Model AT-C3 Machine Code: D111/D142

Field Service Manual

Important Safety Notices

Prevention of Physical Injury

- 1. Before disassembling or assembling parts of the copier and peripherals, make sure that the copier power cord is unplugged.
- 2. The wall outlet should be near the copier and easily accessible.
- 3. 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.
- 4. The copier drives some of its components when it completes the warm-up period. Be careful to keep hands away from the mechanical and electrical components as the copier starts operation.
- 5. The inside and the metal parts of the fusing unit become extremely hot while the copier is operating. Be careful to avoid touching those components with your bare hands.

Health Safety Conditions

- 1. Toner and developer are non-toxic, but if you get either of them in your eyes by accident, it may cause temporary eye discomfort. Immediately wash eyes with plenty of water. If unsuccessful, get medical attention.
- 2. The copier, which use high voltage power source, can generate ozone gas. High ozone density is harmful to human health. Therefore, the machine must be installed in a well-ventilated room.

Observance of Electrical Safety Standards

The copier and its peripherals must be serviced by a customer service representative who has completed the training course on those models.

⚠WARNING

 OKeep the machine away from flammable liquids, gases, and aerosols. A fire or an explosion might occur.

ACAUTION

- The Controller board on this machine 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.
- The optional fax and memory expansion units contain lithium batteries, which can explode if replaced incorrectly. Replace only with the same or an equivalent type recommended by the

manufacturer. Do not recharge or burn the batteries. Used batteries 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, the maintenance unit which includes developer or the organic photoconductor 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.

Laser Safety

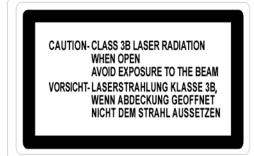
The Center for Devices and Radiological Health (CDRH) prohibits the repair of laser-based optical units in the field. The optical housing unit can only be repaired in a factory or at a location with the requisite equipment. The laser subsystem is replaceable in the field by a qualified Customer Engineer. 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:





Warnings, Cautions, Notes

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

⚠ WARNING

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

ACAUTION

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

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

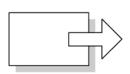
U Note

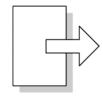
• This information provides tips and advice about how to best service the machine.

Symbols, Abbreviations and Trademarks

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

10	See or Refer to
₿	Clip ring
P	Screw
	Connector
Sign (Clamp
©	E-ring
SEF	Short Edge Feed
LEF	Long Edge Feed





Short Edge Feed (SEF)

Long Edge Feed (LEF)

Trademarks

 $Microsoft^{\otimes}$, $Windows^{\otimes}$, and $MS\text{-}DOS^{\otimes}$ are registered trademarks of Microsoft Corporation in the United States and /or other countries.

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 PCL^{\circledR} is a registered trademark of Hewlett-Packard Company.

 $\label{eq:thermodel} \mbox{Ethernet}^{\mbox{\it @}} \mbox{ is a registered trademark of Xerox Corporation}.$

 ${\sf PowerPC}^{\circledR} \ \text{is a registered trademark of International Business Machines Corporation}.$

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.

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1

1. Product Information

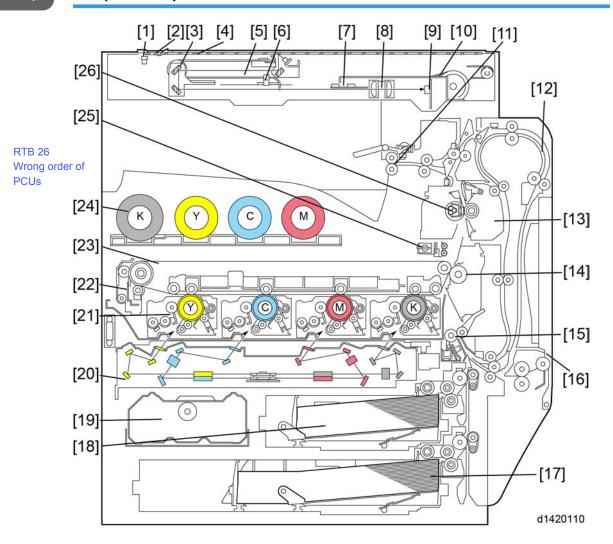
Specifications

See "Appendices" for the following information:

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

Product Overview

Component Layout



- 1. Scanner HP sensor
- 2. ADF exposure glass
- 3. 2nd scanner (2nd carriage)
- 4. Exposure glass
- 5. 1st scanner (1st carriage)
- 6. Scanner lamp
- 7. Original length sensor
- 8. Lens block
- 9. Sensor board unit (SBU)
- 10. Scanner motor
- 11. Paper exit rollers
- 12. Duplex unit
- 13. Fusing unit

- 14. Paper transfer roller
- 15. Registration roller
- 16. By-pass feed table
- 17. Tray 2
- 18. Tray 1
- 19. Toner collection bottle
- 20. Laser optics housing unit
- 21. PCDU (4 colors)
- 22. Image transfer belt cleaning unit
- 23. Image transfer belt unit
- 24. Toner bottle (4 colors)
- 25. ID sensor
- 26. Fusing sleeve belt unit

Paper Path

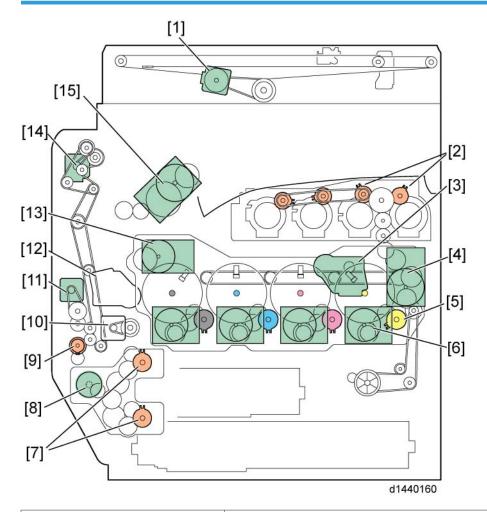
[1] [2] [3] [4] [4] [5] [5] Wrong order of [12] [6] [7] [8] [9]

- 1. Original tray
- 2. Original exit tray
- 3. Duplex inverter
- 4. Duplex feed
- 5. By-pass tray feed
- 6. Tray 1 feed
- 7. Tray 2 feed
- 8. Tray 3: Optional paper feed unit/LCT

- 9. Tray 5: Optional LCT 1200
- 10. Tray 4: Optional paper feed unit
- 11. Finisher stapler (Optional)
- 12. Finisher punch (Optional)
- 13. Finisher lower tray (Optional)
- 14. Finisher proof tray (Optional)
- 15. Inner Tray

The 1000-sheet finisher and 1000-sheet booklet finisher require the bridge unit and one from the two-tray paper feed unit or the LCT.

Drive Layout

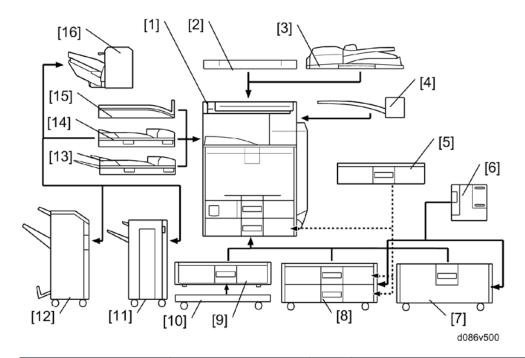


1. Scanner motor:	Drives the scanner unit.
2. Toner supply clutch-K and -CMY:	Turns on/off the drive power to the toner supply unit (K and - CMY).
3.ITB (Image Transfer Belt) contact motor:	Moves the ITB into contact and away from the color PCDUs.
4. Toner transport motor:	Drives the toner attraction pumps and the toner collection coils from the PCDUs, from the transfer belt unit, and inside the toner collection bottle. Also rotates the toner bottles.
5. Development clutch (K, Y, M, C):	Turns on/off the drive power to the development unit (K, Y, M, C).

6. Drum/Development drive motor (K, Y, M, C)	Drives the color drum unit and development unit (K, Y, M, C).
7. Paper feed clutch	Switches the drive power between tray 1 and tray 2.
8. Paper feed motor:	Drives the paper feed mechanisms (tray 1/tray 2).
9. By-pass feed clutch:	Turns on/off the drive power to the by-pass pick-up, feed and separation rollers.
10. Registration motor:	Drives the registration roller.
11. By-pass/duplex feed motor:	Drives the by-pass pick-up, feed and separation roller, and duplex transport rollers.
12. Paper transfer contact motor:	Moves the paper transfer roller in contact with the image transfer belt.
13. ITB drive motor:	Drives the image transfer belt unit.
14. Duplex inverter motor	Drives the duplex inverter rollers and duplex transport rollers.
15. Fusing/paper exit motor:	Drives the fusing unit and paper exit section.
16. Fusing unit shutter plate drive motor	Drives the fusing unit shutter plate.

1

Machine Codes and Peripheral Configuration

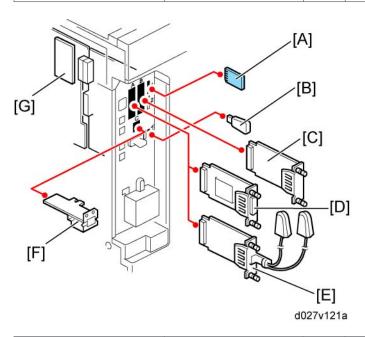


ltem	Machine Code	Call out	Remarks
Mainframe	D111/D142	[1]	
Platen cover	D593	[2]	One from the two for all models.
ARDF	D578	[3]	One from the two for all models.
1-bin tray	D632	[4]	-
Envelope feeder * 1	D638	[5]	Requires Tray 2 of the Mainframe or [8].
1200-sheet LCT	D631-17 (NA) D631-27 (EU/AA)	[6]	Requires [7] or [8].

^{* 1:} The Envelope Feeder EF3020 (D638) cannot be used in the one-tray paper feed unit (D579).

ltem	Machine Code	Call out	Remarks
2000-sheet LCT	D581-17 (NA) D581-27 (EU/AA)	[7]	One from [7], [8] and [9];
Two-tray paper feed unit	D580-17	[8]	[9] requires [10].
One-tray paper feed unit	D579	[9]	
Caster table	D593	[10]	-
1000-sheet finisher	D588	[11]	One from [11], [12] and [16];
1000-sheet booklet finisher	D589	[12]	Requires [14] and one from [7] and [8].
Side tray	D635	[13]	
Bridge unit	D634	[14]	One from [13], [14] and [15].
Shift tray	D633	[15]	
500-sheet finisher	D585	[16]	Requires [14].
Punch unit: 3/2 holes	B807-17	-	
Punch unit: 4/2 holes	B807-27	-	
Punch unit: 4 holes	B807-30	-	. [10]
Punch unit: 2 / 3 holes	D570-00 (NA)	-	Requires [12].
Punch unit: 2 / 4 holes	D570-01 (EU)	-	
Punch unit: 4 holes	D570-02 (Scandinavia)	-	
Card reader bracket	D593-61	-	
Key counter bracket	A674	-	One from the two.
Optional counter interface unit	B870	-	-
Scanner accessibility option	D423	-	-
ADF handle	D593-81	-	-

ltem	Machine Code	Call out	Remarks
Handset (only for NA)	D645	-	The included bracket is not for these models.



ltem	Machine code	Call out	Remark
Gigabit Ethernet Type B	D377-21	[F]	-
IEEE 1284 Interface Board Type A	B679-17	[D]	
Wireless LAN (IEEE 802.11a/g Interface Unit Type J)	D377-01 (NA) D377-02 (EU/AA)	[E]	You can only install one of these at a time.
Wireless LAN (IEEE 802.11g Interface Unit Type K)	D377-19 (EU)		
File Format Converter Type E	D377-04	[C]	

Ш

ltem	Machine code	Call out	Remark
Bluetooth Interface Unit Type D (USB)	D566-01	[B]	-

ltem	Machine code	Call out	Remark
PostScript 3 Unit Type C5502	D645-11 (NA) D645-12 (EU) D645-13 (AA)	[A]	Those cards should be installed from SD slot 2 (lower). If multiple applications are required, merge all applications in one SD card with SP mode. (*** p.157**)
PictBridge Type J	- D645-15		
IPDS Unit Type C5502	D645-07 (NA) D645-08 (EU) D645-09 (AA)		
Browser Unit Type F	D645-17 (NA) D645-24 (EU) D645-25 (AA)		
SD Card for Netware Printing Type H	D645-23		
PDF Direct / VM / App2Me Card (Standard)	-	-	This card should already be in SD slot 1 (upper) when the machine leaves the factory.
Copy Data Security Unit Type F	B829	[G]	-
Fax Option Type C5502	D643-01 (NA) D643-02 (EU) D643-03 (AA)	-	-
G3 Interface Unit Type C5502	D643-11 (NA) D643-12 (EU/AA)	-	-
Memory Unit Type B	G578	-	-

RTB 26

ltem	Machine code	Call out	Remark
Handset Type 3352 (only for NA)	D593-71	-	The included bracket is not for these models.

Guidance for Those Who are Familiar with Predecessor Products

Machine D111/D142 is a successor model to Machine D086/D087. If you have experience with the predecessor products, the following information will be of help when you read this manual.

Different Points from Predecessor Products

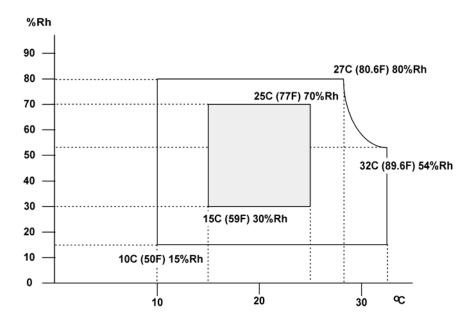
	D111/D142	D086/D087
Controller Type	GW+ Controller	GW Controller
New Fusing Unit without the Decurler	Yes	No
Fusing Unit	New QSU-DH fusing system	IH roller fusing system
SMC data	SD card download or printing	Printing only
Operation Panel	Tiltable Operation Panel Includes USB/SD slot	Stationary Operation Panel
USB2.0/SD Slot	Standard	Optional
Scanner Lamp	LED	Xenon
Data Overwrite Security, HDD Encryption	Included in the controller ROM	SD card

П

2. Installation

Installation Requirements

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 (6,560 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.

• Do not leave the toner bottle in a place directly exposed to sunlight.

2

• The toner bottle must be kept at a temperature of 35°C (95°F) or less. Be careful not to leave the toner bottle in a hot place when transporting or storing it.

Machine Level

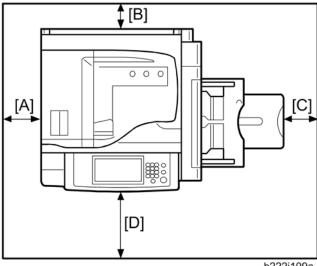
Front to back: Within 5 mm (0.2")

Right to left: Within 5 mm (0.2")

Machine Space Requirements

ACAUTION

• 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.

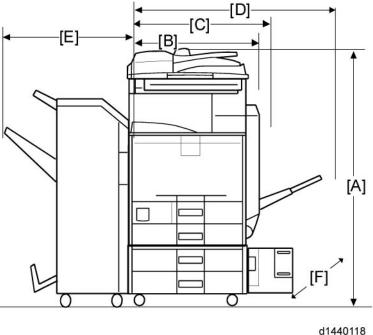


b222i109a

- A: Over 100 mm (3.9")
- B: Over 100 mm (3.9")
- C: Over 100 mm (3.9")
- D: Over 750 mm (29.5")

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

Machine Dimensions



[A]: 760 mm (mainframe) + 260 mm (PFU) + 120 mm (ARDF)

[B]: 580 mm

[C]: 670 mm

[D]: 1065 mm

[E]: 577 mm

[F]: 682 mm (Depth) (766 mm Max. with D580)

Power Requirements

ACAUTION

- 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: 20 A (Taiwan)

120 to 127 V, 60 Hz: More than 12 A (NA)

220 V to 240 V, 50 Hz/60 Hz: 10 A (EU/AA/China/Korea)

2. Permissible voltage fluctuation: +8.66 %/ -10 % (NA)

Permissible voltage fluctuation: ± 10 % (Others)

3. Do not put things on the power cord.

Copier Installation

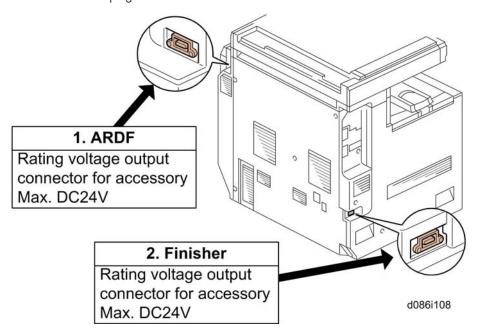
CAUTION

Make sure that the image transfer belt is in its correct position (away from the PCDUs) before you
move the machine. Otherwise, the image transfer belt and the black PCDU can be damaged.

Power Sockets for Peripherals

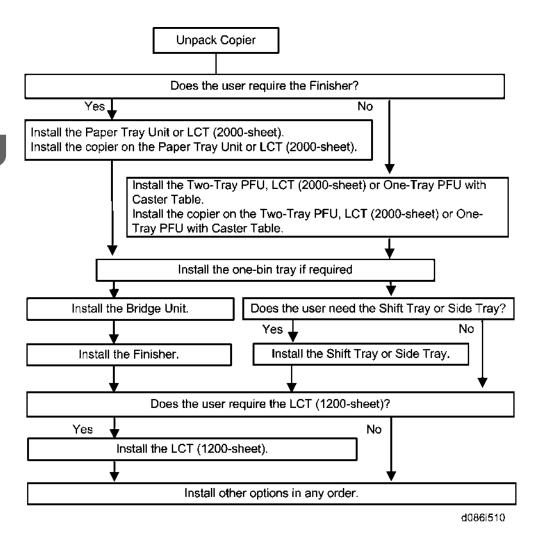
ACAUTION

- Rating voltage for peripherals.
- Make sure to plug the cables into the correct sockets.



Installation Flow Chart

This flow chart shows the best procedure for installation.



You need the optional paper tray unit or the LCT if you want to install the finisher (D588 or D589) or 1200-sheet LCT (D631).

The punch unit is for the booklet finisher (D589).

Installation Procedure



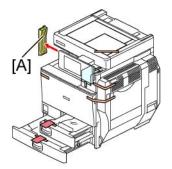
• Remove the tape from the development units before you turn the main switch on. The development units can be severely damaged if you do not remove the tape.

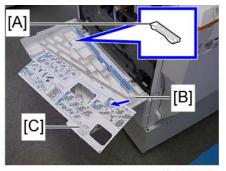
Put the machine on the paper tray unit or the LCT first if you install an optional paper tray unit or the optional LCT at the same time. Then install the machine and other options.



• 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 and Retainers





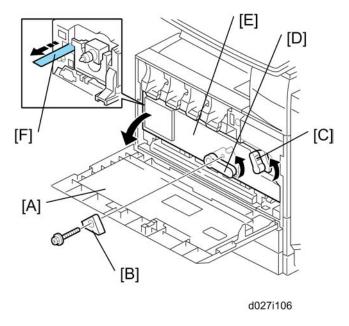
d1440036b

- 1. Remove all the tapes and retainers on the machine.
- 2. Remove all the tapes and retainers in trays 1 and 2, and then take out the power cord from tray 1 (if applicable).
- 3. Remove the scanner unit stay [A].
- 4. Open the front door [B], and then remove the jam location sheet [C].
- 5. Keep the scanner unit stay [A] inside the front door.
- 6. Reattach the jam location sheet.
- 7. Close the front door.

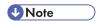


• The scanner unit stay [A] should be reinstalled before the machine is transported.

Developer and Toner Bottles



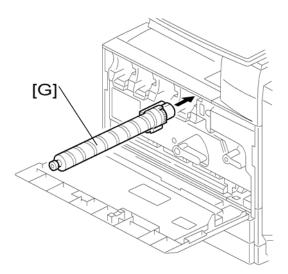
- 1. Open the front door [A].
 - GSA model (-51) and EU models (-27) do not require steps from 2 to 7. Skip to step 8 if you install these models.
- 2. Remove the stopper [B] (*\beta \times 1).



- This stopper locks the drum positioning plate lever.
- 3. Release the image transfer unit lock lever [C], and turn the drum positioning plate lever [D] counterclockwise.
- 4. Open the drum positioning plate [E].
- 5. Remove the tape [F] from the Bk development unit.
- 6. Remove all tapes on the other development units (C, M, Y) in the same way as described in the previous step.



- When you remove the tape from the development unit, hold the development unit with your hand, and then pull the tape.
- 7. Close the drum positioning plate. Then lock the image transfer unit lock and turn the drum positioning plate lever clockwise.
- 8. Lock the drum positioning plate lever with the stopper [B] (** x 1).
- 9. Shake each toner bottle five or six times.



10. Install each toner bottle [G] in the machine.



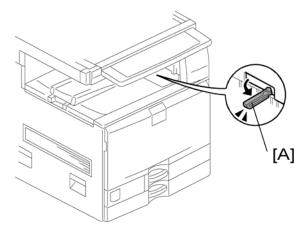
- The toner bottles are unique for the D111/D142 models. The toner bottles for the previous models (D086/D087) cannot be used in the D111/D142 models.
- 11. Close the front door.

Paper Trays

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

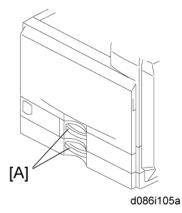


To move the side guide, first pull out the tray fully. Then push down the green lock at the rear
inside the tray.



2. Pull out the feeler [A] for the output tray full detection mechanism.

Emblem and Decals



1. Attach the correct paper tray number and size decals to the paper trays [A].



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

Initialize the Developer

- 1. Plug in the machine.
- 2. Make sure that the platen or ARDF is closed and the main power is turned off.
- 3. Turn the main power switch on. The machine automatically starts the initialization procedure. The Start button LED (②) turns green when this procedure has finished.
- 4. Make copies of image samples (text, photo, and text/photo modes).
- 5. Do the Automatic Color Calibration process (ACC) as follows:
 - 1). Print the ACC test pattern (User tools → Maintenance → ACC → Start).
 - 2). Put the printout on the exposure glass.
 - 3). Put 10 sheets of white paper on top of the test chart.
 - 4). Close the ARDF or the platen cover.
 - 5). Press "Start Scanning" on the LCD panel. The machine starts the ACC.
- 6. Check that the sample image has been copied normally.

Settings Relevant to the Service Contract

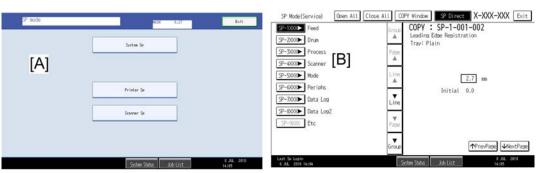
Change the necessary settings for the following SP modes if the customer has made a service contract.



- You must select one of the counter methods (developments/prints) in accordance with the contract (See SP5-045-001).
- The SP operation sound can be turned on or off. For details, see "SP Operation Sound On/Off Setting" below.

ltem	SP No.	Function	Default
Counting method	SP5-045-001	Specifies if the counting method used in meter charge mode is based on developments or prints.	"0": Developments
A3/11" x 17" double counting	SP5-104-001	Specifies whether the counter is doubled for A3/11" x 17" paper. When you have to change this setting, contact your supervisor.	"No": Single counting
Service Tel. No. Setting	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.	

SP Operation Sound On/Off Setting



d086i120

To turn off the SP Operation Sound

- 1. Enter the SP mode.
- 2. On the top menu screen [A], hold down the "Clear" button until you hear a beep sound. This turns off the SP operation sound.
- 3. No SP operation sound can be heard in all levels [B] (SPx, SPx-xxx and SPx-xxx-xxx) of the SP mode.

To turn on the SP Operation Sound

- 1. Enter the SP mode.
- 2. On the top menu screen [A], hold down the "Clear" button again until you hear a beep sound. This turns on the SP operation sound.
- 3. SP operation sound can be heard in all levels [B] (SPx, SPx-xxx and SPx-xxx-xxx) of the SP mode.

Settings for @Remote Service



 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

- 1. The setting of SP5816-201 in the mainframe must be "0".
- 2. 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)
- 3. 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)
- 4. Get a Request Number

Execute the @Remote Settings

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

Value	Meaning	Solution/Workaround
0	Succeeded	-
1	Request number error	Check the request number again.

Value	Meaning	Solution/Workaround
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.
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 \$P5816-206.
- 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
	-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.
Operation Error, Incorrect Setting	-12004	Attempted setting with illegal entries for certification and ID2.	Check ID2 of the mainframe.
, and the same of	-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.
Operation Error, Incorrect Setting	-12009	ID2 mismatch between an individual certification and NVRAM	Write a common certification, and then execute the confirmation request to the @Remote Center.
	-12010	Certification area is not initialized.	Write a common certification after initializing the certification area, and then execute the confirmation request to the @Remote Center.

Cause	Code	Meaning	Solution/Workaround
	-2385	Other error	
	-2387	Not supported at the Service Center	
	-2389	Database out of service	
	-2390	Program out of service	
	-2391	Two registrations for the same mainframe	Check the registration condition of the mainframe
Error Caused by	-2392	Parameter error	
Response from GW URL	-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.

VM Card Installation

The following procedure basically should be done by a customer.

- 1. Press the [User Tools] key on the operation panel.
- 2. Touch the "Extended Feature Settings" button twice.
- 3. Touch the "Java TM Platform" line under the Startup Setting tab.
- 4. Touch the "Extended Feature Info" tab on the LCD.
- 5. Touch the "Java TM Platform" line.
- 6. Set "Auto Start" to "On".
- 7. Touch the "Exit" button.
- 8. Exit the "User Tools" settings.

Enabling App2Me

The following procedure basically should be done by a customer.

- 1. Press the [User Tools] key on the operation panel.
- 2. Touch the "Extended Feature Settings" button twice.
- 3. Touch the "App2Me" line under the Startup Setting tab.
- 4. Touch the "Extended Feature Info" tab on the LCD.
- 5. Touch the "App2Me" line.
- 6. Set "Auto Start" to "On".
- 7. Touch the "Exit" button.
- 8. Exit the "User Tools" settings.

Security Function Installation

The machine contains the Security function (Data Overwrite Security and HDD Encryption unit) built into the controller board.

If you are installing a new machine, it is recommended to activate the Data Overwrite Security and HDD Encryption unit by selecting "Format All Data" from "System Settings" on the operation panel.



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

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



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

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



• If encryption is enabled after data has been stored on the disk, or of the encryption key is changed, this process can take up to three and a half hours or more.

The machine cannot be operated while data is being encrypted.

Once the encryption process begins, it cannot be stopped.

Make sure that the machine's main power is not turned off while the encryption process is in progress.

If the machine's main power is turned off while the encryption process is in progress, the hard disk will be damaged and all data on it will be unusable.

Print encryption key and keep the encryption key (which is printed as a paper sheet).

Keep the encryption key in a safe place. If the encryption key is lost and it need, the controller board, hard disk and NVRAM must all be replaced at the same time.



- "NVRAM" mentioned in here means the NVRAM on Controller Board.
- "NVRAM" or EEPROM on BCU has nothing to do with this.

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

Data Overwrite Security

· Before You Begin the Procedure

- 1. Make sure that the following settings (1) to (3) are not at their factory default values.
- Supervisor login password
- Administrator login name
- Administrator login password

If any of these settings is at a factory default value, tell the customer these settings must be changed before you do the installation procedure.

2. Make sure that "Admin. Authentication" is on.

[System Settings] → [Administrator Tools] → [Administrator Authentication Management] → [Admin. Authentication]

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

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

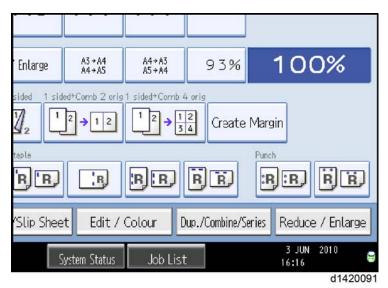
[System Settings] → [Administrator Tools] → [Administrator Authentication Management] → [Available Settings]

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

Installation Procedure

- 1. Connect the network cable if it needs to be connected.
- 2. Turn on the main power switch.
- 3. Go into the SP mode and push "EXECUTE" with SP5-878-001.
- 4. Exit the SP mode and turn off the operation switch. Then turn off the main power switch.
- 5. Turn on the machine power.
- 6. Do SP5-990-005 (SP print mode Diagnostic Report).
- 7. Go into the User Tools mode, and select [System Settings] → [Administrator Tools] →
 [Auto Erase Memory Setting] → [On].

8. Exit the User Tools mode.



Dirty

This icon is lit when there is temporary data to be overwritten, and blinks during overwriting.

Clear

This icon is lit when there is no temporary data to be overwritten.

- 9. Check the display and make sure that the overwrite erase icon [1] shows.
- 10. Check the overwrite erase icon.

The icon [2] is lit when there is temporary data to be overwritten, and blinks during overwriting.

The icon [3] is lit when there is no temporary data to be overwritten.

HDD Encryption

• Before You Begin the Procedure

- 1. Make sure that the following settings (1) to (3) are not at the factory default settings.
- Supervisor login password
- Administrator login name
- Administrator login password

These settings must be set up by the customer before the HDD Encryption unit can be installed.

2. Confirm that "Admin. Authentication" is on.

[User tools/Counter] key → [System Settings] →

[Administrator Tools] → [Administrator Authentication Management] → [Admin. Authentication] → [On]

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

3. Confirm that "Administrator Tools" is selected and enabled.

[User tools/Counter] key * [System Settings] * [Administrator Tools] * [Administrator Authentication Management] * [Available Settings]

"Available Settings" is not displayed until step 2 is done.

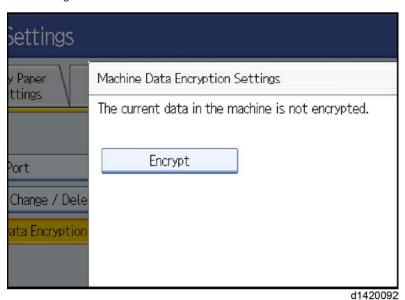
If this setting is not selected, tell the customer that this setting must be selected before you can do the installation procedure.

• Installation Procedure

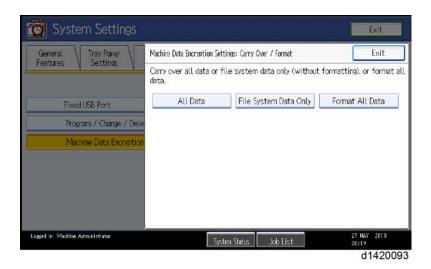
- 1. Turn on the main power switch, and then enter the SP mode.
- 2. Select SP5878-002, and then press "Execute" on the LCD.
- 3. Exit the SP mode after "Completed" is displayed on the LCD.

Enable Encryption Setting

- 1. Press the [User tools/Counter] key.
- 2. Press [System Settings].
- 3. Press [Administrator Tools].
- 4. Press [Machine Data Encryption Settings]. If this item is not visible, press [Next] to display more settings.



5. Press [Encrypt].

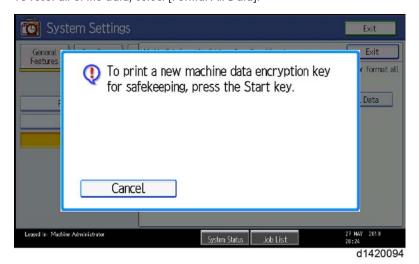


6. Select the data to be carried over to the hard disk and not be reset.

To carry all of the data over to the hard disk, select [All Data].

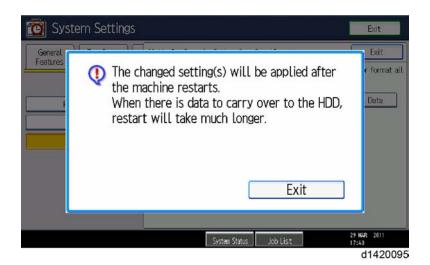
To carry over only the machine settings data, select [File System Data Only].

To reset all of the data, select [Format All Data].

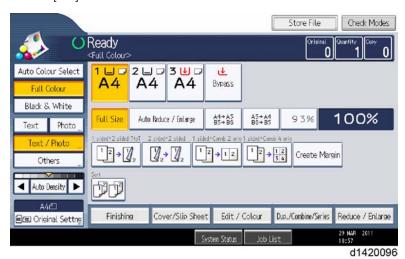


7. Press [Start] key.

The encryption key for backup data is printed.



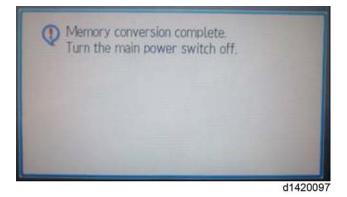
- 8. Press [Exit].
- 9. Press [Exit].



10. Press the [User Tools/Counter] key.



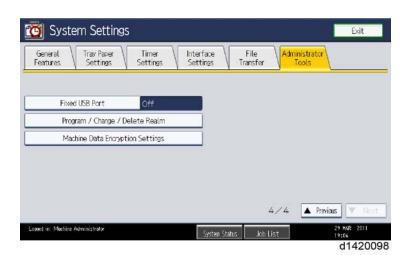
- After the step 11, turn to the below initial operation display. But, it is not be encrypted.
- 11. Turn off the power and the main power switch, and then turn the main power switch back.



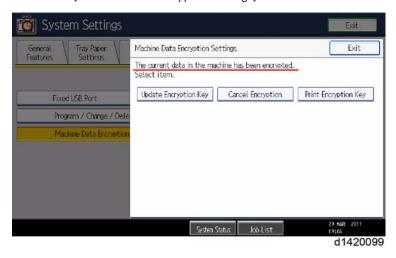
12. Displayed "Memory Conversion complete. Turn the main power switch off" again, turn off the power and the main power switch, and then turn the main power switch back.



- 13. Initial display.
- Confirmation Encryption Setting
 - 1. Press the [User tools/Counter] key.
 - 2. Press the [System Settings].
 - 3. Press the [Administer Tools].



4. Press the [Machine Data Encryption Settings].



5. Please confirm whether the encryption has been completed or not on this display.

Print to encryption key

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

- 1. Press the [User tools/Counter] key.
- 2. Press [System Settings].
- 3. Press [Administrator Tools].
- 4. Press [Machine Data Encryption Settings].
- 5. If this item is not visible, press [Next] to display more settings.
- 6. Press [Print Encryption Key].

Encryption key sample

Machine Data Encryption Key

This is an encryption key which allows you to protect confidential data stored in the machine.

It is essential that the safekeeping and destruction of this encryption key be under your direct responsibility.

Data saved and programmed on the machine (documents, image data, setting values,

address book contents etc.) can be encrypted/decrypted with this encryption key. If this machine breaks down, saved and programmed data in the machine can only be restored by entering this encryption key.

(Please note that it may not be possible to restore data in certain machine breakdown cases.)

This machine data encryption key will remain valid as long as the encryption is not cancelled or the encryption key is not changed.

After changing or cancelling the encryption key, please shred this document to destroy confidential data,

Output Date/Time:September 03,2010 08:55:25 AM

Machine Type:Aficio MP C400SR

Machine ID:S7500717004

Machine Data Encryption Key:

6pF!FFGH#EBiYkPafBJz6YE\$wYXk

d1420100

Encryption key is printed out as a sheet of paper like the sample shown above.

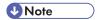
Please instruct the customer to keep it in a safe place.

External USB Keyboard (External Option)

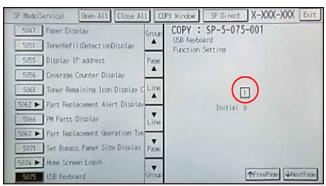
Customers can use an external USB keyboard when the software keyboard is shown on the operation panel, if an external USB keyboard is connected to the USB port at the side of the operation panel or the controller box USB port.

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

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

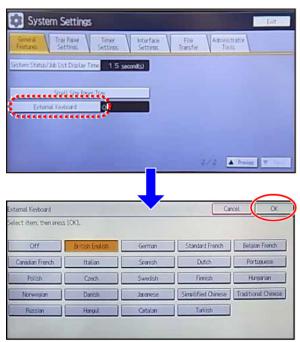


• The external keyboard that is available in this machine is principally for the Windows OS. However, no compatibility check is done, and there is no warranty.



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

- 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.

Moving the Machine

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

1. Remove all trays from the optional paper feed unit or LCT.

Transporting the Machine

Main Frame

- 1. Do SP 4806-001 to move the scanner carriage from the home position. This prevents dust from falling into the machine during transportation.
- 2. Remove the toner cartridges. 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.
- 3. Make sure there is no paper left in the paper trays. Then fix down the bottom plates with a sheet of paper and tape.
- 4. Empty the toner collection bottle. Then attach securing tape to stop the toner bottle from coming
- 5. Take out the scanner stay from inside the front door and install the scanner stay.
- 6. Do one of the following:
 - Attach shipping tape to the covers and doors.
 - Shrink-wrap the machine tightly.



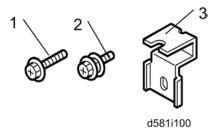
- After you move the machine, make sure you do the "Auto Color Registration" as follows. This
 optimizes color registration.
- 1. Do the "Forced Line Position Adj. Mode c" (SP2-111-3).
- 2. Then do the "Forced Line Position Adj. Mode a" (SP2-111-1).
 To check if SP 2-111-1 was successful, watch the screen during the process. A message is displayed at the end. Also, you can check the result with SP 2-194-10 to -12.
- Make sure that the side fences in the trays are correctly positioned to prevent color registration errors.

Paper Feed Unit PB3120 (D579)

Accessory Check

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

No.	Description	Q'ty
1	Screw (M4x10)	2
2	Screw with Spring washer (M4x10)	2
3	Securing bracket	2



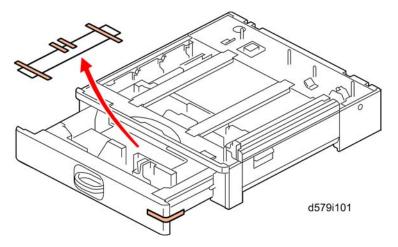
Installation Procedure

ACAUTION

- 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.



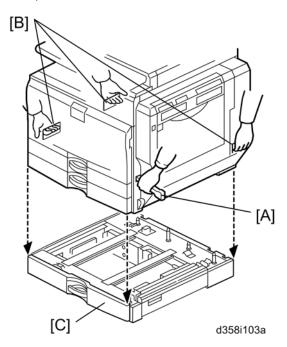
 The one-tray paper feed unit must be installed on the caster table (D593). Prepare the caster table first before installing this unit.



- 1. Remove all tape on the paper feed unit.
- 2. Remove the paper tray and remove all tapes and padding.
- 3. Put the paper tray unit on the caster table (D593).



• For details about the installation of the caster table, see the "Caster Table (D593)" installation procedure.

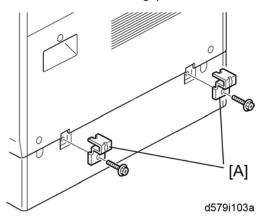


1. Pull out the handle [A], then hold the handle and grips [B], and then put the copier on the paper feed unit [C].

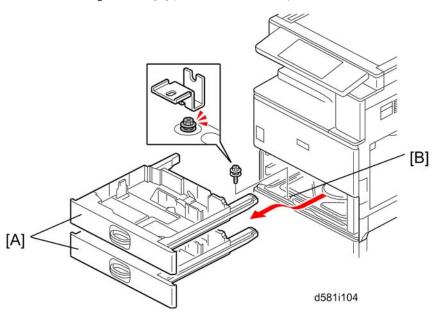
• You need two or more persons to lift the copier.



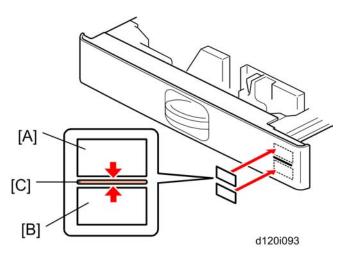
• Hold the handle and grips of the machine when you lift and move the machine.



2. Attach the securing brackets [A] (\rat{p} x 1; M4x10 each).



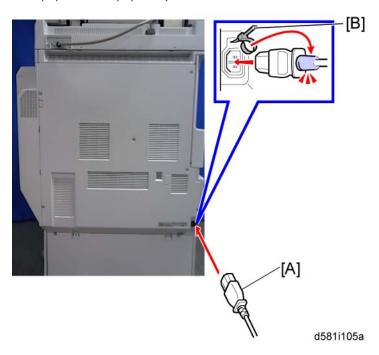
- 3. Remove the 1st and 2nd paper trays [A], and then secure the paper feed unit [B] (** spring washer x 1; M4x10).
- 4. Reinstall the 1st and 2nd paper trays.



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



- The paper tray number and size sheet is in the accessory box of the main machine.
- 6. Lock the caster stoppers for the front two casters under the paper feed unit.
- 7. Load paper into the paper tray and set the side fences and bottom fence.



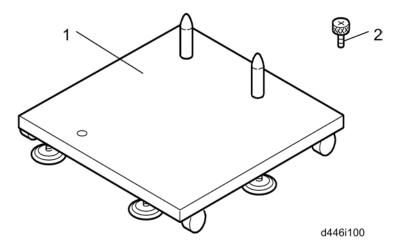
8. Connect the power cord [A] to the inlet of the main machine.

2

9. Secure the power cord with the clamp [B] on the main machine so that the power cord is never disconnected.

Component Check

No.	Description	Q'ty
1	Caster Table	1
2	Stud Screw	1

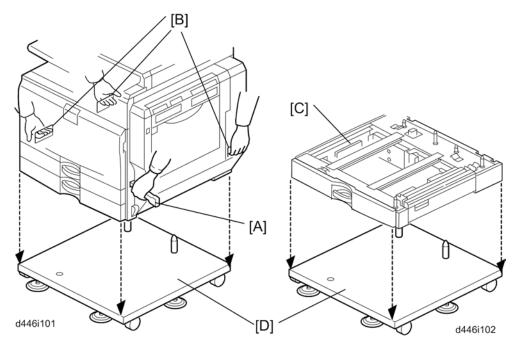


Caster Table Type D (D593)

Installation Procedure

1. Put the caster table on a flat place.

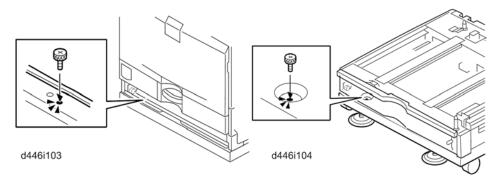
2



- 2. Grasp the handle [A] and grips [B] of the machine, if the copier is to be installed on the caster table.
- 3. Lift the copier or one-tray paper feed unit [C], and then install it on the caster table [D].



- Hold the handle and grips of the machine when you lift and move the machine.
- 4. Pull out tray 2 of the mainframe or the tray of the one-tray paper feed unit.



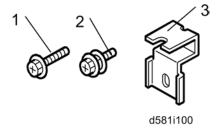
- 5. Secure the machine or one-tray paper feed unit to the caster table (stud screw x 1)
- 6. Reinstall the tray in the mainframe or one-tray paper feed unit.
- 7. Adjust the five leveling adjustors of the caster table.

Paper Feed Unit PB3130 (D580)

Accessory Check

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

No.	Description	Q'ty
1	Screw (M4x10)	2
2	Screw with Spring Washer (M4 x 10)	1
3	Securing Bracket	2

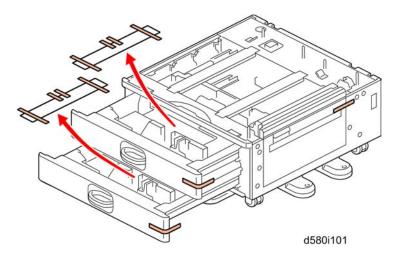


Installation Procedure

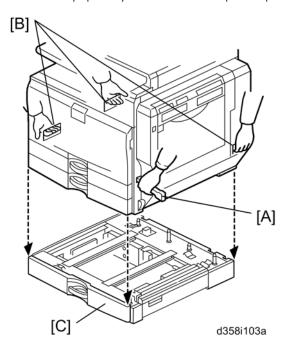
ACAUTION

- Unplug the machine power cord before starting the following procedure.
- The handles of the main machine for lifting must be inserted inside the machine and locked unless these handles are used for the installation or relocation of the main machine.
- 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.

2



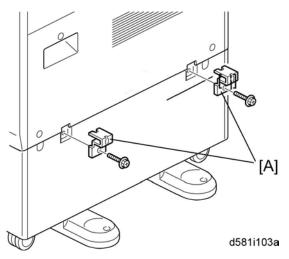
- 1. Remove all tape on the paper feed unit.
- 2. Remove the paper trays and remove all tape and padding.



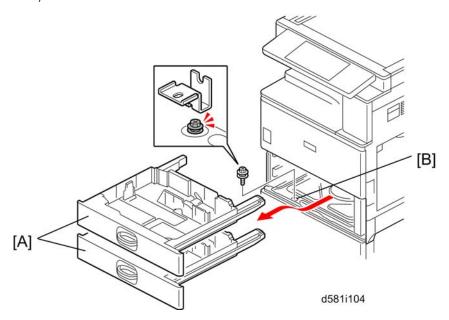
- 3. Pull out the handle [A], then hold the handle and grips [B].
- 4. Lift the copier and install it on the paper feed unit [C].
 - **Important**
 - You need two or more persons to lift the copier.



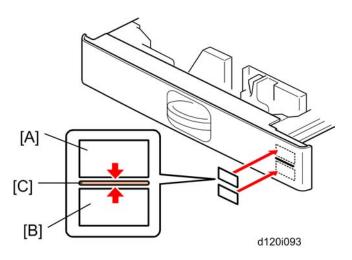
• Hold the handle and grips of the machine when you lift and move the machine.



5. Attach a securing bracket [A] to each side of the paper tray unit, as shown (> x 1; M4 x 10 each).



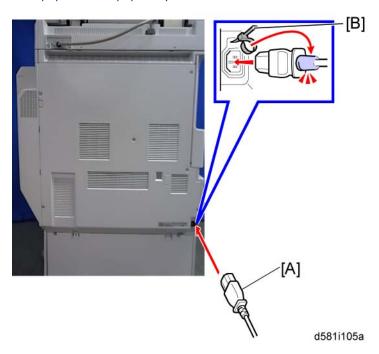
- 6. Remove trays 1 and 2 of the machine [A].
- 7. Fasten the paper tray unit at [B] (F spring washer x 1; M4 x 10).
- 8. Reinstall all the trays.



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



- The paper tray number and size sheet is in the accessory box of the main machine.
- 10. Lock the caster stoppers for the front two casters under the paper feed unit.
- 11. Load paper into the paper trays and set the side fences and bottom fence.



12. Connect the power cord [A] to the inlet of the main machine.

2

13. Secure the power cord with the clamp [B] on the main machine so that the power cord is never disconnected.

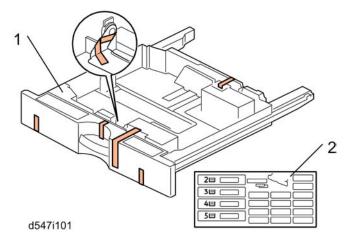
2

Envelope Feeder EF3020 (D638)

Accessory Check

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

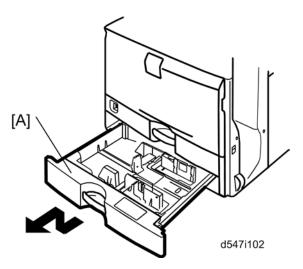
No.	Description	Q'ty
1	Envelope feeder	1
2	Paper size decal	1



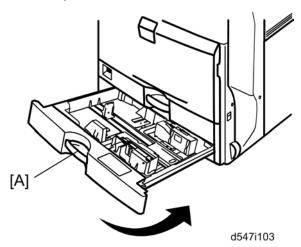
Installation Procedure



- This tray can be installed in tray 2 of the copier, or tray 3 or tray 4 of the paper feed unit (D580).
- There is no automatic paper size detection in the envelope feeder (D638). Adjust the paper size for the tray where the envelope feeder is to be installed with User Tools.
- 1. Remove all tape from the envelope feeder.



2. Pull out tray 2 [A] from the main machine.



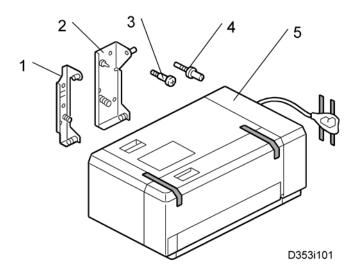
- 3. Install the envelope feeder [A] into tray 2 of the main machine.
- 4. Press the "User/Tools" key on the operation panel.
- 5. Enter "Small Paper Size Tray" under "General Features".
 - Initial Settings > General Features > Small Paper Size Tray
- 6. Select "On" for the tray where the envelope feeder is installed.
- 7. Turn the main machine off and on.

LCIT RT3020 (D631)

Component Check

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

No.	Description	Q'ty
1	Front Bracket	1
2	Rear Bracket	1
3	Stud Screw	4
4	Joint Pin	2
5	LCT	1



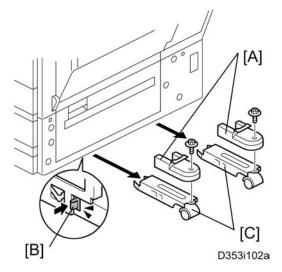
Installation Procedure

ACAUTION

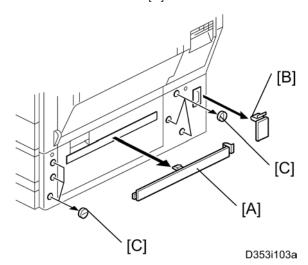
• Unplug the main machine power cord before starting the following procedure.



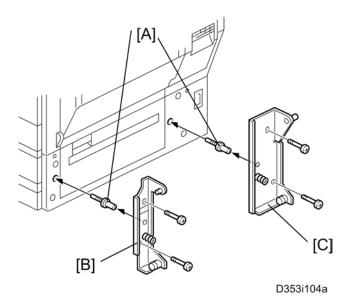
 The Paper Feed Unit (D580) or LCT 2000-sheet (D581) must be installed before installing this 1200-sheet LCT.



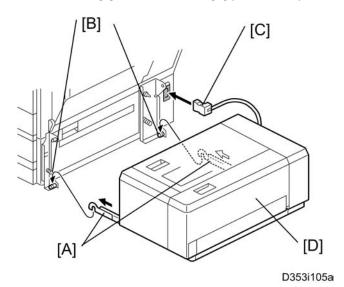
- 1. Unpack the LCT and remove the tapes.
- 2. Remove the stand covers [A].
- 3. Release the locks [B] of the front and rear caster stands.
- 4. Remove the caster stands [C].



5. Remove the paper path cover [A], connector cover [B] and six hole covers [C].



- 6. Insert the joint pins [A].
- 7. Attach the front [B] and rear brackets [C] (** x 2 each).

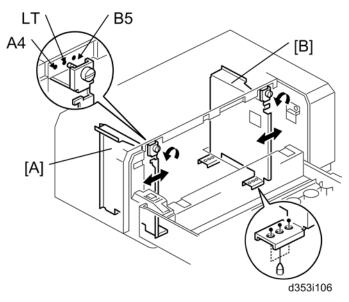


- 8. Pull out the front and rear rails [A], and then hang them on each bracket [B].
- 9. Connect the LCT cable [C] to the main machine.
- 10. Slide the LCT [D] into the main machine.
- 11. Make sure that the front and rear sides of the LCT are closely attached to the main machine.

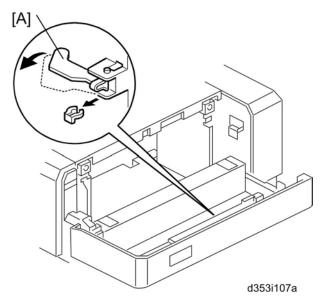
2

Side Fence Position Change

- 1. Open the right door of the LCT.
- 2. Push the down switch to lower the tray bottom plate until it reaches its lowest position.



- 3. Remove the front and rear side fences [A, B] (\mathcal{F} x 1 each).
- 4. Install the side fences in the correct position (A4 LEF/ LT LEF/ B5 LEF).



5. Pull the end fence [A] for B5 size paper as shown (🖾 x 1) if the side fences are adjusted for B5 size paper.

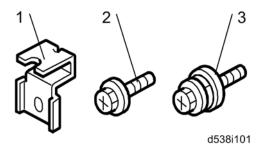
- 6. Close the right door.
- 7. Turn on the main power switch, and then go into the SP mode.
- 8. Input the correct paper size for the 1200-sheet LCT with SP5181-018.

LCIT PB3140 (D581)

Accessory Check

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

No.	Description	Q'ty
1	Screw (M4x10)	2
2	Screw with Spring Washer (M4x10)	1
3	Securing Bracket	2

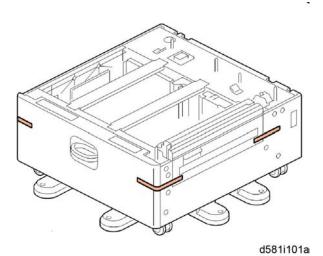


Installation Procedure

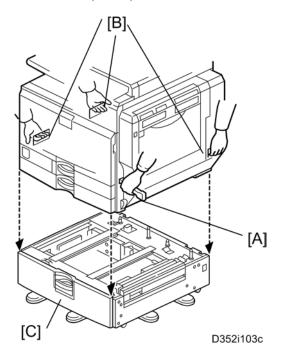
ACAUTION

- Unplug the machine power cord before starting the following procedure.
- The handles of the main machine for lifting must be inserted inside the machine and locked, unless these handles are used for the installation or relocation of the main machine.
- 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.

2



1. Remove the strips of tape.



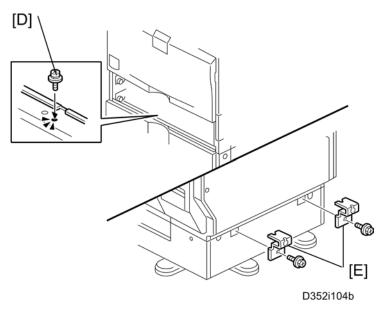
- 2. Grasp the handle [A] and grips [B] of the machine.
- 3. Lift the copier and install it on the LCT [C].



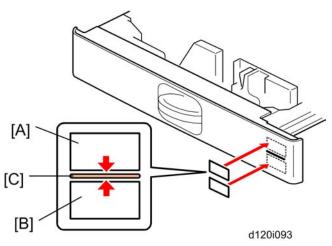
• The copier should be lifted by two persons or more.



• Hold the handle [A] and grips [B] of the machine when you lift and move the machine.



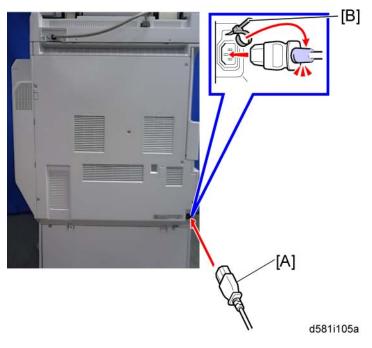
- 4. Remove trays 1 and 2 of the machine.
- 5. Fasten the spring washer screw [D].
- 6. Reinstall all trays.
- 7. Attach the securing brackets [E] (\nearrow x 1 each; M4x10).



8. Attach the appropriate paper tray number decal [A] and paper size decal [B] to the line [C] on the tray of the LCT.



- The paper tray number and size sheet is in the accessory box of the main machine.
- 9. Lock the caster stoppers for the front two casters under the paper feed unit.
- 10. Load paper into the LCT.



- 11. Connect the power cord [A] to the inlet of the main machine.
- 12. Secure the power cord with the clamp [B] on the main machine so that the power cord is never disconnected.

SP Settings

- 1. Connect the copier and turn the main machine on.
- 2. Do SP5-181-010 to set automatic paper size detection for the LCT paper tray.

LCT Paper Tray (Size Adjust Tray 3 / LCT

zer rapor ray toize Aajosi ray o / zer			
		[0 to 1 / 0 / 1]	
5-181-010	A4/LEF/LT/LEF	0: ISO (A3, A4, A5, etc.)	
		1: USA (DLT, LT, EXE, etc.)	

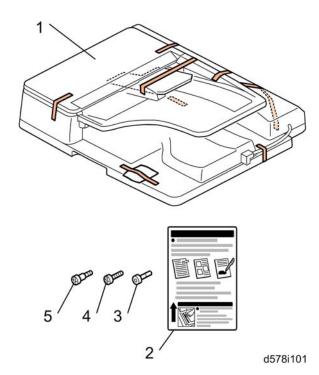
- 3. Exit SP mode.
- 4. Do some test copies to make sure that the machine operates correctly.

ARDF DF3060 (D578)

Component Check

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

No.	Description	Q'ty
1	ARDF	1
2	Original Setting and ARDF Exposure Glass Cleaning Decal	1
3	Stamp Cartridge	1
4	Knob Screw	2
5	Stud Screw	2

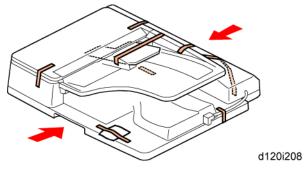


2

Installation Procedure

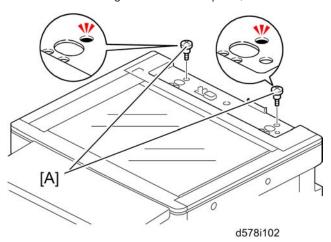
ACAUTION

- Unplug the copier power cord before starting the following procedure.
- 1. Remove all tapes and shipping retainers.

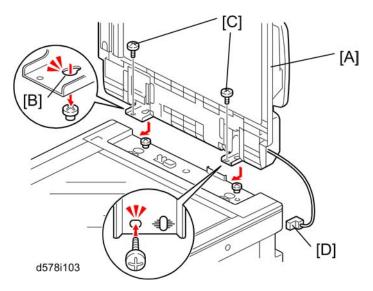


UNote

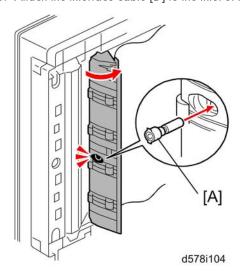
• When unloading the ARDF from a pallet, hold the front and rear side of the ARDF.



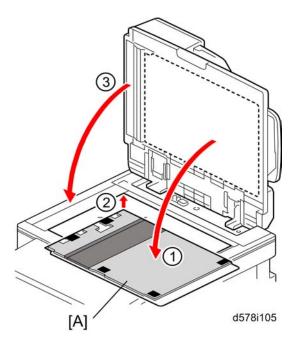
2. Insert the two stud screws [A] on the top of the machine.



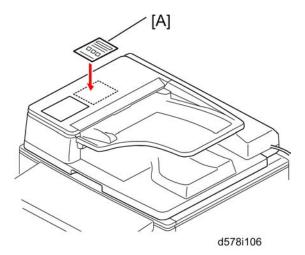
- 3. Mount the ARDF [A] by aligning the screw keyholes [B] of the ARDF support plate over the stud screws.
- 4. Slide the ARDF toward the front of the machine.
- 5. Secure the ARDF with the two knob screws [C].
- 6. Attach the interface cable [D] to the inlet of the machine.



7. Install the stamp cartridge [A] in the ARDF.



- 8. Peel off the platen sheet [A] and place it on the exposure glass.
- 9. Align the rear left corner (of the platen sheet) with the corner on the exposure glass.
- 10. Close the ARDF.
- 11. Open the ARDF and check that the platen sheet is correctly attached.



- 12. Attach the original setting and ARDF exposure glass cleaning decal [A] to the top cover as shown.
- 13. Plug in and turn on the main power switch of the machine, and then check the ARDF operation.
- 14. Make a full size copy. Check that the registrations (side-to-side and leading edge) and image skew are correct. If they are not, adjust the registrations and image skew, referring to the service manual ("Copy Adjustments" in the "Replacements and Adjustments").

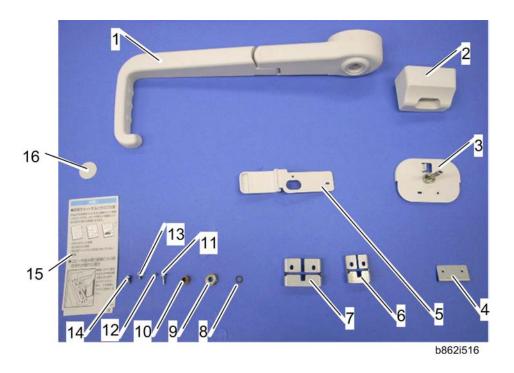
ADF Handle Type B (D593)

Component Check

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

No.	Description	Q'ty
1	Handle Unit	1
2	Holder	1
3	Stud Bracket	1
4	Securing Bracket	1
5	Handle Bracket	1
6	Hinge Stopper - Right	1
7	Hinge Stopper - Left	1
8	Spacer	1
9	Bushing: M6	1
10	Bushing: 6MM	1
11	Tapping Screw: M3 x 12	2
12	Tapping Screw (Self Binding): M3 x 12	2
13	Screw: M3 x 8	3
14	Tapping Screw: M4 x 8	4
15	Operation Decal	1
16	Stud Decal	1

2



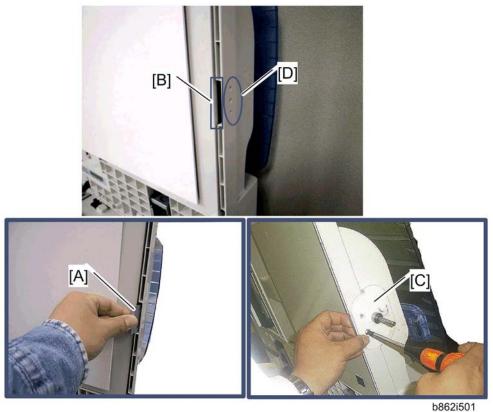
Installation Procedure

ACAUTION

• Turn off the main switch of the copier and unplug the power cord before you start the installation procedure.

Preparing before Installing the DF Handle

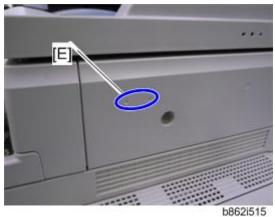
1. Open the ADF unit.



- 2. Hold the securing bracket [A] at the location [B], inside the ADF cover.
- 3. Secure the stud bracket [C] to the outside of the ADF cover at location [D] with two screws (\mathcal{F} x 2: M3x8).

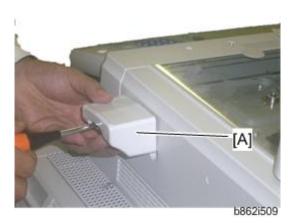


• The two screws must go through the ADF cover and the securing bracket [A].



4. Make two screw holes [E] in the scanner right cover with an M3x12 tapping screw from the accessories.

Installing the DF Handle

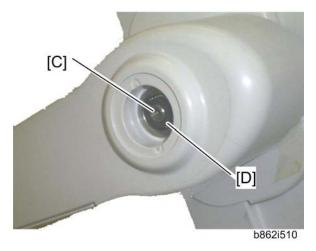


- 1. Attach the holder [A] to the scanner right cover (Tapping Screw x 2: M3x12).
 - At first, secure the screw at the rear side (away from the operation panel) temporarily and then at the front side temporarily. After that, secure them fully.



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- 2. Install the bushing: 6MM [B] in the inside of the handle unit.
- 3. Attach the handle unit to the stud bracket on the left side of the ADF.



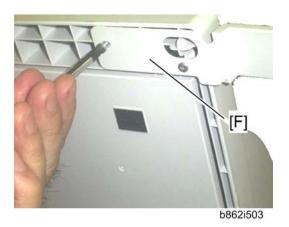
4. In the outside of the handle unit, install the bushing - M6 [C] first, and then the spacer [D].



5. Secure the handle unit with a screw (** x 1: M3x8).



6. Clean the handle unit with alcohol. Then attach the stud decal [E] at the location that was cleaned.



- 7. Attach the handle bracket [F] at the front right side on the bottom of the ADF unit (Tapping Screw [Self Binding] x 2: M3x12).
- 8. Close the ADF unit.



9. Attach the hinge stoppers (left [G] and right [H]) to the left and right hinges (Tapping screw x 2: M4x8 each).



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10. Clean the front side of the duplex unit with alcohol. Then attach the operation decal [I] at the location that was cleaned.



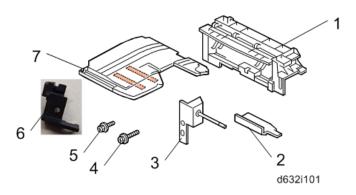
11. Check the operation of the handle unit [J].

1 Bin Tray BN3100 (D632)

Component Check

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

No.	Description	Q'ty
1	1 Bin Tray Unit	1
2	End-fence	1
3	Tray Support Bar	1
4	Screws (M3 x 16)	2
5	Screws (M3 x 8)	1
6	Harness Cover	1
7	Tray	1



Installation Procedure

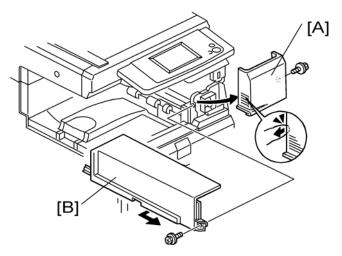
ACAUTION

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

If the bridge unit (D634) or side tray (D635) has already been installed in the machine, remove it before installing the 1 bin tray unit (D632). This will make it easier for you to do the following procedure.

1. Remove all tapes.

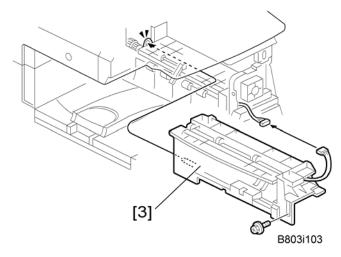
2. Open the right door of the machine.



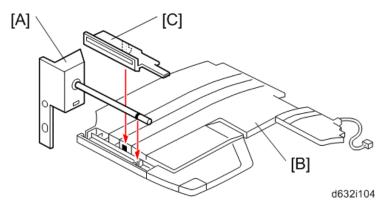
- 3. Remove the front right cover [A] (*x 1).
- 4. Remove the inner cover [B] (*\mathbb{P} \times 1).



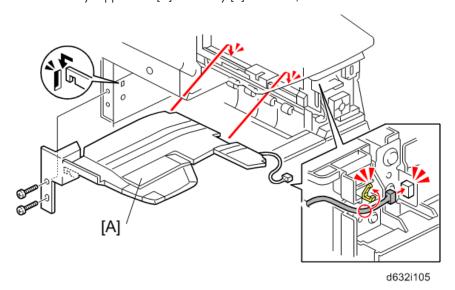
• Keep this screw for step 5.



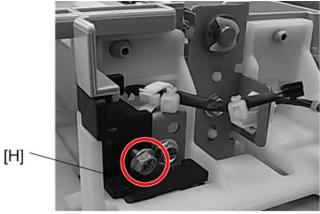
5. Install the 1 bin tray unit [3] (\square x 1, \nearrow x 1 [This screw was removed in step 4]).



6. Attach the tray support bar [A] to the tray [B] as shown, and then attach the end-fence [C].



- 7. Install the tray [A] with the tray support bar in the machine (\mathscr{F} x 2; M3 x 16).
- 8. Connect the harness to the connector of the 1-bin tray unit (x = x + 1).



- d632i106
- 9. Attach the harness cover [H] (\rat{P} x 1; M3 x 8).
- 10. Reinstall the front right cover on the machine, and then close the right door of the machine.
- 11. Turn on the main power switch of the machine.
- 12. Check the 1-bin tray unit operation.

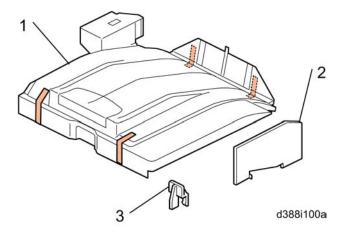
2

Internal Shift Tray SH3060 (D633)

Component Check

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

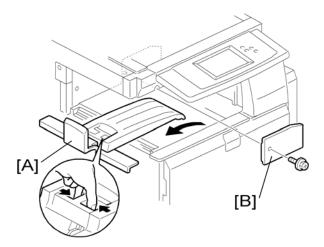
No.	Description	Q'ty
1	Shift Tray Unit	1
2	Connector Cover	1
3	Paper Guide - Small	1



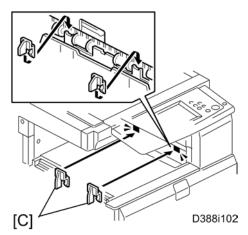
Installation Procedure



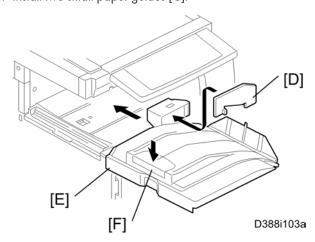
- Unplug the copier power cord before starting the following procedure.
- 1. Remove all tapes.



- 2. Remove the inner tray [A].
- 3. Remove the connector cover [B] ($\rat{p} \times 1$).



4. Install two small paper guides [C].



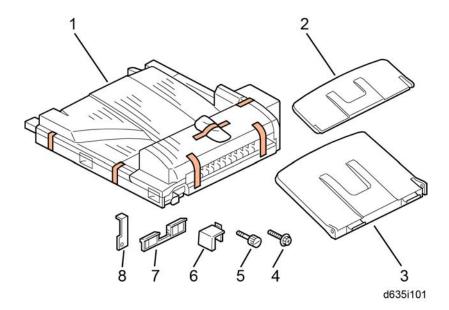
- 5. Attach the connector cover [D] to the shift tray unit [E].
- 6. Install the shift tray unit [E] on the machine.
- 7. Push down the left edge part [F] of the shift tray.
- 8. Turn on the main power switch of the machine.
- 9. Check the shift tray unit operation.

Side Tray Type C5502 (D635)

Component Check

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

No.	Description	Q'ty
1	Side Tray Unit	1
2	Sub Output Tray	1
3	Main Output Tray	1
4	Screw	1
5	Knob screw	1
6	Frame Cover	1
7	Guide	2
8	Holder bracket	1



2

Installation Procedure

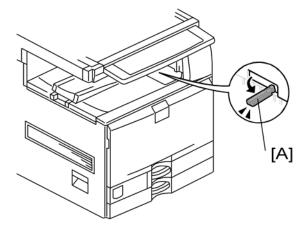


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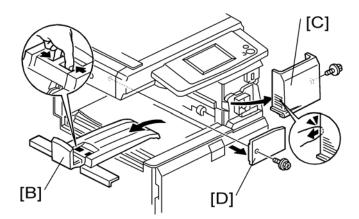
• Turn off the main switch of the copier and unplug the power cord before you start the installation procedure.



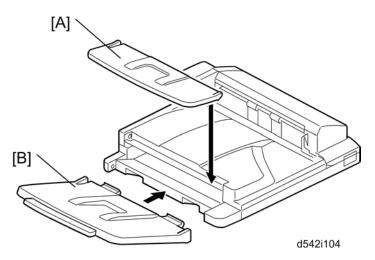
• If you will install the 1-bin tray (D632) on the machine, install the 1-bin tray first before installing the side tray (D635). This makes it easier to do the following procedure.



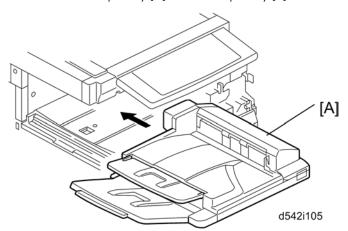
- 1. Remove all tapes.
- 2. If the sensor feeler [A] is out, fold it into the machine.
- 3. Open the right door of the machine.



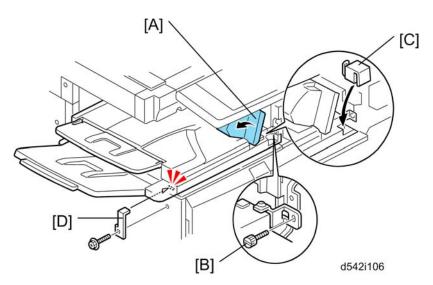
- 4. Remove the upper inner tray [B].
- 5. Remove the front right cover [C] (*x 1).
- 6. Remove the connector cover [D] (*\begin{align*} x 1).



7. Attach the main output tray [A] and sub output tray [B] to the side tray unit.



8. Install the side tray unit [A] in the machine.



- 9. Open the side tray cover [A].
- 10. Secure the side tray unit with the knob screw [B].
- 11. Attach the frame cover [C].
- 12. Reinstall the front right cover on the machine, and then close the right door of the machine.



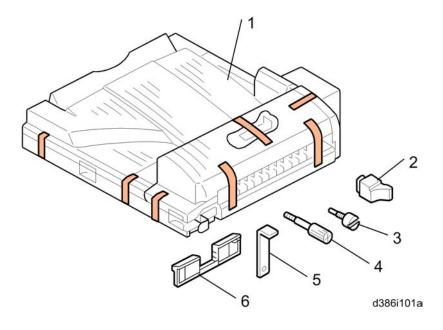
- Open the side tray cover [A] when installing the front right cover. Otherwise, it cannot be reinstalled.
- 13. Install the holder bracket [D] (F x 1)
- 14. Turn on the main power switch of the machine.
- 15. Check the side tray operation.

Bridge Unit BU3060 (D634)

Component Check

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

No.	Description	Q'ty
1	Bridge Unit	1
2	Frame Cover	1
3	Knob screw	1
4	Long knob screw	1
5	Holder bracket	1
6	Guide	2



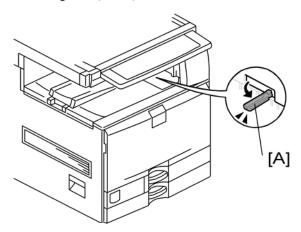
Installation Procedure

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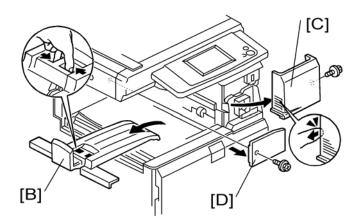
• Unplug the copier power cord before starting the following procedure.



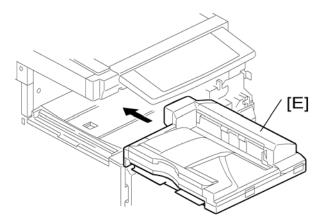
- If you will install the 1-bin tray (D632) on the machine, install the 1-bin tray first before installing the bridge unit (D634). This makes it easy to do the following procedure.
- If you will install a finisher unit (D585, D588, or D589) on the machine, install it after installing the bridge unit (D634).



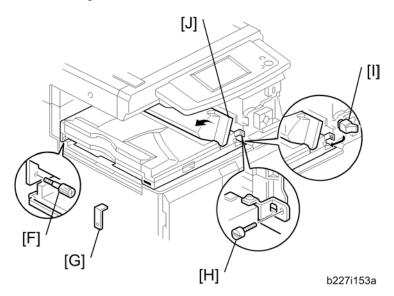
- 1. Remove all tapes.
- 2. If the sensor feeler [A] is out, fold it into the machine.
- 3. Open the right door of the machine.



- 4. Remove the upper inner tray [B].
- 5. Remove the front right cover [C] (*x 1).
- 6. Remove the connector cover [D] (*\begin{align*} x 1).



