015	CTL*	[0 to 99999999/0/1]
8-621-016	Func Use Counter	Function-016	CTL*	[0 to 99999999/0/1]
8-621-017	Func Use Counter	Function-017	CTL*	[0 to 99999999/0/1]
8-621-018	Func Use Counter	Function-018	CTL*	[0 to 99999999/0/1]
8-621-019	Func Use Counter	Function-019	CTL*	[0 to 99999999/0/1]
8-621-020	Func Use Counter	Function-020	CTL*	[0 to 99999999/0/1]
8-621-021	Func Use Counter	Function-021	CTL*	[0 to 99999999/0/1]
8-621-022	Func Use Counter	Function-022	CTL*	[0 to 99999999/0/1]
8-621-023	Func Use Counter	Function-023	CTL*	[0 to 99999999/0/1]
8-621-024	Func Use Counter	Function-024	CTL*	[0 to 99999999/0/1]
8-621-025	Func Use Counter	Function-025	CTL*	[0 to 99999999/0/1]
8-621-026	Func Use Counter	Function-026	CTL*	[0 to 99999999/0/1]
8-621-027	Func Use Counter	Function-027	CTL*	[0 to 99999999/0/1]
8-621-	Func Use Counter	Function-028	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
028				
8-621-029	Func Use Counter	Function-029	CTL*	[0 to 99999999/0/1]
8-621-030	Func Use Counter	Function-030	CTL*	[0 to 99999999/0/1]
8-621-031	Func Use Counter	Function-031	CTL*	[0 to 99999999/0/1]
8-621-032	Func Use Counter	Function-032	CTL*	[0 to 99999999/0/1]
8-621-033	Func Use Counter	Function-033	CTL*	[0 to 99999999/0/1]
8-621-034	Func Use Counter	Function-034	CTL*	[0 to 99999999/0/1]
8-621-035	Func Use Counter	Function-035	CTL*	[0 to 99999999/0/1]
8-621-036	Func Use Counter	Function-036	CTL*	[0 to 99999999/0/1]
8-621-037	Func Use Counter	Function-037	CTL*	[0 to 99999999/0/1]
8-621-038	Func Use Counter	Function-038	CTL*	[0 to 99999999/0/1]
8-621-039	Func Use Counter	Function-039	CTL*	[0 to 99999999/0/1]
8-621-040	Func Use Counter	Function-040	CTL*	[0 to 99999999/0/1]
8-621-041	Func Use Counter	Function-041	CTL*	[0 to 99999999/0/1]
8-621-042	Func Use Counter	Function-042	CTL*	[0 to 99999999/0/1]
8-621-043	Func Use Counter	Function-043	CTL*	[0 to 99999999/0/1]
8-621-044	Func Use Counter	Function-044	CTL*	[0 to 99999999/0/1]
8-621-045	Func Use Counter	Function-045	CTL*	[0 to 99999999/0/1]
8-621-	Func Use Counter	Function-046	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
046				
8-621-047	Func Use Counter	Function-047	CTL*	[0 to 99999999/0/1]
8-621-048	Func Use Counter	Function-048	CTL*	[0 to 99999999/0/1]
8-621-049	Func Use Counter	Function-049	CTL*	[0 to 99999999/0/1]
8-621-050	Func Use Counter	Function-050	CTL*	[0 to 99999999/0/1]
8-621-051	Func Use Counter	Function-051	CTL*	[0 to 99999999/0/1]
8-621-052	Func Use Counter	Function-052	CTL*	[0 to 99999999/0/1]
8-621-053	Func Use Counter	Function-053	CTL*	[0 to 99999999/0/1]
8-621-054	Func Use Counter	Function-054	CTL*	[0 to 99999999/0/1]
8-621-055	Func Use Counter	Function-055	CTL*	[0 to 99999999/0/1]
8-621-056	Func Use Counter	Function-056	CTL*	[0 to 99999999/0/1]
8-621-057	Func Use Counter	Function-057	CTL*	[0 to 99999999/0/1]
8-621-058	Func Use Counter	Function-058	CTL*	[0 to 99999999/0/1]
8-621-059	Func Use Counter	Function-059	CTL*	[0 to 99999999/0/1]
8-621-060	Func Use Counter	Function-060	CTL*	[0 to 99999999/0/1]
8-621-061	Func Use Counter	Function-061	CTL*	[0 to 99999999/0/1]
8-621-062	Func Use Counter	Function-062	CTL*	[0 to 99999999/0/1]
8-621-063	Func Use Counter	Function-063	CTL*	[0 to 99999999/0/1]
8-621-	Func Use Counter	Function-064	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
064				
8-631-001	T:FAX TX PGS	B/W(Tel)	CTL*	[0 to 99999999/0/1]
8-631-101	T:FAX TX PGS	B/W(Cloud)	CTL*	[0 to 99999999/0/1]
8-633-001	F:FAX TX PGS	B/W(Tel)	CTL*	[0 to 99999999/0/1]
8-633-101	F:FAX TX PGS	B/W(Cloud)	CTL*	[0 to 99999999/0/1]
8-641-001	T:IFAX TX PGS	B/W	CTL*	[0 to 99999999/0/1]
8-643-001	F:IFAX TX PGS	B/W	CTL*	[0 to 99999999/0/1]
8-651-001	T:S-to-Email PGS	B/W	CTL*	[0 to 99999999/0/1]
8-651-002	T:S-to-Email PGS	Color	CTL*	[0 to 99999999/0/1]
8-655-001	S:S-to-Email PGS	B/W	CTL*	[0 to 99999999/0/1]
8-655-002	S:S-to-Email PGS	Color	CTL*	[0 to 99999999/0/1]
8-661-001	T:Deliv PGS/Svr	B/W	CTL*	[0 to 99999999/0/1]
8-661-002	T:Deliv PGS/Svr	Color	CTL*	[0 to 99999999/0/1]
8-665-001	S:Deliv PGS/Svr	B/W	CTL*	[0 to 99999999/0/1]
8-665-002	S:Deliv PGS/Svr	Color	CTL*	[0 to 99999999/0/1]
