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Learning ♦ Knowledge ♦ Performance



D117/D118
SERVICE MANUAL

LANIER RICOH SAVIT

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Ricoh Americas Corporation

LEGEND

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READ THIS FIRST

Important Safety Notices

Responsibilities of the Customer Engineer

Customer Engineer

Maintenance shall be done only by trained customer engineers who have completed service training for the machine and all optional devices designed for use with the machine.

Reference Material for Maintenance

- Maintenance shall be done using the special tools and procedures prescribed for maintenance of the machine described in the reference materials (service manuals, technical bulletins, operating instructions, and safety guidelines for customer engineers).
- In regard to other safety issues not described in this document, all customer engineers shall strictly obey procedures and recommendations described the "CE Safety Guide".
- Use only consumable supplies and replacement parts designed for use of the machine.

Before Installation, Maintenance

Shipping and Moving the Machine

CAUTION

- Work carefully when lifting or moving the machine. If the machine is heavy, two or more customer engineers may be required to prevent injuries (muscle strains, spinal injuries, etc.) or damage to the machine if it is dropped or tipped over.
- Personnel moving or working around the machine should always wear proper clothing and footwear. Never wear loose fitting clothing or accessories (neckties, loose sweaters, bracelets, etc.) or casual footwear (slippers, sandals, etc.) when lifting or moving the machine.
- Always unplug the power cord from the power source before you move the product. Before you move the product, arrange the power cord so it will not fall under the product.

The Aim of Anti-tip Components and Precautions

CAUTION

- 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.

Power

WARNING

- Always disconnect the power plug before doing any maintenance procedure. After switching off the machine, power is still supplied to the main machine and other devices. To prevent electrical shock, switch the machine off, wait for a few seconds, then unplug the machine from the power source.
- Before you do any checks or adjustments after turning the machine off, work carefully to avoid injury. After removing covers or opening the machine to do checks or adjustments, never touch electrical components or moving parts (gears, timing belts, etc.).
- After turning the machine on with any cover removed, keep your hands away from electrical components and moving parts. Never touch the cover of the fusing unit, gears, timing belts, etc.

Installation, Disassembly, and Adjustments

CAUTION

- After installation, maintenance, or adjustment, always check the operation of the machine to make sure that it is operating normally. This ensures that all shipping materials, protective materials, wires and tags, metal brackets, etc., removed for installation, have been removed and that no tools remain inside the machine. This also ensures that all release interlock switches have been restored to normal operation.
- Never use your fingers to check moving parts causing spurious noise. Never use your fingers to lubricate moving parts while the machine is operating.

Special Tools

CAUTION

- Use only standard tools approved for machine maintenance.
- For special adjustments, use only the special tools and lubricants described in the service manual. Using tools incorrectly, or using tools that could damage parts, could damage the machine or cause injuries.

During Maintenance

General

CAUTION

- Before you begin a maintenance procedure: 1) Switch the machine off, 2) Disconnect the power plug from the power source, 3) Allow the machine to cool for at least 10 minutes.
- Avoid touching the components inside the machine that are labeled as hot surfaces.

Safety Devices

WARNING

- Never remove any safety device unless it requires replacement. Always replace safety devices immediately.
- Never do any procedure that defeats the function of any safety device. 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.
- 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.

Organic Cleaners

CAUTION

- During preventive maintenance, never use any organic cleaners (alcohol, etc.) other than those described in the service manual.
- Make sure the room is well ventilated before using any organic cleaner. Use organic solvents in small amounts to avoid breathing the fumes and becoming nauseous.
- Switch the machine off, unplug it, and allow it to cool before doing preventive maintenance. To avoid fire or explosion, never use an organic cleaner near any part that generates heat.
- Wash your hands thoroughly after cleaning parts with an organic cleaner to contamination of food, drinks, etc. which could cause illness.
- 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. Use "My Ace" Silicone Oil Remover (or dry rags) to soak up spills. For more details, please refer to Technical Bulletin "Silicone Oil Removal" (A024-50).

Lithium Batteries

WARNING

- Always replace a lithium battery on a PCB with the same type of battery prescribed for use on that board. Replacing a lithium battery with any type other than the one prescribed for use on the board could lead to an explosion or damage to the PCB.
- Never discard used batteries by mixing them with other trash. Remove them from the work site and dispose of them in accordance with local laws and regulations regarding the disposal of such items.

Power Plug and Power Cord

WARNING

- Before serving the machine (especially when responding to a service call), always make sure that the power plug has been inserted completely into the power source. A partially inserted plug could lead to heat generation (due to a power surge caused by high resistance) and cause a fire or other problems.
- Always check the power plug and make sure that it is free of dust and lint. Clean it if necessary. A dirty plug can generate heat which could cause a fire.
- Inspect the length of the power cord for cuts or other damage. Replace the power cord if necessary. A frayed or otherwise damaged power cord can cause a short circuit which could lead to a fire or personal injury from electrical shock.
- Check the length of the power cord between the machine and power supply. Make sure the power cord is not coiled or wrapped around any object such as a table leg. Coiling the power cord can cause excessive heat to build up and could cause a fire.
- Make sure that the area around the power source is free of obstacles so the power cord can be removed quickly in case of an emergency.
- Make sure that the power cord is grounded (earthed) at the power source with the ground wire on the plug.
- Connect the power cord directly into the power source. Never use an extension cord.
- When you disconnect the power plug from the power source, always pull on the plug, not the cable.

After Installation, Servicing

Disposal of Used Items

WARNING

- Never incinerate used toner or toner cartridges.
- Toner or toner cartridges thrown into a fire can ignite or explode and cause serious injury. At the work site always carefully wrap used toner and toner cartridges with plastic bags to avoid spillage before disposal or removal.

CAUTION

- Always dispose of used items (developer, toner, toner cartridges, OPC drums, etc.) in accordance with the local laws and regulations regarding the disposal of such items.
- To protect the environment, never dispose of this product or any kind of waste from consumables at a household waste collection point. Dispose of these items at one of our dealers or at an authorized collection site.
- Return used selenium drums to the service center for handling in accordance with company policy regarding the recycling or disposal of such items.

Points to Confirm with Operators

At the end of installation or a service call, instruct the user about use of the machine. Emphasize the following points.

- Show operators how to remove jammed paper and troubleshoot other minor problems by following the procedures described in the operating instructions.
- Point out the parts inside the machine that they should never touch or attempt to remove.
- Confirm that operators know how to store and dispose of consumables.
- Make sure that all operators have access to an operating instruction manual for the machine.
- Confirm that operators have read and understand all the safety instructions described in the operating instructions.
- Demonstrate how to turn off the power and disconnect the power plug (by pulling the plug, not the cord) if any of the following events occur: 1) something has spilled into the product, 2) service or repair of the product is necessary, 3) the product cover has been damaged.
- Caution operators about removing paper fasteners around the machine. They should never allow paper clips, staples, or any other small metallic objects to fall into the machine.

Special Safety Instructions for Toner

Accidental Physical Exposure

CAUTION

- 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.

Handling and Storing Toner

WARNING

- Toner, used toner, and developer are extremely flammable.
- Never store toner, developer, toner cartridges, or toner bottles (including empty toner bottles or cartridges) in a location where they will be exposed to high temperature or an open flame.

CAUTION

- Always store toner and developer supplies such as toner and developer packages, cartridges, and bottles (including used toner and empty bottles and cartridges) 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.

WARNING

- 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.

Toner Disposal

WARNING

- Never attempt to incinerate toner, used toner, or empty toner containers (bottles or cartridges). Burning toner can explode and scatter, causing serious burns.
- Always wrap used toner and empty toner bottles and cartridges in plastic bags to avoid spillage. Follow the local laws and regulations regarding the disposal of such items.
- Dispose of used toner and toner cartridges at one of our dealers or at an authorized collection site. Always dispose of used toner cartridges and toner bottles in accordance with the local laws and regulations regarding the disposal of such items.

Safety Instructions for this Machine

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. 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.
5. If the [Start] key is pressed before the machine completes the warm-up period (the [Start] key starts blinking red and green), keep hands away from the mechanical and the electrical components as the machine starts making copies as soon as the warm-up period is completed.
6. 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.
7. To prevent a fire or explosion, keep the machine away from flammable liquids, gases, and aerosols.
8. 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.
9. When using a vacuum cleaner around the machine, keep others away from the cleaner, especially small children.

Health Safety Conditions

1. Never operate the machine without the ozone filters installed.
2. Always replace the ozone filters with the specified types at the proper intervals.
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.
2. The NVRAM on the system control board has a lithium battery which can explode if replaced incorrectly. Replace the NVRAM only with an identical one. The manufacturer recommends replacing the entire NVRAM. Do not recharge or burn this battery. Used NVRAM must be handled in accordance with local regulations.

Safety and Ecological Notes for Disposal

1. Do not incinerate toner bottles or used toner. Toner dust may ignite suddenly when exposed to an open flame.
2. Dispose of used toner, developer, and organic photoconductors in accordance with local regulations. (These are non-toxic supplies.)
3. Dispose of replaced parts in accordance with local regulations.
4. 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.

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

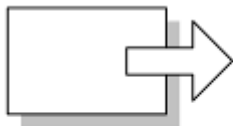
- **WARNING:** Turn off the main switch before attempting any of the procedures in the Laser Optics Housing Unit section. Laser beams can seriously damage your eyes.
- **CAUTION MARKING:**



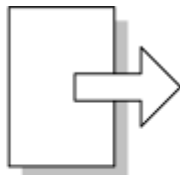
Symbols, Abbreviations and Trademarks

This manual uses several symbols and abbreviations. The meaning of those symbols and abbreviations are as follows:

	See or Refer to
	Clip ring
	Screw
	Connector
	Clamp
	E-ring
SEF	Short Edge Feed
LEF	Long Edge Feed



Short Edge Feed (SEF)



Long Edge Feed (LEF)

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PowerPC[®] is a registered trademark of International Business Machines Corporation.

Other product names used herein are for identification purposes only and may be trademarks of their respective companies. We disclaim any and all rights involved with those marks.

PRODUCT INFORMATION

REVISION HISTORY		
Page	Date	Added/Updated/New
		None

1. PRODUCT INFORMATION

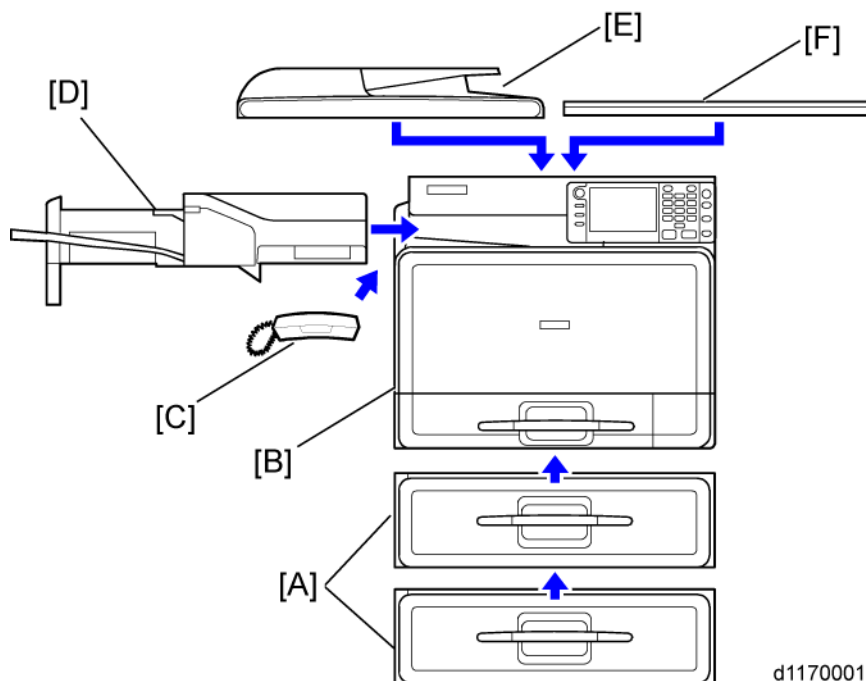
1.1 SPECIFICATIONS

See "Appendices" for the following information:

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

1.2 MACHINE CONFIGURATION

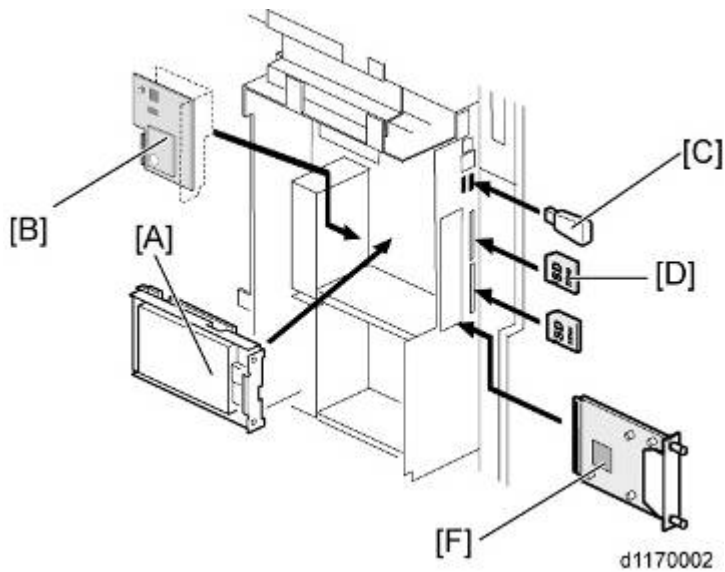
1.2.1 MACHINE CONFIGURATION



d1170001

Main Unit

Item	Machine Code	Remarks
Main Unit [B]	D117 D118	D117: Gr-C1 SPF D118: Gr-C1 SP
Paper Feed Unit PB-1050 [A]	D573	Up to 2 can be stacked
1 Bin Tray BN1010 [D]	D574	-
ARDF DF1030 [E]	D606	NA/Asia Standard EU/China Standard for D117 EU/China Optional for D118
Platen Cover PN1010 [F]	D607	EU/China Optional for D118
Handset Type C5502 (Only for NA) [C]	D645(NA)	Requires the Fax Option.



Controller Options

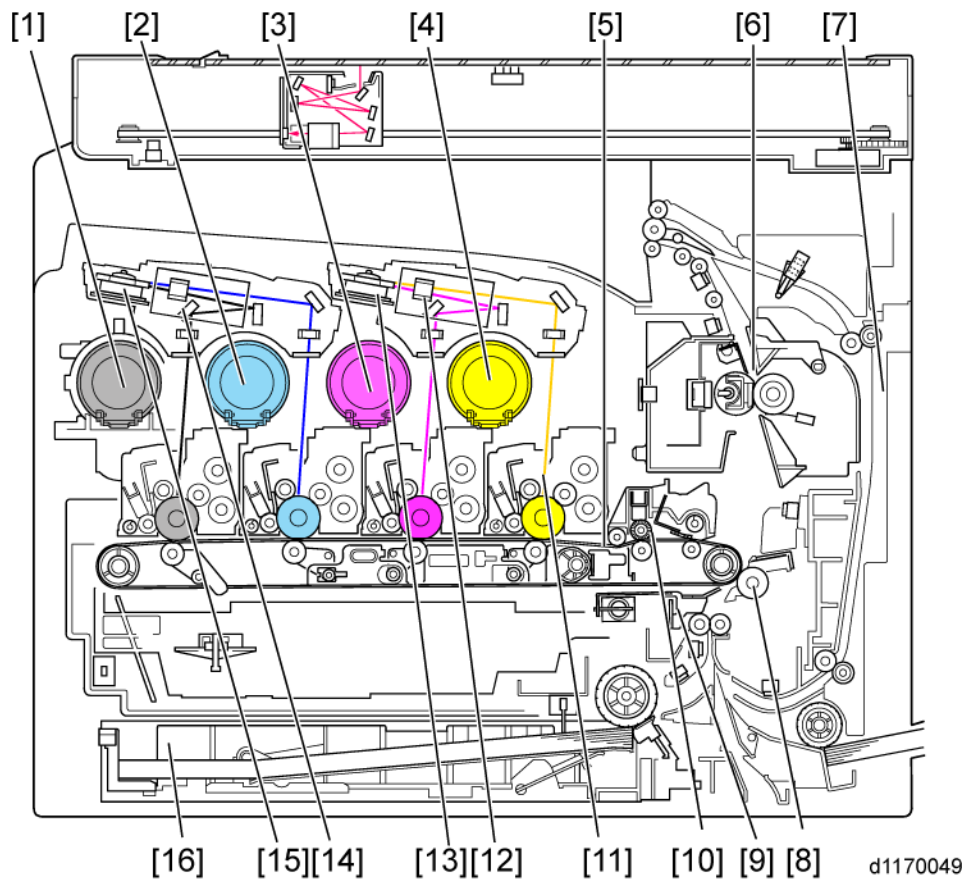
Item	Machine Code	Remarks
Fax Option Type C305 [B]	D649	Only for D118
Fax Connection Unit Type D	D657	Only for machines equipped with a fax unit. *This unit will be released in the near future.
HDD Option Type C305 [A]	D656-00	
Bluetooth Interface Unit Type D (USB) [C]	D566	One of two USB slots. It cannot be used with Wireless LAN Unit Type J/K simultaneously.
IEEE1284 Interface Board Type A [E]	B679	
Wireless LAN Unit Type J/K [F] (IEEE 802.11a/g, g)	D377-01 (NA) D377-02 (EU) D377-19 (Specified countries)	One from these four cards can be installed at the same time.

Machine Configuration

File Format Converter Type E [F]	D377-04	
Gigabit Ethernet Board Type A [F]	G874	
Copy Data Security Unit Type G	D640	-
VM Card Type T [D]	D656	If multiple applications are required, merge all applications in one SD card with the SP mode (SD Card Appli Move)
Browser Unit Type H [D]	D656-05	
Camera Direct Print Card Type K [D]	D658	
SD Card for Netware Printing Type J [D]	D656-01	
Optional Counter Interface Unit Type A	B870	-

1.3 OVERVIEW

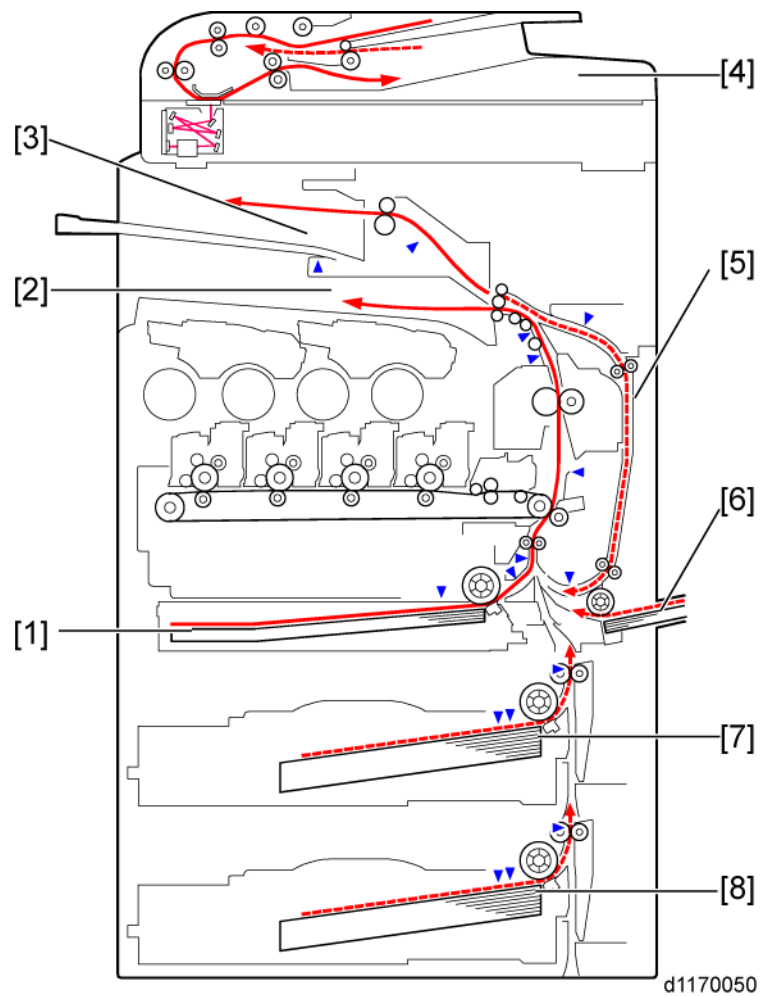
1.3.1 COMPONENT LAYOUT



1. Toner Bottle [K]	11. PCDU (Photo Conductor and Development Unit)
2. Toner Bottle [C]	12. LDU 2 (for Magenta, Yellow) Unit
3. Toner Bottle [M]	13. Polygon Mirror Motor 2
4. Toner Bottle [Y]	14. LDU 1 (for Black, Cyan)
5. Image Transfer Belt Unit	15. Polygon Mirror Motor 1
6. Fusing Unit	16. Standard Paper Feed Tray (Tray 1)
7. Duplex Unit	
8. Paper Transfer Roller	
9. ID Sensor	
10. Image Transfer Belt Cleaning Unit	

1.3.2 PAPER PATH

With all options



[1]: Standard Paper Feed Tray (Tray 1)

[2]: Standard Paper Exit Tray

[3]: 1 Bin Tray (Option)

[4]: ARDF (NA/Asia Standard, EU/China Option)

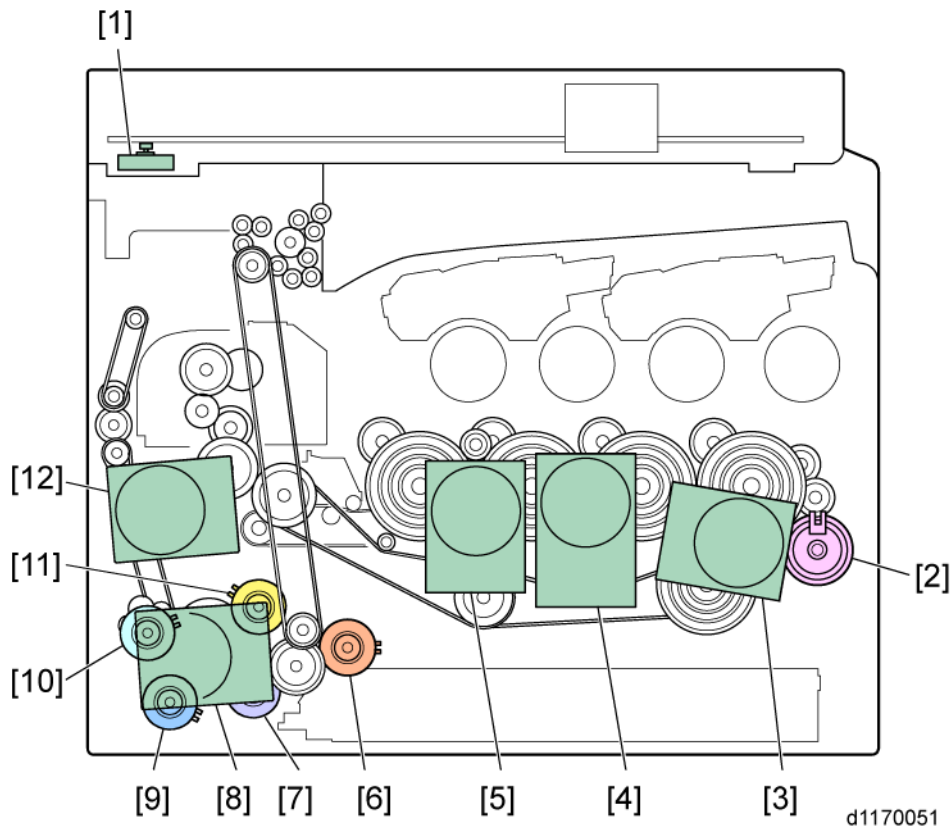
[5]: Duplex Unit

[6]: By-pass Tray

[7]: One-tray Paper Feed Unit (Option)

[8]: One-tray Paper Feed Unit (Option)

1.3.3 DRIVE LAYOUT



- [1]: Scanner Drive Motor
- [2]: Development Clutch (Black)
- [3]: Drum Drive Motor (Black)
- [4]: Drum Drive Motor (Color)
- [5]: Development Motor (Color)
- [6]: Paper Feed Clutch
- [7]: By-pass Tray Bottom Plate Lift Cam Drive Clutch
- [8]: Paper Transport Motor
- [9]: By-pass Feed Clutch
- [10]: Duplex Transport Clutch
- [11]: Registration Clutch
- [12]: Fusing Drive Motor

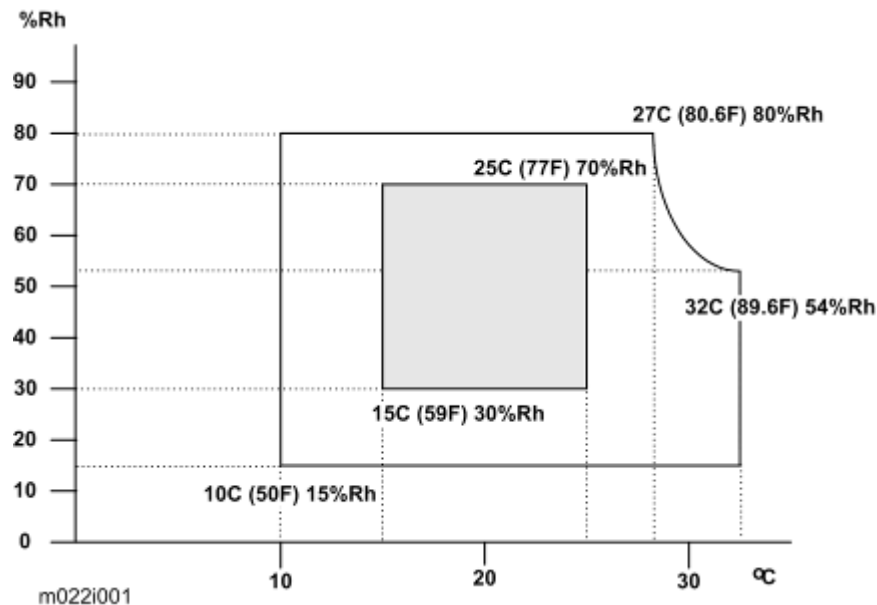
INSTALLATION

REVISION HISTORY		
Page	Date	Added/Updated/New
		None

2. INSTALLATION

2.1 INSTALLATION REQUIREMENTS

2.1.1 ENVIRONMENT



1. Temperature Range: 10°C to 32°C (50°F to 89.6°F)
2. Humidity Range: 15% to 80% RH
3. Ambient Illumination: Less than 1500 lux (do not expose to direct sunlight)
4. Ventilation: 3 times/hr/person or more
5. Do not let the machine get exposed to the following:
 - 1) Cool air from an air conditioner
 - 2) Heat from a heater
6. Do not install the machine in areas that are exposed to corrosive gas.
7. Install the machine at locations lower than 2,000 m (6,500 ft.) above sea level.
8. Install the machine on a strong, level base. (Inclination on any side must be no more than 5 mm.)
9. Do not install the machine in areas that get strong vibrations.

2.1.2 MACHINE LEVEL

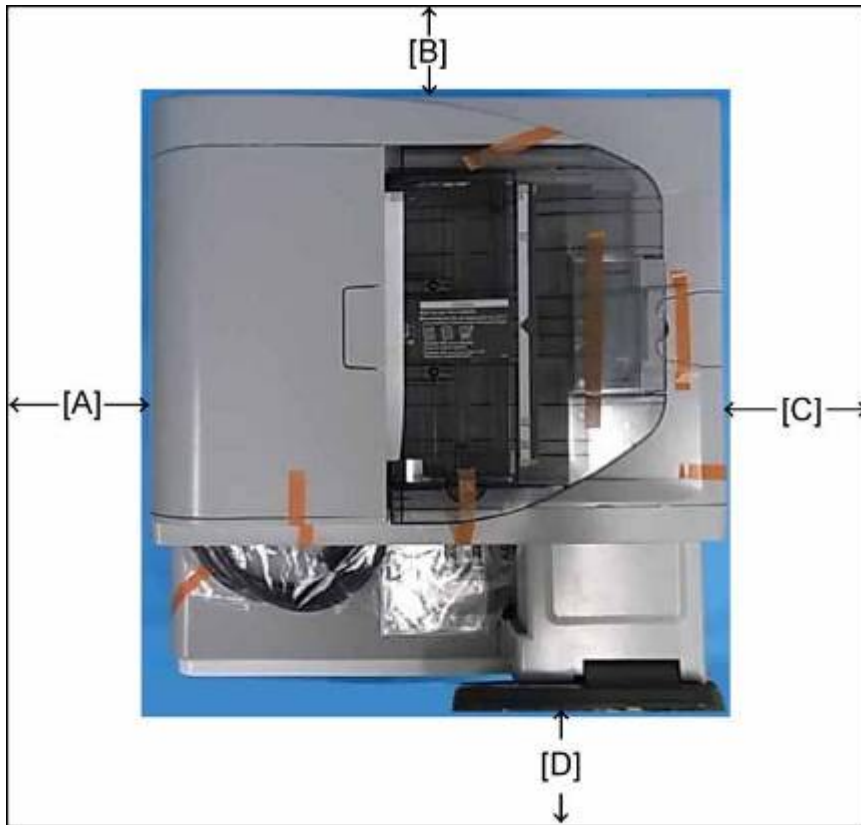
Front to back: Within 5 mm (0.2")

Right to left: Within 5 mm (0.2")

2.1.3 MACHINE SPACE REQUIREMENTS

⚠ CAUTION

- This machine, which uses high voltage power sources, can generate ozone gas. High ozone density is harmful to human health. Therefore, the machine must be installed in a well-ventilated room.



d1170016

A: Over 70 mm (2.8 ") (Base machine) / 120 mm (4.7 ") (with 1-bin tray unit)

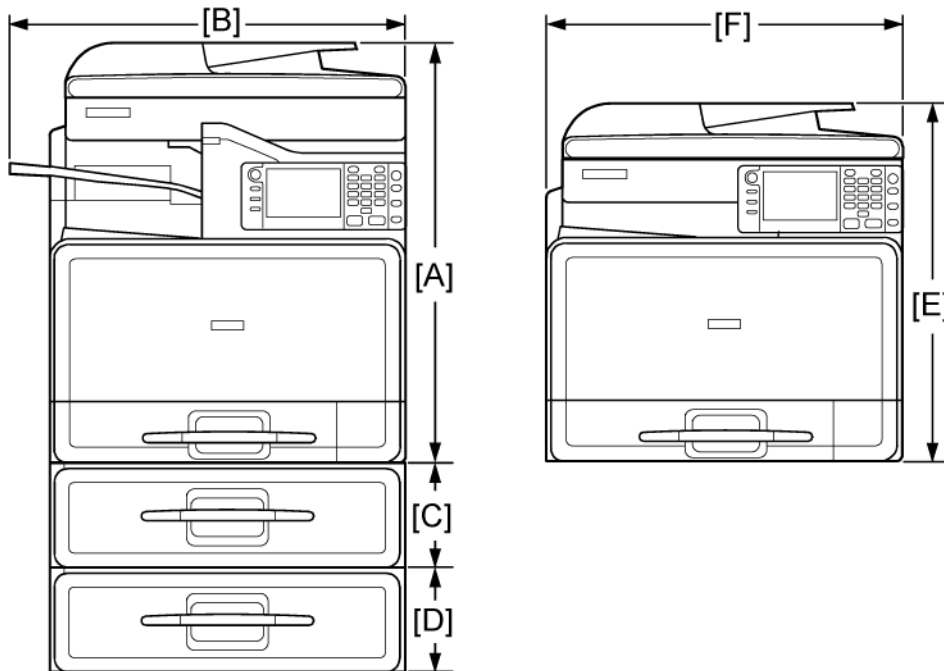
B: Over 100 mm (3.9 ")

C: Over 420 mm (16.5")

D: Over 420 mm (16.5")

Put the machine near the power source with the clearance shown above.

2.1.4 MACHINE DIMENSIONS



d1170017

[A]: 621 mm

[D]: 150 mm

[B]: 540 mm

[E]: 505 mm

[C]: 150 mm

[F]: 498 mm

2.1.5 POWER REQUIREMENTS

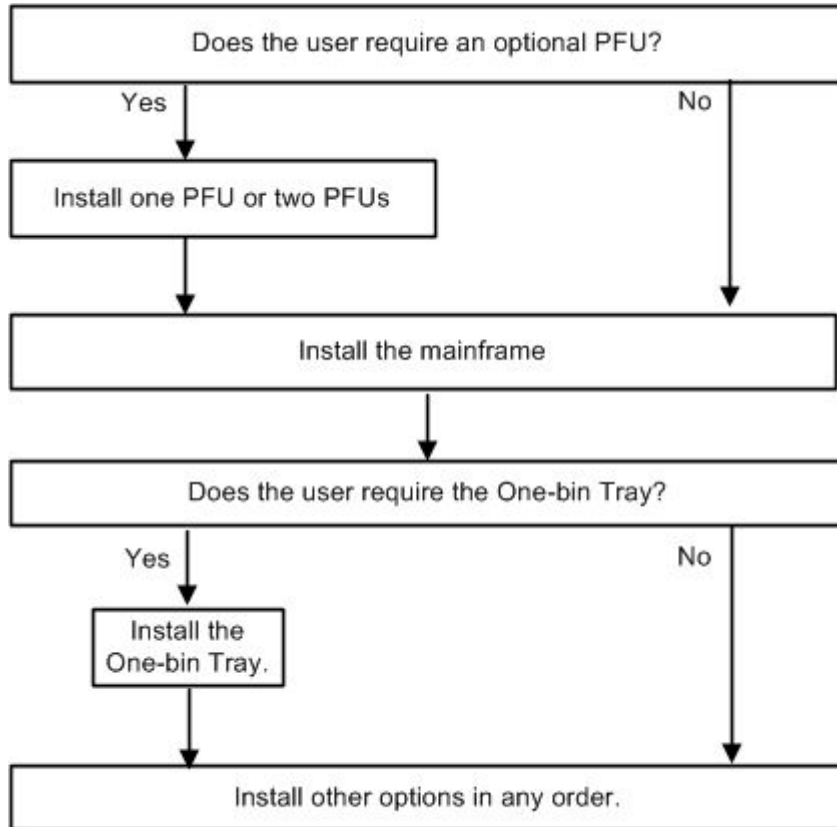
⚠ CAUTION

- Insert the plug firmly in the outlet.
 - Do not use an outlet extension plug or cord.
 - Ground the machine.
1. Input voltage level:
 - 110 V, 60 Hz More than 10 A
 - 120 to 127 V, 60 Hz: More than 10 A
 - 220 V to 240 V, 50 Hz/60 Hz: More than 5 A
 2. Permissible voltage fluctuation:
 - NA: 108 V (120 V-10%) - 138 V (127 V+8.66 %)
 - EU/AA: 198 V (220 V-10%) - 264 V (240 V+10 %)
 - Taiwan: 99 V (110 V -10%) – 121 V (110 V + 10%)
 3. Do not put things on the power cord.

2.2 MAINFRAME INSTALLATION

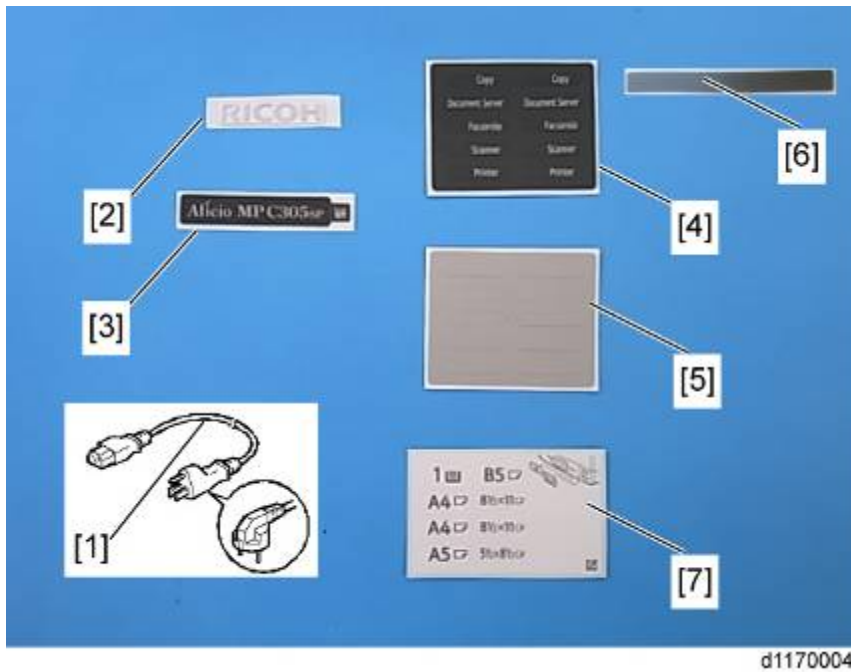
2.2.1 INSTALLATION FLOW CHART

This flow chart shows the best procedure for installation.



d1180001

2.2.2 ACCESSORY CHECK



d1170004

Check the quantity and condition of these accessories.

Component List

No.	Description	Q'ty
1	Power Supply Cord	1
2	Decal - Emblem	1
3	Decal - Machine Code	1
4	Decal - Function Key	1
5	Label - Function Key	1
6	Decal - Fax Hidden Cover (EU only)	1
7	Decal - Paper Tray	1
-	Decal - Note for Main Power Off	1
-	Decal - Main Switch	1

2.2.3 INSTALLATION PROCEDURE

Put the machine on the optional paper tray unit first if you install an optional paper feed unit at the same time. Then install the machine and other options.

Note

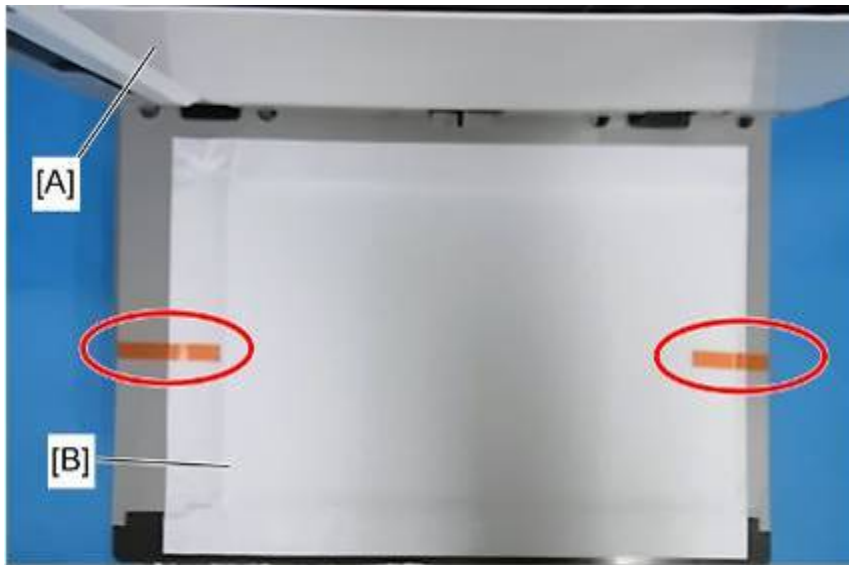
- Keep the shipping retainers after you install the machine. You may need them in the future if you transport the machine to another location.

Tapes, Retainers and Toner Bottles



d1170005

1. Remove the tapes and the retainers from the machine.



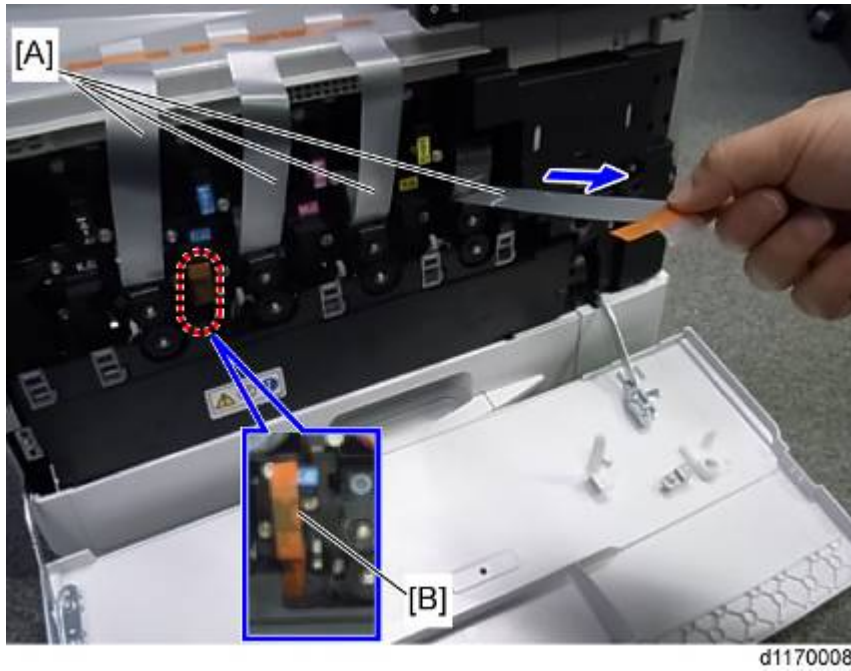
d1170006

2. Open the ARDF cover (D117) [A] or platen cover (D118).
3. Remove all the tapes and the retainer (protective paper) [B] on the exposure glass.



d1170007

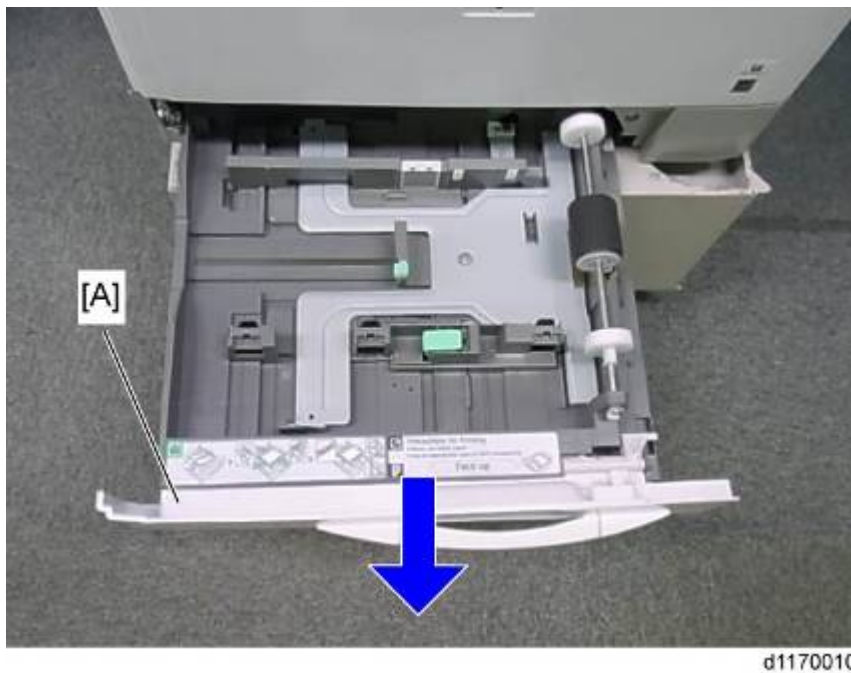
4. Open the front door [A].



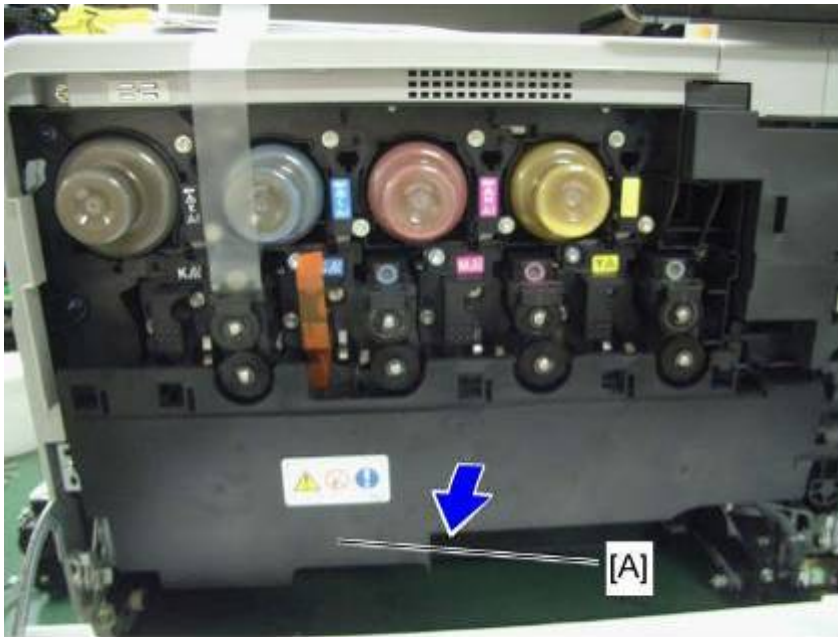
5. Pull out all protection seals [A] on the drums straight out towards the front.

↓ **Note**

- Do not attempt to pull out tape [B] at this time.

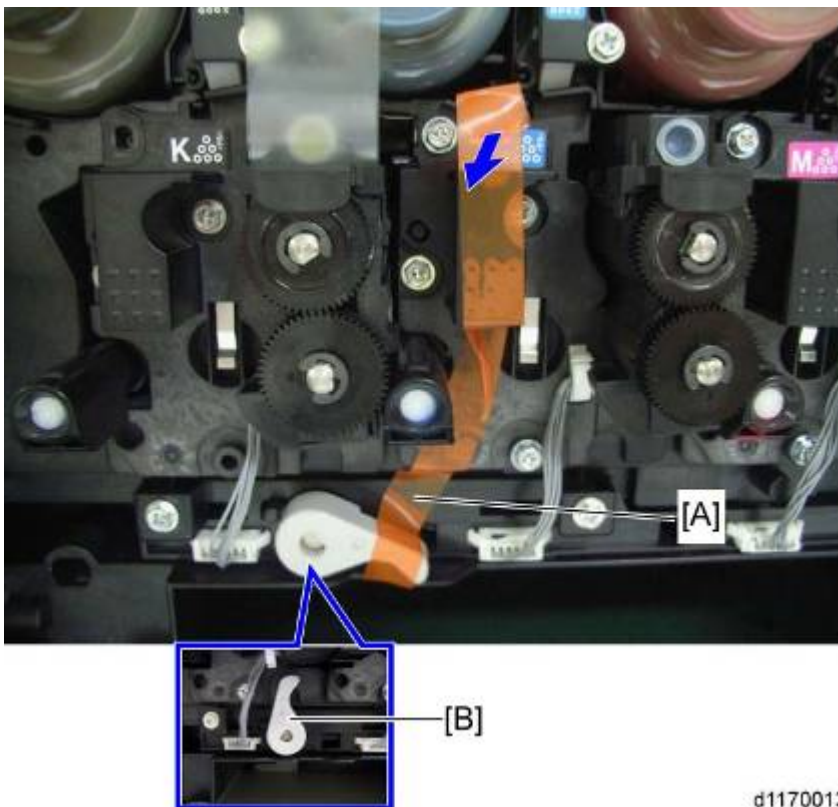


6. Close the front door.
7. Remove the paper tray [A].



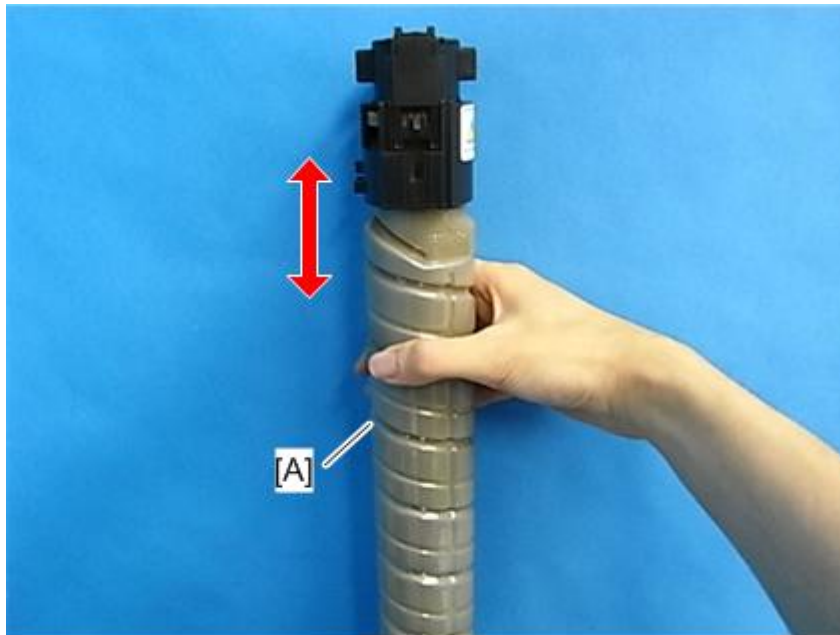
d1170012

8. Reopen the front door and remove the waste toner bottle [A].



d1170013

9. Remove the tape [A] on the lever.
10. Set the lever [B] to the upright position.
11. Set the waste toner bottle.



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12. Shake each toner bottle [A] eight or ten times.



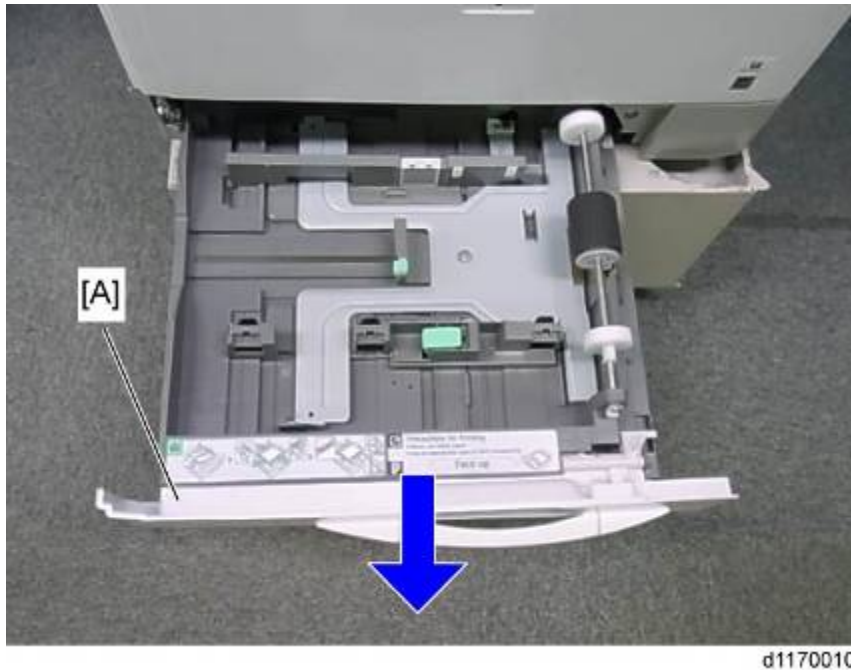
d1170009

13. Install each toner bottle [A] in the machine. The black end, with the label, must go in first, towards the rear of the machine.
14. Close the front door.
15. Connect the power cord to the machine.
16. Set the paper tray.
17. Turn on the main power.
18. The machine will start the initial settings automatically. This takes about 5 minutes.
19. Wait until the initial settings are terminated and "Ready" is shown on the operation panel.

Note

- Never turn off the main power before all initial settings are terminated.

2.2.4 PAPER TRAY

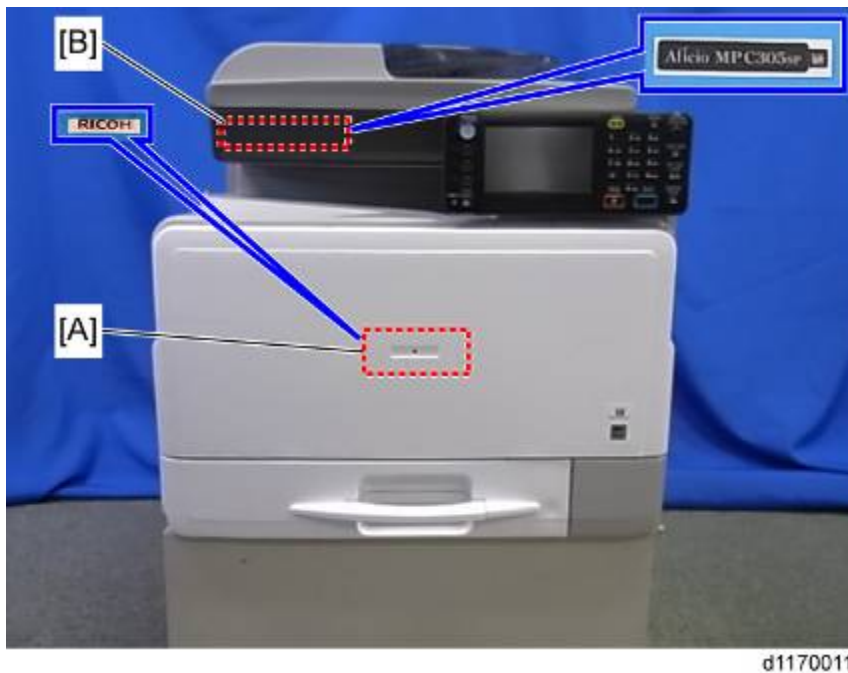


1. Pull out the paper tray [A]. Then adjust the side guides and end guide to match the paper size.

Note

- To move the side guides, first pull out the tray fully. Then push down the green lock at the rear inside the tray.

2.2.5 DECALS



1. Attach the decal [A] and the machine code decal [B] to the front door and the scanner front cover of the machine, if the decal is not attached.
2. Attach the correct paper tray number and size decals to the paper trays.

Note

- Paper tray number and size decals are also used for the optional paper tray. Keep these decals for use with these optional units.

2.2.6 SETTINGS RELEVANT TO THE SERVICE CONTRACT

Change the necessary settings for the following SP modes if the customer has made a service contract.

Note

- You must select one of the counter methods (developments/prints) in accordance with the contract (SP5045-001).

Counting method		
SP No.	Function	Default
SP5-045-001	Specifies if the counting method used in meter charge mode is based on developments or prints. NOTE: You can set this one time only. You cannot change the setting after you have set it for the first time.	"0": Developments
Service Tel. No. Setting		
SP No.	Function	Default
SP5-812-001 through 004	5812-002 programs the service station fax number. The number is printed on the counter list when the meter charge mode is selected. This lets the user fax the counter data to the service station.	

Installation

Settings for @Remote Service

Note

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

Check points before making @Remote settings

- The setting of SP5816-201 in the mainframe must be "0".
- Print the SMC with SP5990-002 and then check if a device ID2 (SP5811-003) 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 (SP5811-003) and the serial number (SP5811-001) must be the same (e.g. ID2: A01____23456789 = serial No. A0123456789)
- The following settings must be correctly programmed.
 - Proxy server IP address (SP5816-063)
 - Proxy server Port number (SP5816-064)
 - Proxy User ID (SP5816-065)
 - Proxy Password (SP5816-066)
- Get a Request Number

Execute the @Remote Settings

- Enter the SP mode.
- Input the Request number which you have obtained from @Remote Center GUI, and then enter [OK] with **SP5816-202**.
- Confirm the Request number, and then click [EXECUTE] with **SP5816-203**.
- Check the confirmation result with **SP5816-204**.

Value	Meaning	Solution/ Workaround
0	Succeeded	-
1	Request number error	Check the request number again.
3	Communication error (proxy enabled)	Check the network condition.
4	Communication error (proxy disabled)	Check the network condition.
5	Proxy error (Illegal user name or password)	Check Proxy user name and password.

Value	Meaning	Solution/ Workaround
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.

5. Make sure that the screen displays the Location Information with **SP5816-205** only when it has been input at the Center GUI.
6. Click [EXECUTE] to execute the registration with **SP5816-206**.
7. Check the registration result with **SP5816-207**.

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 (Illegal user name or password)	Check Proxy user name and password.
8	Other error	See "SP5816-208 Error Codes" below this.
9	Request number confirmation executing	Processing... Please wait.

8. Exit the SP mode.

SP5816-208 Error Codes

Cause	Code	Meaning	Solution/ Workaround
Operation Error, Incorrect Setting	-12002	Inquiry, registration attempted without acquiring Request No.	Obtain a Request Number before attempting the Inquiry or Registration.
	-12003	Attempted registration without execution of 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 User Tools 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	-2385	Other error	
	-2387	Not supported at the Service Center	

Cause	Code	Meaning	Solution/ Workaround
	-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 the Request No.

2.2.7 LANGUAGE SELECTION

This machine can display one of five languages on the operation panel. The default of selectable languages is shown below. The languages numbered 002 to 006 are registered by default.

However, the default can be changed with SP mode (SP5-009-002 to 006) in order to display languages other than the defaults.

Default Language Settings of SP5-009-xxx (002 to 006)

No.	Languages	Destinations				
		NA	EU	Asia	China	Taiwan
1	Japanese	006		005	004	004
3	English-US	002	002	002	003	003
4	French	004	003			
5	German		004			
6	Italian		005			
7	Spanish	003	006	004		
8	Dutch					
9	Norwegian					
10	Danish					
11	Swedish					
12	Polish					
13	Portuguese					
14	Hungarian					
15	Czech					
16	Finnish					
17	Simplified Chinese				002	
18	Traditional Chinese			003		002
20	Russian					

23	Greek					
24	Korean					
25	Catalan					
26	Turkish					
27	Brazilian					

Note

- The last three digits of the SP number (from 002 to 006) show the order in the menu shown on the operation panel display. Therefore, SP5-009-002 is first in the menu.

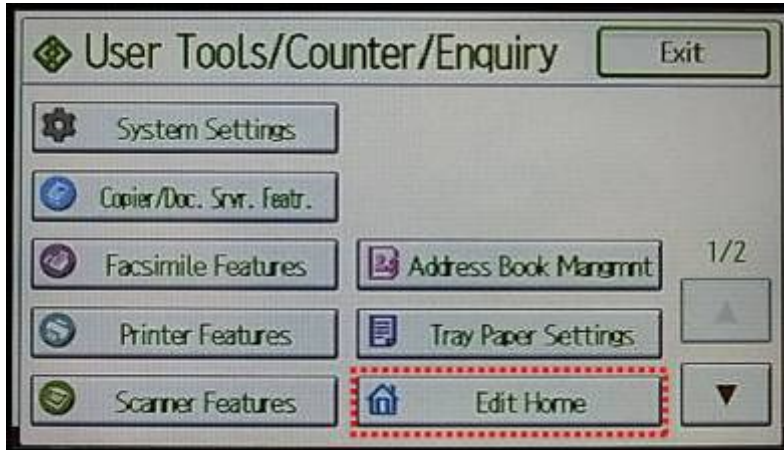
Registration of languages other than the defaults

1. Enter the SP mode.
2. Execute an SP from SP5-009-002 to 006.
3. Select a language from the SP mode menu. For example, if “Dutch” should be registered as the first language, execute SP5-009-002, and select “8” (Dutch).

2.2.8 FAX ICON ADDITION

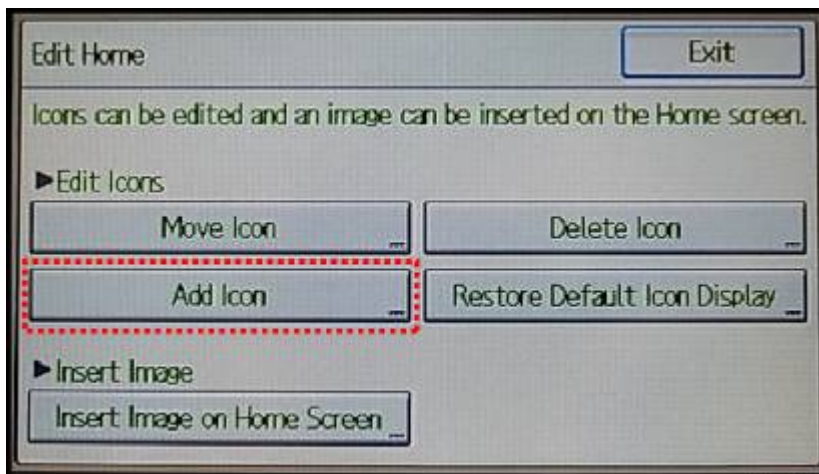
This procedure allows the fax icon to appear on the home screen of the operation panel

1. Press [User Tools].



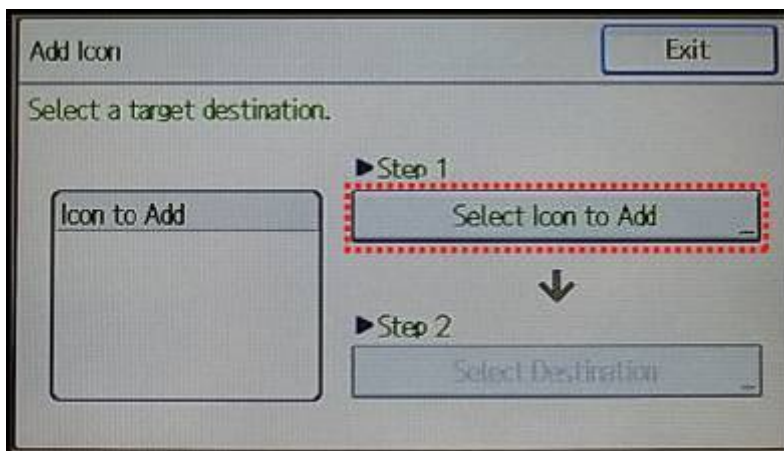
d1180061

2. Press [Edit Home].



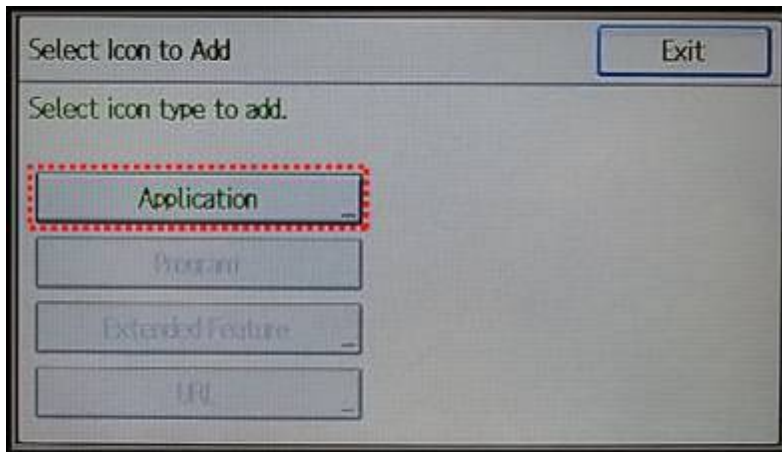
d1180062

3. Press [Add Icon].



d1180063

4. Press [Select Icon to Add].



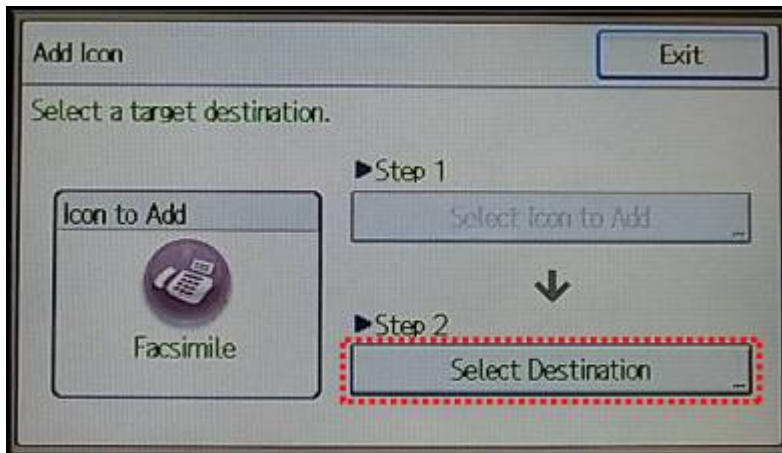
d1180064

5. Press [Application].



d1180065

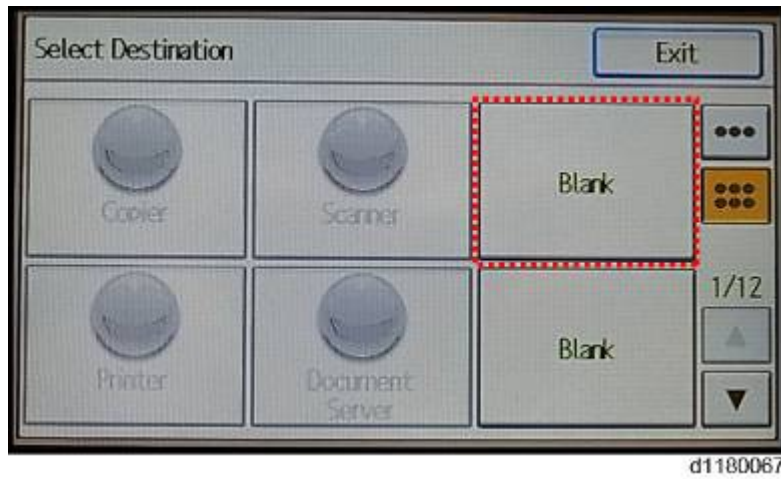
6. Press [Facsimile].



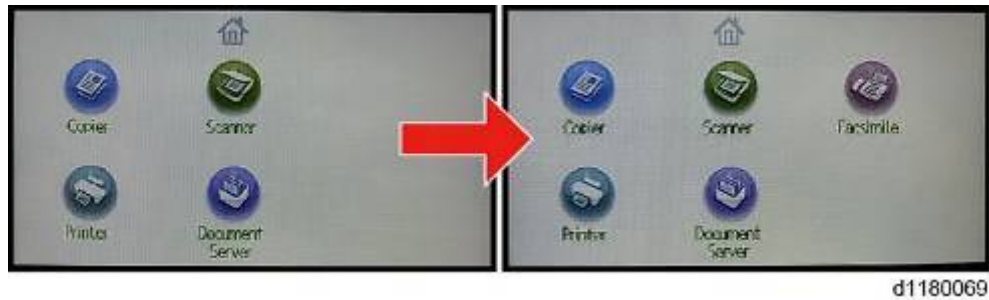
d1180066

7. Press [Select Destination].

Mainframe Installation



8. Press a [Blank] to set a location for the fax icon.
9. Press [Exit] on the “Add Icon” screen to end the fax icon addition.
10. Press [Exit] on the “Edit Home” screen.
11. Press [Exit] on the “User Tools/Counter/Enquiry” screen.



12. The fax icon is added to the home screen.

2.2.9 EXTERNAL USB KEYBOARD (EXTERNAL OPTION)

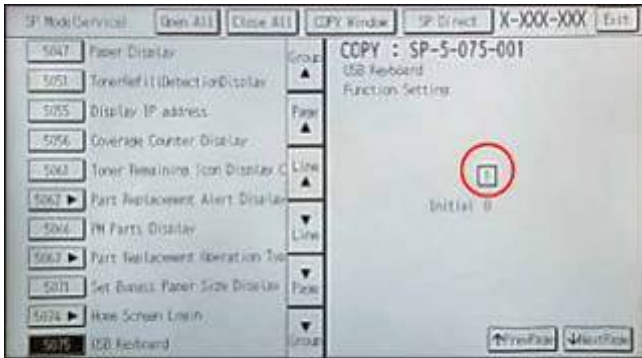
Customers can use an external USB keyboard when the software keyboard is shown on the operation panel, if an external USB keyboard is connected to the USB port at the side of the operation panel or the controller box USB port.

If customers would like to use an external USB keyboard, execute the following steps to enable this feature.

1. Connect the external keyboard to the USB port at the right side of the operation panel or the controller box USB port.

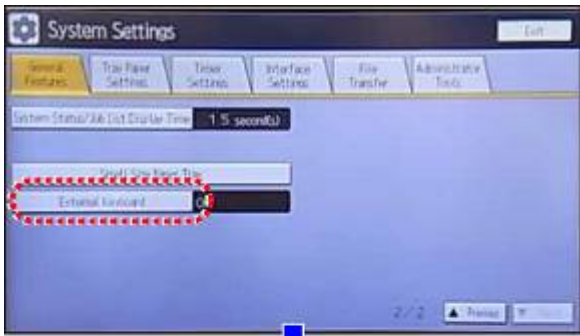
Note

- The external keyboard that is available in this machine is principally for the Windows OS. However, no compatibility check is done, and there is no warranty.



d1440139

2. Enter the SP mode and set SP5075-001 to ON (1) (USB keyboard).
3. Exit the SP mode and turn the main power off and on.



d1440140

4. Select a language type for the external USB keyboard with [User Tools] → [System

Settings] → [General Features] → [External Keyboard].

5. Press [OK] to set it.
6. Turn the main power off and on.

2.2.10 TRANSPORTING THE MACHINE

The following should be done before transporting the machine.

1. Move the ITB lock lever down to the shipping position. This moves the ITB away from the K PCDU.
2. Do SP 4806-001 to move the scanner carriage from the home position. This prevents dust from falling into the machine during transportation.
3. Remove the toner bottles. This prevents toner flow into the toner supply tube, which is caused by vibration during transport. This can also cause the tube to be clogged with toner.
4. Make sure there is no paper left in the paper trays. Then fix down the bottom plates with a sheet of paper and tape.
5. Attach securing tape to stop the waste toner bottle from coming out.
6. Do one of the following:
 - Attach shipping tape to the covers and doors.
 - Shrink-wrap the machine tightly.

2.2.11 INSTRUCTIONS FOR THE CUSTOMERS

The following items should be advised when the machine is installed. These items are explained in more detail in the operating instructions.

- How to add paper to the paper feed unit and the by-pass feed unit.
- How to install a toner bottle
- How to handle paper jams

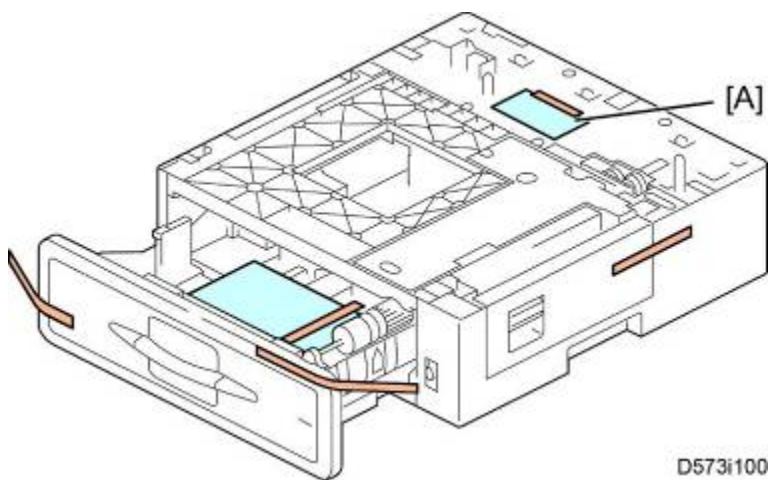
2.3 PAPER FEED UNIT (D573)

2.3.1 COMPONENT CHECK

Confirm that you have the accessory indicated below.

No.	Description	Q'ty
1	Installation Procedure (for service person)	1

Installation

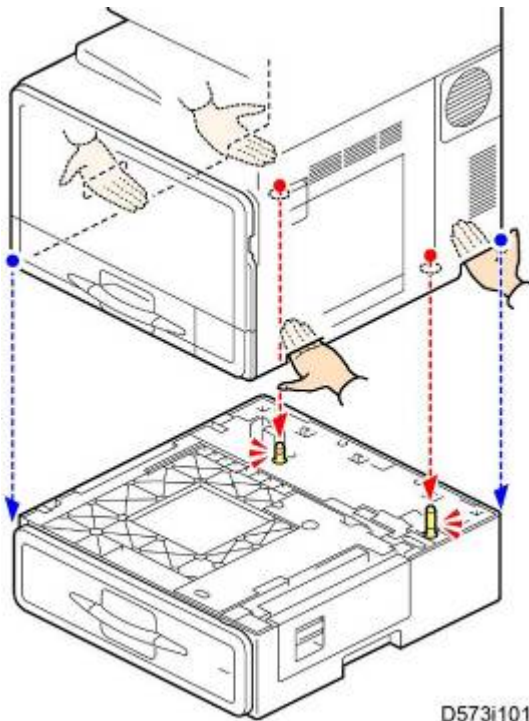


2.3.2 INSTALLATION PROCEDURE

⚠ CAUTION

- Turn off the main switch of the copier and unplug the power cord before you start the installation procedure.
- You need two or more persons to lift the copier. The copier is highly unstable when lifted by one person, and may cause human injury or property damage.
- Do not lift the copier with the paper feed unit installed. The handle and grips may be damaged.

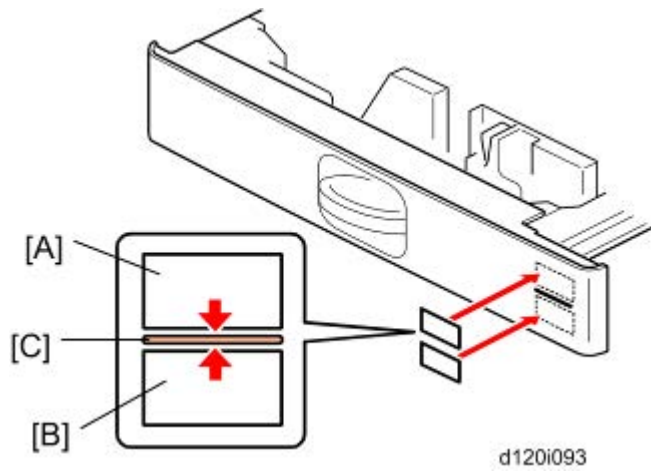
1. Remove the tapes on the paper feed unit.
2. Remove the paper [A].



3. Set the copier on the paper feed unit.

↓ Note

- When installing a second paper feed unit, place it on the first paper feed unit. Then place the copier on the pair of paper feed units.
4. Remove the paper tray(s) from the paper feed unit(s).



5. Attach the appropriate paper tray number decal [A] and paper size decal [B] above and below the line [C] on each tray of the paper feed unit.

Note

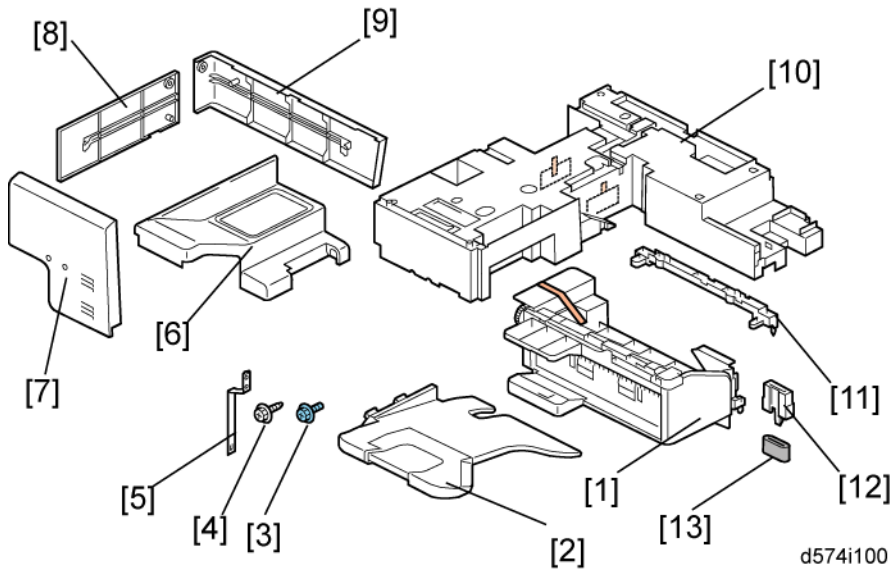
- The paper tray number and size sheet is in the accessory box of the main machine.
6. Load paper into the paper tray(s) and set the side fences and end fence(s).
 7. Adjust the registration for each tray (▶ p.4-3).
 - For tray 2, use SP1002-003
 - For tray 3, use SP1002-004
 8. Check the paper feed unit operation and copy quality.

2.4 1-BIN TRAY UNIT (D574)

2.4.1 COMPONENTS CHECK

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

No.	Description	Q'ty
1	1-Bin Tray Unit	1
2	Tray	1
3	Binding Screw (M3 x 6)	2
4	Screw (M3 x 10)	18
5	Grounding plate	1
6	Front Right Cover*1	1
7	Left Cover*1	1
8	Rear Upper Cover*2	1
9	Rear Upper Right Cover*2	1
10	Mounting Frame	1
11	Mounting Frame Junction	1
12	Ferrite Core Cover	1
13	Ferrite Core	1
-	Installation Procedure (for service persons) (This procedure)	



*1 To replace the existing cover

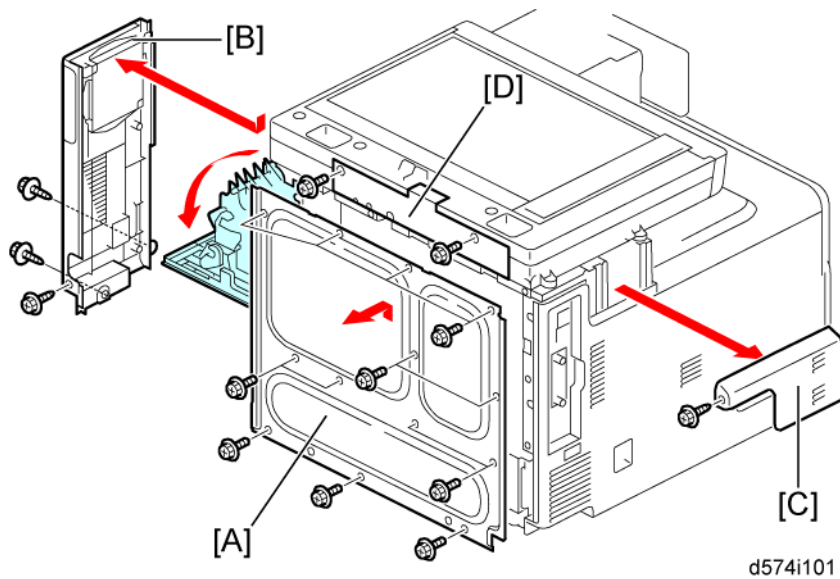
*2 Additional cover

2.4.2 INSTALLATION PROCEDURE

⚠ CAUTION

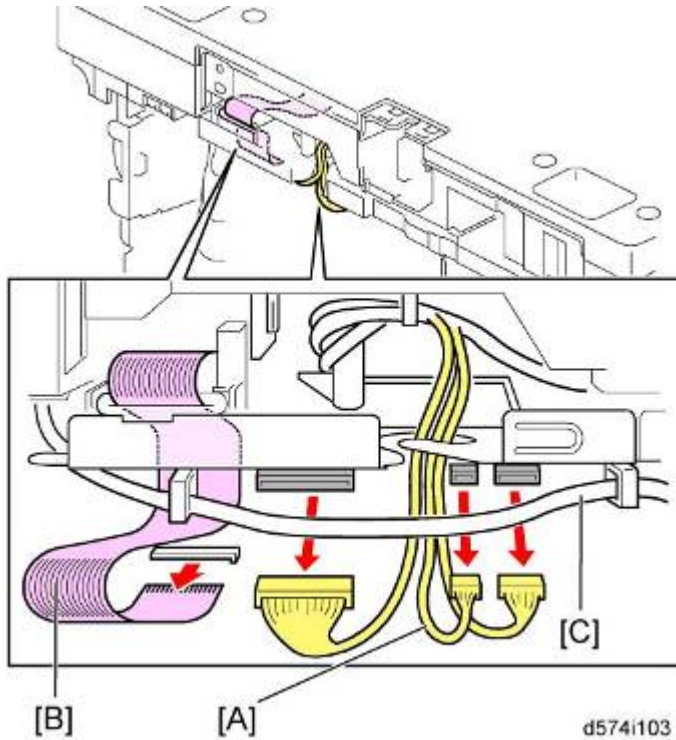
- Unplug the copier power cord before starting the following procedure.


1. All tapes.



- Rear cover [A] (⚙ x 13)
- Rear right cover [B] (⚙ x 3)
- Left cover [C] (⚙ x 1)
- Scanner rear cover [D] (⚙ x 2).

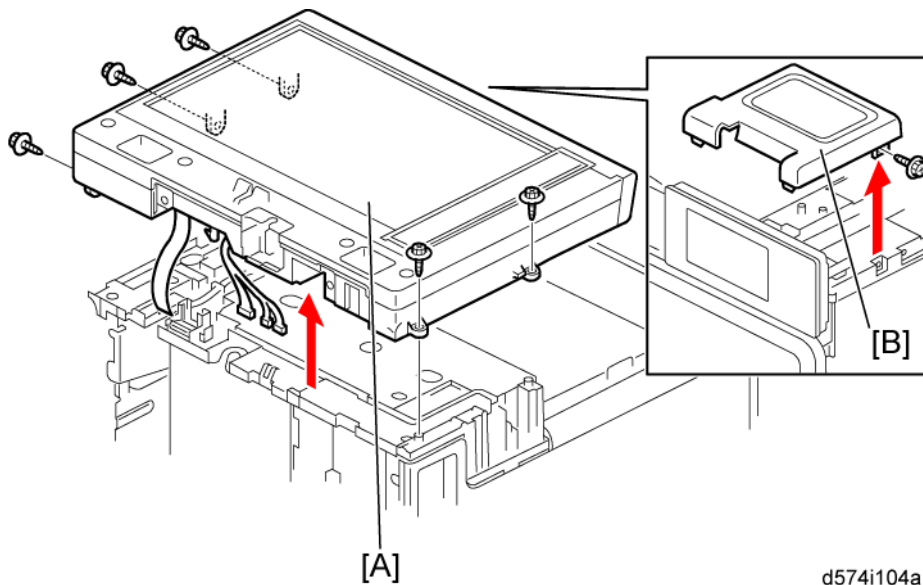
1-Bin Tray Unit (D574)





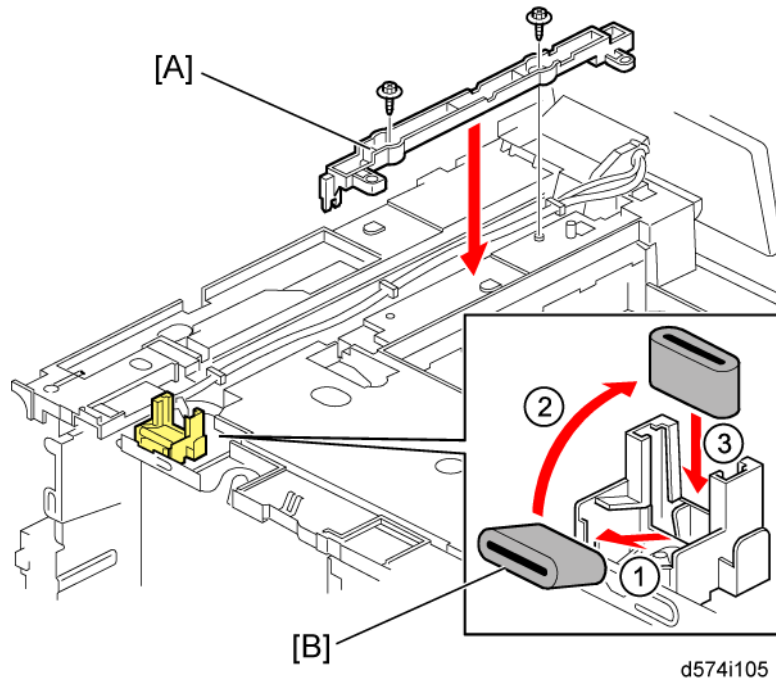
6. Three harnesses [A] and a flat cable [B] ( x 4).


Note

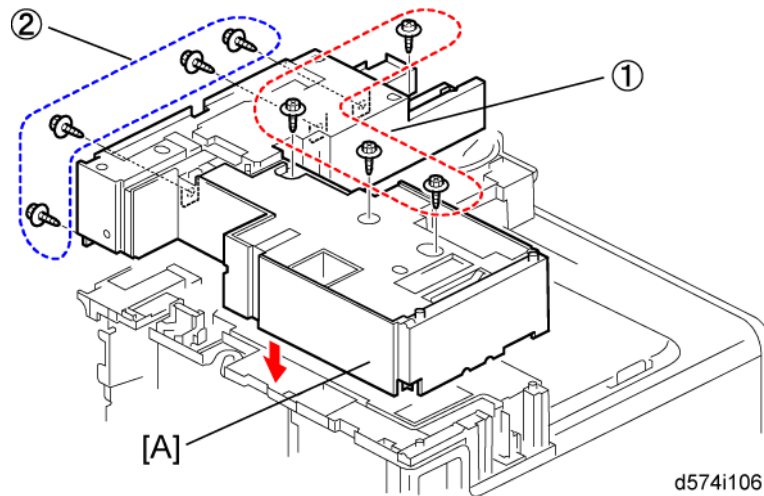
- The harnesses [A] and the flat cable [B] should be routed under the harness [C] when these are reconnected.
- To release the lock of the flat cable connector, lift up the small white tab of the connector, and to lock the flat cable, push down the small white tab.



7. Scanner unit [A] ( x 5)
8. Front right cover [B] ( x 1)



9. Attach the mounting frame junction [A] (M3x10:  x 2)
10. Reinstall the ferrite core [B] at position ③.

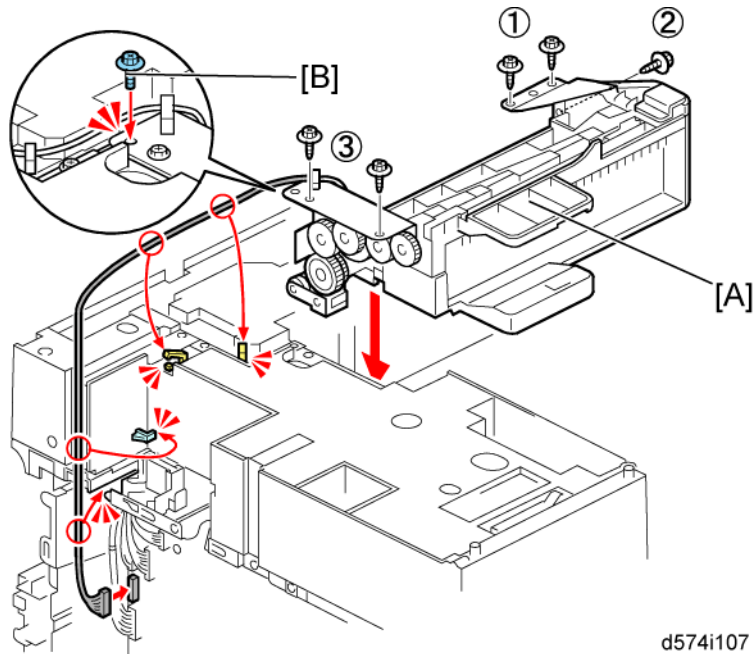






11. Attach the mounting frame [A] (M3x10:  x 8)

 **Note**

- Install the screws in this order: ① → ②.

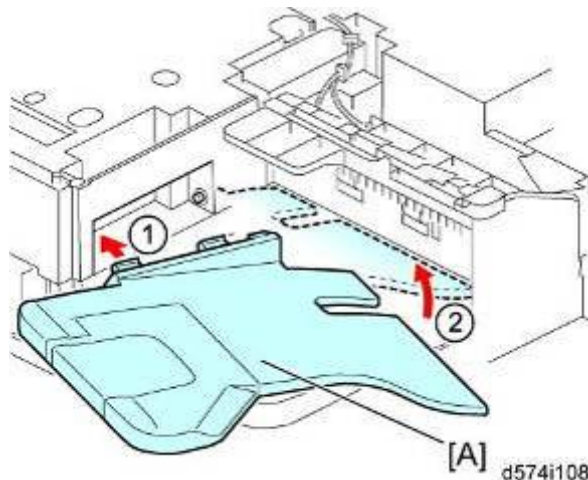
1-Bin Tray Unit (D574)



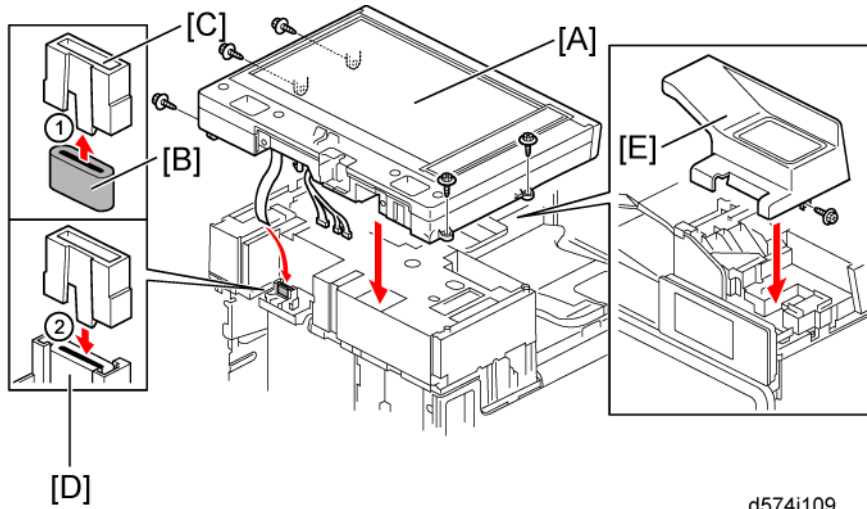
12. Attach the 1-bin tray unit [A] (M3x10:  x 5)
13. Connect the connector of the 1-bin tray unit to CN527 and then fix the harness ( x 1,  x 3)
14. Secure the blue screw [B] ( (blue) x 1)

↓ Note



- Install the screws in this order: ① → ② → ③
- Install the blue screw at the very last.
- Install the screws at the front side while the operation panel is flat.



15. Install the 1-bin tray [A].

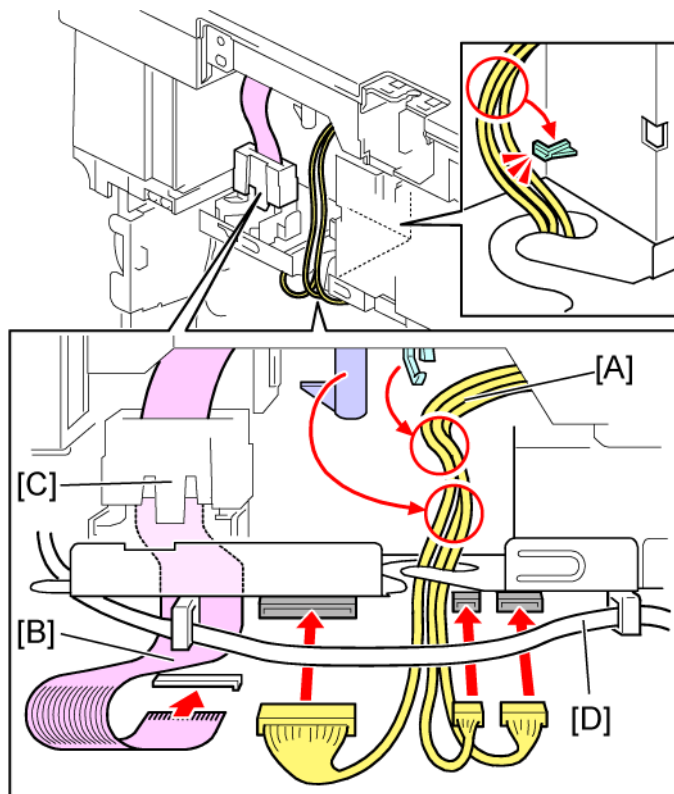


d574i109



16. Attach the front right cover [E] (from the accessories, not the original cover) (M3 x 10:  x 1).
17. Install the scanner unit [A] ( x 5)
18. Insert the ferrite core [B] into the cover [C] (①).
19. Attach the ferrite core cover with the ferrite core to the existing ferrite core [D] (②).

Note

- The ferrite core [B] and the ferrite core cover [C] are included in this kit.



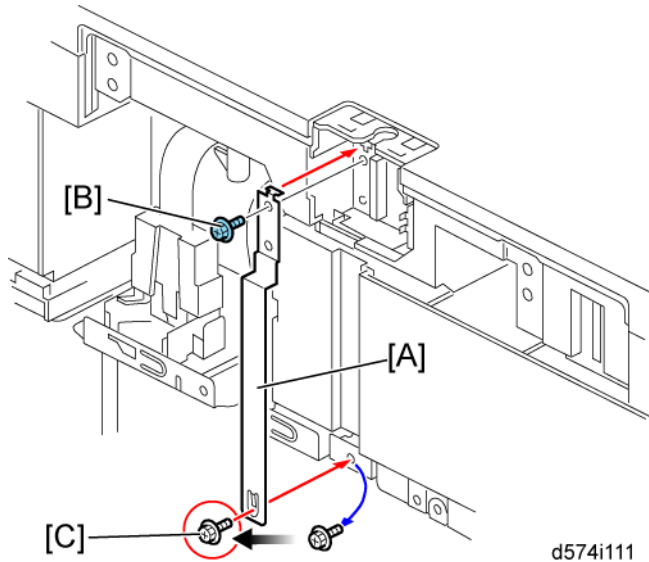
d574i110

20. Connect the connectors of the harnesses [A]. Then route the harnesses [A] and the flat cable [B]. Finally, connect the connector of the flat cable [B] ( x 1,  x 4).

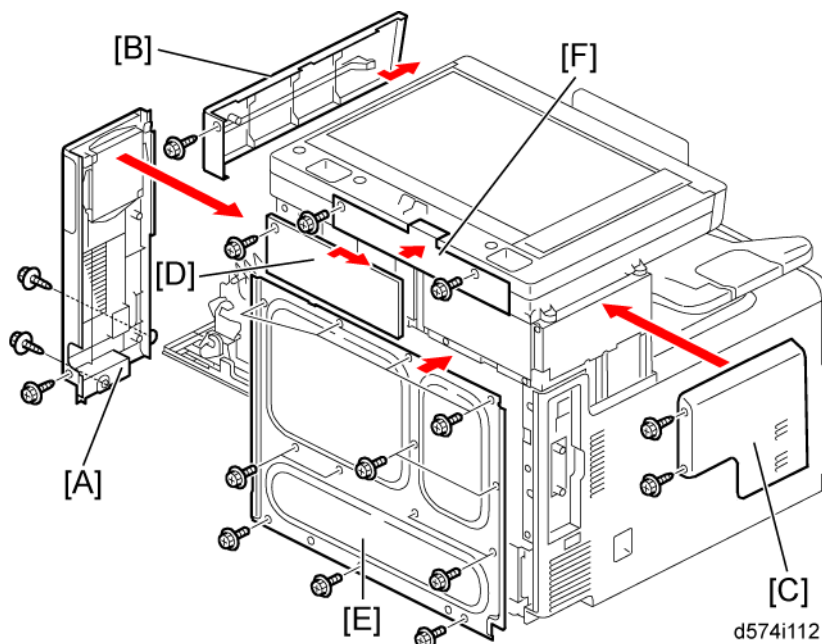
1-Bin Tray Unit (D574)






Note


- The flat cable [B] should go through the ferrite cores [C].
- The harnesses [A] and the flat cable [B] should be routed under the harness [D] when these are reconnected.
- Never connect the flat cable [B] obliquely. Otherwise, the scanner unit may be damaged.



21. Attach the grounding plate [A] (Upper:  (blue) [B] x 1, Lower:  x 1 (existing) [C])



22. Attach the rear right cover [A] ( x 3).
23. Attach the rear upper right cover [B] (M3x10:  x1).
24. Attach the left cover [C] (from the accessories, not the original cover) (M3x10:  x 2).
25. Attach the rear upper cover [D] (M3x10:  x 1).
26. Attach the rear cover [E] ( x 13).

27. Attach the scanner rear cover [F] ( x 2).

 **Important**

- Pay extra attention when reattaching the rear cover [E] to avoid catching the harnesses.

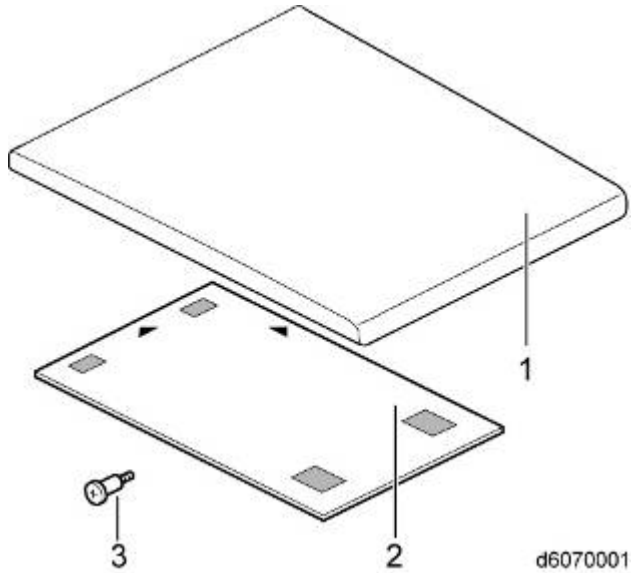
28. Reassemble the machine.

29. Turn on the main power switch of the machine, and check the 1-bin tray unit operation.

2.5 PLATEN COVER (D607)

2.5.1 COMPONENT CHECK

Installation of this unit requires the following components. Other components included in this kit are not used for installation on this machine.



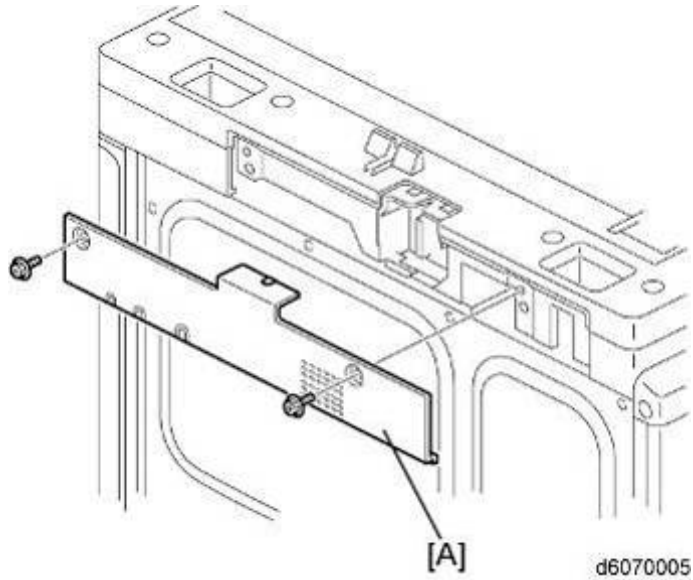
No.	Description	Q'ty
1.	Platen Cover	1
2.	Platen Sheet	1
3.	Stud Screws	1


2.5.2 INSTALLATION PROCEDURE

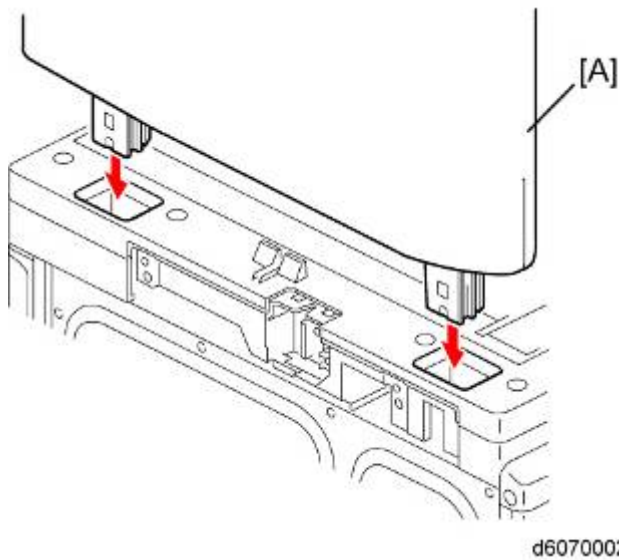
⚠ CAUTION

- Unplug the copier power cord before starting the following procedure.

1. Remove the strips of tape on the platen cover.

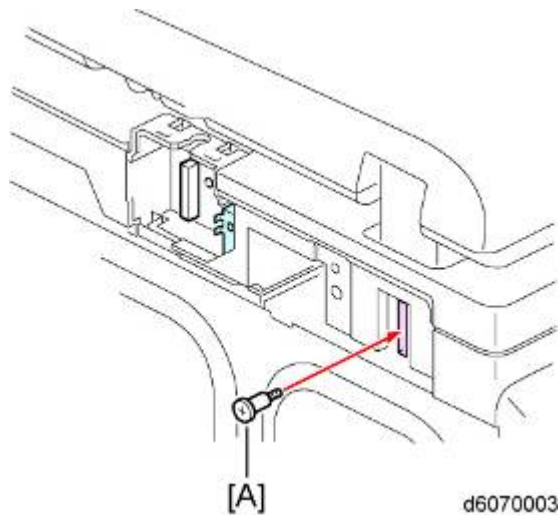


2. Remove the scanner rear cover [A] ( x 2).

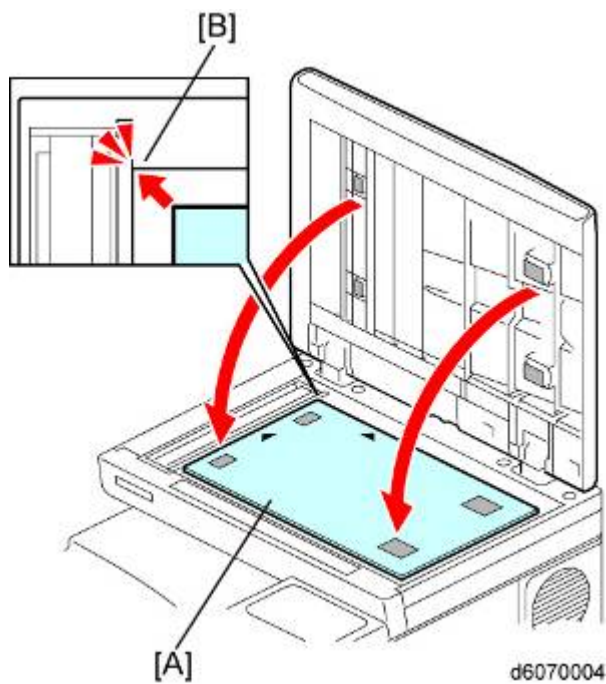


3. Mount the platen cover [A] on the copier as shown.

Platen Cover (D607)



4. Secure the stud screw [A].
5. Reinstall the scanner rear cover removed in step 2.



6. Open the platen cover
7. Place the platen sheet [A] on the exposure glass.
8. Line up the rear left corner of the platen sheet flush against corner [B] on the exposure glass.
9. Close the platen cover.
10. Reopen the platen cover.
11. Press the surface of the platen sheet gently to attach it securely on the platen cover.

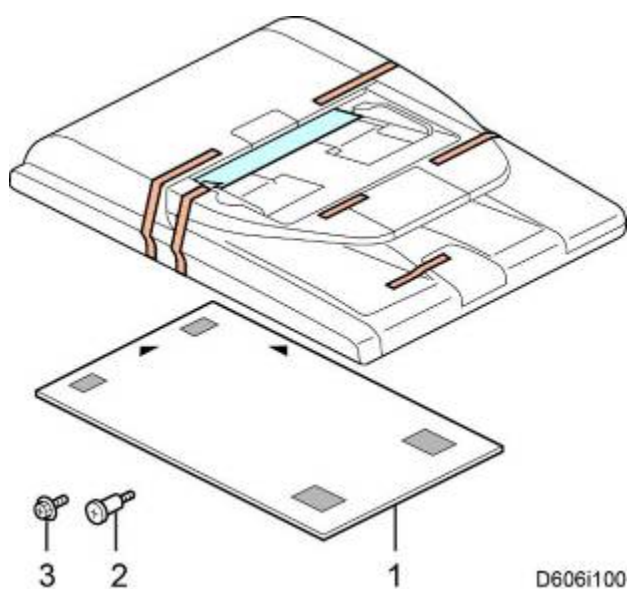
2.6 ARDF (D606)

2.6.1 ACCESSORY CHECK

Confirm that you have the accessories indicated below.

No.	Description	Q'ty
1	Platen sheet	1
2	Stud screw	1
3	Screw (Unused)	1

Installation

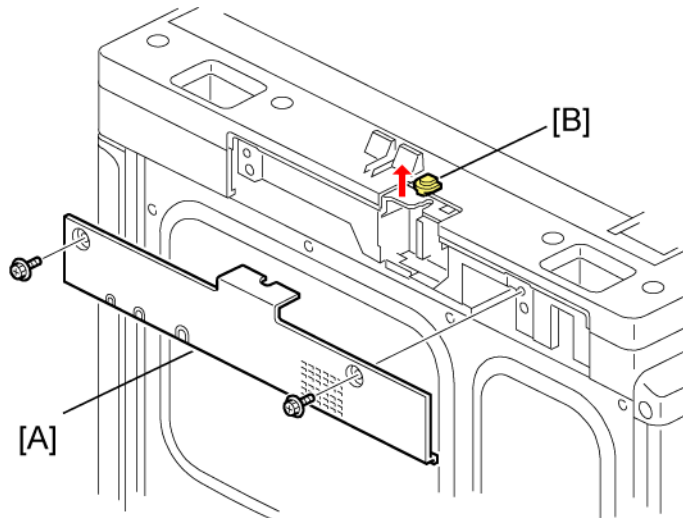


2.6.2 INSTALLATION PROCEDURE


⚠ CAUTION

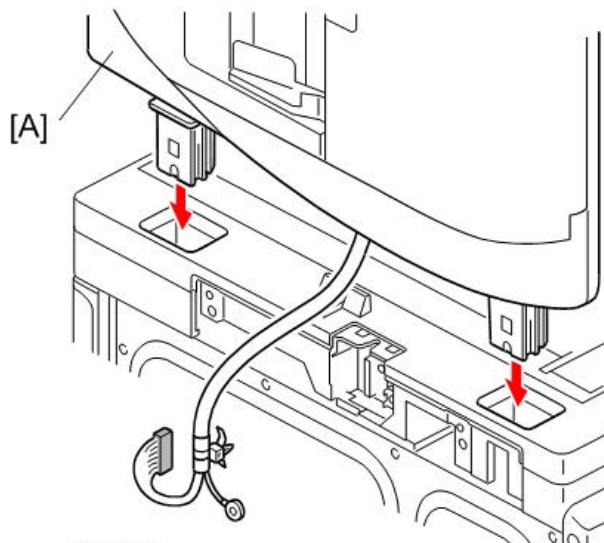
- Unplug the copier power cord before starting the following procedure.

1. Remove the strips of tape on the ARDF.



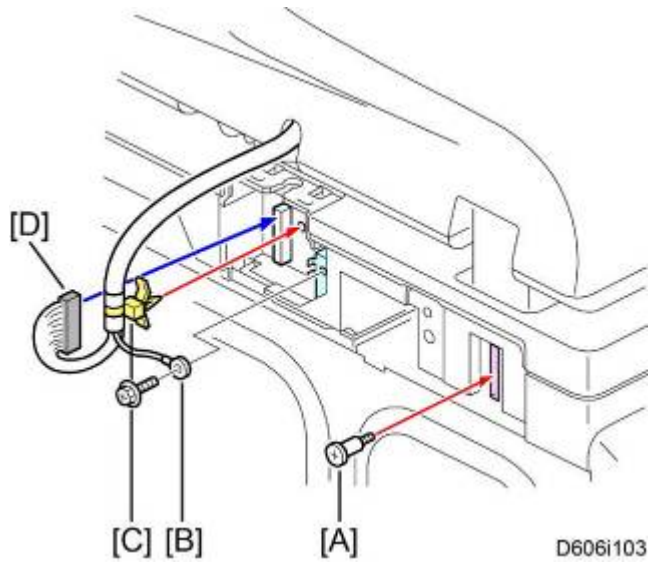
d606i101

2. Remove the scanner rear cover [A] ( x 2).
3. Remove the harness cap [B].

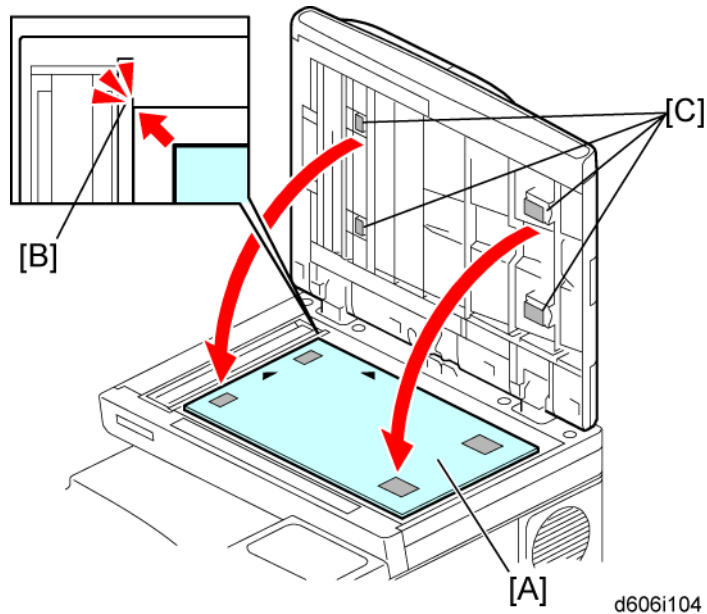


d606i102

4. Mount the ARDF [A] on the copier as shown.



5. Secure the stud screw [A].
6. Secure the ground cable [B] ($\times 1$).
7. Attach the clamp [C].
8. Connect the I/F cable [D] to the connector.
9. Push the excess I/F cable into the interior of the ARDF to prevent the I/F cable from sagging.
10. Reinstall the scanner rear cover removed in step 2.



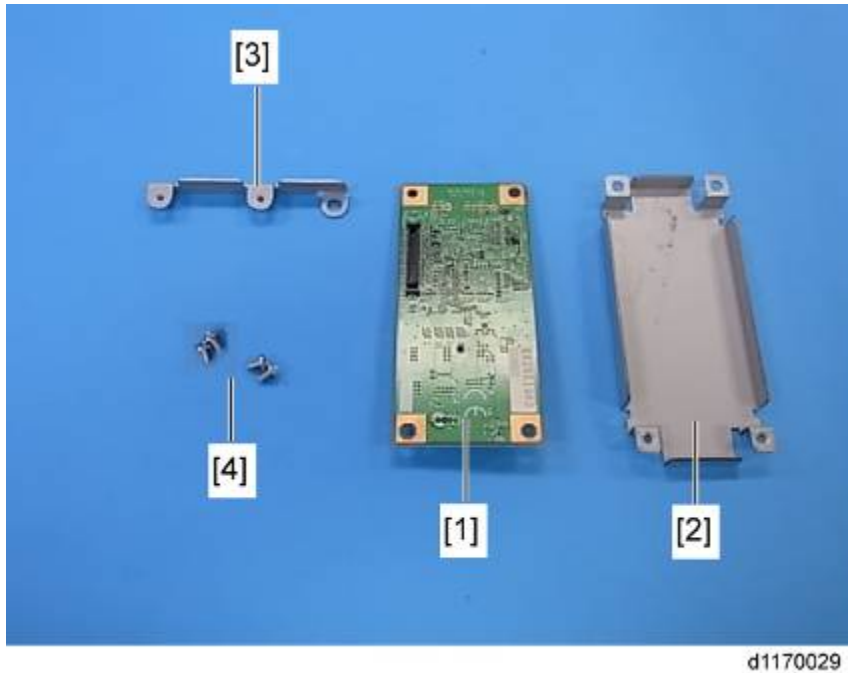
ARDF (D606)

11. Open the ARDF.
12. Place the platen sheet [A] on the exposure glass.
13. Line up the rear left corner of the platen sheet flush against corner [B] on the exposure glass.
14. Remove the protection seals [C].
15. Close the ARDF.
16. Reopen the ARDF.
17. Press the surface of the platen sheet gently to attach it securely on the ARDF.
18. Adjust the ARDF registration (front / back) (▶ p.4-5).

2.7 COPY DATA SECURITY UNIT (D640)

2.7.1 COMPONENT CHECK LIST

Installation of this unit requires the following components. Other components included in this kit are not used for installation on this machine.



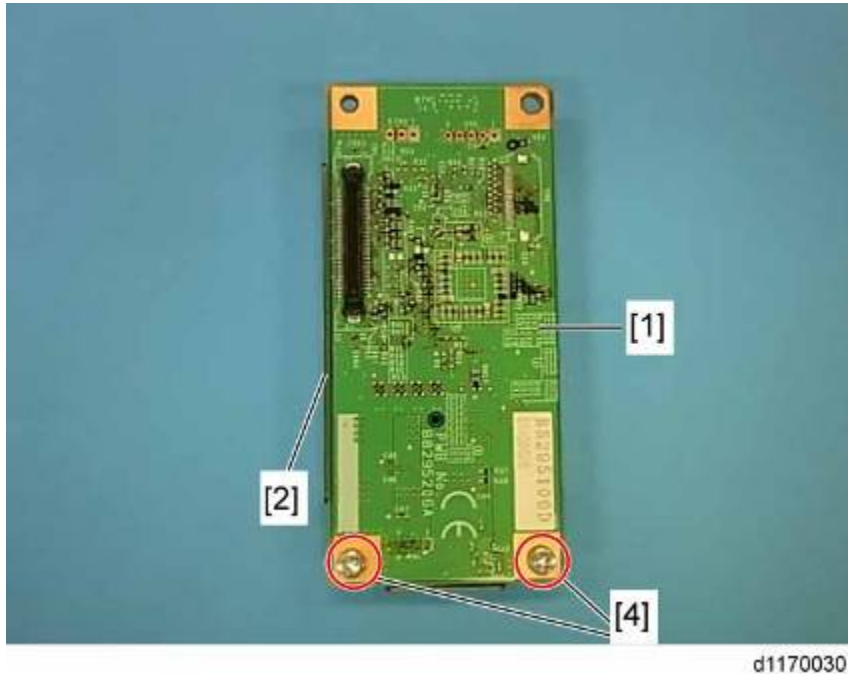
d1170029

Call-outs	Descriptions	Q'ty
1	Copy data security unit board	1
2	Bracket for the board	1
3	Bracket for the machine attachment	1
4	Screws	4

2.7.2 INSTALLATION

⚠ CAUTION

- Unplug the main machine power cord before you do the following procedure.



1. Attach the copy data security unit board [1] to the bracket [2] (⚙ [4] x 2)
2. Rear cover (⚙ p.4-22)

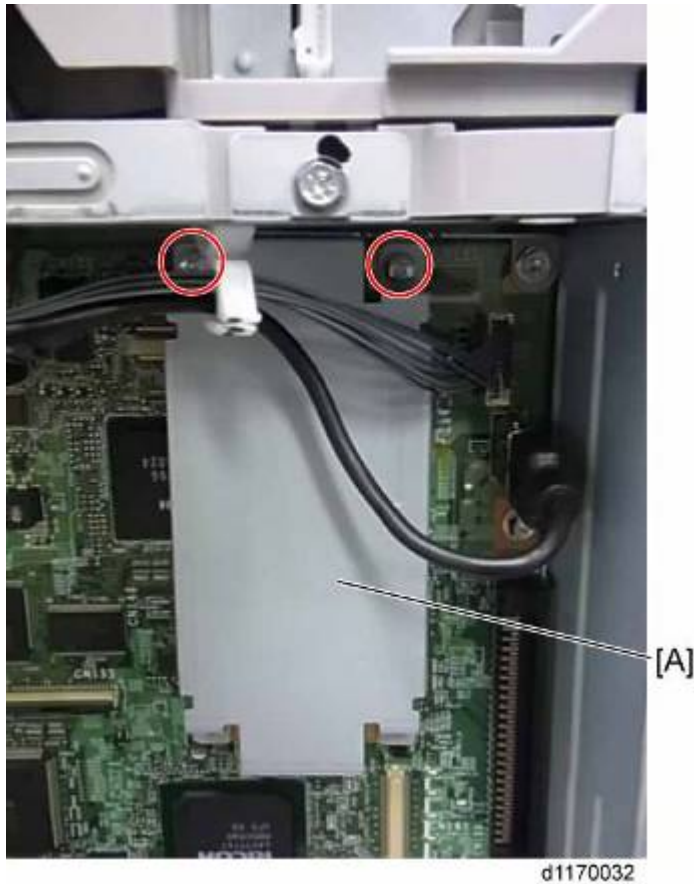



B: CN111

3. Attach the bracket [3] to the machine using the existing screw [A].

Note

- The Bracket [3] and the controller board are screwed together.



4. Attach the copy data security unit board with bracket [A] to CN111 ( [4] x 2).
5. Reassemble the machine.

User Tool Setting

1. Plug in and turn on the main power switch.
2. Go into the User Tools mode, and select System Settings > Administrator Tools > Copy Data Security Option > "On".
3. Exit User Tools.
4. Check the operation.

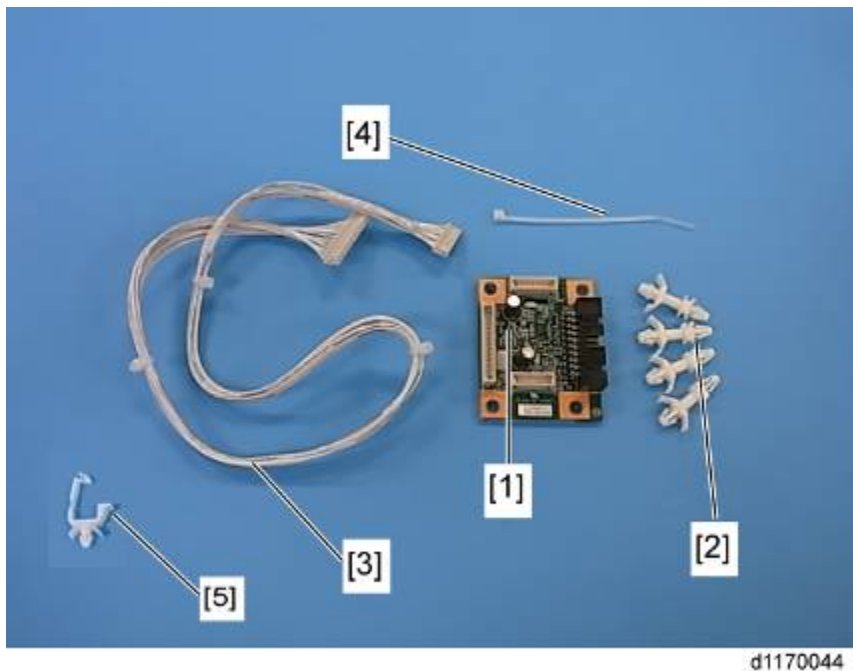
 **Note**

- The machine will issue an SC165 error if the machine is powered on with the ICIB-3 removed and the "Data Security for Copying" feature set to "ON".
 - The machine will issue an uncertain SC165 error if the machine is powered on with the defective ICIB-3 and the "Data Security for Copying" feature set to "OFF".
 - When you remove this option from the machine, first set the setting to "OFF" with the user tool before removing this board. If you forget to do this, "Data Security for Copying" feature cannot appear in the user tool setting. And then SC165 will appear every time the machine is switched on, and the machine cannot be used.
5. Make sure that the machine can recognize the option (see "Check All Connections" at the end of this section).

2.8 OPTIONAL COUNTER INTERFACE UNIT TYPE A (B870)

2.8.1 COMPONENT CHECK

Installation of this unit requires the following components. Other components included in this kit are not used for installation on this machine.



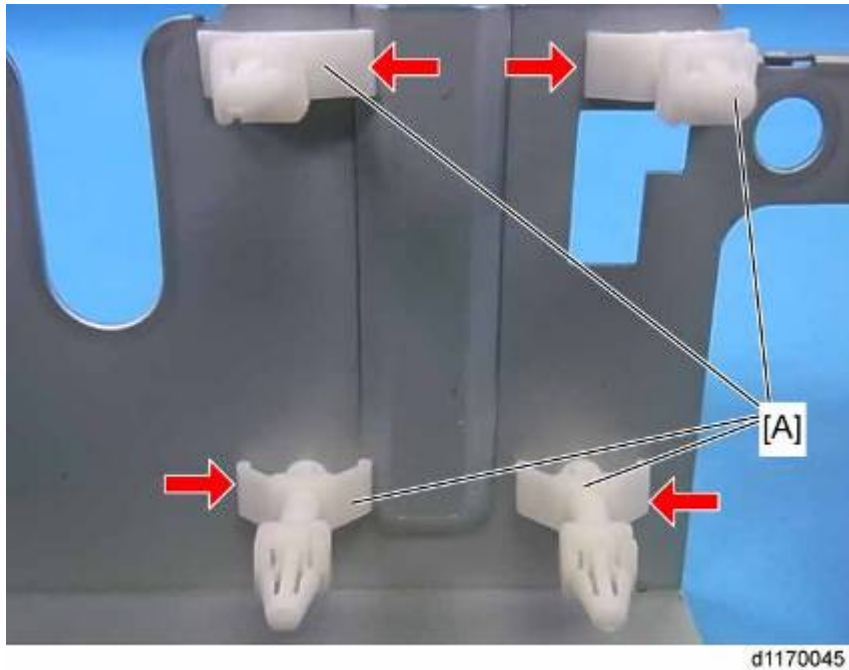
No.	Description	Q'ty
1	Counter interface board	1
2	Stud	4
3	Harness	1
4	Harness band	1
5	Clamp	1

2.8.2 INSTALLATION PROCEDURE

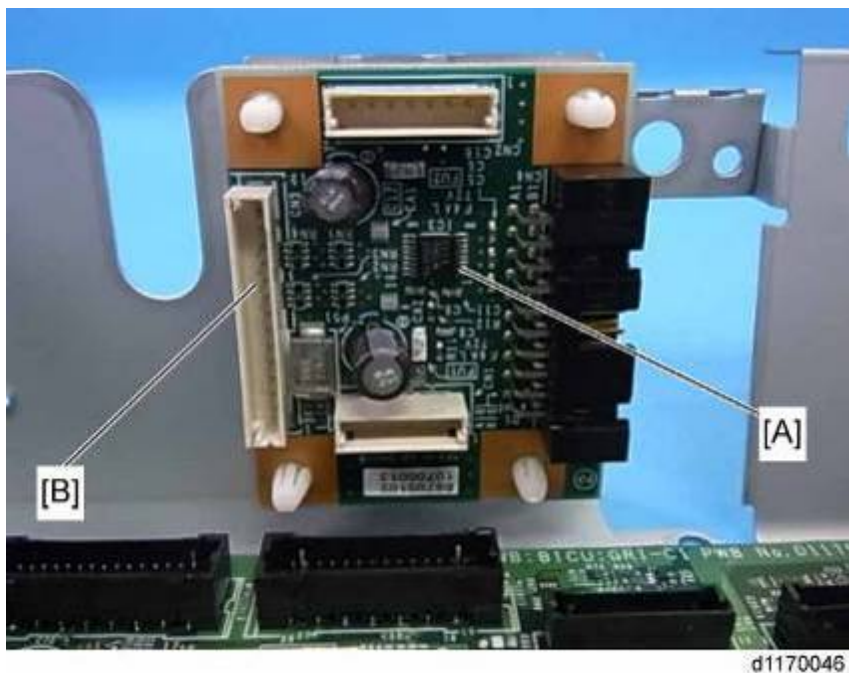
⚠ CAUTION

- Unplug the copier power cord before starting the following procedure.

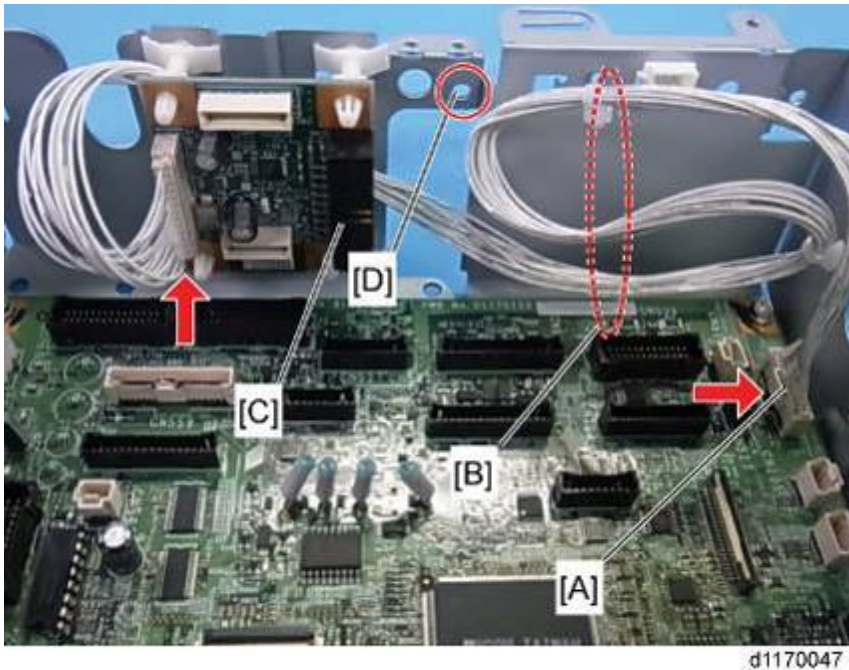
1. Rear cover (p.4-22)
2. Controller box cover (p.4-127)



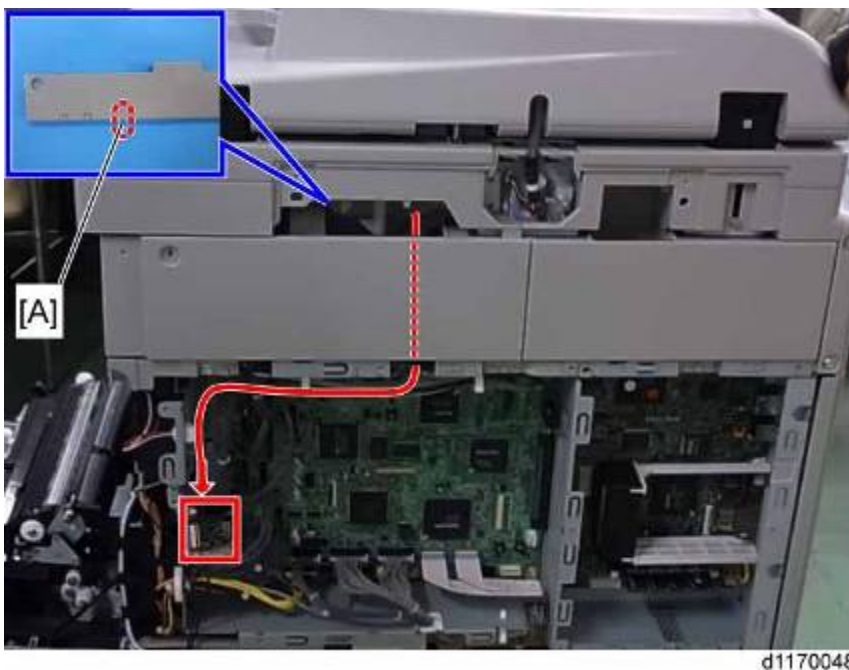
3. Install the four studs [A] in the controller box.



4. Install the key counter interface board [A] on the four studs.
5. Connect the harness included in this kit to the connector [B] on the interface board.



6. Route the harness through the rear of the interface board, and then connect it to CN570 [A] (x 2).
7. Band the harness at the point [B] with the harness band included in this kit to prevent interference with other harnesses.
8. Insert the clamp included in this kit at [D], and clamp the harness with the clamp to prevent interference with other harnesses.
9. Connect the harness from the counter device to CN4 [C] on the key counter interface board.



10. Route the harness.

Optional Counter Interface Unit Type A (B870)

↓ Note

- Remove the cutout from the scanner rear cover [A], and route the harness as shown above.

11. Reassemble the machine.

↓ Note

- Remove the optional counter interface unit before removing the controller box.

2.8.3 MECHANICAL COUNTER INSTALLATION (ONLY FOR NA)

Installation of this unit requires the following components. Other components included in this kit are not used for installation on this machine.

No.	Description	Q'ty
1	Mechanical Counter	1
2	Harness	1

Installation Procedure

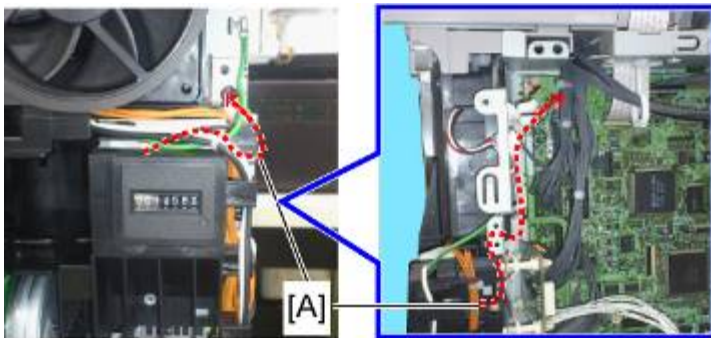
⚠ CAUTION

- Unplug the copier power cord before starting the following procedure.
1. Remove the rear right cover (☞ p.4-22).
 2. Remove the rear cover (☞ p.4-22).



d1170725

3. Connect the harness to the mechanical counter.
4. Insert the mechanical counter into the place [A] at the rear right of the machine (Hooks x 2).



d1170726

5. Route the harness [A] from the mechanical counter as shown above.
6. Connect the connector of the harness to the connector CN570.
7. Reassemble the machine.

2.9 HDD OPTION TYPE C305 (D656)

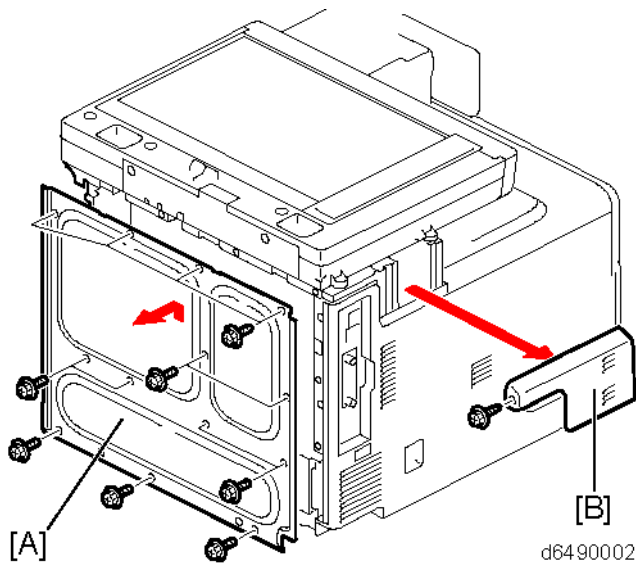
2.9.1 COMPONENT CHECK



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




No.	Description	Q'ty
1.	HDD with the bracket	1
2.	Connection board with the bracket	1
3.	Power cable	1
4.	SATA cable	1
5.	Screws	3
6.	Clamp	1

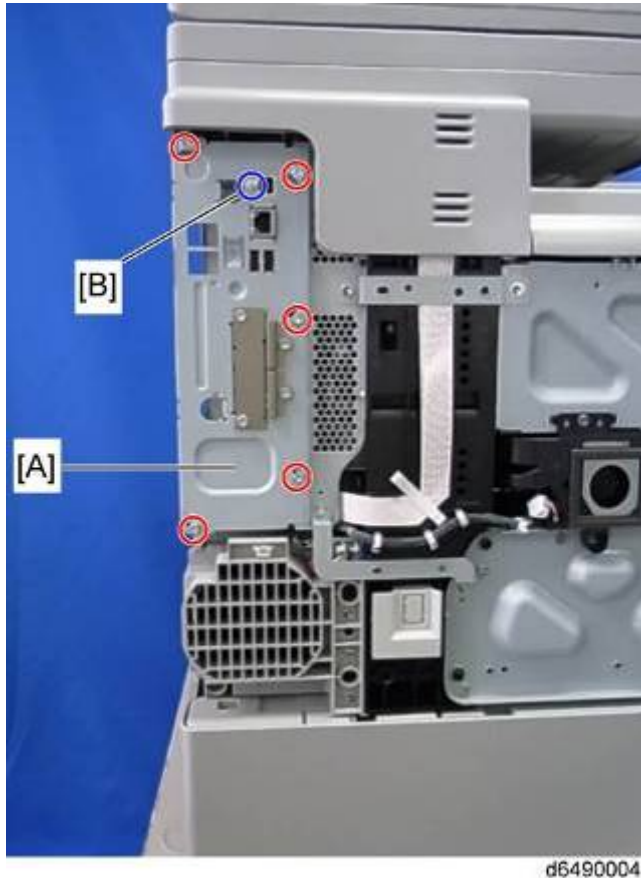
2.9.2 INSTALLATION PROCEDURE



1. Remove the rear cover [A] ( x 13)
2. Remove the scanner rear cover [B] ( x 1)



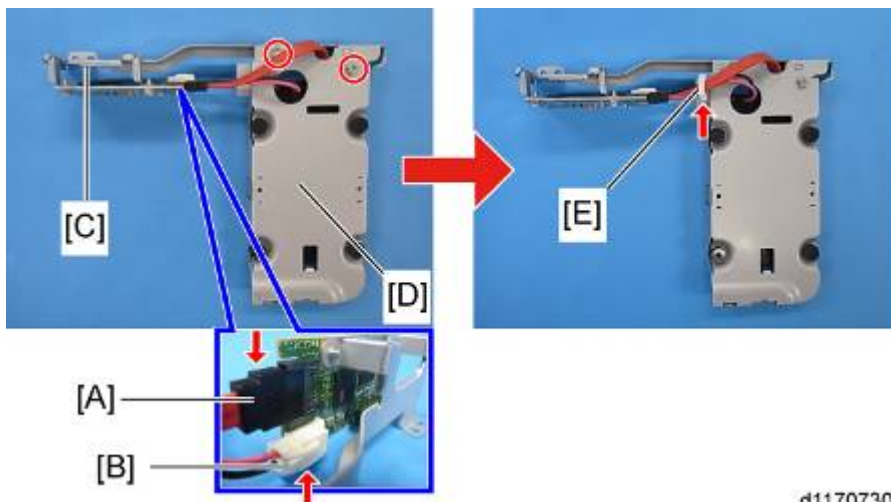
3. Pull out the paper tray.
4. Open the front door.
5. Remove the left cover [A] ( x 2, hooks x 2).





6. Remove the controller box cover [A] ( x 6)

 **Note**

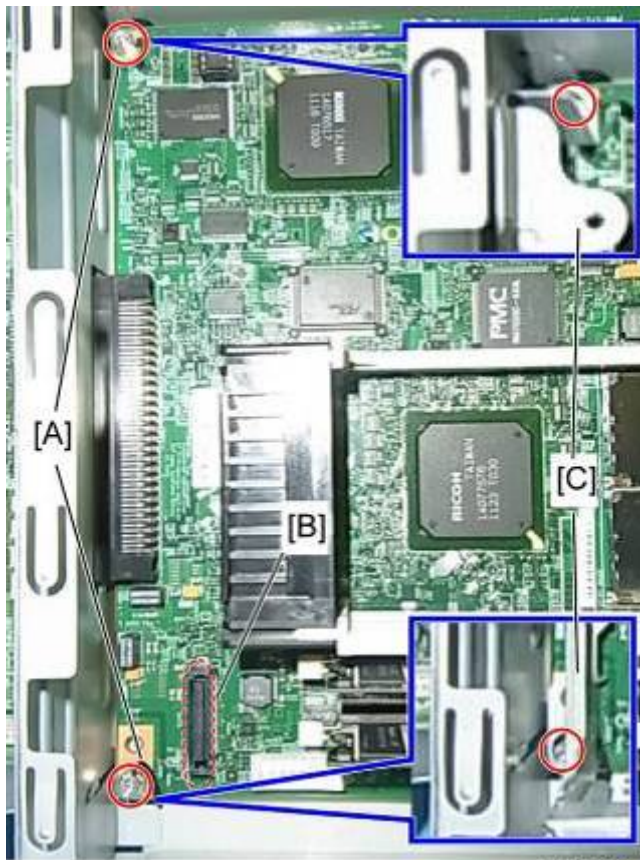
- The screw [B] is different from other five screws.



7. Attach the connection board with the bracket [C] to the HDD with the bracket [D] ( x 2).
8. Connect the SATA cable [A] and the power cable [B] to the HDD ( x 2).
9. Attach the cable clamp [E] to the HDD bracket and clamp the cables from the HDD.

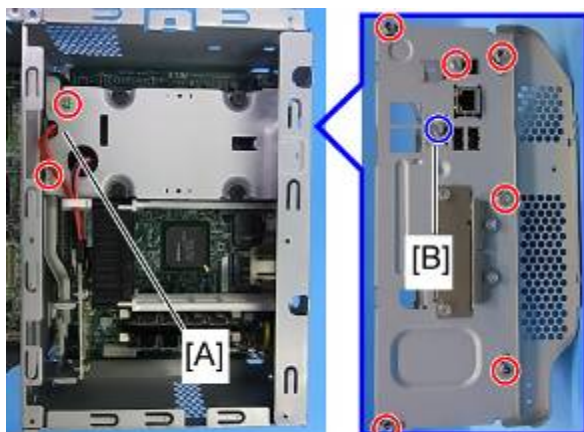
Note

- The power cable [B] should go through the hole in the HDD bracket.



d1170041

10. Remove two screws [A] on the controller board. These screws will be used for attaching the bracket.
11. With the HDD label side facing down, connect the connector of the HDD with the connection bracket to CN710 [B] (🔌 x 1).
12. Attach the HDD with the connection bracket [C] to the controller box (🔩 [A] x 2).



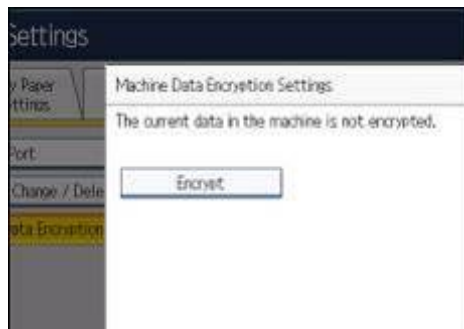
d1170043

13. Secure the HDD with the connection bracket [A] (2 included in this kit).
14. Attach the controller box cover to the machine, and install the screw [B] included in this kit and secure the HDD bracket with the controller box cover (1 (included in this kit)).
15. Install all screws of the controller box cover (6).
16. Reassemble the machine.

2.9.3 HDD ENCRYPTION

Do the following procedure if a customer wants to use this function.

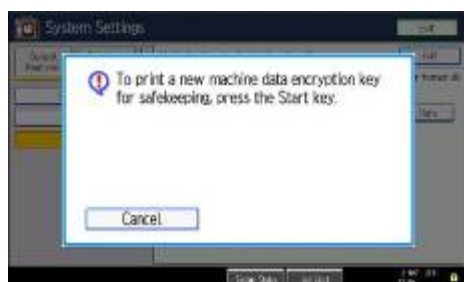
1. Do SP5-878-2 (Option Setup - Encryption Option) and touch [EXECUTE].
2. Go out of the SP mode, turn off the operation switch, and then turn off the main power switch.
3. Turn the machine power on.
4. Push [User Tools] and select System Setting > Administrator Tools > Machine Data Encryption Setting.



5. Press [Encrypt].



6. Select the data to be carried over to the hard disk and not to be reset. To carry all of the data over to the hard disk, select [All data]. To carry over only the machine setting data, select [File System Data Only]. To reset all of the data, select [Format All Data].

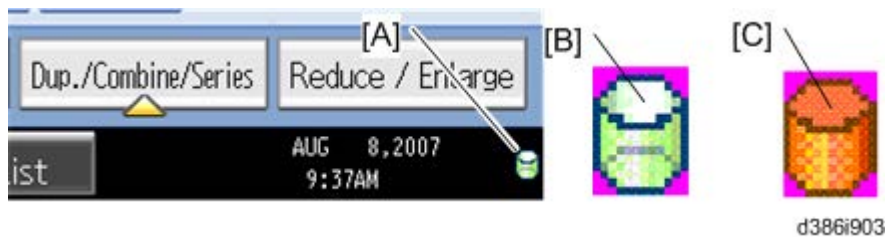


7. Press the [Start] Key.

- The encryption key is printed.

2.9.4 DATA OVERWRITE SECURITY

- Do the following procedure if a customer wants to use this function.
- Do SP5-878-1 (Option Setup - Data Overwrite Security) and touch [EXECUTE].
- Go out of the SP mode, turn off the operation switch, then turn off the main power switch.
- Turn the machine power on.
- Press [User Tools] and select System Setting > Administrator Tools > Auto Erase Memory Setting > On
- Exit from User Tools mode.

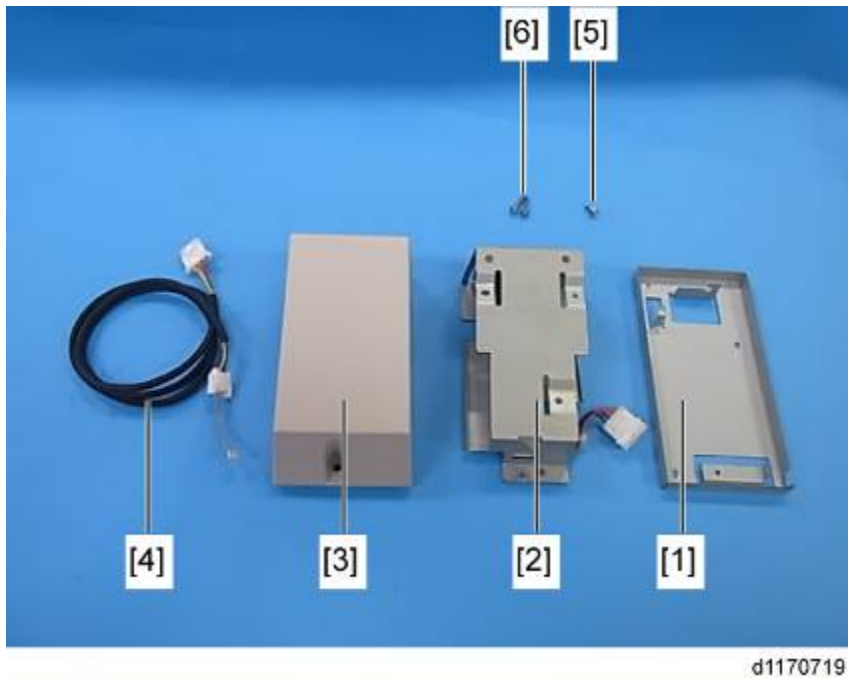


- Check the display and make sure that the overwrite erase icon [A] is displayed.
- Make a Sample Copy.
- Check the overwrite erase icon.
- The icon [B] changes to [C] when job data is stored in the hard disk.
- The icon goes back to its usual shape [B] after this function has completed a data overwrite operation to the hard disk.
- Do SP5990-005 (SP print mode - Diagnostic Report).
- Look at the report:
- Under "[ROM No./Firmware Version]" check the number and version number listed for "HDD Format Option".
- Under "[Loading Program]" check the option number and version number listed for "GW_zoffy".
- These two version numbers should be identical.
- Exit SP mode.

2.10 KEY COUNTER BRACKET TYPE H (A674)

2.10.1 COMPONENT CHECK

Installation of this unit requires the following components. Other components included in this kit are not used for installation on this machine.

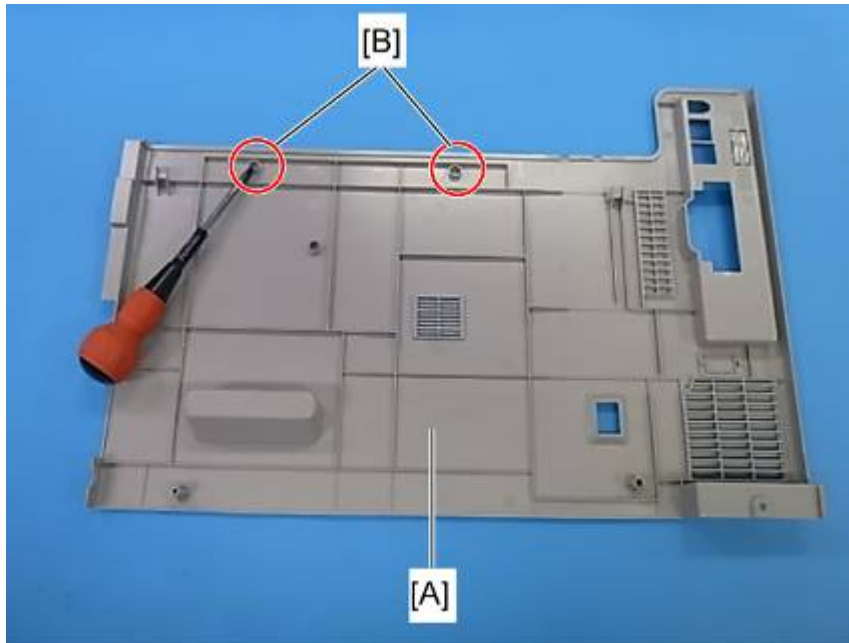


No.	Description	Q'ty
1	Key counter attaching bracket	1
2	Key counter bracket	1
3	Key counter bracket cover	1
4	Harness	1
5	Screw (large)	1
6	Screw (long)	2

2.10.2 INSTALLATION PROCEDURE

⚠ CAUTION

- Unplug the copier power cord before starting the following procedure.
1. Left cover (🔧 p.4-21)
 2. Rear cover (🔧 p.4-22)



d1170720

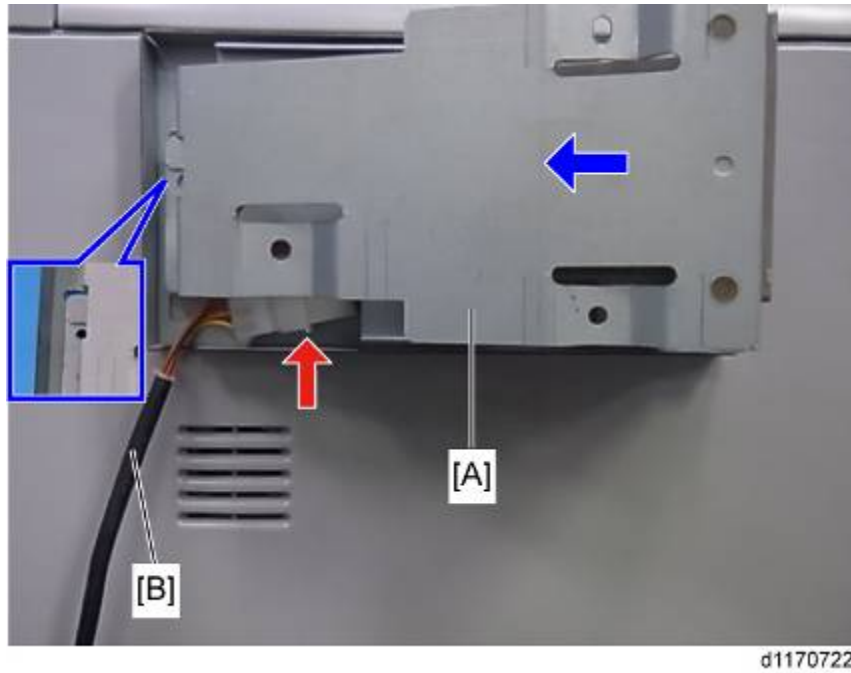
3. Cut out the part [B] from the left cover [A] and make two screw holes to attach the bracket.
4. Attach the left cover.



d1170721

5. Attach the attaching bracket [A] to the left cover by securing two screws to the metal frame of the machine through the screw holes [B] (🔩 (long) x 2).

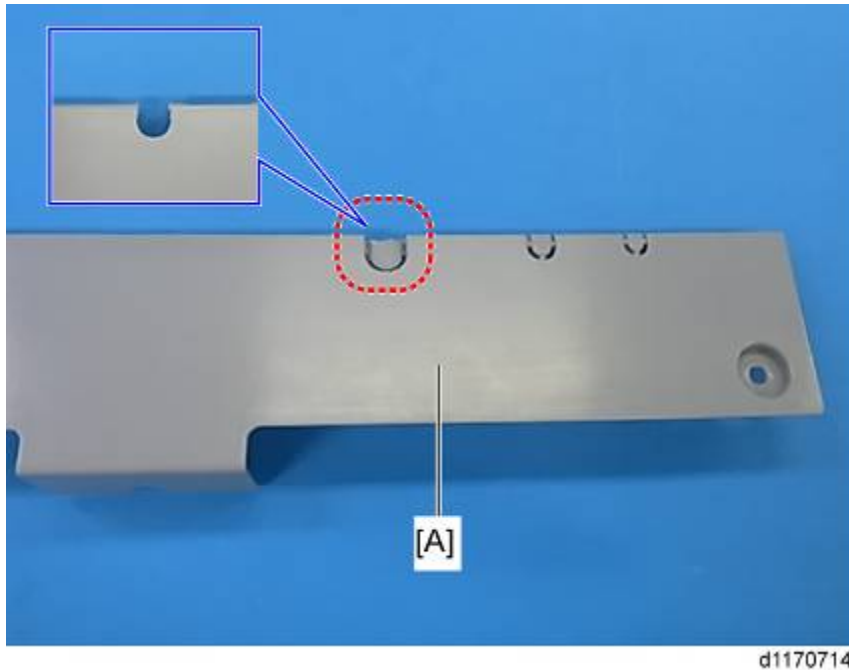
Key Counter Bracket Type H (A674)



6. Connect the connector of the harness [B] to the connector from the key counter bracket, and then insert the key counter bracket [A] into the attaching bracket obliquely from the upper right side (🔧 x 1).
7. Pull out the harness [B] from below as shown above.



8. Attach the key counter bracket cover [A] to the key counter bracket (🔧 (large) x 1).
9. Remove the scanner rear cover (🔧 p.4-30)



10. Cut out the hole for the key counter harness to pass through the rear upper cover [A].
11. Lead the key counter harness into the controller box of the machine through the hole.
12. Route the harness (☞ p.2-47).
13. Connect the harness from the key counter bracket to CN4 on the key counter interface board (☞ p.2-47).
14. Reassemble the machine.



15. Attach the clamps [A] to prevent the cable from sagging if necessary.

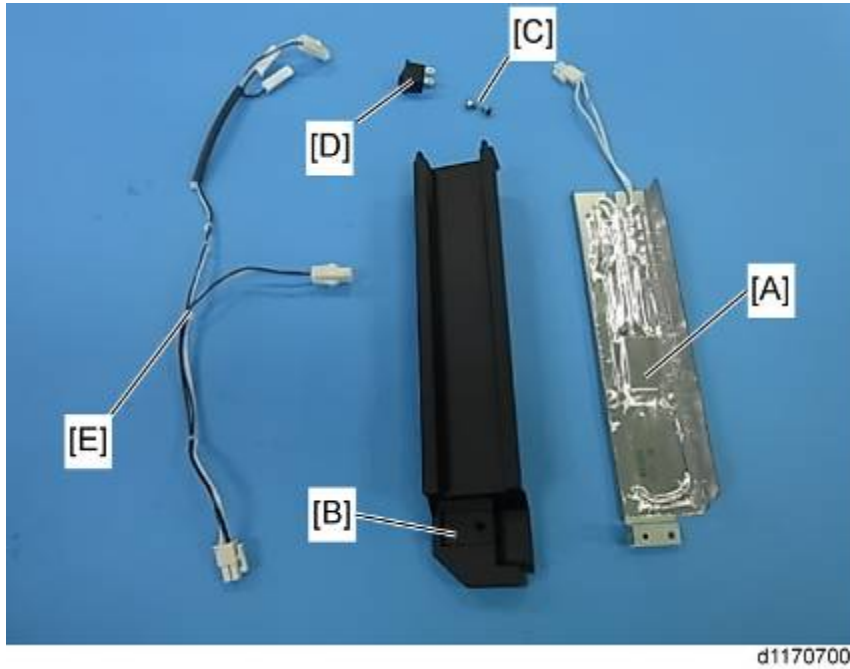
⬇ **Note**

- Prepare these clamps [A] yourself because they are not included in this kit.

2.11 ANTI-CONDENSATION HEATER (MAINFRAME)

2.11.1 COMPONENT CHECK

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

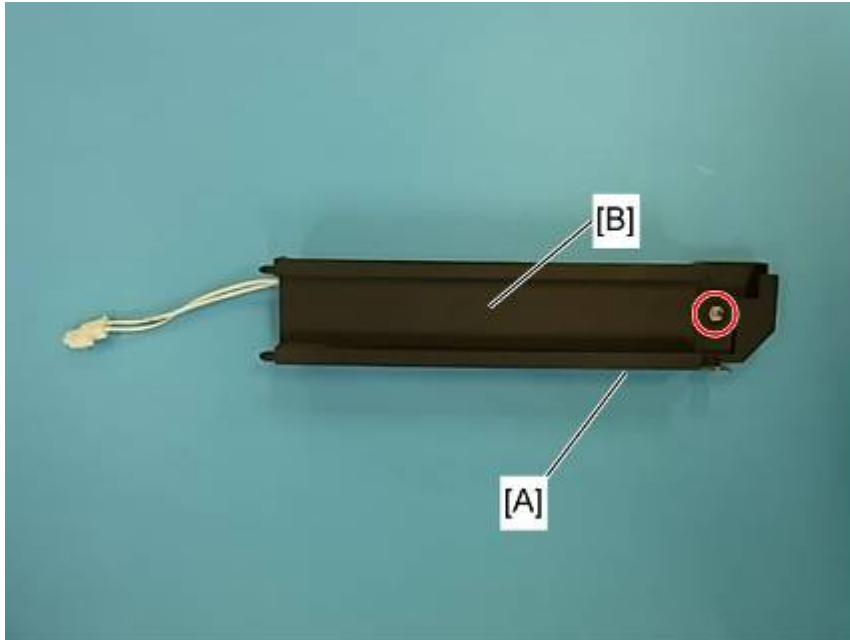


No.	Description	Q'ty
A	Heater	1
B	Heater Cover	1
C	Screw	2
D	Heater Power Switch	1
E	Junction Harness	1





2.11.2 INSTALLATION PROCEDURE

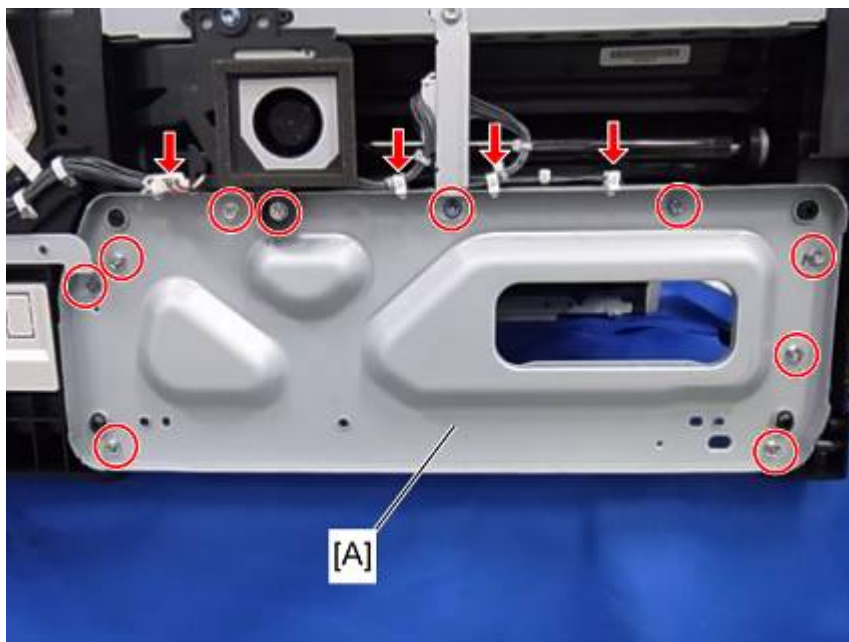
⚠ CAUTION

- Unplug the copier power cord before starting the following procedure.






d1170701

- Attach the heater cover [B] to the heater [A] as shown above ( x 1).
- Pull out the paper tray.
- Waste toner bottle ( p.4-51)
- Left cover ( p.4-21)
- Rear cover ( p.4-22)

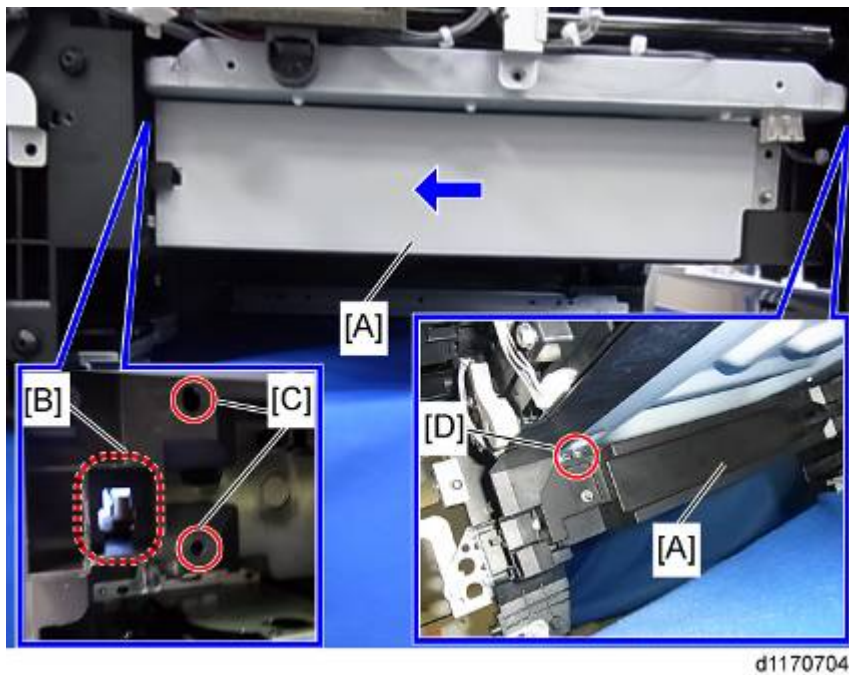


d1170702

- Left stay [A] ( x 3,  x 1,  x 10)

★ Important

- Never press the main frame from above when the left stay [A] is removed. Otherwise, the mainframe may be damaged.

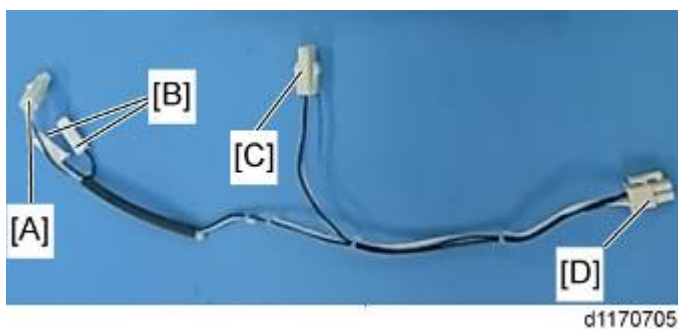


7. Pass the heater harness through the hole [B].
8. Insert the spurs of the heater into the holes [C], and then install the tray heater [A] (⚙ [D] x 1).

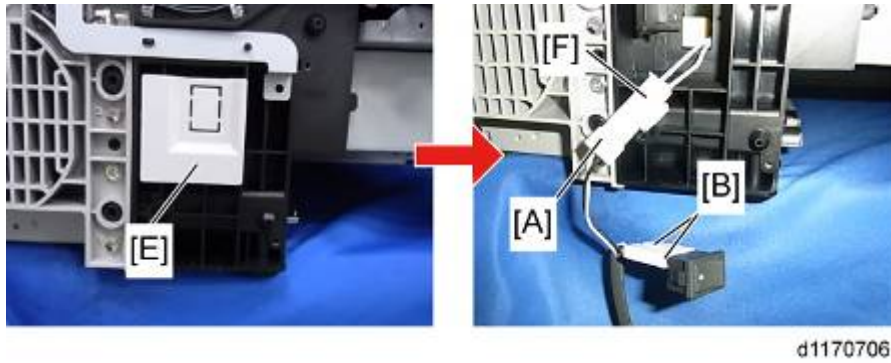
↓ Note

- Use a short screwdriver to secure the screw [D]. If you have difficulty in securing the screw [D], carefully lay down the mainframe with its left side facing up.

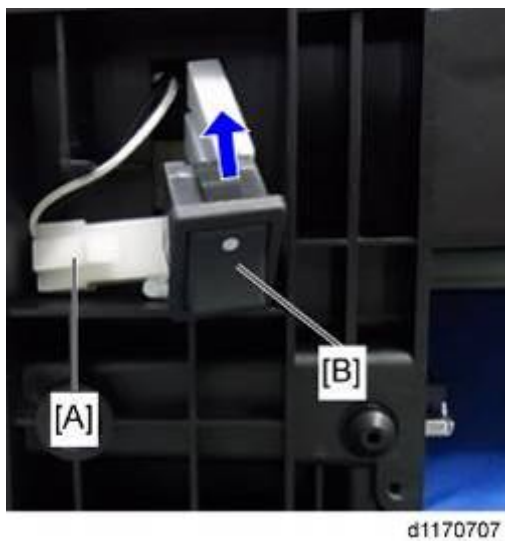
Junction harness connections:



- A: To the heater
- B: To the power switch
- C: To the optional PFU heater (if installed)
- D: To the PSU

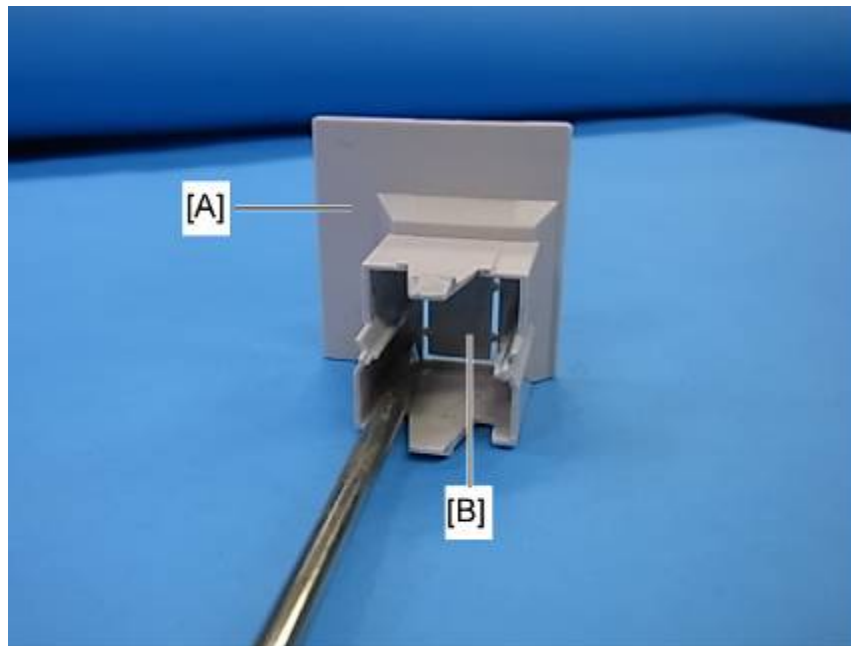


9. Remove the cover [E], then pull out the heater harness [F].
10. Connect the heater harness to the connector of the junction harness [A] (🔌 x 1).
11. Connect the heater power switch to the connectors of the junction harness [B] (🔌 x 2).



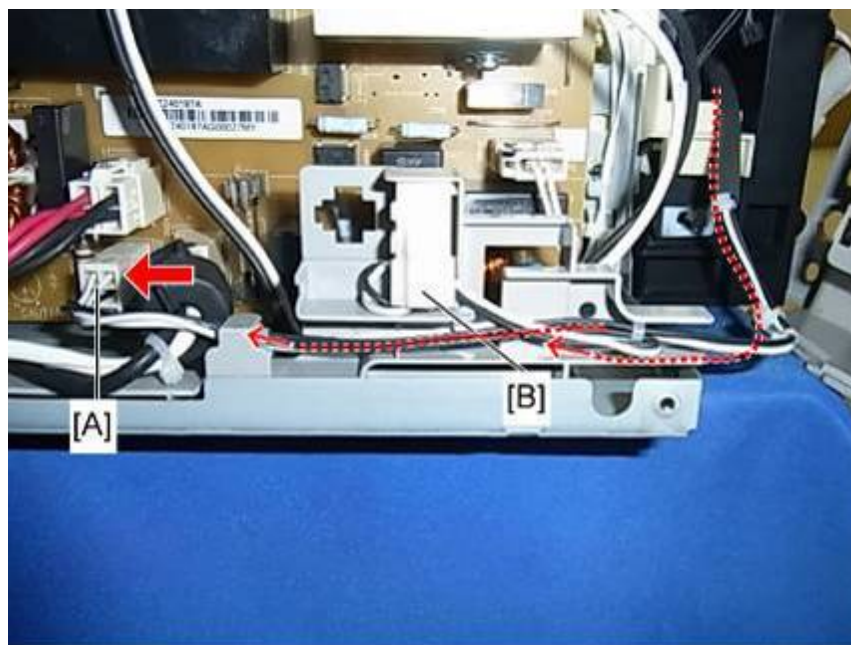
12. Store the connector [A] in the connector holder, then push the power switch [A] into the switch hole until you feel it click into place.

Anti-condensation Heater (Mainframe)



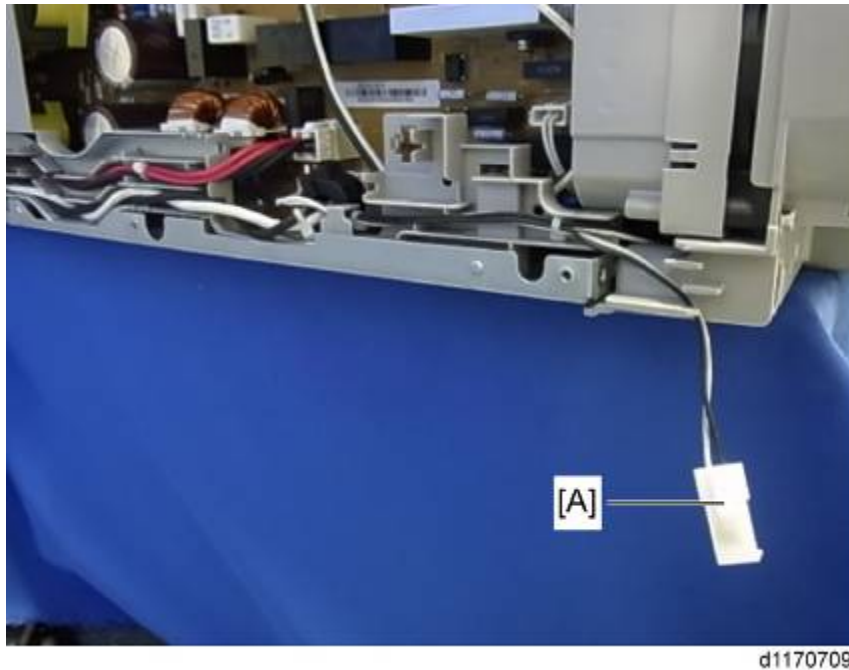
d1170710

13. Cut out the switch hole [B] in the switch cover, then attach the cover [A] (Hooks x 2).
14. Remove the PSU fan (p.4-137).



d1170708

15. Route the junction harness as shown above.
16. Connect the connector [A] to CN103.
17. Store the connector [B] to the holder unless the optional PFU tray heater is installed.



18. **When the optional PFU tray heater will be installed:** Pull out the connector [A] and its harness to the lower part of the machine. Then uncap the connector isolation cap in the optional PFU and connect the connector [A] to the uncapped connector (p.2-68).
19. Reassemble the machine.

↓ **Note**

- The mainframe and the optional paper feed unit should be joined together if the anti-condensation heater of the optional paper feed unit is installed. See “Anti-condensation Heater (Optional Unit)” for details.

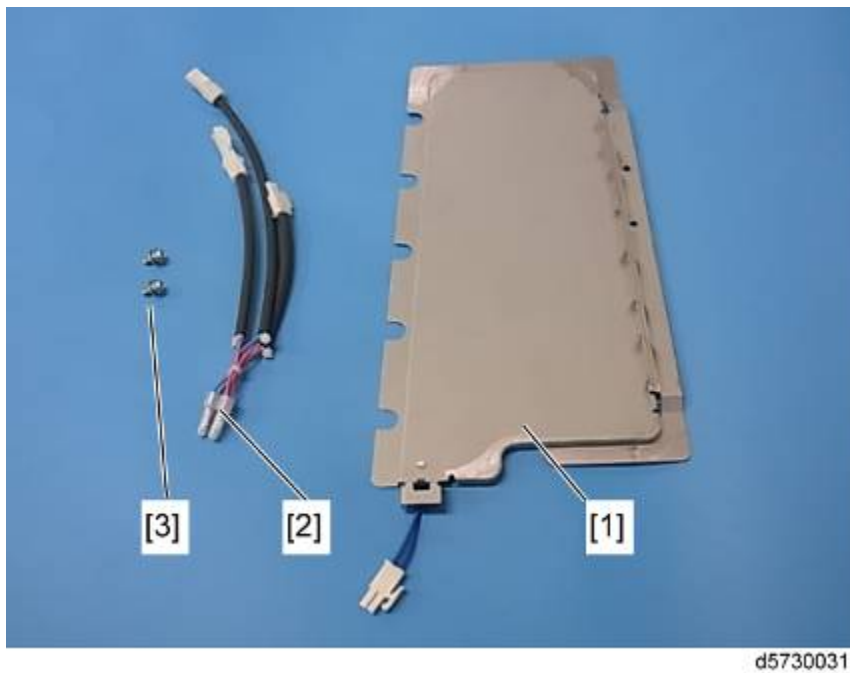
2.12 ANTI-CONDENSATION HEATER (OPTIONAL UNIT)

2.12.1 COMPONENT CHECK

Check the quantity and condition of the accessories against the following list. Other components included in this kit are not used for installation on this machine.

For the Heater Installation:

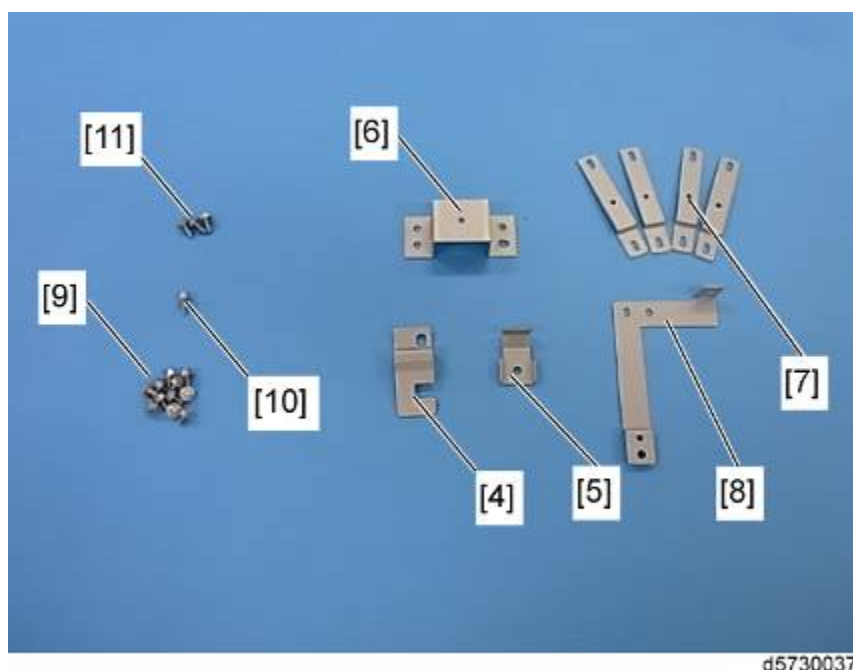
No.	Description	Q'ty
1	Anti-condensation heater	1
2	Harness with the isolation cap	1
3	M4 x 10: Screw	2



For Joining the Mainframe and Another Paper Feed Unit:

No.	Description	Q'ty
4	Joint bracket (Front left)	1
5	Joint bracket (Front right)	1

No.	Description	Q'ty
6	Joint bracket (Front center) (only for the optional paper feed unit)	1
7	Joint bracket (Rear)	4
8	Joint bracket (Frame) (only for optional paper feed unit)	1
9	M3 x 6: Screw	11
10	M3 x 12: Screw	1
11	Tapping screw	3

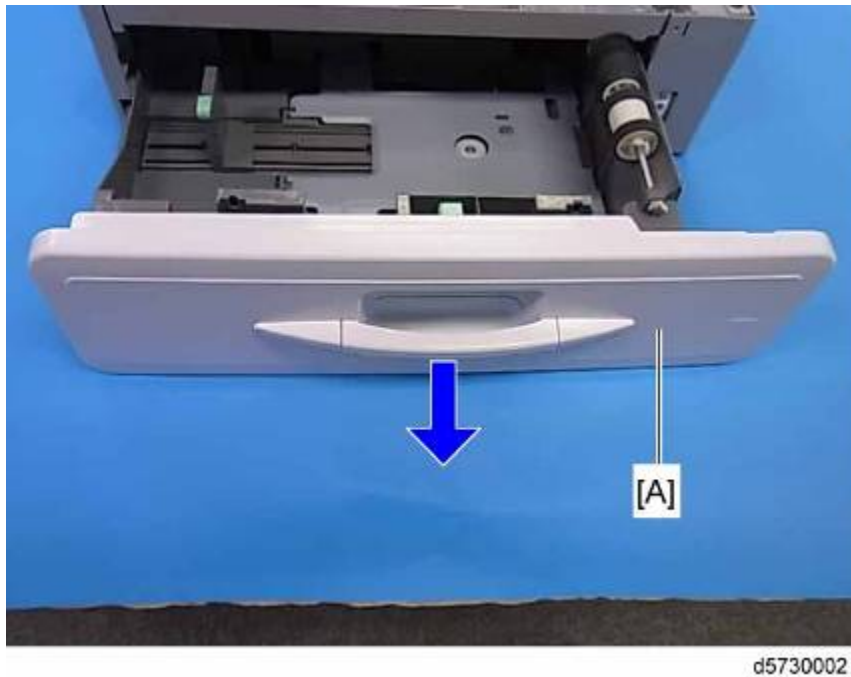


2.12.2 INSTALLATION PROCEDURE

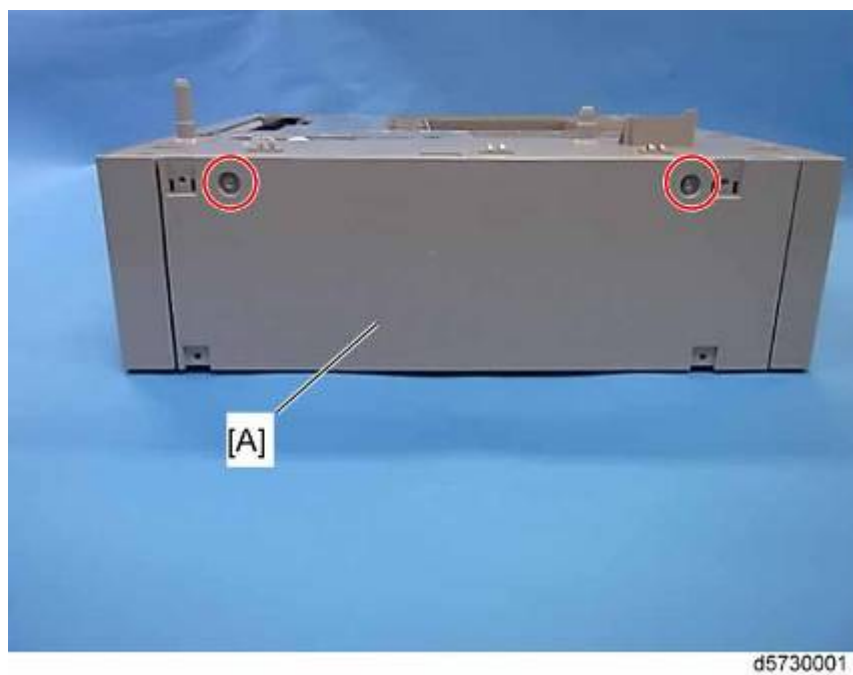
⚠ CAUTION

- Unplug the machine power cord before starting the following procedure.
- Do the following procedure not to damage any harnesses.
- Check that harnesses are not damaged or pinched after installation.

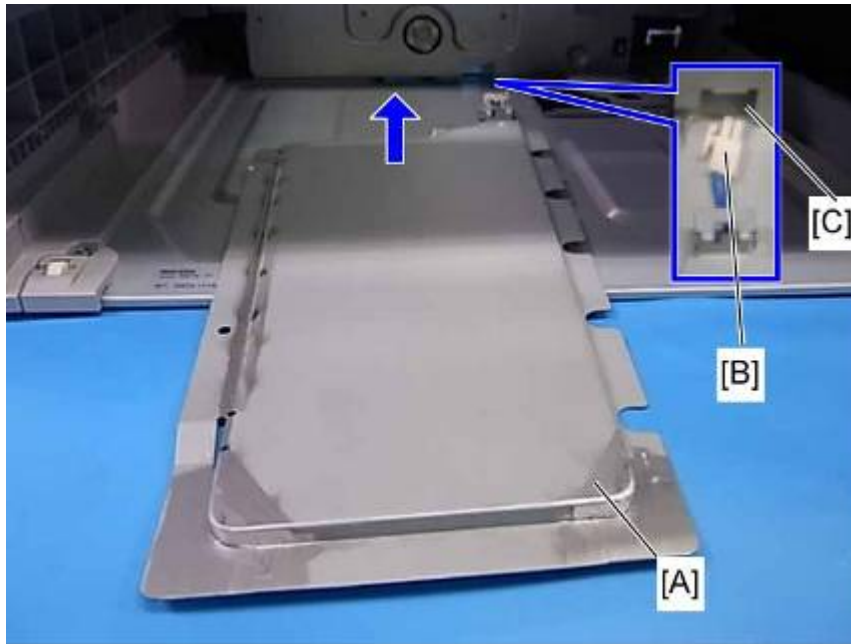
For Installing the Tray Heater in D573



1. Pull out the tray [A] in the optional paper tray.

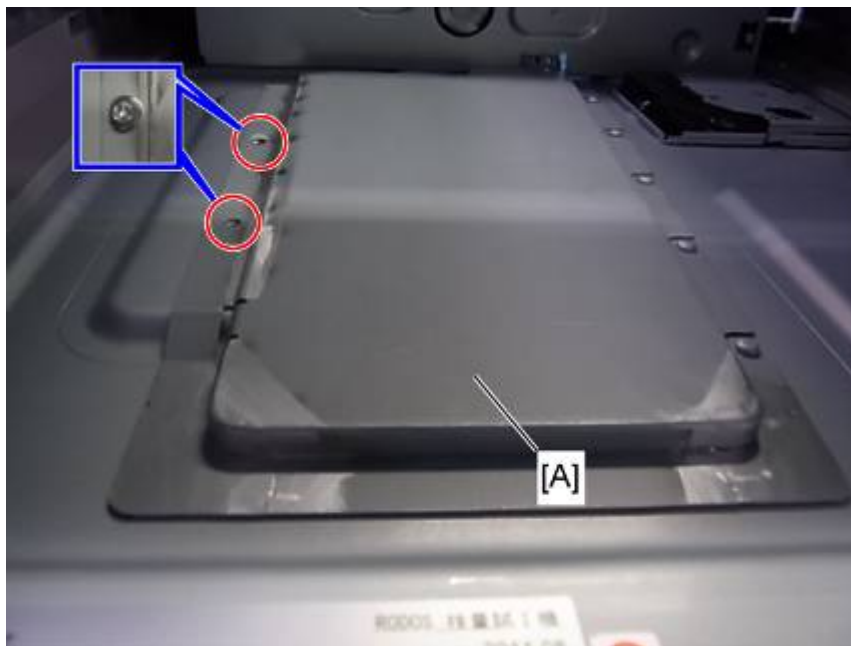


2. Rear cover [A] ( x 2)




d5730032

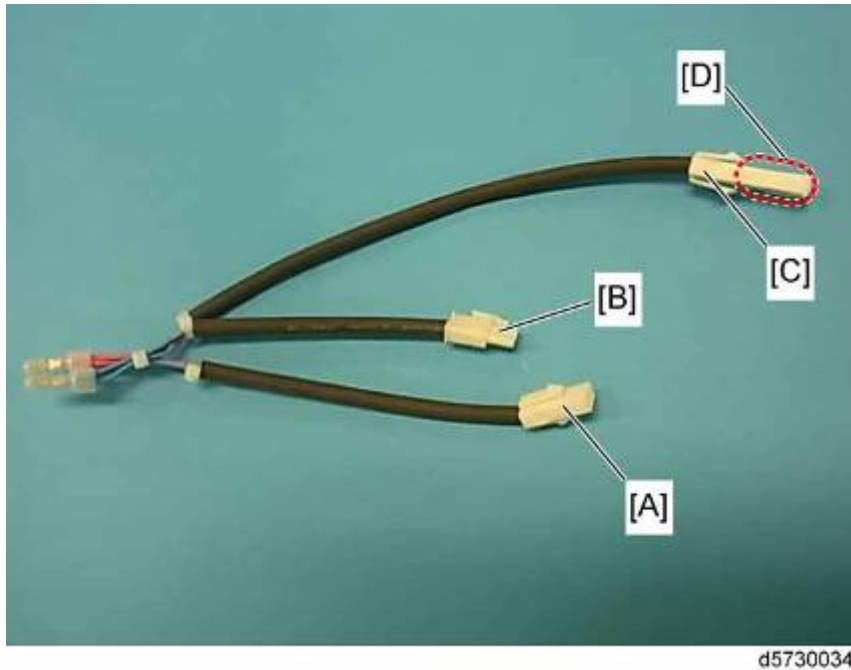
3. Slide in the tray heater [A], and pass the heater harness [B] through the square hole [C].



d5730033

4. Install the tray heater [A] in the paper feed unit ( x 2).

Anti-condensation Heater (Optional Unit)

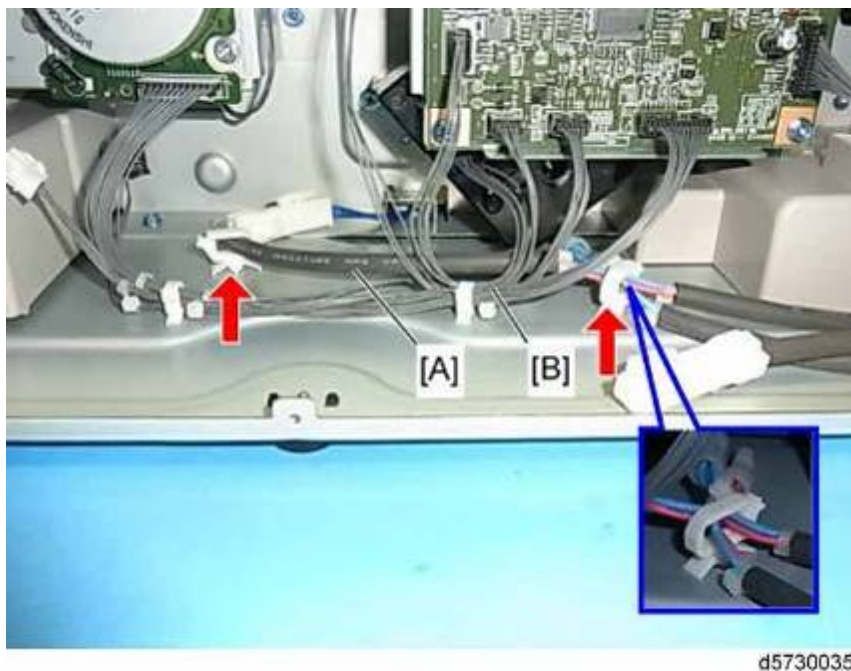


A: For this tray heater

B: For the mainframe

C: For another optional tray heater

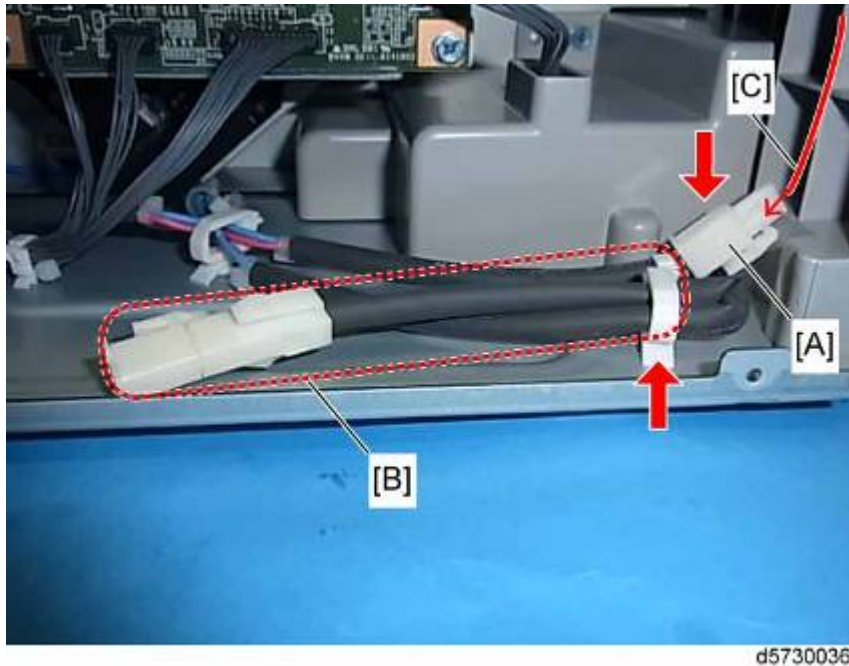
5. Connect the connector [A] to the tray heater connector, and cap the connector [C] with the isolation cap [D] unless there are two optional paper tray units installed (🔧 x 1).



6. Route the harness [A], and clamp it as shown above (🔧 x 2).

⬇ Note

- Pass the harness [A] behind the controller board harness [B] as shown above.



7. Connect the connector [A] to the connector from the mainframe [C], and bend the part [B] of the harness and clamp it as shown above unless another paper feed unit is installed (🖨️ x 1, 🖨️ x 1).

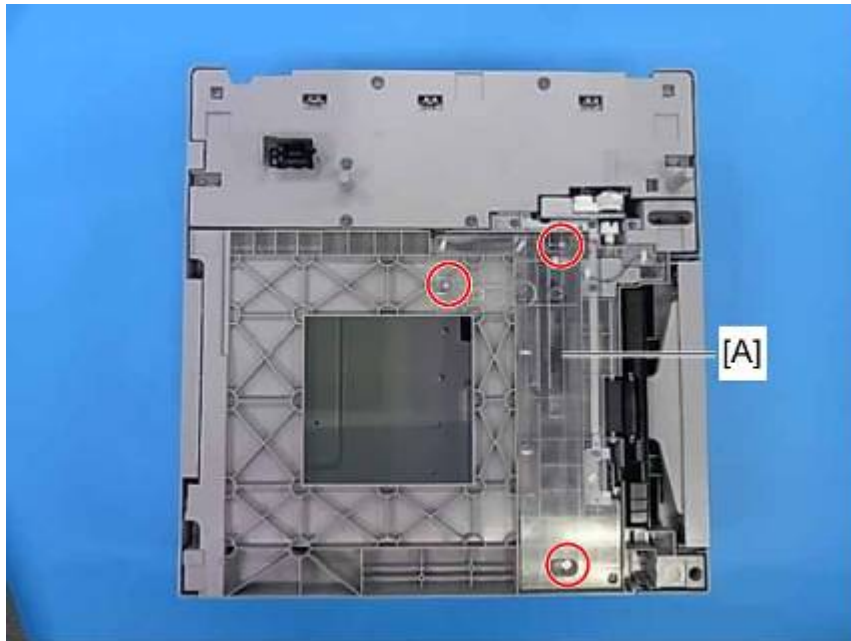
⬇️ **Note**

- Regarding the connector from the mainframe, see the installation procedure for the mainframe paper tray heater (See p.2-62).

For Joining the Mainframe with the Optional Paper Feed Unit

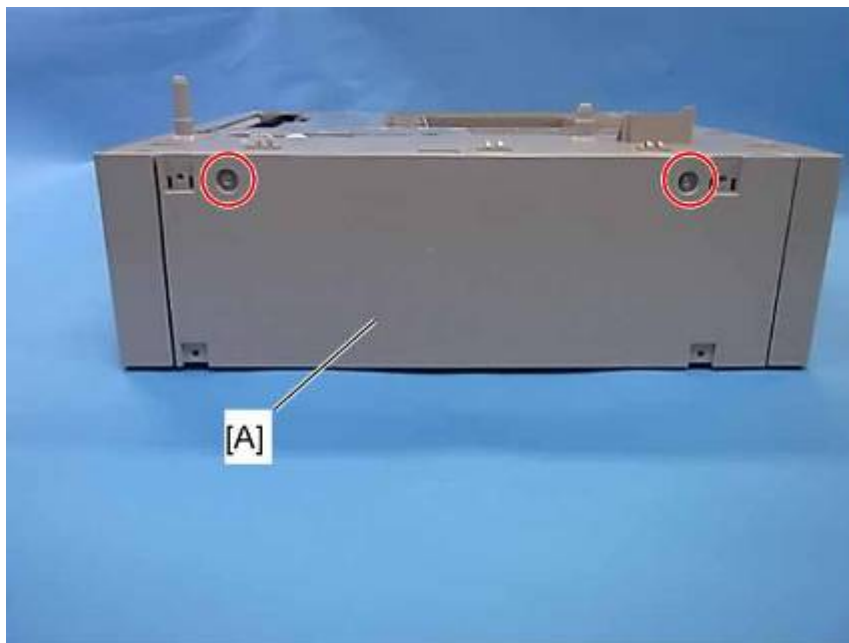
The mainframe and the optional paper feed unit should be joined with joint brackets after the anti-condensation heater installation, because the heater harness may be damaged when the mainframe is removed accidentally.

Anti-condensation Heater (Optional Unit)




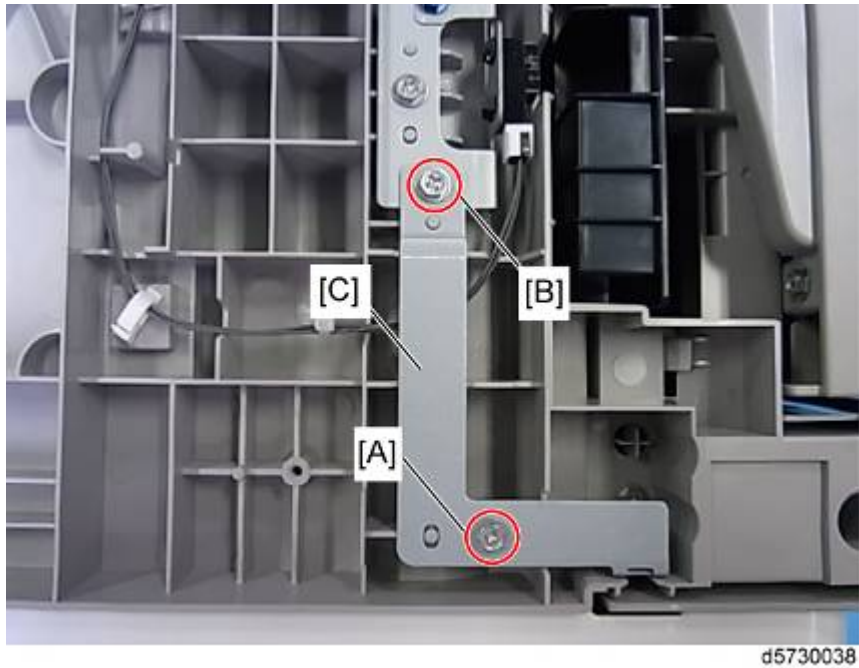
d5730007

1. Remove the upper cover [A] of the paper feed unit ( x 3).

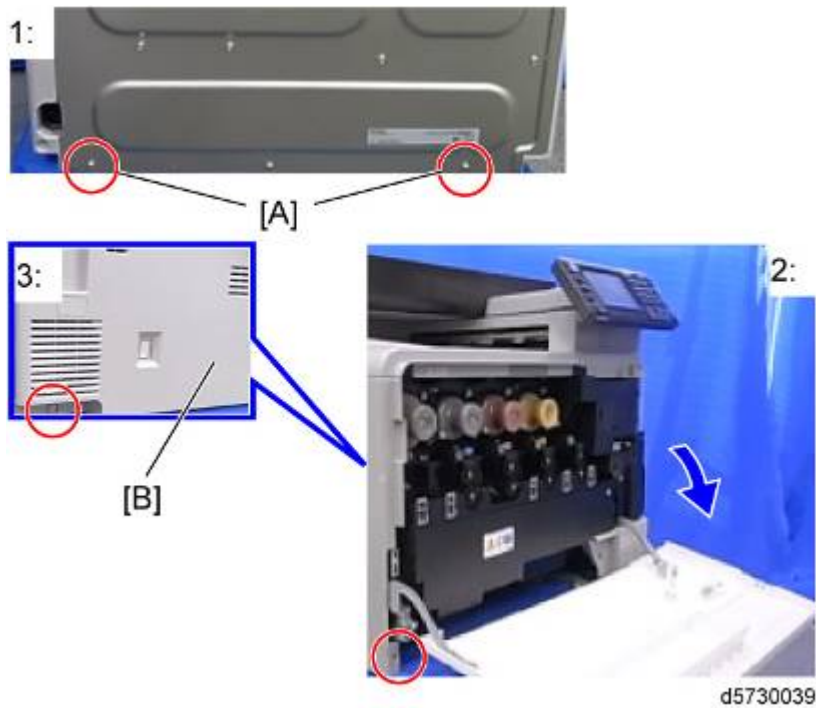


d5730001

2. Remove the rear cover [A] of the paper feed unit ( x 2).




3. Attach the jointing bracket (frame) [C] (Tapping ⚙ x 1 [A], M3x6: ⚙ x 1 [B]).
4. Attach the upper cover of the paper feed unit (⚙ x 3).
5. Put the mainframe on the paper feed unit.

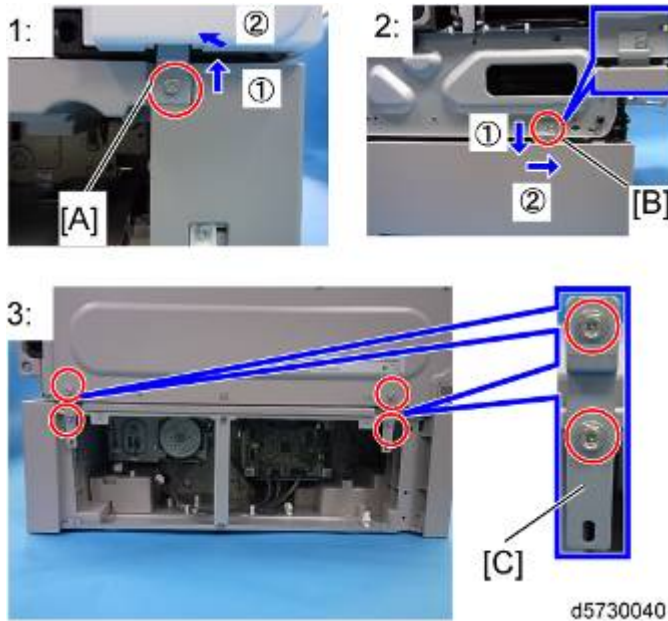


- 1: Rear
 2: Front
 3: Left

6. Remove the paper trays from the mainframe and the optional paper feed unit.
7. Remove two screws [A] on the rear panel of the mainframe. Keep these screws until the joint brackets (rear) are installed.

Anti-condensation Heater (Optional Unit)

8. Remove the left cover [B] of the mainframe ( x 2).



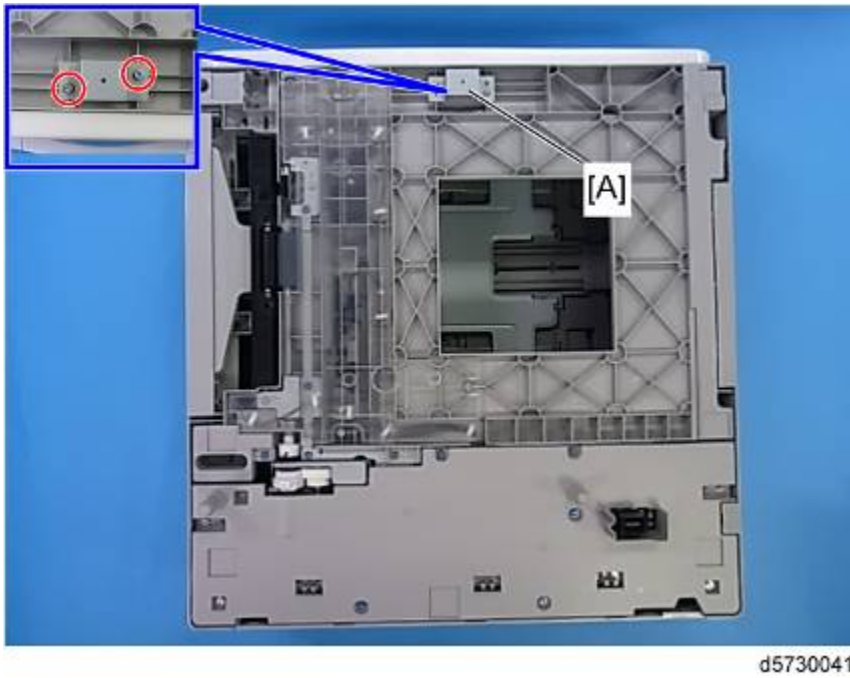
1: Front right

2: Left


3: Rear

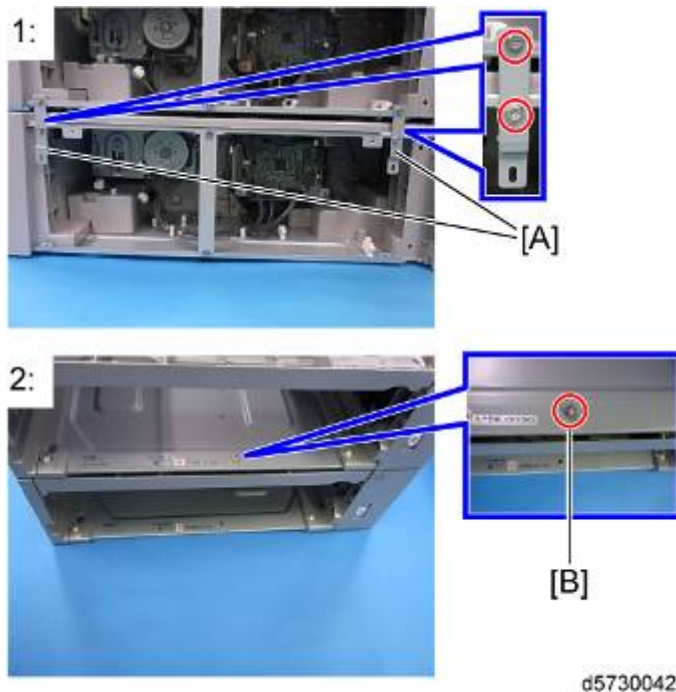
9. Join the mainframe with the optional paper feed unit with four joint brackets [A] (front right), [B] (front left) and [C] (rear) (x 2). These brackets are secured with the following screws.
- [A]: M3 x 12 (included in this kit)
 - [B]: M3 x 6 (included in this kit)
 - [C] (Upper): Existing screws (x 2)
 - [C] (Lower): M3 x 6 (included in this kit)
10. Reassemble the mainframe and the paper feed unit.

Joining Two Optional Paper Feed Units




Installation

1. Attach the joint bracket (front center) [A] to the paper feed unit that will be installed at the lowest position (Tapping  x 2 (included in this kit)).
2. Put the optional paper feed unit on the paper feed unit that was fitted with the bracket [A] in step 1.
3. Remove the paper trays.



- 1: Rear
2: Front center

Anti-condensation Heater (Optional Unit)

4. Join the two paper feed units with two joint brackets (rear) [A] and one screw [B] (M3 x 6:  x 3 (included in this kit)).
5. Reassemble the mainframe and the paper feed units.

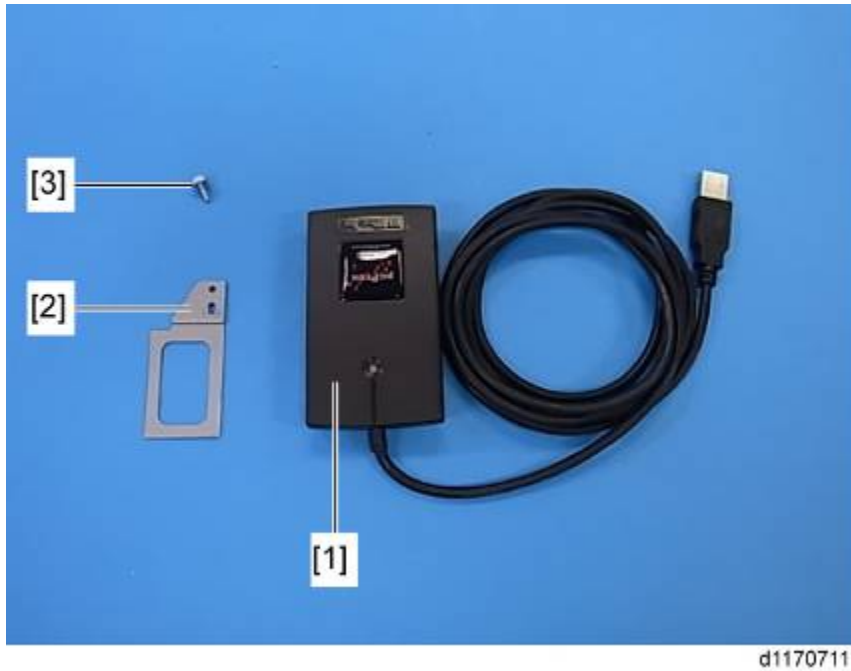
Note

- When installing the mainframe with two paper feed units, join the two paper feed units first, and then join the mainframe with the paper feed units. However, if there is already a machine with one optional paper feed unit, you can put a machine with a paper feed unit on another paper feed unit, and join them (be careful if you do this, because the mainframe with one paper feed unit is very heavy).

2.13 IC CARD READER (EXTERNAL OPTION)

2.13.1 COMPONENT CHECK

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



No.	Description	Q'ty
1	IC Card Reader	1
2	Bracket*	1
3	Screw	1

*The IC card reader attaching bracket has two types. One is for the base machine. The other is for machines that have the 1-bin tray unit. This bracket [2] is for the base machine.

Note

- Consult your supervisor to obtain the bracket for machines that have the 1-bin tray unit.

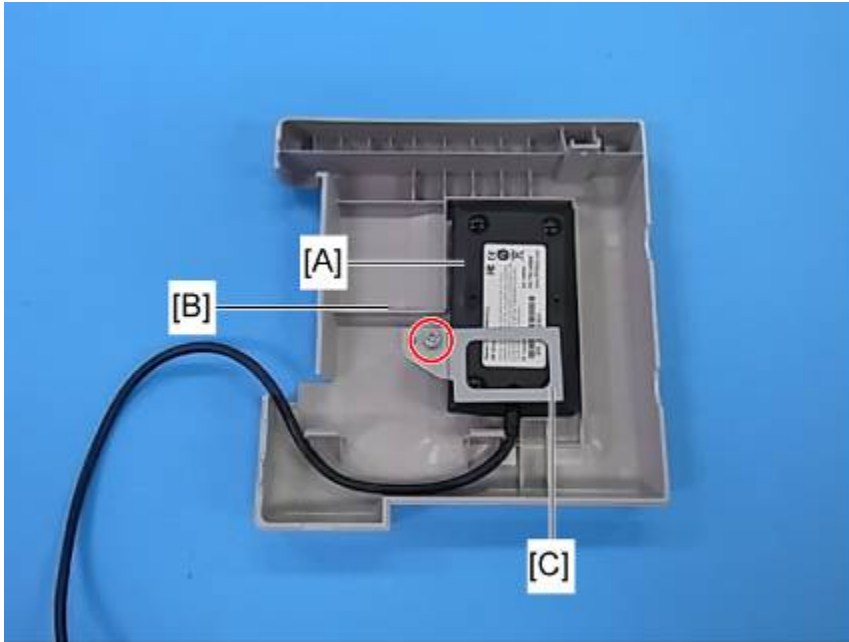
2.13.2 INSTALLATION PROCEDURE

⚠ CAUTION

- Unplug the copier power cord before starting the following procedure.

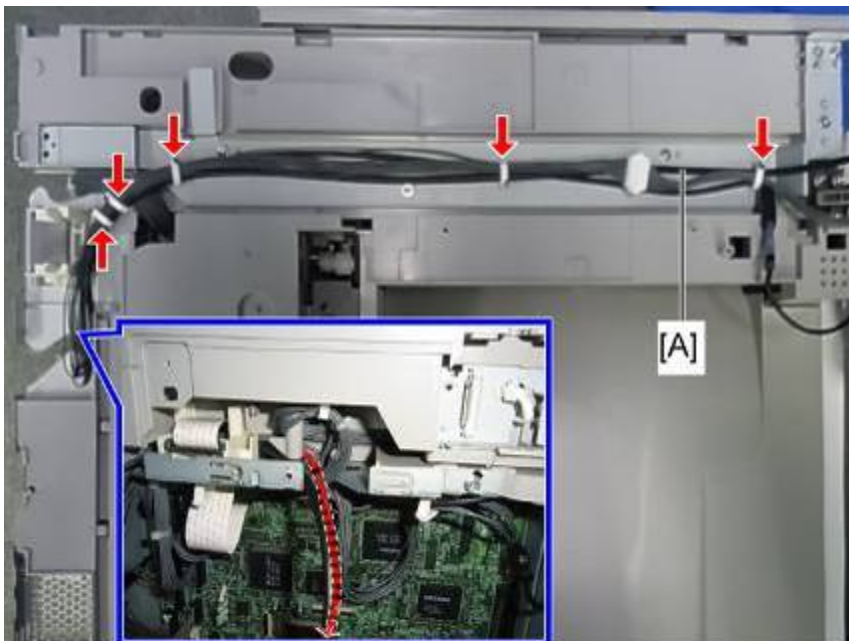
When installing in a machine that does not have the 1-bin tray unit

1. Remove the scanner unit (p.4-30).
2. Remove the rear cover (p.4-22).



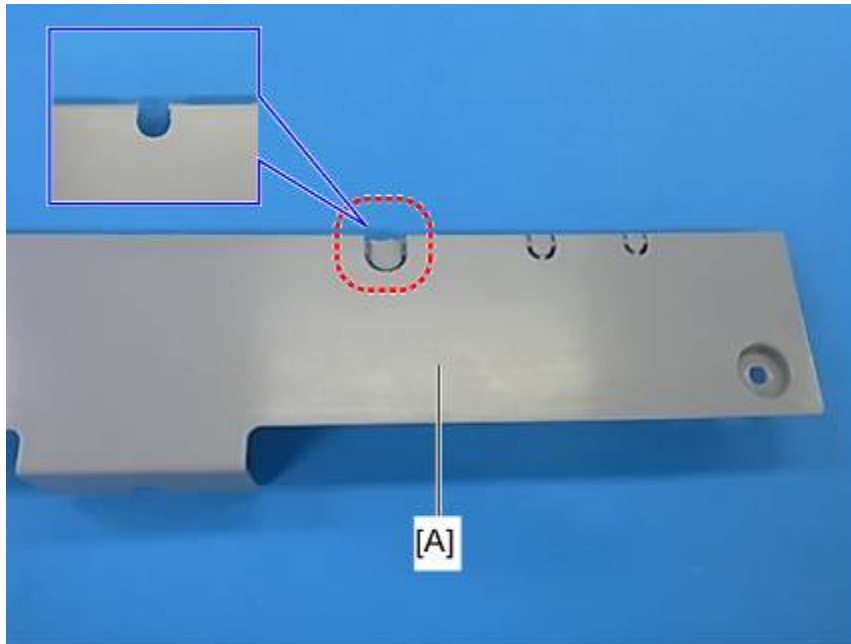
d1170712

3. Attach the IC card reader [A] to the rear of the upper right cover [B] with the bracket [C] (x 1 included in this kit).



d1170713

4. Route the USB cable [A] from the IC card reader as shown above (🖨️ x 5).
5. Pull out the USB cable from the rear of the machine.



6. Cut out the hole for the USB cable to pass through the rear upper cover [A].



7. Pass the USB cable from the IC card reader through the hole in the upper rear cover, and then reassemble the machine.
8. Attach the clamps [A] to prevent the cable from sagging.
9. Connect the USB cable to the USB receptor at the left of the mainframe as shown above. Either receptor can be used.

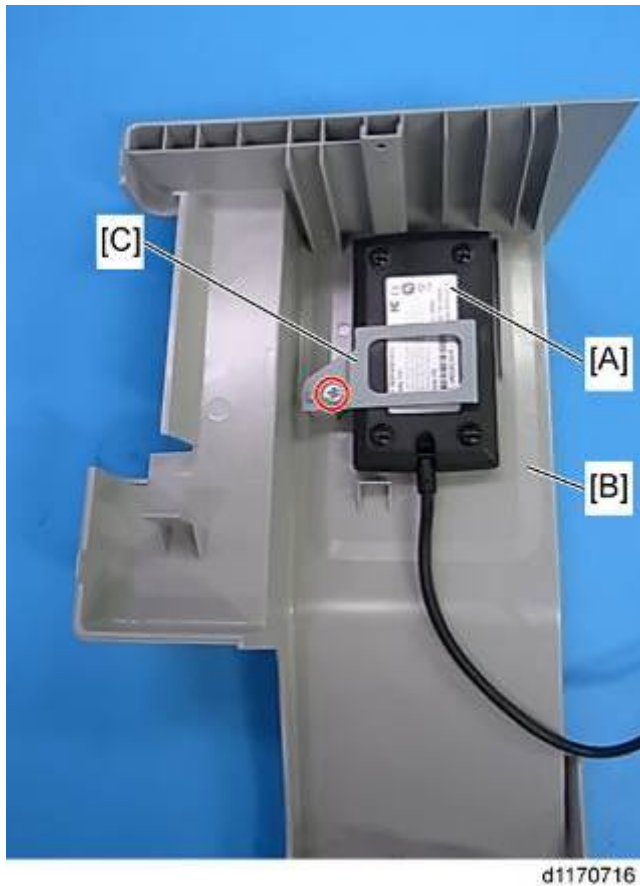
Installation

Note

- Prepare these clamps [A] yourself because they are not included in this kit.

When installing in a machine that has a 1-bin tray unit

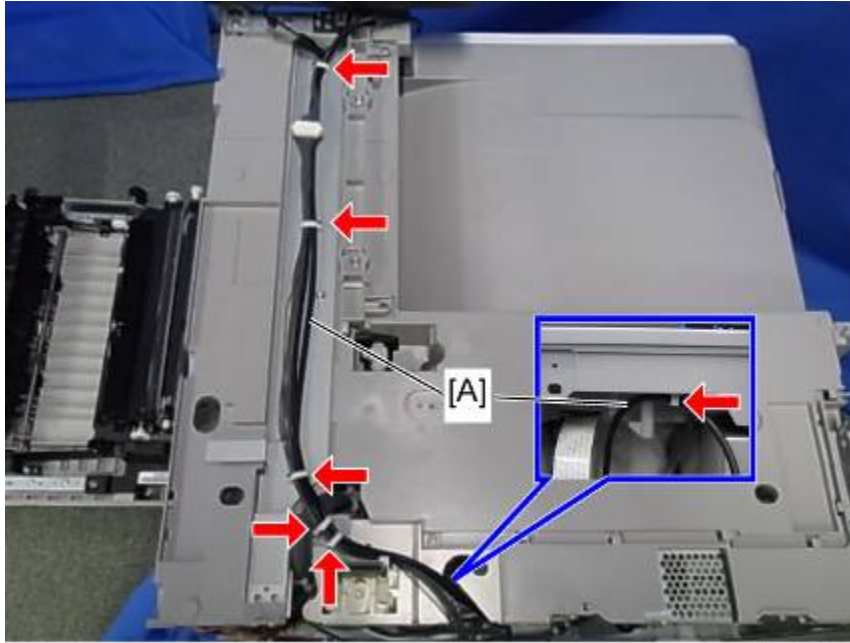
1. Remove the scanner unit (☞ p.2-28).
2. Remove the rear cover (☞ p.2-28).
3. Remove the 1-bin tray unit (☞ p.2-28)



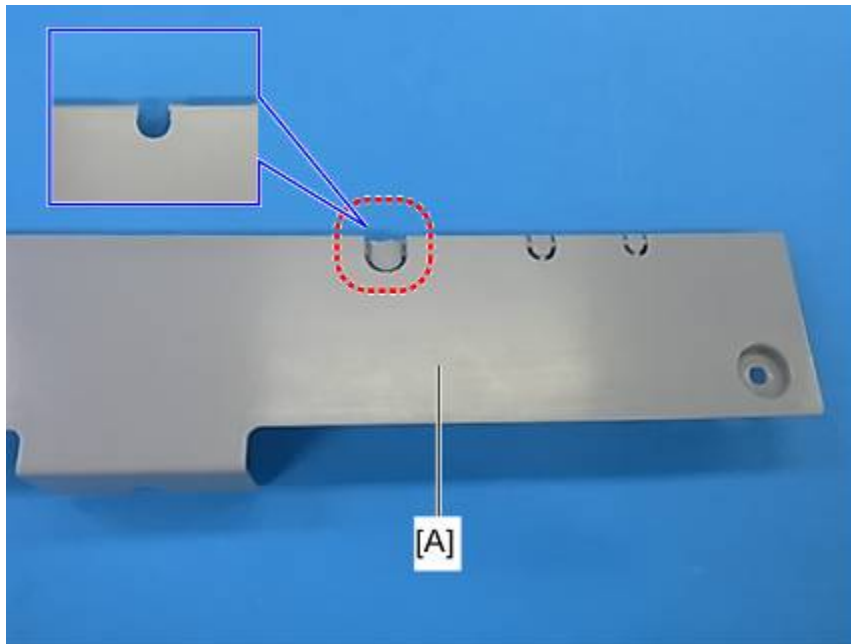
4. Attach the IC card reader [A] to the rear of the upper right cover [B] with the bracket [C] (☞ x 1 included in this kit).

Note

- The bracket [C] is different from that of the base machine. The bracket for the base machine cannot be used. Consult your supervisor to obtain it.

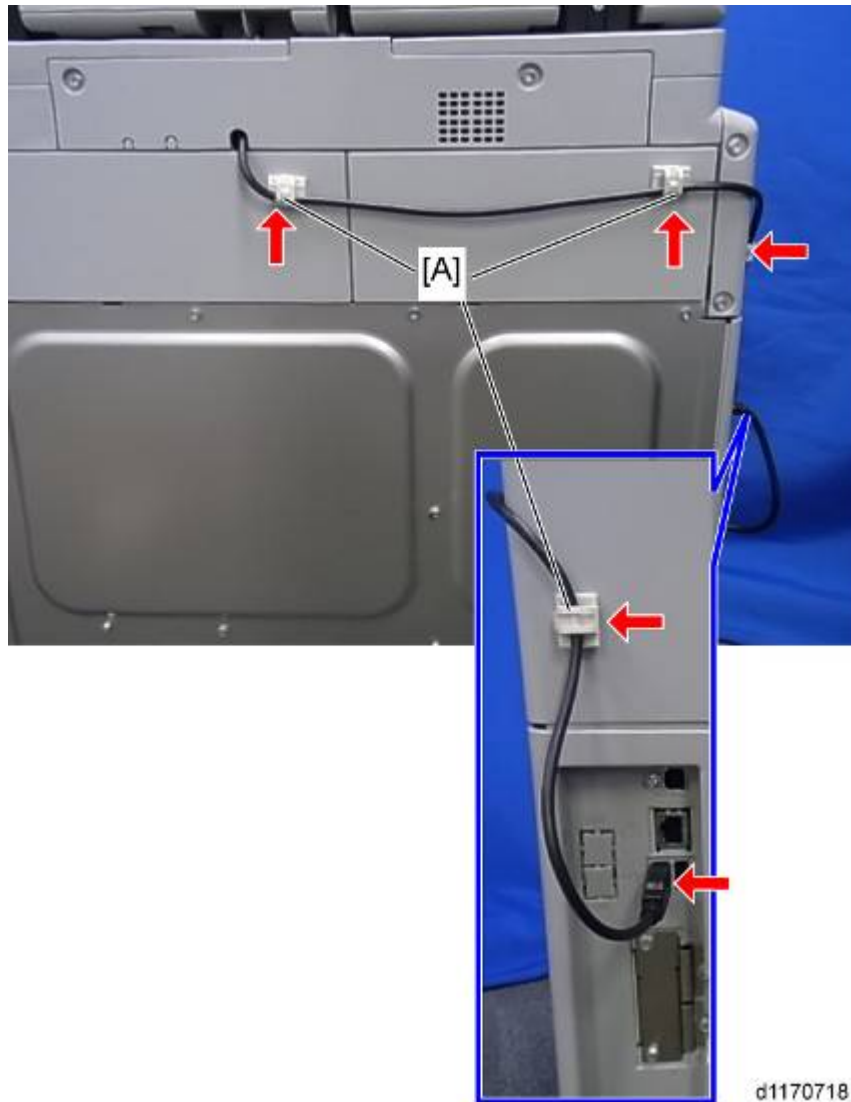


1. Route the USB cable [A] from the IC card reader as shown above (🖨️ x 6).
2. Pull out the USB cable from the rear of the machine in the same way as the installation on the base machine.



3. Cut out the hole for the USB cable to pass through the upper rear cover [A].

IC Card Reader (External Option)



4. Pass the USB cable from the IC card reader through the hole in the upper rear cover, and then reassemble the machine.
5. Attach the clamps [A] to prevent the cable from sagging.
6. Connect the USB cable to the USB receptor at the left of the mainframe as shown above. Either receptor can be used.

⬇ Note

- Prepare these clamps [A] yourself because they are not included in this kit.

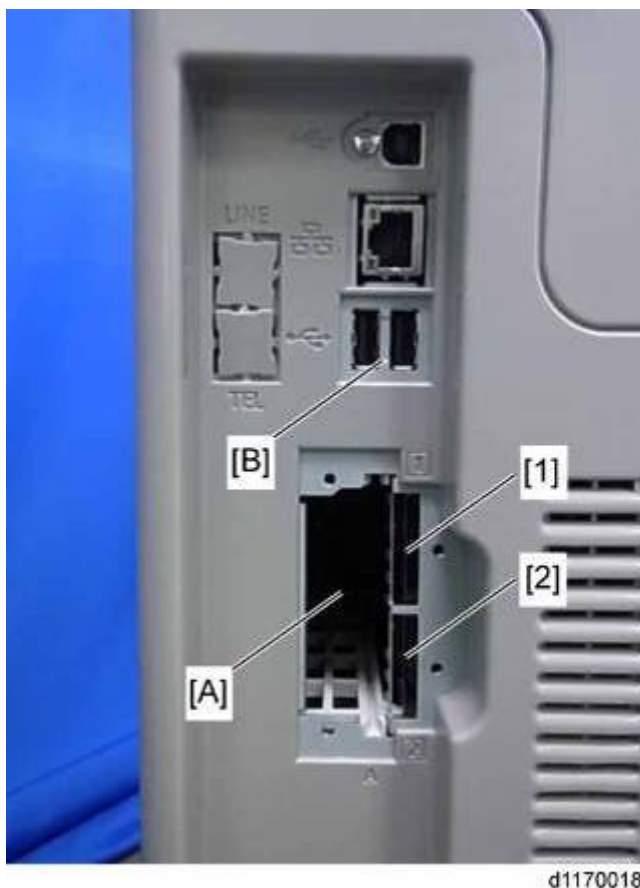
2.14 CONTROLLER OPTIONS

2.14.1 OVERVIEW

★ Important

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

This machine has I/F card slots for optional I/F connections and SD card slots applications. After you install an option, check that the machine can recognize it (see "Check All Connections" at the end of this section).



d1170018

I/F Card Slots

- Slot [A] is used for one of the optional I/F connections (only one can be installed): IEEE1284, IEEE802.11a/g, g (Wireless LAN), File Format Converter and Gigabit Ethernet board.

SD Card Slots

- Slot 1 (upper) is used for optional applications (e.g., Browser Unit, VM Card, PictBridge etc).
- Slot 2 (lower) is used for service only (for example, updating the firmware).

USB Connectors

- These connectors (right and left) [B] are used for the Bluetooth interface unit or the external USB keyboard (external option)

2.14.2 SD CARD APPLI MOVE

Overview

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


If more than one application is required, the applications must be moved to one SD card with SP5873-1 (VM card, PictBridge, Browser unit, etc.).

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

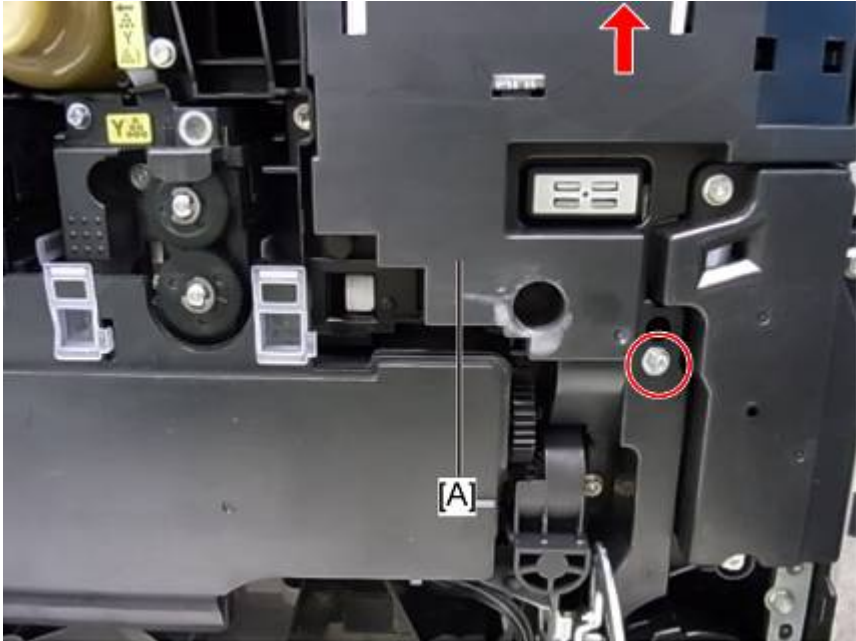
- The data necessary for authentication is transferred with the application program from an SD card to another SD card. Authentication fails if you try to use the SD card after you move the application program from one card to another card.
 - The SD card capacity of the optional VM card is 512 MB. That of other optional SD cards is less than 128 MB. Therefore, files of the other applications must be moved to the VM card if multiple application files should be merged. Any SD-card can be targeted for the application merge if the VM card is not installed.
 - 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.
 - The original application SD card should be stored using the following procedure.
1. Remove the paper tray.



d1170210

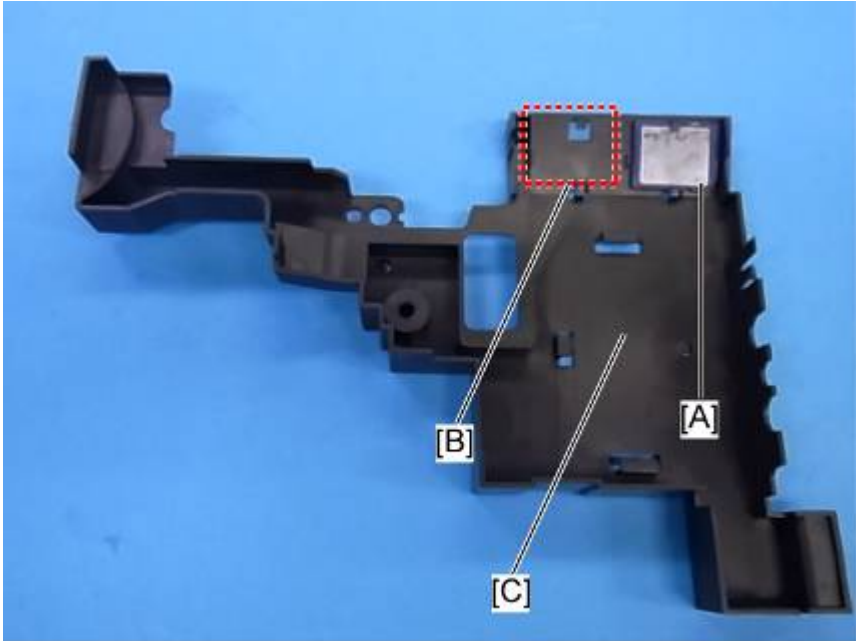
2. Remove the cover [A] ( x 1).

3. Open the front door.



d1170212

4. Remove the cover [A] ( x 1, hook x 1).



d1170213

5. Insert the SD card into either socket [A], [B].

Note

- The place [C] on the cover is for storing the SMC list when the machine is shipped.
6. Reassemble the machine.
 - The original application SD card should be kept in a safe place, for the following reasons:
 - The SD card can be the only proof that the user is licensed to use the application program.
 - You may need to check the SD card and its data to solve a problem in the future.

Move Exec

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

Important

- **Do not turn ON the write protect switch of the system SD card or application SD card on the machine. If the write protect switch is ON, a download error (e.g. Error Code 44) occurs during a firmware upgrade or application merge.**
1. Turn the main switch off.
 2. Make sure that a target SD card is in SD Card Slot 1 (upper). The application program is moved to this SD card.
 3. Insert the source SD card with the application program in SD Card Slot 2 (lower).The application program is copied from this source SD card.
 4. Turn the main switch on.
 5. Start the SP mode.
 6. Select SP5-873-001 "Move Exec".
 7. Follow the messages shown on the operation panel.
 8. Turn the main switch off.
 9. Remove the source SD card from SD Card Slot 2 (lower).
 10. Turn the main switch on.
 11. Check that the application programs run normally.

Undo Exec

"Undo Exec" (SP5-873-002) lets you move back application programs from an SD card in SD Card Slot 1 (upper) to the original SD card in SD Card Slot 2 (lower). You can use this program when, for example, you have mistakenly copied some programs by using Move Exec (SP5-873-001).

★ Important

- Do not turn ON the write protect switch of the system SD card or application SD card on the machine. If the write protect switch is ON, a download error (e.g. Error Code 44) occurs during a firmware upgrade or application merge.
1. Turn the main switch off.
 2. Insert the original SD card in SD Card Slot 2 (lower). The application program is copied back into this card.
 3. Insert the SD card with the application program in SD Card Slot 1 (upper). The application program is copied back from this SD card.
 4. Turn the main switch on.
 5. Start the SP mode.
 6. Select SP5-873-002 "Undo Exec."
 7. Follow the messages shown on the operation panel.
 8. Turn the main switch off.
 9. Remove the SD card from SD Card Slot 2 (lower).
 10. Turn the main switch on.
 11. Check that the application programs run normally.
 12. Make sure that the machine can recognize the option (see "Check All Connections" at the end of this section).


2.14.3 FILE FORMAT CONVERTER TYPE E

⚠ CAUTION

- Unplug the main machine power cord before you do the following procedure.

You can only install one of the following interfaces at one time: (File format converter, IEEE 802.11a/g, g (Wireless LAN), IEEE1284, Bluetooth).



1. Remove the slot cover [A] ( x 2).



d1170021

2. Install the file format converter [A] into the slot and then fasten it with screws.
3. Plug in and turn on the main power switch.
4. Check or set the following SP codes with the values shown below.

SP No.	Title	Setting
SP5-836-001	Capture Function (0:Off 1:On)	"1"
SP5-836-002	Panel Setting	"0"

5. Check the operation.
6. Make sure that the machine can recognize the option (see "Check All Connections" at the end of this section).

2.14.4 IEEE 1284 INTERFACE BOARD TYPE A

Installation Procedure


⚠ CAUTION

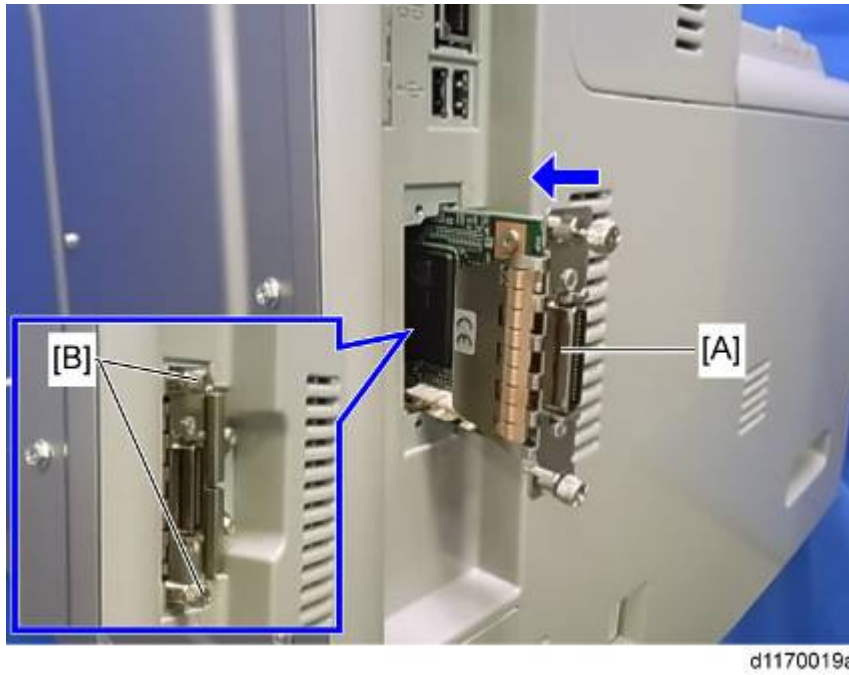
- Unplug the main machine power cord before you do the following procedure.

You can only install one of the following network interfaces at a time: (IEEE 802.11a/g, g (Wireless LAN), IEEE1284, File format converter).



d1170020

1. Remove the slot cover [A] ( x 2).



2. Install the interface board [A] into the slot (Knob-screw x 2 [B]).
3. Make sure that the machine can recognize the option (see "Check All Connections" at the end of this section).

2.14.5 IEEE 802.11A/G, G INTERFACE UNIT TYPE J/K

Installation Procedure

⚠ CAUTION

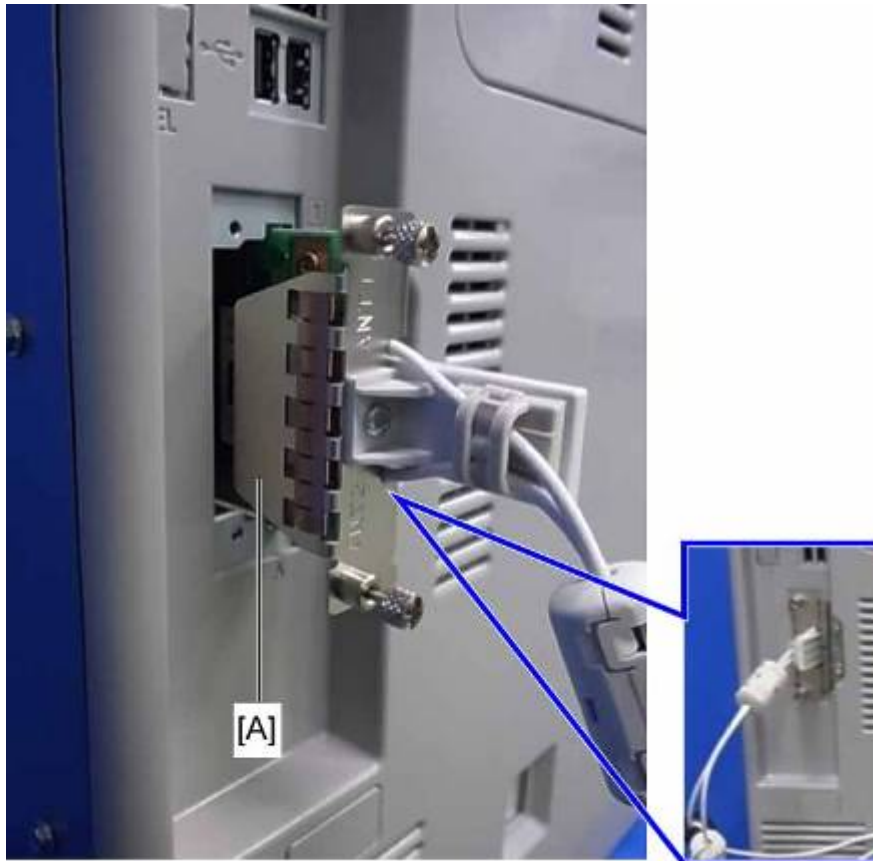
- Unplug the main machine power cord before you do the following procedure.

You can only install one of the following network interfaces at one time: (IEEE 802.11a/g, g (Wireless LAN), IEEE1284, Bluetooth, File format converter).




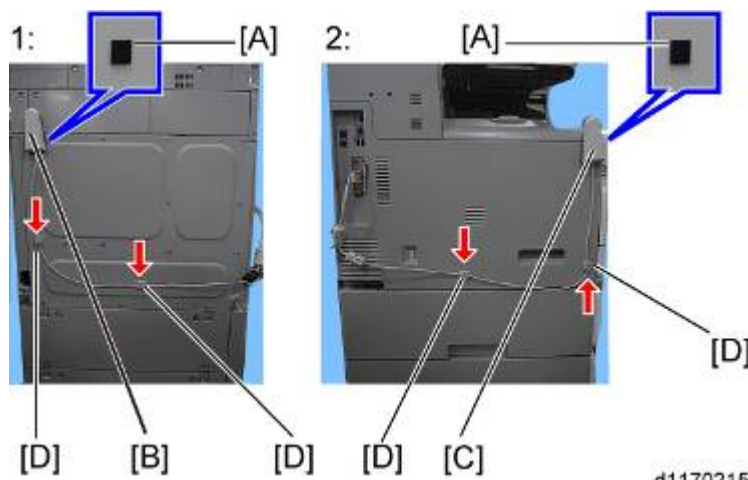
d1170020

1. Remove the slot cover [A] from the board slot ( x 2).



d1170022

2. Install the wireless LAN board [A] (Knob  x 2) into the board slot.
3. Make sure that the machine can recognize the option (see "Check All Connections" at the end of this section).



d1170215

1: Rear

2: Left

4. Peel off the double-sided tapes on the Velcro fasteners [A], and then attach them [A] at the front left and rear of the machine.
5. Attach "ANT1" (having a black ferrite core) [B] to the rear of the machine.

6. Attach "ANT2" (having a white ferrite core) [C] to the front left (forward) of the machine.

Note

- "ANT1" is a transmission/reception antenna and "ANT2" is a reception antenna. Do not attach them at the wrong places.

7. Attach the clamps [D] as shown above.
8. Wire the cables and clamp them (🔌 x 4).

Note

- Make sure that the cables are not slack. Keep them wired tightly along the covers.

You may have to move the machine if the reception is not clear.

- Make sure that the machine is not located near an appliance or any type of equipment that generates strong magnetic fields.
- Put the machine as close as possible to the access point.

UP Mode Settings for Wireless LAN

Enter the UP mode. Then do the procedure below to perform the initial interface settings for IEEE 802.11a/g, g. These settings take effect every time the machine is powered on.

Note

- You cannot use the wireless LAN if you use Ethernet.
- The Bluetooth interface unit and the Wireless LAN interface unit cannot be used simultaneously.

1. Press the "User Tools/Counter" key.
2. On the touch panel, press "System Settings".

Note

- The Network I/F (default: Ethernet) must be set for either Ethernet or wireless LAN.

3. Select "Interface Settings".
4. Press "Wireless LAN". Only the wireless LAN options show.
5. Communication Mode. Select either "802.11 Ad hoc" or "Infrastructure".
6. SSID Setting. Enter the SSID setting. (The setting is case sensitive.)
7. Channel. You need this setting when Ad Hoc Mode is selected.