7. Install the bridge unit [E] in the machine.



- 8. Secure the bridge unit with the long knob screw [F] and knob screw [H].
- 9. Attach the frame cover [1].
- 10. Reinstall the front right cover on the machine, and then close the right door of the machine.

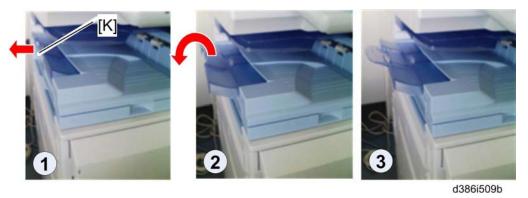


- Open the bridge unit cover [J] when installing the front right cover. Otherwise, it cannot be reinstalled.
- 11. Install the optional finisher (refer to the finisher installation procedure).



 Holder bracket [G] is used in the installation procedure of the finisher (D585, D588 or D589). Do not install it at this time.

- 12. Turn on the main power switch of the machine.
- 13. Check the bridge unit operation.



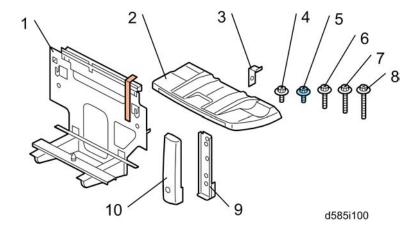
14. Pull the extension tray [K] only if the 1000-sheet finisher (D588) or the 500-sheet finisher (D585) is to be installed in the main machine.

Finisher SR3070 (D585)

Accessory Check

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

No	Description	Q'ty	For This Model
1	Unit Holder	1	Yes
2	Shift Tray	1	Yes
3	Holder Bracket	1	Yes
4	Screw: M3 x 8	4	Yes
5	Screw: M3 x 6	1	Yes
6	Screw: M4 x 14	4	Yes
7	Screw: M4 x 20	4	Yes
8	Screw: M4 x 25	3	Not used
9	Support Bracket	2	Yes
10	Support Bracket Cover	2	Yes

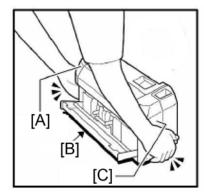


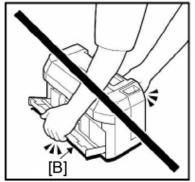
2

Installation Procedure



Whenever you lift or carry the SR3070, always hold it by the bottom edges of the front cover [C] and rear cover [A], as shown in the diagram below left. If you do not, SC798 will occur when you attach the finisher. DO NOT hold the finisher by the tray holder [B], as shown in the diagram below right.





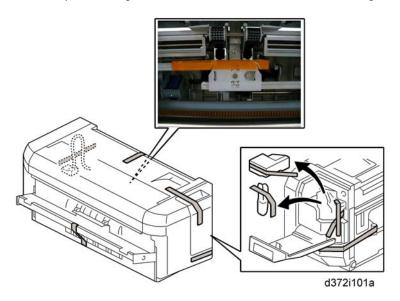
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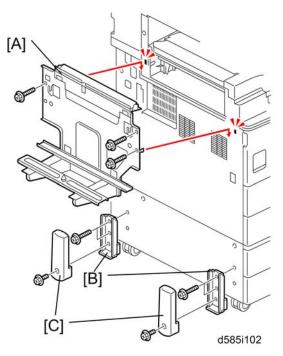
• Unplug the main machine power cord before starting the following procedure.



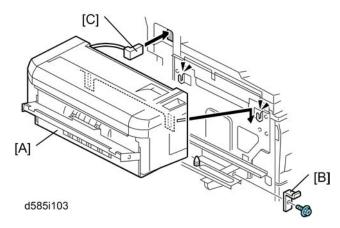
• The optional bridge unit (D634) must be installed before installing this finisher (D585).



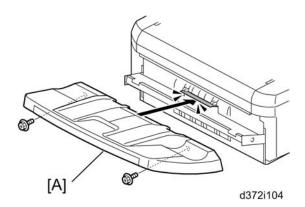
1. Unpack the finisher and remove the tapes.



- 2. Install the unit holder [A] (\mathcal{F} x 4; M4 x 14).
- 3. Install the support brackets [B] (> x 2 each; M4 x 20).
- 4. Install the support bracket covers [C] (** x 1 each; M3 x 8).



- 5. Install the 500-sheet finisher [A].
- 6. Install the holder bracket [B] (🏲 x 1; M3 x 6).
- 7. Connect the finisher cable [C].



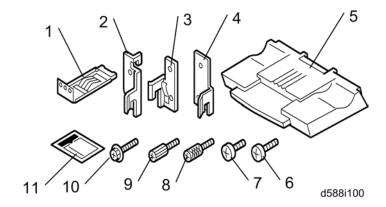
- 8. Install the shift tray [A] (\mathscr{F} x 2; M3 x 8).
- 9. Turn on the main power switch and check the finisher operation.

Finisher SR3090 (D588)

Accessory Check

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

No.	Description	Q'ty
1	Grounding Plate	1
2	Rear Joint Bracket (Not used)	1
3	Front Joint Bracket	1
4	Rear Joint Bracket	1
5	Сору Тгау	1
6	Screw - M3 x 8	1
7	Screw - M4 x 13	4
8	Knob Screw - M3 x 8	1
9	Knob Screw - M4 x 10	1
10	Screw - M4 x 25 (Not used)	3
11	Staple Position Decal	1



2

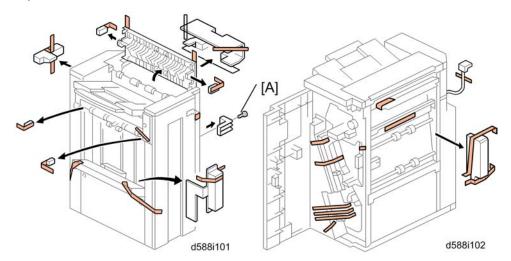
Installation Procedure

ACAUTION

• Unplug the main machine power cord before starting the following procedure.

The following options must be installed before installing this finisher:

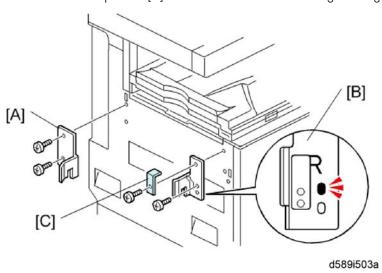
- Bridge Unit (D634)
- Paper Feed Unit (D580) or LCT (D581)



1. Unpack the finisher and remove the tapes.



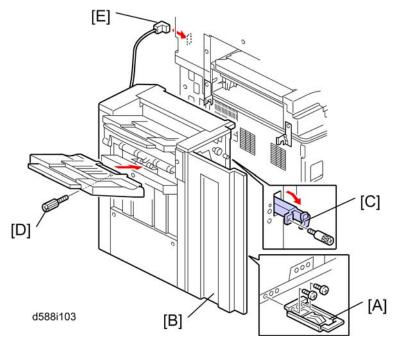
• Be sure to keep screw [A]. It will be needed to secure the grounding plate in step 3.



2. Install the rear joint bracket [A] (** x 2; M4x13), and then attach the front joint bracket [B] and the holder bracket [C] (** x 2; M4x13).



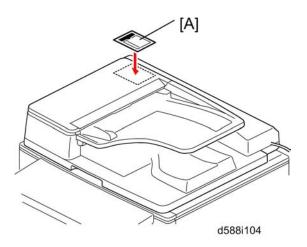
 Holder bracket [C] must be placed outside the front joint bracket [B]. This bracket is provided with the Bridge Unit (D634).



3. Install the grounding plate [A] on the finisher (*\beta x 2; M3x8).



- Use the screw removed in step 1 and the screw from the accessory box.
- 4. Open the front door [B]. Then pull the locking lever [C].
- 5. Align the finisher on the joint brackets, and lock it in place by pushing the locking lever.
- 6. Secure the locking lever (> x 1; knob M3x8) and close the front door.
- 7. Install the copy tray [D] (\mathcal{F} x 1; knob M4x10).
- 8. Connect the finisher cable [E] to the main machine.



- 9. Attach the staple position decal [A] to the ARDF as shown.
- 10. Turn on the ac switch and check the finisher operation.

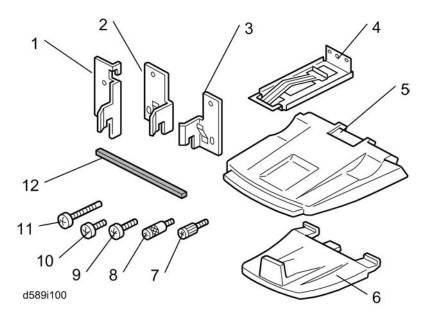
Booklet Finisher SR3100 (D589)

Accessory Check

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

No.	Description	Q'ty
1	Rear Joint Bracket (Not used)	1
2	Rear Joint Bracket	1
3	Front Joint Bracket	1
4	Grounding Plate	1
5	Upper Output Tray	1
6	Lower Output Tray	2
7	Short Knob Screw	1
8	Long Knob Screw	1
9	Screw (M4 x 13)	4
10	Screw (M3 x 8)	2
11	Screw (M4 x 25) (Not used)	3
12	Cushion	2

RTB 26



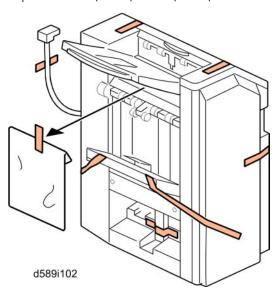
Installation Procedure

ACAUTION

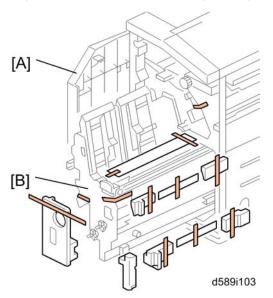
• Unplug the main machine power cord before starting the following procedure.

The following optional units must be installed before installing this finisher (D589).

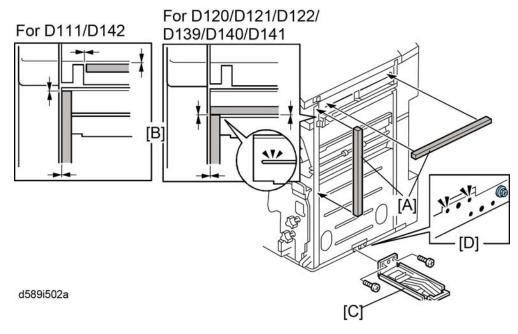
- Bridge Unit (D634)
- Paper Feed Unit (D580) or LCT (D581)







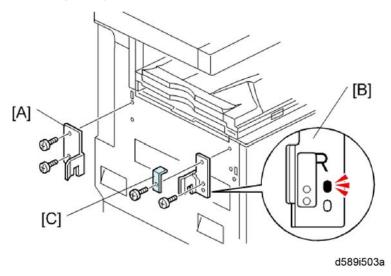
- 2. Open the front door [A] of the 1000-sheet booklet finisher, and then pull out the jogger unit [B].
- 3. Remove all tapes and packing materials from the inside of the finisher.



4. Attach the cushions [A] to the finisher.



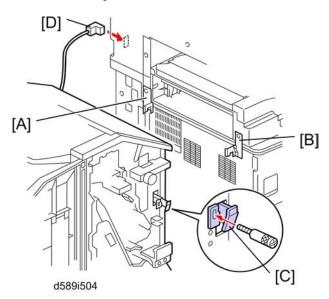
 Make sure that the cushions are placed within 0 to 1 mm [B] from the edge of the cover or frame. 5. Install the ground plate [C] on the finisher [D] (*\mathbb{P} x 2; M3x8).



6. Install the rear joint bracket [A] (** x 2; M4x13), and then attach the front joint bracket [B] and the holder bracket [C] (** x 2; M4 x 13).

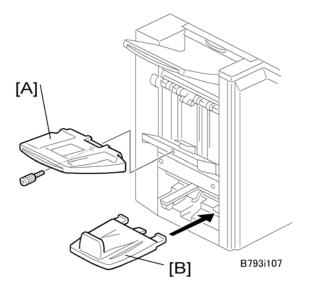


• Holder bracket [C] must be placed outside the front joint bracket [B]. This bracket is provided with the Bridge Unit (D634).



- 7. Slowly push the finisher to the left side of the machine, keeping its front door open until the brackets [A] [B] go into their slots.
- 8. Push the lock lever [C], and then secure it (Long knob screw x 1).
- 9. Close the front door of the finisher.

10. Connect the finisher connector [D] to the machine.



- 11. Install the upper output tray [A] (Short knob screw x 1).
- 12. Install the lower output tray [B].
- 13. Turn on the main power switch of the machine.
- 14. Check the 1000-sheet booklet finisher operation.

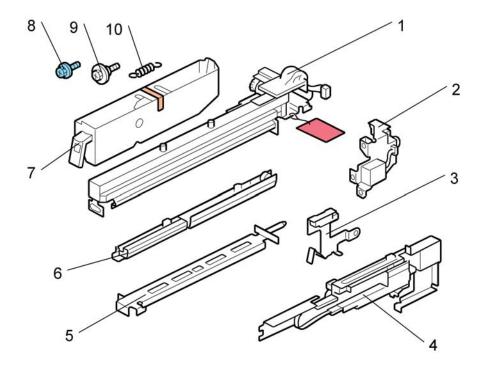
2

Punch Kit PU3000 (B807)

Component Check

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

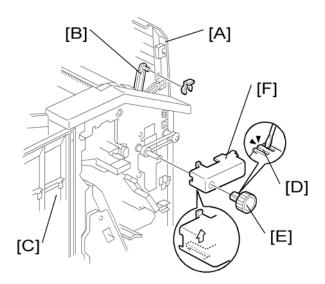
No.	Description	Q'ty
1	Punch Unit	1
2	Punch Drive Motor	1
3	Hopper Full Sensor Arm	1
4	Sub-scan Registration Sensor Unit	1
5	Punch Unit Stay	1
6	Sub-scan Registration Sensor Guide	1
7	Hopper	1
8	Screw	8
9	Step Screw	1
10	Spring	1



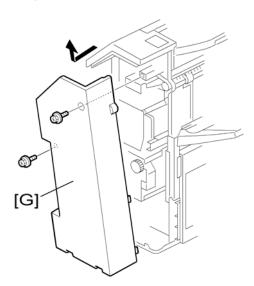
Installation

ACAUTION

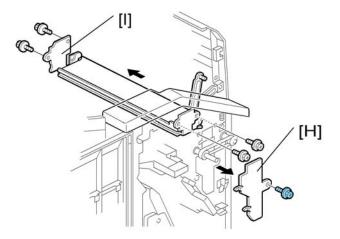
• Unplug the main machine power cord before starting the following procedure. If the 1000-sheet booklet finisher has been installed, disconnect it and pull it away from the machine.



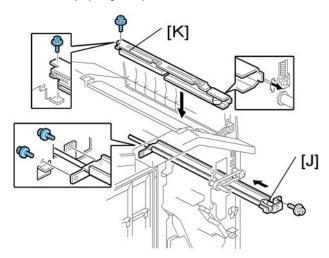
- 1. If the finisher is connected to the machine, disconnect it.
- 2. Open the top cover [A] and then release the guide arm [B] ($\overline{ \mathfrak{Q}} \times 1$).
- 3. Open the front door [C].
- 4. Pull the hook [D] up then remove the knob [E].
- 5. Timing belt cover [F].



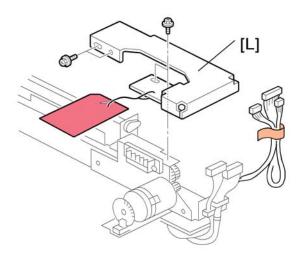
6. Rear cover of the 1000-sheet booklet finisher [G] ($\slash\hspace{-0.4em}P \times 2$).



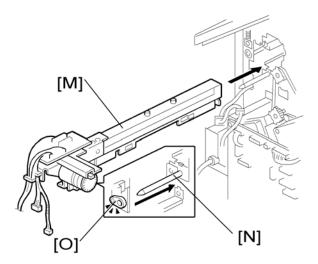
- 7. Cover bracket [H] (🏲 x 1)
- 8. Remove the paper guide plate [1] from the rear side ($\slash\hspace{-0.4em}P \times 4$).



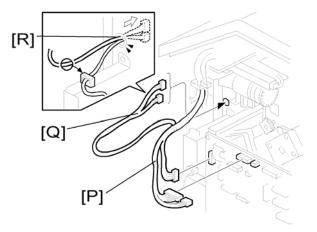
- 9. Install the punch unit stay [J] from the front side ($\slash\hspace{-0.4em}P \times 3$).
- 10. Install the sub-scan registration sensor guide [K] from the top ($\slash\hspace{-0.4em}P \times 1$).



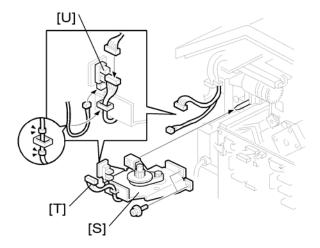
11. Remove the bracket [L] from the punch unit (\mathcal{F} x 1).



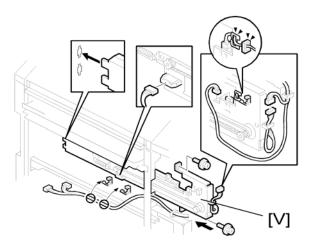
- 12. Install the punch unit [M] along the punch unit stay from the rear side.
- 13. Make sure to put the punch unit stay pin [N] through the hole [O].



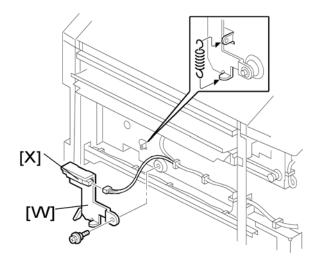
- 14. Connect the harnesses [P] to the main PCB.
- 15. Put the harnesses [Q] through the hole [R] in the rear frame (🖨 x 1).



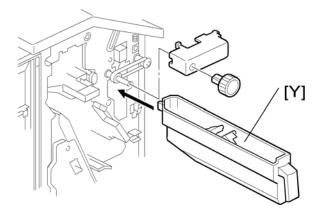
- 16. Install the punch drive motor [S] on the rear frame (F x 2).
- 18. Connect the home position sensor harness from the punch unit to the home position sensor [U].



- 19. Install the sub-scan registration sensor unit [V] from the rear side (\mathcal{F} x 2).
- 20. Route and connect the harnesses as shown (🖨 x 2).



- 21. Install the hopper full sensor arm [W] ($\rat{p} \times 1$, spring x 1).
- 22. Connect the harness from the sub-scan registration sensor unit to the hopper full sensor [X].

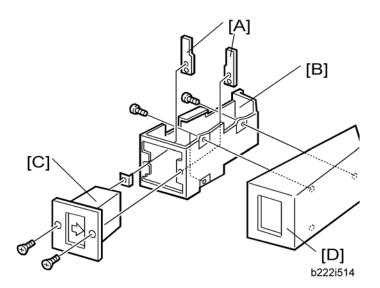


- 23. Install the hopper [Y] from the front side.
- 24. Reinstall the timing belt cover and knob.
- 25. Reinstall the rear cover (F x 2).
- 26. Close the front door and top cover.
- 27. Install the 1000-sheet booklet finisher on the copier.
- 28. Plug in and turn on the main power switch.
- 29. Check the 1000-sheet booklet finisher operation.

2

Key Counter Bracket Type H (A674)

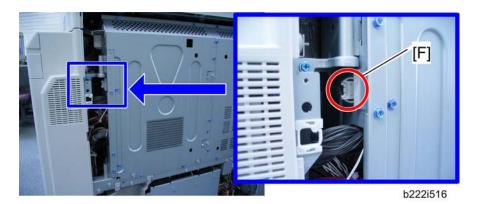
Installation Procedure



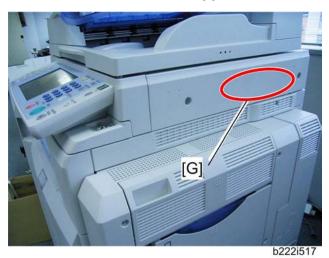
- 1. Hold the key counter plate nuts [A] on the inside of the key counter bracket [B] and insert the key counter holder [C].
- 2. Secure the key counter holder to the bracket ($\slash\hspace{-0.6em}P\slash\hspace{-0.6em}x\slash\hspace{-0.6em}x\slash\hspace{-0.6em}2).$
- 3. Install the key counter cover [D] (*\begin{align*} x 2 \).
- 4. Rear cover (p.195)



5. Cut off the part [E] of the rear cover.



6. Connect the harness to the connector [F] inside the machine.



- 7. Peel off double sided tape on the key counter bracket and attach the key counter to the scanner right cover [G].
- 8. Reassemble the machine.

2

Copy Data Security Unit Type F (B829)

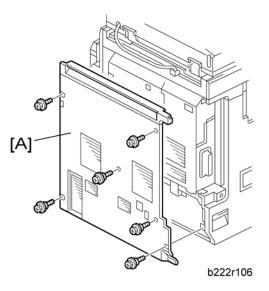
Component Check

No.	Description	Q'ty	For this model
1	Bracket 1	1	Not used
2	ICIB-3	1	Yes
3	Flexible cable: Long	1	Not used
4	Flexible cable: Short	1	Not used
5	Harness with bands	1	Not used
6	Harness	1	Not used
7	Small Bracket	1	Not used
8	Saddle Clamp	1	Not used
9	Screws: M3x6	6	Not used
10	Screws: M3x4	2	Yes
11	Bracket 2	1	Not used

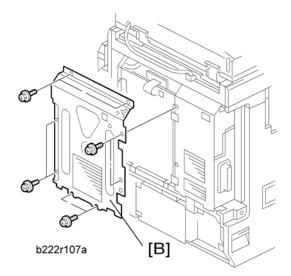
Installation



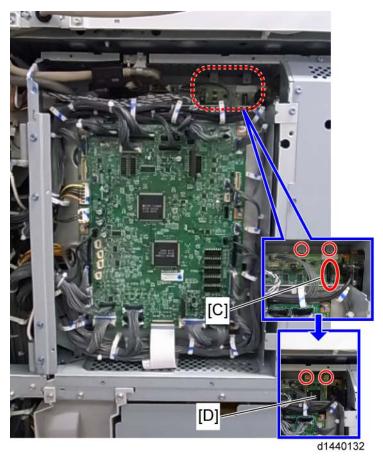
• Unplug the main machine power cord before you do the following procedure.



1. Remove the rear cover [A] of the machine ($\mbox{\ensuremath{\not{P}}}\xspace x 5).$



2. Remove the controller box right cover [B] ($\slash\hspace{-0.4em}P \times 8$).



- 3. Attach the ICIB-3 [D] (copy data security board) to CN 187 [C] on the BCU (x 1, * x 2).
- 4. 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.



- 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".
- 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

2

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.

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

2

Optional Counter Interface Unit Type A (B870)

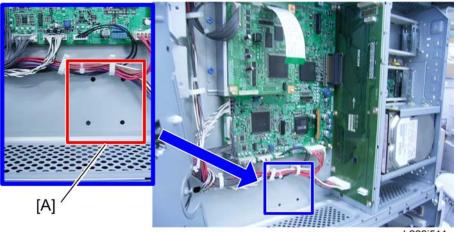
Component Check

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

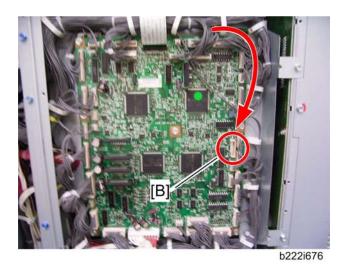
No.	Description	Q'ty
1	Key Counter Interface Board	1
2	Stud Stay	4
3	Wire Harness	1

Installation Procedure

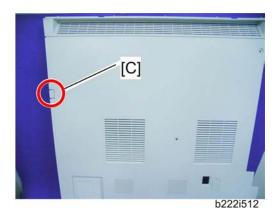
- 1. Rear cover (p.195)
- 2. IOB bracket (** p.341)



- b222i511
- 3. Install the four stud stays in the location [A] in the controller box.
- 4. Install the key counter interface board on the four stud stays in the controller box.
- 5. Connect the harness to CN3 on the key counter interface board.



6. Close the IOB bracket and connect the other terminal to CN215 $\left[B\right]$ on the IOB.



7. Cut off the part [C] of the rear cover.



- 8. Clamp the harness from the counter device with the clamp [D] and put it as shown by the blue arrow (🖨 x 1).
- 9. Route the harness from the counter device in the same way as the other harnesses [E] (🖨 x 3).

- 10. Connect the harness from the counter device to CN4 on the key counter interface board.
- 11. Reattach the IOB bracket (** p.341).
- 12. Reassemble the machine.

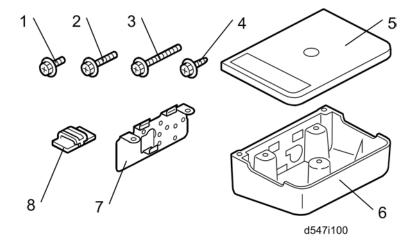
Card Reader Bracket Type 3352 (D593)

Component Check

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

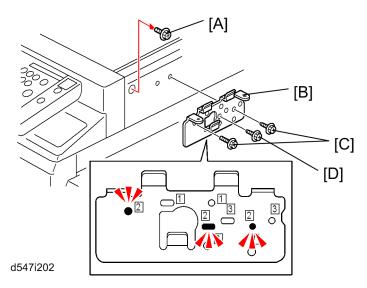
No.	Description	Q'ty
1	Screw: M3 x 8	2
2	Screw: M3 x 14	1
3	Screw: M3 x 25*1	1
4	Tapping Screw: M3 x 10	3
5	Upper Tray	1
6	Lower Tray	1
7	Tray Bracket	1
8	Clamp	5

^{* 1:} Not used in this machine

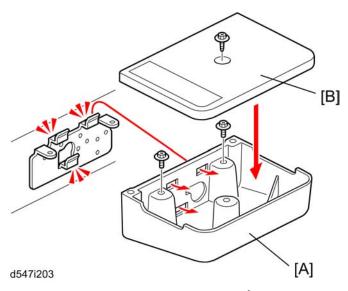


2

Installation Procedure



- 1. Remove the screw [A] on the scanner right cover.
- 2. Attach the tray bracket [B] to the scanner right cover (\mathcal{F} [C] x 2: M3x10, \mathcal{F} [D] x 1: M3x14).
 - For this model, use the screw holes marked "2" on the table bracket.



- 3. Attach the lower tray [A] to the tray bracket (*x 2: M3x8).
- 4. Attach the upper tray [B] to the tray bracket (F x 1: M3x8).
- 5. Use the clamps as necessary to clamp the cable of the card read/writer device.



• The smart card reader must be placed on this card reader table. If not, some antenna or transmitter in the main machine may be interrupted.

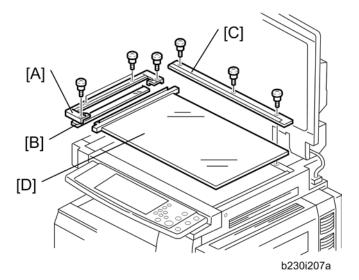
2

Anti-Condensation Heater (Scanner)

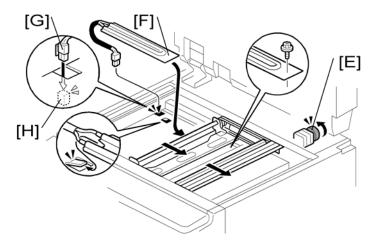


• This option is provided as a service part.

Installation Procedure



- 1. Rear cover (p.195)
- 2. Open the ARDF or platen cover.
- 3. Glass cover [A] (** x 4)
- 4. ARDF exposure glass [B]
- 5. Rear scale [C] (** x 3)
- 6. Exposure glass with left scale [D]



- 7. Move the scanner carriage to the right side by rotating the scanner motor [E].
- 8. Install the heater [F] in the scanner unit (F x 1, hook)
- 9. Put the connector [G] through the cutout.
- 10. Connect it to the connector [H] (blue and red cords) in the frame of the machine.
- 11. Reassemble the machine.

2

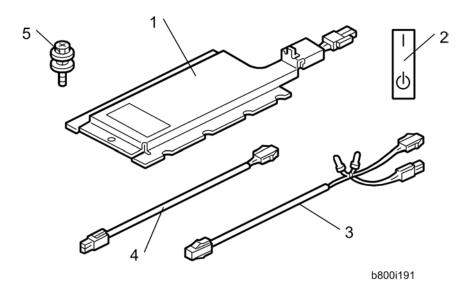
Anti-Condensation Heater Type A



• This option is provided as a service part.

Component Check

No.	Description	Q'ty
1	Tray heater	1
2	On-standby decal	1 (-90) or 2 (-91)
3	Harness 2 (For D387)	1
4	Harness 1 (For D537/D538)	1
5	Screw M4 x 10	2
-	Installation procedure	1



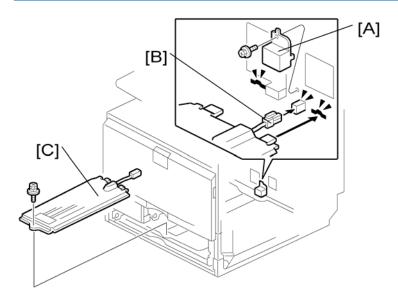
Installation Procedure

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• Unplug the machine power cord before starting the following procedure.

- Do the following procedure not to damage any harnesses.
- Check that all harnesses are not damaged nor pinched after installation.

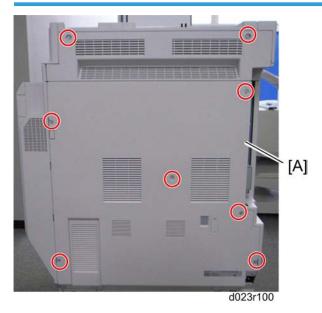
For installing the tray heater in the main machine



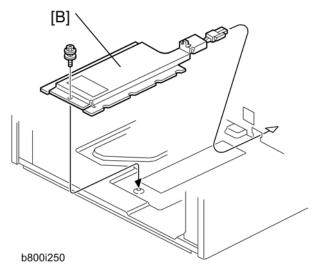
- 1. Remove trays 1 and 2 from the machine.
- 2. Remove the connector cover [A] (*x 1).
- 3. Connect the connector [B] of the heater to the connector of the main machine.
- 4. Install the heater [C] inside the machine ($\mathcal{F} \times 1$).
- 5. Reassemble the machine.

2

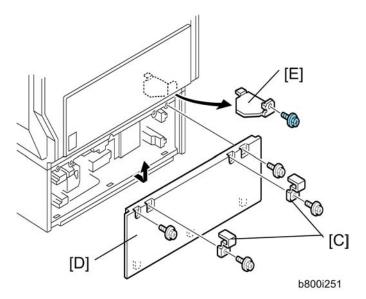
For installing the tray heater in D537



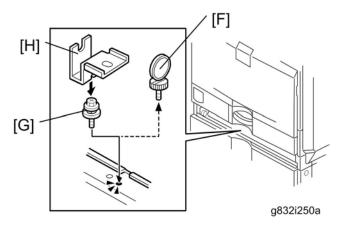
- 1. Rear cover [A] (🗗 x 8)
- 2. Pull out the two trays in the optional paper feed unit.



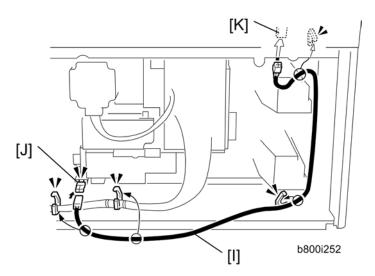
3. Install the tray heater [B] in the optional paper feed unit ($\rlap{/}P$ x 1).



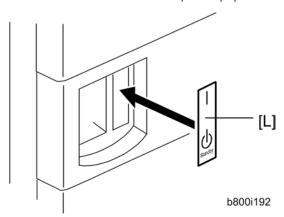
- 4. Remove the two securing brackets [C] (*x 1 each), and then the rear cover [D] of the optional paper feed unit (*x 2).
- 5. Remove the harness cover bracket [E] (\mathcal{F} x 1).



- 6. Pull out tray 2 from the mainframe.
- 7. Replace the shoulder screw [F] with the washer screw [G], using securing bracket [H] (\mathcal{F} x 1).



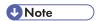
- 8. Connect the harness [I] to the connector [J] of the tray heater.
- 9. Route the harness [1] as shown and clamp it with four clamps (🖨 x 4).
- 10. Connect the harness [I] to the connector [K] of the mainframe.
- 11. Reassemble the mainframe and optional paper feed unit.



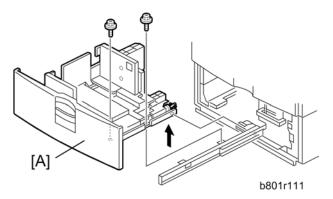
12. Attach the on/standby decal [L] to the right-hand side of the main power switch.

For Installing the Tray Heater in D538

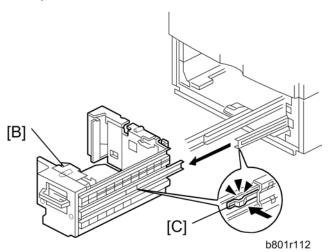
- 1. Remove the rear cover of the mainframe. (See step 1 in "For Installing the Tray Heater in D537".)
- 2. Pull out the LCT drawer.



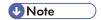
• If the right tray comes out with the left tray, push the right tray into the LCT.



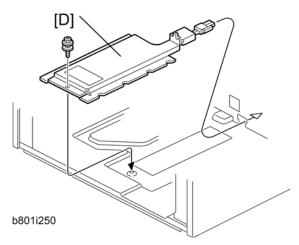
3. Left tray [A] (🔊 x 2)



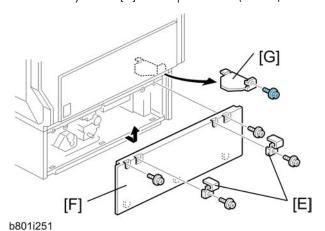
4. Remove the right tray [B] while pressing down the stopper [C].



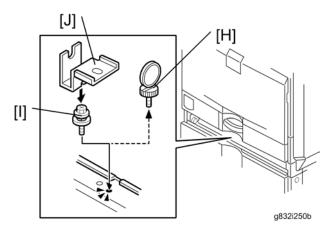
• When reinstalling the right tray, set the right tray on the guide rail and carefully push the tray in, making sure to keep the tray level.



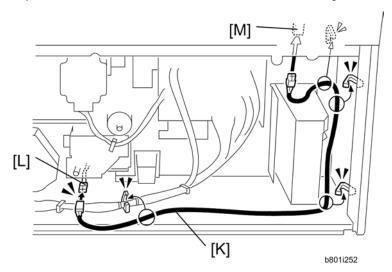
5. Install the tray heater [D] in the optional LCT (\mathcal{F} x 1).



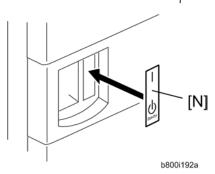
- 6. Remove the two securing brackets [E] (\nearrow x 1 each), and the then rear cover [F] of the optional LCT (\nearrow x 2).
- 7. Remove the harness cover bracket [G] (\rat{p} x 1).



- 8. Pull out tray 2 from the mainframe.
- 9. Replace the shoulder screw [H] with the washer screw [I], using the securing bracket [J] (🗗 x 1).



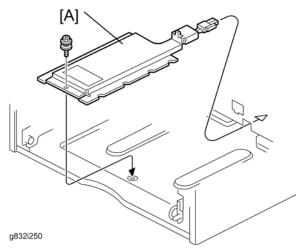
- 10. Connect the harness [K] to the connector [L] of the tray heater.
- 12. Connect the harness [K] to the connector [M] of the mainframe.
- 13. Reassemble the mainframe and optional LCT.



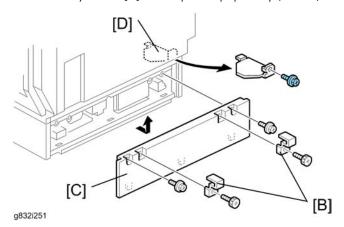
- 14. Reassemble the mainframe and optional paper feed unit.
- 15. Attach the on/standby decal [N] to the right-hand side of the main power switch.

For Installing the Tray Heater in D387

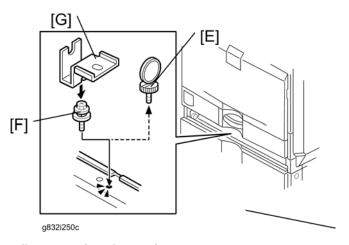
- 1. Remove the rear cover of the mainframe (** step 1 in For Installing the Tray Heater in D537).
- 2. Pull out the tray in the optional paper tray.



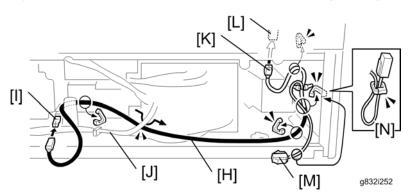
3. Install the tray heater [A] in the optional paper tray (\mathcal{F} x 1).



- 4. Remove the two securing brackets [B] (\nearrow x 1 each), and then the rear cover [C] of the optional paper tray (\nearrow x 2).
- 5. Remove the harness cover bracket [D] (\mathcal{F} x 1).



- 6. Pull out tray 2 from the mainframe.
- 7. Replace the shoulder screw [E] with the washer screw [F], using securing bracket [G] (** x 1).



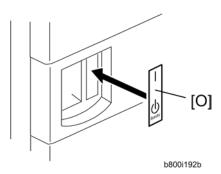
- 8. Connect the harness [H] to the connector [I] of the tray heater.
- 9. Route the harness [H] as shown and clamp it with four clamps ($\mathcal{F} \times 4$).



- Make sure that the harness [H] is placed below the harness [J].
- 10. Connect one harness [K] of the two-way harness to the connector [L] of the mainframe.



- The harness [K] of the two-way harness, which has two binds, is for the connector of the mainframe. The harness [M], which has one bind, is for another optional paper feed unit.
- 11. Clamp the other harness [M] of the two-way harness as shown [N] if you do not install another optional paper feed unit.
- 12. Reassemble the mainframe and optional paper tray.

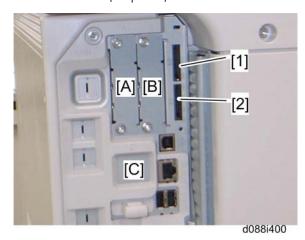


13. Attach the on/standby decal [O] to the right-hand side of the main power switch.

Overview

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 (**p.174*).



I/F Card Slots

RTB 26a Delete text as shown

2

- Slot A is used for one of the optional I/F connections (only one can be installed): IEEE1284, IEEE802.11a/g g (Wireless LAN), Remote Communication Gate.
- Slot B is used for the File Format Converter or Remote Communication Cate
- Slot C is used for Gigabit Ethernet.

SD Card Slots

- Slot 1 (upper) is already occupied by the PDF direct print, VM and App2me SD Card by factory default, and is also used for optional applications (e.g.: Browser Unit, PostScript 3, PictBridge, IPDS unit, etc).
- Slot 2 (lower) is used for installing applications, or for service only (for example, updating the firmware).

SD Card Appli Move

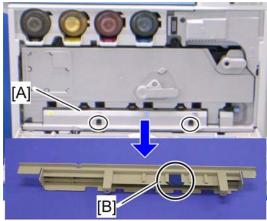
Overview

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 (PostScript 3, Security Application, PictBridge, IPDS unit, PDF Direct, 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.
- 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.



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- Remove the cover [A] (*x 2), and then keep the SD card in the place [B] after you move the application program from one card to another card. This is done for the following reasons:
 - The SD card can be the only proof that the user is licensed to use the application program.
 - You may need to check the SD card and its data to solve a problem in the future.

Move Exec

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

Mportant (

- 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.

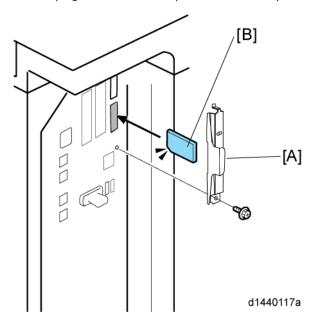
- 8. Turn the main switch off.
- 9. Remove the SD card from SD Card Slot 2 (lower).
- 10. Turn the main switch on.
- 11. Check that the application programs run normally.
- 12. Make sure that the machine can recognize the option, see "Check All Connections" at the end of this section (p.174).

PostScript3 Unit Type C5502

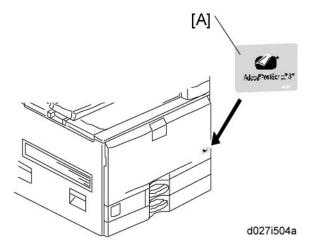


RTB 26 Delete this note

• 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 ($\slash\hspace{-0.4em}P \times 1$).
- 2. Insert the SD card [C] (PostScript 3) in SD slot 2 (lower) with its label face [B] towards the front of the machine. Then push it slowly into SD slot 2 (lower) until you hear a click.



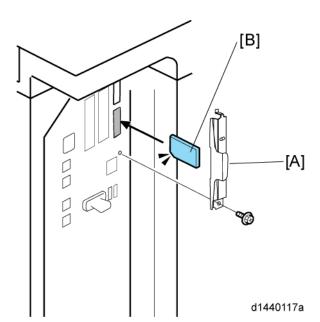
- 3. Attach the "Adobe PostScript 3" decal [A] to the front door.
- 4. Plug in, and then turn on the machine.
- 5. Move the PostScript3 application from the SD card in SD slot 2 (lower) to the SD card in SD slot 1 (upper) with SP5-873-001.
- 6. Turn off the machine.
- 7. Remove the SD card from SD slot 2 (lower), and then keep it in a safe place (**p.157).
- 8. Attach the SD-card slot cover, and then turn on the machine ($\mathcal{F} \times 1$).
- 9. Make sure that the machine can recognize the option, see "Check All Connections" at the end of this section (** p.174*).

IPDS Unit Type C5502

ACAUTION

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

RTB 26 Delete this note



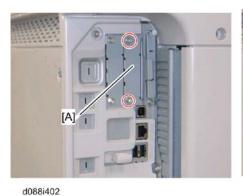
- 1. Remove the SD-card slot cover [A] from the SD card slots (*x 1).
- 2. Insert the SD card [C] (IPDS Unit) in SD slot 2 (lower) with its label face [B] towards the front of the machine.
- 3. Plug in, and then turn on the machine.
- 4. Move security applications from the SD card in SD slot 2 (lower) to the SD card in SD slot 1 (upper) with SP5-873-001.
- 5. Turn off the machine.
- 6. Remove the SD card from SD slot 2 (lower), and then keep it in a safe place (**p.157).
- 7. Attach the SD-card slot cover, and then turn on the machine ($\mathcal{F} \times 1$).

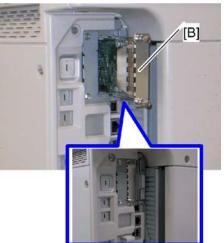
RTB 43
Do not attach the decal until IBM approval has been obtained.

File Format Converter Type E

ACAUTION

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





- 1. Remove the slot B cover [A] (*x 2).
- 2. Install the file format converter [B] into slot B 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)	"]"
SP5-836-002	Panel Setting	"O"

- 5. Check the operation.
- 6. Make sure that the machine can recognize the option, see "Check All Connections" at the end of this section (** p.174*).

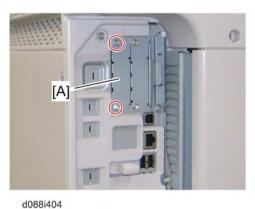
IEEE 1284 Interface Board Type A

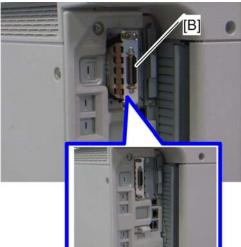
Installation Procedure

ACAUTION

• 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 802.11 a/g g (Wireless LAN), IEEE1284).





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

- 2. Install the interface board [B] (Knob-screw x 2) into the slot A.
- 3. Make sure that the machine can recognize the option, see "Check All Connections" at the end of this section (1 p.174).

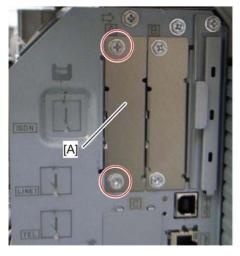
IEEE 802.11a/g g Interface Unit Type J/K

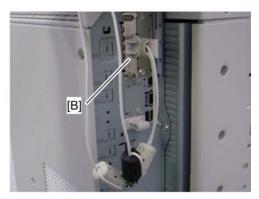
Installation Procedure

ACAUTION

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

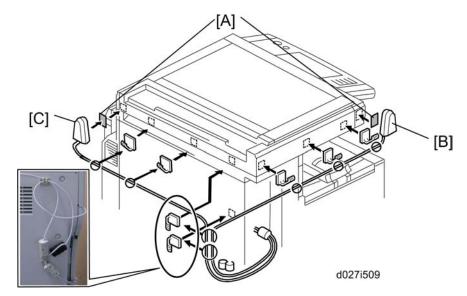
You can only install one of the following network interfaces at one time: (IEEE 802.11 a/g g (Wireless LAN), IEEE1284, Bluetooth).





d027i403a

- 1. Remove the slot cover [A] from the board slot (*\beta x 2).
- 2. Install the wireless LAN board [B] (Knob-screw 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 (p. 174).



- 4. Peel off the double-sided tapes on the Velcro fasteners [A], and then attach them [A] at the front left and rear left of the machine.
- 5. Attach "ANT1" (having a black ferrite core) [B] to the front left of the machine.
- 6. Attach "ANT2" (having a white ferrite core) [C] to the rear right of the machine.



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

- 7. Attach the clamps as shown above.

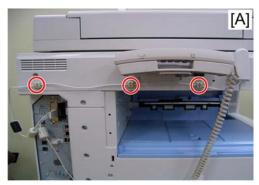


• Make sure that the cables are not slack. Keep them wired tightly along the covers.

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.

Installing Various Hardware Combinations



d027i511a

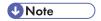
Refer to the above picture [A] when installing the handset.

UP Mode Settings for Wireless LAN

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



- You cannot use the wireless LAN if you use Ethernet.
- The Bluetooth interface unit and the Wireless LAN interface unit can not be used simultaneously.
- 1. Press the "User Tools/Counter" key.
- 2. On the touch panel, press "System Settings".



- 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)



- 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 802.11 a/g g Wireless LAN

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

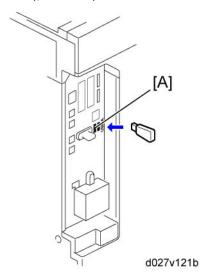
SP No.	Name	Function
5840-008	transmission speed	Sets the transmission speed Auto, 54 Mbps, 48 Mbps, 36 Mbps, 24 Mbps, 18 Mbps, 12 Mbps, 9 Mbps, 6 Mbps, 11 Mbps, 5.5 Mbps, 2 Mbps, 1 Mbps (default: Auto)
5840-011	WEP Key Select	Used to select the WEP key (Default: 00).
	Name	Function
	SSID	Used to confirm the current SSID setting.
UP mode	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.

Bluetooth Interface Unit Type D

ACAUTION

• 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 802.11 a/g g (Wireless LAN), Bluetooth).



ACAUTION

• 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 into the USB connector [A].
- 3. Plug the power cable and turn on the power of the machine.
- Make sure that the machine can recognize the option see "Check All Connections" at the end of this section (Pp. 174).



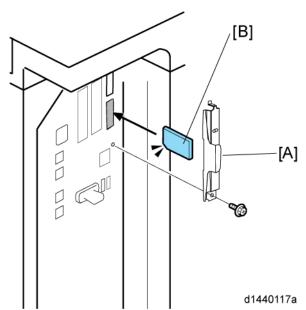
 The Bluetooth interface unit and the Wireless LAN interface unit can not be used simultaneously.

Camera Direct Print Card Type J



RTB 26
Delete this note

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 (*\mathbb{P} x 1).
- 2. Insert the SD card [C] (PictBridge) in SD slot 2 (lower) with its label face to the front of the machine.
- 3. Plug in, and then turn on the machine.
- 4. Move the PictBridge application from the SD card in SD slot 2 (lower) to the SD card in SD slot 1 (upper) with SP5-873-001.
- 5. Turn off the machine.
- 6. Remove the SD card from slot SD 2, and then keep it in a safe place.

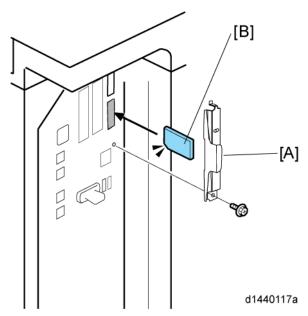
- 7. Attach the SD-card slot cover, and then turn on the machine ($\mathcal{F} \times 1$).
- 8. Make sure that the machine can recognize the option, see "Check All Connections" at the end of this section (p. 174).

SD Card for Netware Printing Type H



• 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 [C] (Netware Printing) in SD slot 2 (lower) with its label face [B] to the front of the machine.
- 3. Plug in, and then turn on the machine.
- 4. Move the Netware printing application from the SD card in SD slot 2 (lower) to the SD card in SD slot 1 (upper) with SP5-873-001.
- 5. Turn off the machine.
- 6. Remove the SD card from SD slot 2 (lower), and then keep it in a safe place.
- 7. Attach the SD-card slot cover, and then turn on the machine ($\mathcal{F} \times 1$).
- 8. Make sure that the machine can recognize the option see "Check All Connections" at the end of this section (p. 174).

Browser Unit Type F

Browser RTB 1

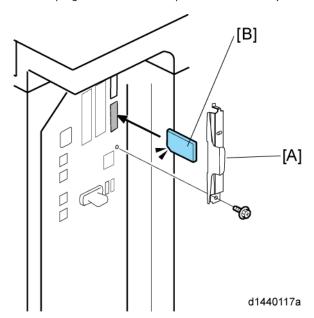
Installation Procedure

Replace the entire procedure.



ACAUTION

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



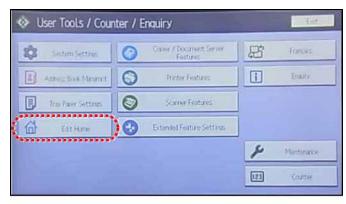
- 1. Remove the slot cover [A] for SD cards (*\beta x 1).
- 2. Turn the SD-card label face [B] of the browser unit to the front of the machine. Then push it slowly into SD slot 2 (lower) until you hear a click.
- 3. Plug in and turn on the main power switch.
- 4. Push the "User Tools" key.
 - If an administrator 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 "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. Touch "Change Allocation".
- 16. Touch the "Browser" line.
- 17. Press one of the hard keys, which you want to use for the Browser Unit. In default, this function is assigned to the "Other Functions" key (bottom key of function keys).
- 18. Touch "OK".
- 19. Touch "Exit" twice to go back to the copy screen.
- 20. Turn off the main power switch.
- 21. Install the key for "Browser Unit" to the place, where you want.
- 22. Remove the SD card of the browser unit from SD slot 2 (lower).
- 23. Attach the slot cover [A] (*x 1).
- 24. Keep the SD card in the place (***p.157) 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

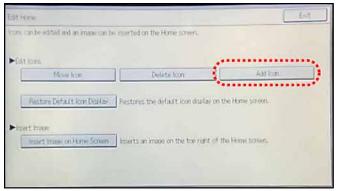
This procedure allows the browser icon to appear on the home screen of the operation panel.

1. Press [User Tools].



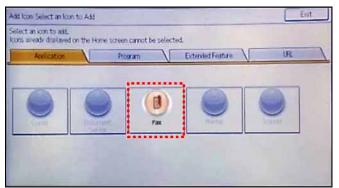
d1440144

2. Press [Edit Home].



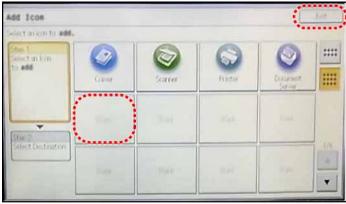
d1440145

3. Press [Add Icon].



d1440146

4. Press [Browser].



d1440147

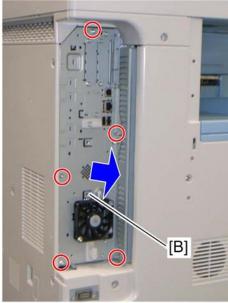
- 5. Press a [Blank] to set a location for the browser icon.
- 6. Press [Exit] to end the fax browser icon addition.

Gigabit Ethernet Type B

ACAUTION

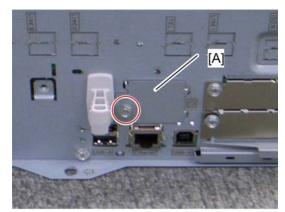
• Unplug the main machine power cord before you do the following procedure.





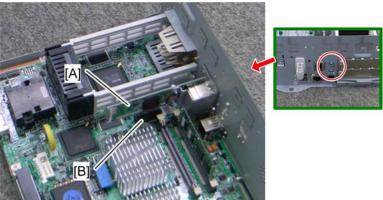
d393i101

- 1. Remove the controller cover [A] ($\mbox{\it P}$ x 3).
- 2. Pull out the controller board [B] (\mathcal{F} x 5).



d027i409

3. Remove the slot cover [A] (\nearrow x 1).



d027i410

- 4. Attach the Gigabit Ethernet controller [A] into the slot [B] (*\begin{align*} x 2 \).
- 5. Install the Ethernet connector cover included in the Gigabit Ethernet board kit on the 100M bit LAN connector.
- 6. Reassemble the machine.
- 7. Check the operation of the Gigabit Ethernet

Check All Connections

- 1. Plug in the power cord. Then turn on the main switch.
- 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.

3

3. Preventive Maintenance

Maintenance Tables

See "Preventive Maintenance Tables" in "Appendices" for the following information:

- Preventive Maintenance Items
- Other Yield Parts

PM Parts Settings

Before Removing the Old PM 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
	Black: 3902-005
Developer	Yellow: 3902-006
Developer	Cyan: 3902-007
	Magenta: 3902-008
	Black: 3902-009
Drum Unit	Yellow: 3902-010
Drum Omi	Cyan: 3902-011
	Magenta: 3902-012
Heating sleeve belt unit and Pressure Roller (not	Heating belt: 3902-018
necessary for complete fusing units; see below)	Pressure roller: 3902-019
Image Transfer Belt Cleaning Unit	3902-015
PTR Unit	3902-016
Toner Collection Bottle (if not full or near-full)	3902-017

mportant !

- After the PM counter for the heating sleeve belt unit reaches its PM life (300K pages), the machine stops the operation automatically. Replace the heating sleeve belt unit before the machine stops its operation (stop warning: 315K pages, stop: 330K pages).
- Change the setting of SP3-902-018 from "0" to "1" before replacing the heating sleeve belt unit.
 Otherwise, the machine will not recover.

For the following units, there is a new unit detection mechanism. It is not necessary to reset PM counters.

3

- PCDU
- Development unit
- Toner Collection Bottle (if full or near-full)
- Fusing unit

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.

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.

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Operation check

Check if the sample image has been copied normally.

4. Replacement and Adjustment

Beforehand

ACAUTION

- 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.

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



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

Image Adjustment

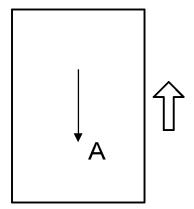
Scanning

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



• Use S-2-1 test chart to do the following adjustments.

Scanner sub-scan magnification

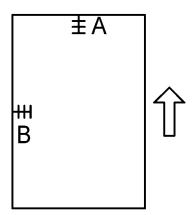


A: Sub-scan magnification

- 1. Put the test chart on the exposure glass. Then make a copy from one of the feed stations.
- Check the magnification ratio. Adjust with SP4-008 if necessary.
 Standard: ±1.0%.

Δ

Scanner leading edge and side-to-side registration



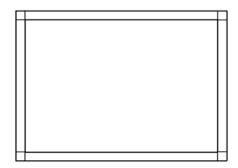
A: Leading Edge Registration

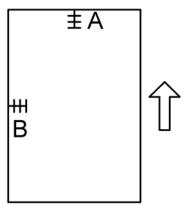
- 1. Put the test chart on the exposure glass. Then make a copy from one of the feed stations.
- 2. Check the leading edge and side-to-side registration. Adjust the following SP modes if necessary. Standard: 0 ± 2mm for the leading edge registration, 0 ± 2.5mm for the side-to-side registration.

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

ARDF

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





A: Leading edge registration

Use A3/DLT 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: Front	± 3.0 mm
SP6-006-003	Leading Edge Registration	± 5.0 mm
SP6-006-005	Buckle: Duplex Front	± 3.0 mm
SP6-006-006	Buckle: Duplex Rear	± 2.5 mm
SP6-006-007	Rear Edge Erase (Trailing Edge)	± 10.0 mm

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.

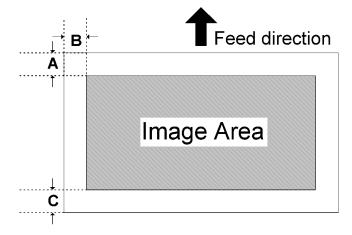
• Standard: ±5.0%

• Reduction mode: ±1.0%

• Enlargement mode: ±1.0%

Registration

Image Area



A = C = 5.2 mm (0.2"), B = 2.0 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, LCT, and duplex unit.

Adjustment Standard

• Leading edge (sub-scan direction): 5.2 ± 2 mm

• Side to side (main-scan direction): 2 ± 1 mm

Paper Registration Standard

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

• Sub-scan direction: 0 ± 9 mm

Main-scan direction: 0 ± 4 mm

4

Adjustment Procedure

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

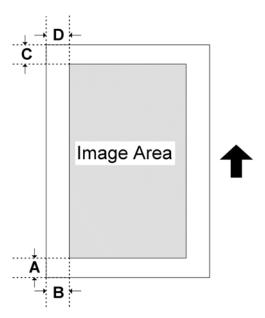


- Registration can change slightly as shown on the previous page. Print some pages of the 1-dot trimming pattern for step 3 and 4. Then average the leading edge and side-to-side registration values, and adjust each SP mode.
- 3. Do the leading edge registration adjustment.
 - 1) Check the leading edge 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 @ 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 @ key.
 - 4) Generate a trim pattern to check the leading edge adjustment.

Erase Margin Adjustment



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. Enter SP2-109-003.
- 2. Print out the test pattern (14: 1-dot trimming pattern) with SP2-109-003.
- 3. Check the erase margin A and B. Adjust them with SP2-103-001 to -015 if necessary.
 - Leading edge: 0.0 to 9.0 mm (default: 4.2 mm)
 - Side-to-side: 0.0 to 9.0 mm (default: 2.0 mm)
 - Trailing edge: 0.0 to 9.0 mm (default: 4.2 mm)

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 open the drum positioning plate
- 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

Printer Gamma Correction



• 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 -

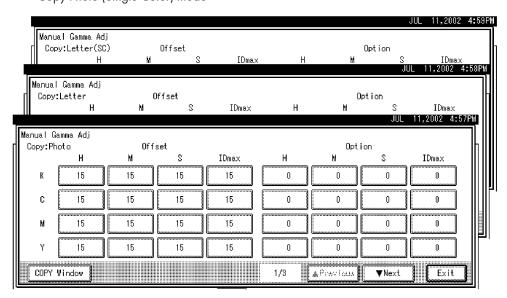
The adjustment uses only "Offset" values.



• 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)	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.	

- 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).



- 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)	1 2 3 4 5 6 7 8 9 10	Adjust the offset value so that the density of level 10 matches that of level 10 on the C-4 chart.

	Item to Adjust	Level on the C-4 chart	Adjustment Standard
2	Middle (Middle ID) (K, C, M, and Y)	1 2 3 4 5 6 7 8 9 10	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)	1 2 3 4 5 6 7 8 9 10	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)	1 2 3 4 5 6 7 8 9 10	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.
5	K Highlight (Low ID) (C,M, and Y) <on color="" copy="" full="" the=""></on>	1 2 3 4 5 6 7 8 9 10	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.

- Photo Mode, Single Color -

	Item to Adjust	Level on the C-4 chart	Adjustment Standard
1	ID max: (K)	1 2 3 4 5 6 7 8 9 10	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)	1 2 3 4 5 6 7 8 9 10	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)	1 2 3 4 5 6 7 8 9 10	Adjust the offset value so that the density of level 8 matches that of level 8 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)	1 2 3 4 5 6 7 8 9 10	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)	1 2 3 4 5 6 7 8 9 10	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)	1 2 3 4 5 6 7 8 9 10	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)	1 2 3 4 5 6 7 8 9 10	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, Single Color -

	Item to Adjust	Level on the C-4 chart (K)	Adjustment Standard
1	ID max: (K)	1 2 3 4 5 6 7 8 9 10	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)	1 2 3 4 5 6 7 8 9 10	Adjust the offset value so that the density of level 6 matches that of level 6 on the C-4 chart.

	Item to Adjust	Level on the C-4 chart (K)	Adjustment Standard
3	Shadow (High ID) (K)	1 2 3 4 5 6 7 8 9 10	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)	1 2 3 4 5 6 7 8 9 10	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 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	С	М	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.



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

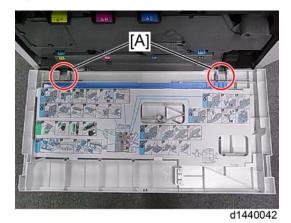
4

Exterior Covers

Front Door

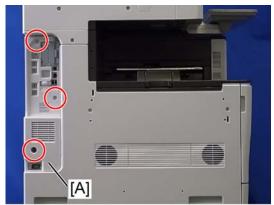


1. Open the front door [A].



2. Remove the two pins [A], and then remove the front cover.

Controller Cover

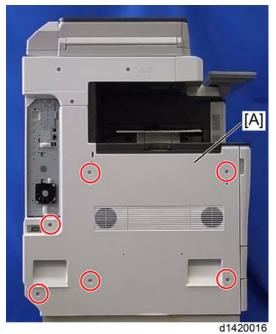


d1420015

1. Controller cover [A] (🗗 x 3)

Left Cover

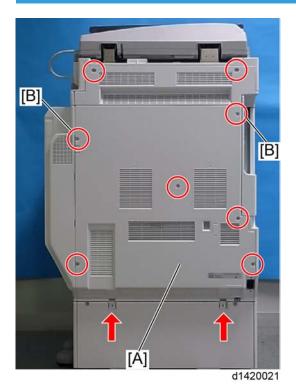
1. Controller cover (p.194)



2. Left cover [A] (🗗 x 6)

4

Rear Cover

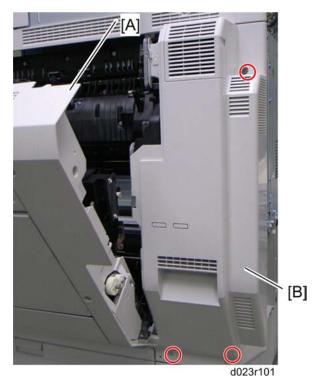


1. Rear cover [A] (🏲 x 2 [B], stepped screw x 6, hook x 2)

Right Rear Cover

- 1. Rear cover (p.195)
- 2. Scanner right cover (** p.202)
- 3. Right top cover (p.202)

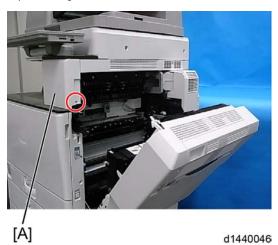




- 4. Open the right door [A].
- 5. Right rear cover [B] (F x 3)

Operation Panel

1. Open the right door.



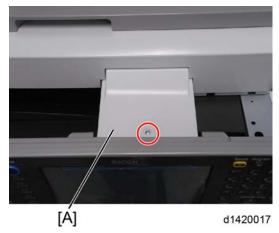
2. Front right cover [A] (F x 1)



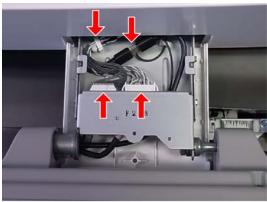


d1420014

3. Turn the operation panel upright.



4. Upper cover [A] (🗗 x 1)

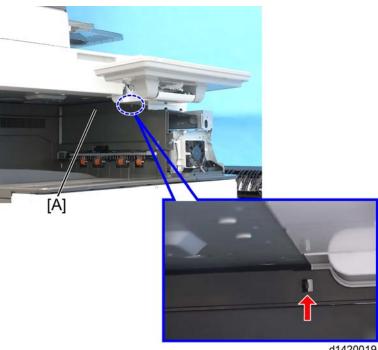


d1420018

- 5. Disconnect the connectors. (

 x 3,

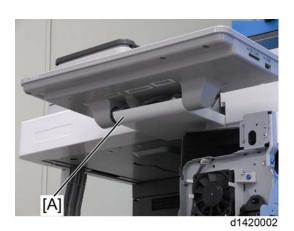
 x 1)
- 6. Return the operation panel to the flat position.



d1420019

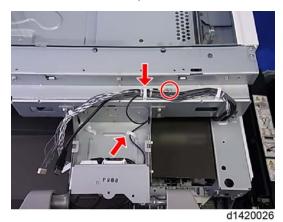
7. Paper exit upper cover [A] (hook x 1)



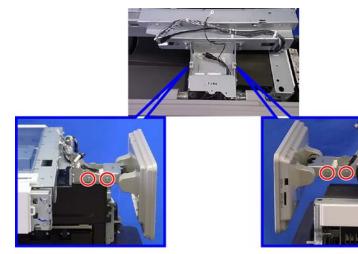




- 8. Take off the under cover [A] (hook x 1)
- 9. Turn the operation panel upright.
- 10. Scanner front cover (** p.206)



11. Ground cable (🗗 x 1, 🖨 x 2)



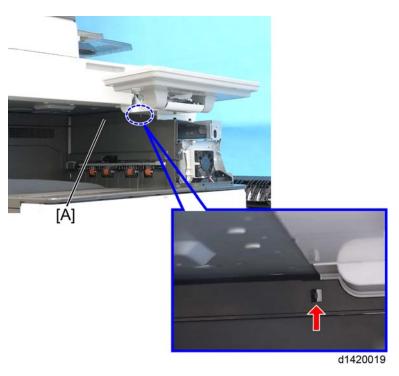
12. Operation panel (🗗 x 4)



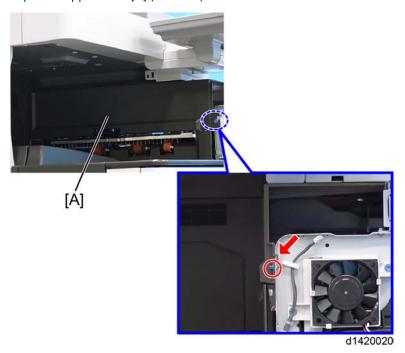
Paper Exit Cover

1. Front right cover (Fr. p. 196)





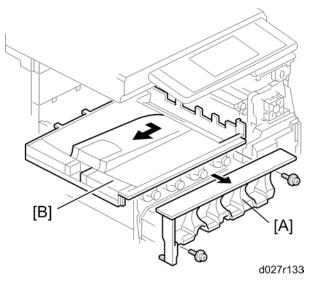
2. Paper exit upper cover [A] (hook x 1)



3. Paper exit cover [A] (> x 1, hook x 1)

Inner Tray

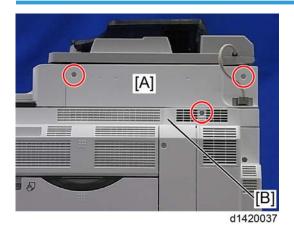
- 1. Image transfer belt unit (** p.252)
- 2. Paper exit cover (p.200)
- 3. Left cover (p.194)



- 4. Toner cartridge cover [A] (** x 2)
- 5. Inner tray [B]

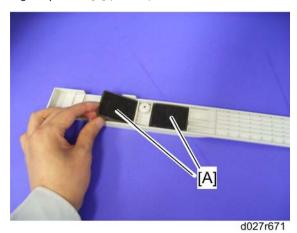
Ozone Filter and Dust Filter

Ozone filters for the scanner unit



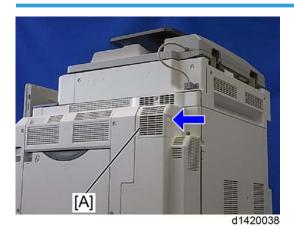
и

- 1. Scanner right cover [A] (F x 2)
 - Loosen the top-right screw of the rear cover.
- 2. Right top cover [B] (F x 1)



3. Ozone filters [A] in the right top cover.

Ozone filter and dust filter for the AC controller



1. AC controller board fan cover [A] (hook x 1)

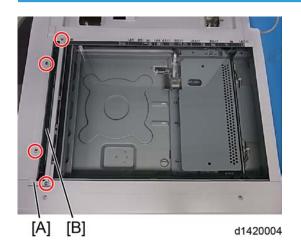
d027r673

- 2. Dust filter [A]
- 3. Ozone filter [B]

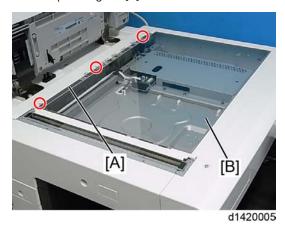
4

Scanner Unit

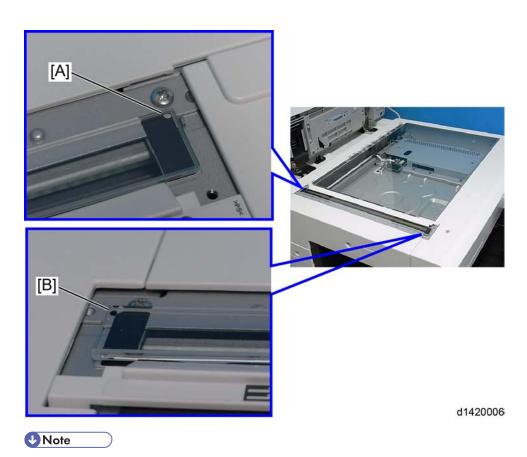
Exposure Glass



- 1. Glass cover [A] (🗗 x 4)
- 2. ARDF exposure glass [B]



- 3. Rear scale [A] (🗗 x 3)
- 4. Exposure glass with left scale [B]



• Position the white marker [A] at the rear-left corner and the black or blue marker [B] at the front-left corner when you reattach the ARDF exposure glass.

Exposure Lamp

- 1. Exposure glass (** p.205)
- 2. Upper cover (** p.196)



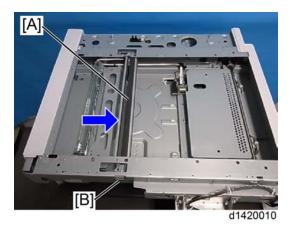
3. Scanner front cover [A] (\ref{p} x 2, hook x 2)



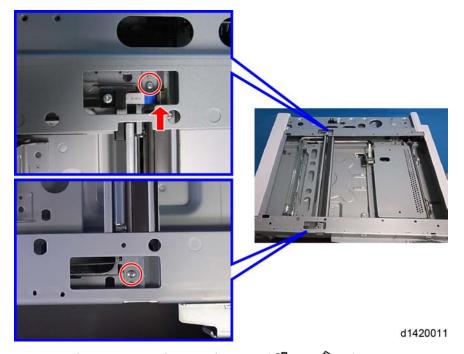
4. ADF (🗗 x 2)



5. Scanner rear cover [A] (🗗 x 1)



6. Move the 1st scanner carriage [A] to the cutout [B] in the front frame.



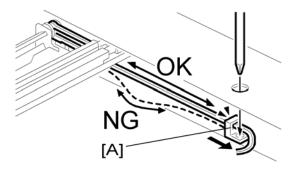
7. Disconnect the connector and remove the screw. (\square x 1, \nearrow x 2)



8. Pull out the exposure lamp from the cutout.



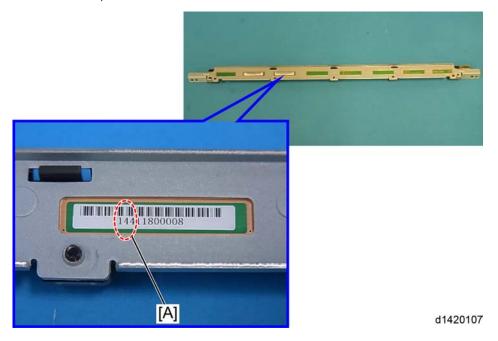
Reassembling



Run the cable so there is no slack. Slide the clamp $[\mathsf{A}]$ to adjust the cable slack.

Chromaticity rank adjustment

Each scanner lamp has a specific chromaticity rank. The chromaticity rank is indicated by the bar-code on the new scanner lamp. After replacing the lamp, adjust the chromaticity rank to correspond to the new scanner lamp.

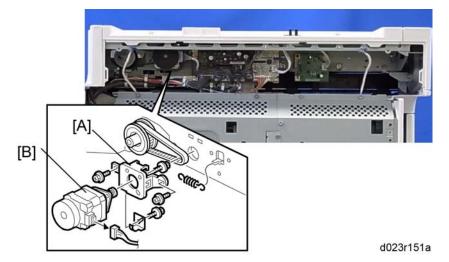


- 1. Check the first three digits [A] in the bar-code on the new scanner lamp before installing the new lamp.
- 2. After installing the new lamp, go to SP4-954-005 and enter the SP setting number referring to the table below.

1 st Three Digits	SP Setting (SP4-954-005)	1 st Three Digits	SP Setting (SP4-954-005)
139	3	166	12
140	2	167	11
141	1	168	10
142	6	169	15
143	5	170	14
144	4	171	13
145	9	172	18
146	8	173	17

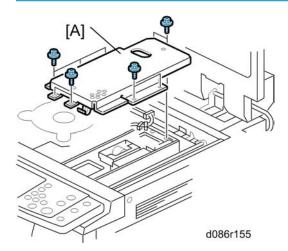
1 st Three Digits	SP Setting (SP4-954-005)	1 st Three Digits	SP Setting (SP4-954-005)
147	7	174	16
148	12	204	3
149	11	205	2
150	10	206	1
151	15	207	6
152	14	208	5
153	13	209	4
154	18	210	9
155	17	211	8
156	16	212	7
157	3	213	12
158	2	214	11
159	1	215	10
160	6	216	15
161	5	217	14
162	4	218	13
163	9	219	18
164	8	220	17
165	7	221	16

Scanner Motor

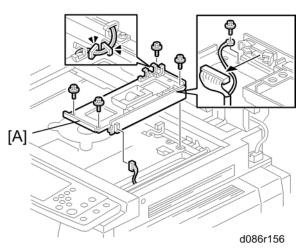


- 1. Rear cover (p.195)
- 2. Scanner Rear cover (p.206)
- 3. Scanner motor assembly [A] (\mathscr{F} x 2, \mathfrak{C} x 1, spring x 1)
- 4. Scanner motor [B] (** x 2)

Sensor Board Unit (SBU)



- 1. Exposure glass (p.205)
- 2. Original length sensor bracket (** p.213)
- 3. SBU cover bracket [A] (🌶 x 9)



4. Sensor board unit [A] (** x 4, Grand screw x 1, ** x 2, ** x 2)

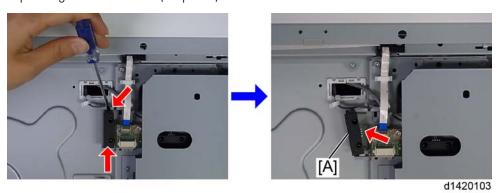
When reassembling

Adjust the following SP modes after you replace the sensor board unit:

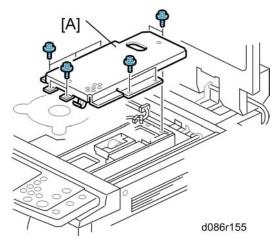
- SP4-008 (Sub Scan Mag): See "Image Adjustment: Scanning".
- SP4-010 (Sub Mag Reg.): See "Image Adjustment: Scanning".
- SP4-011 (Main Scan Reg): See "Image Adjustment: Scanning".
- SP4-688 (DF: Density Adjustment): Use this to adjust the density level if the ID of outputs made in the DF and Platen mode is different.