8-671-001	T:Deliv PGS/PC	B/W	CTL*	[0 to 99999999/0/1]
8-671-002	T:Deliv PGS/PC	Color	CTL*	[0 to 99999999/0/1]
8-675-001	S:Deliv PGS/PC	B/W	CTL*	[0 to 99999999/0/1]
8-675-	S:Deliv PGS/PC	Color	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
002				
8-681-001	T:PCFAX TXPGS		CTL*	[0 to 99999999/0/1]
8-683-001	F:PCFAX TXPGS		CTL*	[0 to 99999999/0/1]
8-691-001	T:TX PGS/LS		CTL*	[0 to 99999999/0/1]
8-692-001	C:TX PGS/LS		CTL*	[0 to 99999999/0/1]
8-693-001	F:TX PGS/LS		CTL*	[0 to 99999999/0/1]
8-694-001	P:TX PGS/LS		CTL*	[0 to 99999999/0/1]
8-695-001	S:TX PGS/LS		CTL*	[0 to 99999999/0/1]
8-696-001	L:TX PGS/LS		CTL*	[0 to 99999999/0/1]
8-701-001	TX PGS/Port	PSTN-1	CTL*	[0 to 99999999/0/1]
8-701-002	TX PGS/Port	PSTN-2	CTL*	[0 to 99999999/0/1]
8-701-003	TX PGS/Port	PSTN-3	CTL*	[0 to 99999999/0/1]
8-701-004	TX PGS/Port	ISDN(G3,G4)	CTL*	[0 to 99999999/0/1]
8-701-005	TX PGS/Port	Network	CTL*	[0 to 99999999/0/1]
8-711-001	T:Scan PGS/Comp	JPEG/JPEG2000	CTL*	[0 to 99999999/0/1]
8-711-002	T:Scan PGS/Comp	TIFF(Multi/Single)	CTL*	[0 to 99999999/0/1]
8-711-003	T:Scan PGS/Comp	PDF	CTL*	[0 to 99999999/0/1]
8-711-004	T:Scan PGS/Comp	Other	CTL*	[0 to 99999999/0/1]
8-711-	T:Scan PGS/Comp	PDF/Comp	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
005				
8-711-006	T:Scan PGS/Comp	PDF/A	CTL*	[0 to 99999999/0/1]
8-711-007	T:Scan PGS/Comp	PDF(OCR)	CTL*	[0 to 99999999/0/1]
8-711-008	T:Scan PGS/Comp	PDF/Comp(OCR)	CTL*	[0 to 99999999/0/1]
8-711-009	T:Scan PGS/Comp	PDF/A(OCR)	CTL*	[0 to 99999999/0/1]
8-715-001	S:Scan PGS/Comp	JPEG/JPEG2000	CTL*	[0 to 99999999/0/1]
8-715-002	S:Scan PGS/Comp	TIFF(Multi/Single)	CTL*	[0 to 99999999/0/1]
8-715-003	S:Scan PGS/Comp	PDF	CTL*	[0 to 99999999/0/1]
8-715-004	S:Scan PGS/Comp	Other	CTL*	[0 to 99999999/0/1]
8-715-005	S:Scan PGS/Comp	PDF/Comp	CTL*	[0 to 99999999/0/1]
8-715-006	S:Scan PGS/Comp	PDF/A	CTL*	[0 to 99999999/0/1]
8-715-007	S:Scan PGS/Comp	PDF(OCR)	CTL*	[0 to 99999999/0/1]
8-715-008	S:Scan PGS/Comp	PDF/Comp(OCR)	CTL*	[0 to 99999999/0/1]
8-715-009	S:Scan PGS/Comp	PDF/A(OCR)	CTL*	[0 to 99999999/0/1]
8-721-001	T:Deliv PGS/WSD/DSM	B/W	CTL*	[0 to 99999999/0/1]
8-721-002	T:Deliv PGS/WSD/DSM	Color	CTL*	[0 to 99999999/0/1]
8-725-001	S:Deliv PGS/WSD/DSM	B/W	CTL*	[0 to 99999999/0/1]
8-725-002	S:Deliv PGS/WSD/DSM	Color	CTL*	[0 to 99999999/0/1]
8-731-	T:Scan PGS/Media	B/W	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
001				
8-731-002	T:Scan PGS/Media	Color	CTL*	[0 to 99999999/0/1]
8-735-001	S:Scan PGS/Media	B/W	CTL*	[0 to 99999999/0/1]
8-735-002	S:Scan PGS/Media	Color	CTL*	[0 to 99999999/0/1]
8-741-001	RX PGS/Port	PSTN-1	CTL*	[0 to 99999999/0/1]
8-741-002	RX PGS/Port	PSTN-2	CTL*	[0 to 99999999/0/1]
8-741-003	RX PGS/Port	PSTN-3	CTL*	[0 to 99999999/0/1]
8-741-004	RX PGS/Port	ISDN(G3,G4)	CTL*	[0 to 99999999/0/1]
8-741-005	RX PGS/Port	Network	CTL*	[0 to 99999999/0/1]
8-771-001	Dev Counter	Total	CTL*	[0 to 99999999/0/1]
8-781-001	Toner_Botol_Info.	BK	CTL*	[0 to 99999999/0/1]
8-791-001	LS Memory Remain		CTL*	[0 to 100/0/1%]
8-801-001	Toner Remain	K	CTL*	[0 to 100/0/1%]
8-811-001	Eco Counter	Eco Total	CTL*	[0 to 99999999/0/1]
8-811-004	Eco Counter	Duplex	CTL*	[0 to 99999999/0/1]
8-811-005	Eco Counter	Combine	CTL*	[0 to 99999999/0/1]
8-811-008	Eco Counter	Duplex(%)	CTL*	[0 to 100/0/1%]
8-811-009	Eco Counter	Combine(%)	CTL*	[0 to 100/0/1%]
8-811-	Eco Counter	Paper Cut(%)	CTL*	[0 to 100/0/1%]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
010				
8-811-051	Eco Counter	Sync Eco Total	CTL*	[0 to 99999999/0/1]
8-811-054	Eco Counter	Sync Duplex	CTL*	[0 to 99999999/0/1]
8-811-055	Eco Counter	Sync Combine	CTL*	[0 to 99999999/0/1]
8-811-058	Eco Counter	Sync Duplex(%)	CTL*	[0 to 100/0/1%]
8-811-059	Eco Counter	Sync Combine(%)	CTL*	[0 to 100/0/1%]
8-811-060	Eco Counter	Sync Paper Cut(%)	CTL*	[0 to 100/0/1%]
8-811-101	Eco Counter	Eco Totalr:Last	CTL*	[0 to 99999999/0/1]
8-811-104	Eco Counter	Duplex:Last	CTL*	[0 to 99999999/0/1]
8-811-105	Eco Counter	Combine:Last	CTL*	[0 to 99999999/0/1]
8-811-108	Eco Counter	Duplex(%):Last	CTL*	[0 to 100/0/1%]
8-811-109	Eco Counter	Combine(%):Last	CTL*	[0 to 100/0/1%]