Region A (mainly Europe and Asia)

Range: 1-13, 36, 40, 44 and 48 channels (default: 11)

In some countries, only the following channels are available:

Range: 1-11 channels (default: 11)

Region B (mainly North America)

Range: 1-11, 36, 40, 44 and 48 channels (default: 11)

Note

- The allowed range for the channel settings may vary for different countries.
8. WEP (Encryption) Setting. The WEP (Wired Equivalent Privacy) setting is designed to protect wireless data transmission. The same WEP key is required on the receiving side in order to unlock encoded data. There are 64 bit and 128 bit WEP keys.

WEP:

Selects "Active" or "Inactive" ("Inactive" is default.).

Range of Allowed Settings:

64 bit: 10 characters

128 bit: 26 characters

9. Press "Return to Default" to initialize the wireless LAN settings.

Press "Yes" to initialize the following settings:

- Transmission mode
- Channel
- Transmission Speed
- WEP
- SSID
- WEP Key

SP Mode and UP Mode Settings for IEEE 802.11a/g, g Wireless LAN

The following SP commands and UP modes can be set for IEEE 802.11a/g, g

SP No.	Name	Function
5840-008	transmission speed	Sets the transmission speed Auto, 54 Mbps, 48 Mbps, 36 Mbps, 24 Mbps, 18 Mbps, 12 Mbps, 9 Mbps, 6 Mbps, 11 Mbps, 5.5 Mbps, 2 Mbps, 1 Mbps (default: Auto)
5840-011	WEP Key Select	Used to select the WEP key (Default: 00).
UP mode	Name	Function
	SSID	Used to confirm the current SSID setting.
	WEP Key	Used to confirm the current WEP key setting.
	WEP Mode	Used to show the maximum length of the string that can be used for the WEP Key entry.

2.14.6 BLUETOOTH INTERFACE UNIT TYPE D

⚠ CAUTION

- Unplug the main machine power cord before you do the following procedure.

You can only install one of the following network interfaces at a time: (IEEE 802.11a/g, g (Wireless LAN), Bluetooth).



d1170026a

⚠ CAUTION

- Do not remove the Bluetooth unit while the power of the machine is on.
1. Turn off the power of the machine, and then unplug the power cable from the wall outlet.
 2. Insert the Bluetooth Interface adapter [A] into the USB connector (Either USB connector can be connectable).
 3. Plug the power cable and turn on the power of the machine.
 4. Make sure that the machine can recognize the option (see "Check All Connections" at the end of this section).

↓ Note


- The Bluetooth interface unit and the Wireless LAN interface unit cannot be used simultaneously.

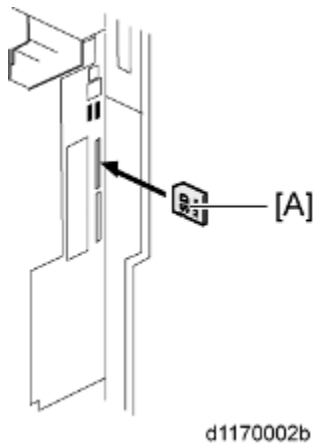
2.14.7 VM CARD TYPE T


⚠ CAUTION

- Unplug the main machine power cord before you do the following procedure.



- Remove the SD-card slot cover [A] from the SD card slots ( x 1).




- Insert the SD card (VM card) in SD slot 1 (upper) with its label face [A] to the rear of the machine.
- Attach the SD-card slot cover, and then turn on the machine ( x 2).
- Make sure that the machine can recognize the option (see "Check All Connections" at the end of this section).

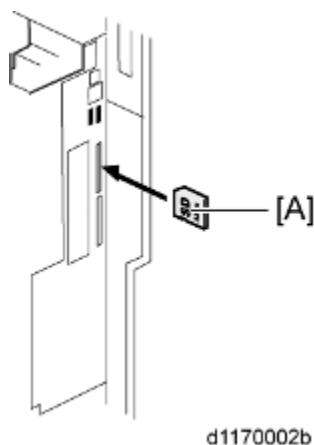
2.14.8 CAMERA DIRECT PRINT CARD TYPE K


⚠ CAUTION

- Unplug the main machine power cord before you do the following procedure.



1. Remove the SD-card slot cover [A] from the SD card slots ( x 1).




2. Insert the SD card (PictBridge) in SD slot 1 (upper) with its label face [A] to the rear of the machine.
3. Attach the SD-card slot cover, and then turn on the machine ( x 2).
4. Make sure that the machine can recognize the option (see "Check All Connections" at the end of this section).

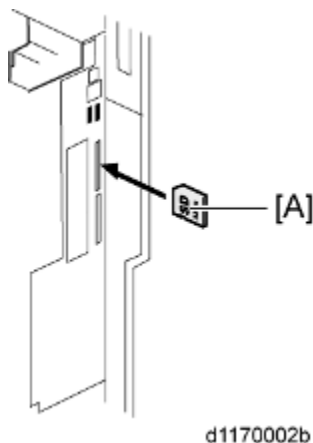
2.14.9 SD CARD FOR NETWARE PRINTING TYPE J


⚠ CAUTION

- Unplug the main machine power cord before you do the following procedure.



1. Remove the SD-card slot cover [A] from the SD card slots ( x 1).



2. Insert the SD card (Netware Printing) in SD slot 1 (upper) with its label face [A] to the rear of the machine..
3. Attach the SD-card slot cover, and then turn on the machine ( x 1).
4. Make sure that the machine can recognize the option (see "Check All Connections" at the end of this section).

2.14.10 BROWSER UNIT TYPE H

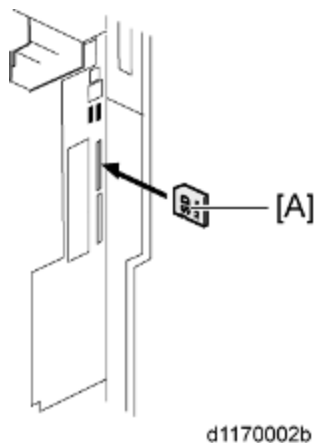
Installation Procedure

⚠ CAUTION



- Unplug the main machine power cord before you do the following procedure.



1. Remove the slot cover [A] for SD cards ( x 1).



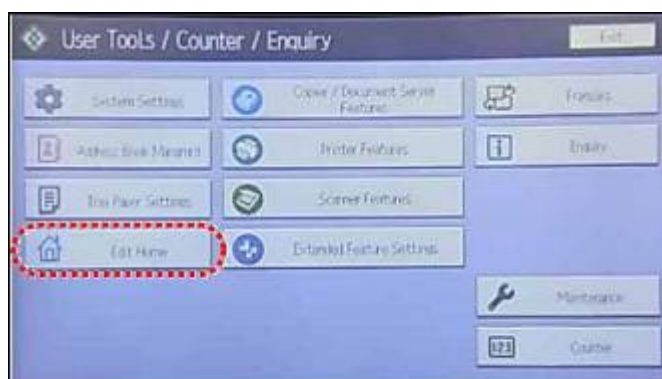
2. Turn the SD-card label face [A] of the browser unit to the rear of the machine. Then, push it slowly into SD slot 1 (upper) until you hear a click.
3. Plug in and turn on the main power switch.

4. Push the "User Tools" key.
 - If an administrator setting is registered for the machine, steps 5 and 6 are required. Otherwise, skip to step 7.
5. Push the "Login/ Logout" key.
6. Login with the administrator user name and password.
7. Touch "Extended Feature Settings" twice on the LCD.
8. Touch "Install" on the LCD.
9. Touch "SD Card".
10. Touch the "Browser" line.
11. Under "Install to" touch "Machine HDD" and touch "Next".
12. When you see "Ready to Install", check the information on the screen to confirm your previous selection.
13. Touch "OK". You will see "Installing the extended feature... Please wait.", and then "Completed".
14. Touch "Exit" to go back to the setting screen.
15. Install the key for "Browser Unit" to the place, where you want.
16. Attach the slot cover ( x 1).
17. Keep the SD card in the place ( SD Card Appli Move) after you install the application program from the card to HDD. This is because: The SD card can be the only proof that the user is licensed to use the application program. You may need to check the SD card and its data to solve a problem in the future.

Browser Icon Addition

This procedure allows the browser icon to appear on the home screen of the operation panel.

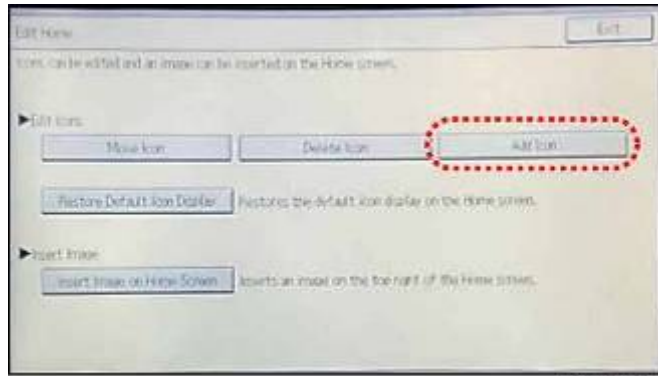
1. Press [User Tools].



d1440144

2. Press [Edit Home].

Controller Options



d1440145

3. Press [Add Icon].



d1440146b

4. Press [Browser].



d1440147

5. Press a [Blank] to set a location for the browser icon.
6. Press [Exit] to end the browser icon addition.


2.14.11 GIGABIT ETHERNET BOARD TYPE A

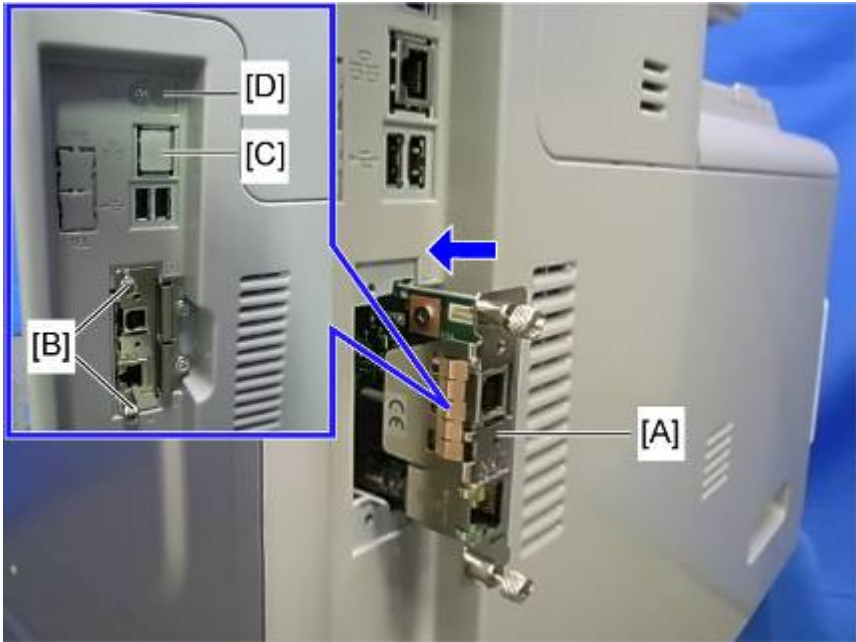
⚠ CAUTION

- Unplug the main machine power cord before you do the following procedure.



d1170020


1. Remove the slot cover [A] ( x 2).

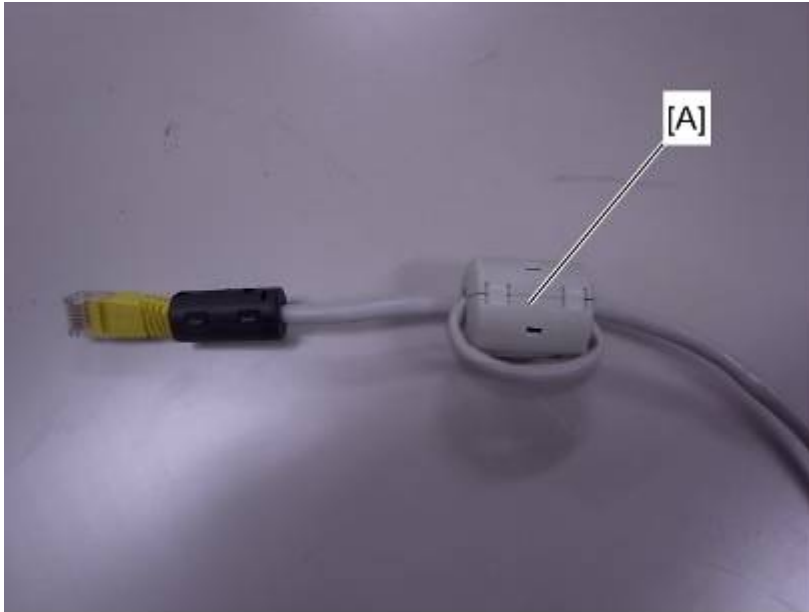


d1170028a

Installation

Controller Options

2. Install the gigabit Ethernet LAN board [A] (Knob  [B] x 2) into the board slot.
3. Install the Ethernet connector and USB type B connector cover included in the Gigabit Ethernet board kit on the 100M bit LAN connector [C] and the USB connector type B [D].



d1170743

4. Attach the ferrite core [A] (included in the kit) to the Ethernet cable of the gigabit ethernet LAN card as shown above.
5. Check the operation of the Gigabit Ethernet

2.14.12 CHECK ALL CONNECTIONS

1. Plug in the power cord. Then turn on the main switch.
 2. Enter the printer user mode. Then print the configuration page.
User Tools → Printer Settings → List Test Print → Config. Page
- All installed options are shown in the "System Reference" column.

PREVENTIVE MAINTENANCE

REVISION HISTORY		
Page	Date	Added/Updated/New
		None

3. PREVENTIVE MAINTENANCE

3.1 MAINTENANCE TABLES

See "Appendices" for the following information:

- Maintenance Tables

3.2 PM PARTS SETTINGS

3.2.1 BEFORE REMOVING THE OLD PM PARTS OR YIELD PARTS

1. Enter the SP mode.
2. Output the SMC logging data with SP5-990-004.
3. Set the following SPs to "1" before you turn the power off. Then, the machine will reset the PM counters automatically. In the case of developer, the developer initialization will also be done automatically.
4. Exit the SP mode.

Item	SP
PCDU	Black: 3701-009
Waste Toner Bottle (if not full or near-full)	3701-020

For other units, we must reset PM counters manually.

3.2.2 AFTER INSTALLING THE NEW PM PARTS

1. Turn on the main power switch.
2. Output the SMC logging data with SP5-990-004 and check the counter values.
3. Make sure that the PM counters for the replaced units are "0" with SP7-803. If the PM counter for a unit was not reset, then reset that counter with SP 7-804.
4. Make sure that the exchange counter counts up with SP7-853.
5. Make sure that the counters for the previous units (SP7-906) on the new SMC logging data list (from step 2 above) are equal to the counters (SP7-803) for these units on the previous SMC logging data list (the list that was output in the "Before removing the old parts" section).
6. Make sure that the unit replacement date is updated with SP7-950.

3.2.3 PREPARATION BEFORE OPERATION CHECK

1. Clean the exposure glasses (for DF and book scanning).
2. Enter the user tools mode.
3. Do the "Automatic Color Calibration(ACC)" for the copier mode & printer mode as follows:
 - Print the ACC test pattern (User Tools > Maintenance > ACC > Start).
 - Put the printout on the exposure glass.
 - Put 10 sheets of white paper on the test chart. This ensures the precise ACC adjustment.
 - Close the ARDF or the platen cover.
 - Press "Start Scanning" on the LCD. Then, the machine starts the ACC.
4. Exit the User Tools mode, and then enter the SP mode.
5. Do the "Forced line position adjustment" as follows.
 - First do SP2-111-3 (Mode c).
 - Then do SP2-111-1 (Mode a).
 - To check if SP 2-111-1 was successful, watch the screen during the process. A message is displayed at the end. Also, you can check the result with SP 2-194-10 to -12.
6. Exit the SP mode.

3.2.4 OPERATION CHECK

Check if the sample image has been copied normally.

REPLACEMENT AND ADJUSTMENT

REVISION HISTORY		
Page	Date	Added/Updated/New
		None

4. REPLACEMENT AND ADJUSTMENT

4.1 BEFOREHAND

CAUTION

- Before installing options, please do the following:
- If there is a fax unit in the machine, 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 switch and disconnect the power cord, the telephone line, and the network cable.

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, turn off the main power switch, check that the shutdown process has finished, then unplug the machine.
- After the main power switch of the machine has been turned off, the power relay board (SDB) keeps the power supply to the controller until the HDD unit has been shut down safely.

4.2 SPECIAL TOOLS

Part Number	Description	Q'ty
B645 5010	SD Card	1
G021 9350	Loop-back Connector – Parallel ^{*NOTE}	1
C401 9503	20X Magnification Scope	1
A257 9300	Grease Barrierta – S552R	1
5203 9502	Silicone Grease G-501	1
A092 9503	C4 Color Test Chart (3 pcs/set)	1
B679 5100	Plug - IEEE1284 Type C	1
B132 9700	Lubricant Powder	1

↓ Note

- The "Loop-back Connector–Parallel" requires the "Plug-IEEE1284 Type A", and the optional IEEE1284 interface option must also be installed.

4.3 IMAGE ADJUSTMENT

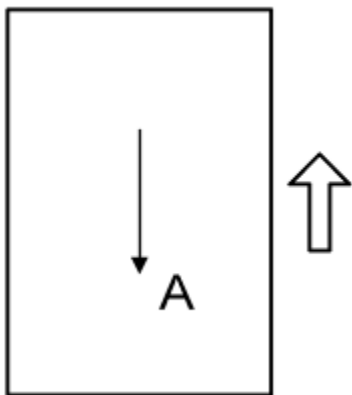
4.3.1 SCANNING

Check the printing registration/side-to-side adjustment and the blank margin adjustment before you do the following scanner adjustments.

Note

- Use C-4 test chart to do the following adjustments.

Scanner sub-scan magnification

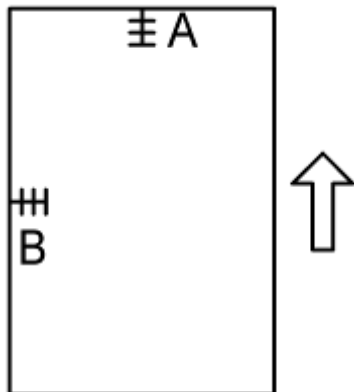


A: Sub-scan magnification

1. Put the test chart on the exposure glass. Then make a copy from one of the feed stations.
2. Check the magnification ratio. Adjust with SP4-008 if necessary.

Standard: $\pm 1.0\%$.

Scanner leading edge and side-to-side registration



A: Leading Edge Registration

1. Put the test chart on the exposure glass. Then make a copy from one of the feed stations.
2. Check the leading edge and side-to-side registration. Adjust the following SP modes if necessary.

Standard: $0 \pm 2\text{mm}$ for the leading edge registration, $0 \pm 2.5\text{mm}$ for the side-to-side registration.

	SP mode
Leading Edge Registration	SP4-010-001
Side-to-Side Registration	SP4-011-001

4.3.2 ARDF

ARDF side-to-side, leading edge registration and trailing edge

Use A4/LT paper to make a temporary test chart as shown above.

1. Put the temporary test chart on the ARDF. Then make a copy from one of the feed stations.
2. Check the registration. Check the leading edge and side-to-side registration. Adjust the following SP modes if necessary.

Standard: 4.2 ± 2 mm for the leading edge registration, 2 ± 1 mm for the side-to-side registration. Use the following SP modes to adjust if necessary.

SP Code	What It Does	Adjustment Range
SP6-006-001	Side-to-Side Regist: 1st	± 2.0 mm
SP6-006-003	Leading Edge Registration	± 5.0 mm
SP6-006-007	Rear Edge Erase (Trailing Edge)	± 5.0 mm

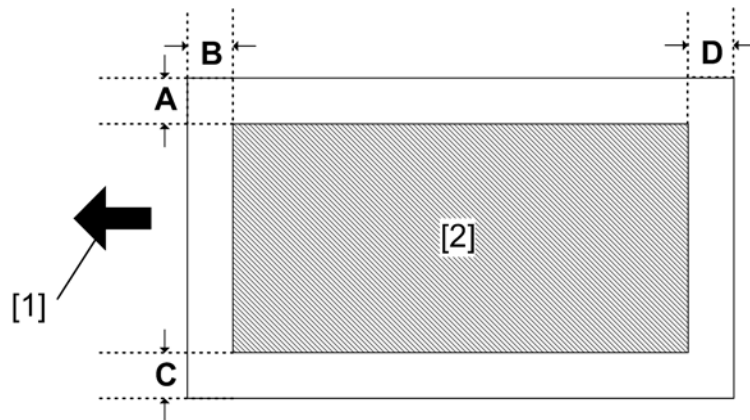
Replacement
and
Adjustment

ARDF sub-scan magnification

1. Put the temporary test chart on the ARDF. Then make a copy from one of the feed stations.
2. Check the magnification ratio. Adjust with SP6-017-001 if necessary.
 - Standard: $\pm 5.0\%$
 - Reduction mode: $\pm 1.0\%$
 - Enlargement mode: $\pm 1.0\%$

4.3.3 REGISTRATION

Image Area



- [1]: Feed direction, [2]: Image area

A = C = 2.25 mm, B = D = 3.25 mm

Make sure that the registration is adjusted within the adjustment standard range as shown below.

Leading Edge

Adjusts the leading edge registration for each paper type and process line speed.

Side to Side

Adjusts the side-to-side registration for each paper feed station. Use SP mode (SP1-002) to adjust the side-to-side registration for the optional paper feed unit and duplex unit.

Adjustment Standard

- Leading edge (sub-scan direction): 3.25 ± 2.75 mm
- Trailing edge (sub-scan direction): 3.25 ± 2.75 mm
- Side to side (main-scan direction): 2.25 ± 1.75 mm

Paper Registration Standard

The registration in both main- and sub-scan directions can change within the following tolerance.

- Sub-scan direction: 0 ± 2 mm
- Main-scan direction: 0 ± 2 mm

Adjustment Procedure

1. Enter SP2-109-003.
2. Print out the test pattern (14: 1-dot trimming pattern) with SP2-109-003.

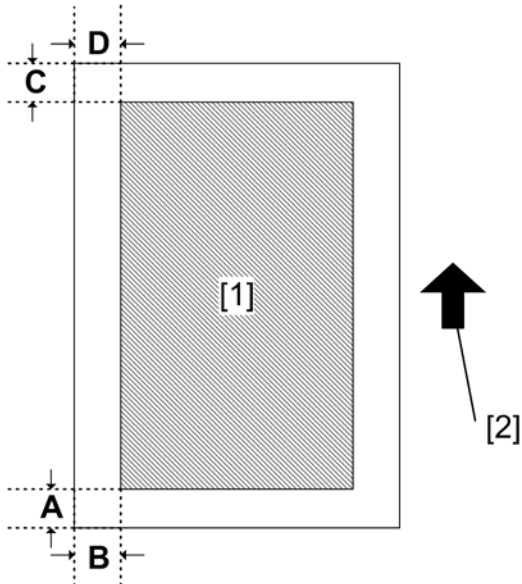
Note

- Registration can change slightly as shown on the previous page. Print some pages of the 1-dot trimming pattern for step 3 and 4. Then average the leading edge and side-to-side registration values, and adjust each SP mode.
3. Do the leading edge registration adjustment.
 - 1) Check the leading edge registration and adjust it with SP1-001.
 - 2) Select the adjustment conditions (paper type and process line speed).
 - 3) Input the value. Then press the \oplus key.
 - 4) Generate a trim pattern to check the leading edge adjustment.
 4. Do the side-to-side registration adjustment.
 - 1) Check the side-to-side registration and adjust it with SP1-002.
 - 2) Select the adjustment conditions (paper feed station).
 - 3) Input the value. Then press the \oplus key.
 - 4) Generate a trim pattern to check the leading edge adjustment.

4.3.4 ERASE MARGIN ADJUSTMENT

Note

- Adjust the erase margin C and D only if the registration (main scan and sub scan) cannot be adjusted within the standard values. Do the registration adjustment after adjusting the erase margin C and D, and then adjust the erase margin A and B.



- [1]: Image area, [2]: Feed direction
- Enter SP2-109-003.
 - Print out the test pattern (14: 1-dot trimming pattern) with SP2-109-003.
 - Check the erase margin A and B. Adjust them with SP2-103-001 to -004 if necessary.
 - Leading edge: 0.0 to 9.9 mm (default: 4.2 mm)
 - Side-to-side: 0.0 to 9.9 mm (default: 2.0 mm)
 - Trailing edge: 0.0 to 9.9 mm (default: 4.2 mm)

4.3.5 COLOR REGISTRATION

Line Position Adjustment

The automatic line position adjustment usually is done for a specified condition to get the best color prints.

Do the following if color registration shifts:

- Do "Auto Color Registration" as follows to do the forced line position adjustment.
 1. First do SP2-111-3.
 2. Then do SP2-111-1.

To check if SP 2-111-1 was successful, watch the screen during the process. A message is displayed at the end. Also, you can check the result with SP 2-194-10 to -12.

- You should also do the line position adjustment at these times:
 - After you transport or move the machine (you should do the forced line position adjustment if you install the machine at the user location.) if the machine is pre-installed at the workshop and moved to the user location,
 - When you remove or replace the motors, clutches, and/or gears related to the drum/development/transfer sections
 - When you remove or replace the image transfer belt, image transfer belt unit or laser optical housing unit

4.3.6 PRINTER GAMMA CORRECTION

Note

- The ACC is usually sufficient to adjust the color balance to get the best print output. You only need the printer gamma correction to fine-tune to meet user requirements.

Use SP modes if you want to modify the printer gamma curve created with ACC. You can adjust the gamma data for the following:

- Highlight
- Middle
- Shadow areas
- IDmax.

The adjustable range is from 0 to 30 (31 steps).

Copy Mode

- KCMY Color Balance Adjustment -

The adjustment uses only "Offset" values.

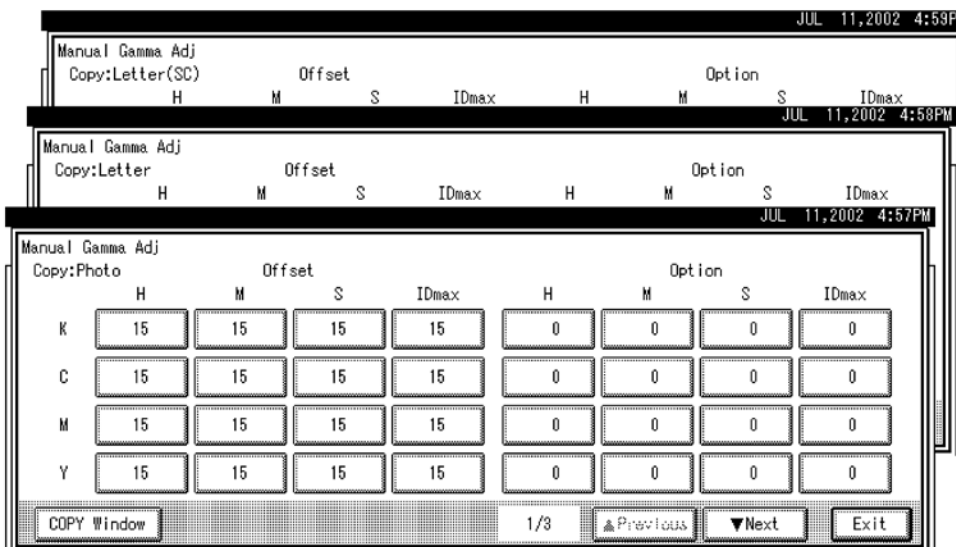
Note

- Never change "Option" values (default value is 0).

Highlight (Low ID)	Levels 2 through 5 in the C4 chart 10-level scale
Middle (Middle ID)	Levels 3 through 7 in the C4 chart 10-level scale
Shadow (High ID)	Levels 6 through 9 in the C4 chart 10-level scale
ID max	Level 10 in the C4 chart 10-level scale (affects the entire image density.)
Offset	The higher the number in the range associated with the low ID, middle ID, high ID, and ID max, the greater the density.

There are four adjustable modes (can be adjusted with SP4-918-009):

- Copy Photo mode
- Copy Letter mode
- Copy Letter (Single Color) mode
- Copy Photo (Single Color) mode



- Adjustment Procedure -

1. Copy the C-4 chart in the mode that you want to adjust.
2. Enter the SP mode.
3. Select "System SP."
4. Select SP4-918-009.
5. Adjust the offset values until the copy quality conforms to the standard (see the table below).

↓ Note

- 1. Never change "Option" value (default value is "0").
- 2. Adjust the density in this order: "ID Max", "Middle", "Shadow", "Highlight".

- Photo Mode, Full Color -

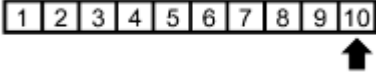
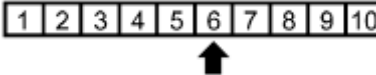
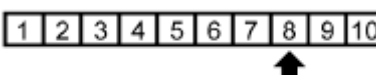
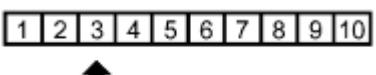
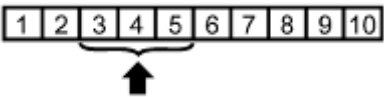
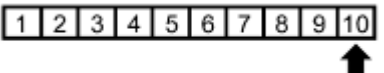
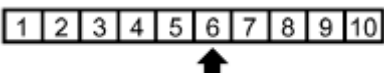
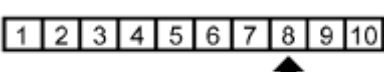
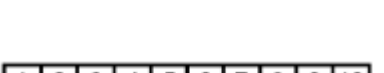
	Item to Adjust	Level on the C-4 chart	Adjustment Standard
1	ID max: (K, C, M, and Y)		Adjust the offset value so that the density of level 10 matches that of level 10 on the C-4 chart.
2	Middle (Middle ID) (K, C, M, and Y)		Adjust the offset value so that the density of level 6 matches that of level 6 on the C-4 chart.
3	Shadow (High ID) (K, C, M, and Y)		Adjust the offset value so that the density of level 8 matches that of level 8 on the C-4 chart.
4	Highlight (Low ID) (K, C, M, and Y)		Adjust the offset value so that dirty background does not show on the copy and the density of level 3 is slightly lighter than that of level 3 on the C-4 chart.

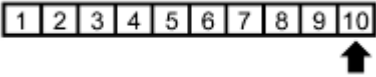
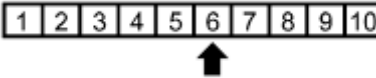
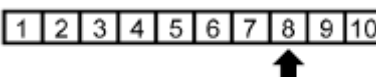
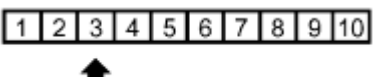
Image Adjustment

5	<p>K Highlight (Low ID) (C,M, and Y) <on the full color copy></p>		<p>Adjust the offset value so that the color balance of black scale levels 3 through 5 in the copy is seen as gray (no C, M, or Y should be visible). If the black scale contains C, M, or Y, do steps 1 to 4 again.</p>
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- Photo Mode, Single Color -

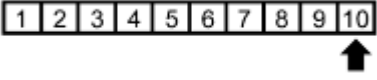
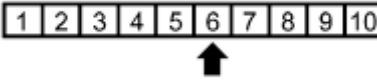
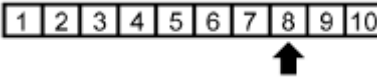
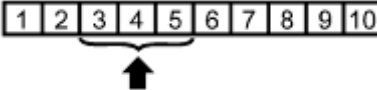
	Item to Adjust	Level on the C-4 chart	Adjustment Standard
1	ID max: (K)		Adjust the offset value so that the density of level 10 matches that of level 10 on the C-4 chart.
2	Middle (Middle ID) (K)		Adjust the offset value so that the density of level 6 matches that of level 6 on the C-4 chart.
3	Shadow (High ID) (K)		Adjust the offset value so that the density of level 8 matches that of level 8 on the C-4 chart.
4	Highlight (Low ID) (K)		Adjust the offset value so that dirty background does not show on the copy and the density of level 3 is slightly lighter than that of level 3 on the C-4 chart.

- Text (Letter) Mode, Full Color -

	Item to Adjust	Level on the C-4 chart (K)	Adjustment Standard
1	ID max: (K, C, M, and Y)		Adjust the offset value so that the density of level 10 matches that of level 10 on the C-4 chart.
2	Middle (Middle ID) (K, C, M, and Y)		Adjust the offset value so that the density of level 6 matches that of level 6 on the C-4 chart.
3	Shadow (High ID) (K, C, M, and Y)		Adjust the offset value so that the density of level 8 matches that of level 8 on the C-4 chart.
4	Highlight (Low ID) (K, C, M, and Y)		Adjust the offset value so that dirty background does not show on the copy and the density of level 3 is slightly lighter than that of level 3 on the C-4 chart.

Replacement and Adjustment

- Text (Letter) Mode, Single Color -

	Item to Adjust	Level on the C-4 chart (K)	Adjustment Standard
1	ID max: (K)		Adjust the offset value so that the density of level 10 matches that of level 10 on the C-4 chart.
2	Middle (Middle ID) (K)		Adjust the offset value so that the density of level 6 matches that of level 6 on the C-4 chart.
3	Shadow (High ID) (K)		Adjust the offset value so that the density of level 8 matches that of level 8 on the C-4 chart.
4	Highlight (Low ID) (K)		Adjust the offset value so that dirty background does not show on the copy and the density of level 3 is slightly lighter than that of level 3 on the C-4 chart.

Note

- Text parts of the test pattern cannot be printed clearly after you adjust "shadow" as shown above. At this time, check if the 5 line/mm pattern at each corner is printed clearly. If it is not, adjust the offset value of "shadow" again until it is.

Printer Mode

There are six adjustable modes (select these modes with printer SP1-102-001):

- 1200 x 1200 photo mode
- 1200 x 1200 text mode
- 2400 x 600 photo mode
- 2400 x 600 text mode
- 1800 x 600 photo mode
- 1800 x 600 text mode
- 600 x 600 photo mode
- 600 x 600 text mode

	K	C	M	Y
Highlight	SP1-104-1	SP1-104-21	SP1-104-41	SP1-104-61
Shadow	SP1-104-2	SP1-104-22	SP1-104-42	SP1-104-62
Middle	SP1-104-3	SP1-104-23	SP1-104-43	SP1-104-63
IDmax	SP1-104-4	SP1-104-24	SP1-104-44	SP1-104-64

- Adjustment Procedure -

1. Do ACC for the printer mode.
2. Turn the main power off and on.
3. Enter SP mode.
4. Select "Printer SP".
5. Select SP1-102-001. Then select the necessary print mode to adjust.
6. Choose SP1-103-1 to print out a tone control test sheet if you want to examine the image quality for these settings.
7. Adjust the color density with SP1-104. Compare the tone control test sheet with the C4 test chart.

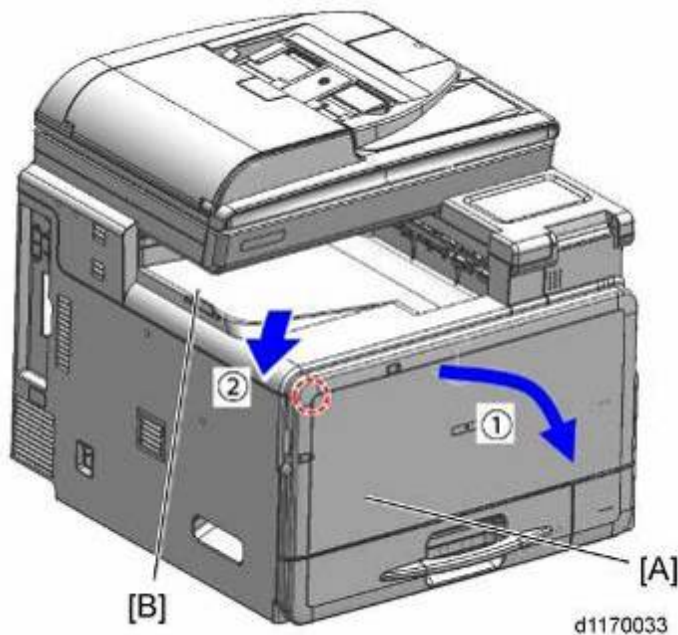
Note


- Adjust the density in this order: "ID Max", "Shadow", "Middle", "Highlight".
8. Use SP1-105-001 to keep the adjusted settings.

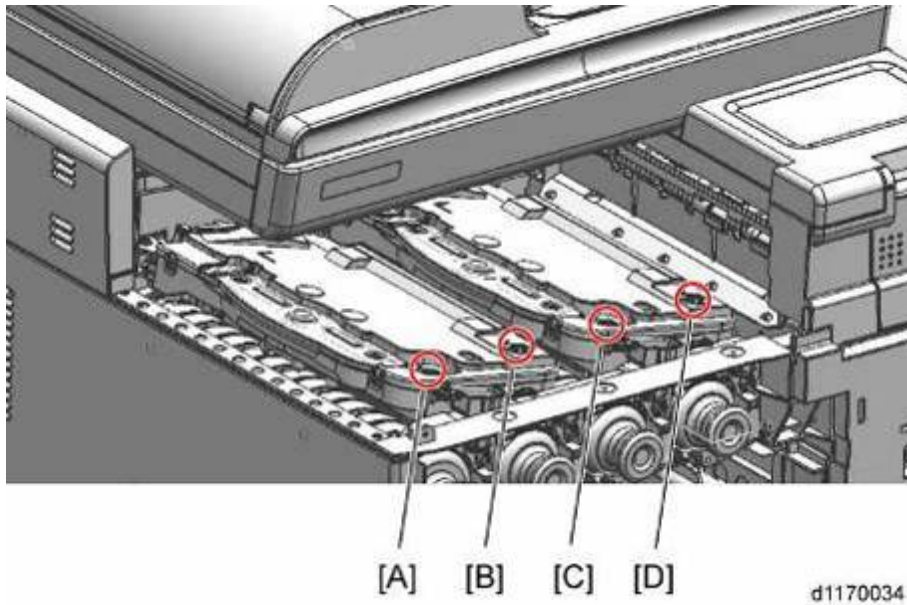
4.3.7 COLOR SKEW ADJUSTMENT

The skew adjustment of this machine should be performed manually. The adjustment flow is as follows:

1. Execute 'MUSIC' (SP2-111-002) and check the result for each color with the following SPs.
 - SP2-117-004 (Black)
 - SP2-117-002 (Cyan)
 - SP2-117-001 (Magenta)
 - SP2-117-003 (Yellow)
2. The color skew adjustment should be executed if one or more of the above SP values is not within ± 5 . No skew adjustment is required when all SP values are within ± 5 . However, if one or more of the SP values is not within ± 5 , then you must adjust color skew for any color that has an SP value that is not 0.



3. Open the front door [A] and then remove the cover [B] ( x 1)
4. Close the front door [A] and execute "MUSIC" (SP2-111-002).



[A]: Adjustment knob for Black

[B]: Adjustment knob for Cyan

[C]: Adjustment knob for Magenta

[D]: Adjustment knob for Yellow

Note

- There are two knobs on each of the two LD units.
- Clockwise: 90 degrees corresponds to changing the SP value by "+1"
- Counterclockwise: 90 degrees corresponds to changing the SP value by "-1"
- A click is felt every 90 degree rotation of the knob.

5. Rotate each knob [A] [B] [C] [D] corresponding to the value shown in SP2-117-001 to 004.
See the note below for how to do this.

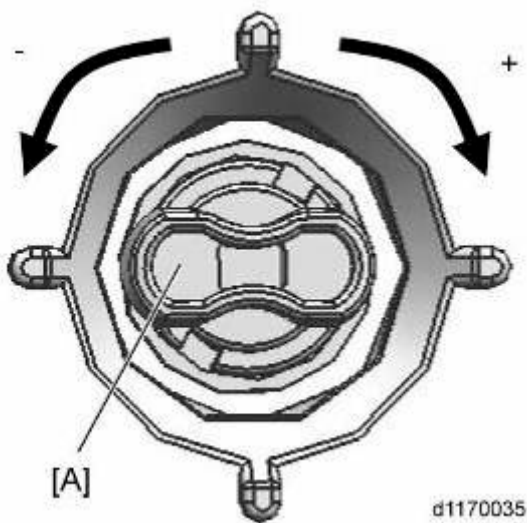


Image Adjustment

↓ Note

- Examples:
- If the SP value is +6, turn knob [A] in the above diagram 6 clicks clockwise.
- If the SP value is -7, turn knob [A] 7 clicks counterclockwise.

6. Reassemble the machine.

↓ Note

- Never touch the LD units when the upper cover is attached. Otherwise, the LD unit may move, and you may have to adjust the color skew again.
7. Check the SPs (SP2-117-001 to 004). If even one of them is over 6 (either positive or negative), repeat steps 1, 2, 3 and 6. The adjustment is finished if all SP values are within ± 5 .

4.4 EXTERIOR COVERS

4.4.1 FRONT COVER




d1170054

1. Pull out the paper tray.

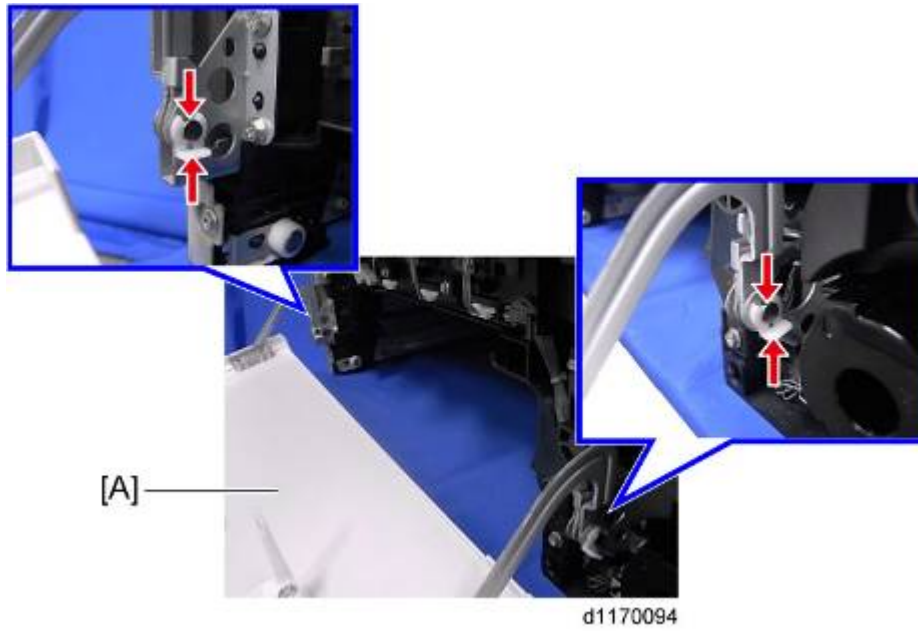


d1170093

2. Front lower cover [A] ( x 1)
3. Open the front cover.

Replacement
and
Adjustment

Exterior Covers



4. Front cover [A] (🔩 x 2, pins x 2)

4.4.2 UPPER LEFT COVER



1. Upper left cover [A] (🔩 x 1)

4.4.3 LEFT COVER



d1170054

1. Pull out the paper tray.

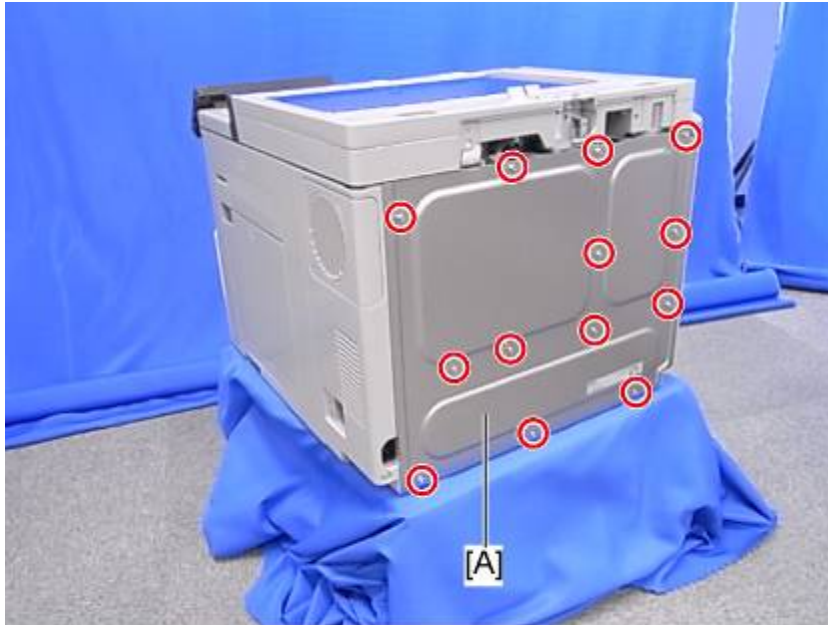


d1170055

2. Open the front cover and remove the left cover [A] ( x 2).

Replacement
and
Adjustment

4.4.4 REAR COVER



d1170052

1. Rear cover [A] ( x 13)

4.4.5 REAR RIGHT COVER




d1180046

1. Open the duplex unit.



d1170148

2. Rear right cover [A] ( x 3)

Note

- Remove the rear right cover while pushing it downward.

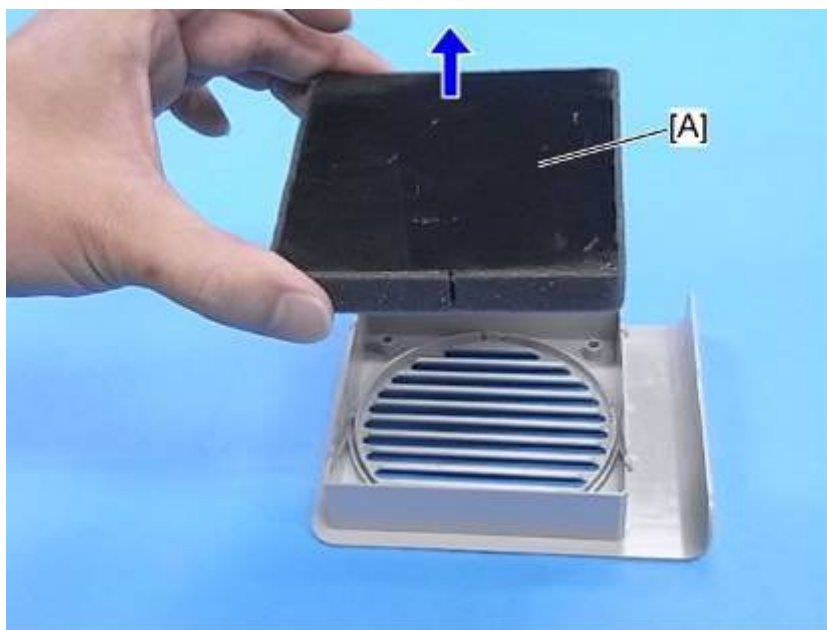
Replacement
and
Adjustment

4.4.6 EXHAUST FILTER



d1170150


1. Filter cover [A]

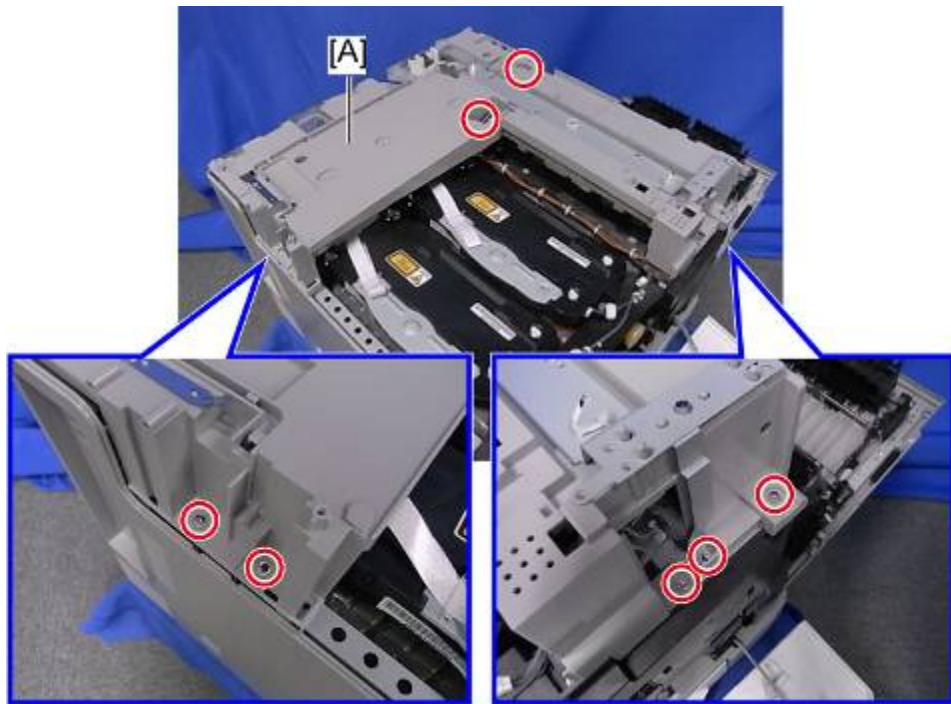


d1170151


2. Remove the exhaust filter [A] from the filter cover.

4.4.7 INNER COVER

1. Scanner unit ( p.4-30)

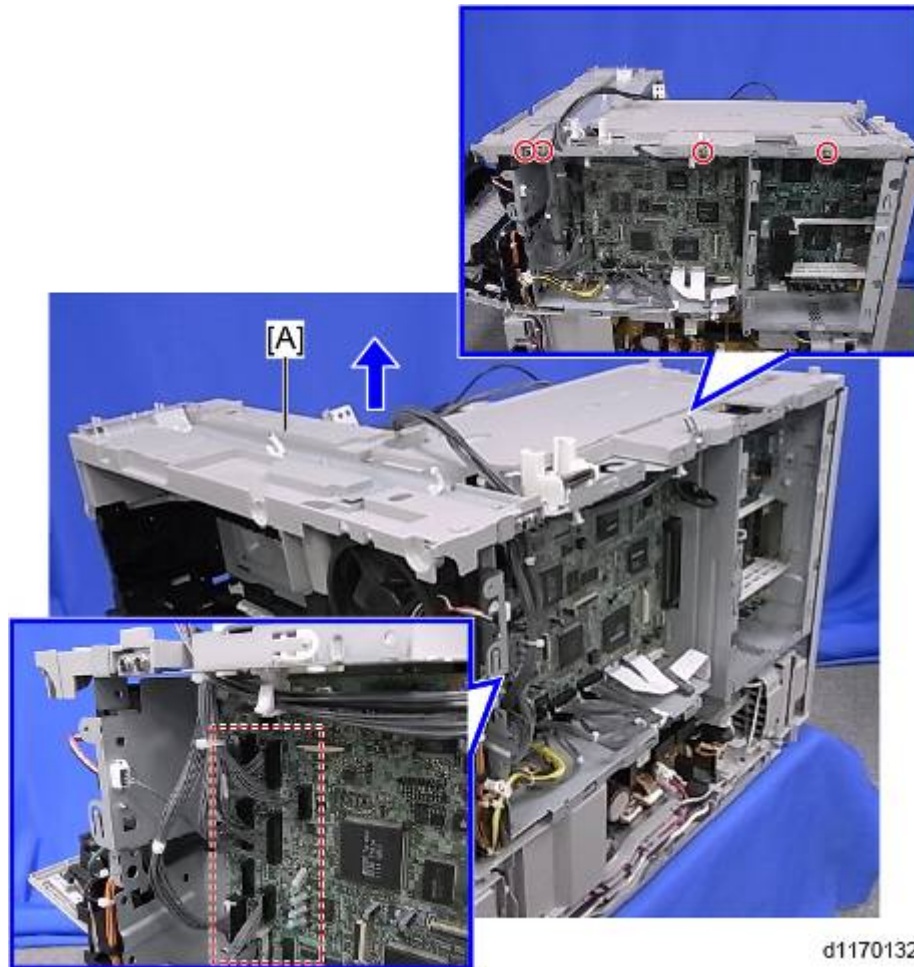




d1170131

2. Remove seven screws from the inner cover [A] ( x 7).


Replacement
and
Adjustment

Exterior Covers




3. Inner cover [A] ( x 4,  x 7)

4.4.8 OPERATION PANEL

1. Scanner unit ( p.4-30)
2. Make the operation panel flat (see the following diagram).




d1170133

3. Front upper cover [A] ( x 1)

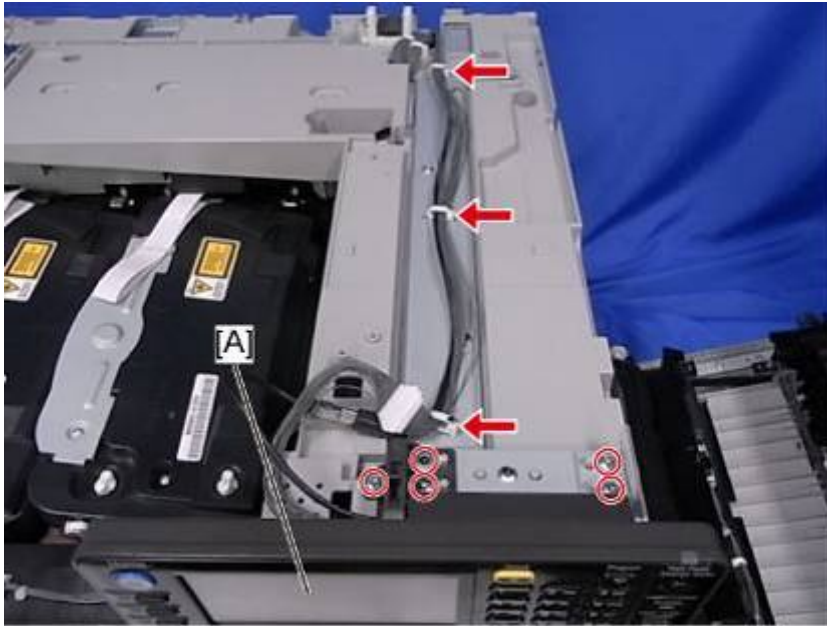


d1170134

4. Upper right cover [A] ( x 1)

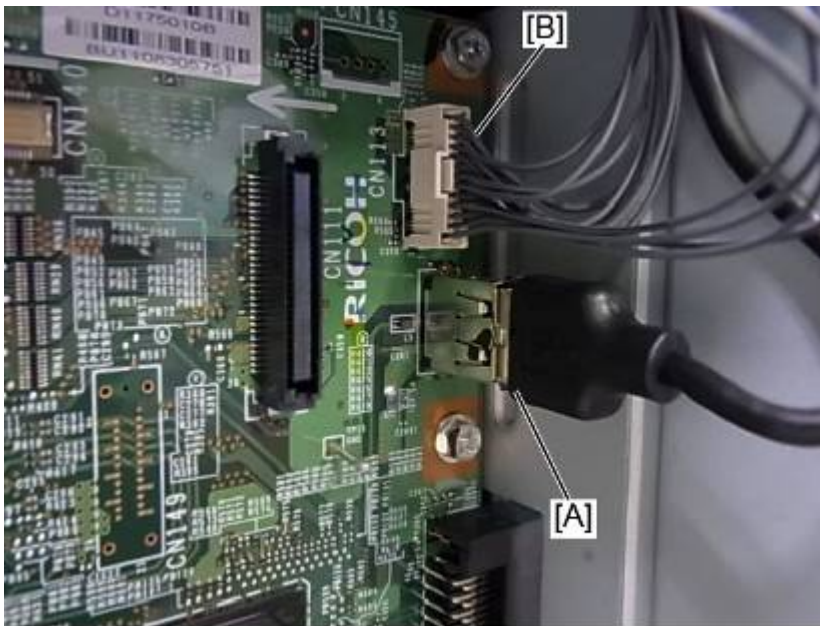
Replacement
and
Adjustment

Exterior Covers



d1170135

5. Operation panel [A] (🖨️ x 3, 🔑 x 5)
6. Rear cover (🖨️ p.4-22)



d1170214b


7. Disconnect the USB connector [A] and harness [B] (CN113) (🖨️ x 2).

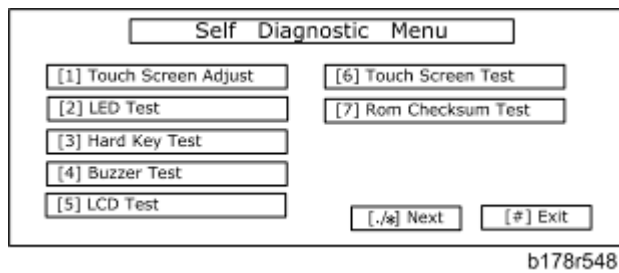
4.4.9 TOUCH PANEL POSITION ADJUSTMENT


Note

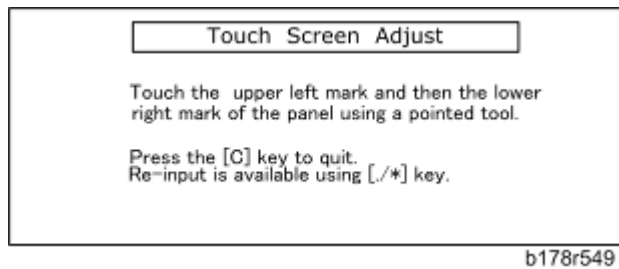
- It is necessary to calibrate the touch panel at the following times:
- When you replace the operation panel.
- When you replace the controller board.
- When the touch panel detection function does not operate correctly



Do not use items [2] to [9] on the Self-Diagnostic Menu. These items are for design use only.

1. Press , press the "1" "9" "9" "3" keys, press the "Clear/Stop" key 5 times to open the Self-Diagnostics menu.



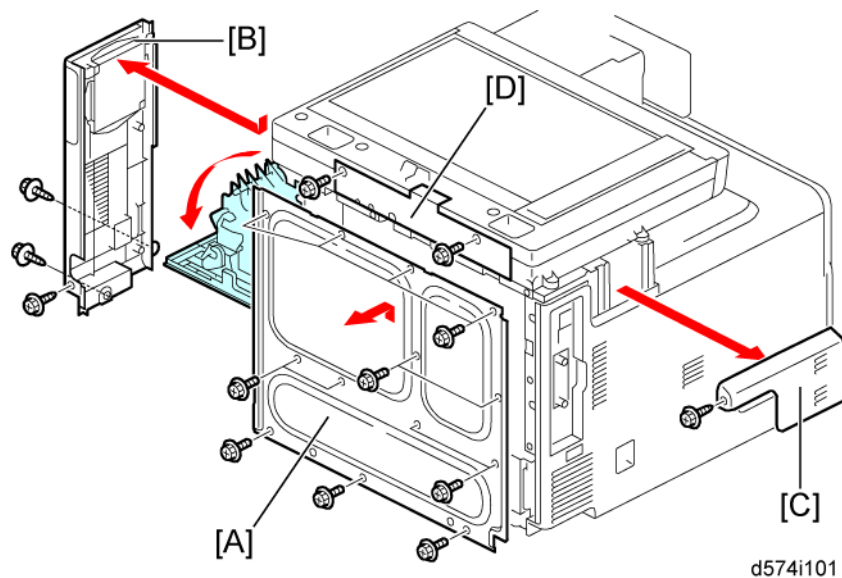
2. On the touch screen press "Touch Screen Adjust" (or press the "1" key).
3. Use a pointed (not sharp) tool to press the upper left mark .







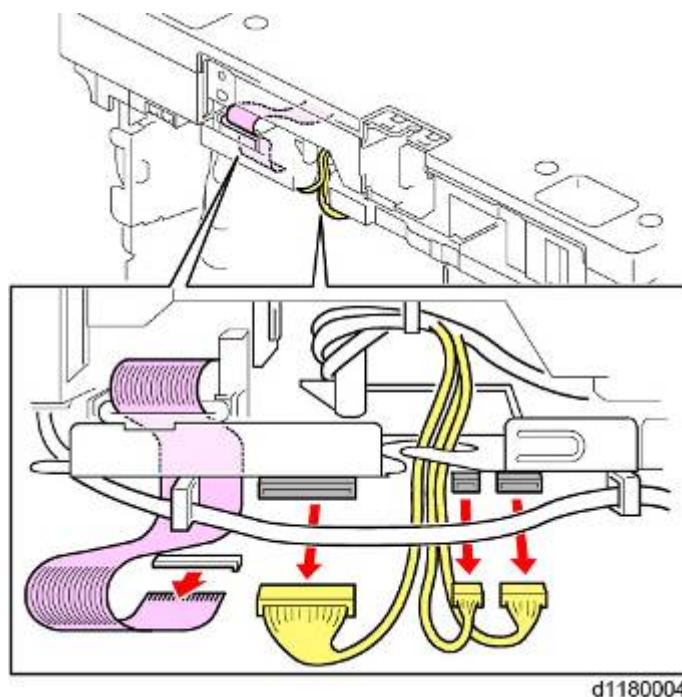
4. Press the lower right mark when  shows.
5. Press [#] OK on the screen (or press ) when you are finished.
6. Touch [#] Exit on the screen to close the Self-Diagnostic menu. Save the calibration settings.


4.5 SCANNER

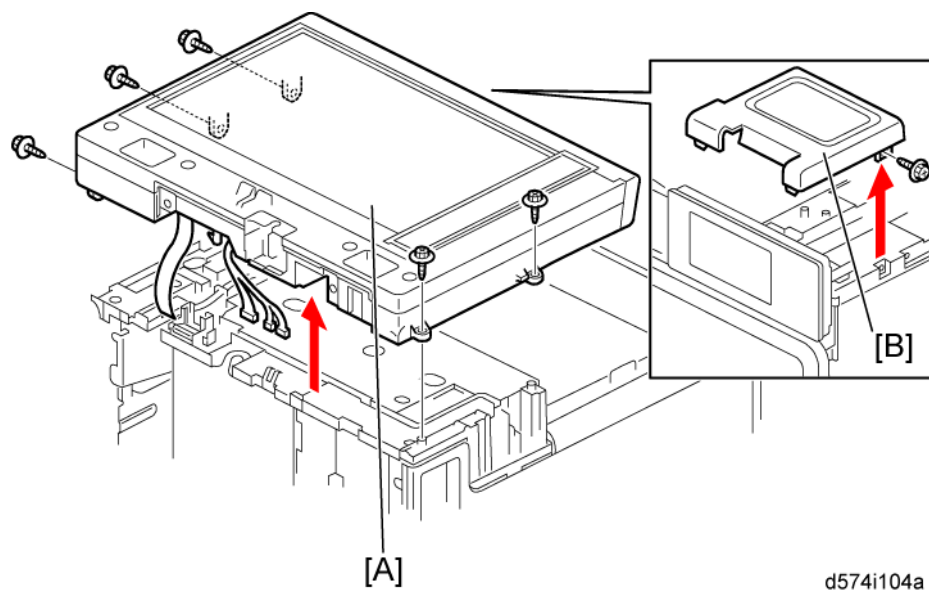
4.5.1 SCANNER UNIT





1. Rear cover [A] ( x 13)
2. Open the duplex unit.
3. Rear right cover [B] ( x 3)
4. Upper left cover [C] ( x 1)
5. Scanner rear cover [D] ( x 2)



6. Disconnect four connectors ( x 4).





d574i104a

- 7. Front right cover [B] ( x 1)
- 8. Scanner unit [A] ( x 5)

Replacement
and
Adjustment

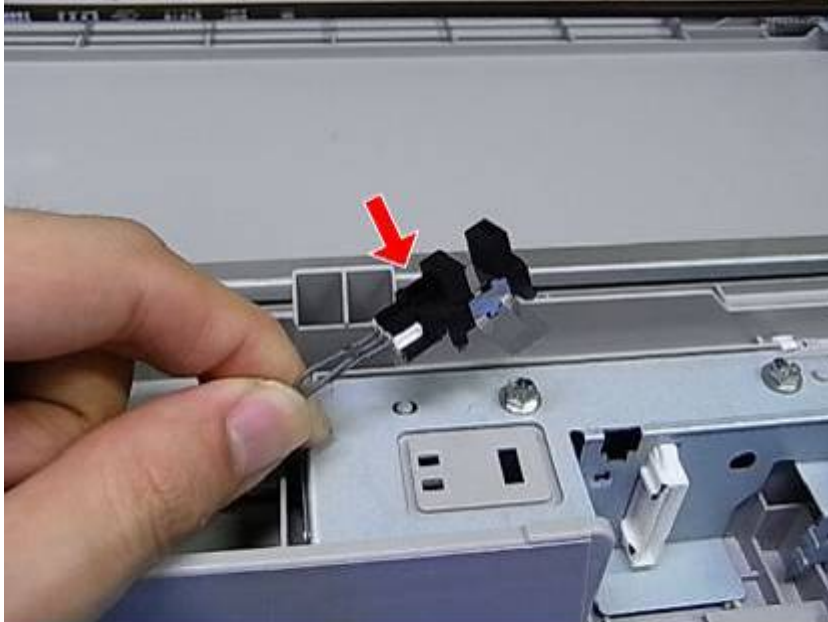
4.5.2 ARDF COVER OPEN / CLOSE SENSOR

1. ARDF ( p.4-144)
2. Scanner front cover ( p.4-30 "Scanner Unit")




d1180006

3. Scanner upper cover ( x 7)



d1180007

4. ARDF open / close sensor (Hook x 3,  x 1)

4.5.3 CARRIAGE UNIT HP SENSOR

1. ARDF (p.4-144)
2. Scanner front cover (p.4-30 "Scanner Unit")
3. Scanner upper cover (p.4-32 "ARDF Cover Open / Close Sensor")



4. Move the carriage to the right.

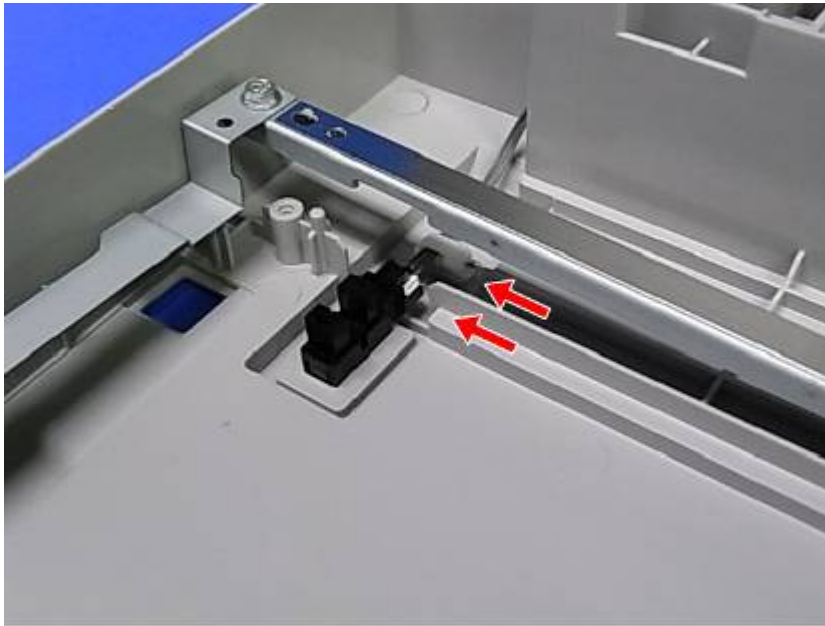
★ Important

- Hold the carriage belt with the hand and move the carriage when moving the carriage.
- Never hold the carriage itself.





Scanner




5. Remove one screw of the bracket ( x 1).



d1180010


6. Remove the carriage HP sensor while lifting up the bracket slightly ( x 1,  x 1, hook x 2).

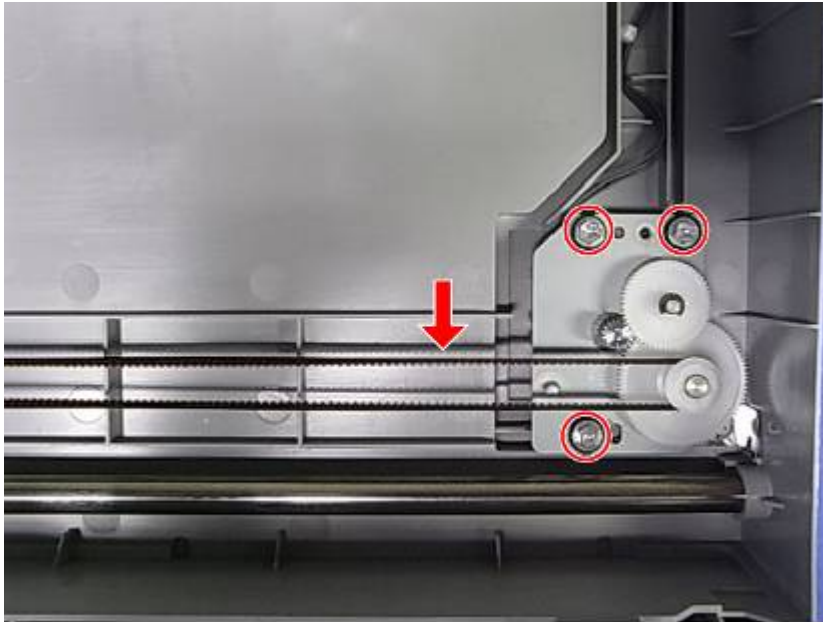
4.5.4 SCANNER MOTOR

1. ARDF ( p.4-144)
2. Scanner front cover ( p.4-30 "Scanner Unit")
3. Scanner upper cover ( p.4-32 "ARDF Cover Open / Close Sensor")




d1180011

4. Shield plate ( x 2)





d1180012

- 5. Scanner motor with the bracket ( x 3, belt x 1)



d1180013

- 6. Scanner motor ( x 1,  x 2)

Replacement
and
Adjustment

4.5.5 CARRIAGE

1. ARDF (p.4-144)
2. Scanner front cover (p.4-30 "Scanner Unit")
3. Scanner upper cover (p.4-32 "ARDF Cover Open / Close Sensor")



d1180008

4. Move the carriage to the right.

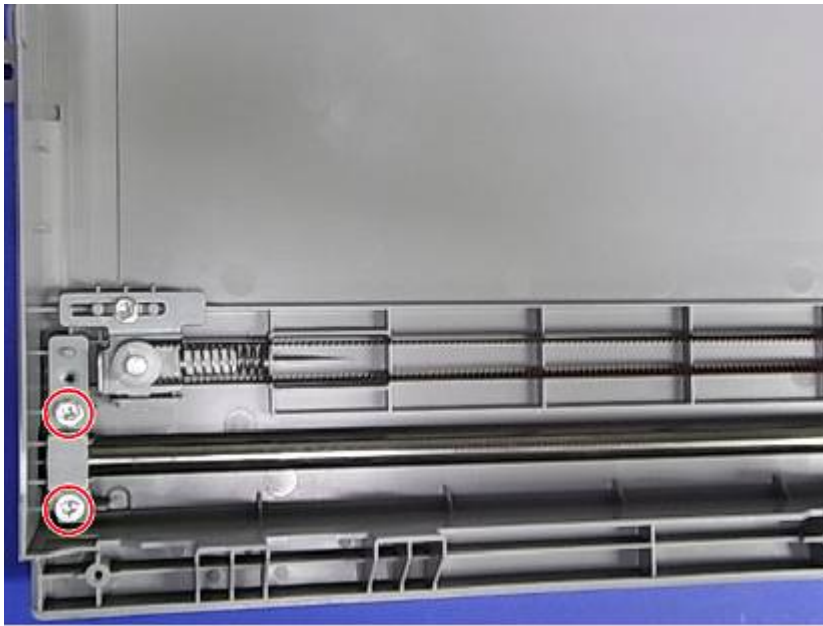
★ Important

- Hold the carriage belt with the hand and move the carriage when moving the carriage.
- Never hold the carriage itself.



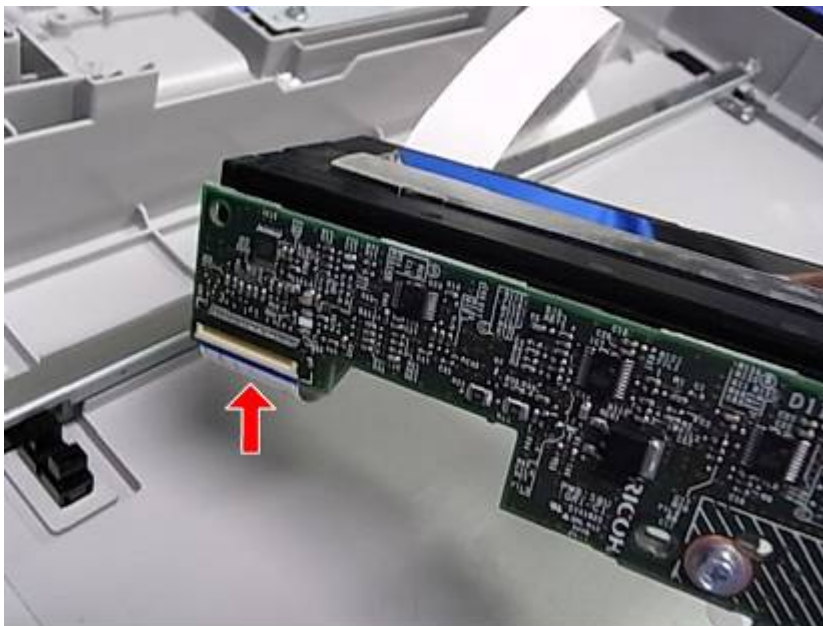
d1180009a

- 5. Bracket ( x 2)




d1180014

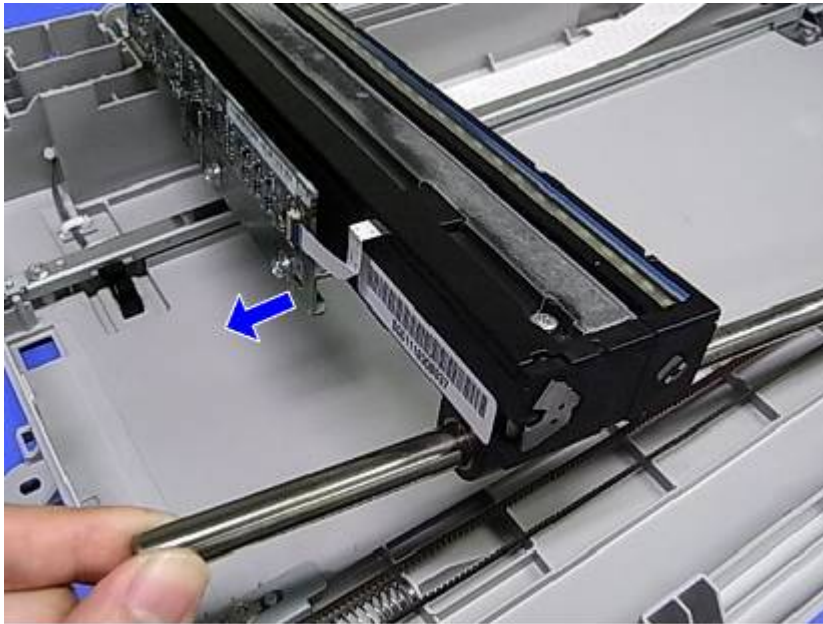
- 6. Bracket ( x 2)



d1180015

- 7. Disconnect the flat cable while lifting up the carriage shaft ( x 1).

Replacement
and
Adjustment



d1180016

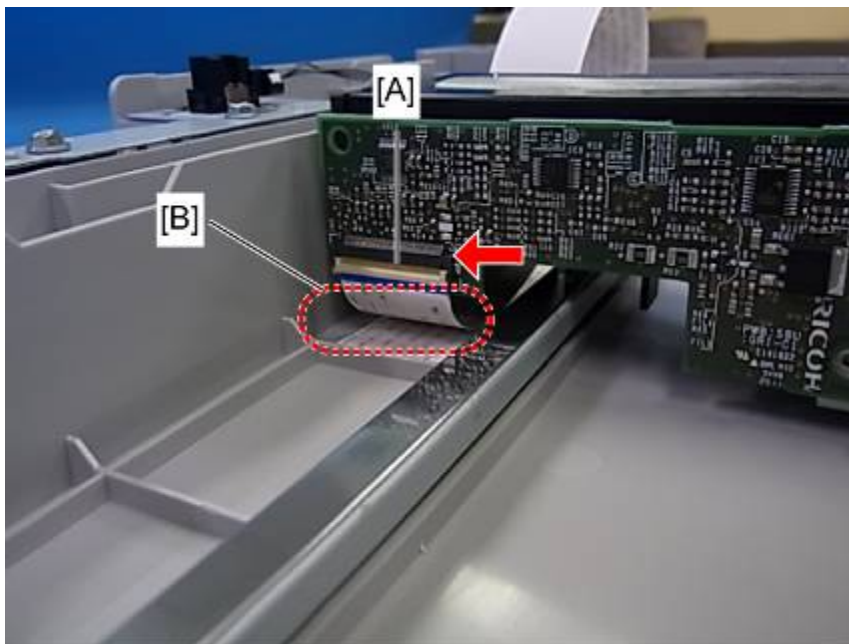
8. Carriage

↓ Note

- Wipe off oil adhered disproportionately to the carriage after the carriage is replaced.
- Never wipe off the oil on the shaft of the carriage.

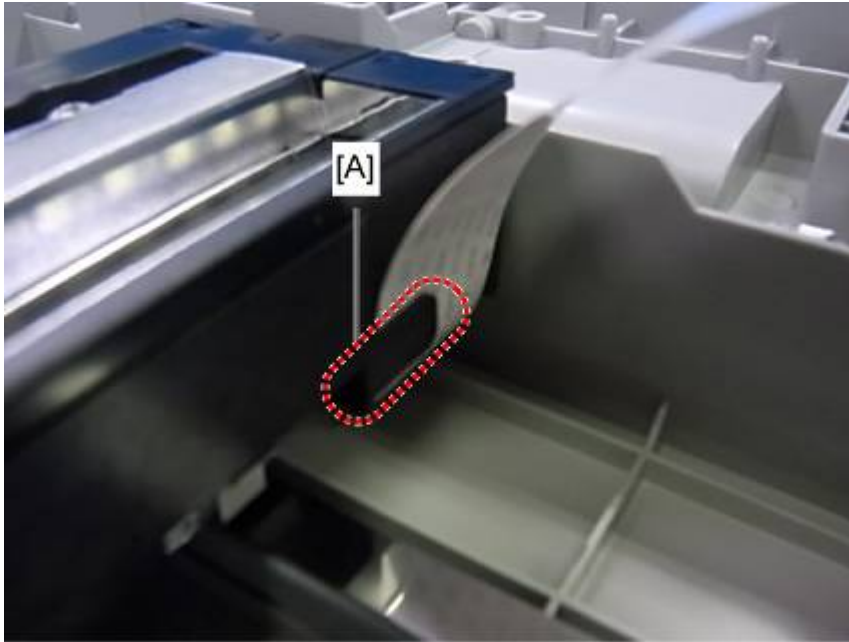
Reinstalling the Carriage

Make sure that the flat cable of the carriage is correctly connected and routed referring to the following points.



d1170737

- The flat cable [A] must be connected straight, and not at an angle.
- The flat cable is not sagging and does not drag on the bottom of the scanner unit [B].



d1170738

- The flat cable is hooked at part [A] of the carriage.

★ Important

- **Never connect the flat cable to the carriage connector obliquely. Otherwise, the BICU or the SCU may be damaged.**

Replacement
and
Adjustment

4.6 LASER OPTICS

⚠ WARNING

- Turn off the main power switch and unplug the machine before beginning any of the procedures in this section. Laser beams can cause serious eye injury.

4.6.1 CAUTION DECAL LOCATION

Caution decal is attached as shown below.



⚠ WARNING

- Be sure to turn off the main power switch and disconnect the power plug from the power outlet before beginning any disassembly or adjustment of the laser unit. This machine uses a class IIIb laser beam with a wavelength of 648 - 663 nm and an output of 9 mW. The laser can cause serious eye injury.

4.6.2 LASER UNITS

Note

- The machine has two laser units. This procedure describes replacement of the right laser unit. Replacement of the left laser unit can be done in the same way.

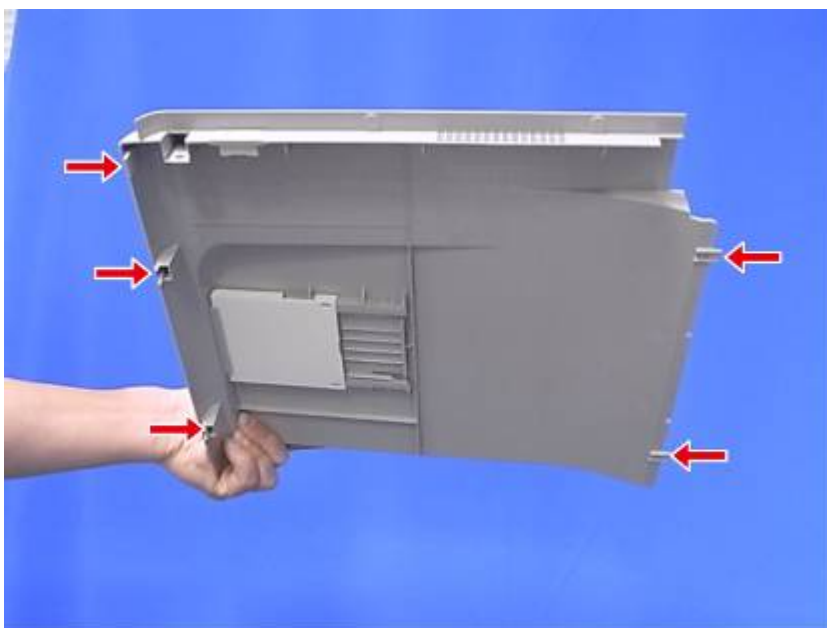


d1171001a

1. Open the front cover [A].



d1171002

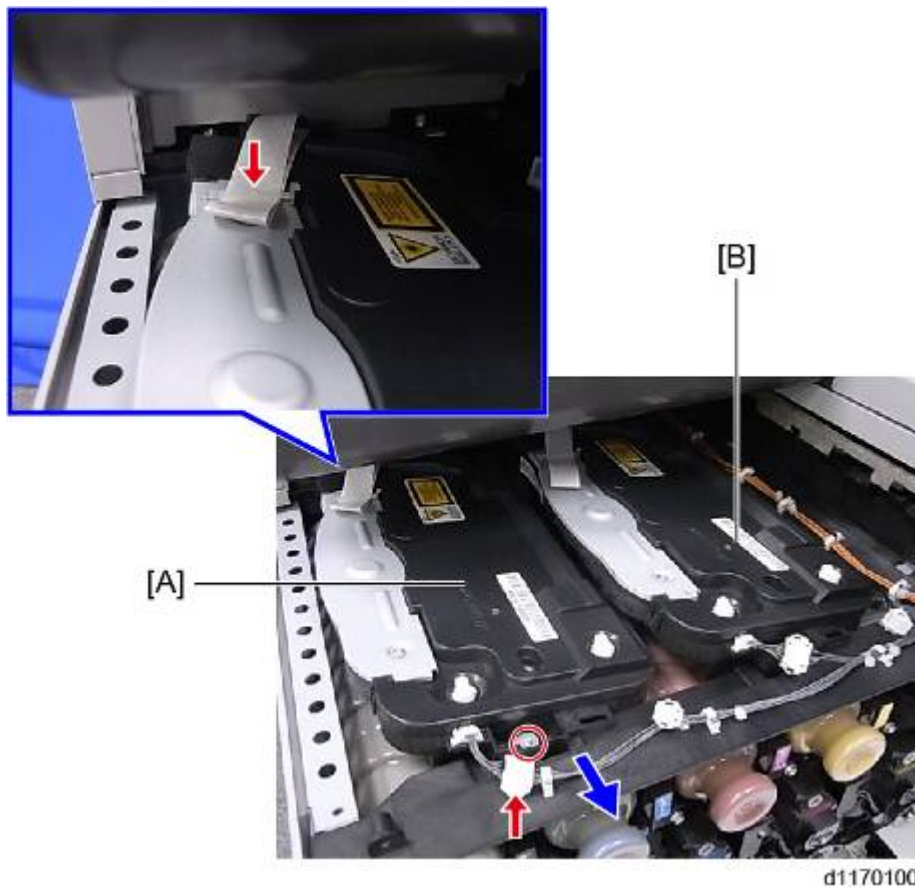


d1170099

Replacement
and
Adjustment

Laser Optics

2. Paper exit tray [A] ( x 1, hook x 5)



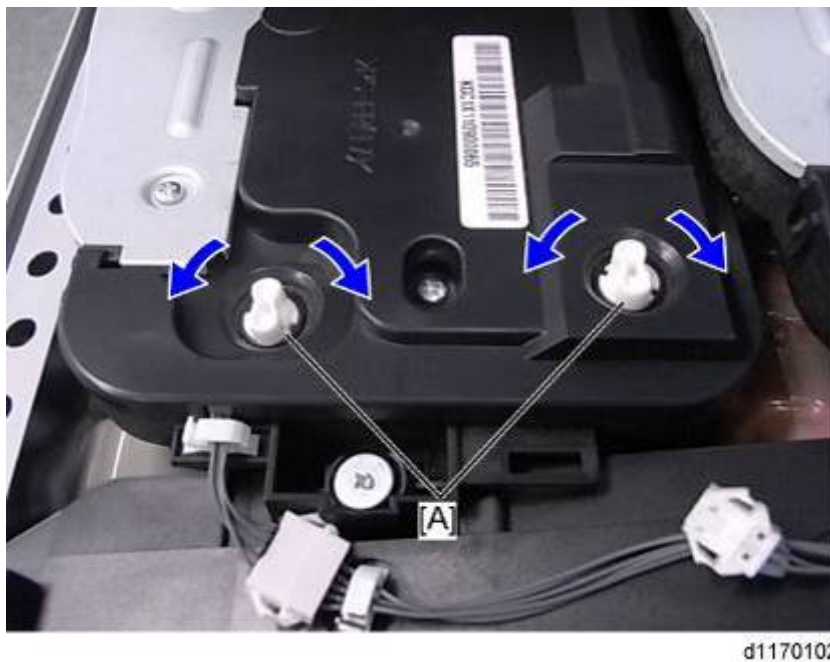
3. Remove the screw, disconnect the connector, and release the stopper to remove laser unit 1 [A]. When you remove laser unit 2 [B], repeat this step.



4. Open the connector cover [A], release the lock and disconnect the flat cable.

↓ **Note**

- Never touch the shield glass under the LD unit when replacing it.
- Never connect the flat cable obliquely. Otherwise, the LD unit may be damaged.



 **Note**

- Turn the adjuster [A] clockwise to move the mirror to the left side, or counterclockwise to move it to the right side. See the Color Skew Adjustment in the Image adjustment section for details (See below for details).


Adjustment after LD unit replacement

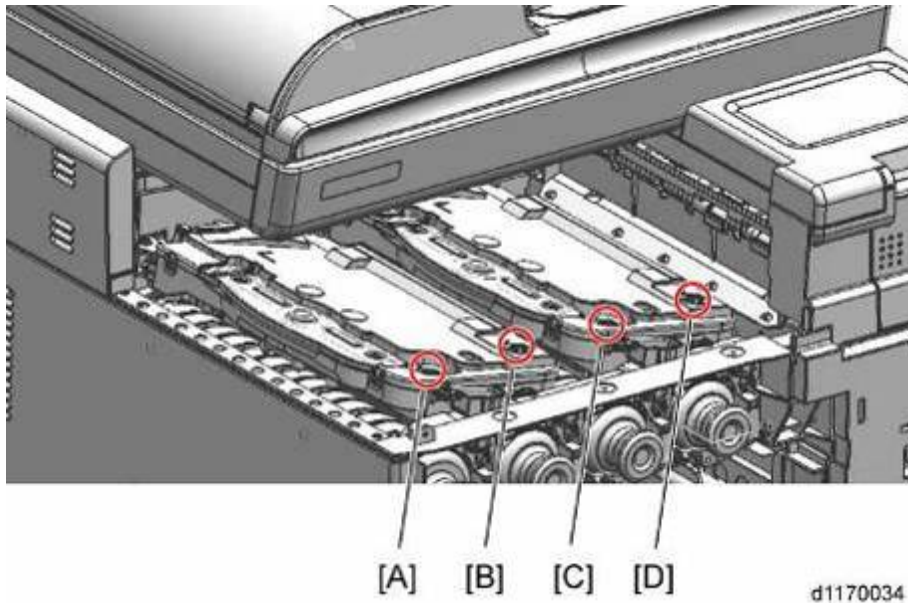
Do the following settings after replacing the laser unit.

These operations are for initializing the D-Phase data and shading data after LD unit replacement.

1. Plug in and turn on the main power switch of the machine.
2. Enter the SP mode.
3. Select the SPs of the replaced LD unit, and set them to “1”.
 - SP2-180-004 (Black/cyan)
 - SP2-180-006 (Black/cyan)
 - SP2-180-005 (Magenta/yellow)
 - SP2-180-007 (Magenta/yellow)
4. Exit from SP mode.
5. Turn the main power switch off and on.

These are adjustments for skew adjustment.

1. Unplug and turn off the main power switch of the machine.
2. Execute ‘MUSIC’ (SP2-111-002) and check the result for each color with the following SPs.
 - SP2-117-004 (Black)
 - SP2-117-002 (Cyan)
 - SP2-117-001 (Magenta)
 - SP2-117-003 (Yellow)
3. The color skew adjustment should only be executed if one or more of the above SP values is not within ± 5 . No skew adjustment is required when all SP values are within ± 5 . However, if one or more of the SP values is not within ± 5 , then you must adjust color skew for any color that has an SP value that is not 0.
4. Open the front door and then remove the paper exit tray ( p.4-41).
5. Close the front door and execute “MUSIC” (SP2-111-002).

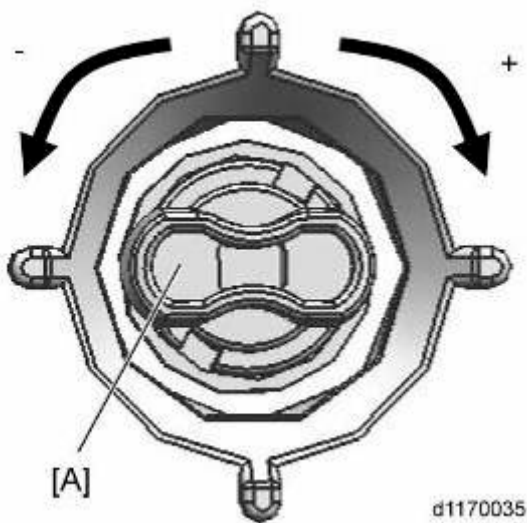


- [A]: Adjustment knob for Black
- [B]: Adjustment knob for Cyan
- [C]: Adjustment knob for Magenta
- [D]: Adjustment knob for Yellow

Note

- There are two knobs on each of the two LD units.
- Clockwise: 90 degrees corresponds to changing the SP value by “+1”
- Counterclockwise: 90 degrees corresponds to changing the SP value by “-1”
- A click is felt every 90 degree rotation of the knob.

6. Rotate each knob [A] [B] [C] [D] corresponding to the value shown in SP2-117-001 to 004. See the note below for how to do this.



Replacement and Adjustment

↓ **Note**

- Examples:
- If the SP value is +7, turn knob [A] 7 clicks clockwise,.
- If the SP value is -6, turn knob [A] 6 clicks counterclockwise.

7. Reassemble the machine.

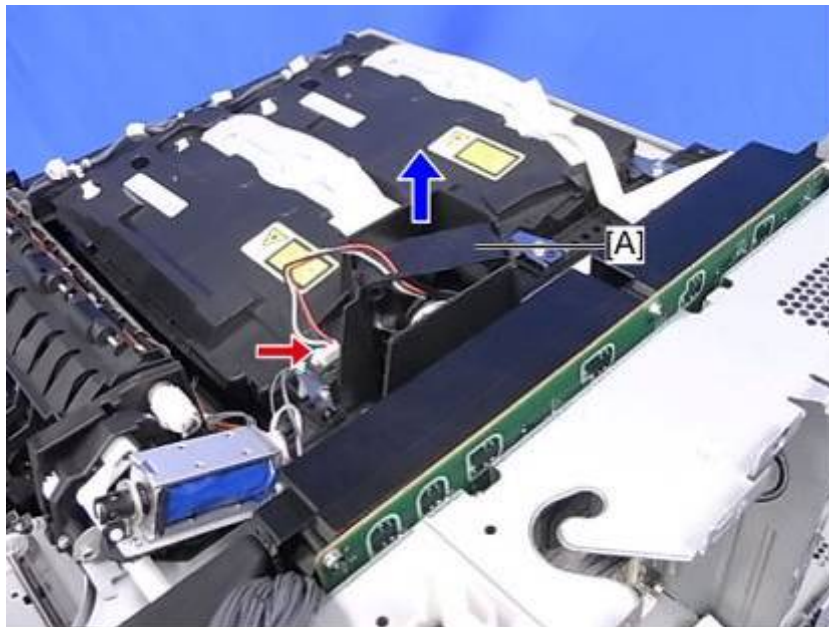
↓ **Note**

- Never touch the LD units when the upper cover is attached. Otherwise, the LD unit may move, and you may adjust the color skew again.

8. Check the SPs (SP2-117-001 to 004). If even one of them is over 5 (either positive or negative), repeat steps 1, 2, 3 and 6. The adjustment is finished if all SP values are within ± 5 .

4.6.3 LD UNIT COOLING FAN

1. Scanner Unit (🔧 p.4-30)



d1170130

2. LD unit cooling fan [A] (🔧 x 1)

4.7 IMAGE CREATION

4.7.1 PCDU (PHOTO CONDUCTOR AND DEVELOPMENT UNIT) (K)

1. Waste toner bottle (🗑️ p.4-51)



d1170058

2. Release the lock lever.
3. PCDU (K) [A] (🔧 x 2, 🗑️ x 1)



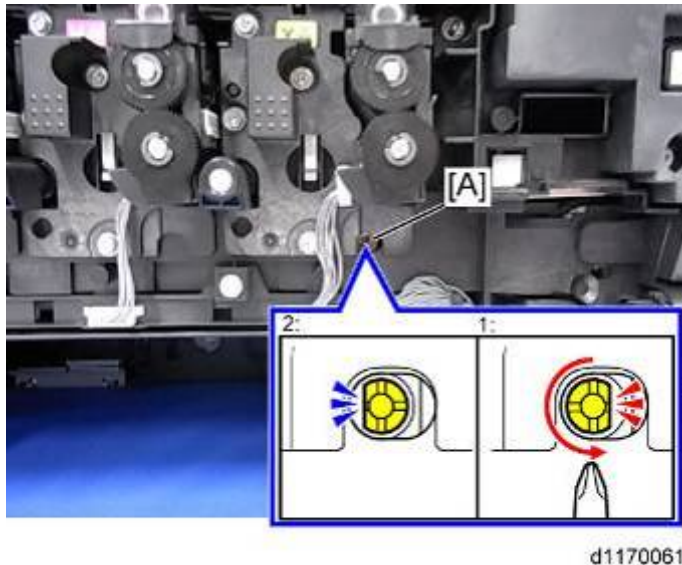
d1170059

⬇ Note

- Put the removed PCDU on a flat surface with a sheet of paper under it.
- After replacing the PCDU, set the lock lever that was released in step 2.

4.7.2 PCDU (CMY)

The removal procedure of the PCDU (CMY) is same as for PCDU (K). However, it is not necessary to release the lock lever.



1: Tension released

2: Tension applied

Note


- Check that the ITB has no tension before PCDU (CMY) replacement. Otherwise, the ITB may be damaged.
- The tension of the ITB can be released as follows.
- Turn the pressure release screw [A] to the left, until the flat part of the half moon on the screw points to the right [1].

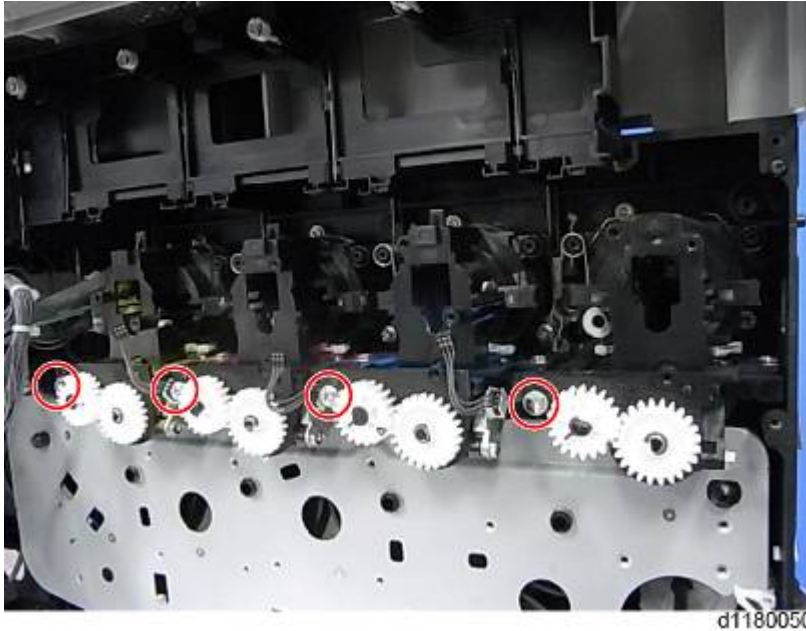


Note

- Put the removed PCDU on a flat surface with a sheet of paper under it .

4.7.3 TONER TRANSPORT SECTION

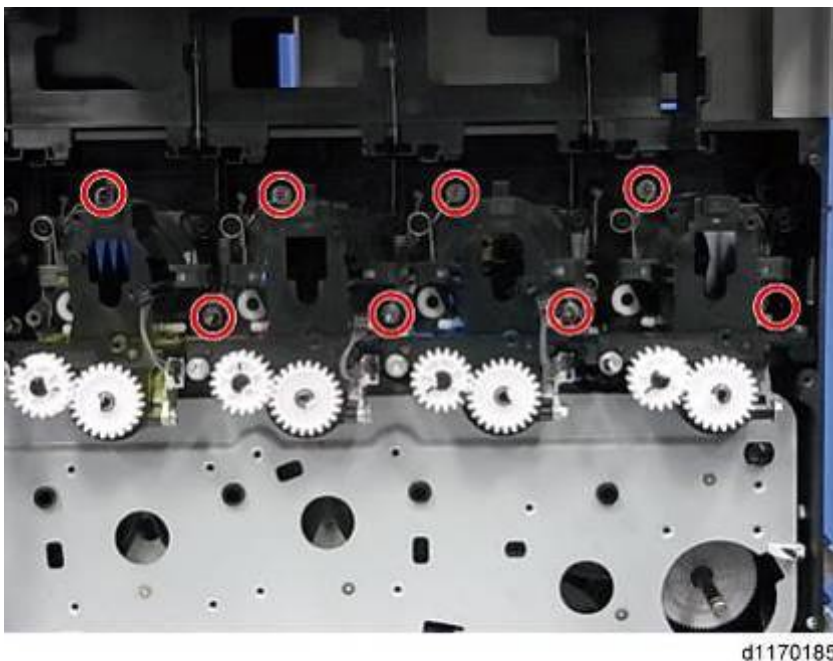
1. Toner supply motor (All colors) ( p.4-69)




Replacement
and
Adjustment

Note

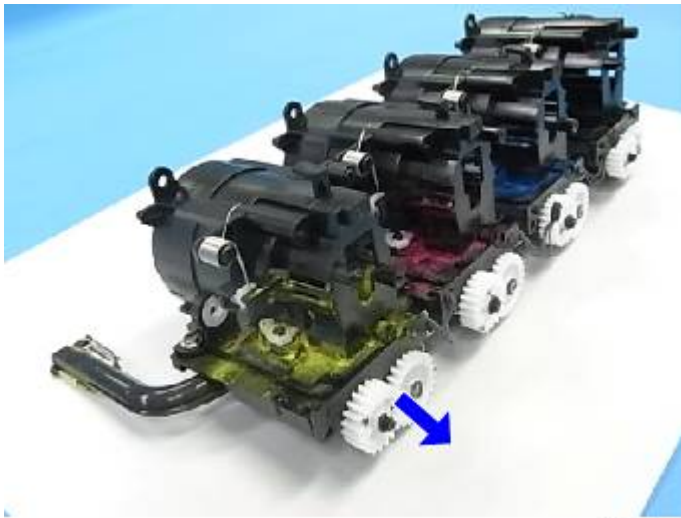
- After the toner supply motor is removed, secure four screws (as shown above) on the toner transport section to prevent toner from flying off.



2. Remove the toner bottles (all colors).
3. Toner supply unit ( x 8)

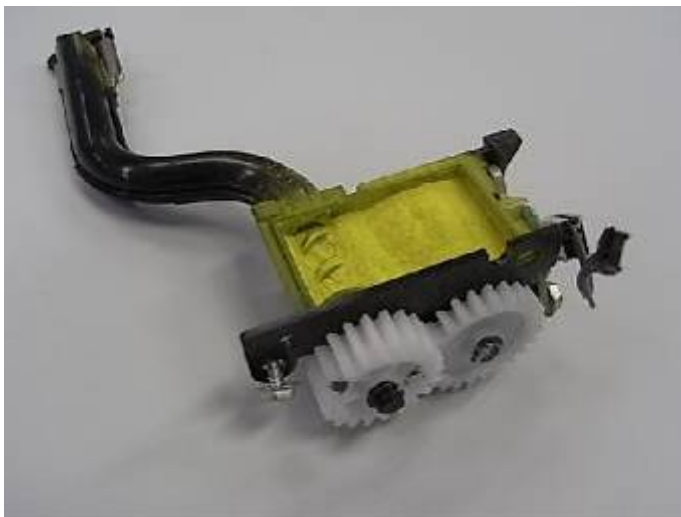
↓ Note

- Pull out the toner supply unit obliquely upward.
- The black toner supply unit has no toner end sensor.



d1180017

4. Remove the toner transport section.



d1180018

Toner transport section

SP Setting after Replacing the Toner Transport Section

The following SP settings are required after a toner transport section (the toner sub-hopper) is replaced.

1. Plug in and turn the main power on.
2. Enter the SP mode.
3. Set the following SPs (New unit flag) to "1" depending upon the color of the replaced unit.
 - SP3-701-027 (Black)
 - SP3-701-028 (Cyan)
 - SP3-701-029 (Magenta)
 - SP3-701-030 (Yellow)
4. Set the following SPs (Toner supply flag) to "1" depending upon the color of the replaced unit.
 - SP3-510-031 (Black)
 - SP3-510-032 (Cyan)
 - SP3-510-033 (Magenta)
 - SP3-510-034 (Yellow)
5. Exit from the SP mode.
6. Turn the main power off and on.

4.7.4 WASTE TONER BOTTLE



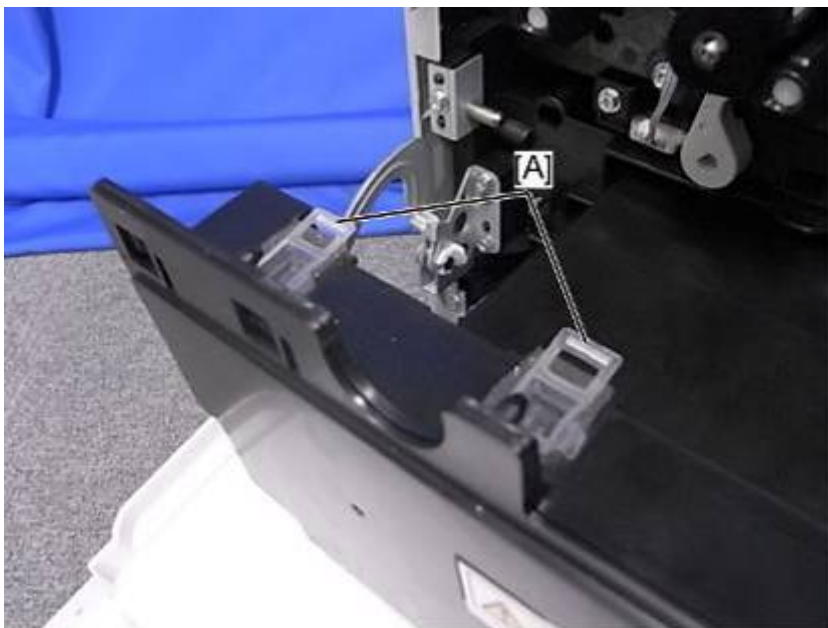
d1170054

1. Remove the paper tray.



d1170056

2. Open the front cover.
3. Remove the waste toner bottle.



d1170057

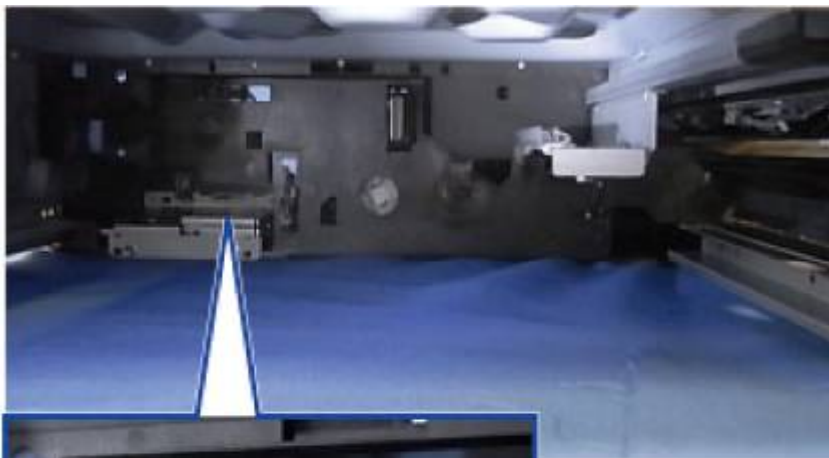
4. Remove the five waste toner bottle caps (KCMY) [A] and install them on the waste toner inlets. The examples [A] in the upper photo are for black and cyan.
5. Replace the waste toner bottle.

4.7.5 WASTE TONER FULL SENSOR



d1170054

1. Remove the paper tray.
2. Open the front cover.
3. Remove the waste toner bottle (p.4-51).



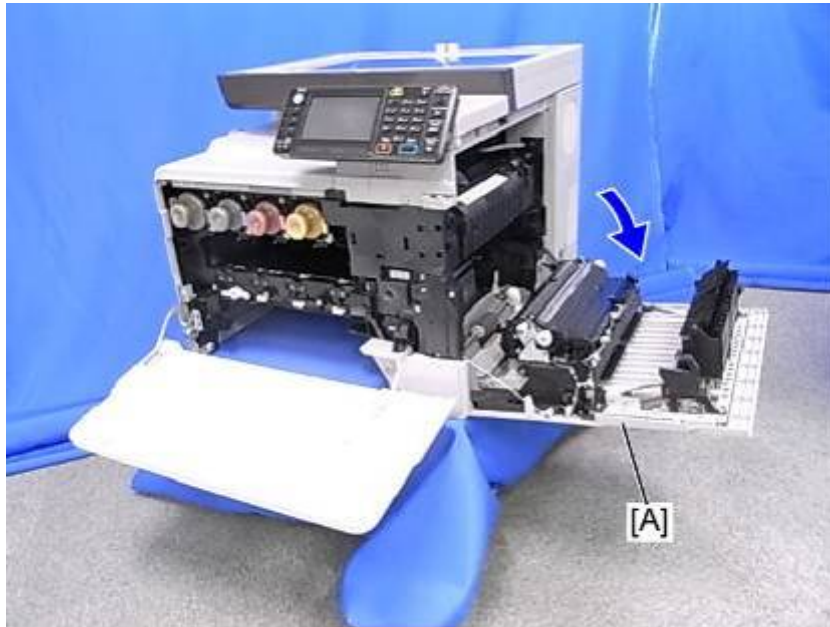
d1170203

4. Waste toner full sensor [A] (hook x 1, hook x 2)

4.8 IMAGE TRANSFER

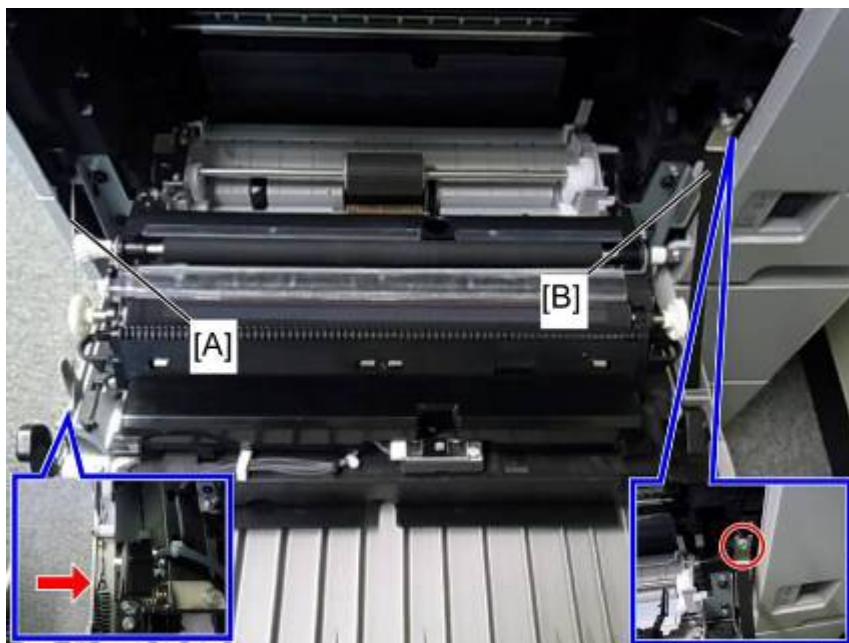
4.8.1 ITB (IMAGE TRANSFER BELT) UNIT

1. All PCUUs (☞ p.4-48, p.4-47)



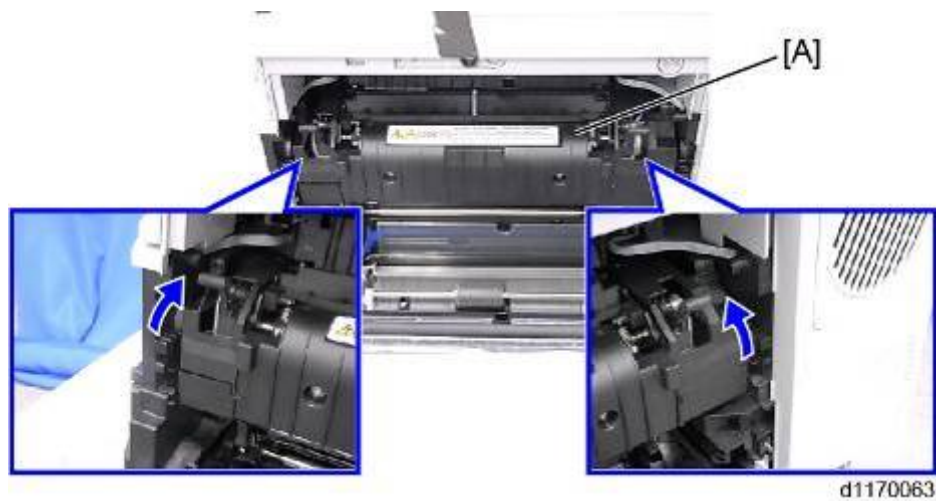
d1170062

2. Open the duplex unit [A].



d1170733

3. Release the tension spring [A] and the tension belt [B] (Hook x 1, ☞ x 1).

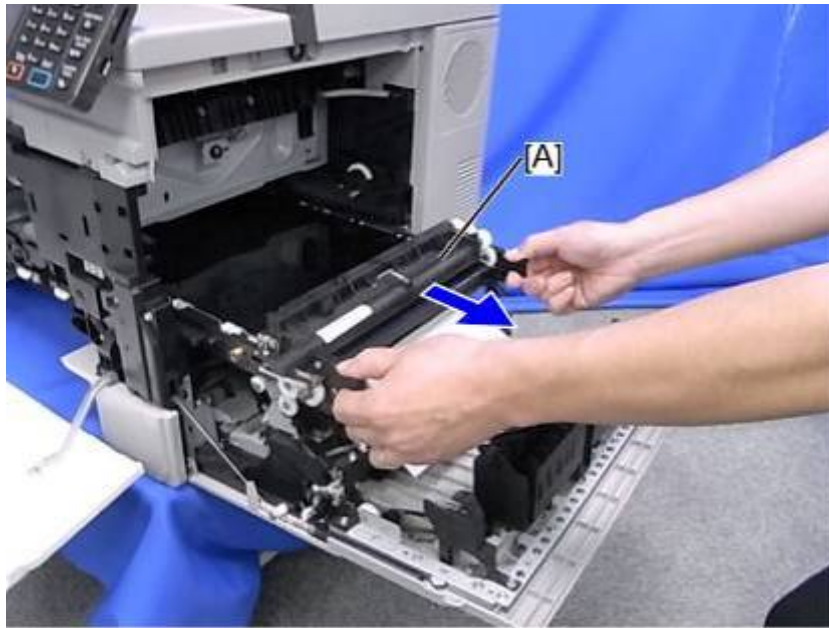


4. Release the lock levers and remove the fusing unit [A].



5. Put a sheet of paper [A] on the duplex unit as shown above, with the short edge of the paper pointing towards the ITB unit.

Replacement
and
Adjustment



d1170065

6. Pull out the ITB unit [A] slightly.



d1170066

7. Remove the ITB unit [A] while holding the right and left guides of the unit.

After replacing the image transfer belt unit

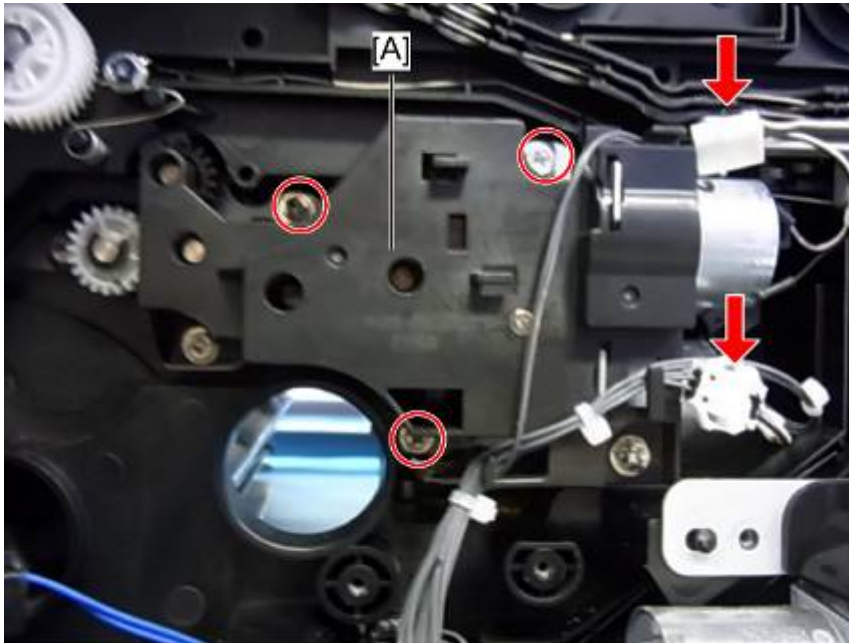
Do the following after replacing the ITB unit.

1. Enter the SP mode.
2. Set SP3-701-018 to "1" (This is the manual setting for the new unit detection).
3. Set SP5-804-022 to "1", and rotate the ITB for about 100 seconds.
4. Set SP5-804-022 to "0" to stop rotation of the ITB after 100 seconds.
5. Set SP1-001-031 to "1".

6. Execute "MUSIC" manually (to do this, execute "SP2-111-001").
7. SP values from SP1-001-033 to 040 are updated by the above steps.
8. Reset SP1-001-031 to "0".

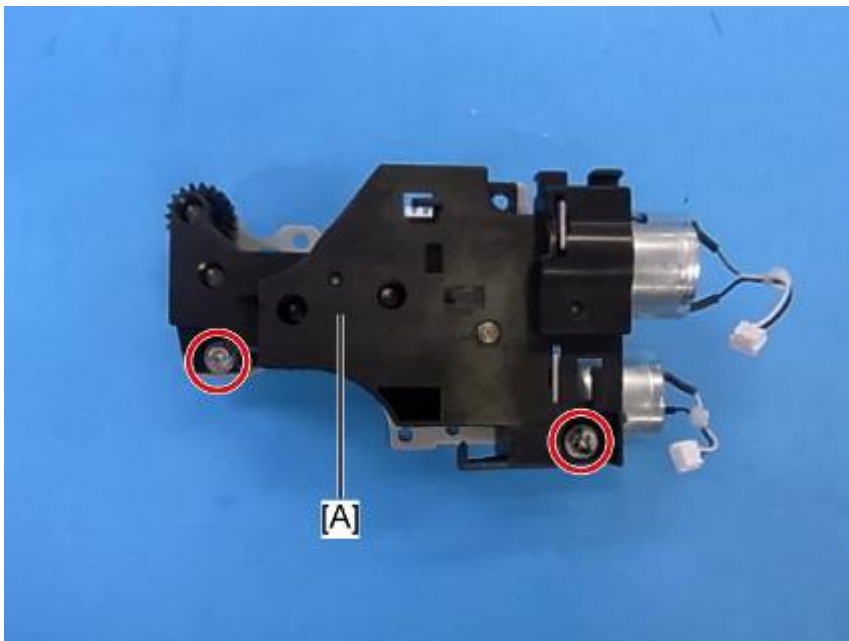
4.8.2 ITB CONTACT MOTOR / PAPER TRANSFER CONTACT MOTOR

1. Drive unit (🔧 p.4-65)
2. Paper transport motor (🔧 p.4-65)



d1170191


3. Transfer roller contact drive unit [A] (🔧 x 3, 📦 x 2)

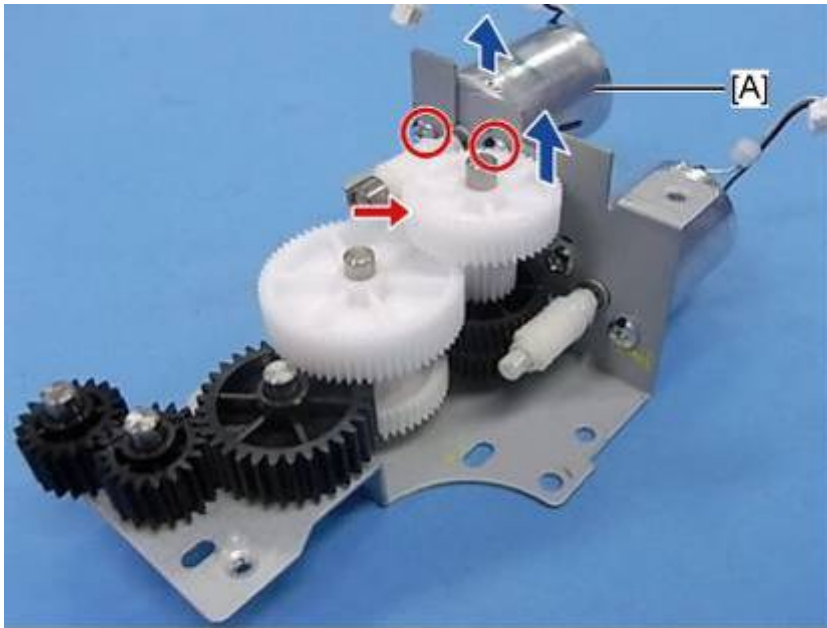


d1170192


 Replacement
and
Adjustment

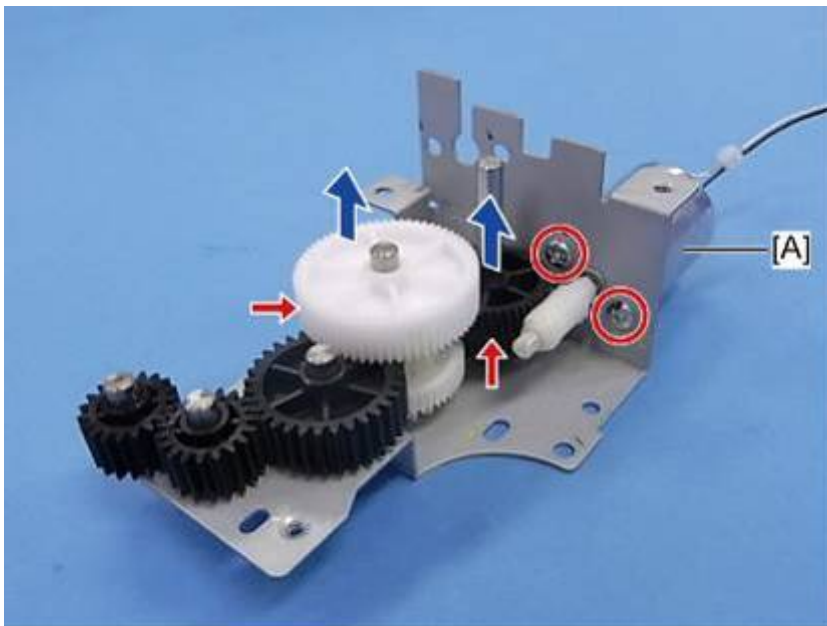
Image Transfer

4. Cover [A] ( x 2)




d1170193

5. ITB contact motor [A] ( x 2, gear x 1).



d1170195

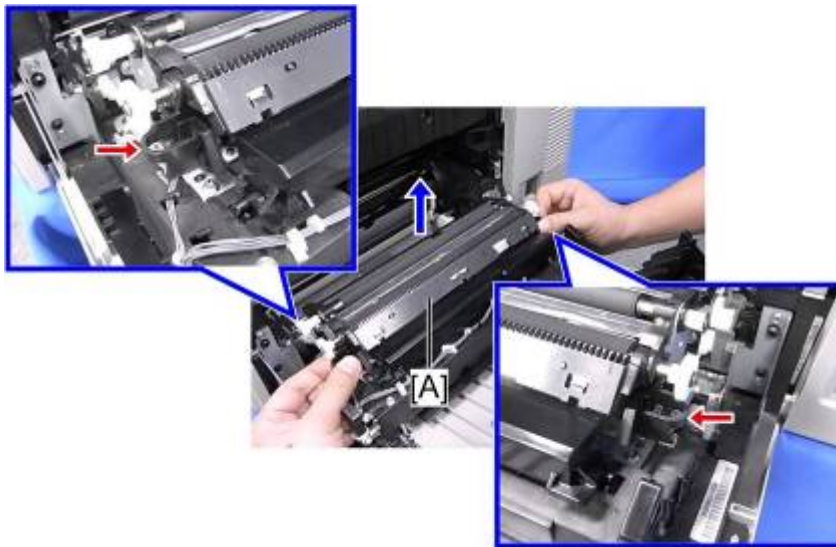
6. Paper transfer contact motor [A] ( x 2, gear x 2)

4.8.3 PAPER TRANSFER ROLLER



d1170076

1. Open the duplex unit.




d1170092

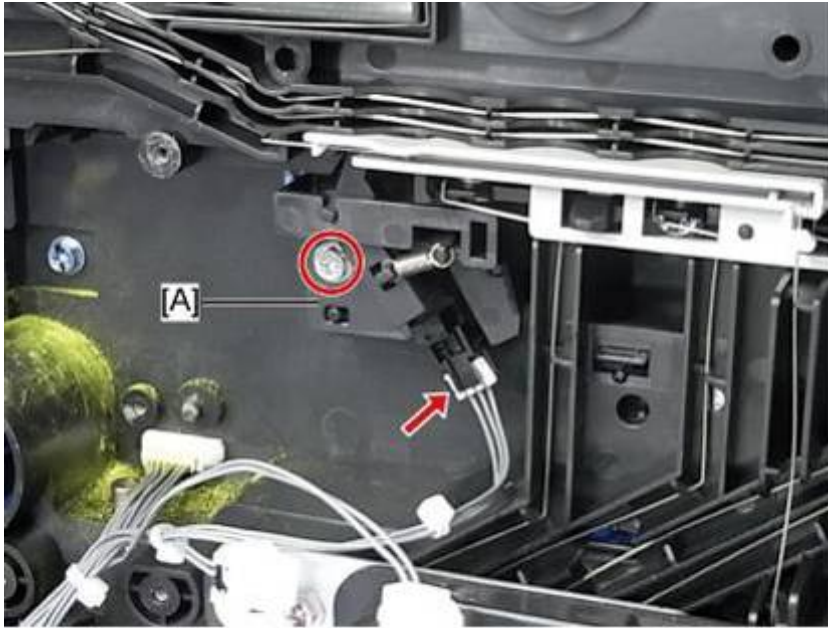
2. Remove the paper transfer roller [A] while pushing the knobs at both ends of the roller.

SP Setting after Changing the Paper Transfer Roller


1. Plug in and turn on the main power.
2. Enter the SP mode.
3. Set SP3-701-018 to "1".
4. Exit from the SP mode.
5. Turn the main power off and on.

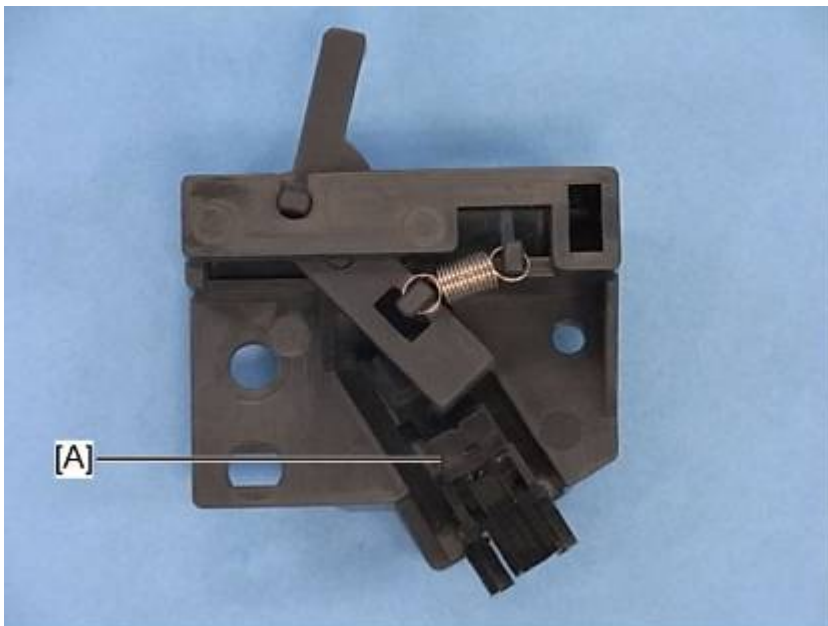
4.8.4 ITB CONTACT SENSOR

1. ITB contact drive unit ( p.4-57 "ITB Contact Motor / Paper Transfer Contact Motor")



d1170197

2. Sensor bracket [A] ( x 1,  x 1)



d1170198

3. ITB contact sensor [A] (Hook x 2)

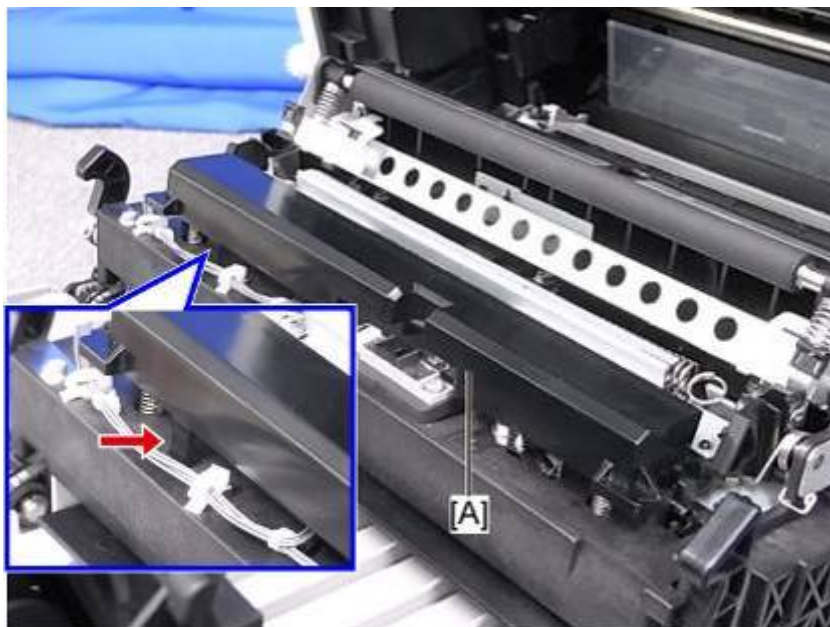
4.9 PAPER TRANSFER

4.9.1 PAPER TRANSFER CONTACT SENSOR



d1170076

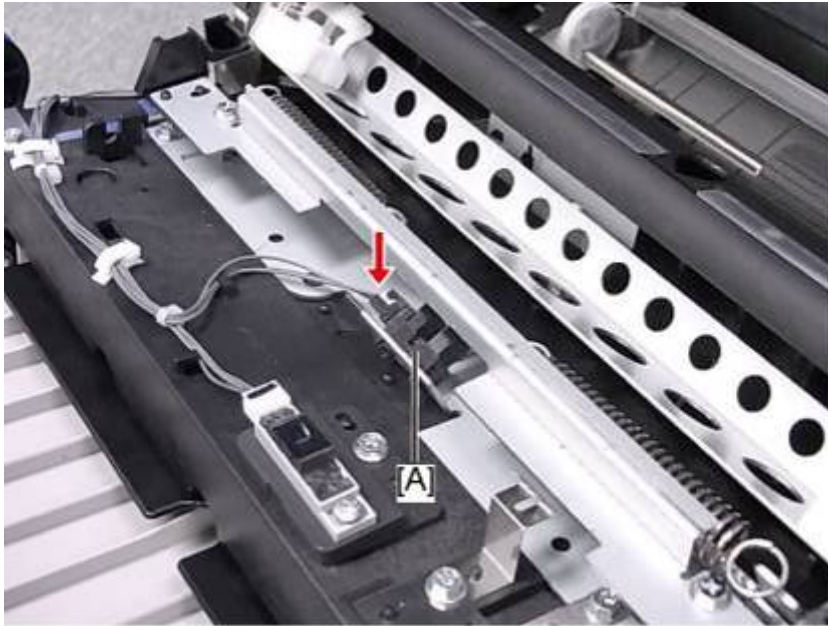
1. Open the duplex unit.



d1170110

2. Paper transfer roller (p.4-59)
3. Cover [A] (Hook x 1)

Replacement
and
Adjustment

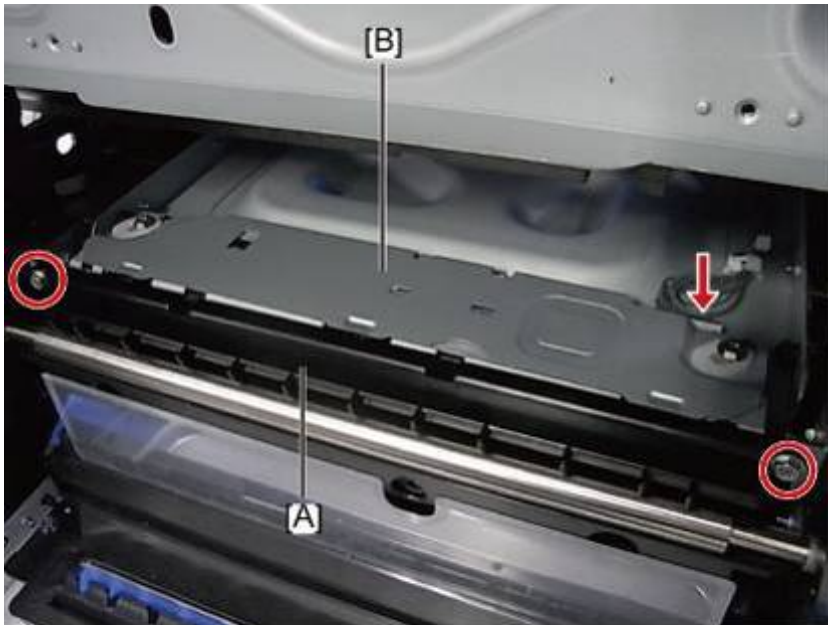


d1170111

4. Paper transfer contact sensor [A] (🔧 x 1, hook x 2)

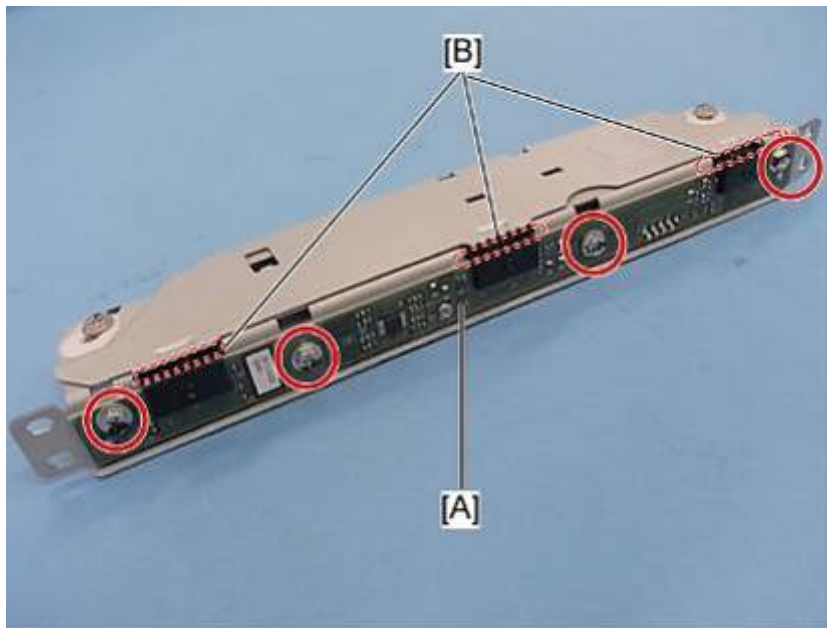
4.9.2 ID SENSOR

1. ITB unit (🔧 p.4-54)




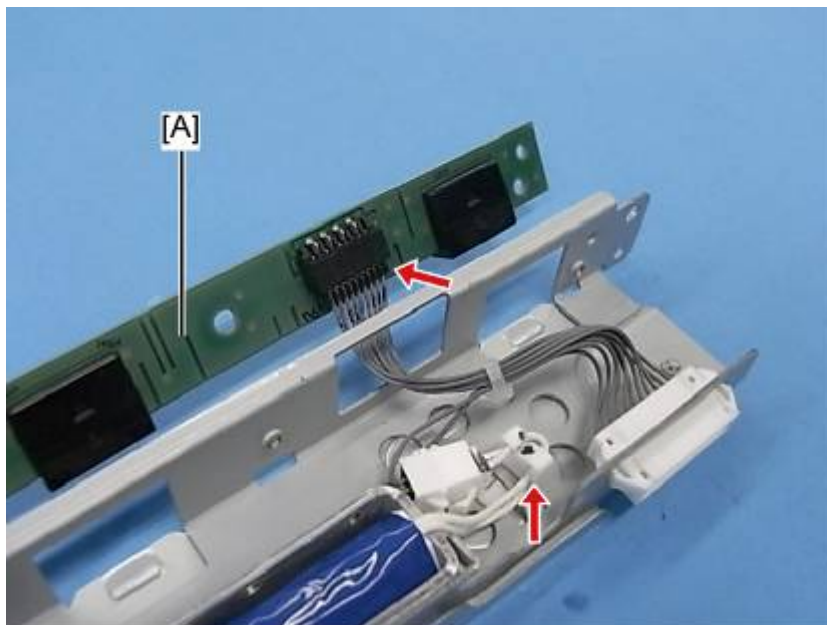
d1170571

2. Guide plate [A] (🔧 x 2)
3. ID sensor bracket [B] (🔧 x 1)





d1170200

4. Remove four screws of the ID sensor [A] ( x 4).



d1170201

5. ID sensor [A] ( x 1,  x 1)

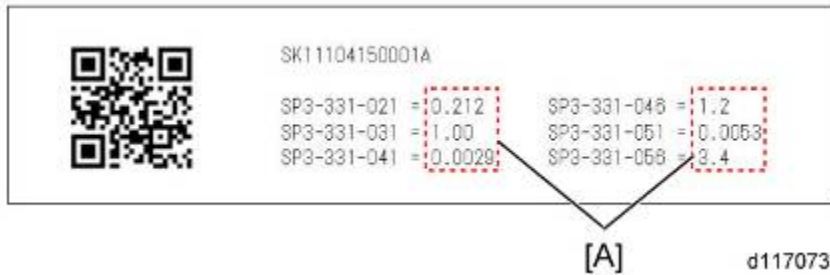
Note

- When cleaning the ID sensor, also wipe part [B] in step 4 with a cloth moistened with water.
- Do not use a dry cloth. Otherwise, the ID sensors may get dirtier due to static electricity.

After installing a new ID sensor board

Do the following adjustment after installing a new ID sensor board.

1. Plug in and turn on the main power switch of the machine
2. Enter the SP mode.



3. Enter all correction coefficients [A] for ID sensor with the SP modes referring to the barcode sheet provided with the new ID sensor board.

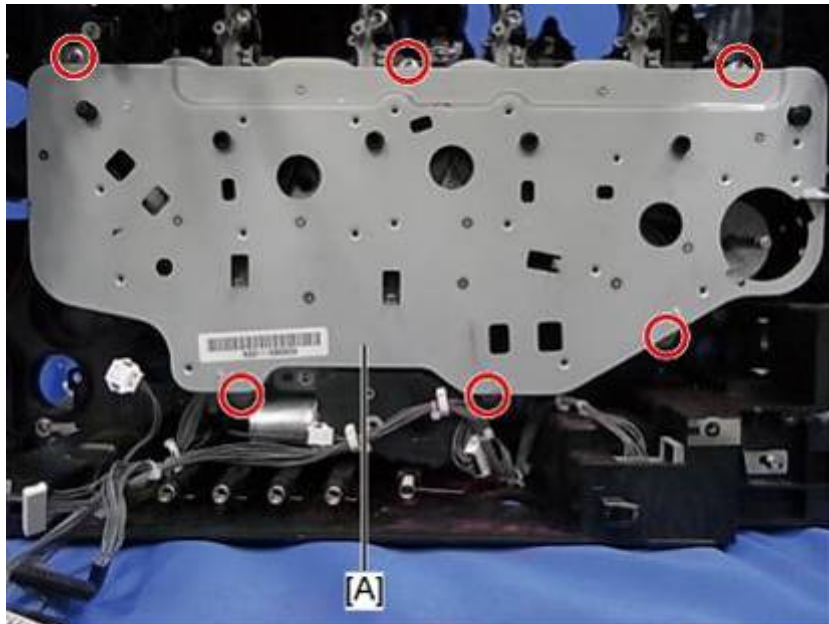
Note

- For example, enter “1.2” with SP3-331-046.
4. Exit the SP mode.

4.10 DRIVE

4.10.1 DRIVE UNIT

1. Toner transport section (🔧 p.4-49)

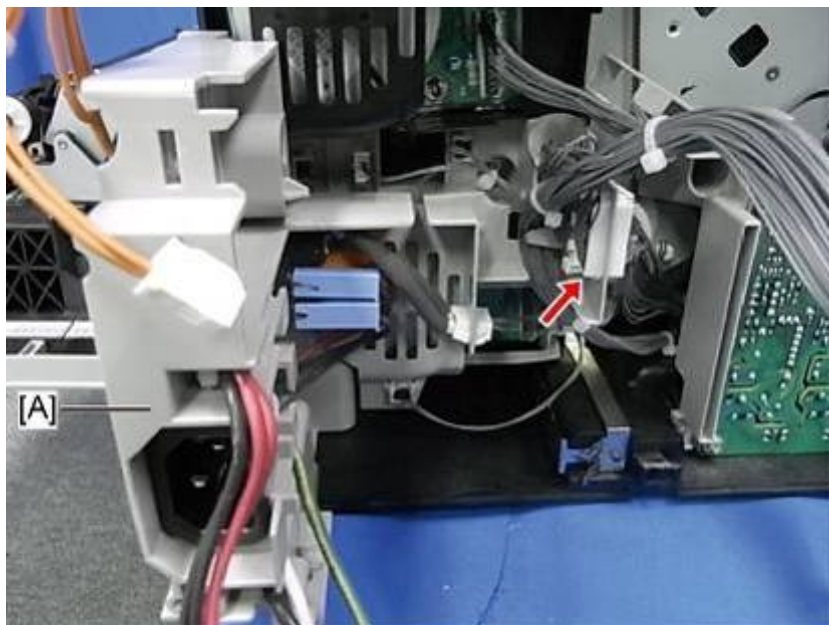


d1170189

2. Drive unit [A] (🔧 x 6)

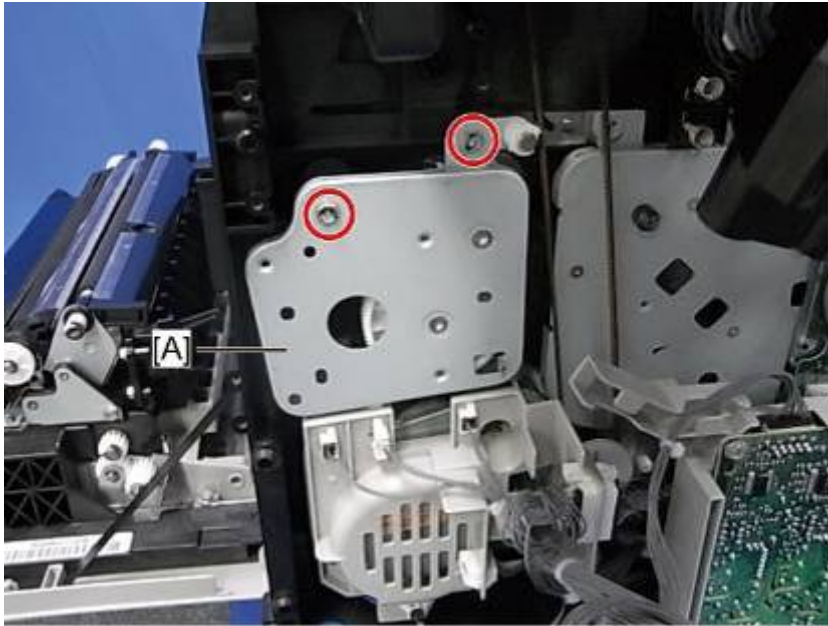
4.10.2 PAPER TRANSPORT MOTOR

1. Fusing motor (🔧 p.4-68)



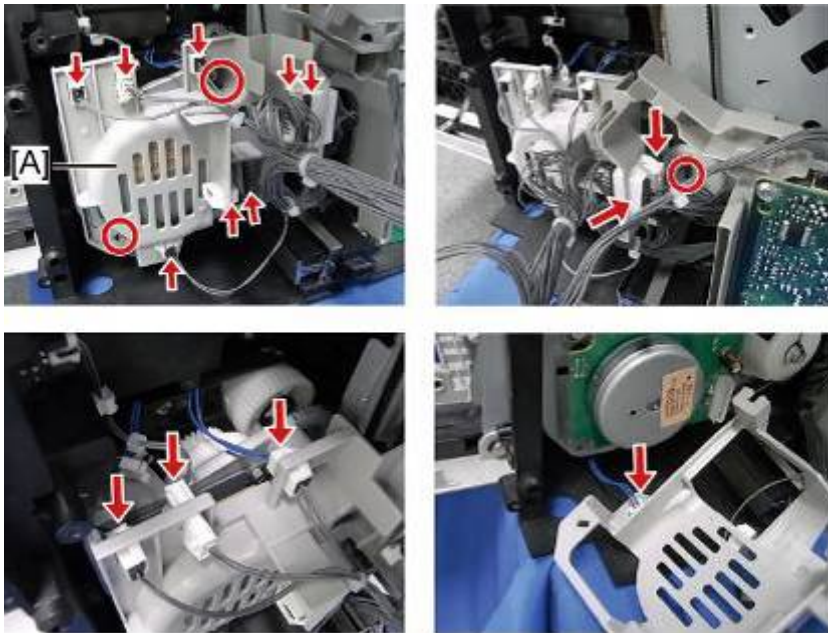
d1170168

2. Rear left handle [A] (🔧 x 1)





d1170169

3. Fusing drive motor bracket with the gears [A] ( x 2)




d1170170


4. Harness guide [A] ( x 3,  x 14)



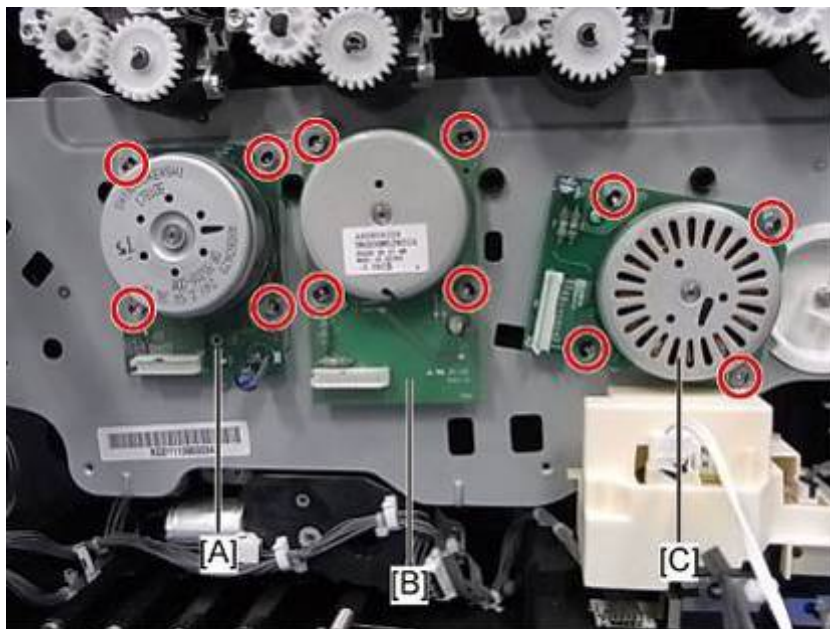
d1170171

5. Paper transport motor [A] ( x 3)

4.10.3 DEVELOPMENT MOTOR (CMY) / DRUM MOTOR (CMY) / DRUM MOTOR (K)

1. HVPS (ITB) with the bracket ( p.4-72 "Duplex Clutch / By-pass Feed Clutch / Registration Clutch / Paper Feed Clutch")

Replacement and Adjustment




d1170179

[A]: Development motor (CMY)

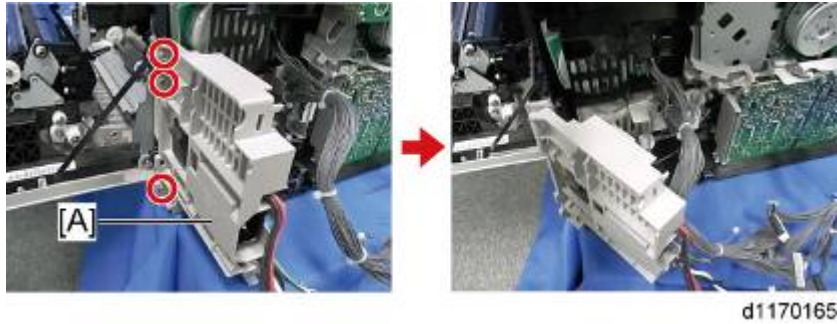
[B]: Drum motor (CMY)


[C]: Drum motor (K)

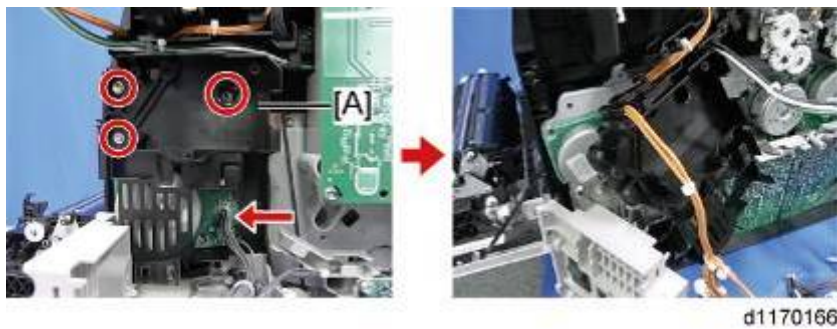
2. Remove each motor ( x 4 each).



4.10.4 FUSING MOTOR

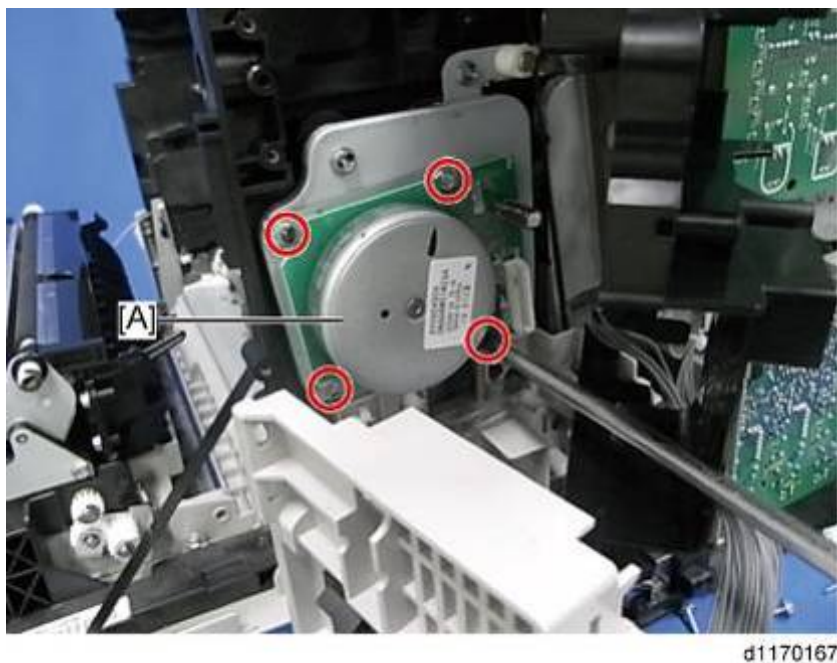
1. PSU ( p.4-131)



2. Move the rear right handle [A] out of the way, so that it does not interfere with the removal procedures ( x 3).



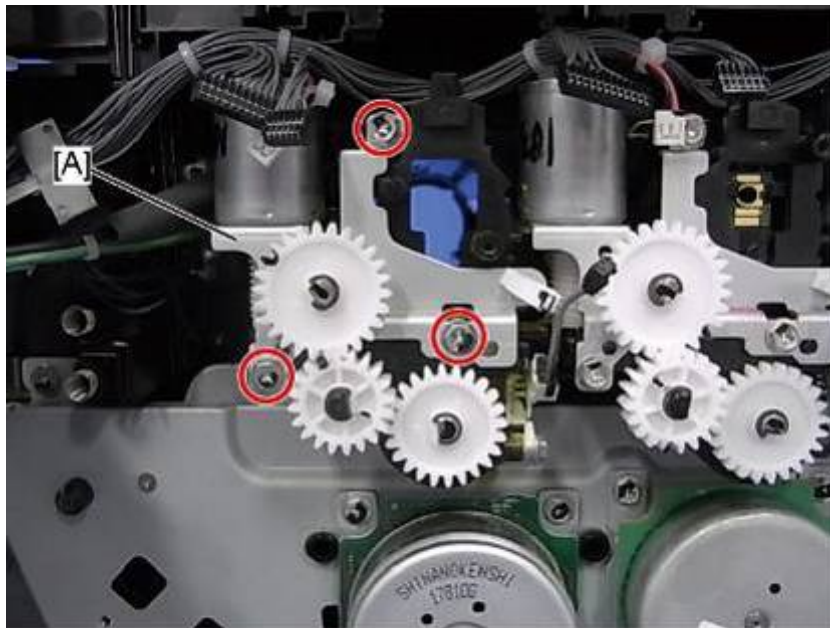
3. Move the harness guide [A] out of the way, so that it does not interfere with the removal procedures ( x 3,  x 1).



4. Fusing motor [A] ( x 4)

4.10.5 TONER SUPPLY MOTORS (CMYK)

1. Toner bottle ID contact sensor (🔧 p.4-133)



d1170181

2. Toner supply motor unit [A] (🔧 x 3 each)

Note

- Each toner supply motor unit can be removed in the same way.



d1170182

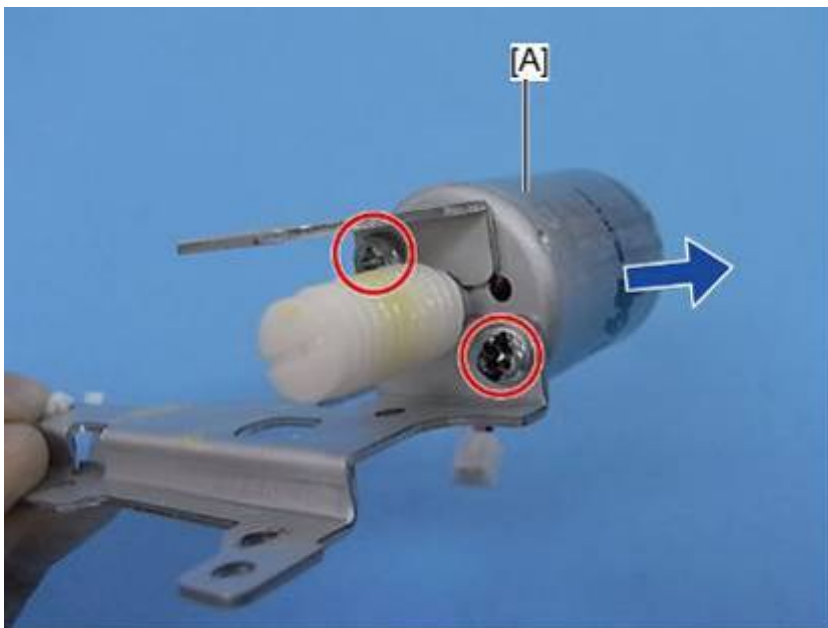
3. Remove the gear [A] (🔧 x 1 each).

Drive



d1170183


4. Remove the shaft, gear and bearing (Ⓢ x 2 each).

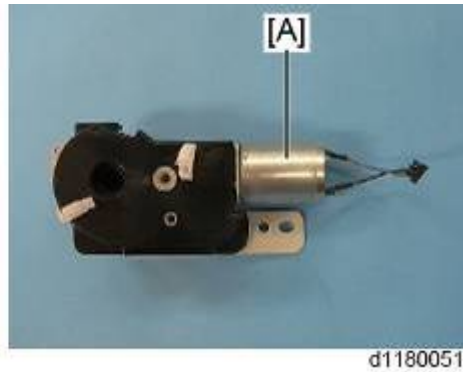
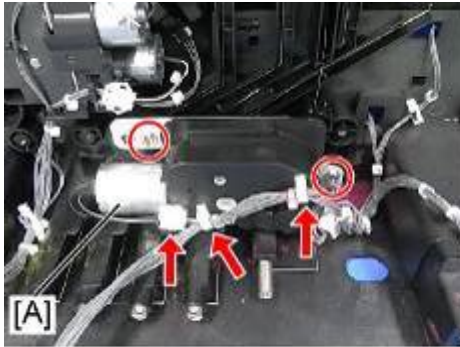



d1170184

5. Toner supply motor [A] (Ⓢ x 2 each)

4.10.6 TRAY LIFT MOTOR

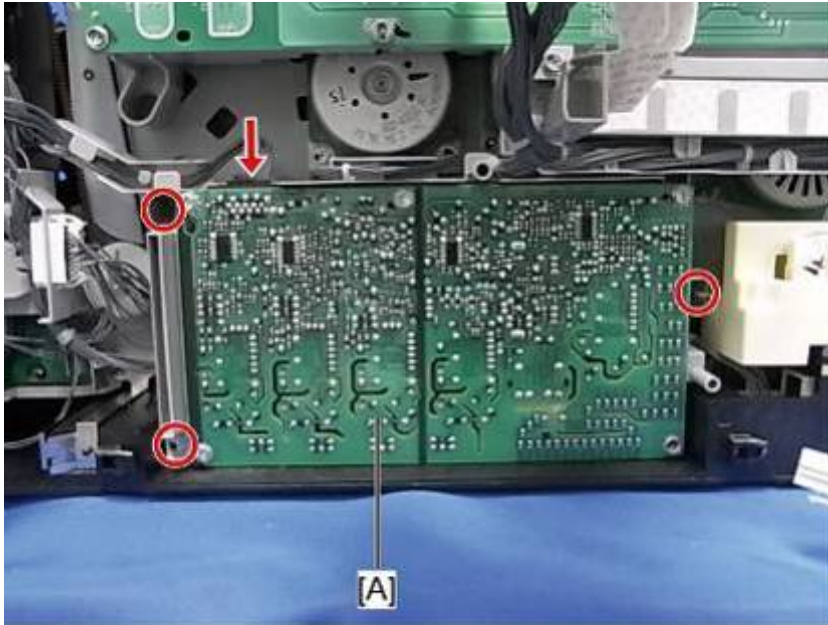
1. Drive unit ( p.4-65)



2. Tray lift motor [A] ( x 2,  x 2,  x 1)

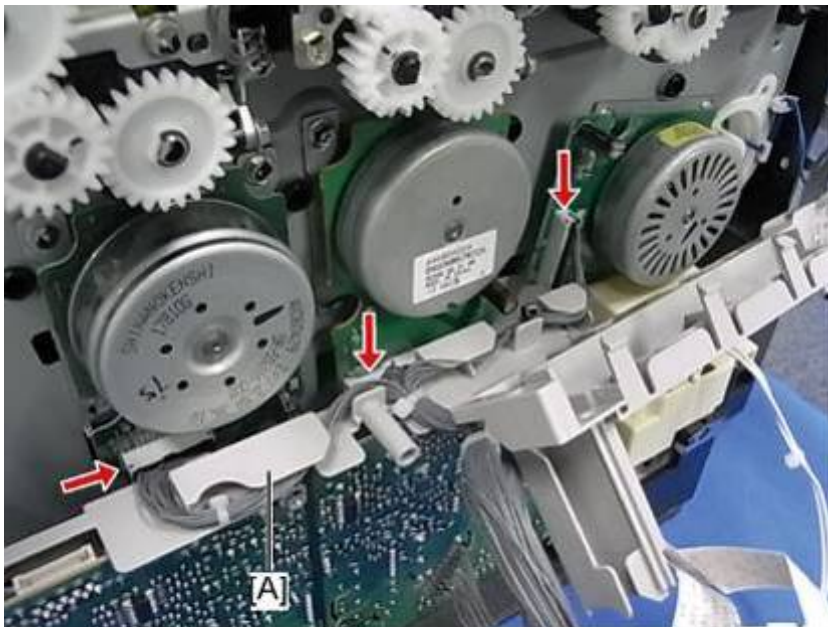
4.10.7 DUPLEX CLUTCH / BY-PASS FEED CLUTCH / REGISTRATION CLUTCH / PAPER FEED CLUTCH

1. Paper transport motor (🔧 p.4-65)
2. HVPS (PCDU) (🔧 p.4-135)



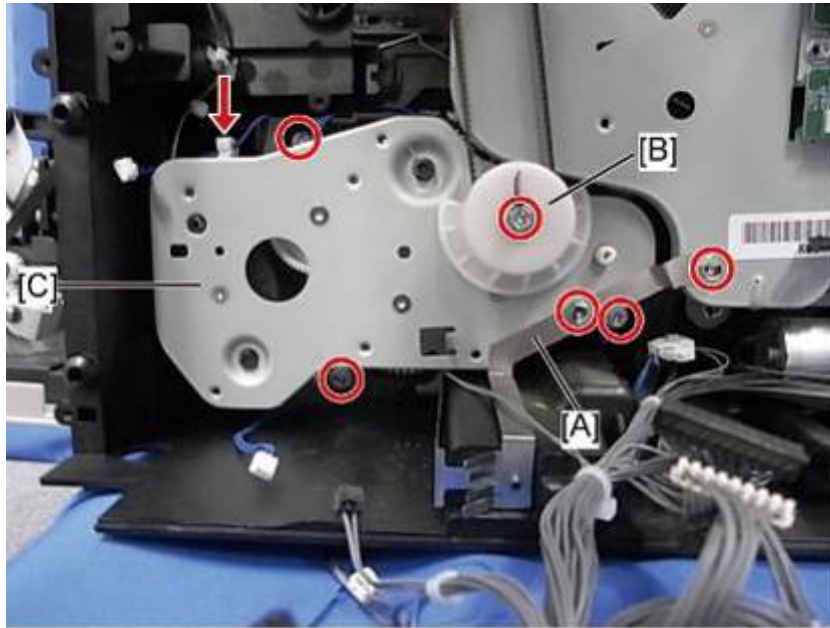
d1170172

3. Remove three screws and one connector of the HVPS (ITB) [A] (🔧 x 3, 📌 x 1).







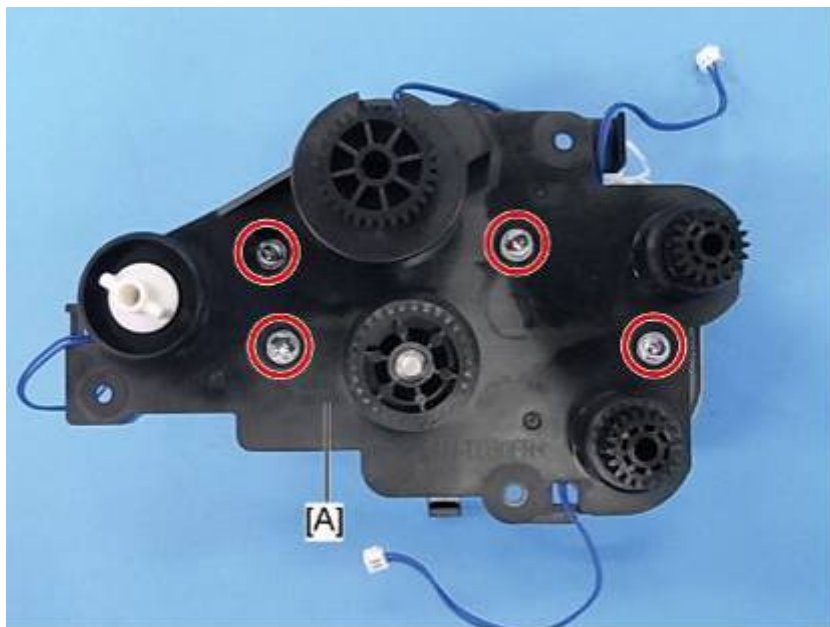
d1170173

4. HVPS (ITB) with the bracket [A] (📌 x 3)




d1170174

5. Grounding plate [A] ( x 2)
6. Gear cover and gear [B] ( x 1)
7. Paper transport unit [C] ( x 3,  x 1)

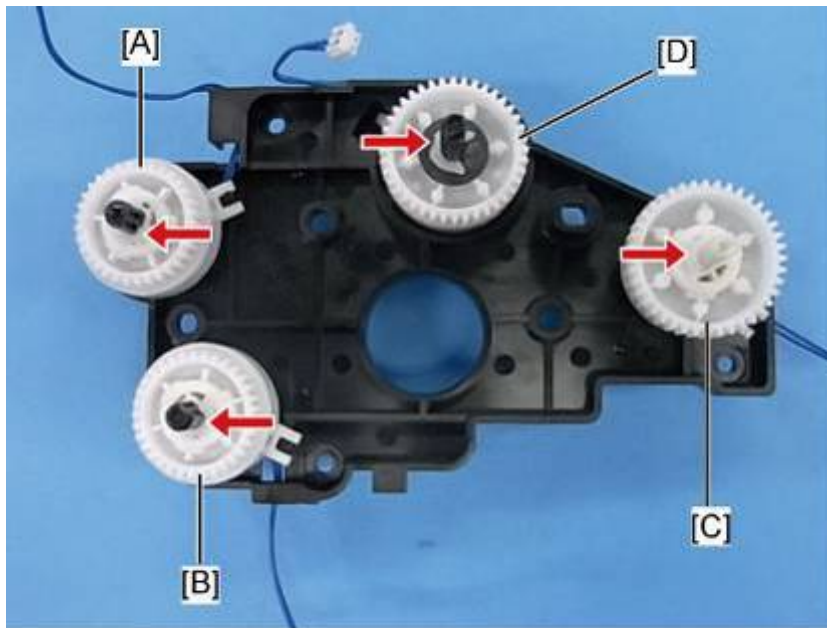


d1170175

8. Paper transport unit cover [A] ( x 4)

Replacement and Adjustment

Drive



d1170176

[A]: Duplex clutch

[B]: By-pass feed clutch

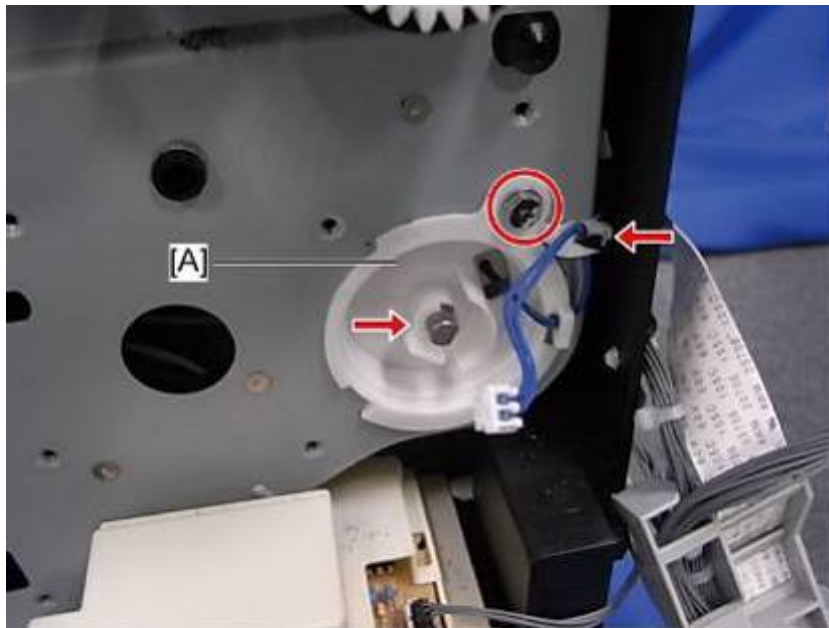
[C]: Paper feed clutch

[D]: Registration clutch

9. Each clutch (☺ x 1 each)

4.10.8 DEVELOPMENT CLUTCH

1. Drum motor (K) (🔧 p.4-67)



d1170187

2. Development clutch with the cover [A] (🔧 x 1, 📏 x 1, 🌀 x 1)



d1170188

3. Remove the development clutch from its cover [A].

4.11 FUSING

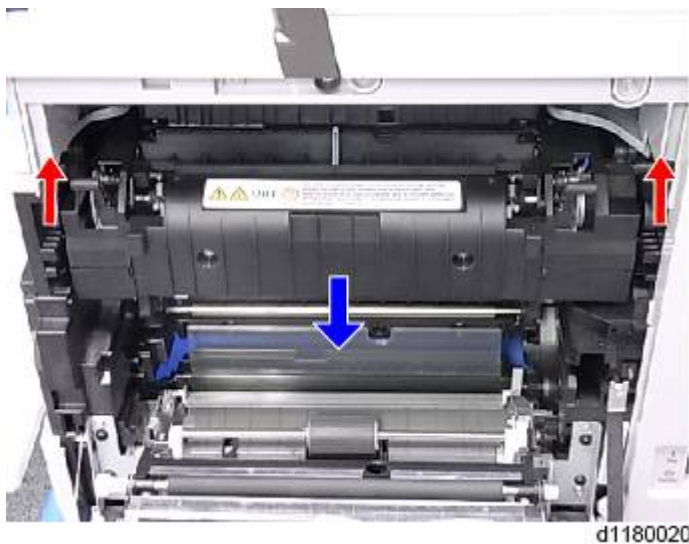
4.11.1 FUSING UNIT

⚠ CAUTION

- Turn off the main switch and wait until the fusing unit cools down before beginning any of the procedures in this section. The fusing unit can cause serious burns.

★ Important

- Basically, the entire fusing unit must be replaced when SC554-00 occurs.
- In some cases, the fusing unit need not be replaced if SC554-00 occurs. See “When SC554-00 Occurs” for these cases.



d1180020

1. Release the left and right lock levers, then remove the fusing unit.

SP Setting after Fusing Unit Replacement

1. Plug in and turn the main power on.
2. Enter the SP mode.
3. Set SP3-701-014 to “1”.
4. Exit the SP mode.
5. Turn the main power off and on.

4.11.2 FUSING UPPER COVER



d1180021

1. Fusing upper cover ( x 4)

4.11.3 FUSING LOWER COVER



d1180022


1. Fusing lower cover ( x 4)

Replacement
and
Adjustment


4.11.4 FUSING ENTRANCE GUIDE PLATE



d1180022a


1. Fusing entrance guide plate ( x 2)

4.11.5 THERMOSTAT

1. Fusing upper cover ( p.4-77)



d1180023

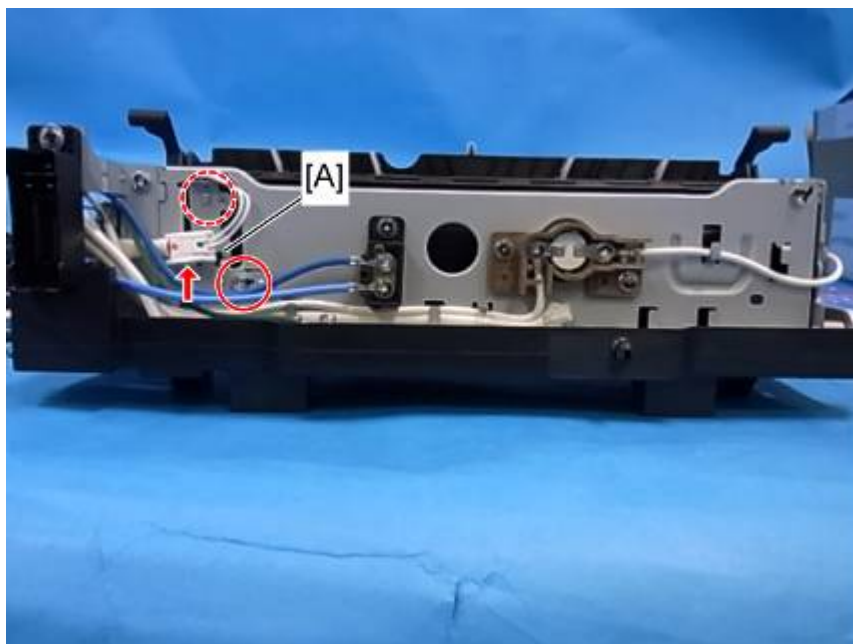
2. Thermostat ( x 2)

 **Note**

- Never re-use a thermostat that has activated. Use a new thermostat for replacement.

4.11.6 FUSING THERMISTOR

1. Fusing upper cover (🔧 p.4-77)



d1180024

2. Remove the fusing thermistor with the bracket [A], and then remove the fusing thermistor from the bracket (🔧 x1, 🔧 x 2)

Replacement
and
Adjustment

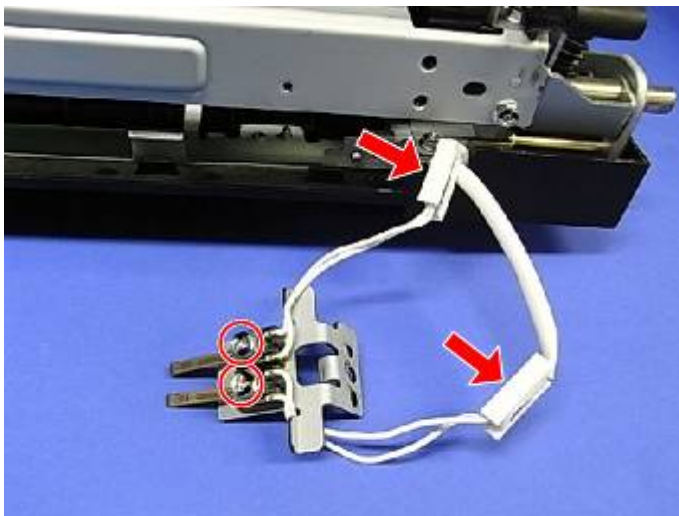
4.11.7 FUSING PRESSURE ROLLER THERMISTORS

1. Fusing upper cover (🔧 p.4-77)



d1180027

2. Thermistor holder (🔧 x 1)

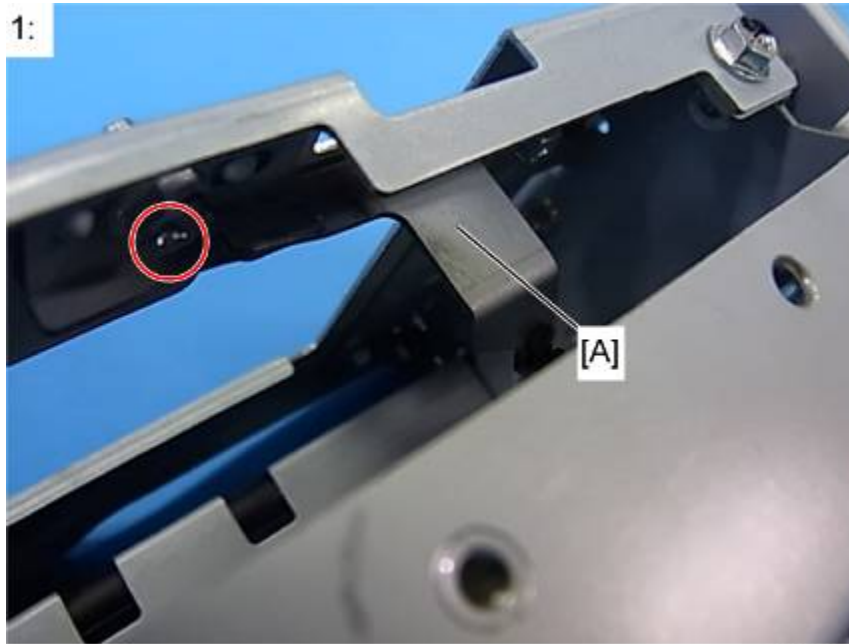


d1180028

3. Pressure roller thermistors (🔧 x 1 each, 🔧 x 1 each)

4.11.8 PRESSURE ROLLER

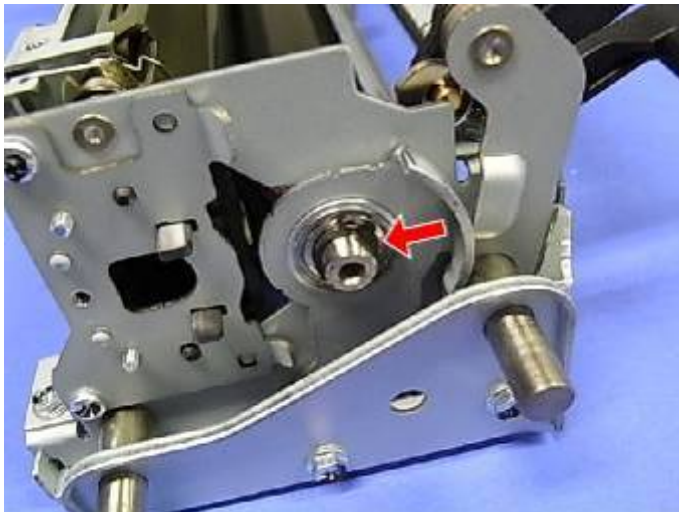
1. Fusing upper cover (☞ p.4-77)
2. Fusing lower cover (☞ p.4-77)
3. Fusing entrance guide plate (☞ p.4-78)
4. Pressure roller thermistors (☞ p.4-80)



d1170735

1: Front lower

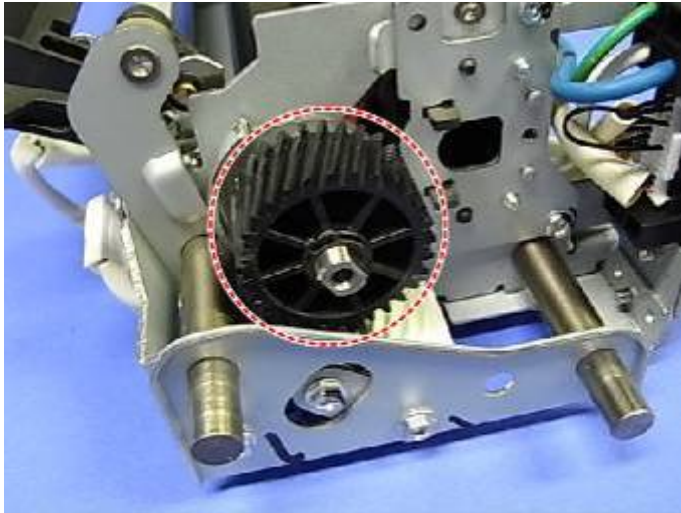
5. Remove the discharge brush [A] (☞ x 1).



d1180033

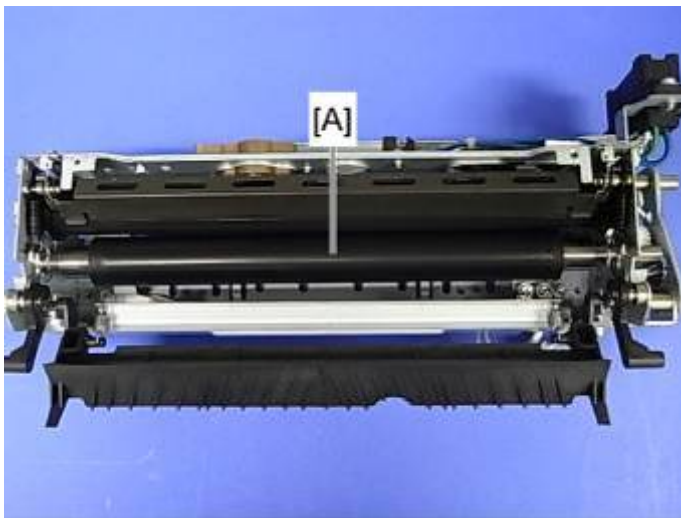
6. Remove the C-ring and bearing.

Fusing



d1180034

7. Remove the C-ring, pressure gear and bearing.

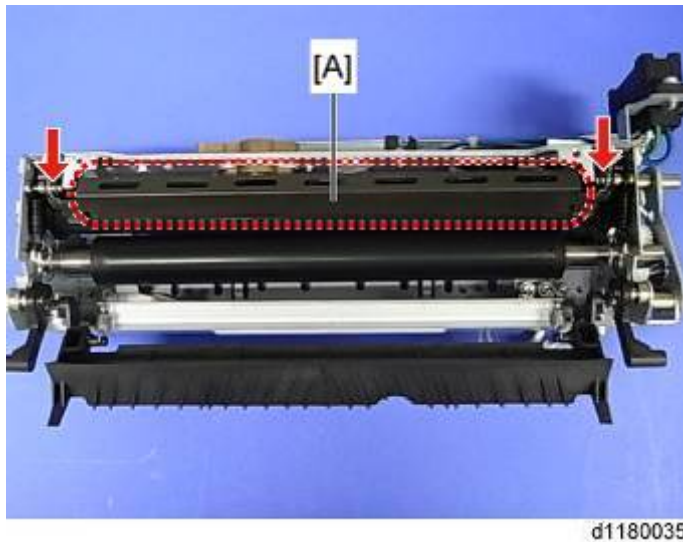


d1170741

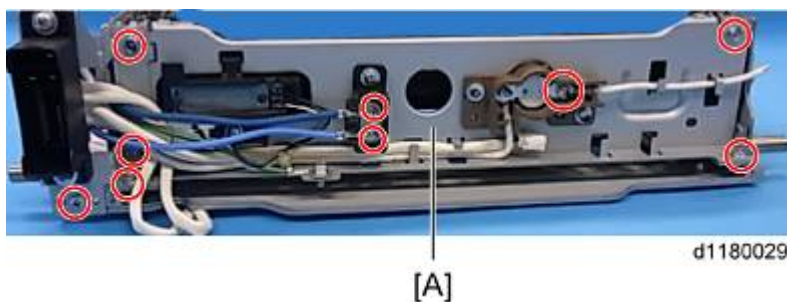
8. Pressure roller [A]

4.11.9 FUSING SLEEVE BELT ASSEMBLY

1. Fusing upper cover (🔧 p.4-77)
2. Fusing lower cover (🔧 p.4-77)
3. Fusing entrance guide plate (🔧 p.4-78)

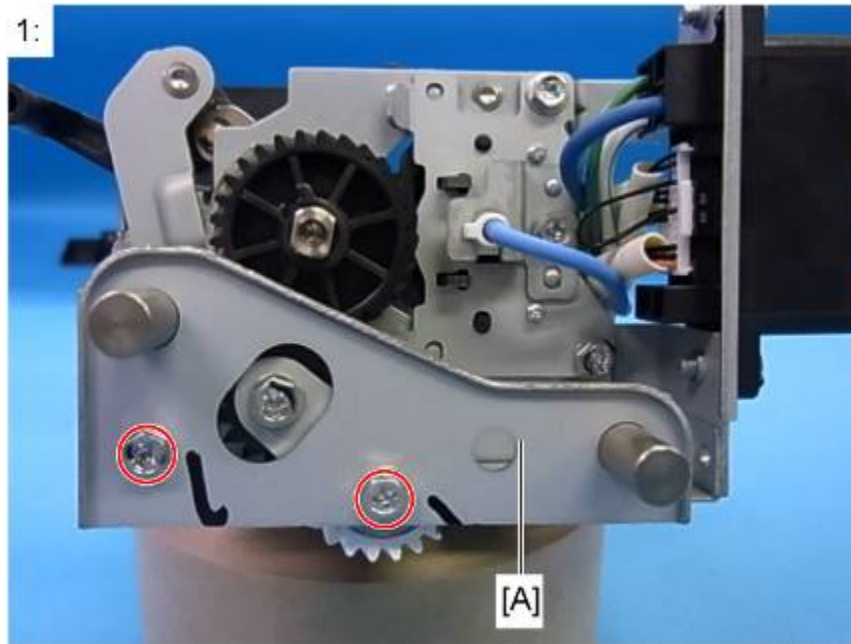


4. Separation plate [A] (Springs x 2)



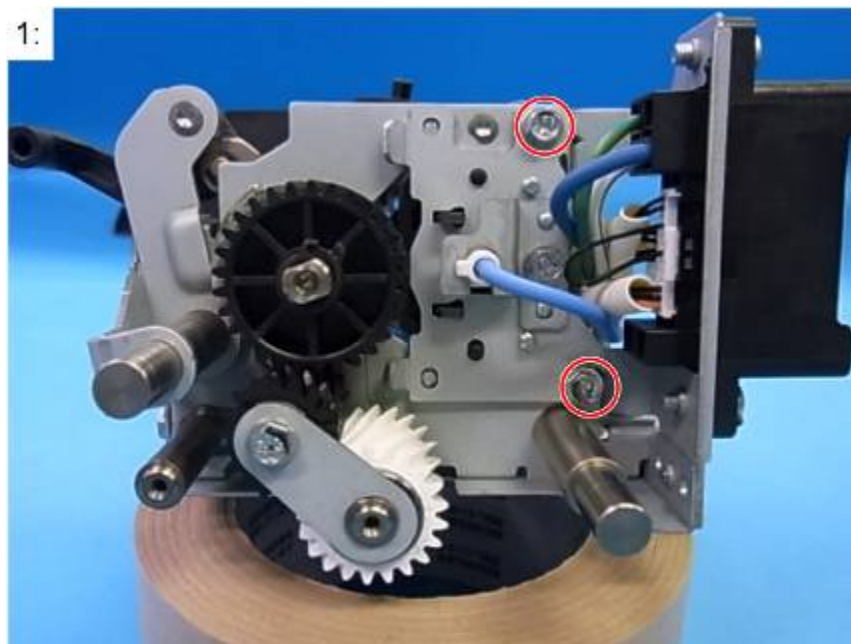
5. Remove the fusing lamp harness (🔧 x 3, short plate x 1)
6. Remove the six screws on the rear frame [A].

Fusing



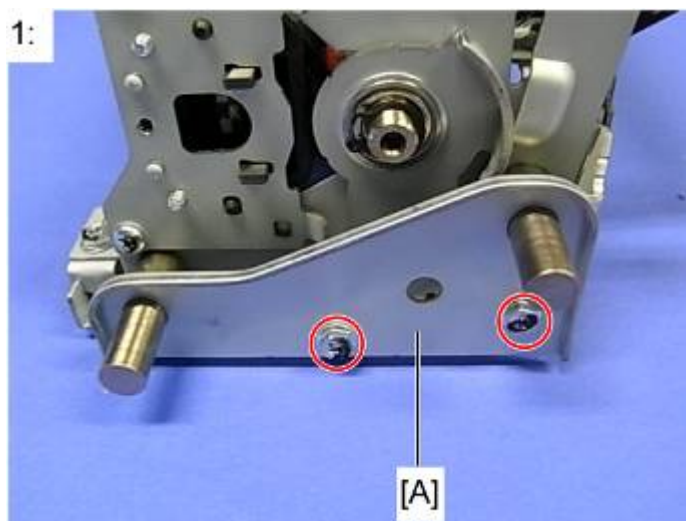
1: Right

7. Remove the right stay [A] ( x 2).



1: Right

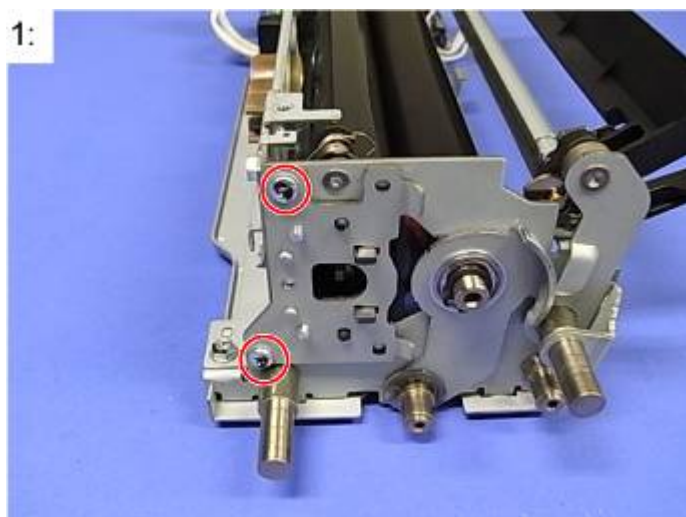
8. Remove two screws at the right.



d1180037

1: Left

9. Remove the left stay [A] ( x 2).



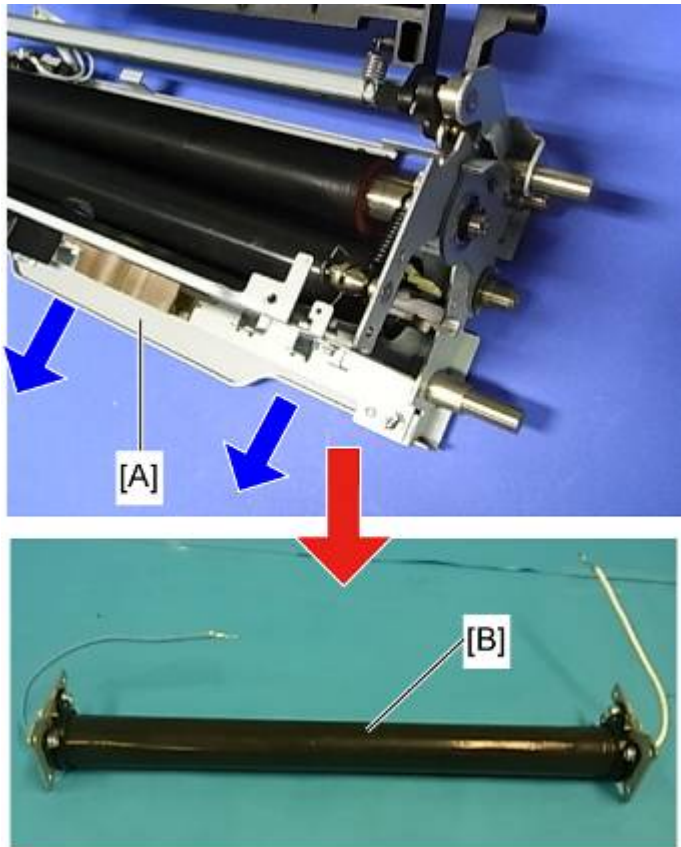
d1180038

1: Left

10. Remove two screws at the left.

Replacement
and
Adjustment

Fusing

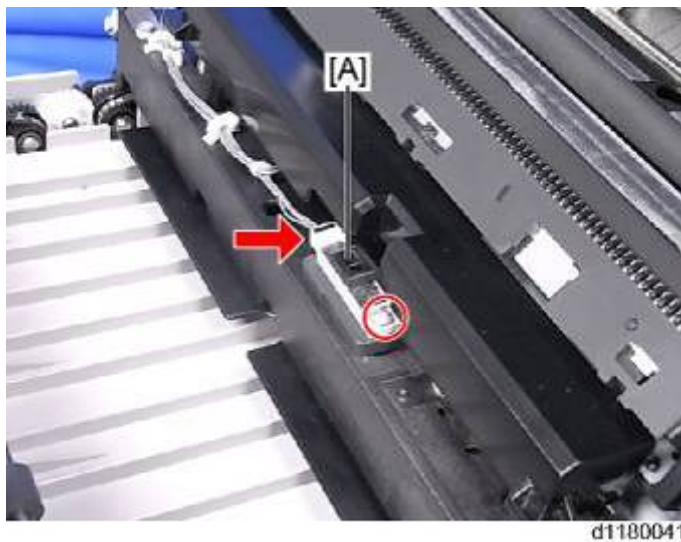


d1180039



11. Pull out the rear frame [A], and take out the fusing sleeve belt assembly [B].

4.11.10 FUSING ENTRANCE SENSOR

1. Open the duplex unit.

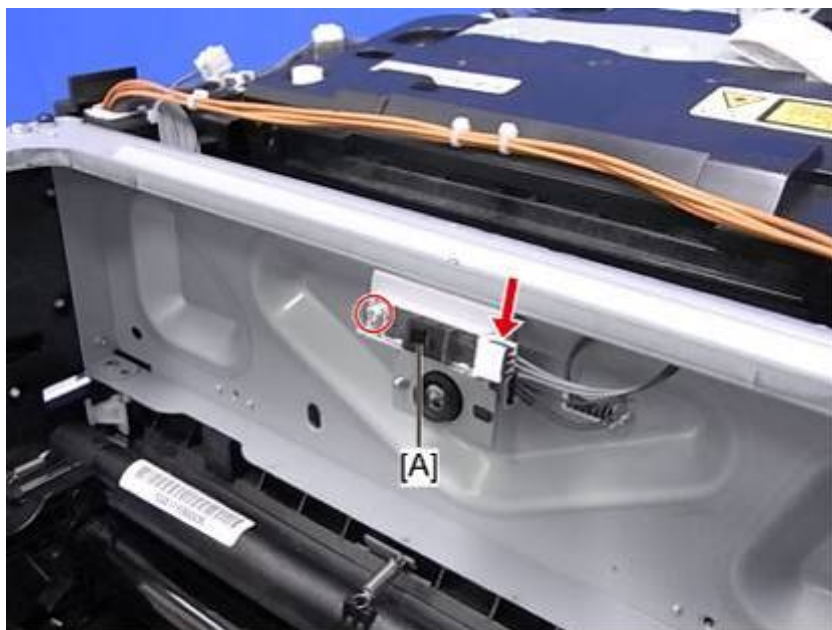


d1180041

2. Fusing entrance sensor [A] ( x 1,  x 1)

4.11.11 FUSING EXIT SENSOR

1. Paper exit unit (🔧 p.4-111)



d1170127

2. Fusing exit sensor [A] (🔧 x 1, 📦 x 1, hook x 2)

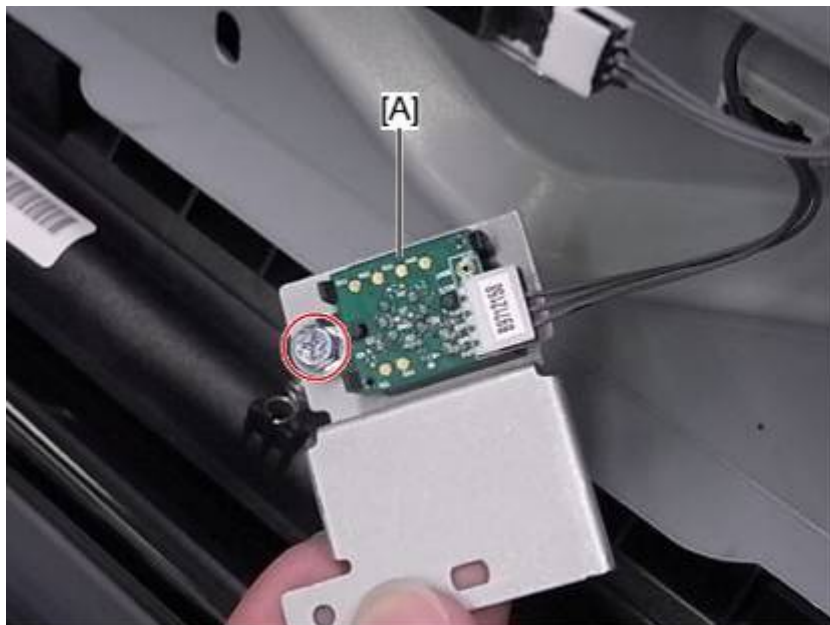
4.11.12 THERMOPILE

1. Paper exit unit (🔧 p.4-111)



d1170128

2. Bracket [A] (🔧 x 1, 📦 x 1)

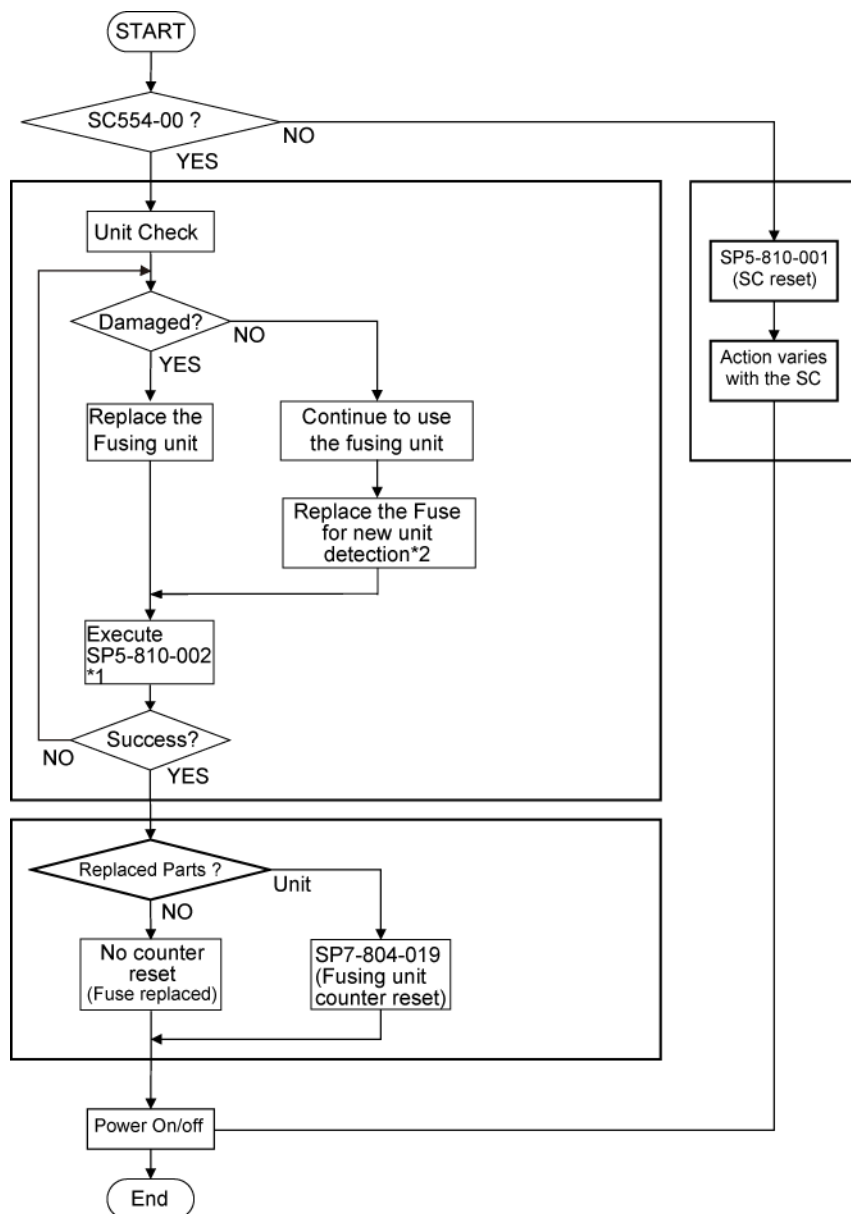


d1170129

3. Thermopile [A] (🔧 x 1)

4.11.13 ACTIONS WHEN SC554-00 OCCURS

Basically, the entire fusing unit must be replaced when SC554-00 occurs. However, it is possible to continue to use the old fusing unit when there is no damage found when you inspect the fusing unit in accordance with the flow chart shown below.



d1170729

*1: a) Do not use SP 3-701-014 to reset the fusing unit counter manually when doing the above reset procedure for SC554-00. b) Do not open the door when doing the procedure in this flow chart ("SC reset failure" will be shown.). The SC reset will be successful if the fuse for new fusing unit detection is blown if the machine door is open during the SC reset, and it will not be successful if it is not blown. The SC reset should be performed again if it fails. "SC reset failure" will be shown when this SP (SP5-810-002) is executed if an SC other than SC554-00 occurred.

Replacement
and
Adjustment

Fusing

*2: If there is no fuse for new unit detection (such as in the fusing unit that comes with the machine from the factory), install a fuse.

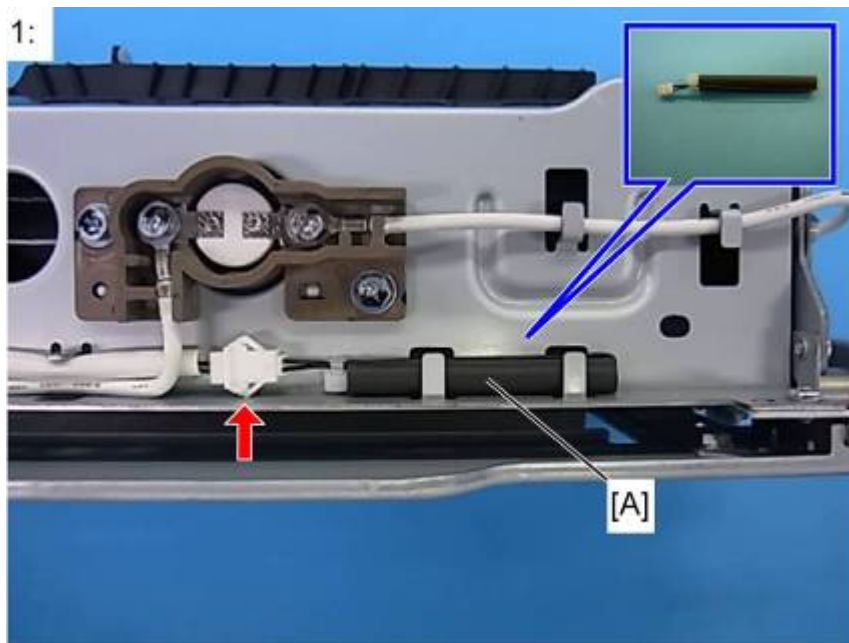
★ Important

- **Never use a damaged fusing unit.**
- **Inspect the entire fusing unit carefully if you will continue to use this unit.**

New Fusing Unit Detection Fuse Replacement and Installation

The new fusing unit detection fuse should be replaced (or installed, such as in the fusing unit that comes with the machine from the factory) if you continue to use the fusing unit. The fuse replacement and installation procedure is as follows.

1. Fusing upper cover (🔧 p.4-77).
2. Fusing lower cover (🔧 p.4-77)



d1170734

1: Rear

3. Remove the new fusing unit detection fuse [A] if the old blown fuse is attached (🔧 x 1).
4. Connect the fuse connector, and insert the fuse into place from the upper side.
5. Reassemble the fusing unit.

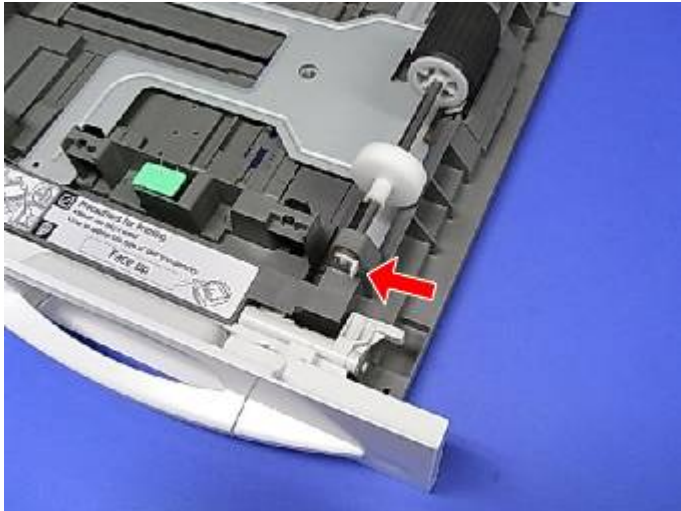
↓ Note

- Ask your supervisor to obtain the new fusing unit detection fuse.

4.12 PAPER FEED

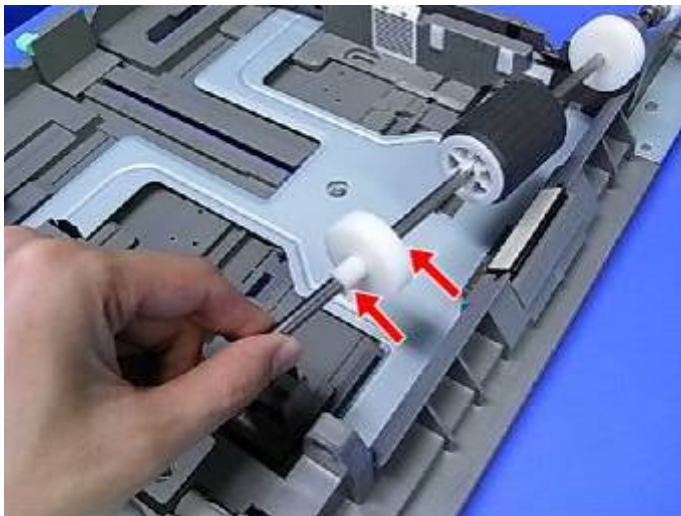
4.12.1 PAPER FEED ROLLER (STANDARD TRAY)

1. Pull out the paper tray.



d1180042

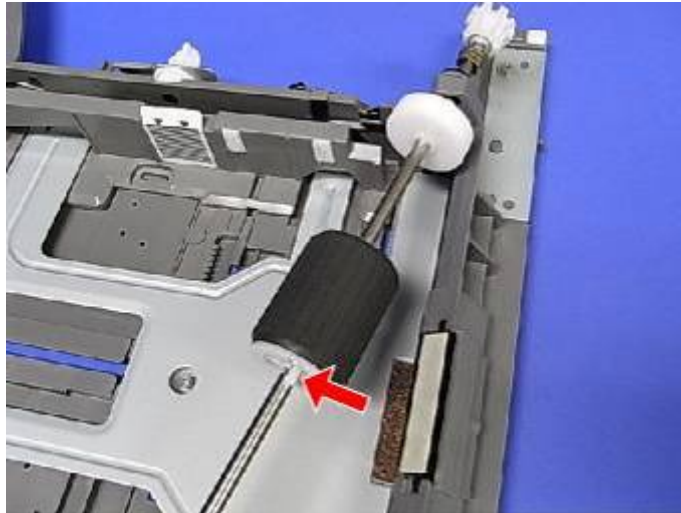
2. Remove the bearing (Ⓢ x 1).



d1180043

3. Sub paper feed roller (Ⓢ x 2)

Paper Feed

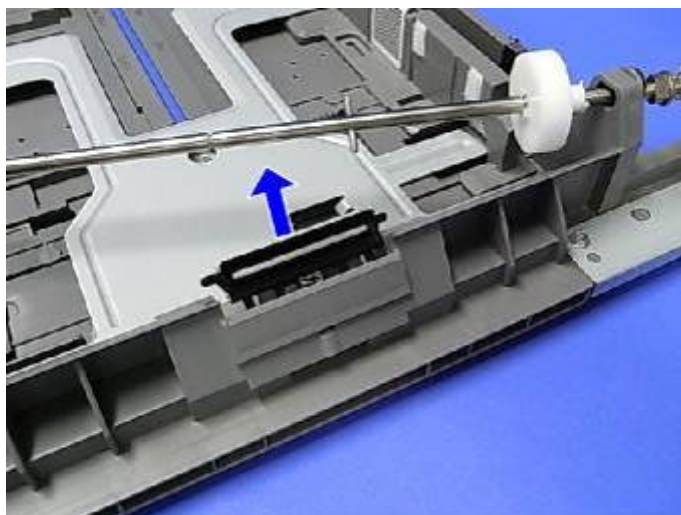


d1180044

4. Paper feed roller (Hook x 1)

4.12.2 FRICTION PAD

1. Paper feed roller (Hook x 1) p.4-91



d1180045

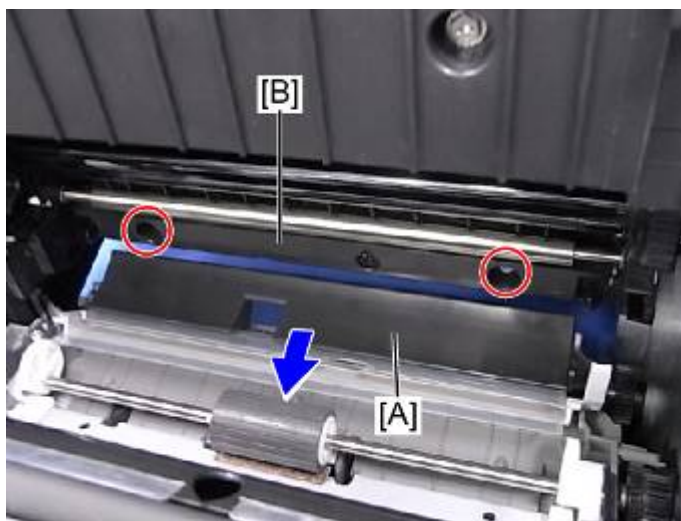
2. Friction pad (Hooks x 2)

4.12.3 REGISTRATION / PAPER FEED SENSOR




d1180046

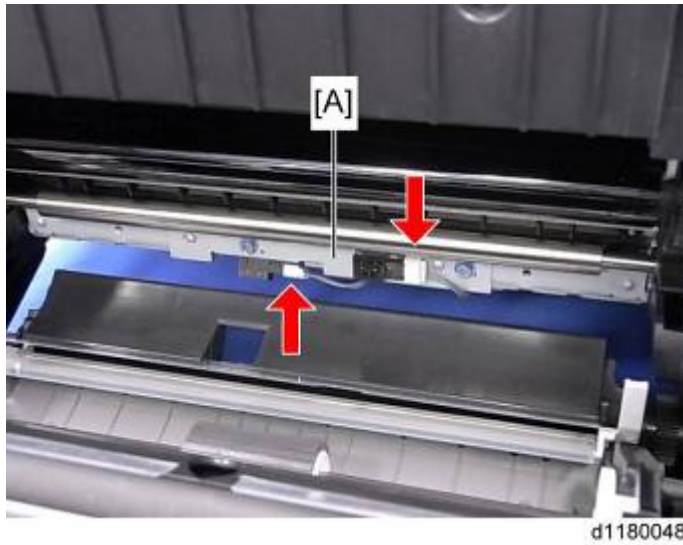
1. Open the duplex unit.





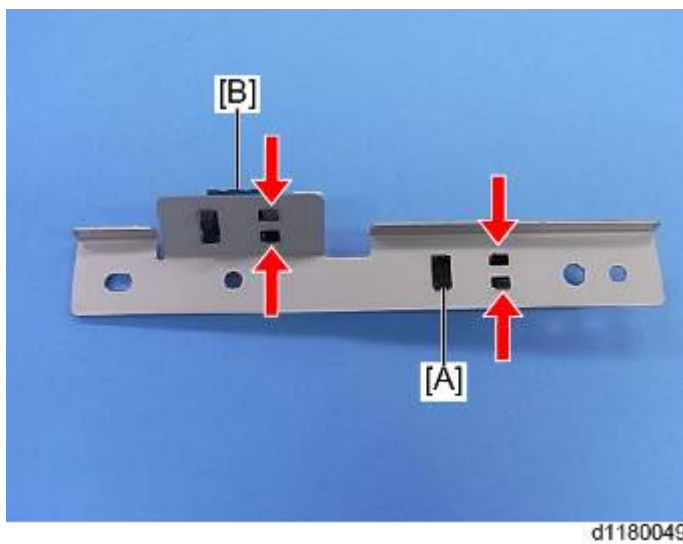
d1180047

2. Pull down the guide plate [A].
3. Sensor cover [B] ( x 2)

Paper Feed



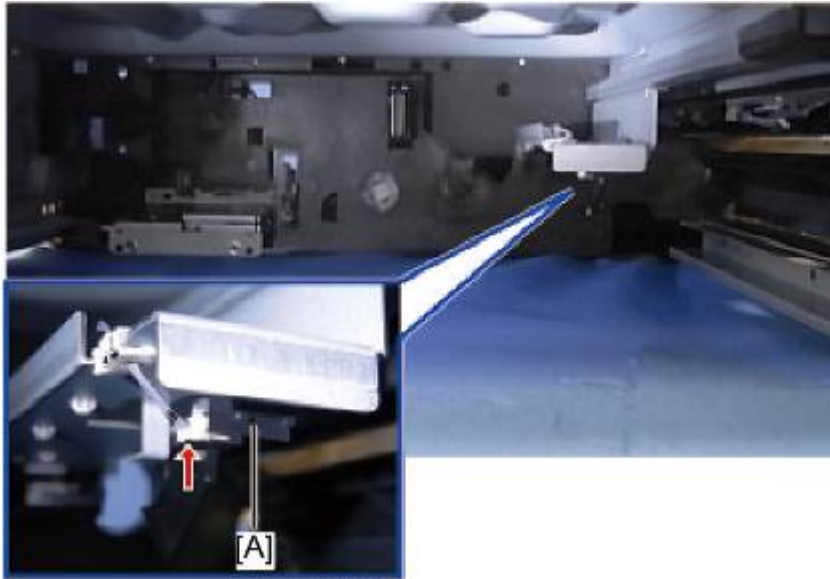
4. Sensor bracket [A] ( x 2,  x 2)



5. Registration sensor [A] (Hook x 2)
6. Paper feed sensor [B] (Hook x 2)

4.12.4 PAPER END SENSOR

1. Pull out the paper tray.

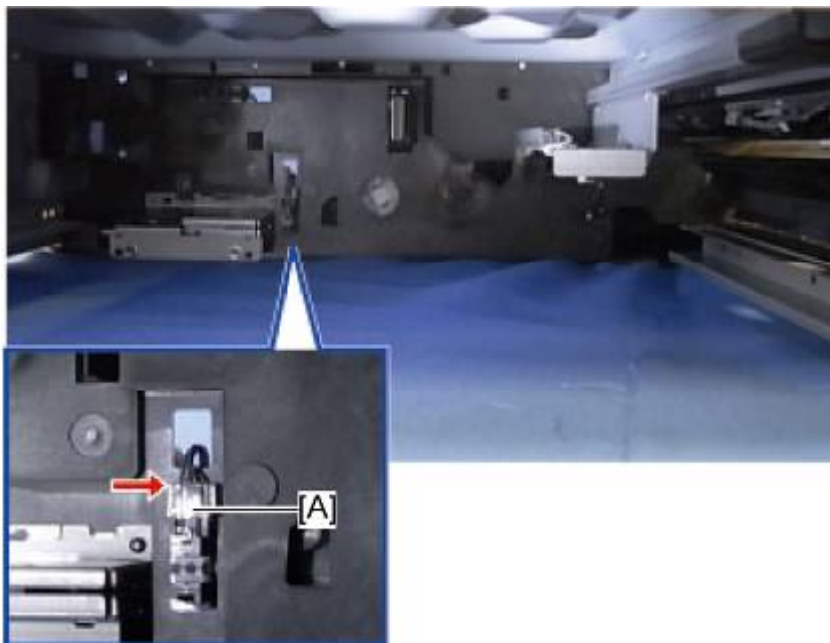


d1170205a

2. Paper end sensor [A] (📎 x 1, hook x 2)

4.12.5 PAPER TRAY BOTTOM PLATE HP SENSOR

1. Pull out the paper tray.



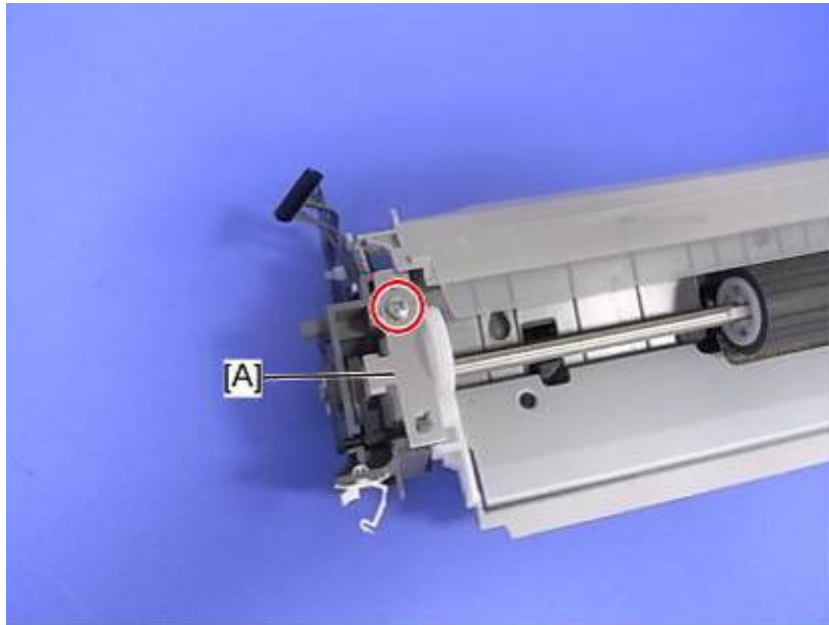
d1170204

2. Paper tray bottom plate HP sensor [A] (📎 x 1, hook x 2)

Replacement
and
Adjustment

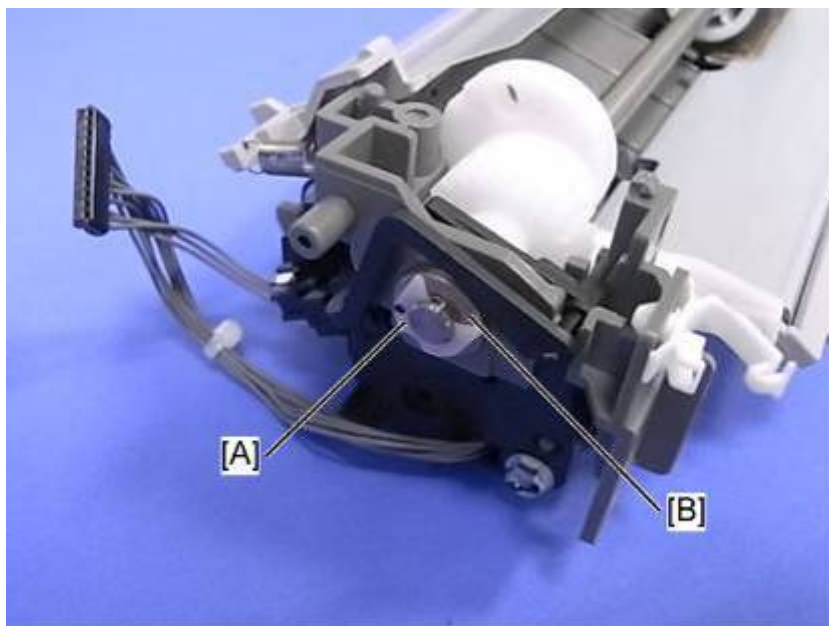
4.12.6 BY-PASS FEED ROLLER

1. By-pass feed unit (🔧 p.4-100)



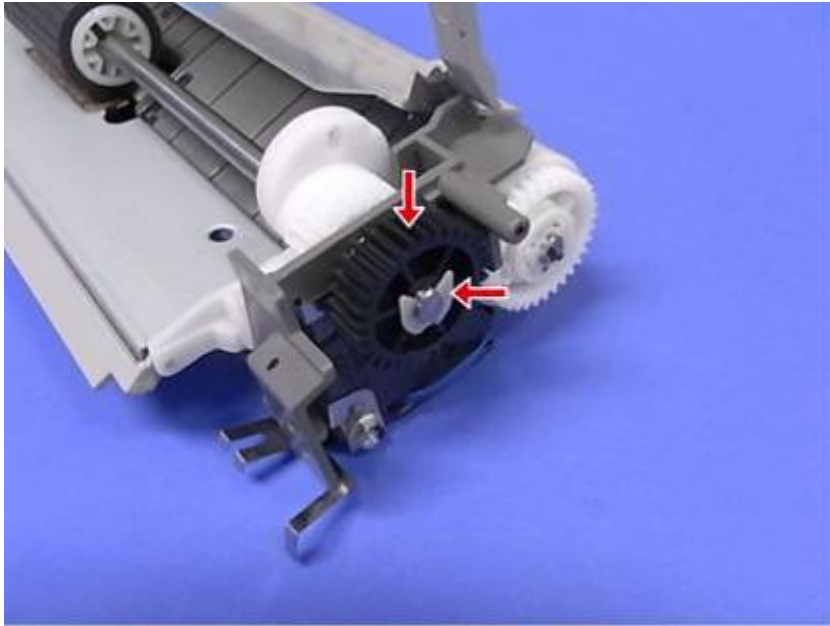
d1170067

2. Bracket [A] (🔧 x 1)



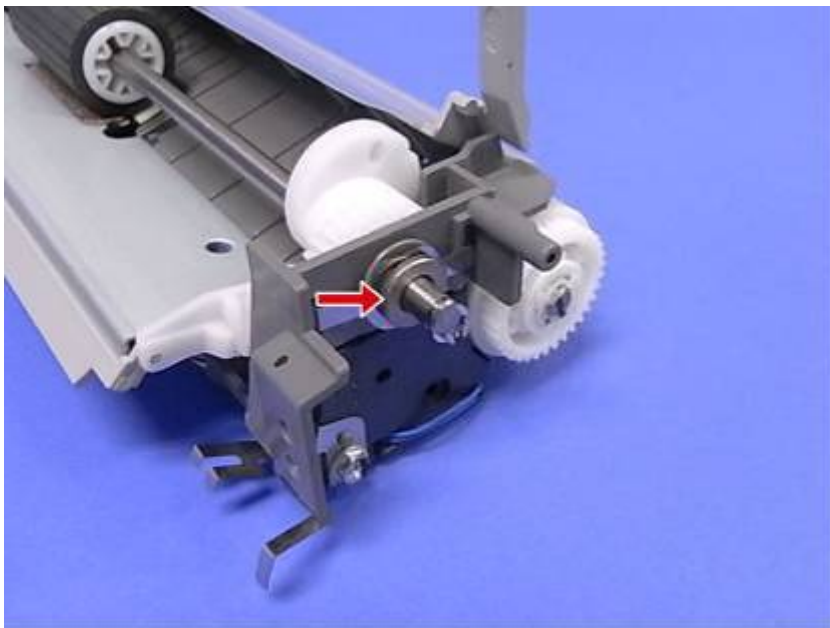
d1170068

3. Remove the e-ring [A] and bearing [B] at the front of the by-pass feed unit (🔧 x 1, bearing x 1).



d1170069

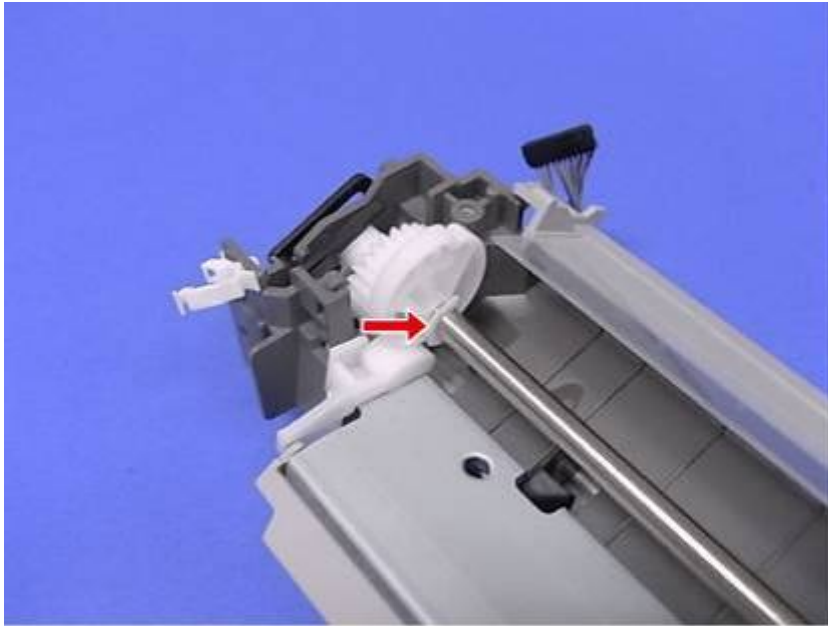
4. Remove the e-ring and the gear at the rear of the by-pass feed unit (e-ring x 1, gear x 1).



d1170070

5. Remove the bearing (bearing x 1).

Replacement
and
Adjustment



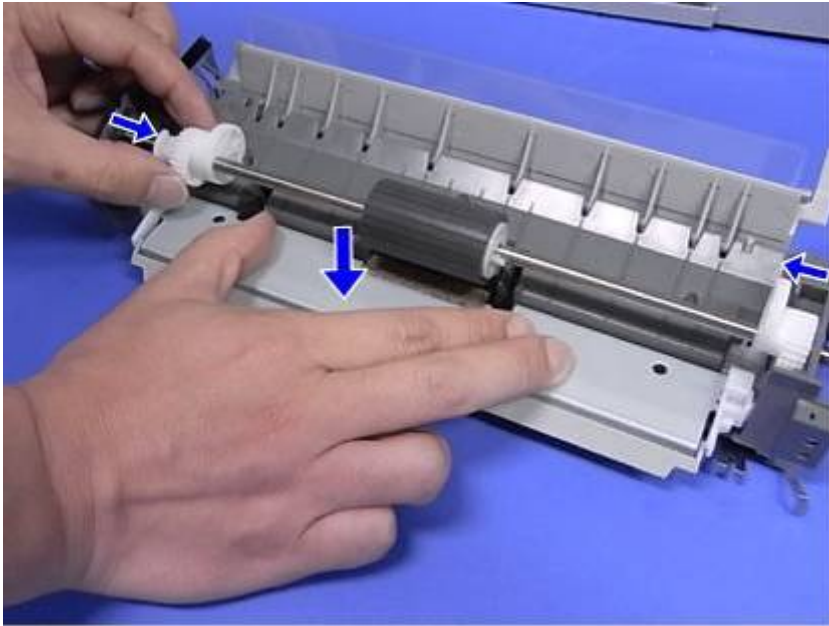
d1170071

6. Remove the e-ring at the front of the by-pass feed unit (Ⓒ x 1).



d1170072

7. Remove the e-ring at the rear of the by-pass feed unit (Ⓒ x 1).



d1170073

8. Move the front cam and rear cam inward while pushing down the bottom plate.

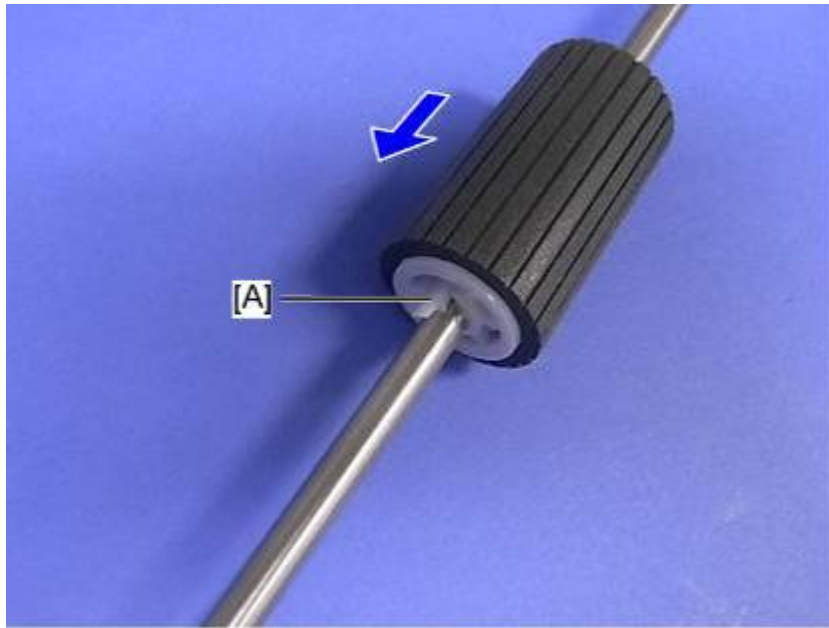


d1170074

9. Remove the paper feed roller with the shaft from the front side.

Replacement
and
Adjustment

Paper Feed

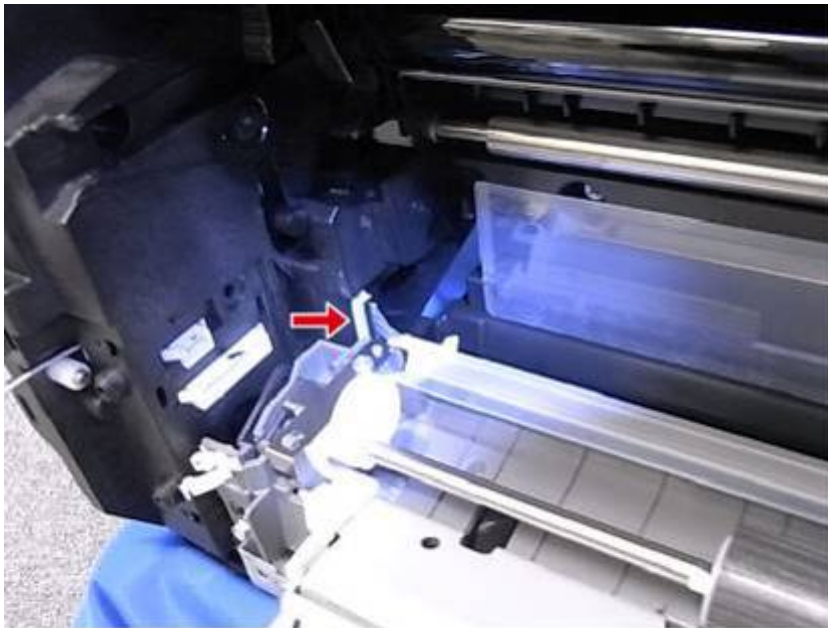


d1170075

10. Paper feed roller (Hook [A] x 1)

4.12.7 BY-PASS FEED UNIT

1. Duplex unit (📄 p.4-114)




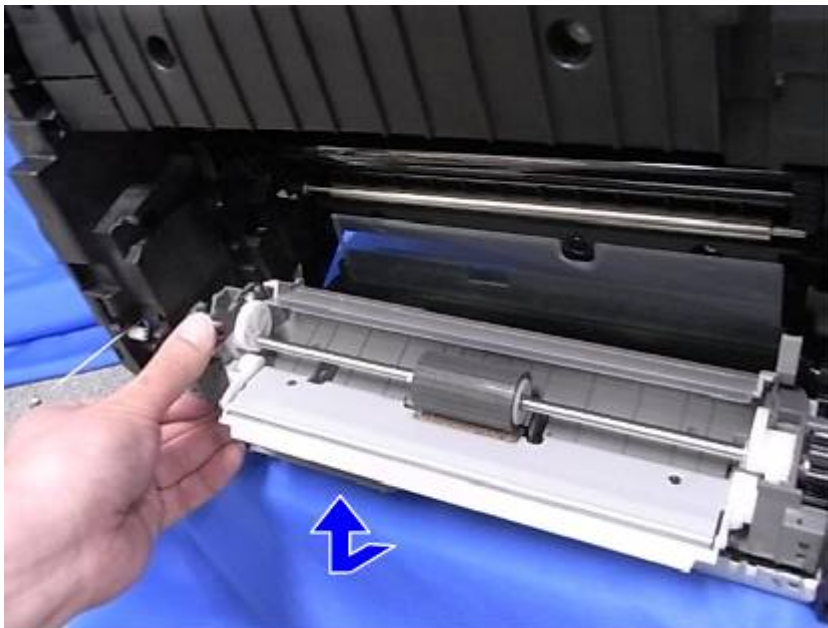
d1170086

2. Disconnect the connector (📄 x 1).



d1170087

3. Remove two screws ( x 2).



d1170088

4. By-pass feed unit.

 **Note**

- Lift up the left side of the unit and remove it while pulling it out forward.