Original Length Sensors

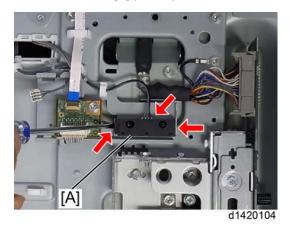
1. Exposure glass with left scale (** p.205)



2. Original length sensor 1 [A] (hook x 2, 🗂 x 1)



3. SBU cover bracket [A] (🗗 x 9)

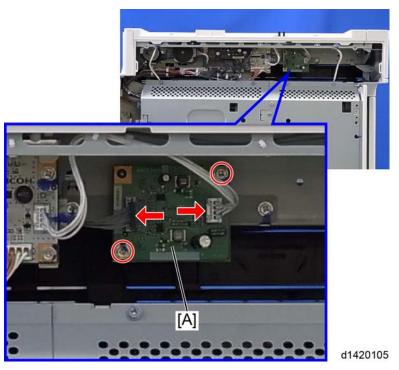


4. Original length sensor 2 [A] (hook x 2, 🗂 x 1)

LED Relay Board

1. Rear cover (**p**.195)

Δ

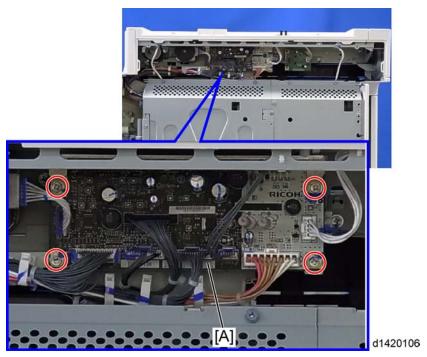


2. LED relay board (🎤 x 2, 📬 x 2)

SIO (Scanner In/Out) Board

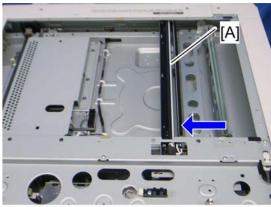
1. Rear cover (p.195)





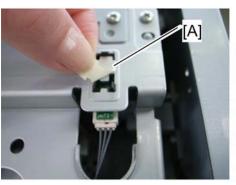
Scanner HP Sensor

- 1. Scanner left cover and scanner rear cover (** p.206)
- 2. Exposure glass (p.205)



d086r111

3. Move the 1st scanner carriage [A] to the right side.



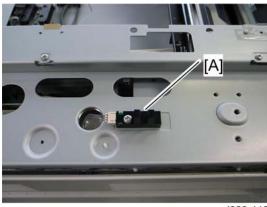


d023r112

- 4. Remove the mylar [A]
- 5. Remove the scanner HP sensor [B] (🗗 x 1, three snaps)

Platen Cover Sensor

1. Scanner left cover and scanner rear cover (p.206)



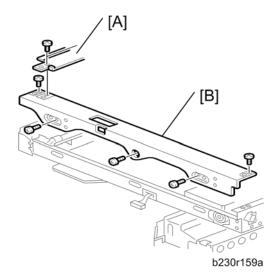
d023r113

2. Platen cover sensor [A] (> x 1, 🚅 x 1)

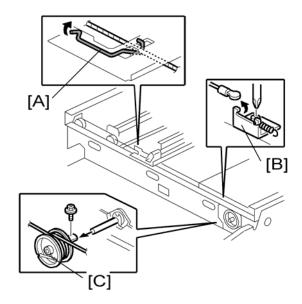
Front Scanner Wire

1. Exposure glass (F p.205)



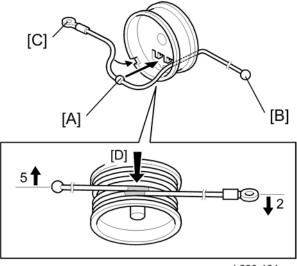


- 2. Scanner left stay [A] (🔊 x 3)
- 3. Front frame [B] (🗗 x 5)



- 4. Front scanner wire clamp [A]
- 5. Front scanner wire bracket [B] (🏲 x 1)
- 6. Front scanner wire and scanner drive pulley [C] ($\rat{p} \times 1$)

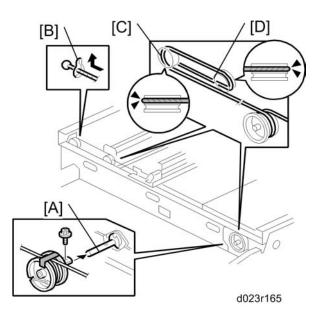
Reinstalling the Front Scanner Wire



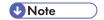
- b230r164a
- 1. Position the center ball [A] in the middle of the forked holder.
- 2. Pass the right end (with the ball) [B] through the square hole. Pass the left end (with the ring) [C] through the notch.
- 3. Wind the right end counterclockwise (shown from the machine's front) five times. Wind the left end clockwise twice.



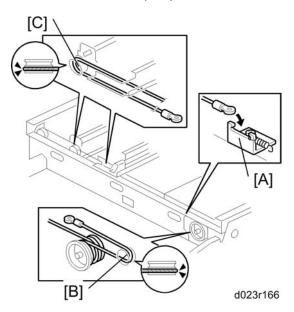
• The two red marks [D] come together when you have done this. Stick the wire to the pulley with tape. This lets you easily handle the assembly at the time of installation.



4. Install the drive pulley on the shaft [A].



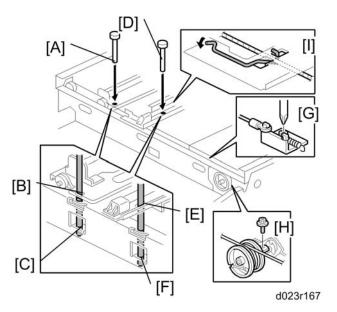
- Do not attach the pulley to the shaft with the screw at this time.
- 5. Insert the left end into the slit [B]. The end should go via the rear track of the left pulley [C] and the rear track of the movable pulley [D].



6. Hook the right end onto the front scanner wire bracket [A]. The end should go via the front track of the right pulley [B] and the front track of the movable pulley [C].



• Do not attach the scanner wire bracket with the screw at this time.



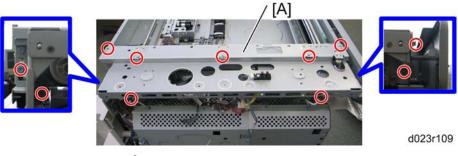
- 7. Remove the tape from the drive pulley.
- 8. Insert a scanner-positioning pin [A] through the 2nd carriage hole [B] and the left holes [C] in the front rail. Insert another scanner positioning pin [D] through the 1st carriage hole [E] and the right holes in the front rail [F].
- 9. Insert two more scanner positioning pins through the holes in the rear rail.
- 10. Screw the drive pulley to the shaft [G].
- 11. Screw the scanner wire bracket to the front rail [H].
- 12. Install the scanner wire clamp [1].
- 13. Pull out the positioning pins.



Make sure the 1st and 2nd carriages move smoothly after you remove the positioning pins.
 Do steps 8 through 13 again if they do not.

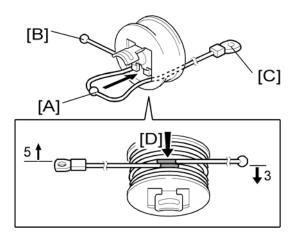
Rear Scanner Wire

- 1. Exposure glass (p.205)
- 2. Scanner left stay (** p.217)



- 3. Scanner rear frame [A] (F x 9, ground screw x 2, 🗂 x All)
- 4. Follow the steps 3 through 5 in the "Reinstalling the Front Scanner Wire" Section. You can remove the rear scanner wire with the same manner for replacing the front scanner wire.

Reinstalling the Rear Scanner Wire



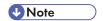
- 1. Position the center ball [A] in the middle of the forked holder.
- 2. Pass the left end (with the ball) [B] through the drive pulley notch. Pass the right end (with the ring) [C] through the drive pulley hole.
- 3. Wind the left end [B] clockwise (shown from the machine's front) five times. Wind the right end [C] counterclockwise three times.



- The two red marks [D] come together when you do this. Attach the wire to the pulley with tape. This lets you easily handle the assembly at the time of installation.
- 4. Install the drive pulley on the shaft.



- Do not attach the pulley on the shaft with the screw at this time.
- 5. Install the wire.

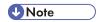


• The winding of the wire on the three pulleys at the rear of the scanner should be the same as the winding on the three pulleys at the front. This must show as a mirror image.

Example: At the front of the machine, the side of the drive pulley with the three windings must face the front of the machine. At the rear of the machine, it must face the rear.

6. Do steps 7 through 13 again in the "Reinstalling the Front Scanner Wire" Section.

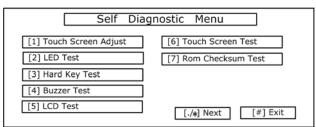
Touch Panel Position Adjustment



- It is necessary to calibrate 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.

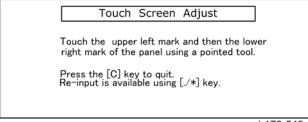
Do not use items [2] to [9] on the Self-Diagnostic Menu. These items are for design use only.

1. Press , press "1", "9", "9", "3", then press 5 times to open the Self-Diagnostics menu.



b178r548

- 2. On the touch screen press "Touch Screen Adjust" (or press "1").



b178r549

- 4. Press the lower right mark when "*o" shows.
- 5. Press [#] OK on the screen (or press ⁽¹⁾) when you are finished.
- 6. Touch [#] Exit on the screen to close the Self-Diagnostic menu. Save the calibration settings.

Laser Optics

MARNING

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

Caution Decal Location

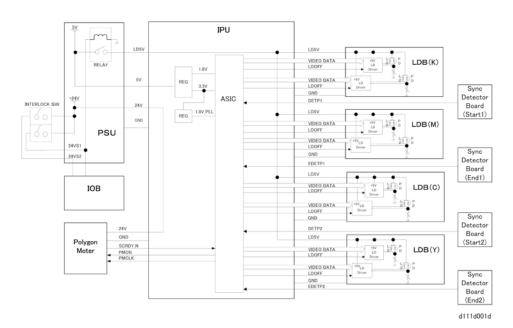
Caution decals are placed as shown below.



MARNING

• Be sure to turn off the main switch and disconnect the power plug from the power outlet before beginning any disassembly or adjustment of the laser unit. This copier uses a class IIIb laser beam with a wavelength of 655 nm and an output of 7 mW. The laser can cause serious eye injury.

LD Safety Switch



A relay on the PSU ensures technician and user safety. It also prevents the laser beam from turning on during servicing. This relay turns off when the front cover, upper left cover, or right door is opened. At this time it cuts the power (+5V) supplied to the LD board for each color through the IPU.

Two safety switches are turned on or off by the front door or right door, and this opens the relay.

- LD Driver: Precise Pulse Modulation ASIC on C-MOS technology
- LDB: LD Drive Board (included in the LD Unit)

Error Messages

Along with other switches, the LD safety switches help show error messages related to external covers. When one or more covers are open, the messages, "Cover is open." and "Close the indicated cover," show with a diagram. The diagram shows which cover is open.

Laser Optics Housing Unit

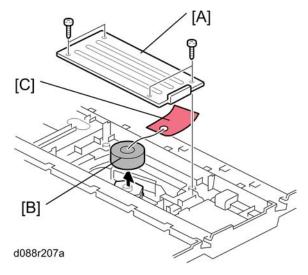
ACAUTION

 Before installing a new laser optics housing unit, remove the sponge padding and the tag from the new unit.

Note

- A new laser optics housing unit has a bracket to protect the LD units. When you install the new unit, do not remove the bracket until near the end of the installation procedure (the correct time is stated in the manual).
- This bracket protects a capacitor on the unit. If the bracket is removed too early, you could break the capacitor on the corner of the main frame when you install the new unit.

Preparing the new laser optics housing unit



- 1. Polygon motor cover [A] of the laser optics housing unit (F x 4)
- 2. Sponge padding [B]
- 3. Tag [C]
- 4. Reinstall the polygon motor cover [A].

Before removing the old laser optics housing unit

Do the following settings before removing the laser optics housing unit. These are adjustments for skew adjustment motors in the laser optics housing unit.

- 1. Plug in and turn on the main power switch of the copier.
- 2. Enter the SP mode.
- 3. Execute SP2220-001 to clear the L2 lens positioning motor setting for Magenta.
- 4. Execute SP2220-002 to clear the L2 lens positioning motor setting for Cyan.
- 5. Execute SP2220-003 to clear the L2 lens positioning motor setting for Yellow.
- 6. Exit the SP mode.

7. Turn off the main power switch and disconnect the power cord of the copier.

Recovery procedure for no replacement preparation of laser optics housing unit

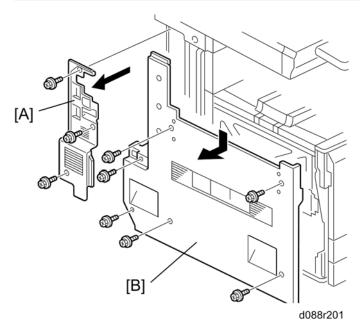
If you did not do the procedure in 'Before removing the old laser optics housing' before removing the old laser optics housing unit, you must do the following.

- 1. Turn off the main power switch and disconnect the power cord of the copier.
- 2. Remove the left cover and harness cover bracket (see the following "Removing the old laser optics housing unit")

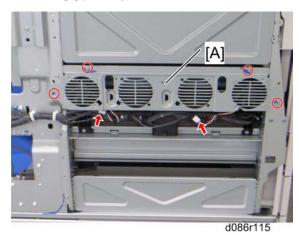


- 3. Disconnect the harness [A] of the skew correction motor.
- 4. Do steps 1 to 7 of "Before removing the old laser optics housing unit".
- 5. Connect the harness [A] and reinstall the harness bracket and left cover.
- 6. Plug in and turn on the main power switch.

Removing the old laser optics housing unit

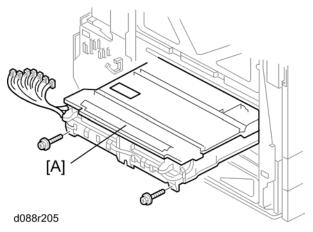


- 1. Controller cover [A] (🗗 x 3)
- 2. Left cover [B] (🗗 x 6)



3. Left fan bracket [A] for the laser housing optics unit ($\mathcal{F} \times 4$, $\square \!\!\!\square \times 2$)

Δ

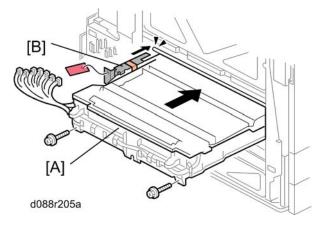


4. Remove the old laser optics housing unit [A] (*x 2, All * 's, \(\hat{\text{2}}}} \text{\ti}\text{\texi}\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi}\text{\text{\texit{\text{\texi}\text{\text{\texi}\text{\texit{\texi}\text{\texi{\texi{\texi{\texi}\texi{\tilit{\texi\tilex{\texi}\texi{\texi}\texit{\t

Installing a new Laser Optics Housing Unit



- A new laser optics housing unit has a bracket to protect the LD units. When you install the new unit,
 do not remove the bracket until near the end of the installation procedure (the correct time is stated
 in the manual).
- This bracket protects a capacitor on the unit. If the bracket is removed too early, you could break the capacitor on the corner of the main frame when you install the new unit.

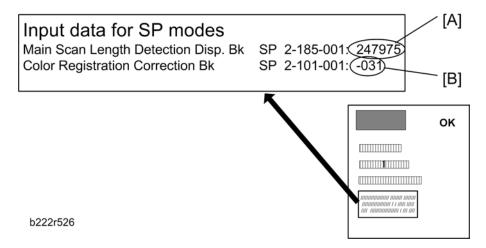


- 1. Push the new laser optics housing unit [A] slowly into the copier until the bracket [B] bumps against the frame of the copier.
- 2. Remove the bracket [B], and then push the new laser optics housing unit fully into the copier (x 2, All 🗂 's, 🖨 x 3).
- 3. Reassemble the machine.

After installing the new laser optics housing unit

Do the following adjustment after installing the new laser optics housing unit.

1. Plug in and turn on the main power switch.



- 2. Adjust the main scan magnification only for black (Bk).
 - Input the standard value [A] provided with a new laser optics housing unit for the main scan magnification adjustment with SP2-185-001.



- The value [A] is different for each laser optics housing unit.
- Print the test pattern (14: 1-dot trimming pattern in the SP2-109-003).
- Check that the left and right trim margin is within 4 ± 1 mm. If not, change the standard value
 for the main scan magnification adjustment.
- 3. Adjust the main scan registration only for black (Bk).
 - Input the registration value [B] provided with a new laser optics housing unit for the main scan registration adjustment with SP2101-001.



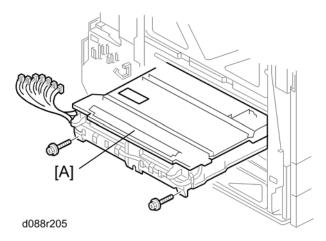
- The value [B] is different for each laser optics housing unit.
- Print the test pattern (14: 1-dot trimming pattern in the SP2-109-003).
- Check that the left trim margin is within 2 ± 1 mm. If not, change the registration value for the main scan registration adjustment.
- 4. Select "0" with SP2-109-003 after printing the "1-dot trimming pattern.
- 5. Do the line position adjustment.
 - First do SP2-111-3.
 - 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.

6. Exit the SP mode.

After you replace the housing unit, do the adjustments in the following section of the manual: Image Adjustment – Registration.

Polygon Mirror Motor and Drive Board

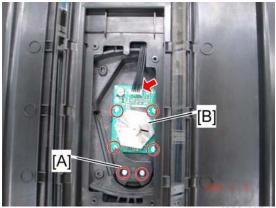


1. Laser optics housing unit [A] (p.225)



2. Polygon mirror motor cover [A] of the laser optics housing unit ($\mbox{\ensuremath{\not{p}}}\xspace x 4)$





- d088r117
- 3. Polygon mirror motor holder [A] (F x 2)
- 4. Polygon mirror motor [B] (* x 4, * x 1)

After installing the polygon mirror motor:

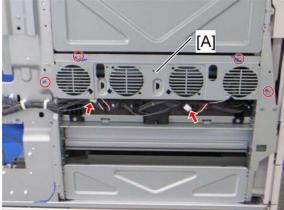
- 1) Do the "Forced Line Position Adj. Mode c" (SP2-111-3).
- 2) Then do the "Forced Line Position Adj. Mode a" (SP2-111-1).

To check if SP2-111-1 was successful, watch the screen during the process. A message is displayed at the end. Also, you can check the result with SP2-194-10 to -12.

After you replace the motor, do the adjustments in the following section of the manual: Image Adjustment – Registration.

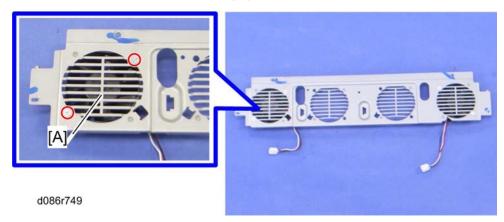
Airflow Fans

- 1. Controller cover (Fr. p. 194)
- 2. Left cover (p.194)



d086r115

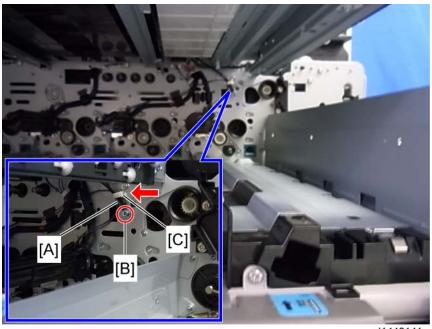
3. Airflow fan bracket [A] for the laser housing optics unit (** x 4, ** x 2)



- 4. Airflow fans [A]
 - There are two airflow fans on the bracket.

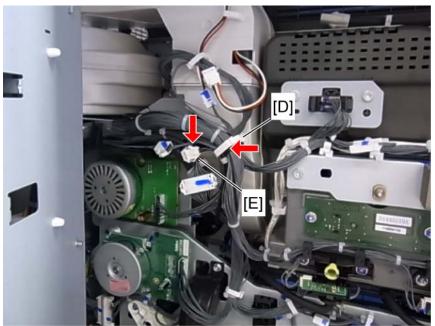
Laser Optics Rear Right Thermistor

- 1. Open the right door.
- 2. Fusing unit (p.289)
- 3. Open the front door.
- 4. All PCDUs (p.236)
- 5. Image transfer belt unit (** p.252)



d1440141

- 6. Release the harness clamp [A] and remove the screw [B].
- 7. Open the controller box (** p.341).



d1440142

1. Release the harness clamp [D] and disconnect the thermistor connector [E].

2. Pull out the laser optics rear right thermistor [A] gently from behind by pinching its harness (x 2, x 1, x 1).



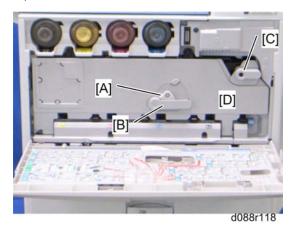
- When reinstalling the laser optics rear right thermistor:
- The thermistor harness is about 25 cm long. When routing the harness, use tweezers, and pay extra attention to avoid damaging the harness.

Image Creation

PCDU



- Do not touch the OPC drum. Do not let metal objects touch the development sleeve.
- 1. Open the front door.



- 2. Lever lock [A] (> x 1)
- 3. Turn the drum positioning plate lever [B] and the image transfer unit lock lever [C] counter-clockwise.
- 4. Open the drum positioning plate [D].



d088r119

5. Pull out the PCDU (hold the grip while you pull it out).

4

Drum Unit and Development Unit

The new drum unit has a front cover and a front joint. When you attach the new drum unit to the development unit, remove a front cover and a front joint at first.

And use them for reassembling the new drum unit and development unit.

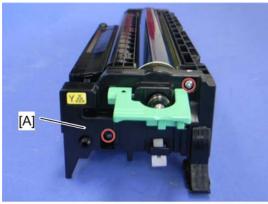
1. If you install a new drum unit, set SP 3902-xxx to "1".

Black: 3902-009Yellow: 3902-010Cyan: 3902-011

• Magenta: 3902-012

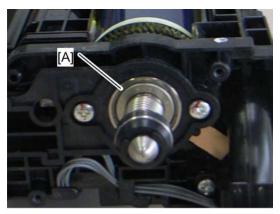


- If you do this, then the machine will reset the PM counter for the drum unit automatically, after you turn the power on again.
- 2. Turn the machine power off.
- 3. PCDU (p.236)



d027r120

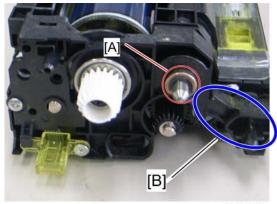
4. Front cover [A] (x 2)



d027r121

U Note

• Do not touch the bearing [A] after removing the front cover. The bearing is properly applied with lubricant.

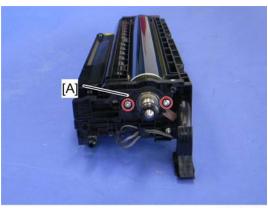


d027r122

5. Remove the bushing [A] of the development roller at the rear of the PCDU (\mathfrak{C} x 1).



• Do not put too much weight on the PCDU. Otherwise, the plastic frame [B] of the development unit may be damaged.

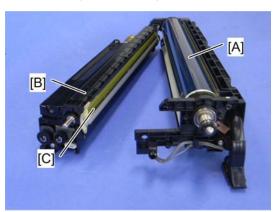


d027r123

6. Remove the front joint [A] ($\mbox{\em psi} x 2$, $\mbox{\em const} x 1$).



• The front joint [A] is firmly set. Remove it with a flat screwdriver.

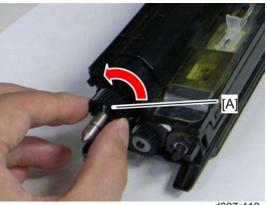


d027r124

7. Drum unit [A] and Development Unit [B]



• When the development unit is removed from the drum unit, clean the entrance mylar [C] with a vacuum.



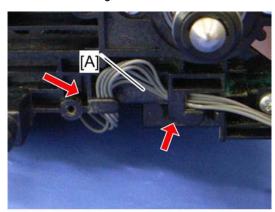
d027r412

8. Rotate the development roller [A] five or six times in the counterclockwise direction.



- This step removes developer that has stuck to the development roller, which would cause color unevenness.
- 9. If you change the development unit, do the ACC procedure.
- 10. Execute the drum phase adjustment with SP1902-001 twice.

When reassembling the PCDU:



d027r681

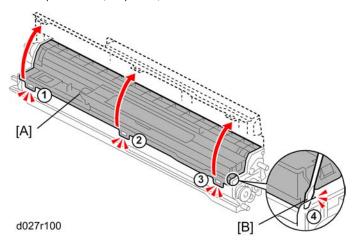
• Make sure that the harness [A] is hooked as shown.

Developer

1. Set SP 3902-xxx to "1".

Black: 3902-005 Yellow: 3902-006 Cyan: 3902-007 Magenta: 3902-008

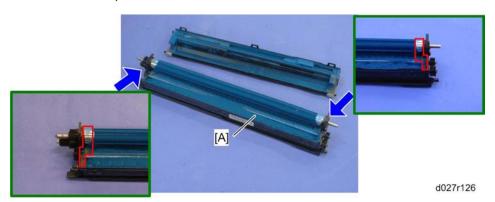
- 2. Turn the machine power off.
- 3. Development unit (p.237)



- 4. Hopper cover [A] (4 hooks)
 - Release the three hooks first in the correct order (from 1 to 3).
 - Put the head of a screwdriver in the groove gap [B] as shown, and then release the hook 4.

ACAUTION

• Follow the correct order ① to ④. Otherwise, the hopper cover may be damaged. The hook ④ breaks easily.



- 5. Shake a bag of developer and pour it into the development hopper [A].
- 6. Reattach the hopper cover (hook x 3).

ACAUTION

 Keep the developer off at both ends of the development unit enclosed in red lines in the diagram.

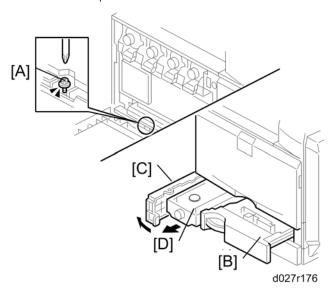
- 7. Turn the machine power on. The machine initializes the developer and resets the PM counter for the developer. (For details of the developer initialization result, see "Developer Initialization Result" in the "Appendix: Process Control Error Conditions" chapter.
- 8. Do the ACC procedure.

Toner Collection Bottle

If you will install a new bottle, and the old bottle is not in a full or near-full condition, then set SP 3902-017 to 1.



- If you do this, then the machine will reset the PM counter for the bottle automatically, after you turn the power on again.
- If the bottle is in a full or near-full condition, it is not necessary to do this.
- 1. Turn off the main power switch.



- 2. Open the front door and remove the screw [A].
- 3. Close the front door.
- 4. Pull out tray 1 [B].
- 5. Open the toner collection bottle door [C].
- 6. Pull out the toner collection bottle [D].

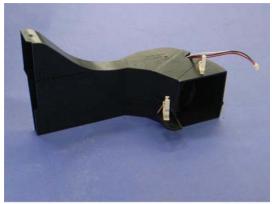
Second Duct Fan

- 1. Rear cover (**p**.195)
- 2. Right rear cover (** p.195)
- 3. Open the controller box (** p.341)



d027r12

4. Second duct [A] (\$\begin{align*} x 2, □ x 1, □ x 2) \end{align*}\$



d027r128

5. Split the second duct (4 hooks).

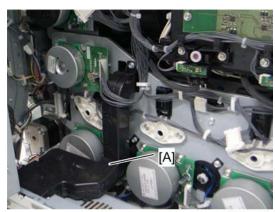
6. Second duct fan [A]

When reinstalling the second duct fan

Make sure that the second duct fan is installed with its decal facing to the front of the machine.

Third Duct Fan

- 1. Rear cover (p.195)
- 2. Right rear cover (p.195)
- 3. Open the controller box (** p.341)



d027r130

4. Third duct [A] ($\mathscr{F} \times 2$, $\square \times 1$)



d027r131

5. Third duct fan [A] (3 hooks)

When reinstalling the third duct fan

Make sure that the third duct fan is installed with its decal facing to the upper side of the machine.

Toner Pump Unit

There are four pump units inside the machine. This procedure describes the replacement procedure only for one unit. If you need to replace another unit, do the same as this procedure.



• Put some sheets of paper on the floor before doing this procedure. Toner may fall on the floor.



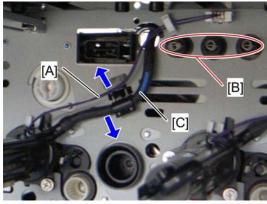
d027r132

- 1. Rear cover (p.195)
- 2. Image transfer belt unit (IP p.252)
- 3. All PCDUs (*p.236)

4. Put a sheet of paper (A3/DLT) inside the machine as shown and on the floor.



• The sheet of paper on the floor is used in a later step.

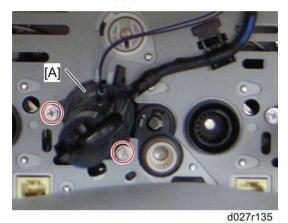


d027r134

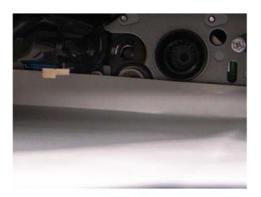
5. Release the harness [A] from the clamp (🖨 x 1 for YCM, 🖨 x 2 for K) and hook, and then disconnect the harness.



- Avoid touching these spring terminals [B].
- 6. Release the toner supply tube [C].



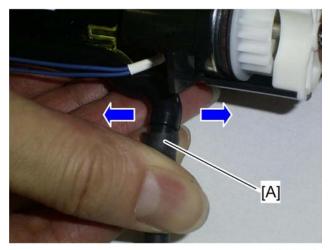
7. Remove the toner pump unit [A] ($\mathcal{F} \times 2$)





d027r136

Make sure that a sheet of paper is attached to the frame of the rear side. The picture on the
left shows a sheet of paper that is correctly set, but the picture on the right shows a sheet of
paper that is not correctly set. This sheet of paper prevents toner and screws from falling into
the laser optics housing unit through cutouts.

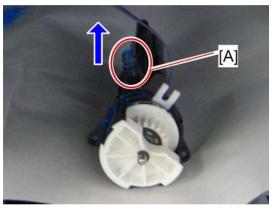


d027r705

- 8. Slowly remove the toner supply tube [A] from the toner pump unit by pulling the tube right and left.
- 9. Turn up the openings of the toner pump unit and toner supply tube just after removing the tube.

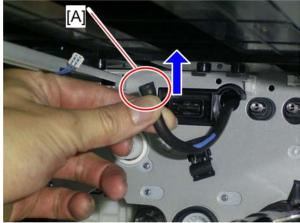


• If not, the toner may scatter away and fall down.



d027r137

10. Put the toner pump unit on the sheet of paper, which has been put in step 4, with its opening [A] up.

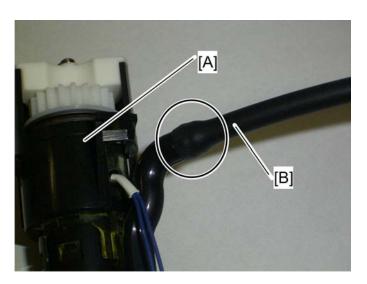


d027r707

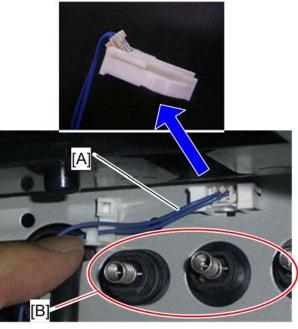
11. Keep the opening [A] of the toner supply tube up, and then clip the opening of the toner supply.

When you install the new toner pump unit

Before installing the new toner pump unit, mask the opening of the old toner pump unit with tape. Dispose of it following local rules.



- 1. Put a sheet of paper (A3/DLT) inside the machine.
- 2. Turn up the opening of the toner supply tube, and then remove the object that was used to clip the opening of the toner supply tube.
- 3. Insert the opening of the toner pump unit [A] into the opening of the toner supply tube [B] as far as possible.



d027r709

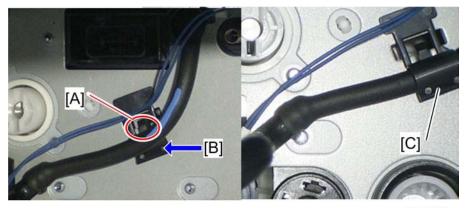
4. Connect the harness [A] to the connector of the machine.



- On the above picture, the magnified picture of the connector shows the easiest way to connect it.
- 5. Clamp the harness [A] (🖨 x 1 for YCM, 🖨 x 2 for K).



• Avoid touching these spring terminals [B].

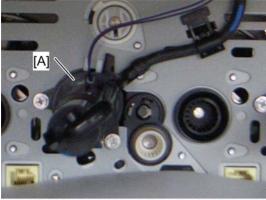


d027r710

- 6. Pass the harness of the toner pump unit behind the hook [A], while pressing at [B].
- 7. Secure the toner supply tube with the holder [C], lifting up the edge of the holder "very gently".



• Be careful when you lift the edge of the holder, because the holder is easily broken.

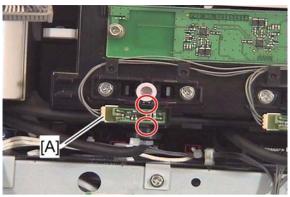


d027r135a

8. Insert the toner pump unit [A] into the rear frame of the machine (\nearrow x 2).

4

Toner End Sensor



d027r042

- 1. Rear cover (p.195)
- 2. Open the controller box (** p.341)
- 3. Toner end sensor [A] (🖾 x 1, 2 hooks each)



• A toner end sensor is not installed in the entrance of the toner supply tube for black.

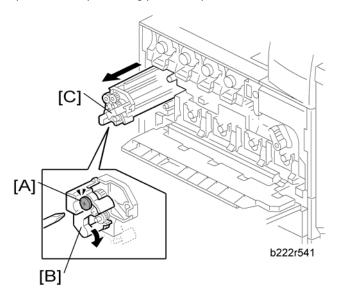
Image Transfer

Image Transfer Belt Cleaning Unit

1. If you will install a new belt cleaning unit, then set SP 3902-015 to 1.



- If you do this, then the machine will reset the PM counter for the belt cleaning unit automatically, after you turn the power on again.
- Do not use SP3902-015 or 013 if you replace the complete ITB unit.
- 2. Turn off the main power switch.
- 3. Open the right door.
- 4. Open the front door.
- 5. Open the drum positioning plate. (F p.236)

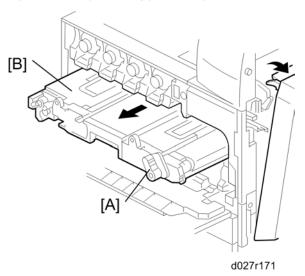


- 6. Loosen the screw [A].
- 7. Turn the lock lever [B] clockwise
- 8. Pull out the image transfer belt cleaning unit [C].

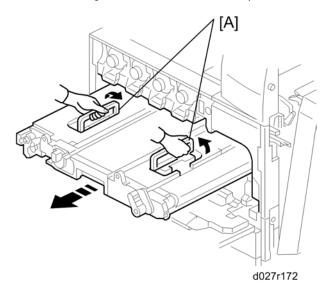
Image Transfer Belt Unit

- 1. Open the right door.
- 2. Open the front door.

3. Open the drum positioning plate. (** p.236)



- 4. Image transfer belt cleaning unit (Image Transfer Belt Cleaning Unit)
- 5. Turn the image transfer belt unit lock lever [A] counterclockwise.
- 6. Pull out the image transfer belt unit [B] halfway.



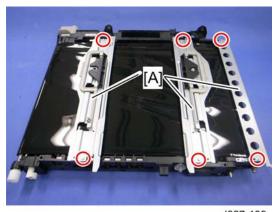
7. Grasp the handles [A], and then pull out the image transfer belt unit fully.

Image Transfer Belt

- 1. Image transfer belt cleaning unit (p.252)
- 2. Image transfer belt unit (Fr p.252)

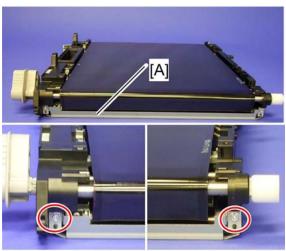
d027r138

- 3. Turn the image transfer unit contact lever [A] counterclockwise (as seen from the rear).
- 4. Gear [B] (hook x 1)
- 5. Turn the gear cover [C] clockwise (as seen from the rear) (\nearrow x 1).



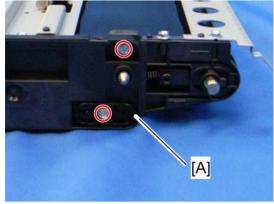
d027r139

6. Three stays [A] (🗗 x 6)



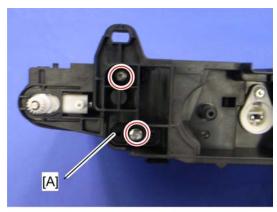
d027r545

7. Guide plate [A] (as seen from the right side of the machine) ($\rat{P} \times 2$)



d027r545a

8. Remove the two screws and then the rear holder bracket [A] (as seen from the rear).

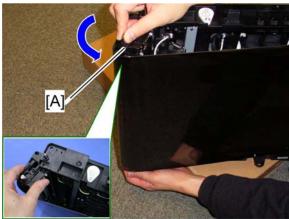


d027r140



b222r548

10. Put the front side of the image transfer belt unit on a corner of the table or a box as shown.



d027r549

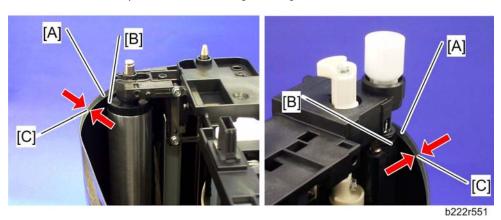
11. Pull the tension roller [A] as shown.



12. Image transfer belt [A]

When reinstalling the image transfer belt

• Clean all rollers with dry cloth before installing the image transfer belt.

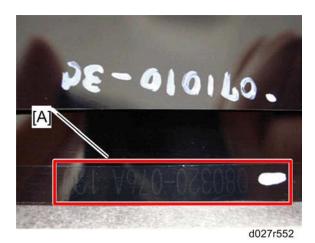


• There is a rim [A] at each edge of the transfer belt. The ends of all the rollers ([B] for example) in the transfer belt unit must be between the two rims.

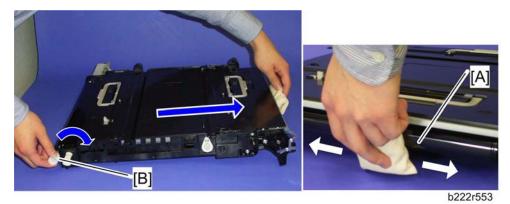


 There are two rims (width [C]: about 5 mm) on the underside of the front and rear edges of the image transfer belt.





• This belt must be installed the correct way around. When you reinstall the image transfer belt unit, install it with the number [A] on the belt at the rear side of the unit.



Put "Lubricant Powder" (B132 9700) on the surface of the image transfer belt [A], while you turn
the drive gear [B] at a constant speed, as shown. (The straight arrow in the picture shows belt
movement direction.) Lubricant powder prevents the image transfer cleaning blade from turning up.



• Do not put the lubricant powder at the right side of the image transfer belt unit (the above picture is taken from the rear). Otherwise, lubricant powder may damage the encoder sensor.

4

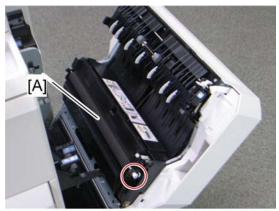
Paper Transfer

Paper Transfer Roller Unit

If you will install a new paper transfer unit, then set SP 3902-016 to 1.



- If you do this, then the machine will reset the PM counter for the paper transfer unit automatically, after you turn the power on again.
- 1. Open the right door.



d088r141

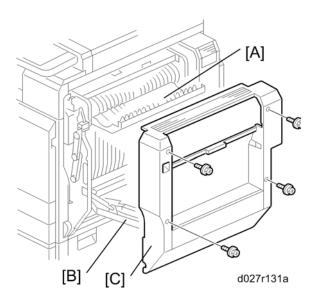
- 2. Release the white hook.
- 3. Paper transfer roller unit [A]

Paper Transfer Unit

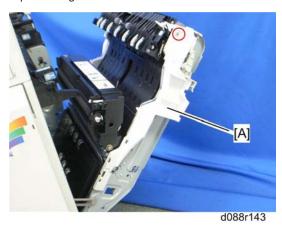
If you will install a new paper transfer unit, then set SP3-902-016 to 1.



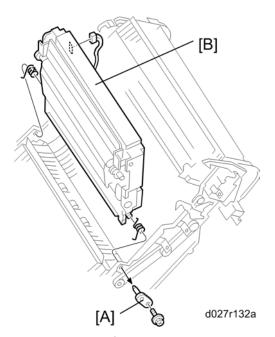
- If you do this, then the machine will reset the PM counter for the paper transfer unit automatically, after you turn the power on again.
- 1. Turn off the main power switch.



- 2. Open the duplex door [A].
- 3. Open the by-pass tray [B]
- 4. Right door cover [C] (* x 4)
- 5. Open the right door.



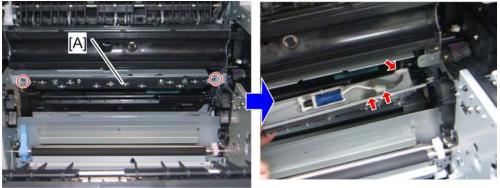
6. Right door inner cover [A] (🗗 x 1)



- 7. Pivot bracket [A] (🗗 x 1)
- 8. Paper transfer unit [B] (🗗 x 1, 2 springs)

ID Sensor Board

- 1. K PCDU (p.236)
- 2. Open the right door.
- 3. Fusing unit (**p** p.289)
- 4. Image transfer belt unit (** p.252)

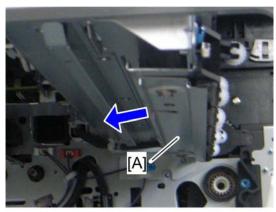


d088r145

- 6. ID sensor cover [A] (F x 4)
- 7. ID sensor board [B] (🗗 x 2)

Cleaning for ID sensors

ID sensors require a cleaning procedure every EM. Do the following steps for ID sensor cleaning.



d027r147

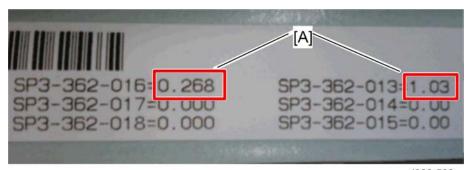
- 1. K PCDU (p.236)
- 2. Fusing unit (p.289)
- 3. Image transfer belt unit (p.252)
- 4. Slide the ID sensor shutter [A] to the left side.
- 5. Clean the ID sensors keeping the ID sensor shutter to the left.

After installing a new ID sensor unit/board

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

1. Plug in and turn on the main power switch of the copier.

2. Enter the SP mode.



d088r502

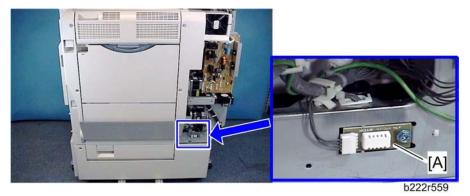
3. Input two correction coefficients [A] for the ID sensor with SP3-362-013 and SP3-362-016 on the barcode sheet provided with the new ID sensor unit/board.



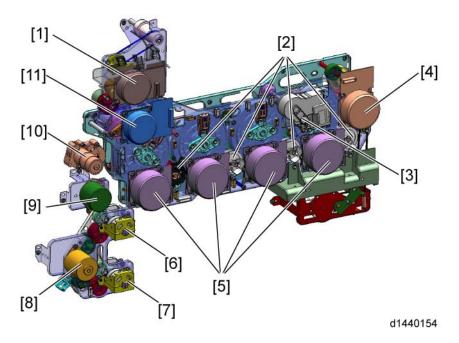
- For example, input "1.03" with SP3-362-013.
- SP numbers other than SP3-362-013 and -016 are not required for this procedure.
- 4. Exit the SP mode.

Temperature and Humidity Sensor

- 1. Rear cover (**p** p.195)
- 2. Right rear cover (p. 195)



3. Temperature and humidity sensor [A] (> x 1, 🗂 x 1)



The drawing above shows the drive unit layout.

- 1. Fusing/paper exit motor
- 2. Development clutches
- 3. Image transfer belt contact motor
- 4. Toner transport motor
- 5. Drum/Development drive motors
- 6. Paper feed clutch Tray 1

- 7. Paper feed clutch Tray 2
- 8. Paper feed motor
- 9. Registration motor
- 10. Paper transfer contact motor
- 11. ITB drive motor

There are some motors and clutches that are not shown in the above drawing:

- Tray lift motor 1 and 2
- Duplex inverter motor
- Duplex/By-pass Motor

- Junction gate 1 motor
- Shutter motor
- By-pass clutch

Gear Unit

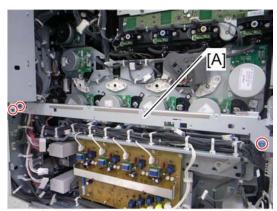
1. All PCDU's

- 2. Image transfer belt unit (** p.252)
- 3. Rear cover (p.195)
- 4. Controller box (** p.341)



d1440153

- 5. Toner sump cover [A] (F x 2)
- 6. Third duct (p.244)
- 7. Left cover (p.194)
- 8. PSU bracket (** p.350)



d027r148

9. Remove the rear stay [A] (F x 3).

10. Remove ten clamps (blue arrows).



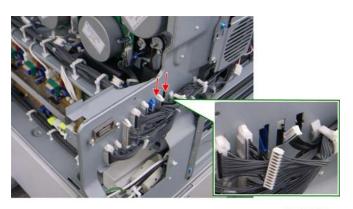
d027r150

11. Release seven clamps and turn each harness aside.



d027r151

12. Disconnect four connectors (red arrows).



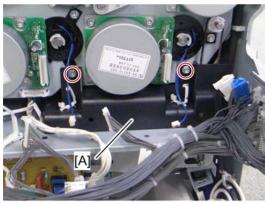
d027r152

13. Disconnect two connectors (red arrows) and put these harnesses inside the machine.



d027r153

- 14. Disconnect each connector (red circles) from the drum/development drive motors (🗗 x 1, 🖨 x 1 each).
- 15. Disconnect each connector (blue circles) from the development clutches (\mathbf{CI} x 1 each).

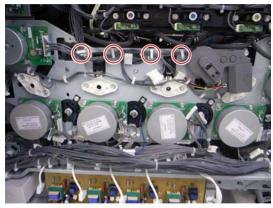


d027r155

16. Cover [A] (🗗 x 2)

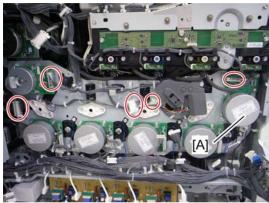
d027r156

17. Disconnect eight connectors from the high voltage supply board (🗂 x 8, 🖨 x 2).



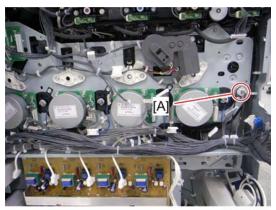
d027r157b

18. Release four clamps (red circles) and turn the harnesses aside.



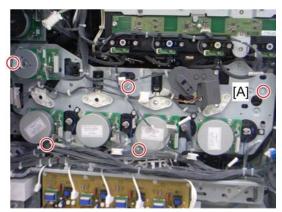
d027r158

- 19. Disconnect five connectors (red circles) (19×5).
- 20. Toner transport motor [A] (🏲 x 3)



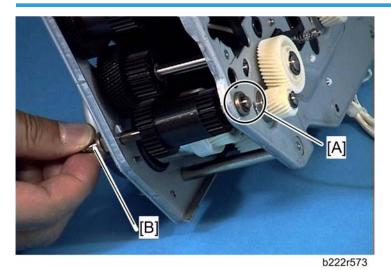
d027r159

21. Pulley [A] (timing belt)



d027r160a

22. Gear unit [A] (🗗 x 8)



Make sure that the bushing [A] is fully set in the frame of the gear unit before installing the timing belt and pulley to the shaft [B].

Adjustment after replacing the gear unit

Do the following procedures after replacing the gear unit.

- 1. Turn on the main power switch.
- 2. Enter "System SP" in the SP mode.
- 3. Do "Amplitude Control" with SP1-902-001.
- 4. Check the result of the Amplitude Control with SP1-902-002.
 - 0: Success, 2: Failure due to no sampling data,
 - 3: Failure due to insufficient number of pattern detections

When the result of this adjustment is "2" or "3":

- Check that all the PCDUs are correctly set and that the image transfer belt unit is correctly set.
- Do "Amplitude Control" again after checking the PCDUs and image transfer belt unit.

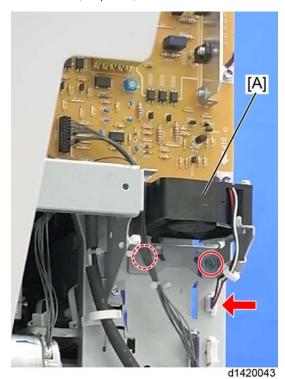
When the result is still "2" or "3" after checking the PCDUs and image transfer belt unit:

- · Check that the gear unit is installed correctly.
- 5. Exit the SP mode.

Registration Motor

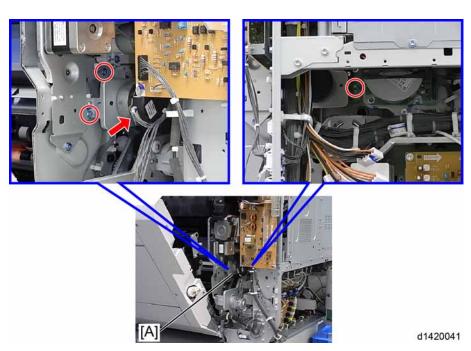
1. Rear cover (p.195)

- 2. Right rear cover (p.195)
- 3. Ventilation duct (IP p.349)
- 4. PSU bracket (** p.350)



5. Fusing power supply board fan bracket [A] (🎤 x 2, 📬 x 1)





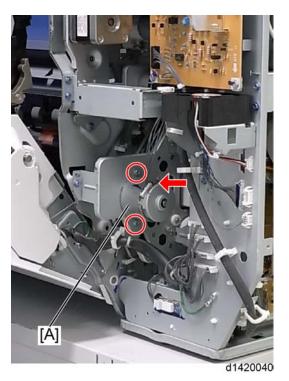
6. Registration motor assembly [A] ($\mbox{\ensuremath{\not\sim}} \times 3$, $\mbox{\ensuremath{\mbox{cm}}}\mbox{\ensuremath{\mbox{\mbox{}}}} \times 1)$



1. Registration motor (F x 2)

Paper Feed Motor

- 1. Rear cover (p.195)
- 2. Right rear cover (p.195)

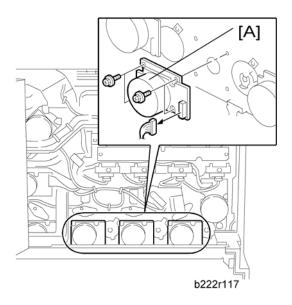


3. Paper feed motor [A] (🗗 x 1, 🌶 x 2)

Drum/Development Motors for M, C, and Y

- 1. Rear cover (p.195)
- 2. PSU bracket (** p.350)
- 3. Open the controller box (p.341).

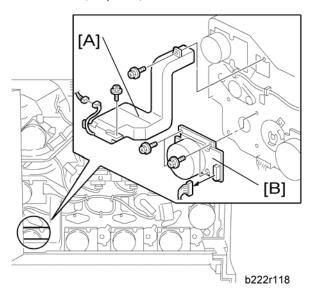




4. Drum/Development motors (three motors, one each for MCY) [A] ($\mathscr{F} \times 4$, $\mathsf{CP} \times 1$ each)

Drum/Development Motor-K

- 1. Rear cover (p.195)
- 2. PSU bracket (** p.350)
- 3. Controller box (** p.341)

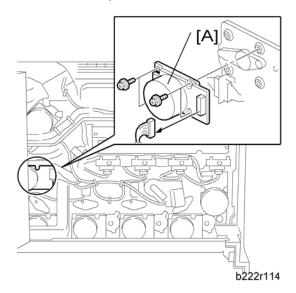


4. Third duct [A] (🔊 x 2, 📬 x 1)

5. Drum/Development motor-K [B] (* x 4, * x 1)

ITB Drive Motor

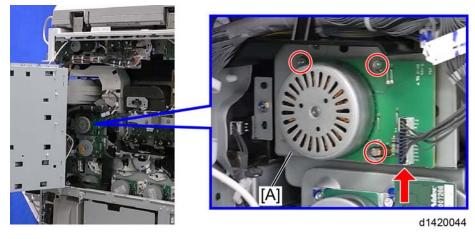
- 1. Rear cover (p.195)
- 2. Controller box (p.341)



3. ITB drive motor [A] (* x 4, 🗂 x 1)

Fusing/Paper Exit Motor

- 1. Rear cover (p.195)
- 2. Open the controller box. (** p.341)

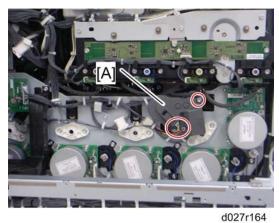


U Note

- You will need a short screwdriver to attach the screw.
- 3. Fusing/paper exit motor [A] (** x 3, ** x 1)

Image Transfer Belt Contact Motor

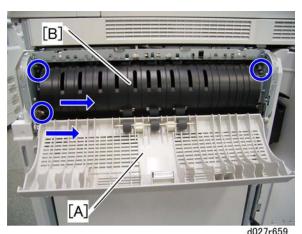
- 1. Rear cover (p.195)
- 2. Controller box (** p.341)



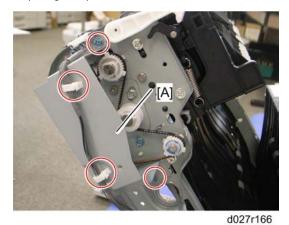
3. Transfer belt contact motor [A] (*x 2, * x 2)

Duplex Inverter Motor

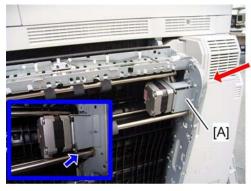
- 1. Open the right door.
- 2. Right door cover (p.325)



- .
- 3. Duplex door [A] (2 hooks)
- 4. Duplex guide plate [B] (🌶 x 3, 2 hooks)



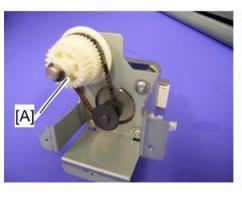
5. Duplex inverter motor bracket cover [A] (*x 2, * x 2)

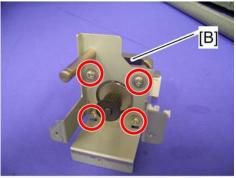




d027r660b

6. Duplex inverter motor bracket [A] (🗗 x 3, 📬 x 1, 😂 x 1)



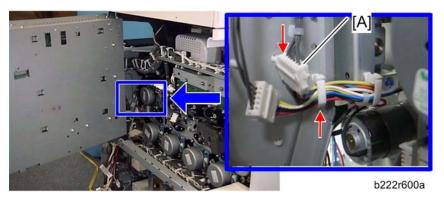


d027r661

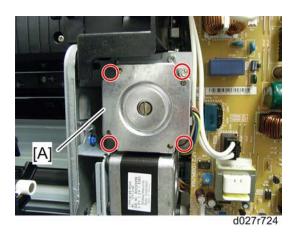
- 7. Gear [A] (**©** x 1, belt x 1)
- 8. Duplex inverter motor [B] (F x 4)

Pressure Roller Contact Motor

- 1. Rear cover (p.195)
- 2. PSU bracket (** p.350)
- 3. Open the controller box (** p.341).



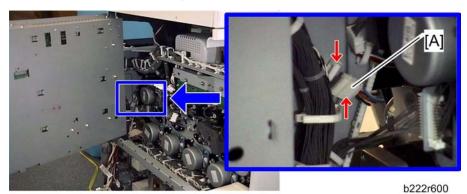
4. Disconnect the connector [A] (🖨 x 1).



5. Pressure roller contact motor [A] (F x 4)

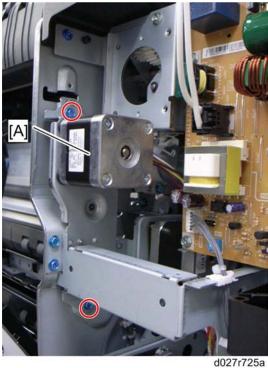
Duplex/By-pass Motor

- 1. Rear cover (p. 195)
- 2. PSU bracket (** p.350)
- 3. Open the controller box (** p.341).
- 4. Pressure roller contact motor (** p.278)

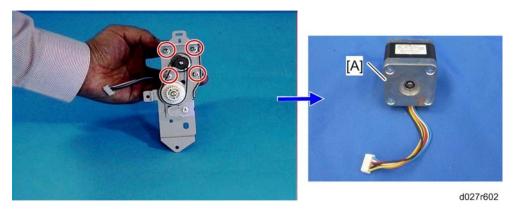


5. Disconnect the connector [A] (\square x 1, \square x 1)





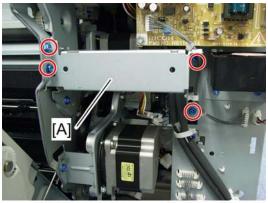
6. Duplex/by-pass motor bracket [A] (🗗 x 2)



7. Duplex/by-pass motor [A] (** x 4, belt x 1)

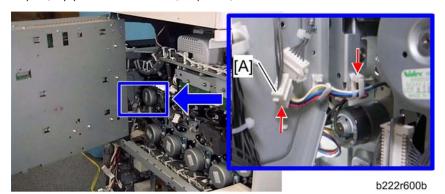
Paper Transfer Contact Motor

- 1. Rear cover (p.195)
- 2. PSU bracket (** p.350)
- 3. Open the controller box (** p.341).

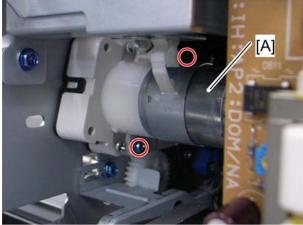


d027r723

- 4. Stay [A] (🗗 x 4)
- 5. Pressure roller contact motor (p.278)
- 6. Duplex/by-pass motor bracket (** p.279)



7. Disconnect the connector [A] (🖨 x 1)



d027r726

8. Paper transfer contact motor [A] (** x 2)

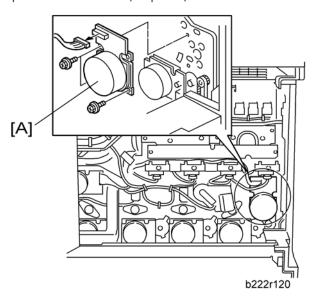
• The picture below shows how to use the screwdriver to remove the screws of the paper transfer contact motor.



d027r72

Toner Transport Motor

- 1. Rear cover (p.195)
- 2. Open the controller box (p.341).

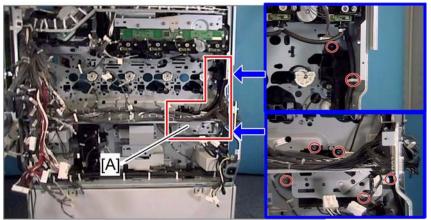


3. Toner transport motor [A] ($\rat{p} \times 3$, $\rat{color} \times 1$)

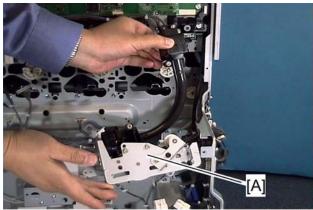
Δ

Toner Collection Unit

1. Gear Unit (**p**.264)



b222r576

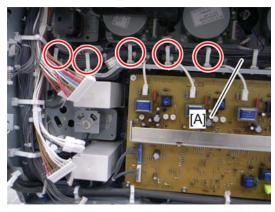


b222r577

2. Toner collection unit [A] (🗗 x 6, 🖨 x 1)

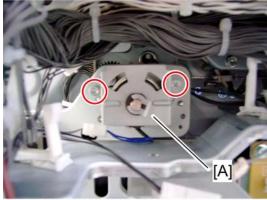
Paper Feed Clutches

- 1. Rear cover (**p** p.195)
- 2. PSU bracket (** p.350)



d027r578

3. Release five clamps, and then turn the harness [A] aside.

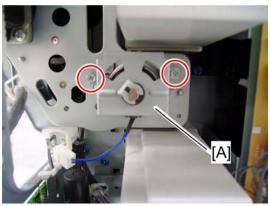


d027r580



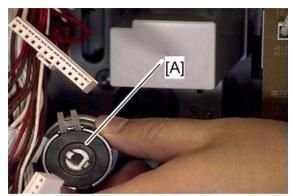
d027r581

5. Paper feed clutch 1 [A]



d027r582

6. Paper feed clutch 2 bracket [A] ($\mbox{\ensuremath{\not\sim}} \times 2$, $\mbox{\ensuremath{\not\sim}} \times 1$, $\mbox{\ensuremath{\not\sim}} \times 1$

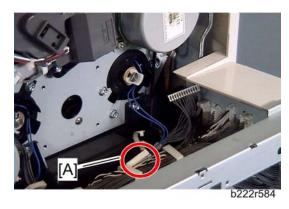


d027r583

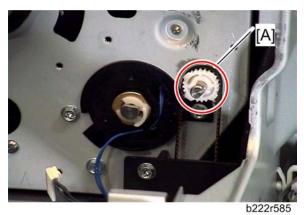
7. Paper feed clutch 2 [A]

Development Clutch-Y

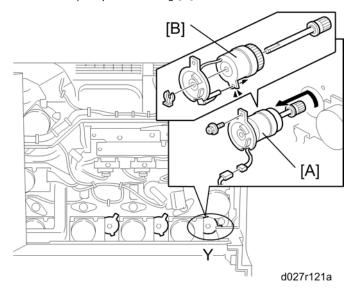
- 1. Rear cover (p.195)
- 2. PSU bracket (** p.350)
- 3. Open the controller box. (** p.341).
- 4. Toner sump cover (p.264)
- 5. Drum/development motor-Y (** p.273)



6. Disconnect the connector [A] (\square x 1).



7. Remove the pulley and bushing [A].

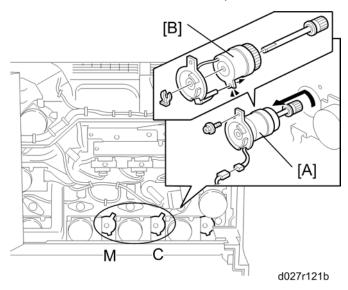


8. Turn the development clutch unit [A] counter-clockwise and then pull it out (${\cal F} \times 1$).

9. Development clutch-Y [B] (🖾 x 1)

Development Clutches for M and C

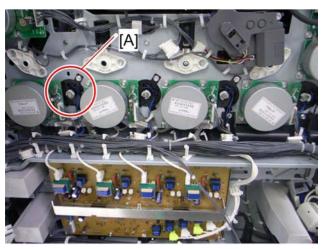
- 1. Rear cover (p.195)
- 2. PSU bracket (p.350)
- 3. Open the controller box. (** p.341).
- 4. Toner sump cover (Pr p.264)
- 5. Drum/development motors for M and C (** p.273)
- 6. Disconnect the connector for each development clutch (\mathfrak{C} x 1).



- 7. Turn the development clutch unit [A] counter-clockwise and then pull it out (\mathcal{F} x 1).
- 8. Development clutches for M and C [B] (🖾 x 1)

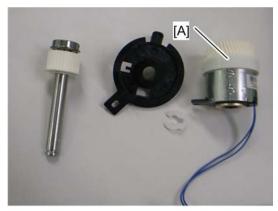
Development Clutch-K

- 1. Rear cover (p.195)
- 2. PSU bracket (** p.350)
- 3. Controller box (** p.341)
- 4. Drum/development motor-K (** p.274)



d027r586

5. Turn the development clutch unit [A] counter-clockwise and then pull it out (\nearrow x 1).



d027r167

6. Development clutch-K [A] ($\overline{\mathbb{O}}$ x 1)

Fusing

Fusing Unit PM Parts

In the fusing unit, there are some PM parts. Refer to the following list to check the PM parts.

Maintenance Parts	Replacement Procedure
Heating sleeve belt unit	№ p.297
Pressure Roller	№ p.300

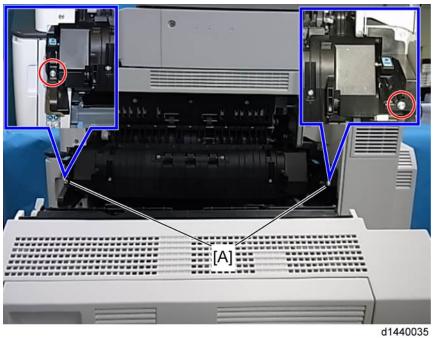
Fusing Unit



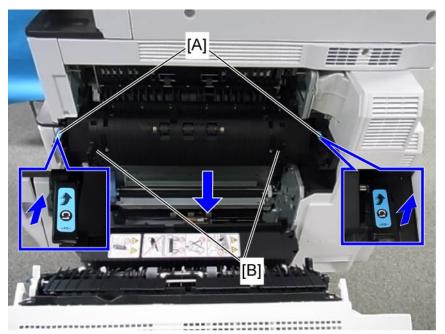
- Turn off the main switch and wait until the fusing unit cools down before beginning any of the
 procedures in this section. The fusing unit can cause serious burns.
- 1. If you will replace the heating roller or pressure roller in the fusing unit (at PM for example), then reset each counter.
 - Set SP 3902-018 to "1" for the heating roller replacement.
 - Set SP 3902-019 to "1" for the pressure roller replacement.



- If you do this, then the machine will reset the PM counter for the heating roller or pressure roller automatically, after you turn the power on again.
- It is not necessary to clear the PM counter for the fusing unit with SP mode when you replace the fusing unit. This is because the fusing unit has a new unit detection mechanism.
- 2. Turn off the main power switch.
- 3. Open the right door.



4. Remove two transport brackets [A] if installed. (F x 1 each)

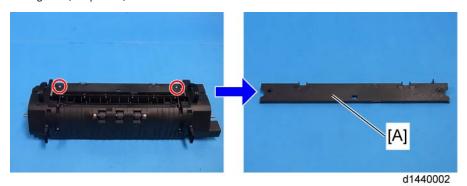


d1440003

- 5. Release the lock levers [A].
- $6. \;$ Hold the fusing unit handles [B], and then pull out the fusing unit.

Fusing Exit Shutter Plate

1. Fusing unit (**p**.289)



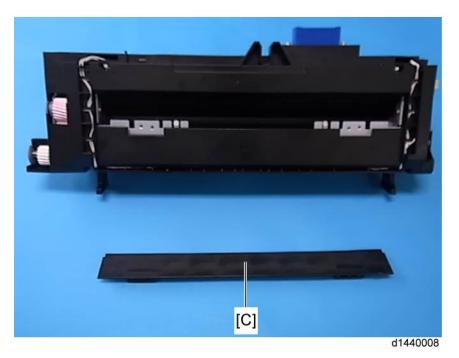
2. Fusing exit shutter plate [A] (** x 2)

Fusing Entrance Guide Plate

- 1. Fusing unit (p.289)
- 2. Turn over the fusing unit.



d1440007



3. Fusing entrance guide plate [C] (F x 2)



• Screw [A] and screw [B] are different from each other.

Cleaning Requirement



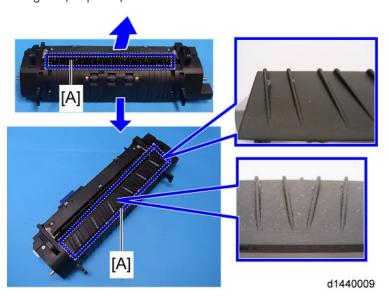
The fusing entrance guide plate requires cleaning maintenance every fusing unit maintenance interval. Clean the fusing entrance guide plate at the place shown above with a dry cloth, and then clean the fusing entrance guide plate again with a cloth moistened with alcohol.

4

Fusing Exit Guide Plate Cleaning Procedure

The fusing exit guide plate requires cleaning maintenance every fusing unit maintenance interval.

1. Fusing unit (p.289)

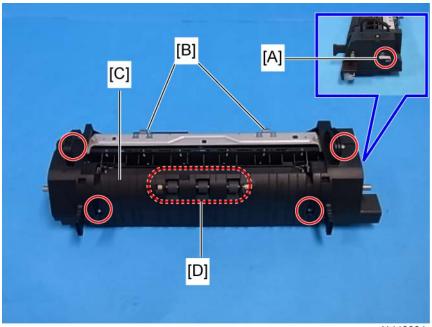


- 2. Open the exit guide plate [A].
- 3. Clean the exit guide plate with a dry cloth, and then clean the exit guide plate again with a cloth moistened with alcohol at the points shown above.

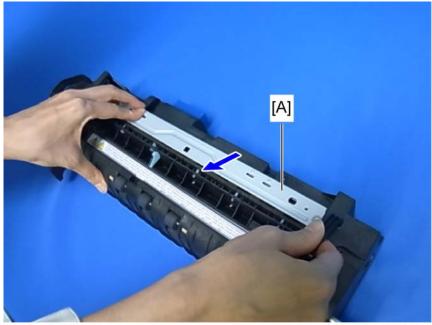
Fusing Unit Upper Cover

- 1. Fusing unit (p.289)
- 2. Fusing exit shutter plate (Fr. p.291)

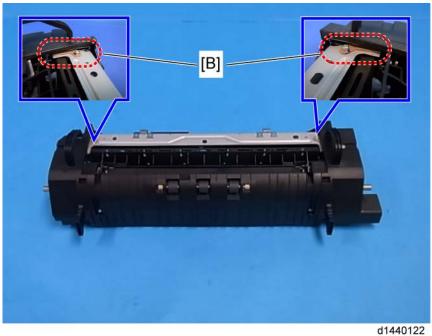




- 3. Right guide bracket [A] (🗗 x 1)
- 4. Springs [B]
- 5. Remove the fusing unit upper cover [C] while pressing down the rollers [D] (*x 4).



d1440121

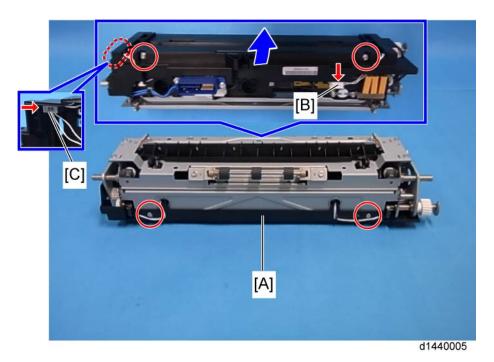




• The shutter plate [A] should be closed whenever the fusing unit upper cover is reinstalled. Otherwise, the ends of the shutter plate [B] may be damaged and this will result in a problem when opening and closing the shutter.

Fusing Unit Lower Cover

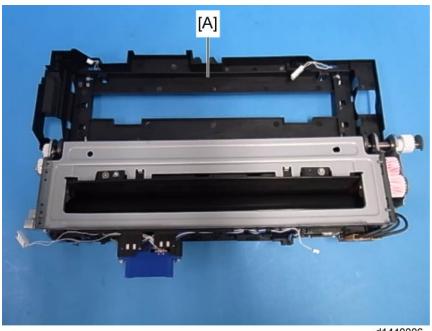
- 1. Fusing unit (p.289)
- 2. Fusing unit upper cover (p.293)



- 3. Place the fusing unit upside down.
- 4. Lift up the fusing unit lower cover [A] half way (F x 4).
- 5. Disconnect two connectors [B], [C] and remove the wire harnesses from their harness guides (🖾 x 2).



 The fusing lower cover cannot be removed from the fusing main body completely before removing the thermistors. Therefore, pay extra attention to handling the fusing lower cover when disassembling the fusing unit.



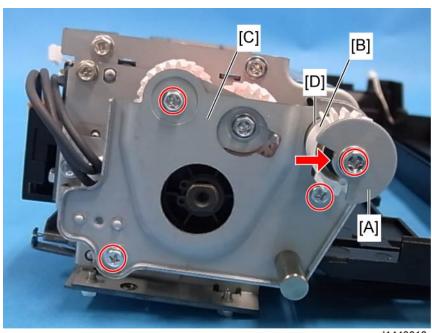
6. Fusing unit lower cover [A]

Heating Sleeve Belt Unit

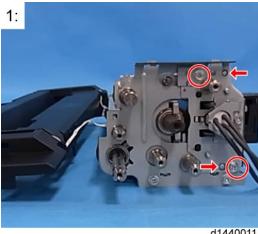


Additional notes due to new components

- After the PM counter for the heating roller has reached its PM life (300K pages), the machine stops automatically. Replace the heating roller before the machine stops (stop warning issued at 315K pages, stops at 330K pages).
- Change the setting of SP3-902-018 from "0" to "1" before replacing the heating roller. Otherwise, the machine will not recover.
- 1. Fusing unit (p.289)
- 2. Fusing unit upper cover (pr p.293)
- 3. Fusing unit lower cover (p.295)
- 4. Fusing entrance guide plate (** p.291)



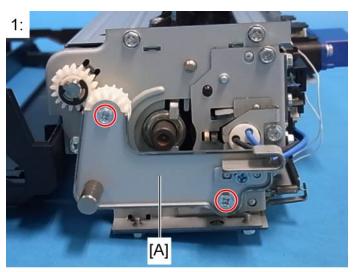
- 5. Pressure roller contact shaft actuator [A] and pressure roller contact shaft gear [B] (🗗 x 1, C x 1)
- 6. Bearing [D]
- 7. Right stay [C] (*\bigsiz x 3)
- 8. Turn over the fusing unit gently to prevent damage to the harnesses.



d1440011

1: Right side

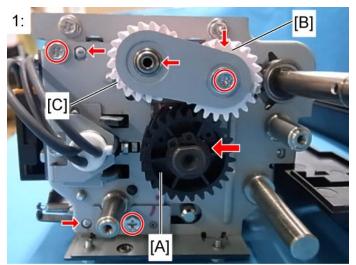
9. Remove two screws at the right side (\mathcal{F} x 2).



d1440012

1: Left side

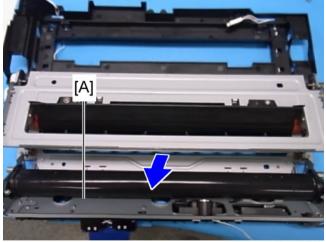
10. Left bracket [A] (🗗 x 2)



d1440013

1: Left side

- 11. Remove gears [A], [B], [C] (\mathcal{F} x 1, \mathcal{C} x 1, bearings x 2).
- 12. Remove two screws on the left side (** x 2).