8-811-110	Eco Counter	Paper Cut(%):Last	CTL*	[0 to 100/0/1%]
8-811-151	Eco Counter	Sync Eco Totalr:Last	CTL*	[0 to 99999999/0/1]
8-811-154	Eco Counter	Sync Duplex:Last	CTL*	[0 to 99999999/0/1]
8-811-155	Eco Counter	Sync Combine:Last	CTL*	[0 to 99999999/0/1]
8-811-158	Eco Counter	Sync Duplex(%):Last	CTL*	[0 to 100/0/1%]
8-811-159	Eco Counter	Sync Combine(%):Last	CTL*	[0 to 100/0/1%]
8-811-	Eco Counter	Sync Paper Cut(%):Last	CTL*	[0 to 100/0/1%]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
160				
8-851-011	Cvr Cnt:0-10%	0~2%:BK	CTL*	[0 to 99999999/0/1]
8-851-021	Cvr Cnt:0-10%	3~4%:BK	CTL*	[0 to 99999999/0/1]
8-851-031	Cvr Cnt:0-10%	5~7%:BK	CTL*	[0 to 99999999/0/1]
8-851-041	Cvr Cnt:0-10%	8~10%:BK	CTL*	[0 to 99999999/0/1]
8-861-001	Cvr Cnt:11-20%	BK	CTL*	[0 to 99999999/0/1]
8-871-001	Cvr Cnt:21-30%	BK	CTL*	[0 to 99999999/0/1]
8-881-001	Cvr Cnt:31%-	BK	CTL*	[0 to 99999999/0/1]
8-891-001	Page/Toner Bottle	BK	CTL*	[0 to 99999999/0/1]
8-901-001	Page/Toner_Prev1	BK	CTL*	[0 to 99999999/0/1]
8-911-001	Page/Toner_Prev2	BK	CTL*	[0 to 99999999/0/1]
8-921-001	Cvr Cnt/Total	Coverage(%):BK	CTL*	[0 to 2147483647/0/1%]
8-921-011	Cvr Cnt/Total	Coverage/P:BK	CTL*	[0 to 99999999/0/1]
8-941-001	Machine Status	Operation Time	CTL*	[0 to 99999999/0/1]
8-941-002	Machine Status	Standby Time	CTL*	[0 to 99999999/0/1]
8-941-003	Machine Status	Energy Save Time	CTL*	[0 to 99999999/0/1]
8-941-004	Machine Status	Low Power Time	CTL*	[0 to 99999999/0/1]
8-941-005	Machine Status	Off Mode Time	CTL*	[0 to 99999999/0/1]
8-941-	Machine Status	SC	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
006				
8-941-007	Machine Status	PrtJam	CTL*	[0 to 99999999/0/1]
8-941-008	Machine Status	OrgJam	CTL*	[0 to 99999999/0/1]
8-941-009	Machine Status	Supply PM Unit End	CTL*	[0 to 99999999/0/1]
8-951-001	AddBook Register	User Code /User ID	CTL*	[0 to 99999/0/1]
8-951-002	AddBook Register	Mail Address	CTL*	[0 to 99999/0/1]
8-951-003	AddBook Register	Fax Destination	CTL*	[0 to 99999/0/1]
8-951-004	AddBook Register	Group	CTL*	[0 to 99999/0/1]
8-951-005	AddBook Register	Transfer Request	CTL*	[0 to 99999/0/1]
8-951-006	AddBook Register	F-Code	CTL*	[0 to 99999/0/1]
8-951-007	AddBook Register	Copy Program	CTL*	[0 to 255/0/1]
8-951-008	AddBook Register	Fax Program	CTL*	[0 to 255/0/1]
8-951-009	AddBook Register	Printer Program	CTL*	[0 to 255/0/1]
8-951-010	AddBook Register	Scanner Program	CTL*	[0 to 255/0/1]
8-961-001	Electricity Status	Ctrl Standby Time	CTL*	[0 to 99999999/0/1]
8-961-002	Electricity Status	STR Time	CTL*	[0 to 99999999/0/1]
8-961-003	Electricity Status	Main Power Off Time	CTL*	[0 to 99999999/0/1]
8-961-004	Electricity Status	Reading and Printing Time	CTL*	[0 to 99999999/0/1]
8-961-	Electricity Status	Printing Time	CTL*	[0 to 99999999/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
005				
8-961-006	Electricity Status	Reading Time	CTL*	[0 to 99999999/0/1]
8-961-007	Electricity Status	Eng Waiting Time	CTL*	[0 to 99999999/0/1]
8-961-008	Electricity Status	Low Pawer State Time	CTL*	[0 to 99999999/0/1]
8-961-009	Electricity Status	Silent State Time	CTL*	[0 to 99999999/0/1]
8-961-010	Electricity Status	Heater Off State Time	CTL*	[0 to 99999999/0/1]
8-961-011	Electricity Status	LCD on Time	CTL*	[0 to 99999999/0/1]
8-961-101	Electricity Status	Silent Print	CTL*	[0 to 99999999/0/1]
8-971-001	Unit Control	Engine Off Recovery Count	CTL*	[0 to 99999999/0/1]
8-971-002	Unit Control	Power Off Count	CTL*	[0 to 99999999/0/1]
8-971-003	Unit Control	Force Power Off Count	CTL*	[0 to 99999999/0/1]
8-999-001	Admin. Counter List	Total	CTL*	[0 to 99999999/0/1]
8-999-003	Admin. Counter List	Copy: BW	CTL*	[0 to 99999999/0/1]
8-999-007	Admin. Counter List	Printer: BW	CTL*	[0 to 99999999/0/1]
8-999-010	Admin. Counter List	Fax Print: BW	CTL*	[0 to 99999999/0/1]
8-999-013	Admin. Counter List	Duplex	CTL*	[0 to 99999999/0/1]
8-999-023	Admin. Counter List	Copy: BW(%)	CTL*	[0 to 2147483647/0/1]
8-999-027	Admin. Counter List	Printer: BW(%)	CTL*	[0 to 2147483647/0/1]
8-999-	Admin. Counter List	Fax Print: BW(%)	CTL*	[0 to 2147483647/0/1]