4.12.8 BY-PASS TRAY



d1170089

1. Open the by-pass tray [A].



d1170090

2. Remove two e-rings (Ⓒ x 2, Stopper [A] x 1).




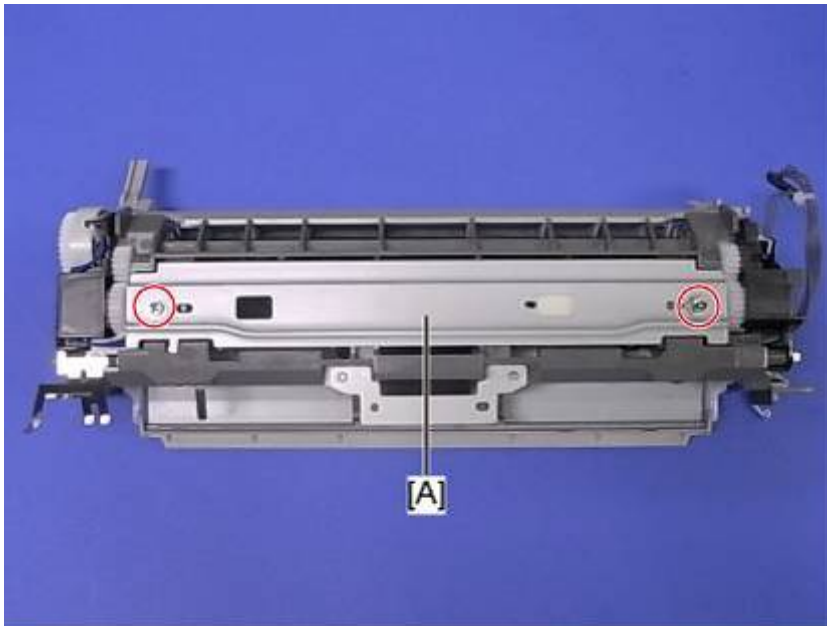
d1170091

3. By-pass tray [A]


Replacement
and
Adjustment

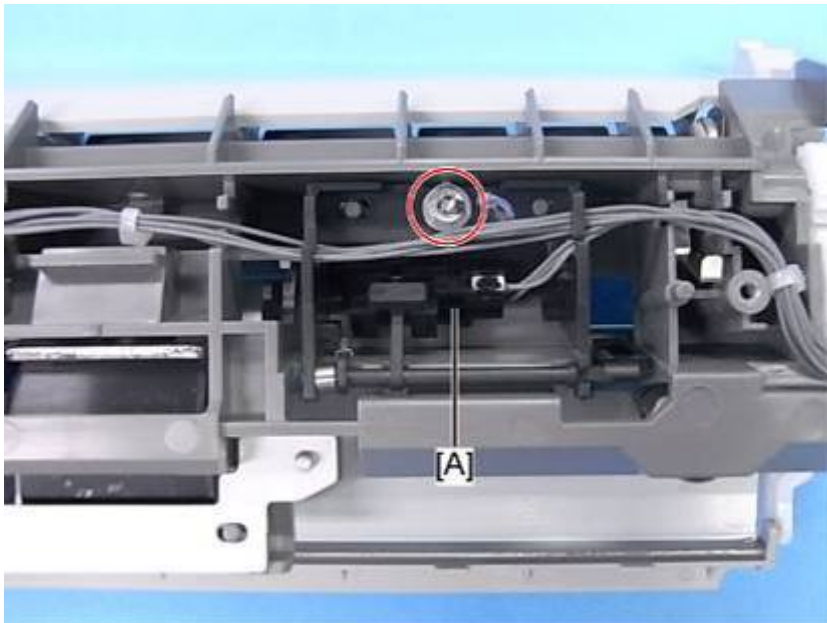
4.12.9 BY-PASS FEED PAPER SENSOR

1. By-pass feed unit ( p.4-100)




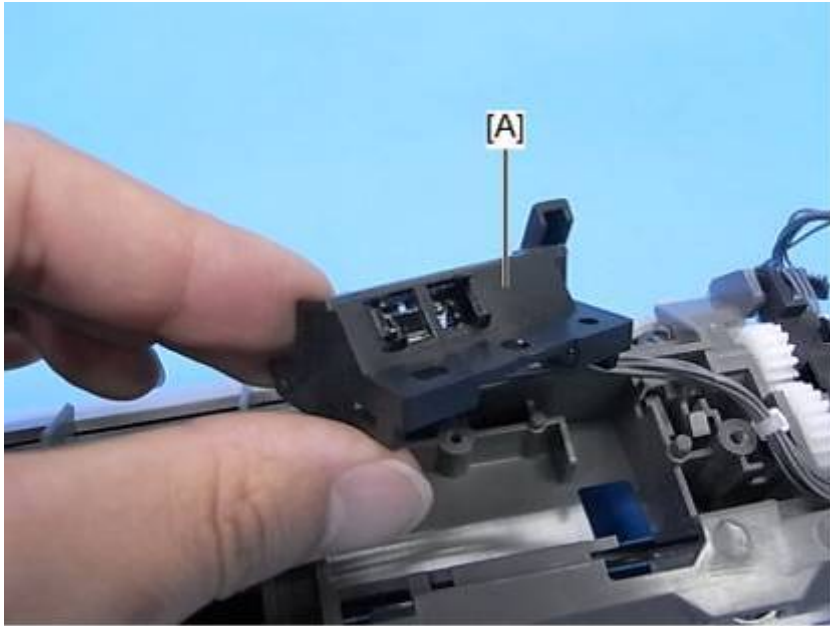
d1170116

2. Bracket [A] ( x 2)



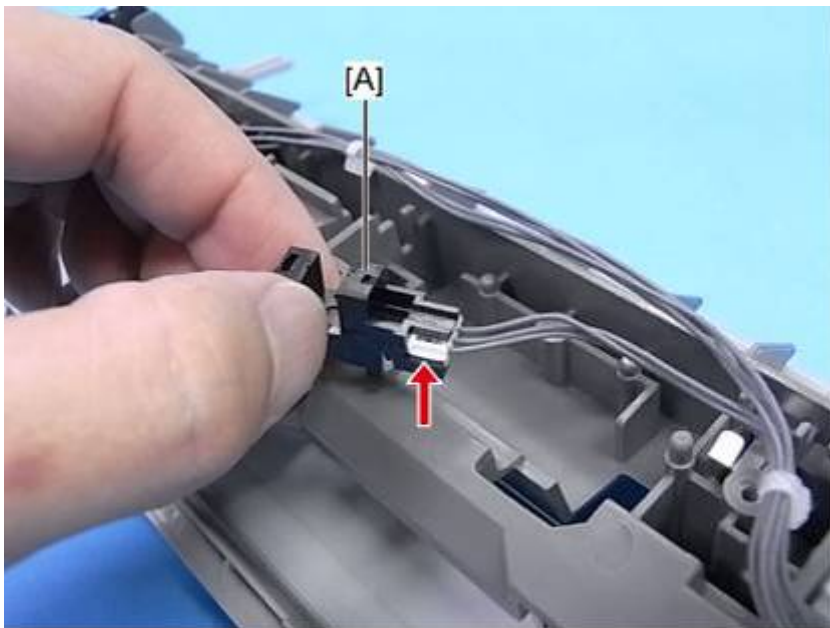
d1170117

3. Remove the by-pass feed paper sensor with the holder [A] ( x 1).



d1170118

- 4. Sensor holder [A] (Hook x 2)



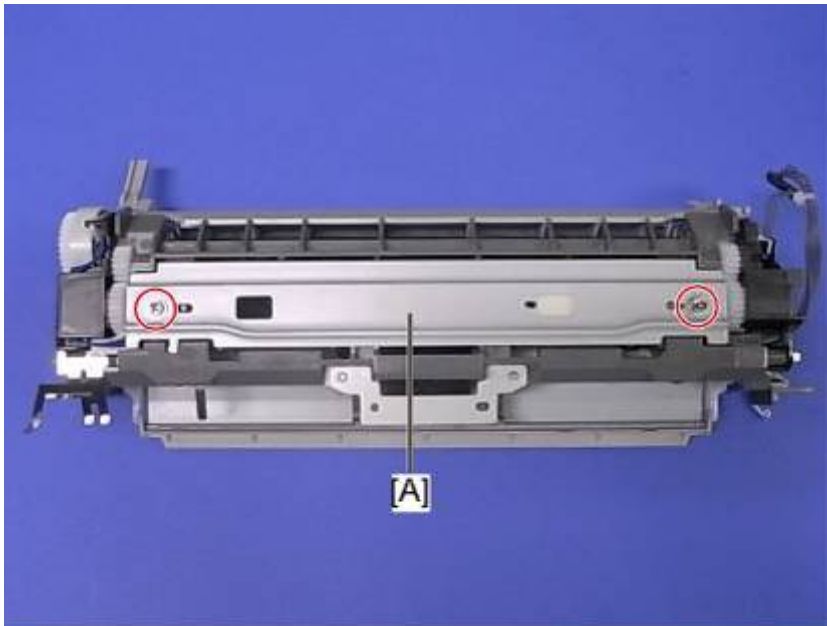
d1170119

- 5. By-pass feed paper sensor [A] (📄 x 1)

Replacement
and
Adjustment

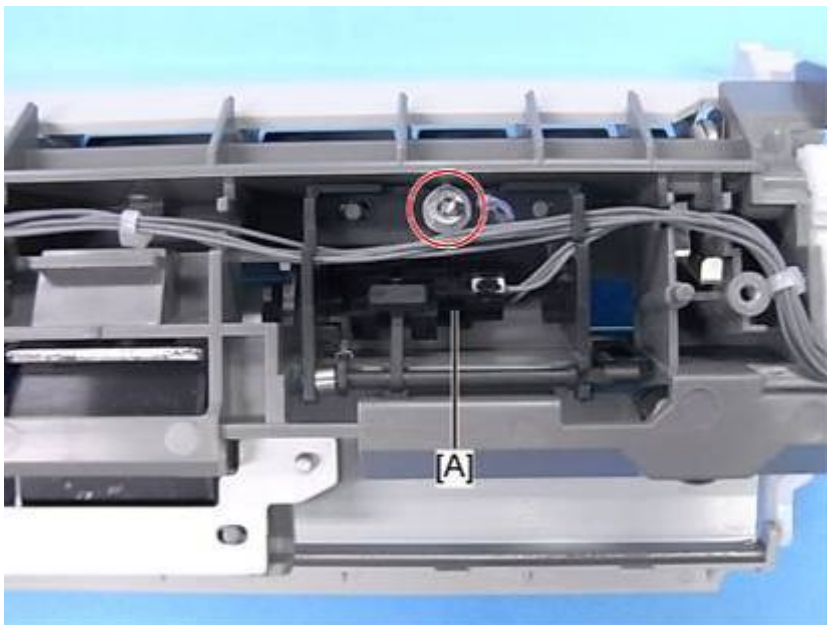
4.12.10 BY-PASS PAPER SIZE SENSOR

1. By-pass feed unit (🔧 p.4-100)



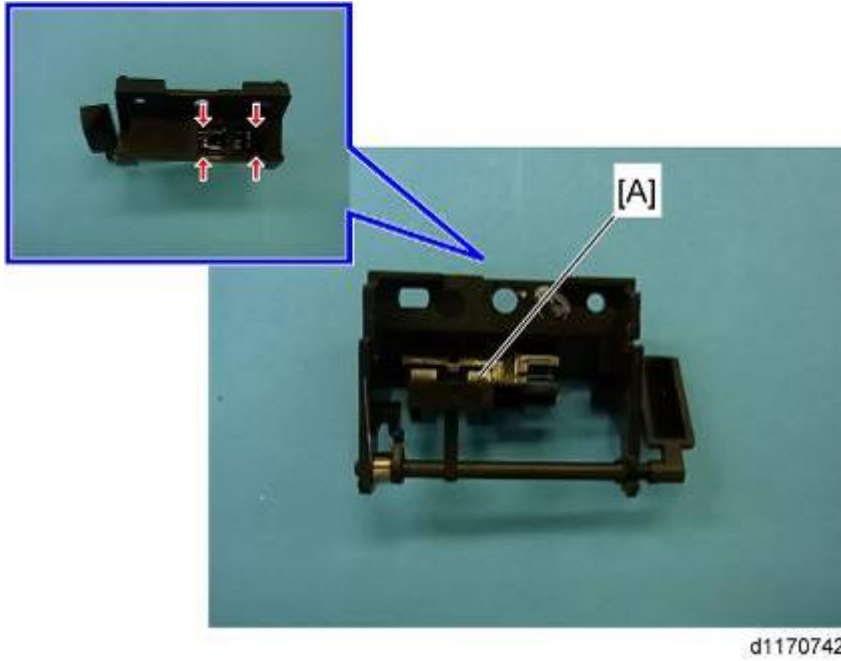
d1170122

2. Bracket [A] (🔧 x 2)



d1170117

3. By-pass feed paper sensor with the holder [A] (🔧 x 1)

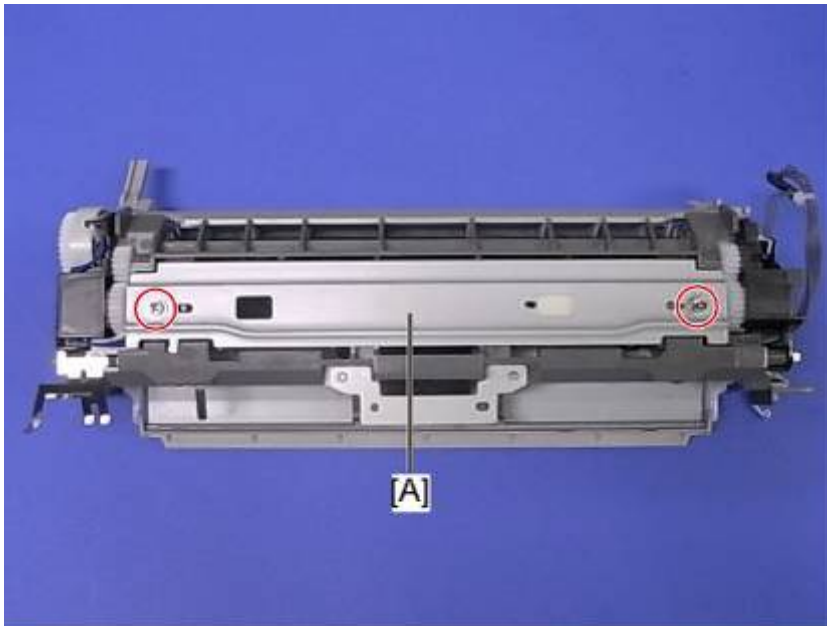


- 4. By-pass feed paper sensor [A] (Hooks x 4)

Replacement
and
Adjustment

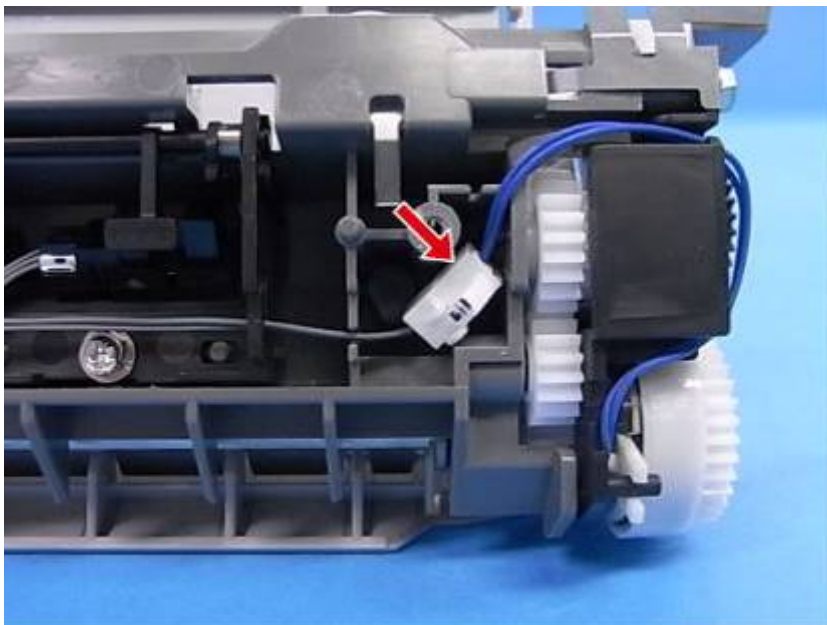
4.12.11 BY-PASS FEED CLUTCH

1. By-pass feed unit (🔧 p.4-100)



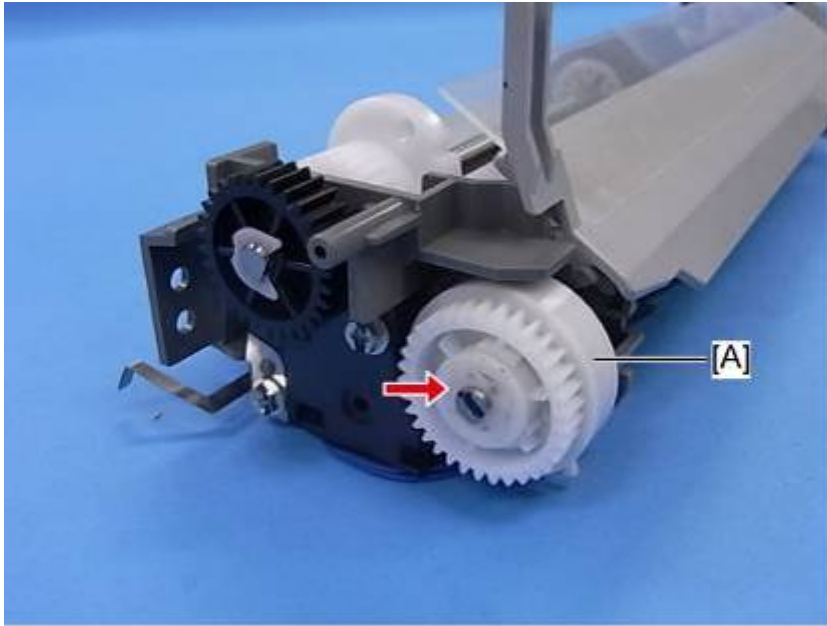
d1170122

2. Bracket [A] (🔧 x 2)




d1170123


3. Disconnect the connector of the clutch (🔧 x 1).

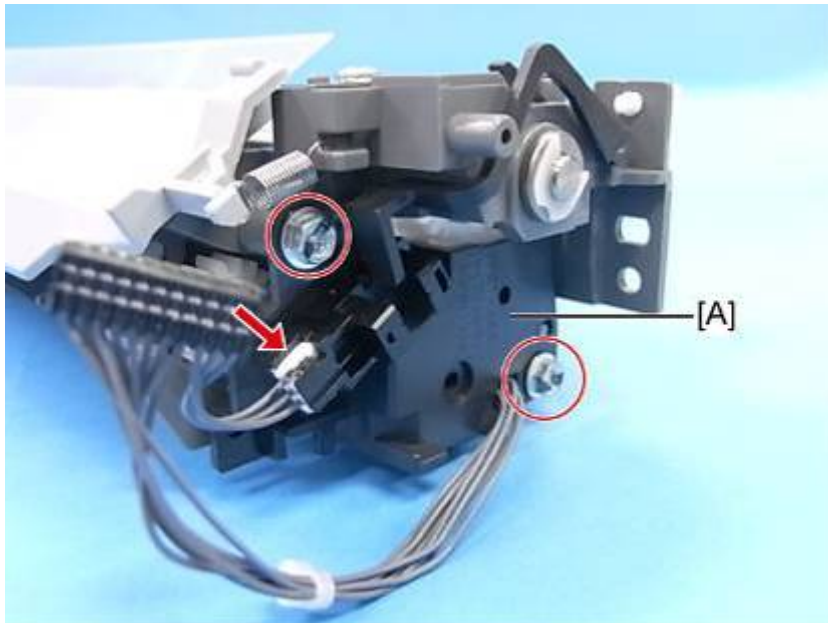


d1170124



4. By-pass feed clutch [A] ( x 1)

4.12.12 BY-PASS FEED BOTTOM PLATE HP SENSOR

1. By-pass feed unit ( p.4-100)

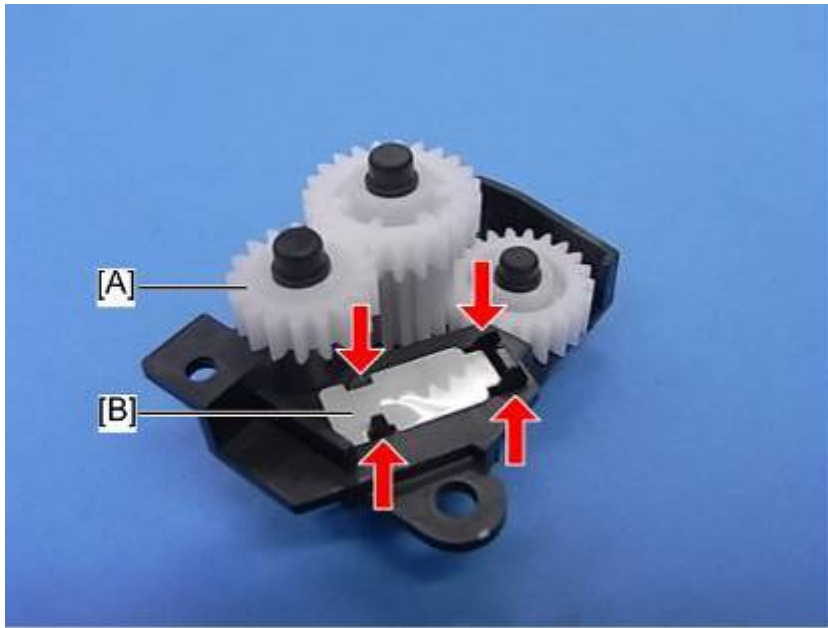


d1170120

1. Sensor holder [A] ( x 2,  x 1)

Replacement
and
Adjustment

Paper Feed



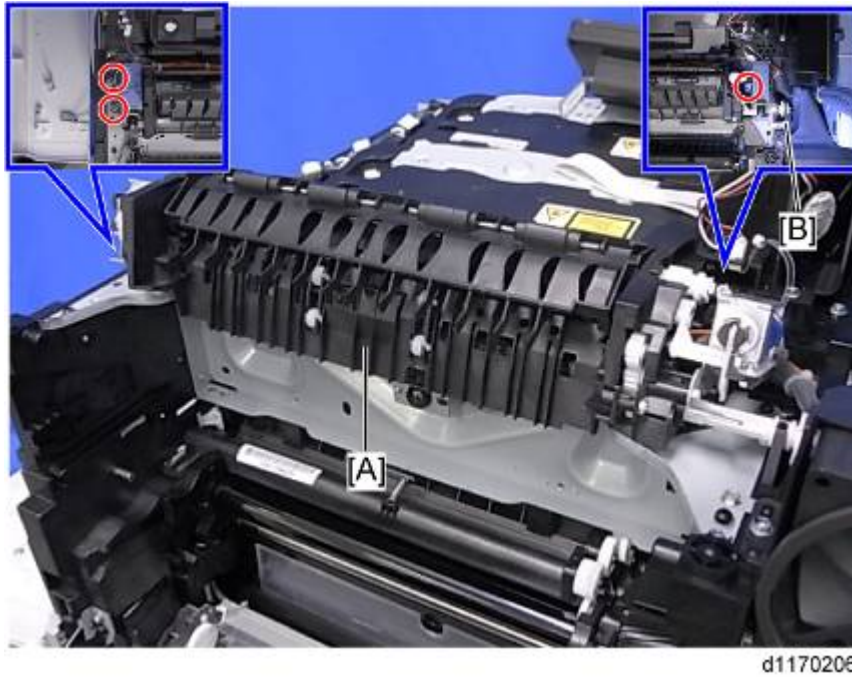
d1170121

1. Remove the gear [A].
2. By-pass feed bottom plate HP sensor [B] (Hooks x 4)

4.13 PAPER EXIT

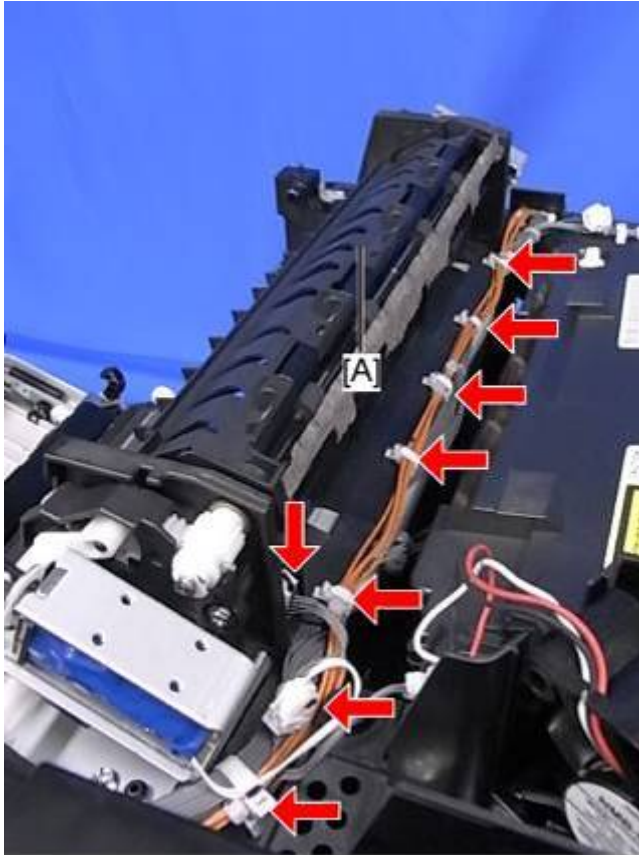
4.13.1 PAPER EXIT UNIT

1. Inner cover (p.4-25)



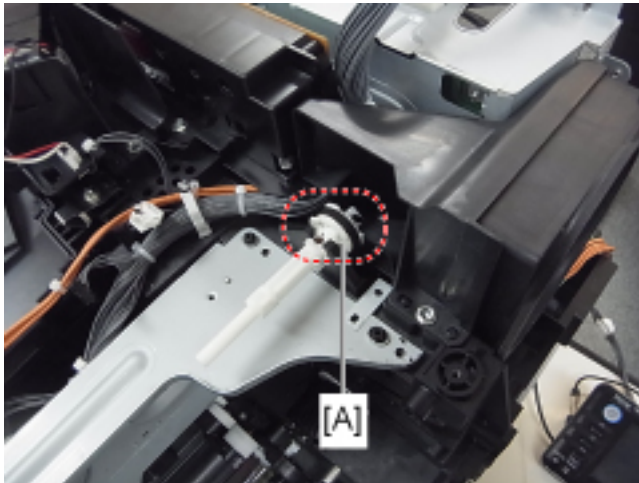
2. Remove the right and left screws of the paper exit unit [A] (x 3).

Paper Exit



1170207

3. Paper exit unit [A] (🖨️ x 6, 🖨️ x 2)



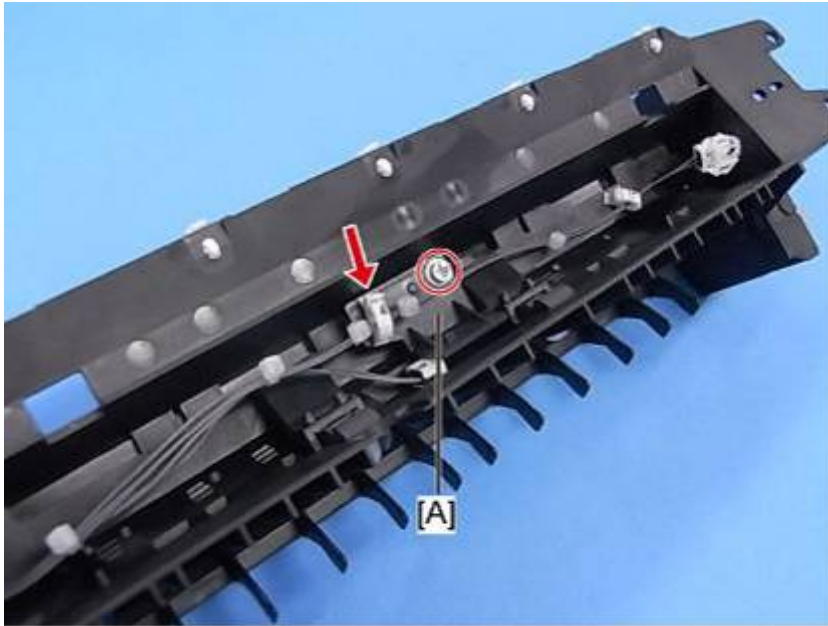
d1170731

⬇️ Note

- Make sure that you do not release the exit roller drive belt [A] ([B] in step 2) by mistake when removing the paper exit unit. If the belt is released and dropped down to the lower part of the machine, you will have difficulty in reattaching it.

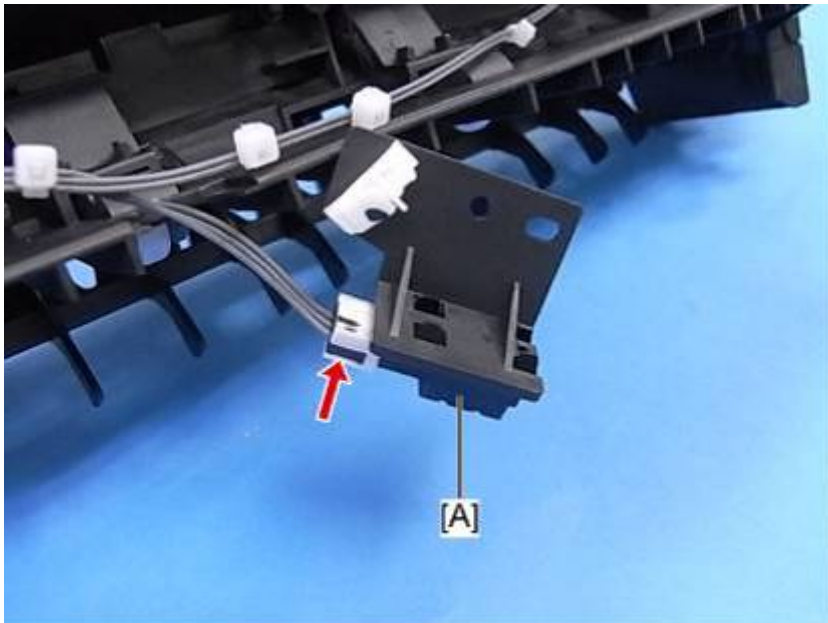
4.13.2 PAPER EXIT SENSOR

1. Paper exit unit (🔧 p.4-111)



d1170125

2. Sensor bracket [A] (🔧 x 1, 🔩 x 1)



d1170126

3. Paper exit sensor [A] (🔧 x 1, hook x 4)

Replacement
and
Adjustment

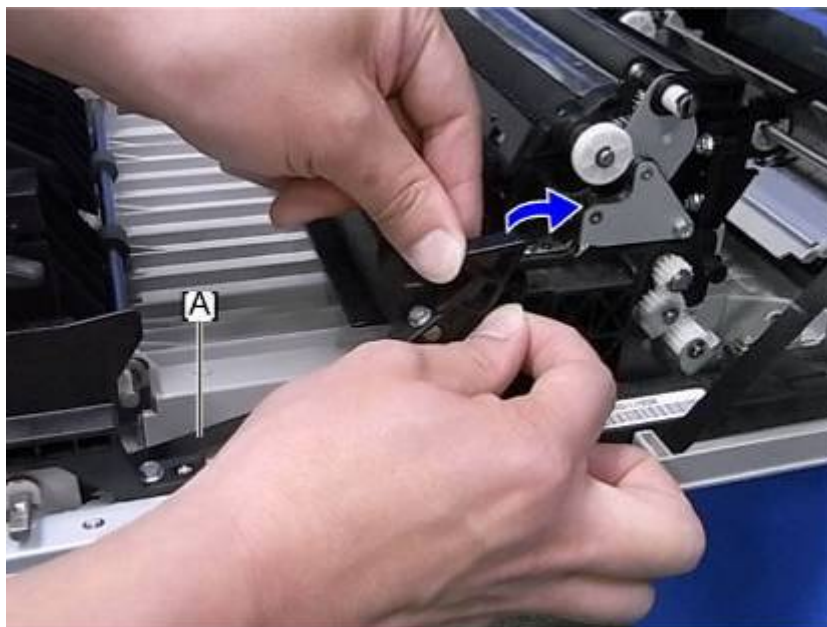
4.14 DUPLEX

4.14.1 DUPLEX UNIT



d1170076

1. Open the duplex unit.




d1170077

2. Push the lever and reduce the tension of the belt [A], then remove the belt.



d1170078

3. Remove two screws on the paper transport unit [A] ( x 2).

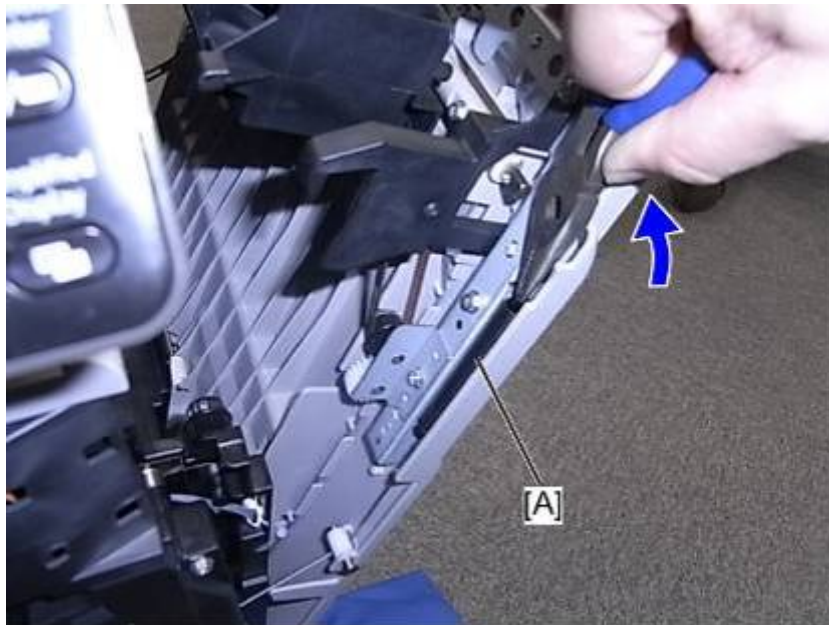


d1170082

4. Lift the paper transport unit [A].

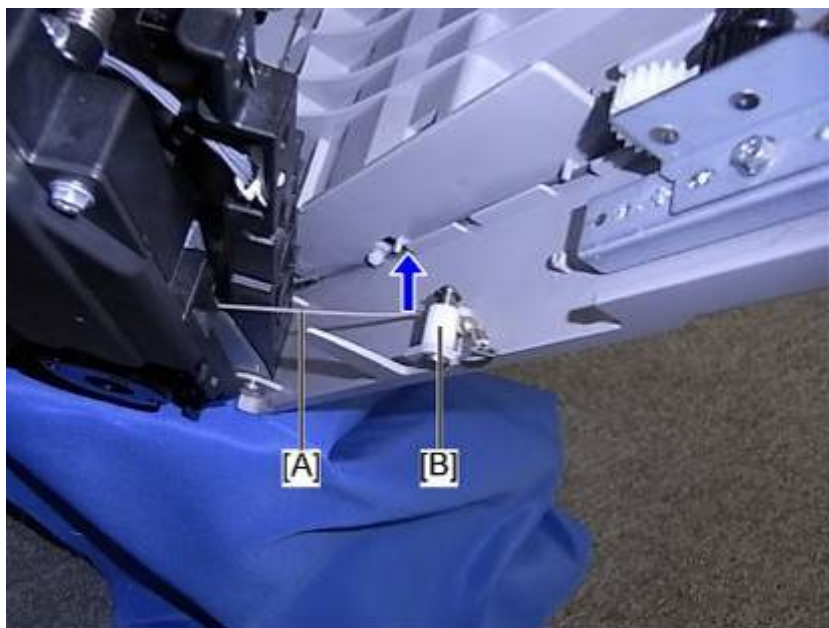
Replacement
and
Adjustment

Duplex



d1170080

5. Lift the duplex unit, then remove the spring [A].



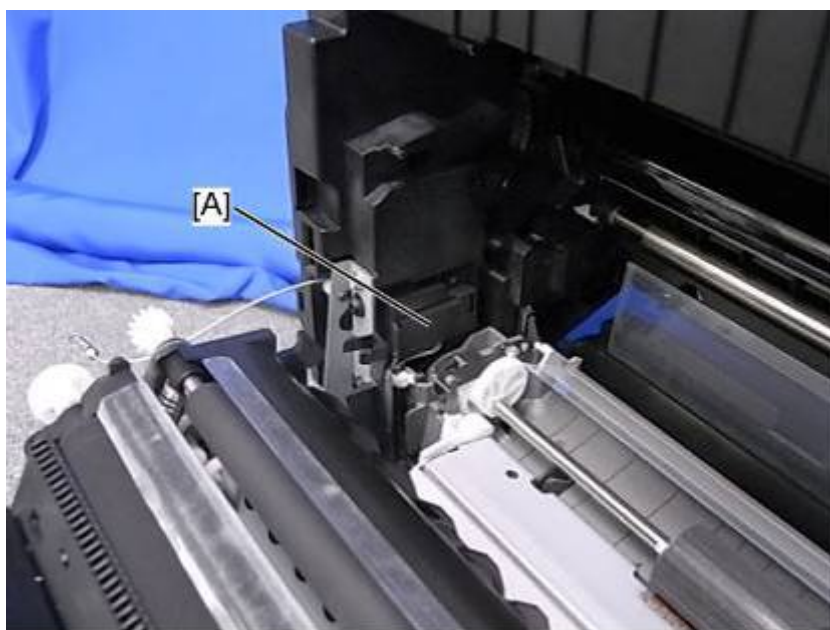
d1170081

6. Release the tension wire [A] from the roller [B].



d1170082

7. Restore the paper transport unit [A].

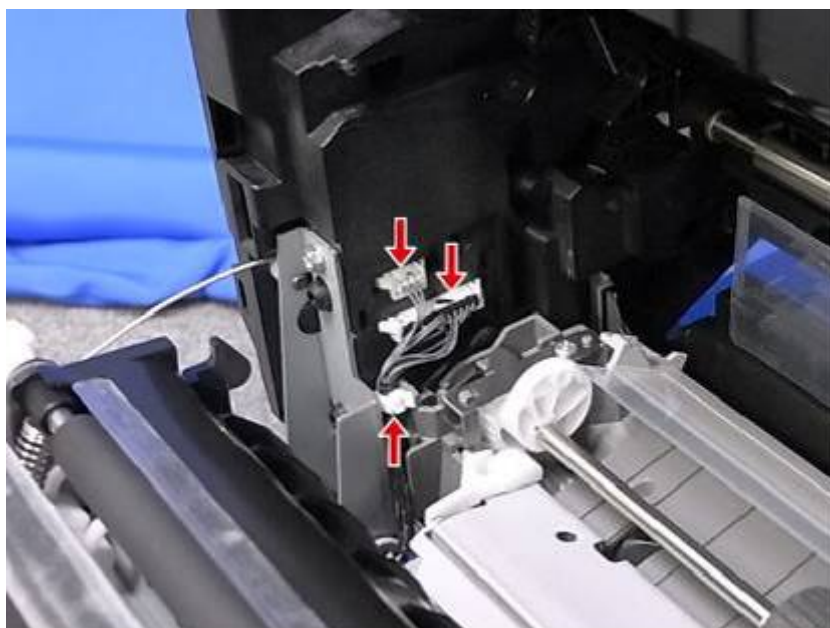


d1170083

8. Connector cover [A]

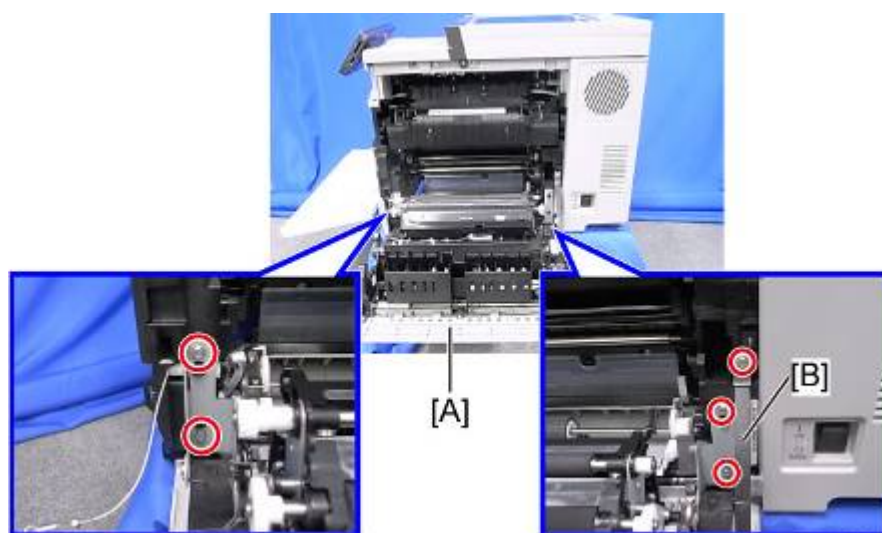
Replacement
and
Adjustment

Duplex





d1170084

9. Disconnect two connectors ( x 2,  x 1).



d1170085

10. Belt [B] ( x 1)
11. Duplex unit [A] ( x 4).

4.14.2 DUPLEX ENTRANCE SENSOR



d1170076

1. Open the duplex unit.

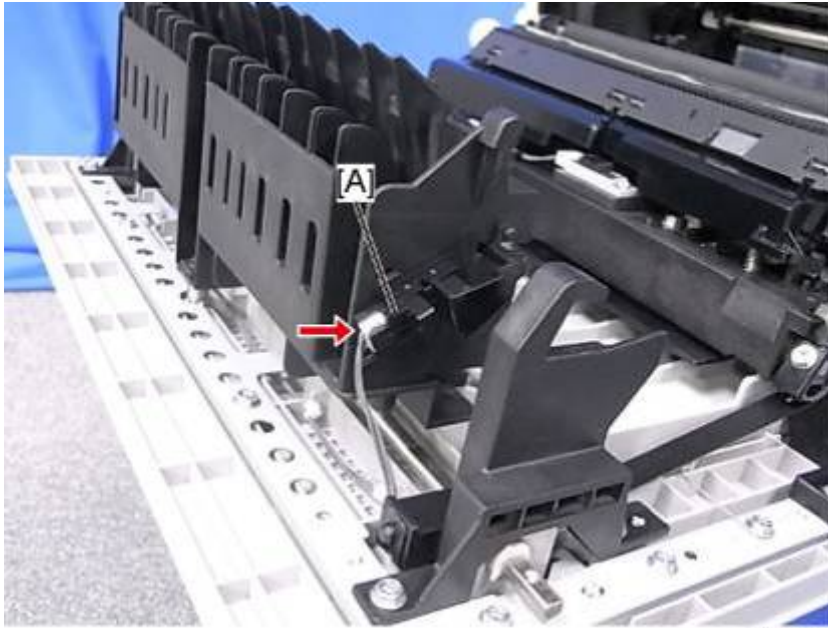


d1170103

2. Sensor cover [A] (Hooks x 3)

Replacement
and
Adjustment

Duplex



d1170104

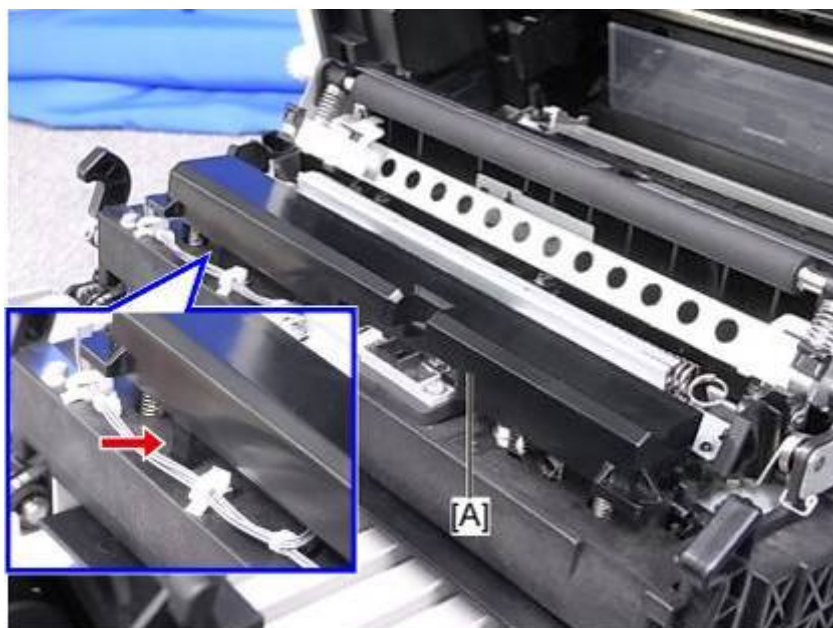
3. Duplex entrance sensor [A] (☞ x 1, hook x 2)

4.14.3 DUPLEX EXIT SENSOR



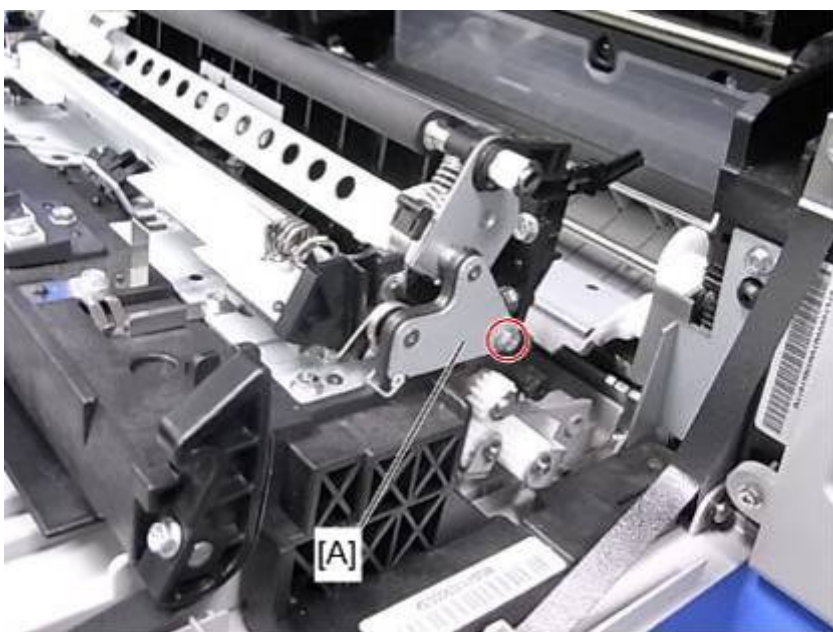
d1170076

1. Open the duplex unit.
2. Paper transfer roller (☞ p.4-59)



d1170110

- 3. Cover [A] (Hook x 1)

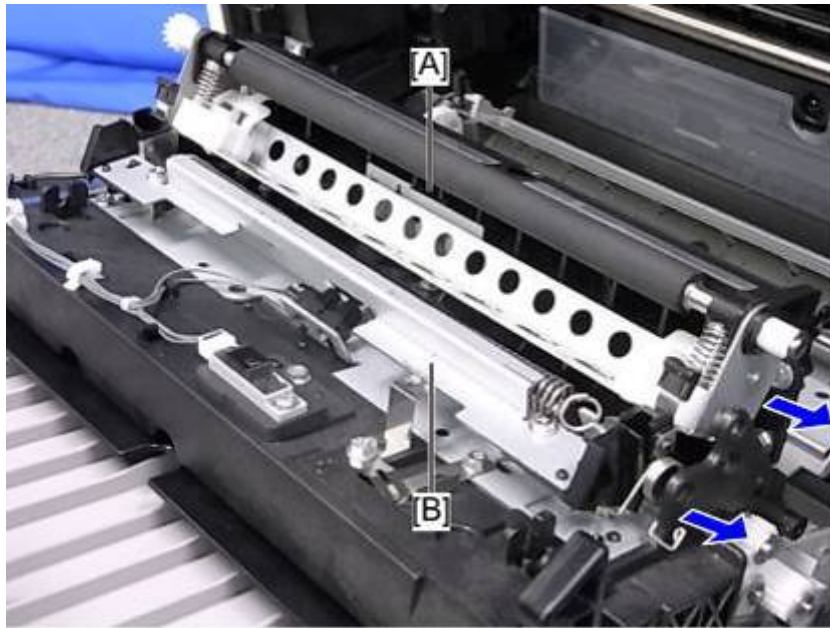


d1170106

- 4. Bracket [A] ( x 1)

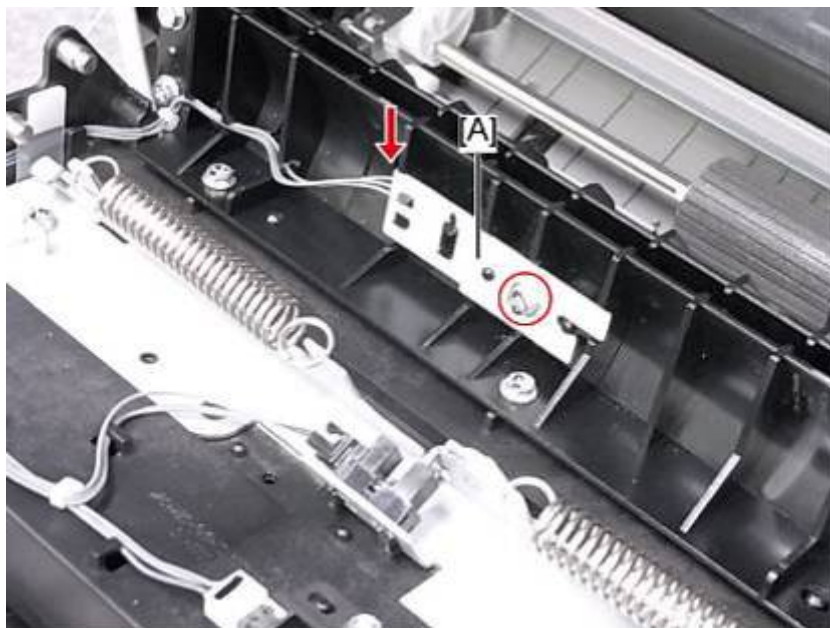
Replacement
and
Adjustment

Duplex





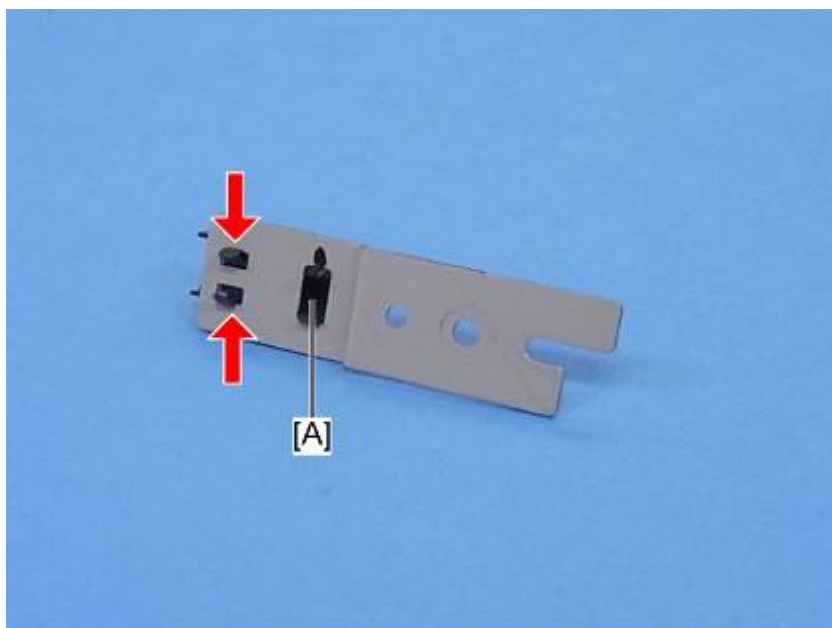
d1170107

5. Registration roller unit [A]
6. Bracket [B]



d1170108

7. Sensor bracket [A] ( x 1,  x 1)



d1170109

- 8. Duplex exit sensor [A] (Hook x 2)

Replacement
and
Adjustment

4.15 ELECTRICAL COMPONENTS

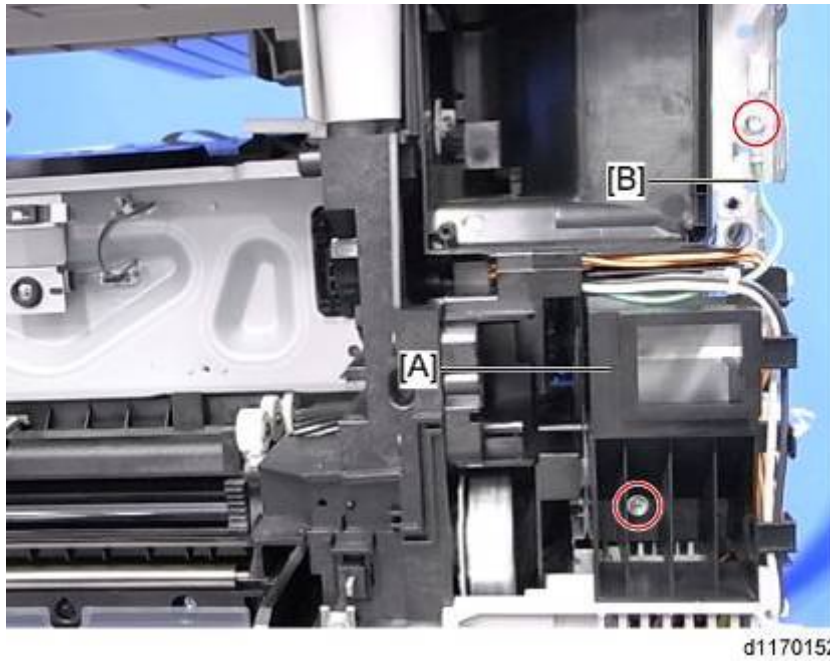
4.15.1 CONTROLLER BOX



If the optional counter interface unit is installed, remove it before you remove the controller box.

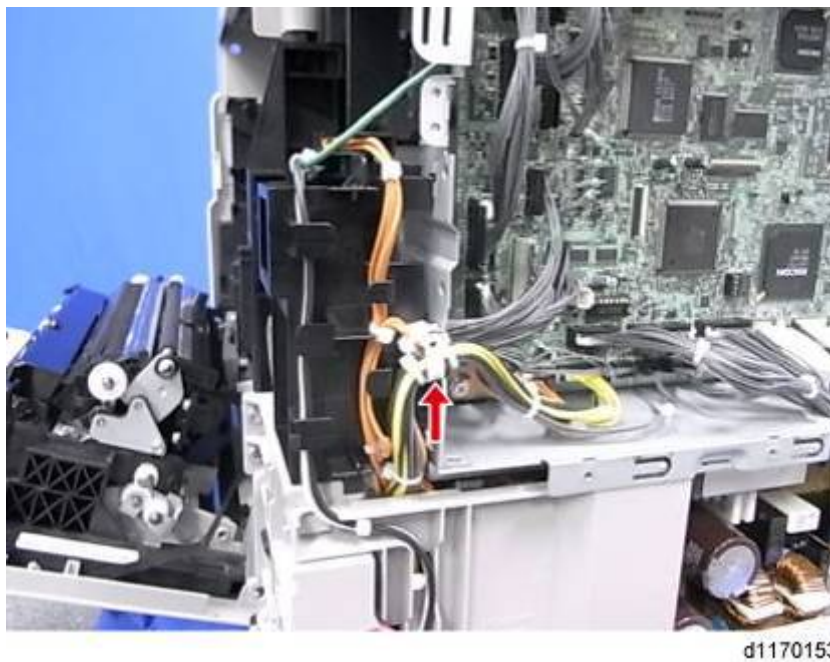


d1170076

1. Open the duplex unit.
2. Rear right cover (🔧 p.4-22)
3. Rear cover (🔧 p.4-22)
4. Left cover (🔧 p.4-21)
5. Scanner rear cover (🔧 p.4-30 "Scanner Unit")
6. Exhaust fan (🔧 p.4-142)

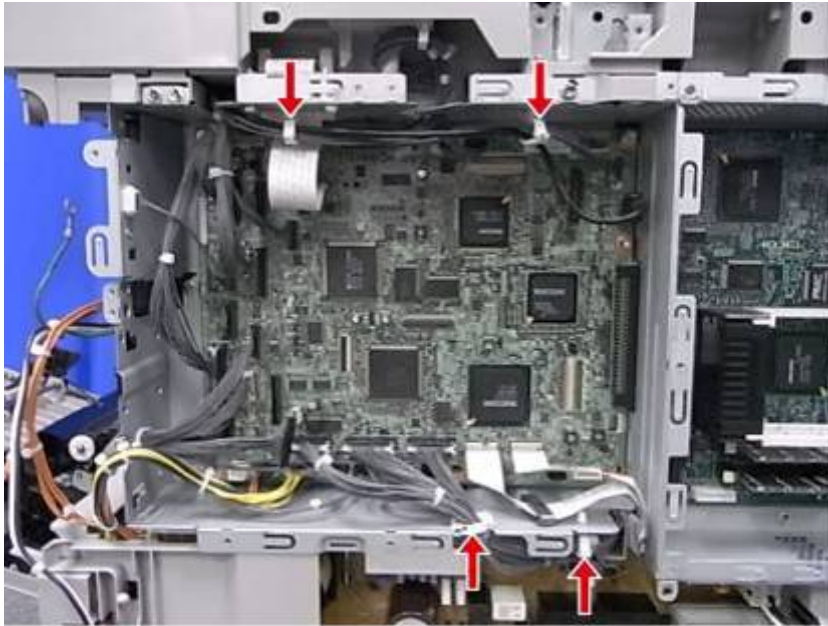


7. Remove one screw of the bracket [A] ( x 1).
8. Grounding cable [B] ( x 1)





9. Release the harness from one clamp.

Replacement
and
Adjustment




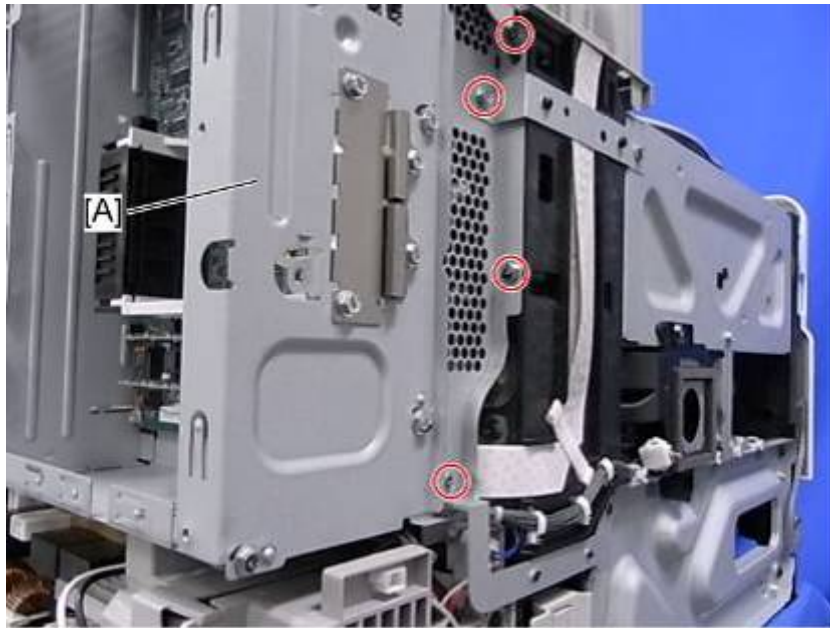
d1170154

10. Disconnect all connectors on the BICU ( x 4, all  s).




d1170155



11. Remove eight screws at the front of the controller box ( x 8).

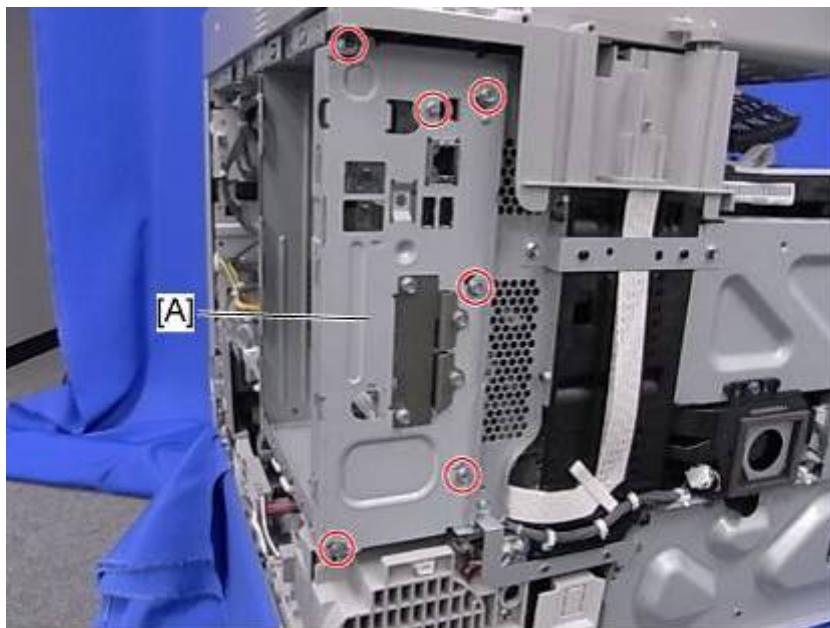


d1170156

12. Controller box [A] ( x 4)

4.15.2 CONTROLLER BOARD

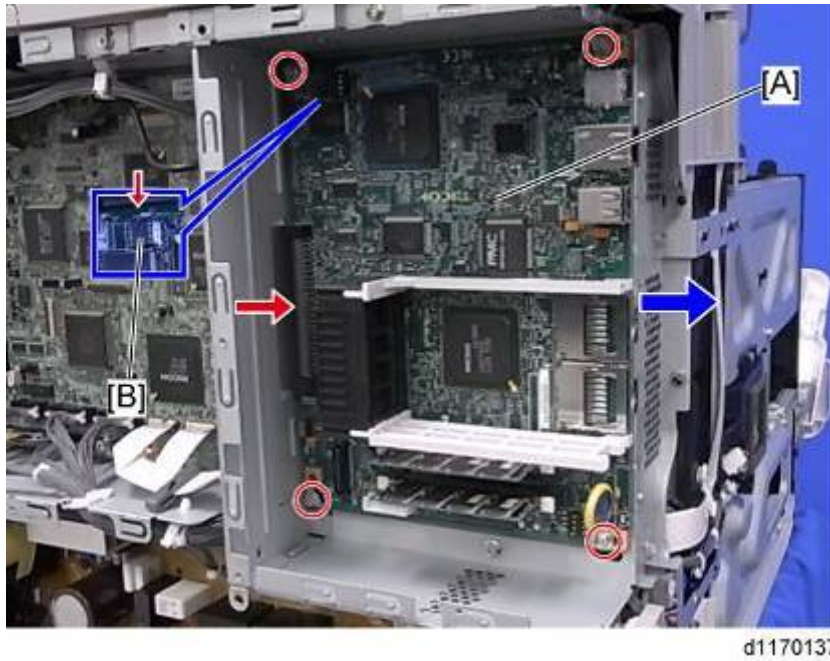
1. Rear cover ( p.4-22)
2. Left cover ( p.4-21)





d1170136

3. Bracket [A] ( x 6)

Replacement
and
Adjustment



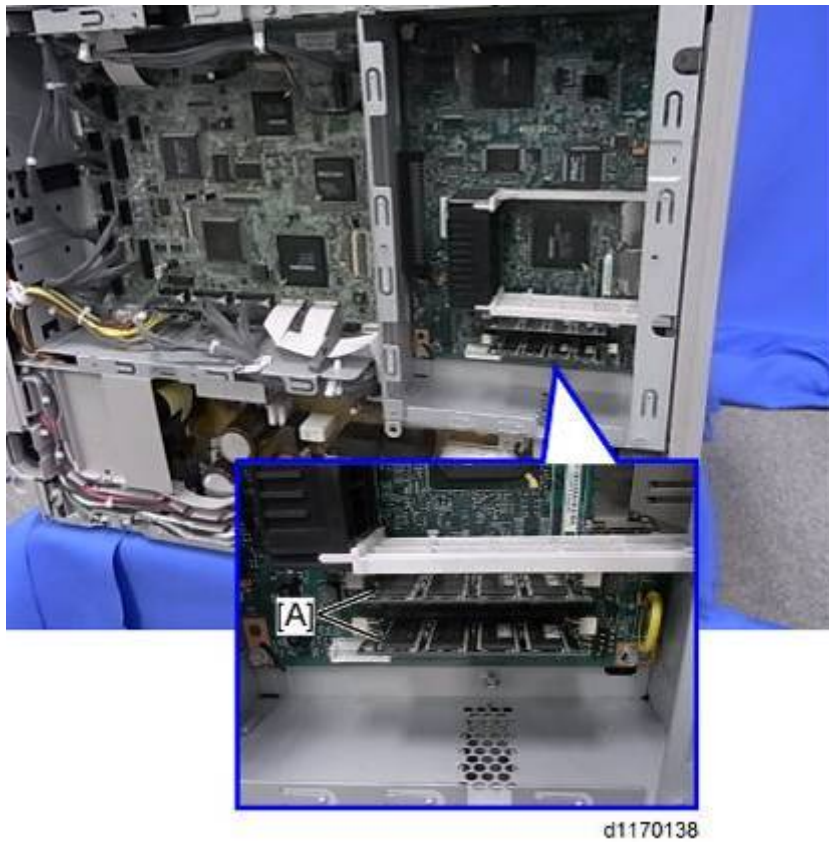
4. Pull out the controller board [A] ( x 4,  x 1).

Note

- The NVRAM [B] on the old controller board should be transferred to the new controller board. Insert the NVRAM with the notch on the NVRAM pointing upward.

4.15.3 CONTROLLER BOARD DIMM

1. Rear cover (p.4-22)

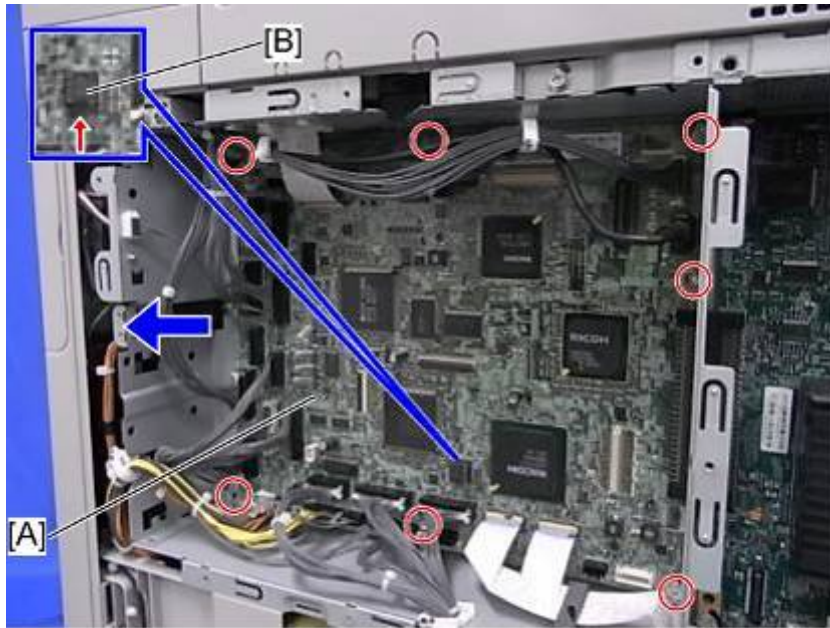


2. Release the lock levers of the DIMM socket at both ends, then remove the DIMM [A].

Replacement
and
Adjustment

4.15.4 BICU

1. Rear cover (🔧 p.4-22)



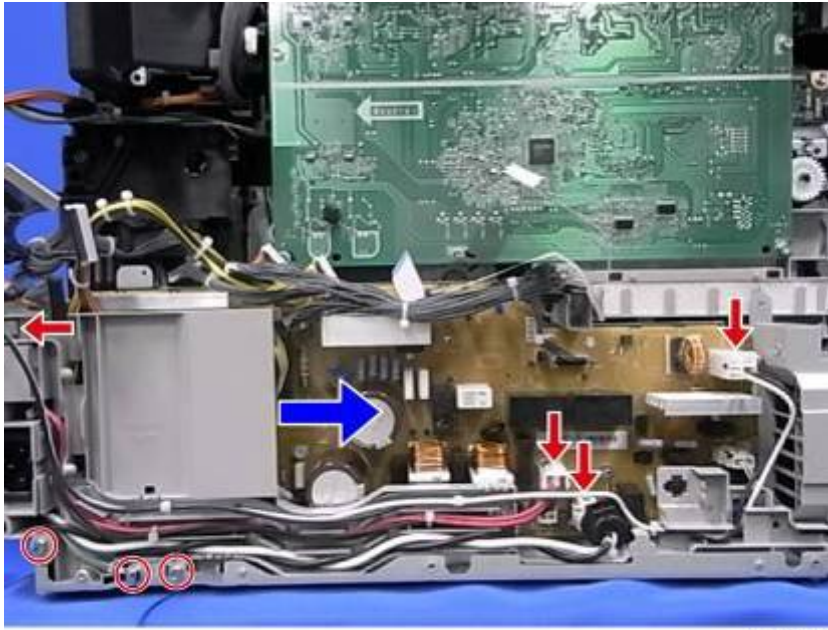
2. BICU [A] (🔧 x 7, all 🛠️s)

⬇️ **Note**

- The EPPROM [B] on the old BICU board should be transferred to the new BICU board. Insert the NVRAM with the notch on the EPPROM pointing downward.

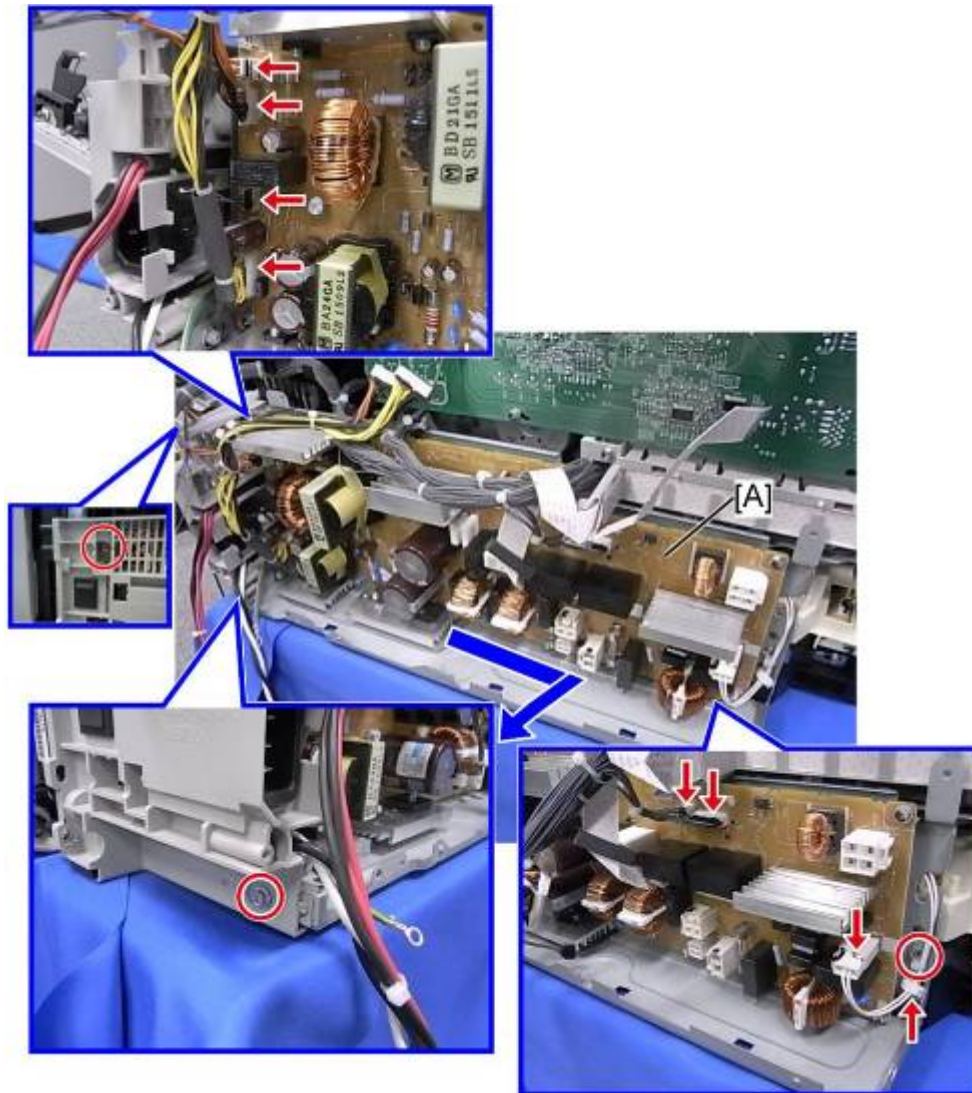
4.15.5 PSU

1. Controller box (🔧 p.4-124)



2. PSU fan (🔧 p.4-137)
3. Remove the bracket (🔧 x 3, 📏 x 3, hook x 1).

Electrical Components

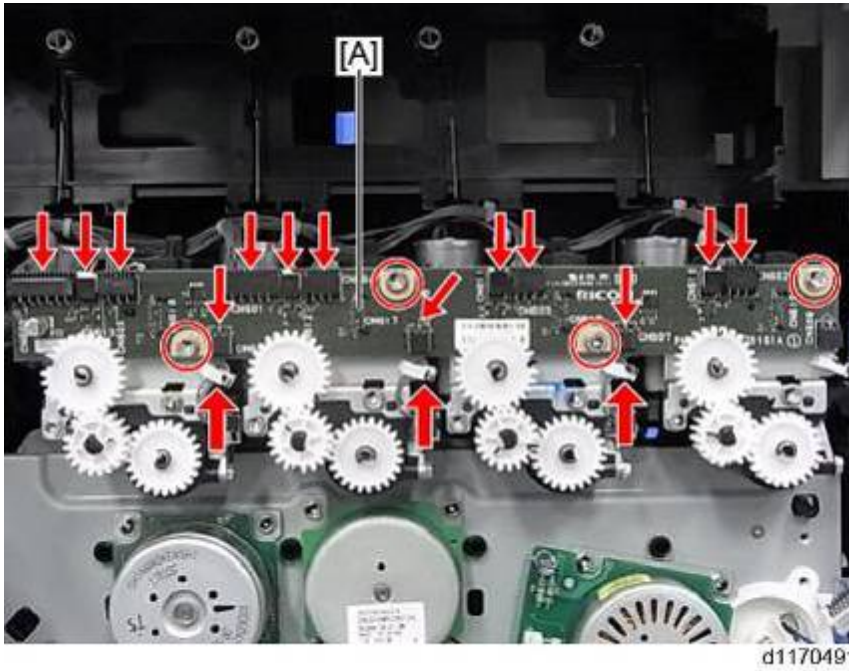


d1170158

4. Disconnect seven connectors from the PSU (🔌 x 7).
5. Remove three screws (🔩 x 3).
6. Release the harnesses from the clamp (🔗 x 1).
7. PSU [A]

4.15.6 TONER BOTTLE ID CONTACT SENSOR

1. HVPS (C, B) (🔧 p.4-135)

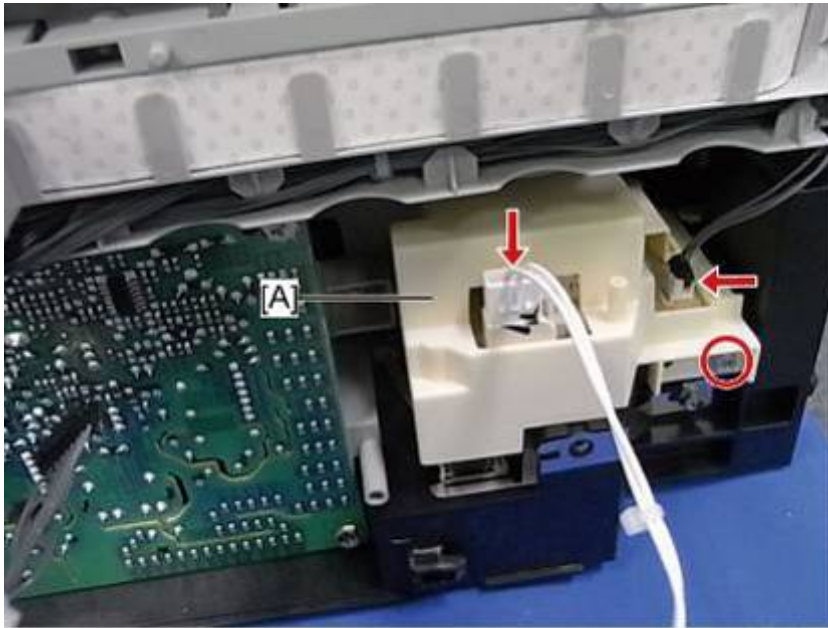


2. Toner bottle ID contact sensor [A] (🔧 x 4, 🛠️ x 3, all 🛠️s)



Replacement
and
Adjustment

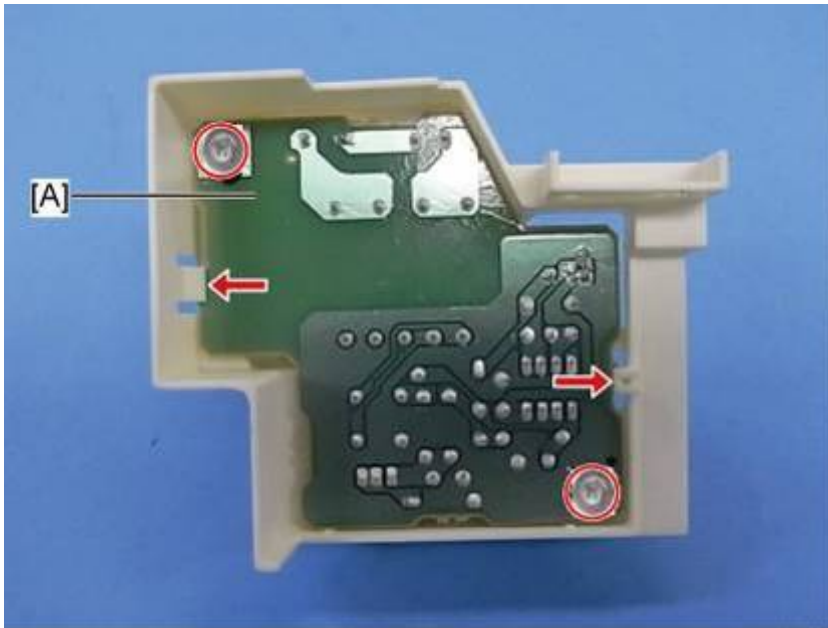
4.15.7 ACVB

1. PSU ( p.4-131)



d1170177

2. ACVB with the bracket [A] ( x 1,  x 2)

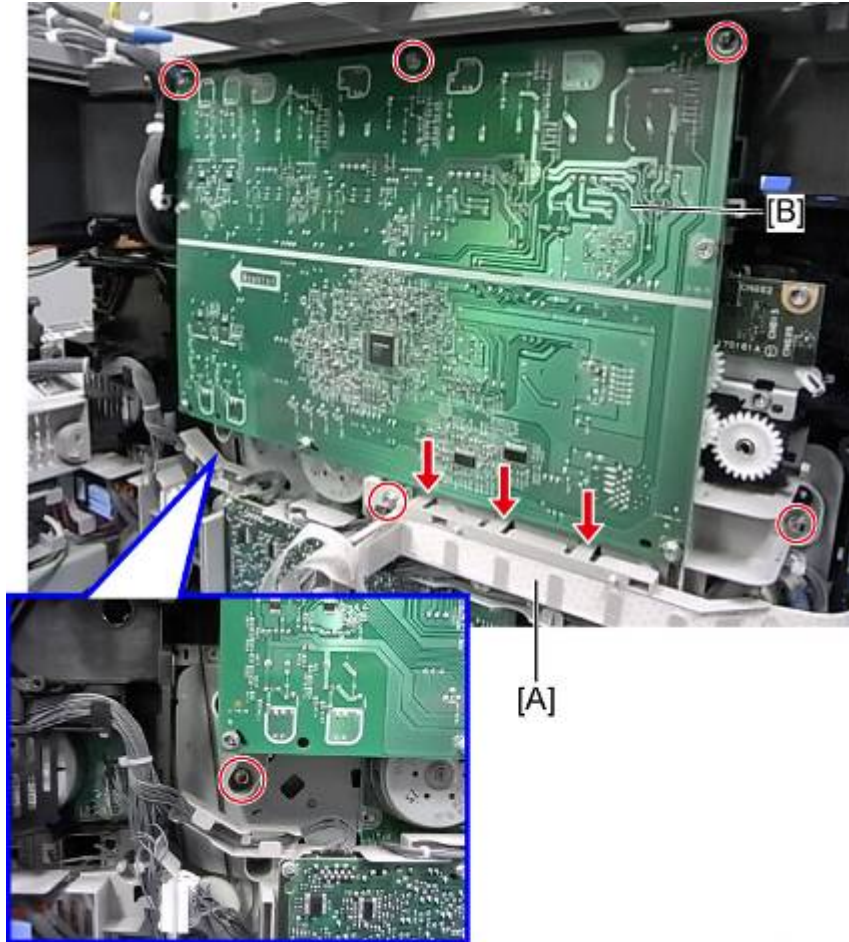


d1170178


3. ACVB [A] ( x 2, hook x 2)

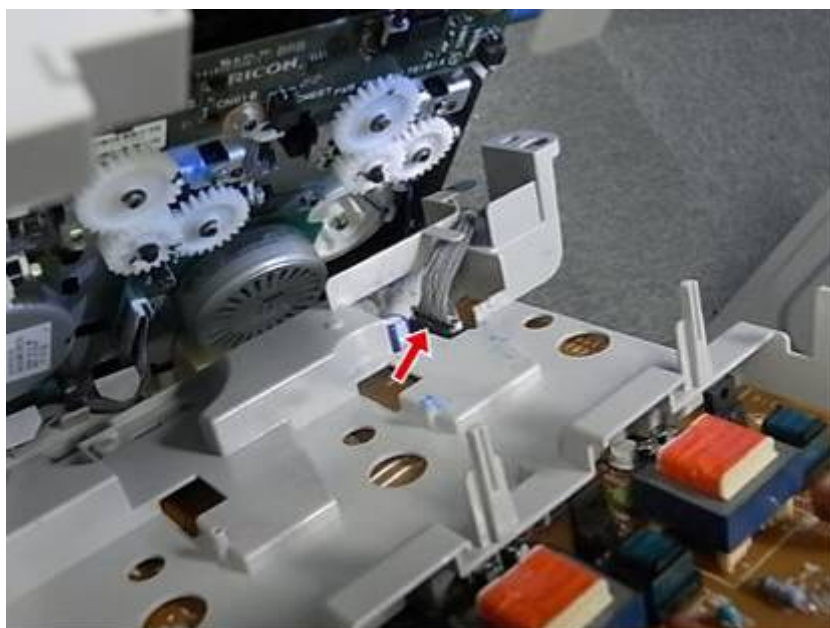
4.15.8 HVPS (C, B)

1. Controller Box (p.4-124)
2. PSU (p.4-131)



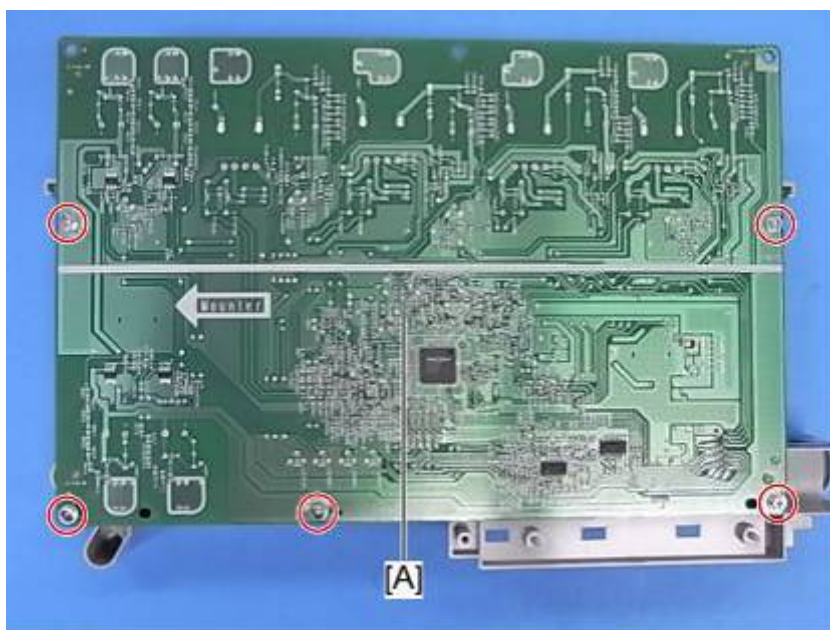
d1170159

3. Remove the bracket [A]. Then remove the HVPS (C, B) [B] ( x 6, hook x 3).



d1170160

4. Disconnect the connector behind the board (🔌 x 1).

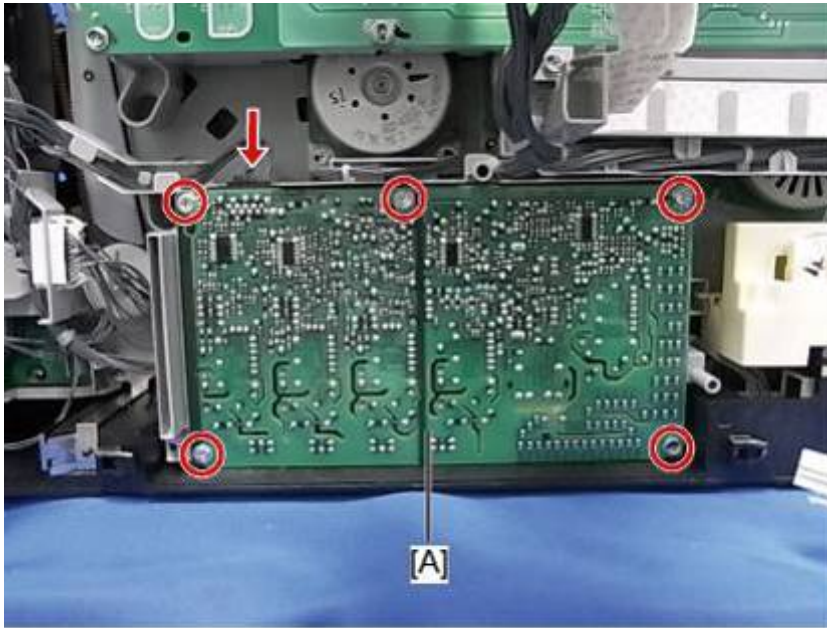


d1170161

5. HVPS (C, B) [A] (🔧 x 5)

4.15.9 HVPS (T1, T2)

1. PSU (p.4-131)

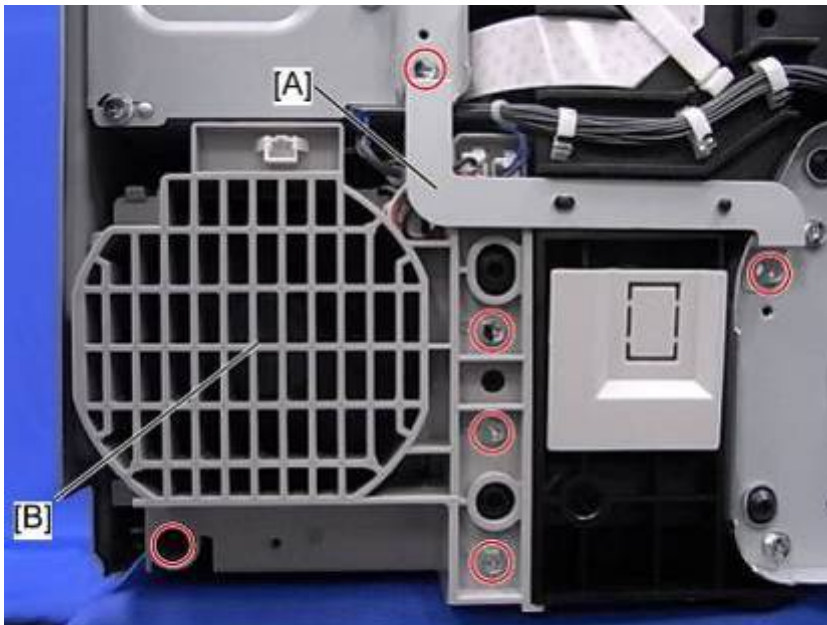


d1170164

2. HVPS (T1, T2) [A] (x 5, x 1)

4.15.10 PSU FAN

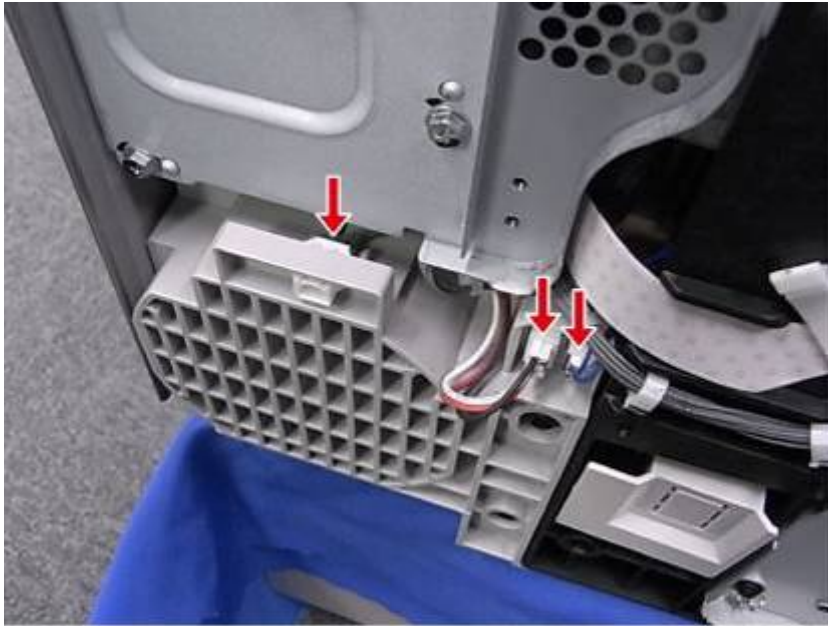
1. Left cover (p.4-21)



d1170140

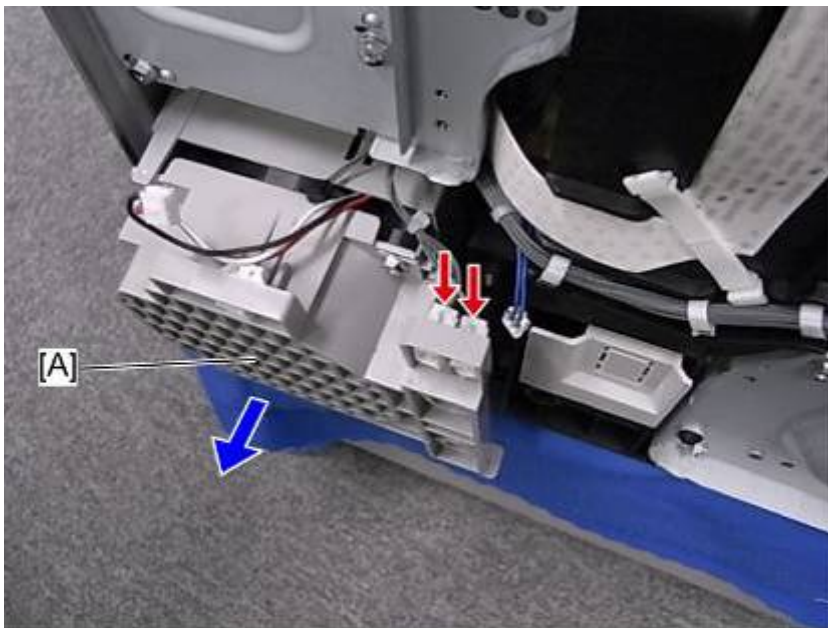
2. Remove the bracket [A] (x 2).
3. Remove four screws of the fan cover [B] (x 4).

Replacement and Adjustment



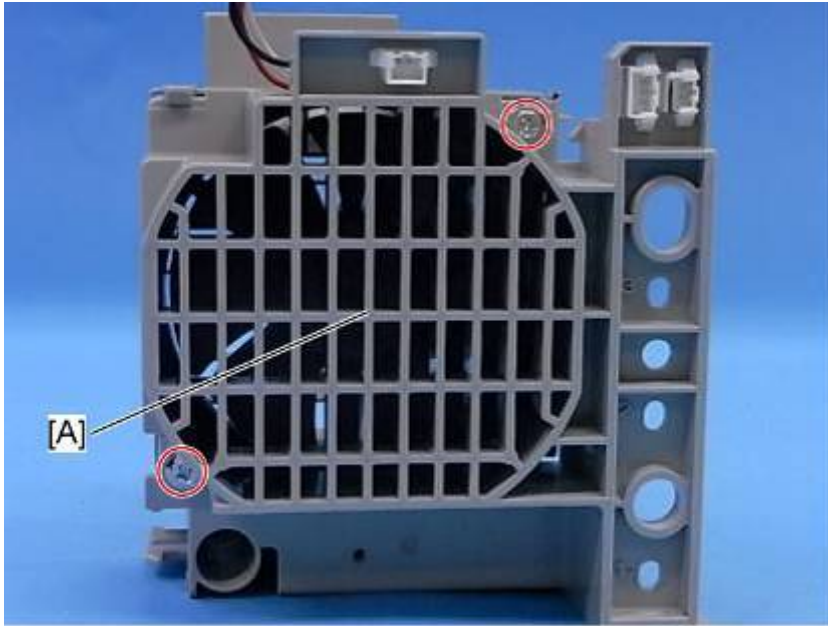
d1170141

4. Disconnect three connectors on the fan cover (🔌 x 3).




d1170142

5. Remove the fan cover [A] (🔌 x 2).



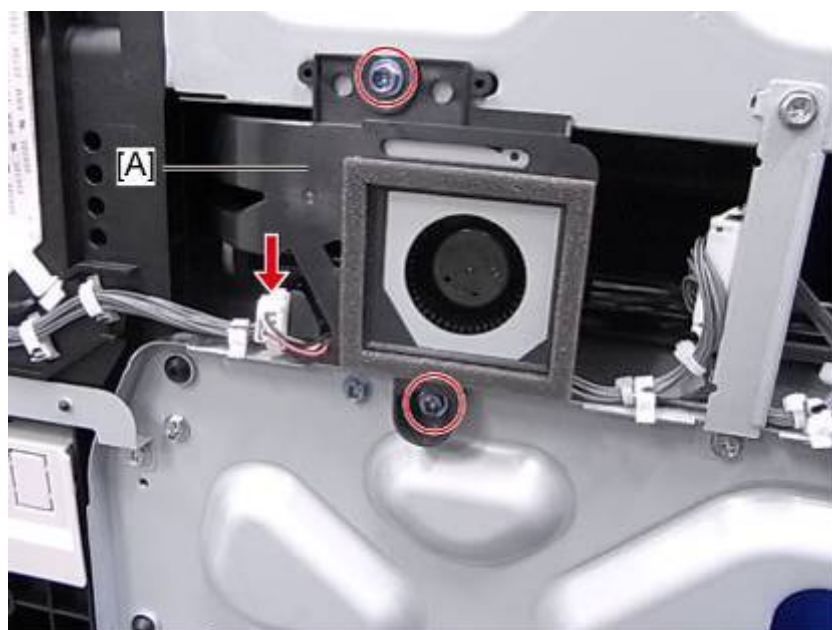
d1170143

- 6. PSU fan [A] ( x 2)

Replacement
and
Adjustment

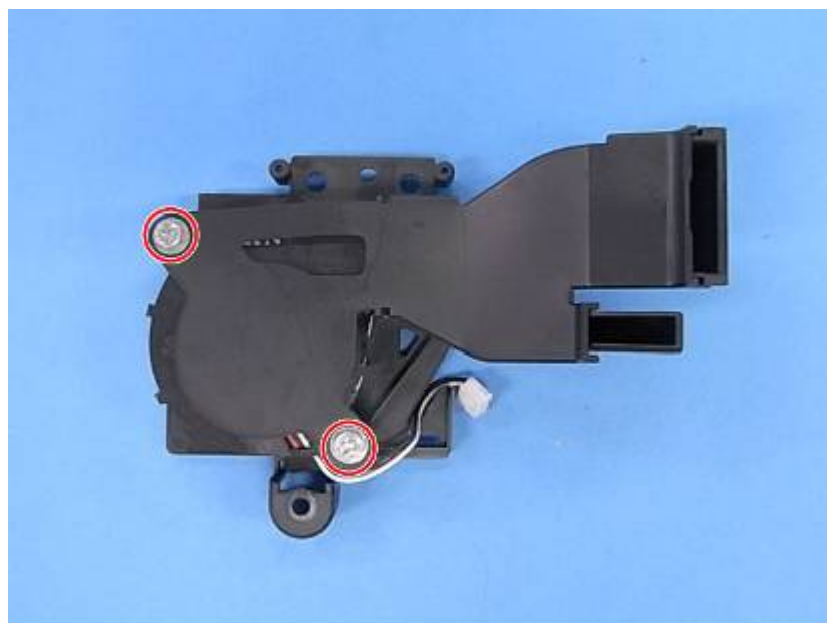
4.15.11 PCDU DUCT FAN

1. Left cover ( p.4-21)



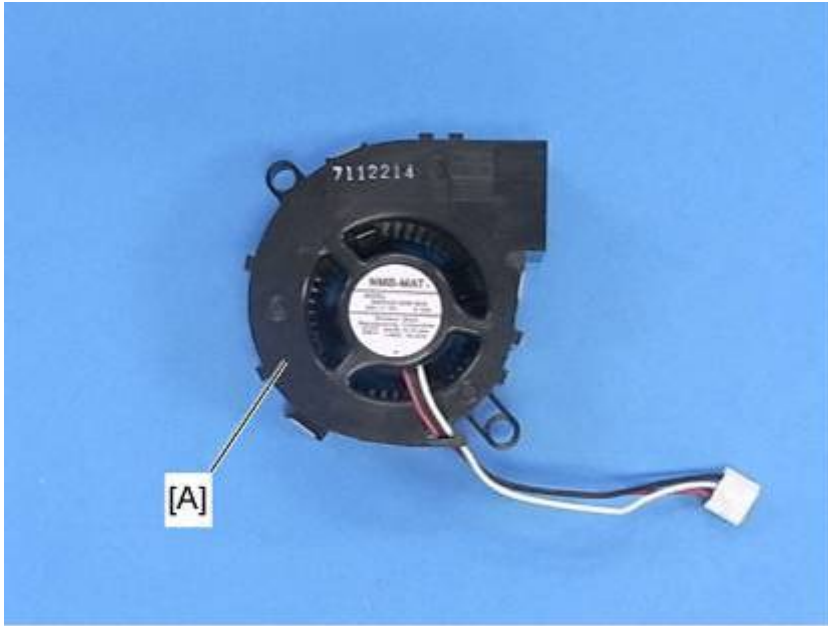
d1170145

2. Duct [A] ( x 2,  x 1)



d1170352

3. PCDU duct fan ( x 2)



d1170147

PCDU duct fan [A]

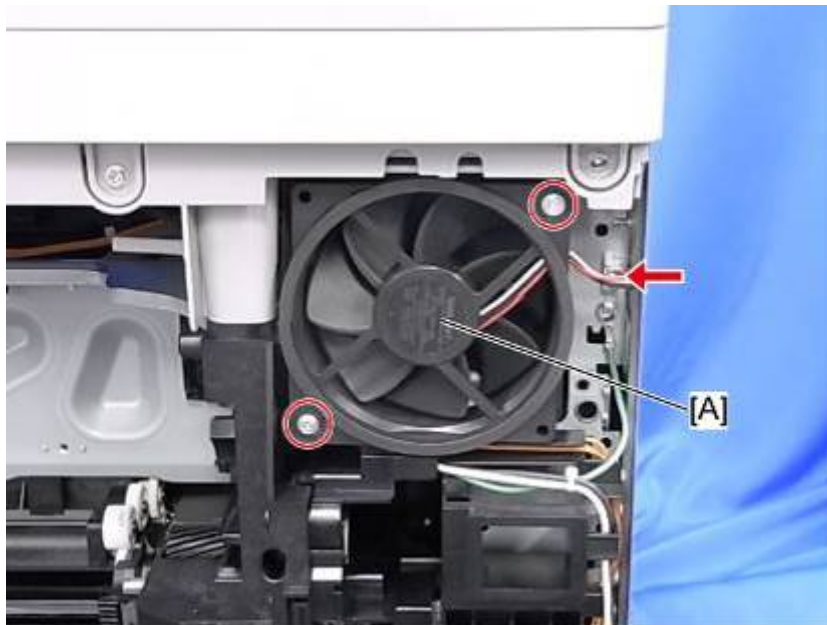
Replacement
and
Adjustment

4.15.12 EXHAUST FAN



d1170076

1. Open the duplex unit.



d1170149

2. Rear right cover (🔧 p.4-22)
3. Exhaust fan [A] (🔧 x 2, 📦 x 1)

⚠️ CAUTION

- Install the exhaust fan with its engraved mark facing the outside of the machine.
- Make sure that the engraved mark on the exhaust fan faces the outside of the machine when replacing it.

4.15.13 TEMPERATURE / HUMIDITY SENSOR

1. Front lower cover (🔧 p.4-19 "Front Cover")



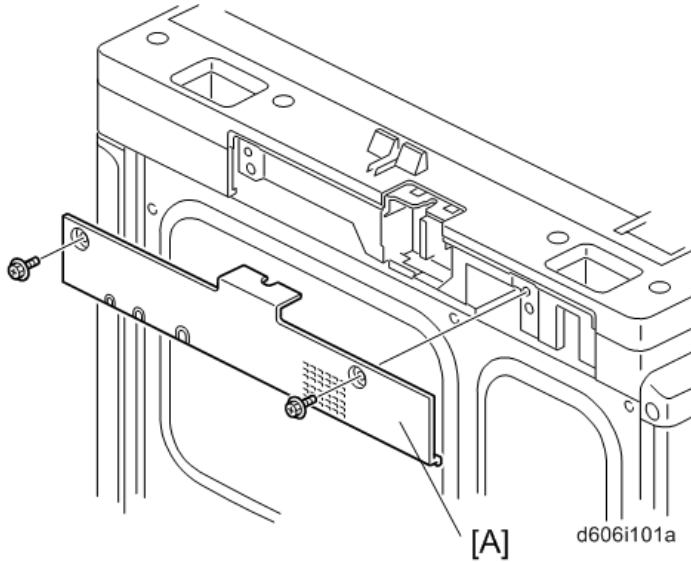
d1170202


2. Temperature / humidity sensor [A] (🔧 x 1, 📦 x 1)

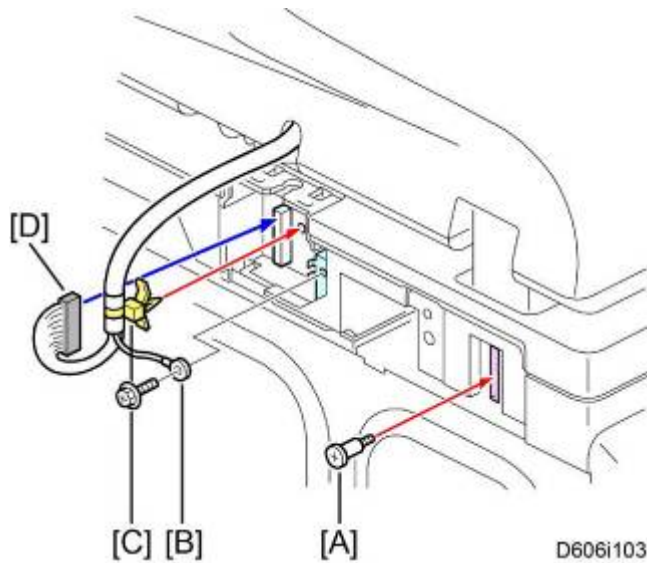
Replacement
and
Adjustment


4.16 ARDF

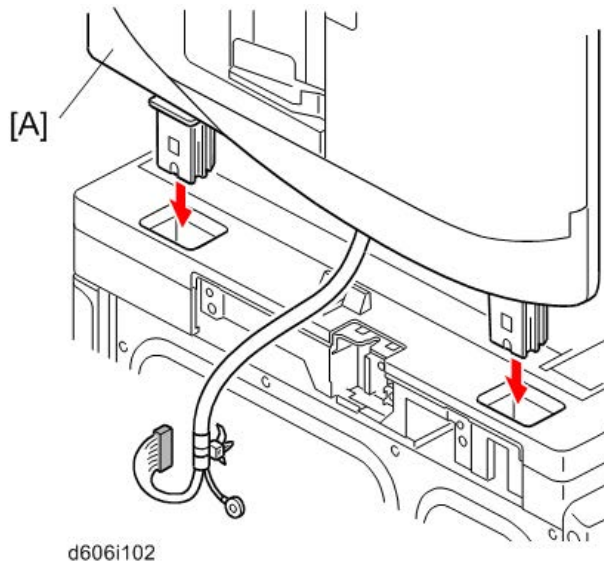
4.16.1 ARDF UNIT



1. Remove the scanner rear cover [A] ( x 2).

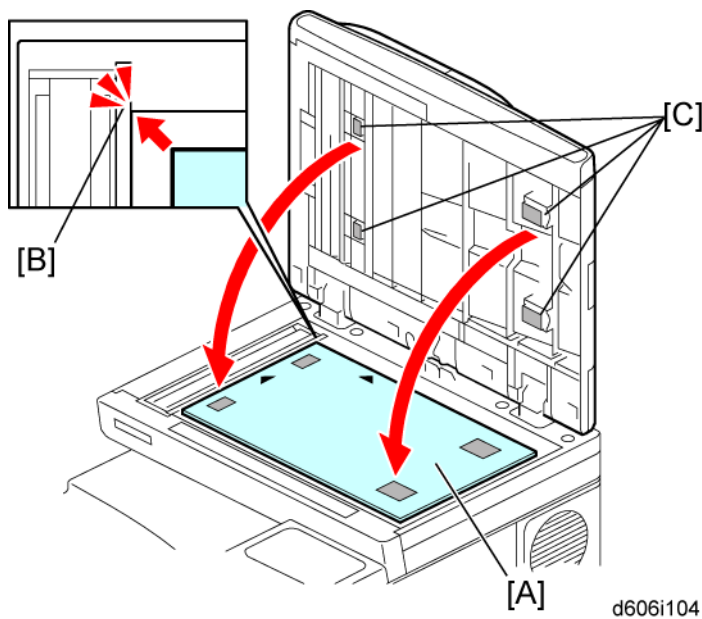


2. Remove the stud screw [A].
3. Remove the ground cable [B] ( x 1).
4. Remove the clamp [C].
5. Disconnect the I/F cable [D].



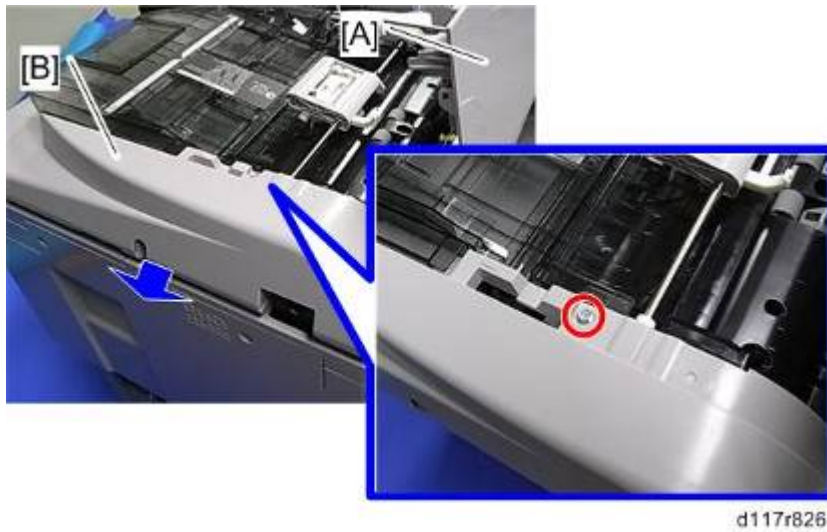
6. Remove the ARDF [A] from the copier as shown.


When installing the ARDF



1. Open the ARDF.
2. Place the platen sheet [A] on the exposure glass.
3. Line up the rear left corner of the platen sheet flush against corner [B] on the exposure glass.
4. Close the ARDF.
5. Reopen the ARDF.
6. Press the surface of the platen sheet gently to fix it on the ARDF firmly.

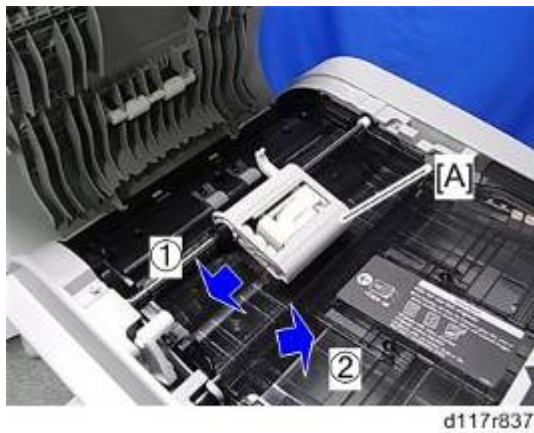
4.16.2 ARDF REAR COVER



1. Open the ARDF left cover [A].
2. ARDF rear cover [B] ( x 1)

4.16.3 ORIGINAL FEED UNIT

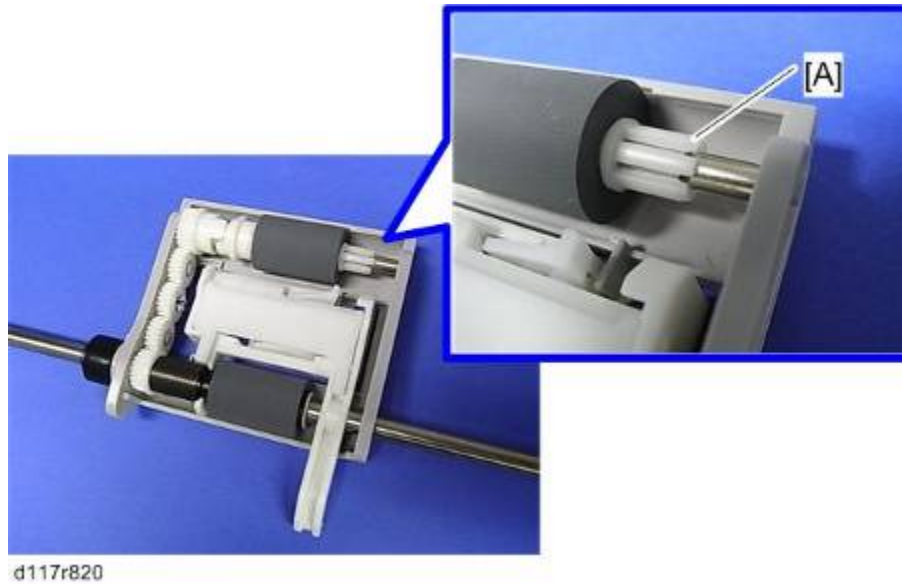
1. Open the ARDF left cover ( p.4-146 "ARDF Rear Cover").



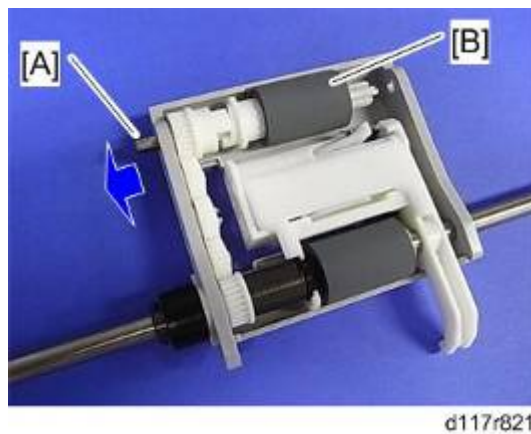
2. Original feed unit [A]

4.16.4 PICK-UP ROLLER

1. Original feed unit (p.4-146)



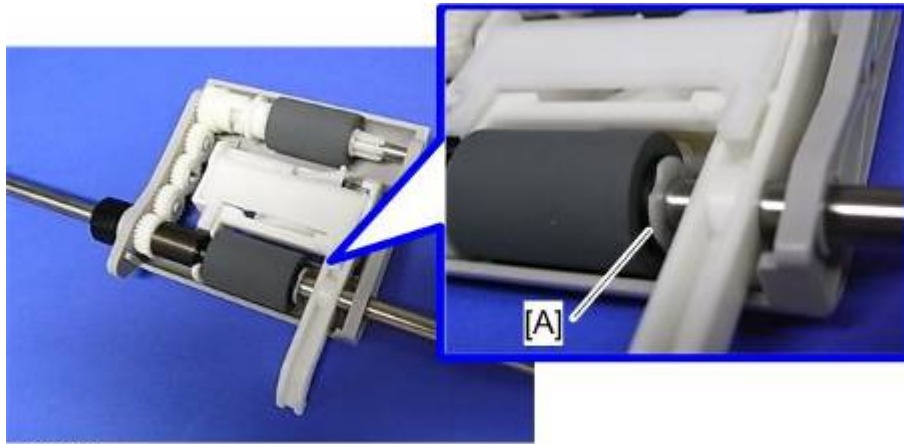
2. Release the hook [A].



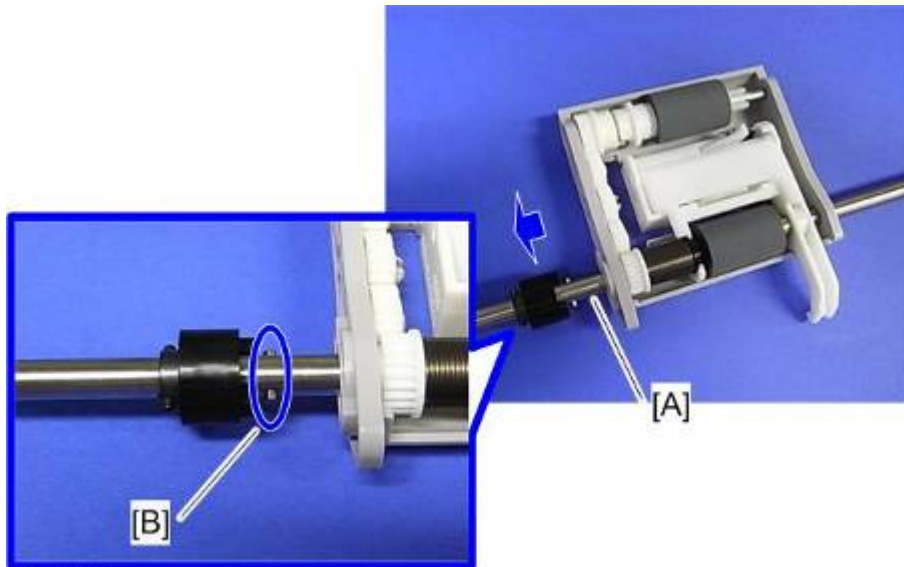
3. Slide the shaft [A], and then remove the pick-up roller [B].

4.16.5 FEED ROLLER

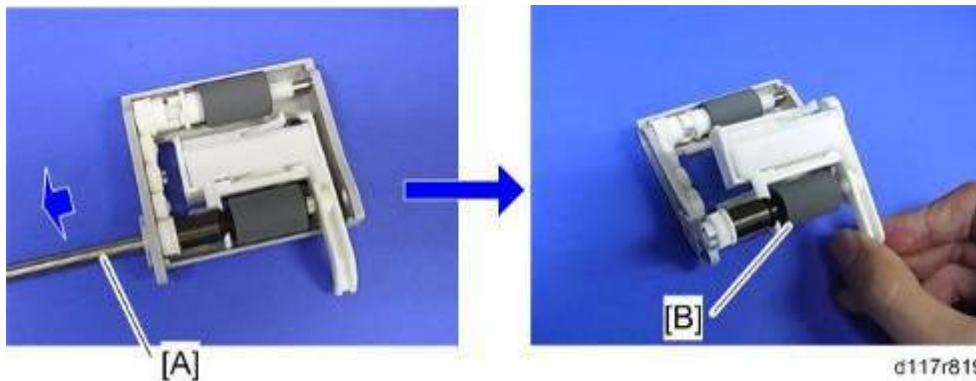
1. Original feed unit (p.4-146)



2. Remove the clip [A].



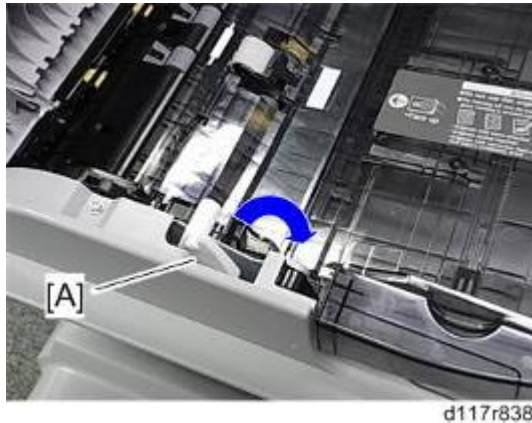
3. Slide the shaft [A], and then remove the pin [B].



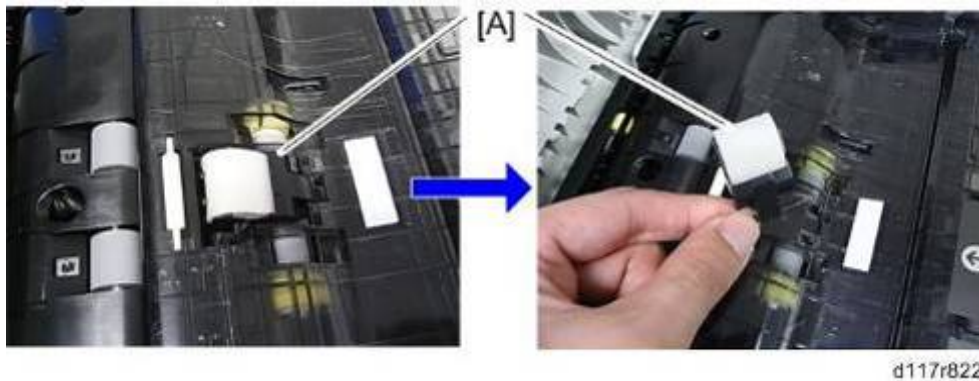
4. Slide the shaft [A], and then remove the feed roller [B].

4.16.6 FRICTION PAD

1. Original feed unit (🔧 p.4-146)



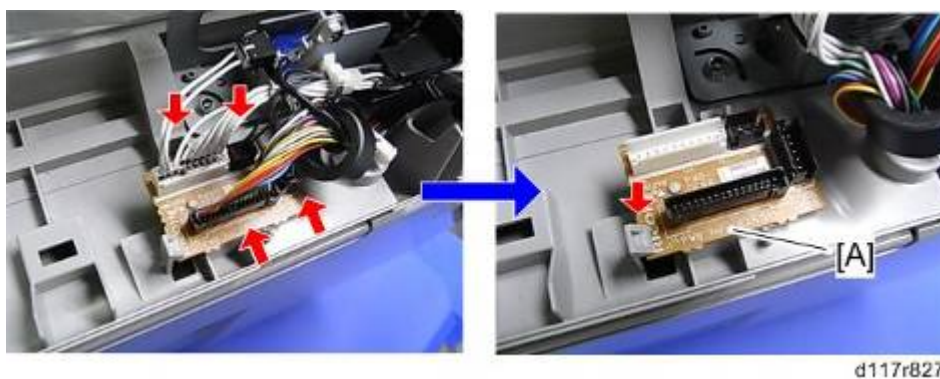
2. Turn the lock lever [A] clockwise.



3. Friction pad [A] (hook x 3)

4.16.7 DFRB

1. ARDF rear cover (🔧 p.4-146)

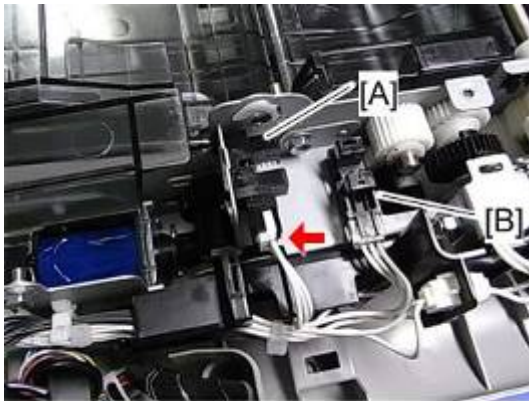


2. DFRB [A] (🔧 x 4, hook x 1)

Replacement
and
Adjustment

4.16.8 ARDF TOP COVER SENSOR/ ORIGINAL SET SENSOR

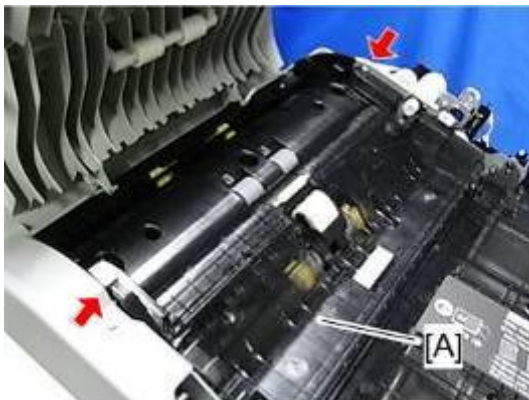
1. ARDF rear cover (🔧 p.4-146)



2. ARDF top cover sensor [A] (🔧 x 1, hooks)
3. Original set sensor [B] (🔧 x 1, hooks)

4.16.9 ARDF DRIVE MOTOR

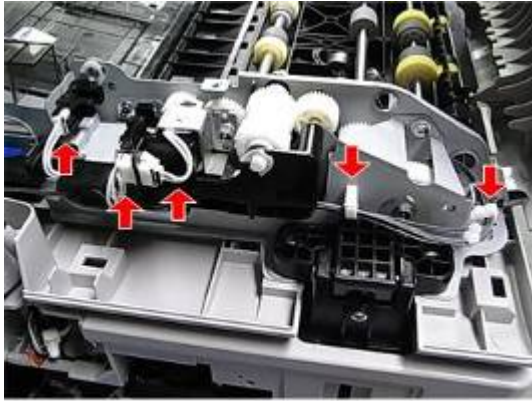
1. ARDF rear cover (🔧 p.4-146)



2. Guide plate [A] (hook x 2)



3. Guide plate [A] (🔧 x 5)



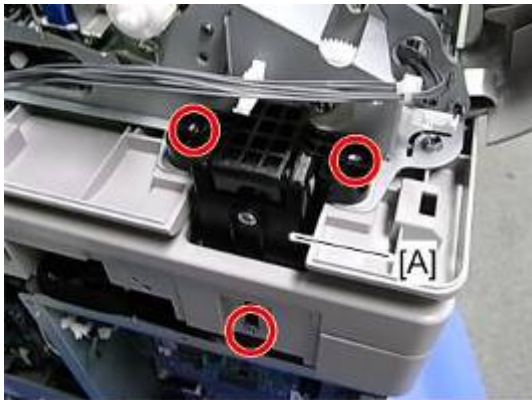
d117r831

4. Release the clamps and disconnect the connectors (🔌 x 3, 🖨️ x 2).



d117r832


5. Holder [A] (🔧 x 1)





d117r833

6. Hinge [A] (🔧 x 3)



7. Bracket [A] ( x 2)



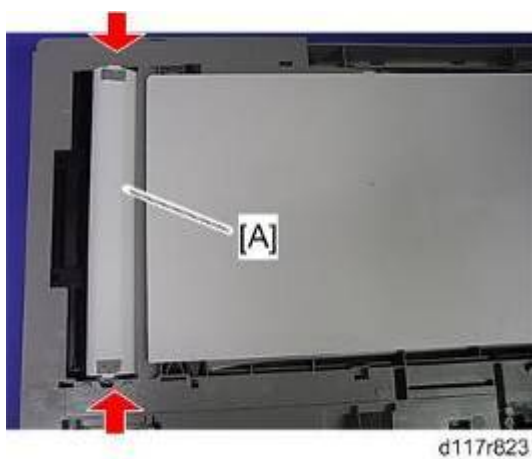
8. ARDF drive motor [A] ( x 2,  x 1)

Note

- Do not touch the encoder [B] when holding the motor.

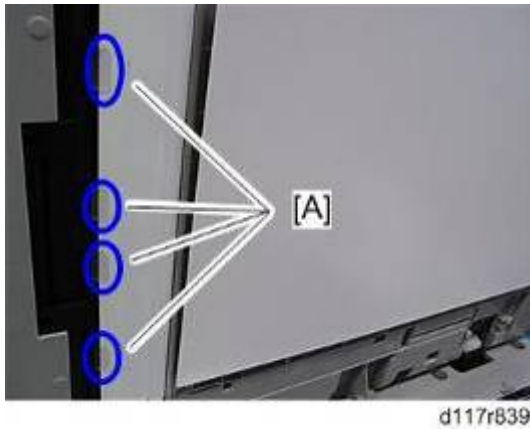
4.16.10 WHITE PLATE

1. Open the ARDF.



2. White plate [A] (hook x 2)

When installing the white plate



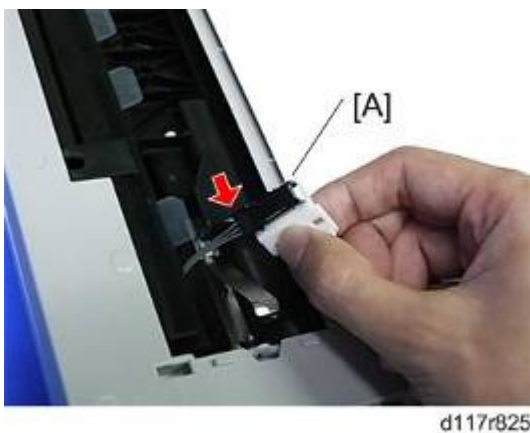
Make sure that the mylars [A] are outside the white plate.

4.16.11 REGISTRATION SENSOR

1. White plate (🔧 p.4-152)



2. Registration sensor holder [A] (🔧 x 1)



3. Registration sensor [A] (🔧 x 1, hooks)

SYSTEM MAINTENANCE

REVISION HISTORY		
Page	Date	Added/Updated/New
		None

5. SYSTEM MAINTENANCE

5.1 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.

5.1.1 SP TABLES

See "[Appendices](#)" for the following information:

- System Service Mode
- Printer Service Mode
- Scanner Service Mode

5.1.2 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

- Press "Exit" on the LCD twice to return to the copy window.



5.1.3 TYPES OF SP MODES

- System SP: SP modes related to the engine functions
- Printer SP: SP modes related to the controller functions
- Scanner SP: SP modes related to the scanner functions
- Fax SP: SP modes related to the fax functions


Select one of the Service Program modes (System, Printer, Scanner, or Fax) from the touch panel as shown in the diagram below after you access the SP mode. This section explains the functions of the System/Printer/Scanner SP modes. Refer to the Fax service manual for the Fax SP modes.

SP Mode Button Summary

Here is a short summary of the touch-panel buttons.

1	Opens all SP groups and sublevels.
2	Closes all open groups and sublevels and restores the initial SP mode display.
3	Opens the copy window (copy mode) so you can make test copies. Press SP Mode (highlighted) in the copy window to return to the SP mode screen,
4	Enter the SP code directly with the number keys if you know the SP number. Then press  . (The required SP Mode number will be highlighted when pressing  . If not, just press the required SP Mode number.)
5	Press two times to leave the SP mode and return to the copy window to resume normal operation.
6	Press any Class 1 number to open a list of Class 2 SP modes.
7	Press to scroll the show to the previous or next group.
8	Press to scroll to the previous or next display in segments the size of the screen display (page).
9	Press to scroll the show the previous or next line (line by line).
10	Press to move the highlight on the left to the previous or next selection in the list.

Switching Between SP Mode and Copy Mode for Test Printing




1. In the SP mode, select the test print. Then press "Copy Window".
2. Use the copy window (copier mode), to select the appropriate settings (paper size, etc.) for the test print.
3. Press Start  to start the test print.
4. Press SP Mode (highlighted) to return to the SP mode screen and repeat from step 1.

Selecting the Program Number

Program numbers have two or three levels.

1. Refer to the Service Tables to find the SP that you want to adjust before you begin.
2. Press the Group number on the left side SP Mode window that contains the SP that you want to adjust.
3. Use the scrolling buttons in the center of the SP mode window to show the SP number that you want to open. Then press that number to expand the list.
4. Use the center touch-panel buttons to scroll to the number and title of the item that you want to set and press it. The small entry box on the right activates and shows the below default or the current settings.

↓ 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.

Exiting Service Mode

- Press the Exit key on the touch-panel.

Service Mode Lock/Unlock

At locations where the machine contains sensitive data, the customer engineer cannot operate the machine until the Administrator turns the service mode lock off. This function makes sure that work on the machine is always done with the permission of the Administrator.

1. If you cannot go into the SP mode, ask the Administrator to log in with the User Tool and then set "Service Mode Lock" to OFF after he or she logs in:

User Tools → System Settings → Administrator Tools → Service Mode Lock → OFF

- This unlocks the machine and lets you get access to all the SP codes.
 - The CE can service the machine and turn the machine off and on. It is not necessary to ask the Administrator to log in again each time the machine is turned on.
2. Go into the SP mode and set SP5169 to "1" if you must use the printer bit switches.
 3. After machine servicing is completed:
 - Change SP5169 from "1" to "0".
 - Turn the machine off and on. Tell the administrator that you have completed servicing the machine.
 - The Administrator will then set the "Service Mode Lock" to ON.

5.1.4 REMARKS

Display on the Control Panel Screen

The maximum number of characters which can show on the control panel screen is limited to 30 characters. For this reason, some of the SP modes shown on the screen need to be abbreviated. The following are abbreviations used for the SP modes for which the full description is over 20 characters.

<p>Paper Weight</p> <p>Plain Paper 1: 60-74 g/m², 16-20lb. Plain Paper 2: 75-81 g/m², 20-22lb. Middle Thick: 82-105 g/m², 22-28lb. Thick Paper 1: 106-130 g/m², 28.3-34.6lb. Thick Paper 2: 131-163 g/m², 35-43lb. Thick Paper 3: 164-220 g/m², 44-58lb.</p>	
<p>Paper Type</p> <p>N: Normal paper MTH: Middle thick paper TH: Thick paper</p>	<p>Paper Feed Station</p> <p>P: Paper tray B: By-pass table</p>

Color Mode [Color] [K]: Black in B&W mode [Y], [M], or [C]: Yellow, Magenta, or Cyan in Full Color mode [YMC]: Only for Yellow, Magenta, and Cyan [FC]: Full Color mode [FC, K], [FC, Y], [FC, M], or [FC, C]: Black, Yellow, Magenta, or Cyan in full color mode	
Print Mode S: Simplex D: Duplex	Process Speed L: Low speed (89 mm/s) M: Middle speed (178 mm/s)

Others

The following symbols are used in the SP mode tables.

FA: Factory setting

(Data may be adjusted from the default setting at the factory. Refer to the factory setting sheets enclosed. You can find it under the jammed paper removal decal.)

DFU: Design/Factory Use only

Do not touch these SP modes in the field.

A sharp (#) to the right hand side of the mode number column means that the main switch must be turned off and on to effect the setting change.

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 board
- CTL: NVRAM on the controller board

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.

SSP: This denotes a "Special Service Program" mode setting.

5.2 MAIN SP TABLES-1

5.2.1 SP1-XXX (FEED)

1001	[Leading Edge Registration] Leading Edge Registration Adjustment (Tray Location, Paper Type, Color Mode), Paper Type: Plain, Thick 1, Thick 2 or Thick3		
	Adjusts the leading edge registration by changing the registration motor operation timing for each mode.		
001	Tray: Plain	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
002	Tray: Middle Thick	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
003	Tray: Thick	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
005	Tray: Plain: 1200	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
006	Tray: Middle Thick: 1200	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
007	By-pass: Plain	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
008	By-pass: Middle Thick	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
009	By-pass: Thick	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
012	By-pass: Plain: 1200	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
013	By-pass: Middle Thick: 1200	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
014	Duplex: Plain	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
015	Duplex: Middle Thick	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
016	Duplex: Thick	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
017	Tray: Special 1	*ENG	[-9.0 to 9.0 / 1.1 / 0.1mm/step]
018	By-pass: Special 1	*ENG	[-9.0 to 9.0 / 1.1 / 0.1mm/step]
019	Duplex: Plain:1200	*ENG	[-9.0 to 9.0 / 0.0 / 0.1 mm/step]
020	Duplex: Middle Thick:1200	*ENG	[-9.0 to 9.0 / 0.0 / 0.1 mm/step]

021	Duplex: Special 1	*ENG	[-9.0 to 9.0 / 1.1 / 0.1mm/step]
022	Tray: Special 1: 1200	*ENG	[-9.0 to 9.0 / 1.1 / 0.1mm/step]
023	By-pass: Special 1: 1200	*ENG	[-9.0 to 9.0 / 1.1 / 0.1mm/step]
024	Duplex: Special 1: 1200	*ENG	[-9.0 to 9.0 / 1.1 / 0.1mm/step]

1002	[Side-to-Side Registration] Side-to-Side Registration Adjustment		
	Adjusts the side-to-side registration by changing the laser main scan start position for each mode and tray.		
001	By-pass Table	*ENG	[-4.0 to 4.0 / 0.0 / 0.1mm/step]
002	Paper Tray 1	*ENG	[-4.0 to 4.0 / 0.0 / 0.1mm/step]
003	Paper Tray 2	*ENG	[-4.0 to 4.0 / 0.0 / 0.1mm/step]
004	Paper Tray 3	*ENG	[-4.0 to 4.0 / 0.0 / 0.1mm/step]
005	Duplex	*ENG	[-4.0 to 4.0 / 0.0 / 0.1mm/step]

1003	[Paper Buckle] Paper Buckle Adjustment (Tray Location, Paper Type), Paper Type: N: Normal, TH: Thick		
	Adjusts the amount of paper buckle at the registration roller by changing the paper feed timing.		
001	Paper Tray1: Plain	*ENG	[-5 to 5 / 0 / 1mm/step]
002	Paper Tray1: Middle Thick	*ENG	[-5 to 5 / 0 / 1mm/step]
003	Paper Tray1: Thick	*ENG	[-5 to 5 / 0 / 1mm/step]
004	Paper Tray2/3: Plain	*ENG	[-5 to 5 / 0 / 1mm/step]
005	Paper Tray2/3: Middle Thick	*ENG	[-5 to 5 / 0 / 1mm/step]
006	Paper Tray2/3: Thick	*ENG	[-5 to 5 / 0 / 1mm/step]
007	By-pass: Plain	*ENG	[-5 to 5 / 0 / 1mm/step]
008	By-pass: Middle Thick	*ENG	[-5 to 5 / 0 / 1mm/step]
009	By-pass: Thick	*ENG	[-5 to 5 / 0 / 1mm/step]

Main SP Tables-1

010	Duplex: Plain	*ENG	[-5 to 5 / 0 / 1mm/step]
011	Duplex: Middle Thick	*ENG	[-5 to 5 / 0 / 1mm/step]
012	Duplex: Thick	*ENG	[-5 to 5 / 0 / 1mm/step]
013	Paper Tray1: Plain:1200	*ENG	[-5 to 5 / 0 / 1mm/step]
014	Paper Tray1: Middle Thick:1200	*ENG	[-5 to 5 / 0 / 1mm/step]
015	Paper Tray2/3: Plain:1200	*ENG	[-5 to 5 / 0 / 1mm/step]
016	Paper Tray2/3: Middle Thick:1200	*ENG	[-5 to 5 / 0 / 1mm/step]
017	By-pass: Plain:1200	*ENG	[-5 to 5 / 0 / 1mm/step]
018	By-pass: Middle Thick:1200	*ENG	[-5 to 5 / 0 / 1mm/step]
019	By-pass: Small	*ENG	[-5 to 5 / -2 / 1mm/step]

1101	[Reload Permit Setting] DFU		
	Specifies the settings of the reload permit for cold temperature in color mode.		
001	Pre-rotation Start Temp.	*ENG	[0 to 200 / 0 / 1deg/step]
002	Reload Target Temp.:Center	*ENG	[0 to 180 / 175 / 1/step]
003	Reload Target Temp.:Press	*ENG	[0 to 200 / 100 / 1deg/step]
004	Temp.:Delta:Cold:Center	*ENG	[0 to 200 / 50 / 1deg/step]
005	Temp.:Delta:Cold:End	*ENG	[0 to 200 / 100 / 1/step]
006	Temp.:Delta:Cold:Press	*ENG	[0 to 200 / 45 / 1deg/step]
007	Rotation Time:Cold	*ENG	[0 to 200 / 0 / 1sec/step]
008	Temp.:Delta:Warm:Center	*ENG	[0 to 200 / 60 / 1deg/step]
009	Temp.:Delta:Warm:End	*ENG	[0 to 200 / 100 / 1/step]
010	Temp.:Delta:Warm:Press	*ENG	[0 to 200 / 45 / 1deg/step]
011	Rotation Time:Warm	*ENG	[0 to 200 / 0 / 1sec/step]

012	Temp.:Delta:Hot:Center	*ENG	[0 to 200 / 60 / 1deg/step]
013	Temp.:Delta:Hot:End	*ENG	[0 to 200 / 100 / 1/step]
014	Temp.:Delta:Hot:Press	*ENG	[0 to 200 / 45 / 1deg/step]
015	Rotation Time:Hot	*ENG	[0 to 200 / 0 / 1sec/step]
016	Temp.:Delta:Cold:BW:Center	*ENG	[0 to 200 / 50 / 1deg/step]
018	Temp.:Delta:Cold:BW:Press	*ENG	[0 to 200 / 45 / 1deg/step]
019	Rotation Time:BW:Cold	*ENG	[0 to 200 / 0 / 1sec/step]
020	Temp.:Delta:Warm:BW:Center	*ENG	[0 to 200 / 60 / 1deg/step]
022	Temp.:Delta:Warm:BW:Press	*ENG	[0 to 200 / 45 / 1deg/step]
023	Rotation Time:BW:Warm	*ENG	[0 to 200 / 0 / 1sec/step]
024	Temp.:Delta:Hot:BW:Center	*ENG	[0 to 200 / 60 / 1deg/step]
026	Temp.:Delta:Hot:BW:Press	*ENG	[0 to 200 / 45 / 1deg/step]
027	Rotation Time:BW:Hot	*ENG	[0 to 200 / 0 / 1sec/step]
101	Temp.:Delta:Cold:BW2:Center	*ENG	[0 to 200 / 50 / 1deg/step]
103	Temp.:Delta:Cold:BW2:Press	*ENG	[0 to 200 / 45 / 1deg/step]
104	Rotation Time:BW2:Cold	*ENG	[0 to 200 / 0 / 1sec/step]
105	Temp.:Delta:Warm:BW2:Center	*ENG	[0 to 200 / 60 / 1deg/step]
107	Temp.:Delta:Warm:BW2:Press	*ENG	[0 to 200 / 45 / 1deg/step]
108	Rotation Time:BW2:Warm	*ENG	[0 to 200 / 0 / 1sec/step]
109	Temp.:Delta:Hot:BW2:Center	*ENG	[0 to 200 / 60 / 1deg/step]
111	Temp.:Delta:Hot:BW2:Press	*ENG	[0 to 200 / 45 / 1deg/step]
112	Rotation Time:BW2:Hot	*ENG	[0 to 200 / 0 / 1sec/step]

1102	[Feed Permit Setting] DFU		
	Specified the settings of the paper feeding timing.		
001	Temp.:Lower Delta:Center	*ENG	[0 to 200 / 40 / 1deg/step]
003	Temp.:Upper Delta:Center	*ENG	[0 to 200 / 15 / 1deg/step]
005	Temp.:Lower Delta:Press	*ENG	[0 to 200 / 95 / 1deg/step]
006	Rotation Time	*ENG	[0 to 200 / 0 / 1sec/step]
007	Temp.:Lower Delta:Center:Sp.1	*ENG	[0 to 200 / 40 / 1deg/step]
009	Temp.:Upper Delta:Center:Sp.1	*ENG	[0 to 200 / 15 / 1deg/step]
011	Temp.:Lower Delta:Press:Sp.1	*ENG	[0 to 200 / 95 / 1deg/step]
012	Rotation Time:Sp.1	*ENG	[0 to 200 / 0 / 1sec/step]
013	Temp.:Lower Delta:Center:Sp.2	*ENG	[0 to 200 / 40 / 1deg/step]
015	Temp.:Upper Delta:Center:Sp.2	*ENG	[0 to 200 / 15 / 1deg/step]
017	Temp.:Lower Delta:Press:Sp.2	*ENG	[0 to 200 / 95 / 1deg/step]
018	Rotation Time:Sp.2	*ENG	[0 to 200 / 0 / 1sec/step]
019	Feed Permit Time	*ENG	[0 to 200 / 60 / 1sec/step]
020	Temp.:Lower Delta:Center:Sp.3	*ENG	[0 to 200 / 40 / 1deg/step]
022	Temp.:Upper Delta:Center:Sp.3	*ENG	[0 to 200 / 15 / 1deg/step]
024	Temp.:Lower Delta:Press:Sp.3	*ENG	[100 to 180 / 10 / 1deg/step]

025	Rotation Time:Sp.3	*ENG	[0 to 200 / 0 / 1sec/step]
026	Temp.:Lower Delta:End:LT	*ENG	[0 to 200 / 100 / 1deg/step]
027	Temp.:Upper Delta:End:LT	*ENG	[0 to 200 / 100 / 1deg/step]

1105	[Print Target Temp.]		
	Roller Type → Center and Ends: Heating roller, Pressure → Pressure roller Paper Type: → Plain, Thin, Thick, OHP, Middle Thick, Special.		
001	Plain1:FC:Center	*ENG	[100 to 180 / 155 / 1deg/step]
002	Plain1:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
003	Plain1:BW:Center	*ENG	[100 to 180 / 145 / 1deg/step]
004	Plain1:BW:Press	*ENG	[0 to 200 / 150 / 1deg/step]
005	Plain2:FC:Center	*ENG	[100 to 180 / 160 / 1deg/step]
006	Plain2:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
007	Plain2:BW:Center	*ENG	[100 to 180 / 150 / 1deg/step]
008	Plain2:BW:Press	*ENG	[0 to 200 / 150 / 1deg/step]
009	Thin:FC:Center	*ENG	[100 to 180 / 150 / 1deg/step]
010	Thin:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
011	Thin:BW:Center	*ENG	[100 to 180 / 140 / 1deg/step]
012	Thin:BW:Press	*ENG	[0 to 200 / 150 / 1deg/step]
013	M-thick:FC:Center	*ENG	[100 to 180 / 165 / 1deg/step]
014	M-thick:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
015	M-thick:BW:Center	*ENG	[100 to 180 / 155 / 1deg/step]
016	M-thick:BW:Press	*ENG	[0 to 200 / 150 / 1deg/step]
017	Thick1:FC:Center	*ENG	[100 to 180 / 155 / 1deg/step]
018	Thick1:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
019	Thick1:BW:Center	*ENG	[100 to 180 / 145 / 1deg/step]

Main SP Tables-1

020	Thick1:BW:Press	*ENG	[0 to 200 / 150 / 1deg/step]
021	Thick2:FC:Center	*ENG	[100 to 180 / 160 / 1deg/step]
022	Thick2:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
023	Thick2:BW:Center	*ENG	[100 to 180 / 150 / 1deg/step]
024	Thick2:BW:Press	*ENG	[0 to 200 / 150 / 1deg/step]
025	Thick3:FC:Center	*ENG	[100 to 180 / 170 / 1deg/step]
026	Thick3:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
027	Thick3:BW:Center	*ENG	[100 to 180 / 160 / 1deg/step]
028	Thick3:BW:Press	*ENG	[0 to 200 / 150 / 1deg/step]
029	Special1:FC:Center	*ENG	[100 to 180 / 165 / 1deg/step]
030	Special1:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
031	Special1:BW:Center	*ENG	[100 to 180 / 155 / 1deg/step]
032	Special1:BW:Press	*ENG	[0 to 200 / 150 / 1deg/step]
033	Special2:FC:Center	*ENG	[100 to 180 / 170 / 1deg/step]
034	Special2:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
035	Special2:BW:Center	*ENG	[100 to 180 / 160 / 1deg/step]
036	Special2:BW:Press	*ENG	[0 to 200 / 150 / 1deg/step]
037	Special3:FC:Center	*ENG	[100 to 180 / 160 / 1deg/step]
038	Special3:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
039	Special3:BW:Center	*ENG	[100 to 180 / 150 / 1deg/step]
040	Special3:BW:Press	*ENG	[0 to 200 / 150 / 1deg/step]
041	Envelop:Center	*ENG	[100 to 180 / 165 / 1deg/step]
042	Envelop:Press	*ENG	[0 to 200 / 150 / 1deg/step]
043	OHP:Center	*ENG	[100 to 180 / 165 / 1deg/step]
044	OHP:Press	*ENG	[0 to 200 / 150 / 1deg/step]

101	Plain1:FC:Center:Low Speed	*ENG	[100 to 180 / 130 / 1deg/step]
102	Plain1:FC:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
103	Plain1:BW:Center:Low Speed	*ENG	[100 to 180 / 120 / 1deg/step]
104	Plain1:BW:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
105	Plain2:FC:Center:Low Speed	*ENG	[100 to 180 / 135 / 1deg/step]
106	Plain2:FC:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
107	Plain2:BW:Center:Low Speed	*ENG	[100 to 180 / 125 / 1deg/step]
108	Plain2:BW:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
109	Thin:FC:Center:Low Speed	*ENG	[100 to 180 / 130 / 1deg/step]
110	Thin:FC:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
111	Thin:BW:Center:Low Speed	*ENG	[100 to 180 / 120 / 1deg/step]
112	Thin:BW:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
113	M-thick:FC:Center:Low Speed	*ENG	[100 to 180 / 140 / 1deg/step]
114	M-thick:FC:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
115	M-thick:BW:Center:Low Speed	*ENG	[100 to 180 / 130 / 1deg/step]
116	M-thick:BW:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
117	Special1:FC:Center:Low Speed	*ENG	[100 to 180 / 140 / 1deg/step]

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118	Special1:FC:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
119	Special1:BW:Center:Low Speed	*ENG	[100 to 180 / 130 / 1deg/step]
120	Special1:BW:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
121	Special2:FC:Center:Low Speed	*ENG	[100 to 180 / 145 / 1deg/step]
122	Special2:FC:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
123	Special2:BW:Center:Low Speed	*ENG	[100 to 180 / 135 / 1deg/step]
124	Special2:BW:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
125	Special3:FC:Center:Low Speed	*ENG	[100 to 180 / 135 / 1deg/step]
126	Special3:FC:Press:Low Speed	*ENG	[0 to 200 / 150 / 11deg/step]
127	Special3:BW:Center:Low Speed	*ENG	[100 to 180 / 125 / 1deg/step]
128	Special3:BW:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
129	Envelope:Thick1:FC:Center	*ENG	[100 to 180 / 145 / 1deg/step]
130	Envelope:Thick1:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
133	Envelope:Thick2:FC:Center	*ENG	[100 to 180 / 150 / 1deg/step]
134	Envelope:Thick2:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
137	Envelope:Thick3:FC:Center	*ENG	[100 to 180 / 155 / 1deg/step]
138	Envelope:Thick3:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]

1107	[Standby Target Temp. Setting] DFU		
001	Stanby/Preheat1:Center	*ENG	[0 to 100 / 60 / 1deg/step]
	Specifies the temperature of the pressure roller for the ready or energy save 1 mode.		
003	Preheat2:Center	*ENG	[-50 to 100 / -50 / 1deg/step]
	Specifies the temperature of the heating roller for the ready or energy save 2 mode.		
005	Low Power:Center	*ENG	[-50 to 100 / -50 / 1deg/step]
	Specifies the temperature of the heating roller for the low power mode.		
007	Print Ready:Center	*ENG	[0 to 180 / 150 / 1deg/step]
	Specifies the temperature of the heating roller for the print ready condition.		

1108	[After Reload/Job Target Temp.] DFU		
001	Center	*ENG	[0 to 180 / 150 / 1deg/step]
	Specifies the temperature of the heating roller after re-load or job.		

1111	[Environment Correction:Fusing] DFU		
001	Temp.:Threshold: Low	*ENG	[0 to 100 / 17 / 1 deg/step]
	Specifies the threshold temperature for low temperature. If the fusing temperature is 17°C or less, the machine executes the fusing mode for low temperature.		
002	Temp.:Threshold: High	*ENG	[0 to 100 / 30 / 1 deg/step]
	Sepcifies the threshold temperature for high temperature. If the fusing temperature is 30°C or more, the machine executes the fusing mode for high temperature.		
003	Low Temp. Correction	*ENG	[0 to 100 / 5 / 1 deg/step]
	Specifies the additional temperature for the target temperature. If the fusing temperature is in low temperature condition, this temperature is added to the target temperature.		
004	High Temp. Correction	*ENG	[0 to 100 / 0 / 1 deg/step]
	Specifies the additional temperature for the target temperature. If the fusing temperature is in high temperature condition, this temperature is added to the target temperature.		
005	Job Low Temp. Correction	*ENG	[0 to 100 / 5 / 1 deg/step]
006	Job High Temp. Correction	*ENG	[0 to 100 / 0 / 1 deg/step]
007	Job Low Temp. Correction:Sp.	*ENG	[0 to 100 / 5 / 1 deg/step]
008	Job High Temp. Correction:Sp.	*ENG	[0 to 100 / 0 / 1 deg/step]
011	Standard Environment Temp.	*ENG	[10 to 30 / 23 / 1 deg/step]

1113	[Curl Correction]		
001	Execute Pattern	*ENG	[0 or 1 / 0:OFF / 1/step]
	Selects the curl correction type.		
002 DFU	Humidity:Threshold:M-humid	*ENG	[0 to 100 / 1 / 1%/step]
	Specifies the threshold between low and middle humidity.		
003 DFU	Humidity:Threshold:H-humid	*ENG	[0 to 100 / 65 / 1%/step]
	Specifies the threshold between middle and high humidity.		
004 DFU	Permit Temp.:Delta:Press:M-humid	*ENG	[0 to 200 / 100 / 1deg/step]
	Specifies the threshold temperature for the curl control in middle humidity.		
005 DFU	Permit Temp.:Delta:Press:H-humid	*ENG	[0 to 100 / 100 / 1deg/step]
	Specifies the threshold temperature for the curl control in high humidity.		
008 DFU	CPM:M-humid	*ENG	[0 to 100 / 80 / 1%/step]
	Specifies the CPM ratio of the decurl control against to the normal operation in middle humidity.		
009 DFU	CPM:H-humid	*ENG	[0 to 100 / 65 / 1%/step]
	Specifies the CPM ratio of the decurl control against to the normal operation in high humidity.		

1114	[Heat Storage Status] DFU		
	Sets the threshold for fusing temperature correction to compensate for heat accumulated on the pressure roller.		
001	Temp.:Threshold:Press	*ENG	[0 to 200 / 80 / 1 deg/step]
002	Temp.:Threshold:Atmosphere	*ENG	[0 to 200 / 80 / 1 deg/step]

1122	[Standby Rotation Setting] DFU		
	Sets the interval between fusing roller idle rotations during standby.		
001	Rotation Interval	*ENG	[0 to 240 / 60 / 1min/step]
002	Rotation Time	*ENG	[0 to 10000 / 5 / 1msec/step]

1124	[CPM Down Setting] DFU		
	Specifies the settings for the CPM down mode.		
001	Low:Down Temp.	*ENG	[-50 to 0 / -20 / 1 deg/step]
	Specifies the CPM down threshold temperature for the low temperature condition. If the fusing temperature decreases -20°C (adjustable) below the target temperature, the machine enters the CPM down mode.		
002	Low:Up Temp.	*ENG	[-50 to 0 / -15 / 1 deg/step]
	Specifies the CPM up threshold temperature for the low temperature condition. If the fusing temperature increases -15°C (adjustable) below the target temperature, the machine enters the CPM up mode.		
003	Low :1st CPM	*ENG	[10 to 100 / 80 / 1 %/step]
	Specifies the 1st CPM down ration against the normal CPM in the low temperature condition.		
004	Low :2nd CPM	*ENG	[10 to 100 / 65 / 1 %/step]
	Specifies the 2nd CPM down ration against the normal CPM in the low temperature condition.		
005	Low :3rd CPM	*ENG	[10 to 100 / 50 / 1 %/step]
	Specifies the 3rd CPM down ration against the normal CPM in the low temperature condition.		
018	Judging Interval	*ENG	[0 to 250 / 10 / 1sec/step]
	Specifies the interval for CPM down judgment.		

1131	[Continuous Print Mode Switch] DFU		
	Sets the permission for paper to feed.		
001	Feed Permit Condition Setting	*ENG	[0 to 2 / 0: Productivity Mode / 1/step] 0: Productivity Model 1: Fusing Quality 1 2: Fusing Quality 2

1141	[Fusing SC Issue Time Info]		
	Displays the time when an SC code was issued.		
001	SC Number	*ENG	Displays the issued SC number.
101	Htg Roller:Ctr Diff1	*ENG	[-50 to 260 / - / 1deg/step]
104	Htg Roller:End Diff1	*ENG	[-50 to 260 / - / 1deg/step]
107	Press Roller Temp Value1	*ENG	[-50 to 260 / - / 1deg/step]
108	Press Roller.End Temp Value1	*ENG	[-50 to 260 / - / 1deg/step]
151	Htg Roller:Ctr Diff2	*ENG	[-50 to 260 / - / 1deg/step]
154	Htg Roller:End Diff2	*ENG	[-50 to 260 / - / 1deg/step]
157	Press Roller Temp Value2	*ENG	[-50 to 260 / - / 1deg/step]
158	Press Roller.End Temp Value2	*ENG	[-50 to 260 / - / 1deg/step]
201	Htg Roller:Ctr Diff3	*ENG	[-50 to 260 / - / 1deg/step]
204	Htg Roller:End Diff3	*ENG	[-50 to 260 / - / 1deg/step]
207	Press Roller Temp Value3	*ENG	[-50 to 260 / - / 1deg/step]
208	Press Roller.End Temp Value3	*ENG	[-50 to 260 / - / 1deg/step]

1142	[Fusing Jam Detection]		
001	SC Display	*ENG	[0 to 1 / 0 : OFF / 1/step] 0:OFF, 1:ON
	Enables or disables the fusing consecutive jam (three times) SC detection.		

1152	[Fusing Nip Band Check]		
	Checks and adjusts the nip of the hot roller and pressure roller.		
	Execute	*ENG	-
001	Executes the nip band measurement between heating roller and pressure roller. If the nip band width is not 8 mm, and fusing is not good, replace the pressure roller or install a new fusing unit.		
002	Pre-idling Time	*ENG	[0 to 999 / 300 / 1sec/step]
DFU	Specifies the fusing rotation time before executing SP1152-001.		
003	Stop Time	*ENG	[0 to 100 / 20 / 1sec/step]
DFU	Specifies the time for measuring the nip.		
004	Feed Time	*ENG	[0 to 10000 / 8316 / 1msec/step]
DFU			

1153	[Low Temp. Start Up]		
001	Temp.:Threshold Value1	*ENG	[-100 to 100 / -100 / 1deg/step]
	Sepecifies the threshold temperature 1 for the warming up in the low temperature condition.		
002	Temp.:Threshold Value2	*ENG	[-100 to 100 / -100 / 1deg/step]
	Sepecifies the threshold temperature 2 for the warming up in the low temperature condition.		
003	Temp.:Target	*ENG	[-100 to 100 / -100 / 1deg/step]
	Sepecifies the target temperature for the warming up in the low temperature condition.		
005	Temp.:Rotation Threshold Value1	*ENG	[-100 to 100 / -100 / 1deg/step]
	Sepecifies the threshold temperature 1 for the warming up rotation in the low temperature condition.		
010	Time:Heat Storage Devision1	*ENG	[0 to 1000 / 0 / 1sec/step]
	Sepecifies the execution time 1 for the warming up in the low temperature condition.		
011	Time:Heat Storage Devision2	*ENG	[0 to 1000 / 0 / 1sec/step]
	Sepecifies the execution time 2 for the warming up in the low temperature condition.		

1801	[Motor Speed Adjust]		
	Adjusts the speeds of each motor.		
001	transportM:Plain1/2	*ENG	[-4.00 to 4.00 / 0.00 / 0.01%/step]
002	transportM:Thin	*ENG	[-4.00 to 4.00 / 0.00 / 0.01%/step]
003	transportM:M-Thick	*ENG	[-4.00 to 4.00 / 0.00 / 0.01%/step]
004	transportM:Thick1	*ENG	[-4.00 to 4.00 / 0.00 / 0.01%/step]
005	transportM:Thick2	*ENG	[-4.00 to 4.00 / 0.00 / 0.01%/step]
006	transportM:Thick3	*ENG	[-4.00 to 4.00 / 0.00 / 0.01%/step]
007	transportM:Special1	*ENG	[-4.00 to 4.00 / 0.00 / 0.01%/step]
008	transportM:Special2	*ENG	[-4.00 to 4.00 / 0.00 / 0.01%/step]
009	transportM:Special3	*ENG	[-4.00 to 4.00 / 0.00 / 0.01%/step]
010	transportM:Envelop	*ENG	[-4.00 to 4.00 / 0.00 / 0.01%/step]
011	transportM:OHP	*ENG	[-4.00 to 4.00 / 0.00 / 0.01%/step]
012	transportM:Plain1/2:Low speed	*ENG	[-4.00 to 4.00 / 0.00 / 0.01%/step]
013	transportM:Thin:Low speed	*ENG	[-4.00 to 4.00 / 0.00 / 0.01%/step]
014	transportM:M-Thick:Low speed	*ENG	[-4.00 to 4.00 / 0.00 / 0.01%/step]
015	transportM:Special1:Low speed	*ENG	[-4.00 to 4.00 / 0.00 / 0.01%/step]
016	transportM:Special2:Low speed	*ENG	[-4.00 to 4.00 / 0.00 / 0.01%/step]
017	transportM:Special3:Low speed	*ENG	[-4.00 to 4.00 / 0.00 / 0.01%/step]

018	transportM:Plain1/2:Glossy	*ENG	[-4.00 to 4.00 / 0.00 / 0.01%/step]
019	transportM:M-Thick:Glossy	*ENG	[-4.00 to 4.00 / 0.00 / 0.01%/step]
020	transportM:Postcard	*ENG	[-4.00 to 4.00 / 0.00 / 0.01%/step]
026	FusingMot:Plain1/2	*ENG	[-10.00 to 10.00 / 0.90 / 0.01%/step]
027	FusingMot:Thin	*ENG	[-10.00 to 10.00 / 0.90 / 0.01%/step]
028	FusingMot:M-thick	*ENG	[-10.00 to 10.00 / 0.90 / 0.01%/step]
029	FusingMot:Thick1	*ENG	[-10.00 to 10.00 / 1.50 / 0.01%/step]
030	FusingMot:Thick2	*ENG	[-10.00 to 10.00 / 1.50 / 0.01%/step]
031	FusingMot:Thick3	*ENG	[-10.00 to 10.00 / 1.50 / 0.01%/step]
032	FusingMot:Special1	*ENG	[-10.00 to 10.00 / 0.90 / 0.01%/step]
033	FusingMot:Special2	*ENG	[-10.00 to 10.00 / 0.90 / 0.01%/step]
034	FusingMot:Special3	*ENG	[-10.00 to 10.00 / 0.90 / 0.01%/step]
035	FusingMot:Envelop	*ENG	[-10.00 to 10.00 / 1.50 / 0.01%/step]
036	FusingMot:OHP	*ENG	[-10.00 to 10.00 / 1.50 / 0.01%/step]
037	FusingMot:Plain1/2:Low Speed	*ENG	[-10.00 to 10.00 / 1.50 / 0.01%/step]
038	FusingMot:Thin:Low Speed	*ENG	[-10.00 to 10.00 / 1.50 / 0.01%/step]
039	FusingMot:M-thick:Low Speed	*ENG	[-10.00 to 10.00 / 1.50 / 0.01%/step]
040	FusingMot:Special1:Low Speed	*ENG	[-10.00 to 10.00 / 1.50 / 0.01%/step]
041	FusingMot:Special2:Low Speed	*ENG	[-10.00 to 10.00 / 1.50 / 0.01%/step]

042	FusingMot:Special3:Low Speed	*ENG	[-10.00 to 10.00 / 1.50 / 0.01%/step]
051	BkOpcDevM:Normal Speed	*ENG	[-4.00 to 4.00 / 0.00 / 0.01/step]
052	BkOpcDevM:Low Speed	*ENG	[-4.00 to 4.00 / 0.00 / 0.01/step]
053	ColorOpcDevM:Normal Speed	*ENG	[-8 to 8 / 0 / 1/step]
054	ColorOpcDevM:Low Speed	*ENG	[-8 to 8 / 0 / 1/step]
055	Offset:Standard Speed:Color	*ENG	[-8 to 8 / 0 / 1/step]
056	Offset:Low Speed:Color	*ENG	[-8 to 8 / 0 / 1/step]
130	OpcMotAdjCtrl	*ENG	[0 or 1 / 1 / 1/step]

1907	[Paper Feed Timing Adj.]		
	Adjusts the timing of paper feed. (A "+" setting broadens paper feed interval, a "-" setting narrows paper feed interval.)		
001	Tray1 Clutch ON: Plain	*ENG	[-10 to 10 / 0 / 1mm/step]
002	Tray1 Clutch ON: Middle Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
003	Tray1 Clutch ON: Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
007	Tray1 Clutch OFF: Plain	*ENG	[-10 to 10 / 0 / 1mm/step]
008	Tray1 Clutch OFF: Middle Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
009	Tray1 Clutch OFF: Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
010	Tray1 Paper Sensor: Plain	*ENG	[-10 to 10 / 0 / 1mm/step]
011	Tray1 Paper Sensor: Middle Thick	*ENG	[-10 to 10 / 0 / 1mm/step]

012	Tray1 Paper Sensor: Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
013	By-pass Clutch ON: Plain	*ENG	[-10 to 10 / 0 / 1mm/step]
014	By-pass Clutch ON: Middle Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
015	By-pass Clutch ON: Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
016	By-pass Clutch ON: Envelop	*ENG	[-10 to 10 / 0 / 1mm/step]
017	By-pass Clutch OFF: Plain	*ENG	[-10 to 10 / 0 / 1mm/step]
018	By-pass Clutch OFF: Middle Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
019	By-pass Clutch OFF: Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
020	By-pass Clutch OFF: Envelop	*ENG	[-10 to 10 / 0 / 1mm/step]
021	ExitPaperDivergence SOL:OFF	*ENG	[-20 to 20 / 0 / 1mm/step]
022	ExitPaperDivergence SOL:ON	*ENG	[-20 to 20 / 0 / 1mm/step]
023	Reversing change SOL:OFF	*ENG	[-20 to 20 / 0 / 1mm/step]
024	Reversing change SOL:ON	*ENG	[-10 to 10 / 0 / 1mm/step]
025	ExitPaperDivergence SOL:OFF:Low	*ENG	[-10 to 10 / 0 / 1mm/step]
026	ExitPaperDivergence SOL:ON:Low	*ENG	[-10 to 10 / 0 / 1mm/step]
027	Reversing change SOL:OFF:Low	*ENG	[-10 to 10 / 0 / 1mm/step]

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028	Reversing change SOL:ON:Low	*ENG	[-10 to 10 / 0 / 1mm/step]
029	Tray1Motor Pressure	*ENG	[-2540 to 2540 / 0 / 1msec/step]
032	Tray1 Motor Base Up	*ENG	[-2540 to 2540 / 0 / 1msec/step]
033	Tray1 Motor Base Down	*ENG	[-2540 to 2540 / 0 / 1msec/step]
034	Tray1 Motor Paper End	*ENG	[-2540 to 2540 / 0 / 1msec/step]
035	Tray2 Bank Paper Feed Interval: Plain	*ENG	[-10 to 10 / 0 / 1mm/step]
036	Tray2 Bank Paper Feed Interval: Middle Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
037	Tray2 Bank Paper Feed Interval: Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
038	Tray3 Bank Paper Feed Interval: Plain	*ENG	[-10 to 10 / 0 / 1mm/step]
039	Tray3 Bank Paper Feed Interval: Middle Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
040	Tray3 Bank Paper Feed Interval: Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
041	Tray2 Bank 1st Page Edge Position: Plain	*ENG	[-10 to 10 / 0 / 1mm/step]
042	Tray2 Bank 1st Page Edge Position: Middle Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
043	Tray2 Bank 1st Page Edge Position: Thick	*ENG	[-10 to 10 / 0 / 1mm/step]

044	Tray3 Bank 1st Page Edge Position: Plain	*ENG	[-10 to 10 / 0 / 1mm/step]
045	Tray3 Bank 1st Page Edge Position: Middle Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
046	Tray3 Bank 1st Page Edge Position: Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
047	Tray2 Bank Mimimum Page Interval: Plain	*ENG	[-10 to 10 / 0 / 1mm/step]
048	Tray2 Bank Mimimum Page Interval: Middle Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
049	Tray2 Bank Mimimum Page Interval: Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
050	Tray3 Bank Mimimum Page Interval: Plain	*ENG	[-10 to 10 / 0 / 1mm/step]
051	Tray3 Bank Mimimum Page Interval: Middle Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
052	Tray3 Bank Mimimum Page Interval: Thick	*ENG	[-10 to 10 / 0 / 1mm/step]

1950	[Fan Cooling Time Set]		
	Adjust the rotation time for each fan motor after a job end.		
001	Imaging Cooling Fan	*ENG	[0 to 600 / 0 / 1sec/step]
002	Fusing Exit Fan	*ENG	[0 to 600 / 10 / 1sec/step]
003	PSU Fan	*ENG	[0 to 600 / 0 / 1sec/step]
004	Writing Cooling Fan	*ENG	[0 to 600 / 0 / 1sec/step]

1951	[Fan Start Time Set]		
	Adjust the start time for each fan motor after a job end.		
001	Imaging Cooling Fan	*ENG	[0 to 120 / 0 / 1sec/step]
002	Fusing Exit Fan	*ENG	[0 to 120 / 0 / 1sec/step]
003	PSU Fan	*ENG	[0 to 120 / 0 / 1sec/step]
004	Writing Cooling Fan	*ENG	[0 to 120 / 0 / 1sec/step]

1952	[Fan Control Off Mode Time Set]		
	Specifies the time for fan control off mode.		
001	-	*ENG	[0 to 60 / 10 / 1min/step]

1953	[Extra Fan Control]		
	Configures the settings of extra fan control.		
001	Extra Fan Cooling State	*ENG	[0 or 1 / - / 1/step] Off, 1: On
	Displays the extra fan cooling is On or Off.		
006	Execution Temp. Threshold	*ENG	[0.0 to 100.0 / 42.0 / 0.1deg/step]
	Specifies the judgment temperature for the starting of extra fan execution.		
007	Cancellation Temp. Threshold	*ENG	[0.0 to 100.0 / 5.0 / 0.1deg/step]
	Specifies the threshold temperature (the difference in value with the starting of extra fan execution) for the cancellation of extra fan execution.		
008	fan setting with or without operation	*ENG	[0 or 1 / - / 1/step]
	Enables or disenables the control of extra fan execution control. 0: Disable 1: Enable		

1954	-		
	Fan low noise mode end temperature		
001	Fan Half Speed Control	*ENG	[0 to 100 / 30 / 0.1deg/step]

5.3 MAIN SP TABLES-2

5.3.1 SP2-XXX (DRUM)

2102	[Magnification Adjustment]		
	These values are the parameters for the automatic line position adjustment and are adjusted at the factory. These SPs must be input only when a new laser unit is installed.		
001	Main Mag.: High Speed: Bk	*ENG	[-1.000 to 1.000 / 0.000 / 0.001/step]
004	Main Mag.: High Speed: Ma	*ENG	
007	Main Mag.: High Speed: Cy	*ENG	
010	Main Mag.: High Speed: Ye	*ENG	
028	Color Main Mag.: High Speed: Ma	*ENG	[-1.000 to 1.000 / 0.000 / 0.001/step]
031	Color Main Mag.: High Speed: Cy	*ENG	
034	Color Main Mag.: High Speed: Ye	*ENG	

2103	[Erase Margin Adjustment] (Area, Paper Size)		
	Adjusts the erase margin by deleting image data at the margins.		
001	Lead Edge Width	*ENG	[0.0 to 9.9 / 4.2 / 0.1mm/step]
002	Trail. Edge Width	*ENG	
003	Left	*ENG	[0.0 to 9.9 / 2.0 / 0.1mm/step]
004	Right	*ENG	
005	Duplex Trail	*ENG	[0.0 to 9.9 / 0.0 / 0.1mm/step]
006	Duplex Left Edge	*ENG	
007	Duplex Right Edge	*ENG	

2104	[Unit LD Power Adj.]		
	Adjusts the LD initial power. These SPs must be input only when a new laser unit is installed.		
001	Bk	*ENG	[60.0 to 140.0 / 100.0 / 0.1%/step]
002	Ma	*ENG	
003	Cy	*ENG	
004	Ye	*ENG	

2105	[LD Power Adj.]		
	Adjusts the LD power of each color for each process speed. Each LD power setting is decided by process control.		
001	High Speed: Bk	*ENG	[60.0 to 140.0 / 100.0 / 0.1%/step]
002	High Speed: Ma	*ENG	[50 to 120 / 100 / 1%/step]
003	High Speed: Cy	*ENG	
004	High Speed: Ye	*ENG	
009	Low Speed: Bk	*ENG	

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010	Low Speed: Ma	*ENG	
011	Low Speed: Cy	*ENG	
012	Low Speed: Ye	*ENG	

2106	[Polygon Rotation Time]		
	Adjusts the time of the polygon motor rotation.		
001	Warming-Up	*ENG	[0 to 60 / 10 / 1sec/step]
002	Job End	*ENG	[0 to 60 / 0 / 1/step]

2107	[Image Parameter]		
	Adjusts image parameters.		
001	Warming-Up	*ENG	[0 or 1 / 1 / 1/step]
002	Shading Correction Flag	*ENG	[0 or 1 / 1 / 1/step]

2109	[Pattern Selection]		
003	Pattern Selection	*ENG	[0 to 23 / 0 / 1/step]
	Selects the test pattern. 0 None 1: Vertical Line (1dot) 2: Vertical Line (2dot) 3: Horizontal (1dot) 4: Horizontal (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 16: Hound's Tooth Check (Horizontal) 17: Band (Horizontal) 18: Band (Vertical) 19: Checker Flag Pattern 20: Grayscale Vertical Margin 21: Grayscale Horizontal Margin 23: Full Dot Pattern

005	Color Selection	*ENG	Specifies the color for the test pattern. [1 to 4 / 1 / 1/step] 1:All Color, 2:Ma, 3:Ye, 4:Bk
006	Density:Bk	*ENG	Specifies the color density for the test pattern. [0 to 15 / 15 / 1/step] 0: Lightest density 15: Darkest density
007	Density:Ma	*ENG	
008	Density:Cy	*ENG	
009	Density:Ye	*ENG	

2111	[Forced Line Position Adj.]		
001	Mode a	ENG	[Execute] Executes the fine line position adjustment twice. If this SP is not completed (NG is displayed), do SP2111-003 first and then try this SP again.
002	Mode b	ENG	[Execute] Executes the fine line position adjustment once. If this SP is not completed, do SP2111-003 first and then try this SP again
003	Mode c	ENG	[Execute] Executes the rough line position adjustment once. After doing this SP, make sure to execute SP2111-001 or -002. Otherwise, the line position adjustment is not perfectly done.

004	Mode d	ENG	[Execute] Executes the fine line position adjustment and rough line position adjustment.
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2112	[TM/ID Sensor Test]		
	This SP is used to check the ID sensors at the factory. The results of this SP are displayed in SP2140 to SP2145.		
001	TM/ID Sensor Check	*ENG	[Execute]
010	General:FCRP	*ENG	[0 to 9999 / - / 1/step]
020	Threshold Setting	*ENG	[0.00 to 5.50 / 1.90 / 0.01V/step]

2117	[Skew Adjustment]		
	Specifies a skew adjustment value for the skew motor M, C, Y or Bk.		
001	Ma:Skew Adjustment	*ENG	[-256 to 256 / 0 / 1 click/step]
002	Cy:Skew Adjustment	*ENG	
003	Ye:Skew Adjustment	*ENG	
004	Bk:Skew Adjustment	*ENG	

2140	[TM/ID Sensor Check Result]		
	Displays the maximum result values of the ID sensor check. Front, Center, Rear: ID sensors for the automatic line position adjustment and the process control		
001	PWM: ID Sensor	*ENG	[0 to 1024 / - / 1/step]
005	PWM: Front	*ENG	
006	PWM: Center	*ENG	
007	PWM: Rear	*ENG	

2141	[TM/ID Sensor Check Result]		
	Displays the maximum result values of the ID sensor check. Front, Center, Rear: ID sensors for the automatic line position adjustment and the process control		
001	Average: ID Sensor	*ENG	[0.00 to 5.50 / - / 0.01V/step]
005	Average: Front	*ENG	
006	Average: Center	*ENG	
007	Average: Rear	*ENG	

2142	[TM/ID Sensor Check Result]		
	Displays the maximum result values of the ID sensor check. Front, Center, Rear: ID sensors for the automatic line position adjustment and the process control		
001	Maximum: ID Sensor	*ENG	[0.00 to 5.50 / - / 0.01V/step]
005	Maximum: Front	*ENG	
006	Maximum: Center	*ENG	
007	Maximum: Rear	*ENG	

2143	[TM/ID Sensor Check Result]		
	Displays the minimum result values of the ID sensor check. Front, Center, Rear: ID sensors for the automatic line position adjustment and the process control		
001	Minimum: ID Sensor	*ENG	[0.00 to 5.50 / - / 0.01V/step]
005	Minimum: Front	*ENG	
006	Minimum: Center	*ENG	
007	Minimum: Rear	*ENG	

2144	[TM/ID Sensor Check Result]		
	Displays the maximum result 2 values of the ID sensor check. Front, Center, Rear: ID sensors for the automatic line position adjustment and the process control		
001	Maximum 2: ID Sensor	*ENG	[0.00 to 5.50 / - / 0.01V/step]
005	Maximum 2: Front	*ENG	
006	Maximum 2: Center	*ENG	
007	Maximum 2: Rear	*ENG	

2145	[TM/ID Sensor Check Result]		
	Displays the minimum result 2 values of the ID sensor check. Front, Center, Rear: ID sensors for the automatic line position adjustment and the process control		
001	Minimum 2: ID Sensor	*ENG	[0.00 to 5.50 / - / 0.01V/step]
005	Minimum 2: Front	*ENG	
006	Minimum 2: Center	*ENG	
007	Minimum 2: Rear	*ENG	

2146	[TM-Sensor Test]		
	This SP is used to check the TM sensors.		
005	Number of Edge Detection:Front	*ENG	[0 to 16 / - / 1/step]
006	Number of Edge Detection:Center	*ENG	
007	Number of Edge Detection:Rear	*ENG	

2150	[Area Mag. Correction] LD Pulse Area Correction (Color, Area) FA		
	<p>Adjusts the magnification for each area. The main scan (297 mm) is divided into 13 areas. Area 1 is at the front side of the machine (left side of the image) and area 13 is at the rear side of the machine (right side of the image). Decreasing a value makes the image shift to the left side on the print. Increasing a value makes the image shift to the right side on the print. 1 pulse = 1/16 dot</p>		
027	Area 0: Bk	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
028	Area 1: Bk	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
029	Area 2: Bk	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
030	Area 3: Bk	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
031	Area 4: Bk	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
032	Area 5: Bk	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
033	Area 6: Bk	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
034	Area 7: Bk	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
035	Area 8: Bk	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
079	Area 0: Ma	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
080	Area 1: Ma	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
081	Area 2: Ma	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
082	Area 3: Ma	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
083	Area 4: Ma	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
084	Area 5: Ma	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
085	Area 6: Ma	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
086	Area 7: Ma	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
087	Area 8: Ma	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
131	Area 0: Cy	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]

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132	Area 1: Cy	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
133	Area 2: Cy	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
134	Area 3: Cy	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
135	Area 4: Cy	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
136	Area 5: Cy	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
137	Area 6: Cy	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
138	Area 7: Cy	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
139	Area 8: Cy	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
183	Area 0: Ye	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
184	Area 1: Ye	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
185	Area 2: Ye	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
186	Area 3: Ye	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
187	Area 4: Ye	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
188	Area 5: Ye	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
189	Area 6: Ye	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
190	Area 7: Ye	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
191	Area 8: Ye	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]

2152	[Area Shad. Correct. Setting]		
	Sets the adjust coefficient for exposure shading for each color in each area of the MUSIC pattern.		
001	Area 0: Bk	*ENG	[-31 to 31 / 0 / 1/step]
002	Area 1: Bk	*ENG	[-31 to 31 / 0 / 1/step]
003	Area 2: Bk	*ENG	[-31 to 31 / 0 / 1/step]
004	Area 3: Bk	*ENG	[-31 to 31 / 0 / 1/step]
005	Area 4: Bk	*ENG	[-31 to 31 / 0 / 1/step]
006	Area 5: Bk	*ENG	[-31 to 31 / 0 / 1/step]
007	Area 6: Bk	*ENG	[-31 to 31 / 0 / 1/step]
008	Area 7: Bk	*ENG	[-31 to 31 / 0 / 1/step]
009	Area 8: Bk	*ENG	[-31 to 31 / 0 / 1/step]
010	Area 9: Bk	*ENG	[-31 to 31 / 0 / 1/step]
011	Area 10: Bk	*ENG	[-31 to 31 / 0 / 1/step]
012	Area 11: Bk	*ENG	[-31 to 31 / 0 / 1/step]
033	Area 0: Ma	*ENG	[-31 to 31 / 0 / 1/step]
034	Area 1: Ma	*ENG	[-31 to 31 / 0 / 1/step]
035	Area 2: Ma	*ENG	[-31 to 31 / 0 / 1/step]
036	Area 3: Ma	*ENG	[-31 to 31 / 0 / 1/step]
037	Area 4: Ma	*ENG	[-31 to 31 / 0 / 1/step]
038	Area 5: Ma	*ENG	[-31 to 31 / 0 / 1/step]
039	Area 6: Ma	*ENG	[-31 to 31 / 0 / 1/step]
040	Area 7: Ma	*ENG	[-31 to 31 / 0 / 1/step]
041	Area 8: Ma	*ENG	[-31 to 31 / 0 / 1/step]
042	Area 9: Ma	*ENG	[-31 to 31 / 0 / 1/step]

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043	Area 10: Ma	*ENG	[-31 to 31 / 0 / 1/step]
044	Area 11: Ma	*ENG	[-31 to 31 / 0 / 1/step]
065	Area 0: Cy	*ENG	[-31 to 31 / 0 / 1/step]
066	Area 1: Cy	*ENG	[-31 to 31 / 0 / 1/step]
067	Area 2: Cy	*ENG	[-31 to 31 / 0 / 1/step]
068	Area 3: Cy	*ENG	[-31 to 31 / 0 / 1/step]
069	Area 4: Cy	*ENG	[-31 to 31 / 0 / 1/step]
070	Area 5: Cy	*ENG	[-31 to 31 / 0 / 1/step]
071	Area 6: Cy	*ENG	[-31 to 31 / 0 / 1/step]
072	Area 7: Cy	*ENG	[-31 to 31 / 0 / 1/step]
073	Area 8: Cy	*ENG	[-31 to 31 / 0 / 1/step]
074	Area 9: Cy	*ENG	[-31 to 31 / 0 / 1/step]
075	Area 10: Cy	*ENG	[-31 to 31 / 0 / 1/step]
076	Area 11: Cy	*ENG	[-31 to 31 / 0 / 1/step]
097	Area 0: Ye	*ENG	[-31 to 31 / 0 / 1/step]
098	Area 1: Ye	*ENG	[-31 to 31 / 0 / 1/step]
099	Area 2: Ye	*ENG	[-31 to 31 / 0 / 1/step]
100	Area 3: Ye	*ENG	[-31 to 31 / 0 / 1/step]
101	Area 4: Ye	*ENG	[-31 to 31 / 0 / 1/step]
102	Area 5: Ye	*ENG	[-31 to 31 / 0 / 1/step]
103	Area 6: Ye	*ENG	[-31 to 31 / 0 / 1/step]
104	Area 7: Ye	*ENG	[-31 to 31 / 0 / 1/step]

105	Area 8: Ye	*ENG	[-31 to 31 / 0 / 1/step]
106	Area 9: Ye	*ENG	[-31 to 31 / 0 / 1/step]
107	Area 10: Ye	*ENG	[-31 to 31 / 0 / 1/step]
108	Area 11: Ye	*ENG	[-31 to 31 / 0 / 1/step]

2180	[Line Pos. Adj. Clear]		
	Clears the line position adjustment.		
001	Color Regist.	ENG	[Execute]
002	Main Scan Length Detection	ENG	
003	MUSIC Result	ENG	
004	Area Magnification Correction	ENG	
005	Area Magnification Correction:unit2	ENG	
006	Shading Correction:unit1	ENG	
007	Shading Correction:unit2	ENG	

System
Maintenance

2181	[Line Position Adj. Result]		
	<p>Displays the values for each correction.</p> <p>"M. Cor.: Dot" indicates the dot correction value in the main scan direction.</p> <p>"M. Cor.: Subdot" indicates the sub dot correction value in the main scan direction.</p> <p>"S. Cor.: Dot" indicates the dot correction value in the sub scan direction.</p> <p>"S. Cor.: Subdot" indicates the sub dot correction value in the sub scan direction.</p>		
003	Skew: M	*ENG	[-5000.000 to 5000.000 / - / 0.001um/step]
011	M. Cor.: Dot: M	*ENG	[-512 to 511 / - / 1dot/step]

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012	M. Cor.: Subdot: M	*ENG	[-1.00 to 1.00 / - / 0.01dot/step]
015	M. Left Mag.: Subdot: M	*ENG	[-32.00 to 32.00 / - / 0.01dot/step]
016	M. Right Mag.: Subdot: M	*ENG	[-32.00 to 32.00 / - / 0.01dot/step]
017	S. Cor.: 600 Line: M	*ENG	[-16384 to 16383 / - / 1line/step]
018	S. Cor.: 600 Sub: M	*ENG	[-1.000 to 1.000 / - / 0.001line/step]
019	S. Cor.: 1200 Line: M	*ENG	[-16384 to 16383 / - / 1line/step]
020	S. Cor.: 1200 Sub: M	*ENG	[-1.000 to 1.000 / - / 0.001line/step]
021	Skew: C	*ENG	[-5000.000 to 5000.000 / - / 0.001um/step]
029	M. Cor.: Dot: C	*ENG	[-512 to 511 / - / 1dot/step]
030	M. Cor.: Subdot: C	*ENG	[-1.00 to 1.00 / - / 0.01dot/step]
033	C. Left Mag.: Subdot: M	*ENG	[-32.00 to 32.00 / - / 0.01dot/step]
034	C. Right Mag.: Subdot: M	*ENG	[-32.00 to 32.00 / - / 0.01dot/step]
035	S. Cor.: 600 Line: C	*ENG	[-16384 to 16383 / - / 1line/step]
036	S. Cor.: 600 Sub: C	*ENG	[-1.000 to 1.000 / - / 0.001line/step]
037	S. Cor.: 1200 Line: C	*ENG	[-16384 to 16383 / - / 1line/step]
038	S. Cor.: 1200 Sub: C	*ENG	[-1.000 to 1.000 / - / 0.001line/step]
039	Skew: Y	*ENG	[-5000.000 to 5000.000 / - / 0.001um/step]
047	M. Cor.: Dot: Y	*ENG	[-512 to 511 / - / 1dot/step]
048	M. Cor.: Subdot: Y	*ENG	[-1.00 to 1.00 / - / 0.01dot/step]
051	Y. Left Mag.: Subdot: M	*ENG	[-32.00 to 32.00 / - / 0.01dot/step]
052	Y. Right Mag.: Subdot: M	*ENG	[-32.00 to 32.00 / - / 0.01dot/step]

053	S. Cor.: 600 Line: Y	*ENG	[-16384 to 16383 / - / 1line/step]
054	S. Cor.: 600 Sub: Y	*ENG	[-1.000 to 1.000 / - / 0.001line/step]
055	S. Cor.: 1200 Line: Y	*ENG	[-16384 to 16383 / - / 1line/step]
056	S. Cor.: 1200 Sub: Y	*ENG	[-1.000 to 1.000 / - / 0.001line/step]
057	S. Cor.: 600 Sub	*ENG	[-1.000 to 1.000 / - / 0.001line/step]
059	S. Cor.: 1200 Sub	*ENG	[-1.000 to 1.000 / - / 0.001line/step]
061	Skew: K	*ENG	[-5000.000 to 5000.000 / - / 0.001um/step]

2182	[Line Position Adj. Offset]		
	Sets the offset amount of the main scan or the sub-scan. (Color) M. Scan: Main scan, S. Scan: Sub-scan		
004	M. Scan: High: Dot: M	*ENG	[-512 to 511 / 0 / 1dot/step]
005	M. Scan: High: Subdot: M	*ENG	[-1.00 to 1.00 / 0.00 / 0.01dot/step]
008	M. Scan: Low: Dot: M	*ENG	[-512 to 511 / 0 / 1dot/step]
009	M. Scan: Low: Subdot: M	*ENG	[-1.00 to 1.00 / 0.00 / 0.01dot/step]
010	M. Scan: High: Dot: C	*ENG	[-512 to 511 / 0 / 1dot/step]
011	M. Scan: High: Subdot: C	*ENG	[-1.00 to 1.00 / 0.00 / 0.01dot/step]
014	M. Scan: Low: Dot: C	*ENG	[-512 to 511 / 0 / 1dot/step]
015	M. Scan: Low: Subdot: C	*ENG	[-1.00 to 1.00 / 0.00 / 0.01dot/step]
016	M. Scan: High: Dot: Y	*ENG	[-512 to 511 / 0 / 1dot/step]
017	M. Scan: High: Subdot: Y	*ENG	[-1.00 to 1.00 / 0.00 / 0.01dot/step]

020	M. Scan: Low: Dot: Y	*ENG	[-512 to 511 / 0 / 1dot/step]
021	M. Scan: Low: Subdot: Y	*ENG	[-1.00 to 1.00 / 0.00 / 0.01dot/step]
022	S. Scan: High: Line: M	*ENG	[-16384 to 16383 / 0 / 1line/step]
023	S. Scan: High: Subline: M	*ENG	[-1.00 to 1.00 / 0.00 / 0.01line/step]
026	S. Scan: Low: Line: M	*ENG	[-16384 to 16383 / 0 / 1line/step]
027	S. Scan: Low: Subline: M	*ENG	[-1.00 to 1.00 / 0 / 0.01line/step]
028	S. Scan: High: Line: C	*ENG	[-16384 to 16383 / 0 / 1line/step]
029	S. Scan: High: Subline: C	*ENG	[-1.00 to 1.00 / 0.00 / 0.01line/step]
032	S. Scan: Low: Line: C	*ENG	[-16384 to 16383 / 0 / 1line/step]
033	S. Scan: Low: Subline: C	*ENG	[-1.00 to 1.00 / 0.00 / 0.01line/step]
034	S. Scan: High: Line: Y	*ENG	[-16384 to 16383 / 0 / 1line/step]
035	S. Scan: High: Subline: Y	*ENG	[-1.00 to 1.00 / 0.00 / 0.01line/step]
038	S. Scan: Low: Line: Y	*ENG	[-16384 to 16383 / 0 / 1line/step]
039	S. Scan: Low: Subline: Y	*ENG	[-1.00 to 1.00 / 0.00 / 0.01line/step]

2193	[MUSIC Condition Set]		
	Line Position Adjustment: Condition Setting		
002	Page: Job End: BW+FC	*ENG	[0 to 999 / 500 / 1page/step]
	Adjusts the threshold of the line position adjustment for BW and color printing mode after job end.		
003	Page: Job End: FC	*ENG	[0 to 999 / 200 / 1page/step]
	Adjusts the threshold of the line position adjustment for color printing mode after job end.		

004	Page: Interrupt: BW+FC	*ENG	[0 to 999 / 200 / 1page/step]
	Adjusts the threshold of the line position adjustment for BW and color printing mode during job.		
005	Page: Interrupt: FC	*ENG	[0 to 999 / 200 / 1page/step]
	Adjusts the threshold of the line position adjustment for color printing mode during jobs.		
006	Page: Stand-By: BW	*ENG	[0 to 999 / 100 / 1page/step]
	Adjusts the threshold of the line position adjustment for BW printing mode in stand-by mode. The line position adjustment is done when the number of outputs in BW printing mode reaches the value specified with this SP and the condition of SP2-193-008 or SP2-193-009 is satisfied		
007	Page: Stand-By: FC	*ENG	[0 to 999 / 100 / 1page/step]
	Adjusts the threshold of the line position adjustment for BW printing mode in stand-by mode. The line position adjustment is done when the number of outputs in color printing mode reaches the value specified with this SP and the condition of SP2-193-008 or SP2-193-009 is satisfied.		
008	Temp.	*ENG	[0 to 100 / 5 / 1deg/step]
	Adjust the temperature change threshold for the line position adjustment (Mode b: adjustment once). The timing for line position adjustment depends on the combinations of several conditions.		
009	Time	*ENG	[1 to 1440 / 300 / 1minute/step]
	Adjust the time threshold for the line position adjustment (Mode b: adjustment once). The timing for line position adjustment depends on the combinations of several conditions.		

010	Magnification	*ENG	[0.00 to 1.00 / 0.10 / 0.01%/step]
	Adjusts the magnification threshold for line position adjustment. If the length of the main scan is changed by this amount since the previous MUSIC, then MUSIC is done again.		
011	Temp. 2	*ENG	[0 to 100 / 10 / 1deg/step]
	Adjust the temperature change threshold for the line position adjustment (Mode a: adjustment twice). The timing for line position adjustment depends on the combinations of several conditions.		
012	Time 2	*ENG	[1 to 9999 / 600 / 1minute/step]
	Adjust the time threshold for the line position adjustment (Mode a: adjustment twice). The timing for line position adjustment depends on the combinations of several conditions.		
013	Temp. 3	*ENG	[0 to 100 / 10 / 1deg/step]
016	Page: Power ON:BW+FC	*ENG	[0 to 999 / 200 / 1page/step]
	Adjusts the threshold of the line position adjustment for BW and FC printing mode at power-on. The line position adjustment is done when the number of outputs in BW and color printing mode reaches the value specified with this SP and the condition of SP2-193-008 or SP2-193-009 is satisfied.		

2194	[MUSIC Execution Result]		
	Line Position Adjustment: Execution Result		
001	Year	*ENG	[0 to 99 / - / 1 year/step]
	Displays the year of the last MUSIC execution.		
002	Month	*ENG	[1 to 12 / - / 1 month/step]
	Displays the month of the last MUSIC execution.		

003	Day	*ENG	[1 to 31 / - / 1 day/step]
	Displays the date of the last MUSIC execution.		
004	Hour	*ENG	[0 to 23 / - / 1 hour/step]
	Displays the time (hour) of the last MUSIC execution		
005	Minute	*ENG	[0 to 59 / - / 1 minute/step]
	Displays the time (minute) of the last MUSIC execution.		
006	Temperature	*ENG	[0 to 100 / - / 1 deg/step]
	Displays the temperature of the last MUSIC execution.		
007	Execution Result	*ENG	[0 or 1 / 0 / 1/step] 0: Completed successfully, 1: Failed
008	Number of Execution	*ENG	[0 to 999999 / - / 1 times/step]
009	Number of Failure	*ENG	[0 to 999999 / - / 1 times/step]
010	Error Result: C	*ENG	[0 to 9 / - / 1/step]
011	Error Result: M	*ENG	0: Not done 1: Completed successfully
012	Error Result: Y	*ENG	2: Cannot detect patterns 3: Fewer lines on the pattern than the target 4: Out of the adjustment range 5 to 9: Not used

2242	[TS Operation Env. Log]		
	Displays TS Operation Env. Logs.		
001	TS<=40	*ENG	[0 to 99999999 / 0 / 1 mm/step]
002	40<TS<=45	*ENG	
003	45<TS	*ENG	
004	Log Clear	*ENG	Execute

2302	[Environmental Correction:Trans]		
	Environmental Correction: Image Transfer Belt Unit		
002	Forced Setting	*ENG	Sets the environment condition manually. [0 to 6 / 0 / 1/step] 0: Automatic environment control 1: LL (Low temperature/ Low humidity) 2: ML (Middle temperature/ Low humidity) 3: MM (Middle temperature/ Middle humidity) 4: MH (Middle temperature/ High humidity) 5: HH (High temperature/ High humidity)
003	Absolute Humidity:Threshold 1	*ENG	Adjusts the threshold value between LL and ML. [0.00 to 100.00 / 4.00 / 0.01g/m ³ /step]
004	Absolute Humidity:Threshold 2	*ENG	Adjusts the threshold value between ML and MM. [0.00 to 100.00 / 8.00 / 0.01g/m ³ /step]

005	Absolute Humidity:Threshold 3	*ENG	Adjusts the threshold value between MM and MH. [0.00 to 100.00 / 16.00 / 0.01g/m ³ /step]
006	Absolute Humidity:Threshold 4	*ENG	Adjusts the threshold value between MH and HH. [0.00 to 100.00 / 24.00 / 0.01g/m ³ /step]
007	Temperature:Threshold	*ENG	[-5 to 30 / 5 / 1deg/step]

2308	[Paper Size Correction]		
	Adjusts the threshold value for the paper size correction.		
001	Threshold 1	*ENG	[0 to 250 / 194 / 1mm/step] Threshold 1 ≤ paper: Paper is detected as "S1" size.
002	Threshold 2	*ENG	[0 to 250 / 165 / 1mm/step] Threshold 2 ≤ paper ≤ Threshold 1: Paper is detected as "S2" size.
003	Threshold 3	*ENG	[0 to 250 / 139 / 1mm/step] Threshold 3 ≤ paper ≤ Threshold 2: Paper is detected as "S3" size.

2311	[Non Image Area:Bias]		
	Adjusts the bias of the paper transfer roller between images		
001	Image Transfer	*ENG	[10 to 250 / 100 / 5%/step]
	Adjusts the bias of the image transfer belt between images. This value is added to the value of the image transfer belt bias.		
002	Paper Transfer	*ENG	[0 to 230 / 0 / 1uA/step]
	Adjusts the bias of the paper transfer roller between images.		

2326	[Transfer Roller CL:Bias]		
001	Positive:befor and after JOB	*ENG	[0 to 2100 / 250 / 10V/step]
	Adjusts the positive voltage of the paper transfer roller for cleaning the paper transfer roller.		
002	Negative:befor and after JOB	*ENG	[10 to 995 / 100 / 10%/step]
	Adjusts the negative current of the paper transfer roller for cleaning the paper transfer roller.		
003	Positive:befor and afterProcon	*ENG	[0 to 2100 / 2000 / 10V/step]
	Adjusts the positive current limit of the paper transfer roller for cleaning the paper transfer roller.		
004	Negative:befor and afterProcon	*ENG	[10 to 995 / 100 / 10%/step]
	Adjusts the negative current limit of the paper transfer roller for cleaning the paper transfer roller.		
005	Positive:prevention	*ENG	[0 to 2100 / 500 / 10V/step]

2327	[Transfer Roller CL:Bias]		
001	Recovery	*ENG	[0 to 20 / 10 / 1times/step]
002	Process Control	*ENG	[0 to 20 / 5 / 1times/step]

2351	[Common:BW:Bias] Image Transfer Belt: B/W: Bias Adjustment		
001	Image Transfer:standard	*ENG	[0 to 60 / 23 / 1 μ A]
	Adjusts the current for the image transfer belt in B/W mode for plain paper.		
003	Image Transfer:low	*ENG	[0 to 60 / 12 / 1 μ A]
	Adjusts the current for the image transfer belt in B/W mode for thick 1 paper.		

2357	[Common:FC:Bias]		
	Image Transfer Belt: Full Color: Bias Adjustment		
001	ImageTransfer:standard:Bk	*ENG	[0 to 60 / 22 / 1uA/step]
002	ImageTransfer:standard:C	*ENG	[0 to 60 / 24 / 1uA/step]
003	ImageTransfer:standard:M	*ENG	[0 to 60 / 26 / 1uA/step]
004	ImageTransfer:standard:Y	*ENG	[0 to 60 / 30 / 1uA/step]
009	Image Transfer:low:Bk	*ENG	[0 to 60 / 11 / 1uA/step]
010	Image Transfer:low:C	*ENG	[0 to 60 / 12 / 1uA/step]
011	Image Transfer:low:M	*ENG	[0 to 60 / 13 / 1uA/step]
012	Image Transfer:low:Y	*ENG	[0 to 60 / 15 / 1uA/step]

2401	[Plain1:Bias]		
	Adjusts the DC voltage of the discharge plate for plain 1 paper.		
001	Separation DC:standard:1side	*ENG	[0 to 4000 / 0 / 10-V/step]
002	Separation DC:standard:2side	*ENG	
003	Separation DC:low:1side	*ENG	
004	Separation DC:low:2side	*ENG	

2403	[Plain1:Bias:BW]		
	Adjusts the current for the paper transfer roller for plain 1 paper in black-and-white mode.		
001	PaperTransfer:standard:1side	*ENG	[0 to 200 / 25 / 1-uA/step]
002	PaperTransfer:standard:2side	*ENG	[0 to 200 / 25 / 1-uA/step]
003	PaperTransfer:low:1side	*ENG	[0 to 200 / 18 / 1-uA/step]
004	PaperTransfer:low:2side	*ENG	

2407	[Plain1:Bias:FC]		
	Adjusts the current for the paper transfer roller for plain 1 paper in full color mode.		
001	PaperTransfer:standard:1side	*ENG	[0 to 200 / 34 / 1-uA/step]
002	PaperTransfer:standard:2side	*ENG	[0 to 200 / 35 / 1-uA/step]
003	PaperTransfer:low:1side	*ENG	[0 to 200 / 22 / 1-uA/step]
004	PaperTransfer:low:2side	*ENG	[0 to 200 / 23 / 1-uA/step]

2411	[Plain1:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
002	PaperTransfer:Standard:2Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
003	PaperTransfer:Low:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:Low:2Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
005	PaperTransfer:Standard:1Sid:S2	*ENG	[100 to 995 / 128 / 5%/step]
006	PaperTransfer:Standard:2Sid:S2	*ENG	[100 to 995 / 156 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[100 to 995 / 139 / 5%/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[100 to 995 / 194 / 5%/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[100 to 995 / 140 / 5%/step]
010	PaperTransfer:Standard:2Sid:S3	*ENG	[100 to 995 / 240 / 5%/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[100 to 995 / 139 / 5%/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[100 to 995 / 250 / 5%/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[100 to 995 / 144 / 5%/step]
014	PaperTransfer:Standard:2Sid:S4	*ENG	[100 to 995 / 244 / 5%/step]

015	PaperTransfer:Low:1Side:S4	*ENG	[100 to 995 / 156 / 5%/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[100 to 995 / 250 / 5%/step]

2412	[Plain1:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
002	PaperTransfer:Standard:2Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
003	PaperTransfer:Low:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:Low:2Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
005	PaperTransfer:Standard:1Sid:S2	*ENG	[100 to 995 / 132 / 5%/step]
006	PaperTransfer:Standard:2Sid:S2	*ENG	[100 to 995 / 171 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[100 to 995 / 127 / 5%/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[100 to 995 / 196 / 5%/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[100 to 995 / 132 / 5%/step]
010	PaperTransfer:Standard:2Sid:S3	*ENG	[100 to 995 / 229 / 5%/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[100 to 995 / 182 / 5%/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[100 to 995 / 274 / 5%/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[100 to 995 / 147 / 5%/step]
014	PaperTransfer:Standard:2Sid:S4	*ENG	[100 to 995 / 243 / 5%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[100 to 995 / 205 / 5%/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[100 to 995 / 283 / 5%/step]

2421	[Plain2:Bias]		
	Adjusts the DC voltage of the discharge plate for plain2 paper.		
001	Separation DC:standard:1side	*ENG	[0 to 4000 / 0 / 10-V/step]
002	Separation DC:standard:2side	*ENG	[0 to 4000 / 0 / 10-V/step]
003	Separation DC:low:1side	*ENG	[0 to 4000 / 0 / 10-V/step]
004	Separation DC:low:2side	*ENG	[0 to 4000 / 0 / 10-V/step]

2423	[Plain2:Bias:BW]		
	Adjusts the current for the paper transfer roller for plain2 paper in black-and-white mode.		
001	PaperTransfer:standard:1side	*ENG	[0 to 200 / 25 / 1-uA/step]
002	PaperTransfer:standard:2side	*ENG	[0 to 200 / 25 / 1-uA/step]
003	PaperTransfer:low:1side	*ENG	[0 to 200 / 18 / 1-uA/step]
004	PaperTransfer:low:2side	*ENG	[0 to 200 / 18 / 1-uA/step]

2425	[HHsmall:LeadEdgeCorrection]		
001	PaperTransfer:1side	*ENG	[0 to 995 / 100 / 5%/step]
002	PaperTransfer:2stSide	*ENG	

2427	[Plain2:Bias:FC]		
	Adjusts the current for the paper transfer roller for plain2 paper in full color mode.		
001	PaperTransfer:standard:1side	*ENG	[0 to 200 / 34 / 1-uA/step]
002	PaperTransfer:standard:2side	*ENG	[0 to 200 / 35 / 1-uA/step]
003	PaperTransfer:low:1side	*ENG	[0 to 200 / 22 / 1-uA/step]
004	PaperTransfer:low:2side	*ENG	[0 to 200 / 23 / 1-uA/step]

2431	[Plain2:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
002	PaperTransfer:Standard:2Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
003	PaperTransfer:Low:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:Low:2Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
005	PaperTransfer:Standard:1Sid:S2	*ENG	[100 to 995 / 128 / 5%/step]
006	PaperTransfer:Standard:2Sid:S2	*ENG	[100 to 995 / 156 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[100 to 995 / 139 / 5%/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[100 to 995 / 194 / 5%/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[100 to 995 / 140 / 5%/step]
010	PaperTransfer:Standard:2Sid:S3	*ENG	[100 to 995 / 240 / 5%/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[100 to 995 / 139 / 5%/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[100 to 995 / 250 / 5%/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[100 to 995 / 144 / 5%/step]
014	PaperTransfer:Standard:2Sid:S4	*ENG	[100 to 995 / 244 / 5%/step]

015	PaperTransfer:Low:1Side:S4	*ENG	[100 to 995 / 156 / 5%/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[100 to 995 / 250 / 5%/step]

2432	[Plain2:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
002	PaperTransfer:Standard:2Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
003	PaperTransfer:Low:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:Low:2Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
005	PaperTransfer:Standard:1Sid:S2	*ENG	[100 to 995 / 132 / 5%/step]
006	PaperTransfer:Standard:2Sid:S2	*ENG	[100 to 995 / 171 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[100 to 995 / 127 / 5%/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[100 to 995 / 196 / 5%/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[100 to 995 / 132 / 5%/step]
010	PaperTransfer:Standard:2Sid:S3	*ENG	[100 to 995 / 229 / 5%/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[100 to 995 / 182 / 5%/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[100 to 995 / 274 / 5%/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[100 to 995 / 147 / 5%/step]
014	PaperTransfer:Standard:2Sid:S4	*ENG	[100 to 995 / 243 / 5%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[100 to 995 / 205 / 5%/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[100 to 995 / 283 / 5%/step]

2441	[Middle:Bias]		
	Adjusts the DC voltage of the discharge plate for middle thick paper.		
001	Separation DC:standard:1side	*ENG	[0 to 4000 / 0 / 10-V/step]
002	Separation DC:standard:2side	*ENG	[0 to 4000 / 0 / 10-V/step]
003	Separation DC:low:1side	*ENG	[0 to 4000 / 0 / 10-V/step]
004	Separation DC:low:2side	*ENG	[0 to 4000 / 0 / 10-V/step]

2443	[Middle:Bias:BW]		
	Adjusts the current for the paper transfer roller for middle thick paper in black-and-white mode.		
001	PaperTransfer:standard:1side	*ENG	[0 to 200 / 22 / 1-uA/step]
002	PaperTransfer:standard:2side	*ENG	[0 to 200 / 25 / 1-uA/step]
003	PaperTransfer:low:1side	*ENG	[0 to 200 / 17 / 1-uA/step]
004	PaperTransfer:low:2side	*ENG	[0 to 200 / 17 / 1-uA/step]

2447	[Middle:Bias:FC]		
	Adjusts the current for the paper transfer roller for middle thick paper in full color mode.		
001	PaperTransfer:standard:1side	*ENG	[0 to 200 / 34 / 1-uA/step]
002	PaperTransfer:standard:2side	*ENG	[0 to 200 / 35 / 1-uA/step]
003	PaperTransfer:low:1side	*ENG	[0 to 200 / 21 / 1-uA/step]
004	PaperTransfer:low:2side	*ENG	[0 to 200 / 22 / 1-uA/step]

2451	[Middle:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
002	PaperTransfer:Standard:2Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
003	PaperTransfer:Low:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:Low:2Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
005	PaperTransfer:Standard:1Sid:S2	*ENG	[100 to 995 / 145 / 5%/step]
006	PaperTransfer:Standard:2Sid:S2	*ENG	[100 to 995 / 156 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[100 to 995 / 121 / 5%/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[100 to 995 / 143 / 5%/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[100 to 995 / 159 / 5%/step]
010	PaperTransfer:Standard:2Sid:S3	*ENG	[100 to 995 / 240 / 5%/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[100 to 995 / 118 / 5%/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[100 to 995 / 214 / 5%/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[100 to 995 / 164 / 5%/step]
014	PaperTransfer:Standard:2Sid:S4	*ENG	[100 to 995 / 240 / 5%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[100 to 995 / 132 / 5%/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[100 to 995 / 257 / 5%/step]

2452	[Middle:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
002	PaperTransfer:Standard:2Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]

003	PaperTransfer:Low:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:Low:2Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
005	PaperTransfer:Standard:1Sid:S2	*ENG	[100 to 995 / 147 / 5%/step]
006	PaperTransfer:Standard:2Sid:S2	*ENG	[100 to 995 / 206 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[100 to 995 / 143 / 5%/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[100 to 995 / 182 / 5%/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[100 to 995 / 147 / 5%/step]
010	PaperTransfer:Standard:2Sid:S3	*ENG	[100 to 995 / 265 / 5%/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[100 to 995 / 167 / 5%/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[100 to 995 / 250 / 5%/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[100 to 995 / 176 / 5%/step]
014	PaperTransfer:Standard:2Sid:S4	*ENG	[100 to 995 / 353 / 5%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[100 to 995 / 167 / 5%/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[100 to 995 / 341 / 5%/step]

2461	[Thin:Bias]		
	Adjusts the DC voltage of the discharge plate for thin paper.		
001	Separation DC:standard:1side	*ENG	[0 to 4000 / 2000 / 10-V/step]
003	Separation DC:low:1side	*ENG	[0 to 4000 / 2000 / 10-V/step]

2463	[Thin:Bias:BW]		
	Adjusts the current for the paper transfer roller for thin paper in black-and-white mode.		
001	PaperTransfer:Standard:1Sid	*ENG	[0 to 200 / 13 / 1-uA/step]
003	Paper Transfer:Low:1side	*ENG	[0 to 200 / 11 / 1-uA/step]

2467	[Thin:Bias:FC]		
	Adjusts the current for the paper transfer roller for thin paper in full color mode.		
001	PaperTransfer:Standard:1Sid	*ENG	[0 to 200 / 17 / 1-uA/step]
003	Paper Transfer:Low:1side	*ENG	[0 to 200 / 16 / 1-uA/step]

2471	[Thin:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
003	PaperTransfer:Low:1Side:S1	*ENG	
005	PaperTransfer:Standard:1Sid:S2	*ENG	[100 to 995 / 135 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	
009	PaperTransfer:Standard:1Sid:S3	*ENG	
011	PaperTransfer:Low:1Side:S3	*ENG	
013	PaperTransfer:Standard:1Sid:S4	*ENG	[100 to 995 / 220 / 5%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	

2472	[Thin:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
003	PaperTransfer:Low:1Side:S1	*ENG	
005	PaperTransfer:Standard:1Sid:S2	*ENG	[100 to 995 / 135 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	
009	PaperTransfer:Standard:1Sid:S3	*ENG	
011	PaperTransfer:Low:1Side:S3	*ENG	

013	PaperTransfer:Standard:1Sid:S4	*ENG	[100 to 995 / 220 / 5%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	

2481	[Thick1:Bias]		
	Adjusts the DC voltage of the discharge plate for thick 1 paper.		
003	Separation DC:1side	*ENG	[0 to 4000 / 0 / 10-V/step]
004	Separation DC:2side	*ENG	

2483	[Thick1:Bias:BW]		
	Adjusts the current for the paper transfer roller for thick 1 paper in black-and-white mode.		
003	PaperTransfer:1side	*ENG	[0 to 200 / 15 / 1-uA/step]
004	PaperTransfer:2side	*ENG	[0 to 200 / 18 / 1-uA/step]

2487	[Thick1:Bias:FC]		
	Adjusts the current for the paper transfer roller for thick 1 paper in full color mode. Middle: 182 mm/sec, Low: 85 mm/sec		
003	PaperTransfer:1side	*ENG	[0 to 200 / 19 / 1-uA/step]
004	PaperTransfer:2side	*ENG	[0 to 200 / 25 / 1-uA/step]

2491	[Thick1:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:2Side:S1	*ENG	
007	PaperTransfer:1Side:S2	*ENG	[100 to 995 / 167 / 5%/step]

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008	PaperTransfer:2Side:S2	*ENG	[100 to 995 / 194 / 5%/step]
011	PaperTransfer:1Side:S3	*ENG	[100 to 995 / 233 / 5%/step]
012	PaperTransfer:2Side:S3	*ENG	[100 to 995 / 250 / 5%/step]
015	PaperTransfer:1Side:S4	*ENG	[100 to 995 / 233 / 5%/step]
016	PaperTransfer:2Side:S4	*ENG	[100 to 995 / 361 / 5%/step]

2492	[Thick1:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:2Side:S1	*ENG	
007	PaperTransfer:1Side:S2	*ENG	[100 to 995 / 158 / 5%/step]
008	PaperTransfer:2Side:S2	*ENG	[100 to 995 / 180 / 5%/step]
011	PaperTransfer:1Side:S3	*ENG	[100 to 995 / 211 / 5%/step]
012	PaperTransfer:2Side:S3	*ENG	[100 to 995 / 260 / 5%/step]
015	PaperTransfer:1Side:S4	*ENG	[100 to 995 / 237 / 5%/step]
016	PaperTransfer:2Side:S4	*ENG	[100 to 995 / 300 / 5%/step]

2501	[Thick2:Bias]		
	Adjusts the DC voltage of the discharge plate for thick 2 paper.		
003	Separation DC:1side	*ENG	[0 to 4000 / 0 / 10-V/step]
004	Separation DC:2side	*ENG	

2503	[Thick2:Bias:BW]		
	Adjusts the current for the paper transfer roller for thick 2 paper in black-and-white mode. Middle: 182 mm/sec, Low: 85 mm/sec		
003	PaperTransfer:1side	*ENG	[0 to 200 / 15 / 1-uA/step]
004	PaperTransfer:2side	*ENG	[0 to 200 / 18 / 1-uA/step]

2507	[Thick2:Bias:FC]		
	Adjusts the current for the paper transfer roller for thick 2 paper in full color mode. Middle: 182 mm/sec, Low: 85 mm/sec		
003	PaperTransfer:1side	*ENG	[0 to 200 / 19 / 1-uA/step]
004	PaperTransfer:2side	*ENG	[0 to 200 / 25 / 1-uA/step]

2511	[Thick2:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:2Side:S1	*ENG	
007	PaperTransfer:1Side:S2	*ENG	[100 to 995 / 167 / 5%/step]
008	PaperTransfer:2Side:S2	*ENG	[100 to 995 / 194 / 5%/step]
011	PaperTransfer:1Side:S3	*ENG	[100 to 995 / 233 / 5%/step]
012	PaperTransfer:2Side:S3	*ENG	[100 to 995 / 250 / 5%/step]
015	PaperTransfer:1Side:S4	*ENG	[100 to 995 / 233 / 5%/step]
016	PaperTransfer:2Side:S4	*ENG	[100 to 995 / 361 / 5%/step]

2512	[Thick2:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:2Side:S1	*ENG	
007	PaperTransfer:1Side:S2	*ENG	[100 to 995 / 158 / 5%/step]
008	PaperTransfer:2Side:S2	*ENG	[100 to 995 / 180 / 5%/step]
011	PaperTransfer:1Side:S3	*ENG	[100 to 995 / 211 / 5%/step]
012	PaperTransfer:2Side:S3	*ENG	[100 to 995 / 260 / 5%/step]
015	PaperTransfer:1Side:S4	*ENG	[100 to 995 / 237 / 5%/step]
016	PaperTransfer:2Side:S4	*ENG	[100 to 995 / 300 / 5%/step]

2515	[Thick2:LeadingEdgeCorrection]		
	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode.		
003	Paper Transfer:1side	*ENG	[100 to 995 / 100 / 5%/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2516	[Thick2:SwitchTimingLeadEdge]		
	Adjusts the bias/ voltage switch timing of the paper transfer roller/ discharge plate at the paper leading edge between the erase margin area and the image area.		
003	Paper Transfer:1side	*ENG	[0 to 50 / 0 / 2mm/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2517	[Thick2:TrailEdgeCorrection]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
003	Paper Transfer:1side	*ENG	[100 to 995 / 100 / 5%/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2518	[Thick2:SwitchTimingTrailEdge]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
003	Paper Transfer:1side	*ENG	[0 to 50 / 0 / 2mm/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2521	[Thick3:Bias]		
	Adjusts the DC voltage of the discharge plate for thick 3 paper.		
003	Separation DC:1side	*ENG	[0 to 4000 / 0 / 10-V/step]
004	Separation DC:2side	*ENG	

2523	[Thick3:Bias:BW]		
	Adjusts the current for the paper transfer roller for thick paper 3 in black-and-white mode.		
003	PaperTransfer:1side	*ENG	[0 to 200 / 14 / 1-uA/step]
004	PaperTransfer:2side	*ENG	[0 to 200 / 15 / 1-uA/step]

2527	[Thick3:Bias:FC]		
	Adjusts the current for the paper transfer roller for thick paper 3 in full color mode.		
003	PaperTransfer:1side	*ENG	[0 to 200 / 18 / 1-uA/step]
004	PaperTransfer:2side	*ENG	[0 to 200 / 20 / 1-uA/step]

2535	[Thick3:LeadingEdgeCorrection]		
	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode.		
003	Paper Transfer:1side	*ENG	[100 to 995 / 100 / 5%/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2536	[Thick3:SwitchTimingLeadEdge]		
	Adjusts the bias/ voltage switch timing of the paper transfer roller/ discharge plate at the paper leading edge between the erase margin area and the image area.		
003	Paper Transfer:1side	*ENG	[0 to 50 / 0 / 2mm/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2537	[Thick3:TrailEdgeCorrection]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
003	Paper Transfer:1side	*ENG	[100 to 995 / 100 / 5%/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2538	[Thick3:SwitchTimingTrailEdge]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mod.		
003	Paper Transfer:1side	*ENG	[0 to 50 / 0 / 2mm/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2539	[Thick3:EnvCorrectionTable]		
	Adjusts the environment coefficient for each mode. When the environment is detected as MM, SP2651 and SP2652 are multiplied by these SP values.		
015	Separation DC:1side	*ENG	[1 to 100 / 30 / 1/step]
016	Separation DC:2side	*ENG	

2541	[OHP:Bias]		
	Adjusts the DC voltage of the discharge plate for OHP.		
003	Separation DC	*ENG	[0 to 4000 / 0 / 10-V/step]

2543	[OHP:Bias:BW]		
	Adjusts the current for the paper transfer roller for OHP in black-and-white mode.		
003	PaperTransfer	*ENG	[0 to 200 / 13 / 1-uA/step]

2547	[OHP:Bias:FC]		
	Adjusts the current for the paper transfer roller for OHP in full color mode.		
003	PaperTransfer	*ENG	[0 to 200 / 15 / 1-uA/step]

2551	[OHP:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size. SP2543 and SP2547 are multiplied by these SP values.		
003	PaperTransfer:S1	*ENG	[100 to 995 / 100 / 5%/step]
007	PaperTransfer:S2	*ENG	[100 to 995 / 150 / 5%/step]
011	PaperTransfer:S3	*ENG	
015	PaperTransfer:S4	*ENG	[100 to 995 / 200 / 5%/step]

2552	[OHP:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
003	PaperTransfer:S1	*ENG	[100 or 995 / 100 / 5%/step]
007	PaperTransfer:S2	*ENG	[100 or 995 / 150 / 5%/step]
011	PaperTransfer:S3	*ENG	
015	PaperTransfer:S4	*ENG	[100 or 995 / 200 / 5%/step]

2555	[OHP:LeadingEdgeCorrection]		
	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode.		
003	Paper Transfer	*ENG	[100 to 995 / 100 / 5%/step]
007	Separation DC	*ENG	

2556	[OHP:SwitchTimingLeadEdge]		
	Adjusts the bias/ voltage switch timing of the paper transfer roller/ discharge plate at the paper leading edge between the erase margin area and the image area.		
003	Paper Transfer	*ENG	[0 to 50 / 0 / 2mm/step]
007	Separation DC	*ENG	

2557	[OHP:TrailEdgeCorrection]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
003	Paper Transfer	*ENG	[100 to 995 / 100 / 5%/step]
007	Separation DC	*ENG	

2558	[OHP:LeadingEdgeCorrection]		
	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode.		
003	Paper Transfer	*ENG	[0 to 50 / 0 / 2mm/step]
007	Separation DC	*ENG	

2559	[OHP:EnvCorrectionTable]		
015	Separation DC	*ENG	[1 to 100 / 30 / 1/step]

2561	[Special1:Bias]		
	Adjusts the DC voltage of the discharge plate for special paper 1.		
001	Separation DC:standard:1side	*ENG	[0 to 4000 / 2000 / 10-V/step]
002	Separation DC:standard:2side	*ENG	
003	Separation DC:low:1side	*ENG	
004	Separation DC:low:2side	*ENG	

2563	[Special1:Bias:BW]		
	Adjusts the current for the paper transfer roller for special paper 1 in black-and-white mode.		
001	PaperTransfer:standard:1side	*ENG	[0 to 200 / 12 / 1-uA/step]
002	PaperTransfer:standard:2side	*ENG	[0 to 200 / 10 / 1-uA/step]
003	PaperTransfer:low:1side	*ENG	[0 to 200 / 9 / 1-uA/step]
004	PaperTransfer:low:2side	*ENG	[0 to 200 / 11 / 1-uA/step]

2567	[Special1:Bias:FC]		
	Adjusts the current for the paper transfer roller for special paper 1 in full color mode.		
001	PaperTransfer:standard:1side	*ENG	[0 to 200 / 20 / 1-uA/step]
002	PaperTransfer:standard:2side	*ENG	[0 to 200 / 14 / 1-uA/step]
003	PaperTransfer:low:1side	*ENG	[0 to 200 / 11 / 1-uA/step]
004	PaperTransfer:low:2side	*ENG	[0 to 200 / 12 / 1-uA/step]

2571	[Special1:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
002	PaperTransfer:Standard:2Sid:S1	*ENG	
003	PaperTransfer:Low:1Side:S1	*ENG	
004	PaperTransfer:Low:2Side:S1	*ENG	
005	PaperTransfer:Standard:1Sid:S2	*ENG	[100 to 995 / 135 / 5%/step]
006	PaperTransfer:Standard:2Sid:S2	*ENG	[100 to 995 / 200 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[100 to 995 / 135 / 5%/step]

008	PaperTransfer:Low:2Side:S2	*ENG	[100 to 995 / 200 / 5%/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[100 to 995 / 135 / 5%/step]
010	PaperTransfer:Standard:2Sid:S3	*ENG	[100 to 995 / 390 / 5%/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[100 to 995 / 135 / 5%/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[100 to 995 / 390 / 5%/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[100 to 995 / 220 / 5%/step]
014	PaperTransfer:Standard:2Sid:S4	*ENG	[100 to 995 / 330 / 5%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[100 to 995 / 220 / 5%/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[100 to 995 / 330 / 5%/step]

2572	[Special1:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
002	PaperTransfer:Standard:2Sid:S1	*ENG	
003	PaperTransfer:Low:1Side:S1	*ENG	
004	PaperTransfer:Low:2Side:S1	*ENG	
005	PaperTransfer:Standard:1Sid:S2	*ENG	[100 to 995 / 135 / 5%/step]
006	PaperTransfer:Standard:2Sid:S2	*ENG	[100 to 995 / 200 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[100 to 995 / 135 / 5%/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[100 to 995 / 200 / 5%/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[100 to 995 / 135 / 5%/step]
010	PaperTransfer:Standard:2Sid:S3	*ENG	[100 to 995 / 325 / 5%/step]

011	PaperTransfer:Low:1Side:S3	*ENG	[100 to 995 / 135 / 5%/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[100 to 995 / 325 / 5%/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[100 to 995 / 220 / 5%/step]
014	PaperTransfer:Standard:2Sid:S4	*ENG	[100 to 995 / 330 / 5%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[100 to 995 / 220 / 5%/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[100 to 995 / 330 / 5%/step]

2581	[Special2:Bias]		
	Adjusts the DC voltage of the discharge plate for special paper 2.		
001	Separation DC:standard:1side	*ENG	[0 to 4000 / 2000 / 10-V/step]
002	Separation DC:standard:2side	*ENG	
003	Separation DC:low:1side	*ENG	
004	Separation DC:low:2side	*ENG	

2583	[Special2:Bias:BW]		
	Adjusts the current for the paper transfer roller for special paper 2 in black-and-white mode.		
001	PaperTransfer:standard:1side	*ENG	[0 to 200 / 12 / 1-uA/step]
002	PaperTransfer:standard:2side	*ENG	[0 to 200 / 10 / 1-uA/step]
003	PaperTransfer:low:1side	*ENG	[0 to 200 / 9 / 1-uA/step]
004	PaperTransfer:low:2side	*ENG	[0 to 200 / 11 / 1-uA/step]

2587	[Special2:Bias:FC]		
	Adjusts the current for the paper transfer roller for special paper 2 in full color mode.		
001	PaperTransfer:standard:1side	*ENG	[0 to 200 / 20 / 1-uA/step]

002	PaperTransfer:standard:2side	*ENG	[0 to 200 / 14 / 1-uA/step]
003	PaperTransfer:low:1side	*ENG	[0 to 200 / 11 / 1-uA/step]
004	PaperTransfer:low:2side	*ENG	[0 to 200 / 12 / 1-uA/step]

2591	[Special2:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
002	PaperTransfer:standard:2Sid:S1	*ENG	
003	PaperTransfer:Low:1Side:S1	*ENG	
004	PaperTransfer:Low:2Side:S1	*ENG	
005	PaperTransfer:standard:1Sid:S2	*ENG	[100 to 995 / 150 / 5%/step]
006	PaperTransfer:standard:2Sid:S2	*ENG	[100 to 995 / 160 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[100 to 995 / 150 / 5%/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[100 to 995 / 160 / 5%/step]
009	PaperTransfer:standard:1Sid:S3	*ENG	[100 to 995 / 150 / 5%/step]
010	PaperTransfer:standard:2Sid:S3	*ENG	[100 to 995 / 270 / 5%/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[100 to 995 / 150 / 5%/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[100 to 995 / 270 / 5%/step]
013	PaperTransfer:standard:1Sid:S4	*ENG	[100 to 995 / 200 / 5%/step]
014	PaperTransfer:standard:2Sid:S4	*ENG	[100 to 995 / 435 / 5%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[100 to 995 / 200 / 5%/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[100 to 995 / 435 / 5%/step]

2592	[Special2:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
002	PaperTransfer:standard:2Sid:S1	*ENG	
003	PaperTransfer:Low:1Side:S1	*ENG	
004	PaperTransfer:Low:2Side:S1	*ENG	
005	PaperTransfer:standard:1Sid:S2	*ENG	[100 to 995 / 150 / 5%/step]
006	PaperTransfer:standard:2Sid:S2	*ENG	[100 to 995 / 160 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[100 to 995 / 150 / 5%/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[100 to 995 / 160 / 5%/step]
009	PaperTransfer:standard:1Sid:S3	*ENG	[100 to 995 / 150 / 5%/step]
010	PaperTransfer:standard:2Sid:S3	*ENG	[100 to 995 / 270 / 5%/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[100 to 995 / 150 / 5%/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[100 to 995 / 270 / 5%/step]
013	PaperTransfer:standard:1Sid:S4	*ENG	[100 to 995 / 200 / 5%/step]
014	PaperTransfer:standard:2Sid:S4	*ENG	[100 to 995 / 435 / 5%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[100 to 995 / 200 / 5%/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[100 to 995 / 435 / 5%/step]

2601	[Special3:Bias]		
	Adjusts the DC voltage of the discharge plate for special paper 3.		
001	Separation DC:standard:1side	*ENG	[0 to 4000 / 2000 / 10-V/step]
002	Separation DC:standard:2side	*ENG	
003	Separation DC:low:1side	*ENG	
004	Separation DC:low:2side	*ENG	

2603	[Special3:Bias:BW]		
	Adjusts the current for the paper transfer roller for special paper 3 in black-and-white mode.		
001	PaperTransfer:standard:1side	*ENG	[0 to 200 / 12 / 1-uA/step]
002	PaperTransfer:standard:2side	*ENG	[0 to 200 / 10 / 1-uA/step]
003	PaperTransfer:low:1side	*ENG	[0 to 200 / 9 / 1-uA/step]
004	PaperTransfer:low:2side	*ENG	[0 to 200 / 11 / 1-uA/step]

2607	[Special3:Bias:FC]		
	Adjusts the current for the paper transfer roller for special paper 3 in full color mode.		
001	PaperTransfer:standard:1side	*ENG	[0 to 200 / 20 / 1-uA/step]
002	PaperTransfer:standard:2side	*ENG	[0 to 200 / 14 / 1-uA/step]
003	PaperTransfer:low:1side	*ENG	[0 to 200 / 11 / 1-uA/step]
004	PaperTransfer:low:2side	*ENG	[0 to 200 / 12 / 1-uA/step]

2611	[Special3:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
002	PaperTransfer:standard:2Sid:S1	*ENG	
003	PaperTransfer:Low:1Side:S1	*ENG	
004	PaperTransfer:Low:2Side:S1	*ENG	
005	PaperTransfer:standard:1Sid:S2	*ENG	[100 to 995 / 150 / 5%/step]
006	PaperTransfer:standard:2Sid:S2	*ENG	[100 to 995 / 160 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[100 to 995 / 150 / 5%/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[100 to 995 / 160 / 5%/step]
009	PaperTransfer:standard:1Sid:S3	*ENG	[100 to 995 / 150 / 5%/step]
010	PaperTransfer:standard:2Sid:S3	*ENG	[100 to 995 / 270 / 5%/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[100 to 995 / 150 / 5%/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[100 to 995 / 270 / 5%/step]
013	PaperTransfer:standard:1Sid:S4	*ENG	[100 to 995 / 200 / 5%/step]
014	PaperTransfer:standard:2Sid:S4	*ENG	[100 to 995 / 435 / 5%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[100 to 995 / 200 / 5%/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[100 to 995 / 435 / 5%/step]

2612	[Special3:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
002	PaperTransfer:standard:2Sid:S1	*ENG	
003	PaperTransfer:Low:1Side:S1	*ENG	
004	PaperTransfer:Low:2Side:S1	*ENG	
005	PaperTransfer:standard:1Sid:S2	*ENG	[100 to 995 / 150 / 5%/step]
006	PaperTransfer:standard:2Sid:S2	*ENG	[100 to 995 / 160 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[100 to 995 / 150 / 5%/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[100 to 995 / 160 / 5%/step]
009	PaperTransfer:standard:1Sid:S3	*ENG	[100 to 995 / 150 / 5%/step]
010	PaperTransfer:standard:2Sid:S3	*ENG	[100 to 995 / 270 / 5%/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[100 to 995 / 150 / 5%/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[100 to 995 / 270 / 5%/step]
013	PaperTransfer:standard:1Sid:S4	*ENG	[100 to 995 / 200 / 5%/step]
014	PaperTransfer:standard:2Sid:S4	*ENG	[100 to 995 / 435 / 5%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[100 to 995 / 200 / 5%/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[100 to 995 / 435 / 5%/step]

2621	[Thick2:Bias]		
	Adjusts the DC voltage of the discharge plate for thick 2 paper.		
003	Separation DC:1side	*ENG	[0 to 4000 / 2000 / 10-V/step]
004	Separation DC:2side	*ENG	

2623	[Thick2:Bias:BW]		
	Adjusts the current for the paper transfer roller for thick 2 paper in black-and-white mode.		
003	PaperTransfer:1side	*ENG	[0 to 200 / 8 / 1-uA/step]
004	PaperTransfer:2side	*ENG	[0 to 200 / 11 / 1-uA/step]

2627	[Thick2:Bias:FC]		
	Adjusts the current for the paper transfer roller for thick 2 paper in full color mode.		
003	PaperTransfer:1side	*ENG	[0 to 200 / 11 / 1-uA/step]
004	PaperTransfer:2side	*ENG	[0 to 200 / 16 / 1-uA/step]

2631	[Thick2:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:2Side:S1	*ENG	
007	PaperTransfer:1Side:S2	*ENG	[100 to 995 / 150 / 5%/step]
008	PaperTransfer:2Side:S2	*ENG	[100 to 995 / 160 / 5%/step]
011	PaperTransfer:1Side:S3	*ENG	[100 to 995 / 150 / 5%/step]
012	PaperTransfer:2Side:S3	*ENG	[100 to 995 / 270 / 5%/step]

015	PaperTransfer:1Side:S4	*ENG	[100 to 995 / 200 / 5%/step]
016	PaperTransfer:2Side:S4	*ENG	[100 to 995 / 435 / 5%/step]

2632	[Thick2:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:2Side:S1	*ENG	
007	PaperTransfer:1Side:S2	*ENG	[100 to 995 / 150 / 5%/step]
008	PaperTransfer:2Side:S2	*ENG	[100 to 995 / 160 / 5%/step]
011	PaperTransfer:1Side:S3	*ENG	[100 to 995 / 150 / 5%/step]
012	PaperTransfer:2Side:S3	*ENG	[100 to 995 / 270 / 5%/step]
015	PaperTransfer:1Side:S4	*ENG	[100 to 995 / 200 / 5%/step]
016	PaperTransfer:2Side:S4	*ENG	[100 to 995 / 435 / 5%/step]

2633	[Thick2:Size-Env.Correct:BW]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[1 to 100 / 18 / 1/step]
004	PaperTransfer:2Side:S1	*ENG	[1 to 100 / 22 / 1/step]
007	PaperTransfer:1Side:S2	*ENG	[1 to 100 / 18 / 1/step]
008	PaperTransfer:2Side:S2	*ENG	[1 to 100 / 22 / 1/step]
011	PaperTransfer:1Side:S3	*ENG	[1 to 100 / 18 / 1/step]
012	PaperTransfer:2Side:S3	*ENG	[1 to 100 / 22 / 1/step]
015	PaperTransfer:1Side:S4	*ENG	[1 to 100 / 18 / 1/step]
016	PaperTransfer:2Side:S4	*ENG	[1 to 100 / 22 / 1/step]

2634	[Thick2:Size-Env.Correct:FC]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[1 to 100 / 13 / 1/step]
004	PaperTransfer:2Side:S1	*ENG	[1 to 100 / 38 / 1/step]
007	PaperTransfer:1Side:S2	*ENG	[1 to 100 / 13 / 1/step]
008	PaperTransfer:2Side:S2	*ENG	[1 to 100 / 38 / 1/step]
011	PaperTransfer:1Side:S3	*ENG	[1 to 100 / 13 / 1/step]
012	PaperTransfer:2Side:S3	*ENG	[1 to 100 / 38 / 1/step]
015	PaperTransfer:1Side:S4	*ENG	[1 to 100 / 13 / 1/step]
016	PaperTransfer:2Side:S4	*ENG	[1 to 100 / 38 / 1/step]

2641	[Thick2:Bias]		
	Adjusts the DC voltage of the discharge plate for thick2 paper.		
003	Separation DC:1side	*ENG	[0 to 4000 / 2000 / 10-V/step]
004	Separation DC:2side	*ENG	

2643	[Thick2:Bias:BW]		
	Adjusts the current for the paper transfer roller for thick 2 paper in black-and-white mode.		
003	PaperTransfer:1side	*ENG	[0 to 200 / 8 / 1-uA/step]
004	PaperTransfer:2side	*ENG	[0 to 200 / 11 / 1-uA/step]

2647	[Thick2:Bias:FC]		
	Adjusts the current for the paper transfer roller for thick 2 paper in full color mode.		
003	PaperTransfer:1side	*ENG	[0 to 200 / 11 / 1-uA/step]
004	PaperTransfer:2side	*ENG	[0 to 200 / 17 / 1-uA/step]

2651	[Thick2:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:2Side:S1	*ENG	
007	PaperTransfer:1Side:S2	*ENG	[100 to 995 / 150 / 5%/step]
008	PaperTransfer:2Side:S2	*ENG	[100 to 995 / 160 / 5%/step]
011	PaperTransfer:1Side:S3	*ENG	[100 to 995 / 150 / 5%/step]
012	PaperTransfer:2Side:S3	*ENG	[100 to 995 / 270 / 5%/step]
015	PaperTransfer:1Side:S4	*ENG	[100 to 995 / 200 / 5%/step]
016	PaperTransfer:2Side:S4	*ENG	[100 to 995 / 435 / 5%/step]

2652	[Thick2:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:2Side:S1	*ENG	
007	PaperTransfer:1Side:S2	*ENG	[100 to 995 / 150 / 5%/step]
008	PaperTransfer:2Side:S2	*ENG	[100 to 995 / 160 / 5%/step]
011	PaperTransfer:1Side:S3	*ENG	[100 to 995 / 150 / 5%/step]

012	PaperTransfer:2Side:S3	*ENG	[100 to 995 / 270 / 5%/step]
015	PaperTransfer:1Side:S4	*ENG	[100 to 995 / 200 / 5%/step]
016	PaperTransfer:2Side:S4	*ENG	[100 to 995 / 435 / 5%/step]

2661	[Thick2:Bias]		
	Adjusts the DC voltage of the discharge plate for thick2 paper.		
003	Separation DC:1side	*ENG	[0 to 4000 / 2000 / 10-V/step]
004	Separation DC:2side	*ENG	

2663	[Thick2:Bias:BW]		
	Adjusts the current for the paper transfer roller for thick 2 paper in black-and-white mode.		
003	PaperTransfer:1side	*ENG	[0 to 200 / 8 / 1-uA/step]
004	PaperTransfer:2side	*ENG	[0 to 200 / 11 / 1-uA/step]

2667	[Thick2:Bias:FC]		
	Adjusts the current for the paper transfer roller for thick 2 paper in full color mode.		
003	PaperTransfer:1side	*ENG	[0 to 200 / 11 / 1-uA/step]
004	PaperTransfer:2side	*ENG	[0 to 200 / 17 / 1-uA/step]

2671	[Thick2:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:2Side:S1	*ENG	
007	PaperTransfer:1Side:S2	*ENG	[100 to 995 / 150 / 5%/step]

008	PaperTransfer:2Side:S2	*ENG	[100 to 995 / 160 / 5%/step]
011	PaperTransfer:1Side:S3	*ENG	[100 to 995 / 150 / 5%/step]
012	PaperTransfer:2Side:S3	*ENG	[100 to 995 / 270 / 5%/step]
015	PaperTransfer:1Side:S4	*ENG	[100 to 995 / 200 / 5%/step]
016	PaperTransfer:2Side:S4	*ENG	[100 to 995 / 435 / 5%/step]

2672	[Thick2:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:2Side:S1	*ENG	
007	PaperTransfer:1Side:S2	*ENG	[100 to 995 / 150 / 5%/step]
008	PaperTransfer:2Side:S2	*ENG	[100 to 995 / 160 / 5%/step]
011	PaperTransfer:1Side:S3	*ENG	[100 to 995 / 150 / 5%/step]
012	PaperTransfer:2Side:S3	*ENG	[100 to 995 / 270 / 5%/step]
015	PaperTransfer:1Side:S4	*ENG	[100 to 995 / 200 / 5%/step]
016	PaperTransfer:2Side:S4	*ENG	[100 to 995 / 435 / 5%/step]

2690	[ITB Contact Setting]		
	Sets the image transfer belt contact for each paper.		
001	Thick1	*ENG	[0 or 1 / 0 / 1/step]
002	Thick2	*ENG	
003	Thick3	*ENG	
014	Special4	*ENG	
015	Special5	*ENG	
016	Special6	*ENG	

2900	[Fus.Reload:DrumIdleTimeOffset]		
001	Normal Speed	*ENG	[0 to 30 / 0 / 1s/step]
003	Low Speed	*ENG	

2905	[Dev Rvs]		
003	Time K	ENG	[0 to 200 / 0 / 10msec/step]
	Sets the clutch on time at drum motor reverse.		
005	Threshold Counter ALL	ENG	[0 to 400000 / 0 / 10mm/step]
	Rotation threshold to determine if development roller reverse is required or not.		
006	Counter K	ENG	[0 to 999999999 / 0 / 1mm/step]
	Rotation counter (Bk) to determine if development roller reverse is required or not.		
007	Counter Cl	ENG	[0 to 999999999 / 0 / 1mm/step]
	Rotation counter (Color) to determine if development roller reverse is required or not.		

2930	[Transfer:Bias Limiter]		
	Adjusts the threshold between high resistance (division 1) and low resistance (division 2) at the paper transfer roller.		
001	Bias	*ENG	[0 to 7000 / 6000 / 10-V/step]

2960	[Process Interval]		
	Adjusts the additional time for ending the machine's process.		
001	Additional Time	*ENG	[0 to 10 / 0 / 1sec/step]

2970	[Cleaning After JOB]		
	Specifies the threshold sheets for the cleaning of the paper transfer roller with or without the refresh mode.		
001	No Refresh	*ENG	[0 to 100 / 33 / 1page/step]
002	Refresh	*ENG	[0 or 1 / 1 / 1/step]
003	-	*ENG	[0 to 9999 / 0 / 1page/step]

2973	[Forced Process Down Threshold]		
001	-	*ENG	[0 to 5000 / 0 / 1page/step]
	Sets the threshold (pages) of forced shutdown during continues printing. 0: Not execute forced shutdown. Other than 0: Pages to execute forced shutdown when the number of page reaches the pages during continues printing.		

2990	[Print Duty Control]		
001	Duty Control State	*ENG	[0 to 1 / - / 1/step]
	Displays the Duty limitation status of the current printing. 0: Not limited 1: Limited		
002	Exec Interval: Duty Control	*ENG	[30 to 3600 / 30 / 10sec/step]
	Sets the determination time interval to determine if the printing Duty limitation is executed or not.		
004	Forced CPM Down Thresh: No Duty Control	*ENG	[0 to 5000 / 0 / 1page/step]
	Sets the forced shutdown threshold when the printing Duty is not limited.		