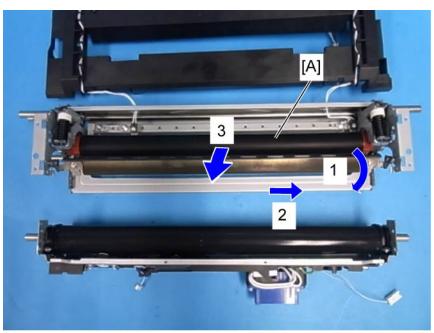
13. Remove the heating sleeve belt unit while releasing 4 snapping points at the right and left side (See the photos of steps 9 and 11).



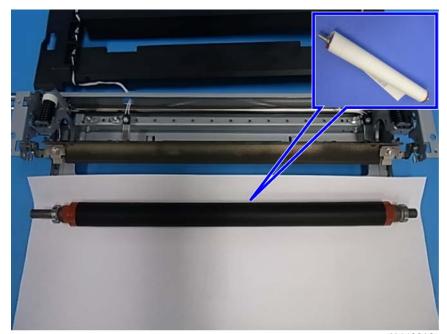
• The surface of the heating sleeve belt is delicate. Never touch the surface. Do not wipe the surface with anything. If the surface of the heating sleeve belt must be cleaned because of offset image for example, feed some sheets of white paper through the fusing unit instead.

Pressure Roller

1. Heating sleeve belt unit (p.297)



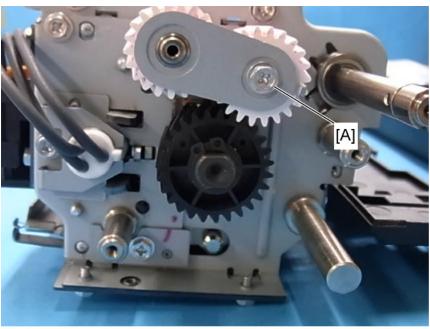
2. Remove the pressure roller with bearings [A].



d1440016

U Note

• The surface of the pressure roller is fragile, so the pressure roller must be covered with a sheet of paper when it is placed on a table or floor.

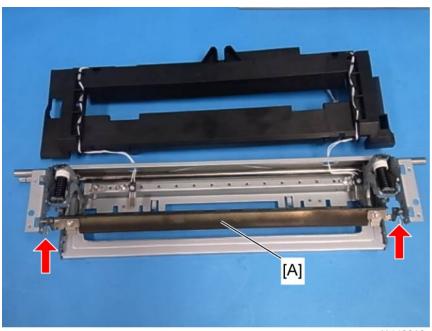




• Do not wipe off the grease of the new fusing drive gear when replacing the fusing drive gear [A].

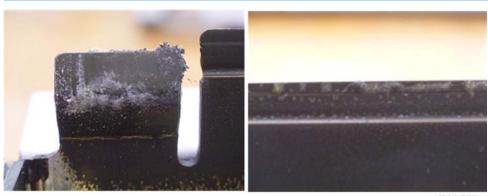
Stripper Plate

- 1. Fusing unit (p.289)
- 2. Heating sleeve belt unit (** p.297)
- 3. Pressure roller (** p.300)



4. Heating roller stripper plate [A] (spring x 2)

Cleaning Requirement



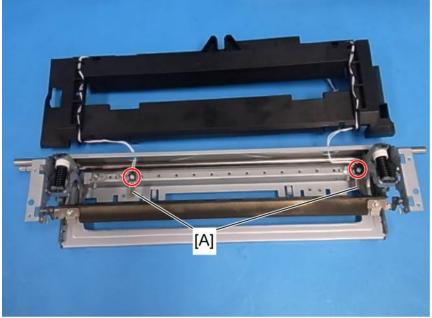
d037r377

The stripper plates require cleaning maintenance every fusing unit maintenance interval. Clean the stripper plates with a dry cloth, and then clean the stripper plates again with a cloth moistened with alcohol at the points shown above.

Pressure Roller Thermistors

1. Fusing unit (**p**.289)



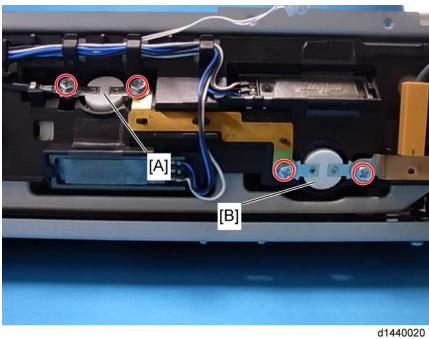


4. Pressure roller thermistor [A] (** x 1 each)

Pressure Roller Thermostats

- 1. Fusing unit (p.289)
- 2. Fusing unit upper cover (p.293)
- 3. Fusing unit lower cover (** p.295)

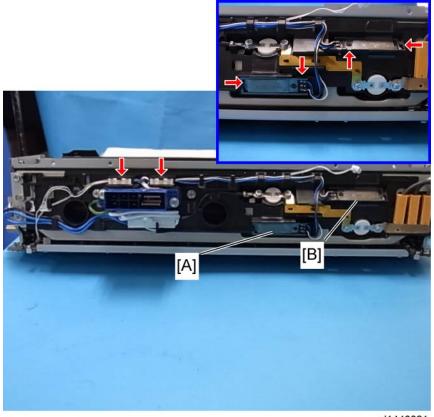
4



4. Pressure roller thermostat (center) [A] and pressure roller thermostat (end) [B] (\rat{p} x 2 each)

NC Sensors

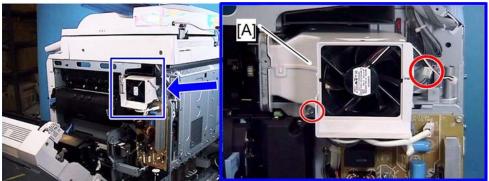
- 1. Fusing unit (p.289)
- 2. Fusing unit upper cover (p.293)
- 3. Fusing unit lower cover (p.295)



4. NC sensor (center) [A] and NC sensor (end) [B] (hooks x 2 each, 🗂 x 1 each)

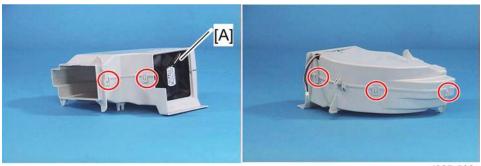
Fusing Fan

- 1. Rear cover (p.195)
- 2. Right rear cover (*p.195)



b222r588

3. Fusing duct [A] (> x 1, 🕮 x 1)



d027r589

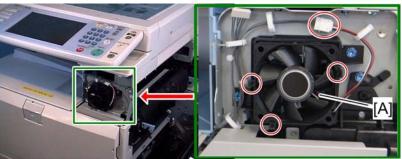
4. Fusing fan [A] (hooks x 5)

When installing the fusing fan

Make sure that the fusing fan is installed with its decal facing the right side of the machine.

Paper Exit Fan

- 1. Open the right door.
- 2. Front right cover (p.196)



d027r590

3. Paper exit fan [A] (🗗 x 1, hook x 3)

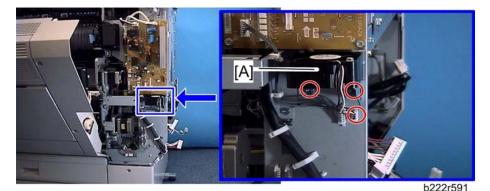
When installing the paper exit fan



• Make sure that the paper exit fan is installed with its decal facing the rear of the machine.

AC Controller Board Fan

- 1. Rear cover (p.195)
- 2. Right rear cover (** p.195)



3. AC controller board fan bracket [A] (F x 2, 🖼 x 1)



b222r592

4. AC controller board fan [B] (F x 2)

When installing the AC controller board fan

Make sure that the AC controller board fan is installed with its decal facing the upper side of the machine.

Fusing Entrance Thermopiles

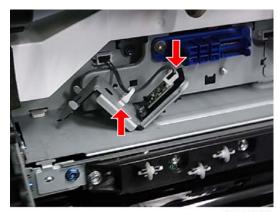
1. Open the right door.

4

2. Fusing unit (p.289)



3. Fusing entrance thermopile brackets (\mathcal{F} x 1 each)



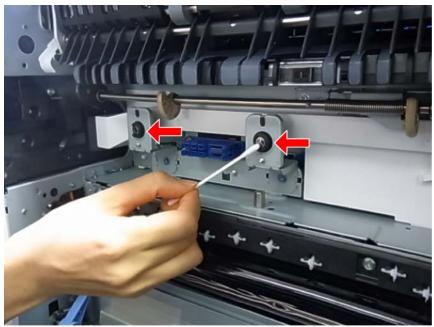
d1440056

4. Fusing entrance thermopiles (x 1 each, x 1 each)

When cleaning the lens of the thermopile

ACAUTION

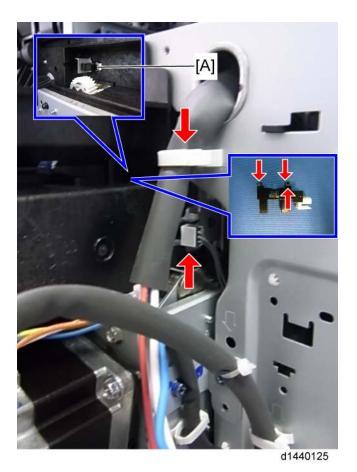
- Do this cleaning procedure after the fusing unit has completely cooled down. Otherwise, you may get a serious burn.
- 1. Fusing unit (p.289)



2. Clean with a cotton-swab dipped in alcohol.

Pressure Roller HP Sensor

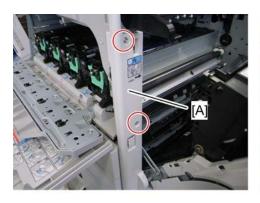
- 1. Open the right door.
- 2. Fusing unit (p.289)
- 3. AC controller board (p.355)
- 4. AC controller board bracket (** p.356)

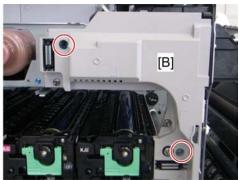


5. Pressure roller HP sensor [A] (🖨 x 1, 🗂 x 1, hooks x 3)

QSU Fan

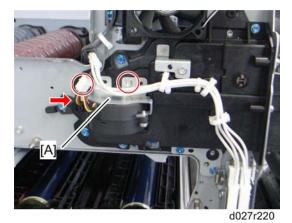
- 1. Open the right door.
- 2. Front right cover (p.196)
- 3. Pull out trays 1 and 2, and the image transfer belt unit.





d027r219

4. Right front cover [A] and front inner cover [B].

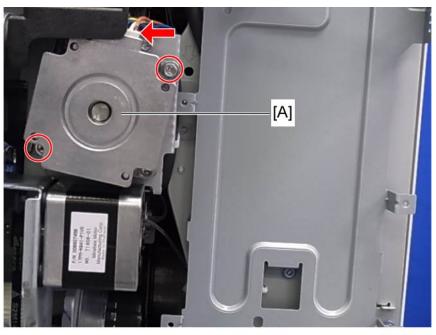


- 6. QSU fan (🏲 x 2)

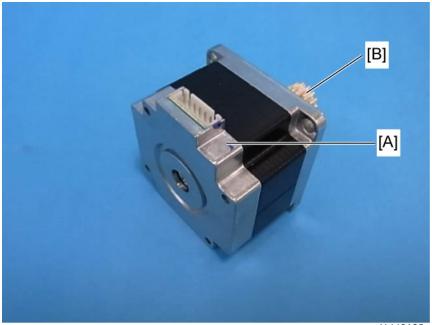
Fusing Unit Shutter Plate Drive Motor

1. AC controller board (p.355)

4



2. Fusing unit shutter plate drive motor [A] ($\mbox{\ensuremath{\not{P}}} \times 2$, $\mbox{\ensuremath{\not{CM}}} \mbox{\ensuremath{V}} \times 1)$



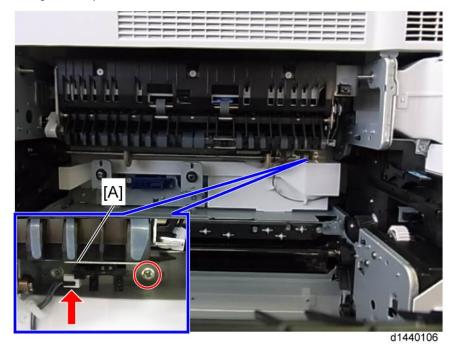
d1440105

Note

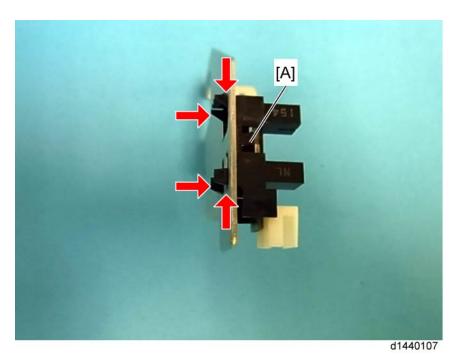
• Do not wipe off the grease of the gear [B] on the new motor [A] when replacing it.

Fusing Unit Shutter Plate Home Position Sensor

- 1. Open the right door.
- 2. Fusing unit (p.289)



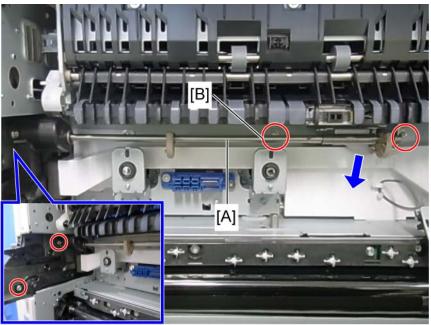
4



4. Fusing unit shutter plate home position sensor [A] (Hooks x 4)

Fusing Unit Shutter Plate Drive Mechanism

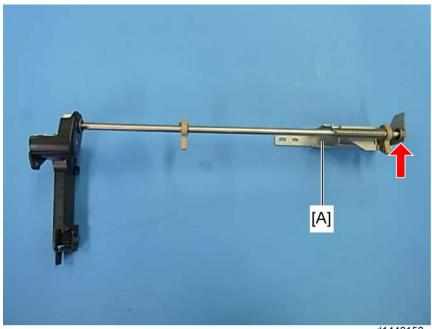
- 1. Open the right door.
- 2. Fusing unit (p.289)
- 3. Fusing unit shutter plate home position sensor bracket (pr.314)



1. Fusing unit shutter plate drive mechanism [A] (F x 4)

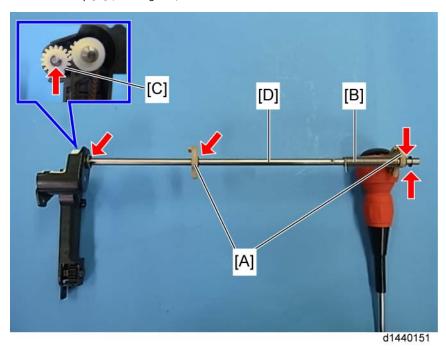


• If the shaft interferes with the movement of the screwdriver, the screw [B] should be removed at the very last while pushing the shaft down slightly.



d1440150

2. Drive shaft stay [A] (Bearing x 1)

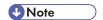


- 3. Drive cams [A] ($\mathbb{C} \times 3$, \mathbb{R} [B] $\times 1$)
- 4. Drive gear [C] and drive shaft [D] (Bearing x 1, \mathfrak{C} x 1)



5. Drive belt [A]





- When reinstalling the fusing unit shutter plate drive mechanism:
- Make sure that the tension of the coil spring on the drive shaft is correct before reinstallation. If the tension is weak, rotate the spring one revolution on the shaft and hook it.

4

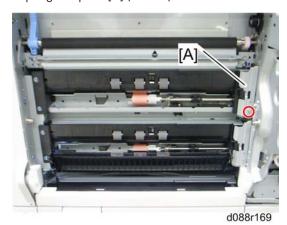
Paper Feed

Paper Feed Unit

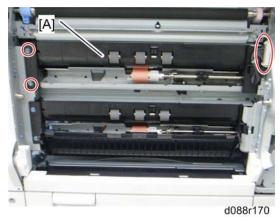
- 1. Rear cover (p.195)
- 2. Right rear cover (** p.195)
- 3. Duplex unit (p.334)
- 4. Pull out tray 1 and tray 2.



5. Paper guide plate [A] (tab x 2)



6. Harness cover [A] (🗗 x 1)

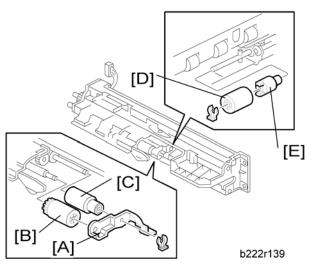


7. Paper feed unit [A] (🗗 x 2, 📬 x 1)

Pick-Up, Feed and Separation Rollers

Tray 1 and Tray 2

1. Paper feed unit (Fr p.319)

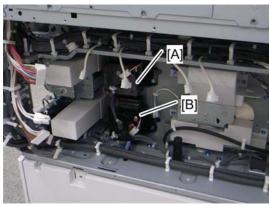


- 2. Roller holder [A] (🛱 x 1)
- 3. Pick-up roller [B]
- 4. Feed roller [C]
- 5. Separation roller [D] and torque limiter [E] (${\raisebox{.5ex}{$\not$}}{\hskip -2pt}{\hskip -2$

4

Tray Lift Motor

- 1. Rear cover (p.195)
- 2. PSU bracket (** p.350)
- 3. High voltage supply board bracket (** p.355)

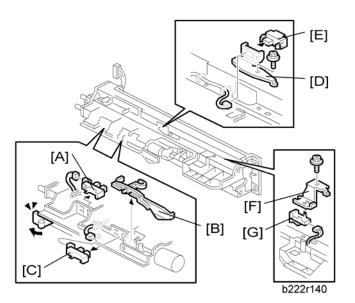


d027r17

4. Tray lift motor 1 [A] or 2 [B] (\ref{eq} x 2, \ref{eq} x 3, \ref{eq} x 1 each)

Vertical Transport, Paper Overflow, Paper End and Paper Feed Sensor

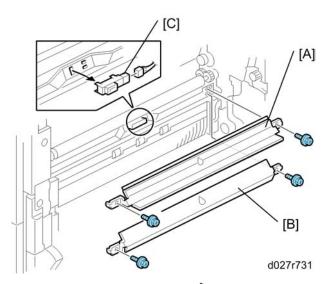
- 1. Rear cover (p.195)
- 2. Right rear cover (** p.195)
- 3. Paper feed unit (p.319)



- 4. Paper overflow sensor [A]
- 5. Paper end feeler [B] and paper end sensor [C] (hook, 📬 x 1 each)
- 6. Vertical transport sensor bracket [D] (** x 1, ** x 1)
- 7. Vertical transport sensor [E] (🗂 x 1, hook)
- 8. Paper feed sensor bracket [F] (F x 1)
- 9. Paper feed sensor [G] (🗗 x 1, hook)

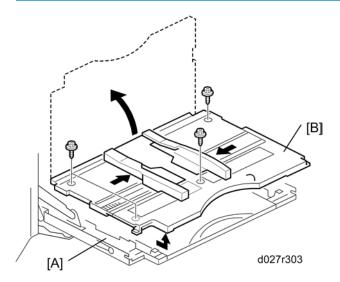
Registration Sensor

- 1. Rear cover (p.195)
- 2. Right rear cover (** p.195)

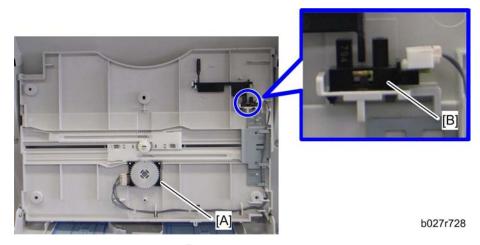


- 3. Paper guide plate 1 [A] and 2 [B] (F x 2 each)
- 4. Registration sensor [C] (🗗 x 1, hook)

By-pass Paper Size Sensor and By-pass Paper Length Sensor



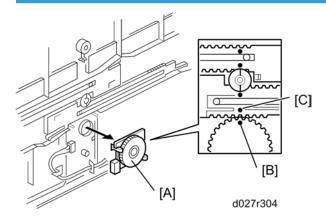
- 1. Open the by-pass tray [A].
- 2. Move the side fences to the center.
- 3. By-pass tray cover [B] (** x 4)



- 4. By-pass paper size sensor [A] (

 1 x 1)
- 5. By-pass paper length sensor [B] (🗗 x 1)

When reinstalling the by-pass paper size sensor



- 1. Adjust the projection [A] of the left side fence bar (it must be centered).
- 2. Install the by-pass paper size detection switch so that the hole [B] in this switch faces the projection [C] of the left side fence bar.
- 3. Reassemble the copier.
- 4. Plug in and turn on the main power switch.
- 5. Check this switch operation with SP5803-011 (By-pass paper size < Input Check).

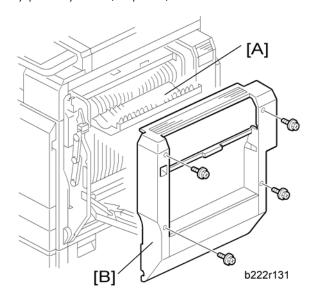
- Display on the LCD -

Paper Size	Display	Paper Size	Display
A3 SEF	00001110	A5 SEF	00001011

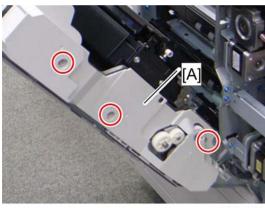
Paper Size	Display	Paper Size	Display
B4 SEF	00001100	B6 SEF	00000011
A4 SEF	00001101	A6 SEF	00000111
B5 SEF	00001001	Smaller A6 SEF	00001111

By-pass Bottom Tray

- 1. Open the right door.
- 2. By-pass tray cover (p.323)

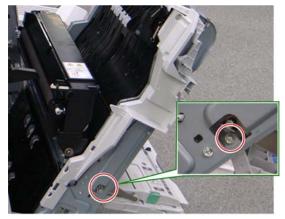


- 3. Open the duplex door [A].
- 4. Right door cover [B] (🗗 x 4)



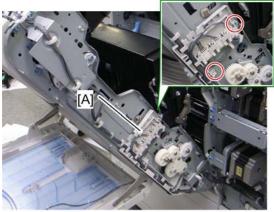
d027r174

5. Right door rear cover [A] ($\ref{p} \times 3$)



d027r175

6. Remove the screw at the front side (\mathcal{F} x 1).



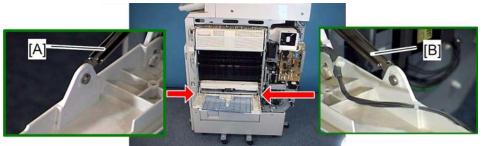
d027r177

7. Remove the cover [A] (2 hooks).



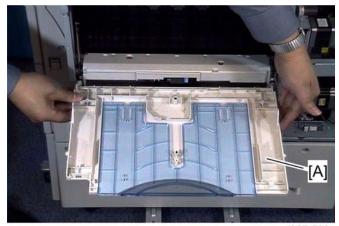
d027r178

8. Remove the screw at the rear side.



d027r597

9. Release the front [A] and rear [B] arms ($\overline{\Diamond}$ x 1 each).

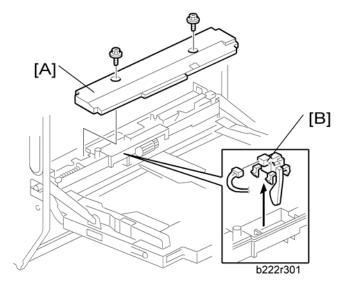


d027r598

10. By-pass bottom tray [A]

By-pass Paper End Sensor

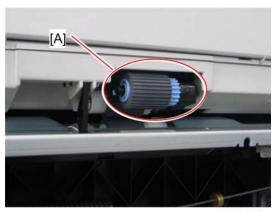
1. Right door cover (p.325)



- 2. By-pass feed unit cover [A] (F x 2).
- 3. By-pass paper end sensor [B] (🖾 x 1, hook)

By-pass Pick-up, Feed and Separation Roller, Torque Limiter

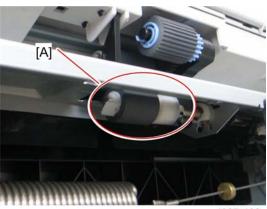
1. Right door cover (p.325)



d027r179

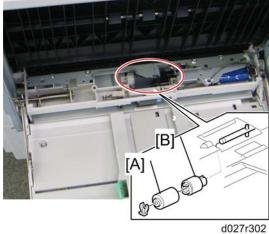
2. By-pass pick-up roller [A] (hook)

Δ



d027r180

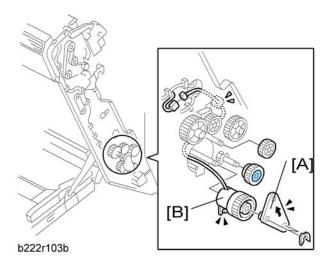
- 3. By-pass feed roller [A] (🖾 x 1)
- 4. By-pass feed unit cover (** p.328)



- 5. By-pass separation roller [A] (♥ x 1)
- 6. Torque limiter [B]

By-pass Feed Clutch

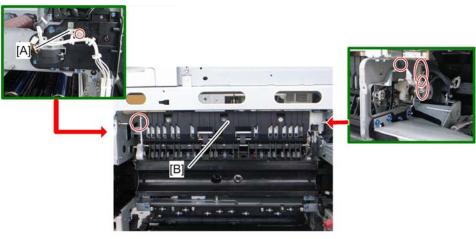
- 1. Open the right door.
- 2. Right door rear cover (** p.325)



- 4. By-pass feed clutch [B] (🗗 x 1, 🖨 x 1)

Paper Exit Unit

- 1. Fusing Unit (p.289)
- 2. Front right cover (Front p.196)
- 3. Image transfer belt unit (IF p.252)
- 4. Inner Tray (p.202)
- 5. Rear cover (p.195)
- 6. Right rear cover (** p.195)
- 7. Fusing entrance thermopiles (** p.308)
- 8. Fusing duct (p.306)
- 9. Open the controller box (** p.341).



d027r181

- 10. Gear cover [A] (🗗 x 1)
- 11. Paper exit unit [B] (🗗 x 2, 📬 x 2)

Fusing Exit, Paper Overflow, Junction Paper Jam and Paper Exit Sensor



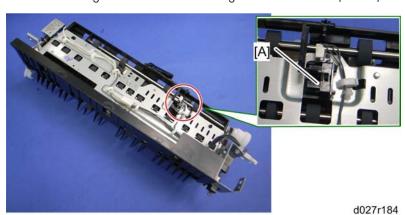
d027r182

1. Paper exit unit (p.330)

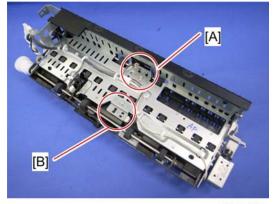


d027r183

- 2. Fusing exit sensor bracket [A] (🔊 x 1, 🕮 x 1)
- 3. Remove the fusing exit sensor from the fusing exit sensor bracket (\nearrow x 1)



4. Paper overflow sensor [A] (🗗 x 1, hook)



d027r185

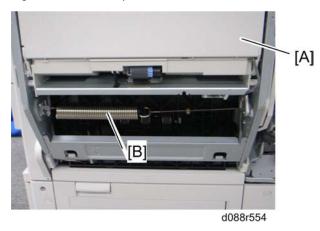
5. Junction paper jam sensor bracket [A] (🔊 x 1, 📬 x 1)

- 6. Remove the junction paper jam sensor from the junction paper jam sensor bracket (hook)
- 7. Paper exit sensor bracket [B] (🎤 x 1, 📬 x 1)
- 8. Remove the paper exit sensor from the paper exit sensor bracket (hook)

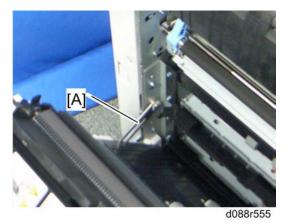
Duplex Unit

Duplex Unit

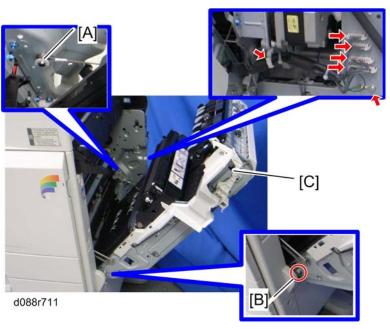
- 1. Rear cover (p.195)
- 2. Right rear cover (** p.195)
- 3. Right door cover (p.259)



- 4. Close the right door [A].
- 5. Remove the spring [B].
- 6. Open the right door [A].



- 7. Release the front link [A] (🛱 x 1).
- 8. Keep the right door fully open.



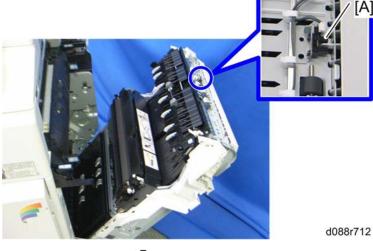
9. Hold the right door, and then release the wire [A] (${\overline{\mathbb{O}}}$ x 1).

ACAUTION

- Keep holding the right door before removing the right door completely. Otherwise, the right door can fall down and injure you.
- 10. Press the projection [B] to pull the right door shaft into the unit, and then remove the duplex unit [C] ($\nearrow x 1$, $\stackrel{\triangle}{\bowtie} x 1$, $\stackrel{\square}{\bowtie} x 4$, ground cable x 1).

Duplex Door Sensor

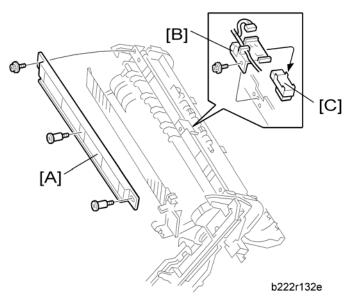
- 1. Right door cover (p.259)
- 2. Open the right door.



3. Duplex door sensor [A] (🗗 x 1, hook)

Duplex Entrance Sensor

- 1. Right door cover (** p.259)
- 2. Open the right door.

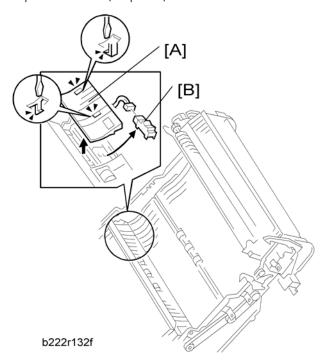


- 3. Duplex entrance guide [A] (🗗 x1, stepped screw x 2)
- 4. Duplex entrance sensor bracket [B] (🗗 x 1, 📬 x 1)

5. Duplex entrance sensor [C] (hook)

Duplex Exit Sensor

1. Paper transfer unit (Fr p.259)

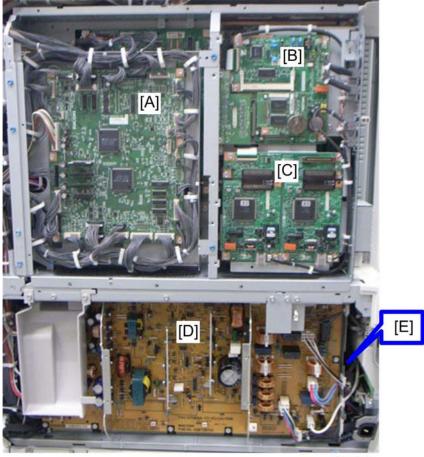


- 2. Guide plate [A] (two hooks)
- 3. Duplex exit sensor [B] (🗂 x 1, hook)

Electrical Components

Boards

Controller Box closed

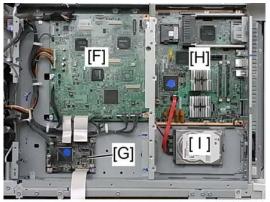


d027r729

[A]	IOB
[B]	FCU (Option)
[C]	G3 Interface Unit (Option)
[D]	PSU
[E]	High Voltage Supply Board (Behind the PSU [D])

4

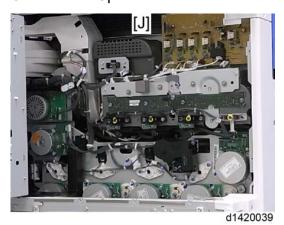
Behind the IOB, FCU and G3 Interface Unit



d1420030

[F]	IPU
[G]	BCU
[H]	Controller Board
[1]	HDD

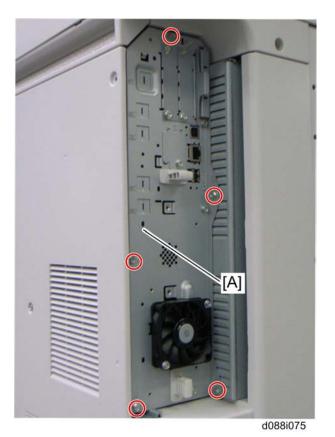
Controller Box Open



[J] ITB Power Supply Board

Controller Unit

1. Controller cover (p.194)

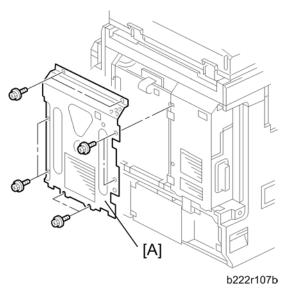


2. Controller unit [A] (🗗 x 5)

Controller Box Right Cover

1. Rear cover (p.195)





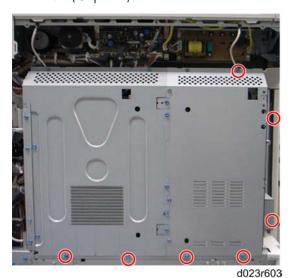
D144 RTB 89
Take caution when removing the controller board cover, because the edges of the cover are sharp.

2. Controller box right cover [A] (** x 8)

Controller Box

When opening the controller box

1. Rear cover (p.195)



2. Remove seven screws.

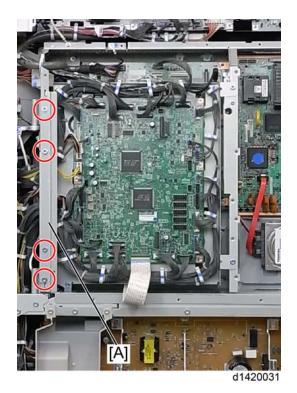


d023r110

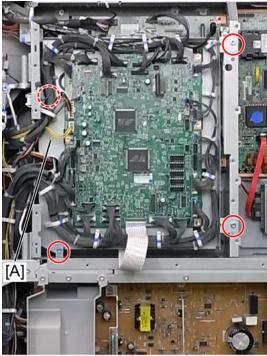
3. Open the controller box [A].

When removing the controller box

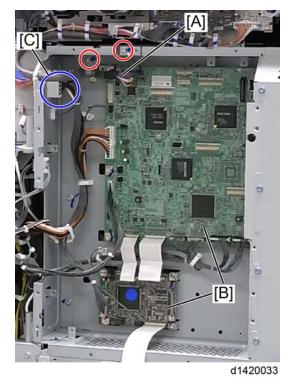
- 1. Rear cover (p.195)
- 2. Controller cover (p.194)
- 3. Right rear cover (** p.195)
- 4. Controller box right cover (p.340)



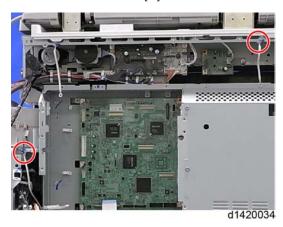
5. Controller box stay [A] (🏲 x 4)



d1420032



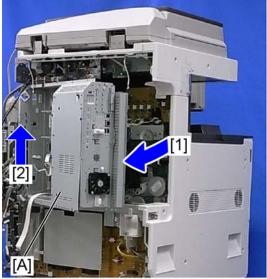
- 7. Disconnect the scanner interface cable [A] (ground cable)
- 8. Release all clamps on the controller box frame.
- 9. Disconnect all connectors on the IPU board and the BCU board [B].
- 10. Disconnect the connector [C] at the outer controller box and at the inner controller box.



11. Disconnect two ground cables. (F x 1, each)





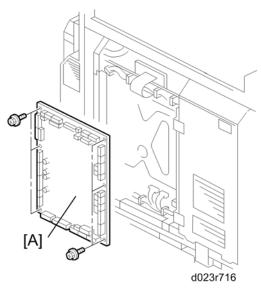


d1420036

12. Open [1] and lift up [2] the controller box [A], and then remove it. (\red{F} x 4)

IOB (In/Out Board)

- 1. Rear cover (p.195)
- 2. Controller box right cover (p.340)



3. IOB [A] (🗗 x 6, All 🗂 s)

IPU

- 1. Rear cover (p.195)
- 2. Controller box right cover (p.340)
- 3. IOB bracket (** p.341)



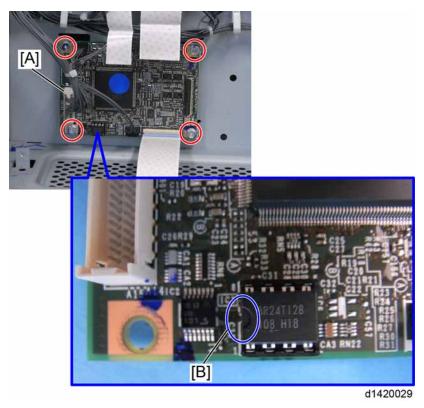


d1420028

4. IPU [A] (🗗 x 6, 📬 x all)

BCU

- 1. Rear cover (p.195)
- 2. Controller box right cover (p.340)
- 3. IOB bracket (** p.341)





 Make sure the NVRAM is correctly installed on the BCU. Insert the NVRAM in the NVRAM slot with the "half-moon" pointing [B] to the left side.

When installing the new BCU

Remove the NVRAM from the old BCU. Then install it on the new BCU after you replace the BCU. Replace the NVRAM (**p.363) if the NVRAM on the old BCU is defective.



Make sure you print out the SMC reports ("SP Mode Data" and "Logging Data") before you
replace the NVRAM.

ACAUTION

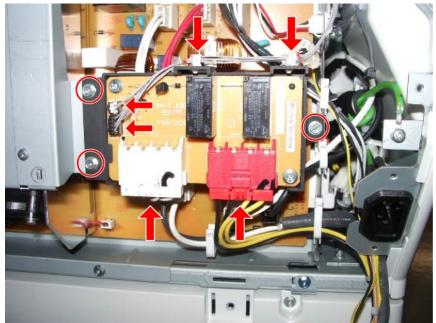
- Keep NVRAMs away from any objects that can cause static electricity. Static electricity can damage NVRAM data.
- Make sure that the DIP-switch settings on the old BCU are the same for the new BCU when. Do not change the DIP switches on the BCU in the field.

 Make sure the serial number is input in the machine for the NVRAM data; if not, SC 995-001 occurs.

PSU

Shutdown Board

1. Rear cover (p.195)



d1440119

2. Shutdown board with bracket (🗗 x 4, 🖨 x 2, 🌶 x 3)



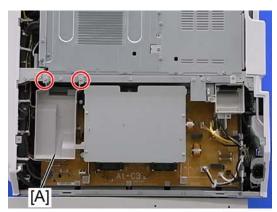


d1440120

3. Shutdown board (🗗 x 2)

PSU bracket

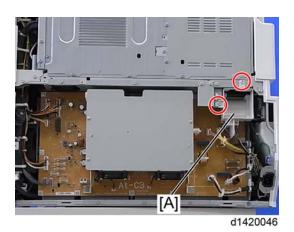
- 1. Rear cover (p.195)
- 2. Shutdown board with bracket (Shutdown Board)



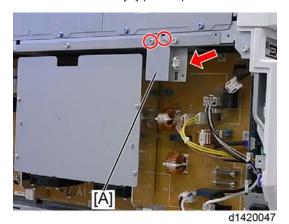
d1420045

3. Ventilation duct [A] (🔊 x 2)

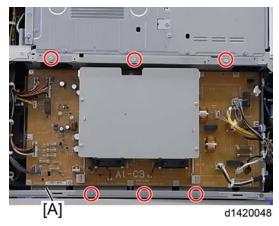




4. First duct fan bracket [A] (> x 2)

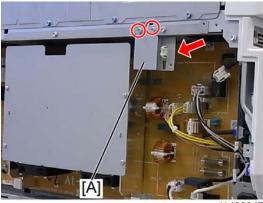


u1420

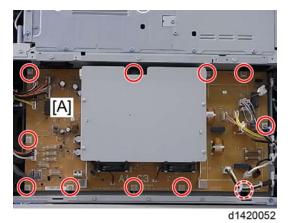


6. PSU bracket [A] (🗗 x 6, 😂 x All, 📬 x All)

- 1. Rear cover (p.195)
- 2. Shutdown board with bracket (p.349)
- 3. Ventilation duct (*p.350)
- 4. First duct fan bracket (** p.350)



d1420047



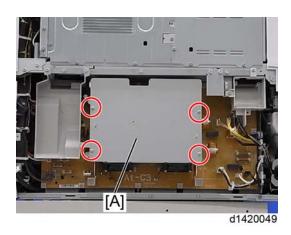
RTB 71

Some parts of the board remain charged even after unplugging the machine.

PSU fans

- 1. Rear cover (p.195)
- 2. Shutdown board with bracket (Fr. p.349)







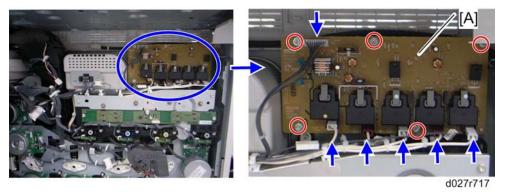
3. PSU fan bracket [A] ($\mathscr{F} \times 4$, $\mathsf{CII} \times 2$)



4. PSU fans (🗗 x 2 each)

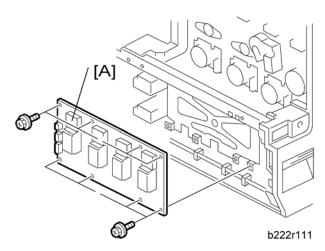
ITB Power Supply Board

- 1. Rear cover (p.195)
- 2. Scanner rear cover (p.206)
- 3. Open the controller box (** p.341)



High Voltage Supply Board

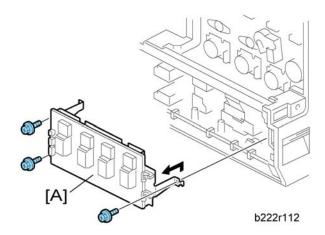
- 1. Rear cover (**p**.195)
- 2. PSU bracket (**p**.350)



3. High voltage supply board [A] (\ref{p} x 8, All \ref{s} s, \ref{s} x 2)

High Voltage Supply Board Bracket

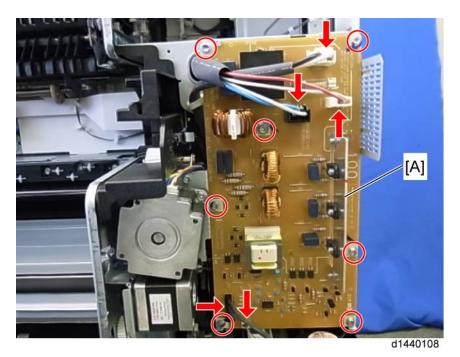
- 1. Rear cover (p.195)
- 2. PSU bracket (** p.350)



3. High voltage supply board bracket [A] (★ x 3, 🗂 x All, 🖨 x 2)

AC Controller Board

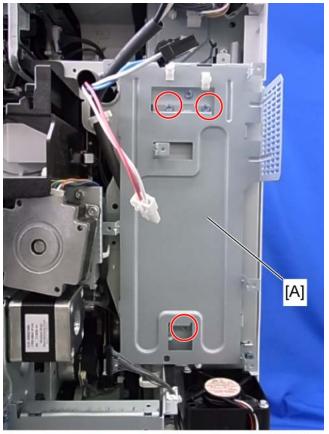
- 1. Rear cover (p.195)
- 2. Right rear cover (** p.195)
- 3. Fusing duct (p.306)



4. AC Controller Board [A] (\mathscr{F} x 7, \square x 5)

AC Controller Board Bracket

1. AC controller board (p.355)



d1440124

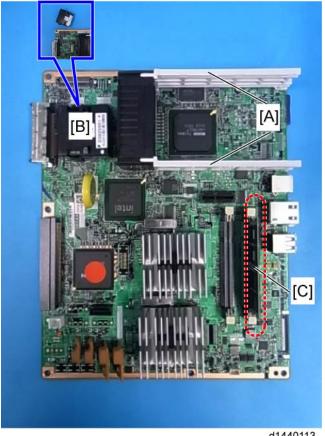
2. AC controller board bracket [A] ($\rat{p} \times 3$)

Controller Board

1. Controller unit (p.339)



2. Controller board [A] (🗗 x 7, 📬 x 3)



d1440113

3. Interface rails [A], NV-RAM [B], RAM-DIMM [C]

When installing the new controller board

Remove the NVRAM from the old controller board. Then install it on the new controller board after you replace the controller board. Replace the NVRAM if the NVRAM on the old controller board is defective.



• Make sure you print out the SMC reports ("SP Mode Data" and "Logging Data") before you replace the NVRAM.

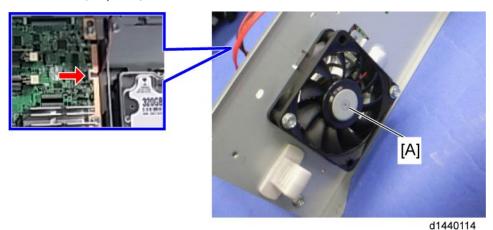
ACAUTION

- Keep NVRAMs away from any objects that can cause static electricity. Static electricity can damage NVRAM data.
- Make sure the NVRAM is correctly installed on the controller board.

 Make sure that the DIP-switch settings on the old controller board are the same for the new controller board. Do not change the DIP switches on the controller board in the field.

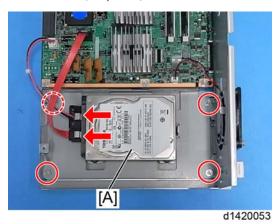
HDD Fan

1. Controller unit (p.339)

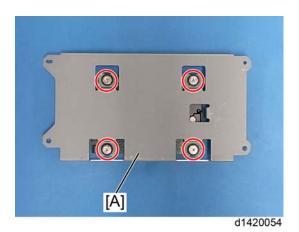


HDD

1. Controller unit (Fr p.339)



2. Remove the HDD [A] with the bracket ($\mbox{\ensuremath{\not{F}}} \times 4$, $\mbox{\ensuremath{\mbox{c1}}}\mbox{\ensuremath{\mbox{\mbox{\ensuremath{A}}}} \times 2).$



3. Remove the HDD from the bracket [A] (*x 4).

When installing a new HDD unit

- 1. Turn the main power switch on. The disk is automatically formatted.
- 2. Install the stamp data using "SP5853".
- 3. Switch the machine off and on to enable the fixed stamps for use.

Disposal of HDD Units

- Never remove an HDD unit from the work site without the consent of the client.
- If the customer has any concerns about the security of any information on the HDD, the HDD must remain with the customer for disposal or safe keeping.
- The HDD may contain proprietary or classified (Confidential, Secret) information. Specifically, the
 HDD contains document server documents and data stored in temporary files created automatically
 during copy job sorting and jam recovery. Such data is stored on the HDD in a special format so it
 cannot normally be read but can be recovered with illegal methods.

Reinstallation

Explain to the customer that the following information stored on the HDD is lost when the HDD is replaced:

- Document server documents
- Custom-made stamps
- Document server address book

The address book and document server documents (if needed) must be input again.

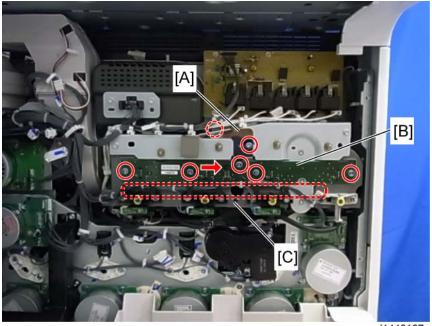
If you previously backed up the address book to an SD card with SP5846 051, you can use SP 5846 052 to copy the data from the SD card to the hard disk.

If the customer is using the Data Overwrite Security feature, the DOS function must be set up again. For more, see Section 1 (Installation).

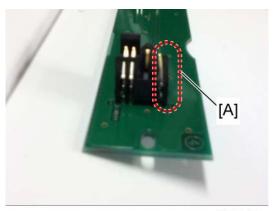
If the customer is using the optional Browser Unit, this unit must be installed again. For more, see Section 1 (Installation).

Toner Bottle Detection Board

1. Open the controller box (** p.341)



- d1440167
- 2. Remove the grounding plate [A] completely (${\it F} \times 3$).
- 3. Move the harnesses [C] downward to prevent the board from catching on them.
- 4. Pull out the toner bottle detection board [B] gently and horizontally (🗗 x 1, 🔊 x 4)



d1440168



 The toner bottles detection board should be pulled out horizontally. If you ignore this, the toner bottle detection terminals [A] may be damaged.

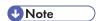
NVRAM Replacement Procedure

This machine has two types of NVRAM. One is on the BCU (p.347); the other is on the controller board (p.357).

RTB 37
Important notes

NVRAM on the BCU

- 1. Make sure that you have the SMC report (factory settings). This report comes with the machine.
- 2. Output the SMC data (SP5-990-001) if possible.
- 3. Turn the main switch off.
- 4. Install an SD card into SD card slot 3. Then turn the main power on.
- 5. Copy the NVRAM data to an SD card (SP5-824-001) if possible.
- 6. Turn off the main switch. Then unplug the power cord.
- 7. Replace the NVRAM on the BCU and reassemble the machine.
- 8. Plug in the power cord. Then turn the main switch on.
- 9. Select a paper-size type (SP5-131-001).
- 10. Specify the serial number and destination code of the machine.



- Contact your supervisor for details on how to enter the serial number and destination code.
- SC 999 or "Fusing Unit Setting Error" can be shown until the serial number and destination code are correctly programmed.

- 12. Copy the data from the SD card to the NVRAM (SP5-825-001) if you have successfully copied them to the SD card.
- 13. Turn the main switch off. Then remove the SD card from SD card slot 2.
- 14. Turn the main switch on.
- 15. Specify the SP and UP mode settings.
- 16. Do the process control self-check.
- 17. Do ACC for the copier application program.
- 18. Do ACC for the printer application program.



 If the message "SD card for restoration is required." appears after the NVRAM replacement, the encryption key should be restored. See "Encryption Key Restoration for NVRAM" for the restoration procedure. (Pr p.863)

NVRAM on the controller board

- 1. Make sure that you have the SMC report (factory settings). This report comes with the machine.
- 2. Output the SMC data ("ALL") using SP5-990-001. (SP5-990-001)
- 3. Turn off the main switch.
- 4. Insert a blank SD card into slot #2, and then turn on the main switch.
- 5. Upload the NVRAM data to the blank SD card using SP5-824-001 (NVRAM Data Upload).
- 6. Turn off the main power switch, and then unplug the AC power cord.
- 7. Remove the SD card containing the NVRAM data from slot #2.
- 8. Replace the NVRAM on the controller board with a new one.
- 9. Plug in the AC power cord, and then turn on the main power switch.



- When you do this, SC995-02 (Defective NVRAM) will be displayed. However, DO NOT turn
 off the main power switch. Continue with this procedure.
- 10. Re-insert the SD card that you removed in step 7 back into slot #2.
- 11. Download the old NVRAM data from the SD card onto the new NVRAM using SP5-825-001 (NVRAM Data Download).



- This will take about 2 or 3 minutes.
- 12. Turn off the main power switch, and then remove the SD card from slot #2.
- 13. Turn on the main power switch.

14. Output the SMC data ("ALL") using SP5-990-001, and make sure that it matches the SMC data you printed out in step 2 above (except for the value of the total counter).



- The value of the total counter is reset to "0" when the NVRAM is replaced.
- 15. Do Process Control Self-check.
- 16. Do ACC for the Copier function.
- 17. Do ACC for the Printer function.



- Do all of the following if SP5-824-001 (NVRAM Data Upload) and SP5-825-001 (NVRAM Data Download) cannot be performed for some reason.
 - 1. Manually enter all data on the SMC report (factory settings).
 - Install the Security function (Data Overwrite Security and HDD Encryption unit) again.
 For the procedure, see "Security function Installation" in "Installation Procedure" of
 "Copier Installation". (Imp. 40)



• If the message "SD card for restoration is required." appears after the NVRAM replacement, the encryption key should be restored. See "Encryption Key Restoration for NVRAM" for the restoration procedure. (IFT p.863)

Using Dip Switches

Controller Board

DIP SW No.	OFF	ON	
1	Boot-up from Flash Memory	Boot-up from SD card	
2 to 8	Factory Use Only: Do not change the switch settings.		

BCU Board

DIP SW No.	OFF	ON
1 and 2	Factory Use Only: Do not cha	nge the switch settings.

5. System Maintenance

Service Program Mode

ACAUTION

• 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.

SP Tables

See "Appendices" for the following information:

- System SP Tables
- Printer SP Tables
- Scanner SP Tables

Enabling and Disabling Service Program Mode



• The Service Program Mode is for use by service representatives only. If this mode is used by anyone other than service representatives for any reason, data might be deleted or settings might be changed. In such case, product quality cannot be guaranteed any more.

Entering SP Mode

For details, ask your supervisor.

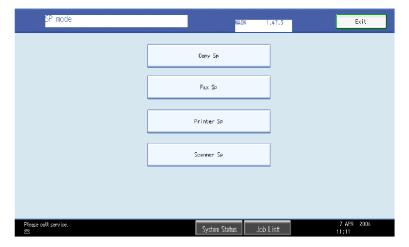
Exiting SP Mode

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

Types of SP Modes

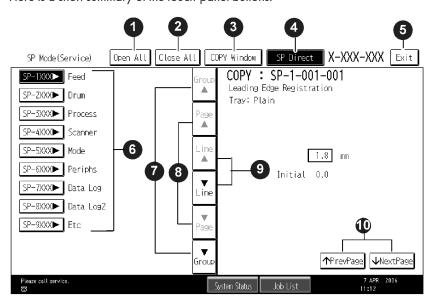
- System SP: SP modes related to the engine functions
- Printer SP: SP modes related to the controller functions
- Scanner SP: SP modes related to the scanner functions

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.



Opens all SP groups and sublevels.
 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.		

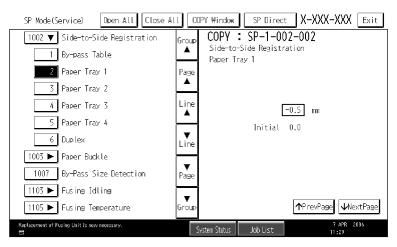
Switching Between SP Mode and Copy Mode for Test Printing

- 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 1 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.





- 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 ⁽¹⁾ 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 3 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.

 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.

Remarks

Paper Weight

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.

Thin paper: 52-59 g/m ²
Plain Paper: 60-81 g/m², 16-21.6lb.
Middle Thick: 82-105 g/m², 21.87-28lb.
Thick Paper 1: 106-169 g/m², 28.5-44.9lb.
TI. I D 0 170 000 / 2 /5 50II

Thick Paper 2: 170-220 g/m², 45-58lb.

Thick Paper 3: 221-256 g/m², 59lb-68lb

Thick 4: 257 g/m^2 - 300 g/m^2 , 68.4-79.8 lb

Paper Type

N: Normal paper

MTH: Middle thick paper

TH: Thick paper

Paper Feed Station

P: Paper tray

B: By-pass table

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 Process Speed	
S: Simplex	L: Low speed (77 mm/s)
D: Duplex	M: Middle speed (154 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. If you do a RAM clear, this SP mode will be reset to the default value. "ENG" and "CTL" show which NVRAM contains the data.

- ENG: NVRAM on the BCU 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



 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.

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Main SP Tables-1

SP1-XXX (Feed)

	[Leading Edge Registration] Leading Edge Registration Adjustment			
1001	(Tray Location, Paper Type, Color Mode), Paper Type → Thin, Plain, Thick 1, Thick 2 or Thick 3			
	Adjusts the leading edge registration by changing the registration motor operation timing for each mode.			
002	Tray: Plain	*ENG		
003	Tray: Middle Thick	*ENG		
004	Tray: Thick 1	*ENG		
005	Tray: Thick 2	*ENG		
007	By-pass: Plain	*ENG		
800	By-pass: Middle Thick	*ENG	[0 0 / 0.0 / 0.1 / 1]	
009	By-pass: Thick 1	*ENG	[-9 to 9 / 0.0 / 0.1 mm/step]	
010	By-pass: Thick 2	*ENG		
011	By-pass: Thick 3	*ENG		
013	Duplex: Plain	*ENG		
014	Duplex: Middle Thick	*ENG		
015	Duplex: Thick 1	*ENG		

016	Tray: Thick 3	*ENG	
017	Tray: Plain:1200	*ENG	
018	Tray: Middle Thick: 1200	*ENG	
019	Tray: Thick 1:1200	*ENG	
020	By-pass: Plain: 1200	*ENG	[0 0 / 0.0 / 0.1 / 1]
021	By-pass: Middle Thick: 1200	*ENG	[-9 to 9 / 0.0 / 0.1 mm/step]
022	By-pass: Thick 1:1200	*ENG	
023	Duplex: Plain:1200	*ENG	
024	Duplex: Middle Thick:1200	*ENG	
025	Duplex: Thick 1:1200	*ENG	
026	Tray: Thin	*ENG	
027	By-pass: Thin	*ENG	
028	Duplex: Thin	*ENG	
029	Tray: Thin: 1200	*ENG	
030	By-pass: Thin: 1200	*ENG	
031	Duplex: Thin: 1200	*ENG	

	[Side to Side Registration] Side-to-Side Registration Adjustment
1002	Adjusts the side-to-side registration by changing the laser main scan start position for each mode.

001	By-pass Table	*ENG	
002	Paper Tray 1	*ENG	
003	Paper Tray 2	*ENG	
004	Paper Tray 3	*ENG	[44- 4 / 00 / 0] /]
005	Paper Tray 4	*ENG	[-4 to 4 / 0.0 / 0.1 mm/step]
006	Duplex	*ENG	
007	Paper Tray 5	*ENG	
008	Large Capacity Tray	*ENG	

1000	[Paper Buckle] Paper Buckle Adjustment (Tray Location, Paper Type, Color mode), Paper Type → Plain, Thick, Thick1			
1003	Adjusts the amount of paper buckle at the registration roller by changing the paper feed timing.			
002	Paper Tray 1: Plain	*ENG	[-9 to 5 / -2 / 1 mm/step]	
003	Tray 1: Middle Thick	*ENG	[-9 to 5 / -1 / 1 mm/step]	
004	Paper Tray 1: Thick 1	*ENG	[0 + 5 / 2 / 1 /-+]	
007	Paper Tray2/3/4/5/LCT: Plain	*ENG	[-9 to 5 / -2 / 1 mm/step]	
800	Tray 2/3/4/5/LCT: Middle Thick	*ENG	[-9 to 5 / -1 / 1 mm/step]	
009	Paper Tray2/3/4/5/LCT: Thick 1	*ENG	[-9 to 5 / -2 / 1 mm/step]	
012	By-pass: Plain	*ENG	[0. 5 / 1 / 1 /]	
013	By-pass: Middle Thick	*ENG	[-9 to 5 / -1 / 1 mm/step]	
014	By-pass: Thick 1	*ENG	[-9 to 5 / -2 / 1 mm/step]	
018	Duplex: Plain	*ENG	[04- 5 / 1 / 1 /1	
019	Duplex: Middle Thick	*ENG	[-9 to 5 / -1 / 1 mm/step]	
020	Duplex: Thick 1	*ENG	[-9 to 5 / -2 / 1 mm/step]	

021	Paper Tray 1: Plain: 1200	*ENG	
022	Tray1: Middle Thick: 1200	*ENG	
023	Tray 2/3/4/5LCT: Plain: 1200	*ENG	[0 . 5 / 0 / 1 /]
024	Tray 2/3/4/5LCT: Mid: 1200	/3/4/5LCT: Mid: 1200 *ENG [-9 to 5 / 0 / 1 mm/step]	
025	By-pass: Plain: 1200	*ENG	
026	By-pass: Middle Thick: 1200	*ENG	
027	Paper Tray 1: Thick 1: 1200	*ENG	
028	Paper Tray2/3/4/5/LCT: Thick 1:1200	*ENG	[-9 to 5 / -2 / 1 mm/step]
029	By-pass: Thick 1: 1200	*ENG	
030	Duplex: Plain: 1200	*ENG	[O to 5 / O / 1 mm /ston]
031	Duplex: Middle Thick: 1200	*ENG	[-9 to 5 / 0 / 1 mm/step]
032	Duplex: Thick 1: 1200	*ENG	[-9 to 5 / -2 / 1 mm/step]

1007	[By-Pass Size Detection] By-Pass Size Detection Display		
	LG *ENG [0 or 1 / 0 / -] 0: OFF, 1: ON		
001	Enables or disables the automatic paper size detection function of the by-pass tray. This SP determines what paper size the machine detects if the detected size is less than 8.5". 0: OFF (Letter/SEF), 1: ON (Legal/SEF)		

1101	[Reload Permit Setting]				
1101	Specifies the settings of the reload permit for cold temperature in color mode.				
001	Pre-rotation Start Temp.	*ENG	[-50 to 200 / -50 / 1 deg/step]		
002	Reload Target Temp.:Center	*ENG	[0 to 180 / 145 / 1 deg/step]		
003	Reload Target Temp.:Press	*ENG	[0 to 200 / 120 / 1 deg/step]		
004	Temp.:Delta:Cold:Center	*ENG	[0 to 200 / 5 / 1 deg/step]		
005	Temp.:Delta:Cold:End	*ENG	[40 to 200 / 5 / 1 deg/step]		

006	Temp.:Delta:Cold:Press	*ENG	[0 to 200 / 80 / 1 deg/step]			
	[Forced Ready Set]					
	Specifies the setting of the forced reload permit for cold temperature in color mode.					
007	Forced Reload Time :Cold	Reload Time :Cold *ENG [0 to 100 / 9 / 1 sec/step]				
	[Reload Permit Setting]					
	Specifies the settings of the reload permit for warm temperature in color mode.					
800	Temp.:Delta:Warm:Center	*ENG	[0 to 200 / 5 / 1 deg/step]			
009	Temp.:Delta:Warm:End	*ENG	[0 to 200 / 5 / 1 deg/step]			
010	Temp.:Delta:Warm:Press	*ENG	[0 to 200 / 80 / 1 deg/step]			
	[Reload Permit Setting]					
	Specifies the setting of the force	ed reload p	permit for warm temperature in color mode.			
011	Forced Reload Time:Warm	*ENG	[0 to 100 / 9 / 1 sec/step]			
	[Reload Permit Setting]					
	Specifies the settings of the rela	oad permit	for hot temperature in color mode.			
012	Temp.:Delta:Hot:Center	*ENG	[0 to 200 / 5 / 1 deg/step]			
013	Temp.:Delta:Hot:End	*ENG	[0 to 200 / 5 / 1 deg/step]			
014	Temp.:Delta:Hot:Press	*ENG	[0 to 200 / 80 / 1 deg/step]			
	[Reload Permit Setting]					
	Specifies the setting of the force	ed reload p	permit for hot temperature in color mode.			
015	Forced Reload Time:Hot	*ENG	[0 to 100 / 9 / 1 sec/step]			
	[Reload Permit Setting Temp.]					
	Specifies the settings of the reload permit for cold temperature in BW mode.					
016	Temp.:Delta:Cold:BW:Center	*ENG	[0 to 200 / 5 / 1 deg/step]			
017	Temp.:Delta:Cold:BW:End	*ENG	[0 to 200 / 5 / 1 deg/step]			
018	Temp.Delta:Cold:BW:Press	*ENG	[0 to 200 / 80 / 1 deg/step]			
	[Reload Permit Setting]					
	Specifies the setting of the forced reload permit for cold temperature in BW mode.					

019	Forced Reload Time:Cold:BW	*ENG	[0 to 100 / 9 / 1 sec/step]
	[Reload Permit Setting] Specifies the settings of the relo	oad permit	for cold temperature in BW mode 2.
020	Temp.:Delta:Cold:BW2:Cent	*ENG	[0 to 200 / 15 / 1 deg/step]
021	Temp.:Delta:Cold:BW2:End	*ENG	[40 to 200 / 100 / 1 deg/step]
022	Temp.Delta:Cold:BW2:Press	*ENG	[0 to 200 / 100 / 1 deg/step]
[Forced Ready Set] Specifies the setting of the forced reload permit for cold temperature in BW m			
023	Time:Cold:BW2	*ENG	[0 to 100 / 30 / 1 sec/step]

1102	[Feed Permit Setting]				
1102	Specified the settings of the pa	Specified the settings of the paper feeding timing.			
001	Temp.:Lower Delta:Center	*ENG	[0 to 200 / 10 / 1 deg/step]		
002	Temp.:Lower Delta:End	*ENG	[0 to 200 / 10 / 1 deg/step]		
003	Temp.:Upper Delta:Center	*ENG	[0 to 200 / 30 / 1 deg/step]		
004	Temp.:Upper Delta:End	*ENG	[0 to 200 / 30 / 1 deg/step]		
005	Temp.:Lower Delta:Press	*ENG	[0 to 200 / 100 / 1 deg/step]		
006	Rotation Time	*ENG	[0 to 100 / 0 / 1 sec/step]		
007	Temp.:Lower Delta:Center:Sp.1	*ENG	[0 to 200 / 5 / 1 deg/step]		
800	Temp.:Lower Delta:End:Sp.1	*ENG	[0 to 200 / 5 / 1 deg/step]		
009	Temp.:Upper Delta:Center:Sp.1	*ENG	[0 to 200 / 30 / 1 deg/step]		
010	Temp.:Upper Delta:End:Sp.1	*ENG	[0 to 200 / 30 / 1 deg/step]		
011	Temp.:Lower Delta:Press:Sp.	*ENG	[0 to 200 / 15 / 1 deg/step]		

012	Rotation Time:Sp.1	*ENG	[0 to 100 / 0 / 1 sec/step]
013	Temp.:Lower Delta:Center:Sp.2	*ENG	[0 to 200 / 5 / 1 deg/step]
014	Temp.:Lower Delta:End:Sp.2	*ENG	[0 to 200 / 5 / 1 deg/step]
015	Temp.:Upper Delta:Center:Sp.2	*ENG	[0 to 200 / 15 / 1 deg/step]
016	Temp.:Upper Delta:End:Sp.2	*ENG	[0 to 200 / 15 / 1 deg/step]
017	Temp.:Lower Delta:Press:Sp.	*ENG	[0 to 200 / 100 / 1 deg/step]
018	Rotation Time:Sp2	*ENG	[0 to 100 / 0 / 1 sec/step]
019	Feed Permit Time	*ENG	[0 to 200 / 60 / 1 sec/step]

1105	[Print Target Temp]			
	(Printing Mode, Roller Type, [Color], Simplex/Duplex) Roller Type → Center and Ends: Heating roller, Pressure → Pressure roller Paper Type → Plain, Thin, Thick, OHP, Middle Thick, Special			
001	Plain 1:FC:Center	*ENG	[100 to 180 / 140 / 1 deg/step]	
001	Specifies the heating roller targ	get tempero	ature for the ready condition in full color printing.	
	Plain 1:FC:Press	*ENG	[0 to 200 / 120 / 1 deg/step]	
002	Specifies the pressure roller target temperature for the ready condition in full color printing.			
003	Plain 1:BW:Center	*ENG	[180 to 100 / 140 / 1 deg/step]	
003	Specifies the heating roller target temperature for the ready condition in BW printing.			
004	Plain 1:BW:Press	*ENG	[0 to 200 / 120 / 1 deg/step]	
004	Specifies the pressure roller target temperature for the ready condition in BW printing.			
005	Plain2:FC:Center	*ENG	[100 to 180 / 145 / 1 deg/step]	
003	Specifies the heating roller target temperature for the ready condition in full color printing.			

	Plain2:FC:Press	*ENG	[0 to 200 / 120 / 1 deg/step]	
006	Specifies the pressure roller target temperature for the ready condition in full coloe printing.			
007	Plain2:BW:Center	*ENG	[100 to 180 / 140 / 1 deg/step]	
007	Specifies the heating roller targ	get tempero	ature for the ready condition in BW printing.	
008	Plain2:BW:Press	*ENG	[0 to 200 / 120 / 1 deg/step]	
006	Specifies the pressure roller ta	rget temper	rature for the ready condition in BW printing.	
009	Thin:FC:Center	*ENG	[100 to 180 / 135 / 1 deg/step]	
010	Thin:FC:Press	*ENG	[0 to 200 / 120 / 1 deg/step]	
011	Thin:BW:Center	*ENG	[100 to 180 / 135 / 1 deg/step]	
012	Thin:BW:Press	*ENG	[0 to 200 / 120 / 1 deg/step]	
013	M-thick:FC:Center	*ENG	[100 to 180 / 150 / 1 deg/step]	
014	M-thick:FC:Press	*ENG	[0 to 200 / 120 / 1 deg/step]	
015	M-thick:BW:Center	*ENG	[100 to 180 / 150 / 1 deg/step]	
016	M-thick:BW:Press	*ENG	[0 to 200 / 120 / 1 deg/step]	
017	Thick 1:FC:Center	*ENG	[100 to 180 / 148 / 1 deg/step]	
018	Thick 1:FC:Press	*ENG	[0 to 200 / 120 / 1 deg/step]	
019	Thick 1:BW:Center	*ENG	[100 to 180 / 148 / 1 deg/step]	
020	Thick 1:BW:Press	*ENG	[0 to 200 / 120 / 1 deg/step]	
021	Thick2:FC:Center	*ENG	[100 to 180 / 158 / 1 deg/step]	
022	Thick2:FC:Press	*ENG	[0 to 200 / 120 / 1 deg/step]	
023	Thick2:BW:Center	*ENG	[100 to 180 / 158 / 1 deg/step]	
024	Thick2:BW:Press	*ENG	[0 to 200 / 120 / 1 deg/step]	
025	Thick3:FC:Center	*ENG	[100 to 180 / 163 / 1 deg/step]	
026	Thick3:FC:Press	*ENG	[0 to 200 / 120 / 1 deg/step]	
027	Thick3:BW:Center	*ENG	[100 to 180 / 163 / 1 deg/step]	

028	Thick3:BW:Press	*ENG	[0 to 200 / 120 / 1 deg/step]
029	Special1:FC:Center	*ENG	[100 to 180 / 145 / 1 deg/step]
030	Special1:FC:Press	*ENG	[0 to 200 / 120 / 1 deg/step]
031	Special 1:BW:Center	*ENG	[100 to 180 / 145 / 1 deg/step]
032	Special 1:BW:Press	*ENG	[0 to 200 / 120 / 1 deg/step]
033	Special2:FC:Center	*ENG	[100 to 180 / 168 / 1 deg/step]
034	Special2:FC:Press	*ENG	[0 to 200 / 120 / 1 deg/step]
035	Special2:BW:Center	*ENG	[100 to 180 / 168 / 1 deg/step]
036	Special2:BW:Press	*ENG	[0 to 200 / 120 / 1 deg/step]
037	Special3:FC:Center	*ENG	[100 to 180 / 158 / 1 deg/step]
038	Special3:FC:Press	*ENG	[0 to 200 / 120 / 1 deg/step]
039	Special3:BW:Center	*ENG	[100 to 180 / 158 / 1 deg/step]
040	Special3:BW:Press	*ENG	[0 to 200 / 120 / 1 deg/step]
041	Envelop:Center	*ENG	[100 to 180 / 168 / 1 deg/step]
042	Envelop:Press	*ENG	[0 to 200 / 120 / 1 deg/step]
101	Plain 1:FC:Center:Low Speed	*ENG	[100 to 180 / 133 / 1 deg/step]
102	Plain1:FC:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
103	Plain 1:BW:Center:Low Speed	*ENG	[100 to 180 / 133 / 1 deg/step]
104	Plain1:BW:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
105	Plain2:FC:Center:Low Speed	*ENG	[100 to 180 / 138 / 1 deg/step]
106	Plain2:FC:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
107	Plain2:BW:Center:Low Speed	*ENG	[100 to 180 / 138 / 1 deg/step]
108	Plain2:BW:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
109	M-thick:FC:Center:Low Speed	*ENG	[100 to 180 / 143 / 1 deg/step]

110	M-thick:FC:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
111	M-thick:BW:Center:Low Speed	*ENG	[100 to 180 / 143 / 1 deg/step]
112	M-thick:BW:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
113	Thick 1:FC:Center:Low Speed	*ENG	[100 to 180 / 148 / 1 deg/step]
114	Thick 1:FC:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
115	Thick 1:BW:Center:Low Speed	*ENG	[100 to 180 / 148 / 1 deg/step]
116	Thick 1:BW:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
117	Special 1:FC:Center:Low Speed	*ENG	[100 to 180 / 138 / 1 deg/step]
118	Special 1:FC:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
119	Special 1:BW:Center:Low Speed	*ENG	[100 to 180/ 138 / 1 deg/step]
120	Special 1:BW:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
121	Special2:FC:Center:Low Speed	*ENG	[100 to 180 / 148 / 1 deg/step]
122	Special2:FC:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
123	Special2:BW:Center:Low Speed	*ENG	[100 to 180 / 148 / 1 deg/step]
124	Special2:BW:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
125	Plain 1: Glossy: Center	*ENG	[100 to 180 / 138 / 1 deg/step]
126	Plain 1: Glossy: Press	*ENG	[0 to 200 / 120 / 1 deg/step]
127	Plain2:Glossy:Center	*ENG	[100 to 180 / 143 / 1 deg/step]
128	Plain2:Glossy:Press	*ENG	[0 to 200 / 120 / 1 deg/step]
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129	M-thick:Glossy:Center	*ENG	[100 to 180 / 148 / 1 deg/step]
130	M-thick:Glossy:Press	*ENG	[0 to 200 / 120 / 1 deg/step]
131	OHP:Center	*ENG	[100 to 180 / 158 / 1 deg/step]
132	OHP:Press	*ENG	[0 to 200 / 120 / 1 deg/step]
133	Envelop:Center:Low Speed	*ENG	[100 to 180 / 163 / 1 deg/step]
134	Envelop:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
135	Thin:FC:Center:Low Speed	*ENG	[100 to 180 / 128 / 1 deg/step]
136	Thin:FC:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
137	Thin:BW:Center:Low Speed	*ENG	[100 to 180 / 128 / 1 deg/step]
138	Thin:BW:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
139	Thick4:FC:Center	*ENG	[100 to 180 / 168 / 1 deg/step]
140	Thick4:FC:Press	*ENG	[0 to 200 / 120 / 1 deg/step]
141	Thick4:BW:Center	*ENG	[100 to 180 / 168 / 1 deg/step]
142	Thick4:BW:Press	*ENG	[0 to 200 / 120 / 1 deg/step]

1106	[Fusing Temp. Display]		
001	Heat Center	-	[-10 to 250 / - / 1 deg/step]
002	Heat End	-	Displays the temperature of the heating roller.
003	Press Center	-	[-10 to 250 / - / 1 deg/step]
004	Press End	-	Displays the temperature of the heating roller.