SP No.	Large Category	Small Category	ENG or CTL	[Min to Max/Init./Step]
030				
8-999-101	Admin. Counter List	Transmission Total: Color	CTL*	[0 to 99999999/0/1]
8-999-102	Admin. Counter List	Transmission Total: BW	CTL*	[0 to 99999999/0/1]
8-999-103	Admin. Counter List	FAX Transmission	CTL*	[0 to 99999999/0/1]
8-999-104	Admin. Counter List	Scanner Transmission: Color	CTL*	[0 to 99999999/0/1]
8-999-105	Admin. Counter List	Scanner Transmission: BW	CTL*	[0 to 99999999/0/1]
8-999-116	Admin. Counter List	Total: BW Simplex Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-999-118	Admin. Counter List	Total: BW Duplex Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-999-136	Admin. Counter List	Copy: BW Simplex Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-999-138	Admin. Counter List	Copy: BW Duplex Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-999-156	Admin. Counter List	Printer: BW Simplex Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-999-158	Admin. Counter List	Printer: BW Duplex Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-999-172	Admin. Counter List	Fax: BW Simplex Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-999-174	Admin. Counter List	Fax: BW Duplex Under A3/DLT	CTL*	[0 to 99999999/0/1]
8-999-192	Admin. Counter List	Scan: Under A3/DLT	CTL*	[0 to 99999999/0/1]