007	Forced CPM Down Thresh: Duty Control	*ENG	[0 to 5000 / 3 / 1page/step]
	Sets the forced shutdown threshold when the printing Duty is limited.		
011	Execution Temp. Threshold	*ENG	[20.0 to 70.0 / 42.0 / 0.1deg/step]
	Sets the temperature threshold to execute the printing Duty limitation. 0: Not execute		
012	Cancellation Temp. Threshold	*ENG	[0.0 to 20.0 / 1.0 / 0.1deg/step]
	Sets the temperature threshold (differences with the temperature of the printing Duty limitation execution) to cancel the printing Duty limitation.		
013	ON/OFF setting	*ENG	[0 or 1 / - / 1/step]
	Control or not control the printing Duty limitation. 0: Not control 1: Control		

5.4 MAIN SP TABLES-3

5.4.1 SP3-XXX (PROCESS)

3011	[Manual ProCon:Exe]		
001	Normal ProCon	ENG	Executes the normal process control manually (potential control). Check the result with SP3-325-001 and 3-012-001 after executing this SP. [Execute]
002	Density Adjustment	ENG	Executes the toner density adjustment. [Execute]
003	ACC RunTime ProCon	ENG	Executes the process control that is normally done before ACC. [Execute]
004	Full MUSIC	ENG	Executes the process control that is normally done at the same time as MUSIC. This SP does the MUSIC (line position adjustment) twice. [Execute]
005	Normal MUSIC	ENG	Executes the process control that is normally done at the same time as MUSIC. This SP does the MUSIC (line position adjustment) once. [Execute]

3012	[ProCon OK?]		
001	History:Last	*ENG	Displays the result of the latest process control execution. [1111 to 99999999 / - / 1/step]
002	History:Last 2	*ENG	
003	History:Last 3	*ENG	
004	History:Last 4	*ENG	
005	History:Last 5	*ENG	
006	History:Last 6	*ENG	
007	History:Last 7	*ENG	
008	History:Last 8	*ENG	
009	History:Last 9	*ENG	
010	History:Last 10	*ENG	

3031	[TD Sens Init OK?]		
001	From Left:YMCK	*ENG	Displays the execution result of TD sensor initialization. [0 to 9999 / - / 1/step]

3050	[Force Tnr Supply:Exe]		
001	Execute:ALL	ENG	Executes the manual toner supply to the development unit. [Execute]
002	Execute:Col	ENG	
003	Execute:K	ENG	
004	Execute:C	ENG	
005	Execute:M	ENG	
006	Execute:Y	ENG	

021	Supply Quantity:K	*ENG	Sets the amount of the toner supply to be supplied forcedly. [0.0 to 5.0 / 0.5 / 0.1wt%/step]
022	Supply Quantity:C	*ENG	
023	Supply Quantity:M	*ENG	
024	Supply Quantity:Y	*ENG	
031	ON Time	*ENG	Sets the supply ON or OFF time of each supply in the forced toner supply processing routin. [10 to 1000 / 200 / 1msec/step]
032	OFF Time	*ENG	Sets the supply ON or OFF time of each supply in the forced toner supply processing routin. [10 to 1000 / 100 / 1msec/step]
033	RepeatCount	*ENG	Sets the repeat count in the forced toner supply processing routin. [0 to 255 / 8 / 1times/step]

3072	[TD.Sens Check: Exe]		
001	All Colors	ENG	Execute TD sensor check for all colors. [Execute]

3073	[TD.Sens Chk]		
001	Disp Vt:K	*ENG	Displays the measurement with the TD sensor check. [0 to 5.5 / - / 0.01V/step]
002	Disp Vt:C	*ENG	
003	Disp Vt:M	*ENG	
004	Disp Vt:Y	*ENG	

3074	[ID.Sens Check :Exe]		
001	All Sensors	ENG	Execute ID sensor check for all sensors. [Execute]

3075	[ID.Sens Chk]		
001	Disp Vsg reg(front)	*ENG	[0 to 5.5 / - / 0.01V/step]
002	Disp Vsg reg(center)	*ENG	
003	Disp Vsg reg(rear)	*ENG	
011	Disp Voffset(front)	*ENG	
012	Disp Voffset(center)	*ENG	
013	Disp Voffset(rear)	*ENG	

3100	[Tonner End Detection: Set]		
001	ON/OFF	*ENG	Enables/disables the toner alert display on the LCD. [0 or 1 / 0 / 1/step] 0:Detect, 1:NotDetect
002	NE Detection	*ENG	Sets the toner near end detection. [0 or 1 / 0 / 1/step] 0:ALL, 1:TESensor

3101	[Toner Status: Display]		
001	Bk	*ENG	Displays the toner remainig status. [0 to 2 / - / 1/step] 0: Full, 1: NE, 2:TE
002	C	*ENG	
003	M	*ENG	
004	Y	*ENG	

3102	[Toner Remaining: Display]		
001	Bottle Motor: Bk	*ENG	Displays the toner remainig amount calculated with motor driving time. [0.000 to 500.000 / - / 0.001g/step]
002	Bottle Motor: C	*ENG	
003	Bottle Motor: M	*ENG	
004	Bottle Motor: Y	*ENG	
011	Pixel: Bk	*ENG	Displays the toner remainig amount calculated with image processing coverage. [0.000 to 500.000 / - / 0.001g/step]
012	Pixel: C	*ENG	
013	Pixel: M	*ENG	
014	Pixel: Y	*ENG	
021	Fill Amount: Bk	*ENG	Displays the toner amount in a new bottle. [0 to 500 / - / 1g/step]
022	Fill Amount: C	*ENG	
023	Fill Amount: M	*ENG	
024	Fill Amount: Y	*ENG	

3110	[Near End Thresh]		
	Sets threshold of toner remainig for near end detection.		
001	Bk	*ENG	[0 to 500 / 5 / 1g/step]
002	C	*ENG	[0 to 500 / 0 / 1g/step]
003	M	*ENG	
004	Y	*ENG	

3121	[TE Counter: Display]		
001	Bk	*ENG	Displays the number of no toner detections with end sensor. [0 to 99 / - / 1times/step]
002	C	*ENG	
003	M	*ENG	
004	Y	*ENG	

3123	[TE Sn Status: Display]		
021	Latest Output: Bk	*ENG	Displays the latest output with end sensor. [0 or 1 / - / 1/step] 0: Not output, 1: Output
022	Latest Output: C	*ENG	
023	Latest Output: M	*ENG	
024	Latest Output: Y	*ENG	

3250	[ImgArea :Disp]		
001	ImgArea:K	*ENG	Diplays image area of the latest page. [0 to 9999 / - / 1cm2/step]
002	ImgArea:C	*ENG	
003	ImgArea:M	*ENG	
004	ImgArea:Y	*ENG	

3251	[DotCoverage :Disp]		
001	DotCoverage:K	*ENG	Displays image coverage of the latest page. [0.00 to 100.00 / - / 0.01%/step]
002	DotCoverage:C	*ENG	
003	DotCoverage:M	*ENG	
004	DotCoverage:Y	*ENG	
011	DC Avg.:S:K	*ENG	Displays the cumulative average (S) of image coverage for the latest page. [0.00 to 100.00 / - / 0.01%/step]
012	DC Avg.:S:C	*ENG	
013	DC Avg.:S:M	*ENG	
014	DC Avg.:S:Y	*ENG	
021	DC Avg.:M:K	*ENG	Displays the cumulative average (M) of image coverage for the latest page. [0.00 to 100.00 / - / 0.01%/step]
022	DC Avg.:M:C	*ENG	
023	DC Avg.:M:M	*ENG	
024	DC Avg.:M:Y	*ENG	
031	DC Avg.:L:K	*ENG	Displays the cumulative average (L) of image coverage for the latest page. [0.00 to 100.00 / - / 0.01%/step]
032	DC Avg.:L:C	*ENG	
033	DC Avg.:L:M	*ENG	
034	DC Avg.:L:Y	*ENG	
041	TotalPage:S:Set	*ENG	Sets the cumulative pages (S). [1 to 255 / 10 / 1sheets/step]
042	TotalPage:S:Set	*ENG	Sets the cumulative pages (M). [1 to 500 / 10 / 1sheets/step]
043	TotalPage:S:Set	*ENG	Sets the cumulative pages (L). [1 to 999 / 50 / 1sheets/step]
051	TotalPage:S:Set	*ENG	Sets the cumulative pages (S2). [1 to 255 / 40 / 1sheets/step]

052	TotalPage:S:Set	*ENG	Sets the cumulative pages (M2). [1 to 500 / 10 / 1sheets/step]
053	TotalPage:S:Set	*ENG	Sets the cumulative pages (L2). [1 to 999 / 50 / 1sheets/step]

3252	[AccumImgArea :Disp]		
001	ImgArea:K	*ENG	Displays accumulate of image area. [0 to 65535 / - / 1cm ² /step]
002	ImgArea:C	*ENG	
003	ImgArea:M	*ENG	
004	ImgArea:Y	*ENG	

3500	[ImgQtyAdj :ON/OFF]		
001	ALL	*ENG	Sets to off for the execution determination of all image processing adjustments, potential controls, MUSIC condition adjustments, or TD sensor initial settings. [0 or 1 / 1 / 1/step] 0:OFF, 1:ON
002	ProCon	*ENG	
003	MUSIC	*ENG	
004	Init TD Sensor	*ENG	

3501	[Toner End Prohibition Setting]		
001	Process Control	*ENG	Enables or disables each adjustment at toner near end. [0 or 1 / 1 / 1/step]
002	MUSIC	*ENG	
003	TC Adj.	*ENG	0:Permit (adjustment is done even toner near end condition) 1:Forbid (adjustment is not done at toner near end condition)

3510	[ImgQtyAdj :ExeFlag]		
001	Toner Recovery: K	*ENG	Sets the execution flag for toner recovery. [0 or 1 / 0 / 1/step]
002	Toner Recovery: C	*ENG	
003	Toner Recovery: M	*ENG	
004	Toner Recovery: Y	*ENG	
011	Init TD Sensor :K	*ENG	Sets the execution flag for TD sensor initial settings. [0 or 1 / 0 / 1/step]
012	Init TD Sensor :C	*ENG	
013	Init TD Sensor :M	*ENG	
014	Init TD Sensor :Y	*ENG	
021	Process Control	*ENG	Sets the execution flag for process control. [0 to 2 / 0 / 1/step]
022	Developer Agitating	*ENG	Sets the execution flag for developer agitating. [0 or 1 / 0 / 1/step]
023	Blade Damage Prevention	*ENG	Sets the execution flag for blade damage prevention mode. [0 or 1 / 0 / 1/step]
024	MUSIC	*ENG	Sets the execution flag for MUSIC. [0 to 2 / 0 / 1/step]
025	Vsg Adj.	*ENG	Sets the execution flag for Vsg adjustment. [0 or 1 / 0 / 1/step]

026	Charge AC Adj.	*ENG	Sets the execution flag for charge roller cleaning. [0 or 1 / 0 / 1/step]
031	Init Toner Replenish: K	*ENG	Sets the execution flag for toner initial replenish. [0 or 1 / 0 / 1/step]
032	Init Toner Replenish: C	*ENG	
033	Init Toner Replenish: M	*ENG	
034	Init Toner Replenish: Y	*ENG	
035	TE Check	*ENG	Sets the execution flag for toner end determine. [0 or 1 / 0 / 1/step]

3520	[ImgQltyAdj :Interval]		
001	During Job	*ENG	Sets the interval pages for image quality adjustment detection during job. [0 to 100 / 5 / 1pages/step]
002	During Stand-by	*ENG	Sets the interval pages for image quality adjustment detection during the stand-by mode. [0 to 100 / 10 / 1minutes/step]

3521	[Drum Stop Time :Disp]		
	Displays the ending time of image processing (year, month, day, hour, and minute).		
001	Year	*ENG	[0 to 99 / - / 1year/step]
002	Month	*ENG	[1 to 12 / - / 1month/step]
003	Day	*ENG	[1 to 31 / - / 1day/step]
004	Hour	*ENG	[0 to 23 / - / 1hour/step]
005	Minute	*ENG	[0 to 59 / - / 1minute/step]

3522	[Drum Stop Environ :Disp]		
001	Temperature	*ENG	Displays the temperature at the end of the image processing. [-1280.0 to 1270.0 / - / 0.1deg/step]
002	Rel Humidity	*ENG	Displays the relative humidity at the end of the image processing. [0.0 to 1000.0 / - / 0.1%RH/step]
003	Abs Humidity	*ENG	Displays the absolute humidity at the end of the image processing. [0.0 to 1000.0 / - / 0.1gm3/step]

3529	[ProCon Interval Control :Set]		
001	Gamma Corr	*ENG	Sets on/off for the developer gamma correction or the environment correction of process control execution interval. [0 or 1 / 1 / 1/step] 0:OFF, 1:ON
002	Environ Corr	*ENG	
003	AbsHum Threshold	*ENG	Sets absolute humidity threshold for the environment correction of process control execution interval. [0.0 to 99.0 / 4.3 / 0.1g/m3/step]
004	Max Cnt Threshold	*ENG	Sets the maximum number of times for interupt or job end process control. [0 to 99 / 2 / 1counts/step]
005	Exe Cnt	*ENG	Displays the maximum counter for interupt or job end process control. [0 to 255 / - / 1 counts/step]
006	Page Cnt:BW	*ENG	Displays the page counter of process control. [0 to 5000 / - / 1sheets/step]
007	Page Cnt:FC	*ENG	

3530	[PowerON ProCon :Set]		
001	Non-use Time Setting	*ENG	Sets the threshold for process control execution determination at power on. [0 to 1440 / 360 / 1minute/step]
002	Temperature Range	*ENG	Sets the threshold for process control execution determination at power on. [0 to 99 / 10 / 1deg/step]
003	Relative Humidity Range	*ENG	Sets the threshold for process control execution determination at power on. [0 to 99 / 50 / 1%RH/step]
004	Absolute Humidity Range	*ENG	Sets the threshold for process control execution determination at power on. [0 to 99 / 6 / 1g/m3/step]
005	Interval:BW	*ENG	Sets the threshold for process control execution determination at power on. [0 to 5000 / 250 / 1sheets/step]
006	Interval:FC	*ENG	Sets the threshold for process control execution determination at power on. [0 to 5000 / 100 / 1sheets/step]
007	Page Cnt:BW	*ENG	Sets the process control page counter at power on. [0 to 5000 / - / 1sheets /step]
008	Page Cnt:FC	*ENG	
009	Non-use Time Setting(Long)	*ENG	Sets the threshold for process control execution determination at power on. [0 to 5000 / 5000 / 1hour/step]

3531	[Non-useTime Procon :Set]		
	Adjusts the threshold for the process control at stand-by. When the current condition has changed by more than the values of these SPs when compared with the conditions at the previous operation, the process control at stand-by is executed.		
001	Non-use Time Setting	*ENG	[0 to 1440 / 360 / 1minute/step]
002	Temperature Range	*ENG	[0 to 99 / 10 / 1deg/step]
003	Relative Humidity Range	*ENG	[0 to 99 / 50 / 1%RH/step]
004	Absolute Humidity Range	*ENG	[0 to 99 / 6 / 1g/m3/step]
005	Maximum Execution Number	*ENG	Adjusts the maximum execution time for the process control at stand-by. [0 to 99 / 10 / 1times/step]

3533	[Interrupt ProCon :Set]		
001	Interval:Set:BW	*ENG	Sets the page interval for interrupt process control. [0 to 5000 / 500 / 1sheets/step]
002	Interval:Disp:BW	*ENG	Displays the page interval for interrupt process control. [0 to 5000 / - / 1sheets/step]
003	Corr(Short):BW	*ENG	Sets the correction coefficient (Short) of page interval for interrupt process control. [0.00 to 1.00 / 0.10 / 0.01/step]
004	Corr(Mid):BW	*ENG	Sets the correction coefficient (Mid) of page interval for interrupt process control. [0.00 to 1.00 / 1.00 / 0.01/step]
011	Interval:Set:FC	*ENG	Sets the page interval for interrupt process control. [0 to 5000 / 200 / 1sheets/step]

012	Interval:Disp:FC	*ENG	Displays the page interval for interrupt process control. [0 to 5000 / - / 1sheets/step]
013	Corr(Short):FC	*ENG	Sets the correction coefficient (Short) of page interval for interrupt process control. [0.00 to 1.00 / 0.25 / 0.01/step]
014	Corr(Mid):FC	*ENG	Sets the correction coefficient (Mid) of page interval for interrupt process control. [0.00 to 1.00 / 1.00 / 0.01/step]

3534	[JobEnd ProCon :Set]		
001	Interval:Set:BW	*ENG	Sets the page interval for job end process control. [0 to 5000 / 250 / 1sheets/step]
002	Interval:Disp:BW	*ENG	Displays the page interval for job end process control. [0 to 5000 / - / 1sheets/step]
003	Corr(Short):BW	*ENG	Sets the correctin coefficient (Short) for job end process control. [0.00 to 1.00 / 0.20 / 0.01/step]
004	Corr(Mid):BW	*ENG	Sets the correctin coefficient (Mid) for job end process control. [0.00 to 1.00 / 1.00 / 0.01/step]
011	Interval:Set:FC	*ENG	Sets the page interval for job end process control. [0 to 1000 / 100 / 1sheets/step]
012	Interval:Disp:FC	*ENG	Displays the page interval for job end process control. [0 to 5000 / - / 1sheets/step]
013	Corr(Short):FC	*ENG	Sets the correctin coefficient (Short) for job end process control. [0.00 to 1.00 / 0.50 / 0.01/step]

014	Corr(Mid):FC	*ENG	Sets the correctin coeficient (Mid) for job end process control. [0.00 to 1.00 / 1 / 0.01/step]
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3540	[PowerON Music :Set]		
001	Page Cnt:BW	*ENG	Sets the page counter of MUSIC at the power on. [0 to 5000 / - / 1sheets/step]
002	Page Cnt:FC	*ENG	

3541	[Music Interval :Set]		
001	Page Cnt:BW	*ENG	Sets the page counter for MUSIC at power on. [0 to 5000 / - / 1sheets/step]
002	Page Cnt:FC	*ENG	

3700	[New Unit Detection]		
001	ON/OFF Setting	*ENG	Turns new PCDU detection on or off. [0 or 1 / 1 / 1/step]

3701	[Manual New Unit Set]		
	Turns the new unit detection flag for each PM unit on or off.		
001	Development Unit: K	*ENG	Sets the flag for new development unit manual settings. [0 or 1 / 0 / 1/step] 0: OFF, 1: ON
002	Development Unit: C	*ENG	
003	Development Unit: M	*ENG	
004	Development Unit: Y	*ENG	
005	Developer: K	*ENG	Sets the flag for new developer manual settings. [0 to 1 / 0 / 1/step] 0: OFF, 1: ON
006	Developer: C	*ENG	
007	Developer: M	*ENG	
008	Developer: Y	*ENG	
009	PCU:Bk	*ENG	Sets the flag for new PCU manual

010	PCU:C	*ENG	settings.
011	PCU:M	*ENG	[0 or 1 / 0 / 1/step]
012	PCU:Y	*ENG	0: OFF, 1: ON
013	Image Transfer Unit	*ENG	Sets the flag for new image transfer unit manual settings. [0 or 1 / 0 / 1/step] 0: OFF, 1: ON
014	Fusing Unit	*ENG	Sets the flag for new fusing unit manual settings. [0 or 1 / 0 / 1/step] 0: OFF, 1: ON
015	Fusing Roller	*ENG	Sets the flag for new pressure roller manual settings. [0 or 1 / 0 / 1/step] 0: OFF, 1: ON
016	Fusing Belt	*ENG	Sets the flag for new fusing belt manual settings. [0 or 1 / 0 / 1/step] 0: OFF, 1: ON
017	Image Transfer Cleaning Unit	*ENG	Sets the flag for new image transfer cleaning unit manual settings. [0 or 1 / 0 / 1/step] 0: OFF, 1: ON
018	Paper Transfer Unit	*ENG	Sets the flag for new paper transfer unit manual settings. [0 or 1 / 0 / 1/step] 0: OFF, 1: ON

020	Toner Collection Bottle	*ENG	Sets the flag for new toner correction bottle manual settings. [0 or 1 / 0 / 1/step] 0: OFF, 1: ON
021	Fusing Pad	*ENG	Sets the flag for new fusing pad manual settings. [0 or 1 / 0 / 1/step] 0: OFF, 1: ON
022	Lubricant: PCU: K	*ENG	Sets the flag for new lubricant for PCU manual settings. [0 or 1 / 0 / 1/step] 0: OFF, 1: ON
023	Lubricant: PCU: C	*ENG	
024	Lubricant: PCU: M	*ENG	
025	Lubricant: PCU: Y	*ENG	
026	Lubricant: Image Transfer Unit	*ENG	Sets the flag for new lubricant for image transfer unit manual settings. [0 or 1 / 0 / 1/step] 0: OFF, 1: ON
027	Toner Sub-hopper: K	*ENG	Sets the flag for new toner sub hopper manual settings. [0 or 1 / 0 / 1/step] 0: OFF, 1: ON
028	Toner Sub-hopper: C	*ENG	
029	Toner Sub-hopper: M	*ENG	
030	Toner Sub-hopper: Y	*ENG	

3710	[HST Concentration Control: Set]		
001	Control Method: Selection	*ENG	Sets the select mode if control is done or not with HST memory. [0 or 1 / 1 / 1/step] 0:NotUse, 1:Use

3711	[HST Concentration Control: K]		
001	Vcnt	*ENG	Displays release check value stored in HST memory. [0.0 to 5.0 / - / 0.1V/step]
002	Vt	*ENG	
003	Sensitivity: HL	*ENG	Displays release check value stored in HST memory. [1.22 to 3.77 / - / 0.01V/step]
004	Sensitivity: HM	*ENG	Displays release check value stored in HST memory. [0.00 to 2.55 / - / 0.01V/step]
005	Sensitivity: ML	*ENG	
006	Set Detection	*ENG	Displays release check value stored in HST memory. [0.0 to 5.0 / - / 0.1V/step]
007	Without Developer	*ENG	
008	With Developer	*ENG	
009	Serial Number 1	*ENG	Displays release check value stored in HST memory. [0 to 255 / - / 1/step]
010	Serial Number 2	*ENG	
011	Adjustment: Vt	*ENG	Displays adjustment value stored in HST memory. [0.0 to 5.0 / - / 0.1V/step]
012	Adjustment: Vtref	*ENG	
013	Adjustment: Vcnt	*ENG	Displays adjustment value stored in HST memory. [0.00 to 5.00 / - / 0.01V/step]
014	Adjustment: Gamma	*ENG	Displays adjustment value stored in HST memory. [0.0 to 2.55 / - / 0.01mg/cm ² /-kV/step]
015	Adjustment: Vcnt Result	*ENG	Displays adjustment value stored in HST memory. [0 to 9 / - / 1/step]

3712	[HST Concentration Control: C]		
001	Vcnt	*ENG	Displays release check value stored in HST memory. [0.0 to 5.0 / - / 0.1V/step]
002	Vt	*ENG	
003	Sensitivity: HL	*ENG	Displays release check value stored in HST memory. [1.22 to 3.77 / - / 0.01V/step]
004	Sensitivity: HM	*ENG	Displays release check value stored in HST memory. [0 to 2.55 / - / 0.01V/step]
005	Sensitivity: ML	*ENG	
006	Set Detection	*ENG	Displays release check value stored in HST memory. [0.0 to 5.0 / - / 0.1V/step]
007	Without Developer	*ENG	
008	With Developer	*ENG	
009	Serial Number 1	*ENG	Displays release check value stored in HST memory. [0 to 255 / - / 1V/step]
010	Serial Number 2	*ENG	
011	Adjustment: Vt	*ENG	Displays adjustment value stored in HST memory. [0.0 to 5.0 / - / 0.1V/step]
012	Adjustment: Vtref	*ENG	
013	Adjustment: Vcnt	*ENG	Displays adjustment value stored in HST memory. [0.00 to 5.00 / - / 0.01V/step]
014	Adjustment: Gamma	*ENG	Displays adjustment value stored in HST memory. [0.00 to 2.55 / - / 0.01mg/cm2/-kV/step]
015	Adjustment: Vcnt Result	*ENG	Displays adjustment value stored in HST memory. [0 to 9 / - / 1/step]

3713	[HST Concentration Control: M]		
	Displays release check value stored in HST memory.		
001	Vcnt	*ENG	Displays release check value stored in HST memory. [0.0 to 5.0 / - / 0.1V/step]
002	Vt	*ENG	
003	Sensitivity: HL	*ENG	Displays release check value stored in HST memory. [1.22 to 3.77 / - / 0.01V/step]
004	Sensitivity: HM	*ENG	Displays release check value stored in HST memory. [0.00 to 2.55 / - / 0.01V/step]
005	Sensitivity: ML	*ENG	
006	Set Detection	*ENG	Displays release check value stored in HST memory. [0.0 to 5.0 / - / 0.1V/step]
007	Without Developer	*ENG	
008	With Developer	*ENG	
009	Serial Number 1	*ENG	Displays release check value stored in HST memory. [0 to 255 / - / 1/step]
010	Serial Number 2	*ENG	
011	Adjustment: Vt	*ENG	Displays adjustment value stored in HST memory. [0.0 to 5.0 / - / 0.1V/step]
012	Adjustment: Vtref	*ENG	
013	Adjustment: Vcnt	*ENG	Displays adjustment value stored in HST memory. [0.00 to 5.00 / - / 0.01V/step]
014	Adjustment: Gamma	*ENG	Displays adjustment value stored in HST memory. [0.00 to 2.55 / - / 0.01mg/cm ² /-kV/step]
015	Adjustment: Vcnt Result	*ENG	Displays adjustment value stored in HST memory. [0 to 9 / - / 1/step]

3714	[HST Concentration Control: Y]		
001	Vcnt	*ENG	Displays release check value stored in HST memory. [0.0 to 5.0 / - / 0.1V/step]
002	Vt	*ENG	
003	Sensitivity: HL	*ENG	Displays release check value stored in HST memory. [1.22 to 3.77 / - / 0.01V/step]
004	Sensitivity: HM	*ENG	Displays release check value stored in HST memory. [0.00 to 2.55 / - / 0.01V/step]
005	Sensitivity: ML	*ENG	
006	Set Detection	*ENG	Displays release check value stored in HST memory. [0.0 to 5.0 / - / 0.1V/step]
007	Without Developer	*ENG	
008	With Developer	*ENG	
009	Serial Number 1	*ENG	Displays release check value stored in HST memory. [0 to 255 / - / 1/step]
010	Serial Number 2	*ENG	
011	Adjustment: Vt	*ENG	Displays adjustment value stored in HST memory. [0.0 to 5.0 / - / 0.1V/step]
012	Adjustment: Vtref	*ENG	
013	Adjustment: Vtcnt	*ENG	Displays adjustment value stored in HST memory. [0.00 to 5.00 / - / 0.01V/step]
014	Adjustment: Gamma	*ENG	Displays adjustment value stored in HST memory. [0 to 2.55 / - / 0.01mg/cm ² -kV/step]
015	Adjustment: Vcnt Result	*ENG	Displays adjustment value stored in HST memory. [0 to 9 / - / 1/step]

3750	[ProCon SC :Last]		
001	SC Number	*ENG	Displays SC number of occurred process control SC. [0 to 999 / - / 1/step]
002	DateTime	*ENG	Displays the time of occurrence (year, month, day, time) of occurred process control SC. [0 to 4212312459 / - / 1/step]
003	TotalCounter	*ENG	Displays total pages of occurred process control SC. [0 to 999999999 / - / 1pages/step]
004	ProCon Result Code	*ENG	Displays result codes (detailed history) of occurred process control SC. [0 to 99999999 / - / 1/step]

3751	[ProCon SC :Last1]		
001	SC Number	*ENG	Displays the SC number of the occurred SC for process control at onset. [0 to 999 / - / 1/step]
002	DateTime	*ENG	Displays the date (year, month, day) and time of the occurred SC for process control at onset. [0 to 4212312459 / - / 1/step]
003	TotalCounter	*ENG	Displays the total pages of the occurred SC for process control at onset. [0 to 999999999 / - / 1pages /step]
004	ProCon Result Code	*ENG	Displays the result code (detailed history) of occurred SC for process control. [0 to 99999999 / - / 1/step]

3752	[ProCon SC :Last2]		
001	SC Number	*ENG	Displays the SC number of the occurred SC for process control at onset. [0 to 999 / - / 1/step]
002	DateTime	*ENG	Displays the date (year, month, day) and time of the occurred SC for process control at onset. [0 to 4212312459 / - / 1/step]
003	TotalCounter	*ENG	Displays the total pages of the occurred SC for process control at onset. [0 to 999999999 / - / 1pages /step]
004	ProCon Result Code	*ENG	Displays the result code (detailed history) of occurred SC for process control. [0 to 99999999 / - / 1/step]

3753	[ProCon SC :Last3]		
001	SC Number	*ENG	Displays the SC number of the occurred SC for process control at onset. [0 to 999 / - / 1/step]
002	DateTime	*ENG	Displays the date (year, month, day) and time of the occurred SC for process control at onset. [0 to 4212312459 / - / 1/step]
003	TotalCounter	*ENG	Displays the total pages of the occurred SC for process control at onset. [0 to 999999999 / - / 1/step]
004	ProCon Result Code	*ENG	Displays the result code (detailed history) of occurred SC for process control. [0 to 99999999 / - / 1pages /step]

3754	[ProCon SC :Last4]		
001	SC Number	*ENG	Displays the SC number of the occurred SC for process control at onset. [0 to 999 / - / 1/step]
002	DateTime	*ENG	Displays the date (year, month, day) and time of the occurred SC for process control at onset. [0 to 4212312459 / - / 1/step]
003	TotalCounter	*ENG	Displays the total pages of the occurred SC for process control at onset. [0 to 999999999 / - / 1pages/step]
004	ProCon Result Code	*ENG	Displays the result code (detailed history) of occurred SC for process control. [0 to 99999999 / - / 1/step]

3755	[ProCon SC :Last5]		
001	SC Number	*ENG	Displays the SC number of the occurred SC for process control at onset. [0 to 999 / - / 1/step]
002	DateTime	*ENG	Displays the date (year, month, day) and time of the occurred SC for process control at onset. [0 to 4212312459 / - / 1/step]
003	TotalCounter	*ENG	Displays the total pages of the occurred SC for process control at onset. [0 to 999999999 / - / 1pages/step]
004	ProCon Result Code	*ENG	Displays the result code (detailed history) of occurred SC for process control. [0 to 99999999 / - / 1/step]

3756	[ProCon SC :Last6]		
001	SC Number	*ENG	Displays the SC number of the occurred SC for process control at onset. [0 to 999 / - / 1/step]
002	DateTime	*ENG	Displays the date (year, month, day) and time of the occurred SC for process control at onset. [0 to 4212312459 / - / 1/step]
003	TotalCounter	*ENG	Displays the total pages of the occurred SC for process control at onset. [0 to 999999999 / - / 1pages/step]
004	ProCon Result Code	*ENG	Displays the result code (detailed history) of occurred SC for process control. [0 to 99999999 / - / 1/step]

3757	[ProCon SC :Last7]		
001	SC Number	*ENG	Displays the SC number of the occurred SC for process control at onset. [0 to 999 / - / 1/step]
002	DateTime	*ENG	Displays the date (year, month, day) and time of the occurred SC for process control at onset. [0 to 4212312459 / - / 1/step]
003	TotalCounter	*ENG	Displays the total pages of the occurred SC for process control at onset. [0 to 999999999 / - / 1pages/step]
004	ProCon Result Code	*ENG	Displays the result code (detailed history) of occurred SC for process control. [0 to 99999999 / - / 1/step]

3758	[ProCon SC :Last8]		
001	SC Number	*ENG	Displays the SC number of the occurred SC for process control at onset. [0 to 999 / - / 1/step]
002	DateTime	*ENG	Displays the date (year, month, day) and time of the occurred SC for process control at onset. [0 to 4212312459 / - / 1/step]
003	TotalCounter	*ENG	Displays the total pages of the occurred SC for process control at onset. [0 to 999999999 / - / 1pages/step]
004	ProCon Result Code	*ENG	Displays the result code (detailed history) of occurred SC for process control. [0 to 99999999 / - / 1/step]

3759	[ProCon SC :Last9]		
001	SC Number	*ENG	Displays the SC number of the occurred SC for process control at onset. [0 to 999 / - / 1/step]
002	DateTime	*ENG	Displays the date (year, month, day) and time of the occurred SC for process control at onset. [0 to 4212312459 / - / 1/step]
003	TotalCounter	*ENG	Displays the total pages of the occurred SC for process control at onset. [0 to 999999999 / - / 1pages/step]
004	ProCon Result Code	*ENG	Displays the result code (detailed history) of occurred SC for process control. [0 to 99999999 / - / 1/step]

5.5 MAIN SP TABLES-4

5.5.1 SP4-XXX (SCANNER)

4008	[Sub Scan Mag.Adjustment]		
	Adjusts the sub-scan magnification by changing the scanner motor speed.		
001	-	*ENG	[-1.0 to 1.0 / 0.0 / 0.1%/step]

4010	[L-Edge Regist Adjustment]		
	Adjusts the leading edge registration by changing the scanning start timing in the sub-scan direction.		
001	-	*ENG	[-1.0 to 1.0 / 0.0 / 0.1mm/step]

4011	[S-to-S Regist Adjustment]		
	Adjusts the side-to-side registration by changing the scanning start timing in the main scan direction.		
001	-	*ENG	[-2.0 to 2.0 / 0.0 / 0.1mm/step]

4012	[Scanner Erase Margin: Scale]		
	Sets the blank margin at each side for erasing the original shadow caused by the gap between the original and the scale.		
001	Book: Leading Edge	*ENG	[0.0 to 3.0 / 0.0 / 0.1mm/step]
002	Book: Trailing Edge	*ENG	[0.0 to 3.0 / 0.0 / 0.1mm/step]
003	Book: Left	*ENG	[0.0 to 3.0 / 0.0 / 0.1mm/step]
004	Book: Right	*ENG	[0.0 to 3.0 / 0.0 / 0.1mm/step]

4013	[Scanner Free Run]		
	Performs the scanner free run with the exposure lamp on or off in the following mode. Full color mode / Full Size / A3 or DLT		
001	Lamp OFF	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
002	Lamp ON	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON

4014	[Scan]		
	Execute the scanner free fun with each mode.		
001	HP Detection Enable	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
002	HP Detection Disable	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON

4020	[Dust Check]		
001	Detection ON/OFF:face	*ENG	Turns the ARDF scan glass dust check on/ off. [0 or 1 / 0 / 1step] 0: OFF, 1: ON
002	Detection Level:face	*ENG	Selects the detect level. [0 to 8 / 4 / 1step] 0: lowest detection level 8: highest detection level
003	Correction Level:face	*ENG	Selects the level of the sub scan line correction when using the ARDF. [0 to 4 / 0 / 1step] 0: Off 1: Weakest 2: Weak 3: Strong 4: Strongest

4400	[Scanner Erase Margin]		
	Sets the Mask for Original. These SPs set the area to be masked during platen (book) mode scanning.		
001	Book: Leading Edge	*ENG	[0.0 to 3.0 / 0.0 / 0.1mm/step]
002	Book: Trailing Edge	*ENG	[0.0 to 3.0 / 0.0 / 0.1mm/step]
003	Book: Left	*ENG	[0.0 to 3.0 / 0.0 / 0.1mm/step]
004	Book: Right	*ENG	[0.0 to 3.0 / 0.0 / 0.1mm/step]

4417	[IPU Test Pattern]		
	Selects the IPU test pattern.		
001	Test Pattern	ENG	[0 to 24 / 0 / 1/step]
	0: Scanned image 1: Gradation main scan A 2: Gradation main scan B 3: Gradation main scan C 4: Gradation main scan D 5: Gradation sub scan (1) 6: Grid pattern 7: Slant grid pattern 8: Gradation RGBCMYK 9: UCR pattern 10: Color patch 16 (1) 11: Color patch 16 (2) 12: Color patch 64		13: Grid pattern CMYK 14: Color patch CMYK 15: Gray pattern (1) 16: Gray pattern (2) 17: Gray Pattern (3) 18: Shading pattern 19: Thin line pattern 20: Scanned + Grid pattern 21: Scanned + Gray scale 22: Scanned + Color patch 23: Scanned + Slant Grid C 24: Scanned + Slant Grid D

4429	[Illegal Copy Output]		
001	Copy	*ENG	[0 to 3 / 3 / 1/step]
002	Scanner	*ENG	[0 to 3 / 3 / 1/step]
003	Fax	*ENG	[0 to 3 / 3 / 1/step]

4450	[Scan Image Pass Selection]		
001	Black Selection ON/OFF	ENG	[0 or 1 / 1 / 1/step] 0: OFF, 1: ON
	Uses or does not use the black reduction image path.		
002	SH ON/OFF	ENG	[0 or 1 / 1 / 1/step] 0: OFF, 1: ON
	Uses or does not use the shading image path.		

4501	[ACC Target Density]		
	Selects the ACC result.		
001	Copy: K: Text	*ENG	[0 to 10 / 5 / 1 /step] 10: Darkest density
002	Copy: C: Text	*ENG	
003	Copy: M: Text	*ENG	
004	Copy: Y: Text	*ENG	
005	Copy: K: Photo	*ENG	
006	Copy: C: Photo	*ENG	
007	Copy: M: Photo	*ENG	
008	Copy: Y: Photo	*ENG	

System
Maintenance

4505	[ACC Cor:Bright]		
	Adjusts the offset correction for light areas of the ACC pattern.		
001	Text:K	*ENG	[-128 to 127 / 0 / 1 /step]
002	Text:C	*ENG	
003	Text:M	*ENG	
004	Text:Y	*ENG	
005	Photo:K	*ENG	[-128 to 127 / 0 / 1 /step]
006	Photo:C	*ENG	

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007	Photo:M	*ENG	
008	Photo:Y	*ENG	

4506	[ACC Cor:Dark]		
	Adjusts the offset correction for dark areas of the ACC pattern.		
001	Text:K	*ENG	[-128 to 127 / 0 / 1 /step]
002	Text:C	*ENG	
003	Text:M	*ENG	
004	Text:Y	*ENG	
005	Photo:K	*ENG	[-128 to 127 / 0 / 1 /step]
006	Photo:C	*ENG	
007	Photo:M	*ENG	
008	Photo:Y	*ENG	

4603	[AGC Execution]		
	Executes the AGC and enables the home position detection.		
001	HP Detection Enable	ENG	Executes the AGC.
002	HP Detection Disable		DFU

4609	[Gray Balance Set: R]		
	Displays the adjustment value of the gray balance for red.		
001	Book Scan	*ENG	[-512 to 511 / -89 / 1digit/step]
002	DF Scan	*ENG	[-512 to 511 / -89 / 1digit/step]

4610	[Gray Balance Set: G]		
	Displays the adjustment value of the gray balance for green.		
001	Book Scan	*ENG	[-512 to 511 / -76 / 1digit/step]
002	DF Scan	*ENG	[-512 to 511 / -76 / 1digit/step]

4611	[Gray Balance Set: B]		
	Displays the adjustment value of the gray balance for blue.		
001	Book Scan	*ENG	[-512 to 511 / -85 / 1digit/step]
002	DF Scan	*ENG	

4645	[Scan Adjust Error]		
	Displays the error value of the scanning adjustment.		
001	White level	ENG	[0 to 65535 / - / 1/step]
002	Black level	ENG	

4647	[Scanner Hard Error]		
	Displays the result of the SBU connection check.		
001	Power-ON	ENG	[0 to 65535 / - / 1/step] 0: OK, Other: SBU connection check failure If the SBU connection check fails, SC144 occurs.

4802	[DF Shading FreeRun]		
	Executes the document feeder shading free run.		
001	Lamp OFF	ENG	Turns off the scanner lamp. [0 or 1 / 0 / 1step] [Execute]
002	Lamp ON		Turns on the scanner lamp. [0 or 1 / 0 / 1step] [Execute]

4806	[Carriage Save]		
001	-	ENG	Moves the carriage from the scanner home position. Dust may fall through the DF exposure glass. Therefore, do this SP when you transport the machine a long distance.

4808	[Factory Setting Input]		
002	Execution Flag	*ENG	[0 or 1 / 0 / 1 /step]

4902	[Disp ACC Data]		
	This SP outputs the final data read at the end of ACC execution. A zero is returned if there was an error reading the data. [0 to 255 / - / 1 /step]		
001	R_DATA1	*ENG	Photo C Patch Level 1 (8-bit)
002	G_DATA1	*ENG	Photo M Patch Level 1 (8-bit)
003	B_DATA1	*ENG	Photo Y Patch Level 1 (8-bit)
004	R_DATA2	*ENG	Photo C Patch Level 17 (8-bit)
005	G_DATA2	*ENG	Photo M Patch Level 17(8-bit)
006	B_DATA2	*ENG	Photo Y Patch Level 17 (8-bit)

4918	[Man Gamma:Pht:Y]		
	Adjusts the offset data of the printer gamma for yellow in Photo mode. See "Printer Gamma Correction" in the Replacement and Adjustment for how to use.		
009	-	ENG	[Execute]

4930	[Total Regulation:Text Copy]		
	Sets the total regulation value.		
001	FC 1	*ENG	[0 to 400 / 200 / 1 /step]
002	FC 2	*ENG	[0 to 400 / 200 / 1 /step]
003	Mono	*ENG	[0 to 400 / 100 / 1 /step]
004	Color Process	*ENG	[0 to 400 / 180 / 1 /step]
005	Cancel	*ENG	[0 to 400 / 400 / 1 /step]

4931	[Total Regulation:Photo Copy]		
	Sets the total regulation value.		
001	FC 1	*ENG	[0 to 400 / 240 / 1 /step]
002	FC 2	*ENG	[0 to 400 / 260 / 1 /step]
003	Mono	*ENG	[0 to 400 / 100 / 1 /step]
004	Color Process	*ENG	[0 to 400 / 200 / 1 /step]
005	Cancel	*ENG	[0 to 400 / 400 / 1 /step]

4954	[Read/Restore:Std]		
	Reads or restores the standard chart.		
001	Read New Chart	ENG	Execute the scanning of the A4 chart.
002	Recall Prev Chart	ENG	Clear the data of the scanned A4 chart.
004	Set Std Chart	ENG	Overwrite the standard data.
005	Chromaticity Rank	*ENG	Restores the standard chromaticity rank. [0 to 255 / 0 /1/step]


4991	[IPU Image Pass Selection]		
	Selects the image path. Enter the number to be selected using the 10-key pad.		
001	RGB Frame Memory:single	ENG	[0 to 11 / 2 / 1 /step]
	0: Scanner input RGB images 1: Scanner I/F RGB images 2: RGB images done by Shading correction (Shading ON, Black offset ON) 3: Shading data 4 to 11: Not used		


4993	[High Light Correction]		
001	Sensitivity Selection	*ENG	Selects the Highlight correction level. [0 to 9 / 4 / 1 /step] 0: weakest sensitivity 9: strongest sensitivity
002	Range Selection	*ENG	Selects the range level of Highlight correction. [0 to 9 / 4 / 1 /step] 0: weakest skew correction, 9: strongest skew correction

4994	[Text/Photo Detect Level Adj.]		
	Selects the definition level between Text and Photo for high compression PDF.		
001	High Compression PDF	*ENG	[0 to 2 / 1 / 1 /step] 0: Text priority 1: Normal 2: Photo priority

5.6 MAIN SP TABLES-5

5.6.1 SP5-XXX (MODE)

5024	[mm/inch Display Selection]		
	Switches the unit between mm and inch displayed on the LCD.  Note <ul style="list-style-type: none"> ▪ Turn off and of the main power after changing this setting. 		
001	0:mm 1:inch	*CTL	0: mm (Europe/Asia) 1: inch (USA)

5045	[Accounting Counter]		
	Selects the counting method.  Note <ul style="list-style-type: none"> ▪ The counting method can be changed only once, regardless of whether the counter value is negative or positive. 		
001	Counter Method	*CTL	[0 or 1 / 0 / -] 0: Developments 1: Prints

5047	[Paper Display]		
	Turns on or off the printed paper display on the LCD.		
001	Backing Paper	*CTL	[0 or 1 / 0 / -] 0: OFF, 1:ON

5055	[Display IP Address]		
	Display or does not display the IP address on the LCD.		
001	-	*CTL	[0 or 1 / 0 / -] 0: OFF 1: ON

5062	[Part Replacement Alert Display]		
	Display or does not display the PM part yield on the LCD.		
001	PCDU: K	*CTL	[0 or 1 / 0 / -] 0: No display, 1: Display
002	PCDU: C	*CTL	
003	PCDU: M	*CTL	
004	PCDU: Y	*CTL	
005	ITB Unit	*CTL	[0 or 1 / 0 / -] 0: No display, 1: Display
006	Fusing Unit	*CTL	
007	Transfer Unit	*CTL	
008	Toner Colloction Bottle	*CTL	

5066	[PM Parts Display]		
	Display or does not display the "PM parts" button on the LCD.		
001	-	*CTL	[0 or 1 / 0 / -] 0: No display, 1: Display

5067	[Parts PM System Setting]		
	Selects the service maintenance or user maintenance for each PM parts. If the user service is selected, PM alert is displayed on the LCD.		
001	PCDU :K	*CTL	[0: Service] or [1: User]
002	PCDU :C	*CTL	
003	PCDU :M	*CTL	
004	PCDU :Y	*CTL	
005	ITB Unit	*CTL	[0: Service] or [1: User]
006	Fusing Unit	*CTL	
007	Transfer Unit	*CTL	

008	Toner Colloction Bottle	*CTL	
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5071	[Set Bypass Paper Size Display] Enables or disables the bypass paper size display for confirmation		
001	-	*CTL	[0 or 1 / 0 / -] 0: Disable, 1: Enable
Turn on or off the paper size confirmation pop-up on the LED. This pop-up prevents mismatching between a paper size selected by the operation panel and an actual paper size on the by-pass tray.			

5074	[Home screen for User]		
002	Home Screen Login Setting	*CTL	[0 or 1 / 0 / -] 0: Disables the use of home screen for user. 1: Enables the use of home screen for user.
091	(0:OFF 1:SDK 2:Reserve)	*CTL	0: Function disable 1: SDK application 2: Legacy application (reserved)
092	Product ID	*CTL	Sets the Application product ID. [0x00 to 0xffff / - / 1/step]
093	Application ID	*CTL	Sets the display category of the application that is specified in the SP5075-001,002 [0 to 255 / 0 / 1/step]

5075	[USB Keyboard]		
	Sets the function of the external keyboard.		
001	Function Setting	*CTL	0: Disable 1: Enable

5076	[Copy LT/LG size combined setting]		
	Enable or Disable the setting of the copy paper size combined with LT and LG.		
001	-	*CTL	[0 or 1 / 1 / -] 0: Disable (Default for other than NA) 1: Enable (Default for NA)

5101	[Energy Save]		
005	Level	*ENG	[0 or 1 / 1 / -]

5113	[Optional Counter Type]		
001	Default Optional Counter Type	*CTL	This program specifies the counter type. 0: None , 1: Key card (RK 3, 4) 2: Key card (down), 3: Prepaid card 4: Coin lock, 5: MF key card 8: Key counter + Vendor 9: Bar-code Printer
002	External Optional Counter Type	*CTL	This program specifies the external counter type. 0: None 1: Expansion Device 1 2: Expansion Device 2 3: Expansion Device 3

5114	[Optional Counter I/F]		
001	MF Key Card Extension	*CTL	[0: Not installed / 1: Installed (scanning accounting)]

5118	[Disable Copying]		
	This program disables copying.		
001	-	*CTL	[0: Enabled / 1: Disabled]

5120	[Mode Clear Opt. Counter Removal]		
	This program updates the information on the optional counter. When you install or remove an optional counter, check the settings.		
001	-	*CTL	[0: Yes (removed) / 1: Standby (installed but not used)/ 2: No (not removed)]

5121	[Counter Up Timing]		
	This program specifies when the counter goes up. The settings refer to “paper feed” and “paper exit” respectively.		
001	0:Feed 1:Exit	*CTL	[0: Feed / 1: Exit]

5127	[APS Mode]		
	This program disables the APS.		
001	-	*CTL	[0 or 1 / 0 / 1/step] 0: Not disabled 1: Disabled

5131	[Paper Size/Type Selection]		
	The program selects a paper size system from the following alternatives: the AB system (0), the LT system (1), and the AF system (2).		
001	-	*ENG	[0 :JP(Japan) / 1: NA / 2: EU/ASIA]

5162	[App. Switch Method]		
	This program specifies the switch that selects an application program.		
001	-	*CTL	[0: Soft Key Set / 1: Hard Key Set]

5167	[Fax Printing Mode at Optional Counter Off]		
	Enables or disables the automatic print out without an accounting device. This SP is used when the receiving fax is accounted by an external accounting device.		
001	Fax Printing Mode at Optional Counter Off	*CTL	[0 or 1 / 0 / -] 0: Automatic printing 1: No automatic printing

5169	[CE Login]		
	If you will change the printer bit switches, you must 'log in' to service mode with this SP before you go into the printer SP mode.		
001	CE Login	*CTL	[0 or 1 / 0 / 1/step] 0: Disabled 1: Enabled

5186	[RK4]		
	Enables or disables the prevention for RK4 (accounting device) disconnection. If the RK4 is disconnected for 10 seconds when this SP is set to "1 (Enable)", the machine automatically jams a sheet of paper.		
001	-	*ENG	[0 or 1 / 0 / 1/step] 0: Disable 1: Enable

5188	[Copy NvVersion]		
	Displays the version number of the NVRAM on the controller board.		
001	-	*CTL	-

5302	[Set Time]		
	Adjusts the RTC (real time clock) time setting for the local time zone. Examples: For Japan (+9 GMT), enter 540 (9 hours x 60 min.) DOM: +540 (Tokyo) NA: -300 (New York) EU: + 60 (Paris) CH: +480 (Peking) TW: +480 (Taipei) AS: +480 (Hong Kong) KO: +540 (Korea)		
002	Time Difference	*CTL	[-1440 to 1440 / -300 / 1 min./step]

5307	[Summer Time]		
001	Usable	*CTL	[0 to 1 / NA, EU, ASIA / 1 /step] 0: Disabled 1: Enabled NA and EUR: 1, ASIA: 0

	Enables or disables the summer time mode.		
	<p>Note</p> <ul style="list-style-type: none"> Make sure that both SP5-307-3 and -4 are correctly set. Otherwise, this SP is not activated even if this SP is set to "1". 		
	start data set	*CTL	-
003	<p>Specifies the start setting for the summer time mode.</p> <p>There are 8 digits in this SP. For months 1 to 9, the "0" cannot be input in the first digit, so the eight-digit setting for -2 or -3 becomes a seven-digit setting.</p> <p>1st and 2nd digits: The month. [1 to 12] 3rd digit: The week of the month. [1 to 5] 4th digit: The day of the week. [0 to 6 = Sunday to Saturday] 5th and 6th digits: The hour. [00 to 23] 7th digit: The length of the advanced time. [0 to 9 / 1 hour /step] 8th digit: The length of the advanced time. [0 to 5 / 10 minutes /step]</p> <ul style="list-style-type: none"> The digits are counted from the left. Make sure that SP5-307-1 is set to "1". 		
	<p>For example: 3500010 (EU default)</p> <p>The timer is advanced by 1 hour at am 0:00 on the 5th Sunday in March</p>		
	end tata set	*CTL	-
004	<p>Specifies the end setting for the summer time mode.</p> <p>There are 8 digits in this SP.</p> <p>1st and 2nd digits: The month. [1 to 12] 3rd digit: The week of the month. [0 to 5] 4th digit: The day of the week. [0 to 7 = Sunday to Saturday] 5th and 6th digits: The hour. [00 to 23] The 7th and 8 digits must be set to "00".</p> <ul style="list-style-type: none"> The digits are counted from the left. Make sure that SP5-307-1 is set to "1". 		

5404	[User Code Count Clear]		
	Clears all counters for users.		
001	-	CTL	Clears all counters for users.

5411	[LDAP-Certification]		
004	Easy Certification	*CTL	Determines whether easy LDAP certification is done. [0 or 1 / 1 / -] 1: On, 0: Off
005	Password Null Not Permit	*CTL	This SP is referenced only when SP5411-4 is set to "1" (On). [0 or 1 / 0 / -] 0: Password NULL not permitted. 1: Password NULL permitted.
006	Detail Option	*CTL	Determines whether LDAP option (anonymous certification) is turned on or off. Bit0 0: OFF, 1: ON

5413	[Lockout Setting]		
001	Lockout On/Off	*CTL	Switches on/off the lock on the local address book account. [0 or 1 / 0 / -] 0: Off, 1: On
002	Lockout Threshold	*CTL	Sets a limit on the frequency of lockouts for account lockouts. [1 to 10 / 5 / 1/step]
003	Cancellation On/Off	*CTL	Determines whether the system waits the prescribed time for input of a correct user ID and password after an account lockout has occurred. [0 or 1 / 0 / -] 0: Off (no wait time, lockout not cancelled) 1: On (system waits, cancels lockout if correct user ID and password are entered).
004	Cancellation Time	*CTL	Determines the length of time that the system waits for correct input of the user ID and password after a lockout has occurred. This setting is used only if SP5413-3 is set to "1" (on). [1 to 999 / 60 / 1 min./step]


5414	[Access Mitigation]		
001	Mitigation On/Off	*CTL	Switches on/off masking of continuously used IDs and passwords that are identical. [0 or 1 / 0 / -] 0: Off, 1: On
002	Mitigation Time	*CTL	Sets the length of time for excluding continuous access for identical user IDs and passwords. [0 to 60 / 15 / 1 min./step]

5415	[Password Attack]		
001	Permissible Number	*CTL	Sets the number of attempts to attack the system with random passwords to gain illegal access to the system. [0 to 100 / 30 / 1 attempt/step]
002	Detect Time	*CTL	Sets the time limit to stop a password attack once such an attack has been detected. [1 to 10 / 5 / 1 sec./step]

5416	[Access Information]		
001	Access User Max Num	*CTL	Limits the number of users used by the access exclusion and password attack detection functions. [50 to 200 / 200 / 1 users/step]
002	Access Password Max Num	*CTL	Limits the number of passwords used by the access exclusion and password attack detection functions. [50 to 200 / 200 / 1 password/step]

003	Monitor Interval	*CTL	Sets the processing time interval for referencing user ID and password information. [1 to 10 / 3 / 1 sec./step]
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5417	[Access Attack]		
001	Access Permissible Number	*CTL	Sets a limit on access attempts when an excessive number of attempts are detected for MFP features. [0 to 500 / 100 / 1/step]
002	Attack Detect Time	*CTL	Sets the length of time for monitoring the frequency of access to MFP features. [10 to 30 / 10 / 1 sec./step]
003	Productivity Fall Wait	*CTL	Sets the wait time to slow down the speed of certification when an excessive number of access attempts have been detected. [0 to 9 / 3 / 1 sec./step]
004	Attack Max Num	*CTL	Sets a limit on the number of requests received for certification in order to slow down the certification speed when an excessive number of access attempts have been detected. [50 to 200 / 200 / 1 attempt/step]

5420	[User Authentication]		
	<p>These settings should be done with the System Administrator.</p> <p> Note</p> <ul style="list-style-type: none"> These functions are enabled only after the user access feature has been enabled. 		
001	Copy	*CTL	<p>Determines whether certification is required before a user can use the copy applications.</p> <p>[0 to 1 / 0 /1] 0: On, 1: Off</p>
002	Color Security Setting	*CTL	-
	<p>Enables or disables the color copy limitation for each copy mode when the user authentication is "ON".</p> <p>0: Enable (default), 1: Disable</p> <p>Bit0: B/W mode Bit1: Mono color mode Bit2: Two colors mode Bit3: Full color mode Bit4: Automatic color mode Bit5 to 7: Reserved</p>		
011	DocumentServer	*CTL	<p>Determines whether certification is required before a user can use the document server.</p> <p>[0 or 1/ 0 /1]0: On , 1: Off</p>
021	Fax	*CTL	<p>Determines whether certification is required before a user can use the fax application.</p> <p>[0 or 1/ 0 /1]0: On , 1: Off</p>
031	Scanner	*CTL	<p>Determines whether certification is required before a user can use the scan applications.</p> <p>[0 or 1/ 0 /1]0: On , 1: Off</p>

041	Printer	*CTL	Determines whether certification is required before a user can use the printer applications. [0 or 1 / 0 / 1] 0: On , 1: Off
051	SDK1	*CTL	[0 or 1 / 0 / 1] 0: ON. 1: OFF
061	SDK2	*CTL	Determines whether certification is required before a user can use the SDK application.
071	SDK3	*CTL	

5481	[Authentication Error Code]		
	These SP codes determine how the authentication failures are displayed.		
001	System Log Disp	*CTL	Determines whether an error code appears in the system log after a user authentication failure occurs. [0 or 1 / 0 / 1] 0: Off, 1: On
002	Panel Disp	*CTL	Determines whether an error code appears on the operation panel after a user authentication failure occurs. [0 or 1 / 1 / 1] 1: On, 0: Off

5490	[MF KeyCard (Japan only)]		
001	Job Permit Setting	*CTL	Sets up operation of the machine with a keycard. [0 to 1 / 0 / 1] 0: Disabled. Cancels operation without a user code. 1: Enabled. Allows operation without a user code.
002	Count Mode Setting	*CTL	-

5501	[PM Alarm]	*CTL
001	PM Alarm Level	[0 to 9999 / 0 / 1 /step] 0: Alarm off 1 to 9999: Alarm goes off when Value (1 to 9999) x 1000 > PM counter
002	Original Count Alarm	[0 or 1 / 0 / -] 0: No alarm sounds 1: Alarm sounds after the number of originals passing through the ARDF > 10,000

5504	[Jam Alarm]		
	Sets the alarm to sound for the specified jam level (document misfeeds are not included).		
001	Interval	*CTL	[0 to 3 / 3 / 1 /step] 0: Zero (Off) 1: Low (2.5K jams) 2: Medium (3K jams) 3: High (6K jams)

5505	[Error Alarm]		
	Sets the error alarm level. The error alarm counter counts "1" when any SC is detected. However, the error alarm counter decreases by "1" when an SC is not detected during a set number of copied sheets (for example, default 1500 sheets). The error alarm occurs when the SC error alarm counter reaches "5".		
001	-	*CTL	[0 to 25500 / 1000 / 100/step]

5508	[CC Call]	*CTL
001	Jam Remains	0: Disable, 1: Enable
	Enables/disables initiating a call for an unattended paper jam.	
002	Continuous Jams	0: Disable, 1: Enable
	Enables/disables initiating a call for consecutive paper jams.	
003	Continuous Door Open	0: Disable, 1: Enable
	Enables/disables initiating a call when the front door remains open.	
011	Jam Detection: Time Length	[3 to 30 / 10 / 1/step]
	Sets the time a jam must remain before it becomes an "unattended paper jam". This setting is enabled only when SP5508-004 is set to "1".	
012	Jam Detection: Continuous Count	[2 to 10 / 5 / 1 /step]
	Sets the number of consecutive paper jams required to initiate a call. This setting is enabled only when SP5508-004 is set to "1".	
013	Door Open: Time Length	[3 to 30 / 10 / 1/step]
	Sets the length of time the door remains open before the machine initiates a call. This setting is enabled only when SP5-508-004 is set to "1".	

	[SC/Alarm Setting]	*CTL	-
5515	With @Remote in use, these SP codes can be set to issue an SC call when an SC error occurs. If this SP is switched off, the SC call is not issued when an SC error occurs.		
001	SC Call	[0 or 1 / 1 / -] 0: Off 1: On	
002	Service Parts Near End Call		
003	Service Parts End Call		
004	User Call		
006	Communication Test Call	[0 or 1 / 1 / -]	

Main SP Tables-5

007	Machine Information Notice	0: Off 1: On
008	Alarm Notice	
009	Non Genuin Tonner Alarm	
010	Supply Automatic Ordering Call	
011	Supply Manegement Report Call	
012	Jam/Door Open Call	

5516	[Individual PM Part Alarm Call]		
	With @Remote in use, these SP codes can be set to issue a PM alarm call when one of SP parts reaches its yield.		
001	Disable/Enable Setting (0:Not Send,1:Send)	*CTL	[0 or 1 / 1 / -] 0: Not send, 1: Send
004	Percent yield for triggering PM alert	*CTL	[1 to 255 / 75 / 1 %/step]

5610	[Base Gamma Ctrl Pt:Execute]		
004	Get Factory Default	*ENG	-
	Recalls the factory settings.		
005	Set Factory Default	*ENG	-
	Overwrites the current values onto the factory settings.		
006	Restore Orginal Value	*ENG	-
	Recalls the previous settings.		

5611	[Toner Color in 2C]		
001	B-C	*ENG	[0 to 128 / 100 / 1 /step] 128: Darkest density
	Adjusts the Cyan correction value of the blue signal in two-color mode.		
002	B-M	*ENG	[0 to 128 / 100 / 1 /step] 128: Darkest density
	Adjusts the Magenta correction value of the blue signal in two-color mode.		
003	G-C	*ENG	[0 to 128 / 100 / 1 /step] 128: Darkest density
	Adjusts the Cyan correction value of the blue signal in two-color mode.		
004	G-Y	*ENG	[0 to 128 / 100 / 1 /step] 128: Darkest density
	Adjusts the Yellow correction value of the blue signal in two-color mode.		
005	R-M	*ENG	[0 to 128 / 100 / 1 /step] 128: Darkest density
	Adjusts the Magenta correction value of the blue signal in two-color mode.		
006	R-Y	*ENG	[0 to 128 / 100 / 1 /step] 128: Darkest density
	Adjusts the Yellow correction value of the blue signal in two-color mode.		

5618	[Color Mode Display Selection]		
001	-	*CTL	[0 or 1 / 1 / -] 0: ACS, Colour, Black & White, Two Colour, Single colour 1: ACD, Full Colour, Black & White
Selects the color selection display on the LCD.			

5731	[Counter Function Settings]		
Changes the Mk1 Counter to the combine counter from the paper type counter.			
001	ChangeMk1CntPaperToCombine	*CTL	[0 or 1 / 0 / 1/step] 0: Disable 1: Enable

5745	[Deemed Power Consumption]		
Displays the status of each mode.			
211	Controller standby	*CTL	[0 to 9999 / 0 / 1/step]
212	STR	*CTL	[0 to 9999 / 0 / 1/step]
213	Main power off	*CTL	[0 to 9999 / 0 / 1/step]
214	Scanning and Printing	*CTL	[0 to 9999 / 0 / 1/step]
215	Printing	*CTL	[0 to 9999 / 0 / 1/step]
216	Scanning	*CTL	[0 to 9999 / 0 / 1/step]
217	Engine Standby	*CTL	[0 to 9999 / 0 / 1/step]
218	Low power standby	*CTL	[0 to 9999 / 0 / 1/step]
219	Low noise	*CTL	[0 to 9999 / 0 / 1/step]
220	Fusing off standby	*CTL	[0 to 9999 / 0 / 1/step]

5749	[Import/Export]		
001	Export	CTL	Exports the preference information. [EXECUTE]
101	Import	CTL	Imports the preference information. [EXECUTE]
251	Export Result Print (SP)	CTL	Prints the execution result of the export. [EXECUTE]
252	Import Result Print (SP)	CTL	Prints the execution result of the import. [EXECUTE]

5795	[SRM Debug SW]		
001	1	CTL	[0 to 255 / - / -]

↓ **Note**

- Memory Clear (SP5-801)
- The following tables list the items that are cleared. The serial number information, meter charge setting and meter charge counters (SP8-581, 582, 583, 584, and 586) are not cleared.


5801	[Memory Clear]		
001	All Clear	CTL	Resets all correction data for process control and all software counters, and returns all modes and adjustments to their default values.
002	Engine	ENG	Clears the engine settings.
003	SCS	CTL	Initializes default system settings, SCS (System Control Service) settings, operation display coordinates, and ROM update information.
005	Mcs	CTL	Initializes the Mcs settings.
006	Copier Application	CTL	Initializes all copier application settings.

008	Printer Application	CTL	<p>The following service settings:</p> <ul style="list-style-type: none"> ▪ Bit switches ▪ Gamma settings (User & Service) ▪ Toner Limit <p>The following user settings:</p> <ul style="list-style-type: none"> ▪ Tray Priority ▪ Menu Protect ▪ System Setting except for setting of Energy Saver ▪ I/F Setup (I/O Buffer and I/O Timeout) ▪ PCL Menu
009	Scanner Application	CTL	Initializes the scanner defaults for the scanner and all the scanner SP modes.
010	Web Service	CTL	Deletes the network file application management files and thumbnails, and initializes the job login ID.
011	NCS	CTL	All setting of Network Setup (User Menu) (NCS: Network Control Service)
014	Clear DCS Setting	CTL	Initializes the DCS (Delivery Control Service) settings.
016	MIRS Setting	CTL	Initializes the MIRS (Machine Information Report Service) settings.
017	CCS	CTL	Initializes the CCS (Certification and Charge-control Service) settings.
018	SRM Memory Clr	CTL	Initializes the SRM (System Resource Manager) settings.
019	LCS	CTL	Initializes the LCS settings.
020	Web Uapli	CTL	Initializes the web user application settings.
025	ECS	CTL	Initializes the ECS settings.

5802	[Free Run]		
	Performs a free run on the copier engine.		
	<p>Note</p> <ul style="list-style-type: none"> ▪ The machine starts free run in the same condition as the sequence of A4/LT, A3 or A4 SEF printing from the 1st or 2nd tray. Therefore, the correct paper should be loaded in the 1st tray or 2nd tray, but paper is not fed. ▪ The main switch has to be turned off and on after using the free run mode for a test. 		
	001	B/W A4 LEF	ENG
002	FC A4 LEF	ENG	[0 to 1 / 0 / 1/step]
003	FC A3 LEF	ENG	


5803	[INPUT Check]	See "Input Check Table" in "Main SP Tables-9".
5804	[OUTPUT Check]	See "Output Check Table" in "Main SP Tables-9".

5807	[Area Selection]		
	Sets the machine destination.		
001	-	*ENG	<p>[0 to 7/ 2:NA / -]</p> <p>1: Japan 2: NA 3: EU 4: Taiwan 5: Asia 6: China 7: Korea</p> <p>* The default value depends on the original machine destination.</p>

5810	[SC Reset]		
	Resets a type A service call condition.  Note <ul style="list-style-type: none"> ▪ Turn the main switch off and on after resetting the SC code. 		
001	Fusing SC Reset	ENG	[0 to 1 / 0 / 1/step]
002	Hard High Temp.Detection	ENG	

5811	[MachineSerial]		
001	Set	*ENG	[Execute]
002	Display	*ENG	Displays the machine serial number. [0 to 255 / 0 / 1/step]

5812	[Service Tel. No. Setting]	*CTL	
001	Service		
	Sets the telephone number for a service representative. This number is printed on the Counter List, which can be printed with the user's "Counter" menu. This can be up to 20 characters (both numbers and alphabetic characters can be input).		
002	Facsimile		
	Sets the fax or telephone number for a service representative. This number is printed on the Counter List. This can be up to 20 characters (both numbers and alphabetic characters can be input).		
003	Supply		
	Use this to input the telephone number of your supplier for consumables. Enter the number and press #.		
004	Operation		
	Use this to input the telephone number of your sales agency. Enter the number and press #.		

5816	[Remote Service]	*CTL
001	I/F Setting	
	Selects the remote service setting. [0 to 2 / 2 / 1/step] 0: Remote service off 1: CSS remote service on 2: NRS remote service on	
002	CE Call	
	Performs the CE Call at the start or end of the service. [0 or 1 / 0 / 1/step] 0: Start of the service 1: End of the service  Note <ul style="list-style-type: none"> ▪ This SP is activated only when SP 5816-001 is set to "2". 	
003	Function Flag	
	Enables or disables the remote service function. [0 to 1 / 0 / 1/step] 0: Disabled, 1: Enabled	
007	SSL Disable	
	Controls if RCG (Remote Communication Gate) confirmation is done by SSL during an RCG send for the @Remote over a network interface. [0 or 1 / 0 / 1/step] 0: Yes (SSL used) 1: No (SSL not used)	

008	RCG Connect Timeout
	Sets the length of time (seconds) for the time-out when the RCG (Remote Communication Gate) connects during a call via the @Remote network. [1 to 90 / 30 / 1 second/step]
009	RCG Write Timeout
	Sets the length of time (seconds) for the time-out when sent data is written to the RCG during a call over the @Remote network. [1 to 100 / 60 / 1 second/step]
010	RCG Read Timeout
	Sets the length of time (seconds) for the timeout when sent data is written from the RCG during a call over the @Remote network. [1 to 100 / 60 / 1 second /step]
011	Port 80 Enable
	Controls if permission is given to get access to the SOAP method over Port 80 on the @Remote network. [0 or 1 / 0 / -] 0: No. Access denied 1: Yes. Access granted.
013	RFU Timing
	Selects the timing for the remote firmware updating. [0 or 1 / 1 / -] 0: Any status of a target machine 1: Sleep or panel off mode only
023	Connect Type (N/M)
	This SP displays and selects the RCG-N connection method. [0 or 1 / 0 / 1 /step] 0: Internet connection 1: Dial-up connection

061	Cert Expire Timing DFU
	Proximity of the expiration of the certification. [0 to 0xffffffff / 0 / 1 /step]
062	Use Proxy
	This SP setting determines if the proxy server is used when the machine communicates with the service center. [0 or 1 / 0 / 1 /step] 0: Not use 1: Use
063	Proxy Host
	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. Note <ul style="list-style-type: none"> ▪ The address display is limited to 128 characters. Characters beyond the 128 character are ignored. ▪ This address is customer information and is not printed in the SMC report.
064	Proxy 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. Note <ul style="list-style-type: none"> ▪ This port number is customer information and is not printed in the SMC report.

065	Proxy User Name
	<p>This SP sets the HTTP proxy certification user name.</p> <p>Note</p> <ul style="list-style-type: none"> ▪ 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.
066	Proxy Password
	<p>This SP sets the HTTP proxy certification password.</p> <p>Note</p> <ul style="list-style-type: none"> ▪ 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.

5816	[Remote Service]	*CTL
067	CERT: Up State	
	Displays the status of the certification update.	
	0	The certification used by Embedded RC Gate is set correctly.
	1	The certification request (setAuthKey) for update has been received from the GW URL and certification is presently being updated.
	2	The certification update is completed and the GW URL is being notified of the successful update.
	3	The certification update failed, and the GW URL is being notified of the failed update.
	4	The period of the certification has expired and new request for an update is being sent to the GW URL.
11	A rescue update for certification has been issued and a rescue certification setting is in progress for the rescue GW connection.	

	12	The rescue certification setting is completed and the GW URL is being notified of the certification update request.
	13	The notification of the request for certification update has completed successfully, and the system is waiting for the certification update request from the rescue GW URL.
	14	The notification of the certification request has been received from the rescue GW controller, and the certification is being stored.
	15	The certification has been stored, and the GW URL is being notified of the successful completion of this event.
	16	The storing of the certification has failed, and the GW URL is being notified of the failure of this event.
	17	The certification update request has been received from the GW URL, the GW URL was notified of the results of the update after it was completed, but a certification error has been received, and the rescue certification is being recorded.
	18	The rescue certification of No. 17 has been recorded, and the GW URL is being notified of the failure of the certification update.

5816	[Remote Service]	*CTL
068	CERT: Error	
	Displays a number code that describes the reason for the request for update of the certification.	
	0	Normal. There is no request for certification update in progress.
	1	Request for certification update in progress. The current certification has expired.
	2	An SSL error notification has been issued. Issued after the certification has expired.
	3	Notification of shift from a common authentication to an individual certification.
	4	Notification of a common certification without ID2.

	5	Notification that no certification was issued.
	6	Notification that GW URL does not exist.

5816	[Remote Service]	*CTL
069	CERT:Up ID	
	The ID of the request for certification.	
083	Firm Up Status	
	Displays the status of the firmware update [0 to5 / - / 1 /step]	
087	CERT:Macro Ver.	
	Displays the macro version of the @Remote certification.	
088	CERT:PAC Ver.	
	Displays the PAC version of the @Remote certification.	
089	CERT:ID2Code	
	Displays ID2 for the @Remote certification. Spaces are displayed as underscores (_). Asterisks (****) indicate that no @Remote certification exists.	
090	CERT:Subject	
	Displays the common name of the @Remote certification subject. CN = the following 17 bytes. Spaces are displayed as underscores (_). Asterisks (****) indicate that no DESS exists.	
091	CERT:Serial No.	
	Displays serial number for the NRS certification. Asterisks (****) indicate that no DESS exists.	
092	CERT:Issuer	
	Displays the common name of the issuer of the @Remote certification. CN = the following 30 bytes. Asterisks (****) indicate that no DESS exists.	

093	CERT:Valid Start
	Displays the start time of the period for which the current @Remote certification is enabled.
094	CERT:Valid End
	Displays the end time of the period for which the current @Remote certification is enabled.
102	CERT:Encrypt Level
	Displays cryptic strength of the NRS certification. 1: 512 bit 2: 2048 bit
150	Selection Country
	Select the country where embedded RCG-M is installed in the machine. After selecting the country, you must also set the following SP codes for embedded RCG-M: <ul style="list-style-type: none"> ▪ SP5816-153 ▪ SP5816-154 ▪ SP5816-161 0: Japan, 1: USA, 2: Canada, 3: UK, 4: Germany, 5: France, 6: Italy, 7: Netherlands, 8: Belgium, 9: Luxembourg, 10: Spain
151	Line Type Automatic Judgement
	Press [Execute]. Setting this SP classifies the telephone line where embedded RCG-M is connected as either dial-up (pulse dial) or push (DTMF tone) type, so embedded RCG-M can automatically distinguish the number that connects to the outside line. <ul style="list-style-type: none"> ▪ The current progress, success, or failure of this execution can be displayed with SP5816-152. ▪ If the execution succeeded, SP5816-153 will display the result for confirmation and SP5816-154 will display the telephone number for the connection to the outside line.

152	<p>Line Type Judgement Result</p> <p>Displays a number to show the result of the execution of SP5816 151. Here is a list of what the numbers mean.</p> <p>0: Success</p> <p>1: In progress (no result yet). Please wait.</p> <p>2: Line abnormal</p> <p>3: Cannot detect dial tone automatically</p> <p>4: Line is disconnected</p> <p>5: Insufficient electrical power supply</p> <p>6: Line classification not supported</p> <p>7: Error because fax transmission in progress – ioctl() occurred.</p> <p>8: Other error occurred</p> <p>9: Line classification still in progress. Please wait.</p>
153	<p>Selection Dial / Push</p> <p>This SP displays the classification (tone or pulse) of the telephone line to the access point for embedded RCG-M. The number displayed (0 or 1) is the result of the execution of SP5816-151. However, this setting can also be changed manually.</p> <p>[0 or 1 / 0 / 1 /step]</p> <p>0: Tone Dialing Phone</p> <p>1: Pulse Dialing Phone</p> <p>Inside Japan "2" may also be displayed:</p> <p>0: Tone Dialing Phone</p> <p>1: Pulse Dialing Phone 10PPS</p> <p>2: Pulse Dialing Phone 20PPS</p>

154	Outside Line Outgoing Number
	<p>The SP sets the number that switches to PSTN for the outside connection for embedded RCG-M in a system that employs a PBX (internal line).</p> <ul style="list-style-type: none"> ▪ If the execution of SP5816-151 has succeeded and embedded RCG-M has connected to the external line, this SP display is completely blank. ▪ If embedded RCG-M has connected to an internal line, then the number of the connection to the external line is displayed. ▪ If embedded RCG-M has connected to an external line, a comma is displayed with the number. The comma is inserted for a 2 sec. pause. ▪ The number setting for the external line can be entered manually (including commas).
156	Dial Up User Name
	<p>Use this SP to set a user name for access to remote dial up. Follow these rules when setting a user name:</p> <ul style="list-style-type: none"> ▪ Name length: Up to 32 characters ▪ Spaces and # allowed but the entire entry must be enclosed by double quotation marks (").
157	Dial Up Password
	<p>Use this SP to set a password for access to remote dial up. Follow these rules when setting a user name:</p> <ul style="list-style-type: none"> ▪ Name length: Up to 32 characters ▪ Spaces and # allowed but the entire entry must be enclosed by double quotation marks (").
161	Local Phone Number
	<p>Use this SP to set the telephone number of the line where embedded RCG-M is connected. This number is transmitted to and used by the Call Center to return calls.</p> <p>Limit: 24 numbers (numbers only)</p>

162	<p>Connection Timing Adjustment Incoming</p> <p>When the Call Center calls out to an embedded RCG-M modem, it sends a repeating ID tone (*#1#). This SP sets the time the line remains open to send these ID tones after the number of the embedded RCG-M modem is dialed up and connected.</p> <p>[0 to 24 / 1 / 1 /step]</p> <p>The actual amount of time is this setting x 2 sec. For example, if you set "2" the line will remain open for 4 sec.</p>
163	<p>Access Point</p> <p>This is the number of the dial-up access point for RCG-M. If no setting is done for this SP code, then a preset value (determined by the country selected) is used.</p> <p>Default: 0</p> <p>Allowed: Up to 16 alphanumeric characters</p>
164	<p>Line Connecting</p> <p>This SP sets the connection conditions for the customer. This setting dedicates the line to RCG-M only, or sets the line for sharing between RCG-M and a fax unit.</p> <p>[0 to 1 / 0 / 1 /step]</p> <p>0: Sharing Fax 1: No Sharing Fax</p> <p>Note</p> <ul style="list-style-type: none"> ▪ If this setting is changed, the copier must be cycled off and on. ▪ SP5816 187 determines whether the off-hook button can be used to interrupt a RCG-M transmission in progress to open the line for fax transaction.

173	Modem Serial No.
	This SP displays the serial number registered for the RCG-M.
174	Retransmission Ringing
	Normally, it is best to allow unlimited time for certification and ID2 update requests, and for the notification that the certification has been completed. However, RCG-M generates charges based on transmission time for the customer, so a limit is placed upon the time allowed for these transactions. If these transactions cannot be completed within the allowed time, do this SP to cancel the time restriction.
187	FAX TX Priority
	This SP determines whether pushing the off-hook button will interrupt a RCG-M transmission in progress to open the line for fax transaction. This SP can be used only if SP5816 164 is set to "0". [0 or 1/ 0 / -] 0: Disable, 1: Enable
200	Manual Polling
	Executes the manual polling.
201	Regist Status
	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.

202	Letter Number
	Allows entry of the number of the request needed for the RCG-N device.
203	Confirm Execute
	Executes the inquiry request to the @Remote GW URL.
204	Confirm Result
	<p>Displays a number that indicates the result of the inquiry executed with SP5816 203.</p> <p>0: Succeeded 1: Inquiry number error 2: Registration in progress 3: Proxy error (proxy enabled) 4: Proxy error (proxy disabled) 5: Proxy error (Illegal user name or password) 6: Communication error 7: Certification update error 8: Other error 9: Inquiry executing</p>
205	Confirm Place
	Displays the result of the notification sent to the device from the GW URL in answer to the inquiry request. Displayed only when the result is registered at the GW URL.
206	Register Execute
	Executes "Embedded RCG Registration".

207	Register Result
	<p>Displays a number that indicates the registration result.</p> <p>0: Succeeded</p> <p>2: Registration in progress</p> <p>3: Proxy error (proxy enabled)</p> <p>4: Proxy error (proxy disabled)</p> <p>5: Proxy error (Illegal user name or password)</p> <p>6: Communication error</p> <p>7: Certification update error</p> <p>8: Other error</p> <p>9: Registration executing</p>

5816	[Remote Service]	*CTL	
208	Error Code		
	<p>Displays a number that describes the error code that was issued when either SP5816-204 or SP5816-207 was executed.</p> <p>[-2147483647 to 2147483647 / 0 / -]</p>		
	Cause	Code	Meaning
	Illegal Modem Parameter	-11001	Chat parameter error
		-11002	Chat execution error
-11003		Unexpected error	

5816	[Remote Service]	*CTL	
208	Error Code		
	Cause	Code	Meaning
	Operation Error,Incorrect Setting	-12002	Inquiry, registration attempted without acquiring device status.
		-12003	Attempted registration without execution of an inquiry and no previous registration.
		-12004	Attempted setting with illegal entries for certification and ID2.
		-12005	@Remote communication is prohibited. The device has an Embedded RC gate-related problem.
		-12006	A confirmation request was made after the confirmation had been already completed.
		-12007	The request number used at registration was different from the one used at confirmation.
		-12008	Update certification failed because mainframe was in use.
		-12009	D2 mismatch between an individual certification and NVRAM.
-12010		Certification area is not initialized.	

5816	[Remote Service]	*CTL	
208	Error Code		
	Cause	Code	Meaning
	Error Caused by Response from GW URL	-2385	Attempted dial up overseas without the correct international prefix for the telephone number.
		-2387	Not supported at the Service Center
		-2389	Database out of service
		-2390	Program out of service
		-2391	Two registrations for same device
		-2392	Parameter error
		-2393	Basil not managed
		-2394	Device not managed
		-2395	Box ID for Basil is illegal
		-2396	Device ID for Basil is illegal
-2397	Incorrect ID2 format		
-2398	Incorrect request number format		
209	Install Clear	Releases the machine from its embedded RCG setup.	
250	CommLog Print	Prints the communication log.	

5821	[Remote Service Address]		
002	RCG IP Address	*CTL	[00000000h to FFFFFFFFh/ 00000000h /1 step] Sets the IP address of the RCG (Remote Communication Gate) destination for call processing at the remote service center.

5824	[NV-RAM Data Upload]		
001	NV-RAM Data Upload	CTL	Uploads the UP and SP mode data (except for counters and the serial number) from the NVRAM to an SD card. [EXECUTE]

5825	[NV-RAM Data Download]		
001	NV-RAM Data Download	CTL	Downloads the UP and SP mode data from an SD card to the NVRAM. [EXECUTE]

5828	[Network Setting]	*CTL	
065	Job Spooling		
	Enables/disables Job Spooling. [0 or 1 / 0 / 1/step] 0: Disabled, 1: Enabled		


066	Job Spooling Clear: Start Time
	Treatment of the job when a spooled job exists at power on. [0 or 1 / 1 / 1/step] 0: ON (Data is cleared), 1: OFF (Automatically printed)
069	Job Spooling (Protocol)
	Validates or invalidates the job spooling function for each protocol. 0: Validates, 1: Invalidates bit0: LPR, bit1: FTP bit2: IPP, bit3: SMB bit4: BMLinkS, bit5: DIPRINT bit6: sftp, bit7: (Reserved)
087	Protocol Using Status
	Used or not used the network. [0 or 1 / 0x00000000 / 1/step] 0: Off (Not used the network with the protocol.) 1: On (Used the network with the protocol once or more.) bit0: IPsec, bit1: IPv6, bit2: IEEE 802. 1X, bit3: Wireless LAN, bit4: Security mode level setting, bit5: Appletalk, bit6: DHCP, bit7: DHCPv6, bit8: telnet, bit9: SSL, bit10: HTTPS, bit11: BMLinkS printing, bit12: diprint printing, bit13: LPR printing, bit14: ftp printing, bit15: rsh printing, bit16: SMB printing, bit17: WSD-Printer, bit18: WSD-Scanner, bit19: Scan to SMB, bit20: Scan to NCP, bit21: Reserve, bit22: Bluetooth, bit23: IEEE 1284, bit24: USB printing, bit25: Dynamic DNS, bit26: Netware printing, bit27: LLTD, bit28: IPP printing, bit29: IPP printing (SSL), bit30: ssh, bit31: sftp
090	TELNET (0: OFF 1: ON)
	Enables or disables the Telnet protocol. [0 or 1 / 1 / -] 0: Disable, 1: Enable


091	Web (0: OFF 1: ON)	
	Enables or disables the Web operation. [0 or 1 / 1 / -] 0: Disable, 1: Enable	
145	Active IPv6 Local Address	
	This is the IPv6 local address link referenced on the Ethernet or wireless LAN (802.11b) in the format: "Link Local Address" + "Prefix Length" The IPv6 address consists of a total 128 bits configured in 8 blocks of 16 bits each.	
147	SettingActive IPv6 Stateless Address 1	These SPs are the IPv6 status addresses (1 to 5) referenced on the Ethernet or wireless LAN (802.11b) in the format: "Status Address" + "Prefix Length" The IPv6 address consists of a total 128 bits configured in 8 blocks of 16 bits each.
149	SettingActive IPv6 Stateless Address 2	
151	Active IPv6 Stateless Address 3	
153	Active IPv6 Stateless Address 4	
155	Active IPv6 Stateless Address 5	
156	IPv6 Manual Address	
	This SP is the IPv6 manually set address referenced on the Ethernet or wireless LAN (802.11b) in the format: "Manual Set Address" + "Prefix Length" The IPv6 address consists of a total 128 bits configured in 8 blocks of 16 bits each.	

158	IPv6 Gateway Address
	This SP is the IPv6 gateway address referenced on the Ethernet or wireless LAN (802.11b). The IPv6 address consists of a total 128 bits configured in 8 blocks of 16 bits each.
236	Web Item visible
	Displays or does not display the Web system items. [0 x 0000 to 0 x ffff / 0 x ffff] 0: Not displayed, 1:Displayed bit0: Net RICOH bit1: Consumable Supplier bit2-15: Reserved (all)
237	Web shopping link visible
	Displays or does not display the link to Net RICOH on the top page and link page of the web system. [0 to 1 / 1 / 1] 0: Not display, 1:Display
238	Web supplies Link visible
	Displays or does not display the link to Consumable Supplier on the top page and link page of the web system. [0 to 1 / 1 / 1] 0: Not display, 1:Display
239	Web Link1 Name
	This SP confirms or changes the URL1 name on the link page of the web system. The maximum characters for the URL name are 31 characters.
240	Web Link1 URL
	This SP confirms or changes the link to URL1 on the link page of the web system. The maximum characters for the URL are 127 characters.

241	Web Link1 visible
	Displays or does not display the link to URL1 on the top page of the web system. [0 to 1 / 1 / 1] 0: Not display, 1:Display
242	Web Link2 Name
	Same as "-239"
243	Web Link2 URL
	Same as "-240"
244	Web Link2 visible
	Same as "-241"

5832	[HDD Formatting]	*CTL
001	HDD Formatting (ALL)	Initializes the hard disk. Use this SP mode only if there is a hard disk error.
002	HDD Formatting (IMH)	
003	HDD Formatting (Thumbnail)	
004	HDD Formatting (Job Log)	
005	HDD Formatting (Printer Fonts)	
006	HDD Formatting (User Info)	
007	HDD Formatting (Mail RX Data)	
008	HDD Formatting (Mail TX Data)	
009	HDD Formatting (Data for a Design)	
010	HDD Formatting (Log)	
011	HDD Formatting (Ridoc I/F)	

5836	[Capture Settings]	*CTL
001	Capture Function (0:Off 1:On)	0: Disable, 1: Enable
	With this function disabled, the settings related to the capture feature cannot be initialized, displayed, or selected.	
002	Panel Setting	0: Displayed, 1: Not displayed
	Displays or does not display the capture function buttons.	
<p>5836-71 to 5836-78, Copier and Printer Document Reduction</p> <p>The following 6 SP modes set the default reduction for stored documents sent to the document management server via the MLB.</p> <p>Enabled only when optional MLB (Media Link Board) is installed.</p>		
071	Reduction for Copy Color	0: 1to-1, 1: 1/2, 2: 1/3 , 3: 1/4
072	Reduction for Copy B&W Text	0: 1to-1 , 1: 1/2, 2: 1/3, 3: 1/4, 6: 2/3
073	Reduction for Copy B&W Other	0: 1to-1 , 1: 1/2, 2: 1/3, 3: 1/4, 6: 2/3
074	Reduction for Printer Color	0: 1to-1, 1: 1/2, 2: 1/3 , 3: 1/4
075	Reduction for Printer B&W	0: 1to-1 , 1: 1/2, 2: 1/3, 3: 1/4, 6: 2/3
077	Reduction for Printer Color 1200dpi	1: 1/2, 3: 1/4, 4: 1/6 , 5: 1/8 (2: skipped) , 6: 2/3
078	Reduction for Printer B&W 1200dpi	1: 1/2 , 3: 1/4, 4: 1/6, 5: 1/8 (2: skipped) , 6: 2/3
<p>5836-81 to 5836-86, Stored document format</p> <p>The following 6 SP modes set the default format for stored documents sent to the document management server via the MLB.</p> <p>Enabled only when optional MLB (Media Link Board) is installed.</p>		
081	Format for Copy Color	<p>0: JFIF/JPEG, 1: TIFF/MMR, 2: TIFF/MH, 3: TIFF/MR</p> <p> Note</p> <ul style="list-style-type: none"> ▪ This SP is not used in this model.

082	Format for Copy B&W Text	0: JFIF/JPEG, 1: TIFF/MMR , 2: TIFF/MH, 3: TIFF/MR
083	Format Copy B&W Other	0: JFIF/JPEG, 1: TIFF/MMR , 2: TIFF/MH, 3: TIFF/MR
084	Format for Printer Color	0: JFIF/JPEG , 1: TIFF/MMR, 2: TIFF/MH, 3: TIFF/MR  Note ▪ This SP is not used in this model.
085	Format for Printer B&W	0: JFIF/JPEG, 1: TIFF/MMR , 2: TIFF/MH, 3: TIFF/MR
091	Default for JPEG	[5 to 95 / 50 / 1 /step]
	Sets the JPEG format default for documents sent to the document management server via the MLB with JPEG selected as the format. Enabled only when optional MLB (Media Link Board) is installed.	
101	Primary srv IP address	Sets the IP address for the primary capture server. This is basically adjusted by the remote system.
102	Primary srv scheme	This is basically adjusted by the remote system.
103	Primary srv port number	This is basically adjusted by the remote system.
104	Primary srv URL path	This is basically adjusted by the remote system.
111	Secondary srv IP address	Sets the IP address for the secondary capture server. This is basically adjusted by the remote system.
112	Secondary srv scheme	This is basically adjusted by the remote system.

113	Secondary srv port number	This is basically adjusted by the remote system.
114	Secondary srv URL path	This is basically adjusted by the remote system.
120	Default Reso Rate Switch	This is basically adjusted by the remote system.
121	Reso: Copy(Color)	[0 to 3 / 2 / 1/step]
	Selects the resolution for color copy mode. This is basically adjusted by the remote system. 0: 600dpi/ 1: 300dpi/ 2: 150dpi/ 3: 75dpi	
122	Reso: Copy(Mono)	[0 to 5 / 3 / 1/step]
	Selects the resolution for BW copy mode. This is basically adjusted by the remote system. 0: 600dpi/ 1: 400dpi/ 2: 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi	
123	Reso: Print(Color)	[0 to 3 / 2 / 1/step]
	Selects the resolution for color print mode. This is basically adjusted by the remote system. 0: 600dpi/ 1: 300dpi/ 2: 150dpi/ 3: 75dpi	
124	Reso: Print(Mono)	[0 to 5 / 3 / 1/step]
	Selects the resolution for BW print mode. This is basically adjusted by the remote system. 0: 600dpi/ 1: 400dpi/ 2: 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi	
126	Reso: Fax(Mono)	[0 to 6 / 3 / 1/step]
	Selects the resolution for BW fax mode. This is basically adjusted by the remote system. 0: 600dpi/ 1: 400dpi/ 2: 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi/ 6: 75dpi	

127	Reso: Scanner(Color)	[0 to 6 / 4 / 1/step]
	Selects the resolution for color scanning mode. This is basically adjusted by the remote system. 0: 600dpi/ 1: 400dpi/ 2: 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi/ 6: 75dpi	
128	Reso: Scanner(Mono)	[0 to 6 / 3 / 1/step]
	Selects the resolution for BW scanning mode. This is basically adjusted by the remote system. 0: 600dpi/ 1: 400dpi/ 2: 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi/ 6: 75dpi	

5840	[IEEE 802.11]	
006	Channel Max	*CTL Europe/Asia: 1 to 13 NA/ Asia: 1 to 11
	Sets the maximum number of channels available for data transmission via the wireless LAN. The number of channels available varies according to location. The default settings are set for the maximum end of the range for each area. Adjust the upper 4 bits to set the maximum number of channels. DFU Note <ul style="list-style-type: none"> Do not change the setting. 	

	Channel Min	*CTL	[1 to 11 or 13 / 1 / 1 /step] Europe: 1 to 13 NA/ Asia: 1 to 11
007	<p>Sets the minimum number of channels available for data transmission via the wireless LAN. The number of channels available varies according to location. The default settings are set for the minimum end of the range for each area. Adjust the lower 4 bits to set the minimum number of channels. DFU</p> <p>Note</p> <ul style="list-style-type: none"> Do not change the setting. 		
008	Transmission Speed	*CTL	<p>[0 x 00 to 0 x FF / 0 x FF to Auto / -] 0 x FF to Auto [Default] 0 x 11 - 55M Fix 0 x 10 - 48M Fix 0 x 0F - 36M Fix 0 x 0E - 18M Fix 0 x 0D - 12M Fix 0 x 0B - 9M Fix 0 x 0A - 6M Fix 0 x 07 - 11M Fix 0 x 05 - 5.5M Fix 0 x 08 - 1M Fix 0 x 13 - 0 x FE (reserved) 0 x 12 - 72M (reserved) 0 x 09 - 22M (reserved)</p>
011	WEP key Select	*CTL	<p>Selects the WEP key. [00 to 11 / 00 / 1 binary] 00: Key #1 01: Key #2 (Reserved) 10: Key #3 (Reserved) 11: Key #4 (Reserved)</p>

042	Fragment Thresh	*CTL	Adjusts the fragment threshold for the IEEE802.11 card. [256 to 2346 / 2346 / 1] This SP is displayed only when the IEEE802.11 card is installed.
043	11g CTS to Self	*CTL	Determines whether the CTS self function is turned on or off. [0 to 1 / 1 / 1] 0: Off, 1: On This SP is displayed only when the IEEE802.11 card is installed.
044	11g Slot Time	*CTL	Selects the slot time for IEEE802.11. [0 to 1 / 0 / 1] 0: 20 um, 1: 9 um
045	WPA Debug Lvl	*CTL	Selects the debug level for WPA authentication application. [1 to 3 / 3 / 1] 1: Info, 2: warning, 3: error] This SP is displayed only when the IEEE802.11 card is installed.

5841	[Supply Name Setting]		
001	Toner Name Setting:Black	*CTL	Specifies supply names. These appear on the screen when the user presses the Inquiry button in the user tools screen.
002	Toner Name Setting:Cyan	*CTL	
003	Toner Name Setting:Yellow	*CTL	
004	Toner Name Setting:Magenta	*CTL	
007	OrgStamp	*CTL	
011	Staple Std1	*CTL	
012	Staple Std2	*CTL	
013	Staple Std3	*CTL	
014	Staple Std4	*CTL	

021	Staple Bind 1	*CTL	
022	Staple Bind 2	*CTL	
023	Staple Bind 3	*CTL	

5844	[USB]		
001	Transfer Rate	*CTL	0001: Full speed 0004: Auto Change
002	Vendor ID	*CTL	Displays the vendor ID. DFU
003	Product ID	*CTL	Displays the product ID. DFU
004	Device Release Number	*CTL	Displays the development release version number. DFU

5845	[Delivery Server Setting]	*CTL	
	Provides items for delivery server settings.		
001	FTP Port No.		[1 to 65535 / 3670 / 1 /step]
	Sets the FTP port number used when image files to the Scan Router Server.		
002	IP Address (Primary)		Range: 000.000.000.000 to 255.255.255.255
	Use this SP to set the Scan Router Server address. The IP address under the transfer tab can be referenced by the initial system setting.		
006	Delivery Error Display Time		[0 to 999 / 300 / 1 second /step]
	Use this setting to determine the length of time the prompt message is displayed when a test error occurs during document transfer with the NetFile application and an external device.		
008	IP Address (Secondary)		Range: 000.000.000.000 to 255.255.255.255
	Specifies the IP address assigned to the computer designated to function as the secondary delivery server of Scan Router. This SP allows only the setting of the IP address without reference to the DNS setting.		

009	Delivery Server Model	[0 to 4/ 0 / 1 /step]
	Allows changing the model of the delivery server registered by the I/O device. 0: Unknown 1: SG1 Provided 2: SG1 Package 3: SG2 Provided 4: SG2 Package	
010	Delivery Svr. Capability	[0 to 255 / - / 1 /step]
	Bit7 = 1 Comment information exists	Changes the capability of the registered that the I/O device registered.
	Bit6 = 1 Direct specification of mail address possible	
	Bit5 = 1 Mail RX confirmation setting possible	
	Bit4 = 1 Address book automatic update function exists	
	Bit3 = 1 Fax RX delivery function exists	
	Bit2 = 1 Sender password function exists	
	Bit1 = 1 Function to link MK-1 user and Sender exists	
	Bit0 = 1 Sender specification required (if set to 1, Bit6 is set to "0")	
011	Delivery Svr Capability (Ext)	[0 to 255 / - / 1 /step]
	Changes the capability of the registered that the I/O device registered. Bit7 = 1 Address book usage limitation (Limitation for each authorized user) Bit6 = 1 RDH authorization link Bit5 to 0: Not used	
013	Server Scheme (Primary) DFU	
	This is used for the scan router program.	
014	Server Port Number (Primary) DFU	
	This is used for the scan router program.	
015	Server URL Path (Primary) DFU	
	This is used for the scan router program.	

016	Server Scheme (Secondary) DFU
	This is used for the scan router program.
017	Server Port Number (Secondary) DFU
	This is used for the scan router program.
018	Server URL Path (Secondary) DFU
	This is used for the scan router program.
022	Rapid Sending Control
	Enables or disables the prevention function for the continuous data sending error. [0 to 1 / 1 / -] 0: Disable, 1: Enable

5847	[Rep Resolution Reduction]	*CTL
	<p>SP5847-1 through SP5847-8 changes the default settings of image data transferred externally by the Net File page reference function. [0 to 5 / 2 / 1 /step]</p> <p>SP5847-21 sets the default for JPEG image quality of image files handled by NetFile.</p> <p>"Net files" are jobs to be printed from the document server using a PC and the DeskTopBinder software.</p>	
001	Rate for Copy Color	0: 1x
002	Rate for Copy B&W Text	1: 1/2x 2: 1/3x
003	Rate for Copy B&W Other	3: 1/4x
004	Rate for Printer Color	4: 1/6x
005	Rate for Printer B&W	5: 1/8x 6: 2/3x
021	Network Quality Default for JPEG	

	<p>Sets the default value for the quality of JPEG images sent as NetFile pages. This function is available only with the MLB (Media Link Board) option installed.</p> <p>[5 to 95 / 50 / 1 /step]</p>
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	[Web Service]	*CTL
5848	<p>SP5848-2 sets the 4-bit switch assignment for the access control setting. A setting of 0001 has no effect on access and delivery from Scan Router.</p> <p>5848 100 sets the maximum size allowed for downloaded images. The default is equal to 1 gigabyte.</p>	
002	Access Ctrl: Repository (only Lower 4 bits)	<p>0000: No access control</p> <p>0001: Denies access to DeskTop Binder.</p> <p>0010: No writing control</p>
003	Access Control: Doc. Svr. Print (Lower 4 bits)	<p>Switches access control on and off.</p> <p>0000: No access control</p> <p>0001: Denies access to DeskTop Binder.</p>
004	Access Control: uirectory (Lower 4 bits)	
007	Access Ctrl: Comm. Log Fax (Lower 4 bits)	
009	Access Ctrl: Job Ctrl (Lower 4 bits)	
011	Access Ctrl: Devicemanagement (Lower 4bits)	
021	Access Ctrl: Delivery (Lower 4 bits)	
022	Access Ctrl: uadministration (Lower 4bits)	
099	Repository: Download Image Setting	DFU

100	Repository: Download Image Max. Size	Specifies the max size of the image data that the machine can download. [1 to 2048 / 2048 / 1 MB /step]
217	Setting: Timing	N/A

5849	[Installation Date]	*CTL
001	Display	The "Counter Clear Day" has been changed to "Installation Date" or "Inst. Date".
002	Switch to Print	Determines whether the installation date is printed on the printout for the total counter. [0 or 1 / 1 / -] 0: OFF (No Print) 1: ON (Print)
003	Total Counter	Displays the total counter at set the setting day (SP5849-001). [0 to 99999999 / 0 / 1/step]


5851	[Bluetooth]	*CTL
001	Mode	
	Sets the operation mode for the Bluetooth Unit. Press either key. [0:Public][1:Private]	

5856	[Remote ROM Update]	
	Allows the technician to upgrade the firmware using a local port (IEEE1284) when updating the remote ROM.	
002	Local Port	*CTL [0 or 1 / 0 / 1/step] 0: Disable 1: Enable

5857	[Save Debug Log]	*CTL
	On/Off (1:ON 0:OFF)	
001	Switches the debug log feature on and off. The debug log cannot be captured until this feature is switched on. [0 or 1 / 0 / 1/step] 0: OFF, 1: ON	
	Target (2: HDD 3: SD)	
002	Selects the storage device to save debug logs information when the conditions set with SP5-858 are satisfied. [1 to 3 / 2 / 1 /step] 1: IC card, 2: HDD, 3: SD card	
	Save to HDD	
005	Saves the debug log of the input SC number in memory to the HDD. A unique file name is generated to avoid overwriting existing file names on the SD Card. Up to 4MB can be copied to an SD Card. 4 MB segments can be copied one by one to each SD Card.	
	Save to SD Card	
006	Saves the debug log of the input SC number in memory to the SD card.	
009	Copy HDD to SD Card(Latest 4MB)	
010	Copy HDD to SD Card(Latest 4MB Any Key)	
011	Erase HDD Debug Data	
012	Erase SD Card Debug Data	
013	Free Space on SD Card	
014	Copy SD to SD(Latest 4MB)	
015	Copy SD to SD(Latest 4MB Any Key)	
016	Make HDD Debug	
017	Make SD Debug	

5858	[Debug Save When]	*CTL
	<p>These SPs select the content of the debugging information to be saved to the destination selected by SP5857-002.</p> <p>SP5858-3 stores one SC specified by number. Refer to Section 4 for a list of SC error codes.</p>	
001	Engine SC Error (0:OFF 1:ON)	Turns on/off the debug save for SC codes generated by printer engine errors. [0 or 1 / 0 / 1/ step]
002	Controller SC Error (0:OFF 1:ON)	Turns on/off the debug save for SC codes generated by GW controller errors. [0 or 1 / 0 / 1/ step]
003	Any SC Error	[0 to 65535 / 0 / 1 /step]
004	Jam(0:OFF 1:ON)	Turns on/off the debug save for jam errors. [0 or 1 / 0 / 1/ step]

5859	[Debug Save Key No.]	*CTL
001	Key 1	<p>These SPs allow you to set up to 10 keys for log files for functions that use common memory on the controller board.</p> <p>[–9999999 to 9999999 / 0 / –]</p>
002	Key 2	
003	Key 3	
004	Key 4	
005	Key 5	
006	Key 6	
007	Key 7	
008	Key 8	
009	Key 9	
010	Key 10	

5860	[SMTP/POP3/IMAP4]	*CTL
020	Partial Mail Receive Timeout	[1 to 168 / 72 / 1hour/step]
	Sets the amount of time to wait before saving a mail that breaks up during reception. The received mail is discarded if the remaining portion of the mail is not received during this prescribed time.	
021	MDN Response RFC2298 Compliance	[0 or 1 / 1 / -]
	Determines whether RFC2298 compliance is switched on for MDN reply mail. 0: No 1: Yes	
022	SMTP Auth. From Field Replacement	[0 or 1 / 0 / -]
	Determines whether the FROM item of the mail header is switched to the validated account after the SMTP server is validated. 0 : No. "From" item not switched. 1: Yes. "From" item switched.	
025	SMTP Auth. Direct Setting	[0 or 1 / - / -]
	<p>Selects the authentication method for SMPT.</p> <p>Bit switch:</p> <ul style="list-style-type: none"> ▪ Bit 0: LOGIN ▪ Bit 1: PLAIN ▪ Bit 2: CRAM MD5 ▪ Bit 3: DIGEST MD5 ▪ Bit 4 to 7: Not used <p> Note</p> <ul style="list-style-type: none"> ▪ This SP is activated only when SMTP authorization is enabled by UP mode. 	

026	S/MIME: MIME Header Setting	Selects the MIME header type of an E-mail sent by S/MIME. [0 to 2 / 0 / 1] 0: Microsoft Outlook Express standard 1: Internet Draft standard 2: RFC standard
028	S/MIME: Authentication Check	[0 to 1 / 0 / 1] 0: Check 1: No check

5869	[RAM Disk Setting]	*CTL
001	Mail Function	Set whether the RAM disk is used or not used when using the mail functions. [0 or 1 / 0 / 1] 0:OFF, 1:ON

5870	[Common keyInfo]		
001	Writing	*CTL	Writes to flash ROM the common proof for validating the device for @Remote specifications.
003	Initialize	*CTL	Initializes the data area of the common proof for validating.

5873		[SDCardAppliMove]	
001	MoveExec	*CTL	This SP copies the application programs from the original SD card in SD card slot 2 to an SD card in SD card slot 1.
002	UndoExec	*CTL	This SP copies back the application programs from an SD card in SD Card Slot 2 to the original SD card in SD card slot 1. Use this menu when you have mistakenly copied some programs by using "Move Exec" (SP5873-1).

5875		[SC Auto Reboot]	
001	Reboot Setting	*CTL	<p>Enables or disables the automatic reboot function when an SC error occurs.</p> <p>[0 or 1 / 0 / -]</p> <p>0: The machine reboots automatically when the machine issues an SC error and logs the SC error code. If the same SC occurs again, the machine does not reboot.</p> <p>1: The machine does not reboot when an SC error occurs.</p> <p>The reboot is not executed for Type A or C SC codes.</p>
002	Reboot Type	*CTL	<p>Selects the reboot method for SC.</p> <p>[0 or 1 / 0 / -]</p> <p>0: Manual reboot, 1: Automatic reboot</p>

5878	[Option Setup]		
001	Data Overwrite Security	*CTL	Enables the Data Overwrite Security unit. Press "EXECUTE" on the operation panel. Then turn the machine off and on.
002	HDD Encryption	*CTL	Installs the HDD Encryption unit.

5881	[Fixed Phrase Block Erasing]		
001	-	*CTL	Deletes the fixed phrase.

5885	[Set WIM Function] Web Image Monitor Settings		
	Close or disclose the functions of web image monitor.		
020	DocSvr Acc Ctrl	*CTL	0: OFF, 1: ON Bit Meaning 0: Forbid all document server access (1) 1: Forbid user mode access (1) 2: Forbid print function (1) 3: Forbid fax TX (1) 4: Forbid scan sending (1) 5: Forbid downloading (1) 6: Forbid delete (1) 7: Reserved
101	Set Encryption	*CTL	Determines whether the scanned documents with the WIM are encrypted when they are transmitted by an e-mail. [0 to 1 / 0 / 1] 0: Not encrypted, 1:Encryption

5888	[Personal Information Protect]		
001	-	*CTL	Selects the protection level for logs. [0 to 1 / 0 / 1} 0: No authentication, No protection for logs 1: No authentication, Protected logs (only an administrator can see the logs)

5893	[SDK Application Counter]	*CTL	
	Displays the counter name of each SDK application.		
001	SDK-1		
002	SDK-2		
003	SDK-3		
004	SDK-4		
005	SDK-5		
006	SDK-6		

5894	[External Counter Setting]		
	Test Name1_1		
001	Switch Charge Mode	*ENG	[0 to 2 / 0 / 1/step]

5907	[Plug & Play Maker/Model Name]	*CTL	
001	Selects the brand name and the production name for Windows Plug & Play. This information is stored in the NVRAM. If the NVRAM is defective, these names should be registered again. After selecting, press the "Original Type" key and "#" key at the same time. When the setting is completed, the beeper sounds five times.		

5913	[Switchover Permission Time]		
	Print Application Timer	*CTL	[3 to 30 / 3 / 1 second /step]
002	Sets the amount of time to elapse while the machine is in standby mode (and the operation panel keys have not been used) before another application can gain control of the display.		

5967	[Copy Server Set Function]	*CTL	[0 or 1 / 0 / -] 0: Enable, 1: Disable
001	Enables and disables the document server. This is a security measure that prevents image data from being left in the temporary area of the HDD. After changing this setting, you must switch the main switch off and on to enable the new setting.		

5974	[Cherry Server]		
	Specifies which version of ScanRouter, "Lite" or "Full", is installed.		
001	(0:Light 1:Full)	*CTL	[0 or 1 / 0 / -]

5987	[Mech Counter]		
001	0: OFF / 1: ON	*ENG	This SP detects that a mechanical counter device is removed. If it is detected, SC610 occurs.

5990	[SP Print Mode]		
	Prints out the SMC sheets.		
001	All(Data List)	*CTL	-
002	SP(Mode Data List)	*CTL	
003	User Program	*CTL	
004	Logging Data	*CTL	

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005	Diagnostic Report	*CTL	
006	Non-Default	*CTL	
007	NIB Summary	*CTL	
008	Capture Log	*CTL	
021	Copier User Program	*CTL	
022	Scanner SP	*CTL	
023	Scanner User Program	*CTL	
024	SDK/J Summary	*CTL	
025	SDK/J Application Info	*CTL	

5992	[SP Text Mode]		
	Exports the SMC sheet data to the SD Card.		
001	All(Data List)	*CTL	Press "Execute" key to start exporting the SMC data in the SP mode display.
002	SP(Mode Data List)	*CTL	
003	User Program	*CTL	
004	Logging Data	*CTL	
005	Diagnostic Report	*CTL	
006	Non-Default	*CTL	
007	NIB Summary	*CTL	
008	Capture Log	*CTL	
021	Copier User Program	*CTL	
022	Scanner SP	*CTL	
023	Scanner User Program	*CTL	
024	SDK/J Summary	*CTL	
025	SDK/J Application Info	*CTL	

026	Printer SP	*CTL	
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5998	[Fusing Cont mode]		
	Turns the silent fusing warm-up mode on or off.		
001	fast/silent	*ENG	[0 to 1 / 1 / -] 0: Silent (less noise) 1: Fast (less time)

5.7 MAIN SP TABLES-6

5.7.1 SP6-XXX (PERIPHERALS)

6006	[ADF Adjustment]		
001	Face	*ENG	Adjusts the side-to-side and leading registration of originals with the ARDF. [-2.0 to 2.0 / 0.0 / 0.1mm/step]
002	Side-to-Side	*ENG	
003	Leading Edge Duplex Front	*ENG	Adjusts the side-to-side and leading registration of originals with the ARDF. [-5.0 to 5.0 / 0.0 / 0.1mm/step]
004	Leading Edge Duplex Rear	*ENG	
007	Rear Edge Erase	*ENG	Adjusts the erase margin at the original trailing edge. [-5.0 to 5.0 / 0.0 / 0.1mm/step]

6007	[ADF INPUT Check]		
	Displays the signals received from the sensors and switches of the ARDF. Only Bit 0 is used for ADF input check.		
009	Original Detection	*ENG	[0 or 1 / 0 / 1/step]
013	Registration Sensor	*ENG	[0 or 1 / 0 / 1/step]
015	Feed Cover	*ENG	[0 or 1 / 0 / 1/step]

6008	[ADF OUTPUT Check]		
	Activates the electrical components for functional check. It is not possible to activate more than one component at the same time.		
003	Paper Feed Motor Rotating	*ENG	[0 or 1 / 0 / 1/step]
004	Paper Feed Motor Counter-rotating	*ENG	[0 or 1 / 0 / 1/step]

009	Paper Feed Solenoid	*ENG	[0 or 1 / 0 / 1/step]
011	Paper Feed Reverse Solenoid	*ENG	[0 or 1 / 0 / 1/step]

6009	[ADF Free Run]		
	Performs a DF free run in simplex, duplex mode or stamp mode.		
001	Simplex Motion	*ENG	[0 or 1 / 0 / 1/step]
002	Duplex Motion	*ENG	[0 or 1 / 0 / 1/step]

6017	[ADF Adjustment Magnification]		
	Adjusts the magnification in the sub-scan direction for the ARDF.		
001	-	*ENG	[-5.0 to 5.0 / 0 / 0.1 %/step]

6021	[ARDF Motor]		
001	Gain selection	*ENG	[0 to 2 / 0 / 1/step] 0: Common 1: Only for GX060050 2: Only for GX060040

6910	[ADF Adjustment]		
001	Shading Time	*ENG	[0 to 90 / 60 / 1 sec/step]

5.8 MAIN SP TABLES-7

5.8.1 SP7-XXX (DATA LOG)

7401	[Total SC]	
	Displays the number of SC codes detected.	
	*CTL	[00000 to 65535 / - / -/step]
001	SC Counter	
002	Total SC Counter	

7403	[SC History]	
	Logs the SC codes detected. The 10 most recently detected SC Codes are not displayed on the screen, but can be seen on the SMC (logging) outputs.	
	*CTL	[-]
001	Latest	
002	Latest 1	
003	Latest 2	
004	Latest 3	
005	Latest 4	
006	Latest 5	
007	Latest 6	
008	Latest 7	
009	Latest 8	
010	Latest 9	

7404	[SC991 History]	
	Logs the SC Code 991 detected. The 10 most recently detected SC Code 991s are not displayed on the screen, but can be seen on the SMC (logging) outputs.	
	*CTL	[-]
001	Latest	
002	Latest 1	
003	Latest 2	
004	Latest 3	
005	Latest 4	
006	Latest 5	
007	Latest 6	
008	Latest 7	
009	Latest 8	
010	Latest 9	

7502	[Total Paper Jam]	
	Displays the total number of jams detected.	
	* CTL	[00000 to 65535 / - / 1 sheet/step]
001	Jam Counter	
002	Total Jam Counter	

7503	[Total Original Jam]	
	Displays the total number of original jams detected.	
	* CTL	[00000 to 65535 / - / 1 sheet/step]
001	Original Jam Counter	
002	Total Original Counter	

7504	[Paper Jam Count by Location]	
	ON: On check, OFF: Off check	
	Displays the number of jams according to the location where jams were detected. For details, see "Jam Detection".	
	*CTL	[0000 to 9999 / - / -/step]
001	At Power On	
003	1st Paper Feed SN: Late	
004	2nd Paper Feed SN: Late	
005	3rd Paper Feed SN: Late	
008	4th Paper Feed SN: Late	
009	2nd Vertical Transport SN: Late	
012	3rd Vertical Transport SN: Late	
017	4th Vertical Transport SN: Late	
018	Relay SN: Late	
019	Registration SN: Late	
020	Fusing Exit SN: Late	
021	Exit Unit Entrance SN: Late	
025	Duplex Transport SN 1: Late	

026	Duplex Transport SN 2: Late
052	Duplex Transport SN 3: Late
053	Duplex Exit SN: Late
057	1st Paper Feed SN: Lag
060	2nd Paper Feed SN: Lag
061	LCT Paper Feed SN: Lag
065	3rd Vertical Transport SN: Lag
066	4th Vertical Transport SN: Lag

7505	[Original Jam Detection0]	
	ON: On check, OFF: Off Check	
	Displays the number of jams according to the location where jams were detected. For details, see "Jam Detection".	
	*CTL	[0000 to 9999 / - / 1/step]
001	At Power On	
003	Separation Sensor: On	
004	Skew Correction Sn: On	
005	Scanning Entrance Sn: On	
006	Registration Sensor: On	
007	Original Exit Sensor: On	
008	Reverse Sensor: On	
053	Separation Sensor: Off	
054	Skew Correction Sn: Off	
055	Scanning Entrance Sn: Off	
056	Registration Sensor: Off	

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057	Original Exit Sensor: Off
058	Reverse Sensor: Off

7506	[Jam Count by Paper Size]	
	Displays the number of jams according to the paper size.	
	*CTL	[0000 to 9999 / - / 1sheet /step]
005	A4 LEF	
006	A5 LEF	
014	B5 LEF	
038	LT LEF	
044	HLT LEF	
132	A3 SEF	
133	A4 SEF	
134	A5 SEF	
141	B4 SEF	
142	B5 SEF	
160	DLT SEF	
164	LG SEF	
166	LT SEF	
172	HLT SEF	
255	Others	

7507	[Plotter Jam History]	
	Displays the 10 most recently detected paper jams.	
	*CTL	[-]
001	Latest	
002	Latest 1	
003	Latest 2	
004	Latest 3	
005	Latest 4	
006	Latest 5	
007	Latest 6	
008	Latest 7	
009	Latest 8	
010	Latest 9	

7508	[Original Jam History]	
	Displays the 10 most recently detected original paper jams.	
	*CTL	[-]
001	Latest	
002	Latest 1	
003	Latest 2	
004	Latest 3	
005	Latest 4	
006	Latest 5	

007	Latest 6
008	Latest 7
009	Latest 8
010	Latest 9

7624	[Part Replacement Operation ON/OFF]	
	Displays the ROM version numbers of the main machine and connected peripheral devices. 0: No, 1:Yes	
	*CTL	[0 or 1 / - / 1 /step]
001	PCDU: Bk	
002	PCDU: C	
003	PCDU: M	
004	PCDU: Y	
005	ITB Unit	
006	Fusing Unit	
007	Transfer Unit	
008	Toner Collocation Bottle	
009	Developer: Bk	
010	Developer: M	
011	Developer: C	
012	Developer: Y	
013	Image Transfer Belt	

014	Image Transfer Cleaning Unit
015	Fusing Unit
016	Paper Transfer Roller Unit
017	Waste Toner bottle
018	Fusing Roller
019	Pressure Roller

7801	[ROM No/ Firmware Version]	
	Displays all versions and ROM numbers in the machine.	
	CTL	[-]
255	Firmware Version	

7803	[PM Counter Display] (Page, Unit, [Color])	
001 to 027	<p>Displays the number of sheets printed for each current maintenance unit. PM counters click up based on the number of A4 (LT) LEF size sheets printed. Therefore, the A3 (DLT) Double Count is activated. The Double Count cannot be deactivated.</p> <p>When a unit is replaced, the machine automatically detects that the new unit is installed.</p> <p>Then, the current PM counter value is automatically moved to the PM Counter – Previous (SP7-906-1 to 10) and is reset to “0”.</p> <p>The total number of sheets printed with the last unit replaced can be checked with SP7-906-1 to 10.</p> <p>Note</p> <ul style="list-style-type: none"> The LCT is counted as the 3rd feed station. 	
	*CTL: 001 ENG: Other than 001	[0 to 9999999 / - / - page/step]
	001	Paper
002	Page: PCU: K	

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003	Page: PCU: C
004	Page: PCU: M
005	Page: PCU: Y
006	Page: Development Unit: K
007	Page: Development Unit: C
008	Page: Development Unit: M
009	Page: Development Unit: Y
010	Page: Developer: K
011	Page: Developer: C
012	Page: Developer: M
013	Page: Developer: Y
014	Page: Image Transfer
015	Page: Image Transfer Cleaning
016	Page: Fusing Unit
017	Page: Fusing Roller
018	Page: Fusing Belt
019	Page: Second Image Transfer
020	Page: Toner Correction Bottle
022	Page: Fusing Pad
023	Page: Lubricant: PCU: K
024	Page: Lubricant: PCU: C
025	Page: Lubricant: PCU: M

026	Page: Lubricant: PCU: Y
027	Page: Lubricant: Image Transfer

7803	[PM Counter Display] (Page, Unit, [Color])	
031 to 048	<p>Displays the number of revolutions of motors or clutches for each current maintenance unit.</p> <p>When a unit is replaced, and SP7804-xxx is executed, the current PM counter value is moved to the PM Counter - Previous (SP7-906-11 to 20) and is reset to "0".</p> <p>The total number of revolutions made with the last unit replaced can be checked with SP7-906-11 to 20.</p>	
	ENG	[0 to 999999999 / - / 1 mm/step]
031	Rotation: PCU: K	
032	Rotation: PCU: C	
033	Rotation: PCU: M	
034	Rotation: PCU: Y	
035	Rotation: Development Unit: K	
036	Rotation: Development Unit: C	
037	Rotation: Development Unit: M	
038	Rotation: Development Unit: Y	
039	Rotation: Developer: K	
040	Rotation: Developer: C	
041	Rotation: Developer: M	
042	Rotation: Developer: Y	
043	Rotation: Image Transfer Belt	

044	Rotation: Image Transfer Clean
045	Rotation: Fusing Unit
046	Rotation: Fusing Roller
047	Rotation: Fusing Belt
048	Rotation: Second Image Transfer

7803	[PM Counter Display] (Page, Unit, [Color])	
	Displays the total amount of each waste toner bottle.	
	ENG	[0 to 999999999 / - / 1 mg/step]
049	Measurement: Toner Correction Bottle	

7803	[PM Counter Display] (Page, Unit, [Color])	
051 to 056	Displays the number of revolutions of motors or clutches for each current maintenance unit. When a unit is replaced, and SP7804-xxx is executed, the current PM counter value is moved to the PM Counter - Previous (SP7-906-11 to 20) and is reset to "0". The total number of revolutions made with the last unit replaced can be checked with SP7-906-11 to 20.	
	ENG	[0 to 999999999 / 0 / 1 mm/step]
051	Rotation: Fusing Pad	
052	Rotation: Lubricant: PCU: K	
053	Rotation: Lubricant: PCU: C	
054	Rotation: Lubricant: PCU: M	
055	Rotation: Lubricant: PCU: Y	
056	Rotation: Lubricant: Image Transfer	

7803	[PM Counter Display] (Page, Unit, [Color])	
	ENG	[0 to 999999999 / 0 / 1/step]
057	Time: Toner Sub Hopper: K	
058	Time: Toner Sub Hopper: C	
059	Time: Toner Sub Hopper: M	
060	Time: Toner Sub Hopper: Y	

7803	[PM Counter Display] (Page, Unit, [Color])	
	<p>Displays the value given by the following formula: (Current revolution / Target revolution) × 100. This shows how much of the unit's expected lifetime has been used up.</p> <p>The Rotation% counter is based on rotations, not prints. If the number of rotations reaches the limit, the machine enters the end condition for that unit. If the print count lifetime is reached first, the machine also enters the end condition, even though the R% counter is still less than 100%.</p>	
061 to 078	ENG	[0 to 255 / - / 1 %/step]
061	Rotation (%): PCU: K	
062	Rotation (%): PCU: C	
063	Rotation (%): PCU:M	
064	Rotation (%): PCU:Y	
065	Rotation (%): Development Unit: K	
066	Rotation (%): Development Unit: C	
067	Rotation (%): Development Unit: M	
068	Rotation (%): Development Unit: Y	
069	Rotation (%): Developer: K	

070	Rotation (%): Developer: C
071	Rotation (%): Developer: M
072	Rotation (%): Developer: Y
073	Rotation (%): Image Transfer
074	Rotation (%): Cleaning Unit
075	Rotation (%): Fusing Unit
076	Rotation (%): Fusing Roller
077	Rotation (%): Fusing Sleeve
078	Rotation (%): Second Image Transfer

7803	[PM Counter Display] (Page, Unit, [Color])	
079	<p>Displays the value given by the following formula: $(\text{Current revolution} / \text{Target revolution}) \times 100$. This shows how much of the unit's expected lifetime has been used up.</p> <p>The Rotation (%) counter is based on rotations, not prints. If the number of rotations reaches the limit, the machine enters the end condition for that unit. If the print count lifetime is reached first, the machine also enters the end condition, even though the R (%) counter is still less than 100%.</p>	
	ENG	[0 to 255 / - / 1 %/step]
	Measurement (%): Toner Correction Bottle	

7803	[PM Counter Display] (Page, Unit, [Color])	
081 to 086	Displays the value given by the following formula: (Current revolution / Target revolution) × 100. This shows how much of the unit's expected lifetime has been used up. The Rotation% counter is based on rotations, not prints. If the number of rotations reaches the limit, the machine enters the end condition for that unit. If the print count lifetime is reached first, the machine also enters the end condition, even though the R% counter is still less than 100%.	
	ENG	[0 to 255 / - / 1 %/step]
081	Rotation (%): Fusing Pad	
082	Rotation (%): Lubricant: PCU: K	
083	Rotation (%): Lubricant: PCU: C	
084	Rotation (%): Lubricant: PCU: M	
085	Rotation (%): Lubricant: PCU: Y	
086	Rotation (%): Lubricant: Image Transfer	

7803	[PM Counter Display] (Page, Unit, [Color])	
091 to 108	Displays the value given by the following formula: (Target printouts / Current printouts) × 100. This shows how much of the unit's expected lifetime has been used up. The Page% counter is based on printouts, not revolutions. If the number of printouts reaches the limit, the machine enters the end condition for that unit. If the revolution count lifetime is reached first, the machine also enters the end condition, even though the Page% counter is still less than 100%.	
	ENG	[0 to 255 / - / 1 %/step]
091	Page (%): PCU: K	
092	Page (%): PCU: C	
093	Page (%): PCU: M	
094	Page (%): PCU: Y	

095	Page (%): Development Unit: K
096	Page (%): Development Unit:C
097	Page (%): Development Unit:M
098	Page (%): Development Unit:Y
099	Page (%): Developer: K
100	Page (%): Developer: C
101	Page (%): Developer: M
102	Page (%): Developer: Y
103	Page (%): Image Transfer
104	Page (%): Cleaning Unit
105	Page (%): Fusing Unit
106	Page (%): Fusing Roller
107	Page (%): Fusing Sleeve
108	Page (%): Second Image Transfer

7803	[PM Counter Display] (Page, Unit, [Color])	
111 to 116	<p>Displays the value given by the following formula: $(\text{Target printouts} / \text{Current printouts}) \times 100$. This shows how much of the unit's expected lifetime has been used up.</p> <p>The Page% counter is based on printouts, not revolutions. If the number of printouts reaches the limit, the machine enters the end condition for that unit. If the revolution count lifetime is reached first, the machine also enters the end condition, even though the Page% counter is still less than 100%.</p>	
	ENG	[0 to 255 / - / 1 %/step]
111	Page (%): Fusing Pad	
112	Page (%): Lubricant: PCU: K	
113	Page (%): Lubricant: PCU: C	

114	Page (%): Lubricant: PCU: M
115	Page (%): Lubricant: PCU: Y
116	Page (%): Lubricant: Image Transfer

7803	[PM Counter Display] (Page, Unit, [Color])	
121 to 124	Displays the number of revolutions of motors or clutches at low speed for each current maintenance unit.	
	ENG	[0 to 999999999 / 0 / 1 mm/step]
121	Rotation: Low Speed: PCU: K	
122	Rotation: Low Speed: PCU: C	
123	Rotation: Low Speed: PCU: M	
124	Rotation: Low Speed: PCU: Y	

7804	[PM Counter Reset] PM Counter Clear (Unit, [Color])	
	Clears the PM counter. Press the Enter key after the machine asks "Execute?", which will store the PM countervalue in SP7-906 (PM Counter - Previous) and reset the value of the current PM counter (SP7-803) to "0".	
	CTL: 001 ENG: Other than 001	-
001	PM Counter Reset	
002	PCU: K	
003	PCU: C	
004	PCU: M	
005	PCU: Y	
006	PCU: All	
007	Development Unit: K	

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008	Development Unit:C
009	Development Unit:M
010	Development Unit:Y
011	Development Unit: All
012	Developer: K
013	Developer: C
014	Developer: M
015	Developer: Y
016	Developer: All
017	Image Transfer
018	Cleaning Unit
019	Fusing Unit
020	Fusing Roller
021	Fusing Sleeve
022	Second Image Transfer
023	Toner Correction Bottle
025	Fusing Pad
026	Lubricant: PCU: K
027	Lubricant: PCU: C
028	Lubricant: PCU: M
029	Lubricant: PCU: Y
030	Lubricant: PCU: All
031	Lubricant: Image Transfer
032	Toner Sub Hopper: K
033	Toner Sub Hopper: C

034	Toner Sub Hopper: M
035	Toner Sub Hopper: Y
036	Toner Sub Hopper: All
100	All

7826	[MF Error Counter]	
	Displays the number of count that can not be required the counting to MF counter device.	
	*CTL	[0000000 to 9999999 / - / -/step]
001	Error Total	
002	Error Staple	

7827	[MF Error Couter Clear]	
	Resets the MF counter device error counter.	
	CTL	[- / - / -]
001	Execute	

7832	[Self-Diagnose Result Display]	
	Displays the result of the diagnostics.	
	CTL	[- / - / -]
001	Diag. Result	

7835	[ACC Counter]	
	Displays the number of times of ACC counter.	
	*CTL	[0 to 9999999 / - / -/step]
001	Copy ACC	
002	Printer ACC	

7836 001	[Total Memory Size]	
	Displays the memory capacity of the controller system.	
	*CTL	[-]

7852	[DF Glass Dust Check]	
	Counts the number of occurrences (0 to 65,535) when dust was detected on the scanning glass of the ARDF or resets the dust detection counter. Counting is done only if SP4-020-1 (ARDF Scan Glass Dust Check) is switched on.	
	*ENG	
001	Dust Detection Counter	[0 to 9999 / - / 1 /step]
002	Dust Detection Clear Counter	[0 to 9999 / - / 1 /step]

7853	[Replacement Counter]	
	Displays the PM parts replacement number.	
	*ENG	[0 to 255 / - / 1 /step]
001	PCU: K	
002	PCU: C	
003	PCU: M	
004	PCU: Y	
005	Development Unit: K	

006	Development Unit: C
007	Development Unit: M
008	Development Unit: Y
009	Developer: K
010	Developer: C
011	Developer: M
012	Developer: Y
013	Image Transfer
014	Cleaning Unit
015	Fusing Unit
016	Fusing Roller
017	Fusing Sleeve
018	Second Image Transfer
019	Toner Correction Bottle
020	Fusing Pad
022	Lunbricant: PCU: K
023	Lunbricant: PCU: C
024	Lunbricant: PCU: M
025	Lunbricant: PCU: Y
026	Lunbricant: PCU: Image Transfer

7901	[Assert Info.]	
	Records the location where a problem is detected in the program. The data stored in this SP is used for problem analysis. DFU	
	*CTL	[-]
001	File Name	
002	Number of Lines	
003	Location	

7906	[Prev. Unit PM Counter]	
	(Page or Rotations, Unit, [Color]), Dev.: Development Unit	
001 to	Displays the number of sheets printed with the previous maintenance units.	
026	ENG	[0 to 9999999 / - / 1 page/step]
001	Page: PCU: K	
002	Page: PCU: C	
003	Page: PCU: M	
004	Page: PCU: Y	
005	Page: Development Unit: K	
006	Page: Development Unit: C	
007	Page: Development Unit: M	
008	Page: Development Unit: Y	
009	Page: Developer: K	
010	Page: Developer: C	
011	Page: Developer: M	

012	Page: Developer: Y
013	Page: Image Transfer
014	Page: Cleaning Unit
015	Page: Fusing Unit
016	Page: Fusing Roller
017	Page: Fusing Sleeve
018	Page: Second Image Transfer
019	Page: Toner Collection Bottle
020	Page: Fusing Pad
022	Page: Lubricant: PCU: K
023	Page: Lubricant: PCU: C
024	Page: Lubricant: PCU: M
025	Page: Lubricant: PCU: Y
026	Page: Lubricant: Image Transfer

7906	[Prev. Unit PM Counter] (Page or Rotations, Unit, [Color]), Dev.: Development Unit	
031 to 056	Displays the number of revolutions for motors or clutches in the previous maintenance units.	
	ENG	[0 to 999999999 / - / 1 mm/step]
031	Rotation: PCU: K	
032	Rotation: PCU: C	
033	Rotation: PCU: M	
034	Rotation: PCU: Y	
035	Rotation: Development Unit: K	

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036	Rotation: Development Unit: C
037	Rotation: Development Unit: M
038	Rotation: Development Unit: Y
039	Rotation: Developer: K
040	Rotation: Developer: C
041	Rotation: Developer: M
042	Rotation: Developer: Y
043	Rotation: Image Transfer
044	Rotation: Cleaning Unit
045	Rotation: Fusing Unit
046	Rotation: Fusing Roller
047	Rotation: Fusing Belt
048	Rotation: Second Image Transfer
049	Measurement: Toner Collection bottle
051	Rotation: Fusing Pad
052	Rotation: Lubricant: PCU: K
053	Rotation: Lubricant: PCU: C
054	Rotation: Lubricant: PCU: M
055	Rotation: Lubricant: PCU: Y
056	Rotation: Lubricant: Image Transfer

7906	[Prev. Unit PM Counter] (Page or Rotations, Unit, [Color]), Dev.: Development Unit	
061 to 086	Displays the value given by the following formula: (Yield revolution / Current revolution) x 100, where "Current revolution" is the current values in the counter for the part, and "Yield revolution" is the recommended yield.	
	ENG	[0 to 255 / - / 1 %/step]
061	Rotation %: PCU:K	
062	Rotation %: PCU:C	
063	Rotation %: PCU:M	
064	Rotation %: PCU:Y	
065	Rotation %: Development Unit: K	
066	Rotation %: Development Unit: C	
067	Rotation %: Development Unit: M	
068	Rotation %: Development Unit: Y	
069	Rotation %: Developer: K	
070	Rotation %: Developer: C	
071	Rotation %: Developer: M	
072	Rotation %: Developer: Y	
073	Rotation %: Image Transfer	
074	Rotation %: Cleaning Unit	
075	Rotation %: Fusing Unit	
076	Rotation %: Fusing Roller	
077	Rotation %: Fusing Sleeve	

078	Rotation %: Second Image Transfer
079	Measurement %: Toner Correction Bottle
081	Rotation %: Fusing Pad
082	Rotation %: Lubricant: PCU: K
083	Rotation %: Lubricant: PCU: C
084	Rotation %: Lubricant: PCU: M
085	Rotation %: Lubricant: PCU: Y
086	Rotation %: Lubricant: Image Transfer

7906	[Prev. Unit PM Counter] (Page or Rotations, Unit, [Color]), Dev.: Development Unit	
091 to 116	Displays the value given by the following formula: (Yield count / Current count) × 100, where "Current count" is the current values in the counter for the part, and "Yield count" is the recommended yield.	
	ENG	[0 to 255 / - / 1 %/step]
091	Page %: PCU: K	
092	Page %: PCU: C	
093	Page %: PCU: M	
094	Page %: PCU: Y	
095	Page %: Development Unit: K	
096	Page %: Development Unit: C	
097	Page %: Development Unit: M	
098	Page %: Development Unit: Y	
099	Page %: Developer: K	
100	Page %: Developer: C	
101	Page %: Developer: M	

102	Page %: Developer: Y
103	Page %: Image Transfer
104	Page %: Cleaning Unit
105	Page %: Fusing Unit
106	Page %: Fusing Roller
107	Page %: Fusing Sleeve
108	Page %: Second Image Transfer
109	Page %: Fusing Pad
112	Page %: Lubricant: PCU: K
113	Page %: Lubricant: PCU: C
114	Page %: Lubricant: PCU: M
115	Page %: Lubricant: PCU: Y
116	Page %: Lubricant: PCU: Image Transfer

7906	[Prev. Unit PM Counter] (Page or Rotations, Unit, [Color]), Dev.: Development Unit	
121 to 124	Displays the number of revolutions of motors or clutches at low speed for each previous maintenance unit.	
	ENG	[0 to 999999999 / - / 1 mm/step]
121	Rotation: Low Speed: PCU: K	
122	Rotation: Low Speed: PCU: C	
123	Rotation: Low Speed: PCU: M	
124	Rotation: Low Speed: PCU: Y	

7931	[Toner Bottle Bk]
	Displays the toner bottle information for Bk.
	*ENG
7932	[Toner Bottle M]
	Displays the toner bottle information for Ma.
	*ENG
7933	[Toner Bottle C]
	Displays the toner bottle information for Cy.
	*ENG
7934	[Toner Bottle Y]
	Displays the toner bottle information for Ye.
	*ENG

Last three digits for 7931 to 7934

793x-001	Machine Serial ID [0 to 255 / - / 1 /step]	793x-012	Toner Remaining [0 to 100 / - / 1% /step]
793x-002	Cartridge Ver [0 to 255 / - / 1 /step]	793x-013	EDP Code [0 to 1 / - / 1 /step]
793x-003	Brand ID [0 to 255 / - / 1 /step]	793x-014	End History [0 to 1 / - / 1 /step]
793x-004	Area ID [0 to 255 / - / 1 /step]	793x-015	Refill Information [0 to 1 / - / 1 /step]
793x-005	Product ID [0 to 255 / - / 1 /step]	793x-016	Attachment: Total Counter [0 to 99999999 / - / 1 /step]

793x-006	Color ID [0 to 255 / - / 1 /step]	793x-017	Attachment: Color Counter [0 to 99999999 / - / 1 /step]
793x-007	Maintenance ID [0 to 255 / - / 1 /step]	793x-018	End: Total Counter [0 to 99999999 / - / 1 /step]
793x-008	New Product Information [0 to 255 / - / 1 /step]	793x-019	End: Color Counter [0 to 99999999 / - / 1 /step]
793x-009	Recycle Counter [0 to 255 / - / 1 /step]	793x-020	Attachment Date [0 to 1 / - / 1 /step]
793x-010	Date [0 to 1 / - / 1 /step]	793x-021	End Date [0 to 1 / - / 1 /step]
793x-011	SerialNo. [0 to 1 / - / 1 /step]	-	-

7935	[Toner Bottle Log 1: Bk]
	Displays the toner bottle information log for Bk.
	*ENG
7936	[Toner Bottle Log 1: M]
	Displays the toner bottle information log for Ma.
	*ENG
7937	[Toner Bottle Log 1: C]
	Displays the toner bottle information log for Cy.
	*ENG
7938	[Toner Bottle Log 1: Y]
	Displays the toner bottle information log for Ye.
	*ENG

Last three digits for 7935 to 7938

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793x-001	Serial No. [0 to 1 / - / 1 /step]	Displays the toner bottle information log 1 for Bk, Ma, Cy, or Ye.
793x-002	Attachment Date [0 to 1 / - / 1 /step]	
793x-003	Attachment: Total Counter [0 to 99999999 / - / 1 /step]	
793x-004	Refill Information [0 to 1 / - / 1 /step]	
793x-011	Serial No. [0 to 1 / - / 1 /step]	Displays the toner bottle information log 2 for Bk, Ma, Cy, or Ye.
793x-012	Attachment Date [0 to 1 / - / 1 /step]	
793x-013	Attachment: Total Counter [0 to 99999999 / - / 1 /step]	
793x-014	Refill Information [0 to 1 / - / 1 /step]	
793x-021	Serial No. [0 to 1 / - / 1 /step]	Displays the toner bottle information log 3 for Bk, Ma, Cy, or Ye.
793x-022	Attachment Date [0 to 99999999 / - / 1 /step]	
793x-023	Attachment: Total Counter [0 to 1 / - / 1 /step]	
793x-024	Refill Information [0 to 1 / - / 1 /step]	
793x-031	Serial No. [0 to 1 / - / 1 /step]	Displays the toner bottle information log 4 for Bk, Ma, Cy, or Ye.
793x-032	Attachment Date [0 to 99999999 / - / 1 /step]	
793x-033	Attachment: Total Counter [0 to 1 / - / 1 /step]	

793x-034	Refill Information [0 to 1 / - / 1 /step]	Displays the toner bottle information log 5 for Bk, Ma, Cy, or Ye.
793x-041	Serial No. [0 to 1 / - / 1 /step]	
793x-042	Attachment Date [0 to 999999999 / - / 1 /step]	
793x-043	Attachment: Total Counter [0 to 1 / - / 1 /step]	
793x-044	Refill Information [0 to 1 / - / 1 /step]	

7950	[Unit Replacement Date]	
	Displays the replacement date of each PM unit.	
	*ENG	[0 to 1 / - / 1 /step]
001	Image Transfer	
002	Cleaning Unit	
003	Second Image Transfer	
004	Fusing Unit	
005	Fusing Roller	
006	Fusing Sleeve	
013	PCU: K	
014	PCU: C	
015	PCU: M	
016	PCU: Y	
017	Development Unit: K	
018	Development Unit: C	

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019	Development Unit: M
020	Development Unit: Y
021	Fusing Pad
022	Lubricant: PCU: K
023	Lubricant: PCU: C
024	Lubricant: PCU: M
025	Lubricant: PCU: Y
026	Lubricant: Image Transfer

7951	[Remaining Day Counter]	
001 to	Displays the remaining unit life of each PM unit.	
026	ENG	[0 to 255 / - / 1 days/step]
001	Page: PCU: K	
002	Page: PCU: C	
003	Page: PCU: M	
004	Page: PCU: Y	
005	Page: Development Unit: K	
006	Page: Development Unit: C	
007	Page: Development Unit: M	
008	Page: Development Unit: Y	
009	Page: Developer: K	
010	Page: Developer:Unit: C	
011	Page: Developer:Unit: M	
012	Page: Developer:Unit: Y	
013	Page: Image Transfer	

014	Page: Cleaning Unit
015	Page: Fusing Unit
016	Page: Fusing Roller
017	Page: Fusing Sleeve
018	Page: Second Image Transfer
019	Page: Fusing Pad
022	Page: Lubricant: PCU: K
023	Page: Lubricant: PCU: C
024	Page: Lubricant: PCU: M
025	Page: Lubricant: PCU: Y
026	Page: Lubricant: Image Transfer

7951	[Remaining Day Counter]	
027 to	Displays the remaining unit life of each PM unit.	
125	ENG	[0 to 255 / - / 1 days/step]
027	Rotation: PCU: K	
032	Rotation: PCU: C	
033	Rotation: PCU: M	
034	Rotation: PCU: Y	
035	Rotation: Development Unit: K	
036	Rotation: Development Unit: C	
037	Rotation: Development Unit: M	
038	Rotation: Development Unit: Y	
039	Rotation: Developer: K	
040	Rotation: Developer: C	

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041	Rotation: Developer: M
042	Rotation: Developer: Y
043	Rotation: Image Transfer
044	Rotation: Cleaning Unit
045	Rotation: Fusing Unit
046	Rotation: Fusing Roller
047	Rotation: Fusing Sleeve
048	Rotation: Second Image Transfer
049	Measurement : Toner Collection bottle
050	Rotation: Fusing Pad
052	Rotation: Lubricant: PCU: K
053	Rotation: Lubricant: PCU: C
054	Rotation: Lubricant: PCU: M
055	Rotation: Lubricant: PCU: Y
056	Rotation: Lubricant: Image Transfer
101	Minimum : PCU: K
102	Minimum : PCU: C
103	Minimum : PCU: M
104	Minimum : PCU: Y
105	Minimum : Development Unit: K
106	Minimum : Development Unit: C
107	Minimum : Development Unit: M
108	Minimum : Development Unit: Y

109	Minimum : Developer: K
110	Minimum : Developer: C
111	Minimum : Developer: M
112	Minimum : Developer: Y
113	Minimum : Image Transfer
114	Minimum : Cleaning Unit
115	Minimum : Fusing Unit
116	Minimum : Fusing Roller
117	Minimum : Fusing Sleeve
118	Minimum : Second Image Transfer
119	Minimum : Toner Collection bottle
120	Minimum : Fusing Pad
121	Minimum : Lubricant: PCU: K
122	Minimum : Lubricant: PCU: C
123	Minimum : Lubricant: PCU: M
124	Minimum : Lubricant: PCU: Y
125	Minimum : Lubricant: Image Transfer Unit

7952	[PM Yield Setting]	
001 to 016	Adjusts the unit yield of each PM unit.	
	ENG	
001	Life Rotation: Image Transfer Unit	[0 to 999999999 / - / 1 mm/step]
002	Life Rotation: Image Transfer Cleaning Unit	[0 to 999999999 / - / 1 mm/step]
003	Life Rotation: Fusing Unit	[0 to 999999999 / - / 1 mm/step]

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004	Life Rotation: Fusing Roller	
005	Life Rotation: Fusing Sleeve	
006	Life Rotation: Second Image Transfer	[0 to 999999999 / - / 1 mm/step]
007	Life Measurement:Tone Collection Bottle	[0 to 999999999 / - / 1 mg/step]
011	Life Page: Image Transfer	[0 to 999999 / - / 1 sheet/step]
012	Life Page: Cleaning Unit	[0 to 999999 / - / 1 sheet/step]
013	Life Page: Fusing Unit	
014	Life Page: Fusing Roller	[0 to 999999 / - / 1 sheet/step]
015	Life Page: Fusing Sleeve	
016	Life Page: Second Image Transfer	[0 to 999999 / - / 1 sheet/step]

7952	[PM Yield Setting]	
021 to	Adjusts the threshold day of the near end for each PM unit.	
024	ENG	[1 to 30 / - / 1 days/step] These threshold days are used for @Remote alarms.
021	Days threshold: PCU: K	
022	Days threshold: PCU: C	
023	Days threshold: PCU: M	
024	Days threshold: PCU: Y	

7952	[PM Yield Setting]	
025 to 037	Adjusts the threshold day of the near end for each PM unit.	
	ENG	[1 to 30 / - / 1 days/step] These threshold days are used for @Remote alarms.
025	Days threshold: Development Unit: K	
026	Days threshold: Development Unit: C	
027	Days threshold: Development Unit: M	
028	Days threshold: Development Unit: Y	
029	Days threshold: Developer: K	
030	Days threshold: Developer: C	
031	Days threshold: Developer: M	
032	Days threshold: Developer: Y	
033	Days threshold: Image Transfer	
034	Days threshold: Cleaning Unit	
035	Days threshold: Fusing Unit	
036	Days threshold: Fusing Roller	
037	Days threshold: Fusing Sleeve	

7952	[PM Yield Setting]	
038 to	Adjusts the threshold rotation of the near end for each PM unit.	
049	ENG	[0 to 999999999 / - / 1 mm/step]
038	Life Rotation: PCU: K	
039	Life Rotation: PCU: C	
040	Life Rotation: PCU: M	
041	Life Rotation: PCU: Y	
042	Life Rotation: Development Unit: K	
043	Life Rotation: Development Unit: C	
044	Life Rotation: Development Unit: M	
045	Life Rotation: Development Unit: Y	
046	Life Rotation: Developer: K	
047	Life Rotation: Developer: C	
048	Life Rotation: Developer: M	
049	Life Rotation: Developer: Y	

7952	[PM Yield Setting]	
050 to	Adjusts the threshold page of the near end for each PM unit.	
061	ENG	[0 to 999999 / - / 1 sheet/step]
050	Life Page: PCU: K	
051	Life Page: PCU: C	
052	Life Page: PCU: M	
053	Life Page: PCU: Y	
054	Life Page: Development Unit: K	
055	Life Page: Development Unit: C	

056	Life Page: Development Unit: M
057	Life Page: Development Unit: Y
058	Life Page: Developer: K
059	Life Page: Developer: C
060	Life Page: Developer: M
061	Life Page: Developer: Y

7952	[PM Yield Setting]	
062 to 070	Adjusts the threshold day of the near end for each PM unit.	
	ENG	[1 to 30 / - / 1 days/step] These threshold days are used for @Remote alarms.
062	Days Threshold: Second Image Transfer	
063	Days Threshold: Toner Correction Bottle	
065	Days Threshold: Fusing Pad	
066	Days Threshold: Lubricant: PCU: K	
067	Days Threshold: Lubricant: PCU: C	
068	Days Threshold: Lubricant: PCU: M	
069	Days Threshold: Lubricant: PCU: Y	
070	Days Threshold: Lubricant: Image Transfer	

7952	[PM Yield Setting]	
075 to 080	Adjusts the threshold rotation of the near end for each PM unit.	
	ENG	[0 to 999999999 / - / 1 mm/step] These threshold days are used for @Remote alarms.
075	Life Rotation: Fusing Pad	
076	Life Rotation: Lubricant: PCU: K	

Main SP Tables-7

077	Life Rotation: Lubricant: PCU: C
078	Life Rotation: Lubricant: PCU: M
079	Life Rotation: Lubricant: PCU: Y
080	Life Rotation: Lubricant: Image Transfer

7952	[PM Yield Setting]	
085 to 090	Adjusts the threshold page of the near end for each PM unit.	
	ENG	[0 to 999999 / - / 1 sheet/step] These threshold days are used for @Remote alarms.
085	Life Page: Fusing Pad	
086	Life Page: Lubricant: PCU: K	
087	Life Page: Lubricant: PCU: C	
088	Life Page: Lubricant: PCU: M	
089	Life Page: Lubricant: PCU: Y	
090	Life Page: Lubricant: Image Transfer	

7953	[Operation Env. Log: PCU: K]	
001 to 021	Displays the PCU rotation distance in each specified operation environment. T: Temperature (°C), H: Relative Humidity (%)	
	ENG	[0 to 99999999 / - / 1 mm/step]
001	T<=0	
002	0<T<=5:0<=H<30	
003	0<T<=5:30<=H<70	
004	0<T<=5:70<=H<=100	

005	5<T<15:0<=H<30
006	5<T<15:30<=H<55
007	5<T<15:55<=H<80
008	5<T<15:80<=H<=100
009	15<=T<25:0<=H<30
010	15<=T<25:30<=H<55
011	15<=T<25:55<=H<80
012	15<=T<25:80<=H<=100
013	25<=T<30:0<=H<30
014	25<=T<30:30<=H<55
015	25<=T<30:55<=H<80
016	25<=T<30:80<=H<=100
017	30<=T<35:0<=H<30
018	30<=T<35:30<=H<55
019	30<=T<35:55<=H<80
020	30<=T<35:80<=H<=100
021	35<=T

7954	[Operation Env.]	
	Clear the usage environment log.	
	ENG	[Excute]
001	Log Clear	

5.9 MAIN SP TABLES-8

5.9.1 SP8-XXX (DATA LOG2)

Many of these counters are provided for features that are currently not available, such as sending color faxes, and so on. However, here are some Group 8 codes that when used in combination with others, can provide useful information.

SP Numbers	What They Do
SP8211 to SP8216	The number of pages scanned to the document server.
SP8401 to SP8406	The number of pages printed from the document server.
SP8691 to SP8696	The number of pages sent from the document server.

Specifically, the following questions can be answered:

- How is the document server actually being used?
- What application is using the document server most frequently?
- What data in the document server is being reused?

Most of the SPs in this group are prefixed with a letter that indicates the mode of operation (the mode of operation is referred to as an "application"). Before reading the Group 8 Service Table, make sure that you understand what these prefixes mean.

Prefixes	What it means	
T:	Total: (Grand Total).	Grand total of the items counted for all applications (C, F, P, etc.).
C:	Copy application.	Totals (pages, jobs, etc.) executed for each application when the job was not stored on the document server.
F:	Fax application.	
P:	Print application.	
S:	Scan application.	

Prefixes	What it means	
L:	Local storage (document server)	Totals (jobs, pages, etc.) for the document server. The L: counters work differently case by case. Sometimes, they count jobs/pages stored on the document server; this can be in document server mode (from the document server window), or from another mode, such as from a printer driver or by pressing the Store File button in the Copy mode window. Sometimes, they include occasions when the user uses a file that is already on the document server. Each counter will be discussed case by case.
O:	Other applications (external network applications, for example)	Refers to network applications such as Web Image Monitor. Utilities developed with the SDK (Software Development Kit) will also be counted with this group in the future.

The Group 8 SP codes are limited to 17 characters, forced by the necessity of displaying them on the small LCDs of printers and faxes that also use these SPs. Read over the list of abbreviations below and refer to it again if you see the name of an SP that you do not understand.

Key for Abbreviations

Abbreviation	What it means
/	"By", e.g. "T:Jobs/Apl" = Total Jobs "by" Application
>	More (2> "2 or more", 4> "4 or more")
AddBook	Address Book
Apl	Application
B/W	Black & White
Bk	Black
C	Cyan
ColCr	Color Create

Abbreviation	What it means
ColMode	Color Mode
Comb	Combine
Comp	Compression
Deliv	Delivery
DesApl	Designated Application. The application (Copy, Fax, Scan, Print) used to store the job on the document server, for example.
Dev Counter	Development Count, no. of pages developed.
Dup, Duplex	Duplex, printing on both sides
Emul	Emulation
FC	Full Color
FIN	Post-print processing, i.e. finishing (punching, stapling, etc.)
Full Bleed	No Margins
GenCopy	Generation Copy Mode
GPC	Get Print Counter. For jobs 10 pages or less, this counter does not count up. For jobs larger than 10 pages, this counter counts up by the number that is in excess of 10 (e.g., for an 11-page job, the counter counts up $11-10=1$)
IFax	Internet Fax
ImgEdt	Image Edit performed on the original with the copier GUI, e.g. border removal, adding stamps, page numbers, etc.
K	Black (YMCK)
LS	Local Storage. Refers to the document server.
LSize	Large (paper) Size
Mag	Magnification
MC	One color (monochrome)

Abbreviation	What it means
NRS	New Remote Service, which allows a service center to monitor machines remotely. "NRS" is used overseas, "CSS" is used in Japan.
Org	Original for scanning
OrgJam	Original Jam
Palm 2	Print Job Manager/Desk Top Editor: A pair of utilities that allows print jobs to be distributed evenly among the printers on the network, and allows files to moved around, combined, and converted to different formats.
PC	Personal Computer
PGS	Pages. A page is the total scanned surface of the original. Duplex pages count as two pages, and A3 simplex count as two pages if the A3/DLT counter SP is switched ON.
PJob	Print Jobs
Ppr	Paper
PrtJam	Printer (plotter) Jam
PrtPGS	Print Pages
R	Red (Toner Remaining). Applies to the wide format model A2 only. This machine is under development and currently not available.
Rez	Resolution
SC	Service Code (Error SC code displayed)
Scn	Scan
Sim, Simplex	Simplex, printing on 1 side.
S-to-Email	Scan-to-E-mail
SMC	SMC report printed with SP5990. All of the Group 8 counters are recorded in the SMC report.

Abbreviation	What it means
Svr	Server
TonEnd	Toner End
TonSave	Toner Save
TXJob	Send, Transmission
YMC	Yellow, Magenta, Cyan
YMCK	Yellow, Magenta, Cyan, Black

Note

- All of the Group 8 SPs are reset with SP5 801 1 Memory All Clear.

8 001	T:Total Jobs	*CTL	<p>These SPs count the number of times each application is used to do a job. [0 to 9999999/ - / 1]</p> <p>Note: The L: counter is the total number of times the other applications are used to send a job to the document server, plus the number of times a file already on the document server is used.</p>
8 002	C:Total Jobs	*CTL	
8 003	F:Total Jobs	*CTL	
8 004	P:Total Jobs	*CTL	
8 005	S:Total Jobs	*CTL	
8 006	L:Total Jobs	*CTL	

- These SPs reveal the number of times an application is used, not the number of pages processed.
- When an application is opened for image input or output, this counts as one job.
- Interrupted jobs (paper jams, etc.) are counted, even though they do not finish.
- Only jobs executed by the customer are counted. Jobs executed by the customer engineer using the SP modes are not counted.
- When using secure printing (when a password is required to start the print job), the job is counted at the time when either "Delete Data" or "Specify Output" is specified.
- A job is counted as a fax job when the job is stored for sending.
- When a fax is received to fax memory, the F: counter increments but the L: counter does not (the document server is not used).
- A fax broadcast counts as one job for the F: counter (the fax destinations in the broadcast are

not counted separately).

- A fax broadcast is counted only after all the faxes have been sent to their destinations. If one transmission generates an error, then the broadcast will not be counted until the transmission has been completed.
- A printed fax report counts as one job for the F: counter.
- The F: counter does not distinguish between fax sending or receiving.
- When a copy job on the document server is printed, SP8022 also increments, and when a print job stored on the document server is printed, SP8024 also increments.
- When an original is both copied and stored on the document server, the C: and L: counters both increment.
- When a print job is stored on the document server, only the L: counter increments.
- When the user presses the Document Server button to store the job on the document server, only the L: counter increments.
- When the user enters document server mode and prints data stored on the document server, only the L: counter increments.
- When an image received from Palm 2 is received and stored, the L: counter increments.
- When the customer prints a report (user code list, for example), the O: counter increments. However, for fax reports and reports executed from the fax application, the F: counter increments.

8 011	T:Jobs/LS	*CTL	<p>These SPs count the number of jobs stored to the document server by each application, to reveal how local storage is being used for input. [0 to 9999999/ - / 1]</p> <p>The L: counter counts the number of jobs stored from within the document server mode screen at the operation panel.</p>
8 012	C:Jobs/LS	*CTL	
8 013	F:Jobs/LS	*CTL	
8 014	P:Jobs/LS	*CTL	
8 015	S:Jobs/LS	*CTL	
8 016	L:Jobs/LS	*CTL	
8 017	O:Jobs/LS	*CTL	

- When a scan job is sent to the document server, the S: counter increments. When you enter document server mode and then scan an original, the L: counter increments.
- When a print job is sent to the document server, the P: counter increments.
- When a network application sends data to the document server, the O: counter increments.
- When an image from Palm 2 is stored on the document server, the O: counter increments.
- When a fax is sent to the document server, the F: counter increments.

Main SP Tables-8

8 021	T:Pjob/LS	*CTL	These SPs reveal how files printed from the document server were stored on the document server originally. [0 to 9999999/ - / 1] The L: counter counts the number of jobs stored from within the document server mode screen at the operation panel.
8 022	C:Pjob/LS	*CTL	
8 023	F:Pjob/LS	*CTL	
8 024	P:Pjob/LS	*CTL	
8 025	S:Pjob/LS	*CTL	
8 026	L:Pjob/LS	*CTL	
8 027	O:Pjob/LS	*CTL	

- When a copy job stored on the document server is printed with another application, the C: counter increments.
- When an application like DeskTopBinder merges a copy job that was stored on the document server with a print job that was stored on the document server, the C: and P: counters both increment.
- When a job already on the document server is printed with another application, the L: counter increments.
- When a scanner job stored on the document server is printed with another application, the S: counter increments. If the original was scanned from within document server mode, then the L: counter increments.
- When images stored on the document server by a network application (including Palm 2), are printed with another application, the O: counter increments.
- When a copy job stored on the document server is printed with a network application (Web Image Monitor, for example), the C: counter increments.
- When a fax on the document server is printed, the F: counter increments.

8 031	T:Pjob/DesApl	*CTL	These SPs reveal what applications were used to output documents from the document server. [0 to 9999999/ - / 1] The L: counter counts the number of jobs printed from within the document server mode screen at the operation panel.
8 032	C:Pjob/DesApl	*CTL	
8 033	F:Pjob/DesApl	*CTL	
8 034	P:Pjob/DesApl	*CTL	
8 035	S:Pjob/DesApl	*CTL	
8 036	L:Pjob/DesApl	*CTL	
8 037	O:Pjob/DesApl	*CTL	

- When documents already stored on the document server are printed, the count for the application that started the print job is incremented.
- When the print job is started from a network application (Desk Top Binder, Web Image Monitor, etc.) the L: counter increments.

8 041	T:TX Jobs/LS	*CTL	These SPs count the applications that stored files on the document server that were later accessed for transmission over the telephone line or over a network (attached to an e-mail, or as a fax image by I-Fax). [0 to 99999999/ - / 1] Note: Jobs merged for sending are counted separately. The L: counter counts the number of jobs scanned from within the document server mode screen at the operation panel.
8 042	C:TX Jobs/LS	*CTL	
8 043	F:TX Jobs/LS	*CTL	
8 044	P:TX Jobs/LS	*CTL	
8 045	S:TX Jobs/LS	*CTL	
8 046	L:TX Jobs/LS	*CTL	
8 047	O:TX Jobs/LS	*CTL	

- When a stored copy job is sent from the document server, the C: counter increments.
- When images stored on the document server by a network application or Palm2 are sent as an e-mail, the O: counter increments.

8 051	T:TX Jobs/DesApl	*CTL	These SPs count the applications used to send files from the document server over the telephone line or over a network (attached to an e-mail, or as a fax image by I-Fax). Jobs merged for sending are counted separately. [0 to 99999999/ - / 1] The L: counter counts the number of jobs sent from within the document server mode screen at the operation panel.
8 052	C:TX Jobs/DesApl	*CTL	
8 053	F:TX Jobs/DesApl	*CTL	
8 054	P:TX Jobs/DesApl	*CTL	
8 055	S:TX Jobs/DesApl	*CTL	
8 056	L:TX Jobs/DesApl	*CTL	
8 057	O:TX Jobs/DesApl	*CTL	

- If the send is started from Desk Top Binder or Web Image Monitor, for example, then the O: counter increments.

Main SP Tables-8

8 061	T:FIN Jobs	*CTL	[0 to 9999999/ - / 1]
	These SPs total the finishing methods. The finishing method is specified by the application.		
8 062	C:FIN Jobs	*CTL	[0 to 9999999/ - / 1]
	These SPs total finishing methods for copy jobs only. The finishing method is specified by the application.		
8 063	F:FIN Jobs	*CTL	[0 to 9999999/ - / 1]
	These SPs total finishing methods for fax jobs only. The finishing method is specified by the application. Note: Finishing features for fax jobs are not available at this time.		
8 064	P:FIN Jobs	*CTL	[0 to 9999999/ - / 1]
	These SPs total finishing methods for print jobs only. The finishing method is specified by the application.		
8 065	S:FIN Jobs	*CTL	[0 to 9999999/ - / 1]
	These SPs total finishing methods for scan jobs only. The finishing method is specified by the application. Note: Finishing features for scan jobs are not available at this time.		
8 066	L:FIN Jobs	*CTL	[0 to 9999999/ - / 1]
	These SPs total finishing methods for jobs output from within the document server mode screen at the operation panel. The finishing method is specified from the print window within document server mode.		
8 067	O:FIN Jobs	*CTL	[0 to 9999999/ - / 1]
	These SPs total finishing methods for jobs executed by an external application, over the network. The finishing method is specified by the application.		

Last three digits for SP8 061 to 067

8 06x 001	Sort	Number of jobs started in Sort mode. When a stored copy job is set for Sort and then stored on the document server, the L: counter increments. (See SP8 066 1)
8 06x 002	Stack	Number of jobs started out of Sort mode.
8 06x 003	Staple	Number of jobs started in Staple mode.
8 06x 004	Booklet	Number of jobs started in Booklet mode. If the machine is in staple mode, the Staple counter also increments.
8 06x 005	Z-Fold	Number of jobs started In any mode other than the Booklet mode and set for folding (Z-fold).
8 06x 006	Punch	Number of jobs started in Punch mode. When Punch is set for a print job, the P: counter increments. (See SP8 064 6.)
8 06x 007	Other	Reserved. Not used.
8 06x 008	Inside-Fold	Not used
8 06x 009	Three-IN-Fold	Not used
8 06x 010	Three-OUT-Fold	Not used
8 06x 011	Four-Fold	Not used
8 06x 012	KANNON-Fold	Not used
8 06x 013	Perfect-Bind	Not used
8 06x 014	Ring-Bind	Not used

Main SP Tables-8

8 071	T:Jobs/PGS	*CTL	[0 to 9999999/ - / 1]
	These SPs count the number of jobs broken down by the number of pages in the job, regardless of which application was used.		
8 072	C:Jobs/PGS	*CTL	[0 to 9999999/ - / 1]
	These SPs count and calculate the number of copy jobs by size based on the number of pages in the job.		
8 073	F:Jobs/PGS	*CTL	[0 to 9999999/ - / 1]
	These SPs count and calculate the number of fax jobs by size based on the number of pages in the job.		
8 074	P:Jobs/PGS	*CTL	[0 to 9999999/ - / 1]
	These SPs count and calculate the number of print jobs by size based on the number of pages in the job.		
8 075	S:Jobs/PGS	*CTL	[0 to 9999999/ - / 1]
	These SPs count and calculate the number of scan jobs by size based on the number of pages in the job.		
8 076	L:Jobs/PGS	*CTL	[0 to 9999999/ - / 1]
	These SPs count and calculate the number of jobs printed from within the document server mode window at the operation panel, by the number of pages in the job.		
8 077	O:Jobs/PGS	*CTL	[0 to 9999999/ - / 1]
	These SPs count and calculate the number of "Other" application jobs (Web Image Monitor, Palm 2, etc.) by size based on the number of pages in the job.		

Last three digits for SP8 071 to 077

8 07x 001	1 Page	8 07x 8	21 to 50 Pages
8 07x 002	2 Pages	8 07x 9	51 to 100 Pages
8 07x 003	3 Pages	8 07x 10	101 to 300 Pages
8 07x 004	4 Pages	8 07x 11	301 to 500 Pages
8 07x 005	5 Pages	8 07x 12	501 to 700 Pages
8 07x 006	6 to 10 Pages	8 07x 13	701 to 1000 Pages
8 07x 007	11 to 20 Pages	8 07x 14	More than 1001 Pages

- For example: When a copy job stored on the document server is printed in document server mode, the appropriate L: counter (SP8076 0xx) increments.
- Printing a fax report counts as a job and increments the F: counter (SP 8073).
- Interrupted jobs (paper jam, etc.) are counted, even though they do not finish.
- If a job is paused and re-started, it counts as one job.
- If the finisher runs out of staples during a print and staple job, then the job is counted at the time the error occurs.
- For copy jobs (SP 8072) and scan jobs (SP 8075), the total is calculated by multiplying the number of sets of copies by the number of pages scanned. (One duplex page counts as 2.)
- The first test print and subsequent test prints to adjust settings are added to the number of pages of the copy job (SP 8072).
- When printing the first page of a job from within the document server screen, the page is counted.

8 111	T:FAX TX Jobs	*CTL	[0 to 9999999/ 0 / 1]
	These SPs count the total number of jobs (color or black-and-white) sent by fax, either directly or using a file stored on the document server, on a telephone line. Note: Color fax sending is not available at this time.		
8 113	F: FAX TX Jobs	*CTL	[0 to 9999999/ 0 / 1]
	These SPs count the total number of jobs (color or black-and-white) sent by fax directly on a telephone line. Note: Color fax sending is not available at this time.		

Main SP Tables-8

8 11x 001	B/W
8 11x 002	Color

- These counters count jobs, not pages.
- This SP counts fax jobs sent over a telephone line with a fax application, including documents stored on the document server.
- If the mode is changed during the job, the job will count with the mode set when the job started.
- If the same document is faxed to both a public fax line and an I-Fax at a destination where both are available, then this counter increments, and the I-Fax counter (8 12x) also increments.
- The fax job is counted when the job is scanned for sending, not when the job is sent.

8 121	T:IFAX TX Jobs	*CTL	[0 to 9999999/ - / 1]
	These SPs count the total number of jobs (color or black-and-white) sent, either directly or using a file stored on the document server, as fax images using I-Fax. Note: Color fax sending is not available at this time.		
8 123	F: IFAX TX Jobs	*CTL	[0 to 9999999/ - / 1]
	These SPs count the number of jobs (color or black-and-white) sent (not stored on the document server), as fax images using I-Fax. Note: Color fax sending is not available at this time.		
8 12x 001	B/W		
8 12x 002	Color		

- These counters count jobs, not pages.
- The counters for color are provided for future use; the color fax feature is not available at this time.
- The fax job is counted when the job is scanned for sending, not when the job is sent.

8 131	T:S-to-Email Jobs	*CTL	[0 to 9999999/ - / 1]
	These SPs count the total number of jobs (color or black-and-white) scanned and attached to an e-mail, regardless of whether the document server was used or not.		
8 135	S: S-to-Email Jobs	*CTL	[0 to 9999999/ - / 1]
	These SPs count the number of jobs (color or black-and-white) scanned and attached to e-mail, without storing the original on the document server.		
8 13x 001	B/W		
8 13x 002	Color		
8 13x 003	ACS		

- These counters count jobs, not pages.
- If the job is stored on the document server, after the job is stored it is determined to be color or black-and-white then counted.
- If the job is cancelled during scanning, or if the job is cancelled while the document is waiting to be sent, the job is not counted.
- If the job is cancelled during sending, it may or may not be counted, depending on what stage of the process had been reached when the job was cancelled.
- If several jobs are combined for sending to the Scan Router, Scan-to-Email, or Scan-to-PC, or if one job is sent to more than one destination. each send is counted separately. For example, if the same document is sent by Scan-to-Email as well as Scan-to-PC, then it is counted twice (once for Scan-to-Email and once for Scan-to-PC).

Main SP Tables-8

8 141	T:Deliv Jobs/Svr	*CTL	[0 to 9999999/ - / 1]
	These SPs count the total number of jobs (color or black-and-white) scanned and sent to a Scan Router server.		
8 145	S: Deliv Jobs/Svr	*CTL	[0 to 9999999/ - / 1]
	These SPs count the number of jobs (color or black-and-white) scanned in scanner mode and sent to a Scan Router server.		
8 14x 001	B/W		
8 14x 002	Color		
8 14x 003	ACS		

- These counters count jobs, not pages.
- The jobs are counted even though the arrival and reception of the jobs at the Scan Router server cannot be confirmed.
- If even one color image is mixed with black-and-white images, then the job is counted as a "Color" job.
- If the job is cancelled during scanning, or if the job is cancelled while the document is waiting to be delivered, the job is not counted.
- If the job is cancelled during sending, it may or may not be counted, depending on what stage of the process had been reached when the job was cancelled.
- Even if several files are combined for sending, the transmission counts as one job.

8 151	T:Deliv Jobs/PC	*CTL	[0 to 9999999/ - / 1]
	These SPs count the total number of jobs (color or black-and-white) scanned and sent to a folder on a PC (Scan-to-PC). Note: At the present time, 8 151 and 8 155 perform identical counts.		
8 155	S:Deliv Jobs/PC	*CTL	[0 to 9999999/ - / 1]
	These SPs count the total number of jobs (color or black-and-white) scanned and sent with Scan-to-PC.		
8 15x 001	B/W		
8 15x 002	Color		

8 15x 003	ACS
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- These counters count jobs, not pages.
- If the job is cancelled during scanning, it is not counted.
- If the job is cancelled while it is waiting to be sent, the job is not counted.
- If the job is cancelled during sending, it may or may not be counted, depending on what stage of the process had been reached when the job was cancelled.
- Even if several files are combined for sending, the transmission counts as one job.

8 161 001	T:PCFAX TX Jobs	*CTL	These SPs count the number of PC Fax transmission jobs. A job is counted from when it is registered for sending, not when it is sent. [0 to 9999999/ - / 1] Note: At the present time, these counters perform identical counts.
8 163 001	F:PCFAX TX Jobs	*CTL	

- This counts fax jobs started from a PC using a PC fax application, and sending the data out to the destination from the PC through the copier.

8 171	T:Deliv Jobs/WSD	*CTL	These SPs count the pages scanned by WS. [0 to 9999999/ - / 1]
8 175	S:Deliv Jobs/WSD	*CTL	
-001	B/W		
-002	Color		
-003	ACS		

8 181	T:Scan to Media Jobs	*CTL	These SPs count the scanned pages in a media by the scanner application. [0 to 9999999/ - / 1]
8 185	S:Scan to Media Jobs	*CTL	
-001	B/W		
-002	Color		
-003	ACS		

Main SP Tables-8

8 191-001	T:Total Scan PGS	*CTL	These SPs count the pages scanned by each application that uses the scanner to scan images. [0 to 9999999/ - / 1]
8 192-001	C:Total Scan PGS	*CTL	
8 193-001	F:Total Scan PGS	*CTL	
8 195-001	S:Total Scan PGS	*CTL	
8 196-001	L:Total Scan PGS	*CTL	

- SP 8 191 to 8 196 count the number of scanned sides of pages, not the number of physical pages.
- These counters do not count reading user stamp data, or reading color charts to adjust color.
- Previews done with a scanner driver are not counted.
- A count is done only after all images of a job have been scanned.
- Scans made in SP mode are not counted.

Examples

- If both sides of 3 A4 sheets are copied and stored to the document server using the Store File button in the Copy mode window, the C: count is 6 and the L: count is 6.
- If both sides of 3 A4 sheets are copied but not stored, the C: count is 6.
- If you enter document server mode then scan 6 pages, the L: count is 6.

8 201-001	T:LSize Scan PGS A3/DLT, Larger	*CTL	[0 to 9999999/ - / 1]
	These SPs count the total number of large pages input with the scanner for scan and copy jobs. Large size paper scanned for fax transmission is not counted. Note: These counters are displayed in the SMC Report, and in the User Tools display.		
8 203-001	F: LSize Scan PGS A3/DLT, Larger	*CTL	[0 to 9999999/ - / 1]
	These SPs count the total number of large pages input with the scanner for fax transmission. Note: These counters are displayed in the SMC Report, and in the User Tools display.		

8 205 -001	S:LSize Scan PGS A3/DLT, Larger	*CTL	[0 to 9999999/ - / 1]
	These SPs count the total number of large pages input with the scanner for scan jobs only. Large size paper scanned for fax transmission is not counted. Note: These counters are displayed in the SMC Report, and in the User Tools display.		

8 211 -001	T:Scan PGS/LS	*CTL	These SPs count the number of pages scanned into the document server [0 to 9999999/ - / 1] The L: counter counts the number of pages stored from within the document server mode screen at the operation panel, and with the Store File button from within the Copy mode screen.
8 212 -001	C:Scan PGS/LS	*CTL	
8 213 -001	F:Scan PGS/LS	*CTL	
8 215 -001	S:Scan PGS/LS	*CTL	
8 216 -001	L:Scan PGS/LS	*CTL	

- Reading user stamp data is not counted.
- If a job is cancelled, the pages output as far as the cancellation are counted.
- If the scanner application scans and stores 3 B5 sheets and 1 A4 sheet, the S: count is 4.
- If pages are copied but not stored on the document server, these counters do not change.
- If both sides of 3 A4 sheets are copied and stored to the document server, the C: count is 6 and the L: count is 6.
- If you enter document server mode then scan 6 pages, the L: count is 6.

8 221	ADF Org Feeds	*CTL	[0 to 9999999/ - / 1]
	These SPs count the number of pages fed through the ADF for front and back side scanning.		
8 221 -001	Front Number of front sides fed for scanning: With an ADF that can scan both sides simultaneously, the Front side count is the same as the number of pages fed for either simplex or duplex scanning. With an ADF that cannot scan both sides simultaneously, the Front side count is the same as the number of pages fed for duplex front side scanning. (The front side is determined by which side the user loads face up.)		
	8 221 -002	Back Number of rear sides fed for scanning: With an ADF that can scan both sides simultaneously, the Back count is the same as the number of pages fed for duplex scanning. With an ADF that cannot scan both sides simultaneously, the Back count is the same as the number of pages fed for duplex rear-side scanning.	

- When 1 sheet is fed for duplex scanning the Front count is 1 and the Back count is 1.
- If a jam occurs during the job, recovery processing is not counted to avoid double counting. Also, the pages are not counted if the jam occurs before the first sheet is output.

8 231	Scan PGS/Mode	*CTL	[0 to 9999999/ - / 1]
	These SPs count the number of pages scanned by each ADF mode to determine the work load on the ADF.		
8 231 -001	Large Volume	Selectable. Large copy jobs that cannot be loaded in the ADF at one time.	
8 231 -002	SADF	Selectable. Feeding pages one by one through the ADF.	
8 231 -003	Mixed Size	Selectable. Select "Mixed Sizes" on the operation panel.	
8 231 -004	Custom Size	Selectable. Originals of non-standard size.	

8 231 -005	Platen	Book mode. Raising the ADF and placing the original directly on the platen.
8 231 -006	Mixed 1side/ 2side	Simplex and Duplex mode.

- If the scan mode is changed during the job, for example, if the user switches from ADF to Platen mode, the count is done for the last selected mode.
- The user cannot select mixed sizes or non-standard sizes with the fax application so if the original's page sizes are mixed or non-standard, these are not counted.
- If the user selects "Mixed Sizes" for copying in the platen mode, the Mixed Size count is enabled.
- In the SADF mode if the user copies 1 page in platen mode and then copies 2 pages with SADF, the Platen count is 1 and the SADF count is 3.

8 241	T:Scan PGS/Org	*CTL	[0 to 9999999/ - / 1]
	These SPs count the total number of scanned pages by original type for all jobs, regardless of which application was used.		
8 242	C:Scan PGS/Org	*CTL	[0 to 9999999/ - / 1]
	These SPs count the number of pages scanned by original type for Copy jobs.		
8 243	F:Scan PGS/Org	*CTL	[0 to 9999999/ - / 1]
	These SPs count the number of pages scanned by original type for Fax jobs.		
8 245	S:Scan PGS/Org	*CTL	[0 to 9999999/ - / 1]
	These SPs count the number of pages scanned by original type for Scan jobs.		
8 246	L:Scan PGS/Org	*CTL	[0 to 9999999/ - / 1]
	These SPs count the number of pages scanned and stored from within the document server mode screen at the operation panel, and with the Store File button from within the Copy mode screen		

Last three digits for SP8 241 to 246

	8 241	8 242	8 243	8 245	8 246
8 24x-001: Text	Yes	Yes	Yes	Yes	Yes
8 24x-002: Text/Photo	Yes	Yes	Yes	Yes	Yes
8 24x-003: Photo	Yes	Yes	Yes	Yes	Yes
8 24x-004: GenCopy, Pale	Yes	Yes	No	Yes	Yes
8 24x-005: Map	Yes	Yes	No	No	Yes
8 24x-006: Normal/Detail	Yes	No	Yes	No	No
8 24x-007: Fine/Super Fine	Yes	No	Yes	No	No
8 24x-008: Binary	Yes	No	No	Yes	No
8 24x-009: Grayscale	Yes	No	No	Yes	No
8 24x-010: Color	Yes	No	No	Yes	No
8 24x-011: Other	Yes	Yes	Yes	Yes	Yes

- If the scan mode is changed during the job, for example, if the user switches from ADF to Platen mode, the count is done for the last selected mode.

8 251 -001	T:Scan PGS/ImgEdt	*CTL	<p>These SPs show how many times Image Edit features have been selected at the operation panel for each application. Some examples of these editing features are:</p> <ul style="list-style-type: none"> ▪ Erase → Border ▪ Erase → Center ▪ Image Repeat ▪ Centering ▪ Positive/Negative <p>[0 to 9999999/ - / 1]</p> <p>Note: The count totals the number of times the edit features have been used. A detailed breakdown of exactly which features have been used is not given.</p>
8 252 -001	C:Scan PGS/ImgEdt	*CTL	
8 255 -001	S : Scan PGS/ImgEdr	*CTL	
8 256 -001	L:Scan PGS/ImgEdt	*CTL	
8 257 -001	O:Scan PGS/ImgEdt	*CTL	

The L: counter counts the number of pages stored from within the document server mode screen at the operation panel, and with the Store File button from within the Copy mode screen.

8 261	T:Scn PGS/ColCr	*CTL	-
8 262	C:Scn PGS/ ColCr	*CTL	-
8 265	S:Scn PGS/Color	*CTL	-
8 266	L:Scn PGS/ColCr	*CTL	-

Last three digits for SP8 261, 262, 265 and 266

8 26x-001	Color Conversion	These SPs show how many times color creation features have been selected at the operation panel.
8 26x-002	Color Erase	
8 26x-003	Background	
8 26x-004	Other	

8 281 -001	T:Scan PGS/TWAIN	*CTL	These SPs count the number of pages scanned using a TWAIN driver. These counters reveal how the TWAIN driver is used for delivery functions. [0 to 9999999/ - / 1] Note: At the present time, these counters perform identical counts.
8 285 -001	S:Scan PGS/TWAIN	*CTL	

8 291 -001	T:Scan PGS/Stamp	*CTL	These SPs count the number of pages stamped with the stamp in the ADF unit. [0 to 9999999/ - / 1] The L: counter counts the number of pages stored from within the document server mode screen at the operation panel, and with the Store File button from within the Copy mode screen
8 293 -001	F:Scan PGS/Stamp	*CTL	
8 295 -001	S:Scan PGS/Stamp	*CTL	

8 301	T:Scan PGS/Size	*CTL	[0 to 9999999/ - / 1]
	These SPs count by size the total number of pages scanned by all applications. Use these totals to compare original page size (scanning) and output (printing) page size [SP 8-441].		
8 302	C:Scan PGS/Size	*CTL	[0 to 9999999/ - / 1]
	These SPs count by size the total number of pages scanned by the Copy application. Use these totals to compare original page size (scanning) and output (printing) page size [SP 8-442].		
8 303	F:Scan PGS/Size	*CTL	[0 to 9999999/ - / 1]
	These SPs count by size the total number of pages scanned by the Fax application. Use these totals to compare original page size (scanning) and output page size [SP 8-443].		
8 305	S:Scan PGS/Size	*CTL	[0 to 9999999/ - / 1]
	These SPs count by size the total number of pages scanned by the Scan application. Use these totals to compare original page size (scanning) and output page size [SP 8-445].		
8 306	L:Scan PGS/Size	*CTL	[0 to 9999999/ - / 1]
	These SPs count by size the total number of pages scanned and stored from within the document server mode screen at the operation panel, and with the Store File button from within the Copy mode screen. Use these totals to compare original page size (scanning) and output page size [SP 8-446].		

Last three digits for SP8 301 to 306

8 30x-001	A3	-	8 30x-007	LG
8 30x-002	A4	-	8 30x-008	LT
8 30x-003	A5	-	8 30x-009	HLT
8 30x-004	B4	-	8 30x-010	Full Bleed
8 30x-005	B5	-	8 30x-254	Other (Standard)
8 30x-006	DLT	-	8 30x-255	Other (Custom)

8 311	T:Scan PGS/Rez	*CTL	[0 to 9999999/ - / 1]
	These SPs count by resolution setting the total number of pages scanned by applications that can specify resolution settings.		
8 315	S: Scan PGS/Rez	*CTL	[0 to 9999999/ - / 1]
	These SPs count by resolution setting the total number of pages scanned by applications that can specify resolution settings. Note: At the present time, SP8-311 and SP8-315 perform identical counts.		

Last three digits for SP8 311 and 315

8 31x-001	1200 dpi
8 31x-002	600 dpi to 1199 dpi
8 31x-003	400 dpi to 599 dpi
8 31x-004	200 dpi to 399 dpi
8 31x-005	199 dpi or less

- Copy resolution settings are fixed so they are not counted.
- The Fax application does not allow finely-adjusted resolution settings so no count is done for the Fax application.

8 381-001	T:Total PrtPGS Field Number	*CTL	These SPs count the number of pages printed by the customer. The counter for the application used for storing the pages increments. [0 to 9999999/ - / 1] The L: counter counts the number of pages stored from within the document server mode screen at the operation panel. Pages stored with the Store File button from within the Copy mode screen go to the C: counter.
8 382-001	C:Total PrtPGS Field Number	*CTL	
8 383-001	F:Total PrtPGS Field Number	*CTL	
8 384-001	P:Total PrtPGS Field Number	*CTL	
8 385-001	S:Total PrtPGS Field Number	*CTL	

Main SP Tables-8

8 386-001	L:Total PrtPGS Field Number	*CTL	
8 387-001	O:Total PrtPGS Field Number	*CTL	

- When several documents are merged for a print job, the number of pages stored is counted for the application that stored them.
- These counters are used primarily to calculate charges on use of the machine, so the following pages are not counted as printed pages:
 - Blank pages in a duplex printing job.
 - Blank pages inserted as document covers, chapter title sheets, and slip sheets.
 - Reports printed to confirm counts.
 - All reports done in the service mode (service summaries, engine maintenance reports, etc.)
 - Test prints for machine image adjustment.
 - Error notification reports.
 - Partially printed pages as the result of a copier jam.

8 391-001	LSize PrtPGS A3/DLT, Larger	*CTL	[0 to 9999999/ - / 1]
	These SPs count pages printed on paper sizes A4/LT and larger. Note: In addition to being displayed in the SMC Report, these counters are also displayed in the User Tools display on the copy machine.		

8 401-001	T:PrtPGS/LS	*CTL	These SPs count the number of pages printed from the document server. The counter for the application used to print the pages is incremented. The L: counter counts the number of jobs stored from within the document server mode screen at the operation panel. [0 to 9999999/ - / 1]
8 402-001	C:PrtPGS/LS	*CTL	
8 403-001	F:PrtPGS/LS	*CTL	
8 404-001	P:PrtPGS/LS	*CTL	
8 405-001	S:PrtPGS/LS	*CTL	
8 406-001	L:PrtPGS/LS	*CTL	

- Print jobs done with Web Image Monitor and Desk Top Binder are added to the L: count.
- Fax jobs done with Web Image Monitor and Desk Top Binder are added to the F: count.

8 411-001	Prints/Duplex	*CTL	This SP counts the amount of paper (front/back counted as 1 page) used for duplex printing. Last pages printed only on one side are not counted. [0 to 9999999/ - / 1]
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8 421	T:PrtPGS/Dup Comb	*CTL	[0 to 9999999/ - / 1]
	These SPs count by binding and combine, and n-Up settings the number of pages processed for printing. This is the total for all applications.		
8 422	C:PrtPGS/Dup Comb	*CTL	[0 to 9999999/ - / 1]
	These SPs count by binding and combine, and n-Up settings the number of pages processed for printing by the copier application.		
8 423	F:PrtPGS/Dup Comb	*CTL	[0 to 9999999/ - / 1]
	These SPs count by binding and combine, and n-Up settings the number of pages processed for printing by the fax application.		
8 424	P:PrtPGS/Dup Comb	*CTL	[0 to 9999999/ - / 1]
	These SPs count by binding and combine, and n-Up settings the number of pages processed for printing by the printer application.		
8 425	S:PrtPGS/Dup Comb	*CTL	[0 to 9999999/ - / 1]
	These SPs count by binding and combine, and n-Up settings the number of pages processed for printing by the scanner application.		
8 426	L:PrtPGS/Dup Comb	*CTL	[0 to 9999999/ - / 1]
	These SPs count by binding and combine, and n-Up settings the number of pages processed for printing from within the document server mode window at the operation panel.		
8 427	O:PrtPGS/Dup Comb	*CTL	[0 to 9999999/ - / 1]
	These SPs count by binding and combine, and n-Up settings the number of pages processed for printing by Other applications		

Last three digits for SP8 421 to 427

Main SP Tables-8

8 42x-001	Simplex> Duplex	-
8 42x-002	Duplex> Duplex	-
8 42x-003	Book> Duplex	-
8 42x-004	Simplex Combine	-
8 42x-005	Duplex Combine	-
8 42x-006	2in1	2 pages on 1 side (2-Up)
8 42x-007	4in1	4 pages on 1 side (4-Up)
8 42x-008	6in1	6 pages on 1 side (6-Up)
8 42x-009	8in1	8 pages on 1 side (8-Up)
8 42x-010	9in1	9 pages on 1 side (9-Up)
8 42x-011	16in1	16 pages on 1 side (16-Up)
8 42x-012	Booklet	-
8 42x-013	Magazine	-
8 42x-014	2in1 + Booklet	-
8 42x-015	4in1 + Booklet	-
8 42x-016	6in1 + Booklet	-
8 42x-017	8in1 + Booklet	-
8 42x-018	9in1 + Booklet	-
8 42x-019	2in1 + Magazine	-
8 42x-020	4in1 + Magazine	-
8 42x-021	6in1 + Magazine	-
8 42x-022	8in1 + Magazine	-
8 42x-023	9in1 + Magazine	-
8 42x-024	16in1 + Magazine	-

- These counts (SP8 421 to SP8 427) are especially useful for customers who need to improve their compliance with ISO standards for the reduction of paper consumption.
- Pages that are only partially printed with the n-Up functions are counted as 1 page.
- Here is a summary of how the counters work for Booklet and Magazine modes:

Booklet			Magazine	
Original Pages	Count		Original Pages	Count
1	1		1	1
2	2		2	2
3	2		3	2
4	2		4	2
5	3		5	4
6	4		6	4
7	4		7	4
8	4		8	4

8 431	T:PrtPGS/ImgEdt	*CTL	[0 to 9999999/ - / 1]
	These SPs count the total number of pages output with the three features below, regardless of which application was used.		
8 432	C:PrtPGS/ImgEdt	*CTL	[0 to 9999999/ - / 1]
	These SPs count the total number of pages output with the three features below with the copy application.		
8 434	P:PrtPGS/ImgEdt	*CTL	[0 to 9999999/ - / 1]
	These SPs count the total number of pages output with the three features below with the print application.		
8 436	L:PrtPGS/ImgEdt	*CTL	[0 to 9999999/ - / 1]
	These SPs count the total number of pages output from within the document server mode window at the operation panel with the three features below.		

Main SP Tables-8

8 437	O:PrtPGS/ImgEdt	*CTL	[0 to 9999999/ - / 1]
	These SPs count the total number of pages output with the three features below with Other applications.		

Last three digits for SP8 431 to 437

8 43x-001	Cover/Slip Sheet	Total number of covers or slip sheets inserted. The count for a cover printed on both sides counts 2.
8 43x-002	Series/Book	The number of pages printed in series (one side) or printed as a book with booklet right/left pagination.
8 43x-003	User Stamp	The number of pages printed where stamps were applied, including page numbering and date stamping.

8 441	T:PrtPGS/Ppr Size	*CTL	[0 to 9999999/ - / 1]
	These SPs count by print paper size the number of pages printed by all applications.		
8 442	C:PrtPGS/Ppr Size	*CTL	[0 to 9999999/ - / 1]
	These SPs count by print paper size the number of pages printed by the copy application.		
8 443	F:PrtPGS/Ppr Size	*CTL	[0 to 9999999/ - / 1]
	These SPs count by print paper size the number of pages printed by the fax application.		
8 444	P:PrtPGS/Ppr Size	*CTL	[0 to 9999999/ - / 1]
	These SPs count by print paper size the number of pages printed by the printer application.		
8 445	S:PrtPGS/Ppr Size	*CTL	[0 to 9999999/ - / 1]
	These SPs count by print paper size the number of pages printed by the scanner application.		

8 446	L:PrtPGS/Ppr Size	*CTL	[0 to 9999999/ - / 1]
	These SPs count by print paper size the number of pages printed from within the document server mode window at the operation panel.		
8 447	O:PrtPGS/Ppr Size	*CTL	[0 to 9999999/ - / 1]
	These SPs count by print paper size the number of pages printed by Other applications.		

Last three digits for SP8 441 to 447

8 44x-001	A3
8 44x-002	A4
8 44x-003	A5
8 44x-004	B4
8 44x-005	B5
8 44x-006	DLT
8 44x-007	LG
8 44x-008	LT
8 44x-009	HLT
8 44x-010	Full Bleed
8 44x-254	Other (Standard)
8 44x-255	Other (Custom)

- These counters do not distinguish between LEF and SEF.

Main SP Tables-8

8 451	PrtPGS/Ppr Tray	*CTL	[0 to 9999999/ - / 1]
	These SPs count the number of sheets fed from each paper feed station.		
8 451-001	Bypass Tray	Bypass Tray	
8 451-002	Tray 1	Machine	
8 451-003	Tray 2	Paper Tray Unit (Option)	
8 451-004	Tray 3	Paper Tray Unit (Option)	
8 451-005	Tray 4	Paper Tray Unit (Option)	
8 451-006	Tray 5	Not used	
8 451-007	Tray 6	Not used	
8 451-008	Tray 7	Not used	
8 451-009	Tray 8	Not used	
8 451-010	Tray 9	Not used	
8 451-011	Tray10	Not used	
8 451-012	Tray11	Not used	
8 451-013	Tray12	Not used	
8 451-014	Tray13	Not used	
8 451-015	Tray14	Not used	
8 451-016	Tray15	Not used	

8 461	T:PrtPGS/Ppr Type	*CTL	[0 to 9999999/ - / 1]
	<p>These SPs count by paper type the number pages printed by all applications.</p> <ul style="list-style-type: none"> ▪ These counters are not the same as the PM counter. The PM counter is based on feed timing to accurately measure the service life of the feed rollers. However, these counts are based on output timing. ▪ Blank sheets (covers, chapter covers, slip sheets) are also counted. ▪ During duplex printing, pages printed on both sides count as 1, and a page printed on one side counts as 1. 		
8 462	C:PrtPGS/Ppr Type	*CTL	[0 to 9999999/ - / 1]
	<p>These SPs count by paper type the number pages printed by the copy application.</p>		
8 463	F:PrtPGS/Ppr Type	*CTL	[0 to 9999999/ - / 1]
	<p>These SPs count by paper type the number pages printed by the fax application.</p>		
8 464	P:PrtPGS/Ppr Type	*CTL	[0 to 9999999/ - / 1]
	<p>These SPs count by paper type the number pages printed by the printer application.</p>		
8 466	L:PrtPGS/Ppr Type	*CTL	[0 to 9999999/ - / 1]
	<p>These SPs count by paper type the number pages printed from within the document server mode window at the operation panel.</p>		

Last three digits for SP8 461 to 466

8 46x-001	Normal
8 46x-002	Recycled
8 46x-003	Special
8 46x-004	Thick
8 46x-005	Normal (Back)
8 46x-006	Thick (Back)

Main SP Tables-8

8 46x-007	OHP
8 46x-008	Other

8 471	PrtPGS/Mag	*CTL	[0 to 9999999/ - / 1]
	These SPs count by magnification rate the number of pages printed.		
8 471-001	49% or less		
8 471-002	50% to 99%		
8 471-003	100%		
8 471-004	101% to 200%		
8 471-005	201% or more		

- Counts are done for magnification adjusted for pages, not only on the operation panel but performed remotely with an external network application capable of performing magnification adjustment as well.
- Magnification adjustments done with printer drivers with PC applications such as Excel are also counted.
- Magnification adjustments done for adjustments after they have been stored on the document server are not counted.
- Magnification adjustments performed automatically during Auto Reduce/Enlarge copying are counted.
- The magnification rates of blank cover sheets, slip sheets, etc. are automatically assigned a rate of 100%.

8 481-001	T:PrtPGS/TonSave	*CTL	[0 to 9999999/ - / 1]
8 484-001	P:PrtPGS/TonSave	*CTL	[0 to 9999999/ - / 1]
<p>These SPs count the number of pages printed with the Toner Save feature switched on.</p> <p>Note: These SPs return the same results as this SP is limited to the Print application.</p>			

8 491	T:PrtPGS/Col Mode	*CTL	These SPs count the number of pages printed in the Color Mode by each application.
8 492	C:PrtPGS/Col Mode	*CTL	
8 493	F:PrtPGS/Col Mode	*CTL	
8 496	L:PrtPGS/Col Mode	*CTL	
8 497	O:PrtPGS/Col Mode	*CTL	

Last three digits for SP8 491 to 493, 496 and 497

8 49x-001	B/W
8 49x-002	Single Color
8 49x-003	Two Color
8 49x-004	Full Color

8 501	T:PrtPGS/Col Mode	*CTL	These SPs count the number of pages printed in the Color Mode by the print application.
8 504	P:PrtPGS/Col Mode	*CTL	
8 507	O:PrtPGS/Col Mode	*CTL	

Last three digits for SP8 501, 504 and 507

8 50x-001	B/W
8 50x-002	Mono Color
8 50x-003	Full Color
8 50x-004	Single Color
8 50x-005	Two Color

Main SP Tables-8

8 511	T:PrtPGS/Emul	*CTL	[0 to 9999999/ - / 1]
	These SPs count by printer emulation mode the total number of pages printed.		
8 514	P:PrtPGS/Emul	*CTL	[0 to 9999999/ - / 1]
	These SPs count by printer emulation mode the total number of pages printed.		

Last three digits for SP8 511 and 514

8 51x-001	RPCS	-
8 51x-002	RPDL	-
8 51x-003	PS3	-
8 51x-004	R98	-
8 51x -005	R16	-
8 51x-006	GL/GL2	-
8 51x-007	R55	-
8 51x-008	RTIFF	-
8 51x-009	PDF	-
8 51x-010	PCL5e/5c	-
8 51x-011	PCL XL	-
8 51x-012	IPDL-C	-
8 51x-013	BM-Links	Japan Only
8 51x-014	Other	-
8 51x-015	IPDS	-

- SP8 511 and SP8 514 return the same results as they are both limited to the Print application.
- Print jobs output to the document server are not counted.

8 521	T:PrtPGS/FIN	*CTL	[0 to 9999999 / - / 1]
	These SPs count by finishing mode the total number of pages printed by all applications.		
8 522	C:PrtPGS/FIN	*CTL	[0 to 9999999 / - / 1]
	These SPs count by finishing mode the total number of pages printed by the Copy application.		
8 523	F:PrtPGS/FIN	*CTL	[0 to 9999999 / - / 1]
	These SPs count by finishing mode the total number of pages printed by the Fax application. Note: Print finishing options for received faxes are currently not available.		
8 524	P:PrtPGS/FIN	*CTL	[0 to 9999999 / - / 1]
	These SPs count by finishing mode the total number of pages printed by the Print application.		
8 525	S:PrtPGS/FIN	*CTL	[0 to 9999999 / - / 1]
	These SPs count by finishing mode the total number of pages printed by the Scanner application.		
8 526	L:PrtPGS/FIN	*CTL	[0 to 9999999 / - / 1]
	These SPs count by finishing mode the total number of pages printed from within the document server mode window at the operation panel.		

Last three digits for SP8 521 to 526

8 52x-001	Sort	-	8 52x-008	Inside-Fold
8 52x-002	Stack	-	8 52x-009	Three-IN-Fold
8 52x-003	Staple	-	8 52x-010	Three-OUT-Fold
8 52x-004	Booklet	-	8 52x-011	Four-Fold
8 52x-005	Z-Fold	-	8 52x-012	KANNON-Fold
8 52x-006	Punch	-	8 52x-013	Perfect-Bind
8 52x-007	Other	-	8 52x-014	Ring-Bind

Note

- If stapling is selected for finishing and the stack is too large for stapling, the unstapled pages are still counted.
- The counts for staple finishing are based on output to the staple tray, so jam recoveries are counted.

8 531	Staples	*CTL	This SP counts the amount of staples used by the machine. [0 to 9999999 / - / 1]
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8 551	T:PrtBooks/FIN	*CTL	-
8 552	C:PrtBooks/FIN	*CTL	-
8 554	P:PrtBooks/FIN	*CTL	-
8 556	L:PrtBooks/FIN	*CTL	-
8 55x-001	Perfect-Bind	Not used	
8 55x-002	Ring-Bind	Not used	

8 561	T:A Sheet Of Paper	*CTL	[0 to 9999999 / - / 1]
8 562	C:A Sheet Of Paper	*CTL	[0 to 9999999 / - / 1]
8 563	F:A Sheet Of Paper	*CTL	[0 to 9999999 / - / 1]
8 564	P:A Sheet Of Paper	*CTL	[0 to 9999999 / - / 1]
8 566	L:A Sheet Of Paper	*CTL	[0 to 9999999 / - / 1]
8 567	O:A Sheet Of Paper	*CTL	[0 to 9999999 / - / 1]

Last three digits for SP8 561 to 567

8 56x-001	Total: Over A3/DLT
8 56x-002	Total: Under A3/DLT
8 56x-003	Duplex: Over A3/DLT
8 56x-004	Duplex: Under A3/DLT

	T:Counter	*CTL	[0 to 9999999 / - / 1]
8 581	These SPs count the total output broken down by color output, regardless of the application used. In addition to being displayed in the SMC Report, these counters are also displayed in the User Tools display on the copy machine.		
8 581-001	Total		
8 581-002	Total: Full Color		
8 581-003	B&W/Mono Color		
8 581-004	Development: CMY		
8 581-005	Development: K		
8 581-006	Copy: Color		
8 581-007	Copy: B/W		
8 581-008	Print: Color		
8 581-009	Print: B/W		
8 581-010	Total: Color		
8 581-011	Total: B/W		
8 581-012	Full Color: A3		
8 581-013	Full Color: B4 JIS or Smaller		
8 581-014	Full Color Print		
8 581-015	Mono Color Print		

Main SP Tables-8

8 581-016	Full Color GPC
8 581-017	Twin Colour Mode Print
8 581-018	Full Colour Print(Twin)
8 581-019	Mono Colour Print(Twin)
8 581-020	Full Colour Total(CV)
8 581-021	Mono Colour Total(CV)
8 581-022	Full Colour Print(CV)
8 581-028	Development: CMY(A3)
8 581-029	Development: K(A3)
8 581-030	Total: Color(A3)
8 581-031	Total: B/W(A3)

8 582	C:Counter	*CTL	[0 to 9999999/ - / 1]
	These SPs count the total output of the copy application broken down by color output.		
8 582-001	B/W		
8 582-002	Single Color		
8 582-003	Two Color		
8 582-004	Full Color		

8 583	F:Counter	*CTL	[0 to 9999999/ - / 1]
	These SPs count the total output of the fax application broken down by color output.		
8 583-001	B/W		
8 583-002	Single Color		

8 584	P:Counter	*CTL	[0 to 9999999/ - / 1]
	These SPs count the total output of the print application broken down by color output.		
8 584-001	B/W		
8 584-002	Mono Color		
8 584-003	Full Color		
8 584-004	Single Color		
8 584-005	Two Color		

8 586	L:Counter	*CTL	[0 to 9999999/ - / 1]
	These SPs count the total output of the local storage broken down by color output.		
8 582-001	B/W		
8 582-002	Single Color		
8 582-003	Two Color		
8 582-004	Full Color		

8 591	O:Counter	*CTL	[0 to 9999999/ - / 1]
	These SPs count the totals for A3/DLT paper use, number of duplex pages printed, and the number of staples used. These totals are for Other (O:) applications only.		
8 591-001	A3/DLT		
8 591-002	Duplex		

8 601	T:Coverage Counter	*CTL	[0 to 9999999/ - / 1]
	These SPs count the total coverage for each color and the total printout pages for each printing mode.		
8 601-001	B/W		

Main SP Tables-8

8 601-002	Color
8 601-011	B/W Printing Pages
8 601-012	Color Printing Pages
8 601-021	Coverage Counter 1
8 601-022	Coverage Counter 2
8 601-023	Coverage Counter 3
8 601-031	Coverage Counter 1 (YMC)
8 601-032	Coverage Counter 2 (YMC)
8 601-033	Coverage Counter 3 (YMC)

8 602	C:Coverage Counter	*CTL	[0 to 9999999/ - / 1]
	These SPs count the total coverage for each color and the total printout pages for each printing mode.		
8 603	F:Coverage Counter	*CTL	[0 to 9999999/ - / 1]
	These SPs count the total coverage for each color and the total printout pages for each printing mode.		
8 604	P:Coverage Counter	*CTL	[0 to 9999999/ - / 1]
	These SPs count the total coverage for each color and the total printout pages for each printing mode.		
8 606	L:Coverage Counter	*CTL	[0 to 9999999/ - / 1]
	These SPs count the total coverage for each color and the total printout pages for each printing mode.		

Last three digits for SP8 602 to 606

	8 602	8 603	8 604	8 606
8 60x-001: B/W	Yes	Yes	Yes	Yes
8 60x-002: Single Color	Yes	Yes	Yes	Yes
8 60x-003: Two Color	Yes	No	Yes	Yes
8 60x-004: Full Color	Yes	No	Yes	Yes

8 617	SDK Apli Counter	*CTL	[0 to 9999999/ - / 1]
	These SPs count the total printout pages for each SDK applicaion.		
8 617-001	SDK-1		
8 617-002	SDK-2		
8 617-003	SDK-3		
8 617-004	SDK-4		
8 617-005	SDK-5		
8 617-006	SDK-6		

8621	Func Use Counter DFU
001 to 064	Function 001 to Function 064

8 631	T:FAX TX PGS	*CTL	[0 to 9999999/ - / 1]
	These SPs count by color mode the number of pages sent by fax to a telephone number.		
8 633	F:FAX TX PGS	*CTL	[0 to 9999999/ - / 1]
	These SPs count by color mode the number of pages sent by fax to a telephone number.		
8 63x-001	B/W		
8 63x-002	Color		

- If a document has color and black-and-white pages mixed, the pages are counted separately as B/W or Color.
- At the present time, this feature is provided for the Fax application only so SP8631 and SP8633 are the same.
- The counts include error pages.
- If a document is sent to more than one destination with a Group transmission, the count is done for each destination.
- Polling transmissions are counted but polling RX are not.
- Relay, memory, and confidential mailbox transmissions and are counted for each destination.

8 641	T:IFAX TX PGS	*CTL	[0 to 9999999/ - / 1]
	These SPs count by color mode the number of pages sent by fax to as fax images using I-Fax.		
8 643	F:IFAX TX PGS	*CTL	[0 to 9999999/ - / 1]
	These SPs count by color mode the number of pages sent by Fax as fax images using I-Fax.		
8 64x-001	B/W		
8 64x-002	Color		

- If a document has color and black-and-white pages mixed, the pages are counted separately as B/W or Color.
- At the present time, this feature is provided for the Fax application only so SP8641 and SP8643 are the same.
- The counts include error pages.
- If a document is sent to more than one destination with a Group transmission, the count is done for each destination.
- Polling transmissions are counted but polling RX are not.
- Relay, memory, and confidential mailbox transmissions and are counted for each destination.

8 651	T:S-to-Email PGS	*CTL	[0 to 9999999/ - / 1]
	These SPs count by color mode the total number of pages attached to an e-mail for both the Scan and document server applications.		
8 655	S:S-to-Email PGS	*CTL	[0 to 9999999/ - / 1]
	These SPs count by color mode the total number of pages attached to an e-mail for the Scan application only.		
8 65x-001	B/W		
8 65x-002	Color		

Note

- The count for B/W and Color pages is done after the document is stored on the HDD. If the job is cancelled before it is stored, the pages are not counted.
- If Scan-to-Email is used to send a 10-page document to 5 addresses, the count is 10 (the pages are sent to the same SMTP server together).
- If Scan-to-PC is used to send a 10-page document to 5 folders, the count is 50 (the document is sent to each destination of the SMB/FTP server).
- Due to restrictions on some devices, if Scan-to-Email is used to send a 10-page document to a large number of destinations, the count may be divided and counted separately. For example, if a 10-page document is sent to 200 addresses, the count is 10 for the first 100 destinations and the count is also 10 for the second 100 destinations, for a total of 20.).

8 661	T:Deliv PGS/Svr	*CTL	[0 to 9999999/ - / 1]
	These SPs count by color mode the total number of pages sent to a Scan Router server by both Scan and LS applications.		
8 665	S:Deliv PGS/Svr	*CTL	[0 to 9999999/ - / 1]
	These SPs count by color mode the total number of pages sent to a Scan Router server by the Scan application.		
8 66x-001	B/W		
8 66x-002	Color		

Note

- The B/W and Color counts are done after the document is stored on the HDD of the Scan Router server.
- If the job is canceled before storage on the Scan Router server finishes, the counts are not done.
- The count is executed even if regardless of confirmation of the arrival at the Scan Router server.

8 671	T:Deliv PGS/PC	*CTL	[0 to 9999999/ - / 1]
	These SPs count by color mode the total number of pages sent to a folder on a PC (Scan-to-PC) with the Scan and LS applications.		
8 675	S: Deliv PGS/PC	*CTL	[0 to 9999999/ - / 1]
	These SPs count by color mode the total number of pages sent with Scan-to-PC with the Scan application.		
8 67x-001	B/W		
8 67x-002	Color		

8 681 -001	T:PCFAX TXPGS	*CTL	These SPs count the number of pages sent by PC Fax. These SPs are provided for the Fax application only, so the counts for SP8 681 and SP8 683 are the same. [0 to 9999999/ - / 1]
8 683 -001	F:PCFAX TXPGS	*CTL	

- This counts pages sent from a PC using a PC fax application, from the PC through the copier to the destination.
- When sending the same message to more than one place using broadcasting, the pages are only counted once. (For example, a 10-page fax is sent to location A and location B. The counter goes up by 10, not 20.)

8 691 -001	T:TX PGS/LS	*CTL	These SPs count the number of pages sent from the document server. The counter for the application that was used to store the pages is incremented. [0 to 9999999/ - / 1] The L: counter counts the number of pages stored from within the document server mode screen at the operation panel. Pages stored with the Store File button from within the Copy mode screen go to the C: counter.
8 692 -001	C:TX PGS/LS	*CTL	
8 693 -001	F:TX PGS/LS	*CTL	
8 694 -001	P:TX PGS/LS	*CTL	
8 695 -001	S:TX PGS/LS	*CTL	
8 696 -001	L:TX PGS/LS	*CTL	

Note

- Print jobs done with Web Image Monitor and Desk Top Binder are added to the count.
- If several documents are merged for sending, the number of pages stored are counted for the application that stored them.
- When several documents are sent by a Fax broadcast, the F: count is done for the number of pages sent to each destination.

Main SP Tables-8

8 701	TX PGS/Port	*CTL	[0 to 9999999/ - / 1]
	These SPs count the number of pages sent by the physical port used to send them. For example, if a 3-page original is sent to 4 destinations via ISDN G4, the count for ISDN (G3, G4) is 12.		
8 701-001	PSTN-1		
8 701-002	PSTN-2		
8 701-003	PSTN-3		
8 701-004	ISDN (G3,G4)		
8 701-005	Network		

8 711	T:Scan PGS/Comp	*CTL	[0 to 9999999/ - / 1]
8 715	S:Scan PGS/Comp	*CTL	[0 to 9999999/ - / 1]
	These SPs count the number of pages sent by each compression mode.		
8 71x-001	JPEG/JPEG2000		
8 71x-002	TIFF(Multi/Single)		
8 71x-003	PDF		
8 71x-004	Other		
8 71x-005	PDF/Comp		
8 71x-006	PDF/A		

8 721	T: Deliv PGS/WSD	*CTL	[0 to 9999999/ - / 1]
8 725	S: Deliv PGS/WSD	*CTL	
These SPs count the number of pages scanned by each scanner mode.			
8 72x-001	B/W		
8 72x-002	Color		

8 731	T:Scan PGS/Media	*CTL	[0 to 9999999/ - / 1]
8 735	S:Scan PGS/Media	*CTL	
These SPs count the number of pages scanned and saved in a meia by each scanner mode.			
8 73x-001	B/W		
8 73x-002	Color		

8 741	RX PGS/Port	*CTL	[0 to 9999999/ - / 1]
	These SPs count the number of pages received by the physical port used to receive them.		
8 741-001	PSTN-1		
8 741-002	PSTN-2		
8 741-003	PSTN-3		
8 741-004	ISDN (G3,G4)		
8 741-005	Network		

Main SP Tables-8

8 771	Dev Counter	*CTL	[0 to 9999999/ - / 1]
	These SPs count the frequency of use (number of rotations of the development rollers) for black and other color toners.		
8 771-001	Total		
8 771-002	K		
8 771-003	Y		
8 771-004	M		
8 771-005	C		

8 781	Toner_Botol_Info.	*ENG	[0 to 9999999/ 0 / 1]
	These SPs display the number of already replaced toner bottles. Note: Currently, the data in SP7-833-011 through 014 and the data in SP8-781-001 through 004 are the same.		
8 781-001	BK	The number of black-toner bottles	
8 781-002	Y	The number of yellow-toner bottles	
8 781-003	M	The number of magenta-toner bottles	
8 781-004	C	The number of cyan-toner bottles	

8 791	LS Memory Remain	*CTL	[0 to 100 / - / 1]
	This SP displays the percent of space available on the document server for storing documents.		

8 801	Toner Remain	*CTL	[0 to 100/ - / 1]
	<p>These SPs display the percent of toner remaining for each color. This SP allows the user to check the toner supply at any time.</p> <p>Note: This precise method of measuring remaining toner supply (1% steps) is better than other machines in the market that can only measure in increments of 10 (10% steps).</p>		
8 801-001	K		
8 801-002	Y		
8 801-003	M		
8 801-004	C		

8 811	Eco Counter		
8 811-001	Eco Total	*CTL	[0 to 9999999 / - / 1]
	Displays the number of pages reduced by using the color, full color, duplex and combine function.		
8 811-002	Color	*CTL	[0 to 9999999 / - / 1]
	Displays the number of pages reduced by using the color function.		
8 811-003	Full Color	*CTL	[0 to 9999999 / - / 1]
	Displays the number of pages reduced by using the full color function		
8 811-004	Duplex	*CTL	[0 to 9999999 / - / 1]
	Displays the number of pages reduced by using the duplex function.		
8 811-005	Combine	*CTL	[0 to 9999999 / - / 1]
	Displays the number of pages reduced by using the combine function.		
8 811-006	Color(%)	*CTL	[0 to 100/ - / 1]
	Displays the utilization ratio of the color function.		

Main SP Tables-8

8 811-007	Full Color(%)	*CTL	[0 to 100/ - / 1]
	Displays the utilization ratio of the full color function.		
8 811-008	Duplex(%)	*CTL	[0 to 100/ - / 1]
	Displays the utilization ratio of the duplex function.		
8 811-009	Combine(%)	*CTL	[0 to 100/ - / 1]
	Displays the utilization ratio of the combine function.		
8 811-010	Paper Cut(%)	*CTL	[0 to 100/ - / 1]
	Displays the paper reduction ratio.		
8 811-101	Eco Totalr>Last	*CTL	[0 to 9999999 / - / 1]
	-		
8 811-102	Color>Last	*CTL	[0 to 9999999 / - / 1]
	-		
8 811-103	Full Color>Last	*CTL	[0 to 9999999 / - / 1]
	-		
8 811-104	Duplex>Last	*CTL	[0 to 9999999 / - / 1]
	-		
8 811-105	Combine>Last	*CTL	[0 to 9999999 / - / 1]
	-		
8 811-106	Color(%):Last	*CTL	[0 to 100/ - / 1]
	-		
8 811-107	Full Color(%):Last	*CTL	[0 to 100/ - / 1]
	-		
8 811-108	Duplex(%):Last	*CTL	[0 to 100/ - / 1]
	-		

8 811-109	Combine(%):Last	*CTL	[0 to 100/ - / 1]
	-		
8 811-110	Paper Cut(%):Last	*CTL	[0 to 100/ - / 1]
	-		

8 851	CVr Cnt: 0-10%	*ENG	[0 to 9999999/ - / 1]
	These SPs display the number of scanned sheets on which the coverage of each color is from 0% to 10%.		
8 851-011	0 to 2%: BK	8 851-031	5 to 7%: BK
8 851-012	0 to 2%: Y	8 851-032	5 to 7%: Y
8 851-013	0 to 2%: M	8 851-033	5 to 7%: M
8 851-014	0 to 2%: C	8 851-034	5 to 7%: C
8 851-021	3 to 4%: BK	8 851-041	8 to 10%: BK
8 851-022	3 to 4%: Y	8 851-042	8 to 10%: Y
8 851-023	3 to 4%: M	8 851-043	8 to 10%: M
8 851-024	3 to 4%: C	8 851-044	8 to 10%: C

8 861	CVr Cnt: 11-20%	*ENG	[0 to 9999999/ - / 1]
	These SPs display the number of scanned sheets on which the coverage of each color is from 11% to 20%.		
8 861-001	BK		
8 861-002	Y		
8 861-003	M		
8 861-004	C		

Main SP Tables-8

8 871	CVr Cnt: 21-30%	*ENG	[0 to 9999999/ - / 1]
	These SPs display the number of scanned sheets on which the coverage of each color is from 21% to 30%.		
8 871-001	BK		
8 871-002	Y		
8 871-003	M		
8 871-004	C		

8 881	CVr Cnt: 31%-	*ENG	[0 to 9999999/ - / 1]
	These SPs display the number of scanned sheets on which the coverage of each color is 31% or higher.		
8 881-001	BK		
8 881-002	Y		
8 881-003	M		
8 881-004	C		

8 891	Page/Toner Bottle	*ENG	[0 to 9999999/ - / 1]
	These SPs display the amount of the remaining current toner for each color.		
8 891-001	BK		
8 891-002	Y		
8 891-003	M		
8 891-004	C		

8 901	Page/Toner_Prev1	*ENG	[0 to 9999999/ - / 1]
	These SPs display the amount of the remaining previous toner for each color.		
8 901-001	BK		
8 901-002	Y		
8 901-003	M		
8 901-004	C		

8 911	Page/Toner_Prev2	*ENG	[0 to 9999999/ - / 1]
	These SPs display the amount of the remaining 2nd previous toner for each color.		
8 911-001	BK		
8 911-002	Y		
8 911-003	M		
8 911-004	C		

8 921	Cvr Cnt/Total	*CTL	[0 to 9999999/ - / 1]
	Displays the total coverage and total printout number for each color.		
8 921-001	Coverage (%) BK		
8 921-002	Coverage (%) Y		
8 921-003	Coverage (%) M		
8 921-004	Coverage (%) C		
8 921-011	Coverage /P: BK		
8 921-012	Coverage /P: Y		
8 921-013	Coverage /P: M		
8 921-014	Coverage /P: C		

Main SP Tables-8

8 941	Machine Status	*CTL	[0 to 9999999/ - / 1]
	These SPs count the amount of time the machine spends in each operation mode. These SPs are useful for customers who need to investigate machine operation for improvement in their compliance with ISO Standards.		
8 941-001	Operation Time	Engine operation time. Does not include time while controller is saving data to HDD (while engine is not operating).	
8 941-002	Standby Time	Engine not operating. Includes time while controller saves data to HDD. Does not include time spent in Energy Save, Low Power, or Off modes.	
8 941-003	Energy Save Time	Includes time while the machine is performing background printing.	
8 941-004	Low Power Time	Includes time in Energy Save mode with Engine on. Includes time while machine is performing background printing.	
8 941-005	Off Mode Time	Includes time while machine is performing background printing. Does not include time machine remains powered off with the power switches.	
8 941-006	SC	Total time when SC errors have been staying.	
8 941-007	PrtJam	Total time when paper jams have been staying during printing.	
8 941-008	OrgJam	Total time when original jams have been staying during scanning.	
8 941-009	Supply PM Unit End	Total time when toner end has been staying.	
8 951	AddBook Register	*CTL	-

	These SPs count the number of events when the machine manages data registration.		
8 951-001	User Code /User ID	User code registrations.	[0 to 9999999/ - / 1]
8 951-002	Mail Address	Mail address registrations.	
8 951-003	Fax Destination	Fax destination registrations.	
8 951-004	Group	Group destination registrations.	
8 951-005	Transfer Request	Fax relay destination registrations for relay TX.	
8 951-006	F-Code	F-Code box registrations.	
8 951-007	Copy Program	Copy application registrations with the Program (job settings) feature.	[0 to 255 / - / 255]
8 951-008	Fax Program	Fax application registrations with the Program (job settings) feature.	
8 951-009	Printer Program	Printer application registrations with the Program (job settings) feature.	
8 951-010	Scanner Program	Scanner application registrations with the Program (job settings) feature.	

8 961	Electricity Status	*CTL	[0 to 9999999/ - / 1]
	-		
8 961-001	Ctrl Standby Time		
8 961-002	STR Time		
8 961-003	Main Power Off Time		
8 961-004	Reading and Printing Time		

Main SP Tables-8

8 961-005	Printing Time
8 961-006	Reading Time
8 961-007	Eng Waiting Time
8 961-008	Low Power State Time
8 961-009	Silent State Time

8 999	Admin. Counter List	*CTL	[0 to 9999999/ - / 1]
	Displays the total coverage and total printout number for each color.		
8 999-001	Total	8 999-024	Copy: Single Color(%)
8 999-002	Copy: Full Color	8 999-025	Copy: Two Color(%)
8 999-003	Copy: BW	8 999-026	Printer: Full Color(%)
8 999-004	Copy: Single Color	8 999-027	Printer: BW(%)
8 999-005	Copy: Two Color	8 999-028	Printer: Single Color(%)
8 999-006	Printer Full Color	8 999-029	Printer: Two Color(%)
8 999-007	Printer BW	8 999-030	Fax Print: BW(%)
8 999-008	Printer Single Color	8 999-031	Fax Print: Single Color(%)
8 999-009	Printer Two Color	8 999-101	Transmission Total: Color
8 999-010	Fax Print: BW	8 999-102	Transmission Total: BW
8 999-011	Fax Print: Single Color	8 999-102	Transmission Total: BW
8 999-013	Duplex	8 999-103	FAX Transmission
8 999-022	Copy: Full Color(%)	8 999-104	Scanner Transmission: Color
8 999-023	Copy: BW(%)	8 999-105	Scanner Transmission: BW

5.10 MAIN SP TABLES-9

5.10.1 INPUT CHECK TABLE

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

Copier

5803	Description	Reading	
		0	1
5803-001	Regist Sensor	Paper detected	Paper not detected
5803-002	Tray Paper End Sensor	Paper detected	Paper not detected
5803-003	Bypass Paper End Sensor	Paper detected	Paper not detected
5803-004	Bypass Paper Width Detection	Paper detected	Paper not detected
5803-005	Tray Lift Motor Position Sensor	(Not used)	
5803-006	Duplex Exit Sensor	Paper detected	Paper not detected
5803-007	Exit Sensor	Paper detected	Paper not detected
5803-008	Duplex Entrance Sensor	Paper detected	Paper not detected
5803-009	Tray Full Exit Sensor	(Not used)	
5803-010	Bypass Lift Positon	Up	Down
5803-011	Tray Exit Sensor	Paper detected	Paper not detected
5803-012	Interlock Release Detection 1	Door open	Door close
5803-013	Interlock Release Detection 2	Door open	Door close

Main SP Tables-9

5803	Description	Reading	
		0	1
5803-014	Right Cover Sensor	Door close	Door open
5803-015	+24V_DCTH Detection	(Not used)	
5803-016	ITB Contact HP Sensor	Not contact	Contact
5803-017	Paper Transfer Contact Sensor	Not contact	Contact
5803-018	ITB New Unit Detection	(Not used)	
5803-019	Toner Collection Full Sensor	Not full	Full
5803-020	Toner Collection Bottle Set	Set	Not set
5803-021	Toner Collection Motor Set: C	(Not used)	
5803-022	Toner End Sensor: Y	Not end	End
5803-023	Toner End Sensor: M	Not end	End
5803-024	Toner End Sensor: C	Not end	End
5803-025	Toner End Sensor: K	(Not used)	
5803-026	Fusing Entrance Sensor	Paper detected	Paper not detected
5803-027	Fusing Exit Sensor	Paper detected	Paper not detected
5803-028	Fusing Destination Detection	-	-
5803-029	Fusing New Unit Detection	New	Not new
5803-030	Fusing High Temp Detection	Detected	Not detected
5803-031	Zero-cross Signal	Not detected	Detected
5803-032	Fusing Air Flow Fan: Lock	Lock	Normal
5803-033	LD Unit Fan: Lock	Lock	Normal
5803-034	PSU Fan: Lock	Lock	Normal
5803-035	Drum Fan: Lock	Lock	Normal
5803-036	Reserve Fan: Lock	Lock	Normal

5803	Description	Reading	
		0	1
5803-038	Bk Dru/Dev/ITB Motor: Lock	Lock	Normal
5803-039	Fc Development Motor: Lock	Lock	Normal
5803-040	Fc Drum Motor: Lock	Lock	Normal
5803-041	Fusing Motor: Lock	Lock	Normal
5803-042	Transport Motor: Lock	Lock	Normal
5803-043	PP:D:SC Detection	SC detected	No SC
5803-044	PP:CB:SC Detection	SC detected	No SC
5803-045	PP:T1T2:SC Detection	SC detected	No SC
5803-046	Mechanical Counter: Set	Not set	Set
5803-047	Key Counter 1: Set	Set	Not set
5803-048	Key Counter 2: Set	Not set	Set
5803-049	Keycard: Set	Set	Not set
5803-050	1-Bin:Exit Sensor	Paper detected	Paper not detected
5803-051	1-Bin:Paper Sensor	Paper detected	Paper not detected
5803-052	1-Bin: Set	Set	Not set
5803-053	Tray Lift Sensor	Down	Up
5803-054	Tray Set Detection	Set	Not set
5803-056	BiCU Version	-	-
5803-060	BANK_VFEED_Sensor1	Paper not detected	Paper detected
5803-061	BANK_VFEED_Sensor2	Paper not detected	Paper detected
5803-062	BANK_Door_Sensor1	Close	Open
5803-063	BANK_Door_Sensor2	Close	Open

Main SP Tables-9

5803	Description	Reading	
		0	1
5803-094	GAVD Open/Close Detection	(Not used)	
5803-200	Scanner HP Sensor	HP	Not HP
5803-201	Platen Cover Sensor	Close	Open

5.10.2 OUTPUT CHECK TABLE

Copier

5804	Display	Description
5804-001	Registration Clutch	-
5804-002	Paper Feed Clutch	-
5804-003	Duplex Clutch	-
5804-004	Bypass Feed Clutch	-
5804-005	Bypass Lift Clutch	-
5804-006	Inverter Solenoid	-
5804-007	Tray Lift Motor	-
5804-008	Exit Junction Solenoid	-
5804-009	Fusing Air Flow Fan: H	-
5804-010	Fusing Air Flow Fan: L	-
5804-011	LD Unit Fan: H	-
5804-012	LD Unit Fan: L	-
5804-013	PSU Fan: H	-
5804-014	PSU Fan: L	-
5804-015	Drum Fan: H	-
5804-016	Drum Fan: L	-
5804-017	Reserve Fan: H	-
5804-018	Reserve Fan: L	-
5804-021	TM Sensor Shutter Solenoid	-
5804-022	Bk Dru/Dev/ITB Motor: H	-
5804-023	Bk Dru/Dev/ITB Motor: L	-

Main SP Tables-9

5804	Display	Description
5804-024	Fc Development Motor: H	-
5804-025	Fc Development Motor: L	-
5804-026	Development Clutch: Bk	-
5804-027	Fc Drum Motor: H	-
5804-028	Fc Drum Motor: L	-
5804-029	Fusing Motor: H	-
5804-030	Fusing Motor: L	-
5804-031	Transport Motor: H	-
5804-032	Transport Motor: L	-
5804-033	ITB/Paper Trans Contact Motor	-
5804-034	Paper Transfer Contact Motor	-
5804-035	Toner Supply Motor: Y	-
5804-036	Toner Supply Motor: M	-
5804-037	Toner Supply Motor: C	-
5804-038	Toner Supply Motor: K	-
5804-039	Toner End Sensor Power	-
5804-041	1-Bin:Solenoid	-
5804-042	HST Sensor Power Supply	-
5804-044	PP:Charge DC:Y	-
5804-045	PP:Charge DC:M	-
5804-046	PP:Charge DC:C	-
5804-047	PP:Charge DC:K	-
5804-048	PP:Development: Y	-
5804-049	PP:Development: M	-

5804	Display	Description
5804-050	PP:Development: C	-
5804-051	PP:Development: K	-
5804-052	PP:Separation	-
5804-053	PP:T1: Y	-
5804-054	PP:T1: M	-
5804-055	PP:T1: C	-
5804-056	PP:T1: K	-
5804-057	PP:T2: +	-
5804-058	PP:T2: -	-
5804-059	PP:Charge AC:Y: H	-
5804-060	PP:Charge AC:Y: L	-
5804-061	PP:Charge AC:M: H	-
5804-062	PP:Charge AC:M: L	-
5804-063	PP:Charge AC:C: H	-
5804-064	PP:Charge AC:C: L	-
5804-065	PP:Charge AC:K: H	-
5804-066	PP:Charge AC:K: L	-
5804-067	HST Sensor: Y	-
5804-068	HST Sensor: M	-
5804-069	HST Sensor: C	-
5804-070	HST Sensor: Bk	-
5804-071	TM Sensor: Front	-
5804-072	TM Sensor: Center	-
5804-073	TM Sensor: Rear	-

Main SP Tables-9

5804	Display	Description
5804-080	BANK_Motor1:High	-
5804-081	BANK_Motor1:Low	-
5804-082	BANK_Motor2:High	-
5804-083	BANK_Motor2:Low	-
5804-084	BANK_FEED_CL1	-
5804-085	BANK_FEED_CL2	-
5804-086	BANK_VFEED_CL1	-
5804-087	BANK_VFEED_CL2	-
5804-104	Polygon Moter1: LL	-
5804-108	Polygon Moter2: LL	-
5804-112	Polygon Moter1,2: LL	-
5804-202	Scanner Lamp: Color 600	-
5804-203	Scanner Lamp: Color 1200	-
5804-204	Scanner Lamp: Bk	-
5804-216	LD1: K	-
5804-218	LD1: Ma	-
5804-220	LD1: Cy	-
5804-222	LD1: Ye	-

5.10.3 PRINTER SERVICE MODE

SP1-XXX (Service Mode)

1001	Bit Switch			
001	Bit Switch 1		0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	DFU	-	-
	bit 3	No I/O Timeout	0: Disable	1: Enable
	Enable: The machine I/O Timeout setting will have no affect. I/O Timeouts will never occur.			
	bit 4	SD Card Save Mode	0: Disable	1: Enable
	Enable: Print jobs will be saved to an SD card in the GW SD slot and not output to paper.			
	bit 5	DFU	-	-
	bit 6	DFU	-	-
	bit 7	[RPCS,PCL]: Printable area frame border	0: Disable	1: Enable
	Prints all RPCS and PCL jobs with a border around the printable area.			

1001	Bit Switch			
002	Bit Switch 2		0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	DFU	-	-
	bit 3	[PCL5e/c.PS]: PDL Auto Switching	0: Enable	1: Disable

1001	Bit Switch			
		Enables/disable the machine ability to change the PDL processor mid-job. Some host systems submit jobs that contain both PS and PCL5e/c. If Auto PDL switching is disabled, these jobs will not be printed properly.		
	bit 4	DFU	-	-
	bit 5	DFU	-	-
	bit 6	Switch dither	0: Use normal dither	1: Use alternative dither
		See RTB#RD014018.		
	bit 7	DFU	-	-

1001	Bit Switch			
003	Bit Switch 3		0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	[PCL5e/c]: Legacy HP compatibility	0: Disable	1: Enable
		Uses the same left margin as older HP models such as HP4000/HP8000. In other words, the left margin defined in the job (usually "<ESC>*r0A") will be changed to "<ESC>*r1A".		
bit 3 to 7	DFU	-	-	

1001	Bit Switch			
004	Bit Switch 4		0	1
	bit 0 to 5	DFU	-	-

1001	Bit Switch			
	bit 6	[PCL. PS. PDF]: Changes the paper direction used with the settings "Any Size/Type" or "Any Custom Size/Type".	0: LEF	1: SEF
	By default "Any Size/Type" and "Any Custom Size/Type" treat all paper in the by-pass tray as if it were loaded in the SEF direction. This bit switch changes the assumed direction to LEF.			
	bit 7	DFU	-	-

1001	Bit Switch			
005	Bit Switch 5		0	1
	bit 0	DFU	-	-
	bit 1	Multiple copies if a paper size or type mismatch occurs	0: Disable (Single copy)	1: Enable (Multiple copy)
	If a paper size or type mismatch occurs during the printing of multiple copies, only a single copy is output by default. Using this bit switch, the device can be configured to print all copies even if a paper mismatch occurs.			
	bit 2	Prevent SDK applications from altering the contents of a job.	0: Disable	1: Enable
	Enable: SDK applications will not be able to alter print data. This is achieved by preventing SDK applications from accessing a module called the "GPS Filter". Note: The main purpose of this bit switch is for troubleshooting the effects of SDK applications on data.			
	bit 3	[PS] PS Criteria	0: Pattern3	1: Pattern1
	Change the number of PS criterion used by the PS interpreter to determine whether a job is PS data or not. Pattern3: Includes most PS commands. Pattern1: A small number of PS tags and headers			

1001	Bit Switch			
	bit 4	Increase max. number of stored jobs.	0: Disable (100)	1: Enable (750)
		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.		
	bit 5	DFU	-	-
	bit 6	Method for determining the image rotation for the edge to bind on.	0: Disable	1: Enable
		Enable: The image rotation will be performed as they were in the specifications of older models for the binding of pages of mixed orientation jobs. The old models are below: - PCL: Pre-04A models - PS/PDF/RPCS: Pre-05S models		
	bit 7	Letterhead mode printing	0: Disable	1: Enable (Duplex)
		Routes all pages through the duplex unit. If this is disabled, simplex pages or the last page of an odd-paged duplex job are not routed through the duplex unit. This could result in problems with letterhead/pre-printed pages. Only affects pages specified as Letterhead paper.		

1001	Bit Switch			
006	Bit Switch 6		0	1
	bit 0	Include bypass in auto tray select	0: Disable	1: Enable
		Enable: By-pass tray will be included in auto tray selection.		
	bit 1 to 7	DFU	-	-

1001	Bit Switch			
007	Bit Switch 7		0	1
	bit 0	Print path	0: Disable	1: Enable
	Enable: Simplex pages (in mixed simplex/duplex PS/PCL5 jobs only) and the last page of an odd paged duplex job (PS, PCL5, PCL6), are always routed through the duplex unit. Not having to switch paper paths increases the print speed slightly.			
bit 1 to 7	DFU	-	-	

1001	Bit Switch			
008	Bit Switch 8		0	1
	bit 0 to 2	DFU	-	-
	bit 3	[PCL.PS]: Allow BW jobs to print without requiring User Code	0: Disable	1: Enable (allow BW jobs to print without a user code)
	BW jobs submitted without a user code will be printed even if usercode authentication is enabled. Note: Color jobs will not be printed without a valid user code.			
bit 4 to 7	DFU	-	-	

1001	Bit Switch			
009	Bit Switch 9		0	1
	bit 0	PDL Auto Detection timeout of jobs submitted via USB or Parallel Port (IEEE 1284).	0: Disable (Immediately)	1: Enable (10 seconds)

1001	Bit Switch		
		To be used if PDL auto-detection fails. A failure of PDL autodetection does not necessarily mean that the job can not be printed. This bit switch tells the device whether to time-out immediately (default) upon failure or to wait 10 seconds.	
	bit 1	DFU	- -
	bit 2	Job Cancel	0: Disable (Not cancelled) 1: Enabled (Cancelled)
		<p>Enable: All jobs will be cancelled after a jam occurs.</p> <p>Note: If this bit switch is enabled, printing under the following conditions might result in problems:</p> <ul style="list-style-type: none"> - Job submission via USB or parallel port - Spool printing (WIM > Configuration > Device Settings > System) 	
	bit 3	DFU	- -
	bit 4	Timing of the PjL Status ReadBack (JOB END) when printing multiple collated copies.	0: Disable 1: Enable
		<p>This bit switch determines the timing of the PjL USTATUS JOB END sent when multiple collated copies are being printed.</p> <p>Disable (=0 (default)):</p> <p>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.</p> <p>Enable (=1):</p> <p>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.</p>	

1001		Bit Switch		
009	Bit Switch 9		0	1
	bit 5	Display UTF-8 text in the operation panel	0: Enable	1: Disable
		Enable (=0): Text composed of UTF-8 characters can be displayed in the operation panel. Disable (=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 bit switch is enabled (=0).		
	bit 6	DFU	-	-
	bit 7	Enable/Disable Print from USB/SD's Preview function	0: Enable	1: Disable
		Determines whether print from USB/SD will have the Preview function. Enabled (=0): Print from USB/SD will have the Preview function. Disabled (=1): Print from USB/SD will not have the Preview function.		

1001		Bit Switch		
010	Bit Switch 10		0	1
	bit 0 to 3	DFU	-	-
	bit 4	Not Used	-	-
	bit 5	Auto Job Promotion locks the queue	0: Queue is not locked after AJP	1: Queue locked after AJP
		If this is 1, then after a job is stored using Auto Job Promotion, new jobs cannot be added to the queue until the stored job has been completely printed.		

1001	Bit Switch			
	bit 6	Allow use of Auto Job Promotion if connected to an external charge device.	0: Does not allow AJP with ECD	1: Allows AJP with ECD
		If this is 0, Auto Job Promotion will be automatically disabled if an external charge device is connected. Note: We do not officially support enabling this bit switch (1). Use it at your own risk.		
	bit 7	Not Used	-	-

1003	[Clear Setting]		
1003-001	Initialize System	Initializes settings in the System menu of the user mode.	
1003-003	Delete Program	DFU	

1004	[Print Summary]		
1004-001	Service Summary	Prints the service summary sheet (a summary of all the controller settings).	

1005	[Display Version]		
1005-002	Printer Version	Displays the version of the controller firmware.	

1101	[ToneCtlSet]		
	Tone (Factory)	-	
1101-001	Recalls a set of gamma settings. This can be either a) the factory setting, b) the previous setting, or c) the current setting.		

1102	[Resolution Settings]	
	Sets the printing mode (resolution) for the printer gamma adjustment. The asterisk (*) shows which mode is set. <ul style="list-style-type: none"> ▪ 00: *1200x1200Photo ▪ 01: 600x600Text ▪ 02: 1200x1200Text ▪ 03: 1200x600Text ▪ 04: 600x600Photo ▪ 05: 1200x600Photo 	
1102-001	Tone Control Mode Selection	[0 to 99 / 0 / 1/step]

1103	[PrnColorSheet]	
1103-001	ToneCtlSheet	Prints the test page to check the color balance before and after the gamma adjustment.
1103-002	ColorChart	

1104	[ToneCtlValue]	
	Adjusts the printer gamma for the mode selected in the Mode Selection menu.	
1104-001	Black: Highlight	[0 to 30 / 0 / 1/step]
1104-021	Cyan: Highlight	
1104-041	Magenta: Highlight	
1104-061	Yellow: Highlight	
1104-002	Black: Shadow	[0 to 30 / 0 / 1/step]
1104-022	Cyan: Shadow	
1104-042	Magenta: Shadow	
1104-062	Yellow: Shadow	
1104-003	Black: Middle	[0 to 30 / 0 / 1/step]

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1104-023	Cyan: Middle	[0 to 30 / 0 / 1/step]
1104-043	Magenta: Middle	
1104-063	Yellow: Middle	
1104-004	Black: IDmax	
1104-024	Cyan: IDmax	
1104-044	Magenta: IDmax	
1104-064	Yellow: IDmax	

1105	[Save Tone Cntrol Value]	
	Saves the print gamma (adjusted with the Gamma Adj.) as the new Current Setting. Before the machine stores the new "current settingR", it moves the data stored as the "current setting" to the "previous setting" memory-storage location.	
1105-001	Save Tone Cntrol Value	[EXECUTE]

1106	[Toner Limit]	
	Adjusts the maximum toner amount for image development.	
1106-001	Toner Limit Value	[100 to 400 / 0 / 1/step]

1110	[Media Print Device Setting]	
	Enable or disable the media print support function. 0: Disable, 1:Enable	
1110-002	0: Disable 1:Enable	[0 to 1 / 1 / 1/step]

5.10.4 SCANNER SERVICE MODE

SP1-xxx (System and Others)

1001	[Scan Nv Version]		
	-	*CTL	
1001-005	<p>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.</p> <p>“Function name”_”Machine code”_”Serial number”</p> <ul style="list-style-type: none"> - Function name: Enter “3”. - Machine code: Enter the machine code with three characters. - Serial number: Enter the number (default: 001). 		
1005	[Erase margin(Remote scan)]		
	Range from 0 to 5 mm	*CTL	[0 to 5 / 0 / 1 mm/step]
1005-001	<p>Creates an erase margin for all edges of the scanned image.</p> <p>If the machine has scanned the edge of the original, create a margin. This SP is activated only when the machine uses TWAIN scanning.</p>		
1009	[Remote scan disable]		
	0:enable 1:desable	*CTL	[0 or 1 / 0 / -]
1009-001	Enable or disable remote scan.		
1010	[Non Display ClearLight PDF]		
	0:Display 1:Nondisplay	*CTL	[0 or 1 / 0 / -]
1010-001	Display or nondisplay ClearLight PDF function.		