1107	07 [Standby Target Temp. Setting]				
	Stanby/Preheat1:Center	*ENG	[0 to 125 / 90 / 1 sec/step]		
001	Specifies the time that the fusing heater turns off after the fusing unit temperature has reached its target temperature.				
000	Stanby/Preheat1: Press	*ENG	[0 to 125 / 90 / 1 deg/step]		
002	Specifies the temperature of the pressure roller for the ready or energy save 1 mode.				

003	Preheat2:Center	*ENG	[0 to 125 / 90 / 1 sec/step]		
003	Specifies the temperature of the heating roller for the ready or energy save 2 mode.				
004	Preheat2:Press	*ENG	[0 to 125 / 90 / 1 deg/step]		
004	Specifies the temperature of the	e pressure r	roller for the energy save 2 mode.		
005	Low Power:Center	*ENG	[0 to 125 / 90 / 1 sec/step]		
003	Specifies the temperature of the heating roller for the low power mode.				
006	Low Power:Press	*ENG	[0 to 125 / 60 / 1 deg/step]		
000	Specifies the temperature of the pressure roller for the low power mode.				
007	Print Ready:Center	*ENG	[0 to 180 / 145 / 1 deg/step]		
007	Specifies the temperature of the heating roller for the print ready condition.				
000	Print Ready:Press	*ENG	[0 to 200 / 120 / 1 deg/step]		
008	Specifies the temperature of the pressure roller for the print ready condition.				

1108	[After Reload/Job Target Temp.]				
001	Center	*ENG	[0 to 180 / 145 / 1 deg/step]		
001	Specifies the temperature of the heating roller after re-load or job.				
000	Press *ENG [0 to 200 / 120 / 1 deg/step]				
002	Specifies the temperature of the pressure roller after re-load or job.				

1111	[Environment Correction:Fusing]			
	Temp.: Threshold: Low	*ENG	[0 to 100 / 17 / 1 deg/step]	
001	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.			
	Temp.: Threshold: High *ENG [0 to 100 / 30 / 1 deg/step]			
002	Specifies the threshold temperature for high temperature. If the fusing temperature is 30°C or more, the machine executes the fusing mode for high temperature.			

	Low Temp. Correction	*ENG	[0 to 15 / 5 / 1 deg/step]	
003	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.			
	High Temp. Correction	*ENG	[0 to 15 / 0 / 1 deg/step]	
004	-	e target temperature. If the fusing temperature is ature is added to the target temperature.		
005	Job Low Temp. Correction	*ENG	[0 to 100 / 5 / 0.1 deg/step]	
006	Job High Temp. Correction	*ENG	[0 to 100 / 0 / 0.1 deg/step]	
007	Job Low Temp. Correction:Sp.	*ENG	[0 to 100 / 5 / 0.1 deg/step]	
008	Job High Temp. Correction:Sp.	*ENG	[0 to 100 / 0 / 0.1 deg/step]	

1113	[Curl Correction]				
001	Execute Pattern	*ENG	[0 to 2 / 0 / 1 /step] 0: Off, 1: On (No Decurl), 2: On		
	Selects the curl correction type				
002	Humidity:Threshold:M-humid	*ENG	[0 to 100 / 1 / 1 %/step]		
002	Specifies the threshold betwee	n low and	middle humidity.		
003	Humidity:Threshold:H-humid	*ENG	[0 to 100 / 65 / 1 %/step]		
003	Specifies the threshold between middle and high humidity.				
004	Permit Temp.:Delta:Press:M- humid	*ENG	[0 to 200 / 60 / 1 deg/step]		
	Specifies the threshold temperature for the curl control in middle humidity.				
005	Permit Temp.:Delta:Press:H- humid	*ENG	[0 to 200 / 50 / 1 deg/step]		
	Specifies the threshold temperature for the curl control in high humidity.				
006	Permit Temp.:Delta:Press:M- humid:No Decurl	*ENG	[0 to 200 / 50 / 1 deg/step]		

	Specifies the threshold temperature for the no curl control in middle humidity.					
007	Permit Temp.:Delta:Press:H- humid:No Decurl	*ENG	[0 to 200 / 40 / 1 deg/step]			
	Specifies the threshold tempero	ature for th	e no curl control in high humidity.			
	CPM:M-humid	*ENG	[0 to 100 / 80 / 1 %/step]			
800	Specifies the CPM ratio of the decurl control against to the normal operation in middle humidity.					
	CPM:H-humid	*ENG	[0 to 100 / 65 / 1 %/step]			
009	Specifies the CPM ratio of the decurl control against to the normal operation in high humidity.					
	CPM:M-humid:No Decurl	*ENG	[0 to 100 / 80 / 1 %/step]			
010	Specifies the CPM ratio against of the no decurl control to the normal operation in middle humidity.					
011	CPM:H-humid:No Decurl	*ENG	[0 to 100 / 65 / 1 %/step]			
	Specifies the CPM ratio against of the no decurl control to the normal operation in high humidity.					

1115	[Target Temp. Correction]			
001	Temp.:Delta:End	*ENG	[-100 to 100 / 0 / 1 deg/step]	
Specifies the different temperature between end and center of the heating roller.				

1141	[Fusing SC Issue Time Info]			
001	SC Number	*ENG	Displays the issued SC number.	

101	Htg Roller:Ctr Det1	*ENG
102	Htg Rolloer:End Det1	*ENG
103	Htg Roller:Ctr Det1	*ENG
104	Htg Roller:End Det1	*ENG
151	Htg Roller:Ctr Det2	*ENG
152	Htg Rolloer:End Det2	*ENG
153	Press Roller:Ctr Det2	*ENG
154	Press Roller:End Det2	*ENG
201	Htg Roller:Ctr Det3	*ENG
202	Htg Rolloer:End Det3	*ENG
203	Press Roller:Ctr Det3	*ENG
204	Press Roller:End Det3	*ENG

[-50 to 300 / - / 1 deg/step]
Displays the temperature at the center of the heating roller when an SC was issued.

1142	[Fusing Jam Detection]				
	[0 or 1 / 0 / -]				
001	Enables or disables the fusing consecutive jam (three times) SC detection.				
	0: No detection, 1: Detection				

1151	[Pressure Setting]				
	Pressure Change ON/OFF	*ENG	[0 or 1 / 1 / -]		
001	Enables or disables the pressure switch 0: OFF , 1: ON	ning contro	l for the fusing unit.		
000	Pressure Position 1	*ENG	[0 to 10,000 / 420 / 10 msec/step]		
Specifies the rotation time of the pressure roller contact motor for the pressure					
000	Pressure Position2	*ENG	[0 to 10,000 / 660 / 10 msec/step]		
003	Specifies the rotation time of the pressure roller contact motor for the pressure position 2.				

004	Pressure Position3	*ENG	[0 to 10,000 / 2130 / 10 msec/step]		
004	Specifies the rotation time of the pressure roller contact motor for the pressure position				
	Depressure Position	*ENG	[0 to 10,000 / 220 / 10 msec/step]		
005	Specifies the rotation time of the pressu (no pressure).	re roller co	ontact motor for the depression position		
	Shift Time	*ENG	[0 to 3600 / 60 / 1 sec/step]		
011		-	If the machine does not get any jobs for , the machine depresses the fusing unit.		
101	Pressure:Plain 1/2	*ENG	[0 to 3 / 3 / 1 /step]		
	Sets the default pressure position of the fusing unit for each paper type in normal speed. O: Depression position (no pressure) 1: Position 1 (less pressure) 2: Position 2 3: Position 3 (strongest pressure)				
102	Pressure:Thin	*ENG	[0 to 3 / 3 / 1 /step]		
103	Pressure:M-thick	*ENG	[0 to 3 / 3 / 1 /step]		
104	Pressure:Thick1	*ENG	[0 to 3 / 3 / 1 /step]		
105	Pressure:Thick2	*ENG	[0 to 3 / 3 / 1 /step]		
106	Pressure:Thick3	*ENG	[0 to 3 / 3 / 1 /step]		
107	Pressure:Special 1	*ENG	[0 to 3 / 3 / 1 /step]		
108	Pressure:Special2	*ENG	[0 to 3 / 3 / 1 /step]		
109	Pressure:Special3	*ENG	[0 to 3 / 3 / 1 /step]		
110	Pressure:Envelope	*ENG	[0 to 3 / 1 / 1 /step]		
151	Pressure:Plain 1/2:Low Speed	*ENG	[0 to 3 / 3 / 1 /step]		

	Sets the default pressure position of the fusing unit for each paper type in low speed.			
	0: Depression position (no pressure)			
	1: Position 1 (less pressure)			
	2: Position 2			
	3: Position 3 (strongest pressure)			
152	Pressure:M-thick:Low Speed	*ENG	[0 to 3 / 3 / 1 /step]	
153	Pressure:Thick 1:Low Speed	*ENG	[0 to 3 / 3 / 1 /step]	
154	Pressure:Special 1:Low Speed	*ENG	[0 to 3 / 3 / 1 /step]	
155	Pressure:Special2:Low Speed	*ENG	[0 to 3 / 3 / 1 /step]	
156	Pressure:Plain 1/2:Glossy	*ENG	[0 to 3 / 3 / 1 /step]	
157	Pressure:M-thick:Glossy	*ENG	[0 to 3 / 3 / 1 /step]	
158	Pressure:OHP	*ENG	[0 to 3 / 3 / 1 /step]	
159	Pressure:Envelope:Low Speed	*ENG	[0 to 3 / 3 / 1 /step]	
160	Pressure:Thin:Low Speed	*ENG	[0 to 3 / 3 / 1 /step]	
	Pressure:Thick4	*ENG	[0 to 3 / 3 / 1 /step]	
	Sets the default pressure position of the fusing unit for thick 4 paper.			
161	0: Depression position (no pressure)			
101	1: Position 1 (less pressure)			
	2: Position 2			
	3: Position 3 (strongest pressure)			
	Pressure:Postcard	*ENG	[0 to 3 / 3 / 1 /step]	
	Sets the default pressure position of the fusing unit for postcard.			
162	0: Depression position (no pressure)			
	1: Position 1 (less pressure)			
	2: Position 2			
	3: Position 3 (strongest pressure)			
201	Filler Edge Detection Counter	ENG	[0 to 9,000,000 / - / 1 /step]	
201	Displays the detection time for the edge of the pressure roller actuator.			

1152	[Fusing Nip Band Check]			
001	Execute	-	[0 or 1 / 0 / 1]	
	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 / 1 sec/step]	
002	Specifies the fusing rotation time before executing SP1109-001.			
003	Stop Time	* ENG	[0 to 100 / 20 / 1 sec/step]	
003	Specifies the time for measuring the nip.			
00.4	Pressure Position	* ENG	[1 to 3 / 3 / 1]	
004	Specifies the pressure position for measuring the nip.			

1153	[Fuser Cleaning]			
001	Compulsion execution	-	Execute the fusing cleaning mode.	
	Operation interval	*ENG	[1 to 300 / 0 / 1 K/step]	
002	Adjusts the execution interval for the fusing cleaning mode. 1K= 100 sheets			
003	Control Temp.	*ENG	[0 to 200 / 180 / 1°C/step]	
003	Specifies the heating roller temperature for the fusing cleaning mode.			
004	Page Count	*ENG	[1 to 300000 / - / 1 page/step]	
004	Displays the page counter for the fusing cleaning mode.			

1801	[Motor Speed Adj.]		
001	Registration:Plain:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]
002	Registration:Plain:High	*ENG	[-2 to 2 / -0.1 / 0.1 %/step]
003	Registration:Middle Thick:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]

004	Registration:Middle Thick:Mid	*ENG	[-2 to 2 / -0.1 / 0.1 %/step]
005	Registration:Middle Thick:High	*ENG	[-2 10 2 / -0.1 / 0.1 %/ step]
006	Registration:Thick 1:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]
007	Registration:Thick1:Mid	*ENG	[-2 to 2 / -0.1 / 0.1 %/step]
008	Registration:Thick 2:Low	*ENG	[24- 2 / 11 / 019 / /4]
009	Registration:Thick 3:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]
010	Duplex CW:Plane:Low	*ENG	
011	Duplex CW:Normal:High	*ENG	
012	Duplex CW:Middle Thick:Low	*ENG	
013	Duplex CW:Middle Thick:Mid	*ENG	
014	Duplex CW:Middle Thick:High	*ENG	[-4 to 4 / 0.0 / 0.1 %/step]
015	Duplex CW:Thick1:Low	*ENG	
016	Duplex CW:Thick1:Mid	*ENG	
017	Duplex CW:Thick2:Low	*ENG	
018	Duplex CW:Thick3:Low	*ENG	
019	Duplex CCW:Normal:High	*ENG	
020	Duplex CCW:Middle Thick:Mid	*ENG	[4 4 / 0.0 / 0.1 9/ / 4]
021	Duplex CCW:Middle Thick:high	*ENG	[-4 to 4 / 0.0 / 0.1 %/step]
023	Duplex CCW:Thick1:Mid	*ENG	
024	Reverse CW:Normal:High	*ENG	[-4 to 4 / -0.5 / 0.1%/step]
025	Reverse CW:Middle Thick:Mid	*ENG	[-4 to 4 / 0 / 0.1 %/step]
026	Reverse CW:Middle Thick:High	*ENG	[-4 to 4 / -0.5 / 0.1%/step]

028	Reverse CW:Thick1:Mid	*ENG	
029	Reverse CCW:Normal:High	*ENG	
030	Reverse CCW:Middle Thick:Mid	*ENG	[-4 to 4 / 0 / 0.1 %/step]
031	Reverse CCW:Middle Thick:High	*ENG	
033	Reverse CCW:Thick1:Mid	*ENG	
034	Feed:Plain:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]
035	Feed:Plain:High	*ENG	[-2 to 2 / -0.1 / 0.1 %/step]
036	Feed:Middle thick:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]
037	Feed:Middle thick:Mid	*ENG	[24.2/01/01%/4]
038	Feed:Middle thick:High	*ENG	[-2 to 2 / - 0.1 / 0.1 %/step]
039	Feed:Thick 1:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]
040	Feed:Thick 1:Mid	*ENG	[-2 to 2 / -0.1 / 0.1 %/step]
041	Feed:Thick 2:Low	*ENG	[0.0/11/010//.]
042	Feed:Thick 3:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]
043	Bridge Motor:Low	*ENG	
044	Bridge Motor:Mid	*ENG	[-4 to 4 / 0 / 0.1 %/step]
045	Bridge Motor:High	*ENG	
060	KOpcDevMot:High	*ENG	
061	KOpcDevMot:Mid	*ENG	[-4 to 4 / -0.3 / 0.01 %/step]
062	KOpcDevMot:Low	*ENG	
063	MOpcDevMot:High	*ENG	[-10 to 10 / 0 / 1 step/step]
064	MOpcDevMot:Mid	*ENG	[-9 to 9 / 0 / 1 step/step]
065	MOpcDevMot:Low	*ENG	[-14 to 14 / 0 / 1 step/step]
066	COpcDevMot:High	*ENG	[-10 to 10 / 0 / 1 step/step]
067	COpcDevMot:Mid	*ENG	[-9 to 9 / 0 / 1 step/step]
068	COpcDevMot:Low	*ENG	[-14 to 14 / 0 / 1 step/step]

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069	YOpcDevMot:High	*ENG	[-10 to 10 / 0 / 1 step/step]		
070	YOpcDevMot:Mid	*ENG	[-9 to 9 / 0 / 1 step/step]		
071	YOpcDevMot:Low	*ENG	[-14 to 14 / 0 / 1 step/step]		
072	Fusing: High	*ENG	[-4 to 4 / -0.6 / 0.01 %/step]		
073	Fusing: Mid	*ENG	[-4 to 4 / -0.8 / 0.01 %/step]		
074	Fusing: Low	*ENG	[-4 to 4 / -0.3 / 0.01 %/step]		
075	TransferMot:High	*ENG			
076	TransferMot:Mid	*ENG	[-4 to 4 / -0.1 / 0.01 %/step]		
077	TransferMot:Low	*ENG			
078	TonerMot	*ENG	[-30 to 30 / 10 / 5 %/step]		
079	Fusing: 1200	*ENG	[-4 to 4 / -0.6 / 0.01 %/step]		
100	Drum Adjust	*ENG	[0 or 1 / 1 / 1] 0: Off, 1: On		
	Enables or disables the drum amplitude adjustment.				
101	MOpcDevMot:High	*ENG			
102	COpcDevMot:High	*ENG	[-7 to 7 / 0 / 1 step/step]		
103	YOpcDevMot:High	*ENG			
104	MOpcDevMot:Mid	*ENG			
105	COpcDevMot:Mid	*ENG	[-7 to 7 / 0 / 1 step/step]		
106	YOpcDevMot:Mid	*ENG			
107	MOpcDevMot:Low	*ENG			
108	COpcDevMot:Low	*ENG	[-14 to 14 / 0 / 1 step/step]		
109	YOpcDevMot:Low	*ENG			
110	MOpcDevMot:1200	*ENG			
111	COpcDevMot: 1200	*ENG	[-7 to 7 / 0 / 1 step/step]		
112	YOpcDevMot:1200	*ENG			

120 Long:Registration:Plain:High				
122 Long:Registration:Middle Thick:High *ENG 123 Long:Registration:Middle Thick:Middle *ENG 124 Long:Registration:Middle Thick:Low *ENG [-2 to 2 / -1.1 / 0.1 %/step] 125 Long:Registration:Thick 1:Middle *ENG [-2 to 2 / -1.1 / 0.1 %/step] 126 Long:Registration:Thick 1:Low *ENG [-2 to 2 / -1.1 / 0.1 %/step] 127 Long:Registration:Thick 2:Low *ENG [-2 to 2 / -1.1 / 0.1 %/step] 128 Long:Registration:Thick 3:Low *ENG [-2 to 2 / -1.1 / 0.1 %/step] 129 Long:Fusing:Plain:High *ENG [-4 to 4 / 1.9 / 0.01 %/step] 130 Long:Fusing:Plain:Low *ENG [-4 to 4 / 2.1 / 0.01 %/step] 131 Long:Fusing:Middle Thick:High *ENG [-4 to 4 / 1.4 / 0.01 %/step] 132 Long:Fusing:Middle Thick:Middle *ENG [-4 to 4 / 1.4 / 0.01 %/step] 133 Long:Fusing:Middle Thick:Low *ENG [-4 to 4 / 2.1 / 0.01 %/step] 134 Long:Fusing:Thick 1:Middle *ENG [-4 to 4 / 2.0 / 0.01 %/step] 135 Long:Fusing:Thick 1:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step] 136 Long:Fusing:Thick 2:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step] 136 Long:Fusing:Thick 2:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step]	120	Long:Registration:Plain:High	*ENG	[-2 to 2 / -0.1 / 0.1 %/step]
Long:Registration:Middle	121	Long:Registration:Plain:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]
123 Eng. Registration: Middle Thick: Low *ENG 124 Long: Registration: Middle Thick: Low *ENG [-2 to 2 / -1.1 / 0.1 %/step] 125 Long: Registration: Thick 1: Middle *ENG [-2 to 2 / -1.1 / 0.1 %/step] 126 Long: Registration: Thick 1: Low *ENG [-2 to 2 / -1.1 / 0.1 %/step] 127 Long: Registration: Thick 2: Low *ENG [-2 to 2 / -1.1 / 0.1 %/step] 128 Long: Registration: Thick 3: Low *ENG [-2 to 2 / -1.1 / 0.1 %/step] 129 Long: Registration: Thick 3: Low *ENG [-4 to 4 / 1.9 / 0.01 %/step] 130 Long: Fusing: Plain: High *ENG [-4 to 4 / 1.9 / 0.01 %/step] 131 Long: Fusing: Middle Thick: High *ENG [-4 to 4 / 1.9 / 0.01 %/step] 132 Long: Fusing: Middle Thick: Middle *ENG [-4 to 4 / 1.4 / 0.01 %/step] 133 Long: Fusing: Middle Thick: Low *ENG [-4 to 4 / 2.1 / 0.01 %/step] 134 Long: Fusing: Thick 1: Middle *ENG [-4 to 4 / 2.0 / 0.01 %/step] 135 Long: Fusing: Thick 1: Low *ENG [-4 to 4 / 1.7 / 0.01 %/step] 136 Long: Fusing: Thick 2: Low *ENG [-4 to 4 / 1.7 / 0.	122	Long:Registration:Middle Thick:High	*ENG	
125 Long:Registration:Thick 1:Middle *ENG [-2 to 2 / -1 / 0.1 %/step] 126 Long:Registration:Thick 1:Low *ENG [-2 to 2 / -1.1 / 0.1 %/step] 127 Long:Registration:Thick 2:Low *ENG [-2 to 2 / -1.1 / 0.1 %/step] 128 Long:Registration:Thick 3:Low *ENG [-2 to 2 / -1.1 / 0.1 %/step] 129 Long:Fusing:Plain:High *ENG [-4 to 4 / 1.9 / 0.01 %/step] 130 Long:Fusing:Plain:Low *ENG [-4 to 4 / 2.1 / 0.01 %/step] 131 Long:Fusing:Middle Thick:High *ENG [-4 to 4 / 1.9 / 0.01 %/step] 132 Long:Fusing:Middle Thick:Middle *ENG [-4 to 4 / 1.4 / 0.01 %/step] 133 Long:Fusing:Middle Thick:Low *ENG [-4 to 4 / 2.1 / 0.01 %/step] 134 Long:Fusing:Thick 1:Middle *ENG [-4 to 4 / 2.0 / 0.01 %/step] 135 Long:Fusing:Thick 1:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step] 136 Long:Fusing:Thick 2:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step]	123		*ENG	[-2 to 2 / -0.1 / 0.1 %/step]
126 Long:Registration:Thick 1:Low *ENG [-2 to 2 / -1.1 / 0.1 %/step] 127 Long:Registration:Thick 2:Low *ENG [-2 to 2 / -1.1 / 0.1 %/step] 128 Long:Registration:Thick 3:Low *ENG [-2 to 2 / -1.1 / 0.1 %/step] 129 Long:Fusing:Plain:High *ENG [-4 to 4 / 1.9 / 0.01 %/step] 130 Long:Fusing:Plain:Low *ENG [-4 to 4 / 2.1 / 0.01 %/step] 131 Long:Fusing:Middle Thick:High *ENG [-4 to 4 / 1.9 / 0.01 %/step] 132 Long:Fusing:Middle Thick:Middle *ENG [-4 to 4 / 1.4 / 0.01 %/step] 133 Long:Fusing:Middle Thick:Low *ENG [-4 to 4 / 2.1 / 0.01 %/step] 134 Long:Fusing:Thick 1:Middle *ENG [-4 to 4 / 2.0 / 0.01 %/step] 135 Long:Fusing:Thick 1:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step] 136 Long:Fusing:Thick 2:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step]	124	Long:Registration:Middle Thick:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]
127 Long:Registration:Thick 2:Low *ENG [-2 to 2 / -1.1 / 0.1 %/step] 128 Long:Registration:Thick 3:Low *ENG [-2 to 2 / -1.1 / 0.1 %/step] 129 Long:Fusing:Plain:High *ENG [-4 to 4 / 1.9 / 0.01 %/step] 130 Long:Fusing:Plain:Low *ENG [-4 to 4 / 2.1 / 0.01 %/step] 131 Long:Fusing:Middle Thick:High *ENG [-4 to 4 / 1.9 / 0.01 %/step] 132 Long:Fusing:Middle Thick:Middle *ENG [-4 to 4 / 1.4 / 0.01 %/step] 133 Long:Fusing:Middle Thick:Low *ENG [-4 to 4 / 2.1 / 0.01 %/step] 134 Long:Fusing:Thick 1:Middle *ENG [-4 to 4 / 2.0 / 0.01 %/step] 135 Long:Fusing:Thick 1:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step] 136 Long:Fusing:Thick 2:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step]	125	Long:Registration:Thick 1:Middle	*ENG	[-2 to 2 / -1 / 0.1 %/step]
128 Long:Registration:Thick 3:Low *ENG [-2 to 2 / -1.1 / 0.1 %/step] 129 Long:Fusing:Plain:High *ENG [-4 to 4 / 1.9 / 0.01 %/step] 130 Long:Fusing:Plain:Low *ENG [-4 to 4 / 2.1 / 0.01 %/step] 131 Long:Fusing:Middle Thick:High *ENG [-4 to 4 / 1.9 / 0.01 %/step] 132 Long:Fusing:Middle Thick:Middle *ENG [-4 to 4 / 1.4 / 0.01 %/step] 133 Long:Fusing:Middle Thick:Low *ENG [-4 to 4 / 2.1 / 0.01 %/step] 134 Long:Fusing:Thick 1:Middle *ENG [-4 to 4 / 2.0 / 0.01 %/step] 135 Long:Fusing:Thick 1:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step] 136 Long:Fusing:Thick 2:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step]	126	Long:Registration:Thick 1:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]
129 Long:Fusing:Plain:High *ENG [-4 to 4 / 1.9 / 0.01 %/step] 130 Long:Fusing:Plain:Low *ENG [-4 to 4 / 2.1 / 0.01 %/step] 131 Long:Fusing:Middle Thick:High *ENG [-4 to 4 / 1.9 / 0.01 %/step] 132 Long:Fusing:Middle Thick:Middle *ENG [-4 to 4 / 1.4 / 0.01 %/step] 133 Long:Fusing:Middle Thick:Low *ENG [-4 to 4 / 2.1 / 0.01 %/step] 134 Long:Fusing:Thick 1:Middle *ENG [-4 to 4 / 2.0 / 0.01 %/step] 135 Long:Fusing:Thick 1:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step] 136 Long:Fusing:Thick 2:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step]	127	Long:Registration:Thick 2:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]
130 Long:Fusing:Plain:Low *ENG [-4 to 4 / 2.1 / 0.01 %/step] 131 Long:Fusing:Middle Thick:High *ENG [-4 to 4 / 1.9 / 0.01 %/step] 132 Long:Fusing:Middle Thick:Middle *ENG [-4 to 4 / 1.4 / 0.01 %/step] 133 Long:Fusing:Middle Thick:Low *ENG [-4 to 4 / 2.1 / 0.01 %/step] 134 Long:Fusing:Thick 1:Middle *ENG [-4 to 4 / 2.0 / 0.01 %/step] 135 Long:Fusing:Thick 1:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step] 136 Long:Fusing:Thick 2:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step]	128	Long:Registration:Thick 3:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]
131 Long:Fusing:Middle Thick:High *ENG [-4 to 4 / 1.9 / 0.01 %/step] 132 Long:Fusing:Middle Thick:Middle *ENG [-4 to 4 / 1.4 / 0.01 %/step] 133 Long:Fusing:Middle Thick:Low *ENG [-4 to 4 / 2.1 / 0.01 %/step] 134 Long:Fusing:Thick 1:Middle *ENG [-4 to 4 / 2.0 / 0.01 %/step] 135 Long:Fusing:Thick 1:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step] 136 Long:Fusing:Thick 2:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step]	129	Long:Fusing:Plain:High	*ENG	[-4 to 4 / 1.9 / 0.01 %/step]
132 Long:Fusing:Middle Thick:Middle *ENG [-4 to 4 / 1.4 / 0.01 %/step] 133 Long:Fusing:Middle Thick:Low *ENG [-4 to 4 / 2.1 / 0.01 %/step] 134 Long:Fusing:Thick 1:Middle *ENG [-4 to 4 / 2.0 / 0.01 %/step] 135 Long:Fusing:Thick 1:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step] 136 Long:Fusing:Thick 2:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step]	130	Long:Fusing:Plain:Low	*ENG	[-4 to 4 / 2.1 / 0.01 %/step]
133 Long:Fusing:Middle Thick:Low *ENG [-4 to 4 / 2.1 / 0.01 %/step] 134 Long:Fusing:Thick 1:Middle *ENG [-4 to 4 / 2.0 / 0.01 %/step] 135 Long:Fusing:Thick 1:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step] 136 Long:Fusing:Thick 2:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step]	131	Long:Fusing:Middle Thick:High	*ENG	[-4 to 4 / 1.9 / 0.01 %/step]
134 Long:Fusing:Thick 1:Middle *ENG [-4 to 4 / 2.0 / 0.01 %/step] 135 Long:Fusing:Thick 1:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step] 136 Long:Fusing:Thick 2:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step]	132	Long:Fusing:Middle Thick:Middle	*ENG	[-4 to 4 / 1.4 / 0.01 %/step]
135 Long:Fusing:Thick 1:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step] 136 Long:Fusing:Thick 2:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step]	133	Long:Fusing:Middle Thick:Low	*ENG	[-4 to 4 / 2.1 / 0.01 %/step]
136 Long:Fusing:Thick 2:Low *ENG [-4 to 4 / 1.7 / 0.01 %/step]	134	Long:Fusing:Thick 1:Middle	*ENG	[-4 to 4 / 2.0 / 0.01 %/step]
	135	Long:Fusing:Thick 1:Low	*ENG	[-4 to 4 / 1.7 / 0.01 %/step]
137 long:Fusing:Thick 3:low	136	Long:Fusing:Thick 2:Low	*ENG	[-4 to 4 / 1.7 / 0.01 %/step]
[4.6 4 / 1.7 / 6.6 1 / 6.6]	137	Long:Fusing:Thick 3:Low	*ENG	[-4 to 4 / 1.7 / 0.01 %/step]

1902	[Amplitude Control]		
001	Execute	*ENG	Execute the drum phase adjustment.
002	Result	*ENG	[0 to 3 / 0 / 1] Displays the result of the drum phase adjustment. 0: Successfully done 2: Sampling failure 3: Insufficient detection number

			[0 or 1 / 1 / -]	
003	Auto Execution	*ENG	Turns the automatic drum phase adjustment on or off.	
			0: Off, 1: On	

1050	[Fan Cooling Time Set]			
Adjust the rotation time for each fan motor c		r after a job end.		
002	Fusing Exit Fan	*ENG		
006	Main Suction Fan	*ENG		
007	Paper Exit Fan	*ENG		
800	PSU Fan	*ENG		
009	QSU Heater Cooling Fan	*ENG	[0 to 120 / 0 / 0.1 min./step]	
010	AC Control board Cooling Fan	*ENG		
011	Second Duct Fan	*ENG		
012	Toner Supply Cooling Fan	*ENG		

1051	[Fan Start Time Set]				
1951	Adjust the start time for each fan motor after a job end.				
002	Fusing Exit Fan	*ENG	[0 to 900 / 0 / 1 sec/step]		
006	Main Suction Fan	*ENG	[0 to 900 / 120 / 1 sec/step]		
007	Paper Exit Fan	*ENG	[0 to 900 / 0 / 1 sec/step]		
008	PSU Fan	*ENG	[0 to 900 / 120 / 1 sec/step]		
009	Fusing IH Coil Fan	*ENG			
010	IH Power Supply Fan	*ENG	[0 to 900 / 0 / 1 sec/step]		
011	Second Duct Fan	*ENG	[0 10 700 / 0 / 1 sec/ siep]		
012	Third Duct Fan	*ENG			

1952	[Fan Control Off Mode Time Set]				
1932	Specifies the time for fan control off mode.				
001	- *ENG [0 to 60 / 10 / 1 min./step]		[0 to 60 / 10 / 1 min./step]		

1953	[Extra Fan Control]				
1933	Configures the settings of extra fan control.				
001	Extra Fan Cooling State	*ENG	[0 or 1 / 0 / 1 /step] 0: Off, 1: On		
	Displays the extra fan cooling is On or Off.				
002	Extra Fan Cooling: Time: Threshold	*ENG	[0 to 180 / C2.5a: 110, C2.5b: 100 / 1 min./step]		
003	Extra Fan Cooling: Rotat: Threshold	*ENG	[0 to 999999999 / 0 / 1 min./step]		
004	Extra Fan Cooling: Start Date	*ENG	Displays the execution time and date of the extra fan cooling.		
005	Extra Fan Cooling Time	*ENG	[0 to 120 / 30 / 0.1 min./step]		
005	Specifies the execution time for the extra fan cooling.				

1954	[Extra Fan Control]				
Configures the settings of extra fan control.		l.			
002	Fan Cooling Time:Fusing Exit Fan:Initial	*ENG	[0 to 120 / 0 / 0.1 min./step]		
006	Fan Cooling Time:Main Suction Fan:Initial	*ENG	[0 to 120 / 0 / 0.1 min./step]		
007	Fan Cooling Time:Paper Exit Fan:Initial	*ENG	[0 to 120 / 0 / 0.1 min./step]		
008	Fan Cooling Time:PSU Fan:Initial	*ENG	[0 to 120 / 0 / 0.1 min./step]		
009	Fan Cooling Time:Fusing IH Coil Fan:Initial	*ENG	[0 to 120 / 0 / 0.1 min./step]		

010	Fan Cooling Time:IH Power Supply Fan:Initial	*ENG	[0 to 120 / 0 / 0.1 min./step]
011	Fan Cooling Time:Second Duct Fan:Initial	*ENG	[0 to 120 / 0 / 0.1 min./step]
012	Fan Cooling Time:Third Duct Fan:Initial	*ENG	[0 to 120 / 0 / 0.1 min./step]

Main SP Tables-2

SP2-XXX (Drum)

	[Charge DC Voltage] Charge	Roller DC \	/oltage Adjustment		
2005	(Paper Type, Process Speed, Color)				
2003	Paper Type 🕏 Plain, Thick 1, Thick 2				
	Plain: High speed, Thick 1: Middle speed, Thick 2&FINE: Low speed				
	Adjusts the DC component of t	he charge i	roller bias in the various print modes.		
	adjusting these settings does no	ot effect wh	cally adjusted during process control; therefore, ile process control mode (SP3-041-1 Default: cess control mode with SP3-041-1, the values in		
001	Plain: Bk	*ENG			
002	Plain: M	*ENG			
003	Plain: C	*ENG			
004	Plain: Y	*ENG			
005	Thick 1: Bk	*ENG			
006	Thick 1: M	*ENG	[0 to 1000 / 690 / 10 –V/step]		
007	Thick 1: C	*ENG	[0 10 1000 / 070 / 10 – v / sieb]		
008	Thick 1: Y	*ENG			
009	Thick 2&FINE: Bk	*ENG			
010	Thick 2&FINE: M	*ENG			
011	Thick 2&FINE: C	*ENG			
012	Thick 2&FINE: Y	*ENG			
	[Charge DC: Correction]				
013	PCU:Plain	*ENG	[-100 to 100 / C3c: -26, C3d: -28 / 1 -V/ step]		
014	PCU:Thick 1	*ENG	[-100 to 100 / -29 / 1 -V/step]		

015	PCU:Thick 2&FINE	*ENG	[-100 to 100 / -28 / 1 -V/step]
016	HVP:Plain	*ENG	[-100 to 100 / 20 / 1 -V/step]
017	HVP:Thick 1	*ENG	[-100 to 100 / 20 / 1 -V/step]
018	HVP: Thick 2&FINE	*ENG	[-100 to 100 / 29 / 1 -V/step]

2006	[Charge AC Voltage] Charge Roller AC Voltage Adjustment (Paper Type, Process Speed, Color) Paper Type → Plain, Thick 1, Thick 2 Plain: High speed, Thick 1: Middle speed, Thick 2&FINE: Low speed Adjusts the AC component of the charge roller bias in the various print modes. Charge bias (AC component) is adjusted by environment correction (SP2-007-xxx to SP2-011-xxxx). These SPs are activated only when SP2-012-1 is set to "1: manual control".		
001	Plain: Bk	*ENG	[0 to 3 / 1.9 / 0.01 KV/step]
002	Plain: M	*ENG	[0 to 3 / 1.9 / 0.01 KV/step]
003	Plain: C	*ENG	[0 to 3 / 1.9 / 0.01 KV/step]
004	Plain: Y	*ENG	[0 to 3 / 1.9 / 0.01 KV/step]
005	Thick 1: Bk	*ENG	[0 to 3 / 1.9 / 0.01 KV/step]
006	Thick 1: M	*ENG	[0 to 3 / 1.9 / 0.01 KV/step]
007	Thick 1: C	*ENG	[0 to 3 / 1.9 / 0.01 KV/step]
008	Thick 1: Y	*ENG	[0 to 3 / 1.9 / 0.01 KV/step]
009	Thick 2&FINE: Bk	*ENG	[0 to 3 / 1.9 / 0.01 KV/step]
010	Thick 2&FINE: M	*ENG	[0 to 3 / 1.9 / 0.01 KV/step]
011	Thick 2&FINE: C	*ENG	[0 to 3 / 1.9 / 0.01 KV/step]
012	Thick 2&FINE: Y	*ENG	[0 to 3 / 1.9 / 0.01 KV/step]

2012	[Charge Output Control]
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001 AC Voltage	*ENG	Selects the AC voltage control type. [0 or 1 / 0 / 1 /step] 0: Process control 1: Manual control (AC voltages are decided with SP2006.)
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2013	[Environmental Correction: PCU]		
			Displays the environmental condition, which is measured in absolute humidity.
			[1 to 5 / – / 1 /step]
	Current Environmental FC:	4	1: LL (LL $\leq 4.3 \text{ g/m}^3$)
001	Display	*ENG	$2: ML (4.3 < ML \le 11.3 g/m^3)$
			$3: MM (11.3 < MM \le 18.0 g/m^3)$
			4: MH (18.0 < MH <= 24.0 g/m ³)
			5: HH (24.0 g/m ³ < HH)
			Selects the environmental condition manually.
			[0 to 5 / 0 / 1 /step]
002	Forced Setting	*ENG	0: The environmental condition is determined
			automatically.
			1: LL, 2: ML, 3: MM, 4: MH, 5: HH
003	Absolute Humidity: Threshold	*ENG	Changes the humidity threshold between LL and ML.
	1		[0 to 100 / 3.0 / 0.01 g/m ³ /step]
004	Absolute Humidity: Threshold	*ENG	Changes the humidity threshold between ML and MM.
	2	2. , 5	[0 to 100 / 8.0 / 0.01 g/m ³ /step]
005	Absolute Humidity: Threshold	*ENG	Changes the humidity threshold between MM and MH.
			[0 to 100 / 15.0 / 0.01 g/m ³ /step]
006	Absolute Humidity: Threshold	*ENG	Changes the humidity threshold between MH and HH.
	4		[0 to 100 / 22.0 / 0.01 g/m ³ /step]

007	Current Temp. FC: Display	*ENG	Displays the current temperature. [0 to 100 / - / 1 deg/step]
008	Current Relative Humidity FC: Display	*ENG	Displays the current relative humidity. [0 to 100 / - / 1%RH/step]
009	Current Absolute Humidity FC: Display	*ENG	Displays the absolute humidity. [0 to 100 / - / 0.01 g/m ³ /step]
010	Previous Environmental Bk: 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. Bk: Display	*ENG	Displays the previous temperature. [0 to 100 / - / 1 deg/step]
012	Previous Relative Humidity Bk: Display	*ENG	Displays the previous relative humidity. [0 to 100 / - / 1%RH/step]
013	Previous Absolute Humidity Bk: Display	*ENG	Displays the previous absolute humidity. [0 to 100 / - / 0.01 g/m³/step]

2015	[Charge AC Adj: Result] Displays a result of the AC charge adjustment.		
001	Bk	*ENG [0 to 9 / 0 / 1 /step]	
002	М	*ENG	0: Success
003	С	*ENG	1: Out of tolerance range 2: Out of adjustable range
004	Υ	*ENG	3: Adjustment incompleted

	[Color Registration Correction] FA
2101	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. For details, see "Laser Optics Housing Unit" in the "Replacement and Adjustment" section. The value should be provided with the new laser optics housing unit.

001	Main Dot: Bk	*ENG	
002	Main Dot: Ma	*ENG	[510 + 511 / 0 / 1 4 + / + - 1
003	Main Dot: Cy	*ENG	[-512 to 511 / 0 / 1 dot/step]
004	Main Dot: Ye	*ENG	
005	Sub Line: Bk	*ENG	
006	Sub Line: Ma	*ENG	[142041 14202 / 0 / 1 1 / 1 / 1
007	Sub Line: Cy	*ENG	[-16384 to 16383 / 0 / 1 line/step]
008	Sub Line: Ye	*ENG	

2103	[Erase Margin Adjustment] (Area, Paper Size)		
	Adjusts the erase margin by deleting image data at the margins.		he margins.
001	Lead Edge Width	*ENG	[0, 0, 0, 0, 1, 2, 1, 0, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
002	Trail. Edge Width	*ENG	[0 to 9.9 / 4.2 / 0.1 mm/step]
003	Left	*ENG	[0+-00/2/01/+]
004	Right	*ENG	[0 to 9.9 / 2 / 0.1 mm/step]
006	Duplex Trail. L Size	*ENG	[0 to 4 / 1 / 0.1 mm/step]
007	Duplex Trail. M Size	*ENG	[0 to 4 / 0.8 / 0.1 mm/step]
008	Duplex Trail. S Size	*ENG	[0 to 4 / 0.6 / 0.1 mm/step]
009	Duplex Left Edge	*ENG	[04-15/02/01/]
010	Duplex Right Edge	*ENG	[0 to 1.5 / 0.3 / 0.1 mm/step]
011	Duplex Trail. L Size:Thick	*ENG	[0 to 4 / 1 / 0.1 mm/step]
012	Duplex Trail. M Size:Thick	*ENG	[0 to 4 / 0.8 / 0.1 mm/step]
013	Duplex Trail. S Size:Thick	*ENG	[0 to 4 / 0.6 / 0.1 mm/step]
014	Duplex Left Edge:Thick	*ENG	[0.1.5 / 0.2 / 0.1 / 1]
015	Duplex Right Edge:Thick	*ENG	[0 to 1.5 / 0.3 / 0.1 mm/step]

016	Lead Edge Width: Thin	*ENG	[0+,00/40/01/+]
017	Trail. Edge Width: Thin	*ENG	[0 to 9.9 / 4.2 / 0.1 mm/step]
018	Duplex Trail. L Size: Thin	*ENG	[0 to 4 / 1 / 0.1 mm/step]
019	Duplex Trail. M Size: Thin	*ENG	[0 to 4 / 0.8 / 0.1 mm/step]
020	Duplex Trail. S Size: Thin	*ENG	[0 to 4 / 0.6 / 0.1 mm/step]

2105	[LD Power Adj.] (Process Speed, Color)		
	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 to 120 / 100 / 1%/step]
002	High Speed: Ma	*ENG	Decreasing a value makes lines thinner on
003	High Speed: Cy	*ENG	the output. Increasing a value makes lines thicker on the
004	High Speed: Ye	*ENG	output.
005	Middle Speed: Bk	*ENG	[50 to 120 / 100 / 1%/step]
006	Middle Speed: Ma	*ENG	Decreasing a value makes lines thinner on
007	Middle Speed: Cy	*ENG	the output. Increasing a value makes lines thicker on the
800	Middle Speed: Ye	*ENG	output.
009	Low Speed: Bk	*ENG	[50 to 120 / 100 / 1%/step]
010	Low Speed: Ma	*ENG	Decreasing a value makes lines thinner on
011	Low Speed: Cy	*ENG	the output. Increasing a value makes lines thicker on the
012	Low Speed: Ye	*ENG	output.

[Test Pattern] Generates the test pattern using "COPY Window" tab in the LCD.				
		dow" tab in the LCD.		
	003	Pattern Selection	-	[0 to 23 / 0 / 1/step]

	0 None		11. Independent Pattern (1 dot)
	1: Vertical Line (1dot)		12. Independent Pattern (2dot)
	2: Vertical Line (2dot)		13. Independent Pattern (4dot)
	3: Horizontal (1dot)		14. Trimming Area
	4: Horizontal (2dot)		16: Hound's Tooth Check (Horizontal)
	5: Grid Vertical Line		17: Band (Horizontal)
	6: Grid Horizontal Line		18: Band (Vertical)
	7: Grid pattern Small		19: Checker Flag Pattern
	8: Grid pattern Large		20: Grayscale Vertical Margin
	9: Argyle Pattern Small		21: Grayscale Horizontal Margin
	10: Argyle Pattern Large		23: Full Dot Pattern
005	Color Selection	-	Specifies the color for the test pattern. [1 to 4 / 1 / 1/step] 1: All colors, 2: Magenta, 3: Yellow, 4: Cyan
006	Density: Bk	-	Specifies the color density for the test pattern.
007	Density: Ma -		[0 to 15 / 15 / 1 /step]
008	Density: Cy -		0: Lightest density
009	Density: Ye	-	15: Darkest density

2111	[Forced Line Position Adj.]		
001	Mode a	-	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	-	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	-	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.

2112	[TM/ID Sensor Check] ID Sensor Check FA	
001	Execute	[0 or 1 / 0 / 1 /step] This SP is used to check the ID sensors at the factory. The results of this SP are displayed in SP2140 to SP2145.

	[Skew Adjustment]			
2117	Specifies a skew adjustment value for the skew motor M, C or Y. These SPs must be used when a new laser optics housing unit is installed or when SC2.585 occurs. For details, see "Laser Optics Housing Unit" in the "Replacement and Adjustment" section.			
001	Pulse: M	*ENG		
002	Pulse: C	e: C *ENG [-50 to 50 / 0 / 1 pulse/step]		
003	Pulse: Y	*ENG		

2118	[Skew Adjustment]		
001	Execute: M	*ENG	Changes the current skew adjustment values to
002	Execute: C	*ENG	the values specified with SP2117. These SPs must be used when a new laser optics
003	Execute: Y	*ENG	housing unit is installed or when SC2.585 occurs. For details, see "Laser Optics Housing Unit" in the "Replacement and Adjustment" section.

2119	[Skew Adjustment Display]		
2119	Displays the current skew adjustment value for each skew motor.		
001	М	*ENG	
002	С	*ENG	[-50 to 50 / - / 1 pulse/step]
003	Υ	*ENG	

	T				
	[Area Mag. Correction] LD Pulse Area Correction (Color, Area) FA				
2150	Adjusts the magnification for each area. The main scan (297 mm) is divided into 8 areas. Area 1 is at the front side of the machine (left side of the image) and area 8 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				
027	Area 0: Bk	*ENG	[-255 to 255 / 0 / 1 sub-dot/step]		
028	Area 1: Bk	*ENG			
029	Area 2: Bk	*ENG			
030	Area 3: Bk	*ENG			
031	Area 4: Bk	*ENG	Adjusts the area magnification for LD 0.		
032	Area 5: Bk	*ENG	[-255 to 255 / 0 / 1 sub-dot/step]		
033	Area 6: Bk	*ENG			
034	Area 7: Bk	*ENG			
035	Area 8: Bk	*ENG			
036	Area 9: Bk	*ENG			
037	Area 10: Bk	*ENG	Notined		
038	Area 11: Bk	*ENG	Not used		
039	Area 12: Bk	*ENG			
079	Area 0: Ma	*ENG	[-255 to 255 / 0 / 1 sub-dot/step]		

Area 1: Ma	*ENG	
Area 2: Ma	*ENG	
Area 3: Ma	*ENG	
Area 4: Ma	*ENG	Adjusts the area magnification for LD 0.
Area 5: Ma	*ENG	[-255 to 255 / 0 / 1 sub-dot/step]
Area 6: Ma	*ENG	
Area 7: Ma	*ENG	
Area 8: Ma	*ENG	
Area 9: Ma	*ENG	
Area 10: Ma	*ENG	
Area 11: Ma	*ENG	Not used
Area 12: Ma	*ENG	
Area 0: Cy	*ENG	[-255 to 255 / 0 / 1 sub-dot/step]
Area 1: Cy	*ENG	
Area 2: Cy	*ENG	
Area 3: Cy	*ENG	
Area 4: Cy	*ENG	Adjusts the area magnification for LD 0.
Area 5: Cy	*ENG	[-255 to 255 / 0 / 1 sub-dot/step]
Area 6: Cy	*ENG	
Area 7: Cy	*ENG	
Area 8: Cy	*ENG	
Area 9: Cy	*ENG	
Area 10: Cy	*ENG	
Area 11: Cy	*ENG	Not used
Area 12: Cy	*ENG	
Area 0: Ye	*ENG	[-255 to 255 / 0 / 1 sub-dot/step]
	Area 2: Ma Area 3: Ma Area 4: Ma Area 5: Ma Area 6: Ma Area 7: Ma Area 8: Ma Area 10: Ma Area 11: Ma Area 12: Ma Area 0: Cy Area 1: Cy Area 3: Cy Area 4: Cy Area 5: Cy Area 6: Cy Area 7: Cy Area 7: Cy Area 7: Cy Area 10: Cy Area 11: Cy	Area 2: Ma *ENG Area 3: Ma *ENG Area 4: Ma *ENG Area 5: Ma *ENG Area 6: Ma *ENG Area 7: Ma *ENG Area 8: Ma *ENG Area 9: Ma *ENG Area 10: Ma *ENG Area 11: Ma *ENG Area 12: Ma *ENG Area 2: Cy *ENG Area 3: Cy *ENG Area 4: Cy *ENG Area 5: Cy *ENG Area 6: Cy *ENG Area 7: Cy *ENG Area 7: Cy *ENG Area 7: Cy *ENG Area 7: Cy *ENG Area 10: Cy *ENG Area 11: Cy *ENG

184	Area 1: Ye	*ENG	
185	Area 2: Ye	*ENG	
186	Area 3: Ye	*ENG	
187	Area 4: Ye	*ENG	Adjusts the area magnification for LD 0.
188	Area 5: Ye	*ENG	[-255 to 255 / 0 / 1 sub-dot/step]
189	Area 6: Ye	*ENG	
190	Area 7: Ye	*ENG	
191	Area 8: Ye	*ENG	
192	Area 9: Ye	*ENG	
193	Area 10: Ye	*ENG	Nishman
194	Area 11: Ye	*ENG	Not used
195	Area 12: Ye	*ENG	

	[Area Shad. Correct. Setting] FA
	Adjusts the area correction value for each LD power. The main scan is divided into 16 areas. However, the image areas are limited from area 1
2152	to area 14. For BK and Magenta, area 1 is at the rear side of the machine (left side of the image) and area 14 is at the front side of the machine (right side of the image).
	For Cyan and Yellow, area 1 is at the front side of the machine (right side of the image) and area 14 is at the rear side of the machine (left side of the image).

001	Area 0: Bk	*ENG	
002	Area 1: Bk	*ENG	
003	Area 2: Bk	*ENG	
004	Area 3: Bk	*ENG	
005	Area 4: Bk	*ENG	
006	Area 5: Bk	*ENG	
007	Area 6: Bk	*ENG	
008	Area 7: Bk	*ENG	This is for the synchronizing detection board. [50 to 150 / 100 / 1 %/step]
009	Area 8: Bk	*ENG	[50 10 130 / 100 / 1 /b/ siep]
010	Area 9: Bk	*ENG	
011	Area 10: Bk	*ENG	
012	Area 11: Bk	*ENG	
013	Area 12: Bk	*ENG	
014	Area 13: Bk	*ENG	
015	Area 14: Bk	*ENG	
016	Area 15: Bk	*ENG	This is out of the image area. [50 to 150 / 100 / 1 %/step]
033	Area 0: Ma	*ENG	This is for the synchronizing detection board. [50 to 150 / 100 / 1 %/step]

034	Area 1: Ma	*ENG	
035	Area 2: Ma	*ENG	
036	Area 3: Ma	*ENG	
037	Area 4: Ma	*ENG	
038	Area 5: Ma	*ENG	
039	Area 6: Ma	*ENG	
040	Area 7: Ma	*ENG	[50 to 150 / 100 / 1 % / to m]
041	Area 8: Ma	*ENG	[50 to 150 / 100 / 1 %/step]
042	Area 9: Ma	*ENG	
043	Area 10: Ma	*ENG	
044	Area 11: Ma	*ENG	
045	Area 12: Ma	*ENG	
046	Area 13: Ma	*ENG	
047	Area 14: Ma	*ENG	
048	Area 15: Ma	*ENG	This is out of the image area. [50 to 150 / 100 / 1 %/step]
065	Area 0: Cy	*ENG	This is for the synchronizing detection board. [50 to 150 / 100 / 1 %/step]

066	Area 1: Cy	*ENG	
067	Area 2: Cy	*ENG	
068	Area 3: Cy	*ENG	
069	Area 4: Cy	*ENG	
070	Area 5: Cy	*ENG	
071	Area 6: Cy	*ENG	
072	Area 7: Cy	*ENG	[50 to 150 / 100 / 1 % / to m]
073	Area 8: Cy	*ENG	[50 to 150 / 100 / 1 %/step]
074	Area 9: Cy	*ENG	
075	Area 10: Cy	*ENG	
076	Area 11: Cy	*ENG	
077	Area 12: Cy	*ENG	
078	Area 13: Cy	*ENG	
079	Area 14: Cy	*ENG	
080	Area 15: Cy	*ENG	This is out of the image area. [50 to 150 / 100 / 1 %/step]
097	Area 0: Ye	*ENG	This is for the synchronizing detection board. [50 to 150 / 100 / 1 %/step]

098	Area 1: Ye	*ENG	
099	Area 2: Ye	*ENG	
100	Area 3: Ye	*ENG	
101	Area 4: Ye	*ENG	
102	Area 5: Ye	*ENG	
103	Area 6: Ye	*ENG	
104	Area 7: Ye	*ENG	[50 to 150 / 100 / 1 % / to]
105	Area 8: Ye	*ENG	[50 to 150 / 100 / 1 %/step]
106	Area 9: Ye	*ENG	
107	Area 10: Ye	*ENG	
108	Area 11: Ye	*ENG	
109	Area 12: Ye	*ENG	
110	Area 13: Ye	*ENG	
111	Area 14: Ye	*ENG	
112	Area 15: Ye	*ENG	This is out of the image area. [50 to 150 / 100 / 1 %/step]

2181	[Line Position Adj. Result]					
	Displays the values for each correction.					
	 "Paper Int. Mag: Subdot" indicates the magnification correction value between two sheets of paper. 					
	"Mag.Cor. Subdot" indicates the magnification correction value.					
	"M. Scan Erro." indicates the shift correction value in the main scan direction.					
	"S. Scan Erro." Indicates the shift correction value in the sub scan direction.					
	"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.					
	Bk: Black, M: Magenta, C: Cyan, Y: Yellow					
001	Paper Int. Mag: Subdot: Bk *ENG [-32768 to 32767 / - / 1 pulse/step]					

002	Mag.Cor. Subdot: Bk	*ENG	[-32768 to 32767 / - / 1 pulse/step]
003	Skew: M	*ENG	[-5000 to 5000 / - / 0.001 um/step]
005	M. Scan Erro.: Left: M	*ENG	
006	M. Scan Erro.: Center: M	*ENG	
007	M. Scan Erro.: Right: M	*ENG	[-5000 to 5000 / - / 0.001 um/step]
008	S. Scan Erro.: Left: M	*ENG	[-3000 to 3000 / • / 0.001 util/step]
009	S. Scan Erro.: Center: M	*ENG	
010	S. Scan Erro.: Right: M	*ENG	
011	M. Cor.: Dot: M	*ENG	[-512 to 511 / - / 1 dot/step]
012	M. Cor.: Subdot: M	*ENG	[-15 to 15 / - / 1 pulse/step]
013	Paper Int. Mag: Subdot: M	*ENG	
014	Mag.Cor. Subdot: M	*ENG	[207/0 , 207/7 / /1 / , 1
015	M. Left Mag.: Subdot: M	*ENG	[-32768 to 32767 / - / 1 pulse/step]
016	M. Right Mag.: Subdot: M	*ENG	
017	S. Cor.: 600 Line: M	*ENG	[-16384 to 16383 / - / 1 line/step]
018	S. Cor.: 600 Sub: M	*ENG	[-1 to 1 / - / 0.001 line/step]
019	S. Cor.: 1200 Line: M	*ENG	[-16384 to 16383 / - / 1 line/step]
020	S. Cor.: 1200 Sub: M	*ENG	[-1 to 1 / - / 0.001 line/step]
021	Skew: C	*ENG	[-5000 to 5000 / - / 0.001 um/step]
023	M. Scan Erro.: Left: C	*ENG	
024	M. Scan Erro.: Center: C	*ENG	
025	M. Scan Erro.: Right: C	*ENG	[5000
026	S. Scan Erro.: Left: C	*ENG	[-5000 to 5000 / - / 0.001 um/step]
027	S. Scan Erro.: Center: C	*ENG	
028	S. Scan Erro.: Right: C	*ENG	
029	M. Cor.: Dot: C	*ENG	[-512 to 511 / - / 1 dot/step]

030	M. Cor.: Subdot: C	*ENG	[-15 to 15 / - / 1 pulse/step]
031	Paper Int. Mag: Subdot: C	*ENG	
032	Mag.Cor. Subdot: C	*ENG	[-32768 to 32767 / - / 1 pulse/step]
033	M. Left Mag.: Subdot: C	*ENG	[-32/06/i0/32/07/-//ipulse/slep]
034	M. Right Mag.: Subdot: C	*ENG	
035	S. Cor.: 600 Line: C	*ENG	[-16384 to 16383 / - / 1 line/step]
036	S. Cor.: 600 Sub: C	*ENG	[-1 to 1 / - / 0.001 line/step]
037	S. Cor.: 1200 Line: C	*ENG	[-16384 to 16383 / - / 1 line/step]
038	S. Cor.: 1200 Sub: C	*ENG	[-1 to 1 / - / 0.001 line/step]
039	Skew: Y	*ENG	
041	M. Scan Erro.: Left: Y	*ENG	
042	M. Scan Erro.: Center: Y	*ENG	
043	M. Scan Erro.: Right: Y	*ENG	[-5000 to 5000 / - / 0.001 um/step]
044	S. Scan Erro.: Left: Y	*ENG	
045	S. Scan Erro.: Center: Y	*ENG	
046	S. Scan Erro.: Right: Y	*ENG	
047	M. Cor.: Dot: Y	*ENG	[-512 to 511 / - / 1 dot/step]
048	M. Cor.: Subdot: Y	*ENG	[-15 to 15 / - / 1 pulse/step]
049	Paper Int. Mag: Subdot: Y	*ENG	
050	Mag.Cor. Subdot: Y	*ENG	
051	M. Left Mag.: Subdot: Y	*ENG	[-32768 to 32767 / - / 1 pulse/step]
052	M. Right Mag.: Subdot: Y	*ENG	
053	S. Cor.: 600 Line: Y	*ENG	[-16384 to 16383 / - / 1 line/step]
054	S. Cor.: 600 Sub: Y	*ENG	[-1 to 1 / - / 0.001 line/step]
055	S. Cor.: 1200 Line: Y	*ENG	[-16384 to 16383 / - / 1 line/step]
056	S. Cor.: 1200 Sub: Y	*ENG	[-1 to 1 / - / 0.001 line/step]

	[Line Position Adj. Offset]		
2182	(Color) M. Scan: Main scan, S. Scan:	Sub-scan	
001	M Magnification	*ENG	
002	C Magnification	*ENG	Adjusts the line position manually. [-1 to 1 / 0 / 0.001%/step]
003	Y Magnification	*ENG	[11017 07 0.001707 3100]
	When line shifts are not corrected by th	ne automat	ric line position adjustment, do this SP.
	Increasing a value reduces the image i	n the main	scan direction.
	Decreasing a value enlarges the image	e in the ma	in scan direction.
004	M. Scan: High: Dot: M	*ENG	[-512 to 511 / 0 / 1 dot/step]
005	M. Scan: High: Subdot: M	*ENG	[-15 to 15 / 0 / 1 pulse/step]
006	M. Scan: Medium: Dot: M	*ENG	[-512 to 511 / 0 / 1 dot/step]
007	M. Scan: Medium: Subdot: M	*ENG	[-15 to 15 / 0 / 1 pulse/step]
800	M. Scan: Low: Dot: M	*ENG	[-512 to 511 / 0 / 1 dot/step]
009	M. Scan: Low: Subdot: M	*ENG	[-15 to 15 / 0 / 1 pulse/step]
010	M. Scan: High: Dot: C	*ENG	[-512 to 511 / 0 / 1 dot/step]
011	M. Scan: High: Subdot: C	*ENG	[-15 to 15 / 0 / 1 pulse/step]
012	M. Scan: Medium: Dot: C	*ENG	[-512 to 511 / 0 / 1 dot/step]
013	M. Scan: Medium: Subdot: C	*ENG	[-15 to 15 / 0 / 1 pulse/step]
014	M. Scan: Low: Dot: C	*ENG	[-512 to 511 / 0 / 1 dot/step]
015	M. Scan: Low: Subdot: C	*ENG	[-15 to 15 / 0 / 1 pulse/step]
016	M. Scan: High: Dot: Y	*ENG	[-512 to 511 / 0 / 1 dot/step]
017	M. Scan: High: Subdot: Y	*ENG	[-15 to 15 / 0 / 1 pulse/step]
018	M. Scan: Medium: Dot: Y	*ENG	[-512 to 511 / 0 / 1 dot/step]
019	M. Scan: Medium: Subdot: Y	*ENG	[-15 to 15 / 0 / 1 pulse/step]
020	M. Scan: Low: Dot: Y	*ENG	[-512 to 511 / 0 / 1 dot/step]
021	M. Scan: Low: Subdot: Y	*ENG	[-15 to 15 / 0 / 1 pulse/step]

022	S. Scan: High: Line: M	*ENG	[-16384 to 16383 / 0 / 1 line/step]
023	S. Scan: High: Subline: M	*ENG	[-1 to 1 / 0 / 0.001 /line]
024	S. Scan: Medium: Line: M	*ENG	[-16384 to 16383 / 0 / 1 line/step]
025	S. Scan: Medium: Subline: M	*ENG	[-1 to 1 / 0 / 0.001 /line]
026	S. Scan: Low: Line: M	*ENG	[-16384 to 16383 / 0 / 1 line/step]
027	S. Scan: Low: Subline: M	*ENG	Not used
028	S. Scan: High: Line: C	*ENG	[-16384 to 16383 / 0 / 1 line/step]
029	S. Scan: High: Subline: C	*ENG	[-1 to 1 / 0 / 0.001 /line]
030	S. Scan: Medium: Line: C	*ENG	[-16384 to 16383 / 0 / 1 line/step]
031	S. Scan: Medium: Subline: C	*ENG	[-1 to 1 / 0 / 0.001 /line]
032	S. Scan: Low: Line: C	*ENG	[-16384 to 16383 / 0 / 1 line/step]
033	S. Scan: Low: Subline: C	*ENG	Not used
034	S. Scan: High: Line: Y	*ENG	[-16384 to 16383 / 0 / 1 line/step]
035	S. Scan: High: Subline: Y	*ENG	[-1 to 1 / 0 / 0.001 /line]
036	S. Scan: Medium: Line: Y	*ENG	[-16384 to 16383 / 0 / 1 line/step]
037	S. Scan: Medium: Subline: Y	*ENG	[-1 to 1 / 0 / 0.001 /line]
038	S. Scan: Low: Line: Y	*ENG	[-16384 to 16383 / 0 / 1 line/step]
039	S. Scan: Low: Subline: Y	*ENG	Not used

	[Main Scan Length Target Display]
0105	Displays/adjusts the target value for the main scan length correction of the line position adjustment.
2185	After replacing the laser optics housing unit, input the standard value for Bk provided with the new unit. For details, see "Laser Optics Housing Unit" in the "Replacement Adjustment" section. It is not necessary to input the values for the other colors; these are automatically adjusted after doing the line position adjustment.

001	Bk	*ENG	
002	С	*ENG	[0 to 266667 / 249449 / 1 sub-dot/step]
004	Y	*ENG	

2193	[MUSIC Condition Set] Line Position Adjustment: Condition Setting				
001	Auto Execution	*ENG	[0 or 1 / 1 / 1] 0: OFF, 1: ON		
	Enables/disables the automatic	line positio	n adjustment		
	Page: Job End: BW+FC	*ENG	[0 to 999 / 500 / 1 page/step]		
002	Adjusts the threshold of the line p	oosition ad	justment for BW and color printing mode after		
003	Page: Job End: FC	*ENG	[0 to 999 / 200 / 1 page/step]		
003	Adjusts the threshold of the line p	osition ad	justment for color printing mode after job end.		
	Page: Interrupt: BW+FC	*ENG	[0 to 999 / 200 / 1 page/step]		
004	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 / 1 page/step]		
003	Adjusts the threshold of the line position adjustment for color printing mode during jobs.				
	Page: Stand-By: BW	*ENG	[0 to 999 / 100 / 1 page/step]		
006	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.				
	Page: Stand-By: FC	*ENG	[0 to 999 / 100 / 1 page/step]		
007	Adjusts the threshold of the line position adjustment for FC 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.				

				-		
	Temp.		*ENG		[0 to 100 / 5 / 1deg/step]	
008	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.					
	Time		*ENG		[1 to 1440 / 300 / 1 minute/step]	
009					adjustment (Mode b: adjustment once). The on the combinations of several conditions.	
	Magnification		*ENG		[0 to 10 / 0.1 / 0.01%/step]	
010	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 MSUIC is done again.					
	Temp. 2		*ENG		[0 to 100 / 10 / 1deg/step]	
011	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.					
	Time 2	*ENG		[1	to 9999 / 600 / 1 minute/step]	
012	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.					
	Page: Power ON:BW+FC	* E1	٧G	[0	to 999 / 200 / 1 page/step]	
013	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]			
001	Displays the year of the last MUSIC execution.					
002	Month	*ENG	[1 to 12 / - / 1 month/step]			
002	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]			
004	Displays the time (hour) of the last MUSIC execution.					
005	Minute	*ENG	[0 to 59 / - / 1 minute/step]			
005	Displays the time (minute) of	the last M	USIC execution.			
007	Temperature	*ENG	[0 to 100 / - / 1 deg/step]			
006	Displays the temperature of t	he last ML	JSIC execution.			
007	Execution Result	*ENG	[0 or 1 / - / 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: M	*ENG [0 to 9 / - / 1 /step]	[0 to 9 / - / 1 /step]			
011	Error Result: C	*ENG	0: Not done			
012	Error Result: Y	*ENG	1: Completed successfully 2: Cannot detect patterns 3: Fewer lines on the pattern than the target 4: Not used 5: Out of the adjustment range 6 to 9: Not used			

2198	[Music A/D Interval]		
2170	ADC Trigger Counter		
001	ADC Trigger Counter	*ENG	[7.5 to 20 / 10 / 0.1 µs/step]

2220	[Skew Origin Set]		
Executes the skew motor initialization in the laser optics unit.			e laser optics unit.
001	M: Skew Motor	*ENG	-
002	C: Skew Motor	*ENG	-
003	Y: Skew Motor	*ENG	-

	[LD Power] LD Power Control		
2221	Adjusts the fixed LD power for each line speed and color. These SPs are activated only when SP3-041-002 is set to "0". Plain: High speed, Thick 1: Middle speed, Thick 2&Fine: Low speed		
001			, mick zarine, tow speed
001	Plain: Bk	*ENG	
002	Plain: M	*ENG	
003	Plain: C	*ENG	
004	Plain: Y	*ENG	
005	Thick 1: Bk	*ENG	
006	Thick 1: M	*ENG	[0 to 200 / 100 / 1%/step]
007	Thick 1: C	*ENG	Increasing this value makes the image density darker.
008	Thick 1: Y	*ENG	
009	Thick 2&FINE: Bk	*ENG	
010	Thick 2&FINE: M	*ENG	
011	Thick 2&FINE: C	*ENG	
012	Thick 2&FINE: Y	*ENG	

	[Development DC Vias] Development DC Bias Adjustment
	Adjusts the development bias. Development bias is automatically adjusted during process control; therefore, adjusting
2229	these settings has no effect while Process Control (SP3-041-001 Default: ON) is activated.
	After deactivating Process Control with SP3-041-001, the values in these SP modes are used for printing.
	Plain: High speed, Thick 1: Middle speed, Thick 2&Fine: Low speed

001	Plain: Bk	*ENG
002	Plain: M	*ENG
003	Plain: C	*ENG
004	Plain: Y	*ENG
005	Thick 1: Bk	*ENG
006	Thick 1: M	*ENG
007	Thick 1: C	*ENG
008	Thick 1: Y	*ENG
009	Thick 2&FINE:Bk	*ENG
010	Thick 2&FINE:M	*ENG
011	Thick 2&FINE:C	*ENG
012	Thick 2&FINE:Y	*ENG

[0 to 800 / **550** / 10 -V/step]

00.41	[Temperature/Humidity: Display]			
2241	Displays the environment temperature and humidity.			
001	Temperature	-	[-50 to 450 / - / 0.1 deg/step]	
002	Relative Humidity	-	[0 to 1000 / - / 0.1 %RH/step]	
003	Absolute Humidity	-	[0 to 100 / - / 0.01 g/m ³ /step]	
004	AIT Temperature	-	[0 to 70 / - / 0.1 deg/step]	
005	Correction Coefficient A	-	[0 to 70 / 1 / 0.1/step]	
006	Correction Coefficient B	-	[-70 to 70 / 0 /0.1/step]	

22.42	[TS Operation Env. Log]		
Displays TS Operation Env. logs.			
001	TS <= 40	-	[0 to 99999999 / - / 1/mm]
002	40 < TS <= 45	-	[0 to 99999999 / - / 1/mm]
003	45 < TS	-	[0 to 99999999 / - / 1/mm]

004	Log Clear	-	[0 to 1 / 0 / 1/step] 1: Clear
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2302	[Environmental Correction: Transfer]		
2302	Environmental Correction: Im	Environmental Correction: Image Transfer Belt Unit	
001	Current Environmental Display	-	Displays the current environment condition.
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 to 100 / 4 / 0.01 g/m³/step]
004	Absolute Humidity: Threshold 2	*ENG	Adjusts the threshold value between ML and MM. [0 to 100 / 8 / 0.01 g/m ³ /step]
005	Absolute Humidity: Threshold 3	*ENG	Adjusts the threshold value between MM and MH. [0 to 100 / 16 / 0.01 g/m³/step]
006	Absolute Humidity: Threshold 4	*ENG	Adjusts the threshold value between MH and HH. [0 to 100 / 24 / 0.01 g/m³/step]
007	Temp Threshold	*ENG	[-5 to 30 / 5 / 1 deg/step]

2308	[Paper Size Correction]		
2306	Adjusts the threshold value for the paper size correction.		er size correction.
001			[0 to 350 / 297 / 1 mm/step] Threshold 1 ≤ paper:
			Paper is detected as "S1" size.

002	Threshold 2	*ENG	[0 to 350 / 257 / 1 mm/step] Threshold 2 ≤ paper ≤ Threshold 1: Paper is detected as "S2" size.
003	Threshold 3	*ENG	[0 to 350 / 210 / 1 mm/step] Threshold 3 ≤ paper ≤ Threshold 2: Paper is detected as "S3" size.
004	Threshold 4	*ENG	[0 to 350 / 148 / 1 mm/step] Threshold 4 ≤ paper ≤ Threshold 3: Paper is detected as "S4" size. Paper ≤ Threshold 4: Paper is detected as "S5" size.

2311	[Non Image Area: Bias]		
001	Image Transfer	*ENG	Adjusts the bias of the image transfer belt between images. This value is added to the value of the image transfer belt bias. [10 to 250 / 100 / 5 %/step]
002	Paper Transfer	*ENG	Adjusts the bias of the paper transfer roller between images. [0 to 2100 / 500 / 100 V/step]

2326	[Transfer Roller CL: Bias] Transfer Roller Cleaning: Bias Adjustment			
	Positive	*ENG	[0 to 2100 / 500 / 100 V /step]	
Adjusts the positive voltage of the paper transfer rolle roller.		er transfer roller for cleaning the paper transfer		
	Negative	*ENG	[10 to 400 / 100 / 10 %/step]	
002	Adjusts the negative current of the paper transfer roller for cleaning the paper transfer roller.			
	Positive	*ENG	[0 to 2100 / 2000 / 100 V/step]	
003	Adjusts the negative current l	imit of the	paper transfer roller for cleaning the paper transfer	

004 Negative	*ENG	[10 to 400 / 100 / 10 %/step]
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2351	[Common: BW: Bias] Plain: High speed, Thick 1: Middle speed, Thick 2&Fine: Low speed		
		[0 to 80 / 25 / 1 µA]	
Adjusts the current for the image transfer belt in B/W mode for plain p			belt in B/W mode for plain paper.
002	ITB unit: Thick 1	*ENG	[0 to 80 / 12 / 1 µA]
002	Adjusts the current for the imag	ge transfer	belt in B/W mode for thick 1 paper.
	ITB unit: Thick 2 & FINE	*ENG	[0 to 80 / 12 / 1 µA]
003	Adjusts the current for the image transfer belt in B/W mode for thick 2 paper or FINE mode.		