Scanner SP Mode

SP1-XXX (System and Others)

1001	**[Scan Nv Version]** 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).		
1-001-005	-	CTL*	-

1005	**[Erase margin]** 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.		
1-005-001	Range from 0 to 5 mm	CTL*	[0 to 5 / **0** / 1 mm]

1009	**[Remote scan disable]** Enable or disable remote scan.		
1-009-001	0:Enable 1:Disable	CTL*	[0 or 1 / **0** / -] 0: enable, 1: disable

1010	**[Non Display Clear Light PDF]** Enable or disable remote scan.		
1-010-001	0:Enable 1:Disable	CTL*	[0 or 1 / **0** / -] 0: Display, 1: No display

1011	**[Org count Disp]** Selects the original counter display. 0: Displays remaining memory for the original scanning. 1: Displays original counter.		
1-011-001	0:ON 1:OFF	CTL*	[0 or 1 / **0** / -]

1012	**[UserInfo release]** Clear the following settings:

	Address, Sender, Text / Subject, Filename		
1-012-001	0:NO 1:YES	CTL*	[0 or 1 / **1** / -] 0: No, 1: Yes

1013	**[Scan to Media Device Setting]** On or off multimedia function		
1-013-001	0:OFF 1:ON	CTL*	[0 or 1 / **1** / -] 0: OFF, 1: ON

1014	**[Scan to Folder Pass Input Set]**		
1-014-001	0:OFF 1:ON	CTL*	[0 or 1 / **0** / -] 0: OFF, 1: ON

1016	**[Scan To Email Sender Address]**		
1-016-001	0:OFF 1:ON	CTL*	[0 or 1 / **0** / -] 0: Login User Address, 1: POP before SMTP Address

1040	**[Scan:LT/LG Mixed Size Setting]**		
1-040-001	0:OFF 1:ON	CTL*	[0 or 1 / ***** / -] NA: 1, Other: 0 0: OFF, 1: ON

1041	**[Scan:FlairAPI Setting]**		
1-041-001	0x00 – 0xff	CTL*	[- / **00000000** / -]

1042	**[Email Date Setting]**		
1-042-001	Setting Range: 0-3	CTL*	[0 to 3 / **0** / -] 0: Follow language setting 1: MM/DD/YYYY 2: DD/MM/YYYY 3: YYYY/MM/DD

1043	**[Result Screen Doc Name Display]**		
1-043-001	0:Nondisplay 1:Display	CTL*	[0 or 1 / **0** / -] 0: No Display, 1: display

SP2-XXX, SP3-XXX (Scanning-image Quality)

2021	**[Compression Level (Grayscale)]**

	Selects the compression ratio for grayscale processing mode (JPEG) for the three settings that can be selected at the operation panel.		
2-021-001	Comp 1: 5-95	CTL*	[5 to 95 / **20** / 1 /step]
2-021-002	Comp 2: 5-95		[5 to 95 / **40** / 1 /step]
2-021-003	Comp 3: 5-95		[5 to 95 / **65** / 1 /step]
2-021-004	Comp 4: 5-95		[5 to 95 / **80** / 1 /step]
2-021-005	Comp 5: 5-95		[5 to 95 / **95** / 1 /step]

2023	**[ClearLightPDF:ACS Setting]**		
2-023-001	0:OFF 1:ON	CTL*	[0 or 1 / **1** / 1]