1011	[Org Count Disp]		
1011-001	0:ON 1:OFF	*CTL	[0 or 1 / 0 / -]
	Display or nondisplay original counter. 0: Displays remaining memory. 1: Displays original counter.		

1012	[UserInfo Release]		
1012-001	0:No 1:Yes	*CTL	[0 or 1 / 1 / -]
	Set if the following user information is released or not. - Destination of the mail, folder, CS - Sender - Message - Subject - Fail name		

1013	[Scan to Media Device Setting]		
1013-002	0:OFF 1:ON	*CTL	[0 or 1 / 1 / -]
	Enable or disable ScanTo media device.		

1015	[Time Stamp to File Name]		
1015-001	0:Disable 1:Enable	*CTL	[0 or 1 / 0 / -]
	Enable or disable the setting for the file name to add the date and time (year, month, day, hour, minute, second). 0: Disable, 1: Enable		

SP2-XXX (Scanning-image quality)

2021	[Compression Level(Grayscale)]		
	Selects the compression ratio for grayscale processing mode (JPEG) for the five settings that can be selected at the operation panel.		
2021-001	Comp1:5-95	*CTL	[5 to 95 / 20 / 1 /step]
2021-002	Comp2:5-95		[5 to 95 / 40 / 1 /step]
2021-003	Comp3:5-95		[5 to 95 / 65 / 1 /step]
2021-004	Comp4:5-95		[5 to 95 / 80 / 1 /step]
2021-005	Comp5:5-95		[5 to 95 / 95 / 1 /step]

2024	[Compression ratio of ClearLightPDF]		
	Selects the compression ratio for clearlight PDF for the two settings that can be selected at the operation panel.		
2024-001	Compression Ratio(Normal)	*CTL	[5 to 95 / 25 / 1 /step]
2024-002	Compression Ratio(High)		[5 to 95 / 20 / 1 /step]

2025	[Compression ratio of ClearLightPDF JPEG2000]		
	Selects the compression ratio for clearlight PDF for the two settings that can be selected at the operation panel.		
2025-001	Compression Ratio(Normal) JPEG2000	*CTL	[5 to 95 / 25 / 1 /step]
2025-002	Compression Ratio(High) JPEG2000		[5 to 95 / 20 / 1 /step]

5.10.5 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, an SC occurs.
1. Enter the SP mode and select **SP2-109-003**.
 2. Enter the number for the test pattern that you want to print and press [OK].
 3. When you want to select the single color of Magenta, Yellow or Cyan for printing a test pattern, select the color with SP2-109-005 (2: Cyan, 3: Magenta, 4: Yellow).
 4. When you want to change the density of printing a test pattern, select the density with SP2-109-006 to -009 for each color.

Note

- If you select "0" with SP2-109-006 to -009, the color to be adjusted to "0" does not come up on a test pattern.
5. When you are prompted to confirm your selection, touch "Yes" to select the test pattern for printing.
 6. Touch "Copy Window" to open the copy window, then select the settings for the test print (paper size etc.).

Note

- If you want to use black and white printing, touch "Black & White" on the LCD. If you want to use color printing, touch "Full Colour" on the LCD.
7. Press the "Start" key to start the test print.
 8. After checking the test pattern, touch "SP Mode" on the LCD to return to the SP mode display.
 9. Reset all settings to the default values.
 10. Touch "Exit" twice to exit SP mode.

No.	Pattern	No.	Pattern
0	None	12	Independent Pattern (2dot)
1	Vertical Line (1dot)	13	Independent Pattern (4dot)
2	Vertical Line (2dot)	14	Ttrimming Area
3	Horizontal Line (1dot)	15	Hound's Tooth Check (Vertical)
4	Horizontal Line (2dot)	16	Hound's Tooth Check (Horizontal)
5	Grid Vertical Line	17	Band (Vertical)
6	Grid Horizontal Line	18	Band (Horizontal)
7	Grid Pattern Small	19	Checkered Flag Pattern
8	Grid Pattern Large	20	Grayscale (Vertical Margin)
9	Argyle Patter Small	21	Grayscale (Horizontal Margin)
10	Argyle Patter Large	22	Two Beam
11	Independent Pattern (1dot)	23	Full Dot Pattern

5.11 FIRMWARE UPDATE

To update the firmware for this machine, you must have the new version of the firmware downloaded onto an SD (Secure Digital) Card. The SD Card is inserted into SD Card Slot 2 on the left rear side of the controller box.

5.11.1 TYPE OF FIRMWARE

There are several types of firmware as shown below.

Type of firmware	Function	Location of firmware	Message shown
Engine	Printer engine control	BICU Flash ROM	Engine
System/Copy Application	Operating system	Flash ROM on the controller board	System/Copy
Lcdc	Panel control	LCDC	Lcdc
ADF	ADF control	ADF Main Control Board	ADF
NIB/DESS	Network Interface/ Security control	Flash ROM on the controller board	NetworkSupport
Security & Encryption	HDD encryption/ Data Overwrite	Flash ROM on the controller board	HDD Format Option
Language (23 languages)	Language firmware 5 languages can be selected from 23 languages.	Operation Panel	Language1/ Language2
RPCS	Page description language (RPCS for XPS driver data process)	Flash ROM on the controller board	RPCS
PS3/ PDF Adobe	Page description language (PostScript3)	Flash ROM on the controller board	PS/ PDF

PCL	Page description language (PCL)	Flash ROM on the controller board	PCL/ PCLXL
PictBridge	PictBridge control	Flash ROM on the controller board	PictBridge
MediaPrint:JPEG/TIFF	MediaPrint control	Flash ROM on the controller board	MediaPrint:JPEG/TIFF
Summary Font	Summary fonts	Flash ROM on the controller board	FONT
PCL Font	PCL fonts	Flash ROM on the controller board	FONT1
PS Font	PostScript3 fonts	Flash ROM on the controller board	FONT2
Netfile Application	Feature application	Flash ROM on the controller board	NetworkDocBox
Fax Application	Feature application	Flash ROM on the controller board	Fax
Printer Application	Feature application	Flash ROM on the controller board	Printer
Scanner Application	Feature application	Flash ROM on the controller board	Scanner
Remote Fax	Fax control	Flash ROM on the controller board	RFax
WebSys	Web Service application	Flash ROM on the controller board	Web Support
WebDocBox	Document server application	Flash ROM on the controller board	Web Uapl
Java VM	Java VM platform	Standard Java VM SD card	SDK1

5.11.2 BEFORE YOU BEGIN

An SD card is a precision device. Always observe the following precautions when you handle SD cards:

- Always switch the machine off before you insert an SD card. Never insert the SD card into the slot with the power on.
- Do not remove the SD card from the service slot after the power has been switched on.
- Never switch the machine off while the firmware is downloading from the SD card.
- Keep SD cards in a safe location where they are not exposed to high temperature, high humidity, or exposure to direct sunlight.
- Always handle SD cards with care. Do not bend or scratch them. Do not let the SD card get exposed to shock or vibration.
- Make sure that the write protection of an SD card is unlocked when you download an application to it. If not, downloading fails and a download error (e.g. Error Code 44) occurs during a firmware upgrade.

Keep the following points in mind when you use the firmware update software:

- "Upload" means to send data from the machine to the SD card. "Download" means to send data from the SD card to the machine.
- To select an item on the LCD, touch the appropriate button on the soft touch-screen of the LCD, or, press the appropriate number key on the 10-key pad of the operation panel. For example, when "Exit (0)" shows on the screen you can touch the Exit button on the screen, or, press the "0" button on the operation panel of the copier.
- Make sure that the machine is disconnected from the network to prevent a print job for arriving while the firmware update is in progress before you start the firmware update procedure.

5.11.3 UPDATING FIRMWARE

Preparation

- If the SD card is blank, copy the entire "romdata" folder onto the SD card.
- If the card already contains the "romdata" folder, copy the "D117" folder onto the card.

If the card already contains folders up to "D117", copy the necessary firmware files (e.g. D086xxxx.fwu) into this folder.

Note

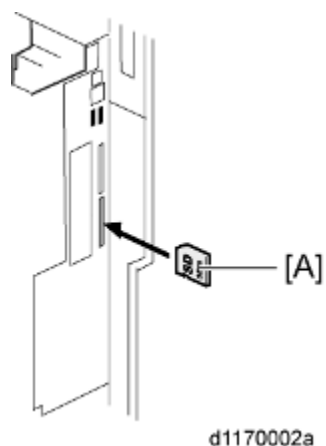
- Do not put multiple machine firmware programs on the same SD card. Copy the only model firmware you want.

Updating Procedure

1. Turn the main power switch off.



2. Remove the slot cover [A] ( x 1).




3. Insert the SD card into SD Card Slot 2 (lower). Make sure the label on the SD card faces the rear side of the machine.
4. Slowly push the SD card into the slot so it locks in place. You will hear it click. Make sure the SD card locks in place.

Note

- To remove the SD, push it in to unlock the spring lock. Then release it so it pops out of the slot.
5. Disconnect the network cable from the copier if the machine is connected to a network.
 6. Switch the main power switch on. After about 45 seconds, the initial version update screen appears on the LCD in English.
 7. On the screen, touch the button or press the corresponding number key on the operation panel to select the item in the menu that you want to update.

ROM/NEW	What it means
ROM:	Tells you the number of the module and name of the version currently installed. The first line is the module number, the second line the version name.
NEW:	Tells you the number of the module and name version on the SD card. The first line is the module number, the second line the version name.

Note

- Controller, engine and operation panel firmware cannot be updated at the same time. It is recommended to update firmware modules one by one.
8. Touch "UpDate (#)" (or ) to start the update.

Note

- The progress bar does not show for the operation panel firmware after you touch "OpPanel". The power on key flashes on and off at 0.5 s intervals when the LCDC firmware is updating. The power key flashes on and off at 3 s intervals when the update is finished.
- 9. The "Update is Done" message appears on the operation panel after completing the updating. The message differs depending on the firmware that has been updated.
- 10. Switch the copier main power switch off when you see the "Update is Done" message or follow the procedure that is displayed on the operation panel.
- 11. Press in the SD card to release it. Then remove it from the slot.
- 12. Switch the copier on for normal operation.

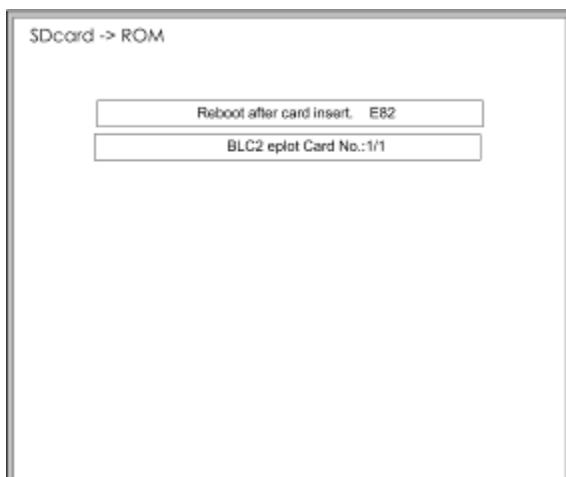
Error Messages

An error message shows in the first line if an error occurs during the download.

The error code consists of the letter "E" and a number. The example above shows error "E24" displayed. For details, refer to the Error Message Table (see "Handling Firmware Update Error").

Firmware Update Error

If a firmware update error occurs, this means the update was cancelled during the update because the module selected for update was not on the SD card.




Recovery after Power Loss

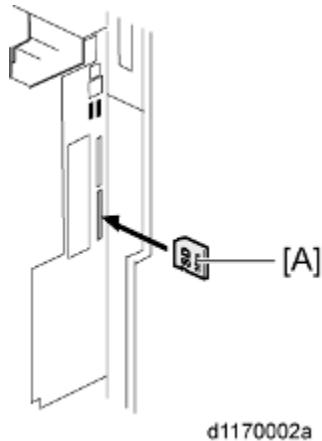
If the ROM update is interrupted as a result of accidental loss of power while the firmware is updating, then the correct operation of the machine cannot be guaranteed after the machine is switched on again. If the ROM update does not complete successfully for any reason, then in order to ensure the correct operation of the machine, the ROM update error will continue to show until the ROM is updated successfully.

In this case, insert the card again and switch on the machine to continue the firmware download automatically from the card without the menu display.

5.11.4 BROWSER UNIT UPDATE PROCEDURE



1. Remove the slot cover [A] for the SD card ( x 1).



2. Turn the SD-card label face [A] of the browser unit to the rear of the machine. Then push it slowly into slot 2 (lower) until you hear a click.
3. Plug in and turn on the main power switch.
4. Push the "User Tools" key.
 - If an administrator setting is registered for the machine, step 5 and 6 are required. Otherwise, skip to the step 7.
5. Push the "Login/ Logout" key.
6. Login with the administrator user name and password.
7. Touch "Extended Feature Settings" twice on the LCD.
8. Touch "Uninstall" on the LCD.
9. Touch the "Browser" line.
10. Confirmation message appears on the LCD.
11. Touch "Yes" to proceed.
12. Reconfirmation message appears on the LCD.
13. Touch "Yes" to uninstall the browser unit.
14. You will see "Uninstalling the extended feature... Please wait.", and then "Completed".
15. Touch "Exit" to go back to the setting screen.
16. Exit "User/Tools" setting, and then turn off the main power switch.
17. Remove the SD card of the browser unit from SD card slot 2 (lower).
18. Overwrite the updated program in the "sdk" folder of the browser unit application with PC.
19. Do the "Installation Procedure" to install the browser unit.

5.11.5 HANDLING FIRMWARE UPDATE ERRORS

An error message shows in the first line if an error occurs during a download. The error code consists of the letter "E" and a number ("E20", for example).

Error Message Table



Code	Meaning	Solution
20	Cannot map logical address	Make sure the SD card is inserted correctly.
21	Cannot access memory	HDD connection incorrect or replace hard disks.
22	Cannot decompress compressed data	Incorrect ROM data on the SD card, or data is corrupted.
23	Error occurred when ROM update program started	Controller program abnormal. If the second attempt fails, replace controller board.
24	SD card access error	Make sure SD card inserted correctly, or use another SD card.
30	No HDD available for stamp data download	HDD connection incorrect or replace hard disks.
31	Data incorrect for continuous download	Insert the SD card with the remaining data required for the download, the re-start the procedure.
32	Data incorrect after download interrupted	Execute the recovery procedure for the intended module download, then repeat the installation procedure.
33	Incorrect SD card version	Incorrect ROM data on the SD card, or data is corrupted.
34	Module mismatch - Correct module is not on the SD card)	SD update data is incorrect. Acquire the correct data (Japan, Overseas, OEM, etc.) then install again.
35	Module mismatch - Module on SD card is not for this machine	SD update data is incorrect. The data on the SD card is for another machine. Acquire correct update data then install again.

36	Cannot write module - Cause other than E34, E35	SD update data is incorrect. The data on the SD card is for another machine. Acquire correct update data then install again.
40	Engine module download failed	Replace the update data for the module on the SD card and try again, or replace the BICU board.
42	Operation panel module download failed	Replace the update data for the module on the SD card and try again, or replace the LCDC.
43	Stamp data module download failed	Replace the update data for the module on the SD card and try again, or replace the hard disks.
44	Controller module download failed	Replace the update data for the module on the SD card and tray again, or replace controller board.
50	Electronic confirmation check failed	SD update data is incorrect. The data on the SD card is for another machine. Acquire correct update data then install again.

5.12 REBOOT/SYSTEM SETTING RESET

5.12.1 SOFTWARE RESET



You can reboot the software with one of the following two procedures:

1. Turn the main power switch off and on.
2. Press and hold down  and  together for over 10 seconds. When the machine beeps once, release both buttons. After "Now loading. Please wait" shows for a few seconds, the copy window will open. The machine is ready for normal operation.

5.12.2 SYSTEM SETTINGS AND COPY SETTING RESET

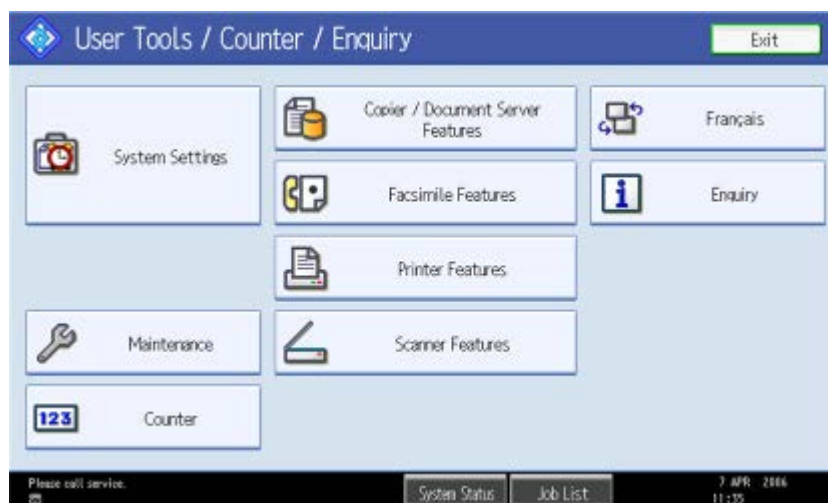
System Setting Reset

The system settings in the UP mode can be reset to their defaults. Use the following procedure.

1. Press User Tools/Counter .
2. Hold down  and then press System Settings.

Note

- You must press  first.




3. Press yes when the message prompts you to confirm that you want to reset the system settings.
4. Press exit when the message tells you that the settings have been reset.

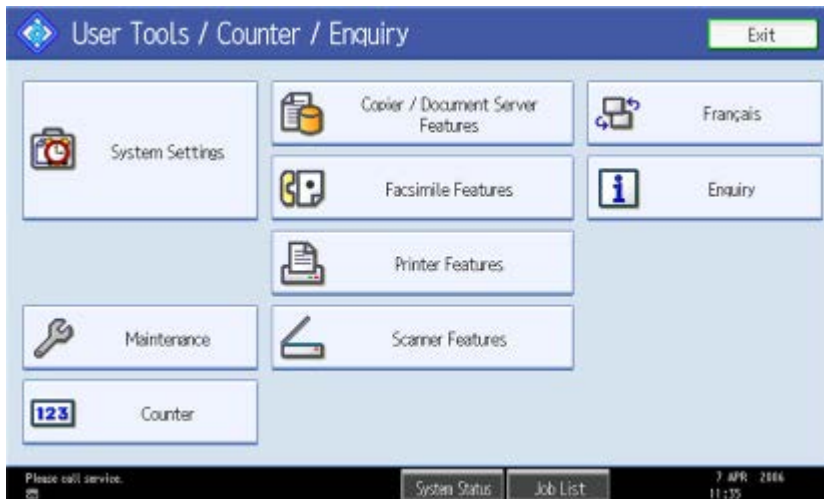
Copier Setting Reset

Use the following procedure to reset the copy settings in the UP mode to their defaults.

1. Press User Tools/Counter .
2. Hold down  and then press Copier/Document Server Settings.

Note

- You must press  first.



3. Press "Yes" when the message prompts you to confirm that you want to reset the Copier Document Server settings.
4. Press exit when the message tells you that the settings have been reset.

5.13 CONTROLLER SELF-DIAGNOSTICS

5.13.1 OVERVIEW

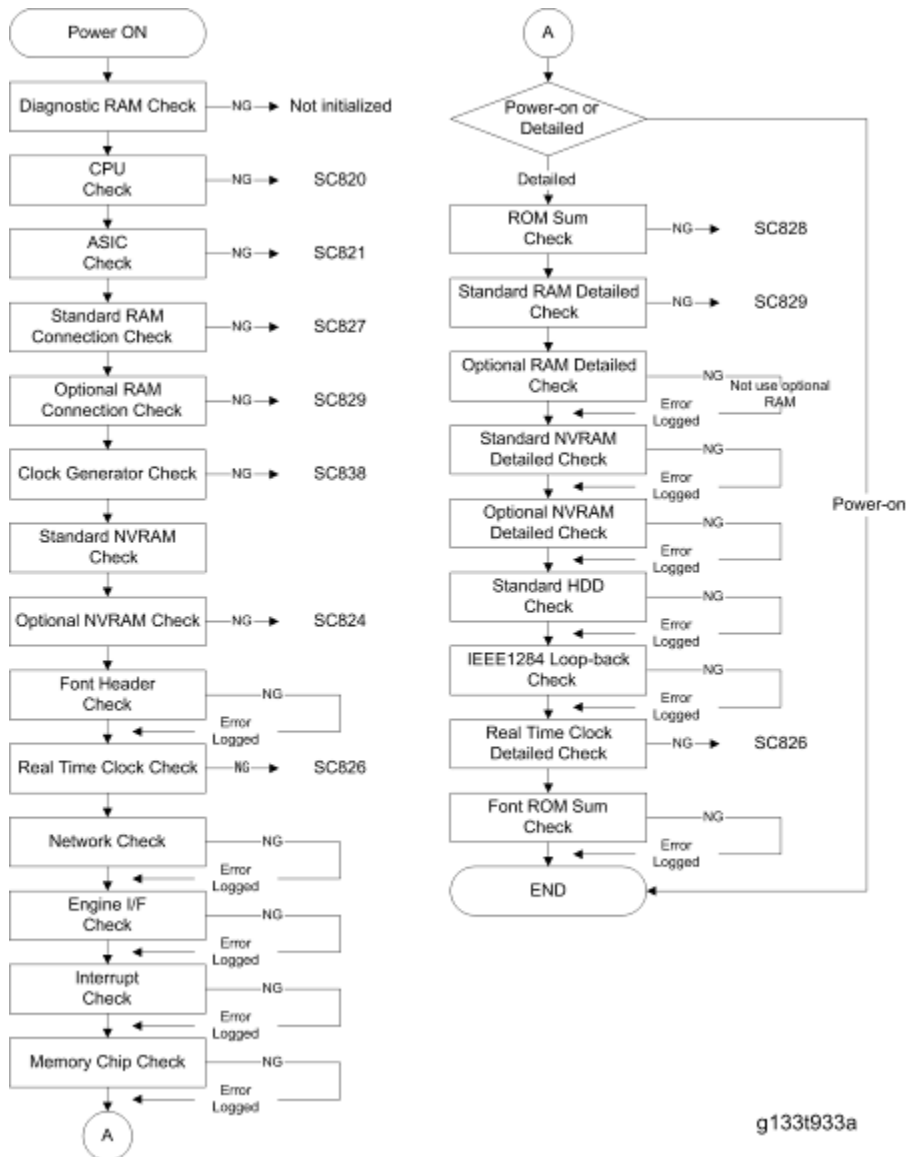
There are three types of self-diagnostics for the controller.

1. Power-on self-diagnostics: The machine automatically starts the self-diagnostics just after the power has been turned on.
2. SC detection: The machine automatically detects SC conditions at power-on or during operation.

The following shows the workflow of the power-on and detailed self-diagnostics.

Note

- Diagnostics for uninstalled options will normally be skipped.



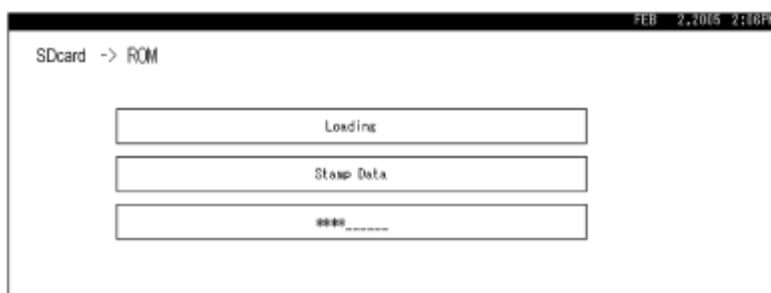
5.14 DOWNLOADING STAMP DATA

The stamp data should be downloaded from the controller firmware to the hard disks at the following times:

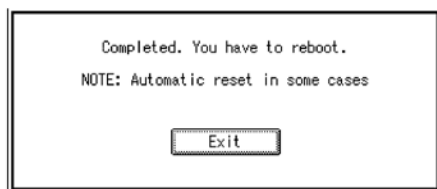
- After the hard disks have been replaced.

The print data contains the controller software. Execute SP 5853 to download the fixed stamp data required by the hard disks.

1. Enter the SP mode.
2. Select SP5853 and then press "EXECUTE". The following screen opens while the stamp data is downloading.



The download is finished when the message prompts you to close.




3. Press the "Exit" button. Then turn the copier off and on again.

5.15 NVRAM DATA UPLOAD/DOWNLOAD

5.15.1 UPLOADING CONTENT OF NVRAM TO AN SD CARD

Do the following procedure to upload SP code settings from NVRAM to an SD card.

 **Note**

- This data should always be uploaded to an SD card before the NVRAM is replaced.
 - Make sure that the write protection of an SD card is unlocked.
1. Do SP5990-001 (SMC Print) before you switch the machine off. You will need a record of the NVRAM settings if the upload fails.
 2. Switch the copier main power switch off.
 3. Remove the SD slot cover ( x 1).
 4. Insert the SD card into SD card slot 2 (lower). Then switch the copier on.
 5. Execute SP5824-001 (NVRAM Data Upload) and then press the "Execute" key.
 6. 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


7. 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.

5.15.2 DOWNLOADING AN SD CARD TO NVRAM

Do the following procedure to download SP data from an SD card to the NVRAM in the machine.

- The NVRAM data download may fail if the SD card with the NVRAM data is damaged, or if the connection between the controller and BCU is defective.
 - Do the download procedure again if the download fails.
 - Do the following procedure if the second attempt fails:
 - Enter the NVRAM data manually using the SMC print you created before uploading the NVRAM data.
1. Switch the copier main power switch off.
 2. Remove the SD slot cover ( x 1).
 3. Insert the SD card with the NVRAM data into SD Card Slot 2 (lower).
 4. Switch the copier main power switch on.
 5. Do SP5825-001 (NVRAM Data Download) and press the "Execute" key.

Note

- The serial number of the file on the SD card must match the serial number of the machine for the NVRAM data to download successfully. The download fails if the serial numbers do not match.

This procedure does not download the following data to the NVRAM:

- Total Count
- C/O, P/O Count


5.16 ADDRESS BOOK UPLOAD/DOWNLOAD

5.16.1 INFORMATION LIST

The following information is possible to be uploaded and downloaded.

Information	
<ul style="list-style-type: none"> ▪ Registration No. ▪ User Code ▪ E-mail ▪ Protection Code ▪ Fax Destination ▪ Fax Option ▪ Group Name ▪ Key Display 	<ul style="list-style-type: none"> ▪ Select Title ▪ Folder ▪ Local Authentication ▪ Folder Authentication ▪ Account ACL ▪ New Document Initial ACL ▪ LDAP Authentication


5.16.2 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 switch of the main machine.
4. Remove the SD slot cover at the left rear side of the machine ( x 1).
5. Install the SD card into the SD card slot 2 (lower) (for service use).
6. Turn on the main power switch.
7. Enter the SP mode.
8. Do SP5-846-051 (Backup All Addr Book).
9. Exit the SP mode, and then turn off the main power switch.
10. Remove the SD card from the SD card slot 2 (lower).
11. Install the SD slot cover.

 **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 user information. Do not take it back to your location.

5.16.3 UPLOAD

1. Turn off the main power switch of the main machine.
2. Remove the SD slot cover at the left rear side of the machine ( x 1).
3. Install the SD card, which has already been uploaded, into the SD card slot 2 (lower).
4. Turn on the main power switch.
5. Enter the SP mode.
6. Do SP5-846-052 (Restore All Addr Book).
7. Exit the SP mode, and then turn off the main power switch.
8. Remove the SD card from the SD card slot 2 (lower).
9. Install the SD slot cover.

 **Note**

- The counter in the user code information is initialized after uploading.
- The information of an administrator and supervisor cannot be downloaded nor uploaded.
- If there is no data of address book information in the SD card, an error message is displayed.

5.17 USING THE DEBUG LOG

5.17.1 OVERVIEW

This machine provides a Save Debug Log feature that allows the Customer Engineer to save and retrieve error information for analysis.

Every time an error occurs, debug information is recorded in volatile memory. But this information is lost when the machine is switched off and on.

To capture this debug information, the Save Debug Log feature provides two main features:

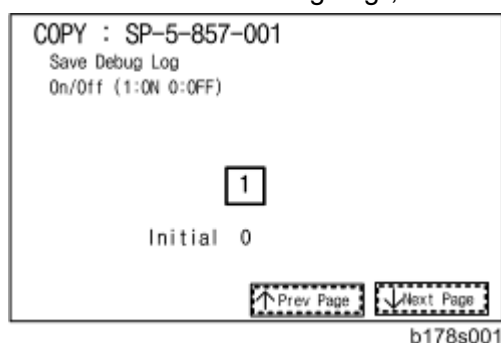
- Switching on the debug feature so error information is saved directly to the HDD for later retrieval.
- Copying the error information from the HDD to an SD card.


Do the following procedure below to set up the machine so the error information is saved automatically to the HDD when a user has problems with the machine. Then ask the user to reproduce the problem.

5.17.2 SWITCHING ON AND SETTING UP SAVE DEBUG LOG

The debug information cannot be saved until the "Save Debug Log" function has been switched on and a target has been selected.

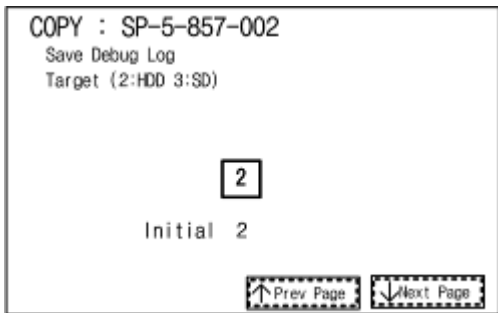
1. Enter the SP mode and switch the Save Debug Log feature on.
 - Enter the SP mode.
 - Touch "System SP".
 - On the LCD panel, open SP5857.
2. Under "5857 Save Debug Log", touch "1 On/Off".




3. On the control panel keypad, press "1". Then press . This switches the Save Debug Log feature on.

Note

- The default setting is "0" (OFF). This feature must be switched on in order for the debug information to be saved.



4. Select the target destination where the debug information will be saved. Under "5857 Save Debug Log", touch "2 Target", enter "2" with the operation panel key to select the hard disk as the target destination. Then press .

Note

- Select "3 SD Card" to save the debug information directly to the SD card if it is inserted in the service slot.

5. Now touch "5858" and specify the events that you want to record in the debug log. SP5858 (Debug Save When) provides the following items for selection.

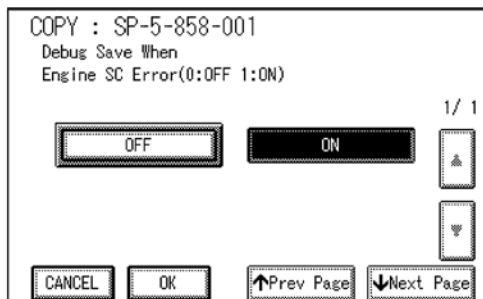
1	Engine SC Error	Saves data when an engine-related SC code is generated.
2	Controller SC Error	Saves debug data when a controller-related SC Code is generated.
3	Any SC Error	Saves data only for the SC code that you specify by entering code number.
4	Jam	Saves data for jams.

Note

- More than one event can be selected.

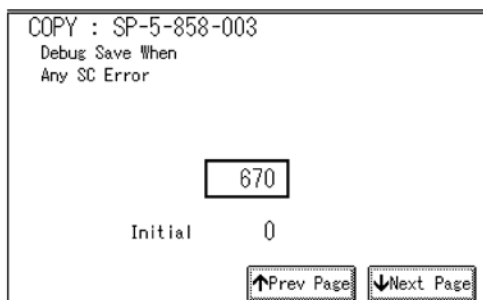
Example 1: To Select Items 1, 2, 4

Touch the appropriate items(s). Press "ON" for each selection. This example shows "Engine SC Error" selected.



Example 2: To Specify an SC Code

Touch "3 Any SC Error", enter the 3-digit SC code number with the control panel number keys. Then press . This example shows an entry for SC670.



Note

- For details about SC code numbers, please refer to the SC tables in Section 4. "Troubleshooting".
- Select one or more memory modules for reading and recording debug information. Touch "5859".
Under "5859" press the necessary key item for the module that you want to record.
Enter the appropriate 4-digit number. Then press .

Note

- Refer to the two tables below for the 4-digit numbers to enter for each key.

The example below shows "Key 1" with "2222" entered.

COPY : SP-5-859-001
 Debug Save Key No.
 Key 1

2222

Initial 0

Prev Page Next Page

The following keys can be set with the corresponding numbers (The initials in parentheses indicate the names of the modules).

4-Digit Entries for Keys 1 to 10

Key No.	Copy	Printer	Scanner	Web
1	2222 (SCS)			
2	14000 (SRM)			
3	256 (IMH)			
4	1000 (ECS)			
5	1025 (MCS)			
6	4848 (COPY)	4400 (GPS)	5375 (Scan)	5682 (NFA)
7	2224 (BICU)	4500 (PDL)	5682 (NFA)	6600 (WebDB)
8		4600 (GPS-PM)	3000 (UCS)	3300 (PTS)
9		2000 (NCS)	2000 (NCS)	6666 (WebSys)
10		2224 (BICU)	4126 (DCS)	2000 (NCS)

 **Note**

- The default settings for Keys 1 to 10 are all zero ("0").

Key to Acronyms

Acronym	Meaning	Acronym	Meaning
ECS	Engine Control Service	NFA	Net File Application
GPS	GW Print Service	PDL	Printer Design Language
GSP-PM	GW Print Service – Print Module	PTS	Print Server
IMH	Image Memory Handler	SCS	System Control Service
MCS	Memory Control Service	SRM	System Resource Management
NCS	Network Control Service	WebDB	Web Document Box (Document Server)

The machine is now set to record the debugging information automatically on the HDD (the target selected with SP5857-002) for the events that you selected with SP5858 and the memory modules selected with SP5859.

Please keep the following important points in mind when you do this setting:

- Note that the number entries for Keys 1 to 5 are the same for the Copy, Printer, Scanner, and Web memory modules.
- The initial settings are all zero.
- These settings remain in effect until you change them. Be sure to check all the settings, especially the settings for Keys 6 to 10. To switch off a key setting, enter a zero for that key.
- You can select any number of keys from 1 to 10 (or all) by entering the corresponding 4-digit numbers from the table.
- You cannot mix settings for the groups (COPY, PRINTER, etc.) for 006 to 010. For example, if you want to create a PRINTER debug log you must select the settings from the 9 available selections for the "PRINTER" column only.
- One area of the disk is reserved to store the debug log. The size of this area is limited to 4 MB.

5.17.3 RETRIEVING THE DEBUG LOG FROM THE HDD



Retrieve the debug log by copying it from the hard disk to an SD card.

1. Insert the SD card into slot 2 (lower)(service slot) of the copier.
2. Enter the SP mode and execute SP5857-009 (Copy HDD to SD Card (Latest 4 MB)) to write the debugging data to the SD card.
3. Use a card reader to copy the file and send it for analysis to your local Ricoh representative by email. You can also send the SD card by regular mail if you want.

5.17.4 RECORDING ERRORS MANUALLY

SC errors and jams only are recorded to the debug log automatically. Please instruct the user to do the following immediately after occurrence to save the debug data for any other errors that occur while the customer engineer is not on site. Such problems also include a controller or panel freeze.

↓ Note

- You must previously switch on the Save Debug Feature (SP5857-001) and select the hard disk as the save destination (SP5857-002) if you want to use this feature.
1. Press  (Clear Modes).on the operation panel when the error occurs.
 2. On the control panel, enter "01". Then hold down  for at least 3 seconds until the machine beeps and then release it. This saves the debug log to the hard disk for later retrieval with an SD card by the service representatives.
 3. Switch the machine off and on to resume operation.

The debug information for the error is saved on the hard disk. This lets the service representative retrieve it on their next visit by copying it from the HDD to an SD card.

5.17.5 DEBUG LOG CODES

SP5857-015 Copy SD Card-to-SD Card: Any Desired Key

This SP copies the log on an SD card (the file that contains the information written directly from shared memory) to a log specified by key number. The copy operation is executed in the log directory of the SD card inserted in the same slot. (This function does not copy from one slot to another.) Each SD card can hold up to 4 MB of file data. Unique file names are created for the data during the copy operation to prevent overwriting files of the same name. This means that log data from more than one machine can be copied onto the same SD card. This command does not execute if there is no log on the HDD for the name of the specified key.

SP5857-016 Create a File on HDD to Store a Log

This SP creates a 32 MB file to store a log on the HDD. However, this is not a completely empty file. The created file will hold the number "2225" as the SCS key number and other non-volatile information. Even if this SP is not executed, a file is created on the HDD when the first log is stored on the HDD (it takes some time to complete this operation). This creates the possibility that the machine may be switched off and on before the log can be created completely. If you execute this SP to create the log file beforehand, this will greatly reduce the amount of time required to acquire the log information and save onto the HDD. With the file already created on the HDD for the log file, the data only needs to be recorded. A new log file does not need to be created. To create a new log file, do SP5857-011 to delete the debug log data from the HDD. Then do SP5857-016.

SP5857-017 Create a File on SD Card to Store a Log

This SP creates a 4 MB file to store a log on an SD card. However, this is not a completely empty file. The created file will hold the number "2225" as the SCS key number and other non-volatile information. Even if this SP is not executed, a file is created on the SD card when the first log is stored on the SD card (it takes some time to complete this operation). This creates the possibility that the machine may be switched off and on before the log can be created completely. If you execute this SP to create the log file beforehand, this will greatly reduce the amount of time required to acquire the log information and save onto the SD card. With the file already created on the SD card for the log file, the data only needs to be recorded; a new log file does not require creation. To create a new log file, do SP5857-012 to delete the debug log data from the SD card. Then do SP5857-017.

5.18 CARD SAVE FUNCTION

5.18.1 OVERVIEW

Card Save:

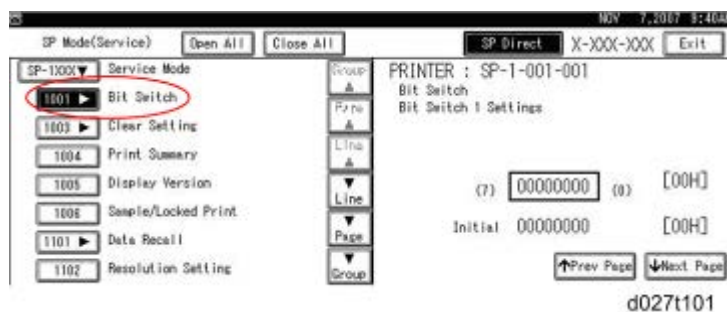
- The Card Save function is used to save print jobs received by the printer on an SD card with no print output. Card Save mode is toggled using printer Bit Switch #1 bit number 4. Card Save will remain enabled until the SD card becomes full, or until all file names have been used.
- Captures are stored on the SD card in the folder /prt/cardsave. File names are assigned sequentially from PRT00000.prn to PRT99999.prn. An additional file PRT.CTL will be created. This file contains a list of all files created on the card by the card save function.
- Previously stored files on the SD card can be overwritten or left intact. Card Save SD has "Add" and "New" menu items.
 - **Card Save (Add):** Appends files to the SD Card. Does not overwrite existing files. If the card becomes full or if all file names are used, an error will be displayed on the operation panel. Subsequent jobs will not be stored.
 - **Card Save (New):** Overwrites files in the card's /prt/cardsave directory.

Limitation:

- Card Save cannot be used with PjL Status Readback commands. PjL Status Readbacks will not work. In addition they will cause the Card Save to fail.

5.18.2 PROCEDURE

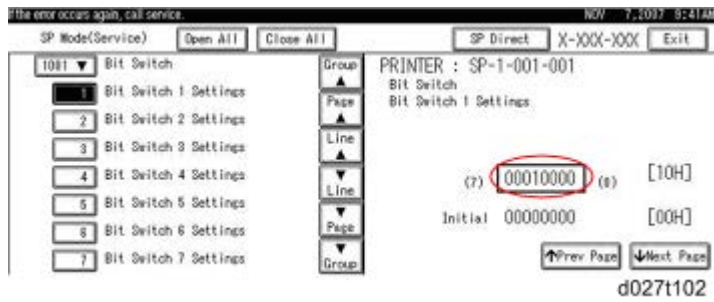
1. Turn the main power switch OFF.
2. Insert the SD card into slot 2 (lower). Then turn the power ON.
3. Enter SP mode.
4. Select the "Printer SP".
5. Select SP-1001 "Bit Switch".



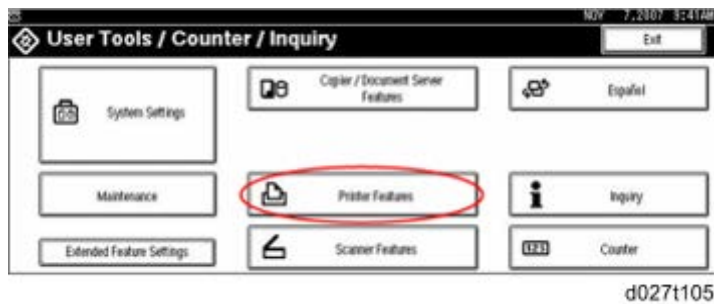
6. Select "Bit Switch 1 Settings" and use the numeric keypad to turn bit 4 ON and then press the "#" button to register the change. The result should look like: **00010000**. By doing this, Card

Card Save Function

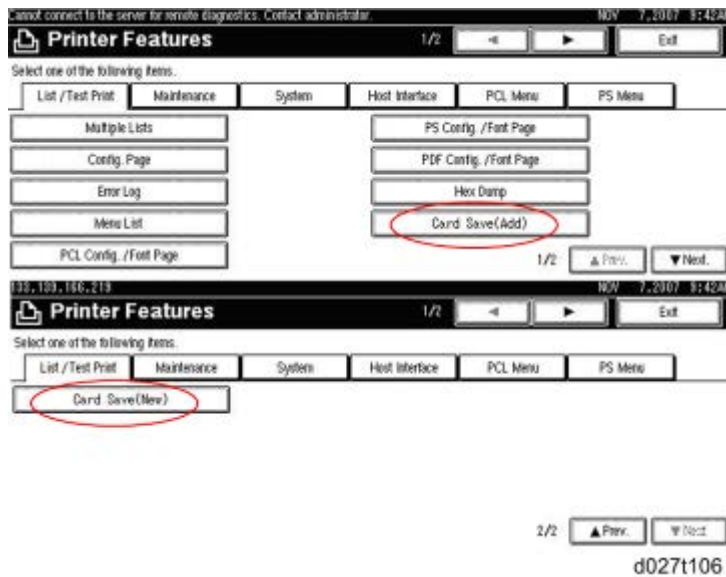
Save option will appear in the "List/Test Print" menu.



7. Press "Exit" to exit SP Mode.
8. Press the "User Tools/Counter" button.



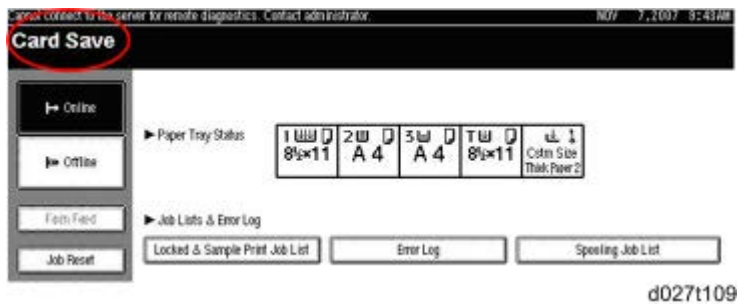
9. Select "Printer Features".



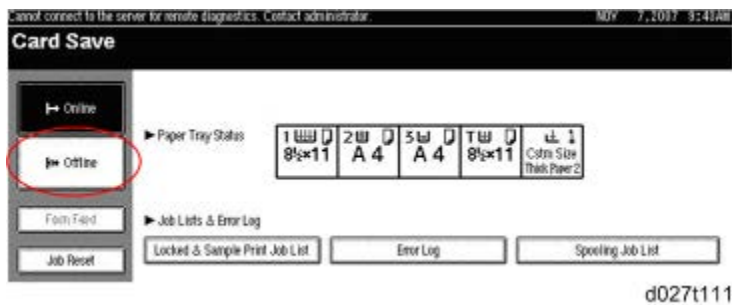
10. Card Save (Add) and Card Save (New) should be displayed on the screen. Select Card Save (Add) or Card Save (New).



11. Press "OK" and then exit the "User Tools/Counter" menu.
12. Press the "Printer" button.



13. Card Save should be displayed in the top left of the display panel.
14. Send a job to the printer. The Communicating light should start blinking.
15. As soon as the printer receives the data, it will be stored on the SD card automatically with no print output. Nothing is displayed on the screen, indicating that a Card Save operation was successful.



16. Press "Offline" and then the "Clear/Stop" button to exit Card Save mode.
17. Change the Bit Switch Settings back to the default **00000000**. Press the "#" button in the numeric keypad to register the changes.
18. Remove the SD card after the main power switch is turned off.

5.18.3 ERROR MESSAGES

Card Save error messages:

- **Init error:** A card save process (e.g. card detection, change to kernel mode) failed to initialize.
- **Card not found:** Card cannot be detected in the slot.
- **No memory:** Insufficient working memory to process the job.
- **Write error:** Failed to write to the card.
- **Other error:** An unknown error occurred.

If an error occurs, pressing "OK" will cause the device to discard the job and return to the ready state.

5.19 SMC LIST CARD SAVE FUNCTION

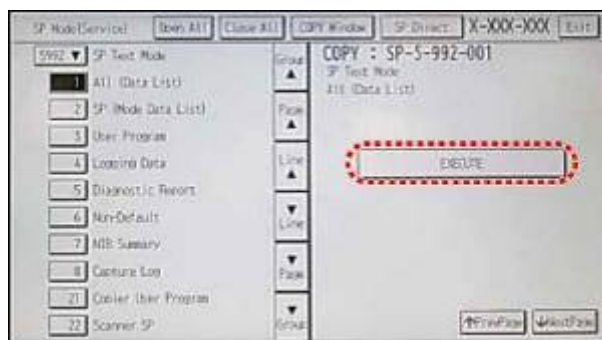
5.19.1 OVERVIEW

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.

5.19.2 PROCEDURE

1. Turn the main power switch OFF.
2. Insert the SD card into the operation panel SD-card slot. Then turn the power ON.
3. Enter SP mode.
4. Select "Copy SP".



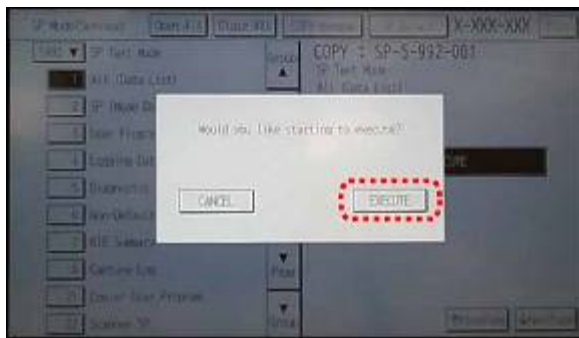
d1440127

5. Select SP-5992 "SP Text Mode".
6. Select a detail SP number shown below to save data on the SD card.
SP-5992-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

Detail No.	SMC Categories to Save
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

- Press [EXECUTE].



d1440128

- Press [EXECUTE] again to start. Press [CANCEL] to cancel the saving.



d1440130

- "It is executing it" is shown on the screen while executing.



d1440129

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.

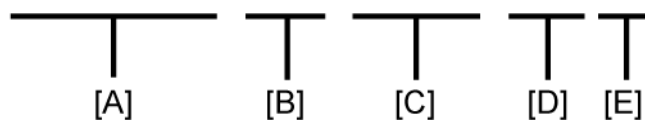
11. Press [Exit] to exit from SP mode.

5.19.3 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:

W801P999017_59921_20111011_53954.csv



d1440131a

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.

5.19.4 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.

TROUBLESHOOTING

REVISION HISTORY		
Page	Date	Added/Updated/New
		None

6. TROUBLESHOOTING

6.1 SC TABLES

6.1.1 SERVICE CALL CONDITIONS

Summary

The 'SC Table' section shows the SC codes for controller errors and other errors. The latter (not controller errors) are put into four types. The type is determined by their reset procedures. The table shows the classification of the SC codes.

	Key	Definition	Reset Procedure
Controller errors	CTL	The error has occurred in the controller.	See "Troubleshooting Procedure" in the table.
Other errors	A	The error involves the fusing unit. The machine operation is disabled. The user cannot reset the error.	Turn the main switch off and on. Reset the SC (set SP5-810-1). Turn the main switch off and on.
	B	The error involves one or some specific units. The machine operates as usual, excluding the related units.	Turn the operation switch off and on.
	C	The error is logged. The SC-code history is updated. The machine operates as usual.	The SC will not show. Only the SC history is updated.
	D	The machine operation is disabled. You can reset the machine by turning the operation switch or main switch off and on. If the error occurs again, the same SC code is displayed.	Turn the operation switch or main power switch off and on.

After you turn the main power switch off, wait for one second or more before you turn the main power switch on (SC 672). All SCs are logged. The print log data (SP5-990-004) in SP mode can check the latest 10 SC codes detected and total counters when the SC code is detected.

Note

- If the problem concerns electrical circuit boards, first disconnect then reconnect the connectors before you replace the PCBs.
- If the problem concerns a motor lock, first check the mechanical load before you replace motors or sensors.

SC Code Classification

The table shows the classification of the SC codes:

Class 1	Section	SC Code	Detailed section
1XX	Scanning	100 -	Scanner
		190 -	Unique for a specific model
2XX	Exposure	200 -	Polygon motor
		220 -	Synchronization control
		230 -	FGATE signal related
		240 -	LD control
		280 -	Unique for a specific model
		290 -	Shutter
3XX	Image Processing 1	300 -	Charge
		330 -	Drum potential
		350 -	Development
		380 -	Unique for a specific model

Class 1	Section	SC Code	Detailed section
4XX	Image Processing 2	400 -	Image transfer
		420 -	Paper separation
		430 -	Cleaning
		440 -	Around drum
		460 -	Unit
		480 -	Others
5XX	Paper feed and Fusing	500 -	Paper feed
		515 -	Duplex
		520 -	Paper transport
		530 -	Fan motor
		540 -	Fusing
		560 -	Others
		570 -	Unique for a specific model
6XX	Communication	600 -	Electrical counters
		620 -	Mechanical counters
		630 -	Account control
		640 -	CSS
		650 -	Network
		670 -	Internal data processing
		680 -	Unique for a specific model

Class 1	Section	SC Code	Detailed section
7XX	Peripherals	700 -	Original handling
		720 -	Two-tray finisher
		740 -	Booklet finisher
8XX	Overall System	800 -	Error after ready condition
		820 -	Diagnostics error
		860 -	Hard disk
		880 -	Unique for a specific model
9XX	Others	900 -	Counter
		920 -	Memory
		990 -	Others

6.1.2 SC1XX: SCANNING

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
101	D	Exposure lamp error
		The peak white level is less than 64/255 digits (8 bits) when scanning the shading plate.
		<ul style="list-style-type: none"> ▪ Exposure lamp defective ▪ Lamp stabilizer defective ▪ Exposure lamp connector defective ▪ Standard white plate dirty ▪ Scanner mirror or scanner lens out of position or dirty
		<ol style="list-style-type: none"> 1. Check and clean the scanner mirror(s) and scanner lens. 2. Check and clean the shading plate. 3. Replace the exposure lamp. 4. Replace the lamp stabilizer. 5. Replace the scanner mirror(s) or scanner lens.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
120	D	Scanner home position error 1
		The scanner home position sensor does not detect the "OFF" condition during operation.
		<ul style="list-style-type: none"> ▪ Scanner motor driver defective ▪ Scanner motor defective ▪ Harness between SBU and scanner motor disconnected ▪ Scanner HP sensor defective ▪ Harness between SBU and HP sensor disconnected
		<ol style="list-style-type: none"> 1. Check the cable connection between the SBU and scanner motor. 2. Check the cable connection between the SBU and HP sensor. 3. Replace the scanner motor. 4. Replace the HP sensor.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
121	D	Scanner home position error 2
		The scanner home position sensor does not detect the "ON" condition during operation.
		<ul style="list-style-type: none"> ▪ Scanner motor driver defective ▪ Scanner motor defective ▪ Harness between SBU and scanner motor disconnected ▪ Scanner HP sensor defective ▪ Harness between SBU and HP sensor disconnected
		<ol style="list-style-type: none"> 1. Check the cable connection between the SBU and scanner motor. 2. Check the cable connection between the SBU and HP sensor. 3. Replace the scanner motor. 4. Replace the HP sensor.

Troubleshooting

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
141	D	Black level detection error
		The black level cannot be adjusted within the target value during the zero clamp.
		<ul style="list-style-type: none"> ▪ Harness disconnected ▪ Defective SBU
		<ol style="list-style-type: none"> 1. Check the cable connection 2. Replace the SBU.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
142	D	White level detection error
		The white level cannot be adjusted within the target during auto gain control.
		<ul style="list-style-type: none"> ▪ Dirty exposure glass or optics section ▪ SBU defective ▪ Exposure lamp defective ▪ Lamp stabilizer defective ▪ Scanner motor defective
		<ol style="list-style-type: none"> 1. Clean the exposure glass, white plate, mirrors, and lens. 2. Check if the exposure lamp is lit during initialization. 3. Check the harness connection between SBU and BICU. 4. Replace the exposure lamp. 5. Replace the scanner motor. 6. Replace the SBU.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
144	D	SBU communication error
		The SBU connection cannot be detected at power on or recovery from the energy save mode, or a signal is abnormal.
		<ul style="list-style-type: none"> ▪ Defective SBU ▪ Defective harness ▪ Defective detection port on the BICU
		<ol style="list-style-type: none"> 1. Replace the harness. 2. Replace the SBU. 3. Replace the BICU.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
161 -01	D	BICU error: abnormal LSYNC
		The error result of the self-diagnostic by the ASIC on the BICU is detected at power on or recovery from the energy save mode.
		<ul style="list-style-type: none"> ▪ Defective BICU ▪ Defective connection between BICU and SBU
		<ol style="list-style-type: none"> 1. Check the connection between BICU and SBU. 2. Replace the BICU.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
162 -01	D	BICU error: PCIE communication error
		The link up interrupt from LYRA is not detected or the number of connection lanes is other than 2 at power on or recovery from the energy save mode.
		<ul style="list-style-type: none"> ▪ Defective BICU ▪ Defective connection between BICU and SBU
		<ol style="list-style-type: none"> 1. Check the connection between BICU and SBU. 2. Replace the BICU.

Troubleshooting

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
165	D	Copy Data Security Unit error
		The copy data security board is not detected or a device check error occurs when the copy data security function is set "ON" with the initial setting.
		<ul style="list-style-type: none"> ▪ Incorrect installation of the copy data security board ▪ Defective copy data security board
		<ol style="list-style-type: none"> 1. Reinstall the copy data security board. 2. Replace the copy data security board.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
195	D	Serial Number Mismatch
		Serial number stored in the memory does not have the correct code.
		<ul style="list-style-type: none"> ▪ EEPROM defective ▪ BICU replaced without original EEPROM
		<ol style="list-style-type: none"> 1. Check the serial number with SP5-811-002. 2. If the stored serial number is incorrect, contact your supervisor.

6.1.3 SC 2XX: EXPOSURE

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
202 -01	D	Polygon motor error 1: ON timeout: Bk, Cy
-03	D	Polygon motor error 1: ON timeout: Ma, Ye
		The polygon mirror motor does not reach the targeted operating speed within the specified time after turning on or changing speed
		<ul style="list-style-type: none"> ▪ Defective or disconnected harness to polygon motor driver board ▪ Defective polygon motor driver board ▪ Defective polygon motor
		<ol style="list-style-type: none"> 1. Replace the polygon motor. 2. Replace the laser optics housing unit. 3. Replace the harness. 4. Replace the BICU.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
203 -01	D	Polygon motor error 2: OFF timeout: Bk, Cy
-03	D	Polygon motor error 2: OFF timeout: Ma, Ye
		The polygon mirror motor does not leave the READY status within the given time after the polygon motor switches off.
		<ul style="list-style-type: none"> ▪ Disconnected or defective harness to polygon motor driver board ▪ Defective polygon motor driver board ▪ Defective polygon motor
		<ol style="list-style-type: none"> 1. Check or replace the harness. 2. Replace the polygon motor.

Troubleshooting

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
204 -01	D	Polygon motor error 0: XSCRDY signal error: Bk, Cy
-03	D	Polygon motor error 1: XSCRDY signal error: Ma, Ye
		The SCRDY_N signal goes HIGH (inactive) during a writing operation.
		<ul style="list-style-type: none"> ▪ Disconnected or defective harness to polygon motor driver board ▪ Defective polygon motor ▪ Defective polygon motor driver board
		<ol style="list-style-type: none"> 1. Check or replace the harness. 2. Replace the polygon motor. 3. Replace the BICU.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
220 -01	D	Laser synchronizing detection error: start position LD1: Bk
-02	D	Laser synchronizing detection error: start position LD1: Ma
		The laser synchronizing detection signal for the start position of the LDB is not output for the prescribed time after the LDB unit turns on while the polygon motor is rotating normally
		<ul style="list-style-type: none"> ▪ Broken I/F harness of synchronizing detection unit ▪ Defective synchronizing detection board ▪ Defective LDB ▪ Defective BICU
		<ol style="list-style-type: none"> 1. Turn off and on the main power switch. 2. Replace the I/F harness. 3. Replace the BICU.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
230 -01	D	FGATE ON error: Bk
-02	D	FGATE ON error: Cy
-03	D	FGATE ON error: Ma
-04	D	FGATE ON error: Ye
		<p>The PFGATE ON signal does not assert within 5 seconds after processing start timing for black (-01), cyan (-02), magenta (-03) or yellow (-04) color writing.</p> <ul style="list-style-type: none"> ▪ Defective ASIC (Lupus) ▪ Poor connection between controller and BICU ▪ Defective BICU <p>1. Check the connection between the controller board and the BICU. 2. Replace the BICU. 3. Replace the controller board.</p>

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
231 -01	D	FGATE OFF error: Bk
-02	D	FGATE OFF error: Cy
-03	D	FGATE OFF error: Ma
-04	D	FGATE OFF error: Ye
		<ul style="list-style-type: none"> ▪ The PFGATE ON signal still asserts within 5 seconds after processing finish timing for black (-01), cyan (-02), magenta (-03) or yellow (-04) color writing. ▪ The PFGATE ON signal still asserts when the next job starts. <p>See SC 230 for troubleshooting details.</p>

Troubleshooting

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
240 -01	D	LD error: Bk or Cy
-03	D	LD error: Ma or Ye
		The BICU detects an LD error a few times consecutively when the LDB unit turns on after LDB initialization.
		<ul style="list-style-type: none"> ▪ Worn-out LD ▪ Disconnected or broken harness of the LD
		<ol style="list-style-type: none"> 1. Replace the harness of the LD. 2. Replace the laser optics housing unit. 3. Replace the BICU.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
260 -01	C	Writing temperature thermistor error: Bk - Cy
-03	C	Writing temperature thermistor error: Ma - Ye
		The temperature thermistor output is no more than 0.81 V or no less than 2.95 V.
		<ul style="list-style-type: none"> ▪ No thermistor is installed or disconnected connectors ▪ Defective thermistor
		<ol style="list-style-type: none"> 1. Check the connection of the connectors. 2. Replace the thermistor.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
285	D	MUSIC error
		Line position adjustment fails four consecutive times.
		<ul style="list-style-type: none"> ▪ Pattern sampling error (insufficient image density) ▪ Defective TM sensors ▪ Defective image transfer belt unit ▪ Defective PCDU(s) ▪ Defective laser optics housing unit
		<ol style="list-style-type: none"> 1. Check and reinstall the image transfer belt unit and PCDUs. 2. Check if each toner bottle has enough toner. 3. Replace the TM sensor. 4. Replace the image transfer belt unit. 5. Replace the PCDU(s). 6. Replace the laser optics housing unit.

6.1.4 SC3XX: IMAGE PROCESSING – 1

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
312	D	Charge P.P. output error: Bk
313	D	Charge P.P. output error: Cy
314	D	Charge P.P. output error: Ma
315	D	Charge P.P. output error: Ye
		<p>The feedback voltage of the charge AC for each color is 0.3 V or less for 0.2 seconds after the charge AC has turned on.</p> <ul style="list-style-type: none"> ▪ Disconnected or broken harnesses of the HVPS ▪ Defective PCDU ▪ Defective HVPS <p>1. Check or replace the harnesses of the HVPS. 2. Reinstall or replace the PCDU. 3. Replace the HVPS.</p>

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		Color development motor error
		The motor LOCK signal is not detected for more than two seconds while the motor START signal is on.
325	D	<ul style="list-style-type: none"> ▪ Color development motor slip due to an increase in the torque caused by connected components ▪ Defective motor <p>1. Adjust the torque properly by replacing or cleaning the PCDU. 2. Replace the PCDU. 3. Replace the development motor: CMY if load torque is normal.</p>

6.1.5 SC3XX: IMAGE PROCESSING – 2

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
360 -01	D	TD sensor (Vt high) error 1: Bk
		The Vt value of the black TD sensor exceeds the specified value (SP3030-031) ± 0.2 V for three consecutive times.
-02	D	TD sensor (Vt high) error 1: Cy
		The Vt value of the cyan TD sensor exceeds the specified value (SP3030-032) ± 0.2 V for three consecutive times.
-03	D	TD sensor (Vt high) error 1: Ma
		The Vt value of the magenta TD sensor exceeds the specified value (SP3030-033) ± 0.2 V for three consecutive times.
-04	D	TD sensor (Vt high) error 1: Ye
		The Vt value of the yellow TD sensor exceeds the specified value (SP3030-034) ± 0.2 V for three consecutive times.
		<ul style="list-style-type: none"> ▪ Black, magenta, cyan, or yellow TD sensor disconnected ▪ Harness between TD sensor and PCDU defective ▪ Defective TD sensor
		<ol style="list-style-type: none"> 1. Check the black, magenta, cyan, or yellow TD sensor connector and harness between the TD sensor and PCDU for damage. 2. Check the drawer connector. 3. Replace the defective PCDU.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
361 -01	D	TD sensor (Vt) upper limit error: Bk
		The Vt value upper limit of the black TD sensor (SP3210-001) exceeds the specified value (SP3211-002) for the specified number of times (SP3211-003) consecutively.
-02	D	TD sensor (Vt) upper limit error 1: Cy
		The Vt value upper limit of the cyan TD sensor (SP3210-002) exceeds the specified value (SP3211-002) for the specified number of times (SP3211-003) consecutively.
-03	D	TD sensor (Vt) upper limit error 1: Ma
		The Vt value upper limit of the magenta TD sensor (SP3210-003) exceeds the specified value (SP3211-002) for the specified number of times (SP3211-003) consecutively.
-04	D	TD sensor (Vt) upper limit error 1: Ye
		The Vt value upper limit of the yellow TD sensor (SP3210-004) exceeds the specified value (SP3211-002) for the specified number of times (SP3211-003) consecutively.
		<ul style="list-style-type: none"> ▪ Black, cyan, magenta, or yellow TD sensor disconnected ▪ Harness between TD sensor and PCDU defective ▪ Defective TD sensor
		<ol style="list-style-type: none"> 1. Check the black, cyan, magenta, or yellow TD sensor connector and harness between the TD sensor and PCDU. 2. Check the drawer connector. 3. Replace the defective TD sensor.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
362 -01	D	TD sensor (Vt) lower limit error: Bk
		The Vt value lower limit of the black TD sensor (SP3210-001) falls below the specified value (SP3211-004) for the specified number of times (SP3211-005) consecutively.
-02	D	TD sensor (Vt) lower limit error 1: Cy
		The Vt value lower limit of the cyan TD sensor (SP3210-002) falls below the specified value (SP3211-004) for the specified number of times (SP3211-005) consecutively.
-03	D	TD sensor (Vt) lower limit error 1: Ma
		The Vt value lower limit of the magenta TD sensor (SP3210-003) falls below the specified value (SP3211-004) for the specified number of times (SP3211-005) consecutively.
-04	D	TD sensor (Vt) lower limit error 1: Ye
		The Vt value lower limit of the yellow TD sensor (SP3210-004) falls below the specified value (SP3211-004) for the specified number of times (SP3211-005) consecutively.
		<ul style="list-style-type: none"> ▪ Black, cyan, magenta, or yellow TD sensor disconnected ▪ Harness between TD sensor and PCDU defective ▪ Defective TD sensor
		<ol style="list-style-type: none"> 1. Check the black, cyan, magenta, or yellow TD sensor connector and harness between the TD sensor and PCDU. 2. Check the drawer connector. 3. Replace the defective TD sensor.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
370	D	ID sensor calibration error
		The reflection light output voltage of the ID sensor (Vsg_reg) is not adjusted within the target range. Upper limit: SP3320-013 (default: 4.5 V) Lower limit: SP3320-014 (default: 3.5 V)
		<ul style="list-style-type: none"> ▪ Disconnected ID sensor connectors ▪ Dirty or defective ID sensor ▪ Defective image transfer belt
		<ol style="list-style-type: none"> 1. Check the connection of the connectors of the ID sensor. 2. Clean or replace the ID sensor. Note: After replacing the ID sensor, input the ID sensor correction coefficient with SP3331. For details, refer to "ID sensor board" in the Replacement and Adjustment section. 3. Replace the image transfer belt unit.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
372	D	TD sensor adjustment error: Bk
373	D	TD sensor adjustment error: Ma
374	D	TD sensor adjustment error: Cy
375	D	TD sensor adjustment error: Ye
		<p>During TD sensor initialization, the output value of the black, magenta, cyan, or yellow TD sensor is not within the range of the value specified with SP3238-001 to -004 (default: 2.5V) \pm 0.2 V.</p> <ul style="list-style-type: none"> ▪ Heat seal not removed from a new developer pack ▪ TD harness sensor disconnected, loose or defective ▪ TD sensor defective ▪ Harness between TD sensor and drawer disconnected, defective

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		<ol style="list-style-type: none"> 1. Remove the heat seal from each PCDU. 2. Replace the defective PCDU.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
396	D	Drum/Development motor error: Bk
397	D	Drum/Development motor error: Cy, Ma, Ye
-	-	<p>The machine detects a High signal from the drum/development motor for 2 seconds after the drum/development motor turned on.</p> <ul style="list-style-type: none"> ▪ Overload on the drum/development motor ▪ Defective drum/development motor ▪ Defective harness ▪ Shorted 24 V fuse on the PSU ▪ Defective interlock system <ol style="list-style-type: none"> 1. Check or replace the harness. 2. Replace the drum/development motor. 3. Replace the 24V fuse on the PSU.

6.1.6 SC4XX: IMAGE PROCESSING - 2

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
442	D	Image transfer belt contact motor error
		The image transfer belt contact motor drives beyond the specified time during home position detection or contact operation.
		<ul style="list-style-type: none"> ▪ Broken harness or defective connectors ▪ Disconnected connector of image transfer belt contact sensor or motor ▪ Defective image transfer belt contact motor ▪ Image transfer belt unit not installed
		<ol style="list-style-type: none"> 1. Check and replace the harness and connectors. 2. Replace the image transfer belt contact motor. 3. Reinstall the image transfer belt unit.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
452	D	Paper transfer belt contact motor error
		The paper transfer belt contact motor drives beyond the specified time during home position detection or contact operation.
		<ul style="list-style-type: none"> ▪ Broken harness or defective connectors ▪ Disconnected connector of paper transfer belt contact sensor or motor ▪ Defective paper transfer belt contact motor ▪ Paper transfer belt unit not installed
		<ol style="list-style-type: none"> 1. Check and replace the harness and connectors. 2. Replace the paper transfer belt contact motor. 3. Reinstall the paper transfer belt unit.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
460	D	Separation power pack output error
		An interrupt checks the status of the power pack every 20 ms. This SC is issued if the BICU detects a short in the power pack 10 times at D(ac).
		<ul style="list-style-type: none"> ▪ High voltage leak ▪ Broken harness ▪ Defective image transfer belt unit or paper transfer unit ▪ Defective high voltage supply unit
		<ol style="list-style-type: none"> 1. Check or replace the harness. 2. Reinstall or replace the image transfer belt unit or paper transfer unit. 3. Replace the high voltage supply unit.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
491	D	High voltage power: Drum/ development bias output error
		An error signal is detected for 0.2 seconds when charging the drum or development.
		<ul style="list-style-type: none"> ▪ High voltage leak ▪ Broken harness ▪ Defective drum unit or development unit ▪ Defective high voltage supply unit
		<ol style="list-style-type: none"> 1. Check or replace the harness. 2. Replace the drum unit or paper transfer unit. 3. Replace the high voltage supply unit.

Troubleshooting

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
492	C	High voltage power: Image transfer/ paper transfer bias output error
		An error signal is detected for 200 ms when charging the separation, image transfer belt or paper transfer roller.
		<ul style="list-style-type: none"> ▪ High voltage leak ▪ Broken harness ▪ Defective image transfer belt unit or paper transfer unit ▪ Defective high voltage supply unit
		<ol style="list-style-type: none"> 1. Check or replace the harness. 2. Reinstall or replace the image transfer belt unit or paper transfer unit. 3. Replace the high voltage supply unit.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
497	C	Image creation temperature sensor error 1
		The thermistor output of the temperature sensor is not within the prescribed range (more than 0.5 V to less than 3.0 V) for three consecutive times.
		-
		<ol style="list-style-type: none"> 1. Turn the power switch off and on.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
498	C	Temperature and humidity sensor error
		<ul style="list-style-type: none"> ▪ The thermistor output of the temperature sensor was not within the prescribed range (more than 0.76V to less than 2.90V). ▪ The thermistor output of the humidity sensor was not within the prescribed range (2.4V or more).
		<ul style="list-style-type: none"> ▪ Temperature and humidity sensor harness disconnected, loose, defective ▪ Temperature and humidity sensor defective
		<ol style="list-style-type: none"> 1. Check the connector and harness. 2. Replace the temperature and humidity sensor.

6.1.7 SC5XX: PAPER FEED AND FUSING

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
501	B	1st paper tray lift motor malfunction
502	B	2nd paper tray lift motor malfunction (optional paper feed unit)
503	B	3rd paper tray lift motor malfunction (optional paper feed unit)
		<p>The paper lift sensor does not detect paper or finish the detection within the specified time, after the tray lift motor switched on.</p> <ul style="list-style-type: none"> ▪ An obstruction (jammed paper, paper scraps, etc.) has blocked the motor drive and caused an overload. ▪ Paper lift sensor connection loose, disconnected, or damaged ▪ Paper lift sensor defective ▪ Tray lift motor connection loose, disconnected, or damaged ▪ Tray lift motor defective <p>1. Check or replace the connector and harness. 2. Replace the tray lift motor.</p>

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		By-pass bottom plate error
		<p>The signal from the by-pass tray HP sensor does not change for 2 seconds after the by-pass bottom plate clutch was activated. If this condition occurs three consecutive times, this SC is generated.</p>
508	B	<ul style="list-style-type: none"> ▪ Disconnected or defective connectors of the by-pass bottom plate clutch ▪ Disconnected or defective by-pass HP sensor ▪ Defective by-pass bottom plate detection filler <p>1. Check or replace the connectors of the by-pass bottom plate clutch. 2. Check or replace the by-pass HP sensor.</p>

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
524	D	Transport motor error
		The machine detects a High signal from a transport motor lock detection for 2 seconds after the transport motor turned on.
		<ul style="list-style-type: none"> ▪ Unit overload ▪ Defective motor
		<ol style="list-style-type: none"> 1. Replace the unit. 2. Replace the motor.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
525	B	Transport motor error: bank 1
		The machine detects a Lock signal from a bank 1 transport motor after the motor turned on.
526	B	Transport motor error: bank 2
		The machine detects a Lock signal from a bank 2 transport motor after the motor turned on.
		<ul style="list-style-type: none"> ▪ Motor overload ▪ Defective motor ▪ Disconnected connectors ▪ Broken harness
		<ol style="list-style-type: none"> 1. Turn off and on the main power switch. 2. Check or connect the connectors. 3. Replace the harness. 4. Replace the motor.

Troubleshooting

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
530	D	Fusing heater exhaust fan motor error
531	D	Development cooling fan motor error
532	D	Writing cooling fan motor error
533	D	PSU fan motor error
		<p>The motor lock signal error is detected 50 consecutive times (5 seconds) after the motor lock signal was first detected.</p> <ul style="list-style-type: none"> ▪ Defective fan motor ▪ Disconnected or defective harness ▪ Defective BICU <ol style="list-style-type: none"> 1. Check or replace the harness. 2. Replace the fan motor. 3. Replace the BICU.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		Fusing motor error
		The machine detects a High signal from the fusing motor 20 consecutive times after the motor turned on.
540	D	<ul style="list-style-type: none"> ▪ Motor overload ▪ Defective fusing motor ▪ Shorted +24 fuse on the PSU <ol style="list-style-type: none"> 1. Check or replace the harness. 2. Replace the fusing motor. 3. Replace the +24 fuse on the PSU.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
541	A	Heating roller thermopile error
		The temperature detected by the heating roller thermopile does not reach 0°C within the prescribed time for 10 consecutive times.
		<ul style="list-style-type: none"> ▪ Loose connection of the heating roller thermopile ▪ Defective heating roller thermopile ▪ Defective thermopile
		<ol style="list-style-type: none"> 1. Check if the heating roller thermopile is firmly connected. 2. Replace the heating roller thermopile.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
542 -02 -03	A	Heating roller thermopile reload error
		<ul style="list-style-type: none"> ▪ The heating roller temperature does not reach 80°C within the prescribed time. ▪ The center temperature of the heating roller does not reach the target reload permit temperature within the prescribed time. ▪ The center temperature of the heating roller does not reach the target temperature after starting the heater control in warm up with low temperature.
		<ul style="list-style-type: none"> ▪ Dirty or defective thermopile lenses ▪ Defective thermistor ▪ Input voltage out of specification (out of warranty)
		<ol style="list-style-type: none"> 1. Check and clean the thermopile lenses. 2. Check if the heating roller thermopile is firmly connected. 3. Replace the thermopile.

Troubleshooting

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
543	A	Heating roller thermopile overheat (software error)
		The temperature detected by the heating roller thermopile stays at the prescribed temperature within the prescribed time.
		<ul style="list-style-type: none"> ▪ Defective PSU ▪ Defective BICU
		<ol style="list-style-type: none"> 1. Replace the PSU. 2. Replace the BICU.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
544	A	Heating roller thermopile overheat (hardware error)
		The temperature detected by the heating roller thermopile reaches the prescribed temperature.
		<ul style="list-style-type: none"> ▪ Defective BICU ▪ Defective fusing control system
		Related SC code: SC 543
		<ol style="list-style-type: none"> 1. Replace the BICU.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
545	A	Heating roller fusing lamp consecutive full power
		When the fusing unit is not running in the ready condition, the heating roller fusing lamp keeps on full power for the prescribed time.
		<ul style="list-style-type: none"> ▪ Defective thermistor ▪ Broken heater
		<ol style="list-style-type: none"> 1. Replace the thermistor. 2. Replace the heating roller fusing lamp.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
547 -01	D	Zero cross error: fusing lamp relay contact welding
		<ul style="list-style-type: none"> ▪ The zero cross signal is detected three times even though the heater relay is off when turning on the main power. ▪ The zero cross signal is not detected for 2 seconds even though the heater relay is on after turning on the main power or closing the front door. ▪ The detection error occurs twice or more in 11 zero cross signal detections. This error is defined when the detected number of zero cross signals is less than 45.
		<ul style="list-style-type: none"> ▪ Defective fusing lamp relay (welded contacts) ▪ Defective fusing lamp relay circuit
		<ol style="list-style-type: none"> 1. Turn off and on the main power switch. 2. Replace the PSU if the fusing lamp relay is defective. 3. Check the connection of the PSU to the controller board and replace the harness or controller board if necessary.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
547 -02	D	Zero cross error: fusing lamp relay contact defective
		<ul style="list-style-type: none"> ▪ The zero cross signal is detected three times even though the heater relay is off when turning on the main power. ▪ The zero cross signal is not detected for 2 seconds even though the heater relay is on after turning on the main power or closing the front door. ▪ The detection error occurs twice or more in 11 zero cross signal detections. This error is defined when the detected number of zero cross signals is less than 45.
		<ul style="list-style-type: none"> ▪ Defective fusing lamp relay (open contact) ▪ Defective fusing lamp relay circuit
		<ol style="list-style-type: none"> 1. Turn off and on the main power switch. 2. Replace the PSU if the fusing lamp relay is defective. 3. Check the connection of the PSU to controller board and replace the harness or controller board if necessary. 4. Replace the fuse if the PSU fuse (24 VS) is welded.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
547-03	D	Zero cross error: low frequencies error
		<ul style="list-style-type: none"> ▪ The zero cross signal is detected three times even though the heater relay is off when turning on the main power. ▪ The zero cross signal is not detected for 2 seconds even though the heater relay is on after turning on the main power or closing the front door. ▪ The detection error occurs twice or more in the 11 zero cross signal detections. This error is defined when the detected number of zero cross signals is less than 45.
		<ul style="list-style-type: none"> ▪ Unstable frequencies from utility power line ▪ Defective fusing lamp relay circuit ▪ Unstable power supply
		<ol style="list-style-type: none"> 1. Turn off and on the main power switch. 2. Check the utility power line. 3. Check the connection of the PSU to controller board and replace the harness or controller board if necessary.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
551	A	Heating roller thermistor error
		The temperature at the end of the heating roller measured by the heating roller thermistor does not exceed -11°C or -41°C for the prescribed time.
		<ul style="list-style-type: none"> ▪ Broken thermopile or thermistor ▪ Defective connectors
		<ol style="list-style-type: none"> 1. Check that the heating roller thermistor is firmly connected. 2. Replace the thermopile or thermistor.

Troubleshooting

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
552 -03	A	Heating roller warm-up error (sensor 2)
		<ul style="list-style-type: none"> ▪ The heating roller temperature does not reach 80°C within the prescribed time. ▪ The center temperature of the heating roller does not reach the target reload permit temperature within the prescribed time. ▪ The center temperature of the heating roller does not reach the target reload permit pressure within the prescribed time.
		<ul style="list-style-type: none"> ▪ Dirty thermopile lenses ▪ Defective heating roller thermistor ▪ Input voltage out of the warranty (out of specification)
		<ol style="list-style-type: none"> 1. Check and clean the thermopile lenses. 2. Replace the thermopile 3. Replace the thermistor.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
554	A	Heating roller fusing lamp overheat (hardware error)
		The temperature detected by the heating roller thermistor reaches the prescribed temperature.
		<ul style="list-style-type: none"> ▪ Defective BICU ▪ Defective fusing control system
		<ol style="list-style-type: none"> 1. Replace the BICU.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
557	C	Zero cross frequency error
		When the zero cross signal is 66 or more and it is detected 10 times or more in 11 detections, the machine determines that input 60 Hz and this SC occurs.
		<ul style="list-style-type: none"> ▪ Noise (High frequency) ▪ Defective PSU
		<ol style="list-style-type: none"> 1. Check the power supply source. 2. Replace the PSU.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
559	A	Consecutive fusing jam
		The paper jam counter for the fusing unit reaches three consecutive times (the fusing exit sensor does not detect the paper).
		<ul style="list-style-type: none"> ▪ Paper jam in the fusing unit.
		Remove the paper that is jammed in the fusing unit. Then make sure that the fusing unit is clean and has no obstacles in the paper feed path.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
561	A	Pressure roller thermistor error: Center
		The temperature detected by the pressure roller thermistor does not reach 0 °C within the prescribed time.
		<ul style="list-style-type: none"> ▪ Loose connection of the pressure roller thermistor ▪ Defective thermopile ▪ Defective pressure roller thermistor
		<ol style="list-style-type: none"> 1. Check if the pressure roller thermistor is firmly connected. 2. Replace the thermopile. 3. Replace the pressure roller thermistor.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
562 -03	A	Heating roller warm-up error (sensor 3)
		The center temperature of the heating roller does not reach the target reload permit pressure within the prescribed time.
		<ul style="list-style-type: none"> ▪ Dirty thermopile lenses ▪ Defective heating roller thermistor ▪ Input voltage out of the warranty (out of specification)
		<ol style="list-style-type: none"> 1. Check and clean the thermopile lenses. 2. Replace the thermopile 3. Replace the thermistor.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
563	A	Pressure roller overheat (software error): Center
		The temperature detected by the pressure roller thermistor stays at the prescribed temperature within the prescribed time.
		<ul style="list-style-type: none"> ▪ Defective PSU ▪ Defective BICU
		<ol style="list-style-type: none"> 1. Replace the PSU. 2. Replace the BICU.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
564	A	Pressure roller overheat (hardware error): Center
		The temperature detected by the pressure roller thermistor detects prescribed temperature.
		<ul style="list-style-type: none"> ▪ Defective BICU ▪ Defective fusing control system
		<ol style="list-style-type: none"> 1. Replace the thermistor. 2. Replace the BICU.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
571	A	Pressure roller thermistor error: End
		The temperature detected by the pressure roller thermistor does not reach 0 °C within the prescribed time.
		<ul style="list-style-type: none"> ▪ Loose connection of the pressure roller thermistor ▪ Defective thermopile ▪ Defective pressure roller thermistor
		<ol style="list-style-type: none"> 1. Check if the pressure roller thermistor is firmly connected. 2. Replace the thermopile. 3. Replace the pressure roller thermistor.

Troubleshooting

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
572 -03	A	Heating roller warm-up error (sensor 4)
		The temperature of the heating roller does not reach 20 °C within the prescribed time.
		<ul style="list-style-type: none"> ▪ Dirty thermopile lenses ▪ Defective heating roller thermistor ▪ Input voltage out of the warranty (out of specification)
		<ol style="list-style-type: none"> 1. Check and clean the thermopile lenses. 2. Replace the thermopile 3. Replace the thermistor.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
573	A	Pressure roller overheat (software error): End
		The temperature detected by the pressure roller thermistor stays at the prescribed temperature within the prescribed time.
		<ul style="list-style-type: none"> ▪ Defective PSU ▪ Defective BICU
		<ol style="list-style-type: none"> 1. Replace the PSU. 2. Replace the BICU.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
574	A	Pressure roller overheat (hardware error): End
		The temperature detected by the pressure roller thermistor detects prescribed temperature.
		<ul style="list-style-type: none"> ▪ Defective BICU ▪ Defective fusing control system
		<ol style="list-style-type: none"> 1. Replace the thermistor. 2. Replace the BICU.

6.1.8 SC6XX: COMMUNICATION

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
610	D	Mechanical counter error: Bk
		This SC is only for NA models. The machine detects the mechanical counter error when SP5987-001 is set to "1".
		<ul style="list-style-type: none"> ▪ Disconnected mechanical counter ▪ Defective mechanical counter
		1. Check or replace the mechanical counter.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
622	D	Paper tray unit communication error
		While the BICU communicates with an optional unit, an SC code is displayed if one of following conditions occurs. <ul style="list-style-type: none"> ▪ The IPU receives the break signal which is generated by the peripherals only just after the main switch is turned on. ▪ When the BCU does not receive an OK signal from a peripheral 100ms after sending a command to it. The IPU resends the command. The IPU does not receive an OK signal after sending the command 3 times.
		<ul style="list-style-type: none"> ▪ Cable problems ▪ BICU problems ▪ PSU problems in the machine ▪ Main board problems in the peripherals
		<ol style="list-style-type: none"> 1. Check if the cables of peripherals are correctly connected. 2. Replace the main board of peripherals. 3. Replace the BICU if no power is supplied to peripherals.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
623	D	2nd Paper Bank communication error

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		This SC is not issued for this machine. When a communication error signal between the 1st paper bank and 2nd paper bank is received.
		<ul style="list-style-type: none"> ▪ Loose or disconnected connector
		1. Check the connection between the main machine and paper feed unit.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
632	CTL B	Counter device error 1
		After 3 attempts to send a data frame to the optional counter device via the serial communication line, no ACK signal was received within 100 ms.
		<ul style="list-style-type: none"> ▪ Serial line between the optional counter device, the relay board and copier control board is disconnected or damaged. ▪ Make sure that SP5113 is set to enable the optional counter device.
		<ol style="list-style-type: none"> 1. Check if the setting of the SP5113 is correctly set. 2. Check the connection between the main machine and optional counter device.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
633	CTL B	Counter device error 2
		After communication is established, the controller receives the brake signal from the accounting device.
		<ul style="list-style-type: none"> ▪ Serial line between the optional counter device, the relay board and copier control board is disconnected or damaged. ▪ Make sure that SP5113 is set to enable the optional counter device.
		<ol style="list-style-type: none"> 1. Check if the setting of SP5113 is correct. 2. Check the connection between the main machine and optional counter device.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
634	CTL B	Counter device error 3
		A backup RAM error was returned by the counter device.
		<ul style="list-style-type: none"> ▪ Counter device control board defective ▪ Backup battery of counter device defective
		1. Replace the counter device.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
635	CTL B	Counter device error 4
		A backup battery error was returned by the counter device.
		<ul style="list-style-type: none"> ▪ Counter device control board defective ▪ Backup battery of counter device defective
		1. Replace the counter device.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
636	CTL	SD Card Error
-01	D	Expanded authentication module error
		There is no expanded authentication module in the machine. The SD card or the file of the expanded authentication module is broken.
		<ul style="list-style-type: none"> ▪ No expanded authentication module ▪ Defective SD card ▪ Defective file of the expanded authentication module

Troubleshooting

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		<ol style="list-style-type: none"> 1. Install the expanded authentication module. 2. Install the SD card. 3. Set the following super service SPs and turn the main switch off and on. <ol style="list-style-type: none"> 1. User limitation: Set SP5401-160 (expanded authentication management setting) to 0. 2. User limitation: Set SP5401-161 (expanded authentication management detailed setting) to 0. 5. Execute SP5-876-1 (security all clear). If this is a mass-produced machine, <ol style="list-style-type: none"> Replace the NVRAM on the controller board.
-02	D	Version error
		The version of the expanded authentication module is not correct.
		<ul style="list-style-type: none"> ▪ Incorrect module version
		Install the correct file of the expanded authentication module.
-11	D	OSM user code file error
		The correct "usercode" file could not be found in the root folder of the SD card because the file is not present, or the existing file is corrupted or the wrong type file.
		<ol style="list-style-type: none"> 1. Create the usercode files with the User Setting Tool "IDissuer.exe" and store the files in the root folder of the SD card. <p>Note: Make sure the eccm.mod file is in the root folder of the SD card.</p>

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
637	CTL	Tracking information notice error
-01	D	Tracking application error
		Tracking information is lost.
		<ul style="list-style-type: none"> The machine failed to give notice of the tracking information to the tracking SDK application. Tracking information is lost, and the machine cannot count correctly.
		1. Turn the main switch off and on.
-02	D	Management server error
		Tracking information is lost.
		<ul style="list-style-type: none"> The machine failed to give notice of the tracking information to the management server. Tracking information is lost, and the machine cannot count correctly.
		1. Turn the main switch off and on

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
640	CTL D	Communication error: Engine → Controller (Check sum error)
		Sum value is added each command frame. Sum check means: STX xx xx xx xx sum ETX → The least significant 7 bits of xx + xx + xx+ xx is compared with the sum. Example: STX 80h 81h 82h 83h 06h ETX → 80h + 81h + 82h + 83h = 206h If sum value is 06h, data is correct. This SC is not displayed when it occurs; count is executed only by logging.
		<ul style="list-style-type: none"> Hardware error with PCI
		1. Turn the main switch off and on.

Troubleshooting

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
641	CTL D	Communication error: Engine → Controller (No response)
		No response from engine to frame after frame sending from controller with RAPI protocol. (No response after 3 attempts of sending every 100 ms)
		Asserts the error detected by the serial driver from PSC module to SRM with RAPI command.
		1. Turn the main switch off and on.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
641	CTL D	Engine Serial Communication error
		An error occurs during serial communication with the engine.
		<ul style="list-style-type: none"> ▪ SC641-001: Timeout error ▪ SC641-002: Retry over ▪ SC641-003: Download error ▪ SC641-004: UART error
		1. Turn the main switch off and on.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
669	D	EEPROM error
		Retry of EEPROM communication fails three times after the machine has detected the EEPROM error.
		<ul style="list-style-type: none"> ▪ Caused by noise
		1. Turn the main power switch off and on.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
670	CTL D	Engine start up error
		The BICU fails to respond within the prescribed time when the machine is turned on.
		<ul style="list-style-type: none"> ▪ Connections between BICU and controller board are loose, disconnected, or damaged.
		<ol style="list-style-type: none"> 1. Replace the BICU. 2. Replace the controller board.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
672	CTL D	Controller start up error
		<p>After the machine is powered on, the communication between the controller and the operation panel is not established, or communication with the controller is interrupted after a normal startup.</p> <p>After startup reset of the operation panel, the attention code (FDH) or the attention acknowledge code (FEH) is not sent from the controller within 30 seconds.</p> <p>After the controller issues a command to check the communication line with the controller at 30-second intervals, the controller fails to respond twice.</p>
		<ul style="list-style-type: none"> ▪ Controller stalled ▪ Controller board installed incorrectly ▪ Controller board defective ▪ Operation panel connector loose or defective ▪ The controller is not completely shut down when the main switch is turned off.
		<ol style="list-style-type: none"> 1. Check the setting of SP5-875-001. If the setting is set to "1 (OFF)", change it to "0 (ON)".

Troubleshooting

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
681	D	Toner bottle ID: Communication error
		<ul style="list-style-type: none"> ▪ Communication error occurs when the toner bottle ID starts to communicate with the toner bottle ID receptor. ▪ Retry of toner bottle ID communication fails three times after the machine has detected the toner bottle ID communication error.
		<ul style="list-style-type: none"> ▪ Defective toner bottle ID reader and writer ▪ Disconnected ASAP I/F ▪ No memory chip on the toner cartridge ▪ Noise
		<ol style="list-style-type: none"> 1. Replace the toner bottle detection board. 2. Replace the toner cartridge.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
682	D	HST sensor: Communication error
		Retry of memory chip communication fails three times after the machine has detected the memory chip communication error.
		<ul style="list-style-type: none"> ▪ Damaged memory chip data ▪ Disconnected interface ▪ No memory chip on the development unit ▪ Noise
		<ol style="list-style-type: none"> 1. Replace the PCDU. 2. Replace the BICU.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
687	D	Memory address (PER) command error
		The BICU does not receive a memory address command from the controller 120 seconds after paper is in the position for registration.
		<ul style="list-style-type: none"> ▪ Loose connection ▪ Defective controller ▪ Defective BICU
		<ol style="list-style-type: none"> 1. Check if the controller is firmly connected to the BICU. 2. Replace the controller 3. Replace the BICU

6.1.9 SC7XX: PERIPHERALS

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
790	D	Too many paper tray units
		An attachment identification code is other than "01H" or "02H".
		<ul style="list-style-type: none"> ▪ Number of paper tray units is more than the machine specification.
		<ol style="list-style-type: none"> 1. Reduce the number of paper tray units within the machine specification.

6.1.10 SC8XX: OVERALL SYSTEM

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
816 -00	CTL	Energy saving I/O sub-system error
		The energy saving I/O sub-system detects an error.
		<ul style="list-style-type: none"> ▪ Controller board defective
		1. Replace the controller board.
-02	D	sysarch (LPUX_GET_PORT_INFO) error
-07	D	sysarch (LPUX_GET_PORT_INFO) error
-08	D	sysarch (LPUX_ENGINE_TIMERCTRL) error
-09	D	sysarch (LPUX_RETURN_FACTOR_STR) error
-10 to -12	D	sysarch (LPUX_GET_PORT_INFO) error
-35	D	read () error
-91 to -94	D	Sub-system error

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
819	CTL D	Fatal kernel 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.
		<ul style="list-style-type: none"> ▪ System program defective ▪ Controller board defective ▪ Optional board defective
		1. Replace controller firmware
[0x6261]		HDD defective

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		6261 6420 6469 7200 00 → "bad dir"
[0x696e]		gwinit process ending
		0x69742064 → "init died"
[0x766d]		VM is full
		0x5f706167 → "vm_pageout: VM is full"
[554c]		Processing ends at USB loader
		UL (USB error)
----		Others
		Error in the OS
		Others
		"init died", "vm_pageout: VM is full", "Cache Error"

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
820	CTL D	Self-diagnostics error: CPU [XXXX]: Detailed error code
[0001] to [06FF] [0801] to [4005]		CPU error During the self-diagnostic, the controller CPU detects an error. There are 47 types of error code (0001 to 4005) depending on the cause of the error. The CPU detects an error and displays the specific error code with the program address where the error occurs.
		<ul style="list-style-type: none"> ▪ System firmware problem ▪ Defective controller

Troubleshooting

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		<ol style="list-style-type: none"> 1. Turn the main switch off and on. 2. Reinstall the controller system firmware. 3. Replace the controller. <p>When the problem cannot be fixed with the above procedure, the following information displayed on the screen needs to be fed back to a technical support center.</p> <ul style="list-style-type: none"> - SC code - Detailed error code - Program address
[0701] to [070A]		CPU/Memory Error
		<ul style="list-style-type: none"> ▪ System firmware problem ▪ Defective RAM-DIMM ▪ Defective controller
		<ol style="list-style-type: none"> 1. Reinstall the controller system software. 2. Replace the RAM-DIMM. 3. Replace the controller.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
821	CTL D	Self-diagnostics error: CPU [XXXX]: Detailed error code
[0B00]		ASIC error The write-&-verify check error has occurred in the ASIC.
		<ul style="list-style-type: none"> ▪ Defective ASIC device
		<ol style="list-style-type: none"> 1. Replace the controller board.
[0D05]		CPU/Memory Error
		<ul style="list-style-type: none"> ▪ System firmware problem ▪ Defective RAM-DIMM ▪ Defective controller

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		<ol style="list-style-type: none"> 1. Reinstall the controller system software. 2. Replace the RAM-DIMM. 3. Replace the controller.
[50A1]		Video bridge device (ASIC) error 1
		The CPU does not detect the video bridge device.
		<ul style="list-style-type: none"> ▪ Defective I/F between the video bridge device and controller
[50A2]		Video bridge device (ASIC) register error 1
		The CPU detects the video bridge device, but detects error data from the video bridge device.
		<ul style="list-style-type: none"> ▪ Defective I/F between the video bridge device and controller

Note

- For more details about this SC code error, execute SP5990 to print an SMC report so you can read the error code. The error code is not displayed on the operation panel.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
822	CTL D	Self-diagnostic error: HDD [XXXX]: Detailed error code
[3003]		Check performed only when HDD is installed: <ul style="list-style-type: none"> ▪ HDD device busy for over 31 s. ▪ After a diagnostic command is set for the HDD, but the device remains busy for over 6 s.
		<ul style="list-style-type: none"> ▪ HDD defective ▪ HDD harness disconnected, defective ▪ Controller board defective
[3004]		No response to the self-diagnostic command from the ASIC to the HDDs.
		<ul style="list-style-type: none"> ▪ HDD defective

Troubleshooting

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
823	CTL B	Self-diagnostic error: NIB [XXXX]: Detailed error code
[6101]		MAC address check sum error The result of the MAC address check sum does not match the check sum stored in ROM.
[6104]		PHY IC error The PHY IC on the controller cannot be correctly recognized.
[6105]		PHY IC loop-back error An error occurred during the loop-back test for the PHY IC on the controller.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
824	CTL D	Self-diagnostic error: NIB [XXXX]: Detailed error code
[1401]		Self-diagnostic error : NVRAM
		NVRAM device does not exist, NVRAM device is damaged, or NVRAM socket damaged.
		<ul style="list-style-type: none"> ▪ NVRAM defective ▪ Controller board defective ▪ NVRAM backup battery exhausted ▪ NVRAM socket damaged

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
827	CTL D	Self-diagnostic error: Standard SDRAM DIMM [XXXX]: Detailed error code
[0201]		Verification error
		Error detected during a write/verify check for the standard RAM (SDRAM DIMM).
		<ul style="list-style-type: none"> ▪ Loose connection ▪ Defective SDRAM DIMM ▪ Defective controller
[0202]		Resident memory error
		The SPD values in all RAM DIMM are incorrect or unreadable.
		<ul style="list-style-type: none"> ▪ Defective RAM DIMM ▪ Defective SPD ROM on RAM DIMM ▪ Defective 12C bus
		1. Replace the RAM DIMM

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
828	CTL D	Self-diagnostic error: ROM [XXXX]: Detailed error code
[0101]		Check sum error 1
		The boot monitor and OS program stored in the ROM DIMM is checked. If the check sum of the program is incorrect, this SC code is displayed.
		1. Replace the controller board.

Troubleshooting

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
835	CTL B	Self-diagnostic error: Standard SDRAM DIMM [XXXX]: Detailed error code
[1102]		Loopback connector is connected but check results in an error.
		<ul style="list-style-type: none"> ▪ IEEE1284 connector error ▪ Centronic loopback connector defective
		1. Replace the controller board.
[110C]		Loopback connector is connected but check results in an error.
		<ul style="list-style-type: none"> ▪ ASIC device error ▪ IEEE1284 connector error ▪ Centronic loopback connector defective
		1. Replace the controller board.
[1120]		Centronic loopback connector is not connected for detailed self-diagnostic test.
		<ul style="list-style-type: none"> ▪ Centronic loopback connector not connected correctly ▪ Centronic loopback connector defective ▪ ASIC device defective
		1. Replace the controller board.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
838	CTL D	Self-diagnostic Error: Clock Generator [XXXX]: Detailed error code
[2701]		A verify error occurred when setting data was read from the clock generator via the I2C bus.
		<ul style="list-style-type: none"> ▪ Defective clock generator ▪ Defective I2C bus ▪ Defective I2C port on the CPU
		1. Replace the controller board.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
839	CTL D	USB NAND Flash ROM error [XXXX]: Detailed error code
[9001]		USB NAND Flash ROM cannot be read. <ul style="list-style-type: none"> Defective controller board
[9101]		The ID of the USB NAND Flash ROM cannot be read. <ul style="list-style-type: none"> Defective controller board
[9110]		The USB NAND Flash ROM controller is disconnected. <ul style="list-style-type: none"> Defective controller board
		1. Replace the controller board.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
840	CTL D	EEPROM error 1: EEPROM access <ul style="list-style-type: none"> 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	Details (Symptom, Possible Cause, Troubleshooting Procedures)
841	CTL D	EEPROM error 2: EEPROM read/write error <ul style="list-style-type: none"> Mirrored data of the EEPROM is different from the original data in EEPROM. Data in the EEPROM is overwritten for some reason.

Troubleshooting

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
842	CTL C	Flash ROM verification error
		Verification error of the flash ROM on the controller board occurs. Note: - This SC is logged at 1st error detection. SC819 is issued at 2nd error detection. - SC819 is issued at 2nd error detection.
		<ul style="list-style-type: none"> ▪ Defective flash ROM (controller board)

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
850	CTL B	Network I/F error
		Inoperative
		1. Turn the main switch off and on.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
853	CTL B	Bluetooth device connection error
		The Bluetooth interface unit was installed while the machine was turned on.
		1. Turn off the main power switch, and then confirm that the Bluetooth interface unit was installed correctly. Then turn on the main power switch again.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
854	CTL B	Bluetooth device connection error
		The Bluetooth interface unit was removed while the machine was turned on.
		1. Turn off the main power switch, and then confirm that the Bluetooth interface unit was installed correctly. Then turn on the main power switch again.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
855	CTL B	Hardware Problem:wireless LAN board
		The wireless LAN board can be accessed, but an error was detected.
		<ul style="list-style-type: none"> ▪ Loose connection ▪ Defective wireless LAN card
		<ol style="list-style-type: none"> 1. Make sure that the Wireless LAN is connected. 2. Replace the wireless LAN card.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
858	CTL	HDD Encryption unit error 1
		A serious error occurs when data is encrypted to update an encryption key with the HDD encryption unit.
-00	A	Encryption key acquisition error: The controller fails to get a new encryption key.
		<ul style="list-style-type: none"> ▪ Defective controller board
		1. Replace the controller board
-01	A	Encryption key setting for HDD error: The controller fails to copy a new encryption key to the HDD.
		<ul style="list-style-type: none"> ▪ Defective SATA chip on the controller board
		1. Replace the controller board.

Troubleshooting

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
-02	A	NVRAM data encryption error 1: An error occurs while the NVRAM data is encrypted.
		<ul style="list-style-type: none"> ▪ Defective NVRAM on the controller board
		1. Replace the NVRAM.
-30	A	NVRAM data encryption error 2: An error occurs before the NVRAM data is encrypted.
		<ul style="list-style-type: none"> ▪ Defective controller board
		1. Replace the controller board.
-31	A	Other error: A serious error occurs while the data is encrypted.
		<ul style="list-style-type: none"> ▪ Same as SC991

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
859	CTL	HDD Encryption unit error 2
		A serious error occurs when the HDD data is encrypted to update an encryption key with the HDD encryption unit.
-08	B	HDD check error: The HDD is not correctly installed.
		<ul style="list-style-type: none"> ▪ No HDD installed ▪ Unformatted HDD ▪ The encryption key on the controller is different from the one on the HDD
		<ol style="list-style-type: none"> 1. Install the HDD correctly. 2. Initialize the HDD.
-09	B	Power failure during the data encryption: The data encryption (NVRAM and HDD) has not been completed.
		<ul style="list-style-type: none"> ▪ Power failure during the data encryption
		1. Initialize the HDD

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
-10	B	Data read/write error: The DMAC error is detected twice or more.
		Same as SC863

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
860	CTL D	HDD startup error at main power on
		HDD is connected but a driver error is detected. The driver does not respond to the HDD within 30 s.
		<ul style="list-style-type: none"> ▪ HDD is not initialized ▪ Label data is corrupted ▪ Defective HDD
		1. Initialize the HDD with SP5832-001.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
862	CTL D	Bad sector number error
		The number of bad sectors in the HDD (image data area) goes over 101.
		<ul style="list-style-type: none"> ▪ Defective HDD
		<ol style="list-style-type: none"> 1. Format the HDD with SP4911-002. 2. Replace the HDD

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
863	CTL	HDD: Read error
		The data written to the HDD cannot be read normally, due to bad sectors generated during operation. Note: -01 to -23 indicate the type of partition where the error occurred. Enable display of these numbers with SP7902.
		▪ HDD defective Note: If the bad sectors are generated at the image partition, the bad sector information is written to NVRAM, and the next time the HDD is accessed, these bad sectors will not be accessed for read/write operation.
		1. Turn the main power switch off and on. 2. Replace the HDD.
-01	D	The error occurred at an area which does not belong to a partition.
-02	D	The error occurred at partition a.
-03	D	The error occurred at partition b.
-04	D	The error occurred at partition c.
-05	D	The error occurred at partition d.
-06	D	The error occurred at partition e.
-07	D	The error occurred at partition f.
-08	D	The error occurred at partition g.
-09	D	The error occurred at partition h.
-10	D	The error occurred at partition i.
-11	D	The error occurred at partition j.
-12	D	The error occurred at partition k.
-13	D	The error occurred at partition l.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
-14	D	The error occurred at partition m.
-15	D	The error occurred at partition n.
-16	D	The error occurred at partition o.
-17	D	The error occurred at partition p.
-18	D	The error occurred at partition q.
-19	D	The error occurred at partition r.
-20	D	The error occurred at partition s.
-21	D	The error occurred at partition t.
-22	D	The error occurred at partition u.
-23	D	The error occurred at partition v.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
864	CTL	HDD: CRC error
		During HDD operation, the HDD cannot respond to a CRC error query. Data transfer does not execute normally while data is being written to the HDD.
		Note: -01 to -23 indicate the type of partition where the error occurred. Enable display of these numbers with SP7902.
		<ul style="list-style-type: none"> ▪ HDD defective
		<ol style="list-style-type: none"> 1. Turn the main power switch off and on. 2. Replace the HDD.
-01	D	The error occurred at an area which does not belong to a partition.
-02	D	The error occurred at partition a.
-03	D	The error occurred at partition b.
-04	D	The error occurred at partition c.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
-05	D	The error occurred at partition d.
-06	D	The error occurred at partition e.
-07	D	The error occurred at partition f.
-08	D	The error occurred at partition g.
-09	D	The error occurred at partition h.
-10	D	The error occurred at partition i.
-11	D	The error occurred at partition j.
-12	D	The error occurred at partition k.
-13	D	The error occurred at partition l.
-14	D	The error occurred at partition m.
-15	D	The error occurred at partition n.
-16	D	The error occurred at partition o.
-17	D	The error occurred at partition p.
-18	D	The error occurred at partition q.
-19	D	The error occurred at partition r.
-20	D	The error occurred at partition s.
-21	D	The error occurred at partition t.
-22	D	The error occurred at partition u.
-23	D	The error occurred at partition v.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
865	CTL D	HDD: Access error
		HDD responded to an error during operation for a condition other than those for SC863, 864. Note: -01 to -23 indicate the type of partition where the error occurred. Enable display of these numbers with SP7902.
		<ul style="list-style-type: none"> ▪ Defective HDD
		<ol style="list-style-type: none"> 1. Turn the main power switch off and on. 2. Replace the HDD.
-01	D	The error occurred at an area which does not belong to a partition.
-02	D	The error occurred at partition a.
-03	D	The error occurred at partition b.
-04	D	The error occurred at partition c.
-05	D	The error occurred at partition d.
-06	D	The error occurred at partition e.
-07	D	The error occurred at partition f.
-08	D	The error occurred at partition g.
-09	D	The error occurred at partition h.
-10	D	The error occurred at partition i.
-11	D	The error occurred at partition j.
-12	D	The error occurred at partition k.
-13	D	The error occurred at partition l.
-14	D	The error occurred at partition m.
-15	D	The error occurred at partition n.
-16	D	The error occurred at partition o.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
-17	D	The error occurred at partition p.
-18	D	The error occurred at partition q.
-19	D	The error occurred at partition r.
-20	D	The error occurred at partition s.
-21	D	The error occurred at partition t.
-22	D	The error occurred at partition u.
-23	D	The error occurred at partition v.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
866	CTL B	SD card error: Confirmation
		The machine detects an electronic license error in the application on the SD card in the controller slot immediately after the machine is turned on. The program on the SD card contains electronic confirmation license data. If the program does not contain this license data, or if the result of the check shows that the license data in the program on the SD card is incorrect, then the checked program cannot execute and this SC is displayed.
		<ul style="list-style-type: none"> ▪ Program missing from the SD card
		1. Download the correct program for the machine to the SD card.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
867	CTL D	SD card error: SD card removed
		The SD card is ejected from the slot while the machine is on.
		1. Insert the SD card, then turn the machine off and on.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
868	CTL D	SD card error: SD card access
		<ul style="list-style-type: none"> ▪ -13 to -3: File system error ▪ Other number: Device error
		An error occurs while an SD card is used.
		<ul style="list-style-type: none"> ▪ SD card not inserted correctly ▪ SD card defective ▪ Controller board defective
		<p>For a file system error:</p> <p>1. Format the SD card on your PC.</p> <p>For a device error:</p> <p>1. Turn off the main power switch and check if the contact with the SD card slot and SD card is normal.</p> <p>2. If the contact is normal, insert the SD card into the slot and turn on the main power switch to check if the error occurs again.</p> <p>3. If the error occurs again, replace the SD card with an SD card for another user, and turn on the main power switch.</p> <p>4. If the error occurs again and again, replace the controller board.</p>

Troubleshooting

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
870	CTL B	Address book error
		The address book data cannot be read from the HDD, SD card or flash ROM on the controller where it is stored, or the data read from the media is defective.
		<ul style="list-style-type: none"> ▪ Defective software program ▪ Defective HDD
		<p>Software defective:</p> <ol style="list-style-type: none"> 1. Turn the machine off and on. 2. If the step 1 is not the solution for the problem, replace the controller firmware. <p>HDD defective:</p> <ol style="list-style-type: none"> 1. Do SP5846-046 (Initialize All Setting & Addr Book) to reset all address book data. 2. Reset the user information with SP5832-006 (HDD Formatting– User Information). 3. Replace the HDD.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
872	CTL B	HDD mail receive data error
		The machine detects that the HDD is not operating correctly (can neither read nor write) at power on or while processing incoming email.
		<ul style="list-style-type: none"> ▪ HDD defective ▪ Power failure during an access to the HDD
		<ol style="list-style-type: none"> 1. Do SP5832-008 to format the mail RX data on the HDD. 2. Replace the HDD.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
873	CTL B	HDD mail send data error
		An error is detected on the HDD immediately after the machine has been turned on, or power has been turned off while the machine has used the HDD.
		<ul style="list-style-type: none"> ▪ Defective HDD ▪ Power failure during an access to the HDD
		<ol style="list-style-type: none"> 1. Do SP5832-008 (Format HDD – Mail TX Data) to initialize the HDD. 2. Replace the HDD.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
874	CTL	Delete All error 1: Data area
		An error occurs while the machine deletes data from the HDD. Note: The source of this error is the DataOverwriteSecurity Unit running from an SD card.
		<ul style="list-style-type: none"> ▪ An error detected at the delete program. ▪ Delete All option is not installed.
		<ol style="list-style-type: none"> 1. Turn the main switch off/on and try the operation again.
-05	D	Read error
-06	D	Write error
-09	D	No response from HDD
-10	D	Kernel
-12	D	No specification for partition
-13	D	No device file
-14	D	Startup option error
-15	D	No specification for sector number

Troubleshooting

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
-16	D	hdderase execution failure
-41	D	Other fatal error
-42	D	Ending with stop direction
-61 to -65	D	Library abnormal recovery
-66	D	Not available
-67	D	Unfinished erase
-68	D	HDD format failure (at normal)
-69	D	HDD format failure (at abnormal)
-70	D	Library incorrect recovery
-99	D	Other error

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
875	CTL	Delete All error 1: HDD
		A data error is detected for the HDD/NVRAM after the Delete All option has been used. Note: The source of this error is the DataOverwriteSecurity Unit running from an SD card.
		<ul style="list-style-type: none"> ▪ Defective HDD
		<ol style="list-style-type: none"> 1. Turn the main switch off/on and try the operation again. 2. Install the DataOverwriteSecurity Unit again.
-01	D	Hddcheck - i error
-02	D	Erase failure

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
876	CTL	Log Data Error
		An error was detected in the handling of the log data at power on or during machine operation. This can be caused by switching the machine off while it is operating.
-01	D	Log Data Error 1
		<ul style="list-style-type: none"> ▪ Damaged log data file in the HDD
		1. Initialize the HDD with SP5832-004.
-02	D	Log Data Error 2
		<ul style="list-style-type: none"> ▪ An encryption module not installed
		1. Disable the log encryption setting with SP9730-004 ("0" is off.)
-03	D	Log Data Error 3
		<ul style="list-style-type: none"> ▪ Invalid log encryption key due to defective NVRAM data
		1. Initialize the HDD with SP5832-004. 2. Disable the log encryption setting with SP9730-004 ("0" is off.)
-04	D	Log Data Error 4
		<ul style="list-style-type: none"> ▪ Unusual log encryption function due to defective NVRAM data
		Initialize the HDD with SP5832-004.
-05	D	Log Data Error 5
		<ul style="list-style-type: none"> ▪ Installed NVRAM or HDD which is used in another machine
		1. Reinstall the previous NVRAM or HDD. 2. Initialize the HDD with SP5832-004.
-99	D	Log Data Error 99
		<ul style="list-style-type: none"> ▪ Other than the above causes
		1. Ask your supervisor.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
877	CTL B	SD card error
		The 'all delete' function cannot be executed but DataOverwriteSecurity Unit is installed and activated.
		<ul style="list-style-type: none"> ▪ Defective SD card ▪ SD card not installed
		<ol style="list-style-type: none"> 1. Replace the NVRAM and then install the new SD card. 2. Check and reinstall the SD card.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
878 -00	CTL D	TPM system authentication error
		The system firmware is not authenticated by TPM (security chip).
		<ul style="list-style-type: none"> ▪ Incorrect updating for the system firmware ▪ Defective flash ROM on the controller board
		<ol style="list-style-type: none"> 1. Replace the controller board.
-01	D	USB Flash Error
		File system in the USB flash device is defective.
		<ul style="list-style-type: none"> ▪ Cannot mount partition 3 in the USB flash device. ▪ Encryption key does not exist. ▪ Cannot find the file for KMMD to be operated.
		<ol style="list-style-type: none"> 1. Replace the controller board.
-02	D	TPM Error
		An error occurred in TPM or in TPM driver.
		<ul style="list-style-type: none"> ▪ TPM defective
		<ol style="list-style-type: none"> 1. Replace the controller board.
-03	D	TCSD Error
		An error occurred in TPM software stack.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		<ul style="list-style-type: none"> ▪ TPM defective
		1. Replace the controller board.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
880	CTL D	File format converter (MLB) error
		A request to get access to the MLB is not answered within the specified time (60 seconds).
		<ul style="list-style-type: none"> ▪ Defective MLB
		1. Replace the MLB.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
881	CTL D	Authentication area error
		Authentication application error is detected. Error data in an authentication application reaches the management limit.
		1. Turn the main power switch off and on.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
899	CTL D	Software performance error
		If the processing program shows abnormal performance and the program exits abnormally, this SC is issued.
		<ul style="list-style-type: none"> ▪ Controller board defective ▪ Software defective

Troubleshooting

6.1.11 SC9XX: OTHERS

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
920	CTL	Printer error
-00	B	No response at PM start up
-01	B	Timeout error during the PM operation
-02	B	Working memory error
-03	B	Cannot start-up the filtering process
-04	B	Abnormal exit from the filtering process
		An error is detected in the printer application program.
		<ul style="list-style-type: none"> ▪ Defective software ▪ Unexpected hardware resource (e.g., memory shortage)
		<p>Software defective:</p> <p>Turn the main power switch off and on. If the problem is not solved, change the controller firmware.</p>

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
921	CTL	Printer font error
		A necessary font is not found in the SD card.
		<ul style="list-style-type: none"> ▪ A necessary font is not found in the SD card. ▪ The SD card data is corrupted.
		1. Check that the SD card has the correct data.
-00	B	Resident font is not found.
-01	B	Option font is not found.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
925	CTL	Net File function error
		The NetFile file management on the HDD cannot be used, or a NetFile management file is corrupted and operation cannot continue. The HDD is defective and it cannot be debugged or partitioned, so the Scan Router functions (delivery of received faxes, document capture, etc.), Web services, and other network functions cannot be used. HDD error status codes are displayed below the SC code:
		<ul style="list-style-type: none"> ▪ Refer to the four procedures below (Recovery from SC 925).
-00	B	HDD is defective.
-01	B	NetFile management file is broken.

Here is a list of HDD error status codes.

Display	Meaning
(-1)	HDD not connected
(-2)	HDD not ready
(-3)	No label
(-4)	Partition type incorrect
(-5)	Error returned during label read or check
(-6)	Error returned during label read or check
(-7)	"filesystem" repair failed
(-8)	"filesystem" mount failed
(-9)	Drive does not answer command
(-10)	Internal kernel error
(-11)	Size of drive is too small
(-12)	Specified partition does not exist

Display	Meaning
(-13)	Device file does not exist

Recovery from SC 925

Procedure 1

If the machine shows SC codes for HDD errors (SC860 to SC865) with SC 925, do the recovery procedures for SC860 to SC865.

Procedure 2

If the machine does not show one of the five HDD errors (SC860 to SC865), turn the machine power off and on. If this is not the solution for the problem, then initialize the NetFile partition on the HDD with SP5832-011 (HDD Formatting – Ridoc I/F).

NetFiles: Jobs printed from the document server using a PC and DeskTopBinder

- Before you initialize the NetFile partition on the HDD, tell the customer that:
- Received faxes on the delivery server will be erased
- All captured documents will be erased
- DeskTopBinder/Print Job Manager/Desk Top Editor job history will be erased
- Documents on the document server, and scanned documents, will not be erased.
- The first time that the network gets access to the machine, the management information must be configured again (this will use a lot of time).

Before you initialize the Netfile partition with SP5832-011, do these steps:

1. Go into the User Tools mode and do "Delivery Settings" to print all received fax documents that are scheduled for delivery. Then erase them.
2. In the User Tools mode, do Document Management → Batch Delete Transfer Documents.
3. Do SP5832-011, then turn the machine power off and on.

Procedure 3

If "Procedure 2" is not the solution for the problem, do SP5832-001 (HDD Formatting - All), then turn the machine power off and on.

SP5832-001 erases all document and address book data on the hard disks. Ask the customer before you do this SP code.

Procedure 4

If "Procedure 3" is not the solution for the problem, replace the HDD.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
990	CTL D	Software error 1
		The software performs an unexpected function and the program cannot continue.
		<ul style="list-style-type: none"> Software defective, re-boot
991	CTL C	Software error 2
		The software performs an unexpected function. However, unlike SC990, recovery processing allows the program to continue.
		<ul style="list-style-type: none"> Software defective, re-boot

In order to get more details about SC990 and SC991:

- 1) Execute SP7403 or print an SMC Report (SP5990) to read the history of the 10 most recent logged errors.
- 2) If you press the zero key on the operation panel with the SP selection menu displayed, you will see detailed information about the recently logged SC990 or SC991, including the software file name, line number, and so on.

Note

- 1) is the recommended method, because another SC could write over the information for the previous SC.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
992	CTL D	Undefined error
		Defective software program
		<ul style="list-style-type: none"> An error undetectable by any other SC code occurred

Troubleshooting

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
994	CTL C	Application Item Error
		The number of executed application items on the operation panel reach the maximum limit for the operation panel structure.
		<ul style="list-style-type: none"> ▪ Too many executed application items

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
997	CTL B	Software Error 3: Cannot select application function
		An application does not start after the user pushed the correct key on the operation panel.
		<ul style="list-style-type: none"> ▪ Software bug ▪ A RAM or DIMM option necessary for the application is not installed or not installed correctly.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
998	CTL D	Software Error 4: Application cannot start
		Register processing does not operate for an application within 60 s after the machine power is turned on. No applications start correctly, and all end abnormally.
		<ul style="list-style-type: none"> ▪ Software bug ▪ A RAM or DIMM option necessary for the application is not installed or not installed correctly.

6.2 PROCESS CONTROL ERROR CONDITIONS

6.2.1 DEVELOPER INITIALIZATION RESULT

SP-3-014-001 (Developer Initialization Result)

No.	Result	Description	Possible Causes/Action
1	Successfully completed	Developer initialization is successfully completed.	-
2	Forced termination	Developer initialization was forcibly terminated.	<ul style="list-style-type: none"> ▪ A cover was opened or the main switch was turned off during the initialization. <ol style="list-style-type: none"> 1. Do the developer initialization again when done in SP mode. Reinstall the engine main firmware if the result is the same. 2. Turn the main switch off and on when done at unit replacement.
6	Vt error	Vt is more than 0.7V when Vcnt is 4.3V.	<ol style="list-style-type: none"> 1. Make sure that the heat seal on the development unit is not removed. 2. Defective TD sensor
7	Vcnt error 1	Vcnt is less than 4.7V when Vcnt is Vt target $\pm 0.2V$.	<ol style="list-style-type: none"> 1. Defective TD sensor 2. Vt target settings are not correct. 3. Toner density error
8	Vcnt error 2	Vt is more than 0.7V when Vcnt is 4.3V and Vcnt is less than 4.7V when Vcnt is Vt target $\pm 0.2V$.	<ol style="list-style-type: none"> 1. Make sure that the heat seal on the development unit is not removed. 2. Defective TD sensor

Process Control Error Conditions

No.	Result	Description	Possible Causes/Action
9	Vcnt error 3	Vcnt is less than 4.7V.	<ol style="list-style-type: none">1. Make sure that the heat seal on the development unit is not removed.2. Defective TD sensor3. Vt target settings are not correct.4. Toner density error

↓ Note

- The machine starts developer initialization after you set "Enable" in SP3-902-005, 006, 007, or 008. Developer initialization automatically resumes when you open and close the front door or turn the main switch off and on if an error other than Error 8 occurs.

6.2.2 PROCESS CONTROL SELF-CHECK RESULT

Displayed number shows results of each color sensor check.

00000000 = YYCCMMKK

SP3-012-001 to -010 (Process Control Self-check Result)

No.	Result	Description	Possible Causes/Action
11	Successfully completed	Process control self-check successfully completed.	Check the Vsg adjustment. See the "Vsg Adjustment Result" following this table.
41	Vt error	Vt maximum or minimum error is detected.	<ul style="list-style-type: none"> ▪ Defective development unit Vt maximum error and an image is faint: <ol style="list-style-type: none"> 1. Replace the toner supply pump unit. Vt maximum error and an image is O.K: <ol style="list-style-type: none"> 1. Replace the development unit. 2. Replace the BICU board. Vt minimum error: <ol style="list-style-type: none"> 1. Replace the development unit. 2. Replace the BICU board.
53	ID sensor coefficient (K5) detection error	Not enough data can be sampled.	<ul style="list-style-type: none"> ▪ Solid image is not sufficient density: <ol style="list-style-type: none"> 1. Retry the process control. 2. Replace the ID sensors. 3. Replace the BICU board. ▪ Solid image is O.K. <ol style="list-style-type: none"> 1. Replace the ID sensors. 2. Replace the BICU board. ▪ ID sensor is dirty: <ol style="list-style-type: none"> 1. Clean the ID sensors. 2. Retry the process control.

Process Control Error Conditions

No.	Result	Description	Possible Causes/Action
54	ID sensor coefficient (K5) maximum/minimum error	When the K5 is more than the value of SP3-362-003 or less than the value of SP3-362-004, the error 54 is displayed.	<ul style="list-style-type: none"> ▪ ID sensor pattern density is too high or low. ▪ ID sensor or shutter is defective. Same as 53
55	Gamma error: Maximum	Gamma is out of range. $5.0 < \text{Gamma}$	<ul style="list-style-type: none"> ▪ ID sensor pattern density is too high. ▪ Hardware defective. Same as 53
56	Gamma error: Minimum	Gamma is out of range. $\text{Gamma} < 0.15$	<ul style="list-style-type: none"> ▪ ID sensor pattern density is too low. ▪ Hardware defective. <ol style="list-style-type: none"> 1. Same as 53 2. Replace the toner supply pump unit.
57	Vk error: Maximum	Vk is out of range. $150 < \text{Vk}$	<ul style="list-style-type: none"> ▪ ID sensor pattern density is too low. ▪ Hardware defective. Same as 53
58	Vk error: Minimum	Vk is out of range. $\text{Vk} < -150$	<ul style="list-style-type: none"> ▪ ID sensor pattern density is too high. ▪ Background dirty ▪ Hardware defective Same as 53
59	Sampling data error during gamma correction	Not enough data can be sampled during the gamma correction.	<ul style="list-style-type: none"> ▪ ID sensor pattern density is too high or low. ▪ Hardware defective Same as 53
99	Unexpected error	Process control fails.	<ul style="list-style-type: none"> ▪ Power Failure Check the power source.

Vsg Adjustment Result**SP3-323-001 to -010 (Vsg Adjustment Result)**

No.	Result	Description	Possible Causes/Action
1	O.K	Vsg adjustment is correctly done.	-
2	ID sensor adjustment error	Vsg cannot be adjusted within $4.0 \pm 0.5V$.	<ul style="list-style-type: none"> ▪ Dirty ID sensor (toner, dust, or foreign material) ▪ Dirty transfer belt ▪ Scratched image transfer belt ▪ Defective ID sensor ▪ Poor connection ▪ Defective BICU <ol style="list-style-type: none"> 1. Clean the ID sensor. 2. Check the belt cleaning. Clean or replace the transfer belt. 3. Replace the image transfer belt. 4. Replace the ID sensor. 5. Check the connection. 6. Replace the BICU board.
3	ID sensor output error	ID sensor output is more than "Voffset Threshold" (SP3-324-004)	<ul style="list-style-type: none"> ▪ Defective ID sensor ▪ Poor connection ▪ Defective BICU <ol style="list-style-type: none"> 1. Replace the ID sensor. 2. Check the connection. 3. Replace the BICU board.
9	Vsg Adjustment error	Vsg adjustment has not been completed.	<ul style="list-style-type: none"> ▪ Other cases Retry SP3-321-010.

6.2.3 LINE POSITION ADJUSTMENT RESULT

SP2-194-010 to -012 (Line Position Adjustment Result: M, C, Y)

This SP shows the number as a line position adjustment result on the LCD. It shows which color has an error (M, Y or C).

No.	Result	Description	Note
0	Not done	Line position adjustment has not been done.	-
1	Completed successfully	Line position adjustment has correctly been done,	-
2	Cannot detect patterns	ID sensors have not detected the patterns for line position adjustment.	See Note
3	Fewer lines on the pattern than the target	The patterns, which ID sensors have detected, are not enough for line position adjustment.	See Note
4	More lines on the pattern than the target	Not used in this machine.	-
5	Out of the adjustment range	ID sensors have correctly detected the patterns for line position adjustment, but a shift of patterns is out of adjustable range.	See Note
6-9	Not used	-	-

↓ Note


- For details, see the "Troubleshooting Guide - Line Position Adjustment" section.

6.3 TROUBLESHOOTING GUIDE

6.3.1 LINE POSITION ADJUSTMENT

When there are color registration errors on the output, do the line position adjustment as follows.

Test

1. Do SP2-111-003 (Mode c: rough adjustment).
2. Use SP2-194-007 to check if the result of the line position adjustment is correct (0: Completed successfully, 1: Not completed). If the result is "1", refer to 'Countermeasure list for color registration errors'.
3. Do SP2-111-001 (Mode a: fine adjustment twice).
4. Use SP2-194-007 to check if the result of the line position adjustment is correct (0: Completed successfully, 1: Not completed). If the result is "1", refer to 'Countermeasure list for color registration errors'.
5. Put some A4/LT paper on the by-pass tray.
 -  **Note**
 - When you print a test pattern, use the by-pass tray to feed the paper.
6. Print out test pattern "7" with SP2-109-003.
7. Check the printed output with a loupe.
8. If there are no color registration errors on the output, the line position adjustment is correctly done. If not, refer to the countermeasure list for color registration errors.

Countermeasure list for color registration errors

After Executing SP2-111-003

- Result: "1" in SP2-194-007
- Result: "2" or "3" (Line pattern detection failure) in SP2-194-010, -011, -012

Test pattern check	Possible cause/Countermeasure
White image, Abnormal image, Low density	<ul style="list-style-type: none"> ▪ Defective image processing unit ▪ Low density of test pattern ▪ Defective BICU <ol style="list-style-type: none"> 1. Replace the high voltage power supply unit. 2. Do the forced process control (SP3-011-001) or supply some toner (SP3-030-xxx). 3. Replace the BICU.
Normal image, but with color registration errors	<ul style="list-style-type: none"> ▪ Defective ID sensor shutter ▪ Defective ID sensor ▪ Defective BICU <ol style="list-style-type: none"> 1. Replace the ID sensor shutter solenoid. 2. Replace the ID sensor. 3. Replace the BICU.

After Executing SP2-111-003

- Result: "1" in SP2-194-007
- One of results: "5" (Out of adjustable range) in SP2-194-010, -011, -012, -013

Test pattern check	Possible cause/Countermeasure
The main scan registrations of M, C, Y, K are shifted by more than ± 15 .	<ul style="list-style-type: none"> ▪ Defective laser unit ▪ Defective BICU <ol style="list-style-type: none"> 1. Perform the color skew adjustment (p.4-3). 2. Replace the laser unit. 3. Replace the BICU.

Test pattern check	Possible cause/Countermeasure
<p>The sub scan registrations of M, C, Y, K are shifted by more than ± 20.</p>	<ul style="list-style-type: none"> ▪ Defective image transfer belt ▪ Defective drive units ▪ Defective BICU <ol style="list-style-type: none"> 1. Replace the image transfer belt. 2. Replace the drum motor. 3. Replace the BICU.
<p>The main scan registration is shifted by more than ± 0.66 mm, but only at the central area of the image on the output.</p>	<ul style="list-style-type: none"> ▪ Defective ID sensor at center ▪ Deformed center area on the image transfer belt ▪ Defective BICU <ol style="list-style-type: none"> 1. Replace the ID sensor. 2. Replace the image transfer belt. 3. Replace the BICU.
<p>The skew for M, C, Y, K is more than ± 0.75 mm.</p>	<ul style="list-style-type: none"> ▪ Defective PCDU ▪ Defective laser optics housing unit ▪ Defective BICU <ol style="list-style-type: none"> 1. Perform the color skew adjustment (p.4-3). 2. Reinstall or replace the PCDU. 3. Replace the laser optics housing unit. 4. Replace the BICU.
<p>Others</p>	<ul style="list-style-type: none"> ▪ Skew correction upper limit error ▪ Defective BICU ▪ Defective laser optics housing unit <ol style="list-style-type: none"> 1. Perform the color skew adjustment (p.4-3). 2. Replace the BICU. 3. Replace the laser optics housing unit.

After Executing SP2-111-003

- Result: "1" in SP2-194-007
- Result: "0" in SP2-194-010, -011, -012, -013

Test pattern check	Possible cause/Countermeasure
	Do SP2-111-001 or -002.

After Executing SP2-111-001

- Result: "1" in SP2-194-007
- Result: "2" or "3" (Line pattern detection failure) in SP2-194-010, -011, -012, -013

Test pattern check	Possible cause/Countermeasure
White image, Abnormal image, Low density	<ul style="list-style-type: none"> ▪ Defective laser optics housing unit shutter ▪ Defective image processing unit ▪ Low density of test pattern ▪ Defective BICU <ol style="list-style-type: none"> 1. Replace the shutter motor. 2. Replace the high voltage power supply unit. 3. Do the forced process control (SP3-011-001) or supply some toner (SP3-030-xxx). 4. Replace the BICU.
Normal image, but with color registration errors	<ul style="list-style-type: none"> ▪ Defective ID sensor shutter ▪ Defective ID sensor ▪ Defective BICU <ol style="list-style-type: none"> 1. Replace the ID sensor shutter solenoid. 2. Replace the ID sensor. 3. Replace the BICU.

After Executing SP2-111-001

- Result: "1" in SP2-194-007
- Result: "5" (Out of adjustable range) in SP2-194-010, -011, -012

Test pattern check	Possible cause/Countermeasure
Low image density on the output	<ul style="list-style-type: none"> ▪ Low pattern density <p>Do the forced process control (SP3-011-001) or supply some toner (SP3-030-xxx).</p>
The main scan registrations of M, C, Y, K are shifted by more than ± 1.4 .	<ul style="list-style-type: none"> ▪ No defective component ▪ Defective laser optics housing unit ▪ Defective BICU <ol style="list-style-type: none"> 1. Do SP2-111-003 again. 2. Replace the laser optics housing unit. 3. Replace the BICU.
The sub scan registrations of M, C, Y are shifted by more than ± 1.4 mm from the sub scan registration of K.	<ul style="list-style-type: none"> ▪ No defective component ▪ Defective image transfer belt ▪ Defective drive units ▪ Defective BICU <ol style="list-style-type: none"> 1. Do SP2-111-003 again. 2. Replace the image transfer belt. 3. Replace the drum motor. 4. Replace the BICU.
The main scan registration is shifted by more than ± 0.66 mm, but only at the central area of the image on the output.	<ul style="list-style-type: none"> ▪ Defective ID sensor at center ▪ Deformed center area on the image transfer belt ▪ Defective BICU <ol style="list-style-type: none"> 1. Replace the ID sensor. 2. Replace the image transfer belt. 3. Replace the BICU.
The skew for M, C, Y, K is more than ± 0.75 mm at the end of the scan line?	<ul style="list-style-type: none"> ▪ Defective PCDU ▪ Defective laser optics housing unit ▪ Defective BICU <ol style="list-style-type: none"> 1. Perform the color skew adjustment (p.4-3). 2. Reinstall or replace the PCDU. 3. Replace the laser optics housing unit. 4. Replace the BICU.

Test pattern check	Possible cause/Countermeasure
Others	<ul style="list-style-type: none"> ▪ Skew correction upper limit error ▪ Defective BICU ▪ Defective laser optics housing unit <ol style="list-style-type: none"> 1. Replace the BICU. 2. Perform the color skew adjustment (p.4-3). 3. Replace the laser optics housing unit.

After Executing SP2-111-001

- Result: "0" in SP2-194-007
- Result: Color registration errors in SP2-194-010, -011, -012, -013

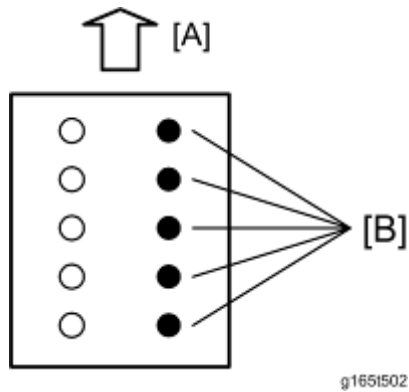
Test pattern check	Possible cause/Countermeasure
Low image density on the output	<ul style="list-style-type: none"> ▪ Low pattern density <p>Do the forced process control (SP3-011-001) or supply some toner (SP3-030-xxx).</p>
The main scan registration is shifted, but only at the central area of the image on the output.	<ul style="list-style-type: none"> ▪ Defective ID sensor at center ▪ Deformed center area on the image transfer belt ▪ Defective BICU <ol style="list-style-type: none"> 1. Replace the ID sensor. 2. Replace the image transfer belt. 3. Replace the BICU.
The main scan registrations of M, C, Y, K are shifted.	<ul style="list-style-type: none"> ▪ Defective laser optics housing unit ▪ Defective ID sensor ▪ Defective BICU ▪ Incorrect SP value <ol style="list-style-type: none"> 1. Perform the color skew adjustment (p.4-3). 2. Replace the laser optics housing unit. 3. Replace the ID sensor. 4. Replace the BICU. 5. Adjust the value with SP2-182-004 to -021.

Test pattern check	Possible cause/Countermeasure
<p>The sub scan registrations of M, C, Y, K are shifted.</p>	<ul style="list-style-type: none"> ▪ Defective image transfer belt ▪ Defective drive units ▪ Defective ID sensor ▪ Defective BICU ▪ Incorrect SP value <ol style="list-style-type: none"> 1. Replace the image transfer belt. 2. Replace the ID sensor. 3. Replace the drum motor. 4. Replace the BICU. 5. Adjust the value with SP2-182-022 to -039.
<p>The skew of M, C, Y, K is different.</p>	<ul style="list-style-type: none"> ▪ Defective PCDU ▪ Defective laser optics housing unit ▪ Defective BICU <ol style="list-style-type: none"> 1. Reinstall or replace the PCDU. 2. Perform the color skew adjustment (p.4-3). 3. Replace the laser optics housing unit. 4. Replace the BICU.
<p>The sub scan lines are shifted. Shifted lines appear cyclically.</p>	<ul style="list-style-type: none"> ▪ Defective PCDU ▪ Defective drive unit ▪ Drum phase adjustment error <ol style="list-style-type: none"> 1. Reinstall or replace the PCDU. 2. Check or replace the drive unit.

6.3.2 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

- Abnormal image at 33.6-mm intervals: Charge roller
- Colored spots at 40.82-mm intervals: Image transfer roller
- Colored spots at 20.9-mm intervals: Development roller
- Abnormal image at 55.4 (center) or 55.0 (end)-mm intervals: Paper transfer roller
- Colored spots at 75.4-mm intervals: OPC drum
- Spots at 78.5-mm intervals: Pressure roller
- Spots at 78.5-mm intervals: Fusing belt

6.3.3 BLANK PRINT

Symptom	Possible cause	Necessary actions
No image is printed.	Defective laser unit	Replace the laser unit.
	Defective PCDU	Replace the PCDU.
	Defective image transfer belt unit	Replace the image transfer belt unit.
	Incorrect action of paper transfer roller	Check the guide and the paper transfer roller.
	Defective HVPS	Replace HVPS.
	Defective BICU	Replace the BICU.

6.3.4 ALL-BLACK PRINT

Symptom	Possible cause	Necessary actions
All the paper is black.	Incorrectly installed PCDU	Install the PCDU correctly.
	Defective PCDU	Replace the PCDU.
	Defective HVPS	Replace HVPS.
	Defective laser unit	Replace the laser unit.
	Defective BICU	Replace the BICU.
	Defective main board	Replace the main board.

6.3.5 MISSING CMY COLOR

Symptom	Possible cause	Necessary actions
C, M, or Y is missing.	Defective PCDU	Replace the PCDU.
	Loose connection between printer cartridge and BICU	Replace the drum positioning cover.
	Image transfer belt not contacting PCDU	Check the belt tension unit.
	Defective the drum motor: CMY	Replace the drum motor: CMY.
	Defective BICU	Replace the BICU.

Troubleshooting

6.3.6 LIGHT PRINT

Symptom	Possible cause	Necessary actions
Printed images are too weak.	Loose connection between paper transfer roller and HVPS	Check the connection between the paper transfer roller and the HVPS.
	Dust in the laser beam path	Clean the laser beam path.
	Image transfer belt not contacting PCDU	Check the image transfer belt unit.
	Defective PCDU	Replace the PCDU.
	Defective paper transfer roller	Repair the paper transfer roller.
	Defective fusing unit	Replace the fusing unit.
	Defective BICU	Replace the BICU.

6.3.7 REPEATED SPOTS OR LINES ON PRINTS

The same spots or lines appear at regular intervals.

Interval	Possible cause	Necessary actions
At intervals of 33.6 mm (1.32 inches)	Defective charge roller	Replace the PCDU.
At intervals of 20.9 mm (0.82 inches)	Defective development roller	Replace the PCDU.
At intervals from 55.0 (end) to 55.4 (center) mm (from 2.16 to 2.18 inches)	Defective paper transfer roller	Replace the paper transfer roller unit.
At intervals of 75.4 mm (2.96 inches)	Defective OPC drum	Replace the PCDU.
At intervals of 78.5 mm (3.09 inches)	Defective pressure roller	Replace the pressure roller or fusing unit.
At intervals of 78.5 mm (3.09 inches)	Defective fusing belt	Replace the fusing unit.
At intervals of 40.82 mm (1.60 inches)	Defective image transfer roller	Replace the image transfer roller.

6.3.8 DARK VERTICAL LINE ON PRINTS

Symptom	Possible cause	Necessary actions
A dark line appears. The line is parallel to the paper feed direction of one CMY color.	Defective PCDU	Replace the PCDU.
A dark line appears. The line is parallel to the paper feed direction of any color (not C, M, or Y).	Dust in the laser beam path	Clean the laser beam path.
	Defective image transfer belt unit	Replace the image transfer belt unit.
	Defective fusing unit	Replace the fusing unit.

6.3.9 WHITE HORIZONTAL LINES OR BANDS

Symptom	Possible cause	Necessary actions
White lines or bands appear in images of all toner colors.	Defective PCDU	Replace the PCDU.
	Defective image transfer belt unit	Replace the image transfer belt unit.
	Defective paper transfer roller	Replace the paper transfer roller.

6.3.10 MISSING PARTS OF IMAGES

Symptom	Possible cause	Necessary actions
Some parts of images are missing.	Defective PCDU	Replace the PCDU.
	Defective image transfer belt unit	Replace the image transfer belt unit.
	Defective paper transfer roller	Replace the paper transfer roller.
	Defective fusing unit	Replace the fusing unit.

6.3.11 DIRTY BACKGROUND

Symptom	Possible cause	Necessary actions
Backgrounds of one CMYK color are too dense.	Defective PCDU	Replace the PCDU.
Backgrounds of more than one CMYK are too dense.color	Defective HVPS	Replace the HVPS.

6.3.12 PARTIAL CMY COLOR DOTS

Symptom	Possible cause	Necessary actions
Unexpected dots of the same color appear at irregular intervals.	Defective PCDU	Replace the PCDU.
	Defective image transfer belt unit	Replace the image transfer belt unit.
	Defective fusing unit	Replace the fusing unit.

6.3.13 DARK IRREGULAR STREAKS ON PRINTS

Symptom	Possible cause	Necessary actions
Unexpected streaks appear at irregular intervals.	Defective image transfer belt	Replace the image transfer belt unit.

6.3.14 CMY COLOR IRREGULAR STREAKS

Symptom	Possible cause	Necessary actions
Unexpected streaks of the same color appear at irregular intervals.	Defective PCDU	Replace the PCDU.
	Defective image transfer belt unit	Replace the image transfer belt unit.

6.3.15 GHOSTING

Symptom	Possible cause	Necessary actions
The same or similar image appears two or more times. They get weaker and weaker.	Defective PCDU	Replace the PCDU.
	Defective transfer unit	Replace the transfer unit.

6.3.16 UNFUSED OR PARTIALLY FUSED PRINTS

Symptom	Possible cause	Necessary actions
Some parts of images are not fused very well.	Non-standard paper in use	Use recommended paper.
	Incorrect media type mode	Select an appropriate media mode.
	Defective fusing unit	Replace the fusing unit.

6.3.17 IMAGE SKEW

Symptom	Possible cause	Necessary actions
Images are skewed	Incorrect installation of paper	Install the paper correctly.
	Incorrect paper guide position	Adjust the paper guide correctly. <div style="border: 1px solid black; border-radius: 10px; padding: 2px; display: inline-block;"> ⬇ Note </div> <ul style="list-style-type: none"> ▪ When adjusting the paper width, use the right side guide only, with the green clip. Do not hold ▪ the left side guide at this time, or skew will occur.
	Defective registration roller	Repair the paper feed unit.
	Incorrect action of paper transfer roller	Check the paper transfer roller.
	Defective BICU	Replace the BICU.
	Incorrect installation of paper tray	Uninstall the paper tray units and re-install them.

6.3.18 BACKGROUND STAIN

Symptom	Possible cause	Necessary actions
The reverse side of the paper is not clean.	Unclean paper transfer roller	Clean the paper transfer roller.
	Unclean paper path	Clean the paper path.
	Unclean registration roller	Clean the registration roller.
	Defective fusing unit	Replace the fusing unit.

6.3.19 NO PRINTING ON PAPER EDGE

Symptom	Possible cause	Necessary actions
Images are not printed in the areas around the paper edges.	Defective PCDU	Replace the PCDU.
	Defective toner cartridge	Replace the toner cartridge.
	Defective image transfer belt unit	Replace the image transfer belt unit.
	Image transfer belt not contacting PCDU	Check the image transfer belt unit.

6.3.20 IMAGE NOT CENTERED WHEN IT SHOULD BE

Symptom	Possible cause	Necessary actions
Images do not come to the center.	Incorrect installation of paper	Install the paper correctly.
	Incorrect paper guide position	Adjust the paper guide correctly.
	Incorrect margin setting	Adjust the margin setting.
	Defective BICU	Replace the BICU.
	Incorrect installation of paper tray	Uninstall the paper tray units and re-install them.

6.4 JAM DETECTION

6.4.1 PAPER JAM DISPLAY

SP7-507 shows the 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 (SP7-502-001).
- **DATE:** indicates the date when the jam occurred.

6.4.2 JAM CODES AND DISPLAY CODES

SP7-504 shows how many jams occurred at each location.

Jam Code SP	Display	Description	LCD Display
7504 1	Fusing Entrance: ON	Fusing entrance sensor does not turn off	A
7504 1	Exit Sensor	Paper exit sensor does not turn off	C
7504 1	Duplex Exit: ON	Paper exit sensor does not turn off	Z
7504 1	Bank Transport 2: ON	Paper exit sensor does not turn off	Y2
7504 1	Relay Exit Sensor	Relay exit sensor does not turn off	C
7504 3	Tray 1: ON	Paper is not fed from tray 1.	A
7504 4	Tray 2: ON	Paper is not fed from tray 2.	Y
7504 5	Tray 3: ON	Paper is not fed from tray 3.	Y
7504 8	Bypass: ON	Paper is not fed from the by-pass tray.	A
7504 9	Duplex: ON	Paper is jammed at the duplex unit.	Z

Jam Detection

Jam Code SP	Display	Description	LCD Display
7504 12	Bank Transport 1: ON	Vertical transport sensor 2 does not detect paper from tray 2.	Y
7504 17	Registration: ON (Tray)	Registration sensor does not detect paper and paper feed exit sensor turns on.	A
7504 17	Registration: ON (LCT)	Registration sensor does not detect paper.	A
7504 18	Fusing Entrance: ON	Fusing entrance sensor does not detect paper.	B
7504 19	Fusing Exit: ON	Fusing exit sensor does not detect paper.	C
7504 20	Paper Exit: ON	Paper exit sensor does not detect paper.	C
7504 21	Relay Exit: ON	Tray exit sensor (bridge unit) does not detect paper.	C
7504 25	Duplex Exit: ON	Duplex exit sensor does not detect paper.	Z
7504 26	Duplex Entrance: ON (In)	Duplex entrance sensor does not detect paper.	Z
7504 52	Bank Vertical Transport Sensor 1	Vertical transport sensor 2 does not turn off.	Y
7504 53	Bank Vertical Transport Sensor 2	Vertical transport sensor or relay sensor 3 does not turn off.	Y
7504 57	Regist Sensor	Registration sensor does not turn off.	B
7504 60	Exit Sensor	Paper exit sensor does not turn off.	C
7504 61	Relay Exit Sensor	Tray exit sensor (bridge unit) does not turn off.	C
7504 65	Duplex Exit Sensor	Duplex exit sensor does not turn off.	Z

Jam Code SP	Display	Description	LCD Display
7505 001	ARDF Registration Sensor	ARDF registration sensor does not turn off.	P
7505 004	ARDF Registration Sensor	ARDF registration sensor does not detect paper (Single/Duplex).	P
7505 054	ARDF Registration Sensor	ARDF registration sensor does not turn off.	P
7505 100	ARDF transport motor	The ARDF original transport motor is abnormal.	P

Paper Size Code

Size Code	Paper Size	Size Code	Paper Size
05	A4 LEF	141	B4 SEF
06	A5 LEF	142	B5 SEF
14	B5 LEF	160	DLT SEF
38	LT LEF	164	LG SEF
44	HLT LEF	166	LT SEF
133	A4 SEF	172	HLT SEF
134	A5 SEF	255	Others

6.5 ELECTRICAL COMPONENT DEFECTS

6.5.1 SENSORS

No.	Sensor Name/ Sensor Board Name	Active	CN No./ Pin No.	Condition	Symptom
S1	By-pass Bottom Plate HP Sensor	H	CN523/24	Open	▪ SC508
				Shorted	
S2	By-pass Paper End Sensor	H	CN523/19	Open	▪ Paper is detected on the by-pass tray when no paper is set.
				Shorted	▪ Paper is not detected on the by-pass tray when paper is set.
S3	By-pass Paper Size Sensor	H	CN523/16	Open	▪ A4/LT size is detected.
				Shorted	▪ A4/LT size is not detected.
S4	Duplex Entrance Sensor	L	CN523/2	Open	▪ Jam Z (Jam 65)
				Shorted	▪ Jam B (Jam18)
S5	Fusing Entrance Sensor	L	CN523/8	Open	▪ Jam B (Jam 18)
				Shorted	▪ Jam C
S6	Duplex Exit Sensor	L	CN523/11	Open	▪ Jam Z (Jam 25)
				Shorted	▪ Jam Z
S7	Fusing Exit Sensor	L	CN525/15	Open	▪ Jam C (Jam 19)
				Shorted	▪ Jam C

No.	Sensor Name/ Sensor Board Name	Active	CN No./ Pin No.	Condition	Symptom
S8	Fusing Thermopile	A	CN525/13	Open	▪ PCU setting Error occurs.
				Shorted	
S9	HST Sensor (K)	A	CN539/14	Open	
				Shorted	
S10	HST Sensor (C)	A	CN539/15	Open	
				Shorted	
S11	HST Sensor (M)	A	CN539/16	Open	
				Shorted	
S12	HST Sensor (Y)	A	CN539/16	Open	
				Shorted	
S13	ID Sensor	A	CN555	Open	▪ SC370
				Shorted	
S14	ITB Contact Sensor	L	CN543/12	Open	▪ SC442
				Shorted	
S15	Paper End Sensor	H	CN559/12	Open	▪ Paper end is detected when there is paper in the paper tray.
				Shorted	▪ Paper end is not detected when there is no paper in the paper tray.
S16	Paper Feed Sensor	H	CN559/14	Open	▪ Jam A.
				Shorted	▪ Normal operation
S17	Platen Cover Sensor	L	CN104/2	Open	▪ Platen cover

Electrical Component Defects

No.	Sensor Name/ Sensor Board Name	Active	CN No./ Pin No.	Condition	Symptom
				Shorted	open cannot be
S18	PTR Contact Sensor	L	CN523/5	Open	▪ SC452
				Shorted	
S19	Registration Sensor	L	CN559/17	Open	▪ Jam A (Jam 17)
				Shorted	▪ Jam B
S20	Scanner HP Sensor	H	CN104/5	Open	SC120, SC121
				Shorted	
S21	Temperature/Humidity Sensor	A	CN526/6,8	Open	<ul style="list-style-type: none"> ▪ Printed image is wrong, such as rough image, dirty background or weak image. ▪ SC498
				Shorted	
S22	TD Sensor (C)	A	CN539/22	Open	▪ SC374
				Shorted	
S23	TD Sensor (M)	A	CN539/23	Open	▪ SC373
				Shorted	
S24	TD Sensor (Y)	A	CN539/24	Open	▪ SC375
				Shorted	
S25	Waste Toner Overflow Sensor	H	CN543/4	Open	▪ Waste toner full indicated when it is not near full.

No.	Sensor Name/ Sensor Board Name	Active	CN No./ Pin No.	Condition	Symptom
				Shorted	<ul style="list-style-type: none"> Waste toner full cannot be detected when the waste toner bottle is nearly full.
S26	Tray Lift Sensor	L	CN543/7	Open	<ul style="list-style-type: none"> SC501
				Shorted	

No.	Sensor Name/ Sensor Board Name	Active	CN No./ Pin No.	Condition	Symptom
S27	Paper Exit	L	CN525/7	Open	<ul style="list-style-type: none"> Jam C (Jam 20)
				Shorted	<ul style="list-style-type: none"> Jam C (Jam 60)
TH1	Pressure Roller Thermistor (End)	A	CN568/4	Open	<ul style="list-style-type: none"> SC551
				Shorted	
TH2	Pressure Roller Thermistor	A	CN568/2	Open	<ul style="list-style-type: none"> SC571
				Shorted	
TH3	Fusing Thermistor (End)	A	CN568/6	Open	<ul style="list-style-type: none"> SC561
				Shorted	
TH4	Temperature Detection Sensor	A	CN526/4	Open	<ul style="list-style-type: none"> SC497
				Shorted	
SW4	Cover Open/close Sensor	L	CN559/19	Open	<ul style="list-style-type: none"> "Open Cover" is displayed.
				Shorted	<ul style="list-style-type: none"> "Open Cover" cannot be detected.

Electrical Component Defects

No.	Sensor Name/ Sensor Board Name	Active	CN No./ Pin No.	Condition	Symptom
SW5	Paper tray set sensor	L	CN543/15	Open	▪ Paper tray cannot be detected.
				Shorted	▪ Paper tray is detected when the paper tray is not set.
SW6	Waste toner bottle set sensor	L	CN535/1	Open	▪ Waste toner bottle cannot be detected.
				Shorted	▪ Waste toner bottle is detected when the waste toner bottle is not set.

6.5.2 BLOWN FUSE CONDITIONS

Power Supply Unit

Fuse	Rating		Symptom when turning on the main switch
	120V-127V	220V-240V	
FU1	10A/250V	10A/250V	<ul style="list-style-type: none"> 24V power to the BICU not supplied.
FU2	10A/250V	10A/250V	<ul style="list-style-type: none"> 24V power to the BICU not supplied.
FU3	5A/250V	5A/250V	<ul style="list-style-type: none"> 5V power to the BICU not supplied. 24VS1 power to the BICU not supplied.
FU101	15A/250V	8A/250V	Fusing SC occurs.
FU102	10A/250V	6.3A/250V	No response
FU103	2A/250V	2A/250V	Power to all the anti-condensation heaters not supplied.
FU104	10A/250V	10A/250V	<ul style="list-style-type: none"> 24V power to the BICU not supplied
FU301	3.15A/250V	3.15A/250V	<ul style="list-style-type: none"> 5V power to the BICU not supplied 24VS1 power to the BICU not supplied

CAUTION

- For continued protection against risk of fire, replace only with same type and rating of fuse.

6.6 SCANNER TEST MODE

6.6.1 SBU TEST MODE

Output the SBU test pattern with SP4-807-001 to make sure the scanner SBU control operates correctly. The SBU test pattern prints out after you have set the SP mode settings and pressed the start key.

- The CCD on the SBU board may be defective if the copy is abnormal and the SBU test pattern is normal.
- The followings can be the cause if the copy is normal and the SBU test pattern is abnormal:
 - The harness may not be correctly connected between the SBU and the BICU.
 - The BICU or SBU board may be defective.

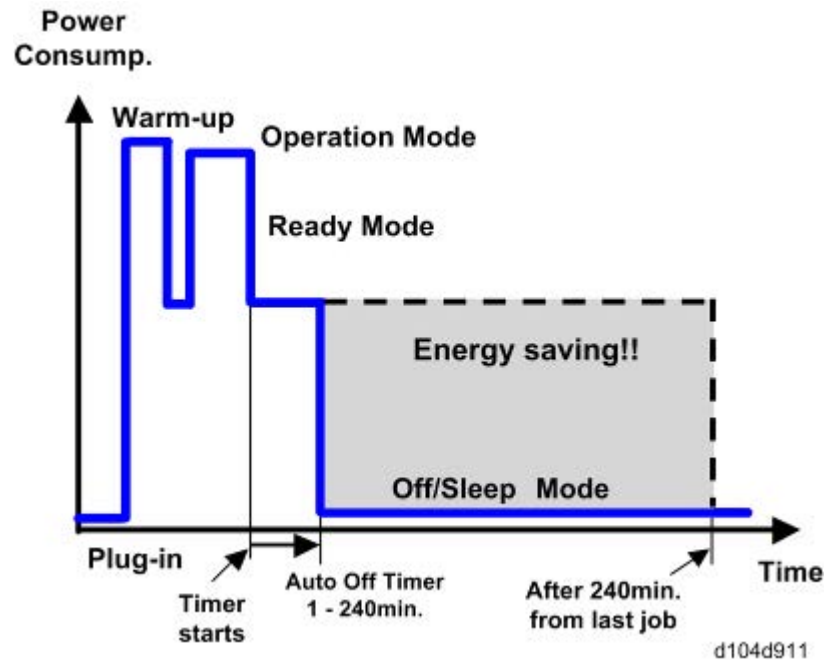
ENERGY SAVE

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		None

7. ENERGY SAVE

7.1 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 with User Tools (System settings > Timer setting)

- Auto off timer (1 – 240 min): Off/Sleep Mode. Default setting: 1 min.

Return to Stand-by Mode

Off/Sleep Mode

Recovery time.

- 10 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 SP8941, as explained below.

7.2 ENERGY SAVE EFFECTIVENESS

SP 8941 (Machine Status) keeps a record of the amount of time that the machine spends in each mode.

- 8941-001: Operating mode
- 8941-002: Standby mode
- 8941-003: Panel off mode (Not used in this model)
- 8941-004: Low power mode (Not used in this model)
- 8941-005: 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 customers site, a watt meter must be used to measure the actual energy consumed.

To use SP8941 to calculate the energy consumed:

- At the start of the measurement period, read the values of SP8941 001 to 005.
- At the end of the measurement period, read the values of SP8941 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	SP8941: 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) $(③ \times ④)/1000$ = ⑤
Operating	001: Operating Time	21089.0	21386.0	4.95	898	4.45
Stand by (Ready)	002: Standby Time	306163.0	308046.0	31.38	179	5.62
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

7.3 PAPER SAVE

7.3.1 EFFECTIVENESS OF DUPLEX/COMBINE FUNCTION

Duplexing and the combine functions reduce the amount of paper used. This means that less energy overall is used for paper production, which improves the environment.

1. Duplex:

Reduce paper volume in half!



d062d102

2. Combine mode:

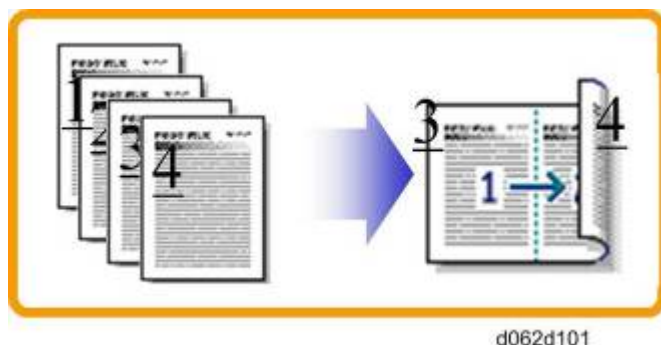
Reduce paper volume in half!



d062d100

3. Duplex + Combine:

Using both features together can further reduce paper volume by 3/4!



d062d101

To check the paper consumption, look at the total counter and the duplex counter.

The total counter counts all pages printed.

- For one duplex page, the total counter goes up by 2.
- For a duplex job of a three-page original, the total counter goes up by 3.

The duplex counter counts pages that have images on both sides.

- For one duplex page, the duplex counter goes up by 1.
- For a duplex job of a three-page original, the duplex counter will only increase by 1, even though two sheets are used.

How to calculate the paper reduction ratio

How to calculate the paper reduction ratio, when compared with Single-sided copying, with no 2-in-1 combine mode

Paper reduction ratio (%) = Number of sheets reduced: A / Number of printed original images: B x 100

- Number of sheets reduced: A
= Output pages in duplex mode / 2 + Number of pages in Single-sided with combine mode + Number of pages in Duplex with combine mode x 3/2
A = ((2) / 2 + (3) + (4) x 3/2
- Number of printed original images: B
= Total counter + Number of pages in Single-sided with combine mode + Number of pages in Duplex with combine mode
B = (1) + (3) + (4)
- (1) Total counter: SP 8581 001 (pages)
- (2) Single-sided with duplex mode: SP 8421 001 (pages)
- (3) Single-sided with combine mode: SP 8421 004 (pages)
- (4) Duplex with combine mode: SP 8421 005 (pages)

D117/D118
SERVICE MANUAL APPENDICES

D117/D118 APPENDICES

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APPENDIX: SPECIFICATIONS

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1. APPENDICES

1.1 SPECIFICATIONS

1.1.1 SPECIFICATIONS

Mainframe

Configuration:	Desktop
Print Process:	Laser beam scanning and electro-photographic printing 4 drums tandem method
Resolution:	Scan: <ul style="list-style-type: none"> ▪ Exposure glass: 600 × 600 dpi ▪ ADF: 600 × 300 dpi Print: 600 × 600 dpi
Gradation:	Scan: 256 tones Print: 1200 x 1200dpi / 1 bits/pixel 600 x 600dpi / 2 bits/pixel 600 x 600dpi / 1 bits/pixel
Original Type:	Sheets, book, objects
Maximum original size:	A4 / LG(8.5" x 14")
Copy Speed:	31 cpm (LT), 30 cpm (A4)
First Copy Time:	Color: 11 seconds or less (A4, LT, SEF) Black and White: 7 seconds or less (A4, LT, SEF)
Warm-up Time:	23 seconds or less (23°C)
Print Paper Capacity: (80 g/m ² , 20lb)	Standard tray: 250 sheets By-pass tray: 100 sheets Optional paper feed tray: 500 sheets

Specifications

Print Paper Size:	See "Supported Paper Sizes"		
	-	Minimum	Maximum
	Standard Tray	A5 (SEF)	A4 / 8.5" x 11" (SEF)
	By-pass	76.2 x 139 mm (3.0 x 5.0 in.)	216 x 600 mm (8.5 x 23.7 in.)
	Optional Tray	A5 (SEF)	A4 / 8.5" x 14" (SEF)
Printing Paper Weight:	Standard tray: 60-163 g/m ² (16-44 lb) By-pass tray: 60-220 g/m ² (16-59 lb) Optional paper feed tray: 60-163 g/m ² (16-44 lb) Duplex: 60-163 g/m ² (16-44 lb)		
Output Paper Capacity:	Basic model: Up to 500 sheets (A4/ LT/ 80 g/m ² / 20 lb)		
Continuous copy:	Up to 99 sheets		
Memory:	1GB		
Hard disk	128GB (Optional)		
Zoom:	Arbitrary: From 25 to 400% (1% step)		
	Fixed:		
	North America		Europe
	25%		25%
	50%		50%
	65%		61%
	73%		71%
	78%		82%
	85%		87%
	93%		93%

	100%	100%
	121%	115%
	129%	122%
	155%	141%
	200%	200%
	400%	400%
Power Source:	110 V, 60 Hz: More than 10 A (for Taiwan) 120V -127 V, 60 Hz: More than 10 A (for North America) 220 V - 240 V, 50/60 Hz: More than 5 A (for Europe/Asia)	
Power Consumption:	110 V: 1300 W or less 120 V: 1300 W or less 220-240 V: 1200 W or less Energy Saver: 1.4 W (D118)/1.7 W (D117) or less	
Noise Emission: (Sound Power Level)	Basic: Color: Less than 64.9 dB (A) Black and White: Less than 60.3 dB (A) Full System: Color: Less than 67.9 dB (A) Black and White: Less than 67.9 dB (A)	
Dimensions (W x D x H):	498 x 532 x 505 mm (19.7" x 21.0" x 19.9"): (including ARDF and operation panel)	
Weight:	Basic model (D118): 42 kg (92.6 lb) ADF model (D117): 45 kg (99.3 lb)	

Printer

Printer Languages:	Standard: PCL5c, PCL6, PS3, PDF direct, Media Print JPEG/TIFF Option: PictBridge
Resolution:	PCL5c: 600 x 600 dpi (1, 2, 4 bit), 300 x 300 dpi Grayscale PCL6: 1200 x 1200 dpi (1 bit), 600 x 600 dpi (1, 2, 4 bit) PS3: 1200 x 1200 dpi (1 bit), 600 x 600 dpi (1, 2, 4 bit)
Printing Speed:	
Resident Fonts:	PCL5c/ 6: 45 fonts, 13 International fonts Adobe PostScript 3: 136 fonts
Host Interfaces:	Ethernet (100 Base-TX/ 10 Base-T): Standard USB2.0 Type A(Operation panel): Standard USB2.0 Type B: Standard SD slot (Operation panel): Standard IEEE802.11a/b/g (Wireless LAN): Optional IEEE1284: Optional Gigabit Ethernet (1000 Base-T): Optional Bluetooth: Optional
Network Protocols:	Standard: TCP/IP (IPv4, IPv6) Optional: IPX/SPX

Scanner

Scanning Method	4-line color sensor
Available Scanning Resolution Range:	<p>Twain Mode:</p> <ul style="list-style-type: none"> ▪ Exposure glass: 100 to 1200 dpi ▪ ADF: 100 to 600 dpi <p>WIA Mode: 100 to 1200 dpi</p> <p>Delivery Mode:</p> <ul style="list-style-type: none"> ▪ 100 / 200 / 300 / 400 / 600 dpi (default: 200 x 200 dpi)
Grayscales:	1 bit or 8 bits/pixel each for RGB
Scanning Throughput	<p>B&W: Over 30ipm (200dpi / 300dpi) (A4, SEF, Mono 1bit, Text/Line Art, MH compression with ADF)</p> <p>Color: Over 30ipm (200dpi), Over 20ipm (300dpi) (A4, SEF, FC Text/Photo / JPEG standard compression with ADF)</p>
Standard Scanner Resolution:	<p>DF: 600 x 300 dpi</p> <p>Flatbed: 600 x 600 dpi</p>
Network Interface:	<p>Standard: 100BASE-TX / 10BASE-T</p> <p>Option: Gigabit Ethernet (1000 Base-T), IEEE802.11a/b/g</p>
Compression Method:	<p>B&W: TIFF (MH, MR, MMR, JBIG2)</p> <p>Gray Scale, Full Color: JPEG</p>

ARDF

Paper Size/Weight:	Simplex	Size	A4 to A5, LG to HLT
		Weight	52 to 128 g/m ² (14 to 34 lb.)
	Duplex	Size	A4 to A5, LG to HLT
		Weight	64 to 105 g/m ² (17 to 28 lb.)
Table Capacity:	50 sheets (80 g/m ² , 20 lb. Bond or less) 20 sheets (more than 80 g/m ² , 20 lb. Bond)		
Separation:	Friction pad		
Original Transport:	Roller transport		
Original Feed Order:	From the top original		
Power Source:	DC 24V, 5V from the scanner unit		
Power Consumption:	20 W or less		
Dimensions (W x D x H):	476 x 360 x 79.8 mm (18.8" x 14.2" x 3.2")		
Weight:	Approx. 3 kg (6.6 lb.)		

1.2 SUPPORTED PAPER SIZES

Paper	Size (W x L)	Main Tray		PFU		By-pass Tray		Duplex
		NA	E/A	NA	E/A	NA	E/A	
A4 SEF	210 x 297 mm	Y	Y	Y	Y	Y	Y	Y
A5 SEF	148 x 210 mm	Y	Y	Y	Y	Y	Y	Y
A5 LEF	210 x 148 mm	N	N	N	N	Y	Y	N
A6 SEF	105 x 148 mm	N	N	N	N	Y	Y	N
B5 SEF	182 x 257 mm	Y	Y	Y	Y	Y	Y	Y
B6 SEF	128 x 182 mm	N	N	N	N	Y	Y	N
Letter SEF	8.5" x 11"	Y	Y	Y	Y	Y	Y	Y
Legal SEF	8.5" x 14"	N	N	Y	Y	Y	Y	Y*
Half Letter SEF	5.5" x 8.5"	Y	Y	Y	Y	Y	Y	Y
Half Letter LEF	8.5" x 5.5"	N	N	N	N	Y	Y	N
Executive SEF	7.25" x 10.5"	Y#	Y#	Y	Y	Y	Y	Y
16K SEF	195 x 267 mm	Y#	Y#	Y#	Y#	Y	Y	N
F/GL SEF	8" x 13"	N	N	Y	Y	Y	Y	Y*
Foolscap SEF	8.5" x 13"	N	N	Y	Y	Y	Y	Y*
Folio SEF	8.25" x 13"	N	N	Y	Y	Y	Y	Y*
8.5" x 12" SEF	8.5" x 12"	N	N	Y	Y	Y	Y	Y*

Supported Paper Sizes

Paper	Size (W x L)	Main Tray		PFU		By-pass Tray		Duplex
		NA	E/A	NA	E/A	NA	E/A	
Government LG SEF	8.25" x 14"	N	N	Y	Y	Y	Y	Y*
Eng Quatro SEF	8" x 10"	Y#	Y#	Y#	Y#	Y	Y	N
Custom (Width)	mm	139.5 to 216		139.5 to 216		76.2 to 216		-
	inch	5.5" to 8.5"		5.5" to 8.5"		3" to 8.5"		-
Custom (Length)	mm	210 to 297		210 to 356.6		139 to 600		-
	inch	8.27" to 11.69"		8.27" to 14.03"		5.48" to 23.62"		-
Com10 Env.	4.13" x 9.5"	N	N	N	N	Y	Y	N
Monarch Env.	3.88" x 7.5"	N	N	N	N	Y	Y	N
C6 Env.	114 x 162 mm	N	N	N	N	Y	Y	N
C5 Env.	162 x 229 mm	N	N	N	N	Y	Y	N
DL Env.	110 x 220 mm	N	N	N	N	Y	Y	N

Y: Supported: the sensor detects the paper size.

Y#: Supported: the user specifies the paper size.

N: Not supported

Y*: A paper tray unit is required. (Not available for Main Tray)

↓ Note

- The paper sizes can be set with the operation panel in 1 mm steps.
- The usable range of paper sizes is as follows:
 - Width: 76.2 to 216 mm (3" to 8.5")
 - Length: 139 to 600 mm (5.48" to 23.62")
- Auto Duplex mode is not available for By-pass tray.

1.3 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.

1.3.1 PRINTER DRIVERS

Printer Language	Windows XP ^{*1*6}	Windows Vista ^{*2*6}	Windows 7 ^{*3*6}
PCL 5c/6	Yes	Yes	Yes
PS3	Yes	Yes	Yes

Printer Language	Windows Server 2003 ^{*4*6}	Windows Server 2008 or later ^{*5*6}	Macintosh ^{*7}
PCL 5c/6	Yes	Yes	No
PS3	Yes	Yes	Yes

*1 Microsoft Windows XP Professional Edition / Home Edition / Media Center Edition / Tablet PC Edition

*2 Microsoft Windows Vista Ultimate / Enterprise / Business / Home Premium / Home Basic

*3 Microsoft Windows 7 Home Premium / Professional / Ultimate / Enterprise

*4 Microsoft Windows Server 2003 Standard Edition / Enterprise Edition / Microsoft Windows Server 2003 R2 Standard Edition / Enterprise Edition

*5 Microsoft Windows Server 2008 Standard / Enterprise / Microsoft Windows Server 2008 R2 Standard / Enterprise

*6 Supports both versions (32/64 bit)

*7 Mac OS X 10.2 or later (native mode). Any versions higher than Mac OS X 10.6 are not supported.

↓ Note

- The PS3 drivers are all genuine AdobePS drivers, except for Windows 2000, which uses Microsoft PS.
- A PPD file for each operating system is provided with the driver.

1.3.2 SCANNER AND LAN FAX DRIVERS

Driver	Windows XP ^{*1*6}	Windows Vista ^{*2*6}	Windows 7 ^{*3*6}
Network TWAIN	Yes	Yes	Yes
LAN-FAX	Yes	Yes	Yes

Driver	Windows Server 2003 ^{*4*6}	Windows Server 2008 or later ^{*5*6}	Macintosh
Network TWAIN	Yes	Yes	No
LAN-FAX	Yes	Yes	No

*1 Microsoft Windows XP Professional Edition / Home Edition / Media Center Edition / Tablet PC Edition

*2 Microsoft Windows Vista Ultimate / Enterprise / Business / Home Premium / Home Basic

*3 Microsoft Windows 7 Home Premium / Professional / Ultimate / Enterprise

*4 Microsoft Windows Server 2003 Standard Edition / Enterprise Edition / Microsoft Windows Server 2003 R2 Standard Edition / Enterprise Edition

*5 Microsoft Windows Server 2008 Standard / Enterprise / Microsoft Windows Server 2008 R2 Standard / Enterprise

*6 Supports both versions (32/64 bit)

↓ 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
- The Network TWAIN driver is provided on the scanner drivers CD-ROM.

1.4 OPTIONAL EQUIPMENT

1.4.1 PAPER FEED UNIT (D573)

Paper Feed System:	Feed Roller and Friction Pad
Paper Height Detection:	Empty only
Tray Capacity:	500 sheets
Paper Weight:	60 to 163 g/m ² (16 to 43.5 lb.)
Paper Size:	A5 SEF to A4/LG SEF
Power Source:	DC 24V, 5V (from the main frame)
Power Consumption:	Less than 27 W (Power is supplied from the main unit.)
Dimensions (W x D x H):	498 mm x 552 mm x 150 mm (19.7" x 21.8" x 6.0")
Weight:	10.4 kg (23.0 lb.) or less

1.4.2 1-BIN TRAY UNIT (D574)

Paper detection:	Detects paper
Tray Capacity:	100 sheets (80 g/m ²)
Paper Weight:	60 to 163 g/m ² (16 to 43.5 lb.)
Paper Size:	Width: 139.7 to 216mm (5.0" to 8.5") Length: 210 to 600mm (8.3" to 23.7")
Power Source:	DC 24V, 5V (from the main frame)
Power Consumption:	Less than 1 W (Power is supplied from the main unit.)
Dimensions (W x D x H):	540 mm x 460 mm x 116 mm (21.3" x 18.1" x 4.6")
Weight:	3.0 kg (6.6 lb.) or less

1.4.3 ARDF (D606)

Scan:	Simplex / Duplex
ADF Capacity:	50 sheets (80 g/m ² or less) 20 sheets (more than 80 g/m ²)
Paper Weight:	Simplex: 52 to 128 g/m ² (14 to 34 lb.) Duplex: 64 to 105 g/m ² (17 to 28 lb.)
Paper Size:	A4 SEF to A5 SEF/LEF, 8.5" x 14" SEF to 5.5" x 8.5 SEF/LEF Width: 128 to 216mm (5" to 8.5") Length: 139.7 to 600mm (5.5" to 23.7") Length: 2-sided: 139.7 to 355.6mm (5.5" to 14")
Power Source:	DC 24V, 5V (from the main frame)
Power Consumption:	20W or less (Power is supplied from the main unit)
Dimensions (W x D x H):	476 x 360 x 79.8 mm (18.8" x 14.2" x 3.2")
Weight:	3kg (6.6lb.)

APPENDIX: PREVENTIVE MAINTENANCE TABLES

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		None

2. PREVENTIVE MAINTENANCE TABLES

2.1 MAINTENANCE TABLES

2.1.1 PREVENTIVE MAINTENANCE ITEMS

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, P/J, and C/O). 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.

Chart: A4 (LT)/5%

Mode: 2 copies / original (prints/job)

Ratio 20%

Environment: Normal temperature and humidity

Yield may change depending on circumstances and print conditions.

Symbol keys: C: Clean, R: Replace, L: Lubricant, I: Inspect

Mainframe

Item	45K	60K	90K	120K	240K	EM	Remarks
Scanner							
Exposure Glass						C	Ricoh exposure glass cleaner
ADF Exposure Glass						C	Ricoh exposure glass cleaner
PCDU							
PCDU		R					
Transfer							
Image Transfer Belt				(R)			

Maintenance Tables

Item	45K	60K	90K	120K	240K	EM	Remarks
Paper Transfer Roller Unit				(R)			
Fusing							
Fusing Unit				(R)			
Paper Path							
Registration Roller						C	Damp cloth
Registration Sensor						C	Blower brush or dry cloth
Inverter Roller						C	Damp cloth
Paper Dust Case						C	Blower brush
Paper Feed Roller				(R)		C	Damp cloth
Paper Feed Exit Sensor						C	Blower brush or dry cloth
By-pass Feed Roller				(R)		C	Damp cloth
Separation Pad				(R)		C	Dry cloth
Paper Path (Duplex)							
Duplex Entrance Sensor						C	Blower brush or dry cloth
Duplex Exit Sensor						C	Blower brush or dry cloth
Duplex Rollers						C	Damp cloth
Duplex Entrance Guide Plate		C					Damp cloth; alcohol
ARDF							
ADF Separation Pad						C	Dry cloth
Pick-up Roller						C	Damp cloth

Item	45K	60K	90K	120K	240K	EM	Remarks
Feed Roller						C	Damp cloth
Transport Roller						C	Damp cloth
Registration Roller						C	Damp cloth
Exit Roller						C	Damp cloth
Inverter Roller						C	Damp cloth
Miscellaneous							
Waste Toner Bottle			R				
Ozone Filter						C	
Shield Glass (Write)						C	

2.1.2 OTHER 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, P/J, and C/O). So, these parts are categorized not as PM parts but as yield parts (EM parts).

One-tray Paper Feed Unit (D573)

Item	120K	EM	Remarks
Feed Roller		C	Damp cloth
Separation Pad	(R)	C	Damp cloth
Pick-up Roller	(R)	C	Damp cloth
Relay Roller		C	Damp cloth
Bottom Plate Pad		C	Damp cloth
Sensors		C	Blower brush or dry cloth

1 Bin Tray (D574)

Items	EM	Remarks
Rollers	C	Damp cloth
Exit Tray	C	Damp cloth
Exit Sensor	C	Blower brush or dry cloth
Paper Sensor	C	Blower brush or dry cloth

SP MODE TABLES

REVISION HISTORY		
Page	Date	Added/Updated/New
		None

3. SP MODE TABLES

3.1 MAIN SP TABLES-1

3.1.1 SP1-XXX (FEED)

1001	[Leading Edge Registration] Leading Edge Registration Adjustment (Tray Location, Paper Type, Color Mode), Paper Type: Plain, Thick 1, Thick 2 or Thick3		
	Adjusts the leading edge registration by changing the registration motor operation timing for each mode. Increasing a value: an image is moved to the trailing edge of paper. Decreasing a value: an image is moved to the leading edge of paper.		
001	Tray: Plain	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
002	Tray: Middle Thick	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
003	Tray: Thick	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
005	Tray: Plain: 1200	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
006	Tray: Middle Thick: 1200	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
007	By-pass: Plain	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
008	By-pass: Middle Thick	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
009	By-pass: Thick	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
012	By-pass: Plain: 1200	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
013	By-pass: Middle Thick: 1200	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
014	Duplex: Plain	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
015	Duplex: Middle Thick	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
016	Duplex: Thick	*ENG	[-9.0 to 9.0 / 0.0 / 0.1mm/step]
017	Tray: Special 1	ENG	[-9.0 to 9.0 / 1.1 / 0.1mm/step]

Main SP Tables-1

018	By-pass: Special 1	ENG	[-9.0 to 9.0 / 1.1 / 0.1mm/step]
019	Duplex: Plain:1200	ENG	[-9.0 to 9.0 / 0.0 / 0.1 mm/step]
020	Duplex: Middle Thick:1200	ENG	[-9.0 to 9.0 / 0.0 / 0.1 mm/step]
021	Duplex: Special 1	ENG	[-9.0 to 9.0 / 1.1 / 0.1mm/step]
022	Tray: Special 1: 1200	ENG	[-9.0 to 9.0 / 1.1 / 0.1mm/step]
023	By-pass: Special 1: 1200	ENG	[-9.0 to 9.0 / 1.1 / 0.1mm/step]
024	Duplex: Special 1: 1200	ENG	[-9.0 to 9.0 / 1.1 / 0.1mm/step]
026	Offset:TransferSeparate	*ENG	[-4.0 to 4.0 / 0.0 / 0.1mm/step]
030	Autocorrect:Available/Disavailable	*ENG	[0 or 1 / 0 / 1/step]
031	StandardMeasure:Available/Disavailable	*ENG	[0 or 1 / 0 / 1/step]
032	Offset	*ENG	[-5.0 to 5.0 / 0.0 / 0.1/step]
033	OffsetStandard:1	*ENG	[0.0 to 999.0 / 0.0 / 0.1/step]
034	OffsetStandard:2	*ENG	[0.0 to 999.0 / 0.0 / 0.1/step]
035	OffsetStandard:3	*ENG	[0.0 to 999.0 / 0.0 / 0.1/step]
036	OffsetStandard:4	*ENG	[0.0 to 999.0 / 0.0 / 0.1/step]
037	OffsetStandard:5	*ENG	[0.0 to 999.0 / 0.0 / 0.1/step]
038	OffsetStandard:6	*ENG	[0.0 to 999.0 / 0.0 / 0.1/step]
039	OffsetStandard:7	*ENG	[0.0 to 999.0 / 0.0 / 0.1/step]
040	OffsetStandard:8	*ENG	[0.0 to 999.0 / 0.0 / 0.1/step]

1002	[Side-to-Side Registration]		
	Adjusts the side-to-side registration by changing the laser main scan start position for each mode and tray. Increasing a value: an image is moved to the rear edge of paper. Decreasing a value: an image is moved to the front edge of paper.		
001	By-pass Table	*ENG	[-4.0 to 4.0 / 0.0 / 0.1mm/step]
002	Paper Tray 1	*ENG	[-4.0 to 4.0 / 0.0 / 0.1mm/step]
003	Paper Tray 2	*ENG	[-4.0 to 4.0 / 0.0 / 0.1mm/step]
004	Paper Tray 3	*ENG	[-4.0 to 4.0 / 0.0 / 0.1mm/step]
005	Duplex	*ENG	[-4.0 to 4.0 / 0.0 / 0.1mm/step]

1003	[Paper Buckle] Paper Buckle Adjustment (Tray Location, Paper Type), Paper Type: N: Normal, TH: Thick		
	Adjusts the amount of paper buckle at the registration roller by changing the paper feed timing.		
001	Paper Tray1: Plain	*ENG	[-5 to 5 / 2 / 1mm/step]
002	Paper Tray1: Middle Thick	*ENG	[-5 to 5 / 0 / 1mm/step]
003	Paper Tray1: Thick	*ENG	[-5 to 5 / 0 / 1mm/step]
004	Paper Tray2/3: Plain	*ENG	[-5 to 5 / 0 / 1mm/step]
005	Paper Tray2/3: Middle Thick	*ENG	[-5 to 5 / 0 / 1mm/step]
006	Paper Tray2/3: Thick	*ENG	[-5 to 5 / 0 / 1mm/step]
007	By-pass: Plain	*ENG	[-5 to 5 / 0 / 1mm/step]
008	By-pass: Middle Thick	*ENG	[-5 to 5 / 0 / 1mm/step]
009	By-pass: Thick	*ENG	[-5 to 5 / 0 / 1mm/step]
010	Duplex: Plain	*ENG	[-5 to 5 / 0 / 1mm/step]
011	Duplex: Middle Thick	*ENG	[-5 to 5 / 0 / 1mm/step]

Main SP Tables-1

012	Duplex: Thick	*ENG	[-5 to 5 / 0 / 1mm/step]
013	Paper Tray1: Plain:1200	*ENG	[-5 to 5 / 2 / 1mm/step]
014	Paper Tray1: Middle Thick:1200	*ENG	[-5 to 5 / 0 / 1mm/step]
015	Paper Tray2/3: Plain:1200	*ENG	[-5 to 5 / 0 / 1mm/step]
016	Paper Tray2/3: Middle Thick:1200	*ENG	[-5 to 5 / 0 / 1mm/step]
017	By-pass: Plain:1200	*ENG	[-5 to 5 / 0 / 1mm/step]
018	By-pass: Middle Thick:1200	*ENG	[-5 to 5 / 0 / 1mm/step]
019	By-pass: Small	*ENG	[-5 to 5 / -2 / 1mm/step]

1101	[Reload Permit Setting]		
	Specifies the settings of the reload permit for cold temperature in color mode.		
001	Pre-rotation Start Temp.	*ENG	[0 to 200 / 0 / 1deg/step]
002	Reload Target Temp.:Center	*ENG	[0 to 180 / 175 / 1deg/step]
003	Reload Target Temp.:Press	*ENG	[0 to 200 / 100 / 1deg/step]
004	Temp.:Delta:Cold:Center	*ENG	[0 to 200 / 75 / 1deg/step]
005	Temp.:Delta:Cold:End	*ENG	[0 to 200 / 100 / 1deg/step]
006	Temp.:Delta:Cold:Press	*ENG	[0 to 200 / 45 / 1deg/step]
007	Rotation Time:Cold	*ENG	[0 to 200 / 0 / 1sec/step]
008	Temp.:Delta:Warm:Center	*ENG	[0 to 200 / 85 / 1deg/step]
009	Temp.:Delta:Warm:End	*ENG	[0 to 200 / 100 / 1deg/step]
010	Temp.:Delta:Warm:Press	*ENG	[0 to 200 / 45 / 1deg/step]
011	Rotation Time:Warm	*ENG	[0 to 200 / 0 / 1sec/step]
012	Temp.:Delta:Hot:Center	*ENG	[0 to 200 / 85 / 1deg/step]
013	Temp.:Delta:Hot:End	*ENG	[0 to 200 / 110 / 1/step]

014	Temp.:Delta:Hot:Press	*ENG	[0 to 200 / 45 / 1deg/step]
015	Rotation Time:Hot	*ENG	[0 to 200 / 0 / 1sec/step]
016	Temp.:Delta:Cold:BW:Center	*ENG	[0 to 200 / 75 / 1deg/step]
017	Temp.:Delta:Cold:BW:End	*ENG	-
018	Temp.:Delta:Cold:BW:Press	*ENG	[0 to 200 / 45 / 1deg/step]
019	Rotation Time:BW:Cold	*ENG	[0 to 200 / 0 / 1sec/step]
020	Temp.:Delta:Warm:BW:Center	*ENG	[0 to 200 / 85 / 1deg/step]
021	Temp.:Delta:Warm:BW:End	*ENG	-
022	Temp.:Delta:Warm:BW:Press	*ENG	[0 to 200 / 45 / 1deg/step]
023	Rotation Time:BW:Warm	*ENG	[0 to 200 / 0 / 1sec/step]
024	Temp.:Delta:Hot:BW:Center	*ENG	[0 to 200 / 85 / 1deg/step]
025	Temp.:Delta:Hot:BW:End	*ENG	-
026	Temp.:Delta:Hot:BW:Press	*ENG	[0 to 200 / 45 / 1deg/step]
027	Rotation Time:BW:Hot	*ENG	[0 to 200 / 0 / 1sec/step]
101	Temp.:Delta:Cold:BW2:Center	*ENG	[0 to 200 / 75 / 1deg/step]
102	Temp.:Delta:Cold:BW2:End	*ENG	-
103	Temp.:Delta:Cold:BW2:Press	*ENG	[0 to 200 / 45 / 1deg/step]
104	Rotation Time:BW2:Cold	*ENG	[0 to 200 / 0 / 1sec/step]
105	Temp.:Delta:Warm:BW2:Center	*ENG	[0 to 200 / 85 / 1deg/step]
106	Temp.:Delta:Warm:BW2:End	*ENG	-
107	Temp.:Delta:Warm:BW2:Press	*ENG	[0 to 200 / 45 / 1deg/step]
108	Rotation Time:BW2:Warm	*ENG	[0 to 200 / 0 / 1sec/step]
109	Temp.:Delta:Hot:BW2:Center	*ENG	[0 to 200 / 85 / 1deg/step]
110	Temp.:Delta:Hot:BW2:End	*ENG	-
111	Temp.:Delta:Hot:BW2:Press	*ENG	[0 to 200 / 45 / 1deg/step]

Main SP Tables-1

112	Rotation Time:BW2:Hot	*ENG	[0 to 200 / 0 / 1sec/step]
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1102	[Feed Permit Setting]		
	Specified the settings of the paper feeding timing.		
001	Temp.:Lower Delta:Center	*ENG	[0 to 200 / 40 / 1deg/step]
002	Temp.:Lower Delta:End	*ENG	-
003	Temp.:Upper Delta:Center	*ENG	[0 to 200 / 15 / 1deg/step]
004	Temp.:Upper Delta:End	*ENG	-
005	Temp.:Lower Delta:Press	*ENG	[0 to 200 / 95 / 1deg/step]
006	Rotation Time	*ENG	[0 to 200 / 0 / 1sec/step]
007	Temp.:Lower Delta:Center:Sp.1	*ENG	[0 to 200 / 40 / 1deg/step]
008	Temp.:Lower Delta:End:Sp.1	*ENG	-
009	Temp.:Upper Delta:Center:Sp.1	*ENG	[0 to 200 / 15 / 1deg/step]
010	Temp.:Upper Delta:End:Sp.1	*ENG	-
011	Temp.:Lower Delta:Press:Sp.1	*ENG	[0 to 200 / 95 / 1deg/step]
012	Rotation Time:Sp.1	*ENG	[0 to 200 / 0 / 1sec/step]
013	Temp.:Lower Delta:Center:Sp.2	*ENG	[0 to 200 / 40 / 1deg/step]
014	Temp.:Lower Delta:End:Sp.2	*ENG	-
015	Temp.:Upper Delta:Center:Sp.2	*ENG	[0 to 200 / 15 / 1deg/step]

016	Temp.:Upper Delta:End:Sp.2	*ENG	-
017	Temp.:Lower Delta:Press:Sp.2	*ENG	[0 to 200 / 95 / 1deg/step]
018	Rotation Time:Sp.2	*ENG	[0 to 200 / 0 / 1sec/step]
019	Feed Permit Time	*ENG	[0 to 200 / 60 / 1sec/step]
020	Temp.:Lower Delta:Center:Sp.3	*ENG	[0 to 200 / 40 / 1deg/step]
021	Temp.:Lower Delta:End:Sp.3	*ENG	-
022	Temp.:Upper Delta:Center:Sp.3	*ENG	[0 to 200 / 15 / 1deg/step]
023	Temp.:Upper Delta:End:Sp.3	*ENG	-
024	Temp.:Lower Delta:Press:Sp.3	*ENG	[0 to 200 / 26 / 1deg/step]
025	Rotation Time:Sp.3	*ENG	[0 to 200 / 0 / 1sec/step]
026	Temp.:Lower Delta:End:LT	*ENG	[0 to 200 / 100 / 1deg/step]
027	Temp.:Upper Delta:End:LT	*ENG	[0 to 200 / 100 / 1deg/step]

1105	[Print Target Temp.]		
	Roller Type Center and Ends: Heating roller, Pressure roller Paper Type: Plain, Thin, Thick, OHP, Middle Thick, Special.		
001	Plain1:FC:Center	*ENG	[100 to 180 / 155 / 1deg/step]
002	Plain1:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
003	Plain1:BW:Center	*ENG	[100 to 180 / 145 / 1deg/step]
004	Plain1:BW:Press	*ENG	[0 to 200 / 150 / 1deg/step]
005	Plain2:FC:Center	*ENG	[100 to 180 / 160 / 1deg/step]

Main SP Tables-1

006	Plain2:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
007	Plain2:BW:Center	*ENG	[100 to 180 / 150 / 1deg/step]
008	Plain2:BW:Press	*ENG	[0 to 200 / 150 / 1deg/step]
009	Thin:FC:Center	*ENG	[100 to 180 / 150 / 1deg/step]
010	Thin:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
011	Thin:BW:Center	*ENG	[100 to 180 / 140 / 1deg/step]
012	Thin:BW:Press	*ENG	[0 to 200 / 150 / 1deg/step]
013	M-thick:FC:Center	*ENG	[100 to 180 / 165 / 1deg/step]
014	M-thick:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
015	M-thick:BW:Center	*ENG	[100 to 180 / 155 / 1deg/step]
016	M-thick:BW:Press	*ENG	[0 to 200 / 150 / 1deg/step]
017	Thick1:FC:Center	*ENG	[100 to 180 / 155 / 1deg/step]
018	Thick1:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
019	Thick1:BW:Center	*ENG	[100 to 180 / 145 / 1deg/step]
020	Thick1:BW:Press	*ENG	[0 to 200 / 150 / 1deg/step]
021	Thick2:FC:Center	*ENG	[100 to 180 / 160 / 1deg/step]
022	Thick2:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
023	Thick2:BW:Center	*ENG	[100 to 180 / 150 / 1deg/step]
024	Thick2:BW:Press	*ENG	[0 to 200 / 150 / 1deg/step]
025	Thick3:FC:Center	*ENG	[100 to 180 / 170 / 1deg/step]
026	Thick3:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
027	Thick3:BW:Center	*ENG	[100 to 180 / 160 / 1deg/step]
028	Thick3:BW:Press	*ENG	[0 to 200 / 150 / 1deg/step]
029	Special1:FC:Center	*ENG	[100 to 180 / 165 / 1deg/step]
030	Special1:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]

031	Special1:BW:Center	*ENG	[100 to 180 / 155 / 1deg/step]
032	Special1:BW:Press	*ENG	[0 to 200 / 150 / 1deg/step]
033	Special2:FC:Center	*ENG	[100 to 180 / 170 / 1deg/step]
034	Special2:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
035	Special2:BW:Center	*ENG	[100 to 180 / 160 / 1deg/step]
036	Special2:BW:Press	*ENG	[0 to 200 / 150 / 1deg/step]
037	Special3:FC:Center	*ENG	[100 to 180 / 160 / 1deg/step]
038	Special3:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
039	Special3:BW:Center	*ENG	[100 to 180 / 150 / 1deg/step]
040	Special3:BW:Press	*ENG	[0 to 200 / 150 / 1deg/step]
041	Envelop:Center	*ENG	[100 to 180 / 165 / 1deg/step]
042	Envelop:Press	*ENG	[0 to 200 / 150 / 1deg/step]
043	OHP:Center	*ENG	[100 to 180 / 165 / 1deg/step]
044	OHP:Press	*ENG	[0 to 200 / 150 / 1deg/step]
101	Plain1:FC:Center:Low Speed	*ENG	[100 to 180 / 130 / 1deg/step]
102	Plain1:FC:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
103	Plain1:BW:Center:Low Speed	*ENG	[100 to 180 / 120 / 1deg/step]
104	Plain1:BW:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
105	Plain2:FC:Center:Low Speed	*ENG	[100 to 180 / 135 / 1deg/step]
106	Plain2:FC:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
107	Plain2:BW:Center:Low Speed	*ENG	[100 to 180 / 125 / 1deg/step]

Main SP Tables-1

108	Plain2:BW:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
109	Thin:FC:Center:Low Speed	*ENG	[100 to 180 / 130 / 1deg/step]
110	Thin:FC:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
111	Thin:BW:Center:Low Speed	*ENG	[100 to 180 / 120 / 1deg/step]
112	Thin:BW:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
113	M-thick:FC:Center:Low Speed	*ENG	[100 to 180 / 140 / 1deg/step]
114	M-thick:FC:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
115	M-thick:BW:Center:Low Speed	*ENG	[100 to 180 / 130 / 1deg/step]
116	M-thick:BW:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
117	Special1:FC:Center:Low Speed	*ENG	[100 to 180 / 130 / 1deg/step]
118	Special1:FC:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
119	Special1:BW:Center:Low Speed	*ENG	[100 to 180 / 120 / 1deg/step]
120	Special1:BW:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
121	Special2:FC:Center:Low Speed	*ENG	[100 to 180 / 135 / 1deg/step]
122	Special2:FC:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
123	Special2:BW:Center:Low Speed	*ENG	[100 to 180 / 125 / 1deg/step]

124	Special2:BW:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
125	Special3:FC:Center:Low Speed	*ENG	[100 to 180 / 140 / 1deg/step]
126	Special3:FC:Press:Low Speed	*ENG	[0 to 200 / 150 / 11deg/step]
127	Special3:BW:Center:Low Speed	*ENG	[100 to 180 / 130 / 1deg/step]
128	Special3:BW:Press:Low Speed	*ENG	[0 to 200 / 150 / 1deg/step]
129	Envelope:Thick1:FC:Center	*ENG	[100 to 180 / 135 / 1deg/step]
130	Envelope:Thick1:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
133	Envelope:Thick2:FC:Center	*ENG	[100 to 180 / 135 / 1deg/step]
134	Envelope:Thick2:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
137	Envelope:Thick3:FC:Center	*ENG	[100 to 180 / 135 / 1deg/step]
138	Envelope:Thick3:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
141	Postcard:Thick1:FC:Center	*ENG	[100 to 180 / 130 / 1deg/step]
142	Postcard:Thick1:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
145	Postcard:Thick2:FC:Center	*ENG	[100 to 180 / 130 / 1deg/step]
146	Postcard:Thick2:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]
149	Postcard:Thick3:FC:Center	*ENG	[100 to 180 / 130 / 1deg/step]
150	Postcard:Thick3:FC:Press	*ENG	[0 to 200 / 150 / 1deg/step]

1106	[Fusing Temp. Display] Fusing Temperature Display (Heating or Pressure)		
	Displays the current temperature of the heating and pressure rollers.		
001	Center	ENG	[-50 to 250 / 0 / 1deg/step]
002	End	ENG	[-20 to 348 / 0 / 1deg/step]
	The heating roller has two lamps. One heats the center of the heating roller and the other heats both ends of the heating roller.		
003	Pressure: Center	ENG	[-20 to 250 / 0 / 1deg/step]
	The pressure roller has two lamps. One heats the center of the heating roller and the other heats both ends of the heating roller.		
005	Pressure: End	ENG	[-20 to 250 / 0 / 1deg/step]

1107	[Standby Target Temp. Setting]		
001	Stanby/Preheat1:Center	*ENG	[0 to 100 / 60 / 1deg/step]
	Specifies the time that the fusing heater turns off after the fusing unit temperature has reached its target temperature.		
003	Preheat2:Center	*ENG	[-50 to 100 / -50 / 1deg/step]
	Specifies the temperature of the heating roller for the ready or energy save 2 mode.		
005	Low Power:Center	*ENG	[-50 to 100 / -50 / 1deg/step]
	Specifies the temperature of the heating roller for the low power mode.		
007	Print Ready:Center	*ENG	[0 to 180 / 150 / 1deg/step]
	Specifies the temperature of the heating roller for the print ready condition.		

1108	[After Reload/Job Target Temp.]		
	Sets the target temperature for immediately after reload temperature has been achieved or paper has been fed.		
001	Center	*ENG	[0 to 180 / 150 / 1deg/step]

1111	[Environment Correction:Fusing]		
	Sets the threshold for fusing temperature correction to compensate for ambient conditions.		
001	Temp.:Threshold: Low	*ENG	[0 to 100 / 17 / 1 deg/step]
002	Temp.:Threshold: High	*ENG	[0 to 100 / 30 / 1 deg/step]
003	Low Temp. Correction	*ENG	[0 to 100 / 5 / 1 deg/step]
004	High Temp. Correction	*ENG	[0 to 100 / 0 / 1 deg/step]
005	Job Low Temp. Correction	*ENG	[0 to 100 / 5 / 1 deg/step]
006	Job High Temp. Correction	*ENG	[0 to 100 / 0 / 1 deg/step]
007	Job Low Temp. Correction:Sp.	*ENG	[0 to 100 / 5 / 1 deg/step]
008	Job High Temp. Correction:Sp.	*ENG	[0 to 100 / 0 / 1 deg/step]
011	Standard Environment Temp.	*ENG	[10 to 30 / 23 / 1 deg/step]

1112	[Image Process Temp. Correction]		
	These SPs are used for the fusing temperature control for variable job images. This control saves the power consumption when the machine copies or prints a job text image in black and white mode.		
001	Temp.:Normal:Level1:Center	*ENG	[-10 to 10 / 0 / 1deg/step]
002	Temp.:Normal:Level2:Center	*ENG	[-30 to 20 / -15 / 1deg/step]

1113	[Curl Correction]		
001	Execute Pattern	*ENG	[0 or 1 / 0:OFF / 1/step]
	Selects the curl correction type.		
002	Humidity:Threshold:M-humid	*ENG	[0 to 100 / 1 / 1%/step]
	Specifies the threshold between low and middle humidity.		
003	Humidity:Threshold:H-humid	*ENG	[0 to 100 / 65 / 1%/step]
	Specifies the threshold between middle and high humidity.		
004	Permit Temp.:Delta:Press:M-humid	*ENG	[0 to 200 / 60 / 1deg/step]
	Specifies the threshold temperature for the curl control in middle humidity.		
005	Permit Temp.:Delta:Press:H-humid	*ENG	[0 to 200 / 50 / 1deg/step]
	Specifies the threshold temperature for the curl control in high humidity.		
008	CPM:M-humid	*ENG	[0 to 100 / 50 / 1%/step]
	Specifies the CPM ratio of the decurl control against to the normal operation in middle humidity.		
009	CPM:H-humid	*ENG	[0 to 100 / 40 / 1%/step]
	Specifies the CPM ratio of the decurl control against to the normal operation in high humidity.		

1114	[Heat Storage Status]		
	Sets the threshold for fusing temperature correction to compensate for heat accumulated on the pressure roller.		
001	Temp.:Threshold:Press	*ENG	[0 to 200 / 80 / 1 deg/step]
002	Temp.:Threshold:Atmosphere	*ENG	[0 to 200 / 80 / 1 deg/step]

1115	[Target Temp. Correction]		
	Corrects the temperature based on the difference in the target temperatures of the end of the hot roller.		
001	Temp.:Delta:End	*ENG	-

1116	[Heat Storage FB Control]		
001	Execution mode	*ENG	[0 to 2 / 0:OFF / 1/step]
	Sets the scope of application for FB control pf the heat accumulated on the pressure roller.		
011	Time Out	*ENG	[0 to 500 / 10 / 1sec/step]
	Sets the time between paper feed starting and temperature correction starting.		
021 to 026	Sets the time until the pressure temperature is acquired from F GATE with normal speed or low speed.		
021	Delay:Standard Speed:FC:1	*ENG	[0 to 20000 / 3862 / 1msec/step]
022	Delay:Standard Speed:FC:1	*ENG	[0 to 20000 / 2712 / 1msec/step]
025	Delay:Low Speed:FC:1	*ENG	[0 to 20000 / 8093 / 1msec/step]
026	Delay:Low Speed:FC:1	*ENG	[0 to 20000 / 5783 / 1msec/step]
031	Delay:Standard Speed:FC:2	*ENG	[0 to 20000 / 3862 / 1msec/step]
032	Delay:Standard Speed:FC:2	*ENG	[0 to 20000 / 2712 / 1msec/step]
035	Delay:Low Speed:FC:2	*ENG	[0 to 20000 / 8093 / 1msec/step]

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036	Delay:Low Speed:FC:2	*ENG	[0 to 20000 / 5783 / 1msec/step]
041 to 043	Sets the pressure temperature to calculate the temperature correction value. Lower limit or Upper limit for temperature correction value.		
041	Press Reference Temp.:FC	*ENG	[0 to 200 / 70 / 1deg/step]
042	Temp. Correction Lower Limit	*ENG	[-30 to 0 / -1 / 1 deg/step]
043	Temp. Correction Upper Limit	*ENG	[0 to 30 / 0 / 1deg/step]
051 to 052	Sets the coefficient to calculate the temperature correction value. Paper Type: Plain 1, Plain 2, Thick 1, Thick 2 Thick3, Special 1, Special 2, Special 3, Envelop, or OHP.		
051	Paper Thickness Coeff.:Plain1	*ENG	[0 to 100 / 0 / 1/step]
052	Paper Thickness Coeff.:Plain2	*ENG	[0 to 100 / 0 / 1/step]
101 to 103	Sets the pressure temperature (Bk) to calculate temperature correction value.		
101	Press Reference Temp.:Bk Normal	*ENG	[0 to 200 / 70 / 1deg/step]
102	Press Reference Temp.:Bk Lv1	*ENG	[0 to 200 / 70 / 1deg/step]
103	Press Reference Temp.:Bk Lv2	*ENG	[0 to 200 / 70 / 1deg/step]

1117	[Time Control]		
	Adjust the amount of time for timeout.		
001	Control Time1:LT	*ENG	[0 to 1000 / 0 / 1sec/step]
002	Control Time2:LT	*ENG	[0 to 1000 / 0 / 1sec/step]
003	Temp:Plain:Center1:LT	*ENG	[-100 to 100 / 0 / 1deg/step]
004	Temp:Plain:Press.1:LT	*ENG	-
005	Temp:Plain:Center2:LT	*ENG	[-100 to 100 / 0 / 1deg/step]
006	Temp:Plain:Press.2:LT	*ENG	-
007	Temp:M-Thick:Center1	*ENG	[-100 to 100 / 0 / 1deg/step]
008	Temp:M-Thick:Press.1	*ENG	[-100 to 100 / 0 / 1deg/step]
009	Temp:M-Thick:Center2	*ENG	[-100 to 100 / 0 / 1deg/step]
010	Temp:M-Thick:Press.2	*ENG	[-100 to 100 / 0 / 1deg/step]
011	Temp:Other:Center1	*ENG	[-100 to 100 / 0 / 1deg/step]
012	Temp:Other:Press.1	*ENG	[-100 to 100 / 0 / 1deg/step]
013	Temp:Other:Center2	*ENG	[-100 to 100 / 0 / 1deg/step]
014	Temp:Other:Press.2	*ENG	[-100 to 100 / 0 / 1deg/step]
021	Control Time1:A4	*ENG	[0 to 1000 / 0 / 1sec/step]
022	Control Time2:A4	*ENG	[0 to 1000 / 0 / 1sec/step]
023	Temp:Center1:A4	*ENG	[-100 to 100 / 0 / 1deg/step]
025	Temp:Center2:A4	*ENG	[-100 to 100 / 0 / 1 deg/step]
031	Control Time1:B5	*ENG	[0 to 1000 / 0 / 1 sec/step]
032	Control Time2:B5	*ENG	[0 to 1000 / 0 / 1 sec/step]
033	Temp:Center1:B5	*ENG	[-100 to 100 / 0 / 1 deg/step]
035	Temp:Center2:B5	*ENG	[-100 to 100 / 0 / 1 deg/step]

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041	Control Time1:LT:BW2	*ENG	[0 to 1000 / 0 / 1 sec/step]
042	Control Time2:LT:BW2	*ENG	[0 to 1000 / 0 / 1 sec/step]
043	Temp:Center1:LT:BW2	*ENG	[-100 to 100 / 0 / 1 deg/step]
045	Temp:Center2:LT:BW2	*ENG	[-100 to 100 / 0 / 1 deg/step]
051	Control Time1:A4:BW2	*ENG	[0 to 1000 / 0 / 1 sec/step]
052	Control Time2:A4:BW2	*ENG	[0 to 1000 / 0 / 1 sec/step]
053	Temp:Center1:A4:BW2	*ENG	[-100 to 100 / 0 / 1 deg/step]
055	Temp:Center2:A4:BW2	*ENG	[-100 to 100 / 0 / 1 deg/step]
061	Control Time1:LT:M-Thick	*ENG	[0 to 1000 / 0 / 1 sec/step]
062	Control Time2:LT:M-Thick	*ENG	[0 to 1000 / 0 / 1 sec/step]
063	Temp:Center1:LT:M-Thick	*ENG	[-100 to 100 / 0 / 1 deg/step]
065	Temp:Center2:LT:M-Thick	*ENG	[-100 to 100 / 0 / 1 deg/step]
071	Control Time1:A4:M-Thick	*ENG	[0 to 1000 / 0 / 1 sec/step]
072	Control Time2:A4:M-Thick	*ENG	[0 to 1000 / 0 / 1 sec/step]
073	Temp:Center1:A4:M-Thick	*ENG	[-100 to 100 / 0 / 1 deg/step]
075	Temp:Center2:A4:M-Thick	*ENG	[-100 to 100 / 0 / 1 deg/step]
081	Control Time1:Envelope	*ENG	[0 to 1000 / 0 / 1 sec/step]
082	Control Time2:Envelope	*ENG	[0 to 1000 / 0 / 1 sec/step]
083	Temp:Center1:Envelope	*ENG	[-100 to 100 / 0 / 1 deg/step]
085	Temp:Center2:Envelope	*ENG	[-100 to 100 / 0 / 1 deg/step]
091	Control Time1:Postcard	*ENG	[0 to 1000 / 0 / 1 sec/step]
092	Control Time2:Postcard	*ENG	[0 to 1000 / 0 / 1 sec/step]
093	Temp:Center1:Postcard	*ENG	[-100 to 100 / 0 / 1 deg/step]
095	Temp:Center2:Postcard	*ENG	[-100 to 100 / 0 / 1 deg/step]

1118	[Before Job Temp. Correct]		
	-		
001	Temp.:Center:LT	*ENG	[0 to 100 / 0 / 1deg/step]

1119	[Aging Temp. Correction]		
	-		
001	Pages (%)	*ENG	[10 to 100 / 100 / 1%/step]
002	Rotation (%)	*ENG	[10 to 100 / 100 / 1%/step]
011	Temp.:Plain:FC	*ENG	[0 to 100 / 0 / 1deg/step]
012	Temp.:Plain:BW	*ENG	[0 to 100 / 0 / 1deg/step]
013	Temp.:Plain:BW2	*ENG	[0 to 100 / 0 / 1deg/step]

1121	[Switch:Rotation Start/Stop]		
	Sets the time interval for the shift from reload temperature to standby temperature.		
001	Time:After Reload	*ENG	[0 to 100 / 60 / 1sec/step]
002	Time:After Recovery	*ENG	[0 to 100 / 10 / 1sec/step]
003	Time:After Job	*ENG	[0 to 100 / 30 / 1sec/step]
004	Press Temp.:After Reload	*ENG	[0 to 160 / 100 / 1deg/step]
005	Temp.:After Job:Press Center:LT	*ENG	[0 to 250 / 150 / 1deg/step]
006	Temp.:After Job:Press Center:B5	*ENG	[0 to 250 / 150 / 1deg/step]
007	Temp.:After Job:Press Center:A5	*ENG	[0 to 250 / 150 / 1deg/step]
008	Overshoot Prevent Temp.	*ENG	[0 to 250 / 190 / 1deg/step]
009	Overshoot Prevent Time	*ENG	[0 to 100 / 10 / 1sec/step]

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010	Overshoot Prevent Temp.:End	*ENG	[0 to 250 / 178 / 1deg/step]
011	Temp.:After Job:Press Center:B6	*ENG	[0 to 250 / 150 / 1deg/step]
021	Temp.:After Main Switch On	*ENG	[0 to 10000 / 60 / 1msec/step]
101	Heat Off Time:Start:Warm Up	*ENG	[0 to 10000 / 2000 / 1msec/step]
102	Heat Off Time:Start:Print Ready	*ENG	[0 to 10000 / 500 / 1msec/step]
111	Heat Off Time:Stop:After Reload/Print Ready	*ENG	[0 to 10000 / 0 / 1msec/step]
112	Heat Off Time:Stop:After Job	*ENG	[0 to 10000 / 0 / 1msec/step]
113	Heat Off Time:Stop:After Job:BW2	*ENG	[0 to 10000 / 0 / 1msec/step]
114	Temp.: Center	*ENG	[0 to 200 / 160 / 1deg/step]
115	Heat Off Time:Stop:Warm UP:BW2	*ENG	[0 to 10000 / 3300 / 1msec/step]

1122	[Standby Rotation Setting]		
	Sets the interval between fusing roller idle rotations during standby.		
001	Rotation Interval	*ENG	[0 to 240 / 60 / 1min/step]
002	Rotation Time	*ENG	[0 to 10000 / 5 / 1msec/step]

1123	[Paper Jam Rotation Setting]		
	-		
001	Normal Rotation Distance	*ENG	[1 to 10000 / 1 / 1mm/step]
002	Reverse Rotation Distance	*ENG	[1 to 10000 / 70 / 1mm/step]

1124	[CPM Down Setting]		
	Sets the temperature differential used to calculate CPM down for low and high temperatures. Also, sets the interval for temperature checks for CPM down.		
001	Low:Down Temp.	*ENG	[-50 to 0 / -20 / 1 deg/step]
002	Low:Up Temp.	*ENG	[-50 to 0 / -15 / 1 deg/step]
003	Low :1st CPM	*ENG	[10 to 100 / 80 / 1 %/step]
004	Low :2nd CPM	*ENG	[10 to 100 / 65 / 1 %/step]
005	Low :3rd CPM	*ENG	[10 to 100 / 50 / 1 %/step]
006	High:1st CPM :Plain1:BW:LT	*ENG	[10 to 100 / 100 / 1%/step]
007	High:2nd CPM :Plain1:BW:LT	*ENG	[10 to 100 / 100 / 1%/step]
008	High:3rd CPM :Plain1:BW:LT	*ENG	[10 to 100 / 100 / 1%/step]
012	High:1st Temp.:Plain1:BW:LT	*ENG	[0 to 250 / 210 / 1deg/step]
013	High:2nd Temp.:Plain1:BW:LT	*ENG	[0 to 250 / 215 / 1deg/step]
014	High:3rd Temp.:Plain1:BW:LT	*ENG	[0 to 250 / 220 / 1deg/step]
015	High:1st Temp.:Plain1:BW:B5	*ENG	[0 to 250 / 50 / 1deg/step]
016	High:2nd Temp.:Plain1:BW:B5	*ENG	[0 to 250 / 129 / 1deg/step]
017	High:3rd Temp.:Plain1:BW:B5	*ENG	[0 to 250 / 142 / 1deg/step]
018	Judging Interval	*ENG	[1 to 250 / 10 / 1sec/step]
019	High:1st Temp.:Plain1:BW:A5	*ENG	[0 to 250 / 50 / 1deg/step]
020	High:2nd Temp.:Plain1:BW:A5	*ENG	[0 to 250 / 144 / 1deg/step]
021	High:3rd Temp.:Plain1:BW:A5	*ENG	[0 to 250 / 148 / 1deg/step]
022	High:1st Temp.:Plain1:BW:B6	*ENG	[0 to 250 / 50 / 1deg/step]

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023	High:2nd Temp.:Plain1:BW:B6	*ENG	[0 to 250 / 134 / 1deg/step]
024	High:3rd Temp.:Plain1:BW:B6	*ENG	[0 to 250 / 144 / 1deg/step]
025	High:1st Temp.:BW:Envelope	*ENG	[0 to 250 / 50 / 1deg/step]
026	High:2nd Temp.:BW:Envelope	*ENG	[0 to 250 / 120 / 1deg/step]
027	High:3rd Temp.:BW:Envelope	*ENG	[0 to 250 / 128 / 1deg/step]
028	High:1st Temp.:BW:Postcard	*ENG	[0 to 250 / 50 / 1deg/step]
029	High:2nd Temp.:BW:Postcard	*ENG	[0 to 250 / 134 / 1deg/step]
030	High:3rd Temp.:BW:Postcard	*ENG	[0 to 250 / 143 / 1deg/step]
031	High:1st CPM:Plain1:BW:B5	ENG	[10 to 100 / 44 / 1%/step]
032	High:2nd CPM:Plain1:BW:B5	ENG	[10 to 100 / 27 / 1%/step]
033	High:3rd CPM:Plain1:BW:B5	ENG	[10 to 100 / 27 / 1%/step]
034	High:1st CPM:Plain1:BW:A5	ENG	[10 to 100 / 37 / 1%/step]
035	High:2nd CPM:Plain1:BW:A5	ENG	[10 to 100 / 23 / 1%/step]
036	High:3rd CPM:Plain1:BW:A5	ENG	[10 to 100 / 23 / 1%/step]
037	High:1st CPM:Plain1:BW:B6	ENG	[10 to 100 / 37 / 1%/step]
038	High:2nd CPM:Plain1:BW:B6	ENG	[10 to 100 / 23 / 1%/step]
039	High:3rd CPM:Plain1:BW:B6	ENG	[10 to 100 / 23 / 1%/step]
040	High:1st CPM:BW:Envelope	ENG	[10 to 100 / 91 / 1%/step]
041	High:2nd CPM:BW:Envelope	ENG	[10 to 100 / 35 / 1%/step]
042	High:3rd CPM:BW:Envelope	ENG	[10 to 100 / 35 / 1%/step]
043	High:1st CPM:BW:Postcard	ENG	[10 to 100 / 65 / 1%/step]
044	High:2nd CPM :Bk:Postcard	ENG	[10 to 100 / 42 / 1%/step]
045	High:3rd CPM:BW:Postcard	ENG	[10 to 100 / 42 / 1%/step]
056	High:1st CPM:Plain1:FC:LT	ENG	[10 to 100 / 100 / 1%/step]

057	High:2nd CPM:Plain1:FC:LT	ENG	[10 to 100 / 100 / 1%/step]
058	High:3rd CPM:Plain1:FC:LT	ENG	[10 to 100 / 100 / 1%/step]
062	High:1st Temp.:Plain1:FC:LT	ENG	[0 to 250 / 210 / 1deg/step]
063	High:2nd Temp.:Plain1:FC:LT	ENG	[0 to 250 / 215 / 1deg/step]
064	High:3rd Temp.:Plain1:FC:LT	ENG	[0 to 250 / 220 / 1deg/step]
065	High:1st Temp.:Plain1:FC:B5	ENG	[0 to 250 / 50 / 1deg/step]
066	High:2nd CPM Temp.:Plain1:FC:B5	ENG	[0 to 250 / 131 / 1deg/step]
067	High:3rd Temp.:Plain1:FC:B5	ENG	[0 to 250 / 132 / 1deg/step]
069	High:1st Temp.:Plain1:FC:A5	ENG	[0 to 250 / 50 / 1deg/step]
070	High:2nd Temp.:Plain1:FC:A5	ENG	[0 to 250 / 137 / 1deg/step]
071	High:3rd Temp.:Plain1:FC:A5	ENG	[0 to 250 / 145 / 1deg/step]
072	High:1st Temp.:Plain1:FC:B6	ENG	[0 to 250 / 50 / 1deg/step]
073	High:2nd Temp.:Plain1:FC:B6	ENG	[0 to 250 / 127 / 1deg/step]
074	High:3rd Temp.:Plain1:FC:B6	ENG	[0 to 250 / 128 / 1deg/step]
075	High:1st Temp.:FC:Envelope	ENG	[0 to 250 / 50 / 1deg/step]
076	High:2nd Temp.:FC:Envelope	ENG	[0 to 250 / 120 / 1deg/step]
077	High:3rd Temp.:FC:Envelope	ENG	[0 to 250 / 128 / 1deg/step]
078	High:1st Temp.:FC:Postcard	ENG	[0 to 250 / 50 / 1deg/step]
079	High:2nd Temp.:FC:Postcard	ENG	[0 to 250 / 134 / 1deg/step]
080	High:3rd Temp.:FC:Postcard	ENG	[0 to 250 / 143 / 1deg/step]
081	High:1st CPM:Plain1:FC:B5	ENG	[10 to 100 / 44 / 1%/step]
082	High:2nd CPM:Plain1:FC:B5	ENG	[10 to 100 / 24 / 1%/step]
083	High:3rd CPM:Plain1:FC:B5	ENG	[10 to 100 / 24 / 1%/step]
084	High:1st CPM:Plain1:FC:A5	ENG	[10 to 100 / 37 / 1%/step]

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085	High:2nd CPM:Plain1:FC:A5	ENG	[10 to 100 / 15 / 1%/step]
086	High:3rd CPM:Plain1:FC:A5	ENG	[10 to 100 / 15 / 1%/step]
087	High:1st CPM:Plain1:FC:B6	ENG	[10 to 100 / 37 / 1%/step]
088	High:2nd CPM:Plain1:FC:B6	ENG	[10 to 100 / 18 / 1%/step]
089	High:3rd CPM:Plain1:FC:B6	ENG	[10 to 100 / 18 / 1%/step]
090	High:1st CPM:FC:Envelope	ENG	[10 to 100 / 91 / 1%/step]
091	High:2nd CPM:FC:Envelope	ENG	[10 to 100 / 35 / 1%/step]
092	High:3rd CPM:FC:Envelope	ENG	[10 to 100 / 35 / 1%/step]
093	High:1st CPM:FC:Postcard	ENG	[10 to 100 / 65 / 1%/step]
094	High:2nd CPM:FC:Postcard	ENG	[10 to 100 / 42 / 1%/step]
095	High:3rd CPM:FC:Postcard	ENG	[10 to 100 / 42 / 1%/step]
106	High:1st CPM:Plain2:BW:LT	*ENG	[10 to 100 / 100 / 1%/step]
107	High:2nd CPM:Plain2:BW:LT	*ENG	[10 to 100 / 100 / 1%/step]
108	High:3rd CPM:Plain2:BW:LT	*ENG	[10 to 100 / 100 / 1%/step]
112	High:1st Temp.:Plain2:BW:LT	*ENG	[0 to 250 / 210 / 1deg/step]
113	High:2nd Temp.:Plain2:BW:LT	*ENG	[0 to 250 / 215 / 1deg/step]
114	High:3rd Temp.:Plain2:BW:LT	*ENG	[0 to 250 / 220 / 1deg/step]
115	High:1st Temp.:Plain2:BW:B5	*ENG	[0 to 250 / 50 / 1deg/step]
116	High:2nd Temp.:Plain2:BW:B5	*ENG	[0 to 250 / 129 / 1deg/step]
117	High:3rd Temp.:Plain2:BW:B5	*ENG	[0 to 250 / 142 / 1deg/step]
119	High:1st Temp.:Plain2:BW:A5	*ENG	[0 to 250 / 50 / 1deg/step]
120	High:2nd Temp.:Plain2:BW:A5	*ENG	[0 to 250 / 144 / 1deg/step]
121	High:3rd Temp.:Plain2:BW:A5	*ENG	[0 to 250 / 148 / 1deg/step]
122	High:1st Temp.:Plain2:BW:B6	*ENG	[0 to 250 / 50 / 1deg/step]

123	High:2nd Temp.:Plain2:BW:B6	*ENG	[0 to 250 / 134 / 1deg/step]
124	High:3rd Temp.:Plain2:BW:B6	*ENG	[0 to 250 / 144 / 1deg/step]
131	High:1st CPM :Plain2:BW:B5	ENG	[10 to 100 / 44 / 1%/step]
132	High:2nd CPM :Plain2:BW:B5	ENG	[10 to 100 / 27 / 1%/step]
133	High:3rd CPM :Plain2:BW:B5	ENG	[10 to 100 / 27 / 1%/step]
134	High:1st CPM :Plain2:BW:A5	ENG	[10 to 100 / 37 / 1%/step]
135	High:2nd CPM :Plain2:BW:A5	ENG	[10 to 100 / 23 / 1%/step]
136	High:3rd CPM :Plain2:BW:A5	ENG	[10 to 100 / 23 / 1%/step]
137	High:1st CPM :Plain2:BW:B6	ENG	[10 to 100 / 37 / 1%/step]
138	High:2nd CPM :Plain2:BW:B6	ENG	[10 to 100 / 23 / 1%/step]
139	High:3rd CPM :Plain2:BW:B6	ENG	[10 to 100 / 23 / 1%/step]
156	High:1st CPM :Plain2:FC:LT	ENG	[10 to 100 / 100 / 1%/step]
157	High:2nd CPM:Plain2:FC:LT	ENG	[10 to 100 / 80 / 1%/step]
158	High:3rd CPM :Plain2:FC:LT	ENG	[10 to 100 / 80 / 1%/step]
162	High:1st Temp.:Plain2:FC:LT	ENG	[0 to 250 / 50 / 1deg/step]
163	High:2nd Temp.:Plain2:FC:LT	ENG	[0 to 250 / 187 / 1deg/step]
164	High:3rd Temp.:Plain2:FC:LT	ENG	[0 to 250 / 220 / 1deg/step]
165	High:1st Temp.:Plain2:FC:B5	ENG	[0 to 250 / 50 / 1deg/step]
166	High:2nd Temp.:Plain2:FC:B5	ENG	[0 to 250 / 131 / 1deg/step]
167	High:3rd Temp.:Plain2:FC:B5	ENG	[0 to 250 / 132 / 1deg/step]
169	High:1st Temp.:Plain2:FC:A5	ENG	[0 to 250 / 50 / 1deg/step]
170	High:2nd Temp.:Plain2:FC:A5	ENG	[0 to 250 / 137 / 1deg/step]
171	High:3rd Temp.:Plain2:FC:A5	ENG	[0 to 250 / 145 / 1deg/step]
172	High:1st Temp.:Plain2:FC:B6	ENG	[0 to 250 / 50 / 1deg/step]

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173	High:2nd Temp.:Plain2:FC:B6	ENG	[0 to 250 / 127 / 1deg/step]
174	High:3rd Temp.:Plain2:FC:B6	ENG	[0 to 250 / 128 / 1deg/step]
181	High:1st CPM :Plain2:FC:B5	ENG	[10 to 100 / 44 / 1%/step]
182	High:2nd CPM :Plain2:FC:B5	ENG	[10 to 100 / 24 / 1%/step]
183	High:3rd CPM :Plain2:FC:B5	ENG	[10 to 100 / 24 / 1%/step]
184	High:1st CPM :Plain2:FC:A5	ENG	[10 to 100 / 37 / 1%/step]
185	High:2nd CPM :Plain2:FC:A5	ENG	[10 to 100 / 15 / 1%/step]
186	High:3rd CPM :Plain2:FC:A5	ENG	[10 to 100 / 15 / 1%/step]
187	High:1st CPM :Plain2:FC:B6	ENG	[10 to 100 / 37 / 1%/step]
188	High:2nd CPM :Plain2:FC:B6	ENG	[10 to 100 / 18 / 1%/step]
189	High:3rd CPM :Plain2:FC:B6	ENG	[10 to 100 / 18 / 1%/step]

1125	[CPM Down Setting]		
	-		
006	High:1st CPM :M-Thick:BW:LT	ENG	[10 to 100 / 100 / 1%/step]
007	High:2nd CPM :M-Thick:BW:LT	ENG	[10 to 100 / 70 / 1%/step]
008	High:3rd CPM :M-Thick:BW:LT	ENG	[10 to 100 / 70 / 1%/step]
012	High:1st Temp.:M-Thick:BW:LT	ENG	[0 to 250 / 50 / 1deg/step]
013	High:2nd Temp.:M-Thick:BW:LT	ENG	[0 to 250 / 197 / 1deg/step]
014	High:3rd Temp.:M-Thick:BW:LT	ENG	[0 to 250 / 220 / 1deg/step]
015	High:1st Temp.:M-Thick:BW:B5	ENG	[0 to 250 / 220 / 1deg/step]

016	High:2nd Temp.:M-Thick:BW:B5	ENG	[0 to 250 / 136 / 1deg/step]
017	High:3rd Temp.:M-Thick:BW:B5	ENG	[0 to 250 / 137 / 1deg/step]
019	High:1st Temp.:M-Thick:BW:A5	ENG	[0 to 250 / 50 / 1deg/step]
020	High:2nd Temp.:M-Thick:BW:A5	ENG	[0 to 250 / 141 / 1deg/step]
021	High:3rd Temp.:M-Thick:BW:A5	ENG	[0 to 250 / 148 / 1deg/step]
022	High:1st Temp.:M-Thick:BW:B6	ENG	[0 to 250 / 50 / 1deg/step]
023	High:2nd Temp.:M-Thick:BW:B6	ENG	[0 to 250 / 132 / 1deg/step]
024	High:3rd Temp.:M-Thick:BW:B6	ENG	[0 to 250 / 140 / 1deg/step]
031	High:1st CPM :M-Thick:BW:B5	ENG	[10 to 100 / 44 / 1%/step]
032	High:2nd CPM :M-Thick:BW:B5	ENG	[10 to 100 / 21 / 1%/step]
033	High:3rd CPM :M-Thick:BW:B5	ENG	[10 to 100 / 21 / 1%/step]
034	High:1st CPM :M-Thick:BW:A5	ENG	[10 to 100 / 37 / 1%/step]
035	High:2nd CPM :M-Thick:BW:A5	ENG	[10 to 100 / 15 / 1%/step]
036	High:3rd CPM :M-Thick:BW:A5	ENG	[10 to 100 / 15 / 1%/step]
037	High:1st CPM :M-Thick:BW:B6	ENG	[10 to 100 / 37 / 1%/step]

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038	High:2nd CPM :M-Thick:Bk:B6	ENG	[10 to 100 / 15 / 1%/step]
039	High:3rd CPM :M-Thick:Bk:B6	ENG	[10 to 100 / 15 / 1%/step]
056	High:1st CPM :M-Thick:FC:LT	ENG	[10 to 100 / 100 / 1%/step]
057	High:2nd CPM:M-Thick:FC:LT	ENG	[10 to 100 / 53 / 1%/step]
058	High:3rd CPM :M-Thick:FC:LT	ENG	[10 to 100 / 53 / 1%/step]
062	High:1st Temp.:M-Thick:FC:LT	ENG	[0 to 250 / 50 / 1deg/step]
063	High:2nd Temp.:M-Thick:FC:LT	ENG	[0 to 250 / 188 / 1deg/step]
064	High:3rd Temp.:M-Thick:FC:LT	ENG	[0 to 250 / 220 / 1deg/step]
065	High:1st Temp.:M-Thick:FC:B5	ENG	[0 to 250 / 50 / 1deg/step]
066	High:2nd Temp.:M-Thick:FC:B5	ENG	[0 to 250 / 133 / 1deg/step]
067	High:3rd Temp.:M-Thick:FC:B5	ENG	[0 to 250 / 145 / 1deg/step]
069	High:1st Temp.:M-Thick:FC:A5	ENG	[0 to 250 / 50 / 1deg/step]
070	High:2nd Temp.:M-Thick:FC:A5	ENG	[0 to 250 / 130 / 1deg/step]
071	High:3rd Temp.:M-Thick:FC:A5	ENG	[0 to 250 / 131 / 1deg/step]
072	High:1st Temp.:M-Thick:FC:B6	ENG	[0 to 250 / 50 / 1deg/step]
073	High:2nd Temp.:M-Thick:FC:B6	ENG	[0 to 250 / 131 / 1deg/step]

074	High:3rd Temp.:M-Thick:FC:B6	ENG	[0 to 250 / 140 / 1deg/step]
081	High:1st CPM :M-Thick:FC:B5	ENG	[10 to 100 / 44 / 1%/step]
082	High:2nd CPM :M-Thick:FC:B5	ENG	[10 to 100 / 15 / 1%/step]
083	High:3rd CPM :M-Thick:FC:B5	ENG	[10 to 100 / 15 / 1%/step]
084	High:1st CPM :M-Thick:FC:A5	ENG	[10 to 100 / 37 / 1%/step]
085	High:2nd CPM :M-Thick:FC:A5	ENG	[10 to 100 / 10 / 1%/step]
086	High:3rd CPM :M-Thick:FC:A5	ENG	[10 to 100 / 10 / 1%/step]
087	High:1st CPM :M-Thick:FC:B6	ENG	[10 to 100 / 37 / 1%/step]
088	High:2nd CPM :M-Thick:FC:B6	ENG	[10 to 100 / 10 / 1%/step]
089	High:3rd CPM :M-Thick:FC:B6	ENG	[10 to 100 / 10 / 1%/step]
106	High:1st CPM :Plain1:Low speed:BW:LT	ENG	[10 to 100 / 100 / 1%/step]
107	High:2nd CPM :Plain1:Low speed:BW:LT	ENG	[10 to 100 / 100 / 1%/step]
108	High:3rd CPM:Plain1:Low speed:BW:LT	ENG	[10 to 100 / 100 / 1%/step]
112	High:1st Temp.:Plain1:Low speed:BW:LT	ENG	[0 to 250 / 210 / 1deg/step]
113	High:2nd Temp.:Plain1:Low speed:BW:LT	ENG	[0 to 250 / 215 / 1deg/step]
114	High:3rd Temp.:Plain1:Low speed:BW:LT	ENG	[0 to 250 / 220 / 1deg/step]

Main SP Tables-1

115	High:1st Temp.:Plain1:Low speed:BW:B5	ENG	[0 to 250 / 50 / 1deg/step]
116	High:2nd Temp.:Plain1:Low speed:BW:B5	ENG	[0 to 250 / 200 / 1deg/step]
117	High:3rd Temp.:Plain1:Low speed:BW:B5	ENG	[0 to 250 / 220 / 1deg/step]
119	High:1st Temp.:Plain1:Low speed:BW:A5	ENG	[0 to 250 / 50 / 1deg/step]
120	High:2nd Temp.:Plain1:Low speed:BW:A5	ENG	[0 to 250 / 200 / 1deg/step]
121	High:3rd Temp.:Plain1:Low speed:BW:A5	ENG	[0 to 250 / 220 / 1deg/step]
122	High:1st Temp.:Plain1:Low speed:BW:B6	ENG	[0 to 250 / 50 / 1deg/step]
123	High:2nd Temp.:Plain1:Low speed:BW:B6	ENG	[0 to 250 / 200 / 1deg/step]
124	High:3rd Temp.:Plain1:Low speed:BW:B6	ENG	[0 to 250 / 220 / 1deg/step]
131	High:1st CPM :Plain1:Low speed:BW:B5	ENG	[10 to 100 / 88 / 1%/step]
132	High:2nd CPM :Plain1:Low speed:BW:B5	ENG	[10 to 100 / 88 / 1%/step]
133	High:3rd CPM :Plain1:Low speed:BW:B5	ENG	[10 to 100 / 88 / 1%/step]
134	High:1st CPM :Plain1:Low speed:BW:A5	ENG	[10 to 100 / 74 / 1%/step]
135	High:2nd CPM :Plain1:Low speed:BW:A5	ENG	[10 to 100 / 74 / 1%/step]
136	High:3rd CPM :Plain1:Low speed:BW:A5	ENG	[10 to 100 / 74 / 1%/step]

137	High:1st CPM :Plain1:Low speed:BW:B6	ENG	[10 to 100 / 74 / 1%/step]
138	High:2nd CPM :Plain1:Low speed:BW:B6	ENG	[10 to 100 / 74 / 1%/step]
139	High:3rd CPM :Plain1:Low speed:BW:B6	ENG	[10 to 100 / 74 / 1%/step]
156	High:1st CPM :Plain1:Low speed:FC:LT	ENG	[10 to 100 / 100 / 1%/step]
157	High:2nd CPM :Plain1:Low speed:FC:LT	ENG	[10 to 100 / 100 / 1%/step]
158	High:3rd CPM :Plain1:Low speed:FC:LT	ENG	[10 to 100 / 100 / 1%/step]
162	High:1st Temp.:Plain1:Low speed:FC:LT	ENG	[0 to 250 / 210 / 1deg/step]
163	High:2nd Temp.:Plain1:Low speed:FC:LT	ENG	[0 to 250 / 215 / 1deg/step]
164	High:3rd Temp.:Plain1:Low speed:FC:LT	ENG	[0 to 250 / 220 / 1deg/step]
165	High:1st Temp.:Plain1:Low speed:FC:B5	ENG	[0 to 250 / 50 / 1deg/step]
166	High:2nd Temp.:Plain1:Low speed:FC:B5	ENG	[0 to 250 / 200 / 1deg/step]
167	High:3rd Temp.:Plain1:Low speed:FC:B5	ENG	[0 to 250 / 220 / 1deg/step]
169	High:1st Temp.:Plain1:Low speed:FC:A5	ENG	[0 to 250 / 50 / 1deg/step]
170	High:2nd Temp.:Plain1:Low speed:FC:A5	ENG	[0 to 250 / 149 / 1deg/step]
171	High:3rd Temp.:Plain1:Low speed:FC:A5	ENG	[0 to 250 / 157 / 1deg/step]

Main SP Tables-1

172	High:1st Temp.:Plain1:Low speed:FC:B6	ENG	[0 to 250 / 50 / 1deg/step]
173	High:2nd Temp.:Plain1:Low speed:FC:B6	ENG	[0 to 250 / 200 / 1deg/step]
174	High:3rd Temp.:Plain1:Low speed:FC:B6	ENG	[0 to 250 / 220 / 1deg/step]
181	High:1st CPM :Plain1:Low speed:FC:B5	ENG	[10 to 100 / 88 / 1%/step]
182	High:2nd CPM :Plain1:Low speed:FC:B5	ENG	[10 to 100 / 88 / 1%/step]
183	High:3rd CPM :Plain1:Low speed:FC:B5	ENG	[10 to 100 / 88 / 1%/step]
184	High:1st CPM :Plain1:Low speed:FC:A5	ENG	[10 to 100 / 74 / 1%/step]
185	High:2nd CPM :Plain1:Low speed:FC:A5	ENG	[10 to 100 / 70 / 1%/step]
186	High:3rd CPM :Plain1:Low speed:FC:A5	ENG	[10 to 100 / 70 / 1%/step]
187	High:1st CPM :Plain1:Low speed:FC:B6	ENG	[10 to 100 / 74 / 1%/step]
188	High:2nd CPM :Plain1:Low speed:FC:B6	ENG	[10 to 100 / 74 / 1%/step]
189	High:3rd CPM :Plain1:Low speed:FC:B6	ENG	[10 to 100 / 74 / 1%/step]