2357	[Common: FC: Bias] Image Transfer Belt: Full Color: Bias Adjustment Plain: High speed, Thick 1: Middle speed, Thick 2&Fine: Low speed		
001	ITB unit: Plain: Bk	*ENG	[0 to 80 / 22 / 1 µA]
001	Adjusts the current for the image transfer	belt for Black	c in full color mode for plain paper.
	ITB unit: Plain: M	*ENG	[0 to 80 / 25 / 1 µA]
002	Adjusts the current for the image transfer paper.	belt for Mag	enta in full color mode for plain
000	ITB unit: Plain: C	*ENG	[0 to 80 / 22 / 1 µA]
003	Adjusts the current for the image transfer	belt for Cyar	n in full color mode for plain paper.
004	ITB unit: Plain: Y	*ENG	[0 to 80 / 28 / 1 µA]
004	w in full color mode for plain paper.		
005	ITB unit: Thick 1: Bk	*ENG	[0 to 80 / 11 / 1 µA]
Adjusts the current for the image transfer belt for Black in full color mode for thick 1			
	ITB unit: Thick 1: M	*ENG	[0 to 80 / 12 / 1 µA]
Adjusts the current for the image transfer belt for paper.		belt for Mag	enta in full color mode for thick 1

007	ITB unit: Thick 1: C	*ENG	[0 to 80 / 11 / 1 µA]	
007	Adjusts the current for the image transfer	belt for Cyan	in full color mode for thick 1 paper.	
	ITB unit: Thick 1: Y	*ENG	[0 to 80 / 14 / 1 µA]	
008	Adjusts the current for the image transfer paper.	belt for Yello	w in full color mode for thick 1	
	ITB unit: Thick 2 & FINE: Bk	*ENG	[0 to 80 / 11 / 1 µA]	
Adjusts the current for the image transfer belt for Black in full color mode for Thic fine.				
	ITB unit: Thick 2 & FINE: M	*ENG	[0 to 80 / 12 / 1 µA]	
010	Adjusts the current for the image transfer and fine.	enta in full color mode for Thick 2		
	ITB unit: Thick 2 & FINE: C	*ENG	[0 to 80 / 11 / 1 µA]	
011	Adjusts the current for the image transfer belt for Cyan in full color mode for Thick 2 and fine.			
	ITB unit: Thick 2 & FINE: Y	*ENG	[0 to 80 / 14 / 1 µA]	
012	Adjusts the current for the image transfer fine.	belt for Yello	w in full color mode for Thick 2 and	

2360	[Common: BW Env. Correction]		
001	ITB unit: Plain	*ENG	
002	ITB unit: Thick 1	*ENG	[1 to 60 / 1 / 1 /step]
003	ITB unit: Thick 2	*ENG	
004	ITB unit: Plain: Bk	*ENG	[1 to 60 / 13/ 1 /step]
005	ITB unit: Plain: M	*ENG	
006	ITB unit: Plain: C	*ENG	[1 to 60 / 2 / 1 /step]
007	ITB unit: Plain: Y	*ENG	
800	ITB unit: Thick 1: Bk	*ENG	[1 to 60 / 31 / 1 /step]
009	ITB unit: Thick 1: M	*ENG	[1 to 60 / 1 / 1 /step]

010	ITB unit: Thick 1: C	*ENG	[1 to 60 / 2 / 1 /step]
011	ITB unit: Thick 1: Y	*ENG	[1 10 00 / 2 / 1 / sieb]
012	ITB unit: Thick 2: Bk	*ENG	[1 to 60 / 31 / 1 /step]
013	ITB unit: Thick 2: M	*ENG	[1 to 60 / 1 / 1 /step]
014	ITB unit: Thick 2: C	*ENG	[1 to 60 / 2 / 1 /step]
015	ITB unit: Thick 2: Y	*ENG	[1 to 60 / 2 / 1 /step]

	[Plain: Bias]			
2401	Adjusts the DC voltage of the discharge plate for plain paper. Plain: High speed, Thick 1: Middle speed, Thick 2&Fine: Low speed			
001	Separation DC: Plain: 1st Side	*ENG	[0 to 4000 / 3500 / 10 –V/step]	
002	Separation DC: Plain: 2nd Side	*ENG	[0 to 4000 / 3500 / 10 -V/step]	
003	Separation DC: 1200: 1st Side	*ENG	[0 to 4000 / 3500 / 10 -V/step]	
004	Separation DC: 1200: 2nd Side	*ENG	[0 to 4000 / 3500 / 10 –V/step]	

	[Plain: Bias: BW]		
2403	Adjusts the current for the paper transfer roller for plain paper in black-and-white mode. Plain: High speed, Thick 1: Middle speed, Thick 2&Fine: Low speed		
001	Paper Transfer: Plain: 1st Side	*ENG	- [0 to 250 / 22 / 1 -µA /step]
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 10 230 / 22 / 1 - PA / Slep]
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 250 / 7 / 1 - µA / step]
004	Paper Transfer: 1200: 2nd Side	*ENG	[0 to 250 / 12 / 1 - µA / step]

	[Plain: Bias: FC]		
2407	Adjusts the current for the paper transfer roller for plain paper in full color mode. Plain: High speed, Thick 1: Middle speed, Thick 2&Fine: Low speed		
001	Paper Transfer: Plain: 1st Side	*ENG	[0 to 250 / 27 / 1 - µA / step]
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 250 / 33 / 1 - µA / step]
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 250 / 10 / 1 – µA /step]
004	Paper Transfer: 1200: 2nd Side	*ENG	[0 to 250 / 12 / 1 – µA /step]

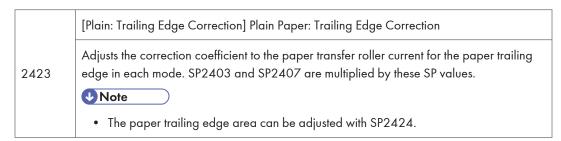
	[Plain: Paper Size Correction]				
2411	Adjusts the size correction coefficient for the paper transfer roller current for each paper size. SP2403 and SP2407 are multiplied by these SP values.				
	Plain: High speed, Thick 1: Middle speed, Thick 2&Fine: Low speed				
001	Paper Transfer: Plain : 1st Side: S1	*ENG			
002	Paper Transfer: Plain: 2nd Side: S1	*ENG	[100 to 600 / 100 / 5%/step]		
003	Paper Transfer: 1200: 1st Side: S1	*ENG	S1 size > 297 mm (Paper width)		
004	Paper Transfer: 1200: 2nd Side: S1	*ENG			
005	Paper Transfer: Plain: 1st Side: S2	*ENG	[100 to 600 / 105 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)		
006	Paper Transfer: Plain: 2nd Side: S2	*ENG	[100 to 600 / 120 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)		
007	Paper Transfer: 1200: 1st Side: S2	*ENG	[100 to 600 / 120 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)		

008	Paper Transfer: 1200: 2nd Side: S2	*ENG	[100 to 600 / 150 / 5%/step]
009	Paper Transfer: Plain: 1st Side: S3	*ENG	[100 to 600 / 110 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)
010	Paper Transfer: Plain: 2nd Side: S3	*ENG	[100 to 600 / 140 / 5%/step]
011	Paper Transfer: 1200: 1st Side: S3	*ENG	275 mm > S3 size > 210 mm (Paper width)
012	Paper Transfer: 1200: 2nd Side: S3	*ENG	[100 to 600 / 300 / 5%/step]
013	Paper Transfer: Plain: 1st Side: S4	*ENG	[100 to 600 / 115 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
014	Paper Transfer: Plain: 2nd Side: S4	*ENG	[100 to 600 / 160 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
015	Paper Transfer: 1200: 1st Side: S4	*ENG	[100 to 600 / 240 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
016	Paper Transfer: 1200: 2nd Side: S4	*ENG	[100 to 600 / 340 / 5%/step]
017	Paper Transfer: Plain: 1st Side: S5	*ENG	[100 to 600 / 120 / 5%/step] 148 mm > S5 size (Paper width)
018	Paper Transfer: Plain: 2nd Side: S5	*ENG	[100 to 600 / 180 / 5%/step] 148 mm > S5 size (Paper width)
019	Paper Transfer: 1200: 1st Side: S5	*ENG	[100 to 600 / 300 / 5%/step] 148 mm > S5 size (Paper width)
020	Paper Transfer: 1200: 2nd Side: S5	*ENG	[100 to 600 / 400 / 5%/step]

	[Plain: Leading Edge Correct	tion] Plain Pa	per: Leading Edge Correction		
2421	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode. SP2403 and SP2407 are multiplied by these SP values.				
	UNote				
	The paper leading edge	e area can b	e adjusted with SP2422.		
001	Paper Transfer: Plain: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]		
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]		
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]		
004	Paper Transfer: 1200: 2nd side	*ENG	[0 10 400 / 1 00 / 3 %/ siep]		
0.40.1	Adjusts the correction to the discharge plate current at the paper leading edge in each mode. SP2401 is multiplied by these SPs values.				
2421	UNote				
	The paper leading edge	e area can b	e adjusted with SP2422.		
005	Separation DC: Plain: 1st Side	*ENG			
006	Separation DC: Plain: 2nd Side	*ENG	[O. 400 / 100 / 50/ / .]		
007	Separation DC: 1200: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]		
008	Separation DC: 1200: 2nd Side	*ENG			

	[Plain: Switch Timing: Lead. Edge]	ıe
2422	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.	
	Plain: High speed, Thick 1: Middle speed, Thick 2&Fine: Low speed	

001	Paper Transfer: Plain: 1st Side	*ENG	
002	Paper Transfer: Plain: 2nd Side	*ENG	
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 50 / 0 / 2 mm/step]
004	Paper Transfer: 1200: 2nd side	*ENG	
005	Separation DC: Plain: 1st Side	*ENG	
006	Separation DC: Plain: 2nd Side	*ENG	
007	Separation DC: 1200: 1st Side	*ENG	
008	Separation DC: 1200: 2nd Side	*ENG	



001	Paper Transfer: Plain: 1st Side	*ENG	
002	Paper Transfer: Plain: 2nd Side	*ENG	
003	Paper Transfer: 1200: 1st Side	*ENG	
004	Paper Transfer: 1200: 2nd side	*ENG	[0 to 400 / 100 / 5%/step]
005	Separation DC: Plain: 1st Side	*ENG	[0 10 400 / 100 / 3 % / siep]
006	Separation DC: Plain: 2nd Side	*ENG	
007	Separation DC: 1200: 1st Side	*ENG	
008	Separation DC: 1200: 2nd Side	*ENG	

[Plain: Switch Timing: Trail. Edge]			
2424	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. Plain: High speed, Thick 1: Middle speed, Thick 2&Fine: Low speed		
001	Paper Transfer: Plain: 1st Side	*ENG	
002	Paper Transfer: Plain: 2nd Side	*ENG	
003	Paper Transfer: 1200: 1st Side	*ENG	
004	Paper Transfer: 1200: 2nd side	*ENG	[0 to 50 / 0 / 2 mm /ston]
005	Separation DC: Plain: 1st Side	*ENG	[0 to 50 / 0 / 2 mm/step]
006	Separation DC: Plain: 2nd Side	*ENG	
007	Separation DC: 1200: 1st Side	*ENG	
008	Separation DC: 1200: 2nd Side	*ENG	

	[Thin: Bias]			
2451	Adjusts the DC voltage of the discharge plate for thin paper. Plain: High speed, Thick 1: Middle speed, Thick 2&Fine: Low speed			
001	Separation DC: Plain: 1st Side	*ENG	[0 to 4000 / 3500 / 10 -V/ step]	
002	Separation DC: Plain: 2nd Side	ENG		
003	Separation DC: 1200: 1st Side	*FNG		
004	Separation DC: 1200: 2nd Side	ENG		

	[Thin: Bias: BW]		
2453	Adjusts the current for the paper transfer roller for thin paper in black-and-white mode. Plain: High speed, Thick 1: Middle speed, Thick 2&Fine: Low speed		
001	Paper Transfer: Plain: 1st Side	*ENG	[0.4- 0.50 / 22 / 1 1/4 /]
002	Paper Transfer: Plain: 2nd Side		[0 to 250 / 22 / 1 - µA / step]
003	Paper Transfer: 1200: 1st Side	*ENG	[0 250 / 11 / 1 4 /]
004	Paper Transfer: 1200: 2nd Side		[0 to 250 / 11 / 1 - #A /step]

	[Thin: Bias: FC]			
Adjusts the current for the paper transfer roller for thin paper lain: High speed, Thick 1: Middle speed, Thick 2&Fine: I		· ·		
001	Paper Transfer: Plain: 1st Side	*ENG	[0.4- 0.50 / 20 / 1 1/4 /1	
002	Paper Transfer: Plain: 2nd Side		[0 to 250 / 30 / 1 - µA / step]	
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 250 / 15 / 1 - µA /step]	
004	Paper Transfer: 1200: 2nd Side		[0 to 230 / 13 / 1 - MA / step]	

	[Thin: Paper Size Correction]
2461	Adjusts the size correction coefficient for the paper transfer roller current for each paper size. SP2453 and SP2457 are multiplied by these SP values.
	Plain: High speed

001	Paper Transfer: Plain: 1st Side: S1	*ENG	[100 to 600 / 100 / 5%/step]
002	Paper Transfer: Plain: 2nd Side: S1	LING	S1 size > 297 mm (Paper width)
005	Paper Transfer: Plain: 1st Side: S2		[100 to 600 / 120 / 5%/step]
006	Paper Transfer: Plain: 2nd Side: S2	*ENG	297 mm > S2 size > 275 mm (Paper width)
009	Paper Transfer: Plain: 1st Side: S3		[100 to 600 / 140 / 5%/step]
010	Paper Transfer: Plain: 2nd Side: S3	*ENG	297 mm > S2 size > 275 mm (Paper width)
013	Paper Transfer: Plain: 1st Side: S4		[100 to 600 / 160 / 5%/step]
014	Paper Transfer: Plain: 2nd Side: S4	*ENG	297 mm > S2 size > 275 mm (Paper width)
017	Paper Transfer: 1st Side: S5	*ENC	[100 to 600 / 190 / 5% /ston]
018	Paper Transfer: 2nd Side: S5	*ENG	[100 to 600 / 180 / 5%/step]

	[Thin: Leading Edge Correction] Thin Paper: Leading Edge Correction			
0.471	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode. SP2453 and SP2457 are multiplied by these SP values.			
2471	Plain: High speed, 1200: Low speed			
	₩ Note			
	The paper leading edge area can be adjusted with SP2472.			
001	Paper Transfer: Plain: 1st Side	*ENG		
002	Paper Transfer: Plain: 2nd Side		[0.1.400 / 100 / F9/ /]	
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]	
004	Paper Transfer: 1200: 2nd Side	EING		
2471	Adjusts the correction to the discharge plate current at the paper leading edge in each mode. SP2451 is multiplied by these SP values.			
24/ [₩Note			
	 The paper leading edge area can be adjusted with SP2472. 			

005	Separation DC: Plain: 1st Side	*ENG	
006	Separation DC: Plain: 2nd Side		[0. 400 /100 /50//]
007	Separation DC: 1200: 1st Side	*5.10	[0 to 400 / 100 / 5%/step]
008	Separation DC: 1200: 2nd Side	*ENG	

	[Thin: Switch Timing: Lead. Edge]		
2472	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. Plain: High speed, 1200: Low speed,		
001	Paper Transfer: Plain: 1st Side	*ENG	
002	Paper Transfer: Plain: 2nd Side	EING	
003	Paper Transfer: 1200: 1st Side	*ENG	
004	Paper Transfer: 1200: 2nd Side	EING	[0.45.50./0./2/.4]
005	Separation DC: Plain: 1st Side	*ENG	[0 to 50 / 0 / 2 mm/step]
006	Separation DC: Plain: 2nd Side	EING	
007	Separation DC: 1200: 1st Side	*FNG	
800	Separation DC: 1200: 2nd Side	ENG	

	[Thin: Trailing Edge Correction] Thin Paper: Trailing Edge Correction		
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode. SP2453 and SP2457 are multiplied by these SP values.		
2473	Plain: High speed, 1200: Low speed		
	↓ Note		
The paper trailing edge of		n be adjusted	with SP2474.
001	Paper Transfer: Plain: 1st Side	*ENG	[0.45, 400, /.100, /.5%, /.45m]
002	Paper Transfer: Plain: 2nd Side		[0 to 400 / 100 / 5%/step]
003	Paper Transfer: 1200: 1st Side	*ENG	[0.4-400 / 100 / 5% /.4]
004	Paper Transfer: 1200: 2nd Side		[0 to 400 / 100 / 5%/step]

005	Separation DC: Plain: 1st Side	*ENG	[0.4-400 / 100 / 59/ /]
006	Separation DC: Plain: 2nd Side		[0 to 400 / 100 / 5%/step]
007	Separation DC: 1200: 1st Side	*ENG	[0+, 400 / 100 / 59/ / +]
008	Separation DC: 1200: 2nd Side		[0 to 400 / 100 / 5%/step]

	[Thin: Switch Timing: Trail. Edge]		
Adjusts the bias/voltage switch timing of the paper transfer roller/discharge plate paper trailing edge between the erase margin area and the image area. Plain: High speed, 1200: Low speed			
001	Paper Transfer: Plain: 1st Side	*ENG	
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 50 / 0 / 2 mm/step]
003	Paper Transfer: 1200: 1st Side		[0 10 30 / 0 / 2 mm/ siep]
004	Paper Transfer: 1200: 2nd Side	LING	
005	Separation DC: Plain: 1st Side	*ENG	
006	Separation DC: Plain: 2nd Side	*ENG	[0 to 50 / 0 / 1 mm /stop]
007	Separation DC: 1200: 1st Side		[0 to 50 / 0 / 1 mm/step]
800	Separation DC: 1200: 2nd Side		

2480	[Thin: Environment Correction] Plain: High speed, 1200: Low speed		
001	Separation DC: Plain: 1st Side	*ENG	[1 to 60 / 26 / 1 /step]
002	Separation DC: Plain: 2nd Side	EING	
003	Paper Transfer: Plain: BW: 1st Side	*ENG	[1 to 60 / 11 / 1 /step]
004	Paper Transfer: Plain: BW: 2nd Side	EING	
005	Paper Transfer: Plain: FC: 1st Side	*ENG	[] to 60 / 1 / 1 /stan]
006	Paper Transfer: Plain: FC: 2nd Side		[1 to 60 / 1 / 1 /step]

007	Separation DC: 1200: 1st Side	*ENG	[1, 40 / 04 / 1 / 1, 1]
800	Separation DC: 1200: 2nd Side	ENG	[1 to 60 / 26 / 1 /step]
009	Paper Transfer: 1200: BW: 1st Side		
010	Paper Transfer: 1200: BW: 2nd Side	*ENG	[1 to 60 / 11 / 1 /step]
011	Paper Transfer: 1200: FC: 1st Side	*ENG	[] to 60 / 1 / 1 /stop]
012	Paper Transfer: 1200: FC: 2nd Side		[1 to 60 / 1 / 1 /step]

2481	[Glossy: Bias]		
001	Separation DC: 1st Side	*ENG	[0 to 4000 / 3500 / 10 –V/step]
001	Adjusts the DC voltage of the discharge plate for glossy paper.		

2482	[Glossy: Bias: BW]		
001	Paper Transfer: 1st Side	*ENG	[0 to 250 / 12 / 1 - µA /step]
001	Adjusts the current for the paper transfer roller for glossy paper in black-and-white mode.		

2483	[Glossy: Bias: FC]		
001	Paper Transfer: 1st Side	*ENG	[0 to 250 / 15 / 1 - µA / step]
001	Adjusts the current for the paper transfer roller for glossy paper in full color mode.		

2484	[Glossy: Paper Size Correction]		
001	Paper Transfer: 1st Side: S1	*ENG	[100 to 600 / 100 / 5%/step]
005	Paper Transfer: 1st Side: S2	*ENG	[100 to 600 / 120 / 5%/step]
009	Paper Transfer: 1st Side: S3	*ENG	[100 to 600 / 140 / 5%/step]
013	Paper Transfer: 1st Side: S4	*ENG	[100 to 600 / 160 / 5%/step]
017	Paper Transfer: 1st Side: S5	*ENG	[100 to 600 / 180 / 5%/step]

2485	[Plain: Leading Edge Correction]
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001	Paper Transfer: 1st Side	*ENG	[10 to 400 / 100 / 5%/step]
005	Separation DC: 1st Side	*ENG	[10 to 400 / 100 / 5%/step]]

2486	[Plain: Switch Timing: Lead. Edge]		
001	Paper Transfer: 1st Side	*ENG	[0 to 50 / 0 / 2 mm/step]
005	Separation DC: 1st Side	*ENG	[O to 30 / O / 2 mm/ step]

2487	[Plain: Trailing Edge Correction]		
001	Paper Transfer: 1st Side	*ENG	[0 to 400 / 100 / 5 %/step]
005	Separation DC: 1st Side	*ENG	[U 10 400 / 100 / 3 %/ siep]

2	488	[Plain:SwitchTiming:Trail. Edge]		
	001	Paper Transfer: 1st Side	*ENG	[0 + 50 / 0 / 2 / +]
	005	Separation DC: 1st Side	*ENG	[0 to 50 / 0 / 2 mm/step]

2489	[Glossy: Environment Correction]		
001	Separation DC: 1st Side	*ENG	[1 to 60 / 26 / 1 /step]
003	Paper Transfer: BW: 1st Side	*ENG	[1 to 60 / 11 / 1 /step]
005	Paper Transfer: FC: 1st Side	*ENG	[1 to 60 / 1 / 1 /step]

	[Thick 1: Bias]			
Adjusts the DC voltage of the discharge plate for thick 1 paper. Plain: High speed, 1200: Low speed				
001	Separation DC: Plain: 1st Side	*ENG		
002	Separation DC: Plain: 2nd Side	*ENG	[0 to 4000 / 3500 / 10 –V/step]	
003	Separation DC: 1200: 1st Side	*ENG		

	[Thick 1: Bias: BW]				
Adjusts the current for the paper transfer roller for thick 1 paper in black-and-white Plain: High speed, 1200: Low speed					
001	Paper Transfer: Plain: 1st Side	*ENG	[0., 0.50 / 10 / 1 14 / 1]		
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 250 / 12 / 1 - µA /step]		
003	Separation DC: 1200: 1st Side	*ENG	[0 to 250 / 12 / 1 - µA /step]		

	[Thick 1: Bias: FC]				
2507	Adjusts the current for the paper transfer roller for thick 1 paper in full color mode. Plain: High speed, 1200: Low speed				
001	Paper Transfer: Plain: 1st Side	*ENG	[0.1. 250 / 15 / 1. 114 / 1]		
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 250 / 15 / 1 - µA /step]		
003	Separation DC: 1200: 1st Side	*ENG	[0 to 250 / 15 / 1 - µA / step]		

	[Thick 1: Paper Size Correction]					
2511	Adjusts the size correction coefficient for the paper transfer roller current for each paper size. SP2502 and SP2507 are multiplied by these SP values. Plain: High speed, 1200: Low speed					
001	Paper Transfer: Plain: 1st Side: S1	*ENG	[100 to 600 / 100 / 5%/step]			
002	Paper Transfer: Plain: 2nd Side: S1	*ENG	S1 size > 297 mm (Paper width)			
003	Paper Transfer: 1200: 1st Side: S1	*ENG	[100 to 600 / 100 / 5%/step] S1 size > 297 mm (Paper width)			
005	Paper Transfer: Plain: 1st Side: S2	*ENG	[100 to 600 / 105 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)			
006	Paper Transfer: Plain: 2nd Side: S2	*ENG	[100 to 600 / 130 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)			

007	Paper Transfer: 1200: 1st Side: S2	*ENG	[100 to 600 / 120 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)
009	Paper Transfer: Plain: 1st Side: S3	*ENG	[100 to 600 / 110 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)
010	Paper Transfer: Plain: 2nd Side: S3	*ENG	[100 to 600 / 160 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)
011	Paper Transfer: 1200: 1st Side: S3	*ENG	[100 to 600 / 140 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)
013	Paper Transfer: Plain 1: 1st Side: S4	*ENG	[100 to 600 / 115 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
014	Paper Transfer: Plain: 2nd Side: S4	*ENG	[100 to 600 / 190 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
015	Paper Transfer: 1200: 1st Side: S4	*ENG	[100 to 600 / 160 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
017	Paper Transfer: Plain 1: 1st Side: S5	*ENG	[100 to 600 / 120 / 5%/step] 148 mm > S5 size (Paper width)
018	Paper Transfer: Plain: 2nd Side: S5	*ENG	[100 to 600 / 220 / 5%/step] 148 mm > S5 size (Paper width)
019	Paper Transfer: 1200: 1st Side: S5	*ENG	[100 to 600 / 180 / 5%/step] 148 mm > S5 size (Paper width)

	[Thick 1: Leading Edge Correction] Thick 1 Paper: Leading Edge Correction					
	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode. SP2502 and SP2507 are multiplied by these SP values.					
2521	Plain: High speed, 1200: Low speed					
	U Note	↓ Note				
	d with SP2522.					
001	Paper Transfer: Plain: 1st Side	*ENG	[0+, 400 / 100 / 5% / +-, -]			
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]			
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]			
005	Separation DC: Plain: 1st Side	*ENG	[0. 400 / 100 / 59/ / .]			
006	Separation DC: Plain: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]			
007	Separation DC: 1200: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]			

	[Thick 1: Switch Timing: Lead. Edge]					
2522	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.					
	Plain: High speed, 1200: Low speed					
001	Paper Transfer: Plain 1: 1st Side	*ENG				
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 50 / 0 / 2 mm/step]			
003	Paper Transfer: 1200: 1st Side	*ENG				
005	Separation DC: Plain 1: 1st Side	*ENG				
006	Separation DC: Plain 1: 2nd Side	*ENG	[0 to 50 / 0 / 2 mm/step]			
007	Separation DC: 1200: 1st Side	*ENG				

	[Thick 1: Trail. Edge Correction] Thick 1 Paper: Trailing Edge Correction				
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode. SP2502 and SP2507 are multiplied by these SP values.				
2523	Plain: High speed, 1200: Low speed				
	Note				
 The paper trailing edge area can be adjusted with SP2524. 					
001	Paper Transfer: Plain: 1st Side	*ENG			
002	Paper Transfer: Plain: 2nd Side	*ENG	[0+, 400 / 100 / 59/ / 4]		
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]		
005	Separation DC: Plain: 1st Side	*ENG			
006	Separation DC: Plain: 2nd Side	*ENG	[0. 400 / 100 / 59/ / .]		
007	Separation DC: 1200: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]		

2524	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.				
	Plain: High speed, 1200: Low speed				
001	Paper Transfer: Plain: 1st Side	*ENG			
002	Paper Transfer: Plain: 2nd Side	*ENG			
003	Paper Transfer: 1200: 1st Side	*ENG	[0. 50/0/1 /.]		
005	Separation DC: Plain: 1st Side	*ENG	[0 to 50 / 0 / 1 mm/step]		
006	Separation DC: Plain: 2nd Side	*ENG			
007	Separation DC: 1200: 1st Side	*ENG			

2530	[Thick 1: Environment Correction] Plain: High speed, 1200: Low speed		
001	Separation DC: Plain: 1st Side	*ENG	[] to 60 / 22 / 1 /stan]
002	Separation DC: Plain: 2nd Side	*ENG	[1 to 60 / 22 / 1 /step]

003	Paper Transfer: Plain: BW: 1st Side	*ENG	[] to 40 / 11 / 1 / to -1
004	Paper Transfer: Plain: BW:2nd Side	*ENG	[1 to 60 / 11 / 1 /step]
005	Paper Transfer: Plain: FC: 1st Side	*ENG	[1 to 60 / 1 / 1 /step]
006	Paper Transfer: Plain: FC:2nd Side	*ENG	[1 to 60 / 11 / 1 /step]
007	Separation DC: 1200: 1st Side	*ENG	[1 to 60 / 22 / 1 /step]
009	Paper Transfer: 1200: BW: 1st Side	*ENG	[1 to 60 / 11 / 1 /step]
011	Paper Transfer: 1200: FC: 1st Side	*ENG	[1 to 60 / 1 / 1 /step]

	2551	[Thick 2: Bias]		
		Adjusts the DC voltage of the discharge plate for thick 2 paper.		
	001	Separation DC: 1st Side	*ENG	[0. 4000 / 2500 / 10) / / .]
	002	Separation DC: 2nd Side	Side *ENG [0 to 4000 / 3500 / 1	

2553	[Thick 2: Bias: BW]				
2555	Adjusts the current for the paper transfer roller for thick 2 paper in black-and-white mode.				
001	001 Paper Transfer: 1st Side *ENG [0 to 250 / 7 / 1 –μA /ste				
002	Paper Transfer: 2nd Side *ENG		[0 to 250 / 12 / 1 - µA /step]		

	2558	[Thick 2: Bias: FC]			
		Adjusts the current for the paper transfer roller for thick 2 paper in full color mode.			
	001			[0 to 250 / 16 / 1 – µA /step]	
	002			[0 to 250 / 15 / 1 – µA /step]	

	[Thick 2: Paper Size Correction]			
2561	er transfer roller current for each paper e SP values.			
00	Paper Transfer: 1st Side: S1	[100 to 600 / 100 / 5%/step]		
002	Paper Transfer: 2nd Side: S1	*ENG	S1 size > 297 mm (Paper width)	

003	Paper Transfer: 1st Side: S2	*ENG	[100 to 600 / 105 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)
004	Paper Transfer: 2nd Side: S2	*ENG	[100 to 600 / 160 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)
005	Paper Transfer: 1st Side: S3	*ENG	[100 to 600 / 110 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)
006	Paper Transfer: 2nd Side: S3	*ENG	[100 to 600 / 260 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)
007	Paper Transfer: 1st Side: S4	*ENG	[100 to 600 / 120 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
008	Paper Transfer: 2nd Side: S4	*ENG	[100 to 600 / 430 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
009	Paper Transfer: 1st Side: S5	*ENG	[100 to 600 / 140 / 5%/step] 148 mm > S5 size (Paper width)
010	Paper Transfer: 2nd Side: S5	*ENG	[100 to 600 / 600 / 5%/step] 148 mm > S5 size (Paper width)

	[Thick 2: Leading Edge Correction] Thick 2 Paper: Leading Edge Correction				
2571	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode. SP2553 and SP2558 are multiplied by these SP values.				
	Note				
	 The paper leading edge area can be adjusted with SP2572. 				
001	Paper Transfer: 1st Side *ENG		[0+, 400 / 100 / 59/ / +]		
002	Paper Transfer: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]		

2571	Adjusts the correction to the discharge plate current at the paper leading edge in each mode. SP2551 is multiplied by these SP values. • Note • The paper leading edge area can be adjusted with SP2572.		
003	Separation DC: 1st Side	*ENG	[0.4-400/100/59//44]
004	Separation DC: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]

	[Thick 2: Sw Timing: Lead. Edge]				
2572	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: 1st Side	*ENG			
002	Paper Transfer: 2nd Side	*ENG	[0.45.50.70.70		
003	Separation DC: 1st Side	*ENG	[0 to 50 / 0 / 2mm/step]		
004	Separation DC: 2nd Side	*ENG			

	[Thick 2: Trail. Edge Correction] Thick 2 Paper: Trailing Edge Correction				
2573	Adjusts the correction to the paper transfer roller current for the paper trailing edge in each mode. SP2553 and SP2558 are multiplied by these SP values.				
	♦ Note				
	The paper trailing edge area ca	dge area can be adjusted with SP2574.			
001	Paper Transfer: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]		
002	Paper Transfer: 2nd Side	*ENG	[0 10 400 / 100 / 3 %/ siep]		
003	Separation DC: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]		
004	Separation DC: 2nd Side	*ENG [0 to 400 / 100 / 5%/step]			

	[Thick 2: Trail. Edge Correction]
2574	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	Paper Transfer: 1st Side	*ENG	
002	Paper Transfer: 2nd Side	*ENG	[0.45.50./0./2/.4]
003	Separation DC: 1st Side	*ENG	[0 to 50 / 0 / 2 mm/step]
004	Separation DC: 2nd Side	*ENG	

2580 [Thick 2 Environment Correction]			
001	Separation DC: 1st Side	*ENG	[] to 40 / 22 /] /ston]
002	Separation DC: 2nd Side	*ENG	[1 to 60 / 22 / 1 /step]
003	Paper Transfer: BW: 1st Side	*ENG	[0.5 40 /11 /1 /55.1
004	Paper Transfer: BW: 2nd Side	*ENG	[0 to 60 / 11 / 1 /step]
005	Paper Transfer: FC: 1st Side	*ENG	[1 to 60 / 53 / 1 /step]
006	Paper Transfer: FC: 2nd Side	*ENG	[1 to 60 / 11 / 1 /step]

2601	[OHP: Bias]				
	Adjusts the DC voltage of the discharge plate for OHP.				
001	Separation DC	*ENG	[0 to 4000 / 3500 / 10 –V/step]		

2603	[OHP: Bias: BW]				
	Adjusts the current for the paper transfer roller for OHP in black-and-white mode.				
	001	Paper Transfer	*ENG	[0 to 250 / 12 / 1 - µA / step]	

2400	[OHP: Bias: FC]					
	2608	Adjusts the current for the paper transfer roller for OHP in full color mode.				
	001	Paper Transfer	*ENG	[0 to 250 / 15 / 1 - µA / step]		

	[OHP: Paper Size Correction]	
	2611	Adjusts the size correction coefficient for the paper transfer roller current for each paper size. SP2603 and SP2608 are multiplied by these SP values.

001	Paper Transfer: S1	*ENG	[100 to 600 / 100 / 5%/step] S1 size > 297 mm (Paper width)
002	Paper Transfer: S2	*ENG	[100 to 600 / 140 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)
003	Paper Transfer: S3	*ENG	[100 to 600 / 200 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)
004	Paper Transfer: S4	*ENG	[100 to 600 / 260 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
005	Paper Transfer: S5	*ENG	[100 to 600 / 330 / 5%/step] 148 mm > S5 size (Paper width)

	[OHP: Leading Edge Correction]					
2621	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode. SP2603 and SP2608 are multiplied by these SP values. • Note • The paper leading edge area can be adjusted with SP2622.					
	The paper leading eage of	Tod can be	3 da 03/04 Willi 0/ 2022.			
001	Paper Transfer	*ENG [0 to 400 / 100 / 5%/step]				
2621	Adjusts the correction to the discharge plate current at the paper leading edge in each mode. SP2601 is multiplied by these SP values. • Note					
	The paper leading edge area can be adjusted with SP2622.					
002	2 Separation DC *ENG [0 to 400 / 100 / 5%/step]					

2622	[OHP: Switch Timing: Leading Edge]				
	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	*ENG	[0 += 50 / 0 / 2 / +=]		
002	Separation DC	*ENG	[0 to 50 / 0 / 2 mm/step]		

	[OHP: Trailing Edge Correction]					
2623	Adjusts the correction to the paper transfer roller current for the paper trailing edge in each mode. SP2603 and SP2608 are multiplied by these SP values.					
	 ♦ Note					
	 The paper trailing edge area can be adjusted with SP2624. 					
001	Paper Transfer	*ENG	[0.1-400 / 100 / 59/ /]			
002	Separation DC	*ENG	[0 to 400 / 100 / 5%/step]			

	[OHP: Trailing Edge Correction]				
2624	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	Paper Transfer	*ENG	[0 to 50 / 0 / 1 mm/step]		
002	Separation DC	*ENG	[0 to 50 / 0 / 2 mm/step]		

2630	[OHP: Environment Correction]				
001	Separation DC	*ENG	[1 to 60 / 22 / 1 /step]		
002	Paper Transfer: BW	*ENG	[1 to 60 / 11 / 1 /step]		
003	Paper Transfer: FC	*ENG	[1 to 60 / 1 / 1 /step]		

2650	[Thick3: Bias]				
	Adjusts the DC voltage of the discharge plate for thick paper 3.				
001	Separation DC: 1st Side	*ENG	[0.1. 2500 / 0 / 10 / / 1]		
002	Separation DC: 2nd Side	*ENG	[0 to 3500 / 0 / 10 –V/step]		

2651	[Thick3: Bias: BW]					
	Adjusts the current for the paper transfer roller for thick paper 3 in black-and-white mode.					
	001	Paper Transfer: 1st Side	*ENG	[0 to 250 / 10 / 1 - µA / step]		
	002	Paper Transfer: 2nd Side	*ENG	[0 to 250 / 12 / 1 - µA / step]		

2652	[Thick3: Bias: FC]		
2032	Adjusts the current for the paper transfer roller for thick paper 3 in full color mode.		
001	Paper Transfer: 1st Side	*ENG	[0 to 250 / 11 / 1 - µA /step]
002	Paper Transfer: 2nd Side	*ENG	[0 to 250 / 15 / 1 - µA / step]

	[Thick3: Paper Size Correction]				
2653	Adjusts the size correction coefficient for the paper transfer roller current for each paper size. SP2651 and SP2652 are multiplied by these SP values.				
001	Paper Transfer: 1st Side: S1	*ENG	[100 to 600 / 100 / 5%/step] S1 size > 297 mm (Paper width)		
002	Paper Transfer: 1st Side: S2	*ENG	[100 to 600 / 100 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)		
003	Paper Transfer: 1st Side: S3	*ENG	[100 to 600 / 100 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)		
004	Paper Transfer: 1st Side: S4	*ENG	[100 to 600 / 160 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)		
005	Paper Transfer: 1st Side: S5	*ENG	[100 to 600 / 100 / 5%/step] 148 mm > S5 size (Paper width)		
006	Paper Transfer: 2nd Side: S1	*ENG	[100 to 600 / 260 / 5%/step] S1 size > 297 mm (Paper width)		
007	Paper Transfer: 2nd Side: S2	*ENG	[100 to 600 / 100 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)		
008	Paper Transfer: 2nd Side: S3	*ENG	[100 to 600 / 430 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)		

009	Paper Transfer: 2nd Side: S4	*ENG	[100 to 600 / 100 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
010	Paper Transfer: 2nd Side: S5	*ENG	[100 to 600 / 600 / 5%/step] 148 mm > S5 size (Paper width)

	[Thick 3: Leading Edge Correction] Thick 3 Paper: Leading Edge Correction				
Adjusts the correction to the paper transfer roller current at the paper leading 6 each mode. SP2651 and SP2652 are multiplied by these SP values.					
	Note				
	The paper leading edge area can be	e adjusted wi	th SP2655.		
001	Paper Transfer: 1st Side	*ENG	[0.4-400 / 100 / 59/ /]		
002	Separation DC: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]		
	Adjusts the correction to the discharge plate current at the paper leading edge in each mode. SP2650 is multiplied by these SP values.				
2654	U Note				
	The paper leading edge area can be adjusted with SP2655.				
003	Paper Transfer: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]		
004	Separation DC: 2nd Side	*ENG	[0 10 400 / 100 / 3 %/ siep]		

	[Thick 3: Sw Timing: Lead. Edge]				
2655	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: 1st Side	*ENG			
002	Separation DC: 1st Side	*ENG	[0.45.50 / 0. / 2.555 / 4555]		
003	Paper Transfer: 2nd Side	*ENG	[0 to 50 / 0 / 2 mm/step]		
004	Separation DC: 2nd Side	*ENG			

	[Thick 3: Trail. Edge Correction] Thick 3 Paper: Trailing Edge Correction			
2656	Adjusts the correction to the paper transfer roller current for the paper trailing edge in each mode. SP2651 and SP2652 are multiplied by these SP values.			
	U Note			
	 The paper trailing edge area can be adjusted with SP2657. 			
001	Paper Transfer: 1st Side	*ENG		
002	Paper Transfer: 2nd Side	*ENG	[0. 400 / 100 / 59/ / . 1	
003	Separation DC: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]	
004	Separation DC: 2nd Side	*ENG		

	[Thick 3: Trail. Edge Correction]		
2657	nsfer roller/discharge plate at the d the image area.		
001	Paper Transfer: 1st Side	*ENG	
002	Paper Transfer: 2nd Side	*ENG	[0.1. 50 / 0 / 2 / 1]
003	Separation DC: 1st Side	*ENG	[0 to 50 / 0 / 2 mm/step]
004	Separation DC: 2nd Side	*ENG	

	rironment Coefficient Adjustment					
Adjusts the environment coefficient for each mode. When the environment is dete MM, SP2651 and SP2652 are multiplied by these SP values.						
001	Separation DC: 1st Side	*ENG		[1. (0 (00 (1 (. 1		
002	Separation DC: 2nd Side	*ENG [1 to 60 / 22 / 1 /step]		1 10 00 / 22 / 1 / siepj		
	Adjusts the environment coefficient for each mode. When the environment is detected as MM, SP2650 is multiplied by these SP values.					
003	Paper Transfer: BW: 1st Side		G	[] to 60 / 11 / 1 /stop]		
004	Paper Transfer: BW: 2nd Side	*ENG		[1 to 60 / 11 / 1 /step]		
005	Paper Transfer: FC: 1st Side	*EN	3	[1 to 60 / 55 / 1 /step]		

006 Paper Transfer: FC: 2nd Side	*ENG	[1 to 60 / 11 / 1 /step]
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2670	[Thick4: Bias]		
20/0	Adjusts the DC voltage of the discharge plate for thick paper 4.		
001	Separation DC: 1st Side	*ENG	[0.t4000 / 2500 / 10 . V/st]
002	Separation DC: 2nd Side	*ENG	[0 to 4000 / 3500 / 10 –V/step]

2671	[Thick4: Bias: BW]		
2071	Adjusts the current for the paper transfer roller for thick paper 4 in black-and-white mode.		
001	Paper Transfer: 1st Side	*ENG	[0 to 250 / 10 / 1 - µA / step]
002	Paper Transfer: 2nd Side	*ENG	[0 to 250 / 12 / 1 - µA / step]

2672	[Thick4: Bias: FC]		
2072	Adjusts the current for the paper transfer roller for thick paper 4 in full color mode.		
001	Paper Transfer: 1st Side	*ENG	[0 to 250 / 11 / 1 - #A /step]
002	Paper Transfer: 2nd Side	*ENG	[0 to 250 / 15 / 1 - µA / step]

	[Thick4: Paper Size Correction]				
2673	Adjusts the size correction coefficient for the paper transfer roller current for each paper size. SP2671 and SP2672 are multiplied by these SP values.				
001	Paper Transfer: 1st Side: S1	*ENG	[100 to 600 / 100 / 5%/step] S1 size > 297 mm (Paper width)		
002	Paper Transfer: 2nd Side: S1	*ENG	[100 to 600 / 100 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)		
003	Paper Transfer: 1st Side: S2	*ENG	[100 to 600 / 100 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)		

004	Paper Transfer: 2nd Side: S2	*ENG	[100 to 600 / 160 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
005	Paper Transfer: 1st Side: S3	*ENG	[100 to 600 / 100 / 5%/step] 148 mm > S5 size (Paper width)
006	Paper Transfer: 2nd Side: S3	*ENG	[100 to 600 / 260 / 5%/step] S1 size > 297 mm (Paper width)
007	Paper Transfer: 1st Side: S4	*ENG	[100 to 600 / 100 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)
008	Paper Transfer: 2nd Side: S4	*ENG	[100 to 600 / 430 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)
009	Paper Transfer: 1st Side: S5	*ENG	[100 to 600 / 100 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
010	Paper Transfer: 2nd Side: S5	*ENG	[100 to 600 / 600 / 5%/step] 148 mm > S5 size (Paper width)

	[Thick 4: Leading Edge Correction] Thick 4 Paper: Leading Edge Correction			
2674	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode. SP2671 and SP2672 are multiplied by these SP values. • The paper leading edge area can be adjusted with SP2675.			
001	Paper Transfer: 1st Side	*ENG	[0.1.400/100/59//]	
002	Separation DC: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]	
2674	Adjusts the correction to the discharge plate current at the paper leading edge in each mode. SP2670 is multiplied by these SP values. ••• Note			
	The paper leading edge area can be	adjusted wi	th SP2655.	

003	Paper Transfer: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]
004	Separation DC: 2nd Side	*ENG	[0 10 400 / 100 / 3 % / siep]

	[Thick 4: Sw Timing: Lead. Edge]			
2675	Adjusts the bias/voltage switch timing of paper leading edge between the erase m	•		
001	Paper Transfer: 1st Side	*ENG		
002	Separation DC: 1st Side	*ENG	[0.1. 50 / 0 / 2 / 1]	
003	Paper Transfer: 2nd Side	*ENG	[0 to 50 / 0 / 2 mm/step]	
004	Separation DC: 2nd Side	*ENG		

	[Thick 4: Trail. Edge Correction] Thick 4 Paper: Trailing Edge Correction				
Adjusts the correction to the paper transfer roller current for the paper trailing e each mode. SP2671 and SP2672 are multiplied by these SP values.					
	Note				
	The paper trailing edge area can be adjusted with SP2677.				
001	Paper Transfer: 1st Side	*ENG			
002	Paper Transfer: 2nd Side	*ENG	10. 400 / 100 / 50/ / . 1		
003	Separation DC: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]		
004	Separation DC: 2nd Side	*ENG			

	[Thick 4: Sw Timing: Trail. Edge]				
	[Trick 4: 5w Timing: Trail. Eage]				
2677	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	Paper Transfer: 1st Side	*ENG			
002	Paper Transfer: 2nd Side	*ENG	[0 to 50 / 0 / 2 mm/step]		
003	Separation DC: 1st Side	*ENG	[[O IO 30 / O / Z mm/ siep]		
004	Separation DC: 2nd Side	*ENG			

	[Thick 4: Environment Correction] Thick 4 Paper: MM Environment Coefficient Adjustment Adjusts the environment coefficient for each mode. When the environment is detected as MM, SP2671 and SP2672 are multiplied by these SP values.				
2680					
001	Separation DC: 1st Side				
002	Separation DC: 2nd Side	*ENG		[1 to 60 / 22 / 1 /step]	
2680	Adjusts the environment coefficient for each mode. When the environment is detected as MM, SP2670 is multiplied by these SP values.				
003	Paper Transfer: BW: 1st Side *ENC				
004	Paper Transfer: BW: 2nd Side:	*ENG		[1 to 60 / 11 / 1 /step]	
005	Paper Transfer: FC: 1 st Side	*		[1 to 60 / 55 / 1 /step]	
006	Paper Transfer: FC: 2nd Side		*ENG	[1 to 60 / 11 / 1 / step]	

	[Special 1 : Bias]			
2751	Adjusts the DC voltage of the discharge plate for special paper 1. Plain: High speed, Thick 1: Middle speed			
001	Separation DC: Plain: 1st Side	*ENG		
002	Separation DC: Plain: 2nd Side	*ENG	[0 to 4000 / 3500 / 10 –V/	
003	Paper Transfer: Thick 1: 1st Side	*ENG		

	[Special 1: Bias: BW]				
2753	Adjusts the current for the paper transfer roller for special paper 1 in black-and-white mode.				
	Plain: High speed				
001	Paper Transfer: Plain: 1st Side	*ENG	[0.5.050 / 20 / 1. 114 / 55.1]		
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 250 / 22 / 1 - µA /step]		
003	Paper Transfer: Plain: 1st Side	*ENG	[0 to 250 / 11 / 1 - µA / step]		

	[Special 1: Bias: FC]				
2757	Adjusts the current for the paper transfer roller for special paper 1 in full color mode. Plain: High speed, Fine: Low speed				
001	Paper Transfer: Plain: 1st Side	*ENG	[0 to 250 / 30 / 1 - µA / step]		
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 250 / 33 / 1 - µA / step]		
003	Paper Transfer: Plain: 1st Side	*ENG	[0 to 250 / 15 / 1 - µA / step]		

	[Special 1: Paper Size Correction] Adjusts the size correction coefficient for the paper transfer roller current for each paper size. SP2753 and SP2757 are multiplied by these SP values.				
2761					
001	Paper Transfer: 1st Side: S1	*ENG	[100 to 600 / 100 / 5%/step]		
002	Paper Transfer: 2nd Side: S1	*ENG	S1 size > 297 mm (Paper width)		
005	Paper Transfer: 1st Side: S2	*ENG	[100 to 600 / 120 / 5%/step]		
006	Paper Transfer: 2nd Side: S2	*ENG	297 mm > S2 size > 275 mm (Paper width)		
009	Paper Transfer: 1st Side: S3	*ENG	[100 to 600 / 140 / 5%/step]		
010	Paper Transfer: 2nd Side: S3	*ENG	275 mm > S3 size > 210 mm (Paper width)		
013	Paper Transfer: 1st Side: S4	*ENG	[100 to 600 / 160 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)		
014	Paper Transfer: 2nd Side: S4	*ENG	[100 to 600 / 160 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)		
017	Paper Transfer: 1st Side: S5	*ENG	[100 to 600 / 180 / 5%/step] 148 mm > S5 size (Paper width)		
018	Paper Transfer: 2nd Side: S5	*ENG	[100 to 600 / 180 / 5%/step] 148 mm > S5 size (Paper width)		

	[Special 1: Leading Edge Correction] Special 1 Paper: Leading Edge Correction				
0.771	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode. SP2753 and SP2757 are multiplied by these SP values.				
2771	Plain: High speed, 1200: Low speed Note				
	The paper leading edge area can be adjusted with SP2772.				
001	Paper Transfer: Plain: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]		
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]		
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]		
2771	Adjusts the correction to the discharge plate current at the paper leading edge in each mode. SP2751 is multiplied by these SP values.				
2//1	↓ Note				
	The paper leading edge area can be adjusted with SP2772.				
005	Separation DC: Plain: 1st Side	*ENG	[0 to 400 / 100 / 5% /stan]		
006	Separation DC: Plain: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]		
007	Separation DC: 1200: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]		

	[Special 1: Sw Timing: Lead. Edge]				
2772	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. Plain: High speed, 1200: Low speed				
	riain: riigh speed, 1200: Low speed				
001	Paper Transfer: Plain: 1st Side	*ENG	[04-50/0/2/]		
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 50 / 0 / 2 mm/step]		
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 50 / 0 / 1 mm/step]		
005	Separation DC: Plain: 1st Side	*ENG			
006	Separation DC: Plain: 2nd Side	*ENG	[0 to 50 / 0 / 2 mm/step]		
007	Separation DC: 1200: 1st Side	*ENG			

	[Sunain 1. Taril Educ Compation] Sunain 1 December Educ Compation				
	[Special 1: Trail. Edge Correction] Special 1 Paper: Trailing Edge Correction				
0770	Adjusts the correction to the paper transfer roller current for the paper trailing edge in each mode. SP2753 and SP2757 are multiplied by these SP values.				
2773	Plain: High speed, 1200: Low speed				
	The paper trailing edge area can be adjusted with SP2774.				
001	Paper Transfer: Plain: 1st Side	*ENG			
002	Paper Transfer: Plain: 2nd Side	*ENG			
003	Paper Transfer: 1200: 1st Side	*ENG	[0.4-400 / 100 / 59/ /]		
005	Separation DC: Plain: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]		
006	Separation DC: Plain: 2nd Side	*ENG			
007	Separation DC: 1200: 1st Side	*ENG			

	[Special 1: Sw Timing: Trail. Edge]				
2774	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. Plain: High speed, 1200: Low speed				
001	Paper Transfer: Plain: 1st Side	*ENG			
002	Paper Transfer: Plain: 2nd Side	*ENG			
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 50 / 0 / 2 mm/step]		
005	Separation DC: Plain: 1st Side	*ENG	[[o lo 30 / o / z mm/siep]		
006	Separation DC: Plain: 2nd Side	*ENG			
007	Separation DC: 1200: 1st Side	*ENG			

2780	[Special 1: Environment Correction] Plain: High speed, 1200: Low speed		
001	Separation DC: Plain: 1st Side	*ENG	[1 to 60 / 26 / 1 /step]
002	Separation DC: Plain: 2nd Side	*ENG	[1 to 60 / 32 / 1 /step]

003	Paper Transfer: Plain: BW: 1st Side	*ENG	[] to 40 / 11 / 1 /stan]
004	Paper Transfer: Plain: BW:2nd Side	*ENG	[1 to 60 / 11 / 1 /step]
005	Paper Transfer: Plain: FC: 1st Side	*ENG	[1 to 60 / 1 / 1 /step]
006	Paper Transfer: Plain: FC:2nd Side	*ENG	[1 to 60 / 14 / 1 /step]
007	Separation DC: 1200: 1st Side	*ENG	[1 to 60 / 26 / 1 /step]
009	Paper Transfer: 1200: BW: 1st Side	*ENG	[1 to 60 / 11 / 1 /step]
011	Paper Transfer: 1200: FC: 1st Side	*ENG	[1 to 60 / 1 / 1 /step]

	[Special2: Bias]		
Adjusts the DC voltage of the discharge plate for special paper 2. Plain: High speed, 1200: Low speed			
001	Separation DC: Plain: 1st Side	*ENG	
002	Separation DC: Plain: 2nd Side	*ENG	[0 to 4000 / 3500 / 10 -V/ step]
003	Separation DC: 1200: 1st Side	*ENG	

	[Special2: Bias: BW] Adjusts the current for the paper transfer roller for special paper 2 in black-and-white mode. Plain: High speed, 1200: Low speed			
2803				
001	Paper Transfer: Plain: 1st Side	*ENG	[0.1. 050 / 22 / 1. 114 / 1]	
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 250 / 22 / 1 - µA /step]	
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 200 / 11 / 1 - µA /step]	

	[Special2: Bias: FC]			
2807	Adjusts the current for the paper transfer roller for special paper 2 in full color mode. Plain: High speed, Thick 2&Fine: Low speed			
001	Paper Transfer: Plain: 1st Side	*ENG	[0 to 250 / 30 / 1 - µA /step]	
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 250 / 33 / 1 - µA /step]	

003 Paper Transfer: 1200: 1st Side

	[Special2: Paper Size Correction]				
2811	Adjusts the size correction coefficient for size. SP2803 and SP2807 are multiplied	r the paper transfer roller current for each paper ed by these SP values.			
001	Paper Transfer: 1st Side: S1	*ENG	[100 to 600 / 100 / 5%/step]		
002	Paper Transfer: 2nd Side: S1	*ENG	S1 size > 297 mm (Paper width)		
005	Paper Transfer: 1st Side: S2	*ENG	[100 to 600 / 120 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)		
006	Paper Transfer: 2nd Side: S2	*ENG	[100 to 600 / 120 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)		
009	Paper Transfer: 1st Side: S3	*ENG	[100 to 600 / 140 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)		
010	Paper Transfer: 2nd Side: S3	*ENG	[100 to 600 / 140 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)		
013	Paper Transfer: 1st Side: S4	*ENG	[100 to 600 / 160 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)		
014	Paper Transfer: 2nd Side: S4	*ENG	[100 to 600 / 160 / 5%/step] 210 mm > \$4 size > 148 mm (Paper width)		
017	Paper Transfer: 1st Side: S5	*ENG	[100 to 600 / 180 / 5%/step] 148 mm > S5 size (Paper width)		
018	Paper Transfer: 2nd Side: S5	*ENG	[100 to 600 / 180 / 5%/step] 148 mm > S5 size (Paper width)		

	[Special 2: Lead Edge Correction] Special 2 Paper: Leading Edge Correction				
2021	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode. SP2803 and SP2807 are multiplied by these SP values.				
Plain: High speed, 1200: Low speed					
	Note				
	The paper leading edge area can be adjusted with SP2822.				
001	Paper Transfer: Plain: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]		
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]		
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]		
2821	Adjusts the correction to the discharge plate current at the paper leading edge in each mode. SP2801 is multiplied by these SP values.				
2021	♦ Note				
	The paper leading edge area can be adjusted with SP2822.				
005	Separation DC: Plain: 1st Side	*ENG			
006	Separation DC: Plain: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]		
007	Separation DC: 12001st Side	*ENG			

	[Special 2: Sw Timing: Lead. Edge]				
2822	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. Plain: High speed, 1200: Low speed				
001	Paper Transfer: Plain: 1st Side	*ENG			
	'				
002	Paper Transfer: Plain: 2nd Side	*ENG			
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 50 / 0 / 2 mm/step]		
005	Separation DC: Plain: 1st Side	*ENG	[0 10 30 / 0 / 2 mm/ siep]		
006	Separation DC: Plain: 2nd Side	*ENG			
007	Separation DC: 1200: 1st Side	*ENG			

[Special 2: Trail. Edge Correction] Special 2 Paper: Trailing Edge Correction					
0000	Adjusts the correction to the paper transfer roller current for the paper trailing edge in each mode. SP2803 and SP2807 are multiplied by these SP values.				
2823	Plain: High speed, 1200: Low speed				
	↓ Note				
The paper trailing edge area can be adjusted with SP2824.					
001	Paper Transfer: Plain: 1st Side	*ENG			
002	Paper Transfer: Plain: 2nd Side	*ENG			
003	Paper Transfer: 1200: 1st Side	*ENG	[0.1- 400 / 100 / 5% /]		
005	Separation DC: Plain: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]		
006	Separation DC: Plain: 2nd Side	*ENG			
007	Separation DC: 1200: 1st Side	*ENG			

	[Special 2: Sw Timing: Trail. Edge]				
2824	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.				
	Plain: High speed, 1200: Low speed				
001	Paper Transfer: Plain: 1st Side	*ENG			
002	Paper Transfer: Plain: 2nd Side	*ENG			
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 50 / 0 / 2 mm/step]		
005	Separation DC: Plain: 1st Side	*ENG	[O IO 3O / O / Z mm/siep]		
006	Separation DC: Plain: 2nd Side	*ENG			
007	Separation DC: 1200: 1st Side	*ENG			

2830	[Special 2: Environment Correction] Plain: High speed, 1200: Low speed		
001	Separation DC: Plain: 1st Side	*ENG	[1 to 60 / 26 / 1 /step]
002	Separation DC: Plain: 2nd Side	*ENG	[1 to 60 / 32 / 1 /step]

003	Paper Transfer: Plain: BW: 1st Side	*ENG	[1 to 60 / 11 / 1 /step]
004	Paper Transfer: Plain: BW:2nd Side	*ENG	[1 to 60 / 11 / 1 /step]
005	Paper Transfer: Plain: FC: 1st Side	*ENG	[1 to 60 / 1 / 1 /step]
006	Paper Transfer: Plain: FC:2nd Side	*ENG	[1 to 60 / 14 / 1 /step]
007	Separation DC: 1200: 1st Side	*ENG	[1 to 60 / 26 / 1 /step]
009	Paper Transfer: 1200: BW: 1st Side	*ENG	[1 to 60 / 11 / 1 /step]
011	Paper Transfer: 1200: FC: 1st Side	*ENG	[1 to 60 / 1 / 1 /step]

	[Special 3: Bias]			
2851	Adjusts the DC voltage of the discharge plate for special paper 3. Plain: High speed, 1200: Low speed			
001	Separation DC: Plain: 1st Side	*ENG		
002	Separation DC: Plain: 2nd Side	*ENG	[0 to 4000 / 3500 / 10 -V/ step]	
003	Separation DC: 1200: 1st Side	*ENG		

	[Special 3: Bias: BW]				
Adjusts the current for the paper transfer roller for special paper 3 in black-and-mode.			paper 3 in black-and-white		
	Plain: High speed, 1200: Low speed				
001	Paper Transfer: Plain: 1 st Side	*ENG	[0. 050 / 00 / 1 !! 4 / 1]		
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 250 / 22 / 1 - µA / step]		
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 250 / 11 / 1 - µA / step]		

	[Special 3: Bias: FC]				
2857	Adjusts the current for the paper transfer roller for special paper 3 in full color mode. Plain: High speed, 1200: Low speed				
001	Paper Transfer: Plain: 1st Side	*ENG	[0 to 250 / 30 / 1 - µA /step]		
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 250 / 33 / 1 - µA /step]		

003 Paper Transfer: 1200: 1st Side	*ENG	[0 to 250 / 15 / 1 - µA /step]
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	[Special 3: Paper Size Correction] Adjusts the size correction coefficient for the paper transfer roller current for each paper size. SP2852 and SP2857 are multiplied by these SP values.				
2861					
001	Paper Transfer: 1st Side: S1	*ENG	[100 to 600 / 100 / 5%/step]		
002	Paper Transfer: 2nd Side: S1	*ENG	S1 size > 297 mm (Paper width)		
005	Paper Transfer: 1st Side: S2	*ENG	[100 to 600 / 120 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)		
006	Paper Transfer: 2nd Side: S2	*ENG	[100 to 600 / 120 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)		
009	Paper Transfer: 1st Side: S3	*ENG	[100 to 600 / 140 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)		
010	Paper Transfer: 2nd Side: S3	*ENG	[100 to 600 / 140 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)		
013	Paper Transfer: 1st Side: S4	*ENG	[100 to 600 / 160 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)		
014	Paper Transfer:: 2nd Side: S4	*ENG	[100 to 600 / 160 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)		
017	Paper Transfer:: 1st Side: S5	*ENG	[100 to 600 / 180 / 5%/step] 148 mm > S5 size (Paper width)		
018	Paper Transfer:: 2nd Side: S5	*ENG	[100 to 600 / 180 / 5%/step] 148 mm > S5 size (Paper width)		

	[Special 3: Lead. Edge Correction] Special 3 Paper: Leading Edge Correction				
0071	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode. SP2852 and SP2857 are multiplied by these SP values.				
2871	Plain: High speed, 1200: Low speed				
	Note				
	The paper leading edge area can be c	ıdjusted wi	th SP2872.		
001	Paper Transfer: Plain: 1st Side	*ENG			
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]		
003	Paper Transfer: 1200: 1st Side	*ENG			
	Adjusts the correction to the discharge plate current at the paper leading edge in each mode. SP2851 is multiplied by these SP values.				
2871	₩ Note				
	The paper leading edge area can be a	ıdjusted wi	th SP2872.		
005	Separation DC: Plain: 1st Side	*ENG			
006	Separation DC: Plain: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]		
007	Separation DC: 1200: 1st Side	*ENG			

	[Special 3: Sw Timing: Lead. Edge]				
2872	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.				
	Plain: High speed, 1200: Low speed				
001	Paper Transfer: Plain: 1st Side	*ENG			
002	Paper Transfer: Plain: 2nd Side	*ENG			
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 50 / 0 / 2 mm /ston]		
005	Separation DC: Plain: 1st Side	*ENG	[0 to 50 / 0 / 2 mm/step]		
006	Separation DC: Plain: 2nd Side	*ENG			
007	Separation DC: 1200: 1st Page	*ENG			

	[Special 3: Trail. Edge Correction] Special 3 Paper: Trailing Edge Correction			
0.070	Adjusts the correction to the paper transfer roller current for the paper trailing edge in each mode. SP2852 and SP2857 are multiplied by these SP values.			
2873	Plain: High speed, 1200: Low speed			
	₩Note			
	The paper trailing edge area can be adjusted with SP2874.			
001	Paper Transfer: Plain: 1st Side	*ENG		
002	Paper Transfer: Plain: 2nd Side	*ENG		
003	Paper Transfer: 1200: 1st Side	*ENG	[0.4-400/100/59//4]	
005	Separation DC: Plain: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]	
006	Separation DC: Plain: 2nd Side	*ENG		
007	Separation DC: 1200: 1st Page	*ENG		

	[Special 3: Sw Timing: Trail. Edge]		
2874	Adjusts the bias/voltage switch timing of the paper transfer roller/discharge plate paper trailing edge between the erase margin area and the image area. Plain: High speed, 1200: Low speed		
001	Paper Transfer: Plain: 1 st Side	*ENG	
002	Paper Transfer: Plain: 2nd Side	*ENG	
003	Paper Transfer: 1200: 1st Side	*ENG	[0.1. 50 / 0. / 0 / 1]
005	Separation DC: Plain: 1st Side	*ENG	[0 to 50 / 0 / 2 mm/step]
006	Separation DC: Plain: 2nd Side	*ENG	
007	Separation DC: 1200: 1st Page	*ENG	

2880	[Special 3: Environment Correction]		
	Plain: High speed, 1200: Low speed		
001	Separation DC: Plain: 1st Side	*ENG	[1 to 60 / 26 / 1 /step]
002	Separation DC: Plain: 2nd Side	*ENG	[1 to 60 / 32 / 1 /step]

003	Paper Transfer: Plain: BW: 1st Side	*ENG	[1 + 40 / 11 / 1 / + - 1
004	Paper Transfer: Plain: BW:2nd Side	*ENG	[1 to 60 / 11 / 1 /step]
005	Paper Transfer: Plain: FC: 1st Side	*ENG	[1 to 60 / 1 / 1 /step]
006	Paper Transfer: Plain: FC:2nd Side	*ENG	[1 to 60 / 11 / 1 /step]
007	Separation DC: 1200: 1st Side	*ENG	[1 to 60 / 26 / 1 /step]
009	Paper Transfer: 1200: BW: 1st Side	*ENG	[1 to 60 / 11 / 1 /step]
011	Paper Transfer: 1200: FC: 1st Side	*ENG	[1 to 60 / 1 / 1 /step]

	[Dev Rvs Time] Development Roller Reverse Time			
2905	Specified the time of the development roller reverse rotation after the development unit has stopped. The reverse rotation of the development roller is used for removing dust from the development roller.			
001	К	*ENG	[0. 000 / 00 / 10 / 1	
002	М	*ENG		
003	С	*ENG	[0 to 200 / 80 / 10 msec/step]	
004	Υ	*ENG		
	[Dev Rvs Threshold Counter]			
005	Specified the threshold distance for the development roller reverse mode. This SP refers to the counters for SP2905-006 to -009.			
	All	*ENG	[0 to 400000 / 4000 / 10 mm/step]	
	[Dev Rvs Counter]			
006	К	*ENG	[0 to 999999999 / - / 1 mm/step]	
007	М	*ENG		
008	С	*ENG		
009	Υ	*ENG		

	[Acs Setting (FC to Bk)]			
2907	Adjusts the threshold for moving away the image transfer belt from the color PCDUs. This SP moves the image transfer belt away from the color PCDUs when the number of B/W image printouts reaches the number of sheets specified with this SP after consecutive full color image printouts in the full color mode. If this SP is set to "0", the image transfer belt does not move away.			
001	Continuous Bk Pages	*ENG	[0 to 10 / 0 / 1 sheet/step]	

2920	[Trans Mot Control]			
	0: Encorder 1 :FG	*ENG	[0 or 1 / 0 / 1 /step]	
001	Selects the speed control mode for the ITB. If SC443 occurs and machine does not recover, change this setting to "1".			
	SC443-00 Count	*ENG	[0 to 3 / 0 / 1 /step]	
002	Displays the number of the ITB encodre error. SC443 is displayed if this counter counts to "3".			

	[SecondaryFB: Threshold] Paper Transfer Roller Feed-back: Threshold Adjustment			
2930	Adjusts the threshold between high resistance (division 1) and low resistance (division 2) at the paper transfer roller. This SP affects SP2931 to SP2939.			
001	Voltage	*ENG	[0 to 7000 / 6000 / 10 –V/step]	

2	2960	[Process Interval]		
	001	Additional Time	*ENG	[0 to 10 / 0 / 1 sec/step]
		Adjusts the additional time for ending the machine's process.		

2970	[Cleaning After JOB]		
001	No Refresh	*ENG	[0 to 100 / 33 / 1 /step] 0: No cleaning
	Specifies the threshold sheets for the cleaning of the paper transfer roller without the refresh mode.		

002	Refresh	*ENG	[0 or 1 / 1 / 1 /step]	
002			0: No cleaning, 1: Cleaning	
2971	T1 Non Image Area ON Timin	g	1	
001	Standard Speed	*ENG	[-400 to 290 / 0 / 10 msec/step]	
	Adjusts the timing for the non-ir	mage area b	ias of the image transfer roller.	
002	Medium Speed	*ENG	[-400 to 290 / 0 / 10 msec/step]	
003	Low Speed	*ENG	[-790 to 410 / 0 / 10 msec/step]	
2972	B/W Image Request Timing			
		*5.10	In	
001	Standard Speed	*ENG	[0 to 4000 / 0 / 10 msec/step]	
002	Medium Speed	*ENG	[0 to 4000 / 0 / 10 msec/step]	
003	Low Speed	*ENG	[0 to 4000 / 0 / 10 msec/step]	
2973	2973 Forced Process Down Threshold			
001	-	*ENG	[0 to 5000 / 0 / 10 page/step]	
2974	OPC PreCharge Time Control			
001	Standard Speed	*ENG	[0 to 1500 / 136 / 1 msec/step]	
002	Medium Speed	*ENG	[0 to 1500 / 146 / 1 msec/step]	
003	Low Speed	*ENG	[0 to 2600 / 0 / 1 msec/step]	
2000	Continuous I.I. D			
2980	Continuous Job Page		T	
001	-	*ENG	[0 to 300 / 100 / 10 page/step]	
002	-	*ENG	[0 to 600 / 30 / 10 sec/step]	
003	-	*ENG	[0 to 600 / 30 / 10 sec/step]	
2990	Print Duty Control			
	<u>'</u>			

001	Duty Control State	*ENG	[0 or 1 / - / 1 /step]
			0: No limit, 1: Limit
002	Exec Interval: Duty Control	*ENG	[60 to 3600 / 300 / 10 min./step]
003	Duty Control Thresh	*ENG	[0 to 999999999 / 0 / 1 mm/step]
004	Forced CPM Down Thresh: No Duty Control	*ENG	[0 to 5000 / 0 / 1 page/step]
005	Drum Stop Time: No Duty Control	*ENG	[300 to 1500 / 500 / 10 msec/step]
006	ITB Stop Time: No Duty Control	*ENG	[300 to 1500 / 500 / 10 msec/step]
007	Forced CPM Down Thresh: Duty Control	*ENG	[0 to 5000 / 1 / 1 page/step]
008	Drum Stop Time: Duty Control	*ENG	[300 to 20000 / 7500 / 10 msec/step]
009	ITB Stop Time: Duty Control	*ENG	[300 to 20000 / 7500 / 10 msec/step]
010	Duty Control: Start Time	*ENG	Displays the time of the duty control execution.
011	Execution Temp. Threshold	*ENG	Sets the threshold of the duty control execution temperature. [20 to 70 / 39.8 / 0.1/step]
012	Cancellation Temp. Threshold	*ENG	Sets the threshold of the duty control cancellation temperature. [0.1 to 20 / 1 / 0.1/step]
013	ON/OFF Setting	*ENG	Turns duty control off or on. 0: OFF 1: ON

Main SP Tables-3

SP3-XXX (Process)

3011	[Process Cont. Manual Execution]			
001	Normal	-	Executes the normal process control manually (potential control). Check the result with SP3-325-001 and 3-012-001 after executing this SP.	
002	Density Adjustment	-	Executes the toner density adjustment manually.	
003	Pre-ACC	-	Executes the process control that is normally done before ACC. The type of process control is selected with SP3-041-004.	
004	Full MUSIC	-	Executes the process control that is normally done at the same time as MUSIC. This SP does the MUSIC (line position adjustment) twice.	
005	Normal MUSIC	-	Executes the process control that is normally done at the same time as MUSIC. This SP does the MUSIC (line position adjustment) once.	

	[Process Cont. Check Result] Process Control Self-check Result
	Displays the result of the latest process control self-check.
	All colors are displayed. The results are displayed in the order "Y C M K"
3012	e.g., 11 (Y) 99 (C) 11 (M) 11 (K): The self-check for Cyan failed but the others were successful.
	See the "Error Condition Tables" in the "Appendix: Process Control Error Conditions" section for details.

001	History: Latest	*ENG	
002	Result: Latest 1	*ENG	
003	Result: Latest 2	*ENG	
004	Result: Latest 3	*ENG	
005	Result: Latest 4	*ENG	[111] + 00000000 / /1/+]
006	Result: Latest 5	*ENG	[1111 to 99999999 / - / 1/step]
007	Result: Latest 6	*ENG	
008	Result: Latest 7	*ENG	
009	Result: Latest 8	*ENG	
010	Result: Latest 9	*ENG	

3013	[T Sensor Initial Set: Exe] Developer Initialization Setting			
001	Execution: ALL	-		
002	Execution: COL	-		
003	Execution: Bk	-	Executes the developer initialization for each	
004	Execution: M	-	color.	
005	Execution: C	-		
006	Execution: Y	-		

3014	[T Sensor Initial Set:Exe] Developer Initialization Result: Display			
	Display: YCMK	*ENG	[0 to 9999 / - / 1 /step] 1: Success, 2 to 9: Failure	
001	Displays the developer initialization result. See section "Developer Initialization Result" in the "Appendix: Process Control Error Conditions" section for details on the meaning of each code.			
	All colors are displayed. Values are displayed in the order Y C M Bk.			
	e.g., 1 (Y) 2 (C) 1 (M) 1 (Bk): Initialization of Cyan failed but the others succeeded.			

3015	[Forced Toner Supply: Execute] Forced Toner Supply ([Color])					
001	Execution: ALL	-				
002	Execution: COL	-				
003	Execution: Bk	-	Executes the manual toner supply to the			
004	Execution: M	-	development unit.			
005	Execution: C	-				
006	Execution: Y	-				

2014	[Forced Toner Supply: Setting]					
Specifies the manual toner supply time for each color.						
001	Supply Time: Bk	*ENG				
002	Supply Time: M	*ENG	[020 / 4 / 1 /]			
003	Supply Time: C	*ENG	[0 to 30 / 4 / 1 sec/step]			
004	Supply Time: Y	*ENG				

3041	[Process Control Type]					
001	Voltage Control	*ENG	[0 or 1 / 1 / 1/step] Alphanumeric 0: FIXED (Use the fixed values for the charge DC bias and development DC bias set with SP2-005 and SP2-229.) 1: CONTROL			
	Enables or disables potential control.					
002	LD Power Control	*ENG	[0 or 1 / 1 / 1/step] Alphanumeric 0: FIXED (at the value in SP2221-xxx) 1: CONTROL (adjusted by process control)			
	Selects the LD power control mode.					

003	AutoControl Prohibition Set	*ENG	[0 or 1 / 0 / -] 0: Permit, 1: Forbid			
	Enables or disables the automatic process control prohibition.					
004	Pre-ACC Process Control Selects the process control r	*ENG	[0 to 2 / 2 / 1/step] 0: Not Executed 1: Process Control 2: TC Control (TD Adjustment) 3: Not used is done before ACC.			
005	Pattern Calculation Method *ENG* [0 to 2 / 2 / 1/step] 0: FIXED 1: INITIALIZED 2: CALCULATED					
	Selects the process control method.					

3043	[TD Adjustment Mode]						
	Repeat Number: Power ON	*ENG	[0 to 9 / 4 / 1 time/step]				
001	Specifies the maximum number of repeats of the toner density adjustment at power on. O: Disabled, 1 to 3: Repeat number, 4: Repeat three times (No consumption mode) 5: Repeat three times (Toner is supplied only when the toner density is too low, and toner consumed only when the toner density is too dark.) 6 to 9: Disabled						
	Repeat Number: Initialization	*ENG	[0 to 9 / 3 / 1 time/step]				
002	Specifies the maximum number of repeats of the toner density adjustment at the developer initialization. O: Disabled, 1 to 3: Repeat number, 4: Repeat three times (No consumption mode) 5: Repeat three times (Toner is supplied only when the toner density is too low, and toner is consumed only when the toner density is too dark.) 6 to 9: Disabled						

	Repeat Number: Non-use	*ENG	[0 to 9 / 0 / 1 time/step]				
	Specifies the maximum number of repeats of the toner density adjustment in stand by mode.						
003	0: Disabled, 1 to 3: Repeat number,						
003	4: Repeat three times (No consumption m	ode)					
	5: Repeat three times (Toner is supplied o consumed only when the toner density is t	•	e toner density is too low, and tor				
	6 to 9: Disabled						
	Repeat Number: ACC	*ENG	[0 to 9 / 3 / 1 time/step]				
	Specifies the maximum number of repeats	of the tone	r density adjustment at ACC.				
	0: Disabled, 1 to 3: Repeat number,						
004	4: Repeat three times (No consumption m	ode)					
	5: Repeat three times (Toner is supplied only when the toner density is too low, and toner consumed only when the toner density is too dark.)						
	6 to 9: Disabled						
005	Repeat Number: Recovery	*ENG	[0 to 9 / 0 / 1 time/step]				
005	Not used						
	Repeat Number: Job End	*ENG	[0 to 9 / 4 / 1 time/step]				
	Specifies the maximum number of repeats of the toner density adjustment at job end.						
	0: Disabled, 1 to 3: Repeat number,						
006	4: Repeat three times (No consumption mode)						
	5: Repeat three times (Toner is supplied only when the toner density is too low, and toner						
	consumed only when the toner density is too dark.)						
	6 to 9: Disabled						
	Repeat: Interrupt	*ENG	[0 to 9 / 0 / 1 time/step]				
007	Specifies the maximum number of repeats of the toner density adjustment during printing. DFU						
	Toner Supply Coefficient	*ENG	[0 to 25.5 / 10 / 0.1 sec/step				
800	Adjusts the time for the toner supply mode when a toner density is detected to be low.						