2024	**[Compression ratio of ClearLight PDF]** 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)		[5 to 95 / **15** / 1 /step]

2025	**[Compression ratio of ClearLight PDF 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		[5 to 95 / **15** / 1 /step]

2030	**[OCR PDF DetectSens]**		
2-030-001	White Lumi Value: 0 - 255	CTL*	[0 to 255 / **250** / -]
2-030-002	White Pix Ratio: 0 - 100		[0 to 100 / **80** / -]
2-030-003	White Tile Ratio: 0 - 100		[0 to 100 / **80** / -]

2031	**[Vertical Judgment Setting]**

2-031-001	Function Setting: 0 - 1	CTL*	[0 or 1 / **0** / 1]
2-031-002	Algorithm Setting: 0 - 2		[0 to 2 / **0** / 1]

3066	**[HighCompressPDF PrioritySettng]**		
3-066-001	0:Generate PDF 1:Handling Speed	CTL*	[0 or 1 / **1** / 1]

3067	**[flate Compression Setting]**		
3-067-001	0:Disable 1:Enable	CTL*	[0 or 1 / **1** / 1]

3070	**[Scan Limit Warning Display Setting]**		
3-070-001	0:Nondisplay 1:Display	CTL*	[0 or 1 / **1** / 1]

6. Software Configuration

Printing Features

Behavior of USB Printer Detection

An MFP/LP 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/LP 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.

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

PDL detection by the printer system, PCL interpreter and PS interpreter

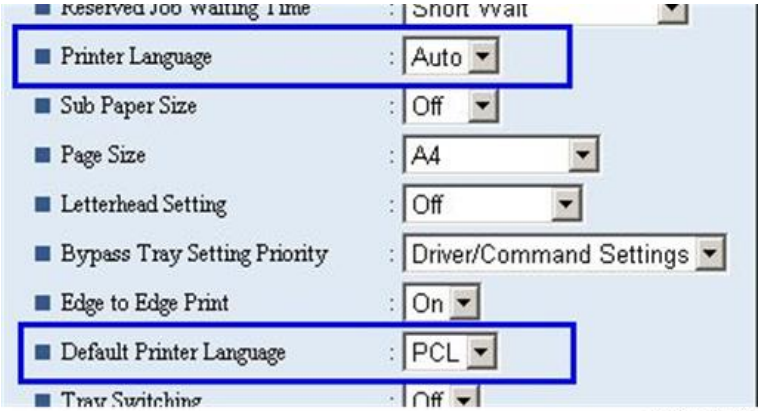
There are 3 components in the printer which can perform Auto PDL Detection:

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:



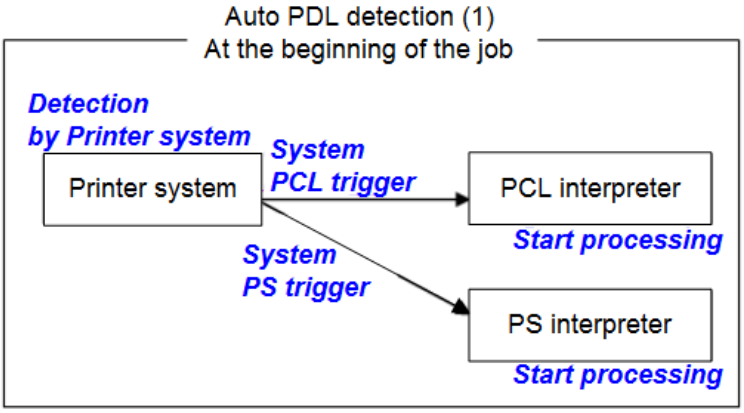
d238m3501

PDL selection and switching

3 types of PDL selection/switching are performed:

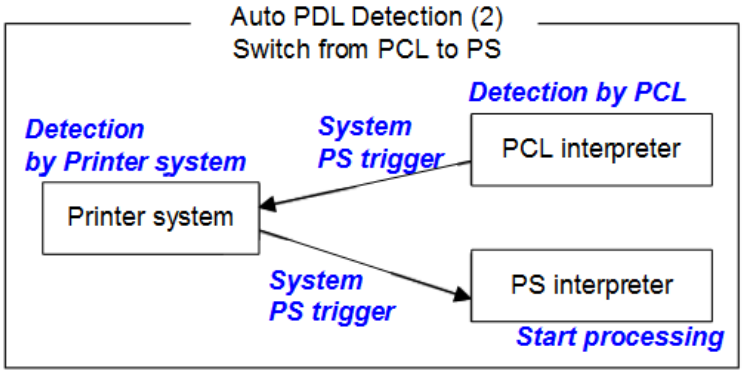
1. PDL selection (PCL5 or PS (including PDF)) at the beginning of the job: performed by the printer