1126	[CPM Down Setting]		
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006	High:1st CPM :Plain2:Low speed:BW:LT	ENG	[10 to 100 / 100 / 1%/step]
007	High:2nd CPM :Plain2:Low speed:BW:LT	ENG	[10 to 100 / 100 / 1%/step]
008	High:3rd CPM :Plain2:Low speed:BW:LT	ENG	[10 to 100 / 100 / 1%/step]
012	High:1st Temp.:Plain2:Low speed:BW:LT	ENG	[0 to 250 / 210 / 1deg/step]
013	High:2nd Temp.:Plain2:Low speed:BW:LT	ENG	[0 to 250 / 215 / 1deg/step]
014	High:3rd Temp.:Plain2:Low speed:BW:LT	ENG	[0 to 250 / 220 / 1deg/step]
015	High:1st Temp.:Plain2:Low speed:BW:B5	ENG	[0 to 250 / 50 / 1deg/step]
016	High:2nd Temp.:Plain:Low speed:BW:B5	ENG	[0 to 250 / 200 / 1deg/step]
017	High:3rd Temp.:Plain:Low speed:BW:B5	ENG	[0 to 250 / 220 / 1deg/step]
019	High:1st Temp.:Plain2:Low speed:BW:A5	ENG	[0 to 250 / 50 / 1deg/step]
020	High:2nd Temp.:Plain2:Low speed:BW:A5	ENG	[0 to 250 / 200 / 1deg/step]
021	High:3rd Temp.:Plain2:Low speed:BW:A5	ENG	[0 to 250 / 220 / 1deg/step]
022	High:1st Temp.:Plain2:Low speed:BW:B6	ENG	[0 to 250 / 50 / 1deg/step]

Main SP Tables-1

023	High:2nd Temp.:Plain2:Low speed:BW:B6	ENG	[0 to 250 / 200 / 1deg/step]
024	High:3rd Temp.:Plain2:Low speed:BW:B6	ENG	[0 to 250 / 220 / 1deg/step]
031	High:1st CPM :Plain2:Low speed:BW:B5	ENG	[10 to 100 / 88 / 1%/step]
032	High:2nd CPM :Plain2:Low speed:BW:B5	ENG	[10 to 100 / 88 / 1%/step]
033	High:3rd CPM :Plain2:Low speed:BW:B5	ENG	[10 to 100 / 88 / 1%/step]
034	High:1st CPM :Plain2:Low speed:BW:A5	ENG	[10 to 100 / 74 / 1%/step]
035	High:2nd CPM :Plain2:Low speed:BW:A5	ENG	[10 to 100 / 74 / 1%/step]
036	High:3rd CPM :Plain2:Low speed:BW:A5	ENG	[10 to 100 / 74 / 1%/step]
037	High:1st CPM :Plain2:Low speed:BW:B6	ENG	[10 to 100 / 74 / 1%/step]
038	High:2nd CPM :Plain2:Low speed:BW:B6	ENG	[10 to 100 / 74 / 1%/step]
039	High:3rd CPM :Plain2:Low speed:BW:B6	ENG	[10 to 100 / 74 / 1%/step]
056	High:1st CPM :Plain2:Low speed:FC:LT	ENG	[10 to 100 / 100 / 1%/step]
057	High:2nd CPM :Plain2:Low speed:FC:LT	ENG	[10 to 100 / 100 / 1%/step]
058	High:3rd CPM :Plain2:Low speed:FC:LT	ENG	[10 to 100 / 100 / 1%/step]
062	High:1st Temp.:Plain2:Low speed:FC:LT	ENG	[0 to 250 / 210 / 1deg/step]

063	High:2nd Temp.:Plain2:Low speed:FC:LT	ENG	[0 to 250 / 215 / 1deg/step]
064	High:3rd Temp.:Plain2:Low speed:FC:LT	ENG	[0 to 250 / 220 / 1deg/step]
065	High:1st Temp.:Plain2:Low speed:FC:B5	ENG	[0 to 250 / 50 / 1deg/step]
066	High:2nd Temp.:Plain2:Low speed:FC:B5	ENG	[0 to 250 / 200 / 1deg/step]
067	High:3rd Temp.:Plain2:Low speed:FC:B5	ENG	[0 to 250 / 220 / 1deg/step]
069	High:1st Temp.:Plain2:Low speed:FC:A5	ENG	[0 to 250 / 50 / 1deg/step]
070	High:2nd Temp.:Plain2:Low speed:FC:A5	ENG	[0 to 250 / 149 / 1deg/step]
071	High:3rd Temp.:Plain2:Low speed:FC:A5	ENG	[0 to 250 / 157 / 1deg/step]
072	High:1st Temp.:Plain2:Low speed:FC:B6	ENG	[0 to 250 / 50 / 1deg/step]
073	High:2nd Temp.:Plain2:Low speed:FC:B6	ENG	[0 to 250 / 200 / 1deg/step]
074	High:3rd Temp.:Plain2:Low speed:FC:B6	ENG	[0 to 250 / 220 / 1deg/step]
081	High:1st CPM :Plain2:Low speed:FC:B5	ENG	[10 to 100 / 88 / 1%/step]
082	High:2nd CPM :Plain2:Low speed:FC:B5	ENG	[10 to 100 / 88 / 1%/step]
083	High:3rd CPM :Plain2:Low speed:FC:B5	ENG	[10 to 100 / 88 / 1%/step]
084	High:1st CPM :Plain2:Low speed:FC:A5	ENG	[10 to 100 / 74 / 1%/step]

Main SP Tables-1

085	High:2nd CPM :Plain2:Low speed:FC:A5	ENG	[10 to 100 / 70 / 1%/step]
086	High:3rd CPM :Plain2:Low speed:FC:A5	ENG	[10 to 100 / 70 / 1%/step]
087	High:1st CPM :Plain2:Low speed:FC:B6	ENG	[10 to 100 / 74 / 1%/step]
088	High:2nd CPM :Plain2:Low speed:FC:B6	ENG	[10 to 100 / 74 / 1%/step]
089	High:3rd CPM :Plain2:Low speed:FC:B6	ENG	[10 to 100 / 74 / 1%/step]
106	High:1st CPM :M-Thick:Low speed:BW:LT	ENG	[10 to 100 / 100 / 1%/step]
107	High:2nd CPM :M-Thick:Low speed:BW:LT	ENG	[10 to 100 / 100 / 1%/step]
108	High:3rd CPM :M-Thick:Low speed:BW:LT	ENG	[10 to 100 / 100 / 1%/step]
112	High:1st Temp.:M-Thick:Low speed:BW:LT	ENG	[0 to 250 / 210 / 1deg/step]
113	High:2nd Temp.:M-Thick:Low speed:BW:LT	ENG	[0 to 250 / 215 / 1deg/step]
114	High:3rd Temp.:M-Thick:Low speed:BW:LT	ENG	[0 to 250 / 220 / 1deg/step]
115	High:1st Temp.:M-Thick:Low speed:BW:B5	ENG	[0 to 250 / 50 / 1deg/step]
116	High:2nd Temp.:M-Thick:Low speed:BW:B5	ENG	[0 to 250 / 200 / 1deg/step]
117	High:3rd Temp.:M-Thick:Low speed:BW:B5	ENG	[0 to 250 / 220 / 1deg/step]
119	High:1st Temp.:M-Thick:Low speed:BW:A5	ENG	[0 to 250 / 50 / 1deg/step]

120	High:2nd Temp.:M-Thick:Low speed:BW:A5	ENG	[0 to 250 / 145 / 1deg/step]
121	High:3rd Temp.:M-Thick:Low speed:BW:A5	ENG	[0 to 250 / 153 / 1deg/step]
122	High:1st Temp.:M-Thick:Low speed:BW:B6	ENG	[0 to 250 / 50 / 1deg/step]
123	High:2nd Temp.:M-Thick:Low speed:BW:B6	ENG	[0 to 250 / 147 / 1deg/step]
124	High:3rd Temp.:M-Thick:Low speed:BW:B6	ENG	[0 to 250 / 153 / 1deg/step]
131	High:1st CPM :M-Thick:Low speed:BW:B5	ENG	[10 to 100 / 88 / 1%/step]
132	High:2nd CPM :M-Thick:Low speed:BW:B5	ENG	[10 to 100 / 88 / 1%/step]
133	High:3rd CPM :M-Thick:Low speed:BW:B5	ENG	[10 to 100 / 88 / 1%/step]
134	High:1st CPM :M-Thick:Low speed:BW:A5	ENG	[10 to 100 / 74 / 1%/step]
135	High:2nd CPM :M-Thick:Low speed:BW:A5	ENG	[10 to 100 / 60 / 1%/step]
136	High:3rd CPM :M-Thick:Low speed:BW:A5	ENG	[10 to 100 / 60 / 1%/step]
137	High:1st CPM :M-Thick:Low speed:BW:B6	ENG	[10 to 100 / 74 / 1%/step]
138	High:2nd CPM :M-Thick:Low speed:BW:B6	ENG	[10 to 100 / 64 / 1%/step]
139	High:3rd CPM :M-Thick:Low speed:BW:B6	ENG	[10 to 100 / 64 / 1%/step]
156	High:1st CPM :M-Thick:Low speed:FC:LT	ENG	[10 to 100 / 100 / 1%/step]

Main SP Tables-1

157	High:2nd CPM :M-Thick:Low speed:FC:LT	ENG	[10 to 100 / 100 / 1%/step]
158	High:3rd CPM :M-Thick:Low speed:FC:LT	ENG	[10 to 100 / 100 / 1%/step]
162	High:1st Temp.:M-Thick:Low speed:FC:LT	ENG	[0 to 250 / 210 / 1deg/step]
163	High:2nd Temp.:M-Thick:Low speed:FC:LT	ENG	[0 to 250 / 215 / 1deg/step]
164	High:3rd Temp.:M-Thick:Low speed:FC:LT	ENG	[0 to 250 / 220 / 1deg/step]
165	High:1st Temp.:M-Thick:Low speed:FC:B5	ENG	[0 to 250 / 50 / 1deg/step]
166	High:2nd Temp.:M-Thick:Low speed:FC:B5	ENG	[0 to 250 / 149 / 1deg/step]
167	High:3rd Temp.:M-Thick:Low speed:FC:B5	ENG	[0 to 250 / 153 / 1deg/step]
169	High:1st Temp.:M-Thick:Low speed:FC:A5	ENG	[0 to 250 / 50 / 1deg/step]
170	High:2nd Temp.:M-Thick:Low speed:FC:A5	ENG	[0 to 250 / 140 / 1deg/step]
171	High:3rd Temp.:M-Thick:Low speed:FC:A5	ENG	[0 to 250 / 149 / 1deg/step]
172	High:1st Temp.:M-Thick:Low speed:FC:B6	ENG	[0 to 250 / 50 / 1deg/step]
173	High:2nd Temp.:M-Thick:Low speed:FC:B6	ENG	[0 to 250 / 141 / 1deg/step]
174	High:3rd Temp.:M-Thick:Low speed:FC:B6	ENG	[0 to 250 / 150 / 1deg/step]
181	High:1st CPM :M-Thick:Low speed:FC:B5	ENG	[10 to 100 / 88 / 1%/step]

182	High:2nd CPM :M-Thick:Low speed:FC:B5	ENG	[10 to 100 / 64 / 1%/step]
183	High:3rd CPM :M-Thick:Low speed:FC:B5	ENG	[10 to 100 / 64 / 1%/step]
184	High:1st CPM :M-Thick:Low speed:FC:A5	ENG	[10 to 100 / 74 / 1%/step]
185	High:2nd CPM :M-Thick:Low speed:FC:A5	ENG	[10 to 100 / 50 / 1%/step]
186	High:3rd CPM :M-Thick:Low speed:FC:A5	ENG	[10 to 100 / 50 / 1%/step]
187	High:1st CPM :M-Thick:Low speed:FC:B6	ENG	[10 to 100 / 74 / 1%/step]
188	High:2nd CPM :M-Thick:Low speed:FC:B6	ENG	[10 to 100 / 50 / 1%/step]
189	High:3rd CPM :M-Thick:Low speed:FC:B6	ENG	[10 to 100 / 50 / 1%/step]

1127	[CPM Down Setting]		
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006	High:1st CPM :Thick1:Low speed:BW:LT	ENG	[10 to 100 / 100 / 1%/step]
007	High:2nd CPM :Thick1:Low speed:BW:LT	ENG	[10 to 100 / 100 / 1%/step]
008	High:3rd CPM :Thick1:Low speed:BW:LT	ENG	[10 to 100 / 100 / 1%/step]
012	High:1st Temp.:Thick1:Low speed:BW:LT	ENG	[0 to 250 / 210 / 1deg/step]
013	High:2nd Temp.:Thick1:Low speed:BW:LT	ENG	[0 to 250 / 215 / 1deg/step]

Main SP Tables-1

014	High:3rd Temp.:Thick1:Low speed:BW:LT	ENG	[0 to 250 / 220 / 1deg/step]
015	High:1st Temp.:Thick1:Low speed:BW:B5	ENG	[0 to 250 / 50 / 1deg/step]
016	High:2nd Temp.:Thick1:Low speed:BW:B5	ENG	[0 to 250 / 139 / 1deg/step]
017	High:3rd Temp.:Thick1:Low speed:BW:B5	ENG	[0 to 250 / 220 / 1deg/step]
019	High:1st Temp.:Thick1:Low speed:BW:A5	ENG	[0 to 250 / 50 / 1deg/step]
020	High:2nd Temp.:Thick1:Low speed:BW:A5	ENG	[0 to 250 / 127 / 1deg/step]
021	High:3rd Temp.:Thick1:Low speed:BW:A5	ENG	[0 to 250 / 220 / 1deg/step]
022	High:1st Temp.:Thick1:Low speed:BW:B6	ENG	[0 to 250 / 50 / 1deg/step]
023	High:2nd Temp.:Thick1:Low speed:BW:B6	ENG	[0 to 250 / 128 / 1deg/step]
024	High:3rd Temp.:Thick1:Low speed:BW:B6	ENG	[0 to 250 / 220 / 1deg/step]
031	High:1st CPM :Thick1:Low speed:BW:B5	ENG	[10 to 100 / 88 / 1%/step]
032	High:2nd CPM :Thick1:Low speed:BW:B5	ENG	[10 to 100 / 58 / 1%/step]
033	High:3rd CPM :Thick1:Low speed:BW:B5	ENG	[10 to 100 / 58 / 1%/step]

034	High:1st CPM :Thick1:Low speed:BW:A5	ENG	[10 to 100 / 74 / 1%/step]
035	High:2nd CPM :Thick1:Low speed:BW:A5	ENG	[10 to 100 / 40 / 1%/step]
036	High:3rd CPM :Thick1:Low speed:BW:A5	ENG	[10 to 100 / 40 / 1%/step]
037	High:1st CPM :Thick1:Low speed:BW:B6	ENG	[10 to 100 / 74 / 1%/step]
038	High:2nd CPM :Thick1:Low speed:BW:B6	ENG	[10 to 100 / 40 / 1%/step]
039	High:3rd CPM :Thick1:Low speed:BW:B6	ENG	[10 to 100 / 40 / 1%/step]
056	High:1st CPM :Thick1:Low speed:FC:LT	ENG	[10 to 100 / 100 / 1%/step]
057	High:2nd CPM :Thick1:Low speed:FC:LT	ENG	[10 to 100 / 100 / 1%/step]
058	High:3rd CPM :Thick1:Low speed:FC:LT	ENG	[10 to 100 / 100 / 1%/step]
062	High:1st Temp.:Thick1:Low speed:FC:LT	ENG	[0 to 250 / 210 / 1deg/step]
063	High:2nd Temp.:Thick1:Low speed:FC:LT	ENG	[0 to 250 / 215 / 1deg/step]
064	High:3rd Temp.:Thick1:Low speed:FC:LT	ENG	[0 to 250 / 220 / 1deg/step]

065	High:1st Temp.:Thick1:Low speed:FC:B5	ENG	[0 to 250 / 50 / 1deg/step]
066	High:2nd Temp.:Thick1:Low speed:FC:B5	ENG	[0 to 250 / 134 / 1deg/step]
067	High:3rd Temp.:Thick1:Low speed:FC:B5	ENG	[0 to 250 / 220 / 1deg/step]
069	High:1st Temp.:Thick1:Low speed:FC:A5	ENG	[0 to 250 / 50 / 1deg/step]
070	High:2nd Temp.:Thick1:Low speed:FC:A5	ENG	[0 to 250 / 119 / 1deg/step]
071	High:3rd Temp.:Thick1:Low speed:FC:A5	ENG	[0 to 250 / 220 / 1deg/step]
072	High:1st Temp.:Thick1:Low speed:FC:B6	ENG	[0 to 250 / 50 / 1deg/step]
073	High:2nd Temp.:Thick1:Low speed:FC:B6	ENG	[0 to 250 / 122 / 1deg/step]
074	High:3rd Temp.:Thick1:Low speed:FC:B6	ENG	[0 to 250 / 220 / 1deg/step]
081	High:1st CPM :Thick1:Low speed:FC:B5	ENG	[10 to 100 / 88 / 1%/step]
082	High:2nd CPM :Thick1:Low speed:FC:B5	ENG	[10 to 100 / 41 / 1%/step]
083	High:3rd CPM :Thick1:Low speed:FC:B5	ENG	[10 to 100 / 41 / 1%/step]
084	High:1st CPM :Thick1:Low speed:FC:A5	ENG	[10 to 100 / 74 / 1%/step]
085	High:2nd CPM :Thick1:Low speed:FC:A5	ENG	[10 to 100 / 30 / 1%/step]

086	High:3rd CPM :Thick1:Low speed:FC:A5	ENG	[10 to 100 / 30 / 1%/step]
087	High:1st CPM :Thick1:Low speed:FC:B6	ENG	[10 to 100 / 74 / 1%/step]
088	High:2nd CPM :Thick1:Low speed:FC:B6	ENG	[10 to 100 / 25 / 1%/step]
089	High:3rd CPM :Thick1:Low speed:FC:B6	ENG	[10 to 100 / 25 / 1%/step]
106	High:1st CPM :Thick2:Low speed:BW:LT	ENG	[10 to 100 / 100 / 1%/step]
107	High:2nd CPM :Thick2:Low speed:BW:LT	ENG	[10 to 100 / 100 / 1%/step]
108	High:3rd CPM :Thick2:Low speed:BW:LT	ENG	[10 to 100 / 100 / 1%/step]
112	High:1st Temp.:Thick2:Low speed:BW:LT	ENG	[0 to 250 / 210 / 1deg/step]
113	High:2nd Temp.:Thick2:Low speed:BW:LT	ENG	[0 to 250 / 215 / 1deg/step]
114	High:3rd Temp.:Thick2:Low speed:BW:LT	ENG	[0 to 250 / 220 / 1deg/step]
115	High:1st Temp.:Thick2:Low speed:BW:B5	ENG	[0 to 250 / 50 / 1deg/step]
116	High:2nd Temp.:Thick2:Low speed:BW:B5	ENG	[0 to 250 / 111 / 1deg/step]
117	High:3rd Temp.:Thick2:Low speed:BW:B5	ENG	[0 to 250 / 220 / 1deg/step]

Main SP Tables-1

119	High:1st Temp.:Thick2:Low speed:BW:A5	ENG	[0 to 250 / 50 / 1deg/step]
120	High:2nd Temp.:Thick2:Low speed:BW:A5	ENG	[0 to 250 / 122 / 1deg/step]
121	High:3rd Temp.:Thick2:Low speed:BW:A5	ENG	[0 to 250 / 220 / 1deg/step]
122	High:1st Temp.:Thick2:Low speed:BW:B6	ENG	[0 to 250 / 50 / 1deg/step]
123	High:2nd Temp.:Thick2:Low speed:BW:B6	ENG	[0 to 250 / 118 / 1deg/step]
124	High:3rd Temp.:Thick2:Low speed:BW:B6	ENG	[0 to 250 / 220 / 1deg/step]
131	High:1st CPM :Thick2:Low speed:BW:B5	ENG	[10 to 100 / 88 / 1%/step]
132	High:2nd CPM :Thick2:Low speed:BW:B5	ENG	[10 to 100 / 36 / 1%/step]
133	High:3rd CPM :Thick2:Low speed:BW:B5	ENG	[10 to 100 / 36 / 1%/step]
134	High:1st CPM :Thick2:Low speed:BW:A5	ENG	[10 to 100 / 74 / 1%/step]
135	High:2nd CPM :Thick2:Low speed:BW:A5	ENG	[10 to 100 / 30 / 1%/step]
136	High:3rd CPM :Thick2:Low speed:BW:A5	ENG	[10 to 100 / 30 / 1%/step]

137	High:1st CPM :Thick2:Low speed:BW:B6	ENG	[10 to 100 / 74 / 1%/step]
138	High:2nd CPM :Thick2:Low speed:BW:B6	ENG	[10 to 100 / 25 / 1%/step]
139	High:3rd CPM :Thick2:Low speed:BW:B6	ENG	[10 to 100 / 25 / 1%/step]
156	High:1st CPM :Thick2:Low speed:FC:LT	ENG	[10 to 100 / 100 / 1%/step]
157	High:2nd CPM :Thick2:Low speed:FC:LT	ENG	[10 to 100 / 100 / 1%/step]
158	High:3rd CPM :Thick2:Low speed:FC:LT	ENG	[10 to 100 / 100 / 1%/step]
162	High:1st Temp.:Thick2:Low speed:FC:LT	ENG	[0 to 250 / 210 / 1deg/step]
163	High:2nd Temp.:Thick2:Low speed:FC:LT	ENG	[0 to 250 / 215 / 1deg/step]
164	High:3rd Temp.:Thick2:Low speed:FC:LT	ENG	[0 to 250 / 220 / 1deg/step]
165	High:1st Temp.:Thick2:Low speed:FC:B5	ENG	[0 to 250 / 50 / 1deg/step]
166	High:2nd Temp.:Thick2:Low speed:FC:B5	ENG	[0 to 250 / 116 / 1deg/step]
167	High:3rd Temp.:Thick2:Low speed:FC:B5	ENG	[0 to 250 / 220 / 1deg/step]
169	High:1st Temp.:Thick2:Low speed:FC:A5	ENG	[0 to 250 / 50 / 1deg/step]
170	High:2nd Temp.:Thick2:Low speed:FC:A5	ENG	[0 to 250 / 111 / 1deg/step]

Main SP Tables-1

171	High:3rd Temp.:Thick2:Low speed:FC:A5	ENG	[0 to 250 / 220 / 1deg/step]
172	High:1st Temp.:Thick2:Low speed:FC:B6	ENG	[0 to 250 / 50 / 1deg/step]
173	High:2nd Temp.:Thick2:Low speed:FC:B6	ENG	[0 to 250 / 108 / 1deg/step]
174	High:3rd Temp.:Thick2:Low speed:FC:B6	ENG	[0 to 250 / 220 / 1deg/step]
181	High:1st CPM :Thick2:Low speed:FC:B5	ENG	[10 to 100 / 88 / 1%/step]
182	High:2nd CPM :Thick2:Low speed:FC:B5	ENG	[10 to 100 / 23 / 1%/step]
183	High:3rd CPM :Thick2:Low speed:FC:B5	ENG	[10 to 100 / 23 / 1%/step]
184	High:1st CPM :Thick2:Low speed:FC:A5	ENG	[10 to 100 / 74 / 1%/step]
185	High:2nd CPM :Thick2:Low speed:FC:A5	ENG	[10 to 100 / 20 / 1%/step]
186	High:3rd CPM :Thick2:Low speed:FC:A5	ENG	[10 to 100 / 20 / 1%/step]
187	High:1st CPM :Thick2:Low speed:FC:B6	ENG	[10 to 100 / 74 / 1%/step]
188	High:2nd CPM :Thick2:Low speed:FC:B6	ENG	[10 to 100 / 15 / 1%/step]
189	High:3rd CPM :Thick2:Low speed:FC:B6	ENG	[10 to 100 / 15 / 1%/step]

1128	[CPM Down Setting]		
	-		
006	High:1st CPM :Thick3:Low speed:BW:LT	ENG	[10 to 100 / 75 / 1%/step]
007	High:2nd CPM :Thick3:Low speed:BW:LT	ENG	[10 to 100 / 50 / 1%/step]
008	High:3rd CPM :Thick3:Low speed:BW:LT	ENG	[10 to 100 / 25 / 1%/step]
012	High:1st Temp.:Thick3:Low speed:BW:LT	ENG	[0 to 250 / 200 / 1deg/step]
013	High:2nd Temp.:Thick3:Low speed:BW:LT	ENG	[0 to 250 / 205 / 1deg/step]
014	High:3rd Temp.:Thick3:Low speed:BW:LT	ENG	[0 to 250 / 210 / 1deg/step]
015	High:1st Temp.:Thick3:Low speed:BW:B5	ENG	[0 to 250 / 50 / 1deg/step]
016	High:2nd Temp.:Thick3:Low speed:BW:B5	ENG	[0 to 250 / 117 / 1deg/step]
017	High:3rd Temp.:Thick3:Low speed:BW:B5	ENG	[0 to 250 / 220 / 1deg/step]
019	High:1st Temp.:Thick3:Low speed:BW:A5	ENG	[0 to 250 / 50 / 1deg/step]
020	High:2nd Temp.:Thick3:Low speed:BW:A5	ENG	[0 to 250 / 104 / 1deg/step]

Main SP Tables-1

021	High:3rd Temp.:Thick3:Low speed:BW:A5	ENG	[0 to 250 / 220 / 1deg/step]
022	High:1st Temp.:Thick3:Low speed:BW:B6	ENG	[0 to 250 / 50 / 1deg/step]
023	High:2nd Temp.:Thick3:Low speed:BW:B6	ENG	[0 to 250 / 108 / 1deg/step]
024	High:3rd Temp.:Thick3:Low speed:BW:B6	ENG	[0 to 250 / 220 / 1deg/step]
031	High:1st CPM :Thick3:Low speed:BW:B5	ENG	[10 to 100 / 88 / 1%/step]
032	High:2nd CPM :Thick3:Low speed:BW:B5	ENG	[10 to 100 / 24 / 1%/step]
033	High:3rd CPM :Thick3:Low speed:BW:B5	ENG	[10 to 100 / 24 / 1%/step]
034	High:1st CPM :Thick3:Low speed:BW:A5	ENG	[10 to 100 / 74 / 1%/step]
035	High:2nd CPM :Thick3:Low speed:BW:A5	ENG	[10 to 100 / 20 / 1%/step]
036	High:3rd CPM :Thick3:Low speed:BW:A5	ENG	[10 to 100 / 20 / 1%/step]
037	High:1st CPM :Thick3:Low speed:BW:B6	ENG	[10 to 100 / 74 / 1%/step]
038	High:2nd CPM :Thick3:Low speed:BW:B6	ENG	[10 to 100 / 15 / 1%/step]

039	High:3rd CPM :Thick3:Low speed:BW:B6	ENG	[10 to 100 / 15 / 1%/step]
056	High:1st CPM :Thick3:Low speed:FC:LT	ENG	[10 to 100 / 75 / 1%/step]
057	High:2nd CPM :Thick3:Low speed:FC:LT	ENG	[10 to 100 / 50 / 1%/step]
058	High:3rd CPM :Thick3:Low speed:FC:LT	ENG	[10 to 100 / 25 / 1%/step]
062	High:1st Temp.:Thick3:Low speed:FC:LT	ENG	[0 to 250 / 200 / 1deg/step]
063	High:2nd Temp.:Thick3:Low speed:FC:LT	ENG	[0 to 250 / 205 / 1deg/step]
064	High:3rd Temp.:Thick3:Low speed:FC:LT	ENG	[0 to 250 / 210 / 1deg/step]
065	High:1st Temp.:Thick3:Low speed:FC:B5	ENG	[0 to 250 / 50 / 1deg/step]
066	High:2nd Temp.:Thick3:Low speed:FC:B5	ENG	[0 to 250 / 107 / 1deg/step]
067	High:3rd Temp.:Thick3:Low speed:FC:B5	ENG	[0 to 250 / 220 / 1deg/step]
069	High:1st Temp.:Thick3:Low speed:FC:A5	ENG	[0 to 250 / 50 / 1deg/step]
070	High:2nd Temp.:Thick3:Low speed:FC:A5	ENG	[0 to 250 / 108 / 1deg/step]
071	High:3rd Temp.:Thick3:Low speed:FC:A5	ENG	[0 to 250 / 220 / 1deg/step]

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072	High:1st Temp.:Thick3:Low speed:FC:B6	ENG	[0 to 250 / 50 / 1deg/step]
073	High:2nd Temp.:Thick3:Low speed:FC:B6	ENG	[0 to 250 / 105 / 1deg/step]
074	High:3rd Temp.:Thick3:Low speed:FC:B6	ENG	[0 to 250 / 220 / 1deg/step]
081	High:1st CPM :Thick3:Low speed:FC:B5	ENG	[10 to 100 / 88 / 1%/step]
082	High:2nd CPM :Thick3:Low speed:FC:B5	ENG	[10 to 100 / 17 / 1%/step]
083	High:3rd CPM :Thick3:Low speed:FC:B5	ENG	[10 to 100 / 17 / 1%/step]
084	High:1st CPM :Thick3:Low speed:FC:A5	ENG	[10 to 100 / 74 / 1%/step]
085	High:2nd CPM :Thick3:Low speed:FC:A5	ENG	[10 to 100 / 10 / 1%/step]
086	High:3rd CPM :Thick3:Low speed:FC:A5	ENG	[10 to 100 / 10 / 1%/step]
087	High:1st CPM :Thick3:Low speed:FC:B6	ENG	[10 to 100 / 74 / 1%/step]
088	High:2nd CPM :Thick3:Low speed:FC:B6	ENG	[10 to 100 / 10 / 1%/step]
089	High:3rd CPM :Thick3:Low speed:FC:B6	ENG	[10 to 100 / 10 / 1%/step]
106	High:1st CPM :Special:Low speed:BW:LT	ENG	[10 to 100 / 100 / 1%/step]

107	High:2nd CPM : Special:Low speed:BW:LT	ENG	[10 to 100 / 100 / 1%/step]
108	High:3rd CPM : Special:Low speed:BW:LT	ENG	[10 to 100 / 100 / 1%/step]
112	High:1st Temp.: Special:Low speed:BW:LT	ENG	[0 to 250 / 210 / 1deg/step]
113	High:2nd Temp.: Special:Low speed:BW:LT	ENG	[0 to 250 / 215 / 1deg/step]
114	High:3rd Temp.: Special:Low speed:BW:LT	ENG	[0 to 250 / 220 / 1deg/step]
115	High:1st Temp.: Special:Low speed:BW:B5	ENG	[0 to 250 / 50 / 1deg/step]
116	High:2nd Temp.: Special:Low speed:BW:B5	ENG	[0 to 250 / 129 / 1deg/step]
117	High:3rd Temp.: Special:Low speed:BW:B5	ENG	[0 to 250 / 142 / 1deg/step]
119	High:1st Temp.: Special:Low speed:BW:A5	ENG	[0 to 250 / 50 / 1deg/step]
120	High:2nd Temp.: Special:Low speed:BW:A5	ENG	[0 to 250 / 144 / 1deg/step]
121	High:3rd Temp.: Special:Low speed:BW:A5	ENG	[0 to 250 / 148 / 1deg/step]
122	High:1st Temp.: Special:Low speed:BW:B6	ENG	[0 to 250 / 50 / 1deg/step]
123	High:2nd Temp.: Special:Low speed:BW:B6	ENG	[0 to 250 / 134 / 1deg/step]

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124	High:3rd Temp.: Special:Low speed:BW:B6	ENG	[0 to 250 / 144 / 1deg/step]
131	High:1st CPM : Special:Low speed:BW:B5	ENG	[10 to 100 / 44 / 1%/step]
132	High:2nd CPM : Special:Low speed:BW:B5	ENG	[10 to 100 / 27 / 1%/step]
133	High:3rd CPM : Special:Low speed:BW:B5	ENG	[10 to 100 / 27 / 1%/step]
134	High:1st CPM : Special:Low speed:BW:A5	ENG	[10 to 100 / 37 / 1%/step]
135	High:2nd CPM : Special:Low speed:BW:A5	ENG	[10 to 100 / 23 / 1%/step]
136	High:3rd CPM : Special:Low speed:BW:A5	ENG	[10 to 100 / 23 / 1%/step]
137	High:1st CPM : Special:Low speed:BW:B6	ENG	[10 to 100 / 37 / 1%/step]
138	High:2nd CPM : Special:Low speed:BW:B6	ENG	[10 to 100 / 23 / 1%/step]
139	High:3rd CPM : Special:Low speed:BW:B6	ENG	[10 to 100 / 23 / 1%/step]
156	High:1st CPM : Special:Low speed:FC:LT	ENG	[10 to 100 / 100 / 1%/step]
157	High:2nd CPM : Special:Low speed:FC:LT	ENG	[10 to 100 / 80 / 1%/step]
158	High:3rd CPM : Special:Low speed:FC:LT	ENG	[10 to 100 / 80 / 1%/step]

162	High:1st Temp.: Special:Low speed:FC:LT	ENG	[0 to 250 / 50 / 1deg/step]
163	High:2nd Temp.: Special:Low speed:FC:LT	ENG	[0 to 250 / 187 / 1deg/step]
164	High:3rd Temp.: Special:Low speed:FC:LT	ENG	[0 to 250 / 220 / 1deg/step]
165	High:1st Temp.: Special:Low speed:FC:B5	ENG	[0 to 250 / 50 / 1deg/step]
166	High:2nd Temp.: Special:Low speed:FC:B5	ENG	[0 to 250 / 131 / 1deg/step]
167	High:3rd Temp.: Special:Low speed:FC:B5	*ENG	[0 to 250 / 132 / 1deg/step]
169	High:1st Temp.: Special:Low speed:FC:A5	*ENG	[0 to 250 / 50 / 1deg/step]
170	High:2nd Temp.: Special:Low speed:FC:A5	*ENG	[0 to 250 / 137 / 1deg/step]
171	High:3rd Temp.: Special:Low speed:FC:A5	*ENG	[0 to 250 / 145 / 1deg/step]
172	High:1st Temp.: Special:Low speed:FC:B6	*ENG	[0 to 250 / 50 / 1deg/step]
173	High:2nd Temp.: Special:Low speed:FC:B6	*ENG	[0 to 250 / 127 / 1deg/step]
174	High:3rd Temp.: Special:Low speed:FC:B6	*ENG	[0 to 250 / 128 / 1deg/step]
181	High:1st CPM : Special:Low speed:FC:B5	*ENG	[10 to 100 / 44 / 1%/step]

182	High:2nd CPM : Special:Low speed:FC:B5	*ENG	[10 to 100 / 24 / 1%/step]
183	High:3rd CPM : Special:Low speed:FC:B5	*ENG	[10 to 100 / 24 / 1%/step]
184	High:1st CPM : Special:Low speed:FC:A5	*ENG	[10 to 100 / 37 / 1%/step]
185	High:2nd CPM : Special:Low speed:FC:A5	*ENG	[10 to 100 / 15 / 1%/step]
186	High:3rd CPM : Special:Low speed:FC:A5	*ENG	[10 to 100 / 15 / 1%/step]
187	High:1st CPM : Special:Low speed:FC:B6	*ENG	[10 to 100 / 37 / 1%/step]
188	High:2nd CPM : Special:Low speed:FC:B6	*ENG	[10 to 100 / 18 / 1%/step]
189	High:3rd CPM : Special:Low speed:FC:B6	*ENG	[10 to 100 / 18 / 1%/step]

1129	[CPM Down Setting]		
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001	Low:Down Temp.:End	*ENG	[-125 to 0 / -60 / 1deg/step]
002	Low:Up Temp.:End	*ENG	[-125 to 0 / -55 / 1deg/step]
003	Low:Judging Interval:End	*ENG	[1 to 250 / 10 / 1sec/step]
101	High:1st CPM :sensor2	*ENG	[10 to 100 / 20 / 1%/step]
102	High:2nd CPM :sensor2	*ENG	[10 to 100 / 15 / 1%/step]
103	High:3rd CPM :sensor2	*ENG	[10 to 100 / 10 / 1%/step]
104	High:1st Temp.:sensor2	*ENG	[0 to 250 / 170 / 1deg/step]
105	High:2nd Temp.:sensor2	*ENG	[0 to 250 / 175 / 1deg/step]

106	High:3rd Temp.:sensor2	*ENG	[0 to 250 / 180 / 1deg/step]
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1131	[Continuous Print Mode Switch]		
	Sets the permission for paper to feed.		
001	Feed Permit Condition Setting	*ENG	[0 to 2 / 0: Productivity Mode / 1/step] 0: Productivity Model 1: Fusing Quality 1 2: Fusing Quality 2

1132	[Maximum Duty Switch]		
	Switches maximum fixed duty level and power control.		
001	Control Method Switch	*ENG	[0 or 1 / 1: Power Control / 1/step] 0: Fixed Duty 1: Power Control
003	Power Offset	*ENG	[-4 to 4 / 0 / 1/step]
012	Voltage Detection	*ENG	[0.0 to 650.0 / 0.0 / 0.1V/step]
013	Temp.:Threshold Value	*ENG	[0 to 200 / 0 / 1deg/step]

1133	[Last Paper Heater OFF Control]		
	Sets the time to start turning off the heater after the last paper has fed.		
001	Heater OFF Time:Normal Speed:FC	*ENG	[0 to 20000 / 3662 / 1msec/step]
002	Heater OFF Time:Normal Speed:BW	*ENG	[0 to 20000 / 2632 / 1msec/step]
005	Heater OFF Time:Low Speed:FC	*ENG	[0 to 20000 / 7693 / 1msec/step]
006	Heater OFF Time:Low Speed:BW	*ENG	[0 to 20000 / 5623 / 1msec/step]

Main SP Tables-1

007	Heater OFF Time:After State Shift	*ENG	[0 to 20000 / 0 / 1msec/step]
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1134	[Effective Duty Adjustment]		
	Switches effective fixed duty level and power control for adjustment.		
001	Control Method Switch	*ENG	[0 or 1 / 1: ON / 1/step] 0: OFF 1: ON

1141	[Fusing SC Issue Time Info]		
	Displays the time when an SC code was issued.		
001	SC Number	*ENG	[0 to 99999 / - / 1/step]
101	Htg Roller Temp1	*ENG	[-50 to 260 / - / 1deg/step]
104	Htg Roller Temp1	*ENG	[-50 to 260 / - / 1deg/step]
107	Press Roller Temp Value1	*ENG	[-50 to 260 / - / 1deg/step]
108	Press Roller.End Temp Value1	*ENG	[-50 to 260 / - / 1deg/step]
151	Htg Roller Temp2	*ENG	[-50 to 260 / - / 1deg/step]
154	Htg Roller Temp2	*ENG	[-50 to 260 / - / 1deg/step]
157	Press Roller Temp Value2	*ENG	[-50 to 260 / - / 1deg/step]
158	Press Roller.End Temp Value2	*ENG	[-50 to 260 / - / 1deg/step]
201	Htg Roller Temp3	*ENG	[-50 to 260 / - / 1deg/step]
204	Htg Roller Temp3	*ENG	[-50 to 260 / - / 1deg/step]

207	Press Roller Temp Value3	*ENG	[-50 to 260 / - / 1deg/step]
208	Press Roller.End Temp Value3	*ENG	[-50 to 260 / - / 1deg/step]

1142	[Fusing Jam Detection]		
	This SP displays the SC code that was issued if a fusing unit jam error occurs three times in succession.		
001	SC Display	*ENG	[0 to 1 / 0: OFF / 1/step] 0:OFF, 1:ON

1152	[Fusing Nip Band Check]		
	Checks and adjusts the nip of the hot roller and pressure roller.		
001	Execute	ENG	[- / - / -] [Execute]
002	Pre-idling Time	*ENG	[0 to 999 / 300 / 1sec/step]
003	Stop Time	*ENG	[0 to 100 / 20 / 1sec/step]
004	Feed Time	*ENG	[0 to 10000 / 6982 / 1msec/step]

1153	[Low Temp. Start Up]		
001	Temp.:Threshold Value1	*ENG	[-100 to 100 / -100 / 1deg/step]
	Specifies the threshold temperature 1 for the warming up in the low temperature condition.		
002	Temp.:Threshold Value2	*ENG	[-100 to 100 / -100 / 1deg/step]
	Specifies the threshold temperature 2 for the warming up in the low temperature condition.		
003	Temp.:Target	*ENG	[-100 to 100 / -100 / 1deg/step]
	Specifies the target temperature for the warming up in the low temperature condition.		

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005	Temp.:Rotation Threshold Value1	*ENG	[-100 to 100 / -100 / 1deg/step]
	Specifies the threshold temperature 1 for the warming up rotation in the low temperature condition.		
010	Time:Heat Storage Devision1	*ENG	[0 to 1000 / 0 / 1sec/step]
	Specifies the execution time 1 for the warming up in the low temperature condition.		
011	Time:Heat Storage Devision2	*ENG	[0 to 1000 / 0 / 1sec/step]
	Specifies the execution time 2 for the warming up in the low temperature condition.		

1157	[Overshoot Prevent Control]		
	-		
001	Decision Time	ENG	[0 to 200 / 1 / 1sec/step]
002	Off Sleep Shift Time	*ENG	[0 to 200 / 60 / 1sec/step]
003	Decision Temp.	*ENG	[0 to 250 / 250 / 1deg/step]

1190	[Flicker Control]		
001	Flicker Control	*ENG	[0 or 1 / 0 / 1/step]

1801	[MotorSpeedAdjust]		
	Adjusts the speeds of each motor.		
001	transportM:Plain1/2	*ENG	[-4.00 to 4.00 / 0.43 / 0.01%/step]
002	transportM:Thin	*ENG	[-4.00 to 4.00 / 0.43 / 0.01%/step]
003	transportM:M-Thick	*ENG	[-4.00 to 4.00 / 0.43 / 0.01%/step]
004	transportM:Thick1	*ENG	[-4.00 to 4.00 / 0.43 / 0.01%/step]
005	transportM:Thick2	*ENG	[-4.00 to 4.00 / 0.43 / 0.01%/step]

006	transportM:Thick3	*ENG	[-4.00 to 4.00 / 0.43 / 0.01%/step]
007	transportM:Special1	*ENG	[-4.00 to 4.00 / 0.43 / 0.01%/step]
008	transportM:Special2	*ENG	[-4.00 to 4.00 / 0.43 / 0.01%/step]
009	transportM:Special3	*ENG	[-4.00 to 4.00 / 0.43 / 0.01%/step]
010	transportM:Envelop	*ENG	[-4.00 to 4.00 / 0.00 / 0.01%/step]
011	transportM:OHP	*ENG	[-4.00 to 4.00 / 0.43 / 0.01%/step]
012	transportM:Plain1/2:Low speed	*ENG	[-4.00 to 4.00 / 0.43 / 0.01%/step]
013	transportM:Thin:Low speed	*ENG	[-4.00 to 4.00 / 0.43 / 0.01%/step]
014	transportM:M-Thick:Low speed	*ENG	[-4.00 to 4.00 / 0.43 / 0.01%/step]
015	transportM:Special1:Low speed	*ENG	[-4.00 to 4.00 / 0.43 / 0.01%/step]
016	transportM:Special2:Low speed	*ENG	[-4.00 to 4.00 / 0.43 / 0.01%/step]
017	transportM:Special3:Low speed	*ENG	[-4.00 to 4.00 / 0.43 / 0.01%/step]
018	transportM:Plain1/2:Glossy	*ENG	[-4.00 to 4.00 / 0.43 / 0.01%/step]
019	transportM:M-Thick:Glossy	*ENG	[-4.00 to 4.00 / 0.43 / 0.01%/step]
020	transportM:Postcard	*ENG	[-4.00 to 4.00 / 0.43 / 0.01%/step]
026	FusingMot:Plain1/2	*ENG	[-10.00 to 10.00 / 0.90 / 0.01%/step]
027	FusingMot:Thin	*ENG	[-10.00 to 10.00 / 0.90 / 0.01%/step]
028	FusingMot:M-thick	*ENG	[-10.00 to 10.00 / 0.90 / 0.01%/step]
029	FusingMot:Thick1	*ENG	[-10.00 to 10.00 / 1.50 / 0.01%/step]

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030	FusingMot:Thick2	*ENG	[-10.00 to 10.00 / 1.50 / 0.01%/step]
031	FusingMot:Thick3	*ENG	[-10.00 to 10.00 / 1.50 / 0.01%/step]
032	FusingMot:Special1	*ENG	[-10.00 to 10.00 / 0.90 / 0.01%/step]
033	FusingMot:Special2	*ENG	[-10.00 to 10.00 / 0.90 / 0.01%/step]
034	FusingMot:Special3	*ENG	[-10.00 to 10.00 / 0.90 / 0.01%/step]
035	FusingMot:Envelop	*ENG	[-10.00 to 10.00 / 1.50 / 0.01%/step]
036	FusingMot:OHP	*ENG	[-10.00 to 10.00 / 1.50 / 0.01%/step]
037	FusingMot:Plain1/2:Low Speed	*ENG	[-10.00 to 10.00 / 1.50 / 0.01%/step]
038	FusingMot:Thin:Low Speed	*ENG	[-10.00 to 10.00 / 1.50 / 0.01%/step]
039	FusingMot:M-thick:Low Speed	*ENG	[-10.00 to 10.00 / 1.50 / 0.01%/step]
040	FusingMot:Special1:Low Speed	*ENG	[-10.00 to 10.00 / 1.50 / 0.01%/step]
041	FusingMot:Special2:Low Speed	*ENG	[-10.00 to 10.00 / 1.50 / 0.01%/step]
042	FusingMot:Special3:Low Speed	*ENG	[-10.00 to 10.00 / 1.50 / 0.01%/step]
043	FusingMot:Plain1/2:Grossy	*ENG	-
044	FusingMot:M-thick:Grossy	*ENG	-
051	BkOpcDevM:Normal Speed	*ENG	[-4.00 to 4.00 / 0.00 / 0.01/step]
052	BkOpcDevM:Low Speed	*ENG	[-4.00 to 4.00 / 0.00 / 0.01/step]
053	ColorOpcDevM:Normal Speed	*ENG	[-8 to 8 / 0 / 1/step]
054	ColorOpcDevM:Low Speed	*ENG	[-8 to 8 / 0 / 1/step]
055	Offset:Standard Speed:Color	*ENG	[-8 to 8 / 0 / 1/step]

056	Offset:Low Speed:Color	*ENG	[-8 to 8 / 0 / 1/step]
057	Execute	*ENG	-
130	OpcMotAdjCtrl	*ENG	[0 or 1 / 1 / 1/step]

1902	[Drum Phase Adj.]		
	-		
001	Execute	ENG	[- / - / -] [Execute]

1907	[Paper Feed Timing Adj.]		
	Adjusts the timing of paper feed. (A "+" setting broadens paper feed interval, a "-" setting narrows paper feed interval.)		
001	Tray1 Clutch ON: Plain	*ENG	[-10 to 10 / 0 / 1mm/step]
002	Tray1 Clutch ON: Middle Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
003	Tray1 Clutch ON: Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
007	Tray1 Clutch OFF: Plain	*ENG	[-10 to 10 / 0 / 1mm/step]
008	Tray1 Clutch OFF: Middle Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
009	Tray1 Clutch OFF: Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
010	Tray1 Paper Sensor: Plain	*ENG	[-10 to 10 / 0 / 1mm/step]
011	Tray1 Paper Sensor: Middle Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
012	Tray1 Paper Sensor: Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
013	By-pass Clutch ON: Plain	*ENG	[-10 to 10 / 0 / 1mm/step]
014	By-pass Clutch ON: Middle Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
015	By-pass Clutch ON: Thick	*ENG	[-10 to 10 / 0 / 1mm/step]

Main SP Tables-1

016	By-pass Clutch ON: Envelop	*ENG	[-10 to 10 / 0 / 1mm/step]
017	By-pass Clutch OFF: Plain	*ENG	[-10 to 10 / 0 / 1mm/step]
018	By-pass Clutch OFF: Middle Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
019	By-pass Clutch OFF: Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
020	By-pass Clutch OFF: Envelop	*ENG	[-10 to 10 / 0 / 1mm/step]
021	ExitPaperDivergence SOL:OFF	*ENG	[-20 to 20 / 0 / 1mm/step]
022	ExitPaperDivergence SOL:ON	*ENG	[-20 to 20 / 0 / 1mm/step]
023	Reversing change SOL:OFF	*ENG	[-20 to 20 / 0 / 1mm/step]
024	Reversing change SOL:ON	*ENG	[-20 to 20 / 0 / 1mm/step]
025	ExitPaperDivergence SOL:OFF:Low	*ENG	[-10 to 10 / 0 / 1mm/step]
026	ExitPaperDivergence SOL:ON:Low	*ENG	[-10 to 10 / 0 / 1mm/step]
027	Reversing change SOL:OFF:Low	*ENG	[-10 to 10 / 0 / 1mm/step]
028	Reversing change SOL:ON:Low	*ENG	[-10 to 10 / 0 / 1mm/step]
029	Tray1Motor Pressure	*ENG	[-2540 to 2540 / 0 / 20msec/step]
032	Tray1 Motor Base Up	*ENG	[-2540 to 2540 / 0 / 20msec/step]
033	Tray1 Motor Base Down	*ENG	[-2540 to 2540 / 0 / 20msec/step]
034	Tray1 Motor Paper End	*ENG	[-2540 to 2540 / 0 / 20msec/step]

035	Paper Tray2: Paper Interval: Plain	*ENG	[-10 to 10 / 0 / 1mm/step]
036	Paper Tray2: Paper Interval: Middle Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
037	Paper Tray2: Paper Interval I: Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
038	Paper Tray3: Paper Interval: Plain	*ENG	[-10 to 10 / 0 / 1mm/step]
039	Paper Tray3: Paper Interval: Middle Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
040	Paper Tray3: Paper Interval: Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
041	Paper Tray2: Leading Edge: Plain	*ENG	[0 to 10 / 0 / 1mm/step]
042	Paper Tray2: Leading Edge: Middle Thick	*ENG	[0 to 10 / 0 / 1mm/step]
043	Paper Tray2: Leading Edge: Thick	*ENG	[0 to 10 / 0 / 1mm/step]
044	Paper Tray3: Leading Edge: Plain	*ENG	[0 to 10 / 0 / 1mm/step]
045	Paper Tray3: Leading Edge: Middle Thick	*ENG	[0 to 10 / 0 / 1mm/step]
046	Paper Tray3: Leading Edge: Thick	*ENG	[0 to 10 / 0 / 1mm/step]
047	Paper Tray2: Minimum Interval: Plain	*ENG	[-10 to 10 / 0 / 1mm/step]
048	Paper Tray2: Minimum Interval: Middle Thick	*ENG	[-10 to 10 / 0 / 1mm/step]

Main SP Tables-1

049	Paper Tray2: Minimum Interval: Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
050	Paper Tray3 Minimum Interval: Plain	*ENG	[-10 to 10 / 0 / 1mm/step]
051	Paper Tray3 Minimum Interval: Middle Thick	*ENG	[-10 to 10 / 0 / 1mm/step]
052	Paper Tray3 Minimum Interval: Thick	*ENG	[-10 to 10 / 0 / 1mm/step]

1950	[Fan Cooling Time Set]		
	Adjust the rotation time for each fan motor after a job end.		
001	Imaging Cooling Fan	*ENG	[0 to 600 / 0 / 1sec/step]
002	Fusing Exit Fan	*ENG	[0 to 600 / 10 / 1sec/step]
003	PSU Fan	*ENG	[0 to 600 / 0 / 1sec/step]
004	Writing Cooling Fan	*ENG	[0 to 600 / 0 / 1sec/step]

1951	[Fan Start Time Set]		
	Adjust the start time for each fan motor after a job end.		
001	Imaging Cooling Fan	*ENG	[0 to 120 / 0 / 1sec/step]
002	Fusing Exit Fan	*ENG	[0 to 120 / 0 / 1sec/step]
003	PSU Fan	*ENG	[0 to 120 / 0 / 1sec/step]
004	Writing Cooling Fan	*ENG	[0 to 120 / 0 / 1sec/step]

1952	[Fan Control Off Mode Time Set]		
	Specifies the time for fan control off mode.		
001	Fan Control Off Mode Time Set	*ENG	[0 to 60 / 10 / 1min/step]

1953	[Extra Fan Control]		
	Configures the settings of extra fan control.		
001	Cancellation Temp. Threshold	*ENG	[0 or 1 / 0 / 1/step]
006	Execution Temp. Threshold	*ENG	[0.0 to 100.0 / 42.0 / 0.1deg/step]
007	Cancellation Temp. Threshold	*ENG	[0.0 to 100.0 / 5.0 / 0.1deg/step]
008	fan setting with or without operation	*ENG	[0 or 1 / - / 1/step]

1954	[Fan Medium Speed Control]		
	Fan low noise mode end temperature		
001	Fan Low Noise Mode End Temp.	*ENG	[0.0 to 100.0 / 30.0 / 0.1deg/step]

3.2 MAIN SP TABLES-2

3.2.1 SP2-XXX (DRUM)

2005	[Charge DC Voltage]		
	Adjusts the DC component of the charge roller bias in the print modes.		
001	Plain: Bk	*ENG	[0 to 1000 / 590 / 10 -V/step]
002	Plain: C	*ENG	[0 to 1000 / 590 / 10 -V/step]
003	Plain: M	*ENG	[0 to 1000 / 590 / 10 -V/step]
004	Plain: Y	*ENG	[0 to 1000 / 590 / 10 -V/step]

2006	[Charge AC Voltage]		
	Adjusts the AC component of the charge roller bias in the print modes.		
001	Plain: Bk	*ENG	[0 to 3000 / 2100 / 10V/step]
002	Plain: C	*ENG	[0 to 3000 / 2100 / 10V/step]
003	Plain: M	*ENG	[0 to 3000 / 2100 / 10V/step]
004	Plain: Y	*ENG	[0 to 3000 / 2100 / 10V/step]

2007	[Charge AC Current: LL]		
	Displays/sets the AC current target of the charge roller for LL environment (Low temperature and Low humidity).		
001	Environmental Target: Bk	*ENG	[0 to 2000 / 600 / 10uA/step]
002	Environmental Target: C	*ENG	[0 to 2000 / 600 / 10uA/step]
003	Environmental Target: M	*ENG	[0 to 2000 / 600 / 10uA/step]
004	Environmental Target: Y	*ENG	[0 to 2000 / 600 / 10uA/step]

2008	[Charge AC Current: ML]		
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	Displays/sets the AC current target of the charge roller for ML environment (Middle temperature and Low humidity).		
001	Environmental Target: Bk	*ENG	[0 to 2000 / 600 / 10uA/step]
002	Environmental Target: C	*ENG	[0 to 2000 / 600 / 10uA/step]
003	Environmental Target: M	*ENG	[0 to 2000 / 600 / 10uA/step]
004	Environmental Target: Y	*ENG	[0 to 2000 / 600 / 10uA/step]

2009	[Charge AC Current: MM]		
	Displays/sets the AC current target of the charge roller for MM environment (Middle temperature and Middle humidity).		
001	Environmental Target: Bk	*ENG	[0 to 2000 / 650 / 10uA/step]
002	Environmental Target: C	*ENG	[0 to 2000 / 650 / 10uA/step]
003	Environmental Target: M	*ENG	[0 to 2000 / 650 / 10uA/step]
004	Environmental Target: Y	*ENG	[0 to 2000 / 650 / 10uA/step]

2010	[Charge AC Current: MH]		
	Displays/sets the AC current target of the charge roller for MH environment (Middle temperature and High humidity).		
001	Environmental Target: Bk	*ENG	[0 to 2000 / 650 / 10uA/step]
002	Environmental Target: C	*ENG	[0 to 2000 / 650 / 10uA/step]
003	Environmental Target: M	*ENG	[0 to 2000 / 650 / 10uA/step]
004	Environmental Target: Y	*ENG	[0 to 2000 / 650 / 10uA/step]

2011	[Charge AC Current: HH]		
	Displays/sets the AC current target of the charge roller for HH environment (High temperature and High humidity).		
001	Environmental Target: Bk	*ENG	[0 to 2000 / 650 / 10uA/step]

002	Environmental Target: C	*ENG	[0 to 2000 / 650 / 10uA/step]
003	Environmental Target: M	*ENG	[0 to 2000 / 650 / 10uA/step]
004	Environmental Target: Y	*ENG	[0 to 2000 / 650 / 10uA/step]

2012	[Charge Output Control]		
	Selects the AC voltage control type.		
001	AC Voltage	*ENG	[0 or 1 / 0 / 1/step]

2013	[Environmental Correction: PCU]		
001	Current Environmental: Display	*ENG	Displays the environmental condition, which is measured in absolute humidity. [0 to 5 / - / 1/step] 1: LL (LL <= 4.3 g/m ³) 2: ML (4.3 < ML <= 11.3 g/m ³) 3: MM (11.3 < MM <= 18.0 g/m ³) 4: MH (18.0 < MH <= 24.0 g/m ³) 5: HH (24.0 g/m ³ < HH)
002	Forced Setting	*ENG	Selects the environmental condition manually. DFU [0 to 5 / 0 / 1/step] 0: The environmental condition is determined automatically. 1: LL, 2: ML, 3: MM, 4: MH, 5: HH
003	Absolute Humidity: Threshold 1	*ENG	Changes the humidity threshold between LL and ML. DFU [0.00 to 100.00 / 4.30 / 0.01 g/m ³ /step]
004	Absolute Humidity: Threshold 2	*ENG	Changes the humidity threshold between ML and MM. DFU [0.00 to 100.00 / 11.30 / 0.01 g/m ³ /step]

005	Absolute Humidity: Threshold 3	*ENG	Changes the humidity threshold between MM and MH. DFU [0.00 to 100.00 / 18.00 / 0.01 g/m ³ /step]
006	Absolute Humidity: Threshold 4	*ENG	Changes the humidity threshold between MH and HH. DFU [0.00 to 100.00 / 24.00 / 0.01 g/m ³ /step]
007	Current Temp.: Display	*ENG	Displays the current temperature. [0 to 100 / - / 1 deg/step]
008	Current Relative Humidity: Display	*ENG	Displays the current relative humidity. [0 to 100 / - / 1%RH/step]
009	Current Absolute Humidity: Display	*ENG	Displays the absolute humidity. [0.00 to 100.00 / - / 0.01 g/m ³ /step]
010	Previous Environmental: Display	*ENG	Displays the previous environmental condition, which is measured in absolute humidity. [1 to 5 / - / 1/step] 1: LL, 2: ML, 3: MM, 4: MH, 5: HH
011	Previous Temp.: Display	*ENG	Displays the previous temperature. [0 to 100 / - / 1 deg/step]
012	Previous Relative Humidity: Display	*ENG	Displays the previous relative humidity. [0 to 100 / - / 1%RH/step]
013	Previous Absolute Humidity: Display	*ENG	Displays the previous absolute humidity. [0.00 to 100.00 / - / 0.01/step]

2014	[Charge Control: Establishment]		
001	Practice Interval: Power ON	*ENG	[0 to 2000 / 500 / 1 page/step]
002	Practice Interval: Printing	*ENG	[0 to 2000 / 0 / 1 page/step]

Main SP Tables-2

003	Judge Interval	*ENG	[0 to 500 / 10 / 1 page/step]
004	Temp Condition	*ENG	[0 to 99 / 35 / 1 deg/step]
005	Relative Humidity Condition	*ENG	[0 to 99 / 50 / 1%RH/step]
006	Absolute Humidity Condition	*ENG	[0 to 99 / 12 / 1 g/m ³ /step]
007	Temp. Change: Threshold M	*ENG	[0 to 99 / 10 / 1 deg/step]
008	Relative Humidity Change: Threshold M	*ENG	[0 to 99 / 50 / 1%RH/step]
009	Absolute Humidity Change: Threshold M	*ENG	[0 to 99 / 6 / 1 g/m ³ /step]
010	Temp. Change: Threshold S	*ENG	[0.0 to 20.0 / 1.0 / 0.1deg/step]
011	Relative Humidity Change: Threshold S	*ENG	[0 to 50 / 5 / 1%RH /step]
012	Absolute Humidity Change: Threshold S	*ENG	[0.0 to 20.0 / 1.0 / 0.1 g/m ³ /step]
013	Alone Time	*ENG	[0 to 1440 / 360 / 10min./step]
014	Coefficient of Correction	*ENG	[0.00 to 2.00 / 0.70 / 0.01 kV/mA/step]

2015	[Charge AC Adjustment:]		
	Displays a result of the AC charge adjustment.		
001	Result K Plain Bk	*ENG	[0 to 9 / 0 / 1/step]
002	Result C Plain C	*ENG	
003	Result M Plain M	*ENG	
004	Result Y Plain Y	*ENG	

2016	[ZnSt Application Mode]		
001	Temperature Threshold(L)	*ENG	[0 to 50 / 15 / 1 deg/step]
002	Temperature Threshold(H)	*ENG	[0 to 50 / 30 / 1 deg/step]

003	Execution Interval: Setting:1	*ENG	[0 to 999 / 10 / 1page/step]
004	Execution Interval: Setting:2	*ENG	[0 to 999 / 20 / 1page/step]
005	Execution Interval: Setting:3	*ENG	[0 to 999 / 0 / 1page/step]
006	Execution Interval: Setting:4	*ENG	[0 to 999 / 20 / 1page/step]
007	High Coverage Threshold:1	*ENG	[0.00 to 100.00 / 10.00 / 0.01%/step]
008	High Coverage Threshold:2	*ENG	[0.00 to 60.00 / 20.00 / 0.01%/step]
009	High Coverage Threshold:3	*ENG	[0.00 to 100.00 / 0.50 / 0.01%/step]
010	High Coverage Threshold:4	*ENG	[0.00 to 100.00 / 20.00 / 0.01%/step]
011	Application Time:1	*ENG	[0 to 99 / 10 / 1sec/step]
012	Application Time:2	*ENG	[0 to 99 / 10 / 1sec/step]
013	Application Time:3	*ENG	[0 to 99 / 10 / 1sec/step]
014	Application Time:4	*ENG	[0 to 99 / 5 / 1sec/step]
015	Average Coverage:1:K	*ENG	[0.00 to 100.00 / 0.05 / 0.01%/step]
016	Average Coverage:1:C	*ENG	[0.00 to 100.00 / 0.05 / 0.01%/step]
017	Average Coverage:1:M	*ENG	[0.00 to 100.00 / 0.05 / 0.01%/step]
018	Average Coverage:1:Y	*ENG	[0.00 to 100.00 / 0.05 / 0.01%/step]
019	Average Coverage:2:K	*ENG	[0.00 to 100.00 / 0.05 / 0.01%/step]
020	Average Coverage:2:C	*ENG	[0.00 to 100.00 / 0.05 / 0.01%/step]
021	Average Coverage:2:M	*ENG	[0.00 to 100.00 / 0.05 / 0.01%/step]
022	Average Coverage:2:Y	*ENG	[0.00 to 100.00 / 0.05 / 0.01%/step]
023	Average Coverage:3:K	*ENG	[0.00 to 100.00 / 0.05 / 0.01%/step]
024	Average Coverage:3:C	*ENG	[0.00 to 100.00 / 0.05 / 0.01%/step]
025	Average Coverage:3:M	*ENG	[0.00 to 100.00 / 0.05 / 0.01%/step]
026	Average Coverage:3:Y	*ENG	[0.00 to 100.00 / 0.05 / 0.01%/step]
027	Average Coverage:4:K	*ENG	[0.00 to 100.00 / 0.05 / 0.01%/step]

028	Average Coverage:4:C	*ENG	[0.00 to 100.00 / 0.05 / 0.01%/step]
029	Average Coverage:4:M	*ENG	[0.00 to 100.00 / 0.05 / 0.01%/step]
030	Average Coverage:4:Y	*ENG	[0.00 to 100.00 / 0.05 / 0.01%/step]
031	Mode Counter:K	*ENG	[0 to 999 / - / 1page/step]
032	Mode Counter:CMY	*ENG	[0 to 999 / - / 1page/step]
033	Execution Interval: Setting:5	*ENG	[0 to 999 / 20 1page/step]
034	High Coverage Threshold:5	*ENG	[60.00 to 100.00 / 60.00 / 0.01%/step]
035	Application Time:5	*ENG	[0 to 99 / 3 / 1sec/step]

2101	[Registration Correction]		
	These values are the parameters for the automatic line position adjustment and are adjusted at the factory. However, you must input a value for SP2101-001 after replacing the laser optics housing unit. The value should be provided with the new laser optics housing unit.		
	001	Color Main Dot: Bk	*ENG
	002	Color Main Dot: Ma	*ENG
	003	Color Main Dot: Cy	*ENG
	004	Color Main Dot: Ye	*ENG
	[-512 to 511 / 0 / 1dot/step]		
	005	Color Sub Line: Bk	*ENG
	006	Color Sub Line: Ma	*ENG
007	Color Sub Line: Cy	*ENG	
008	Color Sub Line: Ye	*ENG	
[-16384 to 16383 / 0 / 1line/step]			

2102	[Magnification Adjustment]		
	These values are the parameters for the automatic line position adjustment and are adjusted at the factory. These SPs must be input only when a new laser unit is installed.		

001	Main Mag.: High Speed: Bk	*ENG	[-1.000 to 1.000 / 0.000 / 0.001/step]
004	Main Mag.: High Speed: Ma	*ENG	
007	Main Mag.: High Speed: Cy	*ENG	
010	Main Mag.: High Speed: Ye	*ENG	
028	Color Main Mag.: High Speed: Ma	*ENG	[-1.000 to 1.000 / 0.000 / 0.001/step]
031	Color Main Mag.: High Speed: Cy	*ENG	
034	Color Main Mag.: High Speed: Ye	*ENG	

2103	[Erase Margin Adjustment] (Area, Paper Size)		
	Adjusts the erase margin by deleting image data at the margins.		
001	Lead Edge Width	*ENG	[0.0 to 9.9 / 4.2 / 0.1mm/step]
002	Trail. Edge Width	*ENG	
003	Left	*ENG	[0.0 to 9.9 / 2.0 / 0.1mm/step]
004	Right	*ENG	
005	Duplex Trail	*ENG	[0.0 to 9.9 / 0.0 / 0.1mm/step]
006	Duplex Left Edge	*ENG	
007	Duplex Right Edge	*ENG	

2104	[Unit LD Power Adj.]		
	Adjusts the LD initial power. These SPs must be input only when a new laser unit is installed.		
001	Bk	*ENG	[60.0 to 140.0 / 100.0 / 0.1%/step]
002	Ma	*ENG	
003	Cy	*ENG	

Main SP Tables-2

004	Ye	*ENG	
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2105	[LD Power Adj.]		
	Adjusts the LD power of each color for each process speed. Each LD power setting is decided by process control.		
001	High Speed: Bk	*ENG	[50.0 to 120.0 / 100.0 / 0.1%/step]
002	High Speed: Ma	*ENG	
003	High Speed: Cy	*ENG	
004	High Speed: Ye	*ENG	
009	Low Speed: Bk	*ENG	
010	Low Speed: Ma	*ENG	
011	Low Speed: Cy	*ENG	
012	Low Speed: Ye	*ENG	

2106	[Polygon Rotation Time]		
	Adjusts the time of the polygon motor rotation.		
001	Warming-Up	*ENG	[0 to 60 / 10 / 1sec/step]
002	Job End	*ENG	[0 to 60 / 0 / 1/step]

2107	[Image Parameter]		
	Adjusts image parameters.		
001	Image Gamma Flag	*ENG	[0 or 1 / 1 / 1/step]
002	Shading Correction Flag	*ENG	[0 or 1 / 1 / 1/step]

2109	[Test Pattern]		
	Generates the test pattern using "COPY Window" tab in the LCD.		
003	Pattern Selection	ENG	[0 to 23 / 0 / 1/step]
	0: None 1: Vertical Line (1dot) 2: Vertical Line (2dot) 3: Horizontal (1dot) 4: Horizontal (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 16: Hound's Tooth Check (Horizontal) 17: Band (Horizontal) 18: Band (Vertical) 19: Checker Flag Pattern 20: Grayscale Vertical Margin 21: Grayscale Horizontal Margin 23: Full Dot Pattern
005	Color Selection	ENG	Specifies the color for the test pattern. [1 to 4 / 1 / 1/step] 1:All Color, 2:Ma, 3:Ye, 4:Bk
006	Density:Bk	ENG	Specifies the color density for the test pattern. [0 to 15 / 15 / 1/step] 0: Lightest density 15: Darkest density
007	Density:Ma	ENG	
008	Density:Cy	ENG	
009	Density:Ye	ENG	

2110	[ST OUT]		
001	ST OUT Selection	*ENG	[0 or 1 / 0 / 1/step]

2111	[Forced Line Position Adj.]		
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Main SP Tables-2

001	Mode a	ENG	<p>[- / - / -] [Execute] Executes the fine line position adjustment twice. If this SP is not completed (NG is displayed), do SP2111-003 first and then try this SP again.</p>
002	Mode b	ENG	<p>[- / - / -] [Execute] Executes the fine line position adjustment once. If this SP is not completed, do SP2111-003 first and then try this SP again</p>
003	Mode c	ENG	<p>[- / - / -] [Execute] Executes the rough line position adjustment once. After doing this SP, make sure to execute SP2111-001 or -002. Otherwise, the line position adjustment is not perfectly done.</p>
004	Mode d	ENG	<p>[- / - / -] [Execute] Executes the fine line position adjustment and rough line position adjustment.</p>

2112	[TM/ID Sensor Test]		
	This SP is used to check the ID sensors at the factory. The results of this SP are displayed in SP2140 to SP2145.		
001	TM/ID Sensor Check	ENG	[- / - / -] [Execute]
010	General:FCRP	*ENG	[0 to 9999 / - / 1/step]
020	Threshold Setting	*ENG	[0.00 to 5.50 / 1.90 / 0.01V/step]

2117	[Skew Adjustment]		
	Specifies a skew adjustment value for the skew motor M, C, Y or Bk.		
001	Ma:Skew Adjustment	*ENG	[-256 to 256 / 0 / 1 click/step]
002	Cy:Skew Adjustment	*ENG	
003	Ye:Skew Adjustment	*ENG	
004	Bk:Skew Adjustment	*ENG	

2140	[TM/ID Sensor Check Result]		
	Displays the maximum result values of the ID sensor check. Front, Center, Rear: ID sensors for the automatic line position adjustment and the process control		
001	PWM: ID Sensor	*ENG	[0 to 1024 / - / 1/step]
005	PWM: Front	*ENG	
006	PWM: Center	*ENG	
007	PWM: Rear	*ENG	

2141	[TM/ID Sensor Check Result]		
	Displays the maximum result values of the ID sensor check. Front, Center, Rear: ID sensors for the automatic line position adjustment and the process control		
001	Average: ID Sensor	*ENG	[0.00 to 5.50 / - / 0.01V/step]
005	Average: Front	*ENG	
006	Average: Center	*ENG	
007	Average: Rear	*ENG	

2142	[TM/ID Sensor Check Result]		
	Displays the maximum result values of the ID sensor check. Front, Center, Rear: ID sensors for the automatic line position adjustment and the process control		
001	Maximum: ID Sensor	*ENG	[0.00 to 5.50 / - / 0.01V/step]
005	Maximum: Front	*ENG	
006	Maximum: Center	*ENG	
007	Maximum: Rear	*ENG	

2143	[TM/ID Sensor Check Result]		
	Displays the minimum result values of the ID sensor check. Front, Center, Rear: ID sensors for the automatic line position adjustment and the process control		
001	Minimum: ID Sensor	*ENG	[0.00 to 5.50 / - / 0.01V/step]
005	Minimum: Front	*ENG	
006	Minimum: Center	*ENG	
007	Minimum: Rear	*ENG	

2144	[TM/ID Sensor Check Result]		
	Displays the maximum result 2 values of the ID sensor check. Front, Center, Rear: ID sensors for the automatic line position adjustment and the process control		
001	Maximum 2: ID Sensor	*ENG	[0.00 to 5.50 / - / 0.01V/step]
005	Maximum 2: Front	*ENG	
006	Maximum 2: Center	*ENG	
007	Maximum 2: Rear	*ENG	

2145	[TM/ID Sensor Check Result]		
	Displays the minimum result 2 values of the ID sensor check. Front, Center, Rear: ID sensors for the automatic line position adjustment and the process control		
001	Minimum 2: ID Sensor	*ENG	[0.00 to 5.50 / - / 0.01V/step]
005	Minimum 2: Front	*ENG	
006	Minimum 2: Center	*ENG	
007	Minimum 2: Rear	*ENG	

2146	[TM-Sensor Test]		
	This SP is used to check the TM sensors.		
005	Number of Edge Detection:Front	*ENG	[0 to 16 / - / 1/step]
006	Number of Edge Detection:Center	*ENG	
007	Number of Edge Detection:Rear	*ENG	

2150	[Area Mag. Correction] LD Pulse Area Correction (Color, Area) FA		
	<p>Adjusts the magnification for each area. The main scan (297 mm) is divided into 13 areas. Area 1 is at the front side of the machine (left side of the image) and area 13 is at the rear side of the machine (right side of the image). Decreasing a value makes the image shift to the left side on the print. Increasing a value makes the image shift to the right side on the print. 1 pulse = 1/16 dot</p>		
027	Area 0: Bk	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
028	Area 1: Bk	*ENG	[-16.00 to 16.00 / 0.20 / 0.01dot/step]
029	Area 2: Bk	*ENG	[-16.00 to 16.00 / -0.45 / 0.01dot/step]
030	Area 3: Bk	*ENG	[-16.00 to 16.00 / -0.62 / 0.01dot/step]
031	Area 4: Bk	*ENG	[-16.00 to 16.00 / -0.40 / 0.01dot/step]
032	Area 5: Bk	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
033	Area 6: Bk	*ENG	[-16.00 to 16.00 / 0.39 / 0.01dot/step]
034	Area 7: Bk	*ENG	[-16.00 to 16.00 / 0.56 / 0.01dot/step]
035	Area 8: Bk	*ENG	[-16.00 to 16.00 / 0.31 / 0.01dot/step]
079	Area 0: Ma	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
080	Area 1: Ma	*ENG	[-16.00 to 16.00 / 0.20 / 0.01dot/step]
081	Area 2: Ma	*ENG	[-16.00 to 16.00 / -0.45 / 0.01dot/step]
082	Area 3: Ma	*ENG	[-16.00 to 16.00 / -0.62 / 0.01dot/step]
083	Area 4: Ma	*ENG	[-16.00 to 16.00 / -0.40 / 0.01dot/step]
084	Area 5: Ma	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
085	Area 6: Ma	*ENG	[-16.00 to 16.00 / 0.39 / 0.01dot/step]
086	Area 7: Ma	*ENG	[-16.00 to 16.00 / 0.56 / 0.01dot/step]
087	Area 8: Ma	*ENG	[-16.00 to 16.00 / 0.31 / 0.01dot/step]
131	Area 0: Cy	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]

132	Area 1: Cy	*ENG	[-16.00 to 16.00 / 0.18 / 0.01dot/step]
133	Area 2: Cy	*ENG	[-16.00 to 16.00 / 0.49 / 0.01dot/step]
134	Area 3: Cy	*ENG	[-16.00 to 16.00 / 0.42 / 0.01dot/step]
135	Area 4: Cy	*ENG	[-16.00 to 16.00 / 0.11 / 0.01dot/step]
136	Area 5: Cy	*ENG	[-16.00 to 16.00 / -0.26 / 0.01dot/step]
137	Area 6: Cy	*ENG	[-16.00 to 16.00 / -0.50 / 0.01dot/step]
138	Area 7: Cy	*ENG	[-16.00 to 16.00 / -0.45 / 0.01dot/step]
139	Area 8: Cy	*ENG	[-16.00 to 16.00 / 0.02 / 0.01dot/step]
183	Area 0: Ye	*ENG	[-16.00 to 16.00 / 0.00 / 0.01dot/step]
184	Area 1: Ye	*ENG	[-16.00 to 16.00 / 0.18 / 0.01dot/step]
185	Area 2: Ye	*ENG	[-16.00 to 16.00 / 0.49 / 0.01dot/step]
186	Area 3: Ye	*ENG	[-16.00 to 16.00 / 0.42 / 0.01dot/step]
187	Area 4: Ye	*ENG	[-16.00 to 16.00 / 0.11 / 0.01dot/step]
188	Area 5: Ye	*ENG	[-16.00 to 16.00 / -0.26 / 0.01dot/step]
189	Area 6: Ye	*ENG	[-16.00 to 16.00 / -0.50 / 0.01dot/step]
190	Area 7: Ye	*ENG	[-16.00 to 16.00 / -0.45 / 0.01dot/step]
191	Area 8: Ye	*ENG	[-16.00 to 16.00 / 0.02 / 0.01dot/step]

2152	[Area Shad. Correct. Setting]		
	Sets the adjust coefficient for exposure shading for each color in each area of the MUSIC pattern.		
001	Area 0: Bk	*ENG	[-31 to 31 / -1 / 1/step]
002	Area 1: Bk	*ENG	[-31 to 31 / -2 / 1/step]
003	Area 2: Bk	*ENG	[-31 to 31 / -2 / 1/step]
004	Area 3: Bk	*ENG	[-31 to 31 / -1 / 1/step]
005	Area 4: Bk	*ENG	[-31 to 31 / 0 / 1/step]

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006	Area 5: Bk	*ENG	[-31 to 31 / 1 / 1/step]
007	Area 6: Bk	*ENG	[-31 to 31 / 2 / 1/step]
008	Area 7: Bk	*ENG	[-31 to 31 / 3 / 1/step]
009	Area 8: Bk	*ENG	[-31 to 31 / 3 / 1/step]
010	Area 9: Bk	*ENG	[-31 to 31 / 3 / 1/step]
011	Area 10: Bk	*ENG	[-31 to 31 / 1 / 1/step]
012	Area 11: Bk	*ENG	[-31 to 31 / 0 / 1/step]
033	Area 0: Ma	*ENG	[-31 to 31 / -1 / 1/step]
034	Area 1: Ma	*ENG	[-31 to 31 / -2 / 1/step]
035	Area 2: Ma	*ENG	[-31 to 31 / -2 / 1/step]
036	Area 3: Ma	*ENG	[-31 to 31 / -1 / 1/step]
037	Area 4: Ma	*ENG	[-31 to 31 / 0 / 1/step]
038	Area 5: Ma	*ENG	[-31 to 31 / 1 / 1/step]
039	Area 6: Ma	*ENG	[-31 to 31 / 2 / 1/step]
040	Area 7: Ma	*ENG	[-31 to 31 / 3 / 1/step]
041	Area 8: Ma	*ENG	[-31 to 31 / 3 / 1/step]
042	Area 9: Ma	*ENG	[-31 to 31 / 3 / 1/step]
043	Area 10: Ma	*ENG	[-31 to 31 / 1 / 1/step]
044	Area 11: Ma	*ENG	[-31 to 31 / 0 / 1/step]
065	Area 0: Cy	*ENG	[-31 to 31 / -1 / 1/step]
066	Area 1: Cy	*ENG	[-31 to 31 / -1 / 1/step]
067	Area 2: Cy	*ENG	[-31 to 31 / -2 / 1/step]

068	Area 3: Cy	*ENG	[-31 to 31 / -1 / 1/step]
069	Area 4: Cy	*ENG	[-31 to 31 / 0 / 1/step]
070	Area 5: Cy	*ENG	[-31 to 31 / 1 / 1/step]
071	Area 6: Cy	*ENG	[-31 to 31 / 2 / 1/step]
072	Area 7: Cy	*ENG	[-31 to 31 / 3 / 1/step]
073	Area 8: Cy	*ENG	[-31 to 31 / 3 / 1/step]
074	Area 9: Cy	*ENG	[-31 to 31 / 3 / 1/step]
075	Area 10: Cy	*ENG	[-31 to 31 / 1 / 1/step]
076	Area 11: Cy	*ENG	[-31 to 31 / 0 / 1/step]
097	Area 0: Ye	*ENG	[-31 to 31 / -1 / 1/step]
098	Area 1: Ye	*ENG	[-31 to 31 / -1 / 1/step]
099	Area 2: Ye	*ENG	[-31 to 31 / -2 / 1/step]
100	Area 3: Ye	*ENG	[-31 to 31 / -1 / 1/step]
101	Area 4: Ye	*ENG	[-31 to 31 / 0 / 1/step]
102	Area 5: Ye	*ENG	[-31 to 31 / 1 / 1/step]
103	Area 6: Ye	*ENG	[-31 to 31 / 2 / 1/step]
104	Area 7: Ye	*ENG	[-31 to 31 / 3 / 1/step]
105	Area 8: Ye	*ENG	[-31 to 31 / 3 / 1/step]
106	Area 9: Ye	*ENG	[-31 to 31 / 3 / 1/step]
107	Area 10: Ye	*ENG	[-31 to 31 / 1 / 1/step]
108	Area 11: Ye	*ENG	[-31 to 31 / 0 / 1/step]

2153	[Area Shad. Size Setting]		
	Sets the area size for exposure shading for each color in each area of the MUSIC pattern.		
001	Area 0: Bk	*ENG	[1 to 63 / 5 / 1/step]
002	Area 1: Bk	*ENG	[1 to 63 / 5 / 1/step]
003	Area 2: Bk	*ENG	[1 to 63 / 5 / 1/step]
004	Area 3: Bk	*ENG	[1 to 63 / 5 / 1/step]
005	Area 4: Bk	*ENG	[1 to 63 / 5 / 1/step]
006	Area 5: Bk	*ENG	[1 to 63 / 5 / 1/step]
007	Area 6: Bk	*ENG	[1 to 63 / 5 / 1/step]
008	Area 7: Bk	*ENG	[1 to 63 / 5 / 1/step]
009	Area 8: Bk	*ENG	[1 to 63 / 5 / 1/step]
010	Area 9: Bk	*ENG	[1 to 63 / 5 / 1/step]
011	Area 10: Bk	*ENG	[1 to 63 / 5 / 1/step]
012	Area 11: Bk	*ENG	[1 to 63 / 5 / 1/step]
017	Area 0: Ma	*ENG	[1 to 63 / 5 / 1/step]
018	Area 1: Ma	*ENG	[1 to 63 / 5 / 1/step]
019	Area 2: Ma	*ENG	[1 to 63 / 5 / 1/step]
020	Area 3: Ma	*ENG	[1 to 63 / 5 / 1/step]
021	Area 4: Ma	*ENG	[1 to 63 / 5 / 1/step]
022	Area 5: Ma	*ENG	[1 to 63 / 5 / 1/step]
023	Area 6: Ma	*ENG	[1 to 63 / 5 / 1/step]
024	Area 7: Ma	*ENG	[1 to 63 / 5 / 1/step]
025	Area 8: Ma	*ENG	[1 to 63 / 5 / 1/step]
026	Area 9: Ma	*ENG	[1 to 63 / 5 / 1/step]

027	Area 10: Ma	*ENG	[1 to 63 / 5 / 1/step]
028	Area 11: Ma	*ENG	[1 to 63 / 5 / 1/step]
033	Area 0: Cy	*ENG	[1 to 63 / 5 / 1/step]
034	Area 1: Cy	*ENG	[1 to 63 / 5 / 1/step]
035	Area 2: Cy	*ENG	[1 to 63 / 5 / 1/step]
036	Area 3: Cy	*ENG	[1 to 63 / 5 / 1/step]
037	Area 4: Cy	*ENG	[1 to 63 / 5 / 1/step]
038	Area 5: Cy	*ENG	[1 to 63 / 5 / 1/step]
039	Area 6: Cy	*ENG	[1 to 63 / 5 / 1/step]
040	Area 7: Cy	*ENG	[1 to 63 / 5 / 1/step]
041	Area 8: Cy	*ENG	[1 to 63 / 5 / 1/step]
042	Area 9: Cy	*ENG	[1 to 63 / 5 / 1/step]
043	Area 10: Cy	*ENG	[1 to 63 / 5 / 1/step]
044	Area 11: Cy	*ENG	[1 to 63 / 5 / 1/step]
049	Area 0: Ye	*ENG	[1 to 63 / 5 / 1/step]
050	Area 1: Ye	*ENG	[1 to 63 / 5 / 1/step]
051	Area 2: Ye	*ENG	[1 to 63 / 5 / 1/step]
052	Area 3: Ye	*ENG	[1 to 63 / 5 / 1/step]
053	Area 4: Ye	*ENG	[1 to 63 / 5 / 1/step]
054	Area 5: Ye	*ENG	[1 to 63 / 5 / 1/step]
055	Area 6: Ye	*ENG	[1 to 63 / 5 / 1/step]
056	Area 7: Ye	*ENG	[1 to 63 / 5 / 1/step]
057	Area 8: Ye	*ENG	[1 to 63 / 5 / 1/step]
058	Area 9: Ye	*ENG	[1 to 63 / 5 / 1/step]
059	Area 10: Ye	*ENG	[1 to 63 / 5 / 1/step]

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060	Area 11: Ye	*ENG	[1 to 63 / 5 / 1/step]
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2154	[Outside Shad. Correct Setting]		
	Sets the adjust coefficient for outside the exposure shading for each color in each area of the MUSIC pattern.		
001	Front Beam Detecting Area: Bk	*ENG	[50 to 150 / 100 / 1%/step]
003	Front End Area: Bk	*ENG	[50 to 150 / 105 / 1%/step]
004	Front Beam Detecting Area: Ma	*ENG	[50 to 150 / 100 / 1%/step]
006	Front End Area: Ma	*ENG	[50 to 150 / 105 / 1%/step]
007	Front Beam Detecting Area: Cy	*ENG	[50 to 150 / 100 / 1%/step]
009	Front End Area: Cy	*ENG	[50 to 150 / 105 / 1%/step]
010	Front Beam Detecting Area: Ye	*ENG	[50 to 150 / 100 / 1%/step]
012	Front End Area: Ye	*ENG	[50 to 150 / 105 / 1%/step]

2160	[Vertical Line Width]		
001	600dpi:Bk	*ENG	[10 to 15 / 14 / 1/step]
002	600dpi:Ma	*ENG	
003	600dpi:Cy	*ENG	
004	600dpi:Ye	*ENG	
005	1200dpi:Bk	*ENG	[10 to 15 / 15 / 1/step]
006	1200dpi:Ma	*ENG	
007	1200dpi:Cy	*ENG	
008	1200dpi:Ye	*ENG	
009	600dpi:Indet.:Bk	*ENG	
010	1200dpi:Indet.:Bk	*ENG	

2180	[Line Pos. Adj. Clear]		
001	Color Regist.	ENG	[- / - / -] [Execute]
002	Main Scan Length Detection	ENG	
003	MUSIC Result	ENG	
004	Area Magnification Correction	ENG	
005	Area Magnification Correction:unit2	ENG	
006	Shading Correction:unit1	ENG	
007	Shading Correction:unit2	ENG	

2181	[Line Position Adj. Result]
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	<p>Displays the values for each correction. "M. Cor.: Dot" indicates the dot correction value in the main scan direction. "M. Cor.: Subdot" indicates the sub dot correction value in the main scan direction. "S. Cor.: Dot" indicates the dot correction value in the sub scan direction. "S. Cor.: Subdot" indicates the sub dot correction value in the sub scan direction.</p>		
003	Skew: M	*ENG	[-5000.000 to 5000.000 / - / 0.001um/step]
011	M. Cor.: Dot: M	*ENG	[-512 to 511 / - / 1dot/step]
012	M. Cor.: Subdot: M	*ENG	[-1.00 to 1.00 / - / 0.01dot/step]
015	M. Left Mag.: Subdot: M	*ENG	[-32.00 to 32.00 / - / 0.01dot/step]
016	M. Right Mag.: Subdot: M	*ENG	[-32.00 to 32.00 / - / 0.01dot/step]
017	S. Cor.: 600 Line: M	*ENG	[-16384 to 16383 / - / 1line/step]
018	S. Cor.: 600 Sub: M	*ENG	[-1.000 to 1.000 / - / 0.001line/step]
019	S. Cor.: 1200 Line: M	*ENG	[-16384 to 16383 / - / 1line/step]
020	S. Cor.: 1200 Sub: M	*ENG	[-1.000 to 1.000 / - / 0.001line/step]
021	Skew: C	*ENG	[-5000.000 to 5000.000 / - / 0.001um/step]
029	M. Cor.: Dot: C	*ENG	[-512 to 511 / - / 1dot/step]
030	M. Cor.: Subdot: C	*ENG	[-1.00 to 1.00 / - / 0.01dot/step]
033	C. Left Mag.: Subdot: M	*ENG	[-32.00 to 32.00 / - / 0.01dot/step]
034	C. Right Mag.: Subdot: M	*ENG	[-32.00 to 32.00 / - / 0.01dot/step]
035	S. Cor.: 600 Line: C	*ENG	[-16384 to 16383 / - / 1line/step]
036	S. Cor.: 600 Sub: C	*ENG	[-1.000 to 1.000 / - / 0.001line/step]
037	S. Cor.: 1200 Line: C	*ENG	[-16384 to 16383 / - / 1line/step]
038	S. Cor.: 1200 Sub: C	*ENG	[-1.000 to 1.000 / - / 0.001line/step]

039	Skew: Y	*ENG	[-5000.000 to 5000.000 / - / 0.001um/step]
047	M. Cor.: Dot: Y	*ENG	[-512 to 511 / - / 1dot/step]
048	M. Cor.: Subdot: Y	*ENG	[-1.00 to 1.00 / - / 0.01dot/step]
051	Y. Left Mag.: Subdot: M	*ENG	[-32.00 to 32.00 / - / 0.01dot/step]
052	Y. Right Mag.: Subdot: M	*ENG	[-32.00 to 32.00 / - / 0.01dot/step]
053	S. Cor.: 600 Line: Y	*ENG	[-16384 to 16383 / - / 1line/step]
054	S. Cor.: 600 Sub: Y	*ENG	[-1.000 to 1.000 / - / 0.001line/step]
055	S. Cor.: 1200 Line: Y	*ENG	[-16384 to 16383 / - / 1line/step]
056	S. Cor.: 1200 Sub: Y	*ENG	[-1.000 to 1.000 / - / 0.001line/step]
057	S. Cor.: 600 Sub	*ENG	[-1.000 to 1.000 / - / 0.001line/step]
059	S. Cor.: 1200 Sub	*ENG	[-1.000 to 1.000 / - / 0.001line/step]
061	Skew: K	*ENG	[-5000.000 to 5000.000 / - / 0.001um/step]

2182	[Line Position Adj. Offset]		
	(Color) M. Scan: Main scan, S. Scan: Sub-scan		
004	M. Scan: High: Dot: M	*ENG	[-512 to 511 / 0 / 1dot/step]
005	M. Scan: High: Subdot: M	*ENG	[-1.00 to 1.00 / 0.00 / 0.01dot/step]
008	M. Scan: Low: Dot: M	*ENG	[-512 to 511 / 0 / 1dot/step]
009	M. Scan: Low: Subdot: M	*ENG	[-1.00 to 1.00 / 0.00 / 0.01dot/step]
010	M. Scan: High: Dot: C	*ENG	[-512 to 511 / 0 / 1dot/step]
011	M. Scan: High: Subdot: C	*ENG	[-1.00 to 1.00 / 0.00 / 0.01dot/step]
014	M. Scan: Low: Dot: C	*ENG	[-512 to 511 / 0 / 1dot/step]
015	M. Scan: Low: Subdot: C	*ENG	[-1.00 to 1.00 / 0.00 / 0.01dot/step]
016	M. Scan: High: Dot: Y	*ENG	[-512 to 511 / 0 / 1dot/step]

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017	M. Scan: High: Subdot: Y	*ENG	[-1.00 to 1.00 / 0.00 / 0.01dot/step]
020	M. Scan: Low: Dot: Y	*ENG	[-512 to 511 / 0 / 1dot/step]
021	M. Scan: Low: Subdot: Y	*ENG	[-1.00 to 1.00 / 0.00 / 0.01dot/step]
022	S. Scan: High: Line: M	*ENG	[-16384 to 16383 / 0 / 1line/step]
023	S. Scan: High: Subline: M	*ENG	[-1.00 to 1.00 / 0.60 / 0.01line/step]
026	S. Scan: Low: Line: M	*ENG	[-16384 to 16383 / 0 / 1line/step]
027	S. Scan: Low: Subline: M	*ENG	[-1.00 to 1.00 / 0 / 0.01line/step]
028	S. Scan: High: Line: C	*ENG	[-16384 to 16383 / 0 / 1line/step]
029	S. Scan: High: Subline: C	*ENG	[-1.00 to 1.00 / 0.20 / 0.01line/step]
032	S. Scan: Low: Line: C	*ENG	[-16384 to 16383 / 0 / 1line/step]
033	S. Scan: Low: Subline: C	*ENG	[-1.00 to 1.00 / 0.00 / 0.01line/step]
034	S. Scan: High: Line: Y	*ENG	[-16384 to 16383 / 0 / 1line/step]
035	S. Scan: High: Subline: Y	*ENG	[-1.00 to 1.00 / 0.60 / 0.01line/step]
038	S. Scan: Low: Line: Y	*ENG	[-16384 to 16383 / 0 / 1line/step]
039	S. Scan: Low: Subline: Y	*ENG	[-1.00 to 1.00 / 0.00 / 0.01line/step]

2185	[MUSIC Pattern Timing :Set]		
001	Delay Time	ENG	[0 to 4000 / 0 / 1msec/step]

2190	[Line Position Adj.]		
012	SnSErr Range	*ENG	[-3500 to 3500 / 0 / 1um/step]

2191	[MUSIC Coefficient Setting]		
	Position Adjustment: Coefficient Setting ch 0: ID sensor at rear, ch 1: ID sensor at center, ch 2: ID sensor at front		
001	ch 0: Filter: Front: a1	ENG	[-131071 to 131071 / 125869 / 1bit/step]

002	ch 0: Filter: Front: a2	ENG	[-131071 to 131071 / -60488 / 1bit/step]
003	ch 0: Filter: Front: b0	ENG	[-131071 to 131071 / 39 / 1bit/step]
004	ch 0: Filter: Front: b1	ENG	[-131071 to 131071 / 77 / 1bit/step]
005	ch 0: Filter: Front: b2	ENG	[-131071 to 131071 / 39 / 1bit/step]
006	ch 0: Filter: Rear: a1	ENG	[-131071 to 131071 / 128596 / 1bit/step]
007	ch 0: Filter: Rear: a2	ENG	[-131071 to 131071 / -63398 / 1bit/step]
008	ch 0: Filter: Rear: b0	ENG	[-131071 to 131071 / 84 / 1bit/step]
009	ch 0: Filter: Rear: b1	ENG	[-131071 to 131071 / 168 / 1bit/step]
010	ch 0: Filter: Rear: b2	ENG	[-131071 to 131071 / 84 / 1bit/step]
011	ch 1: Filter: Front: a1	ENG	[-131071 to 131071 / 125869 / 1bit/step]
012	ch 1: Filter: Front: a2	ENG	[-131071 to 131071 / -60488 / 1bit/step]
013	ch 1: Filter: Front: b0	ENG	[-131071 to 131071 / 39 / 1bit/step]
014	ch 1: Filter: Front: b1	ENG	[-131071 to 131071 / 77 / 1bit/step]
015	ch 1: Filter: Front: b2	ENG	[-131071 to 131071 / 39 / 1bit/step]
016	ch 1: Filter: Rear: a1	ENG	[-131071 to 131071 / 128596 / 1bit/step]
017	ch 1: Filter: Rear: a2	ENG	[-131071 to 131071 / -63398 / 1bit/step]
018	ch 1: Filter: Rear: b0	ENG	[-131071 to 131071 / 84 / 1bit/step]
019	ch 1: Filter: Rear: b1	ENG	[-131071 to 131071 / 168 / 1bit/step]
020	ch 1: Filter: Rear: b2	ENG	[-131071 to 131071 / 84 / 1bit /step]
021	ch 2: Filter: Front: a1	ENG	[-131071 to 131071 / 125869 / 1bit/step]
022	ch 2: Filter: Front: a2	ENG	[-131071 to 131071 / -60488 / 1bit/step]
023	ch 2: Filter: Front: b0	ENG	[-131071 to 131071 / 39 / 1bit/step]
024	ch 2: Filter: Front: b1	ENG	[-131071 to 131071 / 77 / 1bit/step]
025	ch 2: Filter: Front: b2	ENG	[-131071 to 131071 / 39 / 1bit/step]
026	ch 2: Filter: Rear: a1	ENG	[-131071 to 131071 / 128596 / 1bit/step]

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027	ch 2: Filter: Rear: a2	ENG	[-131071 to 131071 / -63398 / 1bit/step]
028	ch 2: Filter: Rear: b0	ENG	[-131071 to 131071 / 84 / 1bit/step]
029	ch 2: Filter: Rear: b1	ENG	[-131071 to 131071 / 168 / 1bit/step]
030	ch 2: Filter: Rear: b2	ENG	[-131071 to 131071 / 84 / 1bit/step]
031	Q Format Selection	ENG	[0 to 3 / 3 / 1/step]

2192	[MUSIC Threshold Setting]		
	Line Position Adjustment: Threshold Setting ch 0: ID sensor at rear, ch 1: ID sensor at center, ch 2: ID sensor at front		
001	ch 0: 1st	*ENG	[0.5 to 3.0 / 1.3 / 0.1V/step]
002	ch 0: 2nd	*ENG	
003	ch 0: 3rd	*ENG	
004	ch 0: 4th	*ENG	
005	ch 1: 1st	*ENG	
006	ch 1: 2nd	*ENG	
007	ch 1: 3rd	*ENG	
008	ch 1: 4th	*ENG	
009	ch 2: 1st	*ENG	
010	ch 2: 2nd	*ENG	
011	ch 2: 3rd	*ENG	
012	ch 2: 4th	*ENG	

2193	[MUSIC Condition Set]		
	Line Position Adjustment: Condition Setting		
002	Page: Job End: BW+FC	*ENG	[0 to 999 / 500 / 1page/step]
	Adjusts the threshold of the line position adjustment for BW and color printing mode after job end.		
003	Page: Job End: FC	*ENG	[0 to 999 / 200 / 1page/step]
	Adjusts the threshold of the line position adjustment for color printing mode after job end.		
004	Page: Interrupt: BW+FC	*ENG	[0 to 999 / 200 / 1page/step]
	Adjusts the threshold of the line position adjustment for BW and color printing mode during job.		
005	Page: Interrupt: FC	*ENG	[0 to 999 / 200 / 1page/step]
	Adjusts the threshold of the line position adjustment for color printing mode during jobs.		
006	Page: Stand-By: BW	*ENG	[0 to 999 / 100 / 1page/step]
	Adjusts the threshold of the line position adjustment for BW printing mode in stand-by mode. The line position adjustment is done when the number of outputs in BW printing mode reaches the value specified with this SP and the condition of SP2-193-008 or SP2-193-009 is satisfied		
007	Page: Stand-By: FC	*ENG	[0 to 999 / 100 / 1page/step]
	Adjusts the threshold of the line position adjustment for BW printing mode in stand-by mode. The line position adjustment is done when the number of outputs in color printing mode reaches the value specified with this SP and the condition of SP2-193-008 or SP2-193-009 is satisfied.		
008	Temp.	*ENG	[0 to 100 / 5 / 1deg/step]
	Adjust the temperature change threshold for the line position adjustment (Mode b: adjustment once). The timing for line position adjustment depends on the combinations of several conditions.		

009	Time	*ENG	[1 to 1440 / 300 / 1minute/step]
	Adjust the time threshold for the line position adjustment (Mode b: adjustment once). The timing for line position adjustment depends on the combinations of several conditions.		
010	Magnification	*ENG	[0.00 to 1.00 / 0.10 / 0.01%/step]
	Adjusts the magnification threshold for line position adjustment. If the length of the main scan is changed by this amount since the previous MUSIC, then MUSIC is done again.		
011	Temp. 2	*ENG	[0 to 100 / 10 / 1deg/step]
	Adjust the temperature change threshold for the line position adjustment (Mode a: adjustment twice). The timing for line position adjustment depends on the combinations of several conditions.		
012	Time 2	*ENG	[1 to 9999 / 600 / 1minute/step]
	Adjust the time threshold for the line position adjustment (Mode a: adjustment twice). The timing for line position adjustment depends on the combinations of several conditions.		
013	Temp. 3	*ENG	[0 to 100 / 100 / 1deg/step]
016	Page: Power ON:BW+FC	*ENG	[0 to 999 / 200 / 1page/step]

2194	[MUSIC Execution Result]		
	Line Position Adjustment: Execution Result		
001	Year	*ENG	[0 to 99 / - / 1 year/step]
	Displays the year of the last MUSIC execution.		
002	Month	*ENG	[1 to 12 / - / 1 month/step]
	Displays the month of the last MUSIC execution.		
003	Day	*ENG	[1 to 31 / - / 1 day/step]
	Displays the date of the last MUSIC execution.		
004	Hour	*ENG	[0 to 23 / - / 1 hour/step]

	Displays the time (hour) of the last MUSIC execution		
005	Minute	*ENG	[0 to 59 / - / 1 minute/step]
	Displays the time (minute) of the last MUSIC execution.		
006	Temperature	*ENG	[0 to 100 / - / 1 deg/step]
	Displays the temperature of the last MUSIC execution.		
007	Execution Result	*ENG	[0 or 1 / 0 / 1/step] 0: Completed successfully, 1: Failed
008	Number of Execution	*ENG	[0 to 999999 / - / 1 times/step]
009	Number of Failure	*ENG	[0 to 999999 / - / 1 times/step]
010	Error Result: C	*ENG	[0 to 9 / - / 1/step]
011	Error Result: M	*ENG	0: Not done
012	Error Result: Y	*ENG	1: Completed successfully
013	Error Result: K	*ENG	2: Cannot detect patterns
			3: Fewer lines on the pattern than the target
			4: Out of the adjustment range
			5 to 9: Not used
014	Temperature 2	*ENG	[-10 to 100 / - / 1deg/step]
015	Temperature 3	*ENG	[-10 to 100 / - / 1deg/step]

2197	[MUSIC Start Time]		
001	MUSIC Start Time (EDT)	*ENG	[10 to 40 / 20 / 10ms/step]
002	TM Sensor Position	*ENG	[50.00 to 500.00 / 379.69 / 0.01mm/step]

2221	[LD Power: fixed]		
	These SP codes set the LD power level for each laser unit.		
001	Standard Speed: Bk	*ENG	[0 to 200 / 100 / 1%/step] Increasing this value makes the image density darker.
002	Standard Speed: C	*ENG	
003	Standard Speed: M	*ENG	
004	Standard Speed: Y	*ENG	
009	Refresh Threshold:Bk	*ENG	
010	Refresh Threshold:Col	*ENG	
011	-	*ENG	
012	-	*ENG	

2229	[Develop DC Vias]		
	Adjusts the development vias.		
001	Standard Speed: Bk	*ENG	[0 to 800 / 450 / 1-V/step]
002	Standard Speed: C	*ENG	
003	Standard Speed: M	*ENG	
004	Standard Speed: Y	*ENG	
009	Low Speed: Bk	*ENG	
010	Low Speed: C	*ENG	
011	Low Speed: M	*ENG	
012	Low Speed: Y	*ENG	

2241	[Temperature: Display]		
	Displays the environment temperature.		
004	PCU Temperature	ENG	[0.0 to 70.0 / - / 0.1deg/step]
005	Correction Coefficient A	*ENG	[0.0 to 10.0 / 1 / 0.1/step]
006	Correction Coefficient B	*ENG	[-70.0 to 70.0 / - / 0.1/step]

2242	[TS Operation Env. Log]		
	Displays the rotation of PCU for each temperature.		
001	TS<=40	ENG	[0 to 99999999 / - / 1 mm/step]
002	40<TS<=45	ENG	
003	45<TS	ENG	
004	Log Clear	ENG	[- / - / -] [Execute]

2302	[Environmental Correction:Trans]		
	Environmental Correction: Image Transfer Belt Unit		
002	Forced Setting	*ENG	Sets the environment condition manually. [0 to 6 / 0 / 1/step] 0: Automatic environment control 1: LL (Low temperature/ Low humidity) 2: ML (Middle temperature/ Low humidity) 3: MM (Middle temperature/ Middle humidity) 4: MH (Middle temperature/ High humidity) 5: HH (High temperature/ High humidity)

Main SP Tables-2

003	Absolute Humidity:Threshold 1	*ENG	Adjusts the threshold value between LL and ML. [0.00 to 100.00 / 4.50 / 0.01g/m ³ /step]
004	Absolute Humidity:Threshold 2	*ENG	Adjusts the threshold value between ML and MM. [0.00 to 100.00 / 9.00 / 0.01g/m ³ /step]
005	Absolute Humidity:Threshold 3	*ENG	Adjusts the threshold value between MM and MH. [0.00 to 100.00 / 17.50 / 0.01g/m ³ /step]
006	Absolute Humidity:Threshold 4	*ENG	Adjusts the threshold value between MH and HH. [0.00 to 100.00 / 24.00 / 0.01g/m ³ /step]
007	Temperature:Threshold	*ENG	[-5 to 30 / 10 / 1deg/step]

2308	[Paper Size Correction]		
	Adjusts the threshold value for the paper size correction.		
001	Threshold 1	*ENG	[0 to 250 / 194 / 1mm/step] Threshold 1 ≤ paper: Paper is detected as "S1" size.
002	Threshold 2	*ENG	[0 to 250 / 165 / 1mm/step] Threshold 2 ≤ paper ≤ Threshold 1: Paper is detected as "S2" size.
003	Threshold 3	*ENG	[0 to 250 / 139 / 1mm/step] Threshold 3 ≤ paper ≤ Threshold 2: Paper is detected as "S3" size.

2311	[Non Image Area:Bias]		
	Adjusts the bias of the paper transfer roller between images		
001	Image Transfer	*ENG	[10 to 250 / 100 / 5%/step]
	Adjusts the bias of the image transfer belt between images. This value is added to the value of the image transfer belt bias.		
002	Paper Transfer	*ENG	[0 to 230 / 0 / 1uA/step]
	Adjusts the bias of the paper transfer roller between images.		
003	Paper Transfer	*ENG	[0 to 2100 / 500 / 10V/step]

2316	[Power ON:Bias]		
	Adjusts the bias of the image transfer roller at power-on or a closed cover.		
001	Image Transfer	*ENG	[0 to 80 / 0 / 1uA/step]

2326	[Transfer Roller CL:Bias]		
	Adjusts the bias of the image transfer roller at power-on or a closed cover.		
001	Positive:befor and after JOB	*ENG	[0 to 2100 / 250 / 10V/step]
	Adjusts the positive voltage of the paper transfer roller for cleaning the paper transfer roller.		
002	Negative:befor and after JOB	*ENG	[10 to 995 / 100 / 10%/step]
	Adjusts the negative current of the paper transfer roller for cleaning the paper transfer roller.		
003	Positive:befor and afterProcon	*ENG	[0 to 2100 / 2000 / 10V/step]
	Adjusts the positive current limit of the paper transfer roller for cleaning the paper transfer roller.		
004	Negative:befor and afterProcon	*ENG	[10 to 995 / 100 / 10%/step]

Main SP Tables-2

	Adjusts the negative current limit of the paper transfer roller for cleaning the paper transfer roller.		
005	Positive:prevention	*ENG	[0 to 2100 / 500 / 10V/step]

2327	[Transfer Roller CL:Bias]		
001	Recovery	*ENG	[0 to 20 / 10 / 1times/step]
002	Process Control	*ENG	[0 to 20 / 5 / 1times/step]

2351	[Common:BW:Bias]		
	Image Transfer Belt: B/W: Bias Adjustment Standard: 260 mm/sec, Middle: 182 mm/sec, Low: 85 mm/sec		
001	Image Transfer:standard	*ENG	[0 to 60 / 20 / 1μA]
	Adjusts the current for the image transfer belt in B/W mode for plain paper.		
003	Image Transfer:low	*ENG	[0 to 60 / 10 / 1μA]
	Adjusts the current for the image transfer belt in B/W mode for thick 1 paper.		

2357	[Common:FC:Bias]		
	Image Transfer Belt: Full Color: Bias Adjustment		
001	ImageTransfer:standard:Bk	*ENG	[0 to 60 / 19 / 1uA/step]
002	ImageTransfer:standard:C	*ENG	[0 to 60 / 21 / 1uA/step]
003	ImageTransfer:standard:M	*ENG	[0 to 60 / 23 / 1uA/step]
004	ImageTransfer:standard:Y	*ENG	[0 to 60 / 27 / 1uA/step]
009	Image Transfer:low:Bk	*ENG	[0 to 60 / 10 / 1uA/step]
010	Image Transfer:low:C	*ENG	[0 to 60 / 10 / 1uA/step]
011	Image Transfer:low:M	*ENG	[0 to 60 / 11 / 1uA/step]
012	Image Transfer:low:Y	*ENG	[0 to 60 / 13 / 1uA/step]

2360	[Common:BW:Env.CorrectionTable]		
001	Image Transfer:standard	*ENG	[1 to 100 / 87 / 1/step]
003	Image Transfer:low	*ENG	[1 to 100 / 89 / 1/step]
2360	[Common:FC:Env.CorrectionTable]		
004	ImageTransfer:standard:Bk	*ENG	[1 to 100 / 87 / 1/step]
005	ImageTransfer:standard:C	*ENG	[1 to 100 / 87 / 1/step]
006	ImageTransfer:standard:M	*ENG	[1 to 100 / 88 / 1/step]
007	ImageTransfer:standard:Y	*ENG	[1 to 100 / 30 / 1/step]
012	Image Transfer:low:Bk	*ENG	[1 to 100 / 89 / 1/step]
013	Image Transfer:low:C	*ENG	[1 to 100 / 92 / 1/step]
014	Image Transfer:low:M	*ENG	[1 to 100 / 90 / 1/step]
015	Image Transfer:low:Y	*ENG	[1 to 100 / 91 / 1/step]

	[Plain1:Bias]		
2401	Adjusts the DC voltage of the discharge plate for plain 1 paper. Standard: 260 mm/sec, Low: 85 mm/sec		
001	Separation DC:standard:1side	*ENG	[0 to 4000 / 0 / 10-V/step]
002	Separation DC:standard:2side	*ENG	
003	Separation DC:low:1side	*ENG	
004	Separation DC:low:2side	*ENG	

2403	[Plain1:Bias:BW]		
	Adjusts the current for the paper transfer roller for plain 1 paper in black-and-white mode.		
001	PaperTransfer:standard:1side	*ENG	[0 to 200 / 25 / 1-uA/step]
002	PaperTransfer:standard:2side	*ENG	[0 to 200 / 23 / 1-uA/step]
003	PaperTransfer:low:1side	*ENG	[0 to 200 / 15 / 1-uA/step]
004	PaperTransfer:low:2side	*ENG	[0 to 200 / 13 / 1-uA/step]

2407	[Plain1:Bias:FC]		
	Adjusts the current for the paper transfer roller for plain 1 paper in full color mode.		
001	PaperTransfer:standard:1side	*ENG	[0 to 200 / 28 / 1-uA/step]
002	PaperTransfer:standard:2side	*ENG	[0 to 200 / 30 / 1-uA/step]
003	PaperTransfer:low:1side	*ENG	[0 to 200 / 20 / 1-uA/step]
004	PaperTransfer:low:2side	*ENG	[0 to 200 / 18 / 1-uA/step]

2411	[Plain1:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
002	PaperTransfer:Standard:2Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
003	PaperTransfer:Low:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:Low:2Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
005	PaperTransfer:Standard:1Sid:S2	*ENG	[100 to 995 / 128 / 5%/step]
006	PaperTransfer:Standard:2Sid:S2	*ENG	[100 to 995 / 156 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[100 to 995 / 139 / 5%/step]

008	PaperTransfer:Low:2Side:S2	*ENG	[100 to 995 / 194 / 5%/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[100 to 995 / 140 / 5%/step]
010	PaperTransfer:Standard:2Sid:S3	*ENG	[100 to 995 / 240 / 5%/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[100 to 995 / 139 / 5%/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[100 to 995 / 250 / 5%/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[100 to 995 / 144 / 5%/step]
014	PaperTransfer:Standard:2Sid:S4	*ENG	[100 to 995 / 244 / 5%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[100 to 995 / 156 / 5%/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[100 to 995 / 250 / 5%/step]

2412	[Plain1:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
002	PaperTransfer:Standard:2Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
003	PaperTransfer:Low:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:Low:2Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
005	PaperTransfer:Standard:1Sid:S2	*ENG	[100 to 995 / 132 / 5%/step]
006	PaperTransfer:Standard:2Sid:S2	*ENG	[100 to 995 / 171 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[100 to 995 / 127 / 5%/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[100 to 995 / 196 / 5%/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[100 to 995 / 132 / 5%/step]
010	PaperTransfer:Standard:2Sid:S3	*ENG	[100 to 995 / 229 / 5%/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[100 to 995 / 182 / 5%/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[100 to 995 / 274 / 5%/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[100 to 995 / 147 / 5%/step]

014	PaperTransfer:Standard:2Sid:S4	*ENG	[100 to 995 / 243 / 5%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[100 to 995 / 205 / 5%/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[100 to 995 / 283 / 5%/step]

2413	[Plain1:Size-Env.Correct:BW]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[1 to 100 / 21 / 1/step]
002	PaperTransfer:Standard:2Sid:S1	*ENG	[1 to 100 / 22 / 1/step]
003	PaperTransfer:Low:1Side:S1	*ENG	[1 to 100 / 23 / 1/step]
004	PaperTransfer:Low:2Side:S1	*ENG	[1 to 100 / 27 / 1/step]
005	PaperTransfer:Standard:1Sid:S2	*ENG	[1 to 100 / 27 / 1/step]
006	PaperTransfer:Standard:2Sid:S2	*ENG	[1 to 100 / 32 / 1/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[1 to 100 / 36 / 1/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[1 to 100 / 68 / 1/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[1 to 100 / 23 / 1/step]
010	PaperTransfer:Standard:2Sid:S3	*ENG	[1 to 100 / 8 / 1/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[1 to 100 / 23 / 1/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[1 to 100 / 66 / 1/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[1 to 100 / 27 / 1/step]
014	PaperTransfer:Standard:2Sid:S4	*ENG	[1 to 100 / 49 / 1/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[1 to 100 / 26 / 1/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[1 to 100 / 47 / 1/step]

2414	[Plain1:Size-Env.Correct:FC]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[1 to 100 / 81 / 1/step]
002	PaperTransfer:Standard:2Sid:S1	*ENG	[1 to 100 / 82 / 1/step]
003	PaperTransfer:Low:1Side:S1	*ENG	[1 to 100 / 17 / 1/step]
004	PaperTransfer:Low:2Side:S1	*ENG	[1 to 100 / 83 / 1/step]
005	PaperTransfer:Standard:1Sid:S2	*ENG	[1 to 100 / 17 / 1/step]
006	PaperTransfer:Standard:2Sid:S2	*ENG	[1 to 100 / 26 / 1/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[1 to 100 / 36 / 1/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[1 to 100 / 66 / 1/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[1 to 100 / 23 / 1/step]
010	PaperTransfer:Standard:2Sid:S3	*ENG	[1 to 100 / 60 / 1/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[1 to 100 / 22 / 1/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[1 to 100 / 66 / 1/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[1 to 100 / 48 / 1/step]
014	PaperTransfer:Standard:2Sid:S4	*ENG	[1 to 100 / 69 / 1/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[1 to 100 / 16 / 1/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[1 to 100 / 79 / 1/step]

2415	[Plain1:LeadingEdgeCorrection]		
	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode.		
001	PaperTransfer:Standard:1Side	*ENG	[0 to 995 / 100 / 5%/step]
002	PaperTransfer:Standard:2Side	*ENG	[0 to 995 / 100 / 5%/step]

003	Paper Transfer:Low:1side	*ENG	[0 to 995 / 100 / 5%/step]
004	Paper Transfer:Low:2side	*ENG	[0 to 995 / 100 / 5%/step]
005	Separation DC:Standard:1side	*ENG	[0 to 995 / 100 / 5%/step]
006	Separation DC:Standard:2side	*ENG	[0 to 995 / 100 / 5%/step]
007	Separation DC:Low:1side	*ENG	[0 to 995 / 100 / 5%/step]
008	Separation DC:Low:2side	*ENG	[0 to 995 / 100 / 5%/step]

2416	[Plain1:SwitchTimingLeadEdge]		
	Adjusts the bias/ voltage switch timing of the paper transfer roller/ discharge plate at the paper leading edge between the erase margin area and the image area.		
001	PaperTransfer:Standard:1side	*ENG	[0 to 50 / 0 / 2mm/step]
002	PaperTransfer:Standard:2side	*ENG	[0 to 50 / 0 / 2mm/step]
003	Paper Transfer:Low:1side	*ENG	[0 to 50 / 0 / 2mm/step]
004	Paper Transfer:Low:2side	*ENG	[0 to 50 / 0 / 2mm/step]
005	Separation DC:Standard:1side	*ENG	[0 to 50 / 0 / 2mm/step]
006	Separation DC:Standard:2side	*ENG	[0 to 50 / 0 / 2mm/step]
007	Separation DC:Low:1side	*ENG	[0 to 50 / 0 / 2mm/step]
008	Separation DC:Low:2side	*ENG	[0 to 50 / 0 / 2mm/step]

2417	[Plain1:TrailEdgeCorrection]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
001	PaperTransfer:Standard:1Side	*ENG	[0 to 995 / 100 / 5%/step]
002	PaperTransfer:Standard:2Side	*ENG	[0 to 995 / 100 / 5%/step]
003	Paper Transfer:Low:1side	*ENG	[0 to 995 / 100 / 5%/step]
004	Paper Transfer:Low:2side	*ENG	[0 to 995 / 100 / 5%/step]
005	Separation DC:Standard:1side	*ENG	[0 to 995 / 100 / 5%/step]
006	Separation DC:Standard:2side	*ENG	[0 to 995 / 100 / 5%/step]
007	Separation DC:Low:1side	*ENG	[0 to 995 / 100 / 5%/step]
008	Separation DC:Low:2side	*ENG	[0 to 995 / 100 / 5%/step]

2418	[Plain1:SwitchTimingTrailEdge]		
	Adjusts the bias/voltage switch timing of the paper transfer roller/discharge plate at the paper trailing edge between the erase margin area and the image area.		
001	PaperTransfer:Standard:1side	*ENG	[0 to 50 / 0 / 2mm/step]
002	PaperTransfer:Standard:2side	*ENG	[0 to 50 / 0 / 2mm/step]
003	Paper Transfer:Low:1side	*ENG	[0 to 50 / 0 / 2mm/step]
004	Paper Transfer:Low:2side	*ENG	[0 to 50 / 0 / 2mm/step]
005	Separation DC:Standard:1side	*ENG	[0 to 50 / 0 / 2mm/step]
006	Separation DC:Standard:2side	*ENG	[0 to 50 / 0 / 2mm/step]
007	Separation DC:Low:1side	*ENG	[0 to 50 / 0 / 2mm/step]
008	Separation DC:Low:2side	*ENG	[0 to 50 / 0 / 2mm/step]

2419	[Plain1:EnvCorrectionTable]		
013	Separation DC:Standard:1side	*ENG	[1 to 100 / 30 / 1/step]
014	Separation DC:Standard:2side	*ENG	
015	Separation DC:Low:1side	*ENG	
016	Separation DC:Low:2side	*ENG	
2419	[Plain1:EdgeEnvCorrection]		
017	Separation DC:Standard:1side	*ENG	[1 to 100 / 50 / 1/step]
018	Separation DC:Standard:2side	*ENG	
019	Separation DC:Low:1side	*ENG	
020	Separation DC:Low:2side	*ENG	

2421	[Plain2:Bias]		
	Adjusts the DC voltage of the discharge plate for plain2 paper.		
001	Separation DC:standard:1side	*ENG	[0 to 4000 / 0 / 10-V/step]
002	Separation DC:standard:2side	*ENG	[0 to 4000 / 0 / 10-V/step]
003	Separation DC:low:1side	*ENG	[0 to 4000 / 0 / 10-V/step]
004	Separation DC:low:2side	*ENG	[0 to 4000 / 0 / 10-V/step]

2423	[Plain2:Bias:BW]		
	Adjusts the current for the paper transfer roller for plain2 paper in black-and-white mode.		
001	PaperTransfer:standard:1side	*ENG	[0 to 200 / 34 / 1-uA/step]
002	PaperTransfer:standard:2side	*ENG	[0 to 200 / 25 / 1-uA/step]
003	PaperTransfer:low:1side	*ENG	[0 to 200 / 26 / 1-uA/step]
004	PaperTransfer:low:2side	*ENG	[0 to 200 / 18 / 1-uA/step]

2425	[HHsmall:LeadEdgeCorrection]		
001	PaperTransfer:1side	*ENG	[0 to 995 / 100 / 5%/step]
002	PaperTransfer:2stSide	*ENG	

2427	[Plain2:Bias:FC]		
	Adjusts the current for the paper transfer roller for plain2 paper in full color mode.		
001	PaperTransfer:standard:1side	*ENG	[0 to 200 / 38 / 1-uA/step]
002	PaperTransfer:standard:2side	*ENG	[0 to 200 / 28 / 1-uA/step]
003	PaperTransfer:low:1side	*ENG	[0 to 200 / 29 / 1-uA/step]
004	PaperTransfer:low:2side	*ENG	[0 to 200 / 18 / 1-uA/step]

2431	[Plain2:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
002	PaperTransfer:Standard:2Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
003	PaperTransfer:Low:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:Low:2Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
005	PaperTransfer:Standard:1Sid:S2	*ENG	[100 to 995 / 128 / 5%/step]
006	PaperTransfer:Standard:2Sid:S2	*ENG	[100 to 995 / 156 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[100 to 995 / 139 / 5%/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[100 to 995 / 194 / 5%/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[100 to 995 / 140 / 5%/step]
010	PaperTransfer:Standard:2Sid:S3	*ENG	[100 to 995 / 240 / 5%/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[100 to 995 / 139 / 5%/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[100 to 995 / 250 / 5%/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[100 to 995 / 144 / 5%/step]
014	PaperTransfer:Standard:2Sid:S4	*ENG	[100 to 995 / 244 / 5%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[100 to 995 / 156 / 5%/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[100 to 995 / 250 / 5%/step]

2432	[Plain2:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
002	PaperTransfer:Standard:2Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
003	PaperTransfer:Low:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:Low:2Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
005	PaperTransfer:Standard:1Sid:S2	*ENG	[100 to 995 / 132 / 5%/step]
006	PaperTransfer:Standard:2Sid:S2	*ENG	[100 to 995 / 171 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[100 to 995 / 127 / 5%/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[100 to 995 / 196 / 5%/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[100 to 995 / 132 / 5%/step]
010	PaperTransfer:Standard:2Sid:S3	*ENG	[100 to 995 / 229 / 5%/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[100 to 995 / 182 / 5%/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[100 to 995 / 274 / 5%/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[100 to 995 / 147 / 5%/step]
014	PaperTransfer:Standard:2Sid:S4	*ENG	[100 to 995 / 243 / 5%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[100 to 995 / 205 / 5%/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[100 to 995 / 283 / 5%/step]

2433	[Plain2:Size-Env.Correct:BW]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[1 to 100 / 78 / 1/step]
002	PaperTransfer:Standard:2Sid:S1	*ENG	[1 to 100 / 35 / 1/step]
003	PaperTransfer:Low:1Side:S1	*ENG	[1 to 100 / 31 / 1/step]
004	PaperTransfer:Low:2Side:S1	*ENG	[1 to 100 / 27 / 1/step]
005	PaperTransfer:Standard:1Sid:S2	*ENG	[1 to 100 / 27 / 1/step]
006	PaperTransfer:Standard:2Sid:S2	*ENG	[1 to 100 / 32 / 1/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[1 to 100 / 36 / 1/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[1 to 100 / 68 / 1/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[1 to 100 / 23 / 1/step]
010	PaperTransfer:Standard:2Sid:S3	*ENG	[1 to 100 / 8 / 1/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[1 to 100 / 23 / 1/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[1 to 100 / 66 / 1/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[1 to 100 / 27 / 1/step]
014	PaperTransfer:Standard:2Sid:S4	*ENG	[1 to 100 / 49 / 1/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[1 to 100 / 26 / 1/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[1 to 100 / 47 / 1/step]

2434	[Plain2:Size-Env.Correct:FC]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[1 to 100 / 84 / 1/step]
002	PaperTransfer:Standard:2Sid:S1	*ENG	[1 to 100 / 67 / 1/step]
003	PaperTransfer:Low:1Side:S1	*ENG	[1 to 100 / 32 / 1/step]
004	PaperTransfer:Low:2Side:S1	*ENG	[1 to 100 / 24 / 1/step]
005	PaperTransfer:Standard:1Sid:S2	*ENG	[1 to 100 / 17 / 1/step]
006	PaperTransfer:Standard:2Sid:S2	*ENG	[1 to 100 / 26 / 1/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[1 to 100 / 36 / 1/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[1 to 100 / 66 / 1/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[1 to 100 / 23 / 1/step]
010	PaperTransfer:Standard:2Sid:S3	*ENG	[1 to 100 / 60 / 1/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[1 to 100 / 22 / 1/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[1 to 100 / 66 / 1/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[1 to 100 / 48 / 1/step]
014	PaperTransfer:Standard:2Sid:S4	*ENG	[1 to 100 / 69 / 1/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[1 to 100 / 16 / 1/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[1 to 100 / 79 / 1/step]

2435	[Plain2:LeadingEdgeCorrection]		
	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode.		
001	PaperTransfer:Standard:1Side	*ENG	[0 to 995 / 100 / 5%/step]
002	PaperTransfer:Standard:2Side	*ENG	[0 to 995 / 100 / 5%/step]
003	Paper Transfer:Low:1side	*ENG	[0 to 995 / 100 / 5%/step]
004	Paper Transfer:Low:2side	*ENG	[0 to 995 / 100 / 5%/step]
005	Separation DC:Standard:1side	*ENG	[0 to 995 / 100 / 5%/step]
006	Separation DC:Standard:2side	*ENG	[0 to 995 / 100 / 5%/step]
007	Separation DC:Low:1side	*ENG	[0 to 995 / 100 / 5%/step]
008	Separation DC:Low:2side	*ENG	[0 to 995 / 100 / 5%/step]

2436	[Plain2:SwitchTimingLeadEdge]		
	Adjusts the bias/ voltage switch timing of the paper transfer roller/ discharge plate at the paper leading edge between the erase margin area and the image area.		
001	PaperTransfer:Standard:1side	*ENG	[0 to 50 / 0 / 2mm/step]
002	PaperTransfer:Standard:2side	*ENG	[0 to 50 / 0 / 2mm/step]
003	Paper Transfer:Low:1side	*ENG	[0 to 50 / 0 / 2mm/step]
004	Paper Transfer:Low:2side	*ENG	[0 to 50 / 0 / 2mm/step]
005	Separation DC:Standard:1side	*ENG	[0 to 50 / 0 / 2mm/step]
006	Separation DC:Standard:2side	*ENG	[0 to 50 / 0 / 2mm/step]
007	Separation DC:Low:1side	*ENG	[0 to 50 / 0 / 2mm/step]
008	Separation DC:Low:2side	*ENG	[0 to 50 / 0 / 2mm/step]

2437	[Plain2:TrailEdgeCorrection]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
001	PaperTransfer:Standard:1Side	*ENG	[0 to 995 / 100 / 5%/step]
002	PaperTransfer:Standard:2Side	*ENG	[0 to 995 / 100 / 5%/step]
003	Paper Transfer:Low:1side	*ENG	[0 to 995 / 100 / 5%/step]
004	Paper Transfer:Low:2side	*ENG	[0 to 995 / 100 / 5%/step]
005	Separation DC:Standard:1side	*ENG	[0 to 995 / 100 / 5%/step]
006	Separation DC:Standard:2side	*ENG	[0 to 995 / 100 / 5%/step]
007	Separation DC:Low:1side	*ENG	[0 to 995 / 100 / 5%/step]
008	Separation DC:Low:2side	*ENG	[0 to 995 / 100 / 5%/step]

2438	[Plain2:SwitchTimingTrailEdge]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
001	PaperTransfer:Standard:1side	*ENG	[0 to 50 / 0 / 2mm/step]
002	PaperTransfer:Standard:2side	*ENG	[0 to 50 / 0 / 2mm/step]
003	Paper Transfer:Low:1side	*ENG	[0 to 50 / 0 / 2mm/step]
004	Paper Transfer:Low:2side	*ENG	[0 to 50 / 0 / 2mm/step]
005	Separation DC:Standard:1side	*ENG	[0 to 50 / 0 / 2mm/step]
006	Separation DC:Standard:2side	*ENG	[0 to 50 / 0 / 2mm/step]
007	Separation DC:Low:1side	*ENG	[0 to 50 / 0 / 2mm/step]
008	Separation DC:Low:2side	*ENG	[0 to 50 / 0 / 2mm/step]

2439	[Plain2:EnvCorrectionTable]		
013	Separation DC:Standard:1side	*ENG	[1 to 100 / 30 / 1/step]
014	Separation DC:Standard:2side	*ENG	
015	Separation DC:Low:1side	*ENG	
016	Separation DC:Low:2side	*ENG	
2439	[Plain2:EdgeEnvCorrection]		
017	Separation DC:Standard:1side	*ENG	[1 to 100 / 50 / 1/step]
018	Separation DC:Standard:2side	*ENG	
019	Separation DC:Low:1side	*ENG	
020	Separation DC:Low:2side	*ENG	

2441	[Middle:Bias]		
	Adjusts the DC voltage of the discharge plate for middle thick paper.		
001	Separation DC:standard:1side	*ENG	[0 to 4000 / 0 / 10-V/step]
002	Separation DC:standard:2side	*ENG	[0 to 4000 / 0 / 10-V/step]
003	Separation DC:low:1side	*ENG	[0 to 4000 / 0 / 10-V/step]
004	Separation DC:low:2side	*ENG	[0 to 4000 / 0 / 10-V/step]

2443	[Middle:Bias:BW]		
	Adjusts the current for the paper transfer roller for middle thick paper in black-and-white mode.		
001	PaperTransfer:standard:1side	*ENG	[0 to 200 / 30 / 1-uA/step]
002	PaperTransfer:standard:2side	*ENG	[0 to 200 / 23 / 1-uA/step]
003	PaperTransfer:low:1side	*ENG	[0 to 200 / 28 / 1-uA/step]
004	PaperTransfer:low:2side	*ENG	[0 to 200 / 17 / 1-uA/step]

2447	[Middle:Bias:FC]		
	Adjusts the current for the paper transfer roller for middle thick paper in full color mode.		
001	PaperTransfer:standard:1side	*ENG	[0 to 200 / 32 / 1-uA/step]
002	PaperTransfer:standard:2side	*ENG	[0 to 200 / 28 / 1-uA/step]
003	PaperTransfer:low:1side	*ENG	[0 to 200 / 28 / 1-uA/step]
004	PaperTransfer:low:2side	*ENG	[0 to 200 / 20 / 1-uA/step]

2451	[Middle:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
002	PaperTransfer:Standard:2Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
003	PaperTransfer:Low:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:Low:2Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
005	PaperTransfer:Standard:1Sid:S2	*ENG	[100 to 995 / 145 / 5%/step]
006	PaperTransfer:Standard:2Sid:S2	*ENG	[100 to 995 / 156 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[100 to 995 / 121 / 5%/step]

008	PaperTransfer:Low:2Side:S2	*ENG	[100 to 995 / 143 / 5%/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[100 to 995 / 159 / 5%/step]
010	PaperTransfer:Standard:2Sid:S3	*ENG	[100 to 995 / 200 / 5%/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[100 to 995 / 118 / 5%/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[100 to 995 / 214 / 5%/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[100 to 995 / 164 / 5%/step]
014	PaperTransfer:Standard:2Sid:S4	*ENG	[100 to 995 / 240 / 5%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[100 to 995 / 132 / 5%/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[100 to 995 / 257 / 5%/step]

2452	[Middle:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
002	PaperTransfer:Standard:2Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
003	PaperTransfer:Low:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:Low:2Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
005	PaperTransfer:Standard:1Sid:S2	*ENG	[100 to 995 / 147 / 5%/step]
006	PaperTransfer:Standard:2Sid:S2	*ENG	[100 to 995 / 160 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[100 to 995 / 143 / 5%/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[100 to 995 / 220 / 5%/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[100 to 995 / 147 / 5%/step]
010	PaperTransfer:Standard:2Sid:S3	*ENG	[100 to 995 / 220 / 5%/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[100 to 995 / 167 / 5%/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[100 to 995 / 270 / 5%/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[100 to 995 / 176 / 5%/step]

014	PaperTransfer:Standard:2Sid:S4	*ENG	[100 to 995 / 353 / 5%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[100 to 995 / 167 / 5%/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[100 to 995 / 341 / 5%/step]

2453	[Middle:Size-Env.Correct:BW]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[1 to 100 / 78 / 1/step]
002	PaperTransfer:Standard:2Sid:S1	*ENG	[1 to 100 / 85 / 1/step]
003	PaperTransfer:Low:1Side:S1	*ENG	[1 to 100 / 86 / 1/step]
004	PaperTransfer:Low:2Side:S1	*ENG	[1 to 100 / 19 / 1/step]
005	PaperTransfer:Standard:1Sid:S2	*ENG	[1 to 100 / 27 / 1/step]
006	PaperTransfer:Standard:2Sid:S2	*ENG	[1 to 100 / 32 / 1/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[1 to 100 / 74 / 1/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[1 to 100 / 40 / 1/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[1 to 100 / 17 / 1/step]
010	PaperTransfer:Standard:2Sid:S3	*ENG	[1 to 100 / 49 / 1/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[1 to 100 / 67 / 1/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[1 to 100 / 25 / 1/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[1 to 100 / 27 / 1/step]
014	PaperTransfer:Standard:2Sid:S4	*ENG	[1 to 100 / 49 / 1/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[1 to 100 / 19 / 1/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[1 to 100 / 16 / 1/step]

2454	[Middle:Size-Env.Correct:FC]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[1 to 100 / 37 / 1/step]
002	PaperTransfer:Standard:2Sid:S1	*ENG	[1 to 100 / 67 / 1/step]
003	PaperTransfer:Low:1Side:S1	*ENG	[1 to 100 / 31 / 1/step]
004	PaperTransfer:Low:2Side:S1	*ENG	[1 to 100 / 17 / 1/step]
005	PaperTransfer:Standard:1Sid:S2	*ENG	[1 to 100 / 40 / 1/step]
006	PaperTransfer:Standard:2Sid:S2	*ENG	[1 to 100 / 68 / 1/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[1 to 100 / 32 / 1/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[1 to 100 / 38 / 1/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[1 to 100 / 23 / 1/step]
010	PaperTransfer:Standard:2Sid:S3	*ENG	[1 to 100 / 66 / 1/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[1 to 100 / 37 / 1/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[1 to 100 / 38 / 1/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[1 to 100 / 19 / 1/step]
014	PaperTransfer:Standard:2Sid:S4	*ENG	[1 to 100 / 49 / 1/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[1 to 100 / 24 / 1/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[1 to 100 / 47 / 1/step]

2455	[Middle:LeadingEdgeCorrection]		
	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode.		
001	PaperTransfer:Standard:1Side	*ENG	[0 to 995 / 100 / 5%/step]
002	PaperTransfer:Standard:2Side	*ENG	[0 to 995 / 100 / 5%/step]

003	Paper Transfer:Low:1side	*ENG	[0 to 995 / 100 / 5%/step]
004	Paper Transfer:Low:2side	*ENG	[0 to 995 / 100 / 5%/step]
005	Separation DC:Standard:1side	*ENG	[0 to 995 / 100 / 5%/step]
006	Separation DC:Standard:2side	*ENG	[0 to 995 / 100 / 5%/step]
007	Separation DC:Low:1side	*ENG	[0 to 995 / 100 / 5%/step]
008	Separation DC:Low:2side	*ENG	[0 to 995 / 100 / 5%/step]

2456	[Middle:SwitchTimingLeadEdge]		
	Adjusts the bias/ voltage switch timing of the paper transfer roller/ discharge plate at the paper leading edge between the erase margin area and the image area.		
001	PaperTransfer:Standard:1side	*ENG	[0 to 50 / 0 / 2mm/step]
002	PaperTransfer:Standard:2side	*ENG	[0 to 50 / 0 / 2mm/step]
003	Paper Transfer:Low:1side	*ENG	[0 to 50 / 0 / 2mm/step]
004	Paper Transfer:Low:2side	*ENG	[0 to 50 / 0 / 2mm/step]
005	Separation DC:Standard:1side	*ENG	[0 to 50 / 0 / 2mm/step]
006	Separation DC:Standard:2side	*ENG	[0 to 50 / 0 / 2mm/step]
007	Separation DC:Low:1side	*ENG	[0 to 50 / 0 / 2mm/step]
008	Separation DC:Low:2side	*ENG	[0 to 50 / 0 / 2mm/step]

2457	[Middle:TrailEdgeCorrection]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
001	PaperTransfer:Standard:1Side	*ENG	[0 to 995 / 100 / 5%/step]
002	PaperTransfer:Standard:2Side	*ENG	[0 to 995 / 100 / 5%/step]
003	Paper Transfer:Low:1side	*ENG	[0 to 995 / 100 / 5%/step]
004	Paper Transfer:Low:2side	*ENG	[0 to 995 / 100 / 5%/step]
005	Separation DC:Standard:1side	*ENG	[0 to 995 / 100 / 5%/step]
006	Separation DC:Standard:2side	*ENG	[0 to 995 / 100 / 5%/step]
007	Separation DC:Low:1side	*ENG	[0 to 995 / 100 / 5%/step]
008	Separation DC:Low:2side	*ENG	[0 to 995 / 100 / 5%/step]

2458	[Middle:SwitchTimingTrailEdge]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
001	PaperTransfer:Standard:1side	*ENG	[0 to 50 / 0 / 2mm/step]
002	PaperTransfer:Standard:2side	*ENG	[0 to 50 / 0 / 2mm/step]
003	Paper Transfer:Low:1side	*ENG	[0 to 50 / 0 / 2mm/step]
004	Paper Transfer:Low:2side	*ENG	[0 to 50 / 0 / 2mm/step]
005	Separation DC:Standard:1side	*ENG	[0 to 50 / 0 / 2mm/step]
006	Separation DC:Standard:2side	*ENG	[0 to 50 / 0 / 2mm/step]
007	Separation DC:Low:1side	*ENG	[0 to 50 / 0 / 2mm/step]
008	Separation DC:Low:2side	*ENG	[0 to 50 / 0 / 2mm/step]

2459	[Middle:EnvCorrectionTable]		
013	Separation DC:Standard:1side	*ENG	[1 to 100 / 30 / 1/step]
014	Separation DC:Standard:2side	*ENG	
015	Separation DC:Low:1side	*ENG	
016	Separation DC:Low:2side	*ENG	
2459	[Middle:EdgeEnvCorrection]		
017	Separation DC:Standard:1side	*ENG	[1 to 100 / 50 / 1/step]
018	Separation DC:Standard:2side	*ENG	
019	Separation DC:Low:1side	*ENG	
020	Separation DC:Low:2side	*ENG	

2461	[Thin:Bias]		
	Adjusts the DC voltage of the discharge plate for thin paper.		
001	Separation DC:standard:1side	*ENG	[0 to 4000 / 2000 / 10-V/step]
003	Separation DC:low:1side	*ENG	[0 to 4000 / 2000 / 10-V/step]

2463	[Thin:Bias:BW]		
	Adjusts the current for the paper transfer roller for thin paper in black-and-white mode.		
001	PaperTransfer:Standard:1Sid	*ENG	[0 to 200 / 13 / 1-uA/step]
003	Paper Transfer:Low:1side	*ENG	[0 to 200 / 11 / 1-uA/step]

2467	[Thin:Bias:FC]		
	Adjusts the current for the paper transfer roller for thin paper in full color mode.		
001	PaperTransfer:Standard:1Sid	*ENG	[0 to 200 / 17 / 1-uA/step]
003	Paper Transfer:Low:1side	*ENG	[0 to 200 / 16 / 1-uA/step]

2471	[Thin:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
003	PaperTransfer:Low:1Side:S1	*ENG	
005	PaperTransfer:Standard:1Sid:S2	*ENG	[100 to 995 / 135 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	
009	PaperTransfer:Standard:1Sid:S3	*ENG	
011	PaperTransfer:Low:1Side:S3	*ENG	
013	PaperTransfer:Standard:1Sid:S4	*ENG	[100 to 995 / 220 / 5%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	

2472	[Thin:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
003	PaperTransfer:Low:1Side:S1	*ENG	
005	PaperTransfer:Standard:1Sid:S2	*ENG	[100 to 995 / 135 / 5%/step]
007	Paper Transfer:Low:1Side:S2	*ENG	
009	PaperTransfer:Standard:1Sid:S3	*ENG	
011	PaperTransfer:Low:1Side:S3	*ENG	

013	PaperTransfer:Standard:1Sid:S4	*ENG	[100 to 995 / 220 / 5%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	

2473	[Thin:Size-Env.Correct:BW]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[1 to 100 / 16 / 1/step]
003	PaperTransfer:Low:1Side:S1	*ENG	[1 to 100 / 21 / 1/step]
005	PaperTransfer:Standard:1Sid:S2	*ENG	[1 to 100 / 8 / 1/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[1 to 100 / 21 / 1/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[1 to 100 / 8 / 1/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[1 to 100 / 21 / 1/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[1 to 100 / 16 / 1/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[1 to 100 / 21 / 1/step]

2474	[Thin:Size-Env.Correct:FC]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[1 to 100 / 9 / 1/step]
003	PaperTransfer:Low:1Side:S1	*ENG	[1 to 100 / 26 / 1/step]
005	PaperTransfer:Standard:1Sid:S2	*ENG	[1 to 100 / 9 / 1/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[1 to 100 / 26 / 1/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[1 to 100 / 9 / 1/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[1 to 100 / 26 / 1/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[1 to 100 / 9 / 1/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[1 to 100 / 26 / 1/step]

2475	[Thin:LeadingEdgeCorrection]		
	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode.		
001	PaperTransfer:Standard:1Side	*ENG	[0 to 995 / 100 / 5%/step]
003	Paper Transfer:Low:1side	*ENG	
005	Separation DC:Standard:1side	*ENG	[0 to 995 / 200 / 5%/step]
007	Separation DC:Low:1side	*ENG	

2476	[Thin:SwitchTimingLeadEdge]		
	Adjusts the bias/ voltage switch timing of the paper transfer roller/ discharge plate at the paper leading edge between the erase margin area and the image area.		
001	PaperTransfer:Standard:1side	*ENG	[0 to 50 / 0 / 2mm/step]
003	Paper Transfer:Low:1side	*ENG	
005	Separation DC:Standard:1side	*ENG	[0 to 50 / 30 / 2mm/step]
007	Separation DC:Low:1side	*ENG	

2477	[Thin:TrailEdgeCorrection]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
001	PaperTransfer:Standard:1Side	*ENG	[0 to 995 / 100 / 5%/step]
003	Paper Transfer:Low:1side	*ENG	
005	Separation DC:Standard:1side	*ENG	
007	Separation DC:Low:1side	*ENG	

2478	[Thin:SwitchTimingTrailEdge]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
001	PaperTransfer:Standard:1side	*ENG	[0 to 50 / 0 / 2mm/step]
003	Paper Transfer:Low:1side	*ENG	
005	Separation DC:Standard:1side	*ENG	
007	Separation DC:Low:1side	*ENG	

2479	[Thin:EnvCorrectionTable]		
013	Separation DC:Standard:1side	*ENG	[1 to 100 / 30 / 1/step]
015	Separation DC:Low:1side	*ENG	
2479	[Thin:EdgeEnvCorrection]		
017	Separation DC:Standard:1side	*ENG	[1 to 100 / 30 / 1/step]
019	Separation DC:Low:1side	*ENG	

2481	[Thick1:Bias]		
	Adjusts the DC voltage of the discharge plate for thick 1 paper.		
003	Separation DC:1side	*ENG	[0 to 4000 / 0 / 10-V/step]
004	Separation DC:2side	*ENG	

2483	[Thick1:Bias:BW]		
	Adjusts the current for the paper transfer roller for thick 1 paper in black-and-white mode.		
003	PaperTransfer:1side	*ENG	[0 to 200 / 28 / 1-uA/step]
004	PaperTransfer:2side	*ENG	[0 to 200 / 19 / 1-uA/step]

2487	[Thick1:Bias:FC]		
	Adjusts the current for the paper transfer roller for thick 1 paper in full color mode.		
003	PaperTransfer:1side	*ENG	[0 to 200 / 28 / 1-uA/step]
004	PaperTransfer:2side	*ENG	[0 to 200 / 21 / 1-uA/step]

2491	[Thick1:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:2Side:S1	*ENG	
007	PaperTransfer:1Side:S2	*ENG	[100 to 995 / 167 / 5%/step]
008	PaperTransfer:2Side:S2	*ENG	[100 to 995 / 150 / 5%/step]
011	PaperTransfer:1Side:S3	*ENG	[100 to 995 / 233 / 5%/step]
012	PaperTransfer:2Side:S3	*ENG	[100 to 995 / 250 / 5%/step]
015	PaperTransfer:1Side:S4	*ENG	[100 to 995 / 233 / 5%/step]
016	PaperTransfer:2Side:S4	*ENG	[100 to 995 / 361 / 5%/step]

2492	[Thick1:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:2Side:S1	*ENG	
007	PaperTransfer:1Side:S2	*ENG	[100 to 995 / 158 / 5%/step]
008	PaperTransfer:2Side:S2	*ENG	[100 to 995 / 210 / 5%/step]
011	PaperTransfer:1Side:S3	*ENG	[100 to 995 / 211 / 5%/step]
012	PaperTransfer:2Side:S3	*ENG	[100 to 995 / 280 / 5%/step]
015	PaperTransfer:1Side:S4	*ENG	[100 to 995 / 237 / 5%/step]
016	PaperTransfer:2Side:S4	*ENG	[100 to 995 / 300 / 5%/step]

2493	[Thick1:Size-Env.Correct:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[1 to 100 / 79 / 1/step]
004	PaperTransfer:2Side:S1	*ENG	[1 to 100 / 25 / 1/step]
007	PaperTransfer:1Side:S2	*ENG	[1 to 100 / 24 / 1/step]
008	PaperTransfer:2Side:S2	*ENG	[1 to 100 / 39 / 1/step]
011	PaperTransfer:1Side:S3	*ENG	[1 to 100 / 23 / 1/step]
012	PaperTransfer:2Side:S3	*ENG	[1 to 100 / 72 / 1/step]
015	PaperTransfer:1Side:S4	*ENG	[1 to 100 / 23 / 1/step]
016	PaperTransfer:2Side:S4	*ENG	[1 to 100 / 72 / 1/step]

2494	[Thick1:Size-Env.Correct:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[1 to 100 / 25 / 1/step]
004	PaperTransfer:2Side:S1	*ENG	[1 to 100 / 22 / 1/step]
007	PaperTransfer:1Side:S2	*ENG	[1 to 100 / 33 / 1/step]
008	PaperTransfer:2Side:S2	*ENG	[1 to 100 / 50 / 1/step]
011	PaperTransfer:1Side:S3	*ENG	[1 to 100 / 27 / 1/step]
012	PaperTransfer:2Side:S3	*ENG	[1 to 100 / 38 / 1/step]
015	PaperTransfer:1Side:S4	*ENG	[1 to 100 / 17 / 1/step]
016	PaperTransfer:2Side:S4	*ENG	[1 to 100 / 72 / 1/step]

2495	[Thick1:LeadingEdgeCorrection]		
	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode.		
003	Paper Transfer:1side	*ENG	[0 to 995 / 100 / 5%/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2496	[Thick1:SwitchTimingLeadEdge]		
	Adjusts the bias/ voltage switch timing of the paper transfer roller/ discharge plate at the paper leading edge between the erase margin area and the image area.		
003	Paper Transfer:1side	*ENG	[0 to 50 / 0 / 2mm/step]
004	Paper Transfer:2side	*ENG	

007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2497	[Thick1:TrailEdgeCorrection]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
003	Paper Transfer:1side	*ENG	[0 to 995 / 100 / 5%/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2498	[Thick1:SwitchTimingTrailEdge]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
003	Paper Transfer:1side	*ENG	[0 to 50 / 0 / 2mm/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2499	[Thick1:EnvCorrectionTable]		
015	Separation DC:1side	*ENG	[1 to 100 / 30 / 1/step]
016	Separation DC:2side	*ENG	
2499	[Thick1:EdgeEnvCorrection]		
019	Separation DC:1side	*ENG	[1 to 100 / 30 / 1/step]
020	Separation DC:2side	*ENG	

2501	[Thick2:Bias]		
	Adjusts the DC voltage of the discharge plate for thick 2 paper.		
003	Separation DC:1side	*ENG	[0 to 4000 / 0 / 10-V/step]
004	Separation DC:2side	*ENG	

2503	[Thick2:Bias:BW]		
	Adjusts the current for the paper transfer roller for thick 2 paper in black-and-white mode. Middle: 182 mm/sec, Low: 85 mm/sec		
003	PaperTransfer:1side	*ENG	[0 to 200 / 24 / 1-uA/step]
004	PaperTransfer:2side	*ENG	[0 to 200 / 18 / 1-uA/step]

2507	[Thick2:Bias:FC]		
	Adjusts the current for the paper transfer roller for thick 2 paper in full color mode. Middle: 182 mm/sec, Low: 85 mm/sec		
003	PaperTransfer:1side	*ENG	[0 to 200 / 26 / 1-uA/step]
004	PaperTransfer:2side	*ENG	[0 to 200 / 21 / 1-uA/step]

2511	[Thick2:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:2Side:S1	*ENG	
007	PaperTransfer:1Side:S2	*ENG	[100 to 995 / 167 / 5%/step]
008	PaperTransfer:2Side:S2	*ENG	[100 to 995 / 160 / 5%/step]
011	PaperTransfer:1Side:S3	*ENG	[100 to 995 / 233 / 5%/step]

012	PaperTransfer:2Side:S3	*ENG	[100 to 995 / 250 / 5%/step]
015	PaperTransfer:1Side:S4	*ENG	[100 to 995 / 233 / 5%/step]
016	PaperTransfer:2Side:S4	*ENG	[100 to 995 / 361 / 5%/step]

2512	[Thick2:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:2Side:S1	*ENG	
007	PaperTransfer:1Side:S2	*ENG	[100 to 995 / 158 / 5%/step]
008	PaperTransfer:2Side:S2	*ENG	[100 to 995 / 220 / 5%/step]
011	PaperTransfer:1Side:S3	*ENG	[100 to 995 / 211 / 5%/step]
012	PaperTransfer:2Side:S3	*ENG	[100 to 995 / 300 / 5%/step]
015	PaperTransfer:1Side:S4	*ENG	[100 to 995 / 237 / 5%/step]
016	PaperTransfer:2Side:S4	*ENG	[100 to 995 / 300 / 5%/step]

2513	[Thick2:Size-Env.Correct:BW]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[1 to 100 / 66 / 1/step]
004	PaperTransfer:2Side:S1	*ENG	[1 to 100 / 17 / 1/step]
007	PaperTransfer:1Side:S2	*ENG	[1 to 100 / 24 / 1/step]
008	PaperTransfer:2Side:S2	*ENG	[1 to 100 / 39 / 1/step]
011	PaperTransfer:1Side:S3	*ENG	[1 to 100 / 23 / 1/step]
012	PaperTransfer:2Side:S3	*ENG	[1 to 100 / 72 / 1/step]
015	PaperTransfer:1Side:S4	*ENG	[1 to 100 / 23 / 1/step]

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016	PaperTransfer:2Side:S4	*ENG	[1 to 100 / 72 / 1/step]
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2514	[Thick2:Size-Env.Correct:FC]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[1 to 100 / 25 / 1/step]
004	PaperTransfer:2Side:S1	*ENG	[1 to 100 / 17 / 1/step]
007	PaperTransfer:1Side:S2	*ENG	[1 to 100 / 33 / 1/step]
008	PaperTransfer:2Side:S2	*ENG	[1 to 100 / 50 / 1/step]
011	PaperTransfer:1Side:S3	*ENG	[1 to 100 / 27 / 1/step]
012	PaperTransfer:2Side:S3	*ENG	[1 to 100 / 38 / 1/step]
015	PaperTransfer:1Side:S4	*ENG	[1 to 100 / 17 / 1/step]
016	PaperTransfer:2Side:S4	*ENG	[1 to 100 / 72 / 1/step]

2515	[Thick2:LeadingEdgeCorrection]		
	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode.		
003	Paper Transfer:1side	*ENG	[0 to 995 / 100 / 5%/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2516	[Thick2:SwitchTimingLeadEdge]		
	Adjusts the bias/ voltage switch timing of the paper transfer roller/ discharge plate at the paper leading edge between the erase margin area and the image area.		
003	Paper Transfer:1side	*ENG	[0 to 50 / 0 / 2mm/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2517	[Thick2:TrailEdgeCorrection]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
003	Paper Transfer:1side	*ENG	[0 to 995 / 100 / 5%/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2518	[Thick2:SwitchTimingTrailEdge]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
003	Paper Transfer:1side	*ENG	[0 to 50 / 0 / 2mm/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2519	[Thick2:EnvCorrectionTable]		
015	Separation DC:1side	*ENG	[1 to 100 / 30 / 1/step]
016	Separation DC:2side	*ENG	
2519	[Thick2:EdgeEnvCorrection]		
019	Separation DC:1side	*ENG	[1 to 100 / 30 / 1/step]
020	Separation DC:2side	*ENG	

2521	[Thick3:Bias]		
	Adjusts the DC voltage of the discharge plate for thick 3 paper.		
003	Separation DC:1side	*ENG	[0 to 4000 / 0 / 10-V/step]
004	Separation DC:2side	*ENG	

2523	[Thick3:Bias:BW]		
	Adjusts the current for the paper transfer roller for thick paper 3 in black-and-white mode.		
003	PaperTransfer:1side	*ENG	[0 to 200 / 24 / 1-uA/step]
004	PaperTransfer:2side	*ENG	[0 to 200 / 18 / 1-uA/step]

2527	[Thick3:Bias:FC]		
	Adjusts the current for the paper transfer roller for thick paper 3 in full color mode.		
003	PaperTransfer:1side	*ENG	[0 to 200 / 26 / 1-uA/step]
004	PaperTransfer:2side	*ENG	[0 to 200 / 21 / 1-uA/step]

[Thick3:SizeCorrection:BW]			
2531	Adjusts the size correction coefficient for the paper transfer roller current for each paper size. SP2523 and SP2527 are multiplied by these SP values.		
003	PaperTransfer:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:2Side:S1	*ENG	
007	PaperTransfer:1Side:S2	*ENG	[100 to 995 / 179 / 5%/step]
008	PaperTransfer:2Side:S2	*ENG	[100 to 995 / 160 / 5%/step]
011	PaperTransfer:1Side:S3	*ENG	[100 to 995 / 250 / 5%/step]
012	PaperTransfer:2Side:S3	*ENG	[100 to 995 / 300 / 5%/step]
015	PaperTransfer:1Side:S4	*ENG	[100 to 995 / 143 / 5%/step]
016	PaperTransfer:2Side:S4	*ENG	[100 to 995 / 380 / 5%/step]

[Thick3:SizeCorrection:FC]			
2532	Adjusts the size correction coefficient for the paper transfer roller current for each paper size. SP2523 and SP2527 are multiplied by these SP values.		
003	PaperTransfer:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:2Side:S1	*ENG	
007	PaperTransfer:1Side:S2	*ENG	[100 to 995 / 167 / 5%/step]
008	PaperTransfer:2Side:S2	*ENG	[100 to 995 / 225 / 5%/step]
011	PaperTransfer:1Side:S3	*ENG	[100 to 995 / 222 / 5%/step]
012	PaperTransfer:2Side:S3	*ENG	[100 to 995 / 325 / 5%/step]
015	PaperTransfer:1Side:S4	*ENG	[100 to 995 / 133 / 5%/step]
016	PaperTransfer:2Side:S4	*ENG	[100 to 995 / 375 / 5%/step]

2533	[Thick3:Size-Env.Correct:BW]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[1 to 100 / 66 / 1/step]
004	PaperTransfer:2Side:S1	*ENG	[1 to 100 / 17 / 1/step]
007	PaperTransfer:1Side:S2	*ENG	[1 to 100 / 24 / 1/step]
008	PaperTransfer:2Side:S2	*ENG	[1 to 100 / 39 / 1/step]
011	PaperTransfer:1Side:S3	*ENG	[1 to 100 / 23 / 1/step]
012	PaperTransfer:2Side:S3	*ENG	[1 to 100 / 72 / 1/step]
015	PaperTransfer:1Side:S4	*ENG	[1 to 100 / 40 / 1/step]
016	PaperTransfer:2Side:S4	*ENG	[1 to 100 / 28 / 1/step]

2534	[Thick3:Size-Env.Correct:FC]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[1 to 100 / 25 / 1/step]
004	PaperTransfer:2Side:S1	*ENG	[1 to 100 / 17 / 1/step]
007	PaperTransfer:1Side:S2	*ENG	[1 to 100 / 33 / 1/step]
008	PaperTransfer:2Side:S2	*ENG	[1 to 100 / 50 / 1/step]
011	PaperTransfer:1Side:S3	*ENG	[1 to 100 / 27 / 1/step]
012	PaperTransfer:2Side:S3	*ENG	[1 to 100 / 38 / 1/step]
015	PaperTransfer:1Side:S4	*ENG	[1 to 100 / 36 / 1/step]
016	PaperTransfer:2Side:S4	*ENG	[1 to 100 / 40 / 1/step]

2535	[Thick3:LeadingEdgeCorrection]		
	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode.		
003	Paper Transfer:1side	*ENG	[0 to 995 / 100 / 5%/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2536	[Thick3:SwitchTimingLeadEdge]		
	Adjusts the bias/ voltage switch timing of the paper transfer roller/ discharge plate at the paper leading edge between the erase margin area and the image area.		
003	Paper Transfer:1side	*ENG	[0 to 50 / 0 / 2mm/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2537	[Thick3:TrailEdgeCorrection]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
003	Paper Transfer:1side	*ENG	[0 to 995 / 100 / 5%/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2538	[Thick3:SwitchTimingTrailEdge]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
003	Paper Transfer:1side	*ENG	[0 to 50 / 0 / 2mm/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2539	[Thick3:EnvCorrectionTable]		
	Adjusts the environment coefficient for each mode. When the environment is detected as MM, SP2651 and SP2652 are multiplied by these SP values.		
015	Separation DC:1side	*ENG	[1 to 100 / 30 / 1/step]
016	Separation DC:2side	*ENG	
2539	[Thick3:EdgeEnvCorrection]		
019	Separation DC:1side	*ENG	[1 to 100 / 30 / 1/step]
020	Separation DC:2side	*ENG	

2541	[OHP:Bias]		
	Adjusts the DC voltage of the discharge plate for OHP.		
003	Separation DC	*ENG	[0 to 4000 / 0 / 10-V/step]

2543	[OHP:Bias:BW]		
	Adjusts the current for the paper transfer roller for OHP in black-and-white mode.		
003	PaperTransfer	*ENG	[0 to 200 / 13 / 1-uA/step]

2547	[OHP:Bias:FC]		
	Adjusts the current for the paper transfer roller for OHP in full color mode.		
003	PaperTransfer	*ENG	[0 to 200 / 15 / 1-uA/step]

2551	[OHP:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size. SP2543 and SP2547 are multiplied by these SP values.		
003	PaperTransfer:S1	*ENG	[100 to 995 / 100 / 5%/step]
007	PaperTransfer:S2	*ENG	[100 to 995 / 150 / 5%/step]
011	PaperTransfer:S3	*ENG	
015	PaperTransfer:S4	*ENG	[100 to 995 / 200 / 5%/step]

2552	[OHP:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
003	PaperTransfer:S1	*ENG	[100 or 995 / 100 / 5%/step]
007	PaperTransfer:S2	*ENG	[100 or 995 / 150 / 5%/step]
011	PaperTransfer:S3	*ENG	
015	PaperTransfer:S4	*ENG	[100 or 995 / 200 / 5%/step]

2553	[OHP:Size-Env.Correct:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size. SP2543 and SP2547 are multiplied by these SP values.		
003	PaperTransfer:S1	*ENG	[1 to 100 / 49 / 1/step]
007	PaperTransfer:S2	*ENG	[1 to 100 / 15 / 1/step]
011	PaperTransfer:S3	*ENG	
015	PaperTransfer:S4	*ENG	

2554	[OHP:Size-Env.Correct:FC]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
003	PaperTransfer:S1	*ENG	[1 to 100 / 49 / 1/step]
007	PaperTransfer:S2	*ENG	[1 to 100 / 12 / 1/step]
011	PaperTransfer:S3	*ENG	
015	PaperTransfer:S4	*ENG	

2555	[OHP:LeadingEdgeCorrection]		
	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode.		
003	Paper Transfer	*ENG	[0 to 995 / 100 / 5%/step]
007	Separation DC	*ENG	

2556	[OHP:SwitchTimingLeadEdge]		
	Adjusts the bias/ voltage switch timing of the paper transfer roller/ discharge plate at the paper leading edge between the erase margin area and the image area.		
003	Paper Transfer	*ENG	[0 to 50 / 0 / 2mm/step]
007	Separation DC	*ENG	

2557	[OHP:TrailEdgeCorrection]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
003	Paper Transfer	*ENG	[0 to 995 / 100 / 5%/step]
007	Separation DC	*ENG	

2558	[OHP:SwitchTimingTrailEdge]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
003	Paper Transfer	*ENG	[0 to 50 / 0 / 2mm/step]
007	Separation DC	*ENG	

2559	[OHP:EnvCorrectionTable]		
015	Separation DC	*ENG	[1 to 100 / 30 / 1/step]
2559	[OHP:EdgeEnvCorrection]		
019	Separation DC	*ENG	[1 to 100 / 30 / 1/step]

2561	[Special1:Bias]		
	Adjusts the DC voltage of the discharge plate for special paper 1. Standard: 260 mm/sec, Low: 85 mm/sec		
001	Separation DC:standard:1side	*ENG	[0 to 4000 / 2000 / 10-V/step]
002	Separation DC:standard:2side	*ENG	
003	Separation DC:low:1side	*ENG	
004	Separation DC:low:2side	*ENG	

2563	[Special1:Bias:BW]		
	Adjusts the current for the paper transfer roller for special paper 1 in black-and-white mode.		
001	PaperTransfer:standard:1side	*ENG	[0 to 200 / 12 / 1-uA/step]
002	PaperTransfer:standard:2side	*ENG	[0 to 200 / 10 / 1-uA/step]
003	PaperTransfer:low:1side	*ENG	[0 to 200 / 9 / 1-uA/step]
004	PaperTransfer:low:2side	*ENG	[0 to 200 / 11 / 1-uA/step]

2567	[Special1:Bias:FC]		
	Adjusts the current for the paper transfer roller for special paper 1 in full color mode.		
001	PaperTransfer:standard:1side	*ENG	[0 to 200 / 20 / 1-uA/step]
002	PaperTransfer:standard:2side	*ENG	[0 to 200 / 14 / 1-uA/step]
003	PaperTransfer:low:1side	*ENG	[0 to 200 / 11 / 1-uA/step]
004	PaperTransfer:low:2side	*ENG	[0 to 200 / 12 / 1-uA/step]

2571	[Special1:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
002	PaperTransfer:Standard:2Sid:S1	*ENG	
003	PaperTransfer:Low:1Side:S1	*ENG	
004	PaperTransfer:Low:2Side:S1	*ENG	
005	PaperTransfer:Standard:1Sid:S2	*ENG	[100 to 995 / 135 / 5%/step]
006	PaperTransfer:Standard:2Sid:S2	*ENG	[100 to 995 / 200 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[100 to 995 / 135 / 5%/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[100 to 995 / 200 / 5%/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[100 to 995 / 135 / 5%/step]
010	PaperTransfer:Standard:2Sid:S3	*ENG	[100 to 995 / 390 / 5%/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[100 to 995 / 135 / 5%/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[100 to 995 / 390 / 5%/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[100 to 995 / 220 / 5%/step]
014	PaperTransfer:Standard:2Sid:S4	*ENG	[100 to 995 / 330 / 5%/step]

015	PaperTransfer:Low:1Side:S4	*ENG	[100 to 995 / 220 / 5%/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[100 to 995 / 330 / 5%/step]

2572	[Special1:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
002	PaperTransfer:Standard:2Sid:S1	*ENG	
003	PaperTransfer:Low:1Side:S1	*ENG	
004	PaperTransfer:Low:2Side:S1	*ENG	
005	PaperTransfer:Standard:1Sid:S2	*ENG	[100 to 995 / 135 / 5%/step]
006	PaperTransfer:Standard:2Sid:S2	*ENG	[100 to 995 / 200 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[100 to 995 / 135 / 5%/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[100 to 995 / 200 / 5%/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[100 to 995 / 135 / 5%/step]
010	PaperTransfer:Standard:2Sid:S3	*ENG	[100 to 995 / 325 / 5%/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[100 to 995 / 135 / 5%/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[100 to 995 / 325 / 5%/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[100 to 995 / 220 / 5%/step]
014	PaperTransfer:Standard:2Sid:S4	*ENG	[100 to 995 / 330 / 5%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[100 to 995 / 220 / 5%/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[100 to 995 / 330 / 5%/step]

2573	[Special1:Size-Env.Correct:BW]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[1 to 100 / 14 / 1%/step]
002	PaperTransfer:Standard:2Sid:S1	*ENG	[1 to 100 / 13 / 1%/step]
003	PaperTransfer:Low:1Side:S1	*ENG	[1 to 100 / 10 / 1%/step]
004	PaperTransfer:Low:2Side:S1	*ENG	[1 to 100 / 12 / 1%/step]
005	PaperTransfer:Standard:1Sid:S2	*ENG	[1 to 100 / 14 / 1%/step]
006	PaperTransfer:Standard:2Sid:S2	*ENG	[1 to 100 / 13 / 1%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[1 to 100 / 10 / 1%/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[1 to 100 / 12 / 1%/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[1 to 100 / 14 / 1%/step]
010	PaperTransfer:Standard:2Sid:S3	*ENG	[1 to 100 / 5 / 1%/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[1 to 100 / 10 / 1%/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[1 to 100 / 5 / 1%/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[1 to 100 / 14 / 1%/step]
014	PaperTransfer:Standard:2Sid:S4	*ENG	[1 to 100 / 13 / 1%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[1 to 100 / 10 / 1%/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[1 to 100 / 12 / 1%/step]

2574	[Special1:Size-Env.Correct:FC]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
001	PaperTransfer:Standard:1Sid:S1	*ENG	[1 to 100 / 7 / 1/step]
002	PaperTransfer:Standard:2Sid:S1	*ENG	[1 to 100 / 43 / 1/step]
003	PaperTransfer:Low:1Side:S1	*ENG	[1 to 100 / 37 / 1/step]
004	PaperTransfer:Low:2Side:S1	*ENG	[1 to 100 / 41 / 1/step]
005	PaperTransfer:Standard:1Sid:S2	*ENG	[1 to 100 / 1 / 1/step]
006	PaperTransfer:Standard:2Sid:S2	*ENG	[1 to 100 / 42 / 1/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[1 to 100 / 37 / 1/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[1 to 100 / 40 / 1/step]
009	PaperTransfer:Standard:1Sid:S3	*ENG	[1 to 100 / 1 / 1/step]
010	PaperTransfer:Standard:2Sid:S3	*ENG	[1 to 100 / 23 / 1/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[1 to 100 / 37 / 1/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[1 to 100 / 39 / 1/step]
013	PaperTransfer:Standard:1Sid:S4	*ENG	[1 to 100 / 7 / 1/step]
014	PaperTransfer:Standard:2Sid:S4	*ENG	[1 to 100 / 43 / 1/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[1 to 100 / 37 / 1/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[1 to 100 / 41 / 1/step]

2575	[Special1:LeadingEdgeCorrection]		
	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode.		
001	PaperTransfer:Standard:1Side	*ENG	[0 to 995 / 100 / 5%/step]
002	PaperTransfer:Standard:2Side	*ENG	
003	Paper Transfer:Low:1side	*ENG	
004	Paper Transfer:Low:2side	*ENG	
005	Separation DC:Standard:1side	*ENG	
006	Separation DC:Standard:2side	*ENG	
007	Separation DC:Low:1side	*ENG	
008	Separation DC:Low:2side	*ENG	

2576	[Special1:SwitchTimingLeadEdge]		
	Adjusts the bias/ voltage switch timing of the paper transfer roller/ discharge plate at the paper leading edge between the erase margin area and the image area.		
001	PaperTransfer:Standard:1side	*ENG	[0 to 50 / 0 / 2mm/step]
002	PaperTransfer:Standard:2side	*ENG	
003	Paper Transfer:Low:1side	*ENG	
004	Paper Transfer:Low:2side	*ENG	
005	Separation DC:Standard:1side	*ENG	
006	Separation DC:Standard:2side	*ENG	
007	Separation DC:Low:1side	*ENG	
008	Separation DC:Low:2side	*ENG	

2577	[Special1:TrailEdgeCorrection]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
001	PaperTransfer:Standard:1Side	*ENG	[0 to 995 / 100 / 5%/step]
002	PaperTransfer:Standard:2Side	*ENG	
003	Paper Transfer:Low:1side	*ENG	
004	Paper Transfer:Low:2side	*ENG	
005	Separation DC:Standard:1side	*ENG	
006	Separation DC:Standard:2side	*ENG	
007	Separation DC:Low:1side	*ENG	
008	Separation DC:Low:2side	*ENG	

2578	[Special1:SwitchTimingTrailEdge]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
001	PaperTransfer:Standard:1side	*ENG	[0 to 50 / 0 / 2mm/step]
002	PaperTransfer:Standard:2side	*ENG	
003	Paper Transfer:Low:1side	*ENG	
004	Paper Transfer:Low:2side	*ENG	
005	Separation DC:Standard:1side	*ENG	
006	Separation DC:Standard:2side	*ENG	
007	Separation DC:Low:1side	*ENG	
008	Separation DC:Low:2side	*ENG	

2579	[Special1:EnvCorrectionTable]		
013	Separation DC:Standard:1side	*ENG	[1 to 100 / 30 / 1/step]
014	Separation DC:Standard:2side	*ENG	
015	Separation DC:Low:1side	*ENG	
016	Separation DC:Low:2side	*ENG	
2579	[Special1:EdgeEnvCorrection]		
017	Separation DC:Standard:1side	*ENG	[1 to 100 / 50 / 1/step]
018	Separation DC:Standard:2side	*ENG	
019	Separation DC:Low:1side	*ENG	
020	Separation DC:Low:2side	*ENG	

2581	[Special2:Bias]		
	Adjusts the DC voltage of the discharge plate for special paper 2.		
001	Separation DC:standard:1side	*ENG	[0 to 4000 / 2000 / 10-V/step]
002	Separation DC:standard:2side	*ENG	
003	Separation DC:low:1side	*ENG	
004	Separation DC:low:2side	*ENG	

2583	[Special2:Bias:BW]		
	Adjusts the current for the paper transfer roller for special paper 2 in black-and-white mode.		
001	PaperTransfer:standard:1side	*ENG	[0 to 200 / 12 / 1-uA/step]
002	PaperTransfer:standard:2side	*ENG	[0 to 200 / 10 / 1-uA/step]
003	PaperTransfer:low:1side	*ENG	[0 to 200 / 9 / 1-uA/step]
004	PaperTransfer:low:2side	*ENG	[0 to 200 / 11 / 1-uA/step]

2587	[Special2:Bias:FC]		
	Adjusts the current for the paper transfer roller for special paper 2 in full color mode.		
001	PaperTransfer:standard:1side	*ENG	[0 to 200 / 20 / 1-uA/step]
002	PaperTransfer:standard:2side	*ENG	[0 to 200 / 14 / 1-uA/step]
003	PaperTransfer:low:1side	*ENG	[0 to 200 / 11 / 1-uA/step]
004	PaperTransfer:low:2side	*ENG	[0 to 200 / 12 / 1-uA/step]

2591	[Special2:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
002	PaperTransfer:standard:2Sid:S1	*ENG	
003	PaperTransfer:Low:1Side:S1	*ENG	
004	PaperTransfer:Low:2Side:S1	*ENG	
005	PaperTransfer:standard:1Sid:S2	*ENG	[100 to 995 / 150 / 5%/step]
006	PaperTransfer:standard:2Sid:S2	*ENG	[100 to 995 / 160 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[100 to 995 / 150 / 5%/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[100 to 995 / 160 / 5%/step]
009	PaperTransfer:standard:1Sid:S3	*ENG	[100 to 995 / 150 / 5%/step]
010	PaperTransfer:standard:2Sid:S3	*ENG	[100 to 995 / 270 / 5%/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[100 to 995 / 150 / 5%/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[100 to 995 / 270 / 5%/step]
013	PaperTransfer:standard:1Sid:S4	*ENG	[100 to 995 / 200 / 5%/step]
014	PaperTransfer:standard:2Sid:S4	*ENG	[100 to 995 / 435 / 5%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[100 to 995 / 200 / 5%/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[100 to 995 / 435 / 5%/step]

2592	[Special2:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
002	PaperTransfer:standard:2Sid:S1	*ENG	
003	PaperTransfer:Low:1Side:S1	*ENG	
004	PaperTransfer:Low:2Side:S1	*ENG	
005	PaperTransfer:standard:1Sid:S2	*ENG	[100 to 995 / 150 / 5%/step]
006	PaperTransfer:standard:2Sid:S2	*ENG	[100 to 995 / 160 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[100 to 995 / 150 / 5%/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[100 to 995 / 160 / 5%/step]
009	PaperTransfer:standard:1Sid:S3	*ENG	[100 to 995 / 150 / 5%/step]
010	PaperTransfer:standard:2Sid:S3	*ENG	[100 to 995 / 270 / 5%/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[100 to 995 / 150 / 5%/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[100 to 995 / 270 / 5%/step]
013	PaperTransfer:standard:1Sid:S4	*ENG	[100 to 995 / 200 / 5%/step]
014	PaperTransfer:standard:2Sid:S4	*ENG	[100 to 995 / 435 / 5%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[100 to 995 / 200 / 5%/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[100 to 995 / 435 / 5%/step]

2593	[Special2:Size-Env.Correct:BW]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
001	PaperTransfer:standard:1Sid:S1	*ENG	[1 to 100 / 20 / 1/step]
002	PaperTransfer:standard:2Sid:S1	*ENG	[1 to 100 / 19 / 1/step]

003	PaperTransfer:Low:1Side:S1	*ENG	[1 to 100 / 18 / 1/step]
004	PaperTransfer:Low:2Side:S1	*ENG	[1 to 100 / 23 / 1/step]
005	PaperTransfer:standard:1Sid:S2	*ENG	[1 to 100 / 20 / 1/step]
006	PaperTransfer:standard:2Sid:S2	*ENG	[1 to 100 / 19 / 1/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[1 to 100 / 18 / 1/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[1 to 100 / 23 / 1/step]
009	PaperTransfer:standard:1Sid:S3	*ENG	[1 to 100 / 20 / 1/step]
010	PaperTransfer:standard:2Sid:S3	*ENG	[1 to 100 / 19 / 1/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[1 to 100 / 18 / 1/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[1 to 100 / 23 / 1/step]
013	PaperTransfer:standard:1Sid:S4	*ENG	[1 to 100 / 20 / 1/step]
014	PaperTransfer:standard:2Sid:S4	*ENG	[1 to 100 / 19 / 1/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[1 to 100 / 18 / 1/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[1 to 100 / 23 / 1/step]

2594	[Special2:Size-Env.Correct:FC]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
001	PaperTransfer:standard:1Sid:S1	*ENG	[1 to 100 / 2 / 1/step]
002	PaperTransfer:standard:2Sid:S1	*ENG	[1 to 100 / 31 / 1/step]
003	PaperTransfer:Low:1Side:S1	*ENG	[1 to 100 / 13 / 1/step]
004	PaperTransfer:Low:2Side:S1	*ENG	[1 to 100 / 25 / 1/step]
005	PaperTransfer:standard:1Sid:S2	*ENG	[1 to 100 / 2 / 1/step]
006	PaperTransfer:standard:2Sid:S2	*ENG	[1 to 100 / 31 / 1/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[1 to 100 / 13 / 1/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[1 to 100 / 25 / 1/step]

009	PaperTransfer:standard:1Sid:S3	*ENG	[1 to 100 / 2 / 1/step]
010	PaperTransfer:standard:2Sid:S3	*ENG	[1 to 100 / 31 / 1/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[1 to 100 / 13 / 1/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[1 to 100 / 25 / 1/step]
013	PaperTransfer:standard:1Sid:S4	*ENG	[1 to 100 / 2 / 1/step]
014	PaperTransfer:standard:2Sid:S4	*ENG	[1 to 100 / 31 / 1/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[1 to 100 / 13 / 1/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[1 to 100 / 25 / 1/step]

2595	[Special2:LeadingEdgeCorrection]		
	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode.		
001	PaperTransfer:standard:1Side	*ENG	[0 to 995 / 100 / 5%/step]
002	PaperTransfer:standard:2Side	*ENG	
003	Paper Transfer:Low:1side	*ENG	
004	Paper Transfer:Low:2side	*ENG	
005	Separation DC:standard:1side	*ENG	
006	Separation DC:standard:2side	*ENG	
007	Separation DC:Low:1side	*ENG	
008	Separation DC:Low:2side	*ENG	

2596	[Special2:SwitchTimingLeadEdge]		
	Adjusts the bias/ voltage switch timing of the paper transfer roller/ discharge plate at the paper leading edge between the erase margin area and the image area.		
001	PaperTransfer:standard:1side	*ENG	[0 to 50 / 0 / 2mm/step]
002	PaperTransfer:standard:2side	*ENG	
003	Paper Transfer:Low:1side	*ENG	
004	Paper Transfer:Low:2side	*ENG	
005	Separation DC:standard:1side	*ENG	
006	Separation DC:standard:2side	*ENG	
007	Separation DC:Low:1side	*ENG	
008	Separation DC:Low:2side	*ENG	

2597	[Special2:TrailEdgeCorrection]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
001	PaperTransfer:standard:1Side	*ENG	[0 to 995 / 100 / 5%/step]
002	PaperTransfer:standard:2Side	*ENG	
003	Paper Transfer:Low:1side	*ENG	
004	Paper Transfer:Low:2side	*ENG	
005	Separation DC:standard:1side	*ENG	
006	Separation DC:standard:2side	*ENG	
007	Separation DC:Low:1side	*ENG	
008	Separation DC:Low:2side	*ENG	

2598	[Special2:SwitchTimingTrailEdge]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
001	PaperTransfer:standard:1side	*ENG	[0 to 50 / 0 / 2mm/step]
002	PaperTransfer:standard:2side	*ENG	
003	Paper Transfer:Low:1side	*ENG	
004	Paper Transfer:Low:2side	*ENG	
005	Separation DC:standard:1side	*ENG	
006	Separation DC:standard:2side	*ENG	
007	Separation DC:Low:1side	*ENG	
008	Separation DC:Low:2side	*ENG	

2599	[Special2:EnvCorrectionTable]		
013	Separation DC:standard:1side	*ENG	[1 to 100 / 30 / 1/step]
014	Separation DC:standard:2side	*ENG	
015	Separation DC:Low:1side	*ENG	
016	Separation DC:Low:2side	*ENG	
2599	[Special2:EdgeEnvCorrection]		
017	Separation DC:standard:1side	*ENG	[1 to 100 / 30 / 1/step]
018	Separation DC:standard:2side	*ENG	
019	Separation DC:Low:1side	*ENG	
020	Separation DC:Low:2side	*ENG	

2601	[Special3:Bias]		
	Adjusts the DC voltage of the discharge plate for special paper 3.		
001	Separation DC:standard:1side	*ENG	[0 to 4000 / 2000 / 10-V/step]
002	Separation DC:standard:2side	*ENG	
003	Separation DC:low:1side	*ENG	
004	Separation DC:low:2side	*ENG	

2603	[Special3:Bias:BW]		
	Adjusts the current for the paper transfer roller for special paper 3 in black-and-white mode.		
001	PaperTransfer:standard:1side	*ENG	[0 to 200 / 12 / 1-uA/step]
002	PaperTransfer:standard:2side	*ENG	[0 to 200 / 10 / 1-uA/step]
003	PaperTransfer:low:1side	*ENG	[0 to 200 / 9 / 1-uA/step]
004	PaperTransfer:low:2side	*ENG	[0 to 200 / 11 / 1-uA/step]

2607	[Special3:Bias:FC]		
	Adjusts the current for the paper transfer roller for special paper 3 in full color mode.		
001	PaperTransfer:standard:1side	*ENG	[0 to 200 / 20 / 1-uA/step]
002	PaperTransfer:standard:2side	*ENG	[0 to 200 / 14 / 1-uA/step]
003	PaperTransfer:low:1side	*ENG	[0 to 200 / 11 / 1-uA/step]
004	PaperTransfer:low:2side	*ENG	[0 to 200 / 12 / 1-uA/step]

2611	[Special3:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
002	PaperTransfer:standard:2Sid:S1	*ENG	
003	PaperTransfer:Low:1Side:S1	*ENG	
004	PaperTransfer:Low:2Side:S1	*ENG	
005	PaperTransfer:standard:1Sid:S2	*ENG	[100 to 995 / 150 / 5%/step]
006	PaperTransfer:standard:2Sid:S2	*ENG	[100 to 995 / 160 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[100 to 995 / 150 / 5%/step]

008	PaperTransfer:Low:2Side:S2	*ENG	[100 to 995 / 160 / 5%/step]
009	PaperTransfer:standard:1Sid:S3	*ENG	[100 to 995 / 150 / 5%/step]
010	PaperTransfer:standard:2Sid:S3	*ENG	[100 to 995 / 270 / 5%/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[100 to 995 / 150 / 5%/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[100 to 995 / 270 / 5%/step]
013	PaperTransfer:standard:1Sid:S4	*ENG	[100 to 995 / 200 / 5%/step]
014	PaperTransfer:standard:2Sid:S4	*ENG	[100 to 995 / 435 / 5%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[100 to 995 / 200 / 5%/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[100 to 995 / 435 / 5%/step]

2612	[Special3:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
001	PaperTransfer:standard:1Sid:S1	*ENG	[100 to 995 / 100 / 5%/step]
002	PaperTransfer:standard:2Sid:S1	*ENG	
003	PaperTransfer:Low:1Side:S1	*ENG	
004	PaperTransfer:Low:2Side:S1	*ENG	
005	PaperTransfer:standard:1Sid:S2	*ENG	[100 to 995 / 150 / 5%/step]
006	PaperTransfer:standard:2Sid:S2	*ENG	[100 to 995 / 160 / 5%/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[100 to 995 / 150 / 5%/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[100 to 995 / 160 / 5%/step]
009	PaperTransfer:standard:1Sid:S3	*ENG	[100 to 995 / 150 / 5%/step]
010	PaperTransfer:standard:2Sid:S3	*ENG	[100 to 995 / 270 / 5%/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[100 to 995 / 150 / 5%/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[100 to 995 / 270 / 5%/step]
013	PaperTransfer:standard:1Sid:S4	*ENG	[100 to 995 / 200 / 5%/step]

014	PaperTransfer:standard:2Sid:S4	*ENG	[100 to 995 / 435 / 5%/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[100 to 995 / 200 / 5%/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[100 to 995 / 435 / 5%/step]

2613	[Special3:Size-Env.Correct:BW]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
001	PaperTransfer:standard:1Sid:S1	*ENG	[1 to 100 / 24 / 1/step]
002	PaperTransfer:standard:2Sid:S1	*ENG	[1 to 100 / 22 / 1/step]
003	PaperTransfer:Low:1Side:S1	*ENG	[1 to 100 / 24 / 1/step]
004	PaperTransfer:Low:2Side:S1	*ENG	[1 to 100 / 22 / 1/step]
005	PaperTransfer:standard:1Sid:S2	*ENG	[1 to 100 / 24 / 1/step]
006	PaperTransfer:standard:2Sid:S2	*ENG	[1 to 100 / 22 / 1/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[1 to 100 / 24 / 1/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[1 to 100 / 22 / 1/step]
009	PaperTransfer:standard:1Sid:S3	*ENG	[1 to 100 / 24 / 1/step]
010	PaperTransfer:standard:2Sid:S3	*ENG	[1 to 100 / 22 / 1/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[1 to 100 / 24 / 1/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[1 to 100 / 22 / 1/step]
013	PaperTransfer:standard:1Sid:S4	*ENG	[1 to 100 / 24 / 1/step]
014	PaperTransfer:standard:2Sid:S4	*ENG	[1 to 100 / 22 / 1/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[1 to 100 / 24 / 1/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[1 to 100 / 22 / 1/step]

2614	[Special3:Size-Env.Correct:FC]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
001	PaperTransfer:standard:1Sid:S1	*ENG	[1 to 100 / 24 / 1/step]
002	PaperTransfer:standard:2Sid:S1	*ENG	[1 to 100 / 27 / 1/step]
003	PaperTransfer:Low:1Side:S1	*ENG	[1 to 100 / 24 / 1/step]
004	PaperTransfer:Low:2Side:S1	*ENG	[1 to 100 / 27 / 1/step]
005	PaperTransfer:standard:1Sid:S2	*ENG	[1 to 100 / 24 / 1/step]
006	PaperTransfer:standard:2Sid:S2	*ENG	[1 to 100 / 27 / 1/step]
007	PaperTransfer:Low:1Side:S2	*ENG	[1 to 100 / 24 / 1/step]
008	PaperTransfer:Low:2Side:S2	*ENG	[1 to 100 / 27 / 1/step]
009	PaperTransfer:standard:1Sid:S3	*ENG	[1 to 100 / 24 / 1/step]
010	PaperTransfer:standard:2Sid:S3	*ENG	[1 to 100 / 27 / 1/step]
011	PaperTransfer:Low:1Side:S3	*ENG	[1 to 100 / 24 / 1/step]
012	PaperTransfer:Low:2Side:S3	*ENG	[1 to 100 / 27 / 1/step]
013	PaperTransfer:standard:1Sid:S4	*ENG	[1 to 100 / 24 / 1/step]
014	PaperTransfer:standard:2Sid:S4	*ENG	[1 to 100 / 27 / 1/step]
015	PaperTransfer:Low:1Side:S4	*ENG	[1 to 100 / 24 / 1/step]
016	PaperTransfer:Low:2Side:S4	*ENG	[1 to 100 / 27 / 1/step]

2615	[Special3:LeadingEdgeCorrection]		
	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode.		
001	Paper Transfer:standard:1side	*ENG	[0 to 995 / 100 / 5%/step]
002	Paper Transfer:standard:2side	*ENG	
003	Paper Transfer:Low:1side	*ENG	
004	Paper Transfer:Low:2side	*ENG	
005	Separation DC:standard:1side	*ENG	
006	Separation DC:standard:2side	*ENG	
007	Separation DC:Low:1side	*ENG	
008	Separation DC:Low:2side	*ENG	

2616	[Special3:SwitchTimingLeadEdge]		
	Adjusts the bias/ voltage switch timing of the paper transfer roller/ discharge plate at the paper leading edge between the erase margin area and the image area.		
001	Paper Transfer:standard:1side	*ENG	[0 to 50 / 0 / 2mm/step]
002	Paper Transfer:standard:2side	*ENG	
003	Paper Transfer:Low:1side	*ENG	
004	Paper Transfer:Low:2side	*ENG	
005	Separation DC:standard:1side	*ENG	

006	Separation DC:standard:2side	*ENG	
007	Separation DC:Low:1side	*ENG	
008	Separation DC:Low:2side	*ENG	

2617	[Special3:TrailEdgeCorrection]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
001	Paper Transfer:standard:1side	*ENG	[0 to 995 / 100 / 5%/step]
002	Paper Transfer:standard:2side	*ENG	
003	Paper Transfer:Low:1side	*ENG	
004	Paper Transfer:Low:2side	*ENG	
005	Separation DC:standard:1side	*ENG	
006	Separation DC:standard:2side	*ENG	
007	Separation DC:Low:1side	*ENG	
008	Separation DC:Low:2side	*ENG	

2618	[Special3:SwitchTimingTrailEdge]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
001	Paper Transfer:standard:1side	*ENG	[0 to 50 / 0 / 2mm/step]
002	Paper Transfer:standard:2side	*ENG	
003	Paper Transfer:Low:1side	*ENG	

004	Paper Transfer:Low:2side	*ENG	
005	Separation DC:standard:1side	*ENG	
006	Separation DC:standard:2side	*ENG	
007	Separation DC:Low:1side	*ENG	
008	Separation DC:Low:2side	*ENG	

2619	[Special3:EnvCorrectionTable]		
013	Separation DC:standard:1side	*ENG	[1 to 100 / 30 / 1/step]
014	Separation DC:standard:2side	*ENG	
015	Separation DC:Low:1side	*ENG	
016	Separation DC:Low:2side	*ENG	
2619	[Special3:EdgeEnvCorrection]		
017	Separation DC:standard:1side	*ENG	[1 to 100 / 30 / 1/step]
018	Separation DC:standard:2side	*ENG	
019	Separation DC:Low:1side	*ENG	
020	Separation DC:Low:2side	*ENG	

2621	[Thick2:Bias]		
	Adjusts the DC voltage of the discharge plate for thick 2 paper.		
003	Separation DC:1side	*ENG	[0 to 4000 / 2000 / 10-V/step]
004	Separation DC:2side	*ENG	

2623	[Thick2:Bias:BW]		
	Adjusts the current for the paper transfer roller for thick 2 paper in black-and-white mode.		
003	PaperTransfer:1side	*ENG	[0 to 200 / 8 / 1-uA/step]
004	PaperTransfer:2side	*ENG	[0 to 200 / 11 / 1-uA/step]

2627	[Thick2:Bias:FC]		
	Adjusts the current for the paper transfer roller for thick 2 paper in full color mode.		
003	PaperTransfer:1side	*ENG	[0 to 200 / 11 / 1-uA/step]
004	PaperTransfer:2side	*ENG	[0 to 200 / 16 / 1-uA/step]

2631	[Thick2:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:2Side:S1	*ENG	
007	PaperTransfer:1Side:S2	*ENG	[100 to 995 / 150 / 5%/step]
008	PaperTransfer:2Side:S2	*ENG	[100 to 995 / 160 / 5%/step]
011	PaperTransfer:1Side:S3	*ENG	[100 to 995 / 150 / 5%/step]
012	PaperTransfer:2Side:S3	*ENG	[100 to 995 / 270 / 5%/step]

015	PaperTransfer:1Side:S4	*ENG	[100 to 995 / 200 / 5%/step]
016	PaperTransfer:2Side:S4	*ENG	[100 to 995 / 435 / 5%/step]

2632	[Thick2:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:2Side:S1	*ENG	
007	PaperTransfer:1Side:S2	*ENG	[100 to 995 / 150 / 5%/step]
008	PaperTransfer:2Side:S2	*ENG	[100 to 995 / 160 / 5%/step]
011	PaperTransfer:1Side:S3	*ENG	[100 to 995 / 150 / 5%/step]
012	PaperTransfer:2Side:S3	*ENG	[100 to 995 / 270 / 5%/step]
015	PaperTransfer:1Side:S4	*ENG	[100 to 995 / 200 / 5%/step]
016	PaperTransfer:2Side:S4	*ENG	[100 to 995 / 435 / 5%/step]

2633	[Thick2:Size-Env.Correct:BW]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[1 to 100 / 18 / 1/step]
004	PaperTransfer:2Side:S1	*ENG	[1 to 100 / 22 / 1/step]
007	PaperTransfer:1Side:S2	*ENG	[1 to 100 / 18 / 1/step]
008	PaperTransfer:2Side:S2	*ENG	[1 to 100 / 22 / 1/step]
011	PaperTransfer:1Side:S3	*ENG	[1 to 100 / 18 / 1/step]
012	PaperTransfer:2Side:S3	*ENG	[1 to 100 / 22 / 1/step]
015	PaperTransfer:1Side:S4	*ENG	[1 to 100 / 18 / 1/step]
016	PaperTransfer:2Side:S4	*ENG	[1 to 100 / 22 / 1/step]

2634	[Thick2:Size-Env.Correct:FC]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[1 to 100 / 13 / 1/step]
004	PaperTransfer:2Side:S1	*ENG	[1 to 100 / 38 / 1/step]
007	PaperTransfer:1Side:S2	*ENG	[1 to 100 / 13 / 1/step]
008	PaperTransfer:2Side:S2	*ENG	[1 to 100 / 38 / 1/step]
011	PaperTransfer:1Side:S3	*ENG	[1 to 100 / 13 / 1/step]
012	PaperTransfer:2Side:S3	*ENG	[1 to 100 / 38 / 1/step]
015	PaperTransfer:1Side:S4	*ENG	[1 to 100 / 13 / 1/step]
016	PaperTransfer:2Side:S4	*ENG	[1 to 100 / 38 / 1/step]

2635	[Thick2:LeadingEdgeCorrection]		
	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode.		
003	Paper Transfer:1side	*ENG	[0 to 995 / 100 / 5%/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2636	[Thick2:SwitchTimingLeadEdge]		
	Adjusts the bias/ voltage switch timing of the paper transfer roller/ discharge plate at the paper leading edge between the erase margin area and the image area.		
003	Paper Transfer:1side	*ENG	[0 to 50 / 0 / 2mm/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2637	[Thick2:TrailEdgeCorrection]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
003	Paper Transfer:1side	*ENG	[0 to 995 / 100 / 5%/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2638	[Thick2:SwitchTimingTrailEdge]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
003	Paper Transfer:1side	*ENG	[0 to 50 / 0 / 2mm/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

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2639	[Thick2:EnvCorrectionTable]		
015	Separation DC:1side	*ENG	[1 to 100 / 30 / 1/step]
016	Separation DC:2side	*ENG	
2639	[Thick2:EdgeEnvCorrection]		
019	Separation DC:1side	*ENG	[1 to 100 / 30 / 1/step]
020	Separation DC:2side	*ENG	

2641	[Thick2:Bias]		
	Adjusts the DC voltage of the discharge plate for thick2 paper.		
003	Separation DC:1side	*ENG	[0 to 4000 / 2000 / 10-V/step]
004	Separation DC:2side	*ENG	

2643	[Thick2:Bias:BW]		
	Adjusts the current for the paper transfer roller for thick 2 paper in black-and-white mode. Middle: 182 mm/sec, Low: 85 mm/sec		
003	PaperTransfer:1side	*ENG	[0 to 200 / 8 / 1-uA/step]
004	PaperTransfer:2side	*ENG	[0 to 200 / 11 / 1-uA/step]

2647	[Thick2:Bias:FC]		
	Adjusts the current for the paper transfer roller for thick 2 paper in full color mode.		
003	PaperTransfer:1side	*ENG	[0 to 200 / 11 / 1-uA/step]
004	PaperTransfer:2side	*ENG	[0 to 200 / 17 / 1-uA/step]

2651	[Thick2:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:2Side:S1	*ENG	
007	PaperTransfer:1Side:S2	*ENG	[100 to 995 / 150 / 5%/step]
008	PaperTransfer:2Side:S2	*ENG	[100 to 995 / 160 / 5%/step]
011	PaperTransfer:1Side:S3	*ENG	[100 to 995 / 150 / 5%/step]
012	PaperTransfer:2Side:S3	*ENG	[100 to 995 / 270 / 5%/step]

015	PaperTransfer:1Side:S4	*ENG	[100 to 995 / 200 / 5%/step]
016	PaperTransfer:2Side:S4	*ENG	[100 to 995 / 435 / 5%/step]

2652	[Thick2:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:2Side:S1	*ENG	
007	PaperTransfer:1Side:S2	*ENG	[100 to 995 / 150 / 5%/step]
008	PaperTransfer:2Side:S2	*ENG	[100 to 995 / 160 / 5%/step]
011	PaperTransfer:1Side:S3	*ENG	[100 to 995 / 150 / 5%/step]
012	PaperTransfer:2Side:S3	*ENG	[100 to 995 / 270 / 5%/step]
015	PaperTransfer:1Side:S4	*ENG	[100 to 995 / 200 / 5%/step]
016	PaperTransfer:2Side:S4	*ENG	[100 to 995 / 435 / 5%/step]

2653	[Thick2:Size-Env.Correct:BW]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[1 to 100 / 18 / 1/step]
004	PaperTransfer:2Side:S1	*ENG	[1 to 100 / 22 / 1/step]
007	PaperTransfer:1Side:S2	*ENG	[1 to 100 / 18 / 1/step]
008	PaperTransfer:2Side:S2	*ENG	[1 to 100 / 22 / 1/step]
011	PaperTransfer:1Side:S3	*ENG	[1 to 100 / 18 / 1/step]
012	PaperTransfer:2Side:S3	*ENG	[1 to 100 / 22 / 1/step]
015	PaperTransfer:1Side:S4	*ENG	[1 to 100 / 18 / 1/step]
016	PaperTransfer:2Side:S4	*ENG	[1 to 100 / 22 / 1/step]

2654	[Thick2:Size-Env.Correct:FC]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[1 to 100 / 13 / 1/step]
004	PaperTransfer:2Side:S1	*ENG	[1 to 100 / 38 / 1/step]
007	PaperTransfer:1Side:S2	*ENG	[1 to 100 / 13 / 1/step]
008	PaperTransfer:2Side:S2	*ENG	[1 to 100 / 38 / 1/step]
011	PaperTransfer:1Side:S3	*ENG	[1 to 100 / 13 / 1/step]
012	PaperTransfer:2Side:S3	*ENG	[1 to 100 / 38 / 1/step]
015	PaperTransfer:1Side:S4	*ENG	[1 to 100 / 13 / 1/step]
016	PaperTransfer:2Side:S4	*ENG	[1 to 100 / 38 / 1/step]

2655	[Thick2:LeadingEdgeCorrection]		
	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode.		
003	Paper Transfer:1side	*ENG	[0 to 995 / 100 / 5%/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2656	[Thick2:SwitchTimingLeadEdge]		
	Adjusts the bias/ voltage switch timing of the paper transfer roller/ discharge plate at the paper leading edge between the erase margin area and the image area.		
003	Paper Transfer:1side	*ENG	[0 to 50 / 0 / 2mm/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2657	[Thick2:TrailEdgeCorrection]		
003	Paper Transfer:1side	*ENG	[0 to 995 / 100 / 5%/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2658	[Thick2:SwitchTimingTrailEdge]		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
003	Paper Transfer:1side	*ENG	[0 to 50 / 0 / 2mm/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2659	[Thick2:EnvCorrectionTable]		
015	Separation DC:1side	*ENG	[1 to 100 / 30 / 1/step]
016	Separation DC:2side	*ENG	
2659	[Thick2:EdgeEnvCorrection]		
019	Separation DC:1side	*ENG	[1 to 100 / 30 / 1/step]
020	Separation DC:2side	*ENG	

2661	[Thick2:Bias]		
	Adjusts the DC voltage of the discharge plate for thick2 paper.		
003	Separation DC:1side	*ENG	[0 to 4000 / 2000 / 10-V/step]
004	Separation DC:2side	*ENG	

2663	[Thick2:Bias:BW]		
	Adjusts the current for the paper transfer roller for thick 2 paper in black-and-white mode.		
003	PaperTransfer:1side	*ENG	[0 to 200 / 8 / 1-uA/step]
004	PaperTransfer:2side	*ENG	[0 to 200 / 11 / 1-uA/step]

2667	[Thick2:Bias:FC]		
	Adjusts the current for the paper transfer roller for thick 2 paper in full color mode.		
003	PaperTransfer:1side	*ENG	[0 to 200 / 11 / 1-uA/step]
004	PaperTransfer:2side	*ENG	[0 to 200 / 17 / 1-uA/step]

2671	[Thick2:SizeCorrection:BW]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:2Side:S1	*ENG	
007	PaperTransfer:1Side:S2	*ENG	[100 to 995 / 150 / 5%/step]
008	PaperTransfer:2Side:S2	*ENG	[100 to 995 / 160 / 5%/step]
011	PaperTransfer:1Side:S3	*ENG	[100 to 995 / 150 / 5%/step]
012	PaperTransfer:2Side:S3	*ENG	[100 to 995 / 270 / 5%/step]
015	PaperTransfer:1Side:S4	*ENG	[100 to 995 / 200 / 5%/step]
016	PaperTransfer:2Side:S4	*ENG	[100 to 995 / 435 / 5%/step]

2672	[Thick2:SizeCorrection:FC]		
	Adjusts the size correction coefficient for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[100 to 995 / 100 / 5%/step]
004	PaperTransfer:2Side:S1	*ENG	
007	PaperTransfer:1Side:S2	*ENG	[100 to 995 / 150 / 5%/step]
008	PaperTransfer:2Side:S2	*ENG	[100 to 995 / 160 / 5%/step]
011	PaperTransfer:1Side:S3	*ENG	[100 to 995 / 150 / 5%/step]
012	PaperTransfer:2Side:S3	*ENG	[100 to 995 / 270 / 5%/step]
015	PaperTransfer:1Side:S4	*ENG	[100 to 995 / 200 / 5%/step]
016	PaperTransfer:2Side:S4	*ENG	[100 to 995 / 435 / 5%/step]

2673	[Thick2:Size-Env.Correct:BW]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[1 to 100 / 18 / 1/step]
004	PaperTransfer:2Side:S1	*ENG	[1 to 100 / 22 / 1/step]
007	PaperTransfer:1Side:S2	*ENG	[1 to 100 / 18 / 1/step]
008	PaperTransfer:2Side:S2	*ENG	[1 to 100 / 22 / 1/step]
011	PaperTransfer:1Side:S3	*ENG	[1 to 100 / 18 / 1/step]
012	PaperTransfer:2Side:S3	*ENG	[1 to 100 / 22 / 1/step]
015	PaperTransfer:1Side:S4	*ENG	[1 to 100 / 18 / 1/step]
016	PaperTransfer:2Side:S4	*ENG	[1 to 100 / 22 / 1/step]

2674	[Thick2:Size-Env.Correct:FC]		
	Adjusts the size correction coefficient table for the paper transfer roller current for each paper size.		
003	PaperTransfer:1Side:S1	*ENG	[1 to 100 / 13 / 1/step]
004	PaperTransfer:2Side:S1	*ENG	[1 to 100 / 38 / 1/step]
007	PaperTransfer:1Side:S2	*ENG	[1 to 100 / 13 / 1/step]
008	PaperTransfer:2Side:S2	*ENG	[1 to 100 / 38 / 1/step]
011	PaperTransfer:1Side:S3	*ENG	[1 to 100 / 13 / 1/step]
012	PaperTransfer:2Side:S3	*ENG	[1 to 100 / 38 / 1/step]
015	PaperTransfer:1Side:S4	*ENG	[1 to 100 / 13 / 1/step]
016	PaperTransfer:2Side:S4	*ENG	[1 to 100 / 38 / 1/step]

2675	[Thick2:LeadingEdgeCorrection]		
	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode.		
003	Paper Transfer:1side	*ENG	[0 to 995 / 100 / 5%/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

	[Thick2:SwitchTimingLeadEdge]		
2676	Adjusts the bias/ voltage switch timing of the paper transfer roller/ discharge plate at the paper leading edge between the erase margin area and the image area.		
003	Paper Transfer:1side	*ENG	[0 to 50 / 0 / 2mm/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

	[Thick2:TrailEdgeCorrection]		
2677	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
003	Paper Transfer:1side	*ENG	[0 to 995 / 100 / 5%/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

	[Thick2:SwitchTimingTrailEdge]		
2678	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode.		
003	Paper Transfer:1side	*ENG	[0 to 50 / 0 / 2mm/step]
004	Paper Transfer:2side	*ENG	
007	Separation DC:1side	*ENG	
008	Separation DC:2side	*ENG	

2679	[Thick2:EnvCorrectionTable]		
015	Separation DC:1side	*ENG	[1 to 100 / 30 / 1/step]
016	Separation DC:2side	*ENG	
2679	[Thick2:EdgeEnvCorrection]		
019	Separation DC:1side	*ENG	[1 to 100 / 30 / 1/step]
020	Separation DC:2side	*ENG	

2690	[ITB Contact Setting]		
	Sets the image transfer belt contact for each paper.		
001	Thick1	*ENG	[0 or 1 / 0 / 1/step]
002	Thick2	*ENG	
003	Thick3	*ENG	
014	Special4	*ENG	
015	Special5	*ENG	
016	Special6	*ENG	

2900	[Drum Idling Time]		
	Sets the drum idling time for each speed.		
001	Standard Speed	*ENG	[0 to 30 / 0 / 1s/step]
003	Low Speed	*ENG	

2901	[Fus.Reload:DrumIdleTimeOffset]		
	Offset coverage for idling rotation time of drum when fusing down reloads.		
001	Coverage:0-6%	*ENG	[-60 to 300 / 0 / 1sec/step]
002	Coverage:6-10%	*ENG	[-60 to 300 / -11 / 1sec/step]
003	Coverage:10-20%	*ENG	[-60 to 300 / -26 / 1sec/step]
004	Coverage:20-40%	*ENG	[-60 to 300 / -21 / 1sec/step]
005	Coverage:40%over	*ENG	[-60 to 300 / -21 / 1sec/step]

2903	[-]		
002	Fc OPC Brake ALL	*ENG	[0 to 65535 / 0 / 10msec/step]
003	Bk OPC/Image Transfer Brake ALL	*ENG	

2904	[-]		
002	Fc OPC Reverse ALL	*ENG	[0 to 200 / 50 / 10msec/step]
003	Bk OPC/Image Transfer Reverse ALL	*ENG	

2905	[Dev Rvs]		
003	Time K	ENG	[0 to 200 / 0 / 10msec/step]
	Sets the clutch on time at drum motor reverse.		
004	Time Cl	ENG	[0 to 200 / 0 / 10/step]
	Sets the time of development roller reverse rotation when color development motor rotates in reverse.		
005	Threshold Counter ALL	ENG	[0 to 400000 / 61420 / 10mm/step]
	Rotation threshold to determine if development roller reverse is required or not.		
006	Counter K	ENG	[0 to 999999999 / 0 / 1mm/step]
	Rotation counter (Bk) to determine if development roller reverse is required or not.		
007	Counter Cl	ENG	[0 to 999999999 / 0 / 1mm/step]
	Rotation counter (Color) to determine if development roller reverse is required or not.		