	Consumption pattern: Bk		*ENC	3	[0 to :	255 / 5 / 1 time/step]
009	Specifies the belt mark generating time for checking the black toner density when toner density is detected to be low at the toner density adjustment.					
	Consumption pattern: M		*ENG	}	[0 to 2	255 / 5 / 1 time/step]
010	Specifies the belt mark generating density is detected to be low at t	-		necking the magenta toner density when toner isity adjustment.		
	Consumption pattern: C	*ENG	[0 to	255	5/5/	'l time/step]
011	Specifies the belt mark generating density is detected to be low at t	-		-		toner density when toner
	Consumption pattern: Y	*ENG	[0 to	255	5/5/	'l time/step]
012	Specifies the belt mark generating density is detected to be low at t	-		-	•	w toner density when toner
012	T1 Bias: Bk	*ENG	[0 to	80	/ 22 /	'l μA/step]
013	Adjusts the image transfer belt bi	as for Blad	ck.			
014	T2 Bias: M	*ENG	[0 to	80	/ 25 /	'l μA/step]
014	Adjusts the image transfer belt bias for Magenta.					
015	T3 Bias: C	*ENG	[0 to	80	/ 22 /	'l μA/step]
013	Adjusts the image transfer belt bi	as for Cyc	ın.			
016	T4 Bias: Y	*ENG	[0 to	80	/ 28 /	'l μA/step]
010	Adjusts the image transfer belt bi	as for Yell	ow.			
017	Developer Mixing Time	*ENG	[0 to	250	/ 10	/ 1 sec/step]
017	Specifies the developer mixing time at the toner density adjustment.					tment.
	Consumption Pat: LD: DUTY: Bk			* E	NG	[0 to 15 / 15 / 1 /step]
018	Adjusts the LD duty for the toner consumption mode at the toner density adjustment. In toner consumption mode, toner is discharged when the detected development gamma values (SP3611-001) exceed the target values (SP3611-005) by more than the specified thresholds (SP3239-009).					

	Consumption Pat: LD: DUTY: M	*ENG	[0 to 15 / 15 / 1 /step]				
	Adjusts the LD duty for the toner consumption mod	de at the tor	ner density adjustment.				
019		ner is discharged when the detected development gamma the target values (SP3611-006) by more than the specified					
	Consumption Pat: LD: DUTY: C	*ENG	[0 to 15 / 15 / 1 /step]				
	Adjusts the LD duty for the toner consumption mode at the toner density adjustment.						
020	In toner consumption mode, toner is discharged when the detected development gamma values (SP3611-003) exceed the target values (SP3611-007) by more than the specified thresholds (SP3239-009).						
	Consumption Pat: LD: DUTY: Y	*ENG	[0 to 15 / 15 / 1 /step]				
	Adjusts the LD duty for the toner consumption mode at the toner density adjustment.						
021	In toner consumption mode, toner is discharged when the detected development gamma values (SP3611-004) exceed the target values (SP3611-008) by more than the specified thresholds (SP3239-009).						

2044	[Toner Supply Type]					
Selects the toner supply method type.						
001	Bk	*ENG	[0 to 4 / 4 / 1/step] Alphanumeric			
002	М	*ENG	0: FIXED (with the supply rates stored with SP 3401)			
003	С	*ENG	1: PID (Vtref_Fixed)			
004	Υ	*ENG	2: PID (Vtref_Control) 3: Not used			
			4:MBD (Vtref_Control)			

3045	[Toner End Detection: Set]						
3043	Enables/disables the toner alert display on the LCD.						
001	ON/OFF	*ENG	[0 or 1 / 0 / 1/step] 0: Detect, 1: Not Detect				

	[Toner End Recovery]						
Adjusts the number of times toner supply is attempted for each color when the TD continues to detect toner end during toner recovery.							
001	Repeat: Bk	*ENG					
002	Repeat: M	*ENG	[14-20 / 5 / 1 5 /]				
003	Repeat: C	*ENG	[1 to 20 / 5 / 1 time/step]				
004	Repeat: Y	*ENG					

3131	[TE Count m: Display]						
3131	Display the number of toner en	s for each color.					
001	Bk	*ENG					
002	М	*ENG	[0.4.00.//1.5/.4]				
003	С	*ENG	[0 to 99 / - / 1 time/step]				
004	Υ	*ENG					

3201	[TD Sensor: Vt Display]				
3201	Display the current voltage of the TD sensor for each color.				
001	Current: Bk	*ENG			
002	Current: M	*ENG	[0.5.5.7.7.0.01.17/]		
003	Current: C	*ENG	[0 to 5.5 / - / 0.01 V/step]		
004	Current: Y	*ENG			

	[Vt Shift: Display/Set]						
3211	Adjusts the Vt correction value for each line speed. Thick 1: 154 mm/sec, Thick 2&Fine: 77 mm/sec						
001	Thick 1 Shift: Bk	*ENG	[0 to 5 / 0.26 / 0.01 V/step]				
002	Thick 1 Shift: M	*ENG	[0 to 5 / 0.26 / 0.01 V/step]				
003	Thick 1 Shift: C	*ENG	[0 to 5 / 0.26 / 0.01 V/step]				

004	Thick 1 Shift: Y	*ENG	[0 to 5 / 0.31 / 0.01 V/step]
005	Thick 2 & FINE Shift: Bk	*ENG	[0 to 5 / 0.26 / 0.01 V/step]
006	Thick 2 & FINE Shift: M	*ENG	[0 to 5 / 0.26 / 0.01 V/step]
007	Thick 2 & FINE Shift: C	*ENG	[0 to 5 / 0.26 / 0.01 V/step]
008	Thick 2 & FINE Shift: Y	*ENG	[0 to 5 / 0.31 / 0.01 V/step]
009	Mid TCShift: Bk	*ENG	
010	Mid TCShift: M	*ENG	[0.54-0.5 / 0./0.01 \//]
011	Mid TCShift: C	*ENG	[-0.5 to 0.5 / 0 / 0.01 V/step]
012	Mid TCShift: Y	*ENG	
013	Low TCShift: Bk	*ENG	
014	Low TCShift: M	*ENG	[0.5 + 0.5 / 0 / 0.01 \/ /1
015	Low TCShift: C	*ENG	[-0.5 to 0.5 / 0 / 0.01 V/step]
016	Low TCShift: Y	*ENG	

3221	[Vtcnt: Display/Set]				
3221	Displays or adjusts the current Vtcnt value for each color.				
001	Current: Bk	*ENG			
002	Current: M	*ENG	[0.5 5 / 2.04 / 0.01 \/ /]		
003	Current: C	*ENG	[0 to 5 / 3.86 / 0.01 V/step]		
004	Current: Y	*ENG			
005-008	Displays or adjusts the Vtcnt v	alue for ea	ch color at developer initialization. DFU		
005	Initial: Bk	*ENG			
006	Initial: M	*ENG	[0 to 5 / 3 94 / 0 01 \/ /stop1		
007	Initial: C	*ENG	[0 to 5 / 3.86 / 0.01 V/step]		
008	Initial: Y	*ENG			

3222	[Vtref: Display/Set]					
3222	Displays or adjusts the current Vtref value for each color.					
001	Current: Bk	*ENG				
002	Current: M	*ENG	[0. 55/ 2 /001V/.]			
003	Current: C	*ENG	[0 to 5.5 / 3 / 0.01 V/step]			
004	Current: Y	*ENG				
005-008	Displays or adjusts the Vtref value for each color at developer initialization. DFU					
005	Initial: Bk	*ENG				
006	Initial: M	*ENG	[0, 55 / /0017/, 1			
007	Initial: C	*ENG	[0 to 5.5 / - / 0.01 V/step]			
008	Initial: Y	*ENG	-			
009-012	Displays and adjusts Vtref cor	rection by	pixel coverage for each color. DFU			
009	Pixel Correction: Bk	*ENG				
010	Pixel Correction: M	*ENG	[5, 55 / /001 \//]			
011	Pixel Correction: C	*ENG	[-5 to 5.5 / - / 0.01 V/step]			
012	Pixel Correction: Y	*ENG				

3239	[Vtref Correction: Setting]	
	Adjusts the parameter for Vtref correction at the process control.	

001	(+)Consumption: Bk	*ENG	
002	(+)Consumption: M	*ENG	
003	(+)Consumption: C	*ENG	
004	(+)Consumption: Y	*ENG	[01 /0.04 /0.01 \//]
005	(-)Consumption: Bk	*ENG	[0 to 1 / 0.04 / 0.01 V/step]
006	(-)Consumption: M	*ENG	
007	(-)Consumption: C	*ENG	
008	(-)Consumption: Y	*ENG	
009-012	Threshold for development go	amma rank.	
009	P Rank 1 Threshold	*ENG	[0 to 2 / 0.2 / 0.1 /step]
010	P Rank 2 Threshold	*ENG	[0 to 2 / 0.05 / 0.1 /step]
011	P Rank 3 Threshold	*ENG	[-2 to 0 / -0.05 / 0.1 /step]
012	P Rank 4 Threshold	*ENG	[-2 to 0 / -0.2 / 0.1 /step]
013-014	Threshold for image density r	ank on the im	nage transfer belt.
013	T Rank 1 Threshold	*ENG	[-1 to 0 / -0.2 / 0.01 V/step]
014	T Rank 2 Threshold	*ENG	[0 to 1 / 0.2 / 0.01 V/step]
021-028	Sets the correction coefficient	of the Vtref	correction.
021	Correction Coefficient 1: Bk	*ENG	[0 to 1 / 0.5 / 0.1/step]
022	Correction Coefficient 1: M	*ENG	[0 to 1 / 0.5 / 0.1/step]
023	Correction Coefficient 1: C	*ENG	[0 to 1 / 0.5 / 0.1/step]
024	Correction Coefficient 1: Y	*ENG	[0 to 1 / 0.5 / 0.1/step]
025	Correction Coefficient 2: Bk	*ENG	[0 to 1 / 0.5 / 0.1/step]
026	Correction Coefficient 2: M	*ENG	[0 to 1 / 0.5 / 0.1/step]
027	Correction Coefficient 2: C	*ENG	[0 to 1 / 0.5 / 0.1/step]
028	Correction Coefficient 2: Y	*ENG	[0 to 1 / 0.5 / 0.1/step]

3241	[Background Potential Setting]					
001	Coefficient: Bk	*ENG	These are parameters for calculating the charge			
002	Coefficient: M	*ENG	bias referring to the development bias at process control.			
003	Coefficient: C	*ENG	[-1000 to 1000 / 0 / 1 /step]			
004	Coefficient: Y	*ENG	DC charge bias = Development bias x (1 + 0.001 x these vales) + SP3-241-005 to -008			
005	Offset: Bk	*ENG	These are additional values for calculating the			
006	Offset: M	*ENG	charge bias referring to the development bias at process control.			
007	Offset: C	*ENG	[0 to 255 / 140 / 1 V/step]			
008	Offset: Y	*ENG	DC charge bias = Development bias x (1 + 0.001 x SP3-241-001 to -004) + these values			

3242			
3242	Adjusts the coefficient for L	ntrol value at the process control.	
001	StdSpd:Coefficient: Bk	*ENG	[-1000 to 1000 / 118 / 1 /step]
002	StdSpd:Coefficient: M	*ENG	[-1000 to 1000 / 117 / 1 /step]
003	StdSpd:Coefficient: C	*ENG	[-1000 to 1000 / 79 / 1 /step]
004	StdSpd:Coefficient: Y	*ENG	[-1000 to 1000 / 92 / 1 /step]
005	StdSpd:Offset: Bk	*ENG	[-1000 to 1000 / 47 / 1 /step]
006	StdSpd:Offset: M	*ENG	[-1000 to 1000 / 41 / 1 /step]
007	StdSpd:Offset: C	*ENG	[-1000 to 1000 / 72 / 1 /step]
800	StdSpd:Offset: Y	*ENG	[-1000 to 1000 / 59 / 1 /step]
009	MidSpd:coef:Bk	*ENG	[-1000 to 1000 / 118 / 1 /step]
010	MidSpd:Coef:M	*ENG	[-1000 to 1000 / 117 / 1 /step]
011	MidSpd:Coef:C	*ENG	[-1000 to 1000 / 79 / 1 /step]
012	MidSpd:Coef:Y	*ENG	[-1000 to 1000 / 92 / 1 /step]
013	MidSpd:offset:Bk	*ENG	[-1000 to 1000 / 47 / 1 /step]

014	MidSpd:offset:M	*ENG	[-1000 to 1000 / 41 / 1 /step]
015	MidSpd:offset:C	*ENG	[-1000 to 1000 / 72 / 1 /step]
016	MidSpd:offset:Y	*ENG	[-1000 to 1000 / 59 / 1 /step]
017	LowSpd:Coef:Bk	*ENG	[-1000 to 1000 / 98 / 1 /step]
018	LowSpd:Coef:M	*ENG	[-1000 to 1000 / 104 / 1 /step]
019	LowSpd:Coef:C	*ENG	[-1000 to 1000 / 78 / 1 /step]
020	LowSpd:Coef:Y	*ENG	[-1000 to 1000 / 84 / 1 /step]
021	LowSpd:offset:Bk	*ENG	[-1000 to 1000 / 59 / 1 /step]
022	LowSpd:offset:M	*ENG	[-1000 to 1000 / 45 / 1 /step]
023	LowSpd:offset:C	*ENG	[-1000 to 1000 / 69 / 1 /step]
024	LowSpd:offset:Y	*ENG	[-1000 to 1000 / 65 / 1 /step]

3251	[Coverage]				
3231	These (-001 to -016) are coefficients for SP3-222-009 to -012.				
001	Latest Pixel: Bk	*ENG			
002	Latest Pixel: M	*ENG	Displays the latest coverage for each color.		
003	Latest Pixel: C	*ENG	[0 to 9999 / - / 1 cm ² /step]		
004	Latest Pixel: Y	*ENG			
005-008	Displays the average coverage of each color for the Vtref correction. "Average S" is defined when the number of developed pages does not reach the number specified with SP3251-017.				
005	Average S: Bk	*ENG			
006	Average S: M	*ENG	[0 to 100 / - / 0.01 %/step]		
007	Average S: C	*ENG	[0 10 100 / - / 0.01 /6/siep]		
008	Average S: Y	*ENG			

	`	erage of each color for the Vtref correction.				
009-012	"Average M" is defined when the number of developed pages does not reach the number specified with SP3251-018.					
009	Average M: Bk	* E1	٧G	G		
010	Average M: M	*ENG		[0.4	- 100 / /001 % /1	
011	Average M: C	* E1	٧G	[0]	o 100 / - / 0.01 %/step]	
012	Average M: Y	* E1	٧G			
	Displays the average co	overa	ge of e	each	color for the Vtref correction.	
013-016	"Average L" is defined number specified with S				of developed pages does not reach the	
013	Average L: Bk	* E1	٧G			
014	Average L: M	*ENG		[0.4	o 100 / - / 0.01 %/step]	
015	Average L: C	*ENG		[0]	0 100 / - / 0.01 %/siepj	
016	Average L: Y	*ENG				
017-019	Adjusts the threshold fo	r SP3-	251-(005 t	o -016.	
017	Total Page Setting: S		*EN	1G	[1 to 100 / 10 / 1 sheet/step]	
018	Total Page Setting: M		*EN	1G	[1 to 500 / 10 / 1 sheet/step]	
019	Total Page Setting: L		*EN	1G	[1 to 999 / 50 / 1 sheet/step]	
020-023	Adjusts the threshold fo	r SP3-	251-0)24 t	o -027.	
020	Total Page Setting: S2		*EN	1G	[1 to 100 / 40 / 1 sheet/step]	
021	Total Page Setting: M2		*EN	1G	[1 to 500 / 10 / 1 sheet/step]	
022	Total Page Setting: L2		*EN	1G	[1 to 999 / 50 / 1 sheet/step]	
024-027	Displays the latest cove	rage i	atio fo	or ea	ch color.	
024	Latest Coverage: Bk		*EN	1G		
025	Latest Coverage: M		*EN	1G	[0 to 100 / - / 0.01 %/step]	
026	Latest Coverage: C		*EN	1G	[0 10 100 / - / 0.01 /6/siep]	
027	Latest Coverage: Y		*EN	1G		

028	Displays the threshold of wh	threshold of whether to perform developer churning or not.	
026	DevMix Threshold	*ENG	[0 to 100 / 20 / 1 %/step]

2211	[ID Sensor DetectValue: Vofset]		
3311	Displays the ID sensor (regula	ar) offset volta	age for Vsg adjustments.
001	Voffset reg: Bk	*ENG	[0 to 5 / - / 0.01 V/step]
002	Voffset reg: M	*ENG	
003	Voffset reg: C	*ENG	[0 to 5.5 / - / 0.01 V/step]
004	Voffset reg: Y	*ENG	
005-007	Displays the ID sensor (diffusion) offset voltage for Vsg adjustments.		
005	Voffset dif: M	*ENG	
006	Voffset dif: C	*ENG	[0 to 5.5 / - / 0.01 V/step]
007	Voffset dif: Y	*ENG	
008-010	Displays the ID sensor offset voltage for Vsg adjustments.		sg adjustments.
008	Voffset TM (Front)	*ENG	
009	Voffset TM (Center)	*ENG	[0 to 5.5 / - / 0.01 V/step]
010	Voffset TM (Rear)	*ENG	

3321	[Vsg Adjustment: Execution]		
010	P/TM Sensor All	-	Execute the ID sensor initialization setting for all sensors

3322	[Vsg Adjustment Result: Vsg]
3322	Displays the result value of the Vsg adjustment for each sensor.

001	Vsg reg: Bk	*ENG	
002	Vsg reg: M	*ENG	
003	Vsg reg: C	*ENG	
004	Vsg reg: Y	*ENG	
005	Vsg dif: M	*ENG	[0 to 5.5
006	Vsg dif: C	*ENG	[0 10 3.3
007	Vsg dif: Y	*ENG	
800	Vsg TM (Front)	*ENG	
009	Vsg TM (Center)	*ENG	
010	Vsg TM (Rear)	*ENG	

0 to 5.5 / - / 0.01 V/step]

	[Vsg Adjustment Result]		
3325	Displays the result of the Vsg adjustment. The displayed numbers mean the result of each sensor (sensor for Front, sensor for Bk, sensor for Cyan, sensor for Center, sensor for Magenta, sensor for Yellow and sensor for Rear).		
001	Latest	*ENG	
002	Result: Latest 1	*ENG	
003	Result: Latest 2	*ENG	
004	Result: Latest 3	*ENG	[111 to 999 / - / 1 /step]
005	Result: Latest 4	*ENG	9: Unexpected error
006	Result: Latest 5	*ENG	3: Offset voltage error 2: Vsg adjustment value error
007	Result: Latest 6	*ENG	1: O.K
800	Result: Latest 7	*ENG	
009	Result: Latest 8	*ENG	
010	Result: Latest 9	*ENG	

2.401	[Fixed Supply Mode]		
Adjusts the toner supply rate in the fixed toner supply mode.			oner supply mode.
001	Fixed Rate: Bk	*ENG	
002	Fixed Rate: M	*ENG	[0 to 100 / 5 / 1 %/step]
003	Fixed Rate: C	*ENG	These SPs are used only when SP3-044 is set to "1".
004	Fixed Rate: Y	*ENG	

3411	[Toner Supply Rate: Display]			
3411	Displays the current toner supply rate.			
001	Latest: Bk	*ENG		
002	Latest: M	*ENG	[0100 / /1.9/ /]	
003	Latest: C	*ENG	[0 to 100 / - / 1 %/step]	
004	Latest: Y	*ENG		

3421	[Toner Supply Range]		
001	Upper Limit: Bk	*ENG	
002	Upper Limit: M	*ENG	Adjusts the toner supply rate during printing.
003	Upper Limit: C	*ENG	[0 to 100 / 100 / 1%/step]
004	Upper Limit: Y	*ENG	
005	Minimum Supply Time: Bk	*ENG	
006	Minimum Supply Time: M	*ENG	Adjusts the minimum toner supply time.
007	Minimum Supply Time: C	*ENG	[0 to 1000 / 0 / 1 msec/step]
008	Minimum Supply Time: Y	*ENG	

3501	[Process Control Target M/A]
3301	Adjusts the target M/A.

001	Maximum M/A: Bk	*ENG	
002	Maximum M/A: M	*ENG	[0.5.1./0.4./0.001/2/551
003	Maximum M/A: C	*ENG	[0 to 1 / 0.4 / 0.001 mg/cm ² /step]
004	Maximum M/A: Y	*ENG	

	[ImageQuality Adj. Counter:Disp]		
3510	Displays the total page counter for each adjustment mode.		
001	Potential Control: BW	*ENG	
002	Potential Control: FC	*ENG	
003	Power ON: BW	*ENG	
004	Power ON: FC	*ENG	
005	MUSIC: BW	*ENG	[0. 0000 / /]
006	MUSIC: FC	*ENG	[0 to 2000 / - / 1 page/step]
007	Vsg Adj.	*ENG	
008	Charge AC Control	*ENG	
009	MUSIC: Power ON: BW	*ENG	
010	MUSIC: Power ON: FC	*ENG	

3511	[Execution Interval: Setting]				
3311	Adjusts the threshold for each adjustment mode.				
001	Job End: Potential Control: BW	*ENG	[0 to 2000 / 250 / 1 page/step]		
002	Job End: Potential Control: FC	*ENG	[0 to 2000 / 100 / 1 page/step]		
003	Interrupt: Potential Control: BW	*ENG	[0 to 2000 / 500 / 1 page/step]		
004	Interrupt: Potential Control: FC	*ENG	[0 to 2000 / 200 / 1 page/step]		
005	Initial: Potential Control: BW	*ENG	[0 to 2000 / 250 / 1 page/step]		
006	Initial: Potential Control: FC	*ENG	[0 to 2000 / 100 / 1 page/step]		

007	Vsg Adj. Counter	*ENG	[0 to 2000 / 0 / 1 page/step]
008	Charge AC Control Counter	*ENG	[0 to 2000 / 0 / 1 page/step]
			[0 or 1 / 1 / 1 /step]
019	Environmental Correction	*ENG	0: Not Correct (OFF)
			1: Correct (ON)
			[0 or 1 / 1 / 1 /step]
020	Gamma Correction	*ENG	0: Not Correct (OFF)
			1: Correct (ON)
			[0 or 1 / 1 / 1 /step]
021	Non-use Time Correction	*ENG	0: Not Correct (OFF)
			1: Correct (ON)
022	Correction Coef 1: JE: BW	*ENG	[0 to 1 / 0.2 / 0.01 page/step]
023	Correction Coef 2: JE: BW	*ENG	[0 to 1 / 1 / 0.01/step]
024	Correction Coef 1: JE: FC	*ENG	[0 to 1 / 0.5 / 0.01/step]
025	Correction Coef 2: JE: FC	*ENG	[0 to 1 / 1 / 0.01/step]
026	Cor Coef 1: Interrupt: BW	*ENG	[0 to 1 / 0.1 / 0.01/step]
027	Cor Coef 2: Interrupt: BW	*ENG	[0 to 1 / 1 / 0.01/step]
028	Cor Coef 1: Interrupt: FC	*ENG	[0 to 1 / 0.25 / 0.01/step]
029	Cor Coef 2: Interrupt: FC	*ENG	[0 to 1 / 1 / 0.01/step]
030	Max. Number Cor Threshold	*ENG	[0 to 99 / 5 / 1/step]
031	Max. Number Correction Counter	*ENG	[0 to 255 / - / 1/step]

3512	[Image Quality Adj.: Interval]			
3312	Adjusts the timing for execution of process control and line position adjustment.			
001	During Job	*ENG	[0 to 100 / 30 / 1 page/step]	
002	During Stand-by	*ENG	[0 to 100 / 10 / 1 minute/step]	

	[PCU Motor Stop Time: Bk]			
Displays the last time that the PCDU motors stopped.			rs stopped.	
	These are used for process control execution timing.			
001	Year	*ENG	[0 to 99 / - / 1/step]	
002	Month	*ENG	[1 to 12 / - / 1/step]	
003	Date	*ENG	[1 to 31 / - / 1/step]	
004	Hour	*ENG	[0 to 23 / - / 1/step]	
005	Minute	*ENG	[0 to 59 / - / 1/step]	

	[Environmental Display: Job End]			
3514	Displays the environmental conditions for the last job. These are used for process control execution timing.			
001	Temperature	*ENG	[-1280 to 1270 / - / 0.1°C/step]	
002	Relative Humidity	*ENG	[0 to 1000 / - / 0.1%RH/step]	
003	Absolute Humidity	*ENG	[0 to 1000 / - / 0.1 g/m ³ /step]	
004	AIT Temperature	*ENG	[-1280 to 1270 / - / 0.1 deg/step]	

	[Execution Interval: Display]			
3515	Displays the current interval for process control execution. When the machine calculates the timing for process control, it uses a number of conditions. These are the results after considering all the conditions.			
001	Job End: Pot Control: BW	*ENG	[0 to 2000 / - / 1 page/step]	
002	Job End: Pot Control: FC	*ENG	[0 to 2000 / - / 1 page/step]	
003	Interrupt: Pot Control: BW	*ENG	[0 to 2000 / - / 1 page/step]	
004	Interrupt: Pot Control: FC	*ENG	[0 to 2000 / - / 1 page/step]	

	[Blade damage prevention mode]			
3517	Adjusts the threshold temperature for preventing the cleaning blade in the transfer belt cleaning unit from being damaged. If the temperature is above this value, toner is applied to the transfer belt at set intervals during the job to prevent the blade from flipping over.			
001	Execution Temp. Threshold	*ENG	[0 to 50 / 40 / 1°C/step]	

	[Toner End Prohibition Setting]			
3519	Enables or disables each adjustment at toner near end.			
001	Process Control	*ENG	[0 or 1 / 1 / 1/step]	
002	MUSIC	*ENG	O: Permit (adjustment is done even toner near end condition)	
003	TC Adj.	*ENG	Forbid (adjustment is not done at toner near end condition)	

2520	[ITB Idling Number]				
3520	Specifies the number of the ITB idling rotation for each condition.				
001	Temperature: H	*ENG			
002	Temperature: M	*ENG	[0 2 / 0 / 1 / 4]		
003	Temperature: L	*ENG	[0 or 3 / 0 / 1 revolution/step]		
004	Temperature: L: Power ON	*ENG			

	[Temperature Threshold]			
3521	Specifies the threshold temperature for each condition. These settings affect the conditions of SP3-520.			
	t1: Threshold between L (low temp.) and M (medium temp.)			
	t2: Threshold between M (medium temp.) and H (high temps)			
001	Threshold: t2	*ENG	[20 or 30 / 25 / 1 deg/step]	
002	Threshold: †1	*ENG	[0 or 15 / 15 / 1 deg/step]	

	[Initial Process Control Set]			
3522	Adjusts the threshold for the process control at power on. 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 power on is executed.			
002	Non-use Time Setting	*ENG	[0 to 1440 / 360 / 1 minute/step]	
003	Temperature Range	*ENG	[0 to 99 / 10 / 1°C/step]	
004	Relative Humidity Range	*ENG	[0 to 99 / 50 / 1 %RH/step]	
005	Absolute Humidity Range	*ENG	[0 to 99 / 6 / 1 g/m ³ /step]	
006	AIT Temperature Range	*ENG	[0 to 99 / 25 / 1°C/step]	
007	Vtref Temperature Range	*ENG	[0 to 99 / 20 / 1°C/step]	
	[Rapi_timer]			
100	Time Setting	*ENG	[0 to 255 / 30 / 1 sec/step]	
	Adjusts the time-out time for the Rapi timer.			

	[Non-use Time Process Control Set]			
3531	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 / 1 minute/step]	
002	Temperature Range	*ENG	[0 to 99 / 10 / 1°C/step]	
003	Relative Humidity Range	*ENG	[0 to 99 / 50 / 1 %RH/step]	
004	Absolute Humidity Range	*ENG	[0 to 99 / 6 / 1 g/m ³ /step]	
005	Maximum Execution Number	*ENG	Adjusts the maximum execution time for the process control at stand-by. [0 to 99 / 10 / 1 time/step]	

3611 [Development Gamma: Display/Set]

001	Bk (Current)	*ENG	
002	M (Current)	*ENG	Displays the current development gamma for each color.
003	C (Current)	*ENG	[0 to 5 / - / 0.01 mg/cm ² /kV /step]
004	Y (Current)	*ENG	
005	Bk (Target Display)	*ENG	
006	M (Target Display)	*ENG	Displays the target development gamma for each color.
007	C (Target Display)	*ENG	[0 to 5 / - / 0.01 mg/cm ² /kV /step]
800	Y (Target Display)	*ENG	
009	Bk (Standard Target Set)	*ENG	
010	M (Standard Target Set)	*ENG	Displays the standard target development gamma for each color.
011	C (Standard Target Set)	*ENG	[0 to 5 / 0.8 / 0.01 mg/cm ² /kV /step]
012	Y (Standard Target Set)	*ENG	
013	Environmental Correction	*ENG	Turns on or off the environmental correction for target development gamma. [0 or 1 / 1 / -] 0: Not Correct, 1: Correct
014	K (Max Correction)	*ENG	Adjusts the maximum correction value for
015	M (Max Correction)	*ENG	each color. These SPs are effective only when the setting of SP3-611-013 is set to
016	C (Max Correction)	*ENG	"1".
017	Y (Max Correction)	*ENG	[0 to 5 / 0.15 / 0.01 mg/cm ² /kv/ step]
018	K (Max Abs Hum)	*ENG	Adjusts the maximum humidity correction
019	M (Max Abs Hum)	*ENG	value for each color. These SPs are effective only when the setting of SP3-611-013 is set
020	C (Max Abs Hum)	*ENG	to "1".
021	Y (Max Abs Hum)	*ENG	[1 to 99 / 20 / 1 g/m ³ /step]
022	K (Min Correction)	*ENG	[0 to 0.1 / 0 / 0.01 mg/cm ² /kv/ step]
	1		1

3612	[Vk Display]		
3012	Displays Vk for each color.		
001	Bk	*ENG	
002	М	*ENG	[200+200//17/4]
003	С	*ENG	[-300 to 300 / - / 1 V/step]
004	Υ	*ENG	

3621	[Development DC Control: Disp] Plain: High speed, Thick 1: Middle speed, Thick 2 & FINE: Low speed				
3021	Displays the development DC bias adjusted with the process control for each line speed and color.				
001	Plain: Bk	*ENG			
002	Plain: M	*ENG	[0.1- 900 / /1 \//]		
003	Plain: C	*ENG	[0 to 800 / - / 1 -V/step]		
004	Plain: Y	*ENG			
005	Thick 1: Bk	*ENG			
006	Thick 1: M	*ENG	[0. 000 / /1 //.]		
007	Thick 1: C	*ENG	[0 to 800 / - / 1 -V/step]		
008	Thick 1: Y	*ENG			
009	Thick 2 & FINE: Bk	*ENG			
010	Thick 2 & FINE: M	*ENG	[0000 / /1 // /]		
011	Thick 2 & FINE: C	*ENG	[0 to 800 / - / 1 -V/step]		
012	Thick 2 & FINE: Y	*ENG			

3631	[Charge DC Control: Display] Plain: High speed, Thick 1: Middle speed, Thick 2 & FINE: Low speed	
3001	Displays the charge DC voltage adjusted with the process control for each line speed and color.	

001	Plain: Bk	*ENG	
002	Plain: M	*ENG	[0+-2000 / /1 ///]
003	Plain: C	*ENG	[0 to 2000 / - / 1 -V/step]
004	Plain: Y	*ENG	
005	Thick 1 & FINE: Bk	*ENG	
006	Thick 1 & FINE: M	*ENG	[0+-2000 / /1 ///]
007	Thick 1 & FINE: C	*ENG	[0 to 2000 / - / 1 -V/step]
800	Thick 1& FINE: Y	*ENG	
009	Thick 2 & FINE: Bk	*ENG	
010	Thick 2 & FINE: M	*ENG	[0 2000 / /1 //]
011	Thick 2 & FINE: C	*ENG	[0 to 2000 / - / 1 -V/step]
012	Thick 2 & FINE: Y	*ENG	

[Charge AC Control: Display] 3641 Plain: High speed			
	th the process control for each color.		
001	Plain: Bk	*ENG	
002	Plain: M	*ENG	[02././0.01]//]
003	Plain: C	*ENG	[0 to 3 / - / 0.01 kV/step]
004	Plain: Y	*ENG	

	[LD Power Control: Display]
3651	Plain: High speed, Thick 1: Middle speed, Thick 2 & FINE: Low speed
	Displays the LD power adjusted for each environment.

001	Plain: Bk	*ENG	
002	Plain: M	*ENG	[0.4-200 / /1.9//]
003	Plain: C	*ENG	[0 to 200 / - / 1 %/step]
004	Plain: Y	*ENG	
005	Thick 1: Bk	*ENG	
006	Thick 1: M	*ENG	[0.4-200 / /1.9//]
007	Thick 1: C	*ENG	[0 to 200 / - / 1 %/step]
800	Thick 1: Y	*ENG	
009	Thick 2 & FINE: Bk	*ENG	
010	Thick 2 & FINE: M	*ENG	[0.1-200 / /1.9//]
011	Thick 2 & FINE: C	*ENG	[0 to 200 / - / 1 %/step]
012	Thick 2 & FINE: Y	*ENG	

3710	[HST Concentration Control: Set] TD Sensor: Toner Concentration Control Setting		
	Selects the toner concentration con	trol method	by HST memory, which is in the TD sensor.
001	Control Method: Selection	*ENG	[0 or 1 / 1 / -] 0: Not Use, 1: Use

3711	[HST Concentration Control: Bk]		
3/11	Displays the factory settings of the black PCDU.		
001	Vcnt	*ENG	[0 to 5 / - / 0.1 V/step]
002	Vt	*ENG	[0 to 5 / - / 0.1 V/step]
003	Sensitivity: HL	*ENG	[1.22 to 3.77 / - / 0.01 V/step]
004	Sensitivity: HM	*ENG	[0.4-2.55 / /0.01 \//.4]
005	Sensitivity: ML	*ENG	[0 to 2.55 / - / 0.01 V/step]
006	Set Detection	*ENG	[0 to 5 / - / 0.1 V/step]
007	Without Developer	*ENG	[0 to 5 / - / 0.1 V/step]

008	With Developer	*ENG	[0 to 5 / - / 0.1 V/step]
009	Serial Number 1	*ENG	[0.5.055 / /1.1//.5]
010	Serial Number 2	*ENG	[0 to 255 / - / 1 V/step]
011	Adjustment: Vt	*ENG	[0 to 5 / - / 0.1 V/step]
012	Adjustment: Vtref	*ENG	[0 to 5 / - / 0.1 V/step]
013	Adjustment: Vtcnt	*ENG	[0 to 5 / - / 0.01 V/step]
014	Adjustment: Gamma	*ENG	[0 to 2.55 / - / 0.01 mg/cm ² /kV /step]
015	Adjustment: Vcnt Result	*ENG	[0 to 9 / - / 1 /step]

2710	[HST Concentration Control: M]			
3712	Displays the factory settings of the magenta PCDU.			
001	Vcnt	*ENG	[0 to 5 / - / 0.1 V/step]	
002	Vt	*ENG	[0 to 5 / - / 0.1 V/step]	
003	Sensitivity: HL	*ENG	[1.22 to 3.77 / - / 0.01 V/step]	
004	Sensitivity: HM	*ENG	[0+055 / /001 \//+1	
005	Sensitivity: ML	*ENG	[0 to 2.55 / - / 0.01 V/step]	
006	Set Detection	*ENG	[0 to 5 / - / 0.1 V/step]	
007	Without Developer	*ENG	[0 to 5 / - / 0.1 V/step]	
800	With Developer	*ENG	[0 to 5 / - / 0.1 V/step]	
009	Serial Number 1	*ENG	[0.4- 0.55 / /1.V/.4]	
010	Serial Number 2	*ENG	[0 to 255 / - / 1 V/step]	
011	Adjustment: Vt	*ENG	[0 to 5 / - / 0.1 V/step]	
012	Adjustment: Vtref	*ENG	[0 to 5 / - / 0.1 V/step]	
013	Adjustment: Vtcnt	*ENG	[0 to 5 / - / 0.01 V/step]	
014	Adjustment: Gamma	*ENG	[0 to 2.55 / - / 0.01 mg/cm ² /kV /step]	
015	Adjustment: Vcnt Result	*ENG	[0 to 9 / - / 1 /step]	

[HST Concentration Control: C]				
3/13	Displays the factory settings of the cyan PCDU.			
001	Vcnt	*ENG	[0 to 5 / - / 0.1 V/step]	
002	Vt	*ENG	[0 to 5 / - / 0.1 V/step]	
003	Sensitivity: HL	*ENG	[1.22 to 3.77 / - / 0.01 V/step]	
004	Sensitivity: HM	*ENG	[0+255 / /001 \//++1	
005	Sensitivity: ML	*ENG	[0 to 2.55 / - / 0.01 V/step]	
006	Set Detection	*ENG	[0 to 5 / - / 0.1 V/step]	
007	Without Developer	*ENG	[0 to 5 / - / 0.1 V/step]	
800	With Developer	*ENG	[0 to 5 / - / 0.1 V/step]	
009	Serial Number 1	*ENG	[0 255 / /1.V/]	
010	Serial Number 2	*ENG	[0 to 255 / - / 1 V/step]	
011	Adjustment: Vt	*ENG	[0 to 5 / - / 0.1 V/step]	
012	Adjustment: Vtref	*ENG	[0 to 5 / - / 0.1 V/step]	
013	Adjustment: Vtcnt	*ENG	[0 to 5 / - / 0.01 V/step]	
014	Adjustment: Gamma	*ENG	[0 to 2.55 / - / 0.01 mg/cm ² /kV /step]	
015	Adjustment: Vcnt Result	*ENG	[0 to 9 / - / 1 /step]	

3714	[HST Concentration Control: Y]		
	Displays the factory settings of the yellow PCDU.		
001	Vcnt	*ENG	[0 to 5 / - / 0.1 V/step]
002	Vt	*ENG	[0 to 5 / - / 0.1 V/step]
003	Sensitivity: HL	*ENG	[1.22 to 3.77 / - / 0.01 V/step]
004	Sensitivity: HM	*ENG	[0. 0.55 / /0.01 \//.]
005	Sensitivity: ML	*ENG	[0 to 2.55 / - / 0.01 V/step]
006	Set Detection	*ENG	[0 to 5 / - / 0.1 V/step]

007	Without Developer	*ENG	[0 to 5 / - / 0.1 V/step]
008	With Developer	*ENG	[0 to 5 / - / 0.1 V/step]
009	Serial Number 1	*ENG	[0 055 / /1 \/ /]
010	Serial Number 2	*ENG	[0 to 255 / - / 1 V/step]
011	Adjustment: Vt	*ENG	[0 to 5 / - / 0.1 V/step]
012	Adjustment: Vtref	*ENG	[0 to 5 / - / 0.1 V/step]
013	Adjustment: Vtcnt	*ENG	[0 to 5 / - / 0.01 V/step]
014	Adjustment: Gamma	*ENG	[0 to 2.55 / - / 0.01 mg/cm ² /kV /step]
015	Adjustment: Vcnt Result	*ENG	[0 to 9 / - / 1 /step]

	[Waste Toner Full Detection]				
3800	Displays/adjusts the toner collection bottle detection settings. These SPs are used for NRS.				
001	Condition	*CTL	[0 to 4 / 0 / 1 /step]		
002	Detection Times	*CTL	[0 to 50 / 0 / 1 /step]		
003	Print Page After Near Full	*CTL	[0 to 1000 / 0 / 1 sheet/step]		
004	Pixel Count After Near Full	*CTL	[0 to 200000 / 0 / 1 cm ² /step]		
005	Pixel Count After Replacement	*CTL	Displays the pixel counter after replacement of toner collection bottle. [0 to 200000 / 0 / 1 cm²/step]		
008	Coefficient	*ENG	[0.1 to 1.5 / 1 / 0.1 /step]		
011	Notice Setting	*ENG	Enables or disables the calling for @Remote. [O or 1 / 1 / -] O: Enable @Remote calling 1: Disable @Remote calling		
			ced before the machine detects used toner achine cannot detect toner collection bottle		

near full. In that case, set SP3-902-017 to "1".

	Day Threshold: Toner Collection bottle:NF	*ENG	[1 to 30 / 5 / 1 day/step]		
012	Sets the threshold days for the near-full display. The near-full of the toner collection bottle is displayed after the toner collection full sensor has detected the actuator in the toner collection bottle.				
013	Total:Toner Collection Bottle	*ENG	Displays the total amount of the used toner. [0 to 999999999 / 0 / 1]		
014	Mechanism Full Detection Date	*ENG	Displays the date of the full detection for he toner collection bottle.		

3900	[Waste Toner New Detection]		
3900	Turns toner collection bottle full detection on or off.		
001	ON/OFF Setting	*ENG	[0 or 1 / 1 / -] 0: OFF, 1: ON

3901	[New PCU Detection]			
3901	Turns new PCDU detection on or off.			
001	ON/OFF Setting	*ENG	[0 or 1 / 1 / -] 0: OFF, 1: ON	

	[Manual New Unit Set]				
3902	Turns the new unit detection flag for each PM unit on or off. The use of these counters is explained in the PM section and in the relevant parts of section 3 (Replacement and Adjustment).				
001	Development Unit: Bk	*ENG			
002	Development Unit: Y	*ENG	[0 or 1 / 0 / -]		
003	Development Unit: C	*ENG	0: OFF, 1: ON		
004	Development Unit: M	*ENG			

005	Developer: Bk	*ENG	
006	Developer: Y	*ENG	[0 or 1 / 0 / -]
007	Developer: C	*ENG	0: OFF, 1: ON
008	Developer: M	*ENG	
009	PCU: Bk	*ENG	
010	PCU: Y	*ENG	[0 or 1 / 0 / -]
011	PCU: C	*ENG	0: OFF, 1: ON
012	PCU: M	*ENG	
013	Image Transfer Unit	*ENG	[0 or 1 / 0 / -]
014	Fusing Unit	*ENG	0: OFF, 1: ON
015	Cleaning Unit	*ENG	Do not use 3902-013 if you only change the cleaning unit.
016	Paper Transfer Unit	*ENG	3902-015: This is for the image transfer belt
017	Toner Collection Bottle	*ENG	cleaning unit.
018	Fusing Roller	*ENG	[0 or 1 / 0 / -]
019	Pressure Roller	*ENG	0: OFF, 1: ON "Fusing Roller" is designated as "Heating Roller" in this manual.
020	Pump Unit: Bk	*ENG	
021	Pump Unit: M	*ENG	[0 or 1 / 0 / -]
022	Pump Unit: C	*ENG	0: OFF, 1: ON
023	Pump Unit: Y	*ENG	

5

Main SP Tables-4

SP4-XXX (Scanner)

4008	[Sub Scan Mag.Adjustment]			
4006	Adjusts the sub-scan magnification by changing the scanner motor speed.			
001	-	*ENG	[-1.0 to 1.0 / 0 / 0.1%/step] FA	

[L-Edge Regist Adjustment]				
4010	Adjusts the leading edge registration by changing the scanning start timing in the sub-sca direction.			
001	-	*ENG	[-2.0 to 2.0 / 0 / 0.1 mm/step] FA	

	[S-to-S Regist Adjustment]		
Adjusts the side-to-side registration by changing the scanning start ti direction.		anging the scanning start timing in the main scan	
001	-	*ENG	[-2.5 to 2.5 / 0 / 0.1 mm/step] FA

	[Scanner Erase Margin: Scale]				
4012	Sets the blank margin at each s	margin at each side for erasing the original shadow caused by the gap riginal and the scale.			
001	Book: Leading Edge	*ENG	[0 to 3.0 / 0 / 0.1 mm/step] FA		
002	Book: Trailing Edge				
003	Book: Left				
004	Book: Right				
005	ADF: Leading Edge	*ENG	[0 to 3.0 / 0 / 0.1 mm/step] FA		
007	ADF: Right				
008	ADF: Left				

	[Scanner Free Run]			
4013	Performs the scanner free run v Full color mode / Full Size / A	r free run with the exposure lamp on or off in the following mode. Ill Size / A3 or DLT		
001	Lamp: OFF	*ENG	[0 or 1 / 0 / -]	
002	Lamp: ON		0: OFF, 1: ON	

4014	[Scan]		
4014	Execute the scanner free fun with each mode.		
001	HP Detection Enable	-	Scanner free run with HP sensor check.
002	HP Detection Disable	-	Scanner free run without HP sensor check.

4020	[Dust Check]		
001	Dust Detect:On/Off	*ENG	Turns the ADF scan glass dust check on/off. [0 or 1 / 0 / 1 /step] 0: OFF, 1: ON
002	Dust Detect:Lvl	*ENG	Selects the detect level. [0 to 8 / 4 / 1 /step] 0: lowest detection level 8: highest detection level
003	Dust Reject:Lvl	*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
011	Dust Detect:On/Off:Rear	*ENG	Not used
012	Dust Detect:Lvl:Rear	*ENG	Not used

	[APS Operation Check]			
4301	Displays a code that represents the original size detected by the original sensors. (See "Input Check Table" in this section.)		ginal size detected by the original sensors. (See	
001	APS Operation Check	-	-	

4303	[APS Min. Size]		
4303	Specifies the result of the detection when the outputs from the original sensors are all		en the outputs from the original sensors are all OFF.
001	-	*ENG	[0 to 2 / 0 / 1 /step] 0: No Original 1: A5-Lengthwise (16K SEF if 4305 is set to 3)

4205	[8K/16K Detection]			
4305	This program enables the machine to automatically recognize the 8K/16K size.			
001	-	*ENG	[0 to 3 / 0 / 1 /step] 0: Normal Detection (the machine detects A4/LT size as A4 or LT, depending on the paper size setting) 1: A4-Sideways LT-Lengthwise 2: LT-Sideways A4-Lengthwise	
			3: 8K 16K	

4308	[Scan Size Detection]		
001	Detection ON/OFF	/OFF *ENG 0: OFF 1: ON	
	Turns on or off the CCD original size detection. This detection is used only when a original is scanned in book scanning mode.		•

4309	[Scan Size Detect:Setting]
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001	Original Density Thresh	*ENG	[0 to 255 / 32 / 1 digit/step]	
	Specifies the threshold between an original area and non-original area for the scan original size detection in book scanning mode.			
002	Detection Time	*ENG	[20 to 100 / 60 / 20 msec/step]	
002	Specifies the detection time for the scan original size detection in book scanning mode.			
003	Lamp ON:Delay Time	*ENG	[0 to 200 / 40 / 20 msec/step]	
003	Specifies the lamp on timing	for the sca	n original size detection in book scanning mode.	
004	LED PWM Duty	*ENG	[0 to 100 / 60 / 1/step]	
	Sets the LED lamp intensity.			

	[Scan Size Detect Value]			
4310	Displays the detected value by CCD. Each detection point for paper size and color is displayed on the LCD.		ich detection point for paper size and color is	
001	S1:R	*ENG		
002	\$1:G	*ENG		
003	S1:B	*ENG		
004	S2:R	*ENG		
005	\$2:G	*ENG	[0 to 255 / - / 1 digit/step]	
006	S2:B	*ENG		
007	S3:R	*ENG		
008	\$3:G	*ENG		
009	S3:B	*ENG		

	[Scanner Erase Margin]	*ENG		
4400	Set the Mask for Original.			
	These SPs set the area to be masked during platen (book) mode scanning.			

001	Book: Leading Edge	
002	Book: Trailing Edge	
003	Book: Left	
004	Book: Right	[0 to 3.0 / 0 / 0.1 mm/step]
005	ADF: Leading Edge	
007	ADF: Right	
008	ADF: Left	

4417	[IPU Test Pattern]			
4417	Selects the IPU test pattern.			
001	Test Pattern Selection	[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	Сору		
002	Scanner	*ENG	[0 to 3 / 3 / 1 /step]
003	Fax		

4450	[Scan Image Path Selection]	
001	Black Subtraction ON/OFF [0 or 1 / 1 / -] 0: OFF, 1: ON	
	Uses or does not use the black reduction image path.	
002	SH ON/OFF [0 or 1 / 0 / 1 /step] 0: ON, 1: OFF	
	Uses or does not use the shading image path.	

4501	[ACC Target Den]			
4301	Selects the ACC result.			
001	Copy: K: Text	*ENG		
002	Copy: C: Text	*ENG		
003	Copy: M: Text	*ENG		
004	Copy: Y: Text	*ENG	[0 to 10 / 5 / 1 /step]	
005	Copy: K: Photo	*ENG	10: Darkest density	
006	Copy: C: Photo	*ENG		
007	Copy: M: Photo	*ENG		
800	Copy: Y: Photo	*ENG		

4505	[ACC Cor:Bright]				
Adjusts the offset correction for light areas of the A			eas of the ACC pattern.		
001	Text:K	*ENG			
002	Text:C	*ENG	[120 + 127 / 0 / 1 / ++]		
003	Text:M	*ENG	[-128 to 127 / 0 / 1 /step]		
004	Text:Y	*ENG			
005	Photo:K	*ENG			
006	Photo:C	*ENG	[120 to 127 / 0 / 1 /stan]		
007	Photo:M	*ENG	[-128 to 127 / 0 / 1 /step]		
008	Photo:Y	*ENG			

4504	[ACC Cor:Dark]					
4506	Adjusts the offset correction for dark areas of the ACC pattern.					
001	Text:K	*ENG				
002	Text:C	*ENG	[-128 to 127 / 0 / 1 /step]			
003	Text:M	*ENG	[-12616127 / 0 / 1 / siep]			
004	Text:Y	*ENG				
005	Photo:K	*ENG				
006	Photo:C	*ENG	[120 to 127 / 0 / 1 /stern]			
007	Photo:M	*ENG	[-128 to 127 / 0 / 1 /step]			
008	Photo:Y	*ENG				

	[Print Coverage]		
4540	This SP corrects the printer coverage Option]) for a total of 48 parameter		s (RY, YR, YG, etc. x 4 Colors [R, G, B,
001-004	RY Phase: Option/R/G/B		
005-008	YR Phase: Option/R/G/B		
009-012	YG Phase: Option/R/G/B		
013-016	GY Phase: Option/R/G/B		
017-020	GC Phase: Option/R/G/B		
021-024	CG Phase: Option/R/G/B	*FNG	Specifies the printer vector correction value.
025-028	CB Phase: Option/R/G/B	ENG	[0 to 255 / 0 / 1 /step]
029-032	BC Phase: Option/R/G/B		
033-036	BM Phase: Option/R/G/B		
037-040	MB Phase: Option/R/G/B		
041-044	MR Phase: Option/R/G/B		
045-048	RM Phase: Option/R/G/B		

4600	[SBU Version Display]				
001	SBU ID	*ENG	Displays the ID of the SBU.		
002	GASBU-N ID	*ENG	Displays the ID of the GASBU.		
003	VSP5100 ID	*ENG	Displays t he ID of the VSP5100.		
4602	[Scanner Memory Access]				
001	Scanner Memory Access	-	Enables the read and write check for the SBU registers.		
4603	[AGC Execution]				
001	HP Detection Enable	-	Executes the AGC.		
002	HP Detection Disable	-	DFU		
4400					
4609	[Gray Balance Set: R]				
001	Book Scan	*ENG	[-512 to 511 / -46 / 1 digit/step]		
002	DF Scan	*ENG	[-512 to 511 / -46 / 1 digit/step]		
4610	[Gray Balance Set: G]				
001	Book Scan	*5.10	[00 / 055 / 00 / 1 k · / 1		
002	DF Scan	*ENG	[-384 to 255 / -20 / 1 digit/step]		
4611	[Gray Balance Set: B]				
001	Book Scan				
002	DF Scan	*ENG	[-384 to 255 / -28 / 1 digit/step]		
4623	[Black Level Adj. Display] RE: Red Even signal, RO: Red Odd signal				
001	Latest: RE Color	*ENG	Displays the black offset value for the even red signal in the CCD circuit board. [0 to 16383 / 0 / 1 digit/step]		

002	Latest: RO Color	,0	Displays the black offset value for the odd red signal in the CCD circuit board. [0 to 16383 / 0 / 1 digit/step]
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4624	[Black Level Adj. Display] GE: Green Even signal, GO: Green Odd signal			
001	Latest: GE Color	*ENG	Displays the black offset value for the even green signal in the CCD circuit board. [0 to 16383 / 0 / 1 digit/step]	
002	Latest: GO Color	*ENG	Displays the black offset value for the odd green signal in the CCD circuit board. [0 to 16383 / 0 / 1 digit/step]	

4625	[Black Level Adj. Display] BE: Blue Even signal, BO: Blue Odd signal				
001	Latest: BE Color	*ENG	Displays the black offset value for the even blue signal in the CCD circuit board. [0 to 16383 / 0 / 1 digit/step]		
002	Latest: BO Color	*ENG	Displays the black offset value for the odd blue signal in the CCD circuit board. [0 to 16383 / 0 / 1 digit/step]		

	4628	[Analog Gain Adjust]				
	4020	Displays the gain value of the amplifiers on the controller for Red.				
	001 Latest: R Color *ENG		*ENG	[0 to 7 / 0 / 1 digit/step]		

4629	[Analog Gain Adjust]				
4029	Displays the gain value of the amplifiers on the controller for Green.				
001	Latest: G Color	*ENG	[0 to 7 / 0 / 1 digit/step]		

	4630	[Analog Gain Adjust]				
Displays the gain value of the amplifiers on the controller fo				plifiers on the controller for Blue.		
	001	Latest: B Color	*ENG	[0 to 7 / 0 / 1 digit/step]		

	4631	[Digital Gain Adjust]		
		Displays the gain value	of the ampl	ifiers on the controller for Red.
	001	Latest: RE Color	*ENG	[0., 1002 / 0 / 1 / 1:1/]
	002	Latest: RO Color	*ENG	[0 to 1023 / 0 / 1 digit/step]

4632	[Digital Gain Adjust]				
4032	Displays the gain value of the amplifiers on the controller for Green.				
001	Latest: GE Color	*ENG	[01002 / 0 / 1 / 1:2/ / 1]		
002	Latest: GO Color	*ENG	[0 to 1023 / 0 / 1 digit/step]		

	4633	[Digital Gain Adjust]				
Displays the gain value of the amplifiers on the		ifiers on the controller for Blue.				
	001	Latest: BE Color	*ENG	[0.1-1022 / 0 / 1 dimit/stand]		
	002	Latest: BO Color	*ENG	[0 to 1023 / 0 / 1 digit/step]		

4645	[Scan Adjust Error]			
001	White level	*ENG	[0.4 45525 / /] distrib/sham]	
002	Black level	*ENG	[0 to 65535 / - / 1 digit/step]	

4647	[Scanner Hard Error]				
4047	Displays the result of the SBU connection check.				
001	Power-ON	*ENG	[0 to 35535 / - / 1 digit /step] 0: OK, Other: SBU connection check failure If the SBU connection check fails, SC144 occurs.		

46	554	[Black Level Adj. Display] RE: Red Even signal, RO: Red Odd signal			
	001	Last Correct Value: RE *ENG		Displays the black offset value for the even red signal in the CCD circuit board. [0 to 16383 / 0 / 1 digit/step]	
	002	Last Correct Value: RO Color	*ENG	Displays the black offset value for the odd red signal in the CCD circuit board. [0 to 16383 / 0 / 1 digit/step]	

4655	[Black Level Adj. Display] GE: Green Even signal, GO: Green Odd signal		
001	Last Correct Value: GE Color	*ENG	Displays the black offset value for the even green signal in the CCD circuit board. [0 to 16383 / 0 / 1 digit/step]
002	Last Correct Value: GO Color	*ENG	Displays the black offset value for the odd green signal in the CCD circuit board. [0 to 16383 / 0 / 1 digit/step]

4656	4656 [Black Level Adj. Display] BE: Blue Even signal, BO: Blue Odd signal		
001	Last Correct Value: BE Color	*ENG	Displays the black offset value for the even blue signal in the CCD circuit board. [0 to 16383 / 0 / 1 digit/step]
002	Last Correct Value: BO Color	*ENG	Displays the black offset value for the odd blue signal in the CCD circuit board. [0 to 16383 / 0 / 1 digit/step]

4658	[Analog Gain Adjust]				
4036	Displays the previous gain value of the amplifiers on the controller for Red.				
001	1 Last Correct Value: R Color *ENG [0 to 7 / 0 / 1 digit/step				

4659	[Analog Gain Adjust]				
4039	Displays the previous gain value of the amplifiers on the controller for Green.				
001	Last Correct Value: G Color	*ENG	[0 to 7 / 0 / 1 digit/step]		

4660	[Analog Gain Adjust]				
4000	Displays the previous gain value of the amplifiers on the controller for Blue.				
001	Last Correct Value: B Color	*ENG	[0 to 7 / 0 / 1 digit/step]		

4661	[Digital Gain Adjust] RE: Red Even signal, RO: Red Odd signal		
001	Last Correct Value: RE Color	*ENG	[0 1002 / 0 / 1 /::::/]
002	Last Correct Value: RO Color	*ENG	[0 to 1023 / 0 / 1 digit/step]

4662	[Digital Gain Adjust] GE: Green Even signal, GO: Green Odd signal		
001	Last Correct Value: GE Color *ENG		[01002 / 0 / 1
002	Last Correct Value: GO Color	*ENG	[0 to 1023 / 0 / 1 digit/step]

4663 [Digital Gain Adjust] BE: Blue Even signal, BO: Blue Odd signal			lue Odd signal
001	Last Correct Value: BE Color	*ENG	[0.1-1022 / 0 / 1 dinit/]
002	Last Correct Value: BO Color	*ENG	[0 to 1023 / 0 / 1 digit/step]

4673	[Black Level Adj. Display] RE: Red Even signal, RO: Red Odd signal		
001	Factory Setting: RE Color	*ENG	Displays the factory setting values of the black level adjustment for the even red signal in the CCD circuit board. [0 to 16383 / - / 1 digit/step]
002	Factory Setting: RO Color	*ENG	Displays the factory setting values of the black level adjustment for the odd red signal in the CCD circuit board. [0 to 16383 / - / 1 digit/step]

[Black Level Adj. Display] GE: Green Even signal, GO: Green Odd signal			
001	Factory Setting: GE Color	*ENG	Displays the factory setting values of the black level adjustment for the even green signal in the CCD circuit board. [0 to 16383 / - / 1 digit/step]
002	Factory Setting: GO Color	*ENG	Displays the factory setting values of the black level adjustment for the odd green signal in the CCD circuit board. [0 to 16383 / - / 1 digit/step]

4675	[Black Level Adj. Display] BE: Blue Even signal, BO: Blue Odd signal			
001	001 Factory Setting: BE Color *ENG		Displays the factory setting values of the black level adjustment for the even blue signal in the CCD circuit board. [0 to 16383 / - / 1 digit/step]	
002	Factory Setting: BO Color	*ENG	Displays the factory setting values of the black level adjustment for the odd blue signal in the CCD circuit board. [0 to 16383 / - / 1 digit/step]	

	[Analog Gain Adjust]			
4677	Displays the factory setting values of the gain adjustment for Red.			
001	Factory Setting: R Color	*ENG	[0 to 7 / - / 1 digit/step]	

	4678	[Analog Gain Adjust]			
	40/0	Displays the factory setting values of the gain adjustment for Green.			
	001	Factory Setting: G Color	*ENG	[0 to 7 / - / 1 digit/step]	

4679	[Analog Gain Adjust]
4079	Displays the factory setting values of the gain adjustment for Blue.

001 Factory Setting: B Color *ENG [0 to	7 / - / 1 digit/step]
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4680	[Digital Gain Adjust]			
4000	Displays the gain value of the amplifiers on the controller for Red.			
001	Factory Setting: RE Color	*ENG	[01002 / /1	
002	Factory Setting: RO Color	*ENG	[0 to 1023 / - / 1 digit/step]	

4681	[Digital Gain Adjust]					
4001	Displays the gain value of the amplifiers on the controller for Green.					
001	Factory Setting: GE Color	*ENG	[0.1.1002 / /1.1555/1]			
002	Factory Setting: GO Color	*ENG	[0 to 1023 / - / 1 digit/step]			

4682	[Digital Gain Adjust]			
4002	Displays the gain value of the amplifiers on the controller for Blue.			
001	Factory Setting: BE Color	*ENG	[01002 / /1	
002	Factory Setting: BO Color	*ENG	[0 to 1023 / - / 1 digit/step]	

	[Scan Image Density Adjustm	nent]		
4688	Adjusts the white shading parameter when scanning an image with the ARDF or 1-pass DF.			
	Adjusts the density level if the ID of outputs made in the DF and Platen mode is different.			
001	ARDF	*ENG	[80 to 120 / 98 / 1%/ step]	
002	1-pass DF	*ENG	[80 to 120 / 98 / 1%/ step]	

		[White Level Peak Read]				
4690)	Displays the peak level of the white level scanning. If these scanned white levels are out of the correct range, SC142 may be issued.				
(001	RE	*ENG	[0 + 1022 / / 1 dimit/++]		
(002	RO	*ENG	[0 to 1023 / - / 1 digit/step]		

	[White Level Peak Read]				
4691	Displays the peak level of the white level scanning. If these scanned white levels are out of the correct range, SC142 may be issued.				
001	GE	*ENG	[01022 / /1.dimis./]		
002	GO	*ENG	[0 to 1023 / - / 1 digit/step]		

	[White Level Peak Read]				
4692	Displays the peak level of the white level scanning. If these scanned white levels are out of the correct range, SC142 may be issued.				
001	BE	*ENG	[0 to 1023 / - / 1 digit/step]		
002	ВО	*ENG	[0 to 1023 / - / 1 digit/ step]		

	[Black Level Peak Read]			
4693	Displays the level of the black level scanning. If these scanned black levels are out of the correct range, SC141 may be issued.			
001	RE	*ENG	[0., 1002 / /1 /:::/]	
002	RO	*ENG	[0 to 1023 / - / 1 digit/step]	

	[Black Level Peak Read]				
4694	Displays the level of the black level scanning.				
	If these scanned black levels are out of the correct range, SC141 may be issued.				
001	GE	*ENG	[0 to 1022 / / 1 dimit/stan]		
002	GO	*ENG	[0 to 1023 / - / 1 digit/step]		

	[Black Level Peak Read]			
4695	Displays the level of the black level scanning. If these scanned black levels are out of the correct range, SC141 may be issued.			
001	BE	*ENG	[0 to 1023 / - / 1 digit/step]	
002	ВО	*ENG		

4796	[Low Density Color Correction]				
001	Front Side	*ENG	[0 or 1 / 0 / -] 0: Off, 1: On		
	Turns on or off the low color density correction for the front side of originals.				
002	Rear Side *ENG [0 or 1 / 0 / -] 0: Off, 1: On				
	Turns on or off the low color density correction for the back side of originals.				

4802	[DF Shading FreeRun]		
001	Lamp OFF		Executes the scanner free run of shading
002	Lamp ON	*ENG	movement with exposure lamp on or off. Press "OFF" to stop this free run. Otherwise, the free run lasts.

4804	[Home Position]		
001	-	*ENG	Executes the scanner HP detection.

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.

4807	[SBU Test Pattern Change]				
			[0 to 255 / 0 / 1 /step]		
			0: Scanning image		
			1: Fixed pattern		
001	-	*ENG	2: Main scanning gradation		
			3: Sub scanning gradation		
			4: Grid pattern		
			(5 to 255 : Scanning images)		

4808	[Factory Setting Input]			
002	Execution Flag	*ENG	[0 or 1 / 0 / 1 /step]	

	[Disp ACC Data]					
4902	This SP outputs the final data read at the end of ACC execution.					
	A zero is returned if there wa	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)			

	[Man Gamma:Pht:Y]			
4918	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	Enter the manual gamma adjustment screen (-001 to 008). For details, see the "Printer Gamma Correction" in the section "Replace and Adjustment".	

4954	[Read/Restore Std]		
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.
003	Read Std Chart	*ENG	Execute the scanning of the A4 standard chart.
004	Set Std Chart	*ENG	Overwrite the standard data.
005	Chromaticity Rank	*ENG	Restores the standard chromaticity rank.

	[IPU Image Pass Selection]					
4991						
	Enter the number to be selected using the 10-key pad.					
	[0 to 11 / 2 / 1 /step]					
	0: Scanner input RGB images					
001	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 Detection Level Adj.]			
4994	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	

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Main SP Tables-5

SP5-XXX (Mode)

5024	[mm/inch Display Selection]				
3024	Display units (mm or inch) for custom paper sizes.				
001	0:mm 1:inch	*CTL	0: mm (Europe/Asia) 1: inch (USA)		

	[Accounting counter]					
5045	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 / 1 / -] 0: Developments 1: Prints	SP 5045 Modified		

5047	[Paper Display]				
3047	Turns on or off the printed paper display on the LCD.				
001	Backing Paper	*CTL	[0 or 1 / 0 / -] 0: OFF, 1: ON		

5051	[TonerRefillDetectionDisplay]				
3031	Enables or disables the toner refill detection display.				
			[0 or 1 / 0 / -] Alphanumeric		
50511	-	*CTL	0: ON		
			1: OFF		

5055	[Display IP Address]		
3033	ess on the LCD.		
001	-	*CTL	[0 or 1 / 0 / -] 0: OFF 1: ON

SP 5056 Deleted

5056	[Coverage Counter Display]				
3030	Display or does not display the coverage counter on the LCD.				
001	_ ,	*CTL	[0 or 1 / 0 / -] 0: Not display, 1: Display		

[Toner Remaining Icon Display Change]

Display or does not display the remaining toner display icon on the LCD.

| Oo1 | *CTL | [0 or 1 / 0 / -] | O: Not display, 1: Display

5040	[Parts Replacement Alert Display]				
5062	Display or does not display the PM part yield on the LCD.				
001	Drum Unit: Bk	*CTL			
002	Drum Unit: M	*CTL	[0 or 1 / 0 / -]		
003	Drum Unit: C	*CTL	0: Not display, 1: Display		
004	Drum Unit: Y	*CTL			
005	Development Unit: Bk	*CTL			
006	Development Unit: M	*CTL	[0 or 1 / 0 / -]		
007	Development Unit: C	*CTL	0: Not display, 1: Display		
800	Development Unit: Y	*CTL			

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009	Developer: Bk	*CTL	
010	Developer: M	*CTL	[0 or 1 / 0 / -]
011	Developer: C	*CTL	0: Not display, 1: Display
012	Developer: Y	*CTL	
013	Image Transfer Belt	*CTL	
014	Image Transfer Cleaning Unit	*CTL	
015	Fusing Unit	*CTL	
016	Paper Transfer Roller Unit	*CTL	[0 or 1 / 0 / -] 0: Not display, 1: Display
017	Waster Toner bottle	*CTL	o. r. to. display,
018	Fusing Roller	*CTL	
019	Pressure Roller	*CTL	

5066	[PM Parts Display] Display or does not display the "PM parts" button on the LCD.		
001	-	*CTL	[0 or 1 / 0 / -] 0: Not display, 1: Display

	[Part Replacement Operation Type]				
5067	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	Drum Unit: Bk	*CTL			
002	Drum Unit: M	*CTL	[O. Sanisa] [1.11]		
003	Drum Unit: C	*CTL	[0: Service] or [1: User]		
004	Drum Unit: Y	*CTL			

005	Development unit: Bk	*CTL	
006	Development unit: M	*CTL	[0.0 . 1 [1 1]
007	Development unit: C	*CTL	[0: Service] or [1: User]
800	Development unit: Y	*CTL	
009	Developer: Bk	*CTL	
010	Developer: M	*CTL	[0, \$]
011	Developer: C	*CTL	[0: Service] or [1: User]
012	Developer: Y	*CTL	
013	Image Transfer Belt	*CTL	[0: Service] or [1: User]
014	Image Transfer Cleaning Unit	*CTL	[0: Service] or [1: User]
015	Fusing Unit	*CTL	[0: Service] or [1: User]
016	Paper Transfer Roller Unit	*CTL	[0: Service] or [1: User]
017	Waste Toner bottle	*CTL	[0: Service] or [1: User]
018	Fusing Roller	*CTL	[0: Service] or [1: User]
019	Pressure Roller	*CTL	[0: Service] or [1: User]

5071	[Set Bypass Paper Size Display]			
	-	*CTL	[0 or 1 / 0 / -] 0: Off, 1: On	
001	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.			

[Home Screen Login] Sets the application that appears when the home key is pressed.			the home key is pressed
Jeis ine application that appears when the holi		The nome key is pressed.	
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

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			Sets the external keyboard type.
			0: None
			1: English (NA)
			2: Turkish
			3: Korean
			4: Chinese (Simplified)
			5: Chinese (Traditional)
			6: English (UK)
			7: French (France)
			8: French (Belgium)
			9: French (Canada)
			10: German
			11: Italian
			12: Spanish
002	Keyboard Type Setting	*CTL	13: Spanish (Latin America)
			14: Dutch
			15: Norwegian
			16: Danish
			17: Swedish
			18: Portuguese
			19: Portuguese (Brazil)
			20: Finnish
			21: Catalan
			22: Portuguese
			23: Hungarian
			24: Czech
			25: Russian
			26: Japanese
			27: Greek

RTB 26c SP5101 added,

5104* [Counter: Size Setting] A3/DLT Double Count (SSP)

Specifies whether the counter is doubled for A3/DLT. "Yes" counts except from the bypass tray. When "Yes" is selected, A3 and DLT paper are counted twice, that is A4 x2 and LT x2 respectively.

Default setting: Yes

5113	[Optional Counter Type]		
001	Default Optional Counter Type	*CTL	This program specifies the counter type. O: None, 1: Key card (RK 3, 4) 2: Key card (down), 3: Prepaid card 4: Coin rack, 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]			
	3110	This program disables copyi	ng.		
	001	-	*CTL	[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	-	*CTL	[0: Yes (removed)/ 1: Standby (installed but not used)/ 2: No (not removed)]		

	[Counter Up Timing]					
5121	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]			

5126	[F Size Original Setting]				
3120	Selects F size original setting.				
001	-	*ENG	[0 to 2 / 0 / 1 /step] 0: 8 1/2" x 13" (Foolscap) 1: 8 1/4" x 13" (Folio) 2: 8" x 13" (F)		

	5127	[APS Mode]		
	312/	This program disables the	APS.	
	001	- *CTL [0: Not disabled/ 1: Disabled]		[0: Not disabled/ 1: Disabled]

	[Paper Size Type Selection]				
5131	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]		

5148	Size Detection Off	*CTL	[0: OFF/ 1: ON]
	0: Detect		
	1: Not Detect		

	[Bypass Length Setting]				
5150	Determines whether the transfer sheet from the by-pass tray is used or not.				
	Normally the paper length for sub scanning paper from the by-pass tray is limited to 600 mm, but this can be extended with this SP to 1260 mm.				
001	0: OFF 1: ON	*CTL	[0: OFF/ 1: ON]		

5162	[App. Switch Method]	*CTL	[0: Soft Key Set/ 1: Hard Key Set]	
001	This program specifies the switch that selects an application program.			

	[Fax Printing Mode at Optional Counter Off]				
5167	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	-	*CTL	[0 or 1 / 0 / -] 0: Automatic printing 1: No automatic printing		

	[CE Login]				
5169	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 / -] 0: Disabled 1: Enabled		

<i>E</i> 1 0 1	[Size Adjust]					
5181	Adjusts the paper size for each tray.					
001	TRAY 1	*ENG	[0 to 3 / 0 (EU/ASIA), 1 (NA) / 1 /step] 0: A4 LEF, 1: LT LEF, 2: B5 LEF, 3: A5 LEF			
002	TRAY 2: 1	*ENG	[0 or 1 / 0 (EU/ASIA), 1 (NA) / -] 0: A4 LEF, 1: LT LEF			
003	TRAY 2: 2	*ENG	[0 or 1 / 0 (EU/ASIA), 1 (NA) / -] 0: A3, 1: DLT			
004	TRAY 2: 3	*ENG	[0 or 1 / 0 (EU/ASIA), 1 (NA) / -] 0: B4, 1: LG			
005	TRAY 2: 4	*ENG	[0 or 1 / 0 (EU/ASIA), 1 (NA) / -] 0: B5 LEF, 1: Exe LEF			

006	TRAY 3/T-LCT: 1	*ENG	[0 or 1 / 0 (EU/ASIA), 1 (NA) / -] 0: A4 LEF, 1: LT LEF
007	TRAY 3: 2	*ENG	[0 or 1 / 0 (EU/ASIA), 1 (NA) / -] 0: A3, 1: DLT
008	TRAY 3: 3	*ENG	[0 or 1 / 0 (EU/ASIA), 1 (NA) / -] 0: B4, 1: LG
009	TRAY 3: 4	*ENG	[0 or 1 / 0 (EU/ASIA), 1 (NA) / -] 0: B5 LEF, 1: Exe LEF
010	TRAY 4: 1	*ENG	[0 or 1 / 0 (EU/ASIA), 1 (NA) / -] 0: A4 LEF, 1: LT LEF
011	TRAY 4: 2	*ENG	[0 or 1 / 0 (EU/ASIA), 1 (NA) / -] 0: A3, 1: DLT
012	TRAY 4: 3	*ENG	[0 or 1 / 0 (EU/ASIA), 1 (NA) / -] 0: B4, 1: LG
013	TRAY 4: 4	*ENG	[0 or 1 / 0 (EU/ASIA), 1 (NA) / -] 0: B5 LEF, 1: Exe LEF
018	LCT	*ENG	[0 to 2 / 0 (EU/ASIA), 1 (NA) / -] 0: A4LEF, 1: LTLEF, 2: B5LEF

	[RK4]		
5186	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 and stops.		
001	-	*ENG	[0 or 1 / 0 / 1/step] 0: Disable 1: Enable

5188	[Copy Nv Version]				
3100	Displays the version number of the NVRAM on the controller board.				
001	-	-	-		

5193	[External Controller Info. Settings]			
			Sets the external controller type. This setting is appropriately adjusted if an external controller is installed in the machine.	
			[0 to 10 / 0 / 1/step]	
001	001	-	0: No external controller installed	
			1: EFI controller	
		2: Ratio controller		
			3: Egret controller	
			4 to 10: Reserved	

5199	[Paper Exit After Staple End.]		
001	-	*CTL	[0 or 1 / 0 / -] 0: OFF, 1: ON
	 Enables or disables the paper feeding out from the finisher without stapling. If this setting is "1: ON", paper is fed out without stapling at the maximum number of the finisher stapling when the machine gets a multiple printing job (over maximum number). If this setting is "0: OFF", paper is fed out with stapling at the maximum number of the finisher stapling when the machine gets a multiple printing job (over maximum number). 		

5212	[Page Numbering]	*CTL		
	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	[-10 to 1	0 / 0 / 1 mm/step]	
004	Duplex Printout High/Low Position	[-10 to 1	0 / 0 / 1 mm/step]	

	[Set Time]				
	Adjusts the RTC (real time clock) time setting for the local time zone.				
	Examples: For Japan (+9 GMT), enter 54	0 (9 hours x 60 min.)		
	DOM: +540 (Tokyo)				
5302	NA: -300 (New York)				
	EU: + 60 (Paris)				
	CH: +480 (Peking)				
	TW: +480 (Taipei)				
	AS: +480 (Hong Kong)				
002	Time Difference	*CTL	[-1440 to 1440 / -300 / 1 min./step]		
002	Time Dinerence	#	[-1440 to 1440 / -300 / 1 min./ step]		

5307	[Summer Time]		
001	Setting	[0 to 1 / NA, EU, ASIA / 1 /step] 0: Disabled 1: Enabled NA and EUR: 1, ASIA: 0	
001	Enables or disables the summer time mode. Note		
	 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". 		