system



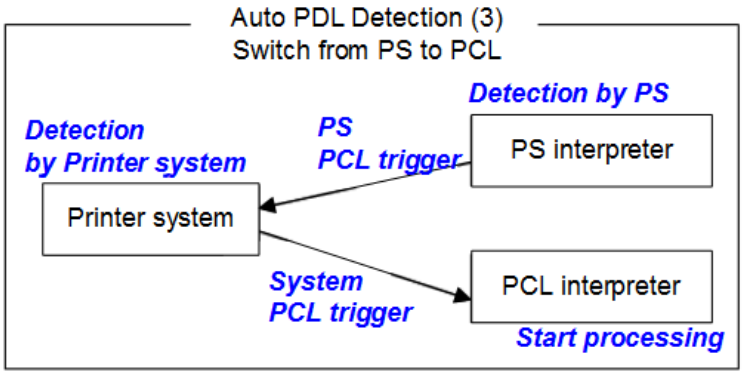
w_d238m3502_en

2. PDL switching from PCL5 to PS: performed by the PCL interpreter and the printer system



w_d238m3503_en

3. PDL switching from PS to PCL5: performed by the PS interpreter and the printer system



w_d238m3504_en

Triggers

Printer system

PCL5 triggers	[ESC]E [FF]
PS triggers	%!PS-Adobe-3.1 %! dict begin bind def findfont showpage /statusdict 0 startjob [EOT] 0x04 "}" + space caracter + "def" userdict 0x14
PDF	%PDF-

triggers	%!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.
- By configuring Printer Bit Switch 5-3=1:
  - "%%" can be added to the PS triggers
  - "userdict" is excluded
- 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 change 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:

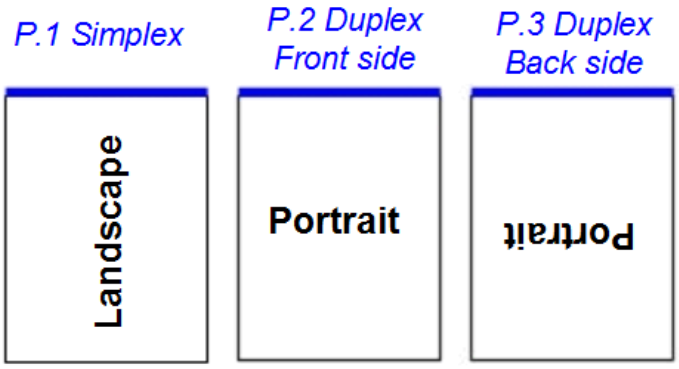
A uniform binding edge (short or long edge) will only be applied if the job is stapled, punched, or Z-folded. Otherwise, the bound edge might differ from page to page.

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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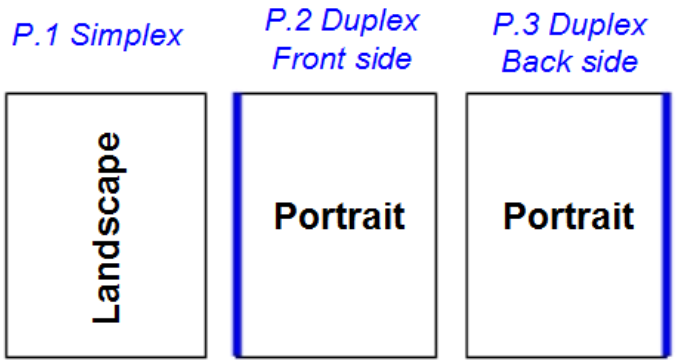
Bit Switch #5-6=1:



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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):

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 (IM 550F/600F/600SRF only)

Display settings of recently used scan destination

Configuring the scanner interface so that the most recently used scan destination is cleared.

Whether the MFP clears the most recently used scan destination, can be configured using Scanner SP 1-012-001.

By default, this is cleared to avoid subsequent users scanning to it by mistake.

Scanner SP 1-012-001

1 (default): Clear

0: Do not clear

This will cause all of the following to be cleared after the scanning is complete:

- Destination
- Sender
- Email subject
- Email message
- File name

The information in the list above will be cleared after scanning is finished.

Exceptions:

- User Auth.:
  If SP 1-012-001 = 0 and if User Auth. (excluding User Code authentication) is enabled, the most recently used scan destination will only be retained until the user logs out.
- Scanner Auto Reset timer:
  Even if SP 1-012-001 = 0 the most recently used scan destination can still be cleared by the Scanner Auto Reset timer. If the Scanner Auto Reset timer is shorter than the System Auto Reset timer, then the most recently used scan destination will be cleared when the Scanner Auto Reset timer elapses.

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 email address will appear in the email's "From" field. The email address of the user who sent the email 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.