2915	[GainAdj:BkOpcDevM]		
001	Standard Speed	*ENG	[0 or 1 / 0 / 1/step]
002	Low Speed	*ENG	[0 or 1 / 1 / 1/step]

2916	[GainAdj:ColorOpcDevM]		
001	Standard Speed	*ENG	[0 or 1 / 0 / 1/step]
002	Low Speed	*ENG	[0 or 1 / 1 / 1/step]

2930	[Transfer:Bias Limiter]		
	Adjusts the threshold between high resistance (division 1) and low resistance (division 2) at the paper transfer roller.		
001	Bias	*ENG	[0 to 7000 / 6000 / 10-V/step]

2931	[transfer: cleaning timing]		
	Sets the waiting time for job end cleaning in normal speed.		
001	T15: standard speed: Refresh	*ENG	[-2000 to 2000 / 0 / 1msec/step]
003	T15: low speed: Refresh	*ENG	
004	T15: standard speed: No Refresh	*ENG	
006	T15: low speed: No Refresh	*ENG	

2941	[Dev.Bias DownMode]		
001	T5:Bk:std	*ENG	[-140 to 140 / -10 / 10msec/step]
002	T7:FC:std	*ENG	[-140 to 140 / -20 / 10msec/step]
003	T5:Bk:low	*ENG	[-210 to 210 / -10 / 10msec/step]
004	T7:Fc:low	*ENG	[-210 to 210 / -30 / 10msec/step]

2960	[Process Interval]		
	Adjusts the additional time for ending the machine's process.		
001	Additional Time	*ENG	[0 to 10 / 0 / 1sec/step]

2970	[Cleaning After JOB]		
	Specifies the threshold sheets for the cleaning of the paper transfer roller with or without the refresh mode.		
001	No Refresh	*ENG	[0 to 100 / 33 / 1page/step]
002	Refresh	*ENG	[0 or 1 / 1 / 1/step]
003	-	-	-

2971	[BW Non-Image:Bias]		
001	T1 mono wait:std	*ENG	[-360 to 80 / -120 / 10msec/step]
003	T1 mono wait:low	*ENG	[-780 to 210 / -120 / 10msec/step]

2972	[B/W Image Request Timing]		
001	T14: standard speed	*ENG	[0 to 4000 / 0 / 10msec/step]
003	T14: low speed	*ENG	

2975	[B/W Image Request Timing]		
001	T14_2: standard speed	*ENG	[0 to 4000 / 0 / 10/msec/step]
003	T14_2: low speed	*ENG	[0 to 4000 / 0 / 10/msec/step]

2990	[Print Duty Control]		
001	Duty Control State	*ENG	[0 or 1 / - / 1/step]
	Displays the Duty limitation status of the current printing. 0: Not limited 1: Limited		
002	Exec Interval: Duty Control	*ENG	[30 to 3600 / 30 / 10sec/step]
	Sets the determination time interval to determine if the printing Duty limitation is executed or not.		
004	Forced CPM Down Thresh: No Duty Control	*ENG	[0 to 5000 / 0 / 1page/step]
	Sets the forced shutdown threshold when the printing Duty is not limited.		
005	BK Drum Stop Time: No Duty Control	*ENG	[0 to 65535 / 0 / 10msec/step]
006	Col Drum Stop Time: No Duty Control	*ENG	
007	Forced CPM Down Thresh: Duty Control	*ENG	[0 to 5000 / 3 / 1page/step]
	Sets the forced shutdown threshold when the printing Duty is limited.		
008	BK Drum Stop Time: Duty Control	*ENG	[0 to 65535 / 0 / 10msec/step]
009	Col Drum Stop Time: Duty Control	*ENG	[0 to 65535 / 32000 / 10msec/step]

010	Correction Coefficient	*ENG	[-1.0 to -1.0 / -0.5 / 0.1/step]
011	Execution Temp. Threshold	*ENG	[20.0 to 70.0 / 42.0 / 0.1deg/step]
	Sets the temperature threshold to execute the printing Duty limitation. 0: Not execute		
012	Cancellation Temp. Threshold	*ENG	[0.0 to 20.0 / 1.0 / 0.1deg/step]
	Sets the temperature threshold (differences with the temperature of the printing Duty limitation execution) to cancel the printing Duty limitation.		
013	ON/OFF setting	*ENG	[0 or 1 / 1 / 1/step]
	Control or not control the printing Duty limitation. 0: Not control 1: Control		

3.3 MAIN SP TABLES-3

3.3.1 SP3-XXX (PROCESS)

3011	[Manual ProCon:Exe]		
001	Normal ProCon	ENG	[- / - / -] [Execute]
002	Density Adjustment	ENG	[- / - / -] [Execute]
003	ACC RunTime ProCon	ENG	[- / - / -] [Execute]
004	Full MUSIC	ENG	[- / - / -] [Execute]
005	Normal MUSIC	ENG	[- / - / -] [Execute]

3012	[ProCon OK?]		
001	History:Last	*ENG	Displays the result of the latest process control execution. [0 to 99999999 / - / 1/step]
002	History:Last 2	*ENG	
003	History:Last 3	*ENG	
004	History:Last 4	*ENG	
005	History:Last 5	*ENG	
006	History:Last 6	*ENG	
007	History:Last 7	*ENG	
008	History:Last 8	*ENG	
009	History:Last 9	*ENG	
010	History:Last 10	*ENG	

3030	[Init TD Sensor :Exe]		
001	Execute:ALL	ENG	[- / - / -] [Execute]
002	Execute:Col	ENG	[- / - / -] [Execute]
003	Execute:K	ENG	[- / - / -] [Execute]
004	Execute:C	ENG	[- / - / -] [Execute]
005	Execute:M	ENG	[- / - / -] [Execute]
006	Execute:Y	ENG	[- / - / -] [Execute]
020	Agitatiton Time	*ENG	Sets agitation time for developer at TD sensor initialization. [0 to 200 / 30 / 1sec/step]
021	Initial TC	*ENG	Sets initial toner concentration. [1.0 to 15.0 / 7.0 / 0.1wt%/step]
031	Vt Target:K	*ENG	Sets the target value for Vt at TD sensor initialization. [0.00 to 5.00 / 2.70 / 0.01V/step]
032	Vt Target:C	*ENG	
033	Vt Target:M	*ENG	
034	Vt Target:Y	*ENG	
041	Vt Target Corr:K	*ENG	[0.00 to 2.55 / 0.00 / 0.01V/step]
042	Vt Target Corr:C	*ENG	
043	Vt Target Corr:M	*ENG	
044	Vt Target Corr:Y	*ENG	

3031	[TD Sens Init OK?]		
001	From Left:YMCK	*ENG	Displays the execution result of TD sensor initialization. [0 to 9999 / - / 1/step]

3050	[Force Tnr Supply:Exe]		
001	Execute:ALL	ENG	[- / - / -] [Execute]
002	Execute:Col	ENG	[- / - / -] [Execute]
003	Execute:K	ENG	[- / - / -] [Execute]
004	Execute:C	ENG	[- / - / -] [Execute]
005	Execute:M	ENG	[- / - / -] [Execute]
006	Execute:Y	ENG	[- / - / -] [Execute]
021	Supply Quantity:K	*ENG	[0.0 to 5.0 / 0.5 / 0.1wt%/step]
022	Supply Quantity:C	*ENG	
023	Supply Quantity:M	*ENG	
024	Supply Quantity:Y	*ENG	
031	ON Time	*ENG	[10 to 1000 / 200 / 1msec/step]
032	OFF Time	*ENG	[0 to 1000 / 100 / 1msec/step]
033	RepeatCount	*ENG	[0 to 255 / 8 / 1times/step]

3072	[TD.Sens Check :Exe]		
001	All Colors	ENG	[- / - / -] [Execute]

3073	[TD.Sens Chk :Disp]		
001	Vt:K	*ENG	[0.00 to 5.50 / - / 0.01V/step]
002	Vt:C	*ENG	
003	Vt:M	*ENG	
004	Vt:Y	*ENG	

3074	[ID.Sens Check :Exe]		
001	All Sensors	ENG	[- / - / -] [Execute]

3075	[ID.Sens Chk :Disp]		
001	Vsg reg(front)	*ENG	[0.00 to 5.50 / - / 0.01V/step]
002	Vsg reg(center)	*ENG	
003	Vsg reg(rear)	*ENG	
011	Voffset(front)	*ENG	
012	Voffset(center)	*ENG	
013	Voffset(rear)	*ENG	

3100	[Toner End Detection: Set]		
001	ON/OFF	*ENG	Sets if NE/TE is detected or not. [0 or 1 / 0 / 1/step] 0:Detect, 1:NotDetect
002	NE Detection	*ENG	Sets NE/TE detection mode. [0 or 1 / 0 / 1/step] 0:ALL, 1:TESensor

3101	[Toner Status: Display]		
001	Bk	*ENG	Displays the toner remaining status. [0 to 2 / - / 1/step] 2: -, 1: -, 0:-
002	C	*ENG	
003	M	*ENG	
004	Y	*ENG	

3102	[Toner Remaining: Display]		
001	Bottle Motor: Bk	*ENG	Displays the toner remaining amount calculated with motor driving time. [0.000 to 500.000 / - / 0.001g/step]
002	Bottle Motor: C	*ENG	
003	Bottle Motor: M	*ENG	
004	Bottle Motor: Y	*ENG	
011	Pixel: Bk	*ENG	Displays the toner remaining amount calculated with image processing coverage. [0.000 to 500.000 / - / 0.001g/step]
012	Pixel: C	*ENG	
013	Pixel: M	*ENG	
014	Pixel: Y	*ENG	
021	Fill Amount: Bk	*ENG	Displays the toner amount in a new bottle. [0 to 500 / - / 1g/step]
022	Fill Amount: C	*ENG	
023	Fill Amount: M	*ENG	

024	Fill Amount: Y	*ENG	
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3110	[Near End Thresh]		
	Sets threshold of toner remaining for NE detection.		
001	Bk	*ENG	[0 to 500 / 23 / 1g/step]
002	C	*ENG	[0 to 500 / 10 / 1g/step]
003	M	*ENG	
004	Y	*ENG	

3121	[TE Counter: Display]		
001	Bk	*ENG	Displays the number of no toner detections with end sensor. [0 to 99 / - / 1times/step]
002	C	*ENG	
003	M	*ENG	
004	Y	*ENG	

3123	[TE Sn Status: Display]		
021	Latest Output: Bk	*ENG	Displays the latest output with end sensor. [0 or 1 / - / 1/step] 0: Not output, 1: Output
022	Latest Output: C	*ENG	
023	Latest Output: M	*ENG	
024	Latest Output: Y	*ENG	

3131	[Vt TE Thresh]		
001	Delta Vt Thresh	*ENG	Sets toner end threshold to sum delta Vt after NE. [0.00 to 5.00 / 0.50 / 0.01V/step]

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002	Delta Vt Sum Thresh	*ENG	Sets toner end threshold for TE detection delta Vt after NE. [0 to 99 / 10 / 1V/step]
011	Delta Vt Thresh BF NE	*ENG	Sets toner end threshold to sum delta Vt before NE. [0.00 to 5.00 / 0.50 / 0.01V/step]
012	Delta Vt Sum Thresh BF NE	*ENG	Sets toner end threshold for TE detection delta Vt before NE. [0 to 99 / 10 / 1V/step]
021	High TC Delta Vt Thresh	*ENG	[0.00 to 5.00 / 0.30 / 0.01V/step]
022	High TC Delta Vt Sum Thresh	*ENG	[0 to 99/ 3 / 1V/step]
023	High TC Delta Vt Thresh BF NE	*ENG	[0.00 to 5.00 / 0.70 / 0.01V/step]
024	High TC Delta Vt Sum Thresh BF NE	*ENG	[0 to 99 / 10 / 1V/step]
031	Low TC Delta Vt Thresh	*ENG	[0.00 to 5.00/ 0.30 / 0.01V/step]
032	Low TC Delta Vt Sum Thresh	*ENG	[0 to 99 / 3 / 1V/step]
033	Low TC Delta Vt Thresh BF NE	*ENG	[0.00 to 5.00 / 0.70 / 0.01V/step]
034	Low TC Delta Vt Sum Thresh BF NE	*ENG	[0 to 99 / 10 / 1V/step]
041	TC Thresh	*ENG	[0.0 to 25.5 / 4.0 / 0.1wt%/step]

3132	[Delta Vt Sum]		
001	Bk	*ENG	Displays sum of delta Vt for each color. [0.00 to 99.00 / - / 0.01/step]
002	C	*ENG	
003	M	*ENG	

004	Y	*ENG	
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3200	[TnrDensity]		
001	K	*ENG	Displays toner density (wt%) for each color. [0.0 to 25.5 / - / 0.1wt%/step]
002	C	*ENG	
003	M	*ENG	
004	Y	*ENG	

3201	[TnrDensity]		
001	Upper TC	*ENG	Sets the upper limit for the control range of toner density (wt%). [1.0 to 15.0 / 8.5 / 0.1 wt%/step]
002	Lower TC	*ENG	Sets the lower limit for the control range of toner density (wt%). [1.0 to 15.0 / 4.0 / 0.1 wt%/step]

3205	[TD.Sens Sensitivity]		
001	HL:K	*ENG	Displays TD sensor sensitivity calculated with check value of HST density control (SP3711-xxx to 3714-xxx). [0.200 to 1.000 / - / 0.001-V/wt%/step]
002	HL:C	*ENG	
003	HL:M	*ENG	
004	HL:Y	*ENG	
011	HM:K	*ENG	[0.050 to 1.000 / - / 0.001-V/wt%/step]
012	HM:C	*ENG	
013	HM:M	*ENG	
014	HM:Y	*ENG	
021	ML:K	*ENG	
022	ML:C	*ENG	

023	ML:M	*ENG	
024	ML:Y	*ENG	
031	Upper Limit	*ENG	Sets sensitivity upper limit using TD sensor sensitivity calculation. [0.200 to 0.500 / 0.440 / 0.001-V/wt%/step]
032	Lower Limit	*ENG	Sets sensitivity lower limit using TD sensor sensitivity calculation. [0.200 to 0.500 / 0.209 / 0.001-V/wt%/step]
033	TC Between H-M	*ENG	Sets the TC between H and M using TD sensor sensitivity calculation. [1.00 to 10.00 / 2.89 / 0.01wt%/step]
034	TC Between M-L	*ENG	Sets the TC between M and L using TD sensor sensitivity calculation. [1.00 to 10.00 / 3.00 / 0.01wt%/step]
035	TC Between H-M:K	*ENG	[1.00 to 10.00 / 2.45 / 0.01wt%/step]
036	TC Between M-L:K	*ENG	[1.00 to 10.00 / 2.58 / 0.01wt%/step]

3210	[TD.Sens:Vt :Disp]		
001	Current: K	*ENG	Displays the latest TD sensor output for each color. [0.00 to 5.50 / - / 0.01V/step]
002	Current: C	*ENG	
003	Current: M	*ENG	
004	Current: Y	*ENG	

3211	[Vt Limits Err :Disp]		
002	Upper Threshold	*ENG	Sets Vt upper limit threshold to detect upper limit error. [0.00 to 5.00 / 4.70 / 0.01V/step]

003	Thresh Num of UpperCounter	*ENG	Sets the number of times to exceed the Vt upper limit threshold to determine the Vt upper limit error (SC360 to 363). [0 to 500 / 280 / 1times/step]
004	Lower Threshold	*ENG	Sets Vt upper lower threshold to detect lower limit error. [0.00 to 5.00 / 0.50 / 0.01V/step]
005	Threshold Num of LowerCounter	*ENG	Sets the number of times to fall below the Vt lower limit threshold to determine the Vt lower limit error (SC365 to 368). [0 to 500 / 140 / 1times/step]
011	Upper Counter: Bk	*ENG	Displays the number of times that Vt for each color exceeds to Vt upper limit threshold. [0 to 500 / - / 1 times /step]
012	Upper Counter: C	*ENG	
013	Upper Counter: M	*ENG	
014	Upper Counter: Y	*ENG	
021	Lower Counter: Bk	*ENG	Displays the number of times that Vt for each color falls below to Vt lower limit threshold. [0 to 500 / - / 1 times /step]
022	Lower Counter: C	*ENG	
023	Lower Counter: M	*ENG	
024	Lower Counter: Y	*ENG	

3212	[Vt Shift :Set]		
011	Low Spd:K	*ENG	Sets the correction value at low speed to correct Vt shift for each color. [0.00 to 5.00 / 0.31 / 0.01V/step]
012	Low Spd:C	*ENG	
013	Low Spd:M	*ENG	
014	Low Spd:Y	*ENG	

3213	[Vt Shift :Set]		
001	TC Cor.(ON/OFF)	*ENG	[0 or 1 / 1 / 1/step] 0:OFF, 1:ON
021	TC Low Spd:K	*ENG	[-0.50 to 0.50 / 0.00 / 0.01V/step]
022	TC Low Spd:C	*ENG	
023	TC Low Spd:M	*ENG	
024	TC Low Spd:Y	*ENG	

3214	[Vt Save :Set]		
001	Coverage Thresh	*ENG	[0 to 100 / 20 / 1%/step]

3218	[Vt Err Flag :Disp]		
001	UppErr Flag: K	*ENG	Displays the flag "1" to indicate Vt exceeds upper limit error threshold (SP3211-002). [0 or 1 / - / 1/step]
002	UppErr Flag: C	*ENG	
003	UppErr Flag: M	*ENG	
004	UppErr Flag: Y	*ENG	
011	LowErr Flag: K	*ENG	Displays the flag "1" to indicate Vt falls below the lower limit error threshold (SP3211-004). [0 or 1 / - / 1/step]
012	LowErr Flag: C	*ENG	
013	LowErr Flag: M	*ENG	
014	LowErr Flag: Y	*ENG	

3219	[TD.Sens:Vt':Disp]		
001	Vt' 0Current:K	ENG	[0.00 to 5.00 / - / 0.01V/step]
002	Vt' 0Current:C	ENG	[0.00 to 5.00 / - / 0.01V/step]
003	Vt' 0Current:M	ENG	[0.00 to 5.00 / - / 0.01V/step]

004	Vt' 0Current:Y	ENG	[0.00 to 5.00 / - / 0.01V/step]
021	Vt' 2Current:K	ENG	[0.00 to 5.00 / - / 0.01V/step]
022	Vt' 2Current:C	ENG	[0.00 to 5.00 / - / 0.01V/step]
023	Vt' 2Current:M	ENG	[0.00 to 5.00 / - / 0.01V/step]
024	Vt' 2Current:Y	ENG	[0.00 to 5.00 / - / 0.01V/step]

3220	[Vtcnt :Disp/Set]		
001	Current: K	*ENG	Displays/Sets current TD sensor control voltage. [2.00 to 5.00 / 4.00 / 0.01V/step]
002	Current: C	*ENG	
003	Current: M	*ENG	
004	Current: Y	*ENG	
011	Initial: K	*ENG	Displays/Sets the TD sensor control voltage at TD sensor initial settings execution. [2.00 to 5.00 / 4.00 / 0.01V/step]
012	Initial: C	*ENG	
013	Initial: M	*ENG	
014	Initial: Y	*ENG	

3230	[Vtref :Disp/Set]		
001	Current: K	*ENG	Displays/Sets the target value of current TD sensor output voltage. [0.00 to 5.00 / 2.70 / 0.01V/step]
002	Current: C	*ENG	
003	Current: M	*ENG	
004	Current: Y	*ENG	
011	Initial: K	*ENG	Displays the target value of TD sensor output voltage at TD sensor initial settings execution. [0.00 to 5.00 / - / 0.01V/step]
012	Initial: C	*ENG	
013	Initial: M	*ENG	
014	Initial: Y	*ENG	

021	Pixel Correction: K	*ENG	Displays the pixel correction value of Vtref correction with image coverage. [-5.00 to 5.50 / - / 0.01V/step]
022	Pixel Correction: C	*ENG	
023	Pixel Correction: M	*ENG	
024	Pixel Correction: Y	*ENG	

3231	[Vtref Limits :Set]		
001	Upper:K	*ENG	Sets the upper limit of Vtref (target value of TD sensor output voltage). [0.00 to 5.00 / 4.00 / 0.01V/step]
002	Upper:C	*ENG	
003	Upper:M	*ENG	
004	Upper:Y	*ENG	
011	Lower:K	*ENG	Sets the lower limit of Vtref (target value of TD sensor output voltage). [0.00 to 5.00 / 2.00 / 0.01V/step]
012	Lower:C	*ENG	
013	Lower:M	*ENG	
014	Lower:Y	*ENG	

3232	[Vtref Correct:Pixel]		
001	ON/OFF	*ENG	[0 or 1 / 1:ON /1/step] 0:OFF, 1:ON
011	Low Coverage Coef:K	*ENG	Sets the coefficient Vtref to determine the Vtref correction value with low image coverage. [0.0 to 5.0 / 0.3 / 0.1/step]
012	Low Coverage Coef:C	*ENG	
013	Low Coverage Coef:M	*ENG	
014	Low Coverage Coef:Y	*ENG	
021	High Coverage Coeff:K	*ENG	Sets the coefficient Vtref to determine the Vtref correction value with high image coverage. [0.0 to 5.0 / 0.4 / 0.1/step]
022	High Coverage Coeff:C	*ENG	
023	High Coverage Coeff:M	*ENG	
024	High Coverage Coeff:Y	*ENG	

040	Initial ProCon Thresh	*ENG	Sets process control flag and executes process control by determining the high image coverage is successive if the cumulative average (M) of image coverage (SP3224-009 to 012) is more than the specified value. [0 to 255 / 6 / 1times/step]
041	High Coverage Thresh:H	*ENG	This SP is referenced when an output of high image coverage. [0 to 100 / 60 / 1%/step]
050	ProCon Thresh	*ENG	[0 to 255 / 14 / 1times/step]
060	Low Coverage Thresh	*ENG	This SP is referenced when an output of low image coverage. [0.0 to 20.0 / 3.0 / 0.1%/step]
070	TC Upper Limit Correction	*ENG	Sets Vtref lower limit (TC upper limit) which can be canceled temporarily by determining the low image coverage is successive if the cumulative average (L) of image coverage (SP3224-013 to 016) is less than the specified value. [0.0 to 5.0 / 0.5 / 0.1wt%/step]
071	TC Upper Limit:Display:Bk	*ENG	Displays Vtref lower limit (TC upper limit) which can be canceled temporarily by determining the low image coverage is successive if the cumulative average (L) of image coverage (SP3224-013 to 016) is less than the specified value. [1.0 to 15.0 / - / 0.1wt%/step]
072	TC Upper Limit:Display:C	*ENG	
073	TC Upper Limit:Display:M	*ENG	
074	TC Upper Limit:Display:Y	*ENG	

3234	[Vtref Corr :Disp/Set]		
001	ON/OFF	*ENG	Controls On/Off for potential Vtref correction. [0 or 1 / 1 / 1/step] 0:OFF, 1:ON
011	Corr Amt(+):K	*ENG	Sets Vtref correction value for (+) side to control toner density to lower with developer gamma in potential control. [0.00 to 1.00 / 0.05 / 0.01V/step]
012	Corr Amt(+):C	*ENG	
013	Corr Amt(+):M	*ENG	
014	Corr Amt(+):Y	*ENG	
021	Corr Amt(-):K	*ENG	Sets Vtref correction value for (-) side to control toner density to lower with developer gamma in potential control. [0.00 to 1.00 / 0.05 / 0.01V/step]
022	Corr Amt(-):C	*ENG	
023	Corr Amt(-):M	*ENG	
024	Corr Amt(-):Y	*ENG	
031	P Rank 1 Threshold	*ENG	[0.00 to 2.00 / 0.15 / 0.01/step]
032	P Rank 2 Threshold	*ENG	[0.00 to 2.00 / 0.05 / 0.01/step]
033	P Rank 3 Threshold	*ENG	[-2.00 to 0.00 / -0.05 / 0.01/step]
034	P Rank 4 Threshold	*ENG	[-2.00 to 0.00 / -0.15 / 0.01/step]
041	T Rank 1 Threshold	*ENG	[-1.00 to 0.00 / -0.20 / 0.01V/step]
042	T Rank 2 Threshold	*ENG	[0.00 to 1.00 / 0.20 / 0.01V/step]
050	T Rank 2 Threshold	*ENG	[1.0 to 5.0 / 2.0 / 0.1/step]

3250	[ImgArea :Disp]		
001	ImgArea:K	*ENG	Displays image area of the latest page. [0 to 9999 / - / 1cm ² /step]
002	ImgArea:C	*ENG	
003	ImgArea:M	*ENG	
004	ImgArea:Y	*ENG	

3251	[DotCoverage :Disp]		
001	DotCoverage:K	*ENG	Displays image coverage of the latest page. [0.00 to 100.00 / - / 0.01%/step]
002	DotCoverage:C	*ENG	
003	DotCoverage:M	*ENG	
004	DotCoverage:Y	*ENG	
011	DC Avg.:S:K	*ENG	Displays the cumulative average (S) of image coverage for the latest page. [0.00 to 100.00 / - / 0.01%/step]
012	DC Avg.:S:C	*ENG	
013	DC Avg.:S:M	*ENG	
014	DC Avg.:S:Y	*ENG	
021	DC Avg.:M:K	*ENG	Displays the cumulative average (M) of image coverage for the latest page. [0.00 to 100.00 / - / 0.01%/step]
022	DC Avg.:M:C	*ENG	
023	DC Avg.:M:M	*ENG	
024	DC Avg.:M:Y	*ENG	
031	DC Avg.:L:K	*ENG	Displays the cumulative average (L) of image coverage for the latest page. [0.00 to 100.00 / - / 0.01%/step]
032	DC Avg.:L:C	*ENG	
033	DC Avg.:L:M	*ENG	
034	DC Avg.:L:Y	*ENG	
041	TotalPage:S:Set	*ENG	Sets the cumulative pages (S). [1 to 255 / 5 / 1sheets/step]
042	TotalPage:S:Set	*ENG	Sets the cumulative pages (M). [1 to 500 / 10 / 1sheets/step]
043	TotalPage:S:Set	*ENG	Sets the cumulative pages (L). [1 to 999 / 50 / 1sheets/step]
051	TotalPage:S:Set	*ENG	Sets the cumulative pages (S2). [1 to 255 / 40 / 1sheets/step]

052	TotalPage:S:Set	*ENG	Sets the cumulative pages (M2). [1 to 500 / 10 / 1sheets/step]
053	TotalPage:S:Set	*ENG	Sets the cumulative pages (L2). [1 to 999 / 50 / 1sheets/step]

3252	[AccumImgArea :Disp]		
001	ImgArea:K	*ENG	Displays accumulate of image area. [0 to 65535 / - / 1cm ² /step]
002	ImgArea:C	*ENG	
003	ImgArea:M	*ENG	
004	ImgArea:Y	*ENG	

3260	[Temperature/Humidity: Display]		
001	Temperature	ENG	Displays the temperature of environment sensor output [-5.0 to 45.0 / - / 0.1deg/step]
002	Relative Humidity	ENG	Displays the relative humidity of environment sensor output. [0.0 to 100.0 / - / 0.1%RH/step]
003	Absolute Humidity	ENG	Displays the absolute humidity of environment sensor output. [0.00 to 100.00 / - / 0.01g/m ³ /step]

3310	[ID.Sens :Voffset]		
001	Voffset reg	*ENG	Displays output voltage of normal reflection light at ID sensor LED off. [0.00 to 5.50 / - / 0.01V/step]
011	Voffset dif	*ENG	Displays output voltage of diffused reflection light at ID sensor LED off. [0.00 to 5.50 / - / 0.01V/step]
021	Voffset TM(Front)	*ENG	Displays output voltage of normal

022	Voffset TM(Center)	*ENG	reflection light at TM_Front, TM_Center or TM_Rear sensor LED off. [0.00 to 5.50 / - / 0.01V/step]
023	Voffset TM(Rear)	*ENG	

3311	[ID.Sens :Vmin]		
001	Vmin_K	*ENG	Displays Vmin output of tone pattern for black. [0.000 to 5.000 / - / 0.001/step]

3312	[ID.Sens :Vct]		
001	Vct_reg	*ENG	Displays the normal reflection output of crosstalk. [0.000 to 5.000 / - / 0.001V/step]
011	Vct_dif	*ENG	Displays the diffused reflection output of crosstalk. [0.000 to 5.000 / - / 0.001V/step]

3320	[Vsg Adj: Execute]		
001	P Sensor	*ENG	[- / - / -] [Execute]
011	Vsg Error Counter	*ENG	Counts Vsg error. [0 to 99 / 0 / 1times/step]
012	Voffset Threshold	*ENG	Sets the upper limit threshold of Voffset error. [0.00 to 5.00 / 1.00 / 0.01V/step]
013	Vsg Upper Threshold	*ENG	Sets the upper limit threshold of Vsg adjustment error. [0.00 to 5.00 / 4.50 / 0.01V/step]
014	Vsg Lower Threshold	*ENG	Sets the lower limit threshold of Vsg adjustment error. [0.00 to 5.00 / 3.50 / 0.01V/step]

015	lfsg UpperLimit	*ENG	Set error detection threshold for SC382 ("lf" upper limit error). [0.0 to 50.0 / 30.0 / 0.1mA/step]
020	Interval :Set	*ENG	Sets Vsg adjustment execution Page interval determined during printing or at the end of printing. Note: Vsg adjustment is executed when process control or MUSIC requires the execution. (Not executed by it.) [0 to 2000 / 500 / 1page/step]
021	Page Cnt	*ENG	Displays Page counter used Vsg execution determination. [0 to 2000 / - / 1page/step]

3321	[Adjusted Vsg]		
001	Vsg reg	*ENG	Displays normal reflection light output from bared belt with Vsg adjustment. [0.00 to 5.50 / - / 0.01V/step]
011	Vsg dif	*ENG	Displays diffused reflection light output from bared belt with Vsg adjustment. [0.00 to 5.50 / - / 0.01V/step]
021	Vsg reg(BW)	*ENG	Displays normal reflection light output from bared belt with Vsg adjustment. [0.00 to 5.50 / - / 0.01V/step]
031	Vsg dif(BW)	*ENG	Displays diffused reflection light output from bared belt with Vsg adjustment. [0.00 to 5.50 / - / 0.01V/step]
041	Vsg TM(Front)	*ENG	Displays normal reflection light output from bared belt with Vsg adjustment (TM_Front, TM_Center or TM_Rear sensor). [0.00 to 5.50 / - / 0.01V/step]
042	Vsg TM(Center)	*ENG	
043	Vsg TM(Rear)	*ENG	

3322	[Adjusted Ifsg]		
	Displays the result value of the Vsg adjustment for each sensor.		
001	Ifsg	*ENG	Displays Vsg adjusted ID sensor LED current. [0.0 to 50.0 / - / 0.1mA/step]
011	Ifsg	*ENG	Displays Vsg adjusted ID sensor LED current. [[0.0 to 50.0 / - / 0.1mA/step]
021	Ifsg: TM(Front)	*ENG	Displays Vsg adjusted ID sensor LED current (TM_Front, TM_Center or TM_Rear sensor). [0.0 to 50.0 / - / 0.1mA/step]
022	Ifsg: TM(Center)	*ENG	
023	Ifsg: TM(Rear)	*ENG	

3323	[Vsg Adj OK?]		
001	Latest	*ENG	Displays Vsg adjustment execution result. [0 to 999 / - / 1/step]
002	Latest 1	*ENG	
003	Latest 2	*ENG	
004	Latest 3	*ENG	
005	Latest 4	*ENG	
006	Latest 5	*ENG	
007	Latest 6	*ENG	
008	Latest 7	*ENG	
009	Latest 8	*ENG	
010	Latest 9	*ENG	

3330	[ID.Sens Coef :Disp]		
001	K2(Latest)	*ENG	Displays the latest value for the sensitivity correction coefficient (K2 or K5) of ID sensor. [0.0000 to 5.0000 / - / 0.0001/step]
011	K5(Latest)	*ENG	

3331	[ID.Sens Coef :Set]		
001	K2: Upp Limit Corr	*ENG	[-0.20 to 0.40 / 0.07 / 0.01/step]
002	K2: Lwr Limit Corr	*ENG	[-0.40 to 0.20 / -0.07 / 0.01/step]
003	K2: Upp/Lwr Limit Coef1	*ENG	[0.00 to 1.00 / 0.00 / 0.01/step]
004	Kn: Lower	*ENG	Sets the upper limit of valid range of normalized value for normal reflection light using the sensitivity correction (K5). [0.00 to 1.00 / 1.00 / 0.01/step]
005	Kn: Upper	*ENG	Sets the lower limit of valid range of normalized value for normal reflection light using the sensitivity correction (K5). [0.00 to 1.00 / 0.10 / 0.01/step]
006	K5: Upper	*ENG	Sets the upper limit of the sensitivity correction coefficient (K5). [0.00 to 10.00 / 5.00 / 0.01/step]
007	K5: Lower	*ENG	Sets the lower limit of the sensitivity correction coefficient (K5). [0.00 to 1.00 / 0.50 / 0.01/step]
008	K5: Target Point	*ENG	Sets correction point (Kn) for sensitivity correction coefficient (K5). [0.00 to 1.00 / 0.15 / 0.01/step]
009	K5: Target Voltage	*ENG	Sets correction point (delta Vsp_dif_Dash) for sensitivity correction coefficient (K5). [0.00 to 5.00 / 1.63 / 0.01V/step]

012	Corrct Coef:C	*ENG	Sets color-difference correction coefficient (C) for delta Vsp_Dif_Dash. [0.500 to 1.500 / 0.925 / 0.001/step]
013	Corrct Coef:M	*ENG	Sets color-difference correction coefficient (M) for delta Vsp_Dif_Dash. [0.500 to 1.500 / 1.000 / 0.001/step]
014	Corrct Coef:Y	*ENG	Sets color-difference correction coefficient (Y) for delta Vsp_Dif_Dash. [0.500 to 1.500 / 1.003 / 0.001/step]
021	K2: Check	*ENG	[0.000 to 1.000 / 0.330 / 0.001/step]
031	Diffuse Corr	*ENG	[0.75 to 1.35 / 1.00 / 0.01/step]
041	Vct_reg Check:Slope	*ENG	[0.0000 to 1.0000 / 0.0000 / 0.0001V/mA/step]
046	Vct_reg Check:Xint	*ENG	[0.0 to 25.5 / 0.0 / 0.1mA/step]
051	Vct_dif Check:Slope	*ENG	[0.0000 to 1.0000 / 0.0000 / 0.0001V/mA/step]
056	Vct_dif Check:Xint	*ENG	[0.0 to 25.5 / 0.0 / 0.1mA/step]

3332	[M/A Calculation]		
001	Corrct Coef:K	*ENG	[0.50 to 2.00 / 1.00 / 0.01/step]
002	Corrct Coef:C	*ENG	
003	Corrct Coef:M	*ENG	
004	Corrct Coef:Y	*ENG	

3400	[Toner Supply Type]		
001	K	*ENG	Selects toner supply mode. [0 to 4 / 4 / 1/step] 0: FIXED 2: PID 4: DANC
002	C	*ENG	
003	M	*ENG	
004	Y	*ENG	

3411	[Toner Supply Qty]		
001	K	ENG	Displays the latest value of toner supply quantity from toner supply calculation. [0.0 to 40000.0 / - / 0.1mg/step]
002	C	ENG	
003	M	ENG	
004	Y	ENG	

3420	[DeveloperWeight]		
001	Total_Weight	*ENG	Sets the developer weight. [50 to 2000 / 120 / 1g/step]

3421	[TnrSplyAbility]		
001	K	*ENG	Sets toner supply ability to developer from sub hopper. [0.001 to 2.000 / 0.350 / 0.001/step]
002	C	*ENG	
003	M	*ENG	
004	Y	*ENG	
011	TnrSplyAbilityCoef1	*ENG	[0.50 to 2.00 / 1.00 / 0.01/step]
012	TnrSplyAbilityCoef2	*ENG	
013	TnrSplyAbilityCoef3	*ENG	
014	TnrSplyAbilityCoef4	*ENG	

015	TnrSplyAbilityCoef5	*ENG	
016	TnrSplyAbilityCoef6	*ENG	
017	TnrSplyAbilityCoef7	*ENG	
018	TnrSplyAbilityCoef8	*ENG	
019	TnrSplyAbilityCoef9	*ENG	
020	TnrSplyAbilityCoef10	*ENG	
021	unit time	*ENG	[0 to 60000 / 3000 / 1msec/step]
031	Environ Threshold:1	*ENG	Sets absolute humidity threshold 1 for supply ability correction. [0.0 to 65.0 / 17.0 / 0.1g/m ³ /step]
032	Environ Threshold:2	*ENG	Sets absolute humidity threshold 2 for supply ability correction. [0.0 to 65.0 / 29.0 / 0.1g/m ³ /step]
033	Environ Threshold:3	*ENG	Sets absolute humidity threshold 3 for supply ability correction. [0.0 to 65.0 / 34.0 / 0.1g/m ³ /step]
041	Environ Coef1	*ENG	Sets environment correction coefficient 1 that corrects supply ability by absolute humidity. [0.50 to 2.00 / 1.04 / 0.01/step]
042	Environ Coef2	*ENG	Sets environment correction coefficient 2 or 3 that corrects supply ability by absolute humidity. [0.50 to 2.00 / 1.00 / 0.01/step]
043	Environ Coef3	*ENG	
044	Environ Coef4	*ENG	Sets environment correction coefficient 4 that corrects supply ability by absolute humidity. [0.50 to 2.00 / 0.96 / 0.01/step]
3422	[Tnr Supply Limits :Set]		

001	Max Supply Rate:K	*ENG	Sets the maximum toner supply rate. [0 to 100 / 100 / 1%/step]
002	Max Supply Rate:C	*ENG	
003	Max Supply Rate:M	*ENG	
004	Max Supply Rate:Y	*ENG	
011	Min Supply Time: K	*ENG	Sets the minimum toner supply rate. [0 to 255 / 100 / 1msec/step]
012	Min Supply Time: C	*ENG	
013	Min Supply Time: M	*ENG	
014	Min Supply Time: Y	*ENG	

3432	[DrvTime: Setting]		
001	DriveTime(max)	*ENG	Sets the maximum continuous supply time. [0 to 1500 / 800 / 1msec/step]

3440	[Fixed Supply Mode]		
001	Fixed Rate: K	*ENG	Sets toner supply ratio for fixed supply mode. [0 to 100 / 10 / 1%/step]
002	Fixed Rate: C	*ENG	
003	Fixed Rate: M	*ENG	
004	Fixed Rate: Y	*ENG	

3450	[Toner Supply PID: Setting]		
001	Vt Proportion: K	*ENG	Sets supply coefficient to supply toner proportionate to Vt-Vtref at toner supply control. [0 to 2550 / 40 / 1/step]
002	Vt Proportion: C	*ENG	
003	Vt Proportion: M	*ENG	
004	Vt Proportion: Y	*ENG	
011	Pixel Proportion: K	*ENG	Sets supply coefficient to supply toner

012	Pixel Proportion: C	*ENG	proportionate to output imaging pixel (Pxl) at toner supply control. [0.00 to 2.55 / 0.60 / 0.01/step]
013	Pixel Proportion: M	*ENG	
014	Pixel Proportion: Y	*ENG	
021	Pixel Proportion 2: K	*ENG	Displays the current value of pixel proportionality coefficient 2 for supply coefficient to supply toner proportionate to the pixel (Pxl) of output image at toner supply control. [0.00 to 2.55 / - / 0.01/step]
022	Pixel Proportion 2: C	*ENG	
023	Pixel Proportion 2: M	*ENG	
024	Pixel Proportion 2: Y	*ENG	
031	Correction Coefficient: 1	*ENG	Sets the supply coefficient to supply toner proportionate to the pixel (Pxl) of output image at toner supply control. [0.00 to 2.55 / 1.00 / 0.01/step]
032	Correction Coefficient: 2	*ENG	[0.00 to 2.55 / 0.50 / 0.01/step]
033	Correction Coefficient: 3	*ENG	[0.00 to 2.55 / 0.00 / 0.01/step]
034	Correction Coefficient: 4	*ENG	[0.00 to 2.55 / 0.25 / 0.01/step]
035	Correction Coefficient: 5	*ENG	[0.00 to 2.55 / 0.50 / 0.01/step]
041	Pixel Proportion 3: K	*ENG	Displays the current value of pixel proportionality coefficient 3 for supply coefficient to supply toner proportionate to the pixel (Pxl) of output image at toner supply control. [0.70 to 1.30 / - / 0.01/step]
042	Pixel Proportion 3: C	*ENG	
043	Pixel Proportion 3: M	*ENG	
044	Pixel Proportion 3: Y	*ENG	
051	Correction Value 1	*ENG	Sets the supply coefficient to supply toner proportionate to the pixel (Pxl) of output image at toner supply control. [-0.10 to 0.00 / -0.01 / 0.01/step]
052	Correction Value 2	*ENG	[0.00 to 0.10 / 0.01 / 0.01/step]
061	P_Pxl_Coef_Err	*ENG	[0.00 to 1.00 / 0.35 / 0.01/step]
071	Vt Integral Control: K	*ENG	Sets the supply coefficient to supply toner

072	Vt Integral Control: C	*ENG	proportionate to the pixel (Pxl) of output image at toner supply control. [0 to 2550 / 500 / 1/step]
073	Vt Integral Control: M	*ENG	
074	Vt Integral Control: Y	*ENG	
081	Vt Integral Value: K	*ENG	Sets the supply coefficient to supply toner according to the accumulation of Vt-Vtref differences at toner supply control. [-255.00 to 255.00 / 0.00 / 0.01/step]
082	Vt Integral Value: C	*ENG	
083	Vt Integral Value: M	*ENG	
084	Vt Integral Value: Y	*ENG	
091	Vt Sum Times: K	*ENG	Displays the accumulation of Vt-Vtref differences. [1 to 255 / - / 1times/step]
092	Vt Sum Times: C	*ENG	
093	Vt Sum Times: M	*ENG	
094	Vt Sum Times: Y	*ENG	

3460	[TonerSupply :DANC]		
011	Time_Min	*ENG	Sets the DANC minimum supply time. [0 to 250 / 100 / 1msec/step]
012	Time_Max	*ENG	Sets the DANC maximum supply time. [0 to 1000 / 200 / 1msec/step]
022	SMITH_Unit_Weight	*ENG	Sets the supply quantity at Smith model. [0 to 500 / 129 / 1mg/step]
111	Rev_Fix:K	*ENG	Sets the inverse of transfer rate to make up for the reverse transfer of ANC. [1.000 to 1.500 / 1.000 / 0.001/step]
112	Rev_Fix:C	*ENG	
113	Rev_Fix:M	*ENG	
114	Rev_Fix:Y	*ENG	
121	N Delay:StdSpd	*ENG	Sets the delay time with the number of control samplings from entrance of toner supply of the Smith model to sensor. [0 to 200 / 3 / 1/step]
123	N Delay:LowSpd	*ENG	

3461	[TonerSupply :DANC]		
001	PI:Power	*ENG	Changes the request values of PI at one time. [5 to 200 / 100 / 1%/step]
011	PI:I Gain	*ENG	Sets I gain. [0.00000 to 0.10000 / 0.01000 / 0.00001/step]
012	PI:P Gain	*ENG	Sets P gain. [0.00000 to 1.00000 / 0.01000 / 0.00001/step]
021	PI:I Limits:Up	*ENG	Sets the limit for the I or P request value (supply plus side). [0.00 to 1.00 / 0.10 / 0.01/step]
022	PI:P Limits:Up	*ENG	
023	PI:I Limits:Low	*ENG	Sets the limit for the I request value (supply minus side). [0.00 to 1.00 / 0.20 / 0.01/step]
024	PI:P Limits:Low	*ENG	[0.00 to 1.00 / 0.10 / 0.01/step]
031	AW:AWIlow	*ENG	Sets AW gain. [0 to 1000 / 1000 / 1/step]
033	AW:AWIpni	*ENG	
103	PI:SpdCoef:LowSpd	*ENG	[0.01 to 1.00 / 0.50 / 0.01/step]
111	SMITH:Gain	*ENG	Sets the gain for the Smith model. [0.00 to 2.00 / 1.00 / 0.01/step]
113	SMITH:LowSpd	*ENG	Sets the liner speed correction to the gain for the Smith model. [0.00 to 1.00 / 1.00 / 0.01/step]

3462		[TonerSupply :DANC]	
001	ANC:Power	*ENG	Sets the request value of ANC to change the all ANC filters at one time. [0 to 200 / 100 / 1%/step] 100: normal control, 0: without ANC
101	ANC:Gain	*ENG	Sets the of all ANC filters. [0.00 to 2.00 / 1.00 / 0.01/step]
103	ANC:Rate:LowSpd	*ENG	Sets the liner speed correction to the gain of all ANC filters (Low speed). [0.00 to 1.00 / 1.00 / 0.01/step]

3463		[TonerSupply :DANC]	
101	Int:I:K	*ENG	Sets the value for I storage corresponding to the power off/on. [-1000.0000 to 1000.0000 / 0.0000 / 0.0001/step]
102	Int:I:C	*ENG	
103	Int:I:M	*ENG	
104	Int:I:Y	*ENG	
111	ANC:ref Sum:K	*ENG	Sets the value for ANC storage corresponding to the power off/on. [-1000.0000 to 1000.0000 / 0.0000 / 0.0001/step]
112	ANC:ref Sum:C	*ENG	
113	ANC:ref Sum:M	*ENG	
114	ANC:ref Sum:Y	*ENG	
201	ImgArea:K	*ENG	Displays the image area of the latest page. [0.00 to 999.00 / - / 0.01cm2/step]
202	ImgArea:C	*ENG	
203	ImgArea:M	*ENG	
204	ImgArea:Y	*ENG	

3500	[ImgQtyAdj :ON/OFF]		
001	ALL	*ENG	Sets to off for the execution determination of all image processing adjustments, potential controls, MUSIC condition adjustments, or TD sensor initial settings. [0 or 1 / 1 :ON / 1/step] 0:OFF, 1:ON
002	ProCon	*ENG	
003	MUSIC	*ENG	
004	Init TD Sensor	*ENG	

3501	[Toner End Prohibition Setting]		
001	Process Control	*ENG	[0 or 1 / 1 / 1/step] 0:Permit, 1:Forbid
002	MUSIC	*ENG	
003	TC Adj.	*ENG	

3510	[ImgQtyAdj :ExeFlag]		
001	Toner Recovery: K	*ENG	Sets the execution flag for toner recovery. [0 or 1 / 0 / 1/step]
002	Toner Recovery: C	*ENG	
003	Toner Recovery: M	*ENG	
004	Toner Recovery: Y	*ENG	
011	Init TD Sensor :K	*ENG	Sets the execution flag for TD sensor initial settings. [0 or 1 / 0 / 1/step]
012	Init TD Sensor :C	*ENG	
013	Init TD Sensor :M	*ENG	
014	Init TD Sensor :Y	*ENG	
021	Process Control	*ENG	Sets the execution flag for process control. [0 to 2 / 0 / 1/step]
022	Developer Agitating	*ENG	Sets the execution flag for developer agitating. [0 or 1 / 0 / 1/step]

023	Blade Damage Prevention	*ENG	Sets the execution flag for blade damage prevention mode. [0 or 1 / 0 / 1/step]
024	MUSIC	*ENG	Sets the execution flag for MUSIC. [0 to 2 / 0 / 1/step]
025	Vsg Adj.	*ENG	Sets the execution flag for Vsg adjustment. [0 or 1 / 0 / 1/step]
026	Charge AC Adj.	*ENG	Sets the execution flag for charge roller cleaning. [0 or 1 / 0 / 1/step]
031	Init Toner Replenish: K	*ENG	Sets the execution flag for toner initial replenish. [0 or 1 / 0 / 1/step]
032	Init Toner Replenish: C	*ENG	
033	Init Toner Replenish: M	*ENG	
034	Init Toner Replenish: Y	*ENG	
035	TE Check	*ENG	Sets the execution flag for toner end determine. [0 or 1 / 0 / 1/step]

3520	[ImgQltyAdj :Interval]		
001	During Job	*ENG	Sets the interval pages for image quality adjustment detection during job. [0 to 100 / 5 / 1pages/step]
002	During Stand-by	*ENG	Sets the interval pages for image quality adjustment detection during the stand-by mode. [0 to 100 / 10 / 1minutes/step]

3521	[Drum Stop Time :Disp]		
	Displays the ending time of image processing (year, month, day, hour, and minute).		
001	Year	*ENG	[0 to 99 / - / 1year/step]
002	Month	*ENG	[1 to 12 / - / 1month/step]
003	Day	*ENG	[1 to 31 / - / 1day/step]
004	Hour	*ENG	[0 to 23 / - / 1hour/step]
005	Minute	*ENG	[0 to 59 / - / 1minute/step]

3522	[Drum Stop Environ :Disp]		
	001	Temperature	*ENG Displays the temperature at the end of the image processing. [-1280.0 to 1270.0 / - / 0.1deg/step]
	002	Rel Humidity	*ENG Displays the relative humidity at the end of the image processing. [0.0 to 1000.0 / - / 0.1%RH/step]
	003	Abs Humidity	*ENG Displays the absolute humidity at the end of the image processing. [0.0 to 1000.0 / - / 0.1g/m ³ /step]
	100	Time Setting	ENG [0 to 255 / 30 / 1sec/step]

3529	[ProCon Interval Control :Set]		
001	Gamma Corr	*ENG	Sets on/off for the developer gamma correction or the environment correction of process control execution interval. [0 or 1 / 1:ON / 1/step] 0:OFF, 1:ON
002	Environ Corr	*ENG	
003	AbsHum Threshold	*ENG	Sets absolute humidity threshold for the environment correction of process control execution interval. [0.0 to 99.0 / 4.3 / 0.1g/m ³ /step]
004	Max Cnt Threshold	*ENG	Sets the maximum number of times for interrupt or job end process control. [0 to 99 / 2 / 1counts/step]
005	Exe Cnt	ENG	Displays the maximum counter for interrupt or job end process control. [0 to 255 / - / 1 counts/step]
006	Page Cnt:BW	*ENG	Displays the page counter of process control. [0 to 5000 / - / 1sheets/step]
007	Page Cnt:FC	*ENG	

3530	[PowerON ProCon :Set]		
001	Non-use Time Setting	*ENG	[0 to 1440 / 360 / 1minute/step]
002	Temperature Range	*ENG	[0 to 99 / 10 / 1deg/step]
003	Relative Humidity Range	*ENG	[0 to 99 / 50 / 1%RH/step]
004	Absolute Humidity Range	*ENG	[0 to 99 / 6 / 1g/m ³ /step]
005	Interval:BW	*ENG	[0 to 5000 / 250 / 1sheets/step]
006	Interval:FC	*ENG	[0 to 5000 / 100 / 1sheets/step]
007	Page Cnt:BW	*ENG	[0 to 5000 / - / 1sheets /step]
008	Page Cnt:FC	*ENG	

009	Non-use Time Setting(Long)	*ENG	[0 to 5000 / 5000 / 1hour/step]
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3531	[Non-useTime Procon :Set]		
	Sets the non-use time setting, temperature, relative humidity, absolute humidity or page interval as the threshold of process control execution determination at power on.		
001	Non-use Time Setting	*ENG	[0 to 1440 / 360 / 1minute/step]
002	Temperature Range	*ENG	[0 to 99 / 10 / 1deg/step]
003	Relative Humidity Range	*ENG	[0 to 99 / 50 / 1%RH/step]
004	Absolute Humidity Range	*ENG	[0 to 99 / 6 / 1g/m3/step]
005	Maximum Execution Number	*ENG	[0 to 99 / 10 / 1times/step]

3533	[Interrupt ProCon :Set]		
001	Interval:Set:BW	*ENG	Sets the page interval for interrupt process control. [0 to 5000 / 500 / 1sheets/step]
002	Interval:Disp:BW	*ENG	Displays the page interval for interrupt process control. [0 to 5000 / - / 1sheets/step]
003	Corr(Short):BW	*ENG	Sets the correction coefficient (Short) of page interval for interrupt process control. [0.00 to 1.00 / 0.10 / 0.01/step]
004	Corr(Mid):BW	*ENG	Sets the correction coefficient (Mid) of page interval for interrupt process control. [0.00 to 1.00 / 1.00 / 0.01/step]
011	Interval:Set:FC	*ENG	Sets the page interval for interrupt process control. [0 to 5000 / 200 / 1sheets/step]

012	Interval:Disp:FC	*ENG	Displays the page interval for interrupt process control. [0 to 5000 / - / 1sheets/step]
013	Corr(Short):FC	*ENG	Sets the correction coefficient (Short) of page interval for interrupt process control. [0.00 to 1.00 / 0.25 / 0.01/step]
014	Corr(Mid):FC	*ENG	Sets the correction coefficient (Mid) of page interval for interrupt process control. [0.00 to 1.00 / 1.00 / 0.01/step]

3534	[JobEnd ProCon :Set]		
001	Interval:Set:BW	*ENG	Sets the page interval for job end process control. [0 to 5000 / 250 / 1sheets/step]
002	Interval:Disp:BW	*ENG	Displays the page interval for job end process control. [0 to 5000 / - / 1sheets/step]
003	Corr(Short):BW	*ENG	Sets the correcting coefficient (Short) for job end process control. [0.00 to 1.00 / 0.20 / 0.01/step]
004	Corr(Mid):BW	*ENG	Sets the correcting coefficient (Mid) for job end process control. [0.00 to 1.00 / 1.00 / 0.01/step]
011	Interval:Set:FC	*ENG	Sets the page interval for job end process control. [0 to 1000 / 100 / 1sheets/step]
012	Interval:Disp:FC	*ENG	Displays the page interval for job end process control. [0 to 5000 / - / 1sheets/step]
013	Corr(Short):FC	*ENG	Sets the correcting coefficient (Short) for job end process control. [0.00 to 1.00 / 0.50 / 0.01/step]

014	Corr(Mid):FC	*ENG	Sets the correcting coefficient (Mid) for job end process control. [0.00 to 1.00 / 1.00 / 0.01/step]
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3539	[Dev Agitating Time :Set]		
001	Time	*ENG	Sets the developer agitating time. [0 to 3000 / 10 / 1sec/step]
010	ON/OFF(by AbsHum)	*ENG	Sets on/off for absolute humidity correction of the developer agitating time. [0 or 1 / 1:ON / 1/step] 0:OFF, 1:ON
011	by AbsHum:1	*ENG	[0 to 3000 / 0 / 1sec/step]
012	by AbsHum:2	*ENG	[0 to 3000 / 0 / 1sec/step]
013	by AbsHum:3	*ENG	[0 to 3000 / 5 / 1sec/step]
014	by AbsHum:4	*ENG	[0 to 3000 / 5 / 1sec/step]
015	by AbsHum:5	*ENG	[0 to 3000 / 5 / 1sec/step]
016	by AbsHum:6	*ENG	[0 to 3000 / 5 / 1sec/step]
021	AbsHum Threshold:1	*ENG	[0.0 to 65.0 / 4.0 / 0.1g/m ³ /step]
022	AbsHum Threshold:2	*ENG	[0.0 to 65.0 / 8.0 / 0.1g/m ³ /step]
023	AbsHum Threshold:3	*ENG	[0.0 to 65.0 / 12.0 / 0.1g/m ³ /step]
024	AbsHum Threshold:4	*ENG	[0.0 to 65.0 / 16.0 / 0.1g/m ³ /step]
025	AbsHum Threshold:5	*ENG	[0.0 to 65.0 / 24.0 / 0.1g/m ³ /step]
030	ON/OFF(by Non-use Time)	*ENG	Sets on/off for non-use time correction of the developer agitating time. [0 or 1 / 1:ON / 1/step] 0:OFF, 1:ON
031	by Non-use Time:1	*ENG	[0 to 3000 / 0 / 1sec/step]
032	by Non-use Time:2	*ENG	

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033	by Non-use Time:3	*ENG	
034	by Non-use Time:4	*ENG	
035	by Non-use Time:5	*ENG	
036	by Non-use Time:6	*ENG	
037	by Non-use Time:7	*ENG	
038	by Non-use Time:8	*ENG	
039	by Non-use Time:9	*ENG	[0 to 3000 / 5 / 1sec/step]
040	by Non-use Time:10	*ENG	
041	by Non-use Time Threshold:1	*ENG	[0 to 30000 / 15 / 1min/step]
042	by Non-use Time Threshold:2	*ENG	[0 to 30000 / 30 / 1min/step]
043	by Non-use Time Threshold:3	*ENG	[0 to 30000 / 60 / 1min/step]
044	by Non-use Time Threshold:4	*ENG	[0 to 30000 / 120 / 1min/step]
045	by Non-use Time Threshold:5	*ENG	[0 to 30000 / 240 / 1min/step]
046	by Non-use Time Threshold:6	*ENG	[0 to 30000 / 360 / 1min/step]
047	by Non-use Time Threshold:7	*ENG	[0 to 30000 / 720 / 1min/step]
048	by Non-use Time Threshold:8	*ENG	[0 to 30000 / 1440 / 1min/step]
049	by Non-use Time Threshold:9	*ENG	[0 to 30000 / 2880 / 1min/step]

050	ON/OFF(by Non-use Time)	*ENG	Sets on/off for image area correction of the developer agitating time. [0 to 1 / 1:ON / 1/step] 0:OFF, 1:ON
051	by DotCoverage :1	*ENG	[0 to 3000 / 0 / 1sec/step]
052	by DotCoverage :2	*ENG	[0 to 3000 / 0 / 1sec/step]
053	by DotCoverage :3	*ENG	[0 to 3000 / 5 / 1sec/step]
054	by DotCoverage :4	*ENG	[0 to 3000 / 5 / 1sec/step]
055	by DotCoverage :5	*ENG	[0 to 3000 / 10 / 1sec/step]
056	by DotCoverage :6	*ENG	[0 to 3000 / 10 / 1sec/step]
061	byDotCoverage Threshold:1	*ENG	[0 to 100 / 10 / 1%/step]
062	byDotCoverage Threshold:2	*ENG	[0 to 100 / 20 / 1%/step]
063	byDotCoverage Threshold:3	*ENG	[0 to 100 / 40 / 1%/step]
064	byDotCoverage Threshold:4	*ENG	[0 to 100 / 60 / 1%/step]
065	byDotCoverage Threshold:5	*ENG	[0 to 100 / 80 / 1%/step]
099	UpperLimit	*ENG	Sets the upper limit of the developer agitating time. [0 to 3600 / 30 / 1sec/step]

3540	[PowerON Music :Set]		
001	Page Cnt:BW	*ENG	Sets the page counter of MUSIC at the power on. [0 to 5000 / 0 / 1sheets/step]
002	Page Cnt:FC	*ENG	

3541	[Music Interval :Set]		
001	Page Cnt:BW	*ENG	[0 to 5000 / 0 / 1sheets/step]
002	Page Cnt:FC	*ENG	

3550	[Refresh Mode]		
001	Required Area: K	*ENG	Displays the image area requiring the refresh. [0 to 65535 / - / 1cm ² /step]
002	Required Area: C	*ENG	
003	Required Area: M	*ENG	
004	Required Area: Y	*ENG	
011	Dev. Motor Rotation: Display: Bk	*ENG	Displays the developer motor rotation between the refresh mode executions. [0.0 to 1000.0 / - / 0.1m/step]
012	Dev. Motor Rotation: Display: C	*ENG	
013	Dev. Motor Rotation: Display: M	*ENG	
014	Dev. Motor Rotation: Display: Y	*ENG	
021	Rotation Threshold	*ENG	Sets the threshold of refresh mode execution determination. [0.0 to 1000.0 / 0.1 / 0.1m/step]
031	Refresh Threshold: Bk	*ENG	Sets the refresh execution threshold at toner density adjustment. [0 to 255 / 25 / 1cm ² /m/step]
032	Refresh Threshold: C	*ENG	Sets the refresh execution threshold at toner density adjustment. [0 to 255 / 25 / 1cm ² /m/step]
033	Refresh Threshold: M	*ENG	
034	Refresh Threshold: Y	*ENG	
041	Job End Area Coefficient	*ENG	[0.1 to 25.5 / 1.0 / 0.1/step]

042	Job End Vb Coefficient	*ENG	[0 to 100 / 34 / 1%/step]
043	Job End Length	*ENG	[0 to 99 / 77 / 1mm/step]
044	Job End Supply	*ENG	[0.000 to 1.000 / 0.450 / 0.001mg/cm ² /step]
081	Max Counts	*ENG	Sets the upper limit of number of toner refreshes performs at the same time of process control. [0 to 50 / 0 / 1/step]

3552	[Blade damage prevention mode]		
001	Execution Temp. Threshold	*ENG	Sets the temperature threshold of blade damage prevention mode execution. [0 to 50 / 50 / 1deg/step]

3553	[Transfer belt cleaning]		
001	TransferIdleTime Temperature:H	*ENG	[0.0 to 3.0 / 0.0 / 0.1revolutions/step]
002	TransferIdleTime Temperature:M	*ENG	
003	TransferIdleTime Temperature:L	*ENG	
004	TransferIdleTime Temperature:L:ON	*ENG	
005	Temperature Threshold:T2	*ENG	[20 to 30 / 25 / 1deg/step]
006	Temperature Threshold:T1	*ENG	[0 to 15 / 15 / 1deg/step]
007	Temperature Threshold:T3	*ENG	[0 to 30 / 18 / 1deg/step]

3555	[Execution Interval]		
001	Charge AC Control Counter	*ENG	[0 to 2000 / 500 / 1page/step]

3600	[Select ProCon]		
001	Potential Control	*ENG	Sets the potential control mode. [0 or 1 / 1:CONTROL / 1/step] 0:FIXED, 1:CONTROL
002	LD Control	*ENG	Sets the LD control mode. [0 or 1 / 1:ON / 1/step] 0:OFF, 1:ON
003	TC Adj. Mode	*ENG	Sets the execution timing for toner density adjustment process control. [0 to 2 / 1 / 1/step] 0:Do Not Execute 1:1st Power On 2:1st Power On & Job End
004	ACC Before ProCon	*ENG	Selects the performance same as the process control executed before ACC. [0 to 2 / 2 / 1/step] 0:Not Execute 1:Process Control 2:TC Control
006	Pattern Cal. Method	*ENG	[0 to 2 / 2 / 1/step] 0:FIXED 1:INITIALIZED 2:CALCULATED

3610	[Chrg AC Control]		
001	Std Speed: K	*ENG	Displays the charged AC control value determined by charged AC control. [0.00 to 3.00 / - / 0.01kV/step]
002	Std Speed: C	*ENG	
003	Std Speed: M	*ENG	
004	Std Speed: Y	*ENG	

3611	[Chrg DC Control]		
001	Std Speed: K	*ENG	Displays charged DC bias determined by process control. [300 to 1000 / - / 1-V/step]
002	Std Speed: C	*ENG	
003	Std Speed: M	*ENG	
004	Std Speed: Y	*ENG	
021	Low Speed: K	*ENG	
022	Low Speed: C	*ENG	
023	Low Speed: M	*ENG	
024	Low Speed: Y	*ENG	
051	Std Speed: BW	*ENG	
071	Low Speed: BW	*ENG	

3612	[Dev DC Control]		
001	Std Speed: K	*ENG	Displays developer bias determined by process control. [200 to 800 / - / 1-V/step]
002	Std Speed: C	*ENG	
003	Std Speed: M	*ENG	
004	Std Speed: Y	*ENG	
021	Low Speed: K	*ENG	Displays developer bias determined by process control.
022	Low Speed: C	*ENG	

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023	Low Speed: M	*ENG	[200 to 800 / - / 1-V/step]
024	Low Speed: Y	*ENG	
041	Vb Limit	*ENG	[0 to 500 / 50 / 1V/step]
051	Std Speed: BW	*ENG	Displays developer bias determined by process control. [200 to 800 / - / 1-V/step]
071	Low Speed: BW	*ENG	

3613	[LD Power Control]		
001	Std Speed: K	*ENG	Displays the LD power determined by process control. [0 to 200 / - / 1%/step]
002	Std Speed: C	*ENG	
003	Std Speed: M	*ENG	
004	Std Speed: Y	*ENG	
021	Std Speed: K	*ENG	Displays the LD power determined by process control. [0 to 200 / - / 1%/step]
022	Std Speed: C	*ENG	
023	Std Speed: M	*ENG	
024	Std Speed: Y	*ENG	
051	Std Speed: BW	*ENG	
071	Std Speed: BW	*ENG	
101	ProCon Corr: K	*ENG	[0 to 200 / - / 1%/step]
102	ProCon Corr: C	*ENG	
103	ProCon Corr: M	*ENG	
104	ProCon Corr: Y	*ENG	

3619	[Dev DC Spd Correct:Set]		
001	Coef Correct: Std Spd: K	*ENG	[0.50 to 1.50 / 1.00 / 0.01/step]
002	Coef Correct: Std Spd: C	*ENG	
003	Coef Correct: Std Spd: M	*ENG	
004	Coef Correct: Std Spd: Y	*ENG	
005	Coef Correct: Low Spd: K	*ENG	[0.50 to 1.50 / 1.00 / 0.01/step]
006	Coef Correct: Low Spd: C	*ENG	
007	Coef Correct: Low Spd: M	*ENG	
008	Coef Correct: Low Spd: Y	*ENG	
011	Offset: Std Spd: K	*ENG	[-128 to 127 / 28 / 1V/step]
012	Offset: Std Spd: C	*ENG	
013	Offset: Std Spd: M	*ENG	
014	Offset: Std Spd: Y	*ENG	
015	Offset: Low Spd: K	*ENG	[-128 to 127 / -22 / 1V/step]
016	Offset: Low Spd: C	*ENG	
017	Offset: Low Spd: M	*ENG	
018	Offset: Low Spd: Y	*ENG	

3620	[ProCon Target M/A]		
001	Maximum M/A:K	*ENG	[0.250 to 0.750 / 0.450 / 0.001mg/cm ² /step]
002	Maximum M/A:C	*ENG	[0.250 to 0.750 / 0.445 / 0.001mg/cm ² /step]
003	Maximum M/A:M	*ENG	[0.250 to 0.750 / 0.468 / 0.001mg/cm ² /step]
004	Maximum M/A:Y	*ENG	[0.250 to 0.750 / 0.467 / 0.001mg/cm ² /step]
051	Maximum M/A:BW	*ENG	[0.250 to 0.750 / 0.420 / 0.001mg/cm ² /step]

3621	[Backgroud Pot:Set]		
001	Slope:K	*ENG	[-1000 to 1000 / 0 / 1/step]
002	Slope:C	*ENG	
003	Slope:M	*ENG	
004	Slope:Y	*ENG	
011	intercept:K	*ENG	[0 to 255 / 150 / 1V/step]
012	intercept:C	*ENG	[0 to 255 / 140 / 1V/step]
013	intercept:M	*ENG	[0 to 255 / 140 / 1V/step]
014	intercept:Y	*ENG	[0 to 255 / 140 / 1V/step]
051	UpperLimit	*ENG	[100 to 200 / 160 / 1V/step]
052	LowerLimit	*ENG	[0 to 100 / 100 / 1V/step]

3622	[Dev Pot :Set]		
001	K	*ENG	Displays the development potential. [0 to 800 / - / 1V/step]
002	C	*ENG	
003	M	*ENG	
004	Y	*ENG	
021	K:BW	*ENG	
051	UpperLimit	*ENG	Sets the development potential upper limit.(K) [400 to 800 / 650 / 1V/step]
052	UpperLimit	*ENG	Sets the development potential upper limit.(C) [400 to 800 / 650 / 1V/step]
053	UpperLimit	*ENG	Sets the development potential upper limit.(M) [400 to 800 / 650 / 1V/step]
054	UpperLimit	*ENG	Sets the development potential upper limit.(Y) [400 to 800 / 650 / 1V/step]
061	LowerLimit	*ENG	Sets the development potential lower limit.(K) [0 to 400 / 300 / 1V/step]
062	LowerLimit	*ENG	Sets the development potential lower limit.(C) [0 to 400 / 300 / 1V/step]
063	LowerLimit	*ENG	Sets the development potential lower limit.(M) [0 to 400 / 300 / 1V/step]
064	LowerLimit	*ENG	Sets the development potential lower limit.(Y) [0 to 400 / 300 / 1V/step]

33	[LD Power :Set]		
001	Std Speed Slope:K	*ENG	[-1000 to 1000 / 186 / 1/step]
002	Std Speed Slope:C	*ENG	
003	Std Speed Slope:M	*ENG	
004	Std Speed Slope:Y	*ENG	
011	Std Speed intercept:K	*ENG	[-1000 to 1000 / 6 / 1/step]
012	Std Speed intercept:C	*ENG	[-1000 to 1000 / 8 / 1/step]
013	Std Speed intercept:M	*ENG	
014	Std Speed intercept:Y	*ENG	
041	Low Speed Slope:K	*ENG	[-1000 to 1000 / 144 / 1/step]
042	Low Speed Slope:C	*ENG	
043	Low Speed Slope:M	*ENG	
044	Low Speed Slope:Y	*ENG	
051	Low Speed intercept:K	*ENG	[-1000 to 1000 / 26 / 1/step]
052	Low Speed intercept:C	*ENG	[-1000 to 1000 / 28 / 1/step]
053	Low Speed intercept:M	*ENG	
054	Low Speed intercept:Y	*ENG	

3624	[TC Adj. Mode]		
001	Target(Upp Limit)	*ENG	Sets the upper limit of the target range of developer gamma adjustment for toner density adjustment process control. [0.00 to 1.00 / 0.15 / 0.01mg/cm ² /-kV/step]

002	Target(Lwr Limit)	*ENG	Sets the lower limit of the target range of developer gamma adjustment for toner density adjustment process control. [0.00 to 1.00 / -0.15 / 0.01mg/cm ² -kV/step]
005	Force Consume Threshold	*ENG	Sets the forced consumption threshold for toner density adjustment process control. [1.00 to 6.00 / 1.50 / 0.01mg/cm ² -kV/step]
006	Consume(Upp Limit)	*ENG	Sets the consumption pattern for toner density adjustment process control. [10 to 2550 / 127 / 10cm ² /step]
007	Consume(Upp Limit)	*ENG	Sets the upper limit of number of consumptions for toner density adjustment process control. [0 to 16 / 16 / 1times/step]
008	Force Supply Threshold	*ENG	Sets the forced supply threshold for toner density adjustment process control. [0.00 to 1.00 / 0.50 / 0.01mg/cm ² -kV/step]
009	Supply(Upp Limit)	*ENG	Sets the upper or lower limit of supply quantity for toner density adjustment process control. [0.1 to 25.5 / 1.0 / 0.1g/step]
010	Supply(Lwr Limit)	*ENG	
021	Pattern Duty:K	*ENG	Sets LD Duty of consumption pattern for toner density adjustment process control. [0 to 15 / 15 / 1/step]
022	Pattern Duty:C	*ENG	
023	Pattern Duty:M	*ENG	
024	Pattern Duty:Y	*ENG	
031	Max Counts:PowerON	*ENG	Sets the upper limit of number of consumptions for toner density adjustment process control. [0 to 50 / 0 / 1/step]
034	Max Counts:Jobend	*ENG	

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035	Max Counts:ACC	*ENG	[0 to 50 / 3 / 1/step]
036	Max Counts:Initialized	*ENG	
040	Counts:TE Check	*ENG	[0 to 50 / 1 / 1/step]
051	Supply Gain(K)	*ENG	Sets the supply gain for toner density adjustment process control. [0.0 to 1.0 / 0.5 / 0.1/step]
052	Supply Gain(C)	*ENG	
053	Supply Gain(M)	*ENG	
054	Supply Gain(Y)	*ENG	
061	Consump Gain(K)	*ENG	Sets the consumption gain for toner density adjustment process control. [0.0 to 1.0 / 0.5 / 0.1/step]
062	Consump Gain(C)	*ENG	
063	Consump Gain(M)	*ENG	
064	Consump Gain(Y)	*ENG	

3627	[P Pattern Extraction :Set]		
001	Edge Detection Threshold :K	*ENG	[0.0 to 5.0 / 2.5 / 0.1V/step]
002	Edge Detection Threshold :C	*ENG	
003	Edge Detection Threshold :M	*ENG	
004	Edge Detection Threshold :Y	*ENG	
011	Edge Upper Limit	*ENG	[0 to 255 / 34 / 1point/step]
021	Edge Lower Limit	*ENG	[0 to 255 / 14 / 1point/step]

3628	[ID Pattern Timing :Set]		
001	Scan: YCMK	*ENG	Sets the process control pattern detection timing with ID sensor. [-500.0 to 500.0 / 0.0 / 0.1mm/step]
002	Detection Delay Time	*ENG	Sets the detection delay time of paper transfer. [0 to 2500 / 0 / 1msec/step]
003	Delay Time	*ENG	Sets the ID pattern delay time. [0 to 2500 / 701 / 1msec/step]
004	MUSIC Delay Time	*ENG	Sets the MUSIC delay time. [-2500 to 2500 / 300 / 1msec/step]

3629	[-]		
001	ChargeDC: Pattern1: Bk	*ENG	[0 to 999 / 260 / 1V/step]
002	ChargeDC: Pattern2: Bk	*ENG	[0 to 999 / 320 / 1V/step]
003	ChargeDC: Pattern3: Bk	*ENG	[0 to 999 / 380 / 1V/step]
004	ChargeDC: Pattern4: Bk	*ENG	[0 to 999 / 440 / 1V/step]
005	ChargeDC: Pattern5: Bk	*ENG	[0 to 999 / 510 / 1V/step]
011	ChargeDC: Pattern1: C	*ENG	[0 to 999 / 215 / 1V/step]
012	ChargeDC: Pattern2: C	*ENG	[0 to 999 / 290 / 1V/step]
013	ChargeDC: Pattern3: C	*ENG	[0 to 999 / 365 / 1V/step]
014	ChargeDC: Pattern4: C	*ENG	[0 to 999 / 440 / 1V/step]
015	ChargeDC: Pattern5: C	*ENG	[0 to 999 / 660 / 1V/step]
021	ChargeDC: Pattern1: M	*ENG	[0 to 999 / 240 / 1V/step]
022	ChargeDC: Pattern2: M	*ENG	[0 to 999 / 315 / 1V/step]
023	ChargeDC: Pattern3: M	*ENG	[0 to 999 / 390 / 1V/step]
024	ChargeDC: Pattern4: M	*ENG	[0 to 999 / 465 / 1V/step]

025	ChargeDC: Pattern5: M	*ENG	[0 to 999 / 660 / 1V/step]
031	ChargeDC: Pattern1: Y	*ENG	[0 to 999 / 265 / 1V/step]
032	ChargeDC: Pattern2: Y	*ENG	[0 to 999 / 340 / 1V/step]
033	ChargeDC: Pattern3: Y	*ENG	[0 to 999 / 415 / 1V/step]
034	ChargeDC: Pattern4: Y	*ENG	[0 to 999 / 490 / 1V/step]
035	ChargeDC: Pattern5: Y	*ENG	[0 to 999 / 660 / 1V/step]
101	DevelopmentDC: Pattern1: Bk	*ENG	[0 to 999 / 110 / 1V/step]
102	DevelopmentDC: Pattern2: Bk	*ENG	[0 to 999 / 170 / 1V/step]
103	DevelopmentDC: Pattern3: Bk	*ENG	[0 to 999 / 230 / 1V/step]
104	DevelopmentDC: Pattern4: Bk	*ENG	[0 to 999 / 290 / 1V/step]
105	DevelopmentDC: Pattern5: Bk	*ENG	[0 to 999 / 360 / 1V/step]
111	DevelopmentDC: Pattern1: C	*ENG	[0 to 999 / 75 / 1V/step]
112	DevelopmentDC: Pattern2: C	*ENG	[0 to 999 / 150 / 1V/step]
113	DevelopmentDC: Pattern3: C	*ENG	[0 to 999 / 225 / 1V/step]
114	DevelopmentDC: Pattern4: C	*ENG	[0 to 999 / 300 / 1V/step]
115	DevelopmentDC: Pattern5: C	*ENG	[0 to 999 / 520 / 1V/step]
121	DevelopmentDC: Pattern1: M	*ENG	[0 to 999 / 100 / 1V/step]

122	DevelopmentDC: Pattern2: M	*ENG	[0 to 999 / 175 / 1V/step]
123	DevelopmentDC: Pattern3: M	*ENG	[0 to 999 / 250 / 1V/step]
124	DevelopmentDC: Pattern4: M	*ENG	[0 to 999 / 325 / 1V/step]
125	DevelopmentDC: Pattern5: M	*ENG	[0 to 999 / 520 / 1V/step]
131	DevelopmentDC: Pattern1: Y	*ENG	[0 to 999 / 125 / 1V/step]
132	DevelopmentDC: Pattern2: Y	*ENG	[0 to 999 / 200 / 1V/step]
133	DevelopmentDC: Pattern3: Y	*ENG	[0 to 999 / 275 / 1V/step]
134	DevelopmentDC: Pattern4: Y	*ENG	[0 to 999 / 350 / 1V/step]
135	DevelopmentDC: Pattern5: Y	*ENG	[0 to 999 / 520 / 1V/step]

3630	[Dev gamma :Disp/Set]		
001	Current:K	*ENG	Displays the latest developer gamma. [0.10 to 6.00 / - / 0.01mg/cm ² -kV/step]
002	Current:C	*ENG	
003	Current:M	*ENG	
004	Current:Y	*ENG	
011	Target:K	*ENG	Displays the target value of developer gamma. [0.50 to 2.55 / - / 0.01 mg/cm ² -kV/step]
012	Target:C	*ENG	
013	Target:M	*ENG	
014	Target:Y	*ENG	

021	Initial:K	*ENG	Sets the initial value of developer gamma. [0.50 to 2.55 / 0.90 / 0.01mg/cm ² -kV/step]
022	Initial:C	*ENG	
023	Initial:M	*ENG	
024	Initial:Y	*ENG	
031	Env Cor.(ON/OFF)	*ENG	Sets on/off of developer gamma (environment correction). [0 or 1 / 1:ON / 1/step] 0:OFF, 1:ON
032	TC Cor.(ON/OFF)	*ENG	Sets on/off of developer gamma (elapsed time correction). 0 or 1 / 1:ON / 1/step] 0:OFF, 1:ON
041	Environ Corr:K	*ENG	Displays the environment correction of developer gamma. [-1.00 to 1.00 / - / 0.01mg/cm ² -kV/step]
042	Environ Corr:Col	*ENG	
051	TnrDensity Corr:K	*ENG	Displays the toner density correction of developer gamma. [-1.00 to 1.00 / - / 0.01mg/cm ² -kV/step]
052	TnrDensity Corr:C	*ENG	
053	TnrDensity Corr:M	*ENG	
054	TnrDensity Corr:Y	*ENG	
061	TnrDensity:K	*ENG	Displays the toner density calculated with TD sensor output. [0.0 to 25.5 / - / 0.1wt%/-kV/step]
062	TnrDensity:C	*ENG	
063	TnrDensity:M	*ENG	
064	TnrDensity:Y	*ENG	
071	Environ Corr1:Bk	*ENG	Sets the table value for environment correction of developer gamma. [-1.00 to 1.00 / 0.00 / 0.01 mg/cm ² -kV /step]
072	Environ Corr2:Bk	*ENG	[-1.00 to 1.00 / 0.04 / 0.01mg/cm ² -kV/step]

073	Environ Corr3:Bk	*ENG	[-1.00 to 1.00 / 0.06 / 0.01mg/cm ² -kV/step]
074	Environ Corr4:Bk	*ENG	[-1.00 to 1.00 / 0.08 / 0.01mg/cm ² -kV/step]
075	Environ Corr5:Bk	*ENG	[-1.00 to 1.00 / 0.10 / 0.01mg/cm ² -kV/step]
076	Environ Corr6:Bk	*ENG	0.01mg/cm ² -kV/step]
081	Environ Corr1:Col	*ENG	[-1.00 to 1.00 / 0.00 / 0.01mg/cm ² -kV/step]
082	Environ Corr2:Col	*ENG	[-1.00 to 1.00 / 0.00 / 0.01mg/cm ² -kV/step]
083	Environ Corr3:Col	*ENG	[-1.00 to 1.00 / 0.00 / 0.01mg/cm ² -kV/step]
084	Environ Corr4:Col	*ENG	[-1.00 to 1.00 / 0.03 / 0.01mg/cm ² -kV/step]
085	Environ Corr5:Col	*ENG	[-1.00 to 1.00 / 0.05 / 0.01mg/cm ² -kV/step]
086	Environ Corr6:Col	*ENG	0.01mg/cm ² -kV/step]
090	TC-Gamma	*ENG	Displays toner correction of developer gamma. [0.05 to 0.25 / 0.12 / 0.01/step]
091	TC Corr ThreshHold:K	*ENG	Sets the toner density threshold to correct with toner correction of developer gamma (target value). [7.0 to 12.0 / 9.0 / 0.1wt%/step]
092	TC Corr ThreshHold:C	*ENG	
093	TC Corr ThreshHold:M	*ENG	
094	TC Corr ThreshHold:Y	*ENG	
101	UpperLimit	*ENG	Sets the developer gamma initial value. [1.00 to 5.00 / 5.00 / 0.01mg/cm ² -kV/step]
102	LowerLimit	*ENG	[0.10 to 1.00 / 0.15 / 0.01mg/cm ² -kV/step]

3631	[Vk :Disp]		
001	K	*ENG	Displays the latest developer starting voltage. [-300 to 300 / - / 1-V/-kV/step]
002	C	*ENG	
003	M	*ENG	
004	Y	*ENG	

3700	[New Unit Detection]		
001	ON/OFF Setting	*ENG	Sets if new unit is detected or not. [0 or 1 / 1 / 1/step]

3701	[Manual New Unit Set]		
001	Development Unit: K	*ENG	Sets the flag for new development unit manual settings. [0 or 1 / 0 / 1/step]
002	Development Unit: C	*ENG	
003	Development Unit: M	*ENG	
004	Development Unit: Y	*ENG	
005	Developer: K	*ENG	Sets the flag for new developer manual settings. [0 or 1 / 0 / 1/step]
006	Developer: C	*ENG	
007	Developer: M	*ENG	
008	Developer: Y	*ENG	
009	PCU:Bk	*ENG	Sets the flag for new PCU manual settings. [0 or 1 / 0 / 1/step]
010	PCU:C	*ENG	
011	PCU:M	*ENG	
012	PCU:Y	*ENG	
013	Image Transfer Unit	*ENG	Sets the flag for new image transfer unit manual settings. [0 or 1 / 0 / 1/step]

014	Fusing Unit	*ENG	Sets the flag for new fusing unit manual settings. [0 or 1 / 0 / 1/step]
015	Fusing Roller	*ENG	Sets the flag for new pressure roller manual settings. [0 or 1 / 0 / 1/step]
016	Fusing Belt	*ENG	Sets the flag for new fusing belt manual settings. [0 or 1 / 0 / 1/step]
017	Image Transfer Cleaning Unit	*ENG	Sets the flag for new image transfer cleaning unit manual settings. [0 or 1 / 0 / 1/step]
018	Paper Transfer Unit	*ENG	Sets the flag for new paper transfer unit manual settings. [0 or 1 / 0 / 1/step]
020	Toner Collection Bottle	*ENG	Sets the flag for new toner correction bottle manual settings. [0 or 1 / 0 / 1/step]
021	Fusing Pad	*ENG	Sets the flag for new fusing pad manual settings. [0 or 1 / 0 / 1/step]
022	ZnSt: PCU:K	*ENG	Sets the flag for new lubricant for PCU manual settings. [0 or 1 / 0 / 1/step]
023	ZnSt: PCU:C	*ENG	
024	ZnSt: PCU:M	*ENG	
025	ZnSt:PCU:Y	*ENG	

026	ZnSt:Image Transfer Unit	*ENG	Sets the flag for new lubricant for image transfer unit manual settings. [0 or 1 / 0 / 1/step]
027	Toner Sub Hopper: K	*ENG	Sets the flag for new toner sub hopper manual settings. [0 or 1 / 0 / 1/step]
028	Toner Sub Hopper: C	*ENG	
029	Toner Sub Hopper: M	*ENG	
030	Toner Sub Hopper: Y	*ENG	

3710	[HST Concentration Control: Set]		
001	Control Method: Selection	*ENG	Sets the select mode if control is done or not with HST memory. [0 or 1 / 1 / 1/step] 0:NotUse, 1:Use

3711	[HST Concentration Control: K]		
001	Vcnt	*ENG	Displays release check value stored in HST memory. [0.0 to 5.0 / - / 0.1V/step]
002	Vt	*ENG	
003	Sensitivity: HL	*ENG	Displays release check value stored in HST memory. [1.22 to 3.77 / - / 0.01V/step]
004	Sensitivity: HM	*ENG	Displays release check value stored in HST memory. [0.00 to 2.55 / - / 0.01V/step]
005	Sensitivity: ML	*ENG	
006	Set Detection	*ENG	Displays release check value stored in HST memory. [0.0 to 5.0 / - / 0.1V/step]
007	Without Developer	*ENG	

008	With Developer	*ENG	
009	Serial Number 1	*ENG	Displays release check value stored in HST memory. [0 to 255 / - / 1/step]
010	Serial Number 2	*ENG	
011	Adjustment: Vt	*ENG	Displays adjustment value stored in HST memory. [0.0 to 5.0 / - / 0.1V/step]
012	Adjustment: Vtref	*ENG	
013	Adjustment: Vcnt	*ENG	Displays adjustment value stored in HST memory. [0.00 to 5.00 / - / 0.01V/step]
014	Adjustment: Gamma	*ENG	Displays adjustment value stored in HST memory. [0.0 to 2.55 / - / 0.01mg/cm ² /-kV/step]
015	Adjustment: Vcnt Result	*ENG	Displays adjustment value stored in HST memory. [0 to 9 / - / 1/step]

3712	[HST Concentration Control: C]		
001	Vcnt	*ENG	Displays release check value stored in HST memory. [0.0 to 5.0 / - / 0.1V/step]
002	Vt	*ENG	
003	Sensitivity: HL	*ENG	Displays release check value stored in HST memory. [1.22 to 3.77 / - / 0.01V/step]
004	Sensitivity: HM	*ENG	Displays release check value stored in HST memory. [0 to 2.55 / - / 0.01V/step]
005	Sensitivity: ML	*ENG	
006	Set Detection	*ENG	Displays release check value stored in HST memory. [0.0 to 5.0 / - / 0.1V/step]

007	Without Developer	*ENG	
008	With Developer	*ENG	
009	Serial Number 1	*ENG	Displays release check value stored in HST memory. [0 to 255 / - / 1V/step]
010	Serial Number 2	*ENG	
011	Adjustment: Vt	*ENG	Displays adjustment value stored in HST memory. [0.0 to 5.0 / - / 0.1V/step]
012	Adjustment: Vtref	*ENG	
013	Adjustment: Vcnt	*ENG	Displays adjustment value stored in HST memory. [0.00 to 5.00 / - / 0.01V/step]
014	Adjustment: Gamma	*ENG	Displays adjustment value stored in HST memory. [0.00 to 2.55 / - / 0.01mg/cm ² -kV/step]
015	Adjustment: Vcnt Result	*ENG	Displays adjustment value stored in HST memory. [0 to 9 / - / 1/step]

3713	[HST Concentration Control: M]		
	Displays release check value stored in HST memory.		
001	Vcnt	*ENG	Displays release check value stored in HST memory. [0.0 to 5.0 / - / 0.1V/step]
002	Vt	*ENG	
003	Sensitivity: HL	*ENG	Displays release check value stored in HST memory. [1.22 to 3.77 / - / 0.01V/step]
004	Sensitivity: HM	*ENG	Displays release check value stored in HST memory. [0.00 to 2.55 / - / 0.01V/step]
005	Sensitivity: ML	*ENG	
006	Set Detection	*ENG	Displays release check value stored in

007	Without Developer	*ENG	HST memory.
008	With Developer	*ENG	[0.0 to 5.0 / - / 0.1V/step]
009	Serial Number 1	*ENG	Displays release check value stored in HST memory.
010	Serial Number 2	*ENG	[0 to 255 / - / 1/step]
011	Adjustment: Vt	*ENG	Displays adjustment value stored in HST memory.
012	Adjustment: Vtref	*ENG	[0.0 to 5.0 / - / 0.1V/step]
013	Adjustment: Vcnt	*ENG	Displays adjustment value stored in HST memory. [0.00 to 5.00 / - / 0.01V/step]
014	Adjustment: Gamma	*ENG	Displays adjustment value stored in HST memory. [0.00 to 2.55 / - / 0.01mg/cm ² -kV/step]
015	Adjustment: Vcnt Result	*ENG	Displays adjustment value stored in HST memory. [0 to 9 / - / 1/step]

3714	[HST Concentration Control: Y]		
001	Vcnt	*ENG	Displays release check value stored in HST memory.
002	Vt	*ENG	[0.0 to 5.0 / - / 0.1V/step]
003	Sensitivity: HL	*ENG	Displays release check value stored in HST memory. [1.22 to 3.77 / - / 0.01V/step]
004	Sensitivity: HM	*ENG	Displays release check value stored in HST memory.
005	Sensitivity: ML	*ENG	[0.00 to 2.55 / - / 0.01V/step]
006	Set Detection	*ENG	Displays release check value stored in HST memory. [0.0 to 5.0 / - / 0.1V/step]

007	Without Developer	*ENG	
008	With Developer	*ENG	
009	Serial Number 1	*ENG	Displays release check value stored in HST memory. [0 to 255 / - / 1/step]
010	Serial Number 2	*ENG	
011	Adjustment: Vt	*ENG	Displays adjustment value stored in HST memory. [0.0 to 5.0 / - / 0.1V/step]
012	Adjustment: Vtref	*ENG	
013	Adjustment: Vtcnt	*ENG	Displays adjustment value stored in HST memory. [0.00 to 5.00 / - / 0.01V/step]
014	Adjustment: Gamma	*ENG	Displays adjustment value stored in HST memory. [0 to 2.55 / - / 0.01mg/cm2/-kV/step]
015	Adjustment: Vcnt Result	*ENG	Displays adjustment value stored in HST memory. [0 to 9 / - / 1/step]

3730	[AdjTime :Last]		
001	AdjID	*ENG	Displays adjustment ID after adjustment. [0 to 99 / - / 1/step]
002	AdjTime	*ENG	Displays adjustment time after adjustment. [0.00 to 654.00 / - / 0.01sec/step]
003	DateTime	*ENG	Displays adjustment date (year, month, day, time) after adjustment. [0 to 4212312459 / - / 1/step]
004	TotalCounter	*ENG	Displays adjustment total counter after adjustment. [0 to 999999999 / - / 1pages/step]

3731	[AdjTime :Last1]		
001	AdjID	*ENG	[0 to 99 / - / 1/step]
002	DateTime	*ENG	[0.00 to 654.00 / - / 0.01sec/step]
003	AdjTime	*ENG	[0 to 4212312459 / - / 1/step]
004	TotalCounter	*ENG	[0 to 999999999 / - / 1pages/step]

3732	[AdjTime :Last2]		
001	AdjID	*ENG	[0 to 99 / - / 1/step]
002	AdjTime	*ENG	[0.00 to 654.00 / - / 0.01sec/step]
003	DateTime	*ENG	[0 to 4212312459 / - / 1/step]
004	TotalCounter	*ENG	[0 to 999999999 / - / 1pages/step]

3733	[AdjTime :Last3]		
001	AdjID	*ENG	[0 to 99 / - / 1/step]
002	AdjTime	*ENG	[0.00 to 654.00 / - / 0.01sec/step]
003	DateTime	*ENG	[0 to 4212312459 / - / 1/step]
004	TotalCounter	*ENG	[0 to 999999999 / - / 1pages/step]

3734	[AdjTime :Last4]		
001	AdjID	*ENG	[0 to 99 / - / 1/step]
002	AdjTime	*ENG	[0.00 to 654.00 / - / 0.01sec/step]
003	DateTime	*ENG	[0 to 4212312459 / - / 1/step]
004	TotalCounter	*ENG	[0 to 999999999 / - / 1pages/step]

3735	[AdjTime :Last5]		
001	AdjID	*ENG	[0 to 99 / - / 1/step]
002	AdjTime	*ENG	[0.00 to 654.00 / - / 0.01sec/step]
003	DateTime	*ENG	[0 to 4212312459 / - / 1/step]
004	TotalCounter	*ENG	[0 to 999999999 / - / 1pages/step]

3736	[AdjTime :Last6]		
001	AdjID	*ENG	[0 to 99 / - / 1/step]
002	AdjTime	*ENG	[0.00 to 654.00 / - / 0.01sec/step]
003	DateTime	*ENG	[0 to 4212312459 / - / 1/step]
004	TotalCounter	*ENG	[0 to 999999999 / - / 1pages/step]

3737	[AdjTime :Last7]		
001	AdjID	*ENG	[0 to 99 / - / 1/step]
002	AdjTime	*ENG	[0.00 to 654.00 / - / 0.01sec/step]
003	DateTime	*ENG	[0 to 4212312459 / - / 1/step]
004	TotalCounter	*ENG	[0 to 999999999 / - / 1pages/step]

3738	[AdjTime :Last8]		
001	AdjID	*ENG	[0 to 99 / - / 1/step]
002	AdjTime	*ENG	[0.00 to 654.00 / - / 0.01sec/step]
003	DateTime	*ENG	[0 to 4212312459 / - / 1/step]
004	TotalCounter	*ENG	[0 to 999999999 / - / 1page/step]

3739	[AdjTime :Last9]		
001	AdjID	*ENG	[0 to 99 / - / 1/step]
002	AdjTime	*ENG	[0.00 to 654.00 / - / 0.01sec/step]
003	DateTime	*ENG	[0 to 4212312459 / - / 1/step]
004	TotalCounter	*ENG	[0 to 999999999 / - / 1pages/step]

3750	[ProCon SC :Last]		
001	SC Number	*ENG	Displays SC number of occurred process control SC. [0 to 999 / - / 1/step]
002	DateTime	*ENG	Displays the time of occurrence (year, month, day, time) of occurred process control SC. [0 to 4212312459 / - / 1/step]
003	TotalCounter	*ENG	Displays total pages of occurred process control SC. [0 to 999999999 / - / 1pages/step]
004	ProCon Result Code	*ENG	Displays result codes (detailed history) of occurred process control SC. [0 to 99999999 / - / 1/step]

3751	[ProCon SC :Last1]		
001	SC Number	*ENG	[0 to 999 / - / 1/step]
002	DateTime	*ENG	[0 to 4212312459 / - / 1/step]
003	TotalCounter	*ENG	[0 to 999999999 / - / 1pages /step]
004	ProCon Result Code	*ENG	[0 to 99999999 / - / 1/step]

3752	[ProCon SC :Last2]		
001	SC Number	*ENG	[0 to 999 / - / 1/step]
002	DateTime	*ENG	[0 to 4212312459 / - / 1/step]
003	TotalCounter	*ENG	[0 to 999999999 / - / 1pages /step]
004	ProCon Result Code	*ENG	[0 to 99999999 / - / 1/step]

3753	[ProCon SC :Last3]		
001	SC Number	*ENG	[0 to 999 / - / 1/step]
002	DateTime	*ENG	[0 to 4212312459 / - / 1/step]
003	TotalCounter	*ENG	[0 to 999999999 / - / 1/step]
004	ProCon Result Code	*ENG	[0 to 99999999 / - / 1pages /step]

3754	[ProCon SC :Last4]		
001	SC Number	*ENG	[0 to 999 / - / 1/step]
002	DateTime	*ENG	[0 to 4212312459 / - / 1/step]
003	TotalCounter	*ENG	[0 to 999999999 / - / 1pages/step]
004	ProCon Result Code	*ENG	[0 to 99999999 / - / 1/step]

3755	[ProCon SC :Last5]		
001	SC Number	*ENG	[0 to 999 / - / 1/step]
002	DateTime	*ENG	[0 to 4212312459 / - / 1/step]
003	TotalCounter	*ENG	[0 to 999999999 / - / 1pages/step]
004	ProCon Result Code	*ENG	[0 to 99999999 / - / 1/step]

3756	[ProCon SC :Last6]		
001	SC Number	*ENG	[0 to 999 / - / 1/step]
002	DateTime	*ENG	[0 to 4212312459 / - / 1/step]
003	TotalCounter	*ENG	[0 to 999999999 / - / 1pages/step]
004	ProCon Result Code	*ENG	[0 to 99999999 / - / 1/step]

3757	[ProCon SC :Last7]		
001	SC Number	*ENG	[0 to 999 / - / 1/step]
002	DateTime	*ENG	[0 to 4212312459 / - / 1/step]
003	TotalCounter	*ENG	[0 to 999999999 / - / 1pages/step]
004	ProCon Result Code	*ENG	[0 to 99999999 / - / 1/step]

3758	[ProCon SC :Last8]		
001	SC Number	*ENG	[0 to 999 / - / 1/step]
002	DateTime	*ENG	[0 to 4212312459 / - / 1/step]
003	TotalCounter	*ENG	[0 to 999999999 / - / 1pages/step]
004	ProCon Result Code	*ENG	[0 to 99999999 / - / 1/step]

3759	[ProCon SC :Last9]		
001	SC Number	*ENG	[0 to 999 / - / 1/step]
002	DateTime	*ENG	[0 to 4212312459 / - / 1/step]
003	TotalCounter	*ENG	[0 to 999999999 / - / 1pages/step]
004	ProCon Result Code	*ENG	[0 to 99999999 / - / 1/step]

3800	[Waste Toner Full Detection]		
012	Remainder daysThreshold	*ENG	Sets the day threshold from toner near end detection to toner full message. [0 to 255 / 255 / 1/step]
020	Pixel Count Threshold 2	*ENG	[0 to 1 / - / 1/step]

3810	[-]		
	Parameters of calculation for enlargement ratio of paper gap.		
001	-	*ENG	[0 to 100 / 10 / 1%/step]
002	-	*ENG	[-2000 to 2000 / 0 / 1%/step]
003	-	*ENG	[100 to 2000 / 100 / 1%/step]

3903	[Last Print Counter]		
001	Counter1	*ENG	Displays the total rotation of development unit after the expiration of 5 minutes. [0 to / - / 1mm/step]
002	Counter2	*ENG	
003	Counter3	*ENG	
004	Counter4	*ENG	
005	Counter5	*ENG	Displays the total rotation of development unit after the expiration of 3 minutes. [0 to 999999 / - / 1mm/step]
006	Counter6	*ENG	Displays the total rotation of development unit after the expiration of 4 minutes. [0 to 999999 / - / 1mm/step]
007	Counter7	*ENG	Displays the total rotation of development unit after the expiration of 5 minutes. [0 to 999999 / - / 1mm/step]
008	Counter8	*ENG	
009	Counter9	*ENG	

010	Counter10	*ENG	
011	Counter11	*ENG	
012	Counter12	*ENG	
013	Counter13	*ENG	
014	Counter14	*ENG	
015	Counter15	*ENG	
016	Counter16	*ENG	
017	Counter17	*ENG	
018	Counter18	*ENG	
019	Counter19	*ENG	
020	Counter20	*ENG	
021	Counter21	*ENG	
022	Counter22	*ENG	
023	Counter23	*ENG	
024	Counter24	*ENG	
025	Counter25	*ENG	
026	Counter26	*ENG	Displays the total rotation of development unit after the expiration of 5 minutes. [0 to 999999 / - / 1mm/step]
027	Counter27	*ENG	
028	Counter28	*ENG	
029	Counter29	*ENG	
030	Counter30	*ENG	
031	Counter31	*ENG	
032	Counter32	*ENG	
033	Counter33	*ENG	

034	Counter34	*ENG	
035	Counter35	*ENG	
036	Counter36	*ENG	
037	Counter37	*ENG	
038	Counter38	*ENG	
039	Counter39	*ENG	
040	Counter40	*ENG	
101	Last Fixed Date	*ENG	
102	Last PM Counter Save Destination	*ENG	Displays the SP number to store the total rotation of development unit until next 5 minutes. [1 to 40 / - / 1/step]
103	Last PM Counter Save Destination	*ENG	Displays the rotation of development unit at the fixed time of previous rotation counter. [0 to 999999999 / - / 1mm/step]

3.4 MAIN SP TABLES-4

3.4.1 SP4-XXX (SCANNER)

4008	[Sub Scan Mag.Adjustment]		
	Adjusts the sub-scan magnification by changing the scanner motor speed.		
001	Sub Scan Mag.Adjustment	*ENG	[-1.0 to 1.0 / 0.0 / 0.1%/step]

4010	[L-Edge Regist Adjustment]		
	Adjusts the leading edge registration by changing the scanning start timing in the sub-scan direction.		
001	L-Edge Regist Adjustment	*ENG	[-1.0 to 1.0 / 0.0 / 0.1mm/step]

4011	[S-to-S Regist Adjustment]		
	Adjusts the side-to-side registration by changing the scanning start timing in the main scan direction.		
001	S-to-S Regist Adjustment	*ENG	[-2.0 to 2.0 / 0.0 / 0.1mm/step]

4012	[Scanner Erase Margin: Scale]		
	Sets the blank margin at each side for erasing the original shadow caused by the gap between the original and the scale.		
001	Book: Leading Edge	*ENG	[0.0 to 3.0 / 0.0 / 0.1mm/step]
002	Book: Trailing Edge	*ENG	[0.0 to 3.0 / 0.0 / 0.1mm/step]
003	Book: Left	*ENG	[0.0 to 3.0 / 0.0 / 0.1mm/step]
004	Book: Right	*ENG	[0.0 to 3.0 / 0.0 / 0.1mm/step]

4013	[Scanner Free Run]		
	Performs the scanner free run with the exposure lamp on or off in the following mode. Full color mode / Full Size / A3 or DLT		
001	Lamp OFF	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
002	Lamp ON	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON

4014	[Scan]		
	Execute the scanner free fun with each mode.		
001	HP Detection Enable	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
002	HP Detection Disable	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
003	HP Detection Enable (FC 600dpi LG)	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
004	HP Detection Enable (Bk 600dpi LG)	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
005	HP Detection Enable (FC 1200dpi LG)	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON

4016	[DF Scan]		
	-		
001	HP Detection Enable (FC 600x300 LG Duplex)	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
002	HP Detection Enable (BK 600x300 LG Duplex)	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
003	HP Detection Enable (FC 600x600 LG Duplex)	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON

004	HP Detection Enable (BK 600x600 LG Duplex)	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
005	HP Detection Enable (FC 600x200 LG Duplex)	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
006	HP Detection Enable (FC 600x300 LG Simplex)	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
007	HP Detection Enable (BK 600x300 LG Simplex)	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
008	HP Detection Enable (FC 600x600 LG Simplex)	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
009	HP Detection Enable (BK 600x600 LG Simplex)	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
010	HP Detection Enable (FC 600x200 LG Simplex)	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON

4020	[Dust Check]		
001	Detection ON/OFF:face	*ENG	Turns the ARDF scan glass dust check on/ off. [0 or 1 / 0 / 1/step] 0: OFF, 1: ON
002	Detection Level:face	*ENG	Selects the detect level. [0 to 8 / 4 / 1/step] 0: lowest detection level 8: highest detection level
003	Correction Level:face	*ENG	Selects the level of the sub scan line correction when using the ARDF. [0 to 4 / 0 / 1/step] 0: Off 1: Weakest 2: Weak 3: Strong 4: Strongest

4400	[Scanner Erase Margin]		
	Sets the Mask for Original. These SPs set the area to be masked during platen (book) mode scanning.		
001	Book: Leading Edge	*ENG	[0.0 to 3.0 / 0.0 / 0.1mm/step]
002	Book: Trailing Edge	*ENG	[0.0 to 3.0 / 0.0 / 0.1mm/step]
003	Book: Left	*ENG	[0.0 to 3.0 / 0.0 / 0.1mm/step]
004	Book: Right	*ENG	[0.0 to 3.0 / 0.0 / 0.1mm/step]
4400	[Mask Margin]		
005	Trailing Edge	*ENG	[0.0 to 3.0 / 0.0 / 0.1mm/step]
007	Left	*ENG	[0.0 to 3.0 / 0.0 / 0.1mm/step]
008	Right	*ENG	[0.0 to 3.0 / 0.0 / 0.1mm/step]

4417	[IPU Test Pattern]		
	Selects the IPU test pattern.		
001	Test Pattern	ENG	[0 to 24 / 0 / 1/step]
	0: Scanned image 1: Gradation main scan A 2: Gradation main scan B 3: Gradation main scan C 4: Gradation main scan D 5: Gradation sub scan (1) 6: Grid pattern 7: Slant grid pattern 8: Gradation RGBCMYK 9: UCR pattern 10: Color patch 16 (1) 11: Color patch 16 (2) 12: Color patch 64		13: Grid pattern CMYK 14: Color patch CMYK 15: Gray pattern (1) 16: Gray pattern (2) 17: Gray Pattern (3) 18: Shading pattern 19: Thin line pattern 20: Scanned + Grid pattern 21: Scanned + Gray scale 22: Scanned + Color patch 23: Scanned + Slant Grid C 24: Scanned + Slant Grid D

4429	[Select Copy Data Security Copying]		
	Adjusts the pattern density of illegal copy output for Copy, Scanner, and Fax.		
001	Copy	*ENG	[0 to 3 / 3 / 1/step] 3: Darkest density
002	Scanner	*ENG	
003	Fax	*ENG	

4450	[Scan Image Pass Selection]		
001	Black Subtraction ON/OFF	ENG	[0 or 1 / 1 / 1/step] 0: OFF, 1: ON
	Uses or does not use the black reduction image path.		
002	SH ON/OFF	ENG	[0 or 1 / 0 / 1/step] 0: OFF, 1: ON
	Uses or does not use the shading image path.		

4460	[Digital AE Set]		
	Adjusts the background level.		
001	Lower Limit:face	*ENG	[0 to 1023 / 364 / 1/step]
002	Background Level:face	*ENG	[512 to 1535 / 932 / 1/step]

4501	[ACC Target Den]		
	Selects the ACC result.		
001	Copy: K: Text	*ENG	[0 to 10 / 5 / 1/step] 10: Darkest density
002	Copy: C: Text	*ENG	
003	Copy: M: Text	*ENG	
004	Copy: Y: Text	*ENG	
005	Copy: K: Photo	*ENG	

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006	Copy: C: Photo	*ENG	
007	Copy: M: Photo	*ENG	
008	Copy: Y: Photo	*ENG	

4505	[ACC Cor:Bright]		
	Adjusts the offset correction for light areas of the ACC pattern.		
001	Text:K	*ENG	[-128 to 127 / 0 / 1/step]
002	Text:C	*ENG	
003	Text:M	*ENG	
004	Text:Y	*ENG	
005	Photo:K	*ENG	[-128 to 127 / 0 / 1/step]
006	Photo:C	*ENG	
007	Photo:M	*ENG	
008	Photo:Y	*ENG	

4506	[ACC Cor:Dark]		
	Adjusts the offset correction for dark areas of the ACC pattern.		
001	Text:K	*ENG	[-128 to 127 / 0 / 1/step]
002	Text:C	*ENG	
003	Text:M	*ENG	
004	Text:Y	*ENG	
005	Photo:K	*ENG	[-128 to 127 / 0 / 1/step]
006	Photo:C	*ENG	
007	Photo:M	*ENG	
008	Photo:Y	*ENG	

4540	[Printor Vector Correction(1)]		
	This SP corrects the printer coverage of 12 hues (RY, YR, YG, etc. x 4 Colors [R, G, B, Option]) for a total of 48 parameters.		
001	RY Phase:Option	*ENG	Specifies the printer vector correction value. [0 to 255 / 0 / 1/step]
002	RY Phase:R	*ENG	[-255 to 255 / 0 / 1/step]
003	RY Phase:G	*ENG	
004	RY Phase:B	*ENG	
005	YR Phase:Option	*ENG	[0 to 255 / 0 / 1/step]
006	YR Phase:R	*ENG	[-255 to 255 / 0 / 1/step]
007	YR Phase:G	*ENG	
008	YR Phase:B	*ENG	
009	YG Phase:Option	*ENG	[0 to 255 / 0 / 1/step]
010	YG Phase:R	*ENG	[-255 to 255 / 0 / 1/step]
011	YG Phase:G	*ENG	
012	YG Phase:B	*ENG	
013	GY Phase:Option	*ENG	[0 to 255 / 0 / 1/step]
014	GY Phase:R	*ENG	[-255 to 255 / 0 / 1/step]
015	GY Phase:G	*ENG	
016	GY Phase:B	*ENG	
017	GC Phase:Option	*ENG	[0 to 255 / 0 / 1/step]
018	GC Phase:R	*ENG	[-255 to 255 / 0 / 1/step]
019	GC Phase:G	*ENG	

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020	GC Phase:B	*ENG	
021	CG Phase:Option	*ENG	[0 to 255 / 0 / 1/step]
022	CG Phase:R	*ENG	[-255 to 255 / 0 / 1/step]
023	CG Phase:G	*ENG	
024	CG Phase:B	*ENG	
025	CB Phase:Option	*ENG	[0 to 255 / 0 / 1/step]
026	CB Phase:R	*ENG	[-255 to 255 / 0 / 1/step]
027	CB Phase:G	*ENG	
028	CB Phase:B	*ENG	
029	BC Phase:Option	*ENG	[0 to 255 / 0 / 1/step]
030	BC Phase:R	*ENG	[-255 to 255 / 0 / 1/step]
031	BC Phase:G	*ENG	
032	BC Phase:B	*ENG	
033	BM Phase:Option	*ENG	[0 to 255 / 0 / 1/step]
034	BM Phase:R	*ENG	[-255 to 255 / 0 / 1/step]
035	BM Phase:G	*ENG	
036	BM Phase:B	*ENG	
037	MB Phase:Option	*ENG	[0 to 255 / 0 / 1/step]
038	MB Phase:R	*ENG	[-255 to 255 / 0 / 1/step]
039	MB Phase:G	*ENG	
040	MB Phase:B	*ENG	
041	MR Phase:Option	*ENG	[0 to 255 / 0 / 1/step]

042	MR Phase:R	*ENG	
043	MR Phase:G	*ENG	[-255 to 255 / 0 / 1/step]
044	MR Phase:B	*ENG	
045	RM Phase:Option	*ENG	
046	RM Phase:R	*ENG	
047	RM Phase:G	*ENG	[-255 to 255 / 0 / 1/step]
048	RM Phase:B	*ENG	
049	WHITE:Option	*ENG	
050	WHITE:R	*ENG	
051	WHITE:G	*ENG	[-255 to 255 / 0 / 1/step]
052	WHITE:B	*ENG	
053	BLACK:Option	*ENG	
054	BLACK:R	*ENG	
055	BLACK:G	*ENG	[-255 to 255 / 0 / 1/step]
056	BLACK:B	*ENG	

4550	[Scan Apli:Txt/Print]		
	Sets the text/print MTF level of the scanner application.		
005	MTF: 0(Off) 1-15 (Weak-Strong)	*ENG	[0 to 15 / 8 / 1/step]
006	Smoothing: 0(x1) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 4 / 1/step]
007	Brightness: 1-255	*ENG	[1 to 255 / 128 / 1/step]
008	Contrast: 1-255	*ENG	[1 to 255 / 128 / 1/step]
009	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 0 / 1/step]

4551	[Scan Apli:Txt]		
	Sets the text MTF level of the scanner application.		
005	MTF: 0(Off) 1-15 (Weak-Strong)	*ENG	[0 to 15 / 8 / 1/step]
006	Smoothing: 0(x1) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 4 / 1/step]
007	Brightness: 1-255	*ENG	[1 to 255 / 128 / 1/step]
008	Contrast: 1-255	*ENG	[1 to 255 / 128 / 1/step]
009	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 0 / 1/step]

4552	[Scan Apli:Txt Dropout]		
	Sets the text dropout color MTF level of the scanner application.		
005	MTF: 0(Off) 1-15 (Weak-Strong)	*ENG	[0 to 15 / 8 / 1/step]
006	Smoothing: 0(x1) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 4 / 1/step]
007	Brightness: 1-255	*ENG	[1 to 255 / 128 / 1/step]
008	Contrast: 1-255	*ENG	[1 to 255 / 128 / 1/step]
009	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 0 / 1/step]

4553	[Scan Apli:Txt/Photo]		
	Sets the text/photo MTF level of the scanner application.		
005	MTF: 0(Off) 1-15 (Weak-Strong)	*ENG	[0 to 15 / 8 / 1/step]
006	Smoothing: 0(x1) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 4 / 1/step]
007	Brightness: 1-255	*ENG	[1 to 255 / 128 / 1/step]
008	Contrast: 1-255	*ENG	[1 to 255 / 128 / 1/step]
009	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 0 / 1/step]

4554	[Scan Apli:Photo]		
	Sets the photo MTF level of the scanner application.		
005	MTF: 0(Off) 1-15 (Weak-Strong)	*ENG	[0 to 15 / 8 / 1/step]
006	Smoothing: 0(x1) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 4 / 1/step]
007	Brightness: 1-255	*ENG	[1 to 255 / 128 / 1/step]
008	Contrast: 1-255	*ENG	[1 to 255 / 128 / 1/step]
009	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 0 / 1/step]

4565	[Scan Apli:GrayScale]		
	Sets the Grayscale MTF level of the scanner application.		
005	MTF: 0(Off) 1-15 (Weak-Strong)	*ENG	[0 to 15 / 8 / 1/step]
006	Smoothing: 0(x1) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 4 / 1/step]

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007	Brightness: 1-255	*ENG	[1 to 255 / 128 / 1/step]
008	Contrast: 1-255	*ENG	[1 to 255 / 128 / 1/step]
009	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 0 / 1/step]

4570	[Scan Apli:Col Txt/Photo]		
	Sets the color text/photo MTF level of the scanner application.		
005	MTF: 0(Off) 1-15 (Weak-Strong)	*ENG	[0 to 15 / 8 / 1/step]
006	Smoothing: 0(x1) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 4 / 1/step]
007	Brightness: 1-255	*ENG	[1 to 255 / 128 / 1/step]
008	Contrast: 1-255	*ENG	[1 to 255 / 128 / 1/step]
009	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 0 / 1/step]

4571	[Scan Apli:Col Gloss Photo]		
	Sets the color gloss photo MTF level of the scanner application.		
005	MTF: 0(Off) 1-15 (Weak-Strong)	*ENG	[0 to 15 / 8 / 1/step]
006	Smoothing: 0(x1) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 4 / 1/step]
007	Brightness: 1-255	*ENG	[1 to 255 / 128 / 1/step]
008	Contrast: 1-255	*ENG	[1 to 255 / 128 / 1/step]
009	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 0 / 1/step]

4572	[Scan Apli:AutoCol]		
	Sets the automatic color MTF level of the scanner application.		
005	MTF: 0(Off) 1-15 (Weak-Strong)	*ENG	[0 to 15 / 8 / 1/step]
006	Smoothing: 0(x1) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 4 / 1/step]
007	Brightness: 1-255	*ENG	[1 to 255 / 128 / 1/step]
008	Contrast: 1-255	*ENG	[1 to 255 / 128 / 1/step]
009	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 0 / 1/step]

4580	[Fax Apli:Txt/Chart]		
	Sets the text/chart MTF level of the fax application.		
005	MTF: 0(Off) 1-15 (Weak-Strong)	*ENG	[0 to 15 / 8 / 1/step]
006	Smoothing: 0(x1) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 4 / 1/step]
007	Brightness: 1-255	*ENG	[1 to 255 / 128 / 1/step]
008	Contrast: 1-255	*ENG	[1 to 255 / 128 / 1/step]
009	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 0 / 1/step]
010	Texture Erase: 0 (Fix), 1-2	*ENG	[0 to 2 / 0 / 1/step]

4581	[Fax Apli:Txt]		
	Sets the text MTF level of the fax application.		
005	MTF: 0(Off) 1-15 (Weak-Strong)	*ENG	[0 to 15 / 8 / 1/step]
006	Smoothing: 0(x1) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 4 / 1/step]
007	Brightness: 1-255	*ENG	[1 to 255 / 128 / 1/step]
008	Contrast: 1-255	*ENG	[1 to 255 / 128 / 1/step]
009	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 0 / 1/step]

4582	[Fax Apli:Txt/Photo]		
	Sets the text/photo MTF level of the fax application.		
005	MTF: 0(Off) 1-15 (Weak-Strong)	*ENG	[0 to 15 / 8 / 1/step]
006	Smoothing: 0(x1) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 4 / 1/step]
007	Brightness: 1-255	*ENG	[1 to 255 / 128 / 1/step]
008	Contrast: 1-255	*ENG	[1 to 255 / 128 / 1/step]
009	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 0 / 1/step]
010	Texture Erase: 0 (Fix), 1-2	*ENG	[0 to 2 / 0 / 1/step]

4583	[Fax Apli:Photo]		
	Sets the photo MTF level of the fax application.		
005	MTF: 0(Off) 1-15 (Weak-Strong)	*ENG	[0 to 15 / 8 / 1/step]
006	Smoothing: 0(x1) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 4 / 1/step]
007	Brightness: 1-255	*ENG	[1 to 255 / 128 / 1/step]
008	Contrast: 1-255	*ENG	[1 to 255 / 128 / 1/step]
009	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 0 / 1/step]
010	Texture Erase: 0 (Fix), 1-2	*ENG	[0 to 2 / 0 / 1/step]

4584	[Fax Apli:Original 1]		
	Sets the original 1 MTF level of the fax application.		
005	MTF: 0(Off) 1-15 (Weak-Strong)	*ENG	[0 to 15 / 8 / 1/step]
006	Smoothing: 0(x1) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 4 / 1/step]
007	Brightness: 1-255	*ENG	[1 to 255 / 128 / 1/step]
008	Contrast: 1-255	*ENG	[1 to 255 / 128 / 1/step]
009	Ind Dot Erase: 0(Off) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 0 / 1/step]

4585	[Fax Apli:Original 2]		
	Sets the original 2 MTF level of the fax application.		
005	MTF: 0(Off) 1-15 (Weak-Strong)	*ENG	[0 to 15 / 8 / 1/step]
006	Smoothing: 0(x1) 1-7 (Weak-Strong)	*ENG	[0 to 7 / 4 / 1/step]
007	Brightness: 1-255	*ENG	[1 to 255 / 128 / 1/step]
008	Contrast: 1-255	*ENG	[1 to 255 / 128 / 1/step]
009	Independent Dot Erase (0)/ 1-7 (Strong)	*ENG	[0 to 7 / 0 / 1/step]

4603	[AGC Execution]		
	Executes the AGC and enables the home position detection.		
001	HP Detection Enable	ENG	[- / - / -] [Execute]
002	HP Detection Disable	ENG	[- / - / -] DFU [Execute]

4604	[FGATE Open/Close]		
	Opens or closes the FGATE		
001	FGATE Open/Close	ENG	[0 or 1 / - / 1/step] 0:OFF, 1:ON

4606	[White Level Adjust]		
	Adjusts the white peak level of the color 600.		
001	Color 600	*ENG	[0 to 1024 / 784 / 1digit /step]

4607	[White Level Adjust]		
	Adjusts the white peak level of the color 1200.		
001	Color 1200	*ENG	[0 to 1024 / 784 / 1digit/step]

4608	[White Level Adjust]		
	Adjusts the white peak level of black.		
001	Bk	*ENG	[0 to 1024 / 784 / 1digit/step]

4609	[Gray Balance Set: R]		
	Displays the adjustment value of the gray balance for red.		
001	Book Scan	*ENG	[-512 to 511 / -89 / 1digit/step]
002	DF Scan	*ENG	[-512 to 511 / -89 / 1digit/step]

4610	[Gray Balance Set: G]		
	Displays the adjustment value of the gray balance for green.		
001	Book Scan	*ENG	[-512 to 511 / -76 / 1digit/step]
002	DF Scan	*ENG	[-512 to 511 / -76 / 1digit/step]

4610	[Gray Balance Set: BW]		
	Displays the adjustment value of the gray balance for black and white.		
003	Book Scan	*ENG	[-512 to 511 / -92 / 1digit/step]
004	DF Scan	*ENG	[-512 to 511 / -92 / 1digit/step]

4611	[Gray Balance Set: B]		
	Displays the adjustment value of the gray balance for blue.		
001	Book Scan	*ENG	[-512 to 511 / -85 / 1digit/step]

002	DF Scan	*ENG	[-512 to 511 / -85 / 1digit/step]
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4623	[Black Level Adj. Display]		
	Displays the latest adjustment value of the black level. RE: Red Even signal, RO: Red Odd signal		
001	Latest: R Color 600	ENG	Displays the black offset value (rough adjustment) for the even red signal in the CCD circuit board (color printing speed). [0 to 255 / 0 / 1digit/step]
002	Latest: R Color 1200	ENG	Displays the black offset value (rough adjustment) for the odd red signal in the CCD circuit board (color printing speed). [0 to 255 / 0 / 1digit/step]

4624	[Black Level Adj. Display]		
	Displays the latest adjustment value of the black level. GE: Green Even signal, GO: Green Odd signal BkE: Black Even signal, BkO: Black Odd signal		
001	Latest: G Color 600	ENG	Displays the black offset value (rough adjustment) for the even green signal in the CCD circuit board (color printing speed). [0 to 255 / 0 / 1digit/step]
002	Latest: G Color 1200	ENG	Displays the black offset value (rough adjustment) for the odd green signal in the CCD circuit board (color printing speed). [0 to 255 / 0 / 1digit/step]
003	Latest: BkE	ENG	[0 to 255 / 0 / 1digit/step]
004	Latest: BkO	ENG	[0 to 255 / 0 / 1digit/step]

4625	[Black Level Adj. Display]		
	Displays the latest adjustment value of the black level. BE: Blue Even signal, BO: Blue Odd signal		
001	Latest: B Color 600	ENG	Displays the black offset value (rough adjustment) for the even blue signal in the CCD circuit board (color printing speed). [0 to 255 / 0 / 1digit/step]
002	Latest: B Color 1200	ENG	Displays the black offset value (rough adjustment) for the odd blue signal in the CCD circuit board (color printing speed). [0 to 255 / 0 / 1digit/step]

4631	[Digital Gain Adjust]		
	Displays the gain value of the amplifiers on the controller for Red.		
001	Latest: R Color 600	ENG	[0 to 511 / 0 / 1digit/step]
002	Latest: R Color 1200	ENG	

4632	[Digital Gain Adjust]		
	Displays the gain value of the amplifiers on the controller for Green.		
001	Latest: G Color 600	ENG	[0 to 511 / 0 / 1digit/step]
002	Latest: G Color 1200	ENG	[0 to 511 / 0 / 1digit/step]
003	Latest: BkE	ENG	[0 to 511 / 0 / 1digit/step]
004	Latest: BkO	ENG	[0 to 511 / 0 / digit/step]

4633	[Digital Gain Adjust]		
	Displays the gain value of the amplifiers on the controller for Blue.		
001	Latest: B Color 600	ENG	[0 to 511 / 0 / 1digit/step]
002	Latest: B Color 1200	ENG	

4645	[Scan Adjust Error]		
	Displays the error value of the scanning adjustment.		
001	White level	ENG	[0 to 65535 / - / 1/step]
002	Black level	ENG	

4647	[Scanner Hard Error]		
	Displays the result of the SBU connection check.		
001	Power-ON	ENG	[0 to 65535 / - / 1/step] 0: OK, Other: SBU connection check failure If the SBU connection check fails, SC144 occurs.

4654	[Black Level Adj. Display]		
	Displays the last correct adjustment value of the black level. RE: Red Even signal, RO: Red Odd signal		
001	Last Correct Value: R Color 600	*ENG	Displays the black offset value for the even red signal in the CCD circuit board (color printing speed). [0 to 255 / - / 1digit/step]
002	Last Correct Value: R Color 1200	*ENG	Displays the black offset value for the odd red signal in the CCD circuit board (color printing speed). [0 to 255 / - / 1digit/step]

4655	[Black Level Adj. Display]		
	Displays the last correct adjustment value of the black level. GE: Green Even signal, GO: Green Odd signal BkE: Black Even signal, BkO: Black Odd signal		
001	Last Correct Value: G Color 600	*ENG	Displays the black offset value for the even green signal in the CCD circuit board (color printing speed). [0 to 255 / - / 1digit/step]
002	Last Correct Value: G Color 1200	*ENG	Displays the black offset value for the odd green signal in the CCD circuit board (color printing speed). [0 to 255 / - / 1digit/step]
003	Last Correct Value: BkE	*ENG	[0 to 255 / - / 1digit/step]
004	Last Correct Value: BkO	*ENG	[0 to 255 / - / 1digit/step]

4656	[Black Level Adj. Display]		
	Displays the last correct adjustment value of the black level. BE: Blue Even signal, BO: Blue Odd signal		
001	Last Correct Value: B Color 600	*ENG	Displays the black offset value for the even blue signal in the CCD circuit board (color printing speed). [0 to 255 / - / 1digit/step]
002	Last Correct Value: B Color 1200	*ENG	Displays the black offset value for the odd blue signal in the CCD circuit board (color printing speed). [0 to 255 / - / 1digit/step]

4661	[Digital Gain Adjust]		
	Displays the last correct adjustment value of the digital gain. RE: Red Even signal, RO: Red Odd signal		
001	Last Correct Value: R Color 600	*ENG	[0 to 511 / - / 1digit/step]
002	Last Correct Value: R Color 1200	*ENG	

4662	[Digital Gain Adjust]		
	Displays the last correct adjustment value of the digital gain. GE: Green Even signal, GO: Green Odd signal BkE: Black Even signal, BkO: Black Odd signal		
001	Last Correct Value: G Color 600	*ENG	[0 to 511 / - / 1digit/step]
002	Last Correct Value: G Color 1200	*ENG	[0 to 511 / - / 1digit/step]
003	Last Correct Value: BkE	*ENG	[0 to 511 / - / 1digit/step]
004	Last Correct Value: BkO	*ENG	[0 to 511 / - / 1digit/step]

4663	[Digital Gain Adjust]		
	Displays the last correct adjustment value of the digital gain. BE: Blue Even signal, BO: Blue Odd signal		
001	Last Correct Value: B Color 600	*ENG	[0 to 511 / - / 1digit/step]
002	Last Correct Value: B Color 1200	*ENG	

4673	[Black Level Adj. Display]		
	Displays the factory setting values of the black level. RE: Red Even signal, RO: Red Odd signal		
001	Factory Setting: R Color 600	*ENG	Displays the factory setting values of the black level adjustment for the even red signal in the CCD circuit board (color printing speed).. [0 to 255 / - / 1digit/step]
002	Factory Setting: R Color 1200	*ENG	Displays the factory setting values of the black level adjustment for the odd red signal in the CCD circuit board (color printing speed). [0 to 255 / - / 1digit/step]

4674	[Black Level Adj. Display]		
	Displays the factory setting values of the black level. GE: Green Even signal, GO: Green Odd signal BkE: Black Even signal, BkO: Black Odd signal		
001	Factory Setting: G Color 600	*ENG	Displays the factory setting values of the black level adjustment for the even green signal in the CCD circuit board (color printing speed). [0 to 255 / - / 1digit/step]
002	Factory Setting: G Color 1200	*ENG	Displays the factory setting values of the black level adjustment for the odd green signal in the CCD circuit board (color printing speed). [0 to 255 / - / 1digit/step]
003	Factory Setting: BkE	*ENG	[0 to 255 / - / 1digit/step]
004	Factory Setting: BkO	*ENG	[0 to 255 / - / 1digit/step]

4675	[Black Level Adj. Display]		
	Displays the factory setting values of the black level. BE: Blue Even signal, BO: Blue Odd signal		
001	Factory Setting: B Color 600	*ENG	Displays the factory setting values of the black level adjustment for the even blue signal in the CCD circuit board (color printing speed). [0 to 255 / - / 1digit/step]
002	Factory Setting: B Color 1200	*ENG	Displays the factory setting values of the black level adjustment for the odd blue signal in the CCD circuit board (color printing speed). [0 to 255 / - / 1digit/step]

4680	[Digital Gain Adjust]		
	Displays the gain value of the amplifiers on the controller for Red. RE: Red Even signal, RO: Red Odd signal BkE: Black Even signal, BkO: Black Odd signal		
001	Factory Setting: R Color 600	*ENG	[0 to 511 / - / 1digit/step]
002	Factory Setting: R Color 1200	*ENG	

4681	[Digital Gain Adjust]		
	Displays the gain value of the amplifiers on the controller for Green. GE: Green Even signal, GO: Green Odd signal BkE: Black Even signal, BkO: Black Odd signal		
001	Factory Setting: G Color 600	*ENG	[0 to 511 / - / 1digit/step]
002	Factory Setting: G Color 1200	*ENG	[0 to 511 / - / 1digit/step]

003	Factory Setting: BkE	*ENG	[0 to 511 / - / 1digit/step]
004	Factory Setting: BkO	*ENG	[0 to 511 / - / 1digit/step]

4682	[Digital Gain Adjust]		
	Displays the gain value of the amplifiers on the controller for Blue.		
001	Factory Setting: B Color 600	*ENG	[0 to 511 / - / 1digit/step]
002	Factory Setting: B Color 1200	*ENG	

4688	[ADF Adjustment]		
	Adjusts the white shading parameter when scanning an image with the ARDF.		
001	Density	*ENG	[50 to 150 / 100 / 1%/step]

4690	[White Level Peak Read]		
	Displays the peak level of the white level scanning.		
001	R Color 600	ENG	[0 to 1023 / - / 1digit/step]
002	R Color 1200	ENG	

4691	[White Level Peak Read]		
	Displays the peak level of the white level scanning. GE: Green Even signal, GO: Green Odd signal BkE: Black Even signal, BkO: Black Odd signal		
001	G Color 600	ENG	[0 to 1023 / - / 1digit/step]
002	G Color 1200	ENG	
003	BkE	ENG	[0 to 1023 / - / 1digit/step]
004	BkO	ENG	[0 to 1023 / - / 1digit/step]

4692	[White Level Peak Read]		
	Displays the peak level of the white level scanning. BE: Blue Even signal, BO: Blue Odd signal		
001	B Color 600	ENG	[0 to 1023 / - / 1digit/step]
002	B Color 1200	ENG	

4693	[Black Level Peak Read]		
	Displays the peak level of the black level scanning. RE: Red Even signal, RO: Red Odd signal		
001	R Color 600	ENG	[0 to 1023 / - / 1digit/step]
002	R Color 1200	ENG	

4694	[Black Level Peak Read]		
	Displays the peak level of the black level scanning. GE: Green Even signal, GO: Green Odd signal BkE: Black Even signal, BkO: Black Odd signal		
001	G Color 600	ENG	[0 to 1023 / - / 1digit/step]
002	G Color 1200	ENG	
003	BkE	ENG	[0 to 1023 / - / 1digit/step]
004	BkO	ENG	[0 to 1023 / - / 1digit/step]

4695	[Black Level Peak Read]		
	Displays the peak level of the black level scanning. BE: Blue Even signal, BO: Blue Odd signal		
001	B Color 600	ENG	[0 to 1023 / - / 1digit/step]
002	B Color 1200	ENG	

4802	[DF Shading FreeRun]		
	Executes the document feeder shading free run.		
001	Lamp OFF	ENG	Turns off the scanner lamp. [- / - / -] [Execute]
002	Lamp ON		Turns on the scanner lamp. [- / - / -] [Execute]

4803	[Home Position Adjustment]		
001	Home Position Adjustment	*ENG	Adjusts the scanner home position. [-1.5 to 1.0 / 0 / 0.1mm/step]

4804	[Home Position]		
001	Home Position	ENG	Executes the scanner HP detection. [- / - / -] [Execute]

4806	[Carriage Save]		
001	Carriage Save	ENG	Moves the carriage from the scanner home position. Dust may fall through the DF exposure glass. Therefore, do this SP when you transport the machine a long distance. [- / - / -] [Execute]

4808	[Factory Setting Input]		
002	Execution Flag	*ENG	[0 or 1 / 0 / 1/step]

4810	[PWM]		
	Displays the PWM value.		
001	Latest: Color 600	ENG	[0 to 4412 / - / 1digit/step]
002	Latest: Color 1200	ENG	[0 to 4412 / - / 1digit/step]
003	Latest: Bk	ENG	[0 to 4412 / - / 1digit/step]
004	Last Correct Value: Color 600	*ENG	[0 to 4412 / 3152 / 1digit/step]
005	Last Correct Value: Color 1200	*ENG	[0 to 4412 / 3152 / 1digit/step]
006	Last Correct Value: Bk	*ENG	[0 to 4412 / 3152 / 1digit/step]
007	Factory Setting: Color 600	*ENG	[0 to 4412 / - / 1digit/step]
008	Factory Setting: Color 1200	*ENG	[0 to 4412 / - / 1digit/step]
009	Factory Setting: Bk	*ENG	[0 to 4412 / - / 1digit/step]

4811	[LED White Level Peak Read]		
	Displays the latest LED white level peak for scanning.		
001	Latest: R Color 600	ENG	[0 to 1023 / - / 1digit/step]
002	Latest: R Color 1200	ENG	[0 to 1023 / - / 1digit/step]
003	Latest: G Color 600	ENG	[0 to 1023 / - / 1digit/step]
004	Latest: G Color 1200	ENG	[0 to 1023 / - / 1digit/step]
005	Latest: BkE	ENG	[0 to 1023 / - / 1digit/step]
006	Latest: BkO	ENG	[0 to 1023 / - / 1digit/step]
007	Latest: B Color 600	ENG	[0 to 1023 / - / 1digit/step]
008	Latest: B Color 1200	ENG	[0 to 1023 / - / 1digit/step]

4812	[LED White Level Peak Read]		
	Displays the factory setting of LED white level peak for scanning. BkE: Black Even signal, BkO: Black Odd signal		
001	Factory Setting: R Color 600	*ENG	[0 to 1023 / - / 1digit/step]
002	Factory Setting: R Color 1200	*ENG	[0 to 1023 / - / 1digit/step]
003	Factory Setting: G Color 600	*ENG	[0 to 1023 / - / 1digit/step]
004	Factory Setting: G Color 1200	*ENG	[0 to 1023 / - / 1digit/step]
005	Factory Setting: BkE	*ENG	[0 to 1023 / - / 1digit/step]
006	Factory Setting: BkO	*ENG	[0 to 1023 / - / 1digit/step]
007	Factory Setting: B Color 600	*ENG	[0 to 1023 / - / 1digit/step]

008	Factory Setting: B Color 1200	*ENG	[0 to 1023 / - / 1digit/step]
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4813	[LED White Level Adjust]		
	Adjusts the target value of the LED white level peak.		
001	Color 600	*ENG	[0 to 1023 / 784 / 1digit /step]
002	Color 1200	*ENG	[0 to 1023 / 784 / 1digit/step]
003	Bk	*ENG	[0 to 1023 / 540 / 1digit/step]

4902	[Disp ACC Data]		
	This SP outputs the final data read at the end of ACC execution. A zero is returned if there was an error reading the data.		
001	R_DATA1	*ENG	Photo C Patch Level 1 (8-bit) [0 to 255 / - / 1 /step]
002	G_DATA1	*ENG	Photo M Patch Level 1 (8-bit) [0 to 255 / - / 1 /step]
003	B_DATA1	*ENG	Photo Y Patch Level 1 (8-bit) [0 to 255 / - / 1 /step]
004	R_DATA2	*ENG	Photo C Patch Level 17 (8-bit) [0 to 255 / - / 1 /step]
005	G_DATA2	*ENG	Photo M Patch Level 17(8-bit) [0 to 255 / - / 1 /step]
006	B_DATA2	*ENG	Photo Y Patch Level 17 (8-bit) [0 to 255 / - / 1 /step]

4905	[Select Gradation Level]		
	Selects the gradation level.		
001	Select Gradation Level	*ENG	[0 to 255 / 0 / 1/step]

4918	[Man Gamma Adj]		
	Adjusts the manual gamma for Copy/Photo or Copy/Text with the soft keys on the operation panel.		
009	Man Gamma Adj	ENG	[- / - / -] [Change]

4930	[Coverage Ctrl: Text]		
	Sets the total regulation value.		
001	Copy: Full Color 1	*ENG	[0 to 400 / 200 / 1/step]
002	Copy: Full Color 2	*ENG	[0 to 400 / 200 / 1/step]
003	Copy: Single Color	*ENG	[0 to 400 / 100 / 1/step]
004	Copy: Color Conversion	*ENG	[0 to 400 / 180 / 1/step]
005	Coverage Ctrl OFF	*ENG	[0 to 400 / 400 / 1/step]

4931	[Coverage Ctrl: Photo]		
	Sets the total regulation value.		
001	Copy: Full Color 1	*ENG	[0 to 400 / 240 / 1/step]
002	Copy: Full Color 2	*ENG	[0 to 400 / 260 / 1/step]
003	Copy: Single Color	*ENG	[0 to 400 / 100 / 1/step]
004	Copy: Color Conversion	*ENG	[0 to 400 / 200 / 1/step]
005	Coverage Ctrl OFF	*ENG	[0 to 400 / 400 / 1/step]

4954	[Read/Restore:Std]		
	Reads or restores the standard chart.		
001	Read New Chart	ENG	Execute the scanning of the A4 chart. [- / - / -] [Execute]
002	Recall Prev Chart	ENG	Clear the data of the scanned A4 chart. [- / - / -] [Execute]
004	Set Std Chart	ENG	Overwrite the standard data. [- / - / -] [Execute]
005	Chroma Rank	*ENG	Restores the standard chromaticity rank. [0 to 255 / 0 / 1/step]

4991	[IPU Image Pass Selection]		
	Selects the image path. Enter the number to be selected using the 10-key pad.		
001	RGB Frame Memory:single	ENG	[0 to 11 / 2 / 1/step]
	0: Scanner input RGB images 1: Scanner I/F RGB images 2: RGB images done by Shading correction (Shading ON, Black offset ON) 3: Shading data 4 to 11: Not used		

4993	[High Light Correction]		
001	Sensitivity Selection	*ENG	Selects the Highlight correction level. [0 to 9 / 4 / 1/step] 0: weakest sensitivity 9: strongest sensitivity
002	Range Selection	*ENG	Selects the range level of Highlight correction. [0 to 9 / 4 / 1/step] 0: weakest skew correction, 9: strongest skew correction

4994	[Text/Photo Detect Level Adj.]		
	Selects the definition level between Text and Photo for high compression PDF.		
001	High Compression PDF	*ENG	[0 to 2 / 1 / 1/step] 0: Text priority 1: Normal 2: Photo priority

4996	[White Paper Detect Level]		
	Adjusts the white paper detect level for fax.		
001	WhitePaperDetectLevel	*ENG	[0 to 6 / 3 / 1/step]

3.5 MAIN SP TABLES-5

3.5.1 SP5-XXX (MODE)

5024	[mm/inch Display Selection]		
	Display units (mm or inch) for custom paper sizes.		
001	0:mm 1:inch	*CTL	[0 or 1 / 0 / 1/step] 0: mm (Europe/Asia) 1: inch (USA)

5045	[Accounting Counter]		
	Selects the counting method. NOTE: The counting method can be changed only once, regardless of whether the counter value is negative or positive.		
001	Counter Method	*CTL	[0 or 1 / 0 / 1/step] 0: Developments 1: Prints

5047	[Paper Display]		
001	Backing Paper	*CTL	[0 or 1 / 0 / 1/step] 0: OFF, 1:ON

5051	[Toner Refill Detection Display]		
	Enables or disables the toner refill detection display.		
001	Toner Refill Detection Display	*CTL	[0 or 1 / 0 / 1/step] Alphanumeric 0: ON, 1: OFF

5055	[Display IP Address]		
	Display or does not display the IP address on the operation panel.		
001	Display IP Address	*CTL	[0 or 1 / 0 / 1/step] 0: OFF 1: ON

5062	[Part Replacement Alert Display]		
	Display or does not display the PM part yield on the LCD.		
001	PCDU: Bk	*CTL	[0 or 1 / 0 / 1/step] 0: No display, 1: Display
002	PCDU: C	*CTL	
003	PCDU: M	*CTL	
004	PCDU: Y	*CTL	
005	ITB Unit	*CTL	[0 or 1 / 0 / 1/step] 0: No display, 1: Display
006	Fusing Unit	*CTL	
007	Transfer Unit	*CTL	
008	Toner Collection Bottle	*CTL	

5066	[PM Parts Display]		
	Display or does not display the "PM parts" button on the LCD.		
001	PM Parts Display	*CTL	[0 or 1 / 0 / 1/step] 0: No display, 1: Display

5067	[Parts PM System Setting]		
	Selects the service maintenance or user maintenance for each PM parts. If the user service is selected, PM alert is displayed on the LCD.		
001	PCDU: Bk	*CTL	[0 or 1 / 0 / 1/step] 0: Service, 1: User
002	PCDU: C	*CTL	
003	PCDU: M	*CTL	

004	PCDU: Y	*CTL	
005	ITB Unit	*CTL	[0 or 1 / 0 / 1/step] 0: Service, 1: User
006	Fusing Unit	*CTL	
007	Transfer Unit	*CTL	
008	Toner Collection Bottle	*CTL	

5071	[Set Bypass Paper Size Display] Enables or disables the bypass paper size display for confirmation		
001	Set Bypass Paper Size Display	CTL	[0 or 1 / 0 / 1/step] 0: Disable, 1: Enable
Turn on or off the paper size confirmation pop-up on the LED. This pop-up prevents mismatching between a paper size selected by the operation panel and an actual paper size on the by-pass tray.			

5074	[Home screen for User]		
002	Home Screen Login Setting	*CTL	[FFh / 0x0 / 1hex/step]
091	(0:OFF 1:SDK 2:Reserve)	*CTL	[0 to 2 / 0 / 1/step] 0: Function disable 1: SDK application 2: Legacy application (reserved)
092	Product ID	*CTL	Sets the Application product ID. [0x00 to 0xFFFF FFFF / - / 1/step]
093	Application ID	*CTL	Sets the display category of the application that is specified in the SP5075-001,002 [0 to 255 / 0 / 1/step]

5075	[USB Keyboard]		
001	Function Setting	*CTL	[0 or 1 / 0 / 1/step] 0: Disable 1: Enable

5076	[Copy:LT/LG Mixed Sizes Setting]		
001	0: OFF 1: ON	*CTL	[0 or 1 / 1 / 1/step] 0: OFF, 1: ON (1: USA default, 0: Others default)

5112	[Non-Std. Paper Sel.]		
001	(0:OFF 1:ON)	*CTL	[0 or 1 / 1 / 1/step] 0: OFF, 1: ON

5113	[Optional Counter Type]		
001	Default Optional Counter Type	*CTL	This program specifies the counter type. [0 to 9 / 0 / 1/step] 0: None, 1: Key card (RK 3, 4) 2: Key card (down), 3: Prepaid card 4: Coin lock, 5: MF key card 8: Key counter + Vendor 9: Bar-code Printer
002	External Optional Counter Type	*CTL	This program specifies the external counter type. [0 to 3 / 0 / 1/step] 0: None 1: Expansion Device 1 2: Expansion Device 2 3: Expansion Device 3

5114	[Optional Counter I/F]		
001	MF Key Card Extension	*CTL	[0 or 1 / 0 / 1/step] 0: Not installed 1: Installed (scanning accounting)

5118	[Disable Copying]		
	This program disables copying.		
001	Disable Copying	*CTL	[0 or 1 / 0 / 1/step] 0: Not disabled 1: Disabled

5120	[Mode Clear Opt. Counter Removal]		
	This program updates the information on the optional counter. When you install or remove an optional counter, check the settings.		
001	0:Yes 1:StandBy 2:No	*CTL	[0 to 2 / 0 / 1/step] 0: Yes (removed) 1: Standby (installed but not used) 2: No (not removed)]

5121	[Counter Up Timing]		
	This program specifies when the counter goes up. The settings refer to "paper feed" and "paper exit" respectively.		
001	0:Feed 1:Exit	*CTL	[0 or 1 / 0 / 1/step] 0: Feed, 1: Exit

5127	[APS Mode]		
	This program disables the APS.		
001	APS Mode	*CTL	[0 or 1 / 0 / 1/step] 0: Not disabled 1: Disabled

5128	[Code Mode With Key/Card Option]		
	Sets whether a user code and an accounting machine are combined or not.		
001	Code Mode With Key/Card Option	*CTL	[0 or 1 / 0 / 1/step] 0: Not combined 1: Combined

5131	[Paper Size Type Selection]		
	The program selects a paper size system from the following alternatives: the AB system (0), the LT system (1), and the AF system (2).		
001	Paper Size Type Selection	*ENG	[1 to 2 / 1: NA / 1/step] 1: NA 2: EU/ASIA

5140	[Disable Duplex for Tray]		
001	Bypass	*CTL	[0 or 1 / 0 / 1/step] 0: Not disabled 1: Disabled
002	Tray 1	*CTL	
003	Tray 2	*CTL	
004	Tray 3	*CTL	
005	Tray 4	*CTL	
006	Tray 5	*CTL	
007	Tray 6	*CTL	
008	Tray 7	*CTL	

5150	[Bypass Length Setting]		
001	0: OFF 1: ON	CTL	[0 or 1 / 0 / 1/step] 0: OFF, 1: ON

5162	[App. Switch Method]		
	This program specifies the switch that selects an application program.		
001	App. Switch Method	*CTL	[0 or 1 / 0 / 1/step] 0: Soft Key Set 1: Hard Key Set

5166	[Auto Delete Time]		
021	Auto Delete Time	*CTL	[0 to 4294967295 / 0 / 1/step]

5167	[Fax Printing Mode at Optional Counter Off]		
	Enables or disables the automatic print out without an accounting device. This SP is used when the receiving fax is accounted by an external accounting device.		
001	Fax Printing Mode at Optional Counter Off	*CTL	[0 or 1 / 0 / 1/step] 0: Automatic printing 1: No automatic printing

5169	[CE Login]		
	If you will change the printer bit switches, you must 'log in' to service mode with this SP before you go into the printer SP mode.		
001	CE Login	*CTL	[0 or 1 / 0 / 1/step] 0: Disabled 1: Enabled

5186	[RK4]		
	Enables or disables the prevention for RK4 (accounting device) disconnection. If the RK4 is disconnected for 10 seconds when this SP is set to "1 (Enable)", the machine automatically jams a sheet of paper.		
001	RK4	*ENG	[0 or 1 / 0 / 1/step] 0: Disable 1: Enable

5188	[Copy NvVersion]		
	Displays the version number of the NVRAM on the controller board.		
001	Copy MvVersion	*CTL	[- / - / -]


5191	[Mode Set]		
	Shifts to the power save mode or not.		
001	Power Str Set	*CTL	[0 or 1 / 1 / 1/step] 0: OFF, 1: ON

5193	[-]		
	External controler settings.		
001	-	CTL	[0 to 10 / 0 / 1/step] 0: External Controller is not installed 1: EFI, 2: Ratio, 3: Egret 4: GJ, 5:Creo, 6: QX-100 7: Kurofune 8~10: Reserved

5195	[Limitless SW]		
	Sets limitless paper feed.		
001	Limitless SW	*CTL	[0 or 1 / 0 / 1/step] 0: Productivity priority 1: Limitless

5212	[Page Numbering]		
	This program adjusts the position of the second side page numbers. A "- value" moves the page number positions to the left edge. A "+ value" moves the page number positions to the right edge.		
003	Duplex Printout Right/Left Position	*CTL	[-10.00 to 10.00 / 0.00 / 0.01mm/step]
004	Duplex Printout High/Low Position	*CTL	[-10.00 to 10.00 / 0.00 / 0.01mm/step]

5302	[Set Time]		
	Adjusts the RTC (real time clock) time setting for the local time zone. Examples: For Japan (+9 GMT), enter 540 (9 hours x 60 min.) DOM: +540 (Tokyo) NA: -300 (New York) EU: + 60 (Paris) CH: +480 (Peking) TW: +480 (Taipei) AS: +480 (Hong Kong) KO: +540 (Korea)		
002	Time Difference	*CTL	[-1440 to 1440 / -300 / 1 min./step]

5307	[Summer Time]		
001	Usable	*CTL	[0 to 1 / - / 1/step] 0: Disabled 1: Enabled (Default) 1: NA and EUR 0: ASIA and others
Enables or disables the summer time mode. <div style="border: 1px solid black; border-radius: 10px; padding: 2px; display: inline-block;">  Note </div> <ul style="list-style-type: none"> ▪ Make sure that both SP5-307-3 and -4 are correctly set. Otherwise, this SP is not activated even if this SP is set to "1". 			
003	start data set	*CTL	[0 to 0xffffffff / - / 1hex/step] (Default) NA: 0x03200210 EUR: 0x03500010 ASIA: 0x10500010 Other: 0x00000000
Specifies the start setting for the summer time mode. There are 8 digits in this SP. For months 1 to 9, the "0" cannot be input in the first digit, so the eight-digit setting for -2 or -3 becomes a seven-digit setting. 1st and 2nd digits: The month. [1 to 12] 3rd digit: The week of the month. [1 to 5] 4th digit: The day of the week. [0 to 6 = Sunday to Saturday] 5th and 6th digits: The hour. [00 to 23] 7th digit: The length of the advanced time. [0 to 9 / 1 hour /step] 8th digit: The length of the advanced time. [0 to 5 / 10 minutes /step] <ul style="list-style-type: none"> ▪ The digits are counted from the left. ▪ Make sure that SP5-307-1 is set to "1". 			
For example: 3500010 (EU default) The timer is advanced by 1 hour at am 0:00 on the 5th Sunday in March			

	end data set	*CTL	[0 to 0xffffffff / - / 1hex/step] (Default) NA: 0x11100200 EUR: 0x10500100 ASIA: 0x03100000 Other: 0x00000000
004	<p>Specifies the end setting for the summer time mode.</p> <p>There are 8 digits in this SP.</p> <p>1st and 2nd digits: The month. [1 to 12]</p> <p>3rd digit: The week of the month. [0 to 5]</p> <p>4th digit: The day of the week. [0 to 7 = Sunday to Saturday]</p> <p>5th and 6th digits: The hour. [00 to 23]</p> <p>The 7th and 8 digits must be set to "00".</p> <ul style="list-style-type: none"> ▪ The digits are counted from the left. ▪ Make sure that SP5-307-1 is set to "1". 		

5401	[Access Control]		
103	Default Document ACL	*CTL	[0 to 3 / 0 / 1/step] 0: Read Only 1: Edit 2: Edit/Delete 3: Full control
104	Authentication Time	*CTL	[0 to 255 / 0 / 1sec/step]
162	ExtAuth Detail	*CTL	[- / 0x00 / 0x01/step]
200	SDK1 UniqueID	*CTL	[0 to 0xffffffff / 0 / 1/step]
201	SDK1 Certification Method	*CTL	[0 to 0xff / 0 / 1/step]
210	SDK2 UniqueID	*CTL	[0 to 0xffffffff / 0 / 1/step]
211	SDK2 Certification Method	*CTL	[0 to 0xff / 0 / 1/step]
220	SDK3 UniqueID	*CTL	[0 to 0xffffffff / 0 / 1/step]
221	SDK3 Certification Method	*CTL	[0 to 0xff / 0 / 1/step]

230	SDK Certification Device	*CTL	<p>[- / 0 / -]</p> <p>0-1: SDK authentication available</p> <p>0-0: Disable all functions</p> <p>1: Reserved</p> <p>2-1: Administrator login</p> <p>2-0: Disable</p> <p>3~7-0: Reserved (set "0" only)</p>
240	Detail Option	*CTL	<p>[/ 0x00 / 0x01/step]</p> <p>0: Logout confirm option</p> <p>-1: ON, 0: OFF</p> <p>2~1: Auto-logout timer(retry timer)</p> <p>-11: 30sec, 10: 20sec,</p> <p>01: 10sec, 00: 60sec</p> <p>3: personal authority / Group authority and operation</p> <p>-1: ON, 0: OFF</p> <p>7: Logout failed panel lock</p> <p>-1: ON, 0: OFF</p>

5402	[Access Control]		
101	SDKJ1 Limit Setting	*CTL	[/ 0x00 / 0x01/step]
102	SDKJ2 Limit Setting	*CTL	bit0: SDKJ Authentication -0: Panel Type
103	SDKJ3 Limit Setting	*CTL	-1: Remote Type
104	SDKJ4 Limit Setting	*CTL	bit1: Using user code setup -0: OFF, 1: ON
105	SDKJ5 Limit Setting	*CTL	bit2: Using key-counter setup -0: OFF, 1: ON
106	SDKJ6 Limit Setting	*CTL	bit3: Using billing external device setup
107	SDKJ7 Limit Setting	*CTL	-0: OFF, 1: ON
108	SDKJ8 Limit Setting	*CTL	bit3: Using external billing device setup
109	SDKJ9 Limit Setting	*CTL	-0: OFF, 1: ON
110	SDKJ10 Limit Setting	*CTL	bit4: Using extended external billing device setup -0: OFF, 1: ON bit5~6: Not used bit7: Using extended function J limit users -0: OFF, 1: ON
111	SDKJ11 Limit Setting	*CTL	[/ 0x00 / 0x01/step]
112	SDKJ12 Limit Setting	*CTL	bit0: SDKJ Authentication -0: Panel Type
113	SDKJ13 Limit Setting	*CTL	-1: Remote Type
114	SDKJ14 Limit Setting	*CTL	bit1: Using user code setup -0: OFF, 1: ON
115	SDKJ15 Limit Setting	*CTL	bit2: Using key-counter setup -0: OFF, 1: ON
116	SDKJ16 Limit Setting	*CTL	-0: OFF, 1: ON

117	SDKJ17 Limit Setting	*CTL	bit3: Using billing external device setup -0: OFF, 1: ON bit3: Using external billing device setup -0: OFF, 1: ON bit4: Using extended external billing device setup -0: OFF, 1: ON bit5~6: Not used bit7: Using extended function J limit users -0: OFF, 1: ON
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118	SDKJ18 Limit Setting	*CTL	
119	SDKJ19 Limit Setting	*CTL	
120	SDKJ20 Limit Setting	*CTL	
121	SDKJ21 Limit Setting	*CTL	[/ 0x00 / 0x01/step]
122	SDKJ22 Limit Setting	*CTL	bit0: SDKJ Authentication -0: Panel Type
123	SDKJ23 Limit Setting	*CTL	-1: Remote Type
124	SDKJ24 Limit Setting	*CTL	bit1: Using user code setup -0: OFF, 1: ON
125	SDKJ25 Limit Setting	*CTL	bit2: Using key-counter setup -0: OFF, 1: ON
126	SDKJ26 Limit Setting	*CTL	bit3: Using billing external device
127	SDKJ27 Limit Setting	*CTL	setup -0: OFF, 1: ON
128	SDKJ28 Limit Setting	*CTL	bit3: Using external billing device
129	SDKJ29 Limit Setting	*CTL	setup -0: OFF, 1: ON
130	SDKJ30 Limit Setting	*CTL	bit4: Using extended external billing device setup -0: OFF, 1: ON bit5~6: Not used bit7: Using extended function J limit users -0: OFF, 1: ON

5402	[Access Control]		
141	SDKJ1 ProductID	*CTL	[0 to 0xffffffff / 0 / 1/step]
142	SDKJ2 ProductID	*CTL	
143	SDKJ3 ProductID	*CTL	
144	SDKJ4 ProductID	*CTL	
145	SDKJ5 ProductID	*CTL	
146	SDKJ6 ProductID	*CTL	
147	SDKJ7 ProductID	*CTL	
148	SDKJ8 ProductID	*CTL	
149	SDKJ9 ProductID	*CTL	
150	SDKJ10 ProductID	*CTL	
151	SDKJ11 ProductID	*CTL	
152	SDKJ12 ProductID	*CTL	
153	SDKJ13 ProductID	*CTL	
154	SDKJ14 ProductID	*CTL	
155	SDKJ15 ProductID	*CTL	[0 to 0xffffffff / 0 / 1/step]
156	SDKJ16 ProductID	*CTL	
157	SDKJ17 ProductID	*CTL	
158	SDKJ18 ProductID	*CTL	
159	SDKJ19 ProductID	*CTL	
160	SDKJ20 ProductID	*CTL	
161	SDKJ21 ProductID	*CTL	
162	SDKJ22 ProductID	*CTL	
163	SDKJ23 ProductID	*CTL	

164	SDKJ24 ProductID	*CTL	
165	SDKJ25 ProductID	*CTL	
166	SDKJ26 ProductID	*CTL	
167	SDKJ27 ProductID	*CTL	
168	SDKJ28 ProductID	*CTL	
169	SDKJ29 ProductID	*CTL	
170	SDKJ30 ProductID	*CTL	

5404	[User Code Count Clear]		
001	User Code Counter Clear	CTL	Clears all counters for users. [- / - / -] [Execute]

5411	[LDAP-Certification]		
004	Simplified Authentication	*CTL	Determines whether simplified LDAP authentication is done. [0 or 1 / 1 / 1/step] 0: OFF, 1: ON
005	Password Null Not Permit	*CTL	This SP is referenced only when SP5411-4 is set to "1" (On). [0 or 1 / 1 / -] 0: Password NULL permitted. 1: Password NULL not permitted.
006	Detail Option	*CTL	Determines whether LDAP option (anonymous certification) is turned on or off. Bit0 0: OFF, 1: ON

5412	[Krb-Certification]		
100	Encrypt Mode	*CTL	[- / 0x1F / 1bit/step] 0x01:AES256-CTS-HMAC-SHA1-96 0x02:AES128-CTS-HMAC-SHA1-96 0x04:DES3-CBC-SHA1 0x08:RC4-HMAC 0x10:DES-CBC-MD5 0xFF(0x1F):ALL

5413	[Lockout Setting]		
001	Lockout On/Off	*CTL	Switches on/off the lock on the local address book account. [0 or 1 / 0 / 1/step] 0: OFF, 1: ON
002	Lockout Threshold	*CTL	Sets a limit on the frequency of lockouts for account lockouts. [1 to 10 / 5 / 1/step]
003	Cancellation On/Off	*CTL	Determines whether the system waits the prescribed time for input of a correct user ID and password after an account lockout has occurred. [0 or 1 / 0 / 1/step] 0: OFF (no wait time, lockout not cancelled) 1: ON (system waits, cancels lockout if correct user ID and password are entered)

004	Cancellation Time	*CTL	Determines the length of time that the system waits for correct input of the user ID and password after a lockout has occurred. This setting is used only if SP5413-3 is set to "1" (on). [1 to 9999 / 60 / 1min./step]
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5414	[Access Mitigation]		
001	Mitigation On/Off	*CTL	Switches on/off masking of continuously used IDs and passwords that are identical. [0 or 1 / 0 / 1/step] 0: OFF, 1: ON
002	Mitigation Time	*CTL	Sets the length of time for excluding continuous access for identical user IDs and passwords. [0 to 60 / 15 / 1min./step]

5415	[Password Attack]		
001	Permissible Number	*CTL	Sets the number of attempts to attack the system with random passwords to gain illegal access to the system. [0 to 100 / 30 / 1attempt/step]
002	Detect Time	*CTL	Sets the time limit to stop a password attack once such an attack has been detected. [1 to 10 / 5 / 1sec./step]

5416	[Access Information]		
001	Access User Max Num	*CTL	Limits the number of users used by the access exclusion and password attack detection functions. [50 to 200 / 200 / 1users/step]
002	Access Password Max Num	*CTL	Limits the number of passwords used by the access exclusion and password attack detection functions. [50 to 200 / 200 / 1 password/step]
003	Monitor Interval	*CTL	Sets the processing time interval for referencing user ID and password information. [1 to 10 / 3 / 1sec./step]

5417	[Access Attack]		
001	Access Permissible Number	*CTL	Sets a limit on access attempts when an excessive number of attempts are detected for MFP features. [0 to 500 / 100 / 1/step]
002	Attack Detect Time	*CTL	Sets the length of time for monitoring the frequency of access to MFP features. [10 to 30 / 10 / 1sec./step]
003	Productivity Fall Wait	*CTL	Sets the wait time to slow down the speed of certification when an excessive number of access attempts have been detected. [0 to 9 / 3 / 1sec./step]

004	Attack Max Num	*CTL	Sets a limit on the number of requests received for certification in order to slow down the certification speed when an excessive number of access attempts have been detected. [50 to 200 / 200 / 1attempt/step]
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5420	[User Authentication]		
	These settings should be done with the System Administrator. Note: These functions are enabled only after the user access feature has been enabled.		
001	Copy	*CTL	Determines whether certification is required before a user can use the copy applications. [0 or 1 / 0 / 1/step] 0: Authentication ON 1: Authentication OFF
002	Color Security Setting	CTL	Enables or disables the color copy limitation for each copy mode when the user authentication is "ON" [0x00 to 0xFF / 0 / 1/step] 0: Enable, 1: Disable Bit0: B/W mode Bit1: Mono color mode Bit2: Two colors mode Bit3: Full color mode Bit4: Automatic color mode Bit5 to 7: Reserved
011	DocumentServer	*CTL	Determines whether certification is required before a user can use the document server. [0 or 1 / 0 / 1/step] 0: Authentication ON 1: Authentication OFF

021	Fax	*CTL	Determines whether certification is required before a user can use the fax application. [0 or 1 / 0 / 1/step] 0: Authentication ON 1: Authentication OFF
031	Scanner	*CTL	Determines whether certification is required before a user can use the scan applications. [0 or 1 / 0 / 1/step] 0: Authentication ON 1: Authentication OFF
041	Printer	*CTL	Determines whether certification is required before a user can use the printer applications. [0 or 1 / 0 / 1/step] 0: Authentication ON 1: Authentication OFF
051	SDK1	*CTL	Determines whether certification is required before a user can use the SDK application. [0 or 1 / 0 / 1/step] 0: Authentication ON 1: Authentication OFF
061	SDK2	*CTL	
071	SDK3	*CTL	
081	Browser	*CTL	Determines whether certification is required before a user can use the Browser application. [0 or 1 / 0 / 1/step] 0: Authentication ON 1: Authentication OFF

5430	[Auth Dialog Message Change]		
	Displays the Authentication dialog message or not.		
001	Message Change On/Off	*CTL	[0 or 1 / 0 / 1/step] 0: OFF 1: ON
002	Message Text Download	CTL	[- / - / -] [Execute]
003	Message Text ID	CTL	[characters(max.16Byte) / - / -]

5431	[External Auth User Preset]		
010	Tag	*CTL	[0 or 1 / 1 / 1/step]
011	Entry	*CTL	
012	Group	*CTL	
020	Mail	*CTL	
030	Fax	*CTL	
031	FaxSub	*CTL	
032	Folder	*CTL	
033	ProtectCode	*CTL	
034	SmtplAuth	*CTL	
035	LdapAuth	*CTL	
036	Smb Ftp Fldr Auth	*CTL	
037	AcntAcl	*CTL	
038	DocumentAcl	*CTL	
040	CertCrypt	*CTL	
050	UserLimitCount	*CTL	

5481	[Authentication Error Code]		
	These SP codes determine how the authentication failures are displayed.		
001	System Log Disp	*CTL	Determines whether an error code appears in the system log after a user authentication failure occurs. [0 or 1 / 0 / 1/step] 0: Display OFF 1: Display ON
002	Panel Disp	*CTL	Determines whether an error code appears on the operation panel after a user authentication failure occurs. [0 or 1 / 0 / 1/step] 0: Display OFF 1: Display ON

5490	[MF KeyCard]		
001	Job Permit Setting	*CTL	Sets up operation of the machine with a keycard. [0 or 1 / 0 / 1/step] 0: Disabled. Cancels operation without a user code. 1: Enabled. Allows operation without a user code.
002	Count Mode Setting	*CTL	[0 or 1 / 0 / 1/step] 0: Simple Color count mode (FC/BK) 1: Detailed Color mode (FC/BK/TC/MC)

5491	[Optional Counter]		
001	Detail Option	*CTL	[- / 0x00 / 0x01/step] bit0: Forced Job Canceling -1:Yes, 2: No

5501	[PM Alarm]		
001	PM Alarm Level	*CTL	[0 to 9999 / 0 / 1/step] 0: Alarm off 1 to 9999: Alarm goes off when Value (1 to 9999) x 1000 > PM counter
002	Original Count Alarm	*CTL	[0 or 1 / 0 / 1/step] 0: No alarm sounds 1: Alarm sounds after the number of originals passing through the ARDF > 10,000

5504	[Jam Alarm]		
001	Jam Alarm	*CTL	Sets the alarm to sound for the specified jam level (document miss feeds are not included). [0 to 3 / 3 / 1/step] 0: Zero (Off) 1: Low (2.5K jams) 2: Medium (3K jams) 3: High (6K jams)

5505	[Error Alarm]		
	Sets the error alarm level. The error alarm counter counts "1" when any SC is detected. However, the error alarm counter decreases by "1" when an SC is not detected during a set number of copied sheets (for example, default 1500 sheets). The error alarm occurs when the SC error alarm counter reaches "5".		
001	Error Alarm	*CTL	[0 to 255 / 10 / 1hundred/step]

5507	[Supply Alarm]		
	Enables or disables the notifying a supply call via the @Remote.		
001	Paper Supply Alarm	*CTL	[0 or 1 / 0 / 1/step] 0: OFF, 1: ON
003	Toner Supply Alarm	*CTL	[0 or 1 / 1 / 1/step] 0: OFF, 1: ON
080	Toner Call Timing	*CTL	Changes the timing of the "Toner Supply Call" via the @Remote, when the following conditions occur. [0 or 1 / 0 / 1/step] 0: At replacement 1: At near end
128	Interval :Others	*CTL	[250 to 10000 / 1000 / 1page/step]
133	Interval :A4	*CTL	
134	Interval :A5	*CTL	
142	Interval :B5	*CTL	
164	Interval :LG	*CTL	
166	Interval :LT	*CTL	
172	Interval :HLT	*CTL	

5508	[CC Call]		
001	Jam Remains	*CTL	Enables/disables initiating a call for an unattended paper jam. [0 or 1 / 1 / 1/step] 0: Disable, 1: Enable
002	Continuous Jams	*CTL	Enables/disables initiating a call for consecutive paper jams. [0 or 1 / 1 / 1/step] 0: Disable, 1: Enable
003	Continuous Door Open	*CTL	Enables/disables initiating a call when the front door remains open. [0 or 1 / 1 / 1/step] 0: Disable, 1: Enable
011	Jam Detection: Time Length	*CTL	Sets the time a jam must remain before it becomes an "unattended paper jam". This setting is enabled only when SP5508-004 is set to "1". [3 to 30 / 10 / 1min./step]
012	Jam Detection: Continuous Count	*CTL	Sets the number of consecutive paper jams required to initiate a call. This setting is enabled only when SP5508-004 is set to "1". [2 to 10 / 5 / 1/step]
013	Door Open: Time Length	*CTL	Sets the length of time the door remains open before the machine initiates a call. This setting is enabled only when SP5-508-004 is set to "1". [3 to 30 / 10 / 1min./step]

5515	[SC/Alarm Setting]	*CTL	-
	With @Remote in use, these SP codes can be set to issue an SC call when an SC error occurs. If this SP is switched off, the SC call is not issued when an SC error occurs.		
001	SC Call	*CTL	[0 or 1 / 1 / 1/step] 0: OFF, 1: ON
002	Service Parts Near End Call	*CTL	
003	Service Parts End Call	*CTL	
004	User Call	*CTL	
006	Communication Test Call	*CTL	
007	Machine Information Notice	*CTL	
008	Alarm Notice	*CTL	
009	Non Genuine Tonner Ararm	*CTL	
010	Supply Automatic Ordering Call	*CTL	
011	Supply Management Report Call	*CTL	
012	Jam/Door Open Call	*CTL	

5516	[Individual PM Part Alarm Call]		
	With @Remote in use, these SP codes can be set to issue a PM alarm call when one of SP parts reaches its yield.		
001	Disable/Enable Setting (0:Not Send,1:Send)	*CTL	[0 or 1 / 1 / 1/step] 0: Not send, 1: Send
004	Percent yield for triggering PM alert	*CTL	[1 to 255 / 75 / 1%/step]

5610		[Base Gamma Ctrl Pt:Execute]	
004	Get Factory Default	ENG	Recalls the factory settings. [- / - / -] [Execute]
005	Set Factory Default	ENG	Overwrites the current values onto the factory settings. [- / - / -] [Execute]
006	Restore Orginal Value	ENG	Recalls the previous settings. [- / - / -] [Execute]

5611		[Toner Color in 2C]	
001	B-C	*ENG	Adjusts the Cyan correction value of the blue signal in two-color mode. [0 to 128 / 100 / 1/step] 128: Darkest density
002	B-M	*ENG	Adjusts the Magenta correction value of the blue signal in two-color mode. [0 to 128 / 100 / 1/step] 128: Darkest density
003	G-C	*ENG	Adjusts the Cyan correction value of the blue signal in two-color mode. [0 to 128 / 100 / 1/step] 128: Darkest density
004	G-Y	*ENG	Adjusts the Yellow correction value of the blue signal in two-color mode. [0 to 128 / 100 / 1/step] 128: Darkest density

005	R-M	*ENG	Adjusts the Magenta correction value of the blue signal in two-color mode. [0 to 128 / 100 / 1/step] 128: Darkest density
006	R-Y	*ENG	Adjusts the Yellow correction value of the blue signal in two-color mode. [0 to 128 / 100 / 1/step] 128: Darkest density

5618	[Color Mode Display Selection]		
	Selects the color selection display on the LCD.		
001	Color Mode Display Selection	*CTL	[0 or 1 / 1 / 1/step] 0: ACS, Color, Black & White, Two Color, Single color 1: ACD, Full Color, Black & White

5730	[Extended Function Setting]		
010	Expiration Prior Alarm Set	-	[0 to 999 / 20 / 1days/step]

5731	[Counter Effect]		
001	Change MK1 Cnt (Paper->Combine)	*CTL	[0 or 1 / 0 / 1/step]

5734	[PDF Setting] Sets the limitation of the PDF category for "Scan to", "Fax sending" and "Web downloading".		
010	PDF/A Fixed	*CTL	[0 or 1 / 0 / 1/step] 0: All PDF categories 1: PDF/A only

5745	[Deemed Power Consumption]		
211	Controller Standby	*CTL	[0 to 9999 / 0 / 1/step]
212	STR	*CTL	[0 to 9999 / 0 / 1/step]
213	Main Power Off	*CTL	[0 to 9999 / 0 / 1/step]
214	Scanning and Printing	*CTL	[0 to 9999 / 0 / 1/step]
215	Printing	*CTL	[0 to 9999 / 0 / 1/step]
216	Scanning	*CTL	[0 to 9999 / 0 / 1/step]
217	Engine Standby	*CTL	[0 to 9999 / 0 / 1/step]
218	Low Power Consumption	*CTL	[0 to 9999 / 0 / 1/step]
219	Silent Consumption	*CTL	[0 to 9999 / 0 / 1/step]

5749	[Import/Export]		
	Imports and exports preference information.		
001	Export	CTL	[- / - / -] Target: System, Printer, Fax, Scanner Option: Unique, Secret Copy config: Encryption, Encryption key(if selected) [Execute]
101	Import	CTL	[- / - / -] Option: Unique Copy config: Encryption, Encryption key(if selected) [Execute]
251	Export Result Print(SP)	CTL	[- / - / -] [Execute]
252	Import Result Print(SP)	CTL	[- / - / -] [Execute]

Note

- Memory Clear (SP5-801)
- The following tables list the items that are cleared. The serial number information, meter charge setting and meter charge counters (SP8-581, 582, 583, 584, and 586) are not cleared.

5801		[Memory Clear]	
001	All Clear	CTL	Resets all correction data for process control and all software counters, and returns all modes and adjustments to their default values. [- / - / -] [Execute]
002	Engine	ENG	Clears the engine settings. [- / - / -] [Execute]
003	SCS	CTL	Initializes default system settings, SCS (System Control Service) settings, operation display coordinates, and ROM update information. [- / - / -] [Execute]
004	IMH Memory Clr	CTL	Initializes the image file system. (IMH: Image Memory Handler) [- / - / -] [Execute]
005	MCS	CTL	Initializes the Mcs settings. [- / - / -] [Execute]
006	Copier Application	CTL	Initializes all copier application settings. [- / - / -] [Execute]

007	FAX Application	CTL	Clears the fax application settings. [- / - / -] [Execute]
008	Printer Application	CTL	The following service settings: <ul style="list-style-type: none"> ▪ Bit switches ▪ Gamma settings (User & Service) ▪ Toner Limit The following user settings: <ul style="list-style-type: none"> ▪ Tray Priority ▪ Menu Protect ▪ System Setting except for setting of Energy Saver ▪ I/F Setup (I/O Buffer and I/O Timeout) ▪ PCL Menu [- / - / -] [Execute]
009	Scanner Application	CTL	Initializes the scanner defaults for the scanner and all the scanner SP modes. [- / - / -] [Execute]
010	Web Service	CTL	Deletes the network file application management files and thumbnails, and initializes the job login ID. [- / - / -] [Execute]
011	NCS	CTL	All setting of Network Setup (User Menu) (NCS: Network Control Service) [- / - / -] [Execute]

012	R-FAX	CTL	Initializes the R-FAX settings. [- / - / -] [Execute]
014	Clear DCS Setting	CTL	Initializes the DCS (Delivery Control Service) settings. [- / - / -] [Execute]
015	Clear UCS Settings	CTL	Initializes the UCS (User Information Control Service) settings. [- / - / -] [Execute]
016	MIRS Setting	CTL	Initializes the MIRS (Machine Information Report Service) settings. [- / - / -] [Execute]
017	CCS	CTL	Initializes the CCS (Certification and Charge-control Service) settings. [- / - / -] [Execute]
018	SRM Memory Clr	CTL	Initializes the SRM (System Resource Manager) settings. [- / - / -] [Execute]
019	LCS	CTL	Initializes the LCS settings. [- / - / -] [Execute]
020	Web Uapli	CTL	Initializes the web user application settings.

021	ECS	CTL	Initializes the ECS settings. [- / - / -] [Execute]
023	AICS	CTL	Initializes the AICS settings. -
024	BROWSER	CTL	Initializes the browser settings. -
025	ECS	CTL	Initializes the ECS settings.

5802	[Free Run]		
	Performs a free run on the copier engine.		
	<p>Note</p> <ul style="list-style-type: none"> ▪ The machine starts free run in the same condition as the sequence of A4/LT, A3 or A4 SEF printing from the 1st or 2nd tray. Therefore, the correct paper should be loaded in the 1st tray or 2nd tray, but paper is not fed. ▪ The main switch has to be turned off and on after using the free run mode for a test. 		
	001	B/W A4 LEF	ENG
002	FC A4 LEF	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
003	FC A3	ENG	

5803	[INPUT Check]		
001	Registration Sensor	ENG	[0 or 1 / 0 / 1/step]
002	Tray Paper End Detection	ENG	[0 or 1 / 0 / 1/step]
003	Bypass Paper End Detection	ENG	[0 or 1 / 0 / 1/step]
004	Bypass paper Width Detection	ENG	[0 or 1 / 0 / 1/step]
006	Duplex Exit Sensor	ENG	[0 or 1 / 0 / 1/step]
007	Exit Sensor	ENG	[0 or 1 / 0 / 1/step]
008	Duplex Entrance Sensor	ENG	[0 or 1 / 0 / 1/step]
010	Bypass Lift Position	ENG	[0 or 1 / 0 / 1/step]
011	Tray Exit Sensor	ENG	[0 or 1 / 0 / 1/step]
012	Interlock Release Detection 1	ENG	[0 or 1 / 0 / 1/step]
013	Interlock Release Detection 2	ENG	[0 or 1 / 0 / 1/step]
014	Right Cover Sensor	ENG	[0 or 1 / 0 / 1/step]
016	ITB Contact HP Sensor	ENG	[0 or 1 / 0 / 1/step]
017	Paper Transfer Contact Sensor	ENG	[0 or 1 / 0 / 1/step]
018	ITB New Unit Detection	ENG	[0 or 1 / 0 / 1/step]
019	Toner Collection Full Sensor	ENG	[0 or 1 / 0 / 1/step]
020	Toner Collection Bottle Set	ENG	[0 or 1 / 0 / 1/step]
022	Toner End Sensor: Y	ENG	[0 or 1 / 0 / 1/step]

023	Toner End Sensor:M	ENG	[0 or 1 / 0 / 1/step]
024	Toner End Sensor:C	ENG	[0 or 1 / 0 / 1/step]
026	Fusing Entrance Sensor	ENG	[0 or 1 / 0 / 1/step]
027	Fusing Exit Sensor	ENG	[0 or 1 / 0 / 1/step]
028	Fusing Detection Sensor	ENG	[0 to 15 / 0 / 1/step]
029	Fusing New Unit Detection	ENG	[0 or 1 / 0 / 1/step]
030	Fusing High Temp Detection	ENG	[0 or 1 / 0 / 1/step]
031	Zero-cross Signal	ENG	[0 or 1 / 0 / 1/step]
032	Fusing Air Flow Fan: Lock	ENG	[0 or 1 / 0 / 1/step]
033	LD Unit fan: Lock	ENG	[0 or 1 / 0 / 1/step]
034	PSU Fan: Lock	ENG	[0 or 1 / 0 / 1/step]
035	Drum fan: Lock	ENG	[0 or 1 / 0 / 1/step]
036	Reserve Fan: Lock	ENG	[0 or 1 / 0 / 1/step]
038	Bk Dru/Dev/ITB Motor: Lock	ENG	[0 or 1 / 0 / 1/step]
039	Fc Development Motor: Lock	ENG	[0 or 1 / 0 / 1/step]
040	Fc Drum Motor: Lock	ENG	[0 or 1 / 0 / 1/step]
041	Fusing Motor: Lock	ENG	[0 or 1 / 0 / 1/step]
042	Transport Motor: Lock	ENG	[0 or 1 / 0 / 1/step]
043	PP:D:SC Detection	ENG	[0 or 1 / 0 / 1/step]
044	PP:CB:SC Detection	ENG	[0 or 1 / 0 / 1/step]
045	PP:T1T2:SC Detection	ENG	[0 or 1 / 0 / 1/step]
046	Mechanical Counter: Set	ENG	[0 or 1 / 0 / 1/step]

047	Key Counter1: Set	ENG	[0 or 1 / 0 / 1/step]
048	Key Counter2: Set	ENG	[0 or 1 / 0 / 1/step]
049	Keycard: Set	ENG	[0 or 1 / 0 / 1/step]
050	1-Bin:Exit Sensor	ENG	[0 or 1 / 0 / 1/step]
051	1-Bin:Paper Sensor	ENG	[0 or 1 / 0 / 1/step]
052	1-Bin: Set	ENG	[0 or 1 / 0 / 1/step]
053	Tray Lift Sensor	ENG	[0 or 1 / 0 / 1/step]
054	Tray Set Detection	ENG	[0 or 1 / 0 / 1/step]
056	BiCU Version	ENG	[0 to 7 / 0 / 1/step]
060	BANK_VFEED_Sensor1	ENG	[0 or 1 / 0 / 1/step]
061	BANK_VFEED_Sensor2	ENG	[0 or 1 / 0 / 1/step]
062	BANK_Door_Sensor1	ENG	[0 or 1 / 0 / 1/step]
063	BANK_Door_Sensor2	ENG	[0 or 1 / 0 / 1/step]
094	GAVD Open/Close Detection	ENG	[0 or 1 / 0 / 1/step]
200	Scanner HP Sensor	ENG	[0 or 1 / 0 / 1/step]
201	Platen Cover Sensor	ENG	[0 or 1 / 0 / 1/step]

5804	[OUTPUT Check]		
001	Registration Clutch	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
002	Paper Feed Clutch	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
003	Duplex Clutch	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
004	Bypass Feed Clutch	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
005	Bypass Lift Clutch	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
006	Inverter Solenoid	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
007	Tray Lift Motor	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
008	Exit Junction Solenoid	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
009	Fusing Air Flow Fan: H	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
010	Fusing Air Flow Fan: L	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
011	LD Unit Fan: H	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
012	LD Unit Fan: L	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON

013	PSU Fan: H	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
014	PSU Fan: L	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
015	Drum Fan: H	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
016	Drum Fan: L	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
017	Reserve Fan: H	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
018	Reserve Fan: L	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
021	TM Sensor Shutter Solenoid	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
022	Bk Dru/Dev/ITB Motor: H	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
023	Bk Dru/Dev/ITB Motor: L	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
024	Fc Development Motor: H	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
025	Fc Development Motor: L	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
026	Development Clutch: Bk	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON

027	Fc Drum Motor: H	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
028	Fc Drum Motor: L	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
029	Fusing Motor: H	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
030	Fusing Motor: L	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
031	Transport Motor: H	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
032	Transport Motor: L	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
033	ITB/Paper Trans Contact Motor	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
034	Paper Transfer Contact Motor	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
035	Toner Supply Motor: Y	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
036	Toner Supply Motor: M	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
037	Toner Supply Motor: C	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
038	Toner Supply Motor: K	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
039	Toner End Sensor Power	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
041	1-Bin:Solenoid	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON

042	HST Sensor Power Supply	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
044	PP:Charge DC:Y	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
045	PP:Charge DC:M	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
046	PP:Charge DC:C	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
047	PP:Charge DC:K	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
048	PP:Development: Y	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
049	PP:Development: M	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
050	PP:Development: C	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
051	PP:Development: K	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
052	PP:Separation	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
053	PP:T1: Y	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
054	PP:T1: M	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
055	PP:T1: C	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
056	PP:T1: K	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
057	PP:T2: +	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON


058	PP:T2: -	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
059	PP:Charge AC:Y: H	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
060	PP:Charge AC:Y: L	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
061	PP:Charge AC:M: H	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
062	PP:Charge AC:M: L	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
063	PP:Charge AC:C: H	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
064	PP:Charge AC:C: L	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
065	PP:Charge AC:K: H	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
066	PP:Charge AC:K: L	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
067	HST Sensor: Y	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
068	HST Sensor: M	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
069	HST Sensor: C	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
070	HST Sensor: Bk	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
071	TM Sensor: Front	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON

072	TM Sensor: Center	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
073	TM Sensor: Rear	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
080	BANK_Motor1:High	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
081	BANK_Motor1:Low	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
082	BANK_Motor2:High	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
083	BANK_Motor2:Low	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
084	BANK_FEED_CL1	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
085	BANK_FEED_CL2	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
086	BANK_VFEED_CL1	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
087	BANK_VFEED_CL2	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
104	Polygon Moter1: LL	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
108	Polygon Moter2: LL	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
112	Polygon Moter1,2: LL	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
202	Scanner Lamp: Color 600	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON

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203	Scanner Lamp: Color 1200	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
204	Scanner Lamp: Bk	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
216	LD1: K	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
218	LD1: Ma	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
220	LD1: Cy	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON
222	LD1: Ye	ENG	[0 or 1 / 0 / 1/step] 0:OFF, 1:ON

5807	[Area Selection] Sets the machine destination.		
001	Area Selection	*ENG	[1 to 7 / 2:NA / 1/step] 1: Japan 2: NA 3: EU 4: Taiwan 5: Asia 6: China 7: Korea * The default value depends on the original machine destination.

5810	[SC Reset]		
	Resets a type A service call condition. <div style="border: 1px solid black; border-radius: 10px; padding: 2px; display: inline-block;">  Note </div> <ul style="list-style-type: none"> ▪ Turn the main switch off and on after resetting the SC code. 		
001	Fusing SC Reset	ENG	[- / - / -] [Execute]
002	Hard High Temp. Detection	ENG	[- / - / -] [Execute]

5811	[Machine Serial]		
001	-	-	-
002	Display	*ENG	Displays the machine serial number. [0 to 255 / - / 1/step]

5812	[Service Tel. No. Setting]		
001	Service	*CTL	[up to 20 / - / 1digit/step]
	Sets the telephone number for a service representative. This number is printed on the Counter List, which can be printed with the user's "Counter" menu. This can be up to 20 characters (both numbers and alphabetic characters can be input).		
002	Facsimile	*CTL	[up to 20 / - / 1digit/step]
	Sets the fax or telephone number for a service representative. This number is printed on the Counter List. This can be up to 20 characters (both numbers and alphabetic characters can be input).		
003	Supply	*CTL	[up to 20 / - / 1digit/step]
	Use this to input the telephone number of your supplier for consumables. Enter the number and press #.		

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004	Operation	*CTL	[up to 20 / - / 1digit/step]
	Use this to input the telephone number of your sales agency. Enter the number and press #.		

5816	[Remote Service]		
001	I/F Setting	*CTL	[0 to 2 / 2 / 1/step] 0: Remote service off 1: CSS remote service on 2: NRS remote service on
	Selects the remote service setting.		
002	CE Call	*CTL	[0 or 1 / 0 / 1/step] 0: Start of the service 1: End of the service
	Performs the CE Call at the start or end of the service. NOTE: This SP is activated only when SP 5816-001 is set to "2".		
003	Function Flag	*CTL	[0 or 1 / 0 / 1/step] 0: Disabled, 1: Enabled
	Enables or disables the remote service function.		
007	SSL Disable	*CTL	[0 or 1 / 0 / 1/step] 0: Yes. SSL not used. 1: No. SSL used.
	Controls if RCG (Remote Communication Gate) confirmation is done by SSL during an RCG send for the @Remote over a network interface.		
008	RCG Connect Timeout	*CTL	[1 to 90 / 30 / 1second/step]
	Sets the length of time (seconds) for the time-out when the RCG (Remote Communication Gate) connects during a call via the @Remote network.		

009	RCG Write Timeout	*CTL	[0 to 100 / 60 / 1second/step]
	Sets the length of time (seconds) for the time-out when sent data is written to the RCG during a call over the @Remote network.		
010	RCG Read Timeout	*CTL	[0 to 100 / 60 / 1second/step]
	Sets the length of time (seconds) for the timeout when sent data is written from the RCG during a call over the @Remote network.		
011	Port 80 Enable	*CTL	[0 or 1 / 0 / 1/step] 0: No. Access denied 1: Yes. Access granted.
	Controls if permission is given to get access to the SOAP method over Port 80 on the @Remote network.		
013	RFU Timing	*CTL	[0 or 1 / 1 / 1/step] 0: Any status of a target machine 1: Sleep or panel off mode only
	Selects the timing for the remote firmware updating.		
014	RCG Error Cause	CTL	[0 or 1 / 0 / 1/step] 0: Initial state, normal condition 1: Error
	Displays RCG connection error. cause		
021	RCG-C Registered	*CTL	[0 or 1 / 0 / 1/step] 0: Installation not completed 1: Installation completed
	This SP displays the RCG-N installation end flag.		
023	Connect Type (N/M)	*CTL	[0 or 1 / 0 / 1/step] 0: Internet connection 1: Dial-up connection
	This SP displays and selects the RCG-N connection method.		

061	Cert Expire Timing	*CTL	[0 to 0xffffffff / 0 / 1/step] DFU
	Proximity of the expiration of the certification.		
062	Use Proxy	*CTL	[0 or 1 / 0 / 1/step] 0: Not use 1: Use
	This SP setting determines if the proxy server is used when the machine communicates with the service center.		
063	Proxy Host	*CTL	[up to 127 / - / 1/step]
	<p>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.</p> <p>The address is necessary to set up the embedded RCG-N.</p> <p>Note</p> <ul style="list-style-type: none"> ▪ The address display is limited to 128 characters. Characters beyond the 128 character are ignored. ▪ This address is customer information and is not printed in the SMC report. 		
064	Proxy Port Number	*CTL	[0 to 0xffff / 0 / 1/step]
	<p>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.</p> <p>Note</p> <ul style="list-style-type: none"> ▪ This port number is customer information and is not printed in the SMC report. 		

065	Proxy User Name	*CTL	[up to 31 / - / 1/step]
	<p>This SP sets the HTTP proxy certification user name.</p> <p>Note</p> <ul style="list-style-type: none"> 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. 		
066	Proxy Password	*CTL	[up to 31 / - / 1/step]
	<p>This SP sets the HTTP proxy certification password.</p> <p>Note</p> <ul style="list-style-type: none"> 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. 		
067	CERT: Up State	*CTL	[0 to 255 / 0 / 1/step]
	Displays the status of the certification update.		
	0	The certification used by Embedded RC Gate is set correctly.	
	1	The certification request (setAuthKey) for update has been received from the GW URL and certification is presently being updated.	
	2	The certification update is completed and the GW URL is being notified of the successful update.	
	3	The certification update failed, and the GW URL is being notified of the failed update.	
	4	The period of the certification has expired and new request for an update is being sent to the GW URL.	
	11	A rescue update for certification has been issued and a rescue certification setting is in progress for the rescue GW connection.	
12	The rescue certification setting is completed and the GW URL is being notified of the certification update request.		

	13	The notification of the request for certification update has completed successfully, and the system is waiting for the certification update request from the rescue GW URL.		
	14	The notification of the certification request has been received from the rescue GW controller, and the certification is being stored.		
	15	The certification has been stored, and the GW URL is being notified of the successful completion of this event.		
	16	The storing of the certification has failed, and the GW URL is being notified of the failure of this event.		
	17	The certification update request has been received from the GW URL, the GW URL was notified of the results of the update after it was completed, but a certification error has been received, and the rescue certification is being recorded.		
	18	The rescue certification of No. 17 has been recorded, and the GW URL is being notified of the failure of the certification update.		
068	CERT: Error		*CTL	[0 to 255 / 0 / 1/step]
	Displays a number code that describes the reason for the request for update of the certification.			
	0	Normal. There is no request for certification update in progress.		
	1	Request for certification update in progress. The current certification has expired.		
	2	An SSL error notification has been issued. Issued after the certification has expired.		
	3	Notification of shift from a common authentication to an individual certification.		
	4	Notification of a common certification without ID2.		
	5	Notification that no certification was issued.		
	6	Notification that GW URL does not exist.		

069	CERT:Up ID	*CTL	[- / - / -]
	The ID of the request for certification.		
083	Firm Up Status	*CTL	[0 to 5 / 0 / 1/step] 0: waiting for receiving firmware update. 1: waiting for scheduling firmware update start. 2: waiting for user confirmation 3: preparing for device firmware update. 4: processing device firmware update. 5: termination processing
			Displays the status of the firmware update
085	Firm Up User Check	*CTL	[- / - / -]
	This SP setting determines if the operator can confirm the previous version of the firmware before the firmware update execution. If the option to confirm the previous version is selected, a notification is sent to the system manager and the firmware update is done with the firmware files from the URL.		
086	Firmware Size	*CTL	[- / - / -]
	Allows the service technician to confirm the size of the firmware data files during the firmware update execution.		
087	CERT:Macro Ver.	CTL	[8digits / - / 1digit/step]
	Displays the macro version of the @Remote certification. This SP displays 8-digit characters.		
088	CERT:PAC Ver.	CTL	[16digits / - / 1digit/step]
	Displays the PAC version of the @Remote certification. This SP displays 16-digit characters.		

089	CERT:ID2Code	CTL	[17digits / - / 1digit/step]
	Displays ID2 for the @Remote certification. Spaces are displayed as underscores (_). Asterisks (****) indicate that no @Remote certification exists. This SP displays 17-digit characters.		
090	CERT:Subject	CTL	[17digits / - / 1digit/step]
	Displays the common name of the @Remote certification subject. CN = the following 17 bytes. Spaces are displayed as underscores (_). Asterisks (****) indicate that no DESS exists.		
091	CERT:Serial No.	CTL	[16digits / - / 1digit/step]
	Displays serial number for the NRS certification. Asterisks (****) indicate that no DESS exists. This SP displays 16-digit characters		
092	CERT:Issuer	CTL	[30digits / - / 1digit/step]
	Displays the common name of the issuer of the @Remote certification. CN = the following 30 bytes. Asterisks (****) indicate that no DESS exists.		
093	CERT:Valid Start	CTL	[10digits / - / 1digit/step]
	Displays the start time of the period for which the current @Remote certification is enabled. This SP displays 10-digit characters.		
094	CERT:Valid End	CTL	[10digits / - / 1digit/step]
	Displays the end time of the period for which the current @Remote certification is enabled. This SP displays 10-digit characters.		
102	CERT:Encrypt Level	*CTL	[1 or 2 / 1 / 1/step] 1: 512 bit 2: 2048 bit
	Displays cryptic strength of the NRS certification.		

150	Selection Country	*CTL	[0 to 10 / 1 / 1/step] 0: Japan, 1: USA, 2: Canada, 3: UK, 4: Germany, 5: France, 6: Italy, 7: Netherlands, 8: Belgium, 9: Luxembourg, 10: Spain
	<p>Select the country where embedded RCG-M is installed in the machine. After selecting the country, you must also set the following SP codes for embedded RCG-M:</p> <ul style="list-style-type: none"> ▪ SP5816-153 ▪ SP5816-154 ▪ SP5816-161 		
151	Line Type Automatic Judgement	CTL	[- / - / -] [Execute]
	<p>Setting this SP classifies the telephone line where embedded RCG-M is connected as either dial-up (pulse dial) or push (DTMF tone) type, so embedded RCG-M can automatically distinguish the number that connects to the outside line.</p> <ul style="list-style-type: none"> ▪ The current progress, success, or failure of this execution can be displayed with SP5816-152. ▪ If the execution succeeded, SP5816-153 will display the result for confirmation and SP5816-154 will display the telephone number for the connection to the outside line. 		
152	Line Type Judgement Result	CTL	[0 to 255 / 0 / 1/step]

	<p>Displays a number to show the result of the execution of SP5816 151. Here is a list of what the numbers mean.</p> <p>0: Success</p> <p>1: In progress (no result yet). Please wait.</p> <p>2: Line abnormal</p> <p>3: Cannot detect dial tone automatically</p> <p>4: Line is disconnected</p> <p>5: Insufficient electrical power supply</p> <p>6: Line classification not supported</p> <p>7: Error because fax transmission in progress – ioctl() occurred.</p> <p>8: Other error occurred</p> <p>9: Line classification still in progress. Please wait.</p>		
153	Selection Dial / Push	*CTL	<p>[0 or 1 / 0 / 1/step]</p> <p>0: Tone Dialing Phone</p> <p>1: Pulse Dialing Phone</p> <p>Inside Japan "2" may also be displayed:</p> <p>0: Tone Dialing Phone</p> <p>1: Pulse Dialing Phone 10PPS</p> <p>2: Pulse Dialing Phone 20PPS</p>
	<p>This SP displays the classification (tone or pulse) of the telephone line to the access point for embedded RCG-M. The number displayed (0 or 1) is the result of the execution of SP5816-151. However, this setting can also be changed manually.</p>		

154	Outside Line Outgoing Number	*CTL	[4digits / - / 1digit/step]
	<p>The SP sets the number that switches to PSTN for the outside connection for embedded RCG-M in a system that employs a PBX (internal line).</p> <ul style="list-style-type: none"> ▪ If the execution of SP5816-151 has succeeded and embedded RCG-M has connected to the external line, this SP display is completely blank. ▪ If embedded RCG-M has connected to an internal line, then the number of the connection to the external line is displayed. ▪ If embedded RCG-M has connected to an external line, a comma is displayed with the number. The comma is inserted for a 2 sec. pause. ▪ The number setting for the external line can be entered manually (including commas). 		
155			
156	Dial Up User Name	*CTL	[up to 32 char. / - / 1char/step]
	<p>Use this SP to set a user name for access to remote dial up. Follow these rules when setting a user name:</p> <ul style="list-style-type: none"> ▪ Name length: Up to 32 characters ▪ Spaces and # allowed but the entire entry must be enclosed by double quotation marks (""). 		
157	Dial Up Password	*CTL	[- / - / -]
	<p>Use this SP to set a password for access to remote dial up. Follow these rules when setting a user name:</p> <ul style="list-style-type: none"> ▪ Name length: Up to 32 characters ▪ Spaces and # allowed but the entire entry must be enclosed by double quotation marks (""). 		
161	Local Phone Number	*CTL	[up to 24 / - / 1/step]
	<p>Use this SP to set the telephone number of the line where embedded RCG-M is connected. This number is transmitted to and used by the Call Center to return calls. Limit: 24 numbers (numbers only)</p>		
162	Connection Timing Adjustment Incoming	*CTL	[0 to 24 / 1 / 1/step]

	<p>When the Call Center calls out to an embedded RCG-M modem, it sends a repeating ID tone (*#1#). This SP sets the time the line remains open to send these ID tones after the number of the embedded RCG-M modem is dialed up and connected.</p> <p>The actual amount of time is this setting x 2 sec. For example, if you set "2" the line will remain open for 4 sec.</p>		
163	Access Point	*CTL	[up to 16 / 0 / 1/step]
	<p>This is the number of the dial-up access point for RCG-M. If no setting is done for this SP code, then a preset value (determined by the country selected) is used.</p> <p>Default: 0</p> <p>Allowed: Up to 16 alphanumeric characters</p>		
164	Line Connecting	*CTL	[0 to 1 / 0 / 1/step] 0: Sharing Fax 1: No Sharing Fax
	<p>This SP sets the connection conditions for the customer. This setting dedicates the line to RCG-M only, or sets the line for sharing between RCG-M and a fax unit.</p> <p>Note</p> <ul style="list-style-type: none"> If this setting is changed, the copier must be cycled off and on. SP5816 187 determines whether the off-hook button can be used to interrupt a RCG-M transmission in progress to open the line for fax transaction. 		
173	Modem Serial No.	*CTL	[- / - / -]
	<p>This SP displays the serial number registered for the RCG-M.</p>		

	Retransmission Ringing	CTL	[- / - / -] [Execute]
174	Normally, it is best to allow unlimited time for certification and ID2 update requests, and for the notification that the certification has been completed. However, RCG-M generates charges based on transmission time for the customer, so a limit is placed upon the time allowed for these transactions. If these transactions cannot be completed within the allowed time, do this SP to cancel the time restriction.		
186			
	FAX TX Priority	*CTL	[0 or 1 / 0 / 1/step] 0: Disable, 1: Enable
187	This SP determines whether pushing the off-hook button will interrupt a RCG-M transmission in progress to open the line for fax transaction. This SP can be used only if SP5816 164 is set to "0".		
200	Manual Polling	*CTL	[0 or 1 / 0 / 1/step] 0: Disable, 1: Enable
	Regist Status	CTL	[0 to 4 / 0 / 1/step]
201	<p>Displays a number that indicates the status of the @Remote service device.</p> <p>0: Neither the registered device by the external nor embedded RCG device is set.</p> <p>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.</p> <p>2: The embedded RCG device is set. In this status, the external RCG unit cannot answer a polling request.</p> <p>3: The registered device by the external RCG is being set. In this status the embedded RCG device cannot be set.</p> <p>4 The registered module by the external RCG has not started.</p>		

202	Letter Number	*CTL	[- / - / -]
	Allows entering the number of the request needed for the RCG-N device.		
203	Confirm Execute	CTL	[- / - / -] [Execute]
	Executes the inquiry request to the @Remote GW URL.		
204	Confirm Result	CTL	[0 to 255 / - / 1/step]
	<p>Displays a number that indicates the result of the inquiry executed with SP5816 203.</p> <p>0: Succeeded</p> <p>1: Inquiry number error</p> <p>2: Registration in progress</p> <p>3: Proxy error (proxy enabled)</p> <p>4: Proxy error (proxy disabled)</p> <p>5: Proxy error (Illegal user name or password)</p> <p>6: Communication error</p> <p>7: Certification update error</p> <p>8: Other error</p> <p>9: Inquiry executing</p>		
205	Confirm Place	CTL	[- / - / -]
	Displays the result of the notification sent to the device from the GW URL in answer to the inquiry request. Displayed only when the result is registered at the GW URL.		
206	Register Execute	CTL	[- / - / -] [Execute]
	Executes "Embedded RCG Registration".		

207	Register Result	CTL	[0 to 255 / 0 / 1/step]
	<p>Displays a number that indicates the registration result.</p> <p>0: Succeeded</p> <p>2: Registration in progress</p> <p>3: Proxy error (proxy enabled)</p> <p>4: Proxy error (proxy disabled)</p> <p>5: Proxy error (Illegal user name or password)</p> <p>6: Communication error</p> <p>7: Certification update error</p> <p>8: Other error</p> <p>9: Registration executing</p>		
208	Error Code	CTL	[-2147483647 to 2147483647 / - / -]
	<p>Displays a number that describes the error code that was issued when either SP5816-204 or SP5816-207 was executed.</p>		
	Cause	Code	Meaning
	Illegal Modem Parameter	-11001	Chat parameter error
		-11002	Chat execution error
-11003		Unexpected error	
Operation Error, Incorrect Setting	-12002	Inquiry, registration attempted without acquiring device status.	
	-12003	Attempted registration without execution of an inquiry and no previous registration.	
	-12004	Attempted setting with illegal entries for certification and ID2.	
	-12005	@Remote communication is prohibited. The device has an Embedded RC gate-related problem.	

		-12006	A confirmation request was made after the confirmation had been already completed.
		-12007	The request number used at registration was different from the one used at confirmation.
		-12008	Update certification failed because mainframe was in use.
		-12009	D2 mismatch between an individual certification and NVRAM.
		-12010	Certification area is not initialized.
	Error Caused by Response from GW URL	-2385	Attempted dial up overseas without the correct international prefix for the telephone number.
		-2387	Not supported at the Service Center
		-2389	Database out of service
		-2390	Program out of service
		-2391	Two registrations for same device
		-2392	Parameter error
		-2393	Basil not managed
		-2394	Device not managed
		-2395	Box ID for Basil is illegal
		-2396	Device ID for Basil is illegal
		-2397	Incorrect ID2 format
	-2398	Incorrect request number format	


209	Install Clear	CTL	[- / - / -] [Execute]
	Releases the machine from its embedded RCG setup.		
250	CommLog Print	CTL	[- / - / -]
	Prints the communication log.		

5821	[Remote Service Address]		
002	RCG IP Address	*CTL	[00000000h to FFFFFFFFh / 00000000h / 1/step]
	Sets the IP address of the RCG (Remote Communication Gate) destination for call processing at the remote service center.		
003	RCG Port Number	*CTL	[0 to 65535/ 443 / 1/step]
004	RCG URL Path	*CTL	[0 to 16 characters] (half characters) Default /RCG/services/

5824	[NV-RAM Data Upload]		
001	NV-RAM Data Upload	CTL	[- / - / -] [Execute]

5825	[NV-RAM Data Download]		
001	NV-RAM Data Download	CTL	[- / - / -] [Execute]

5828	[Network Setting]		
050	1284 Compatibility (Centro)	*CTL	[0 or 1 / 1 / 1/step] 0: Disabled, 1: Enabled
	Enables or disables 1284 Compatibility.		

052	ECP (Centro)	*CTL	[0 or 1 / 1 / 1/step] 0: Disabled, 1: Enabled
	Enables or disables ECP Compatibility.  Note <ul style="list-style-type: none"> This SP is activated only when SP5-828-50 is set to "1". 		
065	Job Spooling	*CTL	[0 or 1 / 0 / 1/step] 0: Disabled, 1: Enabled
	Enables/disables Job Spooling.		
066	Job Spooling Clear: Start Time	*CTL	[0 or 1 / 1 / 1/step] 0: Data is cleared) 1: Automatically printed
	Treatment of the job when a spooled job exists at power on.		
069	Job Spooling (Protocol)	*CTL	[- / 0x7f : All Active / -] 0: Validates 1: Invalidates bit0: LPR bit1: FTP bit2: IPP bit3: SMB bit4: BMLinkS bit5: DIPRINT bit6: sftp bit7: wsprnd
	Validates or invalidates the job spooling function for each protocol.		
087	Protocol usage	*CTL	[0 or 1 / 0x00000000 / 1/step]
090	TELNET (0: OFF 1: ON)	*CTL	[0 or 1 / 1 / 1/step] 0: Disable, 1: Enable
	Enables or disables the Telnet protocol.		
091	Web (0: OFF 1: ON)	*CTL	[0 or 1 / 1 / 1/step] 0: Disable, 1: Enable
	Enables or disables the Web operation.		

145	Active IPv6 Link Local Address	CTL	[- / - / -]
	<p>This is the IPv6 local address link referenced on the Ethernet or wireless LAN (802.11b) in the format: "Link Local Address" + "Prefix Length"</p> <p>The IPv6 address consists of a total 128 bits configured in 8 blocks of 16 bits each.</p>		
147 149 151 153 155	SettingActive IPv6 Stateless Address 1~5	CTL	[- / - / -]
	<p>These SPs are the IPv6 status addresses (1 to 5) referenced on the Ethernet or wireless LAN (802.11b) in the format: "Status Address" + "Prefix Length"</p> <p>The IPv6 address consists of a total 128 bits configured in 8 blocks of 16 bits each.</p>		
156	IPv6 Manual Address	*CTL	[- / - / -]
	<p>This SP is the IPv6 manually set address referenced on the Ethernet or wireless LAN (802.11b) in the format: "Manual Set Address" + "Prefix Length"</p> <p>The IPv6 address consists of a total 128 bits configured in 8 blocks of 16 bits each.</p>		
158	IPv6 Gateway Address	*CTL	[- / - / -]
	<p>This SP is the IPv6 gateway address referenced on the Ethernet or wireless LAN (802.11b). The IPv6 address consists of a total 128 bits configured in 8 blocks of 16 bits each.</p>		
161	IPv6 Stateless Auto Setting	*CTL	[0 or 1 / 1 / 1/step] 0: Disable, 1: Enable
	<p>Enables or disables the automatic setting for IPv6 stateless.</p>		


236	Web Item visible	*CTL	[0x0000 to 0xffff / 0xffff / -] 0: Not displayed, 1:Displayed bit0: Net RICOH bit1: Consumable Supplier bit2-15: Reserved (all)
	Displays or does not display the Web system items.		
237	Web shopping link visible	*CTL	[0 or 1 / 1 / 1/step] 0: Not display, 1:Display
	Displays or does not display the link to Net RICOH on the top page and link page of the web system.		
238	Web supplies Link visible	*CTL	[0 or 1 / 1 / 1/step] 0: Not display, 1:Display
	Displays or does not display the link to Consumable Supplier on the top page and link page of the web system.		
239	Web Link1 Name	*CTL	[- / - / -]
	This SP confirms or changes the URL1 name on the link page of the web system. The maximum characters for the URL name are 31 characters.		
240	Web Link1 URL	*CTL	[- / - / -]
	This SP confirms or changes the link to URL1 on the link page of the web system. The maximum characters for the URL are 127 characters.		
241	Web Link1 visible	*CTL	[0 or 1 / 1 / 1] 0: Not display, 1:Display
	Displays or does not display the link to URL1 on the top page of the web system.		
242	Web Link2 Name	*CTL	Same as "-239"


243	Web Link2 URL	*CTL	Same as "-240"
244	Web Link2 visible	*CTL	Same as "-241"
249	DHCPv6 DUID	*CTL	[00000000000000000000 00000000h to FFFFFFFFFFFFFFFF FFFFFFFFh / 0000000000000000 000000000h / -]

5832	[HDD Formatting]		
	Initializes the hard disk. Use this SP mode only if there is a hard disk error.		
001	HDD Formatting (ALL)	CTL	[- / - / -] [Execute]
002	HDD Formatting (IMH)	CTL	
003	HDD Formatting (Thumbnail)	CTL	
004	HDD Formatting (Job Log)	CTL	
005	HDD Formatting (Printer Fonts)	CTL	
006	HDD Formatting (User Info)	CTL	
007	HDD Formatting (Mail RX Data)	CTL	
008	HDD Formatting (Mail TX Data)	CTL	
009	HDD Formatting (Data for a Design)	CTL	
010	HDD Formatting (Log)	CTL	
011	HDD Formatting (Ridoc I/F)	CTL	

Appendix:
SP Mode
Tables

5836	[Capture Settings]		
001	Capture Function (0:Off 1:On)	*CTL	[0 or 1 / 0 / 1] 0: Disable, 1: Enable
	With this function disabled, the settings related to the capture feature cannot be initialized, displayed, or selected.		
002	Panel Setting	*CTL	[0 or 1 / 0 / 1] 0: Displayed, 1: Not displayed
	Displays or does not display the capture function buttons.		
5836-71 to 5836-78, Copier and Printer Document Reduction The following 7 SP modes set the default reduction for stored documents sent to the document management server via the MLB. Enabled only when optional MLB (Media Link Board) is installed.			
071	Reduction for Copy Color	*CTL	[0 to 3 / 2 / 1/step] 0: 1to-1 1: 1/2, 2: 1/3, 3: 1/4
072	Reduction for Copy B&W Text	*CTL	[0 to 3, 6 / 0 / 1/step] 0: 1to-1 1: 1/2 2: 1/3 3: 1/4 6: 2/3
073	Reduction for Copy B&W Other	*CTL	[0 to 3, 6 / 2 / 1/step] 0: 1to-1 1: 1/2 2: 1/3 3: 1/4 6: 2/3
074	Reduction for Printer Color	*CTL	[0 to 3, 6 / 2 / 1/step] 0: 1to-1 1: 1/2 2: 1/3 3: 1/4 6: 2/3

075	Reduction for Printer B&W	*CTL	[0 to 3, 6 / 0 / 1/step] 0: 1to-1 1: 1/2 2: 1/3 3: 1/4 6: 2/3
077	Reduction for Printer Color 1200dpi	*CTL	[1, 3, 4, 5 / 4 / 1/step] 0: 1to-1 1: 1/2 3: 1/4 4: 1/6 5: 1/8
078	Reduction for Printer B&W 1200dpi	*CTL	[1, 3, 4, 5 / 1 / 1/step] 1: 1/2 3: 1/4 4: 1/6 5: 1/8
<p>5836-81 to 5836-86, Stored document format</p> <p>The following 6 SP modes set the default format for stored documents sent to the document management server via the MLB.</p> <p>Enabled only when optional MLB (Media Link Board) is installed.</p>			
081	Format for Copy Color	*CTL	[0 / 0 / 1/step] 0: JFIF/JPEG, 1: TIFF/MMR, 2: TIFF/MH, 3: TIFF/MR
	<p> Note</p> <ul style="list-style-type: none"> This SP is not used in this model. 		
082	Format for Copy B&W Text	*CTL	[0 to 3 / 1 / 1/step] 0: JFIF/JPEG, 1: TIFF/MMR, 2: TIFF/MH, 3: TIFF/MR

083	Format for Copy B&W Other	*CTL	[0 to 3 / 1 / 1/step] 0: JFIF/JPEG, 1: TIFF/MMR, 2: TIFF/MH, 3: TIFF/MR
084	Format for Printer Color	*CTL	[0 / 0 / 1/step] 0: JFIF/JPEG, 1: TIFF/MMR, 2: TIFF/MH, 3: TIFF/MR
	<p> Note</p> <ul style="list-style-type: none"> This SP is not used in this model. 		
085	Format for Printer B&W	*CTL	[0 to 3 / 1 / 1/step] 0: JFIF/JPEG, 1: TIFF/MMR, 2: TIFF/MH, 3: TIFF/MR
091	Default for JPEG	*CTL	[5 to 95 / 50 / 1/step]
	Sets the JPEG format default for documents sent to the document management server via the MLB with JPEG selected as the format. Enabled only when optional MLB (Media Link Board) is installed.		
101	Primary srv IP address	*CTL	[000.000.000.000 to 255.255.255.255 / - / 1/step]
	Sets the IP address for the primary capture server. This is basically adjusted by the remote system.		
102	Primary srv scheme	*CTL	[0 to 6 char / NULL / 1/step]
	This is basically adjusted by the remote system.		
103	Primary srv port number	*CTL	[1 to 65535 / 80 / 1/step]
	This is basically adjusted by the remote system.		
104	Primary srv URL path	*CTL	[0 to 16 char / - / 1/step]
	This is basically adjusted by the remote system.		

111	Secondary srv IP address	*CTL	[000.000.000.000 to 255.255.255.255 / - / 1/step]
	Sets the IP address for the secondary capture server. This is basically adjusted by the remote system.		
112	Secondary srv scheme	*CTL	[0 to 6 char / NULL / 1/step]
	This is basically adjusted by the remote system.		
113	Secondary srv port number	*CTL	[1 to 65535 / 80 / 1/step]
	This is basically adjusted by the remote system.		
114	Secondary srv URL path	*CTL	[0 to 16 char / - / 1/step]
	This is basically adjusted by the remote system.		
120	Default Reso Rate Switch	*CTL	[0 or 1 / 0 / 1/step]
	This is basically adjusted by the remote system.		
121	Reso: Copy(Color)	*CTL	[0 to 255 / 2 / 1/step]
	Selects the resolution for color copy mode. This is basically adjusted by the remote system. 0: 600dpi/ 1: 400dpi/ 2: 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi/ 6: 75dpi		
122	Reso: Copy(Mono)	*CTL	[0 to 255 / 3 / 1/step]
	Selects the resolution for BW copy mode. This is basically adjusted by the remote system. 0: 600dpi/ 1: 400dpi/ 2: 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi/ 6: 75dpi		
123	Reso: Print(Color)	*CTL	[0 to 255 / 2 / 1/step]
	Selects the resolution for color print mode. This is basically adjusted by the remote system. 0: 600dpi/ 1: 400dpi/ 2: 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi/ 6: 75dpi		

124	Reso: Print(Mono)	*CTL	[0 to 255 / 3 / 1/step]
	Selects the resolution for BW print mode. This is basically adjusted by the remote system. 0: 600dpi/ 1: 400dpi/ 2: 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi/ 6: 75dpi		
125	Reso: Fax(Color)	*CTL	[0 to 255 / 4 / 1/step]
	Selects the resolution for color fax mode. This is basically adjusted by the remote system. 0: 600dpi/ 1: 400dpi/ 2: 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi/ 6: 75dpi		
126	Reso: Fax(Mono)	*CTL	[0 to 255 / 3 / 1/step]
	Selects the resolution for BW fax mode. This is basically adjusted by the remote system. 0: 600dpi/ 1: 400dpi/ 2: 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi/ 6: 75dpi		
127	Reso: Scanner(Color)	*CTL	[0 to 255 / 4 / 1/step]
	Selects the resolution for color scanning mode. This is basically adjusted by the remote system. 0: 600dpi/ 1: 400dpi/ 2: 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi/ 6: 75dpi		
128	Reso: Scanner(Mono)	*CTL	[0 to 255 / 3 / 1/step]
	Selects the resolution for BW scanning mode. This is basically adjusted by the remote system. 0: 600dpi/ 1: 400dpi/ 2: 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi/ 6: 75dpi		
141	All Addr Info Switch	*CTL	[0 or 1 / 1 / 1/step]
142	Stand-by Doc Max Number	*CTL	[10 to 10000 / 2000 / 1/step]

5840	[IEEE 802.11]		
006	Channel Max DFU	*CTL	[1 to 11 or 13 / 11 or 13 / 1/step] Range(Default) Europe/Asia: 1 to 13 (13) NA/ Asia: 1 to 11 (11)
	<p>Sets the maximum number of channels available for data transmission via the wireless LAN. The number of channels available varies according to location. The default settings are set for the maximum end of the range for each area. Adjust the upper 4 bits to set the maximum number of channels.</p> <p>Note</p> <ul style="list-style-type: none"> Do not change the setting. 		
007	Channel Min DFU	*CTL	[1 to 11 or 13 / 1 / 1/step] Range Europe: 1 to 13 NA/ Asia: 1 to 11
	<p>Sets the minimum number of channels available for data transmission via the wireless LAN. The number of channels available varies according to location. The default settings are set for the minimum end of the range for each area. Adjust the lower 4 bits to set the minimum number of channels.</p> <p>Note</p> <ul style="list-style-type: none"> Do not change the setting. 		

008	Transmission Speed	*CTL	[0x00 to 0xFF / 0xFF to Auto / -] 0 x FF to Auto [Default] 0 x 11 - 55M Fix 0 x 10 - 48M Fix 0 x 0F - 36M Fix 0 x 0E - 18M Fix 0 x 0D - 12M Fix 0 x 0B - 9M Fix 0 x 0A - 6M Fix 0 x 07 - 11M Fix 0 x 05 - 5.5M Fix 0 x 08 - 1M Fix 0 x 13 - 0 x FE (reserved) 0 x 12 - 72M (reserved) 0 x 09 - 22M (reserved)
011	WEP key Select	*CTL	[00 to 11 / 00 / 1 binary/step] 00: Key #1 01: Key #2 (Reserved) 10: Key #3 (Reserved) 11: Key #4 (Reserved)
Selects the WEP key.			
013	RTS/CTS Thresh	*CTL	[0 to 3000 / 2432 / 1/step]
Adjusts the RTS/CTS threshold for the IEEE802.11 card. This SP is displayed only when the IEEE802.11 card is installed.			
042	Fragment Thresh	*CTL	[256 to 2346 / 2346 / 1/step]
Adjusts the fragment threshold for the IEEE802.11 card. This SP is displayed only when the IEEE802.11 card is installed.			

043	11g CTS to Self	*CTL	[0 or 1 / 1 / 1/step] 0: OFF, 1: ON
	Determines whether the CTS self function is turned on or off. This SP is displayed only when the IEEE802.11 card is installed.		
044	11g Slot Time	*CTL	[0 or 1 / 0 / 1/step] 0: 20 um, 1: 9 um
	Selects the slot time for IEEE802.11.		
045	WPA Debug Lvl	*CTL	[1 to 3 / 3 / 1/step] 1: Info, 2: warning, 3: error
	Selects the debug level for WPA authentication application. This SP is displayed only when the IEEE802.11 card is installed.		

5841	[Supply Name Setting]		
001	Toner Name Setting:Black	*CTL	Specifies supply names. These appear on the screen when the user presses the Inquiry button in the user tools screen. [0 to 20 / 0 / 1byte/step]
002	Toner Name Setting:Cyan	*CTL	
003	Toner Name Setting:Yellow	*CTL	
004	Toner Name Setting:Magenta	*CTL	
007	OrgStamp	*CTL	
011	Staple Std1	*CTL	
012	Staple Std2	*CTL	
013	Staple Std3	*CTL	
014	Staple Std4	*CTL	
021	Staple Bind 1	*CTL	
022	Staple Bind 2	*CTL	
023	Staple Bind 3	*CTL	

5842	[GWWS Analysis]		
001	Setting 1	*CTL	[8bit assign / 00000000 / bit switch] 0bit[LSB]: system, other group 1bit: capture related group 2bit: authentication related group 3bit: address book related group 4bit: device management related group 5bit: output related(print, FAX, and delivery) group 6bit: repository, F0,etc. document related group 7bit: debug log level suppression
Default: 00000000 – do not change Netfiles: Jobs to be printed from the document server using a PC and the DeskTopBinder software			
002	Setting 2	*CTL	[8bit assign / 00000000 / bit switch] 0~6bit: unused 7bit: time stamp setting for 5682mmesg log. (1: min./sec/msec, 0: day/hour/min./sec)
Optional settings for debug output mode for each NFA process.			

5844	[USB]		
001	Transfer Rate	*CTL	[0x01 or 0x04 / 0x04 / -] 0x01: Full speed (fixed) 0x04: H-speed, F-speed (auto change)
002	Vendor ID DFU	*CTL	
	Displays the vendor ID.		
003	Product ID DFU	*CTL	
	Displays the product ID.		
004	Device Release Number DFU	*CTL	Displays the development release version number.
005	Fixed USB Port	*CTL	[0x00 to 0x02 / 0x00 / 1/step] 0x00: Disable 0x01: Enable (Level 1)
	Device driver reinstallation is not required in the same machine. 0x02: Enable (Level 2) Device driver reinstallation is not required in any machine.		
006	PnP Model Name	*CTL	[20digits character / " Laser Printer " / -]
	Displays PnP Model Name.		
007	PnP Serial Number	*CTL	[12digits character / NULL / -]
	Displays PnP Serial No.		
008	Mac Supply Level	*CTL	[0 or 1 / 1 / 1/step] 0: Disable, 1: Enable
100	Notify Unsupport	*CTL	[0x00 or 0x01 / 0x01 / 1/step] 0x00: Function disabled 0x01: Function enabled

5845	[Delivery Server Setting]		
	Provides items for delivery server settings.		
001	FTP Port No.	*CTL	[1 to 65535 / 3670 / 1/step]
	Sets the FTP port number used when image files to the Scan Router Server.		
002	IP Address (Primary)	*CTL	[000.000.000.000 to 255.255.255.255 / - / 1/step]
	Use this SP to set the Scan Router Server address. The IP address under the transfer tab can be referenced by the initial system setting.		
006	Delivery Error Display Time	*CTL	[0 to 999 / 300 / 1sec/step]
	Use this setting to determine the length of time the prompt message is displayed when a test error occurs during document transfer with the NetFile application and an external device.		
008	IP Address (Secondary)	*CTL	[000.000.000.000 to 255.255.255.255 / - / 1/step]
	Specifies the IP address assigned to the computer designated to function as the secondary delivery server of Scan Router. This SP allows only the setting of the IP address without reference to the DNS setting.		
009	Delivery Server Model	*CTL	[0 to 4/ 0 / 1/step] 0: Unknown 1: SG1 Provided 2: SG1 Package 3: SG2 Provided 4: SG2 Package
			Allows changing the model of the delivery server registered by the I/O device.

010	Delivery Svr. Capability	*CTL	[0 to 255 / - / 1 /step]
	<p>Changes the capability of the registered that the I/O device registered.</p> <p>Bit7 = 1 Comment information exists</p> <p>Bit6 = 1 Direct specification of mail address possible</p> <p>Bit5 = 1 Mail RX confirmation setting possible</p> <p>Bit4 = 1 Address book automatic update function exists</p> <p>Bit3 = 1 Fax RX delivery function exists</p> <p>Bit2 = 1 Sender password function exists</p> <p>Bit1 = 1 Function to link MK-1 user and Sender exists</p> <p>Bit0 = 1 Sender specification required (if set to 1, Bit6 is set to "0")</p>		
011	Delivery Svr Capability (Ext)	*CTL	[0 to 255 / - / x2/step]
	<p>Changes the capability of the registered that the I/O device registered.</p> <p>Bit7 = 1 Address book usage limitation (Limitation for each authorized user)</p> <p>Bit6 = 1 RDH authorization link</p> <p>Bit5 to 0: Not used</p>		
013	Server Scheme (Primary) DFU	*CTL	[Up to 6 char / - / -]
	This SP is used for the scan router program.		
014	Server Port Number (Primary) DFU	*CTL	[1 to 65535 / 80 / 1/step]
	This SP is used for the scan router program.		
015	Server URL Path (Primary) DFU	*CTL	[Up to 16 byte / - / 1byte/step]
	This SP is used for the scan router program.		
016	Server Scheme (Secondary) DFU	*CTL	[Up to 6 char / - / -]
	This SP is used for the scan router program.		

017	Server Port Number (Secondary) DFU	*CTL	[1 to 65535 / 80 / 1/step]
	This SP is used for the scan router program.		
018	Server URL Path (Secondary) DFU	*CTL	[Up to 16 byte / - / 1byte/step]
	This SP is used for the scan router program.		
022	Rapid Sending Control	*CTL	[0 or 1 / 1 / 1/step] 0: Control disabled 1: Control enabled
	Enables or disables the prevention function for the continuous data sending error.		

5846	[UCS Settings]		
001	Machine ID (for Delivery Server)	*CTL	[- / - / -]
	Displays the unique device ID in use by the delivery server directory. The value is only displayed and cannot be changed. This ID is created from the NIC MAC or IEEE 1394 EUI. The ID is displayed as either 6-byte or 8-byte binary.		
002	Machine ID Clear(for Delivery Server)	*CTL	[- / - / -] [Execute]
	Clears the unique ID of the device used as the name in the file transfer directory. Execute this SP if the connection of the device to the delivery server is unstable. After clearing the ID, the ID will be established again automatically by cycling the machine off and on.		

003	Maximum Entries	*CTL	[2000 to 20000 / 2000 / 1/step]
	Changes the maximum number of entries that UCS can handle. If a value smaller than the present value is set, the UCS managed data is cleared, and the data (excluding user code information) is displayed.		
006	Delivery Server Retry Timer	*CTL	[0 to 255 / 0 / 1/step]
	Sets the interval for retry attempts when the delivery server fails to acquire the delivery server address book.		
007	Delivery Server Retry Times	*CTL	[0 to 255 / 0 / 1/step]
	Sets the number of retry attempts when the delivery server fails to acquire the delivery server address book.		
008	Delivery Server Maximum Entries	*CTL	[2000 to 50000 / 2000 / 1/step]
	Sets the maximum number account entries of the delivery server user information managed by UCS.		
010	LDAP Search Timeout	*CTL	[1 to 255 / 60 / 1/step]
	Sets the length of the timeout for the search of the LDAP server.		
020	WSD Maximum Entries	*CTL	[5 to 250 / 250 / 1/step]
	Sets the maximum entries for the address book of the WSD (WS-scanner).		
021	Folder Auth Change	*CTL	[0 or 1 / 0 / 1/step] 0: Login User, 1: Destination
040	Addr Book Migration(USB->HDD)	*CTL	[- / - / -] [Execute]

	Fill Addr Acl Info	*CTL	[- / - / -] [Execute]
041	<p>This SP must be executed immediately after installation of an HDD unit in a basic machine that previously had no HDD. The first time the machine is powered on with the new HDD installed, the system automatically takes the address book from the NVRAM and writes it onto the new HDD. However, the new address book on the HDD can be accessed only by the system administrator at this stage. Executing this SP by the service technician immediately after power on grants full address book access to all users.</p> <p>Procedure</p> <ol style="list-style-type: none"> 1. Turn the machine off. 2. Install the new HDD. 3. Turn the machine on. 4. The address book and its initial data are created on the HDD automatically. 5. However, at this point the address book can be accessed by only the system administrator or key operator. 6. Enter the SP mode and do SP5846-041. After this SP executes successfully, any user can access the address book. 		
043	Addr Book Media	*CTL	[0 to 30 / 4 /1/step] 0: Unconfirmed 1: SD Slot 1 2: SD Slot 2 4: USB Flash ROM 20: HDD 30: Nothing
	Displays the slot number where an address book data is in.		
047	Initialize Local Address Book	*CTL	[- / - / -] [Execute]
	Clears the local address book information, including the user code.		

048	Initialize Delivery Addr Book	*CTL	[- / - / -] [Execute]
	Clears the distribution address book information, except the user code.		
049	Initialize LDAP Addr Book	*CTL	[- / - / -] [Execute]
	Clears the LDAP address book information, except the user code.		
050	Initialize All Addr Book	*CTL	[- / - / -] [Execute]
	Clears all directory information managed by UCS, including all user codes.		
051	Backup All Addr Book	*CTL	[- / - / -] [Execute]
	Uploads all directory information to the SD card.		
052	Restore All Addr Book	*CTL	[- / - / -] [Execute]
	Downloads all directory information from the SD card.		
053	Clear Backup Info	*CTL	[- / - / -] [Execute]
	<p>Deletes the address book data from the SD card in the service slot. Deletes only the files that were uploaded from this machine. This feature does not work if the card is write-protected.</p> <p>Note</p> <ul style="list-style-type: none"> After you do this SP, go out of the SP mode, and then turn the power off. Do not remove the SD card until the Power LED stops flashing. 		

	Search Option	*CTL	[- / - / -]
060	<p>This SP uses bit switches to set up the fuzzy search options for the UCS local address book.</p> <p>Bit: Meaning</p> <p>0: Checks both upper/lower case characters</p> <p>1: Japan Only</p> <p>2: Japan Only</p> <p>3: Japan Only</p> <p>4 to 7: Not Used</p>		
	Complexity Option 1	*CTL	[0 to 32 / 0 / 1/step]
062	<p>Use this SP to set the conditions for password entry to access the local address book. Specifically, this SP limits the password entry to upper case and sets the length of the password.</p> <p>Note</p> <ul style="list-style-type: none"> This SP does not normally require adjustment. This SP is enabled only after the system administrator has set up a group password policy to control access to the address book. 		
063	Complexity Option 2 DFU	*CTL	[0 to 32 / 0 / 1/step]
064	Complexity Option 3 DFU	*CTL	
065	Complexity Option 4 DFU	*CTL	
	FTP Auth Port Setting	*CTL	[0 to 65535 / 3671 / 1/step]
091	Specifies the FTP port for getting a distribution server address book that is used in the identification mode.		
	Encryption Stat	*CTL	[- / - / -]
094	Shows the status of the encryption function for the address book data.		

5847	[Repository Resolution Reduction]		
	<p>SP5847-1 through SP5847-8 changes the default settings of image data transferred externally by the Net File page reference function.</p> <p>SP5847-21 sets the default for JPEG image quality of image files handled by NetFile.</p> <p>“Net files” are jobs to be printed from the document server using a PC and the DeskTopBinder software.</p> <p>Each 001~007 section values are following:</p> <p>0: 1x 1: 1/2x 2: 1/3x 3: 1/4x 4: 1/6x 5: 1/8x 6: 2/3x</p>		
001	Rate for Copy Color	*CTL	[0 to 5 / 2 / 1/step]
002	Rate for Copy B&W Text	*CTL	[0 to 6 / 0 / 1/step]
003	Rate for Copy B&W Other	*CTL	
004	Rate for Printer Color	*CTL	[0 to 5 / 2 / 1/step]
005	Rate for Printer B&W	*CTL	[0 to 6 / 0 / 1/step]
006	Rate for Printer Color 1200dpi	*CTL	[0 to 5 / 4 / 1/step]
007	Rate for Printer B&W 1200dpi	*CTL	[0 to 6 / 1 / 1/step]
021	Network Quality Default for JPEG	*CTL	[5 to 95 / 50 / 1/step]
	Sets the default value for the quality of JPEG images sent as NetFile pages. This function is available only with the MLB (Media Link Board) option installed.		

5848	[Web Service]		
	SP5848-2 sets the 4-bit switch assignment for the access control setting. A setting of 0001 has no effect on access and delivery from Scan Router. 5848 100 sets the maximum size allowed for downloaded images. The default is equal to 1 gigabyte.		
002	Access Ctrl: Repository (only Lower 4 bits)	*CTL	[0000, 0001, or 0010 / 0010 / -] 0000: access permission 0001: access restriction to DeskTop Binder. 0010: writing restriction
003	Access Control: Doc. Svr. Print (Lower 4 bits)	*CTL	Switches access control on and off. [0000 or 0001 / 0000 / 1/step] 0000: No access control 0001: Access control
004	Access Control: uirectory (Lower 4 bits)	*CTL	
007	Access Ctrl: Comm. Log Fax (Lower 4 bits)	*CTL	
009	Access Ctrl: Job Ctrl (Lower 4 bits)	*CTL	
011	Access Ctrl: Devicemanagement (Lower 4bits)	*CTL	
021	Access Ctrl: Delivery (Lower 4 bits)	*CTL	
022	Access Ctrl: uadministration (Lower 4bits)	*CTL	

099	Repository: Download Image Setting DFU	*CTL	[4bit assign / 0000 / bit switch] 1bit(LSB): for Macintosh 2bit: for Windows 3bit: for others 4bit: unused
100	Repository: Download Image Max. Size	*CTL	[1 to 2048 / 2048 / 1 MB/step]
	Specifies the max size of the image data that the machine can download.		
210	Setting: LogType: Job1	*CTL	Read only. [0 to 0xFFFFFFFF / 0 / 1/step]
211	Setting: LogType: Job2	*CTL	
212	Setting: LogType: Access	*CTL	
213	Setting: Primary Srv	*CTL	Read only. [- / - / -]
214	Setting: Secondary Srv	*CTL	
215	Setting: Start Time	*CTL	Read only. [0 to 0xFFFFFFFF / 0 / 1/step]
216	Setting: Interval Time	*CTL	Read only. [0 to 1000 / 1 / 1hour/step]
217	Setting: Timing	*CTL	Read only. [0 to 2 / 0 / 1/step]

5849	[Installation Date]		
001	Display	*CTL	[- / - / -]
	The "Counter Clear Day" has been changed to "Installation Date" or "Inst. Date".		
002	Switch to Print	*CTL	[0 or 1 / 1 / 1/step] 0: OFF (No Print) 1: ON (Print)
	Determines whether the installation date is printed on the printout for the total counter.		

003	Total Counter	*CTL	[0 to 99999999 / 0 / 1/step]
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5851	[Bluetooth]		
001	Mode	*CTL	[0x00 or 0x01 / 0x00 / 1/step] 0x00:Public 0x01:Private
	Sets the operation mode for the Bluetooth Unit. Press either key.		

5856	[Remote ROM Update]		
	Allows the technician to upgrade the firmware using a local port (IEEE1284) when updating the remote ROM.		
002	Local Port	*CTL	[0 or 1 / 0 / 1/step] 0: Disable 1: Enable


5857	[Save Debug Log]		
001	On/Off (1:ON 0:OFF)	*CTL	[0 or 1 / 0 / 1/step] 0: OFF, 1: ON
	Switches the debug log feature on and off. The debug log cannot be captured until this feature is switched on.		
002	Target (2: HDD 3: SD)	*CTL	[2 or 3 / 2 / 1/step] 2: HDD, 3: SD Card
	Selects the storage device to save debug logs information when the conditions set with SP5-858 are satisfied.		
005	Save to HDD	*CTL	[-999999 to 999999 / 0 / 1/step]
	Saves the debug log of the input SC number in memory to the HDD. A unique file name is generated to avoid overwriting existing file names on the SD Card. Up to 4MB can be copied to an SD Card. 4 MB segments can be copied one by one to each SD Card.		

006	Save to SD Card	*CTL	[-999999 to 999999 / 0 / 1/step]
	Saves the debug log of the input SC number in memory to the SD card.		
009	Copy HDD to SD Card(Latest 4MB)	*CTL	[- / - / -] [Execute]
010	Copy HDD to SD Card(Latest 4MB Any Key)	*CTL	
011	Erase HDD Debug Data	*CTL	[- / - / -] [Execute]
012	Erase SD Card Debug Data	*CTL	
013	Free Space on SD Card	*CTL	[- / - / -] [Execute]
014	Copy SD to SD(Latest 4MB)	*CTL	[- / - / -] [Execute]
015	Copy SD to SD(Latest 4MB Any Key)	*CTL	
016	Make HDD Debug	*CTL	[- / - / -] [Execute]
017	Make SD Debug	*CTL	

5858	[Debug Save When]		
	These SPs select the content of the debugging information to be saved to the destination selected by SP5857-002. SP5858-3 stores one SC specified by number. Refer to Section 4 for a list of SC error codes.		
001	Engine SC Error	*CTL	[0 or 1 / 0 / 1/step] 0: OFF, 1: ON
	Turns on/off the debug save for SC codes generated by printer engine errors.		
002	Controller SC Error	*CTL	[0 or 1 / 0 / 1/step] 0: OFF, 1: ON
	Turns on/off the debug save for SC codes generated by GW controller errors.		
003	Any SC Error	*CTL	[0 to 65535 / 0 / 1/step]
004	Jam	*CTL	[0 or 1 / 0 / 1/step] 0: OFF, 1: ON
	Turns on/off the debug save for jam errors.		

5859	[Debug Save Key No.]		
	These SPs allow you to set up to 10 keys for log files for functions that use common memory on the controller board.		
001	Key 1	*CTL	[-9999999 to 9999999 / 0 / 1/step]
002	Key 2	*CTL	
003	Key 3	*CTL	
004	Key 4	*CTL	
005	Key 5	*CTL	
006	Key 6	*CTL	
007	Key 7	*CTL	
008	Key 8	*CTL	

009	Key 9	*CTL	
010	Key 10	*CTL	

5860	[SMTP/POP3/IMAP4]		
020	Partial Mail Receive Timeout	*CTL	[1 to 168 / 72 / 1hour/step]
	Sets the amount of time to wait before saving a mail that breaks up during reception. The received mail is discarded if the remaining portion of the mail is not received during this prescribed time.		
021	MDN Response RFC2298 Compliance	*CTL	[0 or 1 / 1 / 1/step] 0: No, 1: Yes
	Determines whether RFC2298 compliance is switched on for MDN reply mail.		
022	SMTP Auth. From Field Replacement	*CTL	[0 or 1 / 0 / 1/step] 0: No. "From" item not switched. 1: Yes. "From" item switched.
	Determines whether the FROM item of the mail header is switched to the validated account after the SMTP server is validated.		
025	SMTP Auth. Direct Setting	*CTL	[0 to 255 / - / x2/step]
	<p>Selects the authentication method for SMPT.</p> <p>Bit switch:</p> <ul style="list-style-type: none"> ▪ Bit 0: LOGIN ▪ Bit 1: PLAIN ▪ Bit 2: CRAM MD5 ▪ Bit 3: DIGEST MD5 ▪ Bit 4 to 7: Not used <p> Note</p> <ul style="list-style-type: none"> ▪ This SP is activated only when SMTP authorization is enabled by UP mode. 		

026	S/MIME: MIME Header Setting	*CTL	[0 to 2 / 0 / 1/step] 0: Microsoft Outlook Express standard 1: Internet Draft standard 2: RFC standard
	Selects the MIME header type of an E-mail sent by S/MIME.		
028	S/MIME: Authentication Check	*CTL	[0 to 1 / 0 / 1/step] 0: No (not check), 1: Yes (check)

5866	[E-Mail Report]		
001	Report Validity	CTL	[0 to 1 / 0 / 1/step] 0: Enable, 1: Disable
	Enables/disables each function.		
005	Add Date Field	*CTL	[0 to 1 / 0 / 1/step] 0: Not add, 1: Add

5869	[RAM Disk Setting]		
001	Mail Function	*CTL	[0 or 1 / 0 / 1/step] 0: Use, 1: Not use
	Set whether the RAM disk is used or not used when using the mail functions.		

5870	[Common keyInfo Writing]		
001	Writing	CTL	[- / - / -] [Execute]
	Writes to flash ROM the common proof for validating the device for @Remote specifications.		
003	Initialize	CTL	[- / - / -] [Execute]
	Initializes the data area of the common proof for validating.		

004	Writing:2048bit	CTL	[- / - / -] [Execute]
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5873	[SDCardAppliMove]		
001	MoveExec	CTL	[- / - / -] [Execute]
	This SP copies the application programs from the original SD card in SD card slot 2 to an SD card in SD card slot 1.		
002	UndoExec	CTL	[- / - / -] [Execute]
	This SP copies back the application programs from an SD card in SD Card Slot 2 to the original SD card in SD card slot 1. Use this menu when you have mistakenly copied some programs by using "Move Exec" (SP5873-1).		

5875	[SC Auto Reboot]		
001	Reboot Setting	*CTL	[0 or 1 / 0 / 1/step]
	Enables or disables the automatic reboot function when an SC error occurs. 0: The machine reboots automatically when the machine issues an SC error and logs the SC error code. If the same SC occurs again, the machine does not reboot. 1: The machine does not reboot when an SC error occurs. The reboot is not executed for Type A or C SC codes.		
002	Reboot Type	*CTL	[0 or 1 / 0 / 1/step] 0: Manual reboot 1: Automatic reboot
	Selects the reboot method for SC.		

5878	[Option Setup]		
001	Data Overwrite Security	CTL	[- / - / -] [Execute]
	Enables the Data Overwrite Security unit. Press "EXECUTE" on the operation panel. Then turn the machine off and on.		
002	HDD Encryption	*CTL	[- / - / -] [Execute]
	Installs the HDD Encryption unit.		

5881	[Fixed Phrase Block Erasing]		
001	Fixed Phrase Block Erasing	*CTL	[- / - / -] [Execute]
	Deletes the fixed phrase.		

5885	[Set WIM Function] Web Image Monitor Settings		
Close or disclose the functions of web image monitor.			
020	DocSvr Acc Ctrl	*CTL	[8bit assign / 00000000 / bit switch] 0: OFF, 1: ON Bit Meaning 0: Forbid all document server access (1) 1: Forbid user mode access (1) 2: Forbid print function (1) 3: Forbid fax TX (1) 4: Forbid scan sending (1) 5: Forbid downloading (1) 6: Forbid delete (1) 7: Reserved

050	DocSvr Format	**CTL	[0 to 2 / 0 / 1/step] 0: Thumbnail, 1: Icon, 2: Details
	Selects the display type for the document box list.		
051	DocSvr Trans	*CTL	[5 to 20 / 10 / 1/step]
	Sets the number of documents to be displayed in the document box list.		
100	Set Signature	**CTL	[0 to 2 / 0 / 1/step] 0: Setting for each e-mail 1: Signature for all 2: No signature
	Selects whether the signature is added to the scanned documents with the WIM when they are transmitted by an e-mail.		
101	Set Encryption	*CTL	[0 or 1 / 0 / 1/step] 0: Not encrypted, 1:Encryption
	Determines whether the scanned documents with the WIM are encrypted when they are transmitted by an e-mail.		
200	Detect Mem Leak	**CTL	Not Used
201	DocSvr Timeout	*CTL	Not Used

5887	[SD GetCounter]		
	SD GetCounter	CTL	[- / - / -] [Execute]
001	<p>This SP sends a text file to an SD card inserted in SD card Slot 2 (lower slot). The operation stores.</p> <p>The file is stored in a folder created in the root directory of the SD card called SD_COUNTER.</p> <p>The file is saved as a text file (*.txt) prefixed with the number of the machine.</p> <ol style="list-style-type: none"> 1. Insert the SD card in SD card Slot 2 (lower slot). 2. Select SP5887 then touch [EXECUTE]. <p>Touch [Execute] in the message when you are prompted.</p> <p>Note</p> <ul style="list-style-type: none"> ▪ “SD_COUNTER” folder must be created under the root directory of the SC card before this SP is executed. 		

5888	[Personal Information Protect]		
	Personal Information Protect	*CTL	[0 or 1 / 0 / 1/step]
001	<p>Selects the protection level for logs.</p> <p>0: No authentication, No protection for logs</p> <p>1: No authentication, Protected logs (only an administrator can see the logs)</p>		

5893	[SDK Application Counter]		
	Displays the counter name of each SDK application.		
001	SDK-1	CTL	[- / - / -]
002	SDK-2	CTL	
003	SDK-3	CTL	
004	SDK-4	CTL	
005	SDK-5	CTL	
006	SDK-6	CTL	

5894	[External Counter Setting]		
001	Switch Charge Mode	*ENG	[0 to 2 / 0 / 1/step]

5907	[Plug & Play Maker/Model Name]		
001	Plug & Play Maker/Model/Name	*CTL	See detail below
	<p>Selects the brand name and the production name for Windows Plug & Play. This information is stored in the NVRAM. If the NVRAM is defective, these names should be registered again.</p> <p>After selecting, press the "Original Type" key and "#" key at the same time. When the setting is completed, the beeper sounds five times.</p>		

5913	[Switchover Permission Time]		
002	Print Application Timer	*CTL	[3 to 30 / 3 / 1sec/step]
	<p>Sets the amount of time to elapse while the machine is in standby mode (and the operation panel keys have not been used) before another application can gain control of the display.</p>		

5919	[State Of Encryption]		
001	State Of Encryption	*CTL	<p>[0 or 1 / 0 / 1/step]</p> <p>0: OFF (Not working)</p> <p>1: ON (Working)</p>

5967	[Copy Server Set Function]		
	(0:ON 1:OFF)	*CTL	[0 or 1 / 0 / 1/step] 0: ON, 1: OFF
001	Enables and disables the document server. This is a security measure that prevents image data from being left in the temporary area of the HDD. After changing this setting, you must switch the main switch off and on to enable the new setting.		

5974	[Cherry Server]		
	Specifies which version of ScanRouter, "Light" or "Full", is installed.		
001	(0:Light 1:Full)	*CTL	[0 or 1 / 0 / 1/step] 0:Light 1:Full

5985	[Device Setting]		
	Enables/disables the on-board device.		
	On Board NIC	CTL	[0 to 2 / 0 / 1/step] 0: Disable, 1: Enable, 2: Function limitation
001	<p>When the "Function limitation" is set, "On board NIC" is limited only for the NRS or LDAP/NT authentication.</p> <p>Note</p> <ul style="list-style-type: none"> Other network applications than NRS or LDAP/NT authentication are not available when this SP is set to "2". Even though you can change the initial settings of those network applications, the settings do not work. 		
002	On Board USB	CTL	[0 or 1 / 0 / 1/step] 0: Disable, 1: Enable

5987	[Mech. Counter]		
001	0: OFF / 1: ON	*ENG	[0 or 1 / 0 / 1/step]
	This SP detects that a mechanical counter device is removed. If it is detected, SC610 occurs.		

5990	[SP Print Mode]		
	Prints out the SMC sheets.		
001	All(Data List)	CTL	Press "Execute" key to start printing the SMC sheets. [- / - / -] [Execute]
002	SP(Mode Data List)	CTL	
003	User Program	CTL	
004	Logging Data	CTL	
005	Diagnostic Report	CTL	
006	Non-Default	CTL	
007	NIB Summary	CTL	
008	Capture Log	CTL	
021	Copier User Program	CTL	
022	Scanner SP	CTL	
023	Scanner User Program	CTL	
024	SDK/J Summary	CTL	
025	SDK/J Application Info	CTL	
026	Printer SP	CTL	

5992	[SP Text Mode]		
	Exports the SMC sheet data to the SD Card.		
001	All(Data List)	CTL	Press "Execute" key to start exporting the SMC data in the SP mode display. [- / - / -] [Execute]
002	SP(Mode Data List)	CTL	
003	User Program	CTL	
004	Logging Data	CTL	
005	Diagnostic Report	CTL	
006	Non-Default	CTL	
007	NIB Summary	CTL	
008	Capture Log	CTL	
021	Copier User Program	CTL	
022	Scanner SP	CTL	
023	Scanner User Program	CTL	
024	SDK/J Summary	CTL	
025	SDK/J Application Info	CTL	
026	Printer SP	CTL	

5998	[Fusing Cont mode]		
	Turns the silent fusing warm-up mode on or off.		
001	fast/silent	*ENG	[0 or 1 / 1 / 1/step] 0: Silent (less noise) 1: Fast (less time)

3.6 MAIN SP TABLES-6

3.6.1 SP6-XXX (PERIPHERALS)

6006	[ADF Adjustment]		
001	Face	*ENG	[-2.0 to 2.0 / 0.0 / 0.1mm/step]
002	Side-to-Side	*ENG	[-2.0 to 2.0 / 0.0 / 0.1mm/step]
003	Leading Edge Duplex Front	*ENG	[-5.0 to 5.0 / 0.0 / 0.1mm/step]
004	Leading Edge Duplex Rear	*ENG	[-5.0 to 5.0 / 0.0 / 0.1mm/step]
007	Rear Edge Erase	*ENG	[-5.0 to 5.0 / 0.0 / 0.1mm/step]

6007	[ADF INPUT Check]		
	Displays the signals received from the sensors and switches of the ARDF. Only Bit 0 is used for ADF input check.		
009	Original Detection	ENG	[0 or 1 / 0 / 1/step]
013	Registration Sensor	ENG	[0 or 1 / 0 / 1/step]
015	Feed Cover	ENG	[0 or 1 / 0 / 1/step]

6008	[ADF OUTPUT Check]		
	Activates the electrical components for functional check. It is not possible to activate more than one component at the same time.		
003	Transport Motor:Forward	ENG	[0 or 1 / 0 / 1/step]
004	Transport Motor:Reverse	ENG	[0 or 1 / 0 / 1/step]
009	ADF:Feed:Solenoid	ENG	[0 or 1 / 0 / 1/step]
011	ADF:Inverter Solenoid	ENG	[0 or 1 / 0 / 1/step]

6009	[ADF Free Run]		
	Performs a DF free run in simplex, duplex mode or stamp mode.		
001	Simplex Mode	ENG	[0 or 1 / 0 / 1/step]
002	Duplex Mode	ENG	[0 or 1 / 0 / 1/step]

6017	[ADF Adjustment Magnification]		
	Adjusts the magnification in the sub-scan direction for the ARDF.		
001	ADF Adjustment Magnification	*ENG	[-5.0 to 5.0 / 0 / 0.1 %/step]

6021	[ARDF Motor]		
001	Gain selection	*ENG	[0 to 2 / 0 / 1/step] 0: Common 1: Only for GX060050 2: Only for GX060040

6800	[]		
	DFU		
001	-	CTL	[1 to 3 / 3 / 1/step] 1: 1 pages 2: 2 pages 3: 3 pages

6810	□		
	DFU		
001	-	CTL	[1 to 3 / 3 / 1/step] 1: 1 pages 2: 2 pages 3: 3 pages

6830	□		
	DFU		
001	-	*CTL	[0 to 50 / 0 / 1page/step]
002	-	*CTL	[0 to 50 / 0 / 1page/step]

6890	□		
	DFU		
001	-	CTL	[1 or 0 / 0 / 1/step] 0: Disable, 1: Enable

6910	[ADF Adjustment]		
001	Shading Time	*ENG	[0 to 90 / 60 / 1sec/step]

D573

PAPER FEED UNIT PB1050

REVISION HISTORY		
Page	Date	Added/Updated/New
		None

PAPER FEED UNIT PB1050 (D573)

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READ THIS FIRST

Important Safety Notices

WARNING

- Never install telephone wiring during a lightning storm.
- Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- Use caution when installing or modifying telephone lines.
- Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
- Do not use a telephone or cellular phone to report a gas leak in the vicinity of the leak.

CAUTION

- Before installing the fax unit, switch off the main switch, and disconnect the power cord.
- The fax unit contains a lithium battery. 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 batteries in accordance with the manufacturer's instructions and local regulations.







Note

- **Note for Australia:**
- Unit must be connected to Telecommunication Network through a line cord that meets the requirements of ACA Technical Standard TS008.

Symbols, Abbreviations and Trademarks

Conventions Used in this Manual

This manual uses several symbols.

Symbol	What it means
	Refer to section number
	Screw
	Connector
	E-ring
	Clip ring
	Clamp



Cautions, Notes, etc.

The following headings provide special information:

WARNING

- Failure to obey warning information could result in serious injury or death.

CAUTION

- Obey these guidelines to ensure safe operation and prevent minor injuries.

Important

- Obey these guidelines to avoid problems such as misfeeds, damage to originals, loss of valuable data and to prevent damage to the machine.
- Always obey these guidelines to avoid serious problems such as misfeeds, damage to originals, loss of valuable data and to prevent damage to the machine. bold is added for emphasis.

Note

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

Trademarks

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PostScript[®] is a registered trademark of Adobe Systems, Incorporated.

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1. REPLACEMENT AND ADJUSTMENT

1.1 BEFOREHAND

CAUTION

- Before installing options, please do the following:
- If there is a fax unit in the machine, 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 switch and disconnect the power cord, the telephone line, and the network cable.

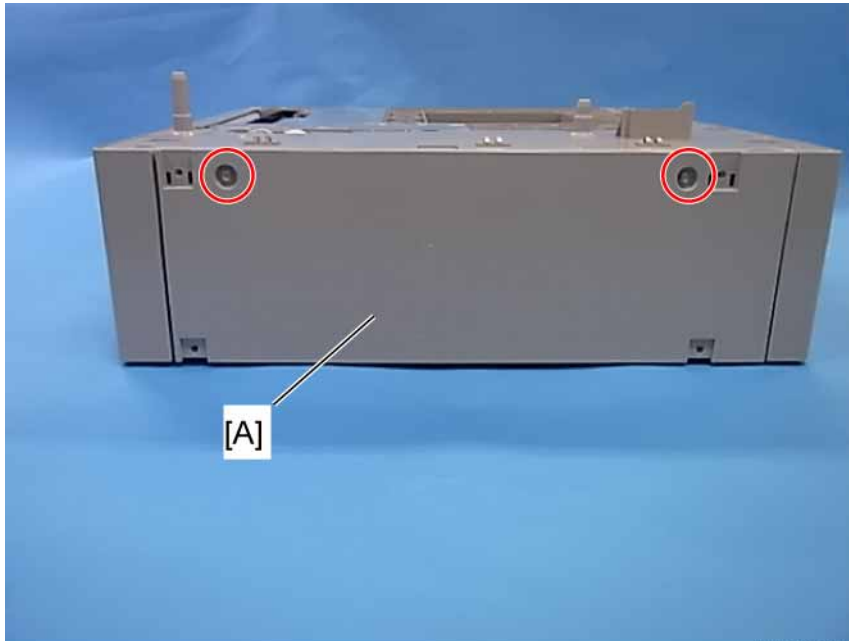
Important

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

1.2 PAPER FEED UNIT (D573)

1.2.1 REAR COVER

1. Pull out the paper tray (p.5).



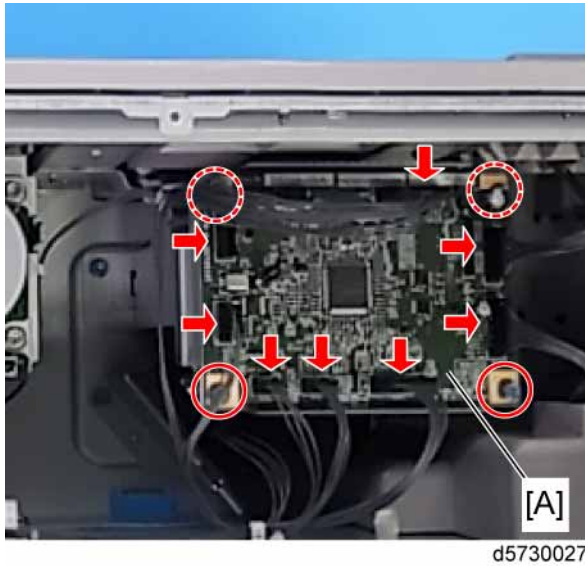
d5730001

2. Rear cover [A] (x 2)

1.2.2 CONTROLLER BOARD

Controller Board

1. Pull out the paper tray (🔧 p.5).
2. Rear cover (🔧 p.2)
3. Rear stay (🔧 p.18)

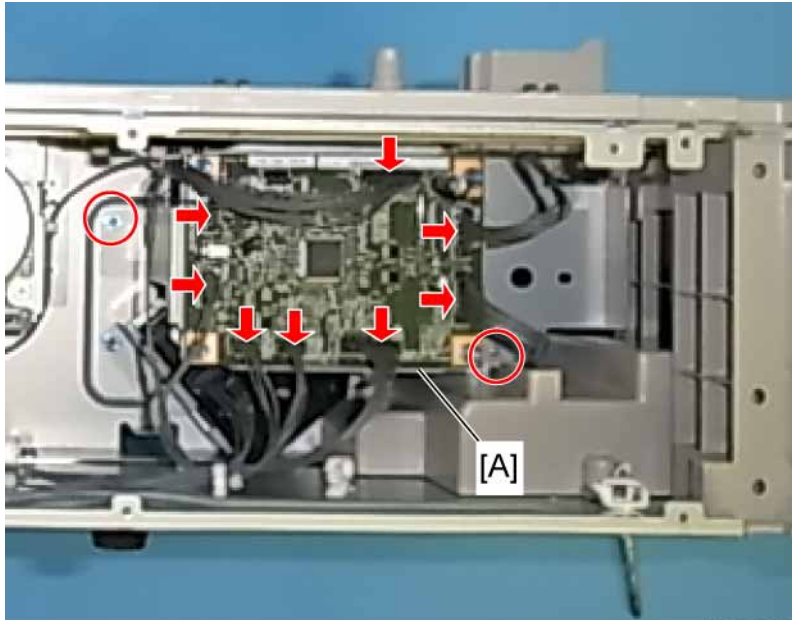


Controller board [A] (All 🔧s, 🔑 x 4)

Paper Feed
Unit PB1050
(D573)

Controller Board with the Bracket

1. Pull out the paper tray (🔧 p.5).
2. Rear cover (🔧 p.2)
3. Rear stay (🔧 p.18)

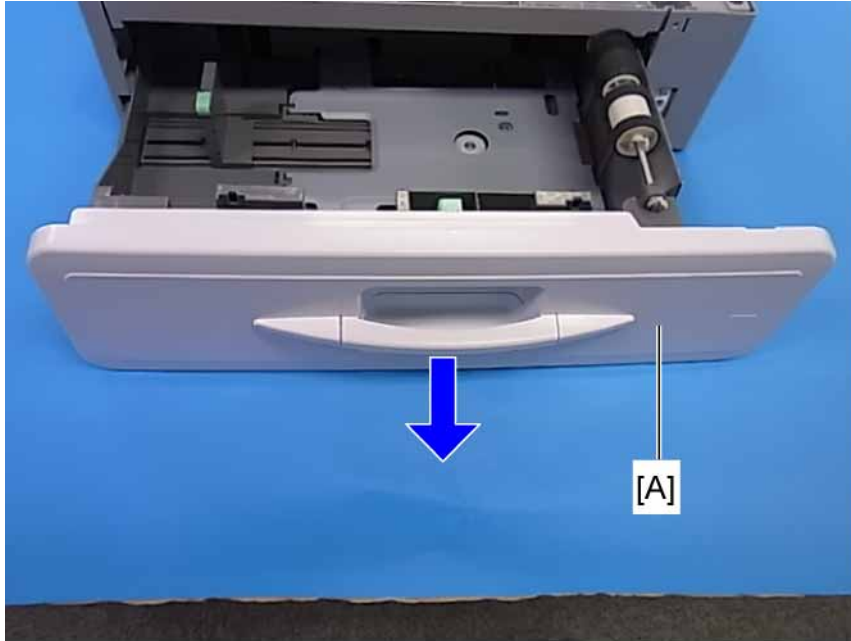


d5730028

4. Controller board with the bracket [A] (All 🔧s, 🔧 x 2)

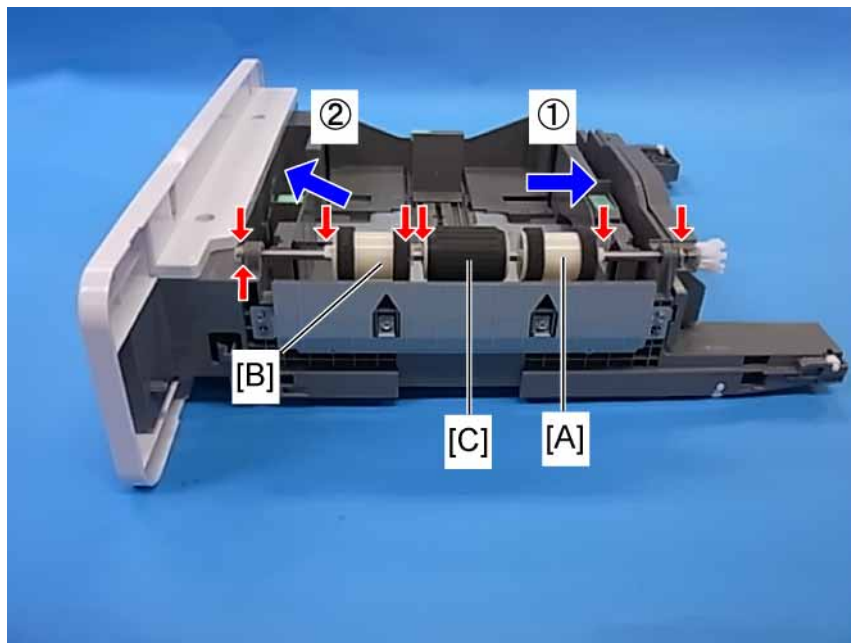
1.2.3 PICK-UP ROLLER

Pick-up Roller



d5730002

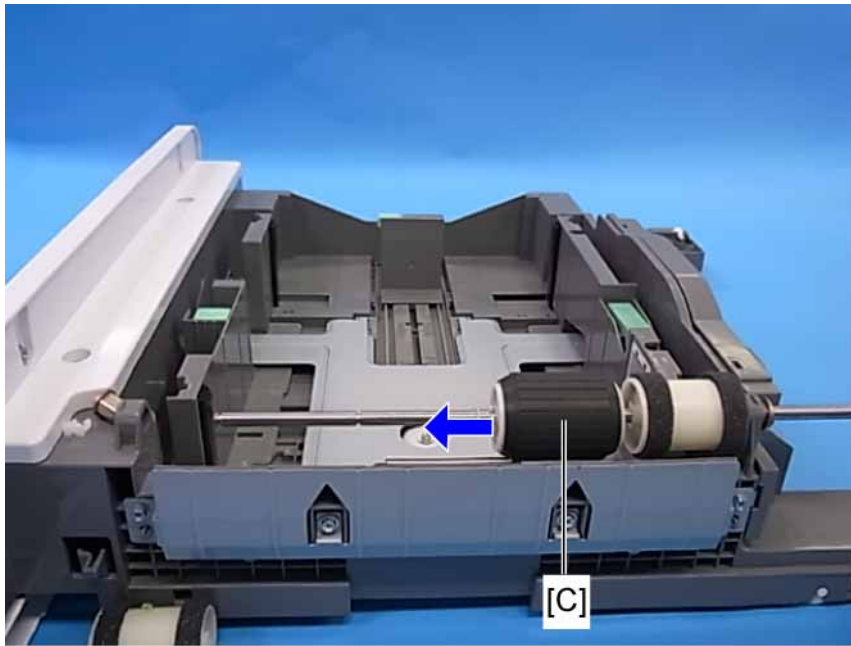
1. Pull out the paper tray [A].



d5730003

Paper Feed
Unit PB1050
(D573)

Paper Feed Unit (D573)

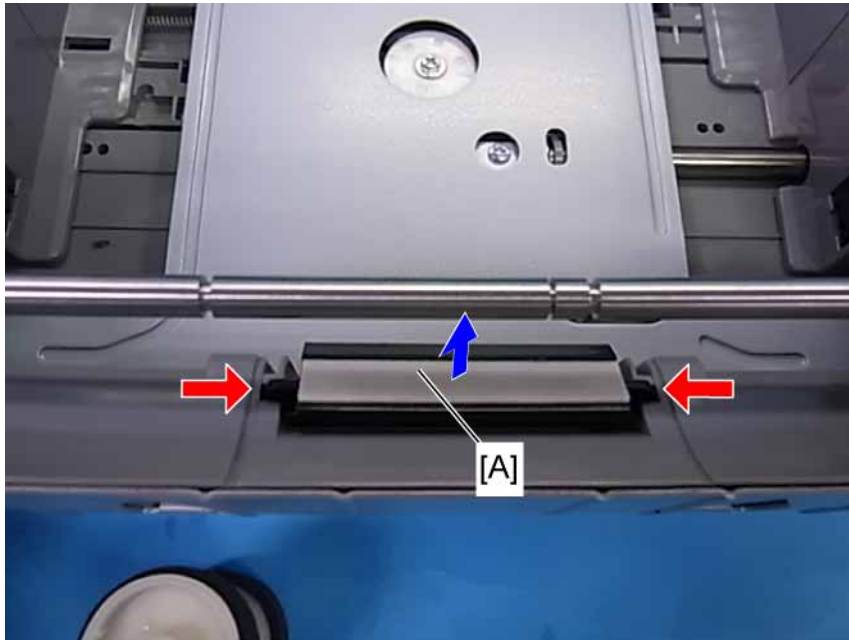


d5730004

2. Remove all clips on the shaft and move the roller [A] to the right side [1] (⌀ x 6, bearing x 1).
3. Move the shaft to the right, and pull out the shaft from the bushing at the left side.
4. Lift up the shaft [2] and remove the shaft from the bushing at the right side.
5. Remove the roller [B].
6. Pick-up roller [C]

1.2.4 FRICTION PAD

1. Pick-up Roller (🔧 p.5)



d5730029

2. Friction pad [A] (Hooks x 2, 🌀 x 1)

When reinstalling the friction pad:



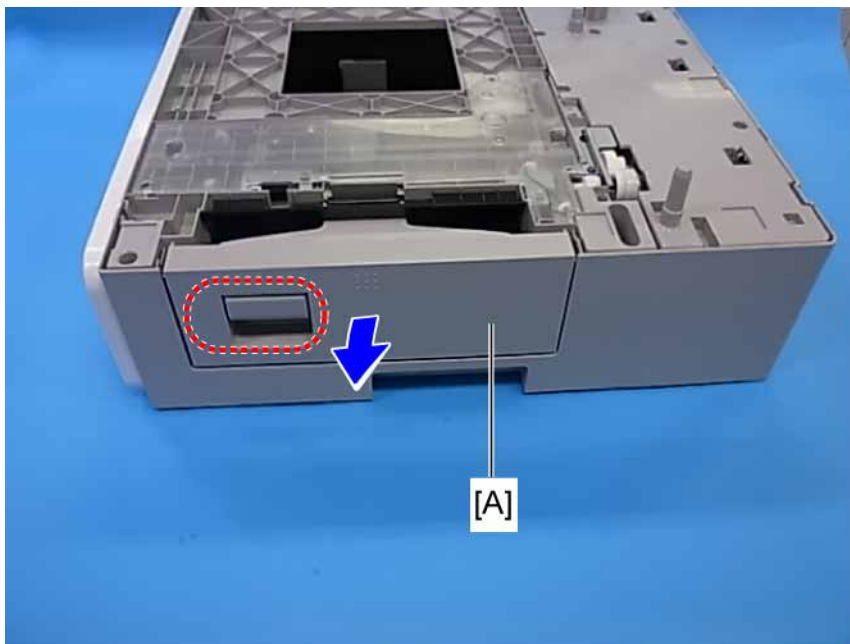
d5730030

↓ Note

- To prevent the friction pad from catching on the Mylar sheet [A], place the friction pad while bending the Mylar sheet slightly outward.

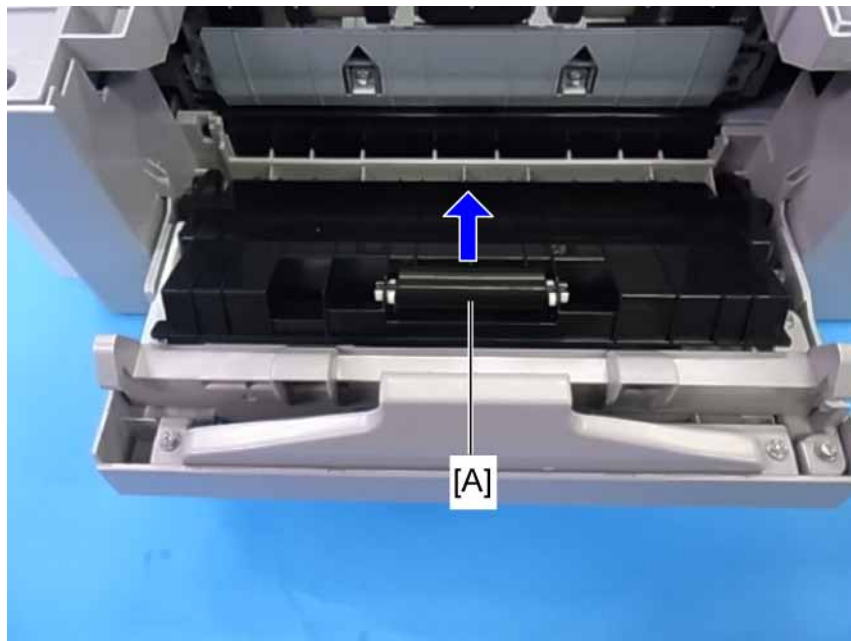
1.2.5 PAPER FEED ROLLERS

Paper Feed Roller (Driven side)



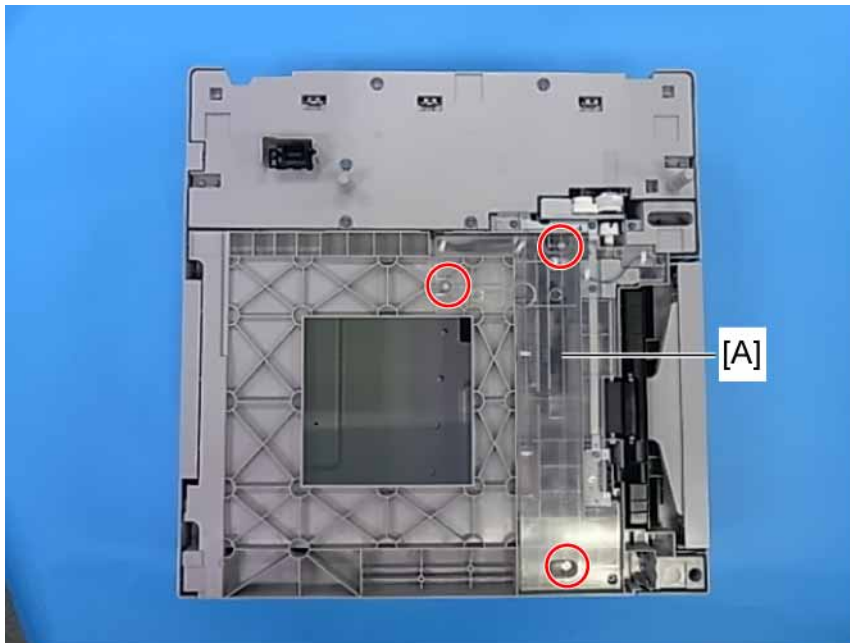
d5730005

1. Open the right door [A].



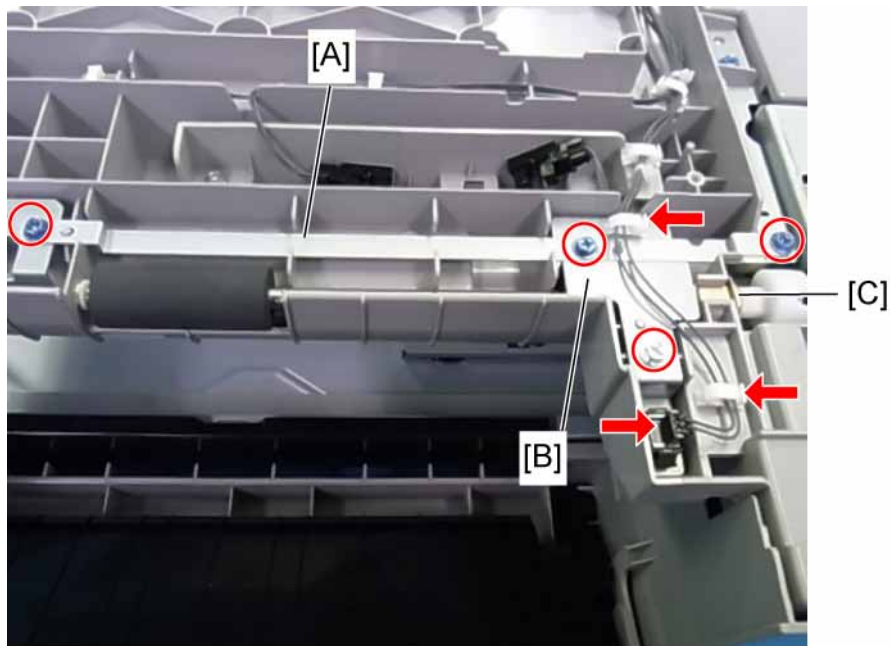
d5730006

2. Paper feed roller [A] (hooks x 2)

Paper Feed Roller (Driving Side)

d5730007

1. Remove the upper cover [A] (🔩 x 3).
2. Open the right cover (🔧 p.8)
3. Paper feed motor assembly (🔧 p.19)

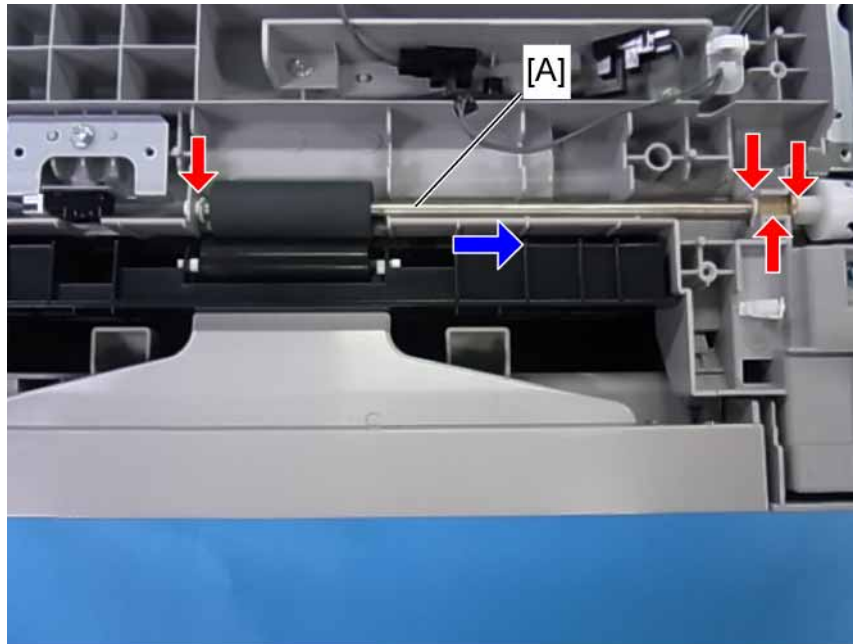


d5730008

4. Remove the grounding plate [A] and sensor bracket [B], and then loosen the discharge plate [C] (🔩 x 4, 🛠️ x 2, 🛠️ x 1)

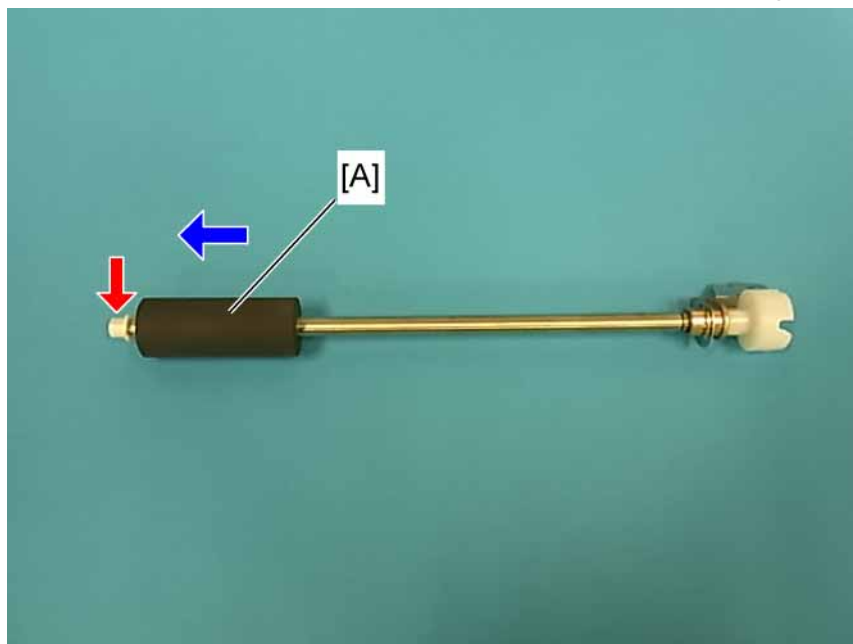
Paper Feed
Unit PB1050
(D573)

Paper Feed Unit (D573)



d5730009

5. Remove the shaft [A] with the paper feed roller (⌀ x 2, bearings x 2).

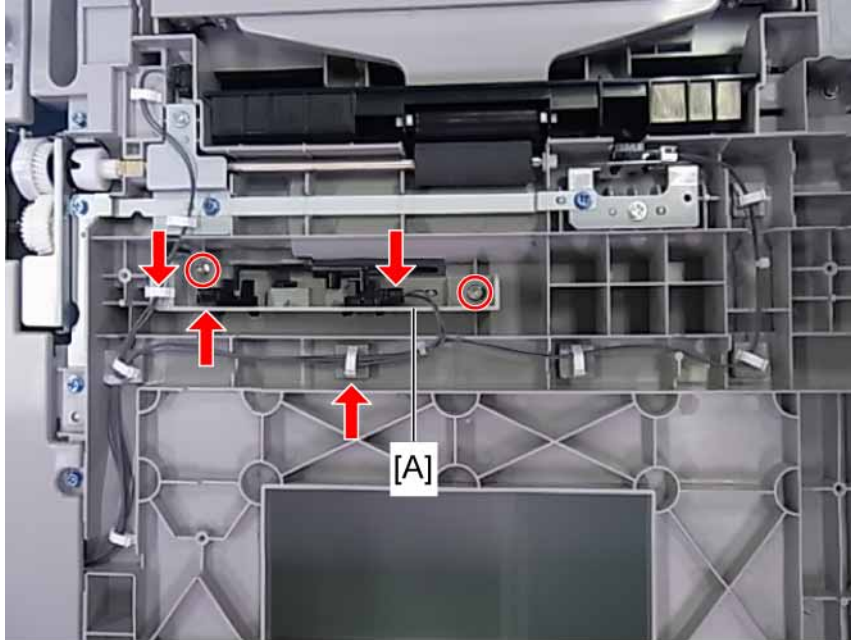


d5730010

6. Paper feed roller (Driving side) [A] (Bearing x 1)

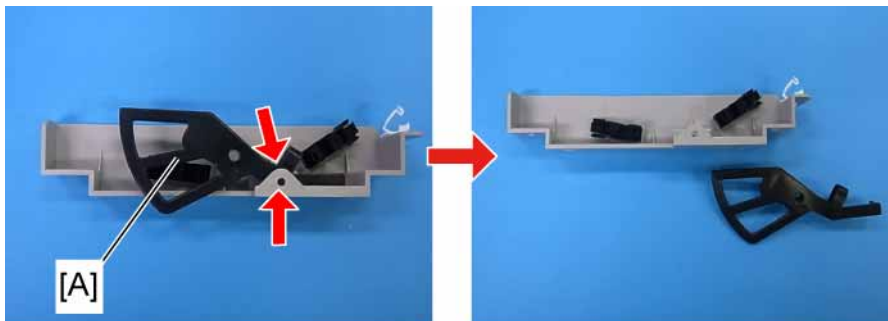
1.2.6 PAPER END SENSOR 1 AND 2

1. Pull out the paper tray (🔧 p.5)
2. Upper Cover (🔧 p.8)



d5730024

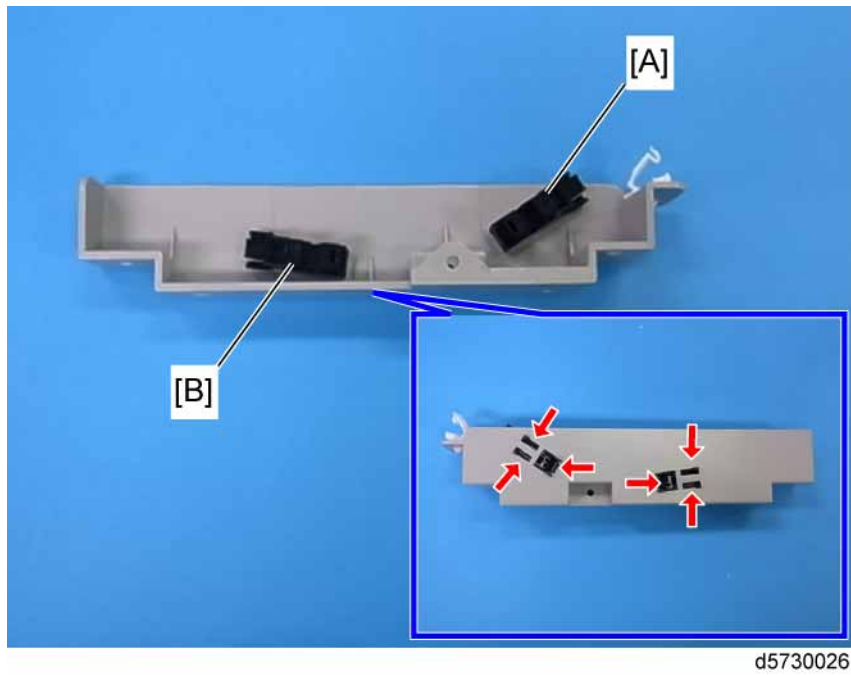
3. Paper end sensor assembly [A] (🔧 x 2, 📎 x 2, 🔧 x 2)



d5730025

4. Feeler [A] (Snap points x 2)

Paper Feed Unit (D573)

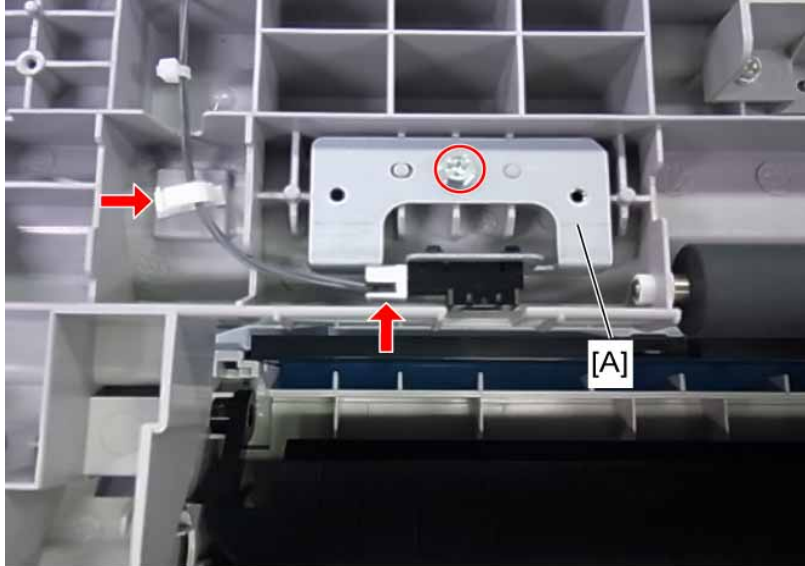


d5730026

5. Paper end sensor 1 [A] and 2 [B] (hooks x 3 each)

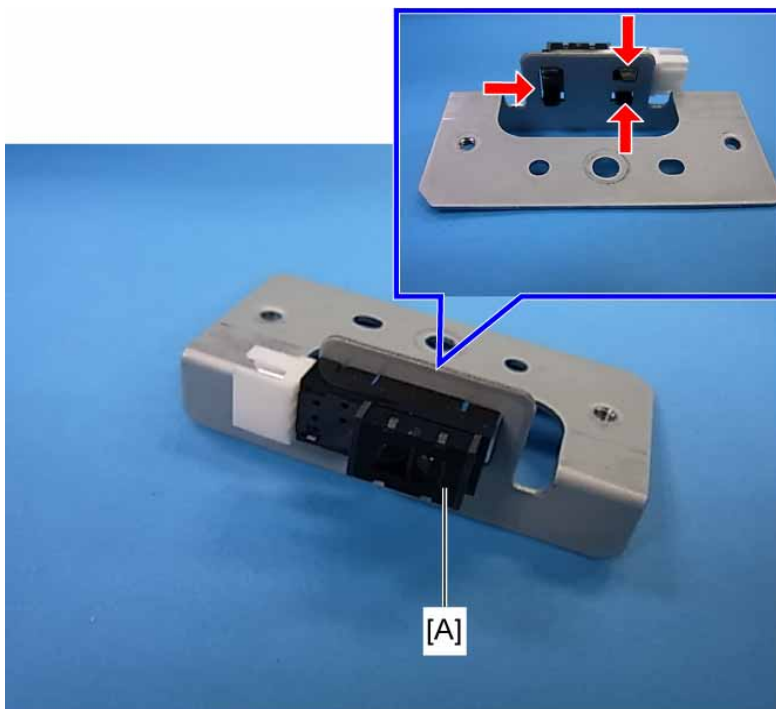
1.2.7 PAPER FEED SENSOR

1. Pull out the paper tray (🔧 p.5)
2. Grounding plate and right door open/close sensor bracket (🔧 p.17)



d5730022

3. Paper feed sensor with bracket [A] (🔧 x 1, 📏 x 1, 🔧 x 1)



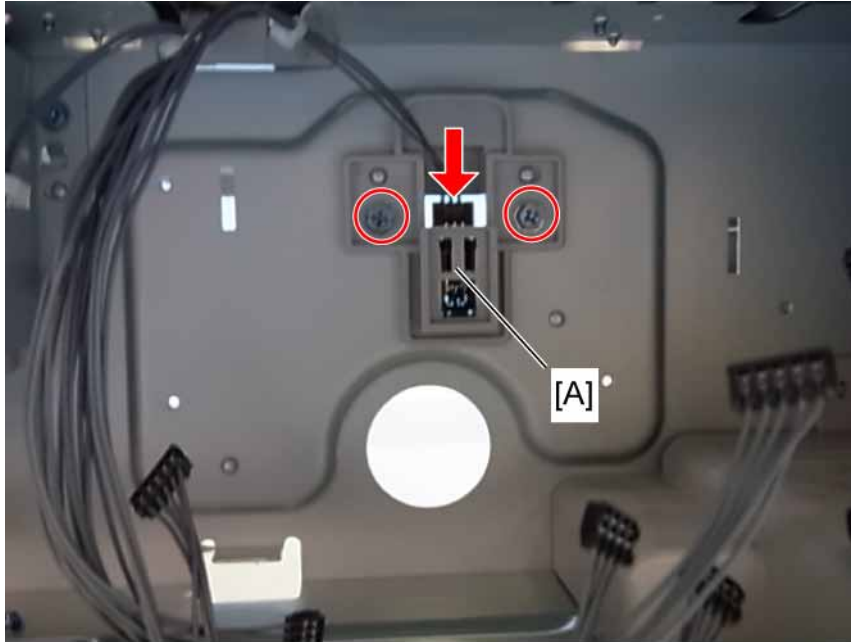
d5730023

4. Paper feed sensor [A] (Hooks x 3)

1.2.8 TRAY BOTTOM PLATE PRESSURE SENSOR AND HP SENSOR

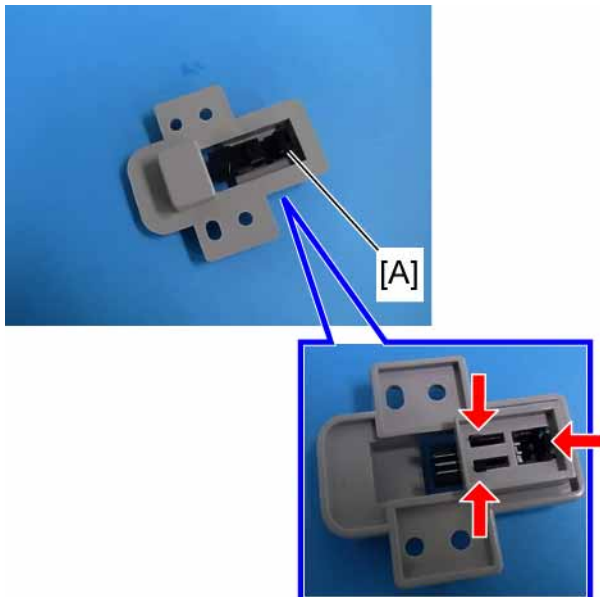
Tray Bottom Plate Position Sensor 1

1. Tray Lift Motor (🔧 p.18)



d5730017

2. Tray bottom plate pressure sensor with the bracket [A] (🔧 x 1, 🔩 x 2)

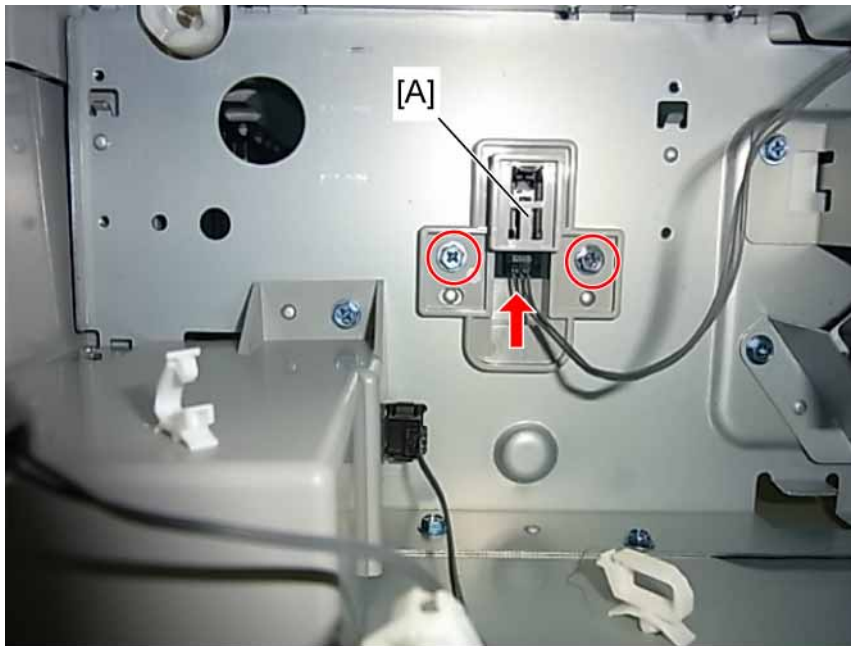


d5730018

3. Tray bottom plate position sensor 1 [A] (Hooks x 3)

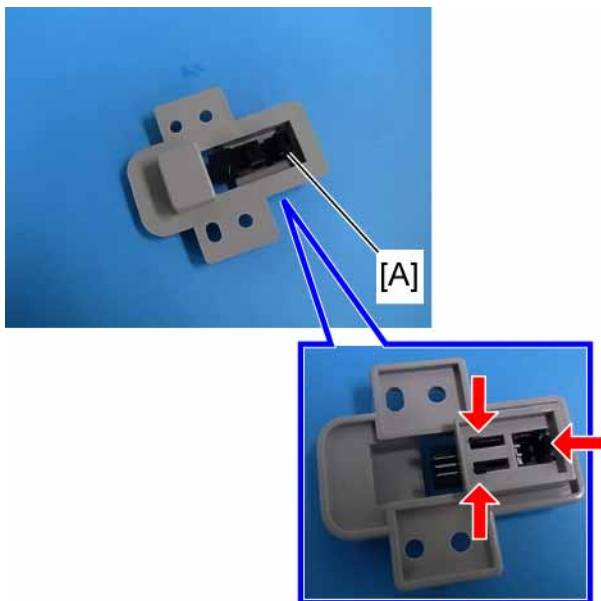
Tray Bottom Plate HP Position Sensor

1. Paper feed gear assembly (☞ p.20)



d5730019

2. Tray bottom plate HP position sensor with the bracket [A] (☞ x 1, ☞ x 2)

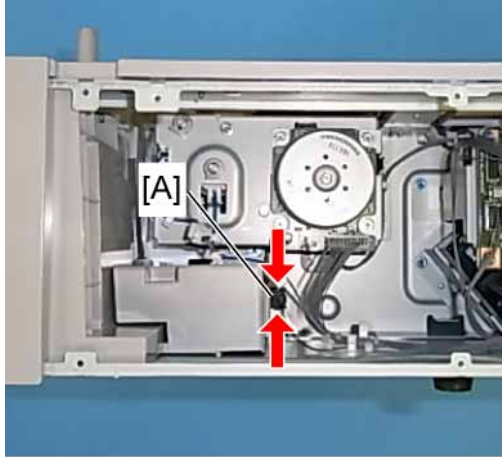


d5730018

3. Tray bottom plate HP position sensor [A] (Hooks x 3)

1.2.9 TRAY SET SENSOR

1. Pull out the paper tray (☞ p.5)
2. Rear cover (☞ p.2)

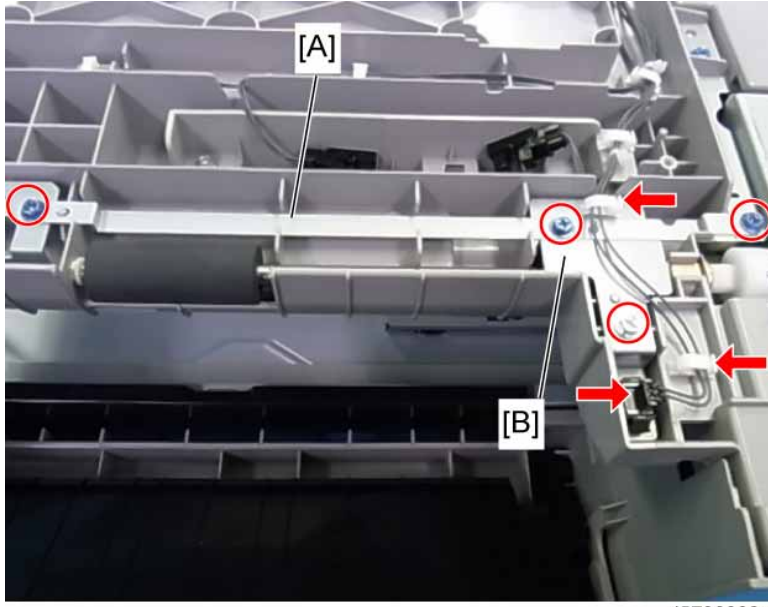


d5730020

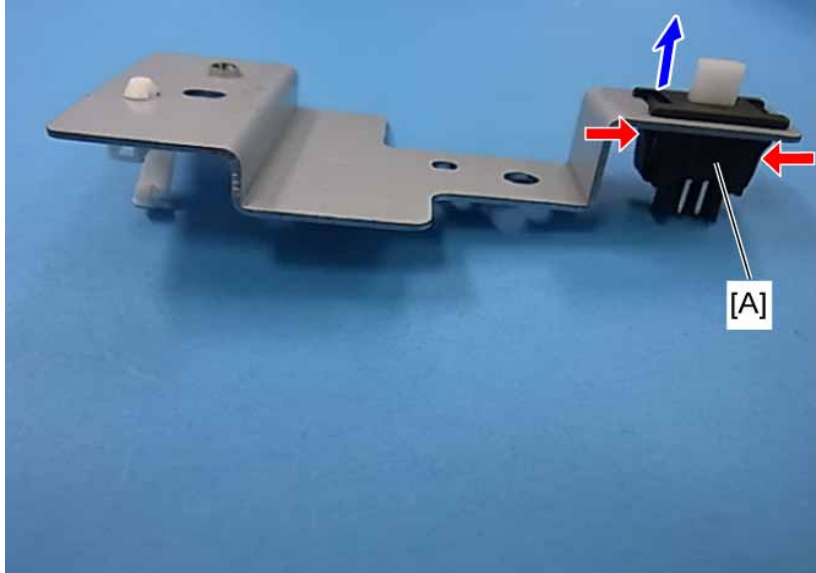
3. Pull out the tray set sensor from the front while releasing the hooks (Hooks x 2).

1.2.10 RIGHT DOOR OPEN/CLOSE SENSOR

1. Open the right door (🔧 p.8)
2. Upper cover (🔧 p.8)



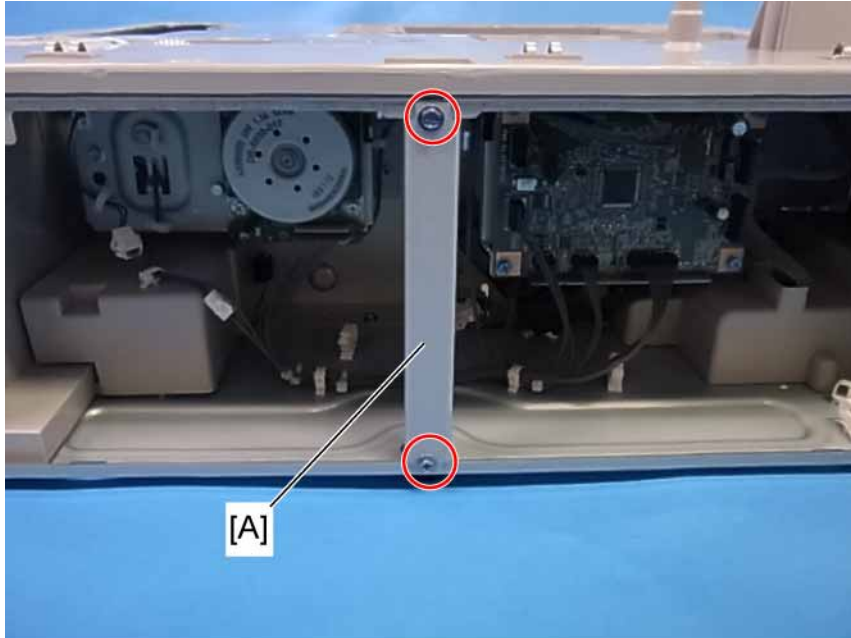
3. Remove the grounding plate [A] and the sensor bracket [B] (🔧 x 4, 🛠️ x 2, 🛠️ x 1)



4. Right door open/close sensor [A] (Hooks x 2)

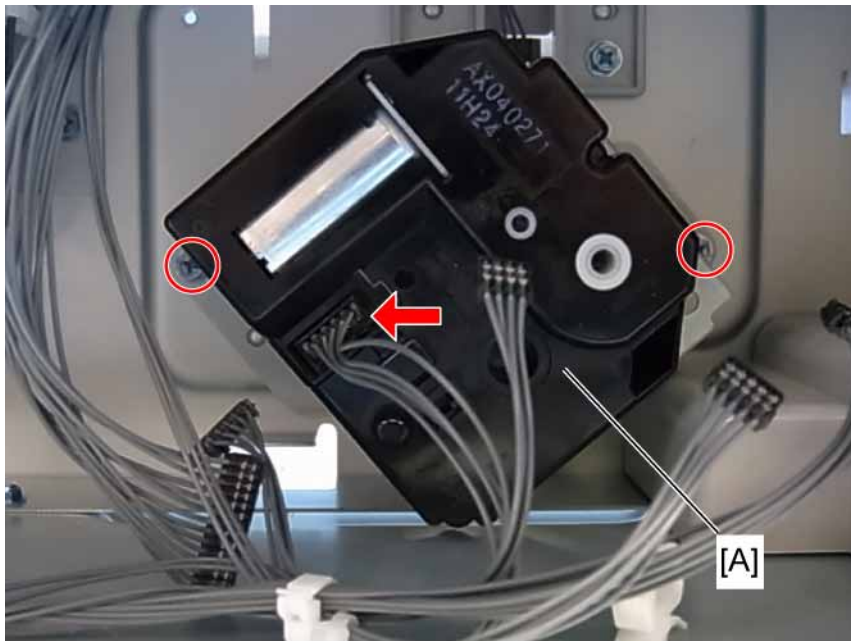
1.2.11 TRAY LIFT MOTOR

1. Pull out the paper tray (🔧 p.5)
2. Rear cover (🔧 p.2)



d5730011

3. Rear stay [A] (🔧 x 2)
4. Controller board with bracket (🔧 Controller Board)

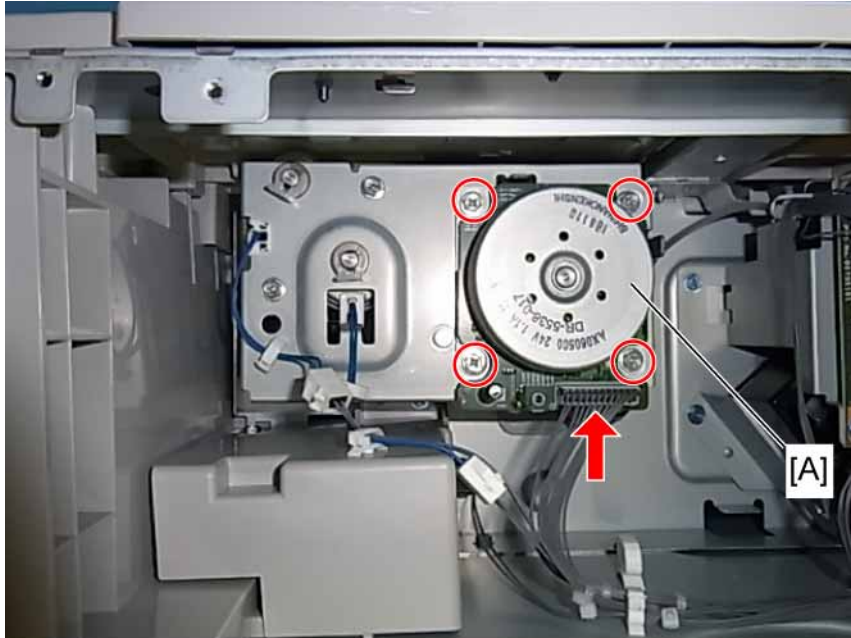


d5730012

5. Tray lift motor [A] (🔧 x 2, 📦 x 1)

1.2.12 PAPER FEED MOTOR

1. Pull out the paper tray (🔧 p.5)
2. Rear cover (🔧 p.2)
3. Rear stay (🔧 p.18)



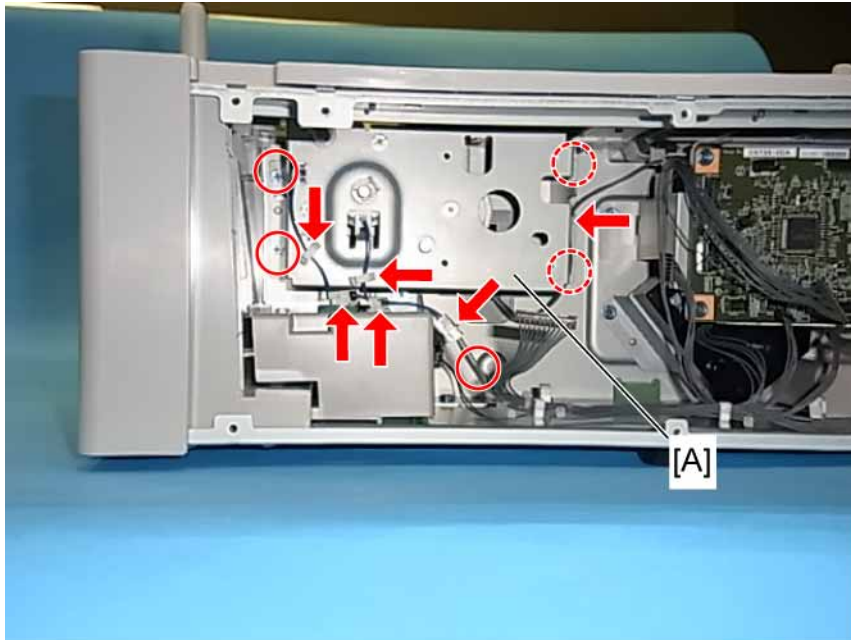
d5730013

4. Paper feed motor [A] (🔧 x 1, 🔩 x 4)

Paper Feed
Unit PB1050
(D573)

1.2.13 PAPER FEED CLUTCH AND RELAY CLUTCH

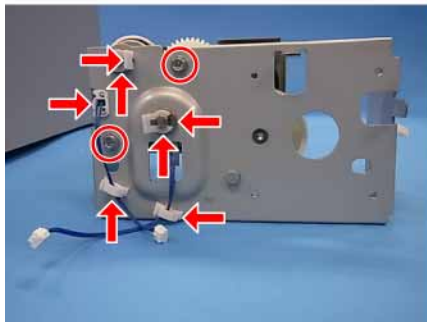
1. Paper feed motor (🔧 p.19)



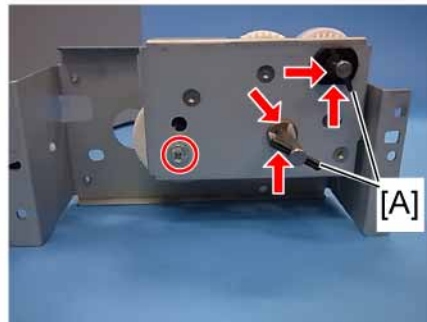
d5730014

2. Paper feed gear assembly [A] (🔧 x 2, 🛠️ x 4, 🛠️ x 4)

1:



2:

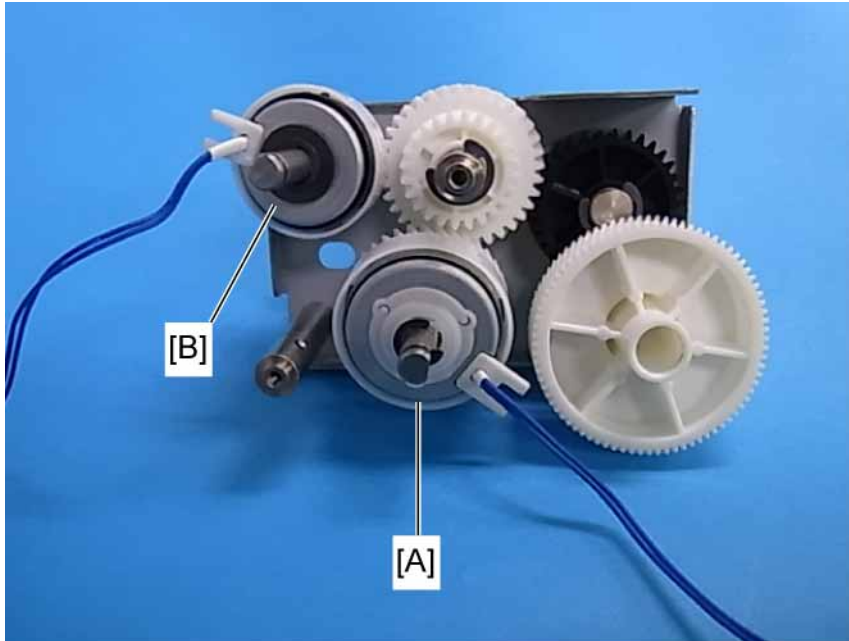


d5730015

1: Front

2: Rear

3. Remove all screws, clips, clamps, e-rings and bearings.
4. Pull out the wedges [A].



d5730016

5. Pull out the paper feed clutch [A] and relay clutch [B] from the bracket.

Note

- Refer to the upper photo when reassembling the paper feed gear assembly.

Paper Feed
Unit PB1050
(D573)

D574

1 BIN TRAY BN1010

REVISION HISTORY		
Page	Date	Added/Updated/New
		None

1 BIN TRAY BN1010 (D574)

TABLE OF CONTENTS

1. REPLACEMENT AND ADJUSTMENT	1
1.1 BEFOREHAND	1
1.2 ELECTRICAL COMPONENTS	2
1.2.1 PAPER SENSOR.....	2
1.2.2 1-BIN TRAY EXIT SENSOR.....	3
1.2.3 LED BOARD	4

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	Screw
	Connector
	Clamp



Cautions, Notes, etc.

The following headings provide special information:

WARNING

- Failure to obey warning information could result in serious injury or death.

CAUTION

- Obey these guidelines to ensure safe operation and prevent minor injuries.

Important

- **Obey these guidelines to avoid problems such as misfeeds, damage to originals, loss of valuable data and to prevent damage to the machine.**
- **Always obey these guidelines to avoid serious problems such as misfeeds, damage to originals, loss of valuable data and to prevent damage to the machine. bold is added for emphasis.**

Note

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

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1. REPLACEMENT AND ADJUSTMENT

1.1 BEFOREHAND

CAUTION

- Before installing options, please do the following:
- If there is a fax unit in the machine, 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 switch and disconnect the power cord, the telephone line, and the network cable.

Important

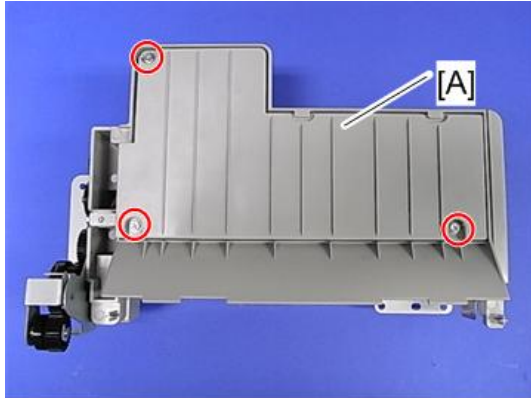
- Always touch a grounded surface to discharge static electricity from your hands before you handle SD cards, printed circuit boards, or memory boards.

1 Bin Tray
BN1010
(D574)

1.2 ELECTRICAL COMPONENTS

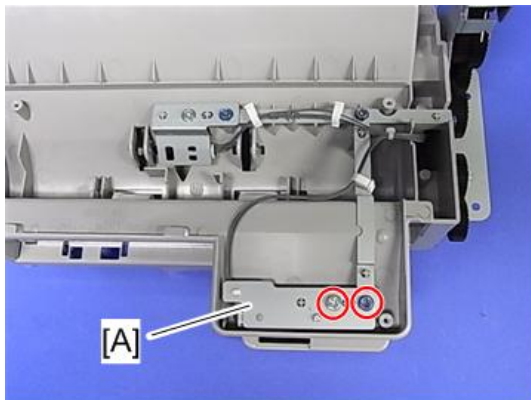
1.2.1 PAPER SENSOR

1. 1-Bin tray unit (☛ 1-bin Tray Unit B1010 in the mainframe service manual)



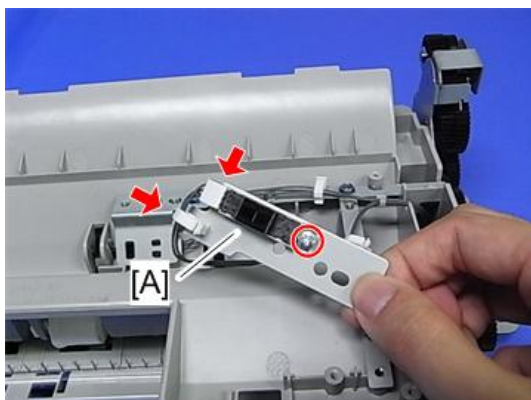
d574r503

2. 1-Bin tray upper cover [A] (☛ x 3)



d574r501

3. Paper sensor bracket [A] (☛ x 2)

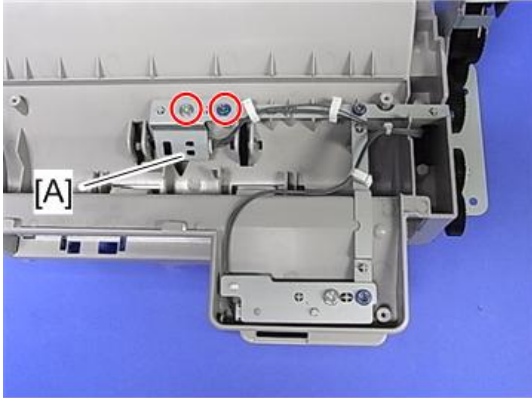


d574r502

4. Paper sensor [A] (☛ x 1, ☛ x 1, ☛ x 1)

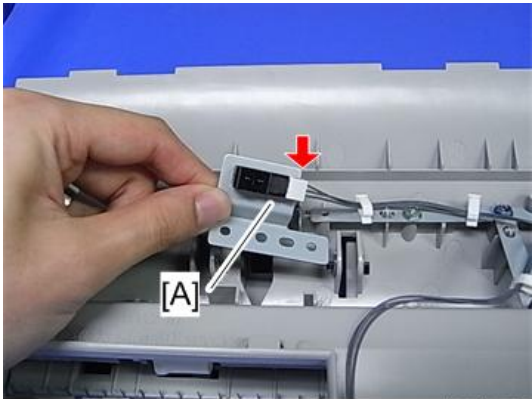
1.2.2 1-BIN TRAY EXIT SENSOR

1. 1-Bin tray unit (☛ 1-bin Tray Unit B1010 in the mainframe service manual)
2. 1-Bin tray upper cover (☛ p.2)



d574r504

3. 1-Bin Tray Exit Sensor bracket [A] (☛ x 2)



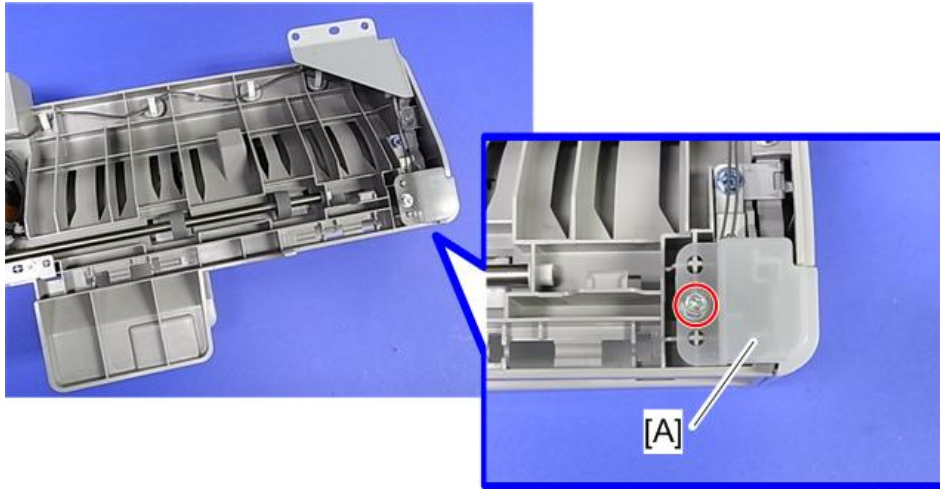
d574r505

4. 1-Bin Tray Exit Sensor [A] (☛ x 1, hooks)

1 Bin Tray
BN1010
(D574)

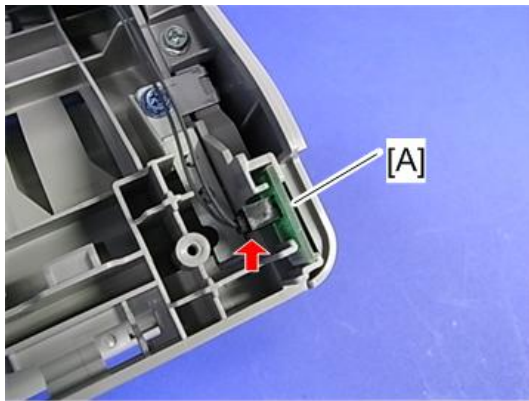
1.2.3 LED BOARD

1. 1-Bin tray unit (☛ 1-bin Tray Unit B1010 in the mainframe service manual)



d574r506

2. LED board cover [A] (☛ x 1)



d574r507

3. LED board [A] (☛ x 1)
- 4.

D649

FAX OPTION TYPE C305

REVISION HISTORY		
Page	Date	Added/Updated/New
		None

FAX OPTION TYPE C305 (D649)

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READ THIS FIRST

Important Safety Notices

WARNING

- Never install telephone wiring during a lightning storm.
- Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- Use caution when installing or modifying telephone lines.
- Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
- Do not use a telephone or cellular phone to report a gas leak in the vicinity of the leak.

CAUTION

- Before installing the fax unit, switch off the main switch, and disconnect the power cord.
- The fax unit contains a lithium battery. 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 batteries in accordance with the manufacturer's instructions and local regulations.







Note

- **Note for Australia:**
- Unit must be connected to Telecommunication Network through a line cord that meets the requirements of ACA Technical Standard TS008.

Symbols and Abbreviations

Conventions Used in this Manual

This manual uses several symbols.

Symbol	What it means
	Refer to section number
	Screw
	Connector
	E-ring
	Clip ring
	Clamp



Cautions, Notes, etc.

The following headings provide special information:

WARNING

- Failure to obey warning information could result in serious injury or death.

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- Obey these guidelines to ensure safe operation and prevent minor injuries.

Important

- **Obey these guidelines to avoid problems such as misfeeds, damage to originals, loss of valuable data and to prevent damage to the machine.**
- **Always obey these guidelines to avoid serious problems such as misfeeds, damage to originals, loss of valuable data and to prevent damage to the machine. bold is added for emphasis.**

Note

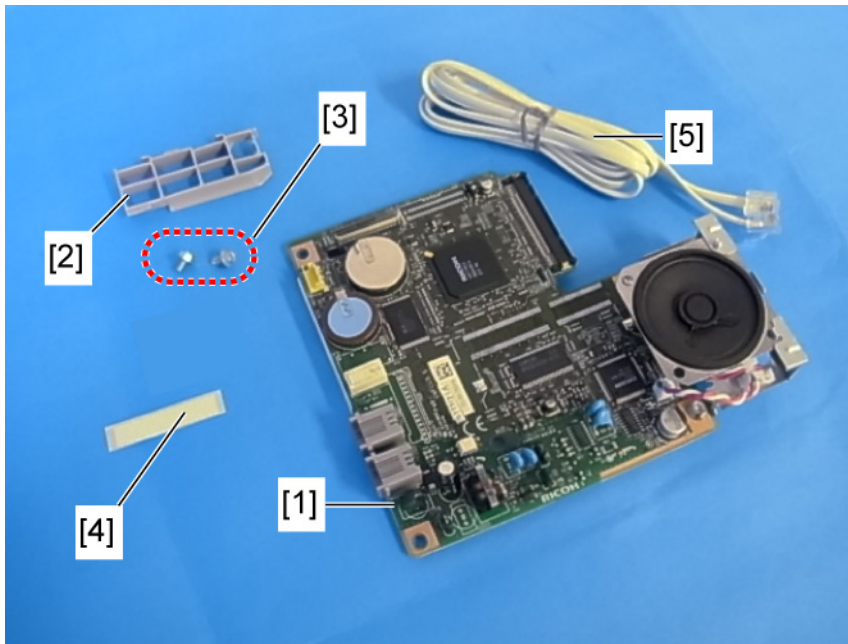
- This document provides tips and advice about how to best service the machine.

1. INSTALLATION

1.1 FAX UNIT (D649)

1.1.1 COMPONENT CHECK

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



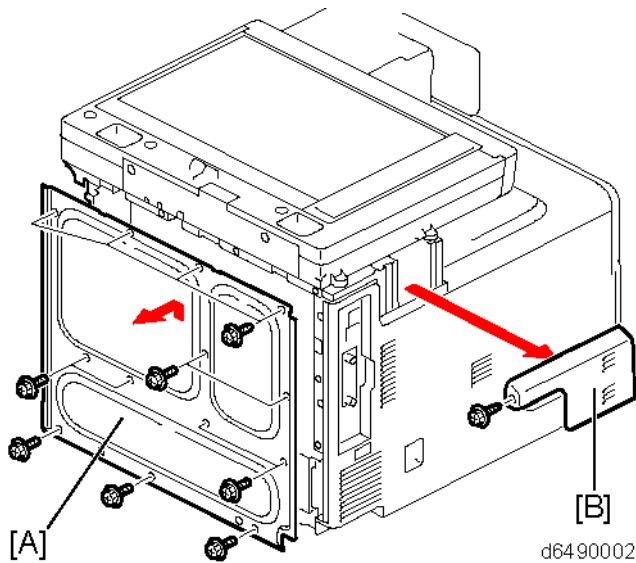
d6490001

No.	Description	Q'ty
1	FCU	1
2	Bracket	1
3	Screw: M3x6	2
4	Serial Number Decal	1
5	Telephone Cord (NA only)	1
-	FCC Decal (NA only)	1
-	EMC Address Decal (EU only)	1
-	Multi-Language Decals (EU only)	1

1.1.2 FAX UNIT INSTALLATION PROCEDURE

⚠ CAUTION

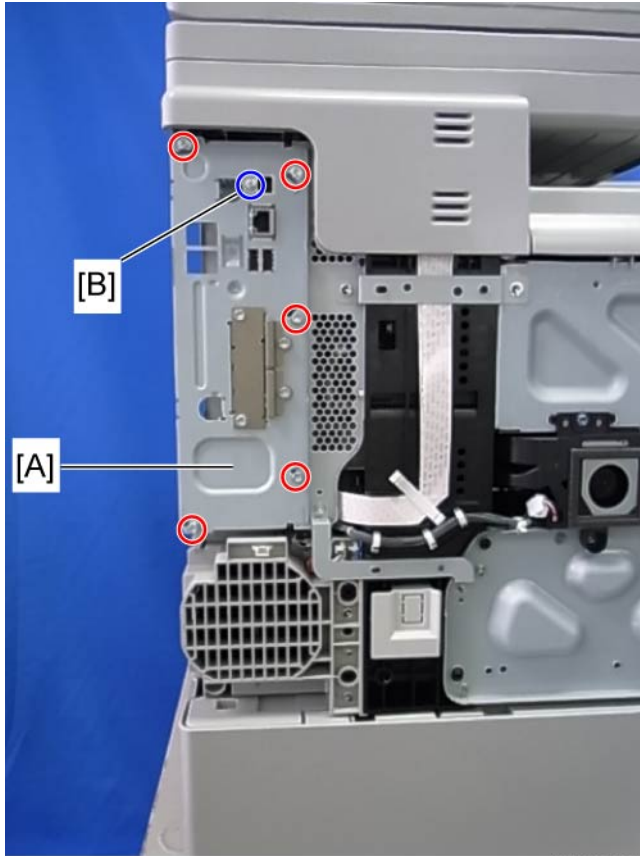
- Before installation, print out all data in the printer buffer.
- Push the operation switch to put the machine in standby mode. Make sure the power LED is off, turn the main switch off, and then disconnect the power cord and the network cable.
- The mainframe equipped with the fax unit must be connected to a properly grounded socket outlet.



1. Remove the rear cover [A] (⚙ x 13).
2. Remove the scanner rear cover [B] (⚙ x 1)



3. Remove the left cover [A] (⚙ x 2, hooks x 2).

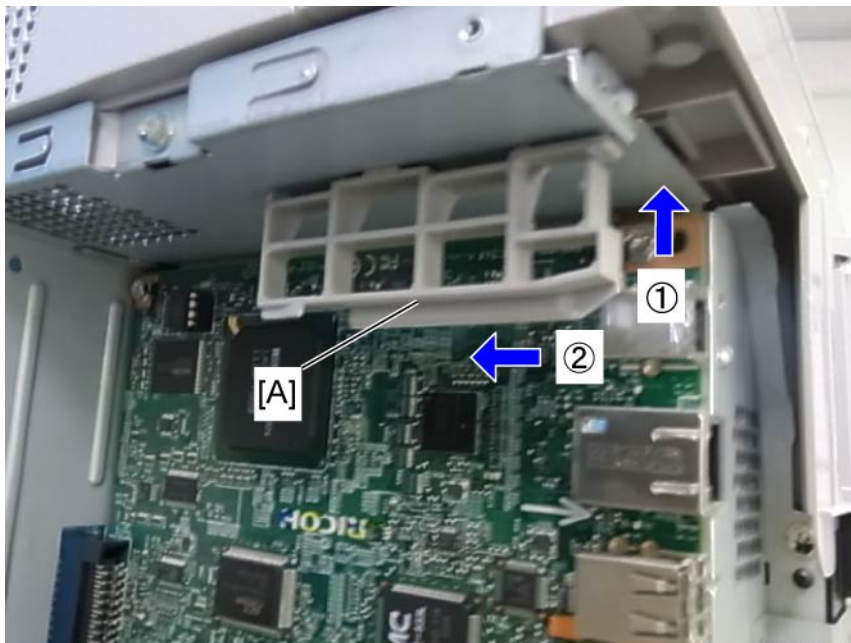


d6490004

- Remove the controller box cover [A] (⚙️ x 6)

⬇️ **Note**

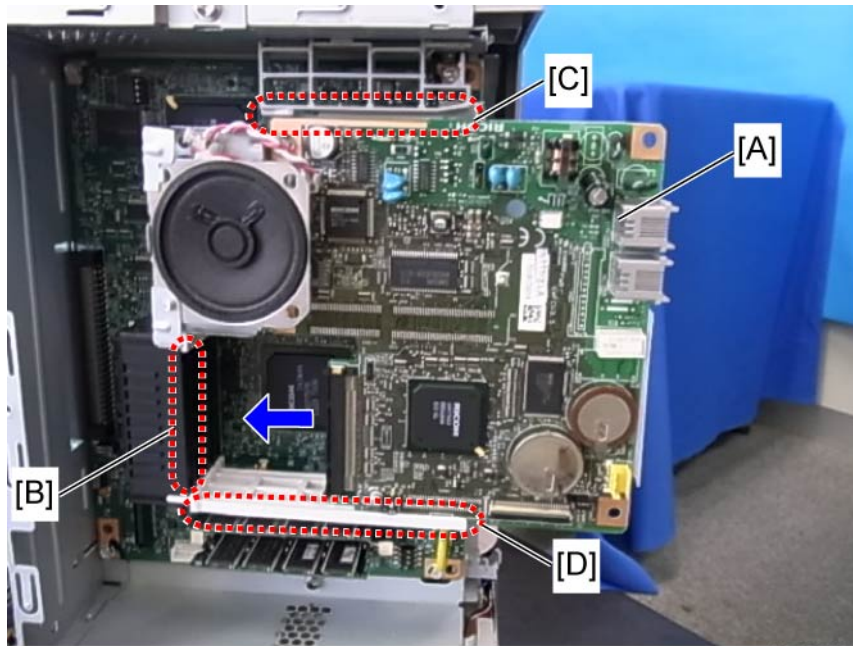
- The screw [B] is different from other five screws.



d6490005

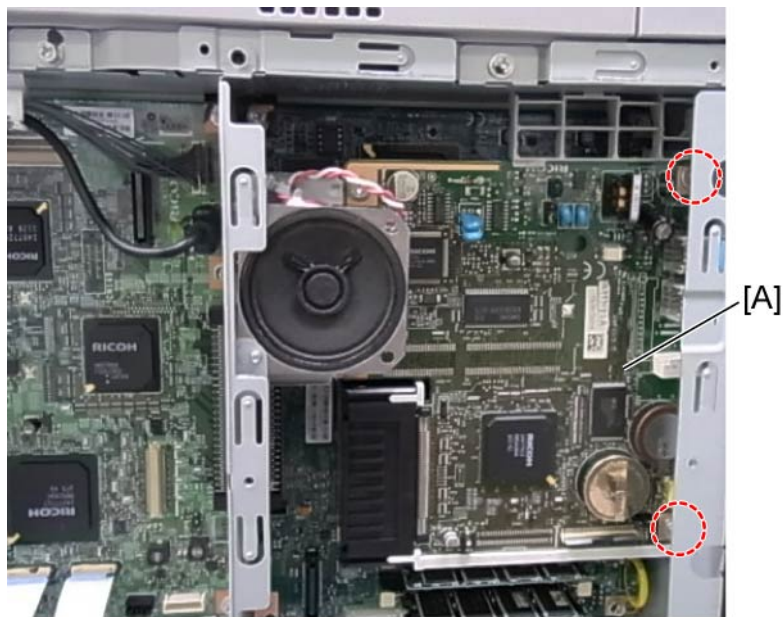
- Install the bracket [A] (hooks x 2).

Fax Unit (D649)



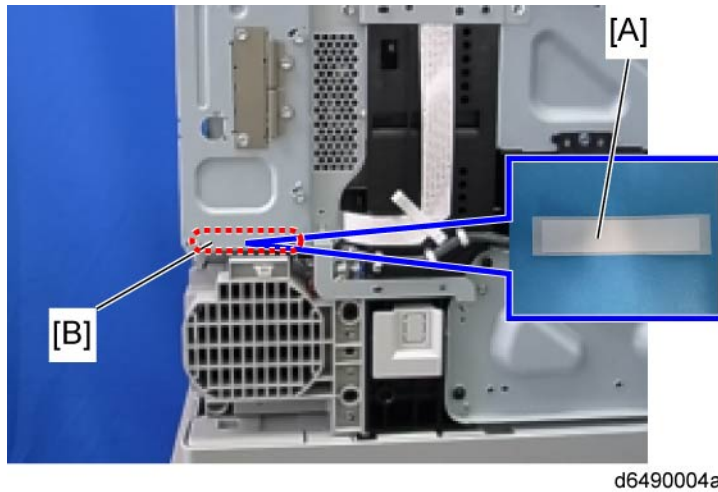
d6490006

6. Slide the FCU [A] into the slot [B] along the guide rails [C], [D].
7. Attach the controller box cover (🔩 Step 4, 🛠️ x 6).

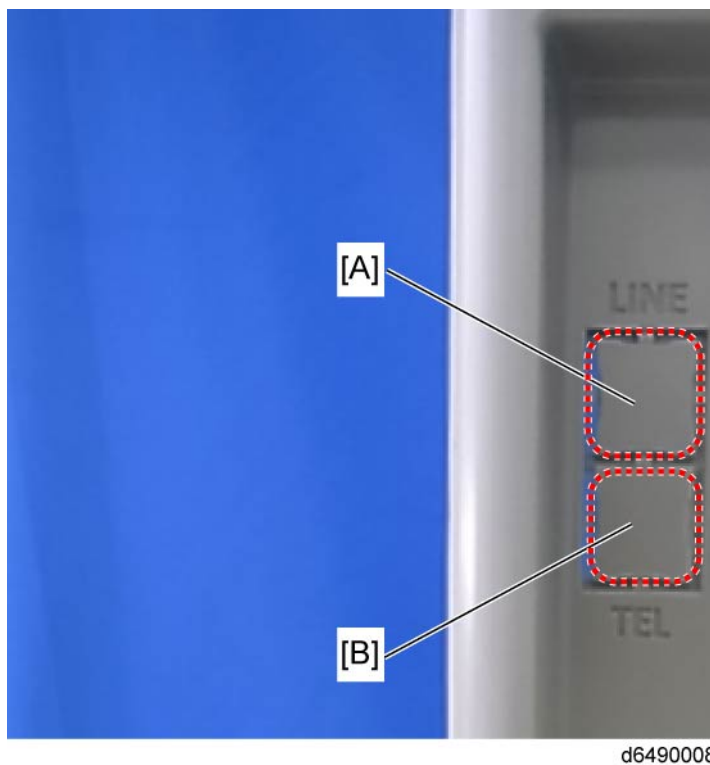


d6490007

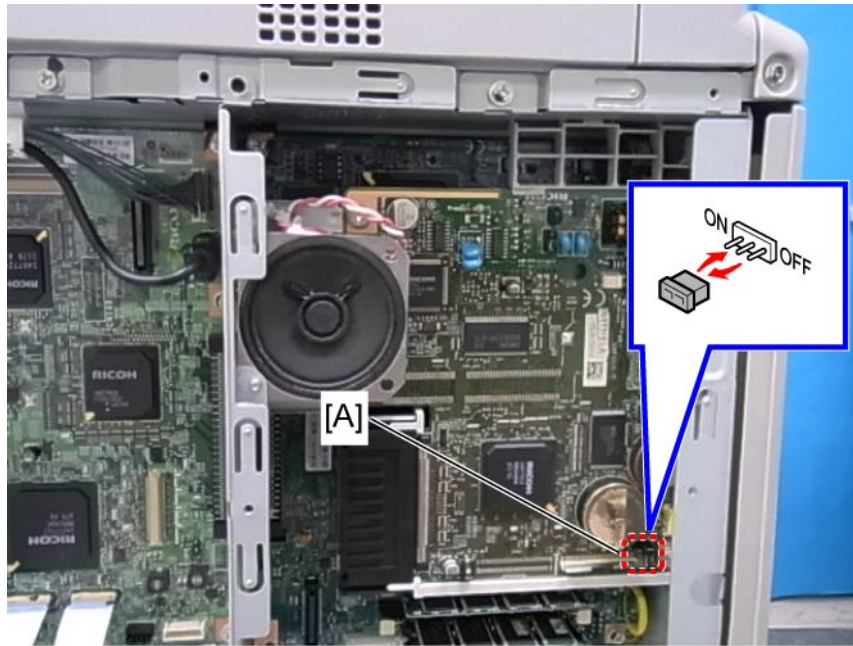
8. Secure the FCU [A] with two screws included in the kit (M3x6: 🛠️ x 2).



9. Write the serial number of the fax unit on the serial number decal [A], and then attach this decal to the controller box [B].

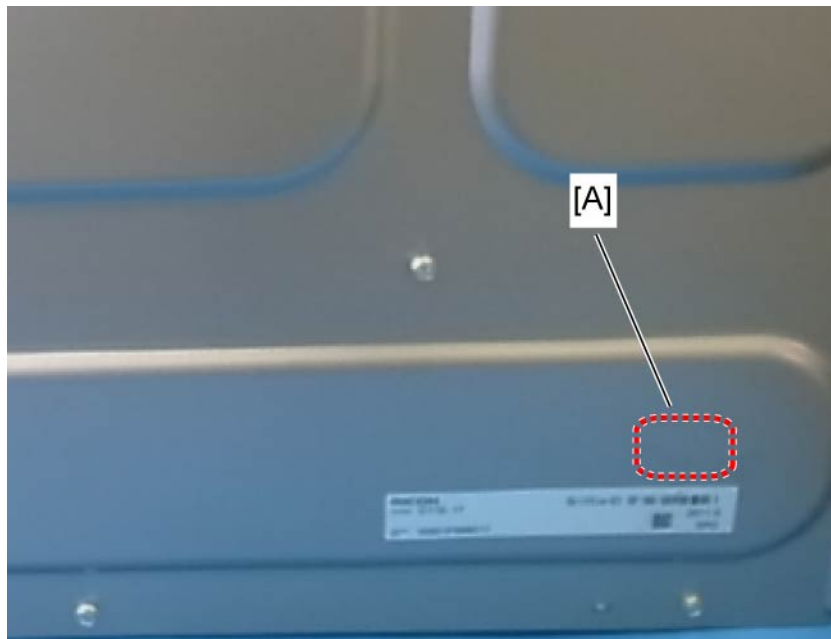


10. Open the line and the telephone connector covers [A], [B] with a flat-head ('minus') screw driver.
11. Attach the left cover (👉 Step 3, 🛠️ x 2).
12. Attach the scanner rear cover (👉 Step 2, 🛠️ x 1).



d6490009

13. Switch the FCU battery jumper switch [A] to the "ON" position.
14. Attach the rear cover (☛ Step 1, 🛠 x 13).
15. Reassemble the machine.
16. Connect the telephone cord to the "LINE" jack.



d6490012

17. Attach the FCC decal on the [A] of the rear cover (NA only).
18. Attach the MC Address Decal on the [A] of the rear cover (EU only).
19. Attach the Multi-language Decal on the keytop of the operation panel (EU only).
20. Plug in the machine and turn on the main power switch.

★ Important

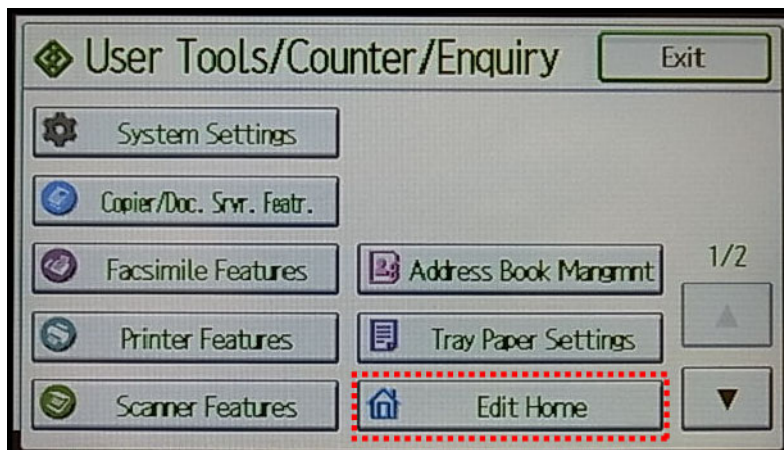
- After you turn the machine on, if you see a message that tells you the SRAM has been formatted due to a problem with SRAM, turn the machine off and on again to clear the message.

21. Enter the "User Tools" mode and set date and time.
22. Do SP3102-000 in the fax SP mode and enter the serial number for the fax unit.
23. Enter the correct country code with SP2103-001 (NCU Country/ Area Code Setting).
24. Exit the SP mode, and turn the machine off and on.

1.1.3 FAX ICON ADDITION

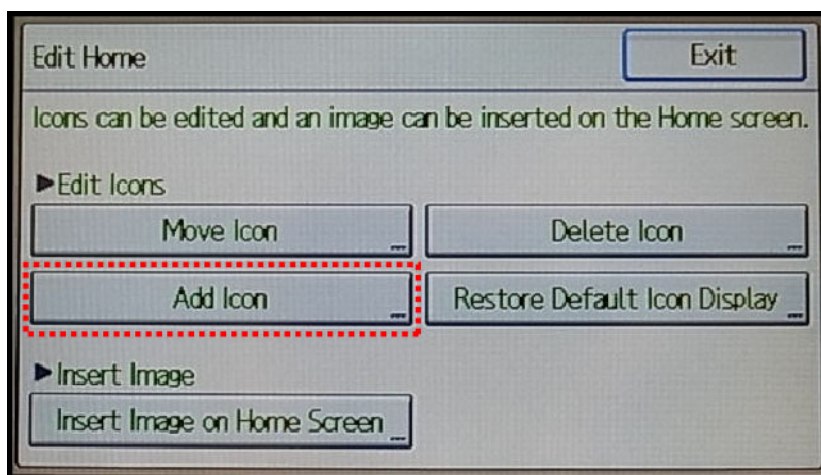
This procedure allows the fax icon to appear on the home screen of the operation panel.

1. Press [User Tools].



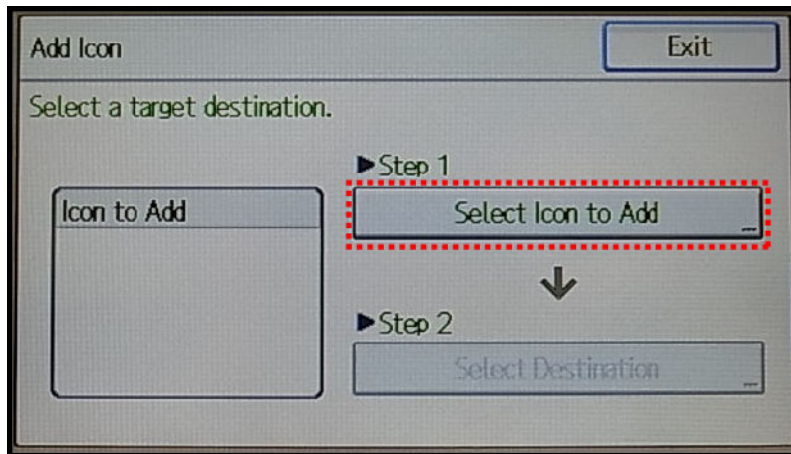
d1180061

2. Press [Edit Home].



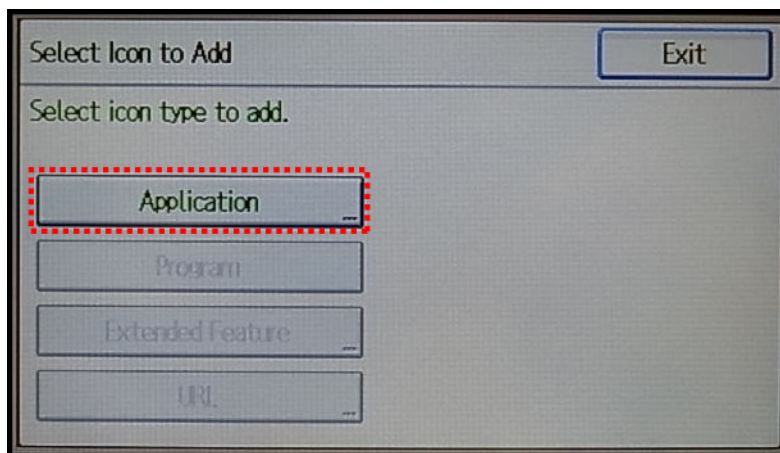
d1180062

3. Press [Add Icon].



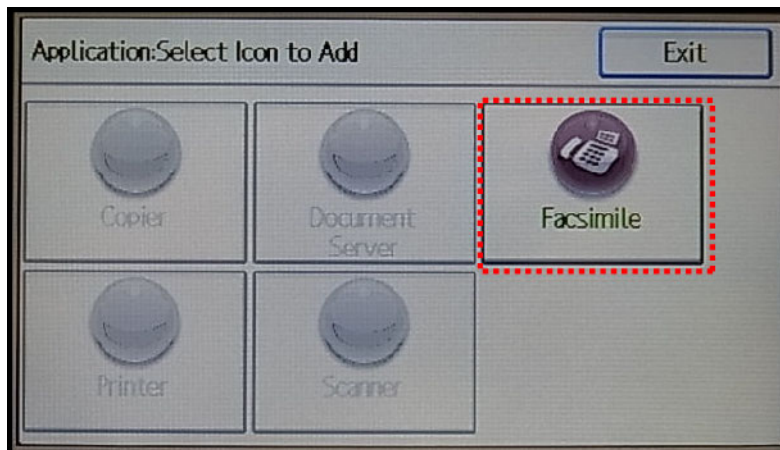
d1180063

4. Press [Select Icon to Add].



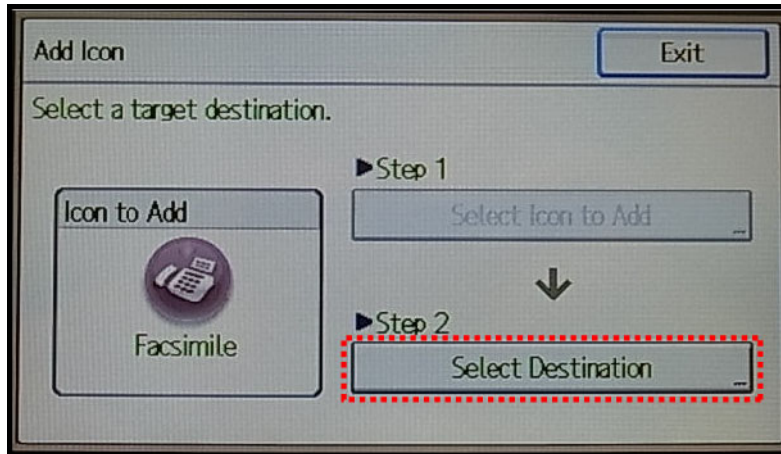
d1180064

5. Press [Application].



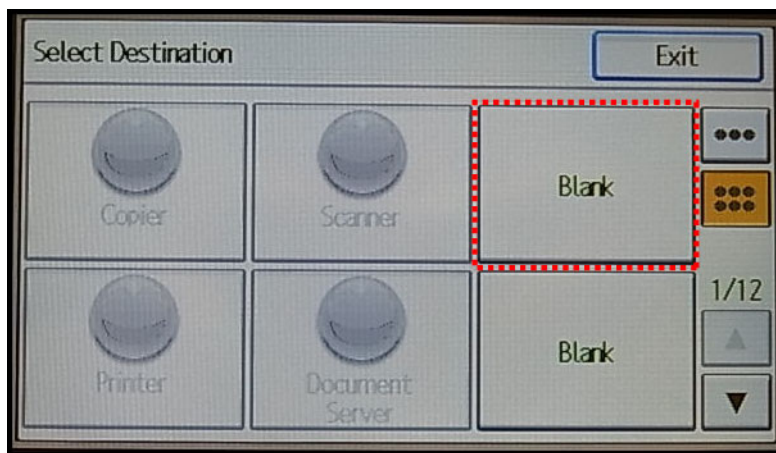
d1180065

6. Press [Facsimile].



d1180066

7. Press [Select Destination].



d1180067

8. Press a [Blank] to set a location for the fax icon.
9. Press [Exit] on the “Add Icon” screen to end the fax icon addition.
10. Press [Exit] on the “Edit Home” screen.
11. Press [Exit] on the “User Tools/Counter/Enquiry” screen.



d1180069

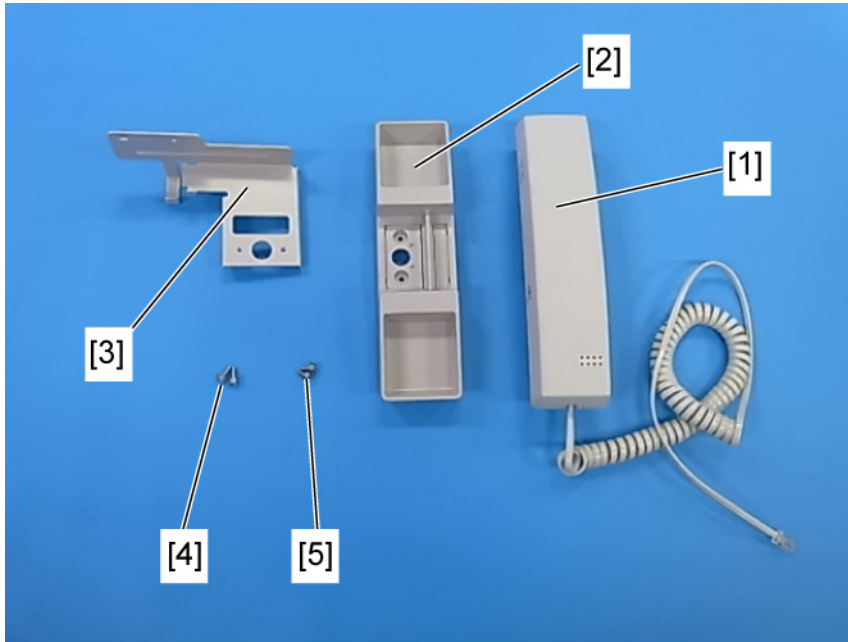
1. The fax icon is added to the home screen.

1.2 FAX UNIT OPTIONS

1.2.1 HANDSET TYPE C5502 (D645) (ONLY FOR NA)

Component Check

Installation of this unit requires the following components. Other components included in this kit are not used for installation on this machine.



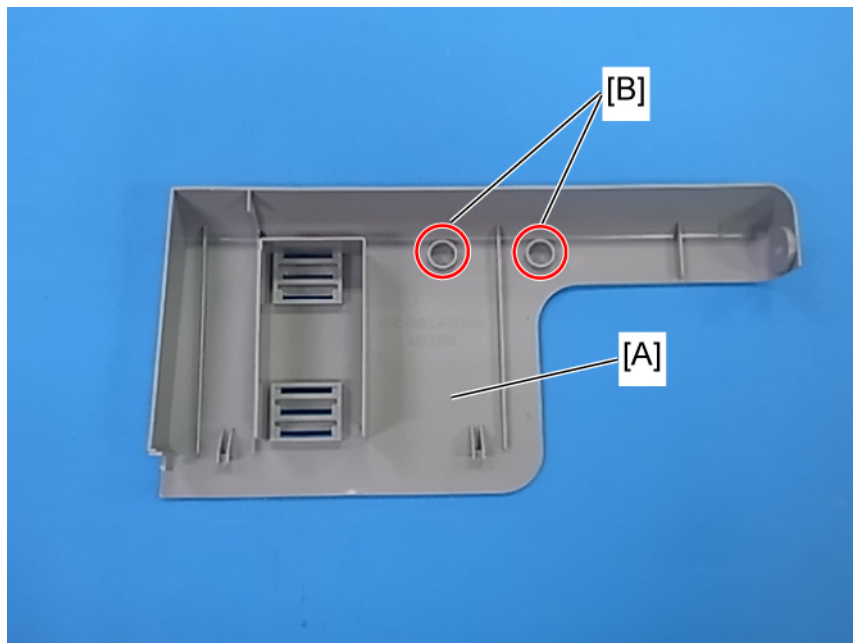
d6490014

No.	Description	Q'ty
1	Handset	1
2	Cradle	1
3	Bracket	1
4	Tapping screw	2
5	Flat head screw	2

Installation Procedure

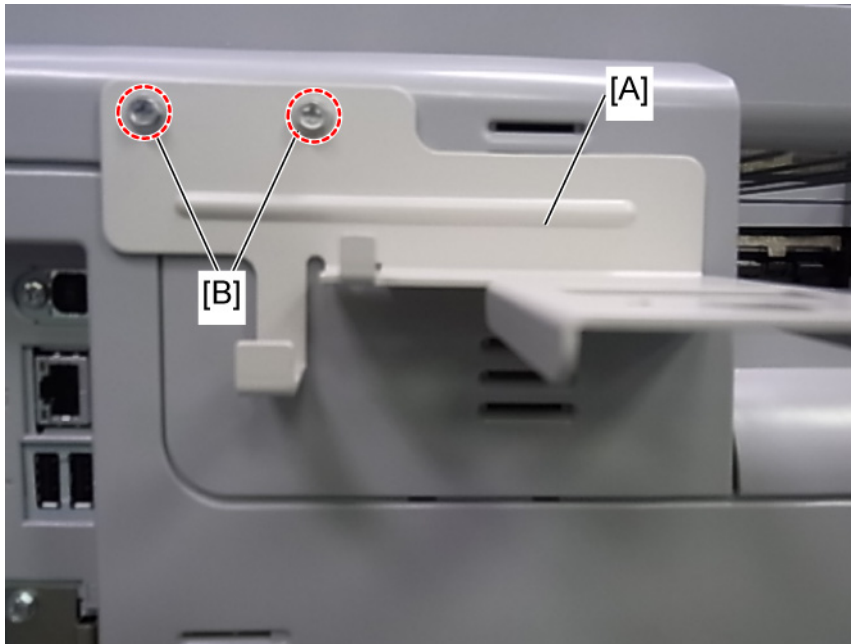
d6490015

1. Remove the scanner rear cover [A] (🔩 x 1).



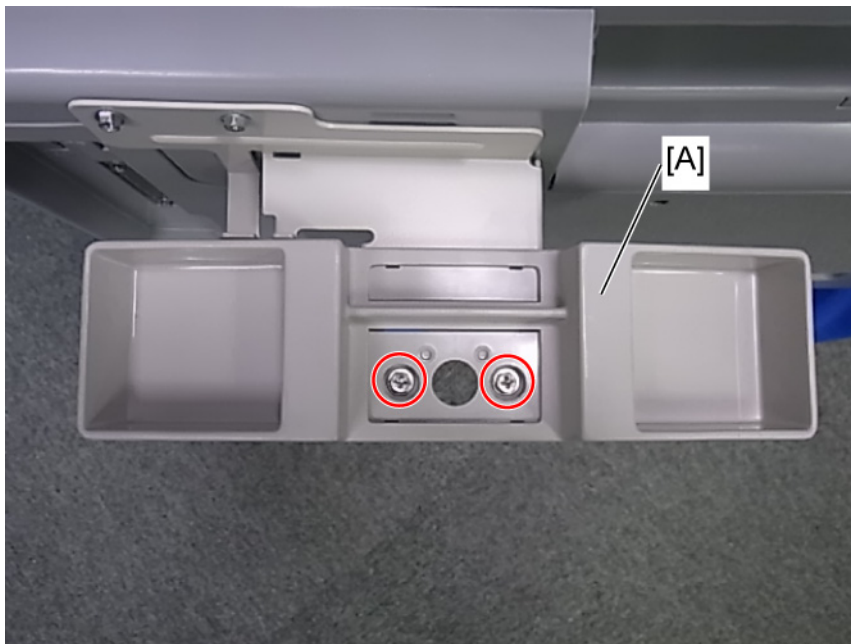
d6490016

2. Cut out the part [B] from the scanner rear cover [A] and make two screw holes to attach the bracket.
3. Attach the scanner rear cover [A] to the mainframe (🔩 x 1 🖱️ Step 1).



d6490017

4. Attach the handset bracket [A] to the scanner rear cover by securing two screws to the frame of the machine through the screw holes [B] (⚙️ (tapping) x 2).



d6490018

5. Attach the cradle [A] to the bracket (⚙️ (flat head) x 2).
6. Connect the handset cable connector to the "TEL" connector of the mainframe.

2. REPLACEMENT AND ADJUSTMENT

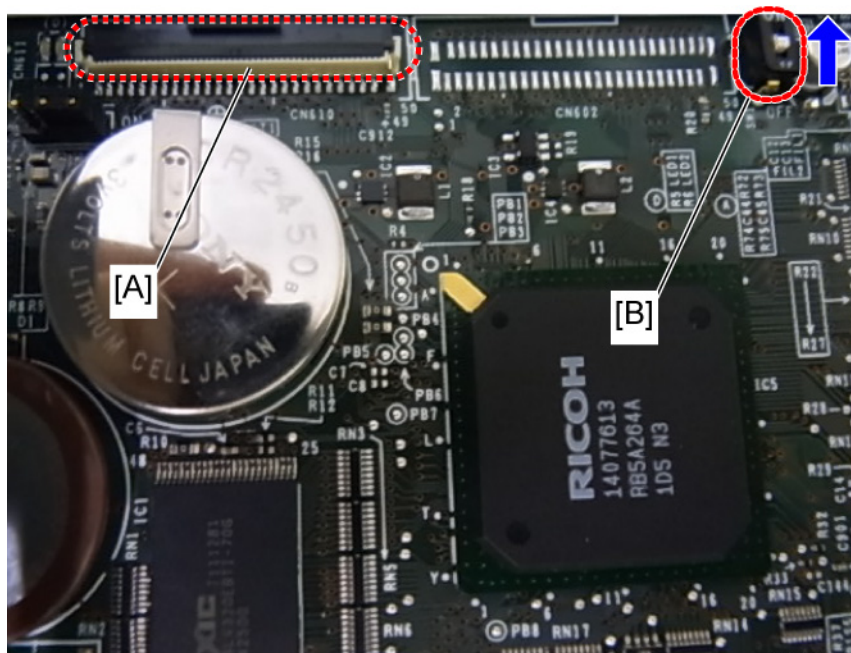
2.1 FCU

2.1.1 SRAM DATA TRANSFER PROCEDURE

When you replace the FCU board, transfer the SRAM data from the old FCU board to the new FCU board. Do the following procedure to back up the SRAM data.

↓ Note

- The following data can be transferred: TTI, RTI, CSI, Fax bit switch settings, RAM address settings, NCU parameter settings.
1. Replace the FCU board (☞ p.1)
 2. Keep the rear cover opened after the new FCU board installation for the SRAM transfer work.



d6490019

3. Connect the flat flexible cable to the connector [A] of the **new FCU board** (☞ x 1). This flexible cable is shipped with the new FCU board.

↓ Note

- The blue side of the flat flexible cable must face outward.
4. Move the Dip Switch [B] of the **old FCU board** from “OFF” to “ON”.
 5. Connect the flat flexible cable to the connector [A] of **the old FCU board**.
 6. Turn on the main power switch.
 7. SRAM data transmission starts. When the transmission is completed, you will hear a beeper sound.

 **Note**

- The beeper sound is the same volume as the speaker sound.
 - The beeper sounds even if the speaker sound is turned off.
 - If the beeper does not sound, turn the main power switch on and off repeatedly and do the transmission procedure 2 or 3 times.
 - If the beeper does not sound after turning the main switch on and off 3 times, you need to input the settings stored in SRAM memory manually.
8. When “Ready” appears on the operation panel display, turn off the main power switch, and then disconnect the flat flexible cable from the old FCU board.
 9. Disconnect the flat flexible cable from the new FCU board.
 10. Reassemble the machine (Attach the rear cover).

3. TROUBLESHOOTING

3.1 ERROR CODES

If an error code occurs, retry the communication. If the same problem occurs, try to fix the problem as suggested below. Note that some error codes appear only in the error code display and on the service report.

Code	Meaning	Suggested Cause/Action
0-00	DIS/NSF not detected within 40 s of Start being pressed	<ul style="list-style-type: none"> ▪ Check the line connection. ▪ The machine at the other end may be incompatible. ▪ Replace the FCU. ▪ Check for DIS/NSF with an oscilloscope. ▪ If the rx signal is weak, there may be a bad line.
0-01	DCN received unexpectedly	<ul style="list-style-type: none"> ▪ The other party is out of paper or has a jammed printer. ▪ The other party pressed Stop during communication.
0-03	Incompatible modem at the other end	The other terminal is incompatible.

Code	Meaning	Suggested Cause/Action
0-04	CFR or FTT not received after modem training	<ul style="list-style-type: none"> ▪ Check the line connection. ▪ Try changing the tx level and/or cable equalizer settings. ▪ Replace the FCU. ▪ The other terminal may be faulty; try sending to another machine. ▪ If the rx signal is weak or defective, there may be a bad line. <p>Cross reference Tx level - NCU Parameter 01 (PSTN) Cable equalizer - G3 Switch 07 (PSTN) Dedicated Tx parameters in Service Program Mode</p>
0-05	Modem training fails even G3 shifts down to 2400 bps.	<ul style="list-style-type: none"> ▪ Check the line connection. ▪ Try adjusting the tx level and/or cable equalizer. ▪ Replace the FCU. ▪ Check for line problems. <p>Cross reference See error code 0-04.</p>
0-06	The other terminal did not reply to DCS	<ul style="list-style-type: none"> ▪ Check the line connection. ▪ Try adjusting the tx level and/or cable equalizer settings. ▪ Replace the FCU. ▪ The other end may be defective or incompatible; try sending to another machine. ▪ Check for line problems. <p>Cross reference See error code 0-04.</p>

Code	Meaning	Suggested Cause/Action
0-07	No post-message response from the other end after a page was sent	<ul style="list-style-type: none"> ▪ Check the line connection. ▪ Replace the FCU. ▪ The other end may have jammed or run out of paper. ▪ The other end user may have disconnected the call. ▪ Check for a bad line. ▪ The other end may be defective; try sending to another machine.
0-08	The other end sent RTN or PIN after receiving a page, because there were too many errors	<ul style="list-style-type: none"> ▪ Check the line connection. ▪ Replace the FCU. ▪ The other end may have jammed, or run out of paper or memory space. ▪ Try adjusting the tx level and/or cable equalizer settings. ▪ The other end may have a defective modem/FCU; try sending to another machine. ▪ Check for line problems and noise. <p>Cross reference</p> <ul style="list-style-type: none"> ▪ Tx level - NCU Parameter 01 (PSTN) ▪ Cable equalizer - G3 Switch 07 (PSTN) ▪ Dedicated Tx parameters in Service Program Mode
0-14	Non-standard post message response code received	<ul style="list-style-type: none"> ▪ Incompatible or defective remote terminal; try sending to another machine. ▪ Noisy line: resend. ▪ Try adjusting the tx level and/or cable equalizer settings. ▪ Replace the FCU. <p>Cross reference See error code 0-08.</p>

Code	Meaning	Suggested Cause/Action
0-15	The other terminal is not capable of specific functions.	<p>The other terminal is not capable of accepting the following functions, or the other terminal's memory is full.</p> <ul style="list-style-type: none"> ▪ Confidential rx ▪ Transfer function ▪ SEP/SUB/PWD/SID
0-16	CFR or FTT not detected after modem training in confidential or transfer mode	<ul style="list-style-type: none"> ▪ Check the line connection. ▪ Replace the FCU. ▪ Try adjusting the tx level and/or cable equalizer settings. ▪ The other end may have disconnected, or it may be defective; try calling another machine. ▪ If the rx signal level is too low, there may be a line problem. <p>Cross reference See error code 0-08.</p>
0-17	Communication was interrupted by pressing the stop key	<ul style="list-style-type: none"> ▪ If the Stop key was not pressed and this error keeps occurring, replace the operation panel or the operation panel drive board.
0-20	Facsimile data not received within 6 s of retraining	<ul style="list-style-type: none"> ▪ Check the line connection. ▪ Replace the FCU. ▪ Check for line problems. ▪ Try calling another fax machine. ▪ Try adjusting the reconstruction time for the first line and/or rx cable equalizer setting. <p>Cross reference Reconstruction time - G3 Switch 0A, bit 6 Rx cable equalizer - G3 Switch 07 (PSTN)</p>

Code	Meaning	Suggested Cause/Action
0-21	EOL signal (end-of-line) from the other end not received within 5 s of the previous EOL signal	<ul style="list-style-type: none"> ▪ Check the connections between the FCU and line. ▪ Check for line noise or other line problems. ▪ Replace the FCU. ▪ The remote machine may be defective or may have disconnected. <p>Cross reference Maximum interval between EOLs and between ECM frames - G3 Bit Switch 0A, bit 4</p>
0-22	The signal from the other end was interrupted for more than the acceptable modem carrier drop time (default: 200 ms)	<ul style="list-style-type: none"> ▪ Check the line connection. ▪ Replace the FCU. ▪ Defective remote terminal. ▪ Check for line noise or other line problems. ▪ Try adjusting the acceptable modem carrier drop time. <p>Cross reference Acceptable modem carrier drop time - G3 Switch 0A, bits 0 and 1</p>
0-23	Too many errors during reception	<ul style="list-style-type: none"> ▪ Check the line connection. ▪ Replace the FCU. ▪ Defective remote terminal ▪ Check for line noise or other line problems. ▪ Try asking the other end to adjust their tx level. ▪ Try adjusting the rx cable equalizer setting and/or rx error criteria. <p>Cross reference Rx cable equalizer - G3 Switch 07 (PSTN) Rx error criteria - Communication Switch 02, bits 0 and 1</p>
0-30	The other terminal did not reply to NSS(A) in AI short protocol mode	<ul style="list-style-type: none"> ▪ Check the line connection. ▪ Try adjusting the tx level and/or cable equalizer settings. ▪ The other terminal may not be compatible. <p>Cross reference Dedicated tx parameters - Section 4</p>

Code	Meaning	Suggested Cause/Action
0-32	The other terminal sent a DCS, which contained functions that the receiving machine cannot handle.	<ul style="list-style-type: none"> ▪ Check the protocol dump list. ▪ Ask the other party to contact the manufacturer.
0-33	The data reception (not ECM) is not completed within 10 minutes.	<ul style="list-style-type: none"> ▪ Check the line connection. ▪ The other terminal may have a defective modem/FCU.
0-52	Polarity changed during communication	<ul style="list-style-type: none"> ▪ Check the line connection. Retry communication.
0-55	FCU does not detect the SG3.	<ul style="list-style-type: none"> ▪ FCU firmware or board defective. ▪ SG3 firmware or board defective.
0-56	The stored message data exceeds the capacity of the mailbox in the SG3.	<ul style="list-style-type: none"> ▪ SG3 firmware or board defective.
0-70	The communication mode specified in CM/JM was not available (V.8 calling and called terminal)	<ul style="list-style-type: none"> ▪ The other terminal did not have a compatible communication mode (e.g., the other terminal was a V.34 data modem and not a fax modem.) ▪ A polling tx file was not ready at the other terminal when polling rx was initiated from the calling terminal.
0-74	The calling terminal fell back to T.30 mode, because it could not detect ANSam after sending CI.	<ul style="list-style-type: none"> ▪ The calling terminal could not detect ANSam due to noise, etc. ▪ ANSam was too short to detect. ▪ Check the line connection and condition. ▪ Try making a call to another V.8/V.34 fax.
0-75	The called terminal fell back to T.30 mode, because it could not detect a CM in response to ANSam (ANSam timeout).	<ul style="list-style-type: none"> ▪ The terminal could not detect ANSam. ▪ Check the line connection and condition. ▪ Try receiving a call from another V.8/V.34 fax.

Code	Meaning	Suggested Cause/Action
0-76	The calling terminal fell back to T.30 mode, because it could not detect a JM in response to CM (CM timeout).	<ul style="list-style-type: none"> ▪ The called terminal could not detect a CM due to noise, etc. ▪ Check the line connection and condition. ▪ Try making a call to another V.8/V.34 fax.
0-77	The called terminal fell back to T.30 mode, because it could not detect a CJ in response to JM (JM timeout).	<ul style="list-style-type: none"> ▪ The calling terminal could not detect a JM due to noise, etc. ▪ A network that has narrow bandwidth cannot pass JM to the other end. ▪ Check the line connection and condition. ▪ Try receiving a call from another V.8/V.34 fax.
0-79	The called terminal detected CI while waiting for a V.21 signal.	<ul style="list-style-type: none"> ▪ Check for line noise or other line problems. ▪ If this error occurs, the called terminal falls back to T.30 mode.
0-80	The line was disconnected due to a timeout in V.34 phase 2 – line probing.	<ul style="list-style-type: none"> ▪ The guard timer expired while starting these phases. Serious noise, narrow bandwidth, or low signal level can cause these errors. <p>If these errors happen at the transmitting terminal:</p> <ul style="list-style-type: none"> ▪ Try making a call at a later time. ▪ Try using V.17 or a slower modem using dedicated tx parameters. <p>If these errors happen at the receiving terminal:</p> <ul style="list-style-type: none"> ▪ Try increasing the tx level. ▪ Try adjusting the tx cable equalizer setting. ▪ Try adjusting the rx cable equalizer setting. ▪ Try increasing the tx level. ▪ Try using V.17 or a slower modem if the same error is frequent when receiving from multiple senders.
0-81	The line was disconnected due to a timeout in V.34 phase 3 – equalizer training.	
0-82	The line was disconnected due to a timeout in the V.34 phase 4 – control channel start-up.	
0-83	The line was disconnected due to a timeout in the V.34 control channel restart sequence.	

Code	Meaning	Suggested Cause/Action
0-84	The line was disconnected due to abnormal signaling in V.34 phase 4 – control channel start-up.	<ul style="list-style-type: none"> ▪ The signal did not stop within 10 s. ▪ Turn off the machine, then turn it back on. ▪ If the same error is frequent, replace the FCU.
0-85	The line was disconnected due to abnormal signaling in V.34 control channel restart.	<ul style="list-style-type: none"> ▪ The signal did not stop within 10 s. ▪ Turn off the machine, then turn it back on. ▪ If the same error is frequent, replace the FCU.
0-86	The line was disconnected because the other terminal requested a data rate using MPH that was not available in the currently selected symbol rate.	<ul style="list-style-type: none"> ▪ The other terminal was incompatible. ▪ Ask the other party to contact the manufacturer.
0-87	The control channel started after an unsuccessful primary channel.	<ul style="list-style-type: none"> ▪ The receiving terminal restarted the control channel because data reception in the primary channel was not successful. ▪ This does not result in an error communication.
0-88	The line was disconnected because PPR was transmitted/received 9 (default) times within the same ECM frame.	<ul style="list-style-type: none"> ▪ Try using a lower data rate at the start. ▪ Try adjusting the cable equalizer setting.
2-11	Only one V.21 connection flag was received	<ul style="list-style-type: none"> ▪ Replace the FCU.
2-12	Modem clock irregularity	<ul style="list-style-type: none"> ▪ Replace the FCU.
2-13	Modem initialization error	<ul style="list-style-type: none"> ▪ Turn off the machine, then turn it back on. ▪ Update the modem ROM. ▪ Replace the FCU.

Code	Meaning	Suggested Cause/Action
2-22	Counter overflow error of JBIG chip	<ul style="list-style-type: none"> If this error occurs frequently, change the settings for resolution, paper size and compression type.
2-23	JBIG compression or reconstruction error	<ul style="list-style-type: none"> Turn off the machine, then turn it back on.
2-24	JBIG ASIC error	<ul style="list-style-type: none"> Turn off the machine, then turn it back on.
2-25	JBIG data reconstruction error (BIH error)	<ul style="list-style-type: none"> JBIG data error Check the sender's JBIG function. Update the MBU ROM.
2-26	JBIG data reconstruction error (Float marker error)	
2-27	JBIG data reconstruction error (End marker error)	
2-28	JBIG data reconstruction error (Timeout)	
2-29	JBIG trailing edge maker error	<ul style="list-style-type: none"> FCU defective Check the destination device.
2-50	The machine resets itself for a fatal FCU system error	<ul style="list-style-type: none"> If this is frequent, update the ROM, or replace the FCU.
2-51	The machine resets itself because of a fatal communication error	<ul style="list-style-type: none"> If this is frequent, update the ROM, or replace the FCU.
2-53	Snd msg() in the manual task is an error because the mailbox for the operation task is full.	<ul style="list-style-type: none"> The user did the same operation many times, and this gave too much load to the machine.
4-01	Line current was cut	<ul style="list-style-type: none"> Check the line connector. Check for line problems. Replace the FCU.

Error Codes

Code	Meaning	Suggested Cause/Action
4-10	Communication failed because of an ID Code mismatch (Closed Network) or Tel. No./CSI mismatch (Protection against Wrong Connections)	<ul style="list-style-type: none"> ▪ Get the ID Codes the same and/or the CSIs programmed correctly, then resend. ▪ The machine at the other end may be defective.
5-00	Data reconstruction not possible	<ul style="list-style-type: none"> ▪ Replace the FCU
5-10	DCR timer expired	<ul style="list-style-type: none"> ▪ Replace the FCU.
5-20	Storage impossible because of a lack of memory	<ul style="list-style-type: none"> ▪ Temporary memory shortage. ▪ Test the SAF memory.
5-21	Memory overflow	
5-23	Print data error when printing a substitute rx or confidential rx message	<ul style="list-style-type: none"> ▪ Test the SAF memory. ▪ Ask the other end to resend the message.
5-25	SAF file access error	<ul style="list-style-type: none"> ▪ Replace an SD card or HDD. ▪ Replace the FCU.
6-00	G3 ECM - T1 time out during reception of facsimile data	<ul style="list-style-type: none"> ▪ Try adjusting the rx cable equalizer. ▪ Replace the FCU.
6-01	G3 ECM - no V.21 signal was received	
6-02	G3 ECM - EOR was received	
6-04	G3 ECM - RTC not detected	<ul style="list-style-type: none"> ▪ Check the line connection. ▪ Check for a bad line or defective remote terminal. ▪ Replace the FCU.

Code	Meaning	Suggested Cause/Action
6-05	G3 ECM - facsimile data frame not received within 18 s of CFR, but there was no line fail	<ul style="list-style-type: none"> ▪ Check the line connection. ▪ Check for a bad line or defective remote terminal. ▪ Replace the FCU. ▪ Try adjusting the rx cable equalizer <p>Cross reference</p> <ul style="list-style-type: none"> ▪ Rx cable equalizer - G3 Switch 07 (PSTN)
6-06	G3 ECM - coding/decoding error	<ul style="list-style-type: none"> ▪ Defective FCU. ▪ The other terminal may be defective.
6-08	G3 ECM - PIP/PIN received in reply to PPS.NULL	<ul style="list-style-type: none"> ▪ The other end pressed Stop during communication. ▪ The other terminal may be defective.
6-09	G3 ECM - ERR received	<ul style="list-style-type: none"> ▪ Check for a noisy line. ▪ Adjust the tx levels of the communicating machines. ▪ See code 6-05.
6-10	G3 ECM - error frames still received at the other end after all communication attempts at 2400 bps	<ul style="list-style-type: none"> ▪ Check for line noise. ▪ Adjust the tx level (use NCU parameter 01 or the dedicated tx parameter for that address). ▪ Check the line connection. ▪ Defective remote terminal.
6-21	V.21 flag detected during high speed modem communication	<ul style="list-style-type: none"> ▪ The other terminal may be defective or incompatible.
6-22	The machine resets the sequence because of an abnormal handshake in the V.34 control channel	<ul style="list-style-type: none"> ▪ Check for line noise. ▪ If the same error occurs frequently, replace the FCU. ▪ Defective remote terminal.
6-99	V.21 signal not stopped within 6 s	<ul style="list-style-type: none"> ▪ Replace the FCU.

Code	Meaning	Suggested Cause/Action
13-17	SIP user name registration error	<ul style="list-style-type: none"> ▪ Double registration of the SIP user name. ▪ Capacity for user-name registration in the SIP server is not sufficient.
13-18	SIP server access error	<ul style="list-style-type: none"> ▪ Incorrect initial setting for the SIP server. ▪ Defective SIP server.
13-24	SIP authentication error	<ul style="list-style-type: none"> ▪ Registered password in the device does not match the password in the SIP server.
13-25	Network I/F setting error	<ul style="list-style-type: none"> ▪ IPV4 is not active in the active protocol setting. ▪ IP address of the device is not registered.
13-26	Network I/F setting error at power on	<ul style="list-style-type: none"> ▪ Active protocol setting does not match the I/F setting for SIP server. ▪ IP address of the device is not registered.
13-27	IP address setting error	<ul style="list-style-type: none"> ▪ IP address of the device is not registered.
14-00	SMTP Send Error	<ul style="list-style-type: none"> ▪ Error occurred during sending to the SMTP server. Occurs for any error other than 14-01 to 16. For example, the mail address of the system administrator is not registered.
14-01	SMTP Connection Failed	<ul style="list-style-type: none"> ▪ Failed to connect to the SMTP server (timeout) because the server could not be found. ▪ The PC is not ready to transfer files. ▪ SMTP server not functioning correctly. ▪ The DNS IP address is not registered. ▪ Network not operating correctly. ▪ Destination folder selection not correct.

Code	Meaning	Suggested Cause/Action
14-02	No Service by SMTP Service (421)	<ul style="list-style-type: none"> ▪ SMTP server operating incorrectly, or the destination for direct SMTP sending is not correct. ▪ Contact the system administrator and check that the SMTP server has the correct settings and operates correctly. ▪ Contact the system administrator for direct SMTP sending and check the sending destination.
14-03	Access to SMTP Server Denied (450)	<ul style="list-style-type: none"> ▪ Failed to access the SMTP server because the access is denied. ▪ SMTP server operating incorrectly. Contact the system administrator to determine if there is a problem with the SMTP server and to check that the SMTP server settings are correct. ▪ Folder send destination is incorrect. Contact the system administrator to determine that the SMTP server settings and path to the server are correct. ▪ Device settings incorrect. Confirm that the user name and password settings are correct. ▪ Direct SMTP destination incorrect. Contact the system administrator to determine if there is a problem at the destination at that the settings at the destination are correct.
14-04	Access to SMTP Server Denied (550)	<ul style="list-style-type: none"> ▪ SMTP server operating incorrectly ▪ Direct SMTP sending not operating correctly

Code	Meaning	Suggested Cause/Action
14-05	SMTP Server HDD Full (452)	<ul style="list-style-type: none"> ▪ Failed to access the SMTP server because the HDD on the server is full. ▪ Insufficient free space on the HDD of the SMTP server. Contact the system administrator and check the amount of space remaining on the SMTP server HDD. ▪ Insufficient free space on the HDD where the destination folder is located. Contact the system administrator and check the amount of space remaining on the HDD where the target folder is located. ▪ Insufficient free space on the HDD at the target destination for SMTP direct sending. Contact the system administrator and check the amount of space remaining on the target HDD.
14-06	User Not Found on SMTP Server (551)	<ul style="list-style-type: none"> ▪ The designated user does not exist. ▪ The designated user does not exist on the SMTP server. ▪ The designated address is not for use with direct SMTP sending.
14-07	Data Send to SMTP Server Failed (4XX)	<ul style="list-style-type: none"> ▪ Failed to access the SMTP server because the transmission failed. ▪ PC not operating correctly. ▪ SMTP server operating incorrectly ▪ Network not operating correctly. ▪ Destination folder setting incorrect. ▪ Direct SMTP sending not operating correctly.
14-08	Data Send to SMTP Server Failed (5XX)	<ul style="list-style-type: none"> ▪ Failed to access the SMTP server because the transmission failed. ▪ SMTP server operating incorrectly ▪ Destination folder setting incorrect. ▪ Direct SMTP sending not operating correctly. ▪ Software application error.

Code	Meaning	Suggested Cause/Action
14-09	Authorization Failed for Sending to SMTP Server	<ul style="list-style-type: none"> POP-Before-SMTP or SMTP authorization failed. Incorrect setting for file transfer
14-10	Addresses Exceeded	<ul style="list-style-type: none"> Number of broadcast addresses exceeded the limit for the SMTP server.
14-11	Buffer Full	<ul style="list-style-type: none"> The send buffer is full so the transmission could not be completed. Buffer is full due to using Scan-to-Email while the buffer is being used send mail at the same time.
14-12	Data Size Too Large	<ul style="list-style-type: none"> Transmission was cancelled because the detected size of the file was too large.
14-13	Send Cancelled	<ul style="list-style-type: none"> Processing is interrupted because the user pressed Stop.
14-14	Security Locked File Error	<ul style="list-style-type: none"> Update the software because of the defective software.
14-15	Mail Data Error	<ul style="list-style-type: none"> The transmitting a mail is interrupted via DCS due to the incorrect data. Update the software because of the defective software.
14-16	Maximum Division Number Error	<ul style="list-style-type: none"> When a mail is divided for the mail transmission and the division number of a mail are more than the specified number, the mail transmission is interrupted. Update the software because of the defective software.
14-17	Incorrect Ticket	<ul style="list-style-type: none"> Update the software because of the defective software.
14-18	Access to MCS File Error	<ul style="list-style-type: none"> The access to MCS file is denied due to the no permission of access. Update the software because of the defective software.

Code	Meaning	Suggested Cause/Action
14-20	SMTP Authentication Error	<ul style="list-style-type: none"> Make sure that the administrator's e-mail address is the same as the SMTP authentication address or POP before SMTP address.
14-21	Transmission error of S/MIME	<ul style="list-style-type: none"> Register the correct user certificate and device certificate.
14-30	MCS File Creation Failed	<p>Failed to create the MCS file because:</p> <ul style="list-style-type: none"> The number of files created with other applications on the Document Server has exceeded the limit. HDD is full or not operating correctly. Software error.
14-31	UFS File Creation Failed	<p>UFS file could not be created:</p> <ul style="list-style-type: none"> Not enough space in UFS area to handle both Scan-to-Email and IFAX transmission. HDD full or not operating correctly. Software error.
14-32	Cancelled the Mail Due to Error Detected by NFAX	<ul style="list-style-type: none"> Error detected with NFAX and send was cancelled due to a software error.
14-33	No Mail Address For the Machine	<ul style="list-style-type: none"> Neither the mail address of the machine nor the mail address of the network administrator is registered.
14-34	Address designated in the domain for SMTP sending does not exist	<ul style="list-style-type: none"> Operational error in normal mail sending or direct SMTP sending. Check the address selected in the address book for SMTP sending. Check the domain selection.
14-50	Mail Job Task Error	<p>Due to an FCU mail job task error, the send was cancelled:</p> <ul style="list-style-type: none"> Address book was being edited during creation of the notification mail. Software error.

Code	Meaning	Suggested Cause/Action
14-51	UCS Destination Download Error	<p>Not even one return notification can be downloaded:</p> <ul style="list-style-type: none"> ▪ The address book was being edited. ▪ The number for the specified destination does not exist (it was deleted or edited after the job was created).
14-60	Send Cancel Failed	<ul style="list-style-type: none"> ▪ The cancel operation by the user failed to cancel the send operation.
14-61	Notification Mail Send Failed for All Destinations	<ul style="list-style-type: none"> ▪ All addresses for return notification mail failed.
14-62	Transmission Error due to the existence of zero line page	<ul style="list-style-type: none"> ▪ When the 0 line page exists in received pages with G3 communication, the transmission is interrupted.
15-01	POP3/IMAP4 Server Not Registered	<ul style="list-style-type: none"> ▪ At startup, the system detected that the IP address of the POP3/IMAP4 server has not been registered in the machine.
15-02	POP3/IMAP4 Mail Account Information Not Registered	<ul style="list-style-type: none"> ▪ The POP3/IMAP4 mail account has not been registered.
15-03	Mail Address Not Registered	<ul style="list-style-type: none"> ▪ The mail address has not been registered.
15-10	DCS Mail Receive Error	<ul style="list-style-type: none"> ▪ Error other than 15-11 to 15-18.
15-11	Connection Error	<p>The DNS or POP3/IMAP4 server could not be found:</p> <ul style="list-style-type: none"> ▪ The IP address for DNS or POP3/IMAP4 server is not stored in the machine. ▪ The DNS IP address is not registered. ▪ Network not operating correctly.

Code	Meaning	Suggested Cause/Action
15-12	Authorization Error	POP3/IMAP4 send authorization failed: <ul style="list-style-type: none"> ▪ Incorrect IFAX user name or password. ▪ Access was attempted by another device, such as the PC. ▪ POP3/IMAP4 settings incorrect.
15-13	Receive Buffer Full	<ul style="list-style-type: none"> ▪ Occurs only during manual reception. Transmission cannot be received due to insufficient buffer space. The buffer is being used for mail send or Scan-to-Email.
15-14	Mail Header Format Error	<ul style="list-style-type: none"> ▪ The mail header is not standard format. For example, the Date line description is incorrect.
15-15	Mail Divide Error	<ul style="list-style-type: none"> ▪ The e-mail is not in standard format. There is no boundary between parts of the e-mail, including the header.
15-16	Mail Size Receive Error	<ul style="list-style-type: none"> ▪ The mail cannot be received because it is too large.
15-17	Receive Timeout	<ul style="list-style-type: none"> ▪ May occur during manual receiving only because the network is not operating correctly.
15-18	Incomplete Mail Received	<ul style="list-style-type: none"> ▪ Only one portion of the mail was received.
15-31	Final Destination for Transfer Request Reception Format Error	<ul style="list-style-type: none"> ▪ The format of the final destination for the transfer request was incorrect.
15-39	Send/Delivery Destination Error	<p>The transmission cannot be delivered to the final destination:</p> <ul style="list-style-type: none"> ▪ Destination file format is incorrect. ▪ Could not create the destination for the file transmission.
15-41	SMTP Receive Error	<ul style="list-style-type: none"> ▪ Reception rejected because the transaction exceeded the limit for the "Auth. E-mail RX" setting.

Code	Meaning	Suggested Cause/Action
15-42	Off Ramp Gateway Error	<ul style="list-style-type: none"> The delivery destination address was specified with Off Ramp Gateway OFF.
15-43	Address Format Error	<ul style="list-style-type: none"> Format error in the address of the Off Ramp Gateway.
15-44	Addresses Over	<ul style="list-style-type: none"> The number of addresses for the Off Ramp Gateway exceeded the limit of 30.
15-61	Attachment File Format Error	<ul style="list-style-type: none"> The attached file is not TIFF format.
15-62	TIFF File Compatibility Error	<p>Could not receive transmission due to:</p> <ul style="list-style-type: none"> Resolution error Image of resolution greater than 200 dpi without extended memory. Resolution is not supported. Page size error The page size was larger than A3. Compression error File was compressed with other than MH, MR, or MMR.
15-63	TIFF Parameter Error	<p>The TIFF file sent as the attachment could not be received because the TIFF header is incorrect:</p> <ul style="list-style-type: none"> The TIFF file attachment is a type not supported. The TIFF file attachment is corrupted. Software error.
15-64	TIFF Decompression Error	<p>The file received as an attachment caused the TIFF decompression error:</p> <ul style="list-style-type: none"> The TIFF format of the attachment is corrupted. Software error.
15-71	Not Binary Image Data	<ul style="list-style-type: none"> The file could not be received because the attachment was not binary image data.

Code	Meaning	Suggested Cause/Action
15-73	MDN Status Error	<ul style="list-style-type: none"> Could not find the Disposition line in the header of the Return Receipt, or there is a problem with the firmware.
15-74	MDN Message ID Error	<ul style="list-style-type: none"> Could not find the Original Message ID line in the header of the Return Receipt, or there is a problem with the firmware.
15-80	Mail Job Task Read Error	<ul style="list-style-type: none"> Could not receive the transmission because the destination buffer is full and the destination could not be created (this error may occur when receiving a transfer request or a request for notification of reception).
15-81	Repeated Destination Registration Error	<ul style="list-style-type: none"> Could not repeat receive the transmission because the destination buffer is full and the destination could not be created (this error may occur when receiving a transfer request or a request for notification of reception).
15-91	Send Registration Error	<p>Could not receive the file for transfer to the final destination:</p> <ul style="list-style-type: none"> The format of the final destination or the transfer destination is incorrect. Destinations are full so the final and transfer destinations could not be created.
15-92	Memory Overflow	<ul style="list-style-type: none"> Transmission could not be received because memory overflowed during the transaction.
15-93	Memory Access Error	<ul style="list-style-type: none"> Transaction could not complete due to a malfunction of SAF memory.
15-94	Incorrect ID Code	<ul style="list-style-type: none"> The machine rejected an incoming e-mail for transfer request, because the ID code in the incoming e-mail did not match the ID code registered in the machine.

Code	Meaning	Suggested Cause/Action
15-95	Transfer Station Function	<ul style="list-style-type: none"> The machine rejected an incoming e-mail for transfer because the transfer function was unavailable.
22-00	Original length exceeded the maximum scan length	<ul style="list-style-type: none"> Divide the original into more than one page. Check the resolution used for scanning. Lower the scan resolution if possible. Add optional page memory.
22-01	Memory overflow while receiving	<ul style="list-style-type: none"> Wait for the files in the queue to be sent. Delete unnecessary files from memory. Transfer the substitute reception files to an another fax machine, if the machine's printer is busy or out of order. Add an optional SAF memory card or hard disk.
22-02	Tx or rx job stalled due to line disconnection at the other end	<ul style="list-style-type: none"> The job started normally but did not finish normally; data may or may not have been received fully. Restart the machine.
22-04	The machine cannot store received data in the SAF	<ul style="list-style-type: none"> Update the ROM Replace the FCU.
22-05	No G3 parameter confirmation answer	<ul style="list-style-type: none"> Defective FCU board or firmware.
23-00	Data read timeout during construction	<ul style="list-style-type: none"> Restart the machine. Replace the FCU.
25-00	The machine software resets itself after a fatal transmission error occurred	<ul style="list-style-type: none"> Update the ROM Replace the FCU.
F0-xx	V.34 modem error	<ul style="list-style-type: none"> Replace the FCU.

Error Codes

Code	Meaning	Suggested Cause/Action
F6-xx	SG3 modem error	<ul style="list-style-type: none">▪ Update the SG3 modem ROM.▪ Replace the SG3 board.▪ Check for line noise or other line problems.▪ Try communicating another V.8/V.34 fax.

3.2 IFAX TROUBLESHOOTING

Use the following procedures to determine whether the machine or another part of the network is causing the problem.

Communication Route	Item	Action [Remarks]
General LAN	1. Connection with the LAN	<ul style="list-style-type: none"> ▪ Check that the LAN cable is connected to the machine. ▪ Check that the LEDs on the hub are lit.
	2. LAN activity	Check that other devices connected to the LAN can communicate through the LAN.
Between IFAX and PC	1. Network settings on the PC	<ul style="list-style-type: none"> ▪ Check the network settings on the PC. [Is the IP address registered in the TCP/IP properties in the network setup correct? Check the IP address with the administrator of the network.]
	2. Check that PC can connect with the machine	<ul style="list-style-type: none"> ▪ Use the "ping" command on the PC to contact the machine. [At the MS-DOS prompt, type ping then the IP address of the machine, then press Enter.]
	3. LAN settings in the machine	<ul style="list-style-type: none"> ▪ Check the LAN parameters ▪ Check if there is an IP address conflict with other PCs. [Use the "Network" function in the User Tools. If there is an IP address conflict, inform the administrator.]
Between machine and e-mail server	1. LAN settings in the machine	<ul style="list-style-type: none"> ▪ Check the LAN parameters ▪ Check if there is an IP address conflict with other PCs. [Use the "Network" function in the User Tools. If there is an IP address conflict, inform the administrator.]

Communication Route	Item	Action [Remarks]
	2. E-mail account on the server	<ul style="list-style-type: none"> ▪ Make sure that the machine can log into the e-mail server. ▪ Check that the account and password stored in the server are the same as in the machine. <p>[Ask the administrator to check.]</p>
	3. E-mail server	<ul style="list-style-type: none"> ▪ Make sure that the client devices which have an account in the server can send/receive e-mail. <p>[Ask the administrator to check. Send a test e-mail with the machine's own number as the destination. The machine receives the returned e-mail if the communication is performed successfully.]</p>
Between e-mail server and internet	1. E-mail account on the Server	<ul style="list-style-type: none"> ▪ Make sure that the PC can log into the e-mail server. ▪ Check that the account and password stored in the server are the same as in the machine. <p>[Ask the administrator to check.]</p>
	2. E-mail server	<ul style="list-style-type: none"> ▪ Make sure that the client devices which have an account in the server can send/receive e-mail. <p>[Ask the administrator to check. Send a test e-mail with the machine's own number as the destination. The machine receives the returned e-mail if the communication is performed successfully.]</p>
	3. Destination e-mail address	<ul style="list-style-type: none"> ▪ Make sure that the e-mail address is actually used. ▪ Check that the e-mail address contains no incorrect characters such as spaces.

Communication Route	Item	Action [Remarks]
	4. Router settings	<ul style="list-style-type: none"> ▪ Use the "ping" command to contact the router. ▪ Check that other devices connected to the router can send data over the router. [Ask the administrator of the server to check.]
	5. Error message by e-mail from the network of the destination.	<ul style="list-style-type: none"> ▪ Check whether e-mail can be sent to another address on the same network, using the application e-mail software. ▪ Check the error e-mail message. [Inform the administrator of the LAN.]

3.3 IP-FAX TROUBLESHOOTING

3.3.1 IP-FAX TRANSMISSION

Cannot send by IP Address/Host Name

Check Point		Action
1	LAN cable connected?	Check the LAN cable connection.
2	Specified IP address/host name correct?	Check the IP address/host name.
3	Firewall/NAT is installed?	Cannot breach the firewall. Send by using another method (Fax, Internet Fax)
4	Transmission sent manually?	Manual sending not supported.
5	IP address of local machine registered?	Register the IP address.
6	Remote terminal port number setting other than 1720 (When using H.323) or 5060 (when using SIP)?	Send by specifying the port number.
7	Specified port number correct?	Confirm the port number of the remote fax.
8	DNS server registered when host name specified?	Contact the network administrator.
9	Remote fax a T.38 terminal?	Check whether the remote fax is a T38 terminal.
10	Remote fax switched off or busy?	Check that the remote fax is switched on.

11	Network bandwidth too narrow?	Request the network administrator to increase the bandwidth.
		Raise the delay level. IPFAX SW 01 Bit 0 to 3
		IP-Fax bandwidth is the same as the DCS speed. Set IP-Fax SW00 Bit 6 to 1.
12	Remote fax cancelled transmission?	Check whether the remote fax cancelled the transmission.

Cannot send via VoIP Gateway

Check Point		Action
1	LAN cable connected?	Check the LAN cable connection.
2	VoIP Gateway T.38 standard?	Contact the network administrator.
3	VoIP Gateway installed correctly?	Contact the network administrator.
4	VoIP Gateway power switched on?	Contact the network administrator.
5	Is the IP address/host name of the specified Gateway correct?	Check the IP address/host name.
6	Number of the specified fax correct?	Check the remote fax number.
7	Firewall/NAT is installed?	Cannot breach the firewall. Send by using another method (Fax, Internet Fax)
8	Transmission sent manually?	Manual sending not supported.
9	IP address of local fax registered?	Register the IP address.
10	DNS registered when host name specified?	Contact the network administrator.
11	Remote fax a G3 fax?	Check that the remote fax is a G3 fax.

12	G3 fax is connected to VoIP gateway?	Check that G3 fax is connected.
13	Remote G3 fax turned on?	Check that G3 fax is switched on.
14	Network bandwidth too narrow?	Request the network administrator to increase the bandwidth.
		Raise the network delay level. IPFAX SW 01 Bit 0 to 3
		IP-Fax bandwidth is the same as the DCS speed. Set IP-Fax SW00 Bit 6 to 1.

Cannot send by Alias Fax number.

Check Point		Action
1	LAN cable connected?	Check the LAN cable connection.
2	Number of specified Alias fax correct?	Confirm the Alias of the remote fax. Error Code: 13-14
3	Firewall/NAT installed?	Cannot breach the firewall. Send by using another method (Fax, Internet Fax)
4	Transmission sent manually?	Manual sending not supported.
5	Gatekeeper/SIP server installed correctly?	Contact the network administrator.
6	Gatekeeper/SIP server power switched on?	Contact the network administrator.
7	IP address/host name of Gatekeeper/SIP server correct?	Check the IP address/host name.
8	DNS server registered when Gatekeeper/SIP host name specified?	Contact the network administrator.

9	Enable H.323 SW is set to on?	Check the settings. See User Parameter SW 34 Bit 0/SW 34 Bit 1
10	IP address of local fax registered?	Register the IP address of the local fax.
11	Alias number of local fax registered?	Register the Alias number of the local fax.
12	Remote fax registered in Gatekeeper?	Contact the network administrator.
13	Remote fax a T.38 terminal?	Check whether the remote fax is a T38 terminal.
14	Remote fax switched off or busy?	Contact the network administrator.
15	Network bandwidth too narrow?	Request the system administrator to increase the bandwidth.
		Raise the delay level. IPFAX SW 01 Bit 0 to 3
		Lower the modem transmission baud rate. IPFAX SW 05
16	Remote fax cancelled transmission?	Check whether the remote fax cancelled the transmission.

3.3.2 IP-FAX RECEPTION





Cannot receive via IP Address/Host Name.

Check Point		Action
1	LAN cable connected?	Check the LAN cable connection.
2	Firewall/NAT is installed?	Cannot breach the firewall. Send by using another method (Fax, Internet Fax)
3	IP address of local fax registered?	Register the IP address.
4	Port number specified at remote sender fax (if required)?	Request the sender to specify the port number.
5	Specified port number correct (if required)?	Request the sender to check the port number.
6	DNS server registered when host name specified on sender side?	<p>Contact the network administrator.</p> <p>Note</p> <ul style="list-style-type: none"> The sender machine displays this error code if the sender fax is a Ricoh model.
7	Network bandwidth too narrow?	Request the system administrator to increase the bandwidth.
		<p>Lower the start modem reception baud rate on the receiving side.</p> <p>IPFAX SW06</p>
8	Remote fax cancelled transmission?	Check whether the remote fax cancelled the transmission.

Cannot receive by VoIP Gateway.

Check Point		Action
1	LAN cable connected?	Check the LAN cable connection.
2	Firewall/NAT is installed?	Cannot breach the firewall. Request the remote fax to send by using another method (Fax, Internet Fax)
3	VoIP Gateway installed correctly?	Contact the network administrator.
4	VoIP Gateway power switched on?	Contact the network administrator.
5	IP address/host name of specified VoIP Gateway correct on sender's side?	Request the remote fax to check the IP address/host name.
6	DNS server registered when host name specified on sender side?	Contact the network administrator.
7	Network bandwidth too narrow?	Request the network administrator to increase the bandwidth.
8	G3 fax connected?	Check that G3 fax is connected.
9	G3 fax power switched on?	Check that G3 fax is switched on.

Cannot receive by Alias Fax number.

Check Point		Action
1	LAN cable connected?	Check the LAN cable connection.
2	Firewall/NAT is installed?	Cannot the breach firewall. Request the remote fax to send by using another method (Fax, Internet Fax)
3	Gatekeeper installed correctly?	Contact the network administrator.  Note <ul style="list-style-type: none"> ▪ The sender machine displays this error code when the sender fax is a Ricoh model.
4	Power to Gatekeeper switched on?	Contact the network administrator.  Note <ul style="list-style-type: none"> ▪ The sender machine displays this error code when the sender fax is a Ricoh model.
5	IP address/host name of Gatekeeper correct on the sender's side?	Request the sender to check the IP address/host name.  Note <ul style="list-style-type: none"> ▪ The sender machine displays this error code when the sender fax is a Ricoh model.
6	DNS server registered when Gatekeeper host name specified on sender's side?	Contact the network administrator.  Note <ul style="list-style-type: none"> ▪ The sender machine displays this error code when the sender fax is a Ricoh model.

7	Enable H.323 SW is set to on?	Request the sender to check the settings. User Parameter SW 34 Bit 0/SW 34 bit 1 Note <ul style="list-style-type: none"> Only if the remote sender fax is a Ricoh fax.
8	Local fax IP address registered?	Register the IP address.
9	Local fax Alias number registered?	Register the Alias number.
10	Network bandwidth too narrow?	Request the system administrator to increase the bandwidth.
		Lower the start modem reception baud rate on the receiving side. IPFAX SW06
11	Remote fax cancelled transmission?	Check whether the remote fax cancelled the transmission.
12	Local fax registered in Gatekeeper/SIP server ?	Contact the network administrator. Note <ul style="list-style-type: none"> The sender machine displays this error code when the sender fax is a Ricoh model.

4. SERVICE TABLES

4.1 BEFOREHAND

CAUTION

- Never turn off the main power switch when the power LED is lit or flashing. To avoid damaging the hard disk or memory, press the operation power switch to switch the power off, wait for the power LED to go off, and then switch the main power switch off.






Note

- The main power LED (Ⓢ) lights or flashes while the platen cover or ARDF is open, while the main machine is communicating with a facsimile or the network server, or while the machine is accessing the hard disk or memory for reading or writing data.

4.2 SERVICE TABLES

4.2.1 SP1-XXX (BIT SWITCHES)

Bit Switches

1	Mode No.	Function
101	System Switch	
	001 – 032	00 – 1F Change the bit switches for system settings for the fax option  "Bit Switches"
102	Ifax Switch	
	001 – 016	00 – 0F Change the bit switches for internet fax settings for the fax option  "Bit Switches"
103	Printer Switch	
	001 – 016	00 – 0F Change the bit switches for printer settings for the fax option  "Bit Switches"
104	Communication Switch	
	001 – 032	00 – 1F Change the bit switches for communication settings for the fax option  "Bit Switches"
105	G3-1 Switch	
	001 – 016	00 – 0F Change the bit switches for the protocol settings of the standard G3 board  "Bit Switches"

110	SCU Switch (DFU)		
	001-064	00-3F	Change the bit switches for SCU settings
111	IP fax Switch		
	001 – 016	00 – 0F	Change the bit switches for optional IP fax parameters ☛ "Bit Switches"

4.2.2 SP2-XXX (RAM DATA)

2	Mode No.		Function
101	RAM Read/Write		
	001		Change RAM data for the fax board directly. ☛ "Service RAM Addresses"
102	Memory Dump		
	001	G3-1 Memory Dump	Print out RAM data for the fax board. ☛ "Service RAM Addresses"
103	G3-1 NCU Parameters		
	001 – 023	CC, 01 – 22	NCU parameter settings for the standard G3 board. ☛ "NCU Parameters"

4.2.3 SP3-XXX (TEL LINE SETTINGS)

3	Mode No.		Function
101	Service Station		
	001	Fax Number	Enter the fax number of the service station.
	002	Select Line	Select the line type.
102	Serial Number		
	000		Enter the fax unit's serial number.
103	PSTN-1 Port Settings		
	001	Select Line	Select the line type setting for the G3-1 line. If the machine is installed on a PABX line, select "PABX", "PABX(GND)" or "PABX(FLASH)".
	002	PSTN Access Number	Enter the PSTN access number for the G3-1 line.
	003	Memory Lock Disabled	Not used
107	IPFAX Port Settings		
	001	H323 Port	Sets the H323 port number.
	002	SIP Port	Sets the SIP port number.
	003	RAS Port	Sets the RAS port number.
	004	Gatekeeper port	Sets the Gatekeeper port number.
	005	T.38 Port	Sets the T.38 port number.
	006	SIP Server Port	Sets the SIP port number.
	007	IPFAX Protocol Priority	Select "H323" or "SIP".
201	FAX SW		
	001 – 032	00 – 1F	

4.2.4 SP4-XXX (ROM VERSIONS)

4	Mode No.		Function
101	001	FCU ROM Version	Displays the FCU ROM version.
102	001	Error Codes	Displays the latest 64 fax error codes.
103	001	G3-1 ROM Version	Displays the G3-1 modem version.

4.2.5 SP5-XXX (INITIALIZING)

5	Mode No.	Function
101	Initialize SRAM	
	000	Initializes the bit switches and user parameters, user data in the SRAM, files in the SAF memory, and clock.
102	Erase All Files	
	000	Erases all files stored in the SAF memory.
103	Reset Bit Switches	
	000	Resets the bit switches and user parameters.
104	Factory setting	
	000	Resets the bit switches and user parameters, user data in the SRAM and files in the SAF memory.
105	Initialize All Bit Switches	
	000	Initializes all the current bit switch settings.
106	Initialize Security Bit Switches	
	000	Initializes only the security bit switches. If you select automatic output/display for the user parameter switches, the security settings are initialized.

4.2.6 SP6-XXX (REPORTS)

6	Mode No.	Function
101	System Parameter List	
	000	- Touch the "ON" button to print the system parameter list.
102	Service Monitor Report	
	000	- Touch the "ON" button to print the service monitor report.
103	G3 Protocol Dump List	
	001	G3 All Communications Prints the protocol dump list of all communications for all G3 lines.
	002	G3-1 (All Communications) Prints the protocol dump list of all communications for the G3-1 line.
	003	G3-1 (1 Communication) Prints the protocol dump list of the last communication for the G3-1 line.
105	All Files print out	
	000	- Prints out all the user files in the SAF memory, including confidential messages. Note <ul style="list-style-type: none"> Do not use this function, unless the customer is having trouble printing confidential messages or recovering files stored using the memory lock feature.
106	Journal Print out	
	001	All Journals The machine prints all the communication records on the report.

Service Tables

	002	Specified Date	The machine prints all communication records after the specified date.
107	Log List Print out		
	001	All log files	These log print out functions are for designer use only.
	002	Printer	
	003	SC/TRAP Stored	
	004	Decompression	
	005	Scanner	
	006	JOB/SAF	
	007	Reconstruction	
	008	JBIG	
	009	Fax Driver	
	010	G3CCU	
	011	Fax Job	
	012	CCU	
	013	Scanner Condition	
108	IP Protocol Dump List		
	001	All Communications	Prints the protocol dump list of all communications for the IP fax line.
	002	1 Communication	Prints the protocol dump list of the last communication for the IP fax line.

4.2.7 SP7-XXX (TEST MODES)

These are the test modes for PTT approval.

7	Function
101	G3-1 Modem Tests
102	G3-1 DTMF Tests
103	Ringer Test
104	G3-1 V34 (S2400baud)
105	G3-1 V34 (S2800baud)
106	G3-1 V34 (S3000baud)
107	G3-1 V34 (S3200baud)
108	G3-1 V34 (S3429baud)
109	Recorded Message Test

4.3 BIT SWITCHES

Note

- Do not adjust a bit switch or use a setting that is described as "Not used", as this may cause the machine to malfunction or to operate in a manner that is not accepted by local regulations. Such bits are for use only in other areas, such as Japan.

Default settings for bit switches are not listed in this manual. Refer to the System Parameter List printed by the machine.

4.3.1 SYSTEM SWITCHES

System Switch 00 (SP No. 1-101-001)		
No	Function	Comments
0	Dedicated transmission parameter programming 0: Disabled 1: Enabled	Set this bit to 1 before changing any dedicated transmission parameters. This setting is automatically reset to "0" after turning off and on.
1	Not used	Do not change
2	Technical data printout on the Journal 0: Disabled 1: Enabled	1: Instead of the personal name, the following data are listed on the Journal for each G3 communication.

	<p>Example:</p> <p>0000 32V34 288/264 L0100 03 04 (1) (2)(3) (4) (5) (6) (7) (8)</p> <p>(1): EQM value (Line quality data). A larger number means more errors. (2): Symbol rate (V.34 only) (3): Final modem type used (4): Starting data rate (for example, 288 means 28.8 kbps) (5): Final data rate (6): Rx level (see below for how to read the rx level) (7): Total number of error lines that occurred during non-ECM reception. (8): Total number of burst error lines that occurred during non-ECM reception.</p> <p>Note</p> <ul style="list-style-type: none"> ▪ EQM and rx level are fixed at "FFFF" in tx mode. ▪ The seventh and eighth numbers are fixed at "00" for transmission records and ECM reception records. 	
	<p>Rx level calculation</p> <p>Example:</p> <p>0000 32V34 288/264 L0100 03 04 (1) (2)(3) (4) (5) (6) (7) (8)</p> <p>The four-digit hexadecimal value (N) after "L" indicates the rx level. The high byte is given first, followed by the low byte. Divide the decimal value of N by -16 to get the rx level. In the above example, the decimal value of N (= 0100 [H]) is 256. So, the actual rx level is 256/-16 = -16 dB</p>	
3	Not used	Do not change this setting.
4	Line error mark print 0: OFF, 1: ON (print)	When "1" is selected, a line error mark is printed on the printout if a line error occurs during reception. This shows an error position in ECM off mode.
5	G3/G4 communication parameter display 0: Disabled 1: Enabled	This is a fault-finding aid. The LCD shows the key parameters (see "G3 Communication Parameters" below this table). This is normally disabled because it cancels the CSI display for the user. Be sure to reset this bit to "0" after testing.

Bit Switches

6	<p>Protocol dump list output after each communication</p> <p>0: Off</p> <p>1: On</p>	<p>This is only used for communication troubleshooting. It shows the content of the transmitted facsimile protocol signals. Always reset this bit to 0 after finishing testing.</p> <p>If system switch 09 bit 6 is at "1", the list is only printed if there was an error during the communication.</p>
7	Not used	Do not change the setting.

G3 Communication Parameters

Modem rate	<p>336: 33600 bps 168: 16800 bps</p> <p>312: 31200 bps 144: 14400 bps</p> <p>288: 28800 bps 120: 12000 bps</p> <p>264: 26400 bps 96: 9600 bps</p> <p>240: 24000 bps 72: 7200 bps</p> <p>216: 21600 bps 48: 4800 bps</p> <p>192: 19200 bps 24: 2400 bps</p>
Resolution	<p>S: Standard (8 x 3.85 dots/mm)</p> <p>D: Detail (8 x 7.7 dots/mm)</p> <p>F: Fine (8 x 15.4 dots/mm)</p> <p>SF: Superfine (16 x 15.4 dots/mm)</p> <p>21: Standard (200 x 100 dpi)</p> <p>22: Detail (200 x 200 dpi)</p> <p>44: Superfine (400 x 400 dpi)</p>
Compression mode	<p>MMR: MMR compression</p> <p>MR: MR compression</p> <p>MH: MH compression</p> <p>JBO: JBIG compression (Optional mode)</p> <p>JBB: JBIG compression (Basic mode)</p>
Communication mode	<p>ECM: With ECM</p> <p>NML: With no ECM</p>

Width and reduction	A4: A4 (8.3"), no reduction B4: B4 (10.1"), no reduction A3: A3 (11.7"), no reduction
I/O rate	0: 0 ms/line 5: 5 ms/line 10: 10 ms/line 20: 20 ms/line 25: 2.5 ms/line 40: 40 ms/line <div style="border: 1px solid black; border-radius: 10px; padding: 2px; display: inline-block;"> Note </div> <ul style="list-style-type: none"> ▪ "40" is displayed while receiving a fax message using AI short protocol.

System Switch 01 - Not used (Do not change the factory settings.)

System Switch 02 (SP No. 1-101-003)

No	Function	Comments
0	Not used	Do not change these settings.
2	Forced reset after transmission stalls 0: Off 1: On	With this setting on, the machine resets itself automatically if a transmission stalls and fails to complete the job.
3	Not used	Do not change these settings.
4	File retention time 0: Depends on User Parameter 24 [18(H)] 1: No limit	1: A file that had a communication error will not be erased unless the communication is successful.
5	Not used	Do not change this setting.

6-7	Memory read/write by RDS			<p>(0,0): All RDS systems are always locked out.</p> <p>(0,1), (1,0): Normally, RDS systems are locked out, but the user can temporarily switch RDS on to allow RDS operations to take place. RDS will automatically be locked out again after a certain time, which is stored in System Switch 03. Note that if an RDS operation takes place, RDS will not switch off until this time limit has expired.</p> <p>(1,1): At any time, an RDS system can access the machine.</p>
	Bit 7	Bit 6	Setting	
	0	0	Always disabled	
	0	1	User selectable	
	1	0	User selectable	
	1	1	Always enabled	

System Switch 03 (SP No. 1-101-004)		
No	Function	Comments
0 to 7	Length of time that RDS is temporarily switched on when bits 6 and 7 of System Switch 02 are set to "User selectable"	<p>00 - 99 hours (BCD).</p> <p>This setting is only valid if bits 6 and 7 of System Switch 02 are set to "User selectable".</p> <p>The default setting is 24 hours.</p>

System Switch 04 (SP No. 1-101-005)		
No	Function	Comments
0-2	Not used	Do not change these settings.
3	<p>Printing dedicated tx parameters on Quick/Speed Dial Lists</p> <p>0: Disabled</p> <p>1: Enabled</p>	<p>1: Each Quick/Speed dial number on the list is printed with the dedicated tx parameters (10 bytes each).</p> <p>The first 10 bytes of data are the programmed dedicated tx parameters; 34 bytes of data are printed (the other 24 bytes have no use for service technicians).</p>
4-7	Not used	Do not change these settings.

System Switch 05 - Not used (Do not change the factory settings.)
System Switch 06 - Not used (Do not change the factory settings.)
System Switch 07 - Not used (Do not change the factory settings.)
System Switch 08 - Not used (Do not change the factory settings.)

System Switch 09 (SP No. 1-101-010)		
No	Function	Comments
0	Addition of image data from confidential transmissions on the transmission result report 0: Disabled 1: Enabled	If this feature is enabled, the top half of the first page of confidential messages will be printed on transmission result reports.
1	Print timing of communication reports on the Journal when no image data was exchanged. 0: After DCS/NSS communication (default), 1: After polling	0: Journal is printed only when image data is sent. 1: Journal is printed when any data is sent.
2	Automatic error report printout 0: Disabled 1: Enabled	0: Error reports will not be printed. 1: Error reports will be printed automatically after failed communications.
3	Printing of the error code on the error report 0: No 1: Yes	1: Error codes are printed on the error reports. This can be used for detecting an error which rarely occurs.
4	Not used	Do not change this setting.
5	Power failure report 0: Disabled 1: Enabled (default)	1: A power failure report will be automatically printed after the power is switched on if a fax message disappeared from the memory when the power was turned off last. NOTE: If "0" is selected, no reports are printed and no one may recognize that fax data is gone due to a power failure.

6	<p>Conditions for printing the protocol dump list</p> <p>0: Print for all communications</p> <p>1: Print only when there is a communication error</p>	<p>This switch becomes effective only when system switch 00 bit 6 is set to 1.</p> <p>1: Set this bit to 1 when you wish to print a protocol dump list only for communications with errors.</p> <p>NOTE: The memory size is limited. Use this bit switch only when some log reports are necessary.</p>
7	<p>Priority given to various types of remote terminal ID when printing reports</p> <p>0: RTI > CSI > Dial label > Tel. number</p> <p>1: Dial label > Tel. number > RTI > CSI</p>	<p>This bit determines which set of priorities the machine uses when listing remote terminal names on reports.</p> <p>Dial Label: The name stored, by the user, for the Quick/Speed Dial number.</p>

System Switch 0A (SP No. 1-101-011)		
No	Function	Comments
0	<p>Automatic port selection</p> <p>0: Disabled, 1: Enabled</p>	<p>When "1" is selected, a suitable port is automatically selected if the selected port is not used.</p> <p>NOTE: This bit is useful if all communication lines at a customer site are not same quality.</p>
1-3	Not used	Do not change these settings.
4	<p>Dialing on the ten-key pad when the external telephone is off-hook</p> <p>0: Disabled 1: Enabled</p>	<p>0: Prevents dialing from the ten-key pad while the external telephone is off-hook. Use this setting when the external telephone is not by the machine, or if a wireless telephone is connected as an external telephone.</p> <p>1: The user can dial on the machine's ten-key pad when the handset is off-hook.</p>

5	On hook dial 0: Disabled 1: Enabled	0: On hook dial is disabled.
6-7	Not used	Do not change the factory settings

System Switch 0B - Not used (Do not change the factory settings.)

System Switch 0C - Not used (Do not change the factory settings.)

System Switch 0D - Not used (Do not change the factory settings.)

System Switch 0E (SP No. 1-101-015)

No	Function	Comments
0-1	Not used	Do not change the settings.
2	Enable/disable for direct sending selection 0: Direct sending off 1: Direct sending on	Direct sending cannot operate when the capture function is on during sending. Setting this switch to "1" enables direct sending without capture. Setting this switch to "0" masks the direct sending function on the operation panel so direct sending with ScanRouter cannot be selected.
3	Action when the external handset goes off-hook 0: Manual tx and rx operation 1: Memory tx and rx operation (the display remains the same)	0: Manual tx is possible while the external handset is off-hook. However, manual tx during handset off-hook may not be sent to a correct direction. Manual tx is not possible. 1: The display stays in standby mode even when the external handset is used, so that other people can use the machine for memory tx operation. Note that manual tx and rx are not possible with this setting.
4-7	Not used	Do not change these settings.

System Switch 0F (SP No. 1-101-016)			
No	Function	Comments	
0 to 7	Country/area code for functional settings (Hex)	This country/area code determines the factory settings of bit switches and RAM addresses. However, it has no effect on the NCU parameter settings and communication parameter RAM addresses. Cross reference NCU country code: SP No. 2-103-001 for G3-1	
	00: France		12: Asia
	01: Germany		13: Japan
	02: UK		14: Hong Kong
	03: Italy		15: South Africa
	04: Austria		16: Australia
	05: Belgium		17: New Zealand
	06: Denmark		18: Singapore
	07: Finland		19: Malaysia
	08: Ireland		1A: China
	09: Norway		1B: Taiwan
	0A: Sweden		1C: Korea
	0B: Switz.		1D: Brazil
	0C: Portuga		20: Turkey
	0D: Holland		21: Greece
	0E: Spain		22: Hungary
	0F: Israel		23: Czech
10: ---	24: Poland		
11: USA			

System Switch 10 (SP No. 1-101-017)		
No	Function	Comments
0-7	Threshold memory level for parallel memory transmission	Threshold = N x 128 KB + 256 KB N can be between 00 - FF(H) Default setting: 02(H) = 512 KB

System Switch 11 (SP No. 1-101-018)		
No	Function	Comments
0	TTI printing position 0: Superimposed on the page data 1: Printed before the data leading edge	Change this bit to 1 if the TTI overprints information that the customer considers to be important (G3 transmissions). NOTE: If "1" is selected, it is possible that sent data is printed on two sheets of paper.
1-2	Not used	Do not change the factory settings.
3	TTI used for broadcasting 0: The TTIs selected for each Quick/Speed dial are used 1: The same TTI is used for all destinations	1: The TTI (TTI_1 or TTI_2) which is selected for all destinations during broadcasting.
4-7	Not used	Do not change the factory settings.

System Switch 12 (SP No. 1-101-019)		
No	Function	Comments
0-7	TTI printing position in the main scan direction	TTI: 08 to 92 (BCD) mm Input even numbers only. This setting determines the print start position for the TTI from the left edge of the paper. If the TTI is moved too far to the right, it may overwrite the file number which is on the top right of the page. On an A4 page, if the TTI is moved over by more than 50 mm, it may overwrite the page number.

System Switch 13 - Not used (do not change these settings)

System Switch 14 - Not used (do not change these settings)

System Switch 15 (SP No. 1-101-022)		
No	Function	Comments
0	Not used	Do not change the settings.
1	Going into the Energy Saver mode automatically 0: Enabled 1: Disabled	1: The machine will restart from the Energy Saver mode quickly, because the +5V power supply is active even in the Energy Saver mode. The LED of the operation switch is flashing instead of entering Energy Saver mode. Use this setting if an external telephone has to be used when the machine is in the Energy Saver mode.

2-3	Not used			Do not change these settings.
4-5	Interval for preventing the machine from entering Energy Saver mode if there is a pending transmission file.			<p>If there is a file waiting for transmission, the machine does not go to Energy Saver mode during the selected period.</p> <p>After transmitting the file, if there is no file waiting for transmission, the machine goes to the Energy Saver mode.</p>
	Bit 5	Bit 4	Setting	
	0	0	1 min	
	0	1	30 min	
	1	0	1 hour	
	1	1	24 hours	
6-7	Not used			Do not change

System Switch 16 (SP No. 1-101-023)		
No	Function	Comments
0	Parallel Broadcasting 0: Disabled 1: Enabled	1: The machine sends messages simultaneously using all available ports during broadcasting. NOTE: If a customer wants to keep a line available for fax reception or other reasons, select "0" (Disable).
1-7	Not used	
Do not change these settings.		

System Switch 17 - Not used (do not change these settings)
System Switch 18 - Not used (do not change these settings)

System Switch 19 (SP No. 1-101-026)		
No	Function	Comments
0-5	Not used	Do not change the settings.
6	Extended scanner page memory after memory option is installed 0: Disabled 1: Enabled	0: After installing the memory expansion option, the scanner page memory is extended to 4 MB from 2 MB. 1: If this bit is set to 1 after installing the memory expansion option, the scanner page memory is extended to 12 MB. But the SAF memory decreases to 18 MB.
7	Special Original mode 0: Disabled 1: Enabled	1: If the customer frequently wishes to transmit a form or letterhead which has a colored or printed background, change this bit to "1". "Original 1" and "Original 2" can be selected in addition to the "Text", "Text/Photo" and "Photo" modes.

System Switch 1A (SP No. 1-101-027)		
No	Function	Comments
0 to 7	LS RX memory capacity threshold setting 00-FF (0-1020 Kbyte: Hex)	Sets the value to x4KB. When the amount of available memory drops below this setting, RX documents are printed to conserve memory. Initial setting 0x80 (512 KB) NOTE: If a customer wants available memory size larger, decrease this threshold.

System Switch 1B - Not used (do not change these settings)

System Switch 1C - Not used (do not change these settings)

System Switch 1D (SP No. 1-101-030)		
No	Function	Comments
0	RTI/CSI/CPS code display 0: Enable 1: Disable	0: RTI, CSI, CPS codes are displayed on the top line of the LCD panel during communication. 1: Codes are switched off (no display)
1-7	Not used	Do not change these settings.

System Switch 1E (SP No. 1-101-031)		
No	Function	Comments
0	Communication after the Journal data storage area has become full 0: Impossible 1: Possible	0: When this switch is on and the journal history becomes full, the next report prints. If the journal history is not deleted, the next transmission cannot be received. This prevents overwriting communication records before the machine can print them. 1: If the buffer memory of the communication records for the Journal is full, fax communications are still possible. But the machine will overwrite the oldest communication records. Note <ul style="list-style-type: none"> This setting is effective only when Automatic Journal printout is enabled but the machine cannot print the report (e.g., no paper).

1	<p>Action when the SAF memory has become full during scanning</p> <p>0: The current page is erased. 1: The entire file is erased.</p>	<p>0: If the SAF memory becomes full during scanning at the memory transmission, the successfully scanned pages are transmitted.</p> <p>1: If the SAF memory becomes full during scanning at the memory transmission, the file is erased and no pages are transmitted.</p> <p>Note</p> <ul style="list-style-type: none"> This setting is effective only when Automatic Journal printout is enabled but the machine cannot print the report (e.g., no paper).
2	<p>RTI/CSI display priority</p> <p>0: RTI 1: CSI</p>	<p>This bit determines which identifier, RTI or CSI, is displayed on the LCD while the machine is communicating in G3 non-standard mode.</p>
3	<p>File No. printing</p> <p>0: Enabled 1: Disabled</p>	<p>1: File numbers are not printed on any reports.</p> <p>NOTE: The file numbers may not be printed in the sequential order. If a customer does not like this numbering, select "0".</p>
4	<p>Action when authorized reception is enabled but authorized RTIs/CSIs are not yet programmed</p> <p>0: Faxes can be received if the sender has an RTI or CSI 1: All fax reception is disabled</p>	<p>If authorized reception is enabled but the user has stored no acceptable sender RTIs or CSIs, the machine will not be able to receive any fax messages.</p> <p>If the customer wishes to receive messages from any sender that includes an RTI or CSI, and to block messages from senders that do not include an RTI or CSI, change this bit to "0", then enable Authorized Reception. Otherwise, keep this bit at "1 (default setting)".</p>
5-7	<p>Not used</p>	<p>Do not change the settings</p>

System Switch 1F (SP No. 1-101-032)		
No	Function	Comments
0	Not used	Do not change the settings.
1	Report printout after an original jam during SAF storage or if the SAF memory fills up 0: Enabled 1: Disabled	0: When an original jams, or the SAF memory overflows during scanning, a report will be printed. Change this bit to "1" if the customer does not want to have a report in these cases. Memory tx – Memory storage report Parallel memory tx – Transmission result report
2	Not used	Do not change the settings.
3	Received fax print start timing (G3 reception) 0: After receiving each page 1: After receiving all pages	0: The machine prints each page immediately after the machine receives it. 1: The machine prints the complete message after the machine receives all the pages in the memory.
4-6	Not used	Do not change the factory settings.
7	Action when a fax SC has occurred 0: Automatic reset 1: Fax unit stops	0: When the fax unit detects a fax SC code other than SC1201 and SC1207, the fax unit automatically resets itself. 1: When the fax unit detects any fax SC code, the fax unit stops. Cross Reference Fax SC codes - See "Troubleshooting"

4.3.2 I-FAX SWITCHES

I-fax Switch 00 (SP No. 1-102-001)		
No	Function	Comments
Original Width of TX Attachment File		This setting sets the maximum size of the original that the destination can receive. (Bits 3~7 are reserved for future use or not used.)
0	A4	-
1	B4	
2	A3	
3-6	Reserved	
7	Not used	
<p>0: Off (not selected), 1: On (selected)</p> <p>If more than one of these three bits is set to "1", the larger size has priority. For example, if both Bit 2 and Bit 1 are set to "1" then the maximum size is "A3" (Bit 2).</p> <p>When mail is sent, there is no negotiation with the receiving machine at the destination, so the sending machine cannot make a selection for the receiving capabilities (original width setting) of the receiving machine. The original width selected with this switch is used as the RX machine's original width setting, and the original is reduced to this size before sending. The default is A4.</p> <p>If the width selected with this switch is higher than the receiving machine can accept, the machine detects this and this causes an error.</p>		

I-fax Switch 01 (SP No. 1-102-002)		
No	Function	Comments
Original Line Resolution of TX Attachment File		These settings set the maximum resolution of the original that the destination can receive.
0	200x100 Standard	0: Not selected 1: Selected If more than one of these three bits is set to "1", the higher resolution has priority. For example, if both Bit 0 and Bit 2 are set to "1" Then The Resolution is set for "Bit 2 200 x 400.
1	200x200 Detail	
2	200x400 Fine	
3	300 x 300 Reserve	
4	400 x 400 Super Fine	
5	600 x 600 Reserve	
6	Reserve	
7	mm/inch	
	<p>This setting selects mm/inch conversion for mail transmission. 0: Off (No conversion), 1: On (Conversion) When on (set to "1"), the machine converts millimeters to inches for sending mail. There is no switch for converting inches to millimeters. Unlike G3 fax transmissions which can negotiate between sender and receiver to determine the setting, mail cannot negotiate between terminals; the mm/inch selection is determined by the sender fax. When this switch is Off (0):</p> <ul style="list-style-type: none"> ▪ Images scanned in inches are sent in inches. ▪ Images scanned in mm are sent in mm. ▪ Images received in inches are transmitted in inches. ▪ Images received in mm are transmitted in mm. <p>When this switch is On (1):</p> <ul style="list-style-type: none"> ▪ Images scanned in inches are sent in inches. ▪ Images scanned in mm are converted to inches. ▪ Images received in inches are transmitted in inches. ▪ Images received in mm are converted to inches. 	

I-fax Switch 02 (SP No. 1-102-003)		
No	Function	Comments
0	RX Text Mail Header Processing	
		<p>This setting determines whether the header information is printed with text e-mails when they are received.</p> <p>0: Prints only text mail. 1: Prints mail header information attached to text mail.</p> <p>When a text mail is received with this switch On (1), the "From" address and "Subject" address are printed as header information.</p> <p>When a mail with only binary data is received (a TIFF-F file, for example), this setting is ignored and no header is printed.</p>
1	Output from Attached Document at E-mail TX Error	
		<p>This setting determines whether only the first page or all pages of an e-mail attachment are printed at the sending station when a transmission error occurs. This allows the customer to see which documents have not reached their intended destinations if sent to the wrong e-mail addresses, for example.</p> <p>0: Prints 1st page only. 1: Prints all pages.</p>
2-3	Text String for Return Receipt	
		<p>This setting determines the text string output for the Return Receipt that confirms the transmission was received normally at the destination.</p>

	<p>00: "Dispatched"</p> <p>Sends from PC mail a request for a Return Receipt. Receives the Return Receipt with "dispatched" in the 2nd part:</p> <p>Disposition: Automatic-action/MDN-send automatically; dispatched</p> <p>The "dispatched" string is included in the Subject string.</p> <p>01: "Displayed"</p> <p>Sends from PC mail a request for a Return Receipt. Receives the Return Receipt with "displayed" in the 2nd part:</p> <p>Disposition: Automatic-action/MDN-send automatically; displayed</p> <p>The "displayed" string is included in the Subject string.</p> <p>10: Reserved</p> <p>11: Reserved</p> <p>A mail requesting a Return Receipt sent from an IFAX with this switch set to "00" (for "dispatched") received by Microsoft Outlook 2000 may cause an error. If any setting other than "displayed" (01) causes a problem, change the setting to "01" to enable normal sending of the Return Receipt.</p>
4	<p>Media accept feature</p> <p>This setting adds or does not add the media accept feature to the answer mail to confirm a reception.</p> <p>0: Does not add the media accept feature to the answer mail</p> <p>1: Adds the media accept feature to the answer mail.</p> <p>Use this bit switch if a problem occurs when the machine receives an answer mail, which contains the media accept feature field.</p>
5-6	Not Used
7	<p>Image Resolution of RX Text Mail</p> <p>This setting determines the image resolution of the received mail.</p> <p>0: 200 x 200</p> <p>1: 400 x 400</p> <p>The "1" setting requires installation of the Function Upgrade Card in order to have enough SAF (Store and Forward) memory to receive images at 400 x 400 resolution.</p>

I-fax Switch 03 - Not used (do not change these settings)

I-fax Switch 04 (SP No. 1-102-005)		
No	Function	Comments
0	Subject for Delivery TX/Memory Transfer	<p>This setting determines whether the RTI/CSI registered on this machine or the RTI/CSI of the originator is used in the subject lines of transferred documents.</p> <p>0: Puts the RTI/CSI of the originator in the Subject line. If this is used, either the RTI or CSI is used. Only one of these can be received for use in the subject line.</p> <p>1: Puts the RTI/CSI registered on this machine in the Subject line.</p> <p>When this switch is used to transfer and deliver mail to a PC, the information in the Subject line that indicates where the transmission originated can be used to determine automatically the destination folder for each e-mail.</p>
1	Subject corresponding to mail post database	<p>0: Standard subject</p> <p>1: Mail post database subject</p> <p>The standard subject is replaced by the mail post database subject in the following three cases:</p> <ol style="list-style-type: none"> 1) When the service technician sets the service (software) switch. 2) When memory sending or delivery specified by F code is applied by the SMTP server 3) With relay broadcasting (1st stage without the Schmidt 4 function). <p>Note</p> <ul style="list-style-type: none"> ▪ This switch does not apply for condition 3) when the RX system is set up for memory sending, delivery by F-code, sending with SMTP RX and when operators are using FOL (to prevent problems when receiving transmissions).
2-7	Not Used	

I-fax Switch 05 (SP No. 1-102-006)		
No	Function	Comments
0	Mail Addresses of SMTP Broadcast Recipients	
	Determines whether the e-mail addresses of the destinations that receive transmissions broadcasted using SMTP protocol are recorded in the Journal. For example: "1st destination + Total number of destinations: 9" in the Journal indicates a broadcast to 9 destinations. 0: Not recorded 1: Recorded	
1	I-Fax Automatic Re-dial Setting 0: OFF 1: ON	Determines whether the I-fax automatically redials when an error occurs.
2-7	Not Used	

I-fax Switch 06 - Not used (do not change the settings)

I-fax Switch 07 - Not used (do not change the settings)

I-fax Switch 08 (SP No. 1-102-009)		
No	Function	Comments
0-7	Memory Threshold for POP Mail Reception	
	This setting determines the amount of SAF (Store and Forward) memory. (SAF stores fax messages to send later for transmission to more than one location, and also holds incoming messages if they cannot be printed.) When the amount of SAF memory available falls below this setting, mail can no longer be received; received mail is then stored on the mail server. 00-FF (0 to 1024 KB: HEX) The hexadecimal number you enter is multiplied by 4 KB to determine the amount of memory.	

I-fax Switch 09 (SP No. 1-102-010)		
No	Function	Comments
0-3	Not used	Do not change the settings
4-7	Restrict TX Retries	This setting determines the number of retries when connection and transmission fails due to errors. 01-F (1-15 Dec)

I-fax Switch 0A - Not used (do not change the settings)

I-fax Switch 0B - Not used (do not change the settings)

I-fax Switch 0C - Not used (do not change the settings)

I-fax Switch 0D (SP No. 1-102-014)				
No	Function		Comments	
0-1	Not used		Do not change the settings.	
2-3	Set to select the signature when sending mail notification of the send results		In response to IEEE2600.1.1	
	Bit 3	Bit 2		Setting
	0	0		No sign
	0	1		No setting
	1	0		Individual setting
1	1	Always sign		

4-5	Set to select the signature when sending mail.			In response to IEEE2600.1.1
	Bit 5	Bit 4	Setting	
	0	0	No sign	
	0	1	No setting	
	1	0	Individual setting	
	1	1	Always sign	
6-7	Not used			Do not change the settings.

I-fax Switch 0E - Not used (do not change the settings)

I-fax Switch 0F (SP No. 1-102-016)		
No	Function	Comments
0	Delivery Method for SMTP RX Files	
	This setting determines whether files received with SMTP protocol are delivered or output immediately. 0: Off. Files received via SMTP are output immediately without delivery. 1: On. Files received via SMTP are delivered immediately to their destinations.	
1	Signature for the SMTP	
	This setting determines whether a signature is put on an e-mail via SMTP. 0: No signature 1: Signature	
2	Encryption for the SMTP	
	This setting determines whether an e-mail via SMTP is encrypted. 0: Not encrypted 1: Encrypted	
3-7	Not used	

4.3.3 PRINTER SWITCHES

Printer Switch 00 (SP No. 1-103-001)		
No	Function	Comments
0	Select page separation marks 0: Off 1: On	<p>0: If a 2 page RX transmission is split, [*] is printed in the bottom right corner of the 1st page and only a [2] is printed in the upper right corner of the 2nd page.</p> <p>1: If a 2 page RX transmission is split into two pages, for example, [*] [2] is printed in the bottom right corner of the 1st page and only a [2] is printed in the upper right corner of the 2nd page.</p> <p>Note</p> <ul style="list-style-type: none"> This helps the user to identify pages that have been split because the size of the paper is smaller than the size of the document received. (When A5 is used to print an A4 size document, for example.)
1	Repetition of data when the received page is longer than the printer paper 0: Off 1: On	<p>1: Default. 10 mm of the trailing edge of the previous page are repeated at the top of the next page.</p> <p>0: The next page continues from where the previous page stopped without any repeated text.</p>
2	Prints the date and time on received fax messages 0: Disabled 1: Enabled	<p>This switch is only effective when user parameter 02 - bit 2 (printing the received date and time on received fax messages) is enabled.</p> <p>1: The machine prints the received and printed date and time at the bottom of each received page.</p>
3-7	Not used	Do not change the settings.

Printer Switch 01 (SP No. 1-103-002)				
No	Function			Comments
0-2	Not used			Do not change the settings.
3-4	Maximum print width used in the setup protocol			These bits are only effective when bit 7 of the printer switch 01 is "1".
	Bit 4	Bit 3	Setting	
	0	0	Not used	
	0	1	A3	
	1	0	B4	
	1	1	A4	
5-6	Not used			Do not change the settings.
7	Received message width restriction in the protocol signal to the sender 0: Disabled 1: Enabled			0: The machine informs the transmitting machine of the print width depending on the paper size available from the paper feed stations. Refer to the table on the next page for how the machine chooses the paper width used in the setup protocol (NSF/DIS). 1: The machine informs the transmitting machine of the fixed paper width which is specified by bits 3 and 4 above.

Relationship between available paper sizes and printer width used in the setup protocol

Available Paper Size	Printer width used in the Protocol (NSF/DIS)
A4 or 8.5" x 11"	297 mm width
B5	256 mm width
A5 or 8.5" x 5.5"	216 mm width
No paper available (Paper end)	216 mm width

Printer Switch 02 (SP No. 1-103-003)		
No	Function	Comments
0	1st paper feed station usage for fax printing 0: Enabled 1: Disabled	0: Enabled The paper feed station can be used to print fax messages and reports. 1: Disabled
1	2nd paper feed station usage for fax printing	The specified paper feed station will not be used for printing fax messages and reports.
2	3rd paper feed station usage for fax printing	<p>Note</p> <ul style="list-style-type: none"> Do not disable usage for a paper feed station which has been specified by User Parameter Switch 0F (15), or which is used for the Specified Cassette Selection feature.
3	4th paper feed station usage for fax printing	
4	LCT usage for fax printing	
5-7	Not used	Do not change the settings.

Printer Switch 03 (SP No. 1-103-004)		
No	Function	Comments
0	Length reduction of received data 0: Disabled 1: Enabled	0: Incoming pages are printed without length reduction. (Page separation threshold: Printer Switch 03, bits 4 to 7) 1: Incoming page length is reduced when printing. (Maximum reducible length: Printer Switches 04, bits 0 to 4)
1-3	Not used	Do not change the settings
4 to 7	Page separation setting when sub scan compression is forbidden 00-0F (0-15 mm: Hex) Default: 6 mm	Page separation threshold (with reduction disabled with switch 03-0 above). For example, if this setting is set to "10", and A4 is the selected paper size: If the received document is 10 mm or less longer than A4, then the 10 mm are cut and only 1 page prints. If the received document is 10 mm longer than A4, then the document is split into 2 pages.

Printer Switch 04 (SP No. 1-103-005)						
No	Function			Comments		
0 to 4	Maximum reducible length when length reduction is enabled with switch 03-0 above. [Maximum reducible length] = [Paper length] + (N x 5mm) "N" is the decimal value of the binary setting of bits 0 to 4.					
	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Setting
	0	0	0	0	0	0 mm
	0	0	0	0	1	5 mm
	0	0	1	0	0	20 mm
	1	1	1	1	1	155 mm
	For A5 sideways and B5 sideways paper [Maximum reducible length] = [Paper length] + 0.75 x (N x 5mm)					
5 6	Length of the duplicated image on the next page, when page separation has taken place.					
	Bit 6		Bit 5		Setting	
	0		0		4 mm	
	0		1		10 mm	
	1		0		15 mm	
1		1		Not used		
7	Not used.			Do not change the setting.		

Printer Switch 05 - Not used (do not change the settings)

Printer Switch 06 (SP No. 1-103-007)

No	Function	Comments
0	Printing while a paper cassette is pulled out, when the Just Size Printing feature is enabled. 0: Printing will not start 1: Printing will start if another cassette has a suitable size of paper, based on the paper size selection priority tables.	Cross reference Just size printing on/off – User switch 05, bit 5
1-7	Not used.	Do not change the settings.

Printer Switch 07 (SP No. 1-103-008)

No	Function	Comments
0-3	Not used.	Do not change the settings.
4	List of destinations in the Communication Failure Report for broadcasting 0: All destinations 1: Only destinations where communication failure occurred	1: Only destinations where communication failure occurred are printed on the Communication Failure Report.
5-7	Not used.	Do not change the settings.

Printer Switch 08 - Not used (do not change the settings)

Printer Switch 09 - Not used (do not change the settings)

Printer Switch 0A - Not used (do not change the settings)

Printer Switch 0B - Not used (do not change the settings)

Printer Switch 0C - Not used (do not change the settings)
Printer Switch 0D - Not used (do not change the settings)

Printer Switch 0E (SP No. 1-103-015)				
No	Function		Comments	
0	Paper size selection priority 0: Width 1: Length		0: A paper size that has the same width as the received data is selected first. 1: A paper size which has enough length to print all the received lines without reduction is selected first.	
1	Paper size selected for printing A4 width fax data 0: 8.5" x 11" size 1: A4 size		This switch determines which paper size is selected for printing A4 width fax data, when the machine has both A4 and 8.5" x 11" size paper.	
2	Page separation 0: Enabled 1: Disabled		1: If all paper sizes in the machine require page separation to print a received fax message, the machine does not print the message (Substitute Reception is used). After a larger size of paper is set in a cassette, the machine automatically prints the fax message.	
3-4	Printing the sample image on reports			"Same size" means the sample image is printed at 100%, even if page separation occurs. User Parameter Switch 19 (13H) bit 4 must be set to "0" to enable this switch. Refer to Detailed Section Descriptions for more on this feature.
	Bit 4	Bit 3	Setting	
	0	0	The upper half only	
	0	1	50% reduction (sub-scan only)	
	1	0	Same size	
1	1	Not used		

5-6	Not used	Do not change the settings.
7	<p>Equalizing the reduction ratio among separated pages (Page Separation)</p> <p>0: Enabled 1: Disabled</p>	<p>0: When page separation has taken place, all the pages are reduced with the same reduction ratio.</p> <p>1: Only the last page is reduced to fit the selected paper size when page separation has taken place. Other pages are printed without reduction.</p>

Printer Switch 0F (SP No. 1-103-016)				
No	Function			Comments
0-1	Smoothing feature			(0, 0) (0, 1): Disable smoothing if the machine receives halftone images from other manufacturers fax machines frequently.
	Bit 1	Bit 0	Setting	
	0	0	Disabled	
	0	1	Disabled	
	1	0	Enabled	
1	1	Not used		
2	<p>Duplex printing</p> <p>0: Disabled 1: Enabled</p>			1: The machine always prints received fax messages in duplex printing mode:
3	<p>Binding direction for Duplex printing</p> <p>0: Left binding 1: Top binding</p>			<p>0: Sets the binding for the left edge of the stack.</p> <p>1: Sets the binding for the top of the stack.</p>
4-7	Not used			Do not change the settings.

4.3.4 COMMUNICATION SWITCHES

Communication Switch 00 (SP No. 1-104-001)				
No	Function			Comments
0-1	Compression modes available in receive mode			These bits determine the compression capabilities to be declared in phase B (handshaking) of the T.30 protocol.
	Bit 1	Bit 0	Modes	
	0	0	MH only	
	0	1	MH/MR	
	1	0	MH/MR/MMR	
1	1	MH/MR/MMR/JBIG		
2-3	Compression modes available in transmit mode			These bits determine the compression capabilities to be used in the transmission and to be declared in phase B (handshaking) of the T.30 protocol.
	Bit 3	Bit 2	Modes	
	0	0	MH only	
	0	1	MH/MR	
	1	0	MH/MR/MMR	
1	1	MH/MR/MMR/JBIG		
4	Not used			Do not change the settings.
5	JBIG compression method: Reception 0: Only basic supported 1: Basic and optional both supported			Change the setting when communication problems occur using JBIG compression.
6	JBIG compression method: Transmission 0: Basic mode priority 1: Optional mode priority			Change the setting when communication problems occur using JBIG compression.

7	Closed network (reception) 0: Disabled 1: Enabled	1: Reception will not go ahead if the polling ID code of the remote terminal does not match the polling ID code of the local terminal. This function is only available in NSF/NSS mode.
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Communication Switch 01 (SP No. 1-104-002)																			
No	Function			Comments															
0	ECM 0: Off 1: On			If this bit is set to 0, ECM is switched off for all communications. In addition, V.8 protocol and JBIG compression are switched off automatically.															
1	Not used			Do not change the setting.															
2-3	Wrong connection prevention method <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Bit 3</th> <th style="text-align: center;">Bit 2</th> <th style="text-align: center;">Setting</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">None</td> </tr> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">1</td> <td style="text-align: center;">8 digit CSI</td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">0</td> <td style="text-align: center;">4 digit CSI</td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">1</td> <td style="text-align: center;">CSI/RTI</td> </tr> </tbody> </table>			Bit 3	Bit 2	Setting	0	0	None	0	1	8 digit CSI	1	0	4 digit CSI	1	1	CSI/RTI	(0,1): The machine will disconnect the line without sending a fax message, if the last 8 digits of the received CSI do not match the last 8 digits of the dialed telephone number. This does not work when manually dialed. (1,0): The same as above, except that only the last 4 digits are compared. (1,1): The machine will disconnect the line without sending a fax message, if the other end does not identify itself with an RTI or CSI. (0,0): Nothing is checked; transmission will always go ahead. <div style="border: 1px solid black; border-radius: 10px; padding: 2px; display: inline-block;"> ⬇ Note </div> <ul style="list-style-type: none"> ▪ This function does not work when dialing is done from the external telephone.
Bit 3	Bit 2	Setting																	
0	0	None																	
0	1	8 digit CSI																	
1	0	4 digit CSI																	
1	1	CSI/RTI																	
4-5	Not used			Do not change the setting.															

6-7	Maximum printable page length available			The setting determined by these bits is informed to the transmitting terminal in the pre-message protocol exchange (in the DIS/NSF frames).
	Bit 7	Bit 6	Setting	
	0	0	No limit	
	0	1	B4 (364 mm)	
	1	0	A4 (297 mm)	
	1	1	Not used	

Communication Switch 02 (SP No. 1-104-003)		
No	Function	Comments
0	G3 Burst error threshold 0: Low 1: High	If there are more consecutive error lines in the received page than the threshold, the machine will send a negative response. The Low and High threshold values depend on the sub-scan resolution, and are as follows.
		100 dpi 6(L) → 12(H)
		200 dpi 12(L) → 24(H)
		300 dpi 18(L) → 36(H)
		400 dpi 24(L) → 48(H)
1	Acceptable total error line ratio 0: 5% 1: 10%	If the error line ratio for a page exceeds the acceptable ratio, RTN will be sent to the other end.
2	Treatment of pages received with errors during G3 reception 0: Deleted from memory without printing 1: Printed	0: Pages received with errors are not printed.

3	Hang-up decision when a negative code (RTN or PIN) is received during G3 immediate transmission 0: No hang-up, 1: Hang-up	0: The next page will be sent even if RTN or PIN is received. 1: The machine will send DCN and hang up if it receives RTN or PIN. This bit is ignored for memory transmissions or if ECM is being used.
4-7	Not used	Do not change the settings.

Communication Switch 03 (SP No. 1-104-004)

No	Function	Comments
0-7	Maximum number of page retransmissions in a G3 memory transmission	00 - FF (Hex) times. This setting is not used if ECM is switched on. Default setting - 03(H)

Communication Switch 04 - Not used (do not change the settings)

Communication Switch 05 - Not used (do not change the settings)

Communication Switch 06 - Not used (do not change the settings)

Communication Switch 07 - Not used (do not change the settings)

Communication Switch 08 - Not used (do not change the settings)

Communication Switch 09 (SP No. 1-104-010)

No	Function	Comments
0-7	IP-Fax dial interval setting	Adjusts the interval of the I-fax dialing. The interval of I-fax dialing is calculated by following formula. [Interval time = specified value with this switch x 0.2 msec]

Communication Switch 0A (SP No. 1-104-011)		
No	Function	Comments
0	Point of resumption of memory transmission upon redialing 0: From the error page 1: From page 1	0: The transmission begins from the page where transmission failed the previous time. 1: Transmission begins from the first page, using normal memory transmission.
1-7	Not used	Do not change the settings.

Communication Switch 0B (SP No. 1-104-012)		
No	Function	Comments
0-3	Not used	Do not change the settings.
4	Printout of the message when acting as a Transfer Station 0: Disabled, 1: Enabled	When the machine is acting as a Transfer Station, this bit determines whether the machine prints the fax message coming in from the Requesting Terminal.
5-7	Not used	Do not change the settings.

Communication Switch 0C - Not used (do not change the settings)
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Communication Switch 0D (SP No. 1-104-014)		
No	Function	Comments
0-7	The available memory threshold, below which ringing detection (and therefore reception into memory) is disabled	00 to FF (Hex), unit = 4 kbytes (e.g., 06(H) = 24 kbytes) One page is about 24 kbytes. The machine refers to this setting before each fax reception. If the amount of remaining memory is below this threshold, the machine cannot receive any fax messages. If this setting is kept at 0, the machine will detect ringing signals and go into receive mode even if there is no memory available. This will result in communication failure.

Communication Switch 0E (SP No. 1-104-015)		
No	Function	Comments
0-7	Minimum interval between automatic dialing attempts	06 to FF (Hex), unit = 2 s (e.g., 06(H) = 12 s) This value is the minimum time that the machine waits before it dials the next destination.

Communication Switch 0F – Not used (do not change the settings.)

Communication Switch 10 (SP No. 1-104-017)		
No	Function	Comments
0-7	Memory transmission: Maximum number of dialing attempts to the same destination	01 – FE (Hex) times

Communication Switch 11 – Not used (do not change the settings.)

Communication Switch 12 (SP No. 1-104-019)

No	Function	Comments
0-7	Memory transmission: Interval between dialing attempts to the same destination	01 – FF (Hex) minutes

Communication Switch 13 – Not used (do not change the settings.)

Communication Switch 14 (SP No. 1-104-021)

No	Function	Comments
0	Inch-to-mm conversion during transmission 0: Disabled, 1: Enabled	0: In immediate transmission, data scanned in inch format are transmitted without conversion. In memory transmission, data stored in the SAF memory in mm format are transmitted without conversion. Note: When storing the scanned data into SAF memory, the fax unit always converts the data into mm format. 1: The machine converts the scanned data or stored data in the SAF memory to the format which was specified in the set-up protocol (DIS/NSF) before transmission.
1-5	Not used	Do not change the factory settings.

6-7	Available unit of resolution in which fax messages are received			For the best performance, do not change the factory settings. The setting determined by these bits is informed to the transmitting terminal in the pre-message protocol exchange (in the DIS/NSF frames).
	Bit 7	Bit 6	Unit	
	0	0	mm	
	0	1	inch	
	1	0	mm and inch	
1	1	Not used		

Communication Switch 15 – Not used (do not change the settings)

Communication Switch 16 – Not used (do not change the settings)

Communication Switch 17 (SP No. 1-104-024)

No	Function	Comments
0	SEP reception 0: Disabled 1: Enabled	0: Polling transmission to another maker's machine using the SEP (Selective Polling) signal is disabled.
1	SUB reception 0: Disabled 1: Enabled	0: Confidential reception to another maker's machine using the SUB (Sub-address) signal is disabled.
2	PWD reception 0: Disabled 1: Enabled	0: Disables features that require PWD (Password) signal reception.
3-4	Not used	Do not change the settings.
5	PSTN dial-in routing setting 0: OFF 1: ON	1: The machine sets multiple PSTN dial-in number in the PSTN dial-in lien and transfers received data of each PSTN dial-in number to each address.

6	Not used	Do not change the settings.
7	Action when there is no box with an F-code that matches the received SUB code 0: Disconnect the line 1: Receive the message (using normal reception mode)	Change this setting when the customer requires.

Communication Switch 18 (SP No. 1-104-025)		
No	Function	Comments
0-4	Not used	Do not change the settings.
5	IP-Fax dial-in routing selection 0: Off 1: On	1: Transfers receiving data to each IP-Fax dial-in number. IP-Fax dial-in number is 4 digit-number.
6-7	Not used	Do not change the settings.

Communication Switch 19 - Not used (do not change the settings)
Communication Switch 1A - Not used (do not change the settings)

Communication Switch 1B (SP No. 1-104-028)		
No	Function	Comments
0-7	Extension access code (0 to 7) to turn V.8 protocol On/Off 0: On 1: Off	If the PABX does not support V.8/V.34 protocol procedure, set this bit to "1" to disable V.8. Example: If "0" is the PSTN access code, set bit 0 to 1. When the machine detects "0" as the first dialed number, it automatically disables V.8 protocol. (Alternatively, if "3" is the PSTN access code, set bit 3 to 1.)

Communication Switch 1C (SP No. 1-104-029)		
No	Function	Comments
0-1	Extension access code (8 and 9) to turn V.8 protocol On/Off 0: On 1: Off	Refer to communication switch 1B. Example: If "8" is the PSTN access code, set bit 0 to 1. When the machine detects "8" as the first dialed number, it automatically disables V.8 protocol. (If "9" is the PSTN access code, use bit 1.)
2-7	Not used	Do not change the settings.

Communication Switch 1D - Not used (do not change the settings)
Communication Switch 1E - Not used (do not change the settings)
Communication Switch 1F - Not used (do not change the settings)

4.3.5 G3 SWITCHES

G3 Switch 00 (SP No. 1-105-001)				
No	Function			Comments
0 1	Monitor speaker during communication (tx and rx)			(0, 0): The monitor speaker is disabled all through the communication. (0, 1): The monitor speaker is on up to phase B in the T.30 protocol. (1, 0): Used for testing. The monitor speaker is on all through the communication. Make sure that you reset these bits after testing.
	Bit 1	Bit 0	Setting	
	0	0	Disabled	
	0	1	Up to Phase B	
	1	0	All the time	
	1	1	Not used	
2	Monitor speaker during memory transmission 0: Disabled 1: Enabled			1: The monitor speaker is enabled during memory transmission.
3-5	Not used			Do not change the settings.
6	G3 mode selection for direct line 0: Off 1:On			1: G3 communication through the direct line is enabled.
7	Not used			Do not change the settings.

G3 Switch 01 (SP No. 1-105-002)		
No	Function	Comments
0-3	Not used	Do not change the settings.
4	DIS frame length 0: 10 bytes 1: 4 bytes	1: The bytes in the DIS frame after the 4th byte will not be transmitted (set to 1 if there are communication problems with PC-based faxes which cannot receive the extended DIS frames).
5	Not used	Do not change the setting.
6	Forbid CED/AMsam output 0: Off 1: On (Forbid output)	Do not change this setting (Default: 0: Off), unless communication problem is caused by a CED or ANSam transmission.
7	Not used	Do not change the setting.

G3 Switch 02 (SP No. 1-105-003)		
No	Function	Comments
0	G3 protocol mode used 0: Standard and non-standard 1: Standard only	Change this bit to 1 only when the other end can only communicate with machines that send T.30-standard frames only. 1: Disables NSF/NSS signals (these are used in non-standard mode communication)
1-6	Not used	Do not change the settings.
7	Short preamble 0: Disabled 1: Enabled	Refer to Appendix B in the Group 3 Facsimile Manual for details about Short Preamble.

G3 Switch 03 (SP No. 1-105-004)		
No	Function	Comments
0	DIS detection number (Echo countermeasure) 0: 1 1: 2	0: The machine will hang up if it receives the same DIS frame twice. 1: Before sending DCS, the machine will wait for the second DIS which is caused by echo on the line.
1	Not Used	Do not change the settings.
2	V.8 protocol 0: Disabled 1: Enabled	0: V.8/V.34 communications will not be possible. Note <ul style="list-style-type: none"> ▪ Do not set to 0 unless the line condition is always bad enough to slow down the data rate to 14.4 kbps or lower.
3	ECM frame size 0: 256 bytes 1: 64 bytes	Keep this bit at "0" in most cases.
4	CTC transmission conditions 0: After one PPR signal received 1: After four PPR signals received (ITU-T standard)	0: When using ECM in non-standard (NSF/NSS) mode, the machine sends a CTC to drop back the modem rate after receiving a PPR, if the following condition is met in communications at 14.4, 12.0, 9.6, and 7.2 kbps. $\sqrt{N_{\text{Transmit}} \leq N_{\text{Resend}}}$ <p>N_{Transmit}- Number of transmitted frames N_{Resend}- Number of frames to be retransmitted</p> 1: When using ECM, the machine sends a CTC to drop back the modem rate after receiving four PPRs. PPR, CTC: These are ECM protocol signals. This bit is not effective in V.34 communications.

5	Modem rate used for the next page after receiving a negative code (RTN or PIN) 0: No change 1: Fallback	1: The machine's tx modem rate will fall back before sending the next page if a negative code is received. This bit is ignored if ECM is being used.
6	Not used	Do not change the settings
7	Select detection of reverse polarity in ringing 0: Off 1: On	This switch is used to prevent reverse polarity in ringing on the phone line (applied to PSTN-G3 ringing). Do not change this setting 0: No detection (Outside Japan) 1: Detection (Inside Japan only)

G3 Switch 04 (SP No. 1-105-005)

No	Function	Comments
0-3	Training error detection threshold	0 - F (Hex); 0 - 15 bits If the number of error bits in the received TCF is below this threshold, the machine informs the sender that training has succeeded.
4-7	Not used	Do not change the settings.

G3 Switch 05 (SP No. 1-105-006)

No	Function					Comments
0-3	Initial Tx modem rate (kbps)					These bits set the initial starting modem rate for transmission. Use the dedicated transmission parameters if you need to change this for specific receivers. If a modem rate 14.4 kbps or slower is selected, V.8 protocol should be disabled manually. Cross reference V.8 protocol on/off - G3 switch 03, bit 2
	Bit 3	Bit 2	Bit 1	Bit 0	kbps	
	0	0	0	1	2.4	
	0	0	1	0	4.8	
	0	0	1	1	7.2	
	0	1	0	0	9.6	
	0	1	0	1	12.0	

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	0	1	1	0	14.4	
	0	1	1	1	16.8	
	1	0	0	0	19.2	
	1	0	0	1	21.6	
	1	0	1	0	24.0	
	1	0	1	1	26.4	
	1	1	0	0	28.8	
	1	1	0	1	31.2	
	0	0	1	1	33.6	
	Other settings - Not used					
4-5	Initial modem type for 9.6 k or 7.2 kbps.					These bits set the initial modem type for 9.6 and 7.2 kbps, if the initial modem rate is set at these speeds.
	Bit 5	Bit 4	Setting			
	0	0	V.29			
	0	1	V.17			
	1	0	V.34			
1	1	Not used				
6-7	Not used				Do not change the settings.	

G3 Switch 06 (SP No. 1-105-007)						
No	Function					Comments
0-3	Initial Rx modem rate(kbps)					<p>These bits set the initial starting modem rate for reception.</p> <p>Use a lower setting if high speeds pose problems during reception.</p> <p>If a modem rate 14.4 kbps or slower is selected, V.8 protocol should be disabled manually.</p> <p>Cross reference V.8 protocol on/off - G3 switch 03, bit2</p>
	Bit 3	Bit 2	Bit 1	Bit 0	kbps	
	0	0	0	1	2.4	
	0	0	1	0	4.8	
	0	0	1	1	7.2	
	0	1	0	0	9.6	
	0	1	0	1	12.0	
	0	1	1	0	14.4	
	0	1	1	1	16.8	
	1	0	0	0	19.2	
	1	0	0	1	21.6	
	1	0	1	0	24.0	
	1	0	1	1	26.4	
	1	1	0	0	28.8	
	1	1	0	1	31.2	
Other settings - Not used						

<p>Modem types available for reception</p> <p>The setting of these bits is used to inform the transmitting terminal of the available modem type for the machine in receive mode.</p> <p>If V.34 is not selected, V.8 protocol must be disabled manually.</p> <p>Cross reference</p> <p>V.8 protocol on/off - G3 switch 03, bit 2</p>					
4-7	Bit 7	Bit 6	Bit 5	Bit 4	Types
	0	0	0	1	V.27ter
	0	0	1	0	V.27ter, V.29
	0	0	1	1	V.27ter, V.29, V.33
	0	1	0	0	V.27ter, V.29, V.17/V.33
	0	1	0	1	V.27ter, V.29, V.17/V.33, V.34
Other settings - Not used					

G3 Switch 07 (SP No. 1-105-008)				
No	Function			Comments
0-1	PSTN cable equalizer (tx mode: Internal)			Use a higher setting if there is signal loss at higher frequencies because of the length of wire between the modem and the telephone exchange. Use the dedicated transmission parameters for specific receivers. Also, try using the cable equalizer if one or more of the following symptoms occurs. Communication error Modem rate fallback occurs frequently. Note This setting is not effective in V.34 communications.
	Bit 1	Bit 0	Setting	
	0	0	None	
	0	1	Low	
	1	0	Medium	
	1	1	High	

2-3	PSTN cable equalizer (rx mode: Internal)			<p>Use a higher setting if there is signal loss at higher frequencies because of the length of wire between the modem and the telephone exchange.</p> <p>Also, try using the cable equalizer if one or more of the following symptoms occurs.</p> <p>Communication error with error codes such as 0-20, 0-23, etc.</p> <p>Modem rate fallback occurs frequently.</p> <p>Note</p> <ul style="list-style-type: none"> This setting is not effective in V.34 communications.
	Bit 3	Bit 2	Setting	
	0	0	None	
	0	1	Low	
	1	0	Medium	
	1	1	High	
4	PSTN cable equalizer (V.8/V.17 rx mode: External) 0: Disabled 1: Enabled			Keep this bit at "1".
5	Not used			Do not change the settings.
6	Parameter selection for dial tone detection 0: Normal parameter 1: Specific parameter			<p>0: This uses the fixed table in the ROM for dial tone detection.</p> <p>1: This uses the specific parameter adjusted with SRAM (69ECBEH - 69ECDEH). Select this if the dial tone cannot be detected when the "Normal parameter: 0" is selected.</p>
7	Not used			Do not change the settings.

G3 Switch 08 - Not used (do not change the settings)

G3 Switch 09 - Not used (do not change the settings)

G3 Switch 0A (SP No. 1-105-011)				
No	Function			Comments
0-1	Maximum allowable carrier drop during image data reception			These bits set the acceptable modem carrier drop time. Try a longer setting if error code 0-22 is frequent.
	Bit 1	Bit 0	Value (ms)	
	0	0	200	
	0	1	400	
	1	0	800	
	1	1	Not used	
2	Select cancellation of high-speed RX if carrier signal lost while receiving 0: Off 1: On			This switch setting determines if high-speed receiving ends if the carrier signal is lost when receiving during non-ECM mode
3	Not used			Do not change the settings
4	Maximum allowable frame interval during image data reception. 0: 5 s 1: 13 s			This bit set the maximum interval between EOL (end-of-line) signals and the maximum interval between ECM frames from the other end. Try using a longer setting if error code 0-21 is frequent.
5	Not used			Do not change the settings.

6	Reconstruction time for the first line in receive mode 0: 6 s 1: 12 s	When the sending terminal is controlled by a computer, there may be a delay in receiving page data after the local machine accepts set-up data and sends CFR. This is outside the T.30 recommendation. But, if this delay occurs, set this bit to 1 to give the sending machine more time to send data. Refer to error code 0-20. ITU-T T.30 recommendation: The first line should come within 5 s of CFR.
7	Not used	Do not change the settings.

G3 Switch 0B Not used (do not change the settings).
G3 Switch 0C Not used (do not change the settings).
G3 Switch 0D Not used (do not change the settings).

G3 Switch 0E (SP No. 1-105-015)		
No	Function	Comments
0-7	Set CNG send time interval Some machines on the receiving side may not be able to automatically switch the 3-second CNG interval.	
	High order bit	3000-2250ms: 3000-50xNms 3000 – 50 x Nms 0F (3000 ms) <= N <= FF (2250 ms)
	Low order bit	00-0E(3000-3700ms: 3000+50xNms 3000 – 50 x Nms 0F (3000 ms) <= N <= 0F (3700 ms)

G3 Switch 0F (SP No. 1-105-016)		
No	Function	Comments
0	Alarm when an error occurred in Phase C or later 0: Disabled 1: Enabled	If the customer wants to hear an alarm after each error communication, change this bit to "1".
1	Alarm when the handset is off-hook at the end of communication 0: Disabled 1: Enabled	If the customer wants to hear an alarm if the handset is off-hook at the end of fax communication, change this bit to "1".
2-3	Not used	Do not change the settings.
4	Sidaa manual calibration setting 0: Off 1: On	1: manually calibrates for communication with a line, whose current change occurs such as an optical fiber line.
5-7	Not used	Do not change the settings.

4.3.6 IP FAX SWITCHES

IP Fax Switch 00 (SP No. 1-111-001)		
No.	Function	Comments
0	Not used	Do not change this setting.
1	IP Fax Transport 0: TCP, 1: UDP	Selects TCP or UDP protocol for IP-Fax
2	IP Fax single port selection 0: OFF, 1: ON (enable)	Selects single data port.
3	IP Fax double ports (single data port) selection 0: OFF, 1: ON (enable)	Selects whether IP-Fax uses a double port.
4	IP Fax Gatekeeper 0: OFF, 1: ON (enable)	Enables/disables the gatekeeper for IP-Fax.
5	IP Fax T30 bit signal reverse 0: LSB first, 1: MSB first	Reverses the T30 bit signal.
6	IP Fax max bit rate setting 0: Not affected, 1: Affected	When "0" is selected, the max bit rate does not affect the value of the DIS/DCS. When "1" is selected, the max bit rate affects the value of the DIS/DCS.
7	IP Fax received telephone number confirmation 0: No confirmation 1: Confirmation	When "0" is selected, fax data is received without checking the telephone number. When "1" is selected, fax data is received only when confirming that the telephone number from the sender matches the registered telephone number in this machine. If this confirmation fails, the line is disconnected.

IP Fax Switch 01 (SP No. 1-111-002)					
No.	Function			Comments	
0-3	IP Fax delay level setting Selects the acceptable delay level. Level 0 is the highest quality Default is "0000" (level 0).				
	Bit 3	Bit 2	Bit 1	Bit 0	
	0	0	0	0	Level 0
	0	0	0	1	Level 1
	0	0	1	0	Level 2
	0	0	1	1	Level 3
4-7	IP Fax preamble wait time setting			Selects the preamble wait time. [00 to 0f] There are 16 values in this 4-bit binary switch combination. Waiting time: set value level x 100 ms Max: 0f (1500 ms) Min: 00 (No wait time) The default is "0000" (00H).	

IP Fax Switch 02 (SP No. 1-111-003)		
No.	Function	Comments
0	IP Fax bit signal reverse setting 0: Maker code setting 1: Internal bit switch setting	When "0" is selected, the bit signal reverse method is decided by the maker code. When "1" is selected, the bit signal reverse method is decided by the internal bit switch. (When communicating between IP Fax devices, LSB first is selected.)
1	IP Fax transmission speed setting 0: Modem speed 1: No limitation	Selects the transmit speed for IP Fax communication.
2	SIP transport setting 0: TCP 1: UDP	This bit switch sets the transport that has priority for receiving IP Fax data. This function is activated only when the sender has both TCP and UDP.
3	CCM connection 0: No CCM connection 1: CCM connection	When "1" is selected, only the connection call message with H.323 or no tunneled H.245 is transmitted via CCM.
4	Message reception selection from non-registered SIP server 0: Answer 1: Not answer	0: This answers the INVITE message from the SIP server not registered for the machine. 1: This does not receive the INVITE message from the SIP server not registered for the machine and send a refusal message.
5	ECM communication setting 0: No limit for image compression 1: Limit for image compression	0: This does not limit the type of the image compression with ECM communication. 1: When the other end machine is Cisco, this permits the image compression other than JBIG or MMR with ECM communication.
6-7	Not used	Do not change these settings.

IP Fax Switch 03 (SP No. 1-111-004)		
No.	Function	Comments
0	Effective field limitation for G3 standard function information 0: OFF, 1: 4byte (DIS)	Limits the effective field for standard G3 function information.
1	Switching between G3 standard and G3 non standard 0: Enable switching 1: G3 standard only	Enables/disables switching between G3 standard and G3 non-standard.
2	AI modem rate function 0: OFF, 1: ON (enable)	Enables/disables the AI modem rate.
3	ECM frame size selection at transmitting 0: 256byte, 1: 64byte	Selects the ECM frame size for sending.
4	DIS detection times for echo prevention 0: 1 time, 1: 2 times	Sets the number of times for DIS to detect echoes.
5	CTC transmission selection 0: PPRx1 1: PPRx4	When "0" is selected, the transmission condition is decided by error frame numbers. When "1" is selected, the transmission condition is based on the ITU-T method.
6	Shift down setting at receiving negative code 0: OFF, 1: ON	Selects whether to shift down when negative codes are received.
7	Not used	Do not change this setting.

IP Fax Switch 04 (SP No. 1-111-005)		
No.	Function	Comments
0-3	TCF error threshold	Sets the TCF error threshold level. [00 to 0f] The default is "1111" (0fH).
4-7	Not used	Do not change these settings.

IP Fax Switch 05 (SP No. 1-111-006)						
No.	Function					Comments
0-3	Modem bit rate setting for transmission (kbps)					Sets the modem bit rate for transmission. The default is "0110" (14.4K bps).
	Bit 3	Bit 2	Bit 1	Bit 0	kbps	
	0	0	0	1	2.4	
	0	0	1	1	4.8	
	0	0	1	1	7.2	
	0	1	0	0	9.6	
	0	1	0	1	12.0	
	0	1	1	0	14.4	
4-5	Modem setting for transmission					Sets the modem type for transmission. The default is "00" (V29).
	Bit 5	Bit 4	Types			
	0	0	V29			
	0	1	V17			
	1	0	Not used			
	1	1	Not used			
6-7	Not used					Do not change these settings.

IP Fax Switch 06 (SP No. 1-111-007)					
No.	Function			Comments	
0-3	Modem bit rate setting for reception Sets the modem bit rate for reception. The default is "0110" (14.4K bps).				
4-7	Modem setting for reception Sets the modem type for reception. The default is "0100" (V27ter, V29, V17).				
	Bit 7	Bit 6	Bit 5	Bit 4	Types
	0	0	0	1	V.27ter
	0	0	1	0	V.27ter, V.29
	0	0	1	1	V.27ter, V.29, V.33
	0	1	0	0	V.27ter, V.29, V.17/V.33
Other settings - Not used					

IP Fax Switch 07 (SP No. 1-111-008)		
No.	Function	Comments
0	TSI information 0: Not added, 1: Added	Adds or does not add TSI information to NSS(S).
1	DCN transmission setting at T1 timeout 0: Not transmitted 1: Transmitted	Transmits or does not transmit DCN at T1 timeout.
2	Not used	Do not change this setting.
3	Hang up setting at DIS reception disabled 0: No hang up 1: Hang up after transmitting DCN	Sets whether the machine disconnects after DIS reception.
4	Number of times for training 0: 1 time, 1: 2 times	Selects the number of times training is done at the same bit rate.

5	Space CSI transmission setting at no CSI registration 0: Not transmitted 1: Transmitted	When "0" is selected, frame data is enabled. When "1" is selected, the transmitted data is all spaces.
6-7	Not used	Do not change these settings.

IP Fax Switch 08 (SP No. 1-111-009)				
No.	Function			Comments
0-1	T1 timer adjustment			Adjusts the T1 timer. The default is "00" (35 seconds).
	Bit 1	Bit 0		
	0	0	35 s	
	0	1	40 s	
	1	0	50 s	
	1	1	60 s	
2-3	T4 timer adjustment			Adjust the T4 timer. The default is "00" (3 seconds).
	Bit 3	Bit 2		
	0	0	3 s	
	0	1	3.5 s	
	1	0	4 s	
	1	1	5 s	
4-5	T0 timer adjustment			Adjusts the fail safe timer. This timer sets the interval between "setup" data transmission and T.38 phase decision. If your destination return is late on the network or G3 fax return is late, adjust the longer interval timer. The default is "00" (75 seconds).
	Bit 5	Bit 4		
	0	0	75 s	
	0	1	120 s	
	1	0	180 s	
	1	1	240 s	

6-7	Not used	Do not change these settings.
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IP Fax Switch 09 (SP No. 1-111-010)				
No.	Function		Comments	
0	Network I/F setting for SIP connection 0: IPv4 1: IPv6.		Selects the connection type (IPV4 or IPV6) to connect to the SIP server.	
1	Network I/F setting for Fax communication 0: Same setting as SIP server connection 1: Automatic setting		0: The I/F setting for fax communication follows the setting for SIP server connection. 1: The negotiation between the SIP server and the device decides whether IPv4 or IPv6 is used for the I/F setting for fax communication.	
2	Record-route setting 0: Disable 1: Enable		0: Disables the record-route function of the SIP server. 1: Enables the record-route function of the SIP server.	
3-4	re-INVITE transmission delay timer setting		This changes the interval for transmit re-INVITE after receiving the ACK message transmitted by T.38 device.	
	Bit 4	Bit 3		
	0	0		No delay
	0	1		1 sec
	1	0		2 sec
	1	1	3 sec	
5-7	Not used.		Do not change these settings.	

IP Fax Switch 0A - Not used (do not change the settings).
IP Fax Switch 0B - Not used (do not change the settings).
IP Fax Switch 0C - Not used (do not change the settings).
IP Fax Switch 0D - Not used (do not change the settings).
IP Fax Switch 0E - Not used (do not change the settings).

Fax Option
Type C305
(D649)

4.4 NCU PARAMETERS

The following tables give the RAM addresses and the parameter calculation units that the machine uses for ringing signal detection and automatic dialing. The factory settings for each country are also given. Most of these must be changed by RAM read/write (SP2-102), but some can be changed using NCU Parameter programming (SP2-103, 104 and 105); if SP2-103, 104 and 105 can be used, this will be indicated in the Remarks column. The RAM is programmed in hex code unless (BCD) is included in the Unit column.

Note

- The following addresses describe settings for the standard NCU.
- Change the fourth digit from “5” to “6” (e.g. 680500 to 680600) for the settings for the first optional G3 interface unit and from “5” to “7” (e.g. 680700) for the settings for the second optional G3 interface unit.

Address	Function					
680500	Country/Area code for NCU parameters					
	Use the Hex value to program the country/area code directly into this address, or use the decimal value to program it using SP2-103-001					
	Country /Area	Decimal	Hex	Country /Area	Decimal	Hex
	France	00	00	Asia	18	12
	Germany	01	01	Japan	19	13
	UK	02	02	Hong Kong	20	14
	Italy	03	03	South Africa	21	15
	Austria	04	04	Australia	22	16
	Belgium	05	05	New Zealand	23	17
	Denmark	06	06	Singapore	24	18
	Finland	07	07	Malaysia	25	19
	Ireland	08	08	China	26	1A
	Norway	09	09	Taiwan	27	1B

Address	Function					
	Sweden	10	0A	Korea	28	1C
	Switzerland	11	0B	Brazil	29	1D
	Portugal	12	0C	Turkey	32	20
	Holland	13	0D	Greece	33	21
	Spain	14	0E	Hungary	34	22
	Israel	15	0F	Czech	35	23
	USA	17	11	Poland	36	24

Address	Function	Unit	Remarks
680501	Line current detection time	20 ms	Line current detection is disabled. Line current is not detected if 680501 contains FF.
680502	Line current wait time		
680503	Line current drop detect time		
680504	PSTN dial tone frequency upper limit (high byte)	Hz (BCD)	If both addresses contain FF(H), tone detection is disabled.
680505	PSTN dial tone frequency upper limit (low byte)		
680506	PSTN dial tone frequency lower limit (high byte)	Hz (BCD)	If both addresses contain FF(H), tone detection is disabled.
680507	PSTN dial tone frequency lower limit (low byte)		
680508	PSTN dial tone detection time	20 ms	If 680508 contains FF(H), the machine pauses for the pause time (address 68050D / 68050E). Italy: See Note 2.
680509	PSTN dial tone reset time (LOW)		
68050A	PSTN dial tone reset time (HIGH)		
68050B	PSTN dial tone continuous tone time		

Address	Function	Unit	Remarks
68050C	PSTN dial tone permissible drop time		
68050D	PSTN wait interval (LOW)		
68050E	PSTN wait interval (HIGH)		-
68050F	PSTN ring-back tone detection time	20 ms	Detection is disabled if this contains FF.
680510	PSTN ring-back tone off detection time	20 ms	-
680511	PSTN detection time for silent period after ring-back tone detected (LOW)	20 ms	-
680512	PSTN detection time for silent period after ring-back tone detected (HIGH)	20 ms	-
680513	PSTN busy tone frequency upper limit (high byte)		
680514	PSTN busy tone frequency upper limit (low byte)	Hz (BCD)	If both addresses contain FF(H), tone detection is disabled.
680515	PSTN busy tone frequency lower limit (high byte)		
680516	PSTN busy tone frequency lower limit (low byte)	Hz (BCD)	If both addresses contain FF(H), tone detection is disabled.
680517	PABX dial tone frequency upper limit (high byte)		
680518	PABX dial tone frequency upper limit (low byte)	Hz (BCD)	If both addresses contain FF(H), tone detection is disabled.
680519	PABX dial tone frequency lower limit (high byte)	Hz (BCD)	If both addresses contain FF(H), tone

Address	Function	Unit	Remarks
68051A	PABX dial tone frequency lower limit (low byte)		detection is disabled.
68051B	PABX dial tone detection time	20 ms	If 68051B contains FF, the machine pauses for the pause time (680520 / 680521).
68051C	PABX dial tone reset time (LOW)		
68051D	PABX dial tone reset time (HIGH)		
68051E	PABX dial tone continuous tone time		
68051F	PABX dial tone permissible drop time		
680520	PABX wait interval (LOW)		
680521	PABX wait interval (HIGH)		
680522	PABX ringback tone detection time	20 ms	If both addresses contain FF(H), tone detection is disabled.
680523	PABX ringback tone off detection time	20 ms	
680524	PABX detection time for silent period after ringback tone detected (LOW)	20 ms	If both addresses contain FF(H), tone detection is disabled.
680525	PABX detection time for silent period after ringback tone detected (HIGH)	20 ms	
680526	PABX busy tone frequency upper limit (high byte)	Hz (BCD)	If both addresses contain FF(H), tone detection is disabled.
680527	PABX busy tone frequency upper limit (low byte)		
680528	PABX busy tone frequency lower limit (high byte)	Hz (BCD)	If both addresses contain FF(H), tone detection is disabled.
680529	PABX busy tone frequency lower limit (low byte)		

Address	Function	Unit	Remarks
68052A	Busy tone ON time: range 1	20 ms	
68052B	Busy tone OFF time: range 1		
68052C	Busy tone ON time: range 2		
68052D	Busy tone OFF time: range 2		
68052E	Busy tone ON time: range 3		
68052F	Busy tone OFF time: range 3	20 ms	
680530	Busy tone ON time: range 4		
680531	Busy tone OFF time: range 4		
680532	Busy tone continuous tone detection time		
680533	<p>Busy tone signal state time tolerance for all ranges, and number of cycles required for detection (a setting of 4 cycles means that ON-OFF-ON or OFF-ON-OFF must be detected twice).</p> <p>Tolerance (±)</p> <p>Bit 1: 0, Bit 0: 0 = 75% Bits 2 and 3 must always be kept at 0.</p> <p>Bit 1: 0, Bit 0: 0 = 50% Bits 2 and 3 must always be kept at 0.</p> <p>Bit 1: 0, Bit 0: 0 = 25%</p> <p>Bit 1: 0, Bit 0: 0 = 12.5%</p> <p>Bits 7, 6, 5, 4 - number of cycles required for cadence detection</p>		
680534	International dial tone frequency upper limit (high byte)	Hz (BCD)	If both addresses contain FF(H), tone detection is disabled.
680535	International dial tone frequency upper limit (low byte)		
680536	International dial tone frequency lower limit (high byte)	Hz (BCD)	If both addresses contain FF(H), tone detection is disabled.
680537	International dial tone frequency lower limit (low byte)		
680538	International dial tone detection time	20 ms	If 680538 contains FF, the machine pauses for

Address	Function	Unit	Remarks
680539	International dial tone reset time (LOW)		the pause time (68053D / 68053E). Belgium: See Note 2.
68053A	International dial tone reset time (HIGH)		
68053B	International dial tone continuous tone time		
68053C	International dial tone permissible drop time		
68053D	International dial wait interval (LOW)		
68053E	International dial wait interval (HIGH)	-	
68053F	Country dial tone upper frequency limit (HIGH)	Hz (BCD)	If both addresses contain FF(H), tone detection is disabled.
680540	Country dial tone upper frequency limit (LOW)		
680541	Country dial tone lower frequency limit (HIGH)		
680542	Country dial tone lower frequency limit (LOW)		
680543	Country dial tone detection time	20 ms	If 680543 contains FF, the machine pauses for the pause time (680548 / 680549).
680544	Country dial tone reset time (LOW)		
680545	Country dial tone reset time (HIGH)		
680546	Country dial tone continuous tone time	-	-
680547	Country dial tone permissible drop time	20 ms	-

Address	Function	Unit	Remarks
680548	Country dial wait interval (LOW)		
680549	Country dial wait interval (HIGH)		
68054A	Time between opening or closing the DO relay and opening the OHDI relay	1 ms	See Notes 3, 6 and 8. SP2-103-012 (parameter 11).
68054B	Break time for pulse dialing	1 ms	See Note 3. SP2-103-013 (parameter 12).
68054C	Make time for pulse dialing	1 ms	See Note 3. SP2-103-014 (parameter 13).
68054D	Time between final OHDI relay closure and DO relay opening or closing	1 ms	See Notes 3, 6 and 8. SP2-103-015 (parameter 14). This parameter is only valid in Europe.
68054E	Minimum pause between dialed digits (pulse dial mode)	20 ms	See Note 3 and 8. SP2-103-016 (parameter 15).
68054F	Time waited when a pause is entered at the operation panel		SP2-103-017 (parameter 16). See Note 3.
680550	DTMF tone on time	1 ms	SP2-103-018 (parameter 17).
680551	DTMF tone off time		SP2-103-019 (parameter 18).
680552	Tone attenuation level of DTMF signals while dialing	-N x 0.5 -3.5 dBm	SP2-103-020 (parameter 19). See Note 5.

Address	Function	Unit	Remarks
680553	Tone attenuation value difference between high frequency tone and low frequency tone in DTMF signals	-dBm x 0.5	SP2-103-021 (parameter 20). The setting must be less than -5dBm, and should not exceed the setting at 680552h above. See Note 5.
680554	PSTN: DTMF tone attenuation level after dialling	-N x 0.5 -3.5 dBm	SP2-103-022 (parameter 21). See Note 5.
680555	ISDN: DTMF tone attenuation level after dialling	-dBm x 0.5	See Note 5
680556	Not used	-	Do not change the settings.
680557	Time between 68054Dh (NCU parameter 14) and 68054Eh (NCU parameter 15)	1 ms	This parameter takes effect when the country code is set to France.
680558	Not used	-	Do not change the setting.
680559	Grounding time (ground start mode)	20 ms	The Gs relay is closed for this interval.
68055A	Break time (flash start mode)	1 ms	The OHDI relay is open for this interval.
68055B	International dial access code (High)	BCD	For a code of 100: 68055B - F1 68055C - 00
68055C	International dial access code (Low)		

Address	Function	Unit	Remarks
68055D	PSTN access pause time	20 ms	This time is waited for each pause input after the PSTN access code. If this address contains FF[H], the pause time stored in address 68054F is used. Do not set a number more than 7 in the UK.
68055E	Progress tone detection level, and cadence detection enable flags	Bit 7: 0, Bit 6: 0, Bit 5: 0 = -25.0 dBm Bit 7: 0, Bit 6: 0, Bit 5: 1 = -35.0 dBm Bit 7: 0, Bit 6: 1, Bit 5: 0 = -30.0 dBm Bit 7: 1, Bit 6: 0, Bit 5: 0 = -40.0 dBm Bit 7: 1, Bit 6: 1, Bit 5: 0 = -49.0 dBm Bits 2, 0 - See Note 2.	
68055F To 680564	Not used	-	Do not change the settings.
680565	Long distance call prefix (HIGH)	BCD	For a code of 0: 680565 – FF 680566 - FF
680566	Long distance call prefix (LOW)	BCD	
680567 to 680571	Not used	-	Do not change the settings.
680572	Acceptable ringing signal frequency: range 1, upper limit	1000/ N (Hz).	SP2-103-003 (parameter 02).
680573	Acceptable ringing signal frequency: range 1, lower limit		SP2-103-004 (parameter 03).
680574	Acceptable ringing signal frequency: range 2, upper limit		SP2-103-005 (parameter 04).
680575	Acceptable ringing signal frequency: range 2, lower limit		SP2-103-006 (parameter 05).

Address	Function	Unit	Remarks
680576	Number of rings until a call is detected	1	SP2-103-007 (parameter 06). The setting must not be zero.
680577	Minimum required length of the first ring	20 ms	See Note 4. SP2-103-008 (parameter 07).
680578	Minimum required length of the second and subsequent rings	20 ms	SP2-103-009 (parameter 08).
680579	Ring signal detection reset time (LOW)	20 ms	SP2-103-010 (parameter 09).
68057A	Ring signal detection reset time (HIGH)		SP2-103-011 (parameter 10).
68057B to 680580	Not used	-	Do not change the settings.
680581	Interval between dialing the last digit and switching the Oh relay over to the external telephone when dialing from the operation panel in handset mode.	20 ms	Factory setting: 500 ms
680582	Bits 0 and 1 - Handset off-hook detection time Bit 1:0, Bit 0: 0 = 200 ms Bit 1:0, Bit 0: 1 = 800 ms Other Not used Bits 2 and 3 - Handset on-hook detection time Bit 3: 0, Bit 2: 0 = 200 ms Bit 3: 0, Bit 2: 1 = 800 ms Other Not used Bits 4 to 7 - Not used	-	-

Address	Function	Unit	Remarks
680583 To 6805A0	Not used	-	Do not change the settings.
6805A1	Acceptable CED detection frequency upper limit (high byte)	BCD (Hz)	If both addresses contain FF(H), tone detection is disabled.
6805A2	Acceptable CED detection frequency upper limit (low byte)		
6805A3	Acceptable CED detection frequency lower limit (high byte)	BCD (Hz)	If both addresses contain FF(H), tone detection is disabled.
6805A4	Acceptable CED detection frequency lower limit (low byte)		
6805A5	CED detection time	20 ms ± 20 ms	Factory setting: 200 ms
6805A6	Acceptable CNG detection frequency upper limit (high byte)	BCD (Hz)	If both addresses contain FF(H), tone detection is disabled.
6805A7	Acceptable CNG detection frequency upper limit (low byte)		
6805A8	Acceptable CNG detection frequency lower limit (high byte)	BCD (Hz)	If both addresses contain FF(H), tone detection is disabled.
6805A9	Acceptable CNG detection frequency lower limit (low byte)		
6805AA	Not used	-	Do not change the setting.
6805AB	CNG on time	20 ms	Factory setting: 500 ms
6805AC	CNG off time	20 ms	Factory setting: 3000 ms
6805AD	Number of CNG cycles required for detection	-	The data is coded in the same way as address 680533.

Address	Function	Unit	Remarks
6805AE	Not used	-	Do not change the settings.
6805AF	Acceptable AI short protocol tone (800Hz) detection frequency upper limit (high byte)	Hz (BCD)	If both addresses contain FF(H), tone detection is disabled.
6805B0	Acceptable AI short protocol tone (800Hz) detection frequency upper limit (low byte)		
6805B1	Acceptable AI short protocol tone (800Hz) detection frequency lower limit (high byte)	Hz(BCD)	If both addresses contain FF(H), tone detection is disabled.
6805B2	Acceptable AI short protocol tone (800Hz) detection frequency lower limit (low byte)		
6805B3	Detection time for 800 Hz AI short protocol tone	20 ms	Factory setting: 360 ms
6805B4	PSTN: Tx level from the modem	-N – 3 dBm	SP2-103-002 (parameter 01).
6805B5	PSTN: 1100 Hz tone transmission level	- N 6805B4 - 0.5N 6805B5 –3.5 (dB) See Note 7.	
6805B6	PSTN: 2100 Hz tone transmission level	- N6805B4 - 0.5N 6805B6 –3 (dB) See Note 7.	
6805B7	PABX: Tx level from the modem	- dBm	
6805B8	PABX: 1100 Hz tone transmission level	- N 6805B7 - 0.5N 6805B8 (dB)	
6805B9	PABX: 2100 Hz tone transmission level	- N 6805B7 - 0.5N 6805B9 (dB)	
6805BD	Modem turn-on level (incoming signal detection level)	-37-0.5N (dBm)	

Address	Function	Unit	Remarks			
6805BE to 6805C6	Not used	-	Do not change the settings.			
6805C7	Bits 0 to 3 – Not used Bit 4 = V.34 protocol dump 0: Simple, 1: Detailed (default) Bits 5 to 7 – Not used.					
6805C8 to 6805D9	Not used	-	Do not change the settings.			
6805DA	T.30 T1 timer	1 s				
6805E0 bit 3	Maximum wait time for post message	0: 12 s 1: 30 s	1: Maximum wait time for post message (EOP/EOM/MPS) can be changed to 30 s. Change this bit to “1” if communication errors occur frequently during V.17 reception.			
6805E3	Voltage setting to detect off-hook for voltage/DP detection for an externally connected line.		0: Auto 1: Fixed V	Do not change these settings		
	Here is a summary of the fixed voltage settings (1: Fixed) for an externally connected line.					
	Bit 7	Bit 6	Bit 5		Bit 4	-
	0	0	0		0	Not used
	0	0	0		1	2.75 V
	0	0	1		0	5.5 V
	1	0	0		0	22 V
1	1	1	1	41.25 V		

Address	Function				Unit	Remarks		
6805E4	Bit 1 sets the level of the call signal, Bit 3 sets the call signal impedance				Bit 1	0	RT=0 (Low)	-
						1	RT=1 (High)	
					Bit 3	0	RZ=0 (High)	
						1	RZ=1 (Composite)	
6805E5	Bit 0 sets the ring detection method, Bit 1 sets the ring detection method when fixed.				Bit 0	0	Auto	If any setting is changed, select a setting that is higher than the default setting.
						1	Fixed	
					Bit 1	0	Use RDTP	
						1	Use RDTN	
	Here is a summary of the voltages for the detection of off-hook for DP detection.							
	Bit 7	Bit 6	Bit 5	Bit 4	-			
	0	0	0	0	Not used			
	0	0	0	1	2.75 V			
	0	0	1	0	5.5 V			
	1	0	0	0	22 V			
1	1	1	1	41.25 V				

NOTES

1. If a setting is not required, store FF in the address.

2. Italy and Belgium only

RAM address 68055E: the lower four bits have the following meaning.

Bit 2 - 1: International dial tone cadence detection enabled (Belgium)

Bit 1 - Not used

Bit 0 - 1: PSTN dial tone cadence detection enabled (Italy)

If bit 0 or bit 2 is set to 1, the functions of the following RAM addresses are changed.

680508 (if bit 0 = 1) or 680538 (if bit 2 = 1): tolerance for on or off state

duration (%), and number of cycles required for detection, coded as in address 680533.

68050B (if bit 0 = 1) or 68053B (if bit 2 = 1): on time, hex code (unit = 20 ms)

68050C (if bit 0 = 1) or 68053C (if bit 2 = 1): off time, hex code (unit = 20 ms)

3. Pulse dial parameters (addresses 68054A to 68054F) are the values for 10 pps. If 20 pps is used, the machine automatically compensates.

4. The first ring may not be detected until 1 to 2.5 wavelengths after the time specified by this parameter.

5. The calculated level must be between 0 and 10.

The attenuation levels calculated from RAM data are:

High frequency tone:

- $-0.5 \times N_{680552/680554} - 3.5$ dBm
- $-0.5 \times N_{680555}$ dBm

Low frequency tone:

- $-0.5 \times (N_{680552/680554} + N_{680553}) - 3.5$ dBm
- $-0.5 \times (N_{680555} + N_{680553})$ dBm

Note

- N_{680552} , for example, means the value stored in address 680552(H)

6. 68054A: Europe - Between Ds opening and Di opening, France - Between Ds closing and Di opening

68054D: Europe - Between Ds closing and Di closing, France - Between Ds opening and Di closing

7. Tone signals which frequency is lower than 1500Hz (e.g., 800Hz tone for AI short protocol) refer to the setting at 6805B5h. Tones which frequency is higher than 1500Hz refer to the setting at 6805B6h.

8. 68054A, 68054D, 68054E: The actual inter-digit pause (pulse dial mode) is the sum of the period specified by the RAM addresses 68054A, 68054D, and 68054E.

4.5 DEDICATED TRANSMISSION PARAMETERS

There are two sets of transmission parameters: Fax and E-mail

Each Quick Dial Key and Speed Dial Code has eight bytes of programmable parameters allocated to it. If transmissions to a particular machine often experience problems, store that terminal's fax number as a Quick Dial or Speed Dial, and adjust the parameters allocated to that number.

The programming procedure will be explained first. Then, the eight bytes will be described.

4.5.1 PROGRAMMING PROCEDURE

1. Set the bit 0 of System Bit Switch 00 to 1.
2. Enter Address Book Management mode ([User Tools]> System Settings> Key Operator> Address Book Management).
3. Select the address book that you want to program.
4. For the fax parameter, select "Fax Dest.", for the E-mail parameter, select "E-mail", then press "Start". Make sure that the LED of the Start button lights green.
5. The settings for the switch 00 are now displayed. Press the bit number that you wish to change.
6. To scroll through the parameter switches, either:
7. Select the next switch: press "Next" or Select the previous switch: "Prev." until the correct switch is displayed. Then go back to step 6.
8. After the setting is changed, press "OK".
9. After finishing, reset bit 0 of System Bit Switch 00 to 0.

4.5.2 PARAMETERS

Fax Parameters

The initial settings of the following fax parameters are all FF(H) - all the parameters are disabled.

Switch 00
FUNCTION AND COMMENTS
<p>ITU-T T1 time (for PSTN G3 mode)</p> <p>If the connection time to a particular terminal is longer than the NCU parameter setting, adjust this byte. The T1 time is the value stored in this byte (in hex code), multiplied by 1 second.</p> <p>Range: 0 to 120 s (00h to 78h)</p> <p>FFh - The local NCU parameter factory setting is used.</p> <p>Do not program a value between 79h and FEh.</p>

Switch 01							
No	FUNCTION					COMMENTS	
0-4	Tx level					<p>If communication with a particular remote terminal often contains errors, the signal level may be inappropriate. Adjust the Tx level for communications with that terminal until the results are better.</p> <p>If the setting is "Disabled", the NCU parameter 01 setting is used.</p> <p>Note</p> <ul style="list-style-type: none"> Do not use settings other than listed on the left. 	
	Bit4	Bit3	Bit2	Bit1	Bit0		
	0	0	0	0	0		0
	0	0	0	0	1		-1
	0	0	0	1	0		-2
	0	0	0	1	1		-3
	0	0	1	0	0		-4
	↓	↓	↓	↓	↓		↓
	0	1	1	1	1		-15
	1	1	1	1	1		Disabled


5-7	<p>Cable equalizer</p> <p>Bit 7: 0, Bit 6: 0, Bit 5: 0 = None</p> <p>Bit 7: 0, Bit 6: 0, Bit 5: 1 = Low</p> <p>Bit 7: 0, Bit 6: 1, Bit 5: 0 = Medium</p> <p>Bit 7: 0, Bit 6: 1, Bit 5: 1 = High</p> <p>Bit 7: 1, Bit 6: 1, Bit 5: 1 = Disabled</p>	<p>Use a higher setting if there is signal loss at higher frequencies because of the length of wire between the modem and the telephone exchange when calling the number stored in this Quick/Speed Dial.</p> <p>Also, try using the cable equalizer if one or more of the following symptoms occurs.</p> <p>Communication error with error codes such as 0-20, 0-23, etc.</p> <p>Modem rate fallback occurs frequently.</p> <p>Note</p> <ul style="list-style-type: none"> Do not use settings other than listed on the left. <p>If the setting is "Disabled", the bit switch setting is used.</p>
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Switch 02						
No	FUNCTION					COMMENTS
0-3	Initial Tx modem rate					<p>If training with a particular remote terminal always takes too long, the initial modem rate may be too high. Reduce the initial Tx modem rate using these bits.</p> <p>For the settings 14.4 or kbps slower, Switch 04 bit 4 must be changed to 0.</p> <p>Note</p> <ul style="list-style-type: none"> Do not use settings other than listed on the left. If the setting is "Disabled", the bit switch setting is used.
	Bit3	Bit2	Bit1	Bit0	bps	
	0	0	0	0	Not used	
	0	0	0	1	2400	
	0	0	1	0	4800	
	0	0	1	1	7200	
	0	1	0	0	9600	
	0	1	0	1	12000	
	0	1	1	0	14400	
	0	1	1	1	16800	

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	1	0	0	0	19200	
	1	0	0	1	21600	
	1	0	1	0	24000	
	1	0	1	1	26400	
	1	1	0	0	28800	
	1	1	0	1	31200	
	1	1	1	0	33600	
	1	1	1	1	Disabled	
	Other settings: Not used					
4-7	Not used				Do not change the settings.	

Switch 03		
No	FUNCTION	COMMENTS
0-1	Inch-mm conversion before tx Bit 1: 0, Bit 0: 0 = Inch-mm conversion available Bit 1: 0, Bit 0: 1 = Inch only Bit 1: 1, Bit 0: 0 = Not used Bit 1: 1, Bit 0: 1 = Disabled	The machine uses inch-based resolutions for scanning. If "inch only" is selected, the printed copy may be slightly distorted at the other end if that machine uses mm-based resolutions. If the setting is "Disabled", the bit switch setting is used.
2-3	DIS/NSF detection method Bit 3: 0, Bit 2: 0 = First DIS or NSF Bit 3: 0, Bit 2: 1 = Second DIS or NSF Bit 3: 1, Bit 2: 0 = Not used Bit 3: 1, Bit 2: 1 = Disabled	(0, 1): Use this setting if echoes on the line are interfering with the set-up protocol at the start of transmission. The machine will then wait for the second DIS or NSF before sending DCS or NSS. If the setting is "Disabled", the bit switch setting is used.

4	V.8 protocol 0: Off 1: Disabled	If transmissions to a specific destination always end at a lower modem rate (14,400 bps or lower), disable V.8 protocol so as not to use V.34 protocol. 0: V.34 communication will not be possible. If the setting is "Disabled", the bit switch setting is used.
5	Compression modes available in transmit mode 0: MH only 1: Disabled	This bit determines the capabilities that are informed to the other terminal during transmission. If the setting is "Disabled", the bit switch setting is used.
6-7	ECM during transmission Bit 7: 0, Bit 6: 0 = Off Bit 7: 0, Bit 6: 1 = On Bit 7: 1, Bit 6: 0 = Not used Bit 7: 1, Bit 6: 1 = Disabled	For example, if ECM is switched on but is not wanted when sending to a particular terminal, use the (0, 0) setting. <div style="border: 1px solid black; border-radius: 10px; padding: 2px; display: inline-block;">  Note </div> <ul style="list-style-type: none"> ▪ V.8/V.34 protocol and JBIG compression are automatically disabled if ECM is disabled. ▪ If the setting is "Disabled", the bit switch setting is used.

Switch 04 - Not used (do not change the settings)
Switch 05 - Not used (do not change the settings)
Switch 06 - Not used (do not change the settings)
Switch 07 - Not used (do not change the settings)
Switch 08 - Not used (do not change the settings)
Switch 09 - Not used (do not change the settings)

E-mail Parameters

The initial settings of the following e-mail parameters are all "0" (all parameters disabled).

Switch 00		
No	FUNCTION	COMMENTS
0	MH Compression mode for e-mail attachments 0: Off 1: On	Switches MH compression on and off for files attached to e-mails for sending.
1	MR Compression mode for e-mail attachments 0: Off 1: On	Switches MR compression on and off for files attached to e-mails for sending.
2	MMR Compression mode for e-mail attachments 0: Off 1: On	Switches MMR compression on and off for files attached to e-mails for sending.
3-6	Not used	Do not change these settings.
7	Designates the bits to reference for compression method of e-mail attachments 0: Registered (Bit 0 to 6) 1: No registration.	The "0" selection (default) references the settings for Bits 00, 01, 02 above. The "1" selection ignores the selections of Bits 00, 01, 02.

Switch 01		
No	FUNCTION	COMMENTS
0	Original width of e-mail attachment: A4 0: Off 1: On	Sets the original width of the e-mail attachment as A4.
1	Original width of e-mail attachment: B4 0: Off 1: On	Sets the original width of the e-mail attachment as B4.
2	Original width of e-mail attachment: A3 0: Off 1: On	Sets the original width of the e-mail attachment as A3.
3-6	Not used	Do not change these settings.
7	Designates the bits to reference for original size of e-mail attachments 0: Registered (Bit 0 to 6) 1: No registration.	The "0" selection (default) references the settings for Bits 00, 01, 02 above. The "1" selection ignores the selections of Bits 00, 01, 02.

Dedicated Transmission Parameters

Switch 02		
No	FUNCTION	COMMENTS
0	Line resolution of e-mail attachment: 200 x 100 0: Off 1: On	Sets the line resolution of the e-mail attachment as 200 x100.
1	Line resolution of e-mail attachment: 200 x 200 0: Off 1: On	Sets the line resolution of the e-mail attachment as 200 x 200.
2	Line resolution of e-mail attachment: 200 x 400 0: Off 1: On	Sets the line resolution of the e-mail attachment as 200 x 400.
3	Not used	Do not change these settings.
4	Line resolution of e-mail attachment: 400 x 400 0: Off 1: On	Sets the line resolution of the e-mail attachment as 400 x 400.
5-6	Not used	Do not change these settings.
7	Designates the bits to reference for original size of e-mail attachments 0: Registered (Bit 0 to 6) 1: No registration.	The "0" selection (default) references the settings for Bits 00, 01, 02, 04 above. The "1" selection ignores the selections of Bits 00, 01, 02, 04.

Switch 03 - Not used (do not change the settings)

Switch 04		
No	FUNCTION	COMMENTS
0	Full mode address selection 0: Full mode address 1: No full mode (simple mode)	If the other ends have the addresses, which have the full mode function flag ("0"), this machine determines them as full mode standard machines. <ul style="list-style-type: none"> ▪ This machine attaches the "demand of reception confirmation" to a message when transmitting. ▪ This machine updates the reception capability to the address book when receiving.
1-7	Not used	Do not change these settings.

Switch 05		
No	FUNCTION	COMMENTS
0	Direct transmission selection to SMTP server 0: ON 1: OFF	Allows or does not allow the direct transmission to SMTP server.
1-7	Not used	Do not change these settings.

Switch 06 - Not used (do not change the settings)
Switch 07 - Not used (do not change the settings)
Switch 08 - Not used (do not change the settings)
Switch 09 - Not used (do not change the settings)

4.6 GENERAL SPECIFICATIONS

4.6.1 FCU

Type:	Desktop type transceiver
Circuit:	PSTN PABX
Connection:	Direct couple
Original Size:	Book (Face down): Maximum Width: 216 mm [8.5 inch] ARDF (Face up): (Single-sided document) Length: 139 - 1200 mm [5.5 - 47.2 inch] Width: 139 - 216 mm [5.5 - 8.5 inch] (Double-sided document) Length: 160 - 356 mm [6.3 - 14.0 inch] Width: 139 - 216 mm [5.5 - 8.5 inch]
Scanning Method:	Flat bed, with CCD
Resolution:	G3: 8 x 3.85 lines/mm, 200 x 100 dpi (Standard character), 8 x 7.7 lines/mm, 200 x 200 dpi (Detail character),
Transmission Time:	G3: 3 s at 28800 bps; Measured with G3 ECM using memory for an ITU-T #1 test document (Slerexe letter) at standard resolution
Data Compression:	MH, MR, MMR, JBIG
Protocol:	Group 3 with ECM
Modulation:	V.34, V.17 (TCM), V.29, V.17 (QAM), V.27ter (PHM), V.8, V.21 (FSK)
Data Rate:	G3: 33600/31200/28800/26400/24000/21600/ 19200/16800/14400/12000/9600/7200/4800/2400 bps Automatic fallback

I/O Rate:	With ECM: 0 ms/line Without ECM: 2.5, 5, 10, 20, or 40 ms/line
Memory Capacity:	ECM: 128 KB SAF: 4MB

4.6.2 CAPABILITIES OF PROGRAMMABLE ITEMS

The following table shows the capabilities of each programmable items.

Item	Standard	With Optional HDD
Quick Dial	200	2000
Groups	10	100
Destination per Group	200	500
Programs	100	100
Communication records for Journal stored in the memory	200	200
Specific Senders	30	30

Note

- Measured using an ITU-T #1 test document (Slerexe letter) at the standard resolution, the auto image density mode and the Text mode.

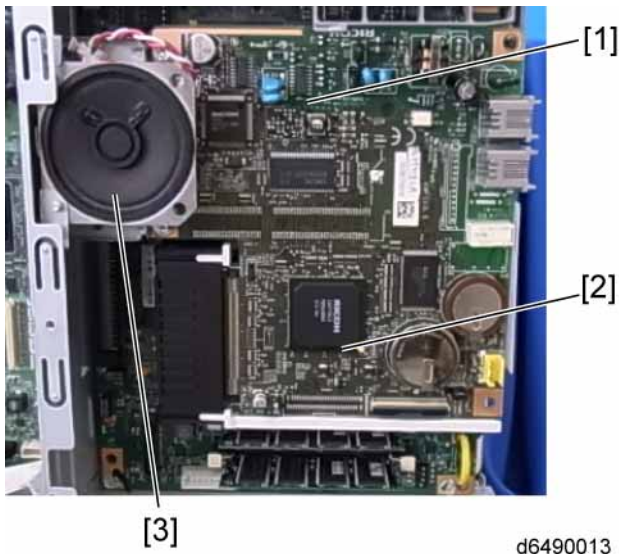
4.7 IFAX SPECIFICATIONS

Connectivity:	Local area network Ethernet 100base-Tx/10base-T IEEE802.11a/g (wireless LAN), 1000 Base-T
Resolution:	Main scan: 200 dpi Sub scan: 200 dpi, 100 dpi
Transmission Time:	1 s (through a LAN to the server) Condition: ITU-T #1 test document (Selerexe Letter) MTF correction: OFF TTI: None Resolution: 200 x 100 dpi Communication speed: 10 Mbps Correspondent device: E-mail server Line conditions: No terminal access
Document Size:	Maximum message width is A4/LT.
E-mail File Format:	Single/multi-part MIME conversion Image: TIFF-F (MH, MR, MMR)
Protocol:	Transmission: SMTP, TCP/IP Reception: POP3, SMTP, IMAP4, TCP/IP
Data Rate:	100 Mbps(100base-Tx) 10 Mbps (10base-T)
Authentication Method:	SMTP-AUTH POP before SMTP A-POP
Remark:	The machine must be set up as an e-mail client before installation. Any client PCs connected to the machine through a LAN must also be e-mail clients, or some features will not work (e.g. Autorouting).

4.8 IP-FAX SPECIFICATIONS

Network:	Local Area Network Ethernet/10base-T, 100base-TX IEEE802.11a/g (wireless LAN), 1000 Base-T
Scan line density:	8 x 3.85 lines/mm, 200x100dpi (standard character), 8 x 7.7lines/mm, 200x200dpi (detail character),
Original size:	A4
Maximum scanning size:	A4, 216 x 356 mm, Irregular, 216 x 1200 mm
Transmission protocol:	Recommendation: T.38, TCP, UDP/IP communication, SIP (RFC 3261 compliant), H.323 v2
Compatible machines:	IP-Fax compatible machines
IP-Fax transmission function:	Specify IP address and send fax to an IP-Fax compatible fax through a network. Also capable of sending fax from a G3 fax connected to the public telephone lines via a VoIP gateway.
IP-Fax reception function:	Receive a fax sent from an IP-Fax compatible fax through a network. Also capable of receiving fax from a G3 fax connected the public telephone lines via a VoIP gateway.

4.9 FAX UNIT CONFIGURATION



d6490013

Component	Code	No.	Remarks
FCU	D649	1	Included with the fax unit
MBU		2	
Speaker		3	
Fax Connection Unit Type D	D657	-	Optional This is used to set up the remote fax function.
Handset Type C5502	D645	-	Optional only for NA