	Rule Set (Start)				
	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]				
003	3rd digit: The week of the mon	th. [1 to	5]		
003	4th digit: The day of the week.	[0 to 6 =	= Sunday to Saturday]		
	5th and 6th digits: The hour. [C	00 to 23]			
	7th digit: The length of the adv	anced tii	me. [0 to 9 / 1 hour /step]		
	8th digit: The length of the adv	anced tii	me. [0 to 5 / 10 minutes /step]		
	The digits are counted fro	m the lef	ft.		
	Make sure that SP5-307-	-1 is set t	o "1".		
	For example: 3500010 (EU d	efault)			
	The timer is advanced by 1 hour at am 0:00 on the 5th Sunday in March				
	The timer is advanced by 1 ho	ur at am	0:00 on the 5th Sunday in March		
	The timer is advanced by 1 ho Rule Set (End)	ur at am -	0:00 on the 5th Sunday in March		
	,	-	-		
	Rule Set (End)	-	-		
	Rule Set (End) Specifies the end setting for the	- e summe	r time mode.		
004	Rule Set (End) Specifies the end setting for the There are 8 digits in this SP.	summer	r time mode.		
004	Rule Set (End) Specifies the end setting for the There are 8 digits in this SP. 1st and 2nd digits: The month.	- e summer [1 to 12 th. [0 to	r time mode.] 5]		
004	Rule Set (End) Specifies the end setting for the There are 8 digits in this SP. 1st and 2nd digits: The month. 3rd digit: The week of the mon	- [1 to 12 th. [0 to [0 to 7 =	r time mode.] 5] = Sunday to Saturday]		
004	Rule Set (End) Specifies the end setting for the There are 8 digits in this SP. 1 st and 2nd digits: The month. 3rd digit: The week of the mon4th digit: The day of the week.	- (1 to 12 th. [0 to 7 = 00 to 23]	- time mode.] 5] = Sunday to Saturday]		
004	Rule Set (End) Specifies the end setting for the There are 8 digits in this SP. 1 st and 2nd digits: The month. 3rd digit: The week of the mon 4th digit: The day of the week. 5th and 6th digits: The hour. [Continue of the continue of	- [1 to 12 th. [0 to [0 to 7 = 00 to 23] et to "00"	- time mode.] 5] = Sunday to Saturday]		

5404	[User Code Count Clear]		
001	UCodeCtrClr		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 / -] O: Password NULL not permitted. 1: Password NULL permitted.
006	Detail Option	*CTL	Determines whether LDAP option (anonymous certification) is turned on or off. BitO O: 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]
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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]

5417	[Access Attack]	
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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]

	[User Authentication]			
5420	These settings should be done with the System Administrator. • These functions are enabled only after the user access feature has been enabled.			
001	Сору	*CTL	Determines whether certification is required before a user can use the copy applications. [0 to 1 / 0 / 1] 0: On, 1: Off	

	Color Security Setting	*CTL	-			
	Enables or disables the color copy limitation for each copy mode when the user authentication is "ON". O: Enable (default), 1: Disable					
	BitO: B/W mode					
002	Bit 1: 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] 0: On, 1: Off			
021	Fax	*CTL	Determines whether certification is required before a user can use the fax application. [0 or 1/0/1] 0: On, 1: Off			
031	Scanner	*CTL	Determines whether certification is required before a user can use the scan applications. [0 or 1/0/1] 0: On, 1: Off			
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		[0 or 1 / 0 / 1] 0: ON. 1: OFF			
061	SDK2	*CTL	Determines whether certification is required			
071	SDK3		before a user can use the SDK application.			

E 401	[Authentication Error Code]				
5481	These SP codes determine ho	w the au	uthentication 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)]				
			Set	s up operation of the machine with a keycard.	
			[O t	01/0/1]	
001 Job Permit Setting *CTL	*CTL	°CTL 0: Disabled. Cancels operation without a code.			
	1: E	Enabled. Allows operation without a user le.			
002	Count Mode Setting	*CTL	_		
302 Coom Mode coming CTL					
5501	[PM Alarm]	*CTL		-	
		[0 to 9	[0 to 9999 / 0 / 1 /step]		

5501	[PM Alarm]	*CTL	-			
		[0 to 9999 / 0 / 1 /step]				
001	001 PM Alarm Level	0: Alarm o	0: Alarm off			
	TWY Warm Level	1 to 9999: Alarm goes off when Value (1 to 9999) x 1000 > PM counter				
		[0 or 1 / 0	0/-]			
002	002 Original Count Alarm	0: No alarm sounds				
	002 Original Coolii Alami		ounds after the number of originals passing • ARDF > 10,000			

5504	[Jam Alarm]	*CTL	-
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Sets the alarm to sound for the specified jam level (document misfeeds 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)

	[Error Alarm]			
5505	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 255 / C3a : 25 , C3b : 35 / 100 copies / step]	

5508*	[CC Call]	*C	CTL	-	
001*	Jam Remains		0: Disable, 1: Enable		
001	Enables/disables initiating a call for an unattended paper jam.				
002*	Continuous Jams		0: Disable, 1: Enable		
002	Enables/disables initiating a call for consecutive paper jams.				
003*	Continuous Door Open		0: Dis	able, 1: Enable	
003	Enables/disables initiating a call when the front door remains open.				
	Jam Detection: Time Length		[3 to 30 / 10 / 1 minute /step]		
011*	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".				
	Jam Detection: Continuous Count		[2 to 10 / 5 / 1 /step]		
012*	Sets the number of consecutive paper jams required to initiate a call. This setting is enabled only when SP5508-004 is set to "1".				

	Door Open: Time Length	[3 to 30 / 10 / 1 /step]		
O13* 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 NRS (New Remote Service) 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		
002	Service Parts Near End Call		[0 or 1 / 1 / -]
003	Service Parts End Call		0: Off 1: On
004	User Call		
006	Communication Test Call		
007	Machine Information Notice		
008	Alarm Notice		[0 or 1 / 1 / -]
009	Non Genuine Tonner Alarm		0: Off
010	Supply Automatic Ordering Call		1: On
011	Supply Management Report Call		
012	Jam/Door Open Call		

	[Individual PM Part Alarm Call]	*CTL	-			
5516	With @Remote in use, these SP codes can be set to issue an PM alarm call when one of SP parts reaches its yield.					
001	Disable/Enable Setting (0: Not send, 1: Send)		[0 or 1 / 1 / -]			
			0: Not send, 1: Send			
004	Percent yield for triggering PM alert		[1 to 255 / 75 / 1 %/step]			

5610	[Base Gamma Control Point: Command]
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004	Factory Setting	*ENG	-		
	Recalls the factory settings.				
005	Restore	*ENG	-		
	Overwrites the current values onto the factory settings.				
006	Restore	*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 correcti	on value of t	he blue signal in two-color mode.	
002	В-М	*ENG	[0 to 128 / 100 / 1 /step] 128: Darkest density	
	Adjusts the Magenta corr	rection 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.			

[Color Mode Display ociection]	5618	[Color Mode Display Selection]	
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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 of	display on	the LCD.



- 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	Resets all correction data for process control and all software counters, and returns all modes and adjustments to their default values.
002	Engine	Clears the engine settings.
003	SCS	Initializes default system settings, SCS (System Control Service) settings, operation display coordinates, and ROM update information.
004	IMH Memory Clr	Initializes the IMH settings.
005	Mcs	Initializes the Mcs settings.
006	Copier Application	Initializes all copier application settings.
007	Fax Application	Initializes the fax reset time, job login ID, all TX/RX settings, local storage file numbers, and off-hook timer.

	1	1
008	Printer Application	The following service settings: Bit switches Gamma settings (User & Service) Toner Limit The following user settings: 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	Initializes the scanner defaults for the scanner and all the scanner SP modes.
010	Web Service	Deletes the network file application management files and thumbnails, and initializes the job login ID.
011	NCS	All setting of Network Setup (User Menu) (NCS: Network Control Service)
012	R-Fax	Initializes the job login ID, SmartDeviceMonitor for Admin, job history, and local storage file numbers.
014	Clear DCS Setting	Initializes the DCS (Delivery Control Service) settings.
015	Clear UCS Setting	Initializes the UCS (User Information Control Service) settings.
016	MIRS Setting	Initializes the MIRS (Machine Information Report Service) settings.
017	CCS	Initializes the CCS (Certification and Charge-control Service) settings.
018	SRM Memory Clr	Initializes the SRM (System Resource Manager) settings.
019	LCS	Initializes the LCS settings.
020	Web Uapli	Initializes the web user application settings.
021	ECS	Initializes the ECS settings.

[FreeRun] Performs a free run on the copier engine. Note 5802 • 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. B/W A4 LEF 001 002 FC A4 LEF *ENG 003 FC A3 LEF See "Input Check Table" in "Main SP Tables-9". 5803 [Input Check] (**p**.681) 0: Unlock Cooling Fan: Lock *ENG 044 1: Lock 0: Unlock 2nd Duct Fan2: Lock *ENG 045 1: Lock See "Output Check Table" in "Main SP *ENG 5804 [Output Check] Tables-9". (** p.692) 5805 [Anti-Condensation Heater] *ENG 0:OFF / 1:ON 002 [SC Reset] Resets a type A service call condition. 5810 **U** Note • Turn the main switch off and on after resetting the SC code. 001 Fusing SC Reset 002 Hard High Temp. Detection

5811	[MachineSerial] Machine Serial Number Display		
002	Display	*ENG	Displays the machine serial number.
004	BCU		Inputs

5812	[Service Tel. No. Setting]			
001	Service	*CTL	-	
	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 chara	cters (both	numbers and alphabetic characters can be input).	
	Facsimile	*CTL	-	
002	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).			
	Supply	*CTL	-	
003	Use this to input the telephonumber and press #.	one numbe	r of your supplier for consumables. Enter the	
004	Operation	*CTL	-	
	Use this to input the telepho	one numbe	r of your sales agency. Enter the number and press	

5816	[Remote Service] *CTL -			
	I/F Setting			
	Selects the remote service setting.			
001	[0 to 2 / 2 / 1 /step]			
	0: Remote service off			
	1: CSS remote service on			
	2: NRS remote service on			

	CE Call
	Performs the CE Call at the start or end of the service.
	[0 or 1 / 0 / 1 /step]
002	0: Start of the service
	1: End of the service
	◆ Note
	 This SP is activated only when SP 5816-001 is set to "2".
	Function Flag
	Enables or disables the remote service function.
003	[0 to 1 / 0 / 1 /step]
	0: Disabled
	1: Enabled
	SSL Disable
	Controls if RCG (Remote Communication Gate) confirmation is done by SSL during an
007	RCG send for the @Remote over a network interface.
	[0 or 1 / 0 / 1 /step]
	0: Yes. SSL not used.
	1: No. SSL used.
	RCG Connect Timeout
008	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]
	RCG Write Timeout
009	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]
	RCG Read Timeout
010	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]

	Port 80 Enable	-			
011	Controls if permission is given to get access to the SOAP method over Port 80 on the @Remote network.				
011	[0 or 1 / 0 / -]				
	0: No. Access denied				
	1: Yes. Access granted.				
	RFU Timing				
	Selects the timing for the re	mote firmware updating.			
013	[0 or 1 / 1 / –]				
	0: Any status of a target mo	achine			
	1: Sleep or panel off mode	only			
	RCG – C Registed				
021	This SP displays the RCG-N installation end flag.				
021	0: Installation not completed				
	1: Installation completed				
	Connect Type (N/M)				
	This SP displays and selects the RCG-N connection method.				
023	[0 or 1 / 0 / 1 /step]				
	0: Internet connection				
	1: Dial-up connection				
0.71	C . F . T BELL	Proximity of the expiration of the certification.			
061	Cert Expire Timing DFU	[0 to 0xfffffff / 0 / 1 /step]			
		This SP setting determines if the proxy server is used when			
		the machine communicates with the service center.			
062	Use Proxy	[0 or 1 / 0 / 1 /step]			
		0: Not use 1: Use			
		1. Use			

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. 063 Note • 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. Proxy PortNumber 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 064 RC Gate-N. **Note** • This port number is customer information and is not printed in the SMC report. Proxy User Name This SP sets the HTTP proxy certification user name. ■ Note 065 • 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. Proxy Password This SP sets the HTTP proxy certification password. Note 066 • 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.

	CERT:Up State					
	Displays the status of the certification update.					
	0	The certification used by RCG-N 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.				
067	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 an 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.				

	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.				
068	2	An SSL error notification has been issued. Issued after the certification has expired.				
	3	Notification of shift f	rom a common authentication to an individual certification.			
	4	Notification of a cor	nmon certification without ID2.			
	5	Notification that no	certification was issued.			
	6	Notification that GV	VURL does not exist.			
069	CERT	:Up ID	The ID of the request for certification.			
083	Firm (Jp Status	Displays the status of the firmware update.			
085	Firm (Jp User Check	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	Firmv	vare Size	Allows the service technician to confirm the size of the firmware data files during the firmware update execution.			
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	: ID2 Code	Displays ID2 for the @Remote certification. Spaces are displayed as underscores (_). Asteriskes (****) 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. Asteriskes (****)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: Strength	Displays cryptic strength of the NRS certification. 1: 512 bit 2: 2048 bit				
	Selection Country	Selection Country				
150	the country, you must also	mbedded RCG-M is installed in the machine. After selecting set the following SP codes for embedded RCG-M: ada, 3: UK, 4: Germany, 5: France, 6: Italy, a, 9: Luxembourg, 10: Spain				
	Line Type AutomaticJudgm	ent				
151	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. • 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.					

Line Type Judgment Result

Displays a number to show the result of the execution of SP5816 151. Here is a list of what the numbers mean.

- 0: Success
- 1: In progress (no result yet). Please wait.
- 2: Line abnormal
- 152 3: Cannot detect dial tone automatically
 - 4: Line is disconnected
 - 5: Insufficient electrical power supply
 - 6: Line classification not supported
 - 7: Error because fax transmission in progress ioctl() occurred.
 - 8: Other error occurred
 - 9: Line classification still in progress. Please wait.

Selection Dial / Push

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.

[0 or 1 / 0 / 1 /step]

153 0: Tone Dialing Phone

1: Pulse Dialing Phone

Inside Japan "2" may also be displayed:

- 0: Tone Dialing Phone
- 1: Pulse Dialing Phone 10PPS
- 2: Pulse Dialing Phone 20PPS

	Outside Line Outgoing Number
	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).
	 If the execution of SP5816-151 has succeeded and embedded RCG-M has connected to the external line, this SP display is completely blank.
154	 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).
	Dial Up User Name
156	Use this SP to set a user name for access to remote dial up. Follow these rules when setting a user name:
156	Name length: Up to 32 characters
	 Spaces and # allowed but the entire entry must be enclosed by double quotation marks (").
	Dial Up Password
1.57	Use this SP to set a password for access to remote dial up. Follow these rules when setting a user name:
107	Name length: Up to 32 characters
	 Spaces and # allowed but the entire entry must be enclosed by double quotation marks (").
	Local Phone Number
161	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)

Connection Timing Adjustment Incoming 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 162 number of the embedded RCG-M modem is dialed up and connected. [0 to 24 / 1 / 1 /step] 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. Access Point This is the number of the dial-up access point for RCG-M. If no setting is done for this SP 163 code, then a preset value (determined by the country selected) is used. Default: 0 Allowed: Up to 16 alphanumeric characters Line Connecting 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. [0 to 1 / 0 / 1 /step] 0: Sharing Fax 164 1: No Sharing Fax **Note** • 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. Modem Serial No. 173 This SP displays the serial number registered for the RCG-M. Retransmission Limit 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 174 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.

	FAX TX Priority	-			
187			e off-hook button will interrupt a RCG-M ne for fax transaction. This SP can be used only if		
200	Manual Polling	-	Executes the manual polling.		
	Regist Status				
201	Displays a number that indicates the status of the @Remote service device. O: 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.				
201	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 extern	al RCG has not started.		
202	Letter Number	Allows en RCG-N d	try of the number of the request needed for the evice.		
203	Confirm Execute	Executes t	he inquiry request to the @Remote GW URL.		
	Confirm Result	Confirm Result			
204	O: Succeeded 1: Inquiry number error 2: Registration in progress 3: Proxy error (proxy enab 4: Proxy error (proxy disab 5: Proxy error (Illegal user 6: Communication error 7: Certification update erro 8: Other error	led) led) name or po	esult of the inquiry executed with SP5816 203.		
	9: Inquiry executing				

	Confirm Place				
205	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".				
	Register Result				
	Displays a number that indicates the registration result.				
	0: Succeeded				
	2: Registration in progress				
	3: Proxy error (proxy enabled)				
207	4: Proxy error (proxy disabled)				
	5: Proxy error (Illegal user name or password)				
	6: Communication error				
	7: Certification update error				
	8: Other error				
	9: Registration executing				

Error Code

Displays a number that describes the error code that was issued when either SP5816-204 or SP5816-207 was executed.

	Cause	Code	Meaning
		-11001	Chat parameter error
208	Illegal Modem Parameter	-11002	Chat execution error
		-11003	Unexpected error
		-12002	Inquiry, registration attempted without acquiring device status.
708	Operation Error,	-12003	Attempted registration without execution of an inquiry and no previous registration.
	Incorrect Setting	-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.
	Operation Error, Incorrect Setting	-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	ID2 mismatch between an individual certification and NVRAM
		-12010	Certification area is not initialized.

		-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
	Error Caused by Response from GW URL	-2391	Two registrations for same device
208		-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	Instal Clear	Releases the	machine from its embedded RCG setup.
250	CommLog Print	Prints the cor	mmunication log.

5821	[Remote Service Address]		
002	RCG IP Address	*CTL	Sets the IP address of the RCG (Remote Communication Gate) destination for call processing at the remote service center.

	[NV-RAM Data Upload]			
Uploads the UP and SP mode data (except for counters and the serial number) from NVRAM to an SD card. For details, see the "NVRAM Data Upload/Download" in section.				
001	NV-RAM Data Upload	#	-	

	[NV-RAM Data Download]			
5825	Downloads the UP and SP mode data from an SD card to the NVRAM. For details, see the "NVRAM Data Upload/Download" in this section.			
001	NV-RAM Download	#	-	

5828	[Network Setting]	*CTL	-	
050	1284 Compatibility (Centro)	Enables or disables 1284 Compatibility. [0 or 1 / 1 / 1 / step] 0: Disabled, 1: Enabled		
052	ECP (Centro)	[0 or 1 / 0: Disable	or disables ECP Compatibility. 1 / 1 / step] ed, 1: Enabled SP is activated only when SP5-828-50 is set to	
065	Job Spooling	[0 or 1 /	'disables Job Spooling. O / 1 / step] ed, 1: Enabled	
066	Job Spooling Clear: Start Time	0: ON (D	t of the job when a spooled job exists at power on. Data is cleared) Automatically printed)	

Validates or invalidates the job spooling function for each protocol. O: Validates 1: Invalidates bit0: LPR bit1: FTP bit2: IPP bit3: SMB bit4: BMLinkS	
1: Invalidates bit0: LPR bit1: FTP bit2: IPP bit3: SMB	h
O69 Job Spooling (Protocol) bit0: LPR bit1: FTP bit2: IPP bit3: SMB	
bit 1: FTP bit 2: IPP bit 3: SMB	
O69 Job Spooling (Protocol) bit2: IPP bit3: SMB	
bit2: IPP bit3: SMB	
bit4: BMLinkS	
bit5: DIPRINT	
bit6: sftp	
bit7: (Reserved)	
Enables or disables the Telnet protocol.	
090 TELNET (0: OFF 1: ON) [0 or 1 / 1 / -]	
0: Disable, 1: Enable	
Enables or disables the Web operation.	
091 Web (0: OFF 1: ON) [0 or 1 / 1 / -]	
0: Disable, 1: Enable	
This is the IPv6 local address link referenced on the Ethern or wireless LAN (802.11b) in the format:	net
145 Active IPv6 Link Local "Link Local Address" + "Prefix Length"	
The IPv6 address consists of a total 128 bits configured in blocks of 16 bits each.	n 8

147	Active IPv6 Stateless Address 1						
149	Active IPv6 Stateless Address 2	These SPs are the IPv6 status addresses (1 to 5) referenced					
151	Active IPv6 Stateless Address 3	on the Ethernet or wireless LAN (802.11b) in the format: "Status Address" + "Prefix Length"					
153	Active IPv6 Stateless Address 4	The IPv6 address consists of a total 128 bits configured in 8 blocks of 16 bits each.					
155	Active IPv6 Stateless Address 5	_					
		This SP is the IPv6 manually set address referenced on the Ethernet or wireless LAN (802.11b) in the format:					
156	IPv6 Manual Address	"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.					
161	IPv6 Stateless Auto Setting	Enables or disables the automatic setting for IPv6 stateless. [0 or 1 / 1 / 1 / step] 0: Disable, 1: Enable					
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					

plays or does not display the link to Consumable oplier on the top page and link page of the web system.
01/1/1]
Not display, 1:Display
s SP confirms or changes the URL1 name on the link page the web system. The maximum characters for the URL ne are 31 characters.
s SP confirms or changes the link to URL1 on the link ge of the web system. The maximum characters for the are 127 characters.
olays or does not display the link to URL1 on the top ge of the web system. o 1 / 1 / 1]
Not display, 1:Display
ne as "-239"
ne as "-240"
ne as "-241"

5832	[HDD] HDD Initialization	*CTL	-
------	--------------------------	------	---

001	HDD Formatting (ALL)	
002	HDD Formatting (IMH)	
003	HDD Formatting (Thumbnail)	
004	HDD Formatting (Job Log)	
005	HDD Formatting (Printer Fonts)	
006	HDD Formatting (User Info)	Initializes the hard disk. Use this SP mode only if
007	Mail RX Data	there is a hard disk error.
008	Mail TX Data	
009	HDD Formatting (Data for a Design)	
010	HDD Formatting (Log)	
011	HDD Formatting (Ridoc I/F)	

5836	[Capture Setting]	*CTL	-		
	Capture Function (0:Off 1:On)		0: Disable, 1: Enable		
001	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		
002	Displays or does not display the capture function buttons.				
	5836-71 to 5836-78, Copier and Printer Document Reduction				
	The following 6 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		0: 1to-1, 1: 1/2, 2: 1/3 , 3: 1/4		
072	Reduction for Copy B&W Text		0: 01, 1: 1/2, 2: 1/3, 3: 1/4, 6: 2/3		
073	Reduction for Copy B&W Other		0: 01, 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: 01 , 1: 1/2, 2: 1/3, 3: 1/4, 6: 2/3		

076	Reduction for Printer B&W HQ	0: 1to-1 , 1: 1/2, 2: 1/3, 3: 1/4
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
	5836-81 to 5836-86, Stored document f	ormat
	The following 6 SP modes set Sets the defo	ault format for stored documents sent to the 3.
	Enabled only when optional MLB (Media	Link Board) is installed.
081	Format for Copy Color	O: JFIF/JPEG, 1: TIFF/MMR, 2: TIFF/MH, 3: TIFF/MR Note This SP is not used in this model.
082	Format for Copy B&W Text	O: JFIF/JPEG, 1: TIFF/MMR, 2: TIFF/MH, 3: TIFF/MR
083	Format Copy B&W Other	O: JFIF/JPEG, 1: TIFF/MMR, 2: TIFF/MH, 3: TIFF/MR
084	Format for Printer Color	O: 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	O: JFIF/JPEG, 1: TIFF/MMR, 2: TIFF/MH, 3: TIFF/MR
086	Format for Printer B&W HQ	O: JFIF/JPEG, 1: TIFF/MMR, 2: TIFF/MH, 3: TIFF/MR
	Default for JPEG	[5 to 95 / 50 / 1 /step]
091	Sets the JPEG format default for document the MLB with JPEG selected as the format. Enabled only when optional MLB (Media	

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.			
	Reso: Copy (Color)	[0 to 3 / 2 / 1/step]			
121	Selects the resolution for color copy mode. This is basically adjusted by the remote system.				
	0: 600dpi/ 1: 300dpi/ 2: 150dpi/ 3: 75dpi				
	Reso: Copy (Mono)	[0 to 5 / 3 / 1/step]			
122	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			
	Reso: Print (Color)	This is basically adjusted by the remote system. [0 to 3 / 2 / 1/step]			
123	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)	This is basically adjusted by the remote system. [0 to 5 / 3 / 1/step]			
124		V print mode. This is basically adjusted by the remote system. 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi			

125	Reso: Fax (Color)	This is basically adjusted by the remote system. [0 to 6 / 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		
124	Reso: Fax (Mono)	This is basically adjusted by the remote system. [0 to 6 / 3 / 1/step]	
126		V fax mode. This is basically adjusted by the remote system. 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi/ 6: 75dpi	
	Reso: Scan (Color)	This is basically adjusted by the remote system. [0 to 6 / 4 / 1/step]	
127	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		
	Reso: Scan (Mono)	This is basically adjusted by the remote system. [0 to 6 / 3 / 1/step]	
128	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]			
	Channel Max	*CTL	[1 to 11 or 13 / 11 or 13 / 1 /step] Europe/Asia: 1 to 13 NA/ Asia: 1 to 11	
006	Sets the maximum number of channels available for data transmission via the wireless			

			[1 to 11 or 13 / 1 / 1 /step]		
	Channel Min	*CTL	Europe: 1 to 13		
			NA/ Asia: 1 to 11		
007	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 • Note • Do not change the setting.				
			0 x 00 to 0 x FF / 0 x FF to Auto / -]		
			0 x FF to Auto [Default]		
			0 x 11 - 55M Fix		
	Transmission Speed	*CTL	0 x 10 - 48M Fix		
			0 x 0F - 36M Fix		
			0 x 0E - 18M Fix		
			0 x 0D - 12M Fix		
800			0 x 0B - 9M Fix		
			0 x 0A - 6M Fix		
			0 x 07 - 11M Fix		
			0 x 05 - 5.5M Fix		
			0 x 08 - 1 M Fix		
			0 x 13 - 0 x FE (reserved)		
			0 x 12 - 72M (reserved)		
			0 x 09 - 22M (reserved)		
			Selects the WEP key.		
			[00 to 11 / 00 / 1 binary]		
011	WEP key Select	*CTL	00: Key #1		
011	VVER KEY SEIECT	CIL	01: Key #2 (Reserved)		
			10: Key #3 (Reserved)		
			11: Key #4 (Reserved)		
	I	l			

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 µm, 1: 9 µm
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		
002	Toner Name Setting: Cyan		
003	Toner Name Setting: Yellow		
004	Toner Name Setting: Magenta		
007	OrgStamp		Specifies supply names. These appear on the screen when the user presses the Inquiry button in the user tools screen.
011	Staple Std1	*CTL	
012	Staple Std2		
013	Staple Std3		
014	Staple Std4		
021	Staple Bind 1		
022	Staple Blind2		
023	Staple Blind 3		

5844	[USB]		
001	Transfer Rate	*CTL	0x01: Full speed 0x04: Auto Change
	Adjusts the USB transfer rate.		
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.	[0 to 6553	35 / 3670 / 1 /step]
001	Sets the FTP port number used when image files to the Scan Router Server.		

	IP Address (Primary)	Range: 000.000.000	.000 to
002	ii / taaross (i iiiiary)	255.255.255	
	Use this SP to set the Scan Router Servican be referenced by the initial system		ress under the transfer tab
	Delivery Error Display Time	[0 to 999 / 300 / 1 s	second /step]
006	Use this setting to determine the length test error occurs during document trandevice.		
	IP Address (Secondary)	Range: 000.000.000 255.255.255.255	.000 to
008	Specifies the IP address assigned to the secondary delivery server of Scan Roi address without reference to the DNS	uter. This SP allows only	
	Delivery Server Model	[0 to 4/0/1/step]	
009	Allows changing the model of the deli 0: Unknown 1: SG1 Provided 2: SG1 Package 3: SG2 Provided 4: SG2 Package	ivery server registered b	y the I/O device.
	Delivery Svr. Capability	[0 to 255 / - / 1 /ste	p]
	Bit7 = 1 Comment information exits		
	Bit6 = 1 Direct specification of mail address possible		
	Bit5 = 1 Mail RX confirmation setting possible		
010	Bit4 = 1 Address book automatic update function exists		Changes the capability of
	Bit3 = 1 Fax RX delivery function exists		the registered that the I/O device registered.
	Bit2 = 1 Sender password function exists		,, o ao noo rogisioroan
	Bit 1 = 1 Function to link MK-1 user an		
	BitO = 1 Sender specification required to "0")	l (if set to 1, Bitó is set	

	Delivery Svr Capability (Ext)	[0 to 255 / - / 1 /step]	
	Changes the capability of the registered that the I/O device registered.		
011	Bit7 = 1 Address book usage limitation (Limitation for each authorized user) Bit6 = 1 RDH authorization link Bit5 to 0: Not used		
010	Server Scheme (Primary) DFU		
013	This is used for the scan router progra	m.	
014	Server Port Number (Primary) DFU		
014	This is used for the scan router progra	m.	
015	Server URL Path (Primary) DFU		
013	This is used for the scan router progra	m.	
016	Server Scheme (Secondary) DFU		
010	This is used for the scan router progra	m.	
017	Server Port Number (Secondary) DFU		
	This is used for the scan router progra	m.	
018	Server URL Path (Secondary) DFU		
	This is used for the scan router program.		
	Rapid Sending Control		
022	Enables or disables the prevention fun [0 to 1 / 1 / -] 0: Disable, 1: Enable	action for the continuous data sending error.	

5846	[UCS Setting]	*CTL	-	
	Machine ID (For Delivery Server)		Displays ID	
001	displayed and cannot be cha	Displays the unique device ID in use by the delivery served displayed and cannot be changed. This ID is created from EUI. The ID is displayed as either 6-byle or 8-byte binary.		om the NIC MAC or IEEE 1394

	Machine ID Clear (For Delivery Server) Clears ID			Clears ID
002	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.			
	Maximum Entries	[2000 to 20000/ 2000 / 1 /step]		
OO3 Changes the maximum number If a value smaller than the prese the data (excluding user code in		ent value is set, the UCS managed data is cleared, and		
	Delivery Server Retry Timer		[0 to 25	55 / 0 / 1 /step]
006	Sets the interval for retry attempts when the delivery server fails to acquire the delivery server address book.			ver fails to acquire the delivery
	Delivery Server Retry Times		[0 to 25	55 / 0 / 1 /step]
007	Sets the number of retry attempts when the delivery server fails to acquire the delivery server address book.			ver fails to acquire the delivery
	Delivery Server Maximum Entries		[2000 1	to 50000 / 2000 / 1/step]
008	Sets the maximum number account managed by UCS.	entries of th	ne delive	ry server user information
010	LDAP Search Timeout		[1 to 25	55 / 60 / 1 /step]
010	Sets the length of the timeout for the search of the LDAP server.			server.
020	WSD Maximum Entries		[5 to 25	50 / 250 / 1 /step]
020	Sets the maximum entries for the address book of the WSD (WS-scanner).			
040	Addr Book Migration (USB → HDD)			
040	Not used in this machine.			

Fill Addr Acl Info.

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.

Procedure

041

- 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	Displays the slot number where an address book data is in. [0 to 30 / - /1] 0: Unconfirmed 1: SD Slot 1 2: SD Slot 2 4: USB Flash ROM	
		20: HDD	
		30: Nothing	
047	Initialize Local Addr Book	Clears the local address book information, including the user code.	
048	Initialize Delivery Addr Book	Clears the distribution address book information, except the user code.	
049	Initialize LDAP Addr Book	Clears the LDAP address book information, except the user code.	
050	Initialize All Addr Book	Clears all directory information managed by UCS, including all user codes.	

051	Backup All Addr Book	Uploads all directory information to the SD card.	
052	Restore All Addr Book	Downloads all directory information from the SD card.	
		Deletes the address book data from the SD card in the service slot. Deletes only the files that were uploaded from this	
		machine.	
053	Clear Backup Info	This feature does not work if the card is write-protected. • Note	
		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		
	This SP uses bit switches to set up the fuzzy search options for the UCS local address book.		
	Bit: Meaning		
060	0: Checks both upper/lower case characters		
	1: Japan Only		
	2: Japan Only		
	3: Japan Only		
	4 to 7: Not Used		
	Complexity option 1		
		ons for password entry to access the local address book. password entry to upper case and sets the length of the	
062	[0 to 32 / 0 / 1 /step]		
	U Note		
	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		
064	Complexity Option 3 DFU		
	!		

065	Complexity Option 4 DFU	
091	FTP Auth Port Setting	Specifies the FTP port for getting a distribution server address book that is used in the identification mode. [0 to 65535 / 3671 / 1 /step]
094	Encryption Stat	Shows the status of the encryption function for the address book data.

	[Rep Resolution Reduction]	*CTL	-	
5847	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] SP5847-21 sets the default for JPEG image quality of image files handled by NetFile.			
	"Net files" are jobs to be printed from the document server using a PC and the DeskTopBinder software.			
001	Rate for Copy Color		0: 1x	
002	Rate for Copy B&W Text		1: 1/2x	
003	Rate for Copy B&W Other		2: 1/3x	
004	Rate for Printer Color		3: 1/4x 4: 1/6x	
005	Rate for Printer B&W		5: 1/8x	
006	Rate for Printer Color 1200dpi		0: 1x 1: 1/2x 2: 1/3x 3: 1/4x 4: 1/6x 5: 1/8x	
007	Rate for Printer B&W 1200dpi		0: 1x 1: 1/2x 2: 1/3x 3: 1/4x 4: 1/6x 5: 1/8x	

	Network Quality Default for JPEG
021	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.
	[5 to 95 / 50 / 1 /step]

5848	[Web Service]	*CTL	-
	5848 2 sets the 4-bit switch assignment for the access control setting. 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)	0000:	No access control
		0001: Denies access to DeskTop Binder.	
		0010:	No writing control
003	Access Control: Doc. Svr. Print (Lower 4 bits)	Switches access control on and off. 0000: No access control 0001: Denies access to DeskTop Binder.	
004	Access Control: udirectory (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)		
99	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]	

210	Setting: LogType: Job1	
211	Setting: LogType: Job2	
212	Setting: LogType: Access	
213	Setting: PrimarySrv	NIA
214	Setting: SecondarySrv	NIA
215	Setting: StartTime	
216	Setting: IntervalTime	
217	Setting: Timing	

5849	[Installation Date]	*CTL	-	
5849 1	Display	The "Counter Clear Day" has been changed to "Installation Date" or "Inst. Date".		
5849 2	Switch to Print	Determines whether the installation date is printed the printout for the total counter. [0 or 1 / 1 / -] 0: OFF (No Print) 1: ON (Print)		
003	Total Counter	-		

5850	[Address Book Function]	*CTL	-		
	Replacement of Circuit Classification Japan Only				
003	to convert to G4 after you add a	The machine is sold ready to use with a G3 line. This SP allows you to switch all at once to convert to G4 after you add a G4 line. Conversely, if for some reason the G4 line becomes unusable, you can easily switch back to G3.			

5851	[Bluetooth]	*CTL	-	
	mode			
001	Sets the operation mode for the Bluetooth Unit. Press either key.			
	[O:Public] [1: Private]			

[Stamp Data Download] Use this SP to download the fixed stamp data stored in the firmware of the ROM and copy it to the HDD. This SP can be executed as many times as required. This SP must be executed after replacing or formatting the hard disks. • Note • This SP can be executed only with the hard disks installed.

	[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 to 1 / 0 / 1/step] 0: Disable 1: Enable	

5857	[Save Debug Log]	*CTL	-	
	On/Off (1:ON 0:OFF)	0 : OFF,	I: ON	
001	The debug log cannot be captured until this			
	Target (2: HDD 3: SD)	2 : HDD,	3: SD Card	
002	Selects the storage device to save debug logs information when the conditions set with SP5-858 are satisfied.			
	[2 to 3 / 2 / 1 /step]	/step]		
	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.			
00/	Save to SD Card			
Saves the debug log of the input SC number			r in memory to the SD card.	
009	Copy HDD to SD Card (Latest 4 MB)			
010	Copy HDD to SD Card (Latest 4 MB 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 4 MB)
015	Copy SD to SD (Latest 4 MB Any Key)
016	Make HDD Debug
017	Make SD Debug

	[Debug Save When]	*CTL	-		
5858	selected by SP5857-002.	lect the content of the debugging information to be saved to the destination SP5857-002. Ores one SC specified by number. Refer to Section 4 for a list of SC error			
001	Engine SC Error (0: OFF, 1: ON)	Turns on/off the debug save for SC codes generated by copier 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	-
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001	Key 1	
002	Key 2	
003	Key 3	
004	Key 4	These SPs allow you to set up to 10 keys for log files fo functions that use common memory on the controller board. [-9999999 to 9999999 / 0 / -]
005	Key 5	
006	Кеу б	
007	Key 7	
008	Key 8	
009	Key 9	
010	Key 10	

5860	[SMTP/POP3/IMAP4]	*CTL	-	
	Partial Mail Receive Timeout			[1 to 168 / 72 / 1 hour/step]
020	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.			
	MDN Response RFC2298 Compliance [0 to 1 / 1 / -]			[0 to 1 / 1 / -]
021	Determines whether RFC2.5298 compliance is switched on for MDN reply mail. 0: No 1: Yes			
	SMTP Auth. From Field Replac	ement		[0 to 1 / 0 / -]
022	Determines whether the FROM item of the mail header is switched to the validated account after the SMTP server is validated. O: No. "From" item not switched. 1: Yes. "From item switched.			ader is switched to the validated

	SMTP Auth. Direct Setting		[0 or 1 / - / -]		
	Selects the authentication meth	od for SMPT.			
	Bit switch:				
	Bit 0: LOGIN				
025	Bit 1: PLAIN				
023	Bit 2: CRAM MD5				
	Bit 3: DIGEST MD5				
	Bit 4 to 7: Not used				
	↓ Note				
	This SP is activated only when SMTP authorization is enabled by UP mode.				
			ects the MIME header type of an E-mail sent S/MIME.		
	S/MIME: MIME Header	[0	0 to 2 / 0 / 1]		
026	Setting	- O:	Microsoft Outlook Express standard		
		1:	nternet Draft standard		
		2:	RFC standard		

5	870 [Common Key Info Writing]			
	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	[SD Card Appli Move]			
001	Move Exec	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	Undo Exec	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]	
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001	Reboot Setting	*CTL	Enables or disables the automatic reboot function when an SC error occurs. [0 or 1/0/-] 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	Selects the reboot method for SC. [0 or 1 / 0 / -] 0: Manual reboot, 1: Automatic reboot

5878	[Option Setup]			
001	Data Overwrite Security	-	Enables the Data Overwrite Security unit. Press "EXECUTE" on the operation panel. Then turn the machine off and on.	
002	HDD Encryption	-	Installs the HDD Encryption unit.	

5881	[Fixed Phrase Block Erasing]		
001	-	-	Deletes the fixed phrase.

5883	[Line Speed Selection]					
3003	Selects the line speed for middle thick paper.					
001	Middle Thick	*ENG	[0 or 1 / 0 / 1 /step] 0: MID CARD: Half Speed (115 mm/sec) 1: MID CARD: Normal Speed			

E 0 0 E	[Set WIM Function] Web Image Monitor Settings
5885	Close or disclose the functions of web image monitor.

			<u> </u>
			0: OFF, 1: ON
			Bit Meaning
			0: Forbid all document server access (1)
			1: Forbid user mode access (1)
020	DocSvr Acc Ctrl	* <i>C</i> TI	2: Forbid print function (1)
020	DOCOVI ACC CITI	CIL	3: Forbid fax TX (1)
			4: Forbid scan sending (1)
			5: Forbid downloading (1)
			6: Forbid delete (1)
		*CTL *CTL *CTL	7: Reserved
			Selects the display type for the document box
050	DocSvr Format	*CTI	list.
	Docovi i omidi	CIL	[0 to 2 / 0 / 1]
			0: Thumbnail, 1: Icon, 2: Details
	DocSvr Trans		Sets the number of documents to be displayed in
051		*CTL	the document box list.
			[5 to 20 / 10 / 1]
		*CTL	Selects whether the signature is added to the
			scanned documents with the WIM when they are transmitted by an e-mail.
100	Set Signature		[0 to 2 / 0 / 1/step]
100			0: Setting for each e-mail
			1: Signature for all
			2: No signature
			Determines whether the scanned documents with
	Set Encrypsion		the WIM are encrypted when they are
101		*CTL	transmitted by an e-mail.
			[0 to 1 / 0 / 1]
			0: Not encrypted, 1:Encryption
200	Detect Mem Leak	*CTL	Not Used
201	DocSvr Timeout	*CTL	Not Used

5007	[SD Get Counter]			
5887	This SP determines whether the	ROM ca	n be updated.	
001	-	*CTL	This SP sends a text file to an SD card inserted in SD card Slot 2 (lower slot). The operation stores. The file is stored in a folder created in the root directory of the SD card called SD_COUNTER. The file is saved as a text file (*.txt) prefixed with the number of the machine. 1. Insert the SD card in SD card Slot 2 (lower slot). 2. Select SP5887 then touch [EXECUTE]. Touch [Execute] in the message when you are prompted.	

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	-				
3093	Displays the counter name of each SDK application.						
001 SDK-1							
002							
003 SDK-3							
004 SDK-4 005 SDK-5							
				006			

E004	[External Counter Setting]
5894	Test Name 1_1

001 Switch Charge Mode *	NG [0 to 2 / 0 / 1/step]	
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	[Application Invalidation]		
5895	Enables or disables the printer or scanner application. These SPs are used only when an external controller is installed in the machine.		
001	Printer	*CTL	[0 or 1 / 0 / -]
002	Scanner	*CTL	0: Enable 1: Disable

5907	[Plug & Play Maker/Model Name]
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: ON, 1: OFF
001	Enables and disables the document ser data from being left in the temporary a must switch the main switch off and on	rea of the H	HDD. After changing this setting, you

5974	[Cherry Server]			
	Specifies which version of ScanRouter, "Lite" or "Full", is installed.			
	001	(O:Light 1:Full)	*CTL	[0 or 1 / 0 / –]

	[Device Setting]	
5985	and disable these fea	oport features are built into the GW controller. Use this SP to enable tures. In order to use the NIC and USB functions built into the se SP codes must be set to "1".
001 On Board NIC		[0 to 2 / 0 / 1 /step] 0: Disable, 1: Enable, 2: Function limitation
	On Board NIC	When the "Function limitation" is set, "On board NIC" is limited only for the NRS or LDAP/NT authentication. ••• Note
		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	[0 or 1 / 0 / 1/step] 0: Disable, 1: Enable

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)	-	
002	SP (Mode Data List)	-	
003	User Program	-	
004	Logging Data	-	
005	Diagnostic Report	-	
006	Non-Default	-	-
007	NIB Summary	-	
800	Capture Log	-	
021	Copier User Program	-	
022	Scanner SP	-	
023	Scanner User Program	-	
024	SDK/J Summary	-	
025	SDK/J Application Info	-	-

5992	[SP Text mode]	
	Exports the SMC sheet data to the SD Card.	

001	All (Data List)	-	
002	SP (Mode Data List)	-	
003	User Program	-	
004	Logging Data	-	
005	Diagnostic Report	-	
006	Non-Default	-	
007	NIB Summary	-	Press "Execute" key to start exporting the SMC
008	Capture Log	-	data in the SP mode display.
021	Copier User Program	-	
022	Scanner SP	-	
023	Scanner User Program	-	
024	SDK/J Summary	-	
025	SDK/J Application Info	-	
026	Printer SP mode	-	

5998	[Fusing Cont mode] Fusing Control Mode			
	Turns the silent fusing warm-up mode on or off.			
001	fast/silent	*ENG	[0 or 1 / 1 / -] 0: Silent (less noise) 1: Fast (less time)	

Main SP Tables-6

SP6-XXX (Peripherals)

6006	[ADF Adjustment]			
	Adjusts the side-to-side and leading registration of originals with the ARDF.			
001	Side-to-Side Regist: Front	*ENIC	[204-20/0/01/-	
002	Side-to-Side Regist: Rear	EING	[-3.0 to 3.0 / 0 / 0.1 mm/step]	
003	Leading Edge Registration	*ENG	[-5.0 to 5.0 / 0 / 0.1 mm/step]	
	Adjusts the amount of paper buckle to correct original skew for the front and rear sides			
005	Buckle: Duplex Front	*ENG	[-3.0 to 3.0 / 0 / 0.1 mm/step]	
006	Buckle: Duplex Rear	EING	[-2.5 to 2.5 / 0 / 0.1 mm/step]	
	Adjusts the erase margin at the origin	the erase margin at the original trailing edge.		
007	Rear Edge Erase	*ENG	[-10 to 10 / 0 / 0.1 mm/step]	

	[ADF INPUT Check]
6007	Displays the signals received from the sensors and switches of the ARDF. Only Bit 0 is used for ADF input check (**p.681).

	[ADF OUTPUT Check]
6008	Activates the electrical components for functional check.
	It is not possible to activate more than one component at the same time (F p.692).

6009	[ADF Free Run]				
0009	Performs a DF free run in simplex, dup	duplex mode or stamp mode.			
001	Free Run Simplex Motion	*ENG			
002	Free Run Duplex Motion	*ENG	-		
003	Free Run Stamp Motion	*ENG			

6010	[Stamp Position Adj.] Fax Stamp Position Adjustment			
0010	Adjusts the horizontal position of the stamp on the scanned originals.			
001	-	*ENG	[-5.0 to 5.0 / 0 / 1 mm/step]	

6016	[Original Size Detect Setting]				
	Specifies the original size for a size detected by the original sensor, since original sensors cannot recognize all sizes.				
		*ENG	[0 or 1 / - / -] 0: Setting 1, 1: Setting 2		
		NA	Setting 1	Setting 2	
			DLT SEF	Folio SEF 11" x 15"	
			LG SEF	Foolscap SEF	
001			LT SEF	US EXE 8" x 10"	
			LT LEF	US EXE LEF	
		EU/ ASIA	DLT SEF	8K 267 x 390 mm	
			LT SEF	16K 195 x 267 mm	
			LT LEF	16K 267 x 195 mm	

6017	[DF Magnification Adj.] DF Magnification Adjustment		
0017	Adjusts the magnification in the sub-scan direction for the ARDF.		
001	-	*CTL	[-5.0 to 5.0 / 0 / 0.1 %/step]

	6020	[Skew Correction Moving Setting]				
6020		Turns the original skew correction in the ARDF for all original sizes on or off.				
	001			[O or 1 / O / -] O: Off (only for small original sizes)		
				1: On (for all original sizes)		

/100	[Punch Position: Sub Scan]				
6128	Adjusts the punching position in the sub scan direction.				
001	Domestic 2Hole (Europe 2Hole)	*ENG			
002	North America 3Hole	*ENG			
003	Europe 4Hole	*ENG	[-7.5 to 7.5 / 0 / 0.5 mm/step]		
004	North Europe 4Hole	*ENG			
005	North America 2Hole	*ENG			

/100	[Punch Position: Main Scan]			
6129	Adjusts the punching position in the main scan direction.			
001	Domestic 2Hole (Europe 2Hole)	*ENG		
002	North America 3Hole	*ENG		
003	Europe 4Hole	*ENG	[-2.0 to 2.0 / 0 / 0.4 mm/step]	
004	North Europe 4Hole	*ENG		
005	North America 2Hole	*ENG		

4120	[Skew Correction: Buckle Adj.]
6130	Adjusts the paper buckle for each paper size.

001	АЗТ	*ENG	
002	B4T	*ENG	
003	A4T	*ENG	
004	A4Y	*ENG	
005	B5T	*ENG	
006	B5Y	*ENG	[-5.0 to 5.0 / 0 / 0.25 mm/step]
007	DLT-T	*ENG	[-3.0 to 3.0 / 0 / 0.23 mm/step]
008	LG-T	*ENG	
009	LT-T	*ENG	
010	LT-Y	*ENG	
011	12*18	*ENG	
012	Other	*ENG	

	[Skew Correction Control]
6131	Selects the skew correction control for each paper size. These are only activated for B804/B805.

001	АЗТ	*ENG	
002	B4T	*ENG	
003	A4T	*ENG	
004	A4Y	*ENG	
005	B5T	*ENG	
006	B5Y	*ENG	[0 or 1 / 0 / 1/step]
007	DLT-T	*ENG	0: No (No skew correction) 1: Roller Stop Skew Correction
008	LG-T	*ENG	'
009	LT-T	*ENG	
010	LT-Y	*ENG	
011	12*18	*ENG	
012	Other	*ENG	

	[Jogger Fence Fine Adj]
6132	This SP adjusts the distance between the jogger fences and the sides of the stack on the finisher stapling tray in the (Booklet) Finisher B804/B805. The adjustment is done perpendicular to the direction of paper feed.

001	A3T	*ENG	
002	B4T	*ENG	
003	A4T	*ENG	
004	A4Y	*ENG	
005	B5T	*ENG	[-1.5 to 1.5 / 0 / 0.5 mm/step]
006	B5Y	*ENG	+ Value: Increases distance between jogger fences and the sides of the stack.
007	DLT-T	*ENG	- Value: Decreases the distance between the
800	LG-T	*ENG	jogger fences and the sides of the stack.
009	LT-T	*ENG	
010	LT-Y	*ENG	
011	12*18	*ENG	
012	Other	*ENG	

	[Staple Position Adjustment]		
6133	Adjusts the staple position for e + Value: Moves the staple posit - Value: Moves the staple posit	tion to the 1	rear side.
001	Finisher 1	*ENG	[-3.5 to 3.5 / 0 / 1/step]

	[Saddle Stitch Position Adjust]	
6134	Use this SP to adjust the stapling position of the booklet stapler when paper is stapled and folded in the Booklet Finisher B804.	

001	A3T	
002	B4T	[-3.0 to 3.0 / 0 / 0.2 mm/step]
003	A4T	+ Value: Shifts staple position toward the crease.
004	B5T	- Value: Shifts staple position away from the crease.
005	DLT-T	Feed Out
006	LG-T	J
007	LT-T	
008	12*18	$\bigoplus \longleftarrow \rightarrow \bigcirc$
009	Other	

	[Folder Position Adj.]			
6135	This SP corrects the Finisher B804.	folding position when paper is stapled and folded in the Booklet		
001	A3T			
002	B4T	[-3.0 to 3.0 / 0 / 0.2 mm/step]		
003	A4T	+ Value: Shifts staple position toward the crease.		
004	B5T	- Value: Shifts staple position away from the crease.		
005	DLT-T			
006	LG-T			
007	LT-T	$ \bigoplus \longleftrightarrow \ominus \bigcirc $		
008	12*18			
009	Other			

4124	6136	[Folding Number]		
	0130	Sets the number of times that folding is done in the Booklet Finisher B804.		
	001	-	[2 to 30 / 2 / 1 time/step]	

6139	[FIN (KIN) INPUT Check] Finisher (B408) Input Check	
	Displays the signals received from sensors and switches of the booklet finisher. (*** p. 681)	

6140	[FIN (EUP) INPUT Check] Finisher (B804/B805) Input Check
	Displays the signals received from sensors and switches of the (booklet) finisher. (**p. 681)

6144	[FIN (KIN) OUPUT Check] Finisher (B408) Output Check
	Displays the signals received from sensors and switches of the booklet finisher. (*** p. 692)

6145	[FIN (EUP) OUPUT Check] Finisher (B804/B805) Output Check
	Displays the signals received from sensors and switches of the (booklet) finisher. (**p. 692)

	[Max. Pre-Stack S	neet]	*ENG	Number of Pre-Stack Sheets	
6149	This SP sets the number of sheets sent to the pre-stack tray. •• Note				
	You may need to adjust this setting or switch it off when feeding thick or slick paper.				
001	-	[0 to 3 / 3 / 1 sheet/step]			

	[INPUT Check]
6150	Displays the signals received from sensors and switches of the bridge unit (D386) / side tray (D542) (** p.681).

	[OUTPUT Check]
6151	Displays the signals received from sensors and switches of the bridge unit (D386)/ side tray (D542) (1 p.692).

	[INPUT Check]					
6152	Displays the signals received from sensors and switches of the shift tray (D388) (**p. 681).					
	[OUTPUT Check]					
6153	Displays the signals received from sensors and switches of the shift tray (D388) (** p. 692).					
	[INPUT Check]					
6154	Displays the signals received from sensors and switches of the 1 bin tray (D536) (** p. 681).					
	[OUTPUT Check]					
6155	Displays the signals received from sensors and switches of the 1 bin tray (D536) (** p. 692)					
001	1 bin: Junction Solenoid					
	[INPUT Check]					
6160	Displays the signals received from sensors and switches of the two-tray paper feed unit (D537), LCT 2000 (D538) and LCT 1200 (D539) (** p.681)					
	[OUTPUT Check]					
6161	Displays the signals received from sensors and switches of the two-tray paper feed unit (D537), LCT 2000 (D538) and LCT 1200 (D539) (** p.692)					

Main SP Tables-7

SP7-XXX (Data Log)

7401	[Total SC]				
7401	Displays the number of SC codes detected.				
001	SC Counter	*CTL	[0 to 65535 / - / 1/step]		
002	Total SC Counter	*CTL	[0 to 65535 / - / 1/step]		

	[SC History]				
7403	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.				
001	-				
002	-				
003	-				
004	-				
005	-	*CTL			
006	-	CIL	-		
007	-				
008	-				
009	-				
010	-				

7502	[Total Paper Jam]				
7302	Displays the total number of jams detected.				
001	Jam Counter	* CTL	[0 to 65535 / - / 1/step]		
002	Total Jam Counter	* CTL	[0 to 65535 / - / 1/step]		

5

7502	[Total Original Jam]					
7503		Displays the total number of original jams.				
001 Original Jam counter *CTL [0 to 9999 /		[0 to 9999 / - / 1 original/step]				
	002	Total Original Counter	*CTL	-		

7504	[Paper Jam Loc] ON: On check, OFF: Off Check					
	Displays the number of jams according to the location where jams were detected. NOTE: The LCT is counted as the 3rd feed station.					
001	At Power On	*CTL				
003	Tray 1: On	*CTL				
004	Tray 2: On	*CTL				
005	Tray 3: On	*CTL				
006	Tray 4: On	*CTL	For details, see "Jam Detection". (
007	LCT : On	*CTL	870)			
008	Registration Sn: On (Bypath)	*CTL				
009	Registration Sn: On (Duplex)	*CTL				
011	Vertical Trans. 1: On	*CTL				
012	Vertical Trans. 2: On	*CTL				

013	Vertical Trans. 3: On	*CTL	
014	Vertical Trans. 4: On	*CTL	
017	Registration: On	*CTL	
018	Fusing Entrance: On	*CTL	_
019	Fusing Exit: On	*CTL	For details, see "Jam Detection". (IF p. 870)
020	Paper Exit: On	*CTL	
021	Bridge Tray Exit: On	*CTL	
022	Bridge Relay: On	*CTL	
024	Junction Gate Sensor : On	*CTL	
025	Duplex Exit: On	*CTL	
026	Duplex Entrance: On (In)	*CTL	
027	Duplex Entrance: On (Out)	*CTL	
051	Vertical Trans. 1: Off	*CTL	
052	Vertical Trans. 2: Off	*CTL	
053	Vertical Trans. 3: Off	*CTL	For details, see "Jam Detection". (*** p.
054	Vertical Trans. 4: Off	*CTL	870)
057	Registration Sensor: Off	*CTL	
058	LCT Feed Sensor : Off		
060	Paper Exit Off	*CTL	
061	Bridge Tray Exit: Off	*CTL	
062	Bridge Relay: Off	*CTL	

064	Junction Gate Sensor : Off	*CTL	
065	Duplex Exit: Off	*CTL	
066	Duplex Entrance: Off (In)	*CTL	
067	Duplex entrance : Off (Out)	*CTL	
100	Finisher Entrance: KIN	*CTL	
101	Finisher Shift Tray Exit: KIN	*CTL	
102	Finisher Staple: KIN	*CTL	For details, see "Jam Detection". (P p. 870)
103	Finisher Exit: KIN	*CTL	
105	Finisher Tray Lift Motor: KIN	*CTL	
106	Finisher Jogger Motor: KIN	*CTL	
107	Finisher Shift Motor: KIN	*CTL	
108	Finisher Staple Motor: KIN	*CTL	
109	Finisher Exit Motor: KIN	*CTL	
191	Finisher Entrance: EUP	*CTL	
192	Finisher Proof Exit: EUP	*CTL	
193	Finisher Shift Tray Exit: EUP	*CTL	
194	Finisher Stapler Exit: EUP	*CTL	
195	Finisher Exit: EUP	*CTL	
198	Finisher Folder: EUP	*CTL	
199	Finisher Tray Motor: EUP	*CTL	For details, see "Jam Detection". (p p. 870)
200	Finisher Jogger Motor: EUP	*CTL	,
201	Finisher Shift Motor: EUP	*CTL	
202	Finisher Staple Moving Motor: EUP	*CTL	
203	Finisher Staple Motor: EUP	*CTL	
204	Finisher Folder Motor: EUP	*CTL	
206	Finisher Punch Motor: EUP	*CTL	

7505	[Original Jam Det]				
7303	Displays the total number of original jams by loc	· of original jams by location.			
001	At Power On	*CTL	-		
003	Skew Correction Sensor: On	*CTL			
004	Registration Sensor: On	*CTL			
005	Original Exit Sensor: On	*CTL			
006	Registration Sensor: On	*CTL	, -		
007	Original Exit Sensor: On	*CTL			
008	Reverse Sensor: On	*CTL			
053	Skew Correction Sensor: Off	*CTL			
054	Registration Sensor: Off	*CTL			
055	Original Exit Sensor: Off	*CTL			
056	Registration Sensor: Off	*CTL	1 -		
057	Original Exit Sensor: Off	*CTL			
058	Reverse Sensor: Off	*CTL			

7506	[Jam Count by Paper Size]			
7306	Displays the number of jams according to the paper size.			
005	A4 LEF	*CTL		
006	A5 LEF	*CTL		
014	B5 LEF	*CTL	[0 to 9999 / - / 1 sheet/step]	
038	LT LEF	*CTL		
044	HLT LEF	*CTL		

132	A3 SEF	*CTL	
133	A4 SEF	*CTL	
134	A5 SEF	*CTL	
141	B4 SEF	*CTL	
142	B5 SEF	*CTL	[0 to 9999 / - / 1 sheet/step]
160	DLT SEF	*CTL	
164	LG SEF	*CTL	
166	LT SEF	*CTL	
172	HLT SEF	*CTL	
255	Others	*CTL	[0 to 9999 / - / 1 sheet/step]

7507	[Plotter Jam History]		
/ 30/	Displays the 10 most recently	detected p	paper jams.
001	-		
002	-		
003	-		
004	-		
005	-	*CTL	
006	-	CIL	-
007	-		
800	-		
009	-		
010	-		

7500	[Original Jam History]
7508	Displays the 10 most recently detected original jams.

001	-		
002	-		
003	-		
004	-		
005	-	*CTL	
006	-	CIL	-
007	-		
008	-		
009	-		
010	-		

7/0/	Part Replacement Operation ON/OFF	
7624	Selects the PM maintenance for each part.	
001	Drum unit: Bk	
002	Drum unit: M	
003	Drum unit: C	
004	Drum unit: Y	
005	Development unit: Bk	
006	Development unit: M	[0 or 1 / 1 -]
007	Development unit: C	0: Not PM maintenance 1: PM maintenance
008	Development unit: Y	
009	Developer: Bk	
010	Developer:M	
011	Developer:C	
012	Developer:Y	

013	Image Transfer Belt	
014	Image Transfer Cleaning Unit	
015	Fusing Unit	[0 or 1 / 1 -]
016	Paper Transfer Roller Unit	0: Not PM maintenance
017	Waste Toner bottle	1: PM maintenance
018	Fusing Roller	
019	Pressure Roller	

7801	[ROM No/ Firmware Version]		
002	Engine	*CTL	Displays all versions and ROM numbers in the machine.

	[PM Counter Display] (Page, Unit, [Color])		
	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.		
7803	When a unit is replaced, the machine automatically detects that the new unit is installed. Then, the current PM counter value is automatically moved to the PM Counter - Previous (SP7-906-1 to 10) and is reset to "0".		
	The total number of sheets printed with the last unit replaced can be checked w SP7-906-1 to 10. NOTE: The LCT is counted as the 3rd feed station.		•
001	Paper	*CTL	-

002	Page: PCU: Bk			
003	Page: PCU: M	*ENG	-	
004	Page: PCU: C			
005	Page: PCU: Y			
006	Page: Development Unit: Bk			
007	Page: Development Unit: M			
008	Page: Development Unit: C			
009	Page: Development Unit: Y			
010	Page: Developer: Bk			
011	Page: Developer: M			
012	Page: Developer: C			
013	Page: Developer: Y			
014	Page: Image Transfer			
015	Page: Cleaning Unit	*ENG		
016	Page: Fusing Unit			
017	Page: Paper Transfer Unit			
018	Page: Toner Collection Bottle			
019	Page: Fusing Roller			
020	Page: Pressure Roller			
	Displays the number of revolutions of motors or clutches for each current maintenance unit. [0 to 999999 / 0 / 1 revolution/step]			
	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.			
021	-	*ENC	3	
		'		

Displays the number of pages of the pump unit for each current maintenance unit. [0 to 9999999 / **-** / 1 page/step] When a unit is replaced, and SP7804-xxx is executed, the current PM counter value is moved to the PM Counter - Previous (SP7-906-020 to 112) and is reset to "0". The total number of revolutions made with the last unit replaced can be checked with SP7-906-020 to 112. 021 Page: Pump Unit: Bk 022 Page: Pump Unit: M [0 to 9999999 / **-** / 1 page/ *ENG step] 023 Page: Pump Unit: C 024 Page: Pump Unit: Y 031 Rotation: PCU: Bk 032 Rotation: PCU: M 033 Rotation: PCU: C 034 Rotation: PCU: Y 035 Rotation: Development Unit: Bk 036 Rotation: Development Unit: M [0 to 999999999 / - / 1 mm/ *ENG step] 037 Rotation: Development Unit: C 038 Rotation: Development Unit: Y 039 Rotation: Developer: Bk 040 Rotation: Developer: M 041 Rotation: Developer: C 042 Rotation: Developer: Y

043	Rotation: Image Transfer	*E	NG		
044	Rotation: Cleaning Unit	*E	NG	[0 to 999999999 / - / 1 mm/step]	
045	Rotation: Fusing Unit	*E	NG		
046	Rotation: Paper Transfer Unit	*E	NG		
047	Measurement: Toner Collection bottle	*E	NG	•	
048	Rotation: Fusing Roller	*E	NG		
049	Rotation: Pressure Roller	*E	NG		
	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%.				
050	-		*ENG		
	Displays the running time of the pump unit for each current maintenance unit. [0 to 99999999 / 0 / 1 msec/step] When a unit is replaced, and SP7804-xxx is executed, the current PM counter value is moved to the PM Counter - Previous (SP7-906-020 to 112) and is reset to "0". The total number of revolutions made with the last unit replaced can be checked with SP7-906-020 to 112.				
050	Run Time: Pump Unit : Bk				
051	Run Time: Pump Unit : M		* [\	JC.	[0 to 999999999 / - / 1
052	Run Time: Pump Unit : C		*ENG [0 10 777777777777777777777777777777777		msec/step]
053	Run Time: Pump Unit : Y				

061 Rotation (%): PCU: Bk				
061 Rotation (%): PCU: Bk				
062 Rotation (%): PCU: M	[0 to 255 / - / 1 %/step] (See SP7-803-079 below.)			
063 Rotation (%): PCU:C				
064 Rotation (%): PCU:Y				
065 Rotation (%): Development Unit: Bk				
066 Rotation (%): Development Unit: M *ENG [0 to 255 / - / 1 9				
067 Rotation (%): Development Unit: C (See SP7-803-079				
068 Rotation (%): Development Unit: Y				
069 Rotation (%): Developer: Bk				
070 Rotation (%): Developer: M				
071 Rotation (%): Developer: C				
072 Rotation (%): Developer: Y				
073 Rotation (%): Image Transfer Belt				
074 Rotation (%): Cleaning Unit	[0 to 255 / - / 1 %/step]			
075 Rotation (%): Fusing Unit				
076 Rotation (%): Paper Transfer Unit *ENG [0 to 255 / - / 1 9				
077 Measurement (%): Toner Collection bottle				
078 Rotation (%): Fusing Roller				
079 Rotation (%): Pressure Roller				
Displays the value given by the following formula:	Displays the value given by the following formula:			
(Current revolution / Target revolution) \times 100. This shows how much of the a expected lifetime has been used up.	(Current revolution / Target revolution) × 100. This shows how much of the unit's			
reaches the limit, the machine enters the end condition for that unit. If the prin	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 (%)			
[0 to 255 / - / 1 %/step]	[0 to 255 / - / 1 %/step]			

			I		
	-	*ENG			
	Displays the value given by the following formula:				
	(Current running time / Target running time) \times 100. This shows how much of the unit's expected lifetime has been used up.				
080	The Run Time (%) counter is based on the running time, not printouts nor 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 Run Time (%) counter is still less than 100%.				
	[0 to 255 / - / 1 %/step]				
080	Run Time(%): Pump Unit: Bk				
081	Run Time(%): Pump Unit: M	*ENG	[0 to 255 / - / 1 %/step]		
082	Run Time(%): Pump Unit: C	LING			
083	Run Time(%): Pump Unit: Y				
091	-				
	Displays the value given by the following formula:				
	(Current printouts / Target printouts) \times 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%.				
	[0 to 255 / - / 1 %/step]				
091	Page (%): PCU: Bk				
092	Page (%): PCU: M	*ENG	[0 to 255 / - / 1 %/step]		
093	Page (%): PCU: C				
094	Page (%): PCU: Y				
095	Page (%): Development Unit: Bk				
096	Page (%): Development Unit:M				
097	Page (%): Development Unit:C				
098	Page (%): Development Unit:Y				

099	Page (%): Developer: Bk		[0 to 255 / - / 1 %/step] (See SP7-803-091 below.)
100	Page (%): Developer: M		
101	Page (%): Developer: C		
102	Page (%): Developer: Y		
103	Page (%): Image Transfer	*ENG	
104	Page (%): Cleaning Unit		
105	Page (%): Fusing Unit		
106	Page (%): Paper Transfer Unit		
107	Page (%): Fusing Roller		
108	Page (%): Pressure Roller		
109	-	*ENG	
Displays the value given by the following formula: (Current printouts / Target 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%.			
	[0 to 255 / - / 1 %/step]		
109	Page (%): Pump Unit: Bk	*ENG	[0 to 255 / - / 1 %/step]
110	Page (%): Pump Unit: M		
111	Page (%): Pump Unit: C		
112	Page (%): Pump Unit: 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 counter value in SP7-906 (PM Counter - Previous) and reset the value of the current PM counter (SP7-803) to "0".		

002	PCU (Drum Unit): Bk	-	-
003	PCU (Drum Unit): M	-	-
004	PCU (Drum Unit): C	-	-
005	PCU (Drum Unit): Y	-	-
006	PCU (Drum Unit): All	-	-
007	Development Unit: Bk	-	-
008	Development Unit: M	-	-
009	Development Unit: C	-	-
010	Development Unit: Y	-	-
011	Development Unit: All	-	-
012	Developer: Bk	-	-
013	Developer: M	-	-
014	Developer: C	-	-
015	Developer: Y	-	-
016	Developer: All	-	-
017	ITB Unit	-	-
018	Cleaning Unit	-	-
019	Fusing Unit	-	-
020	PTR Unit	-	-
021	Toner Collection Bottle	-	-
022	Fusing Roller (Heating Roller)	-	-
023	Pressure Roller	-	-
024	Pump Unit: Bk	-	-
025	Pump Unit: M	-	-
026	Pump Unit: C	-	-
027	Pump Unit: Y	-	-

028	Pump Unit: All	-	-
100	All	-	-

7007	[SC/Jam Counter Reset]			
7807	Clears the counters related to S	SC codes	s and paper jams.	
001	SC/Jam Clear	-	-	

7832	[Self-Diagnose Result Display]		
7032	Displays the result of the diagn	ostics.	L -
001	Diag. Result	*CTL	-

7835	[ACC Counter]		
001	Сору АСС	*CTL	Displays the ACC exectuion times for each
002	Printer ACC	*CTL	mode.

7024	Total Memory Size
7836	Displays the memory capacity of the controller system.

		[DF Glass Dust Check]				
7852		Counts the number of occurrences (0 to 65,535) when dust was detected on the scanning glass of the ADF or resets the dust detection counter. Counting is done only if SP4-020-1 (ADF Scan Glass Dust Check) is switched on.				
	001	Dust Detection Counter	*ENG	[0 to 9999 / - / 1 /step]		
002		Dust Detection Clear Counter	*ENG	[0 to 9999 / - / 1 /step]		
	003	Dust Detection Counter: Back	*ENG	[0 to 9999 / - / 1 /step]		

7853	[Replacement Counter]
7633	Displays the PM parts replacement number.

001	PCU: Bk	*ENG	
002	PCU: M	*ENG	
003	PCU: C	*ENG	
004	PCU: Y	*ENG	
005	Development Unit: Bk	*ENG	
006	Development Unit: M	*ENG	[0, 055 / /1 /, 1
007	Development Unit: C	*ENG	[0 to 255 / - / 1 /step]
800	Development Unit: Y	*ENG	
009	Developer: Bk	*ENG	
010	Developer: M	*ENG	
011	Developer: C	*ENG	
012	Developer: Y	*ENG	
013	Image Transfer	*ENG	
014	Cleaning Unit	*ENG	
015	Fusing Unit	*ENG	
016	Paper Transfer Unit	*ENG	[0 to 255 / - / 1 /step]
017	Tonner Collection Bottle	*ENG	
018	Fusing Roller	*ENG	
019	Pressure Roller	*ENG	
020	Pump Unit: Bk		
021	Pump Unit: M	*ENIA	[0.5.055 / /1 /4.5.1
022	Pump Unit: C	*ENG	[0 to 255 / - / 1 /step]
023	Pump Unit: Y		

[Coverage Range] Sets the color coverage threshold. Coverage rate = Coverage per page / A4 full coverage (dots) x 100 There are three coverage counters: Color 1, Color 2, and Color 3 • [A] 5% (default) is adjustable with SP7855-001. • [B] 20% (default) is adjustable with SP7855-002. [A] [B] Color1 Color2 Color3 7855 Color 200% 0% coverage **Note** • The setting value [B] must be set larger than [A]. The total numbers of printouts (BW printing plus color printing) for each coverage range are displayed with the following SPs. Color1 counter: SP8601-021 • Color2 counter: SP8601-022 • Color3 counter: SP8601-023 001 *CTL [1 to 200 / 5 / 1]Coverage Range 1 002 Coverage Range 2 *CTL [1 to 200 / 20 / 1]

	[Prev. Unit PM Counter]	
7	7906	(Page or Rotations, Unit, [Color]), Dev.: Development Unit
		Displays the number of sheets printed with the previous maintenance units.

001	Page: PCU: Bk		
002	Page: PCU: M		
003	Page: PCU: C		
004	Page: PCU: Y		
005	Page: Development Unit: Bk		
006	Page: Development Unit: M	*5510	[0.1.0000000 / 0./1/]
007	Page: Development Unit: C	*ENG	[0 to 9999999 / 0 / 1 page/step]
008	Page: Development Unit: Y		
009	Page: Developer: Bk		
010	Page: Developer: M		
011	Page: Developer: C		
012	Page: Developer: Y		
013	Page: Image Transfer		
014	Page: Cleaning Unit		
015	Page: Fusing Unit		
016	Page: Paper Transfer Unit	*ENG	[0 to 9999999 / 0 / 1 page/step]
017	Page: Toner Collection Bottle		
018	Page: Fusing Roller		
019	Page: Pressure Roller		
	Displays the number of revolutions for motors or clutches in the previous maintenance units (See SP7-906-031 to 046 below.)		
020	Page: Pump Unit	*ENG	
	Displays the number of sheets printed with the previous maintenance units. [0 to 9999999 / 0 / 1 page/step]		

020	Page: Pump Unit: Bk		
021	Page: Pump Unit: M		[0 to 9999999 / 0 / 1 page/step]
022	Page: Pump Unit: C	*ENG	
023	Page: Pump Unit: Y		
031	Rotation: PCU: Bk		
032	Rotation: PCU: M		
033	Rotation: PCU: C		
034	Rotation: PCU: Y		
035	Rotation: Development Unit: Bk		
036	Rotation: Development Unit: M	*ENG	[0 to 9999999 / 0 / 1 mm/step]
037	Rotation: Development Unit: C	ENG	(See SP7-906-019 above.)
038	Rotation: Development Unit: Y		
039	Rotation: Developer: Bk		
040	Rotation: Developer: M		
041	Rotation: Developer: C		
042	Rotation: Developer: Y		
043	Rotation: Image Transfer		
044	Rotation: Cleaning Unit		
045	Rotation: Fusing Unit		
046	Rotation: Paper Transfer Unit	*ENG	[0 to 9999999 / 0 / 1 mm/step]
047	Measurement: Toner Collection bottle		(See SP7-906-019 above.)
048	Rotation: Fusing Roller		
049	Rotation: Pressure Roller		
	Displays the number of sheets printed	with the pre	evious maintenance unit or toner cartridge.
050	Run Time: Pump Unit	*ENG	

	Displays the running time of the previous pump unit		
	[0 to 99999999 / 0 / 1 msec/step]		
050	Run Time: Pump Unit: Bk		
051	Run Time: Pump Unit: M	*ENG	[a accessed (a ())
052	Run Time: Pump Unit: C	EING	[0 to 999999999 / 0 / 1 msec/step]
053	Run Time: Pump Unit: Y		
061	Rotation %: PCU:	*ENG	
	Displays the value given by the followi	ng formula	:
	(Current revolution / Target revolution) \times 100. This shows how much of the unit's exp lifetime has been used up.		
	The Rotation % counter is based on rotations, not prints. If the number of rotations reached 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 Rotation % counter is still less than 100%.		
	[0 to 255 / 0 / 1 %/step]		
061	Rotation %: PCU: BK		
062	Rotation %: PCU:M		
063	Rotation %: PCU:C		
064	Rotation %: PCU:Y	*ENIC	[0.1-0.55 / 0 / 1.9/ / 1.1-1.]
065	Rotation %: Development Unit: Bk	*ENG	[0 to 255 / 0 / 1 %/step]
066	Rotation %: Development Unit: M		
067	Rotation %: Development Unit: C		
068	Rotation %: Development Unit: Y		

069	Rotation %: Developer: Bk				
070	Rotation %: Developer: M				
071	Rotation %: Developer: C				
072	Rotation %: Developer: Y				
073	Rotation %: Image Transfer Belt				
074	Rotation %: Cleaning Unit	*ENG	0]	[0 to 255 / 0 / 1 %/step]	
075	Rotation %: Fusing Unit				
076	Rotation %: Paper Transfer Unit				
077	Measurement %: Toner Collection bottle				
078	Rotation (%): Fusing Roller				
079	Rotation (%): Pressure Roller				
	Displays the value given by the followi (Current count / Yield count) x 100, w counter for the part, and "Yield count"	here "Cı	urrent		
	Run Time (%): Pump Unit	*	ENG		
	Displays the value given by the followi (Current running time / Target running expected lifetime has been used up.	et running time) × 100. This shows how much of the unit's			
080	The Run Time (%) counter is based on the number of printouts reaches the lim If the revolution count lifetime is reache even though the Run Time (%) counter	it, the mo	achine e mad	enters the end condition for that unit. chine also enters the end condition,	
	[0 to 255 / 0 / 1 %/step]				
080	Run Time (%): Pump Unit: Bk				
081	Run