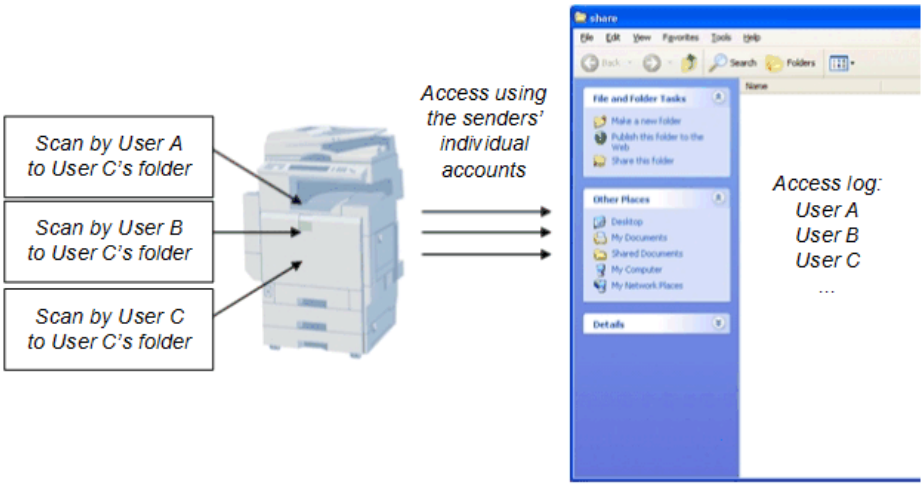
Cases:

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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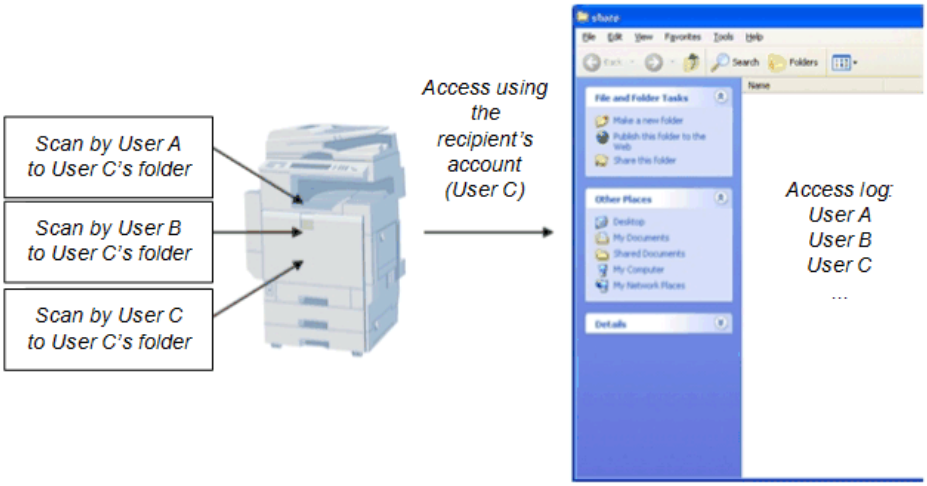
Case B or Case C with SP=1: All access will be logged as the same user.



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Management Features

How to Disable the Document Server Function (IM 550F/600F/600SRF only)

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.

How to Use Locked Print When the Document Server Is Disabled

1. Enter 'Printer' SP mode.
2. Set SP1-006-001 to 1.

   0: Link with Doc. Srv (default)

   Locked print will only be enabled if the document server is enabled.

   1: Enable

   Enable Locked

   Print will be enabled no matter the status of the document server.
3. Turn OFF then ON the main power.

Security Features

How to Restrict Access to the WIM Job Menu

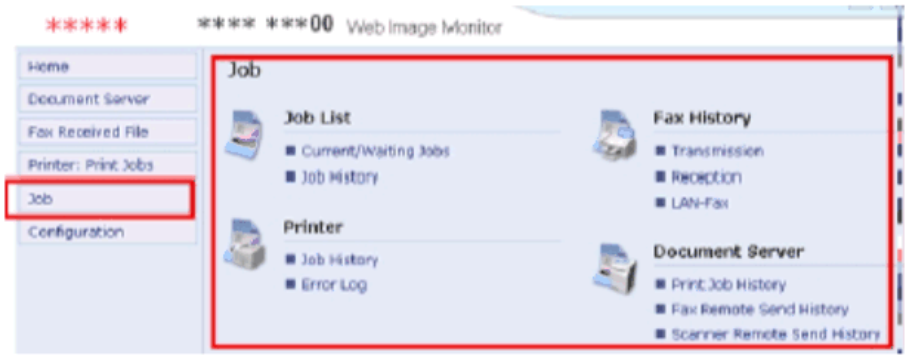
1. Enter 'Printer' SP mode.
2. Set SP5-888-001

   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 (IM 550F/600F/600SRF only)

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 precedence 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 and Printer SP1-006-001.
- 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 (IM 550F/600F/600SRF only)

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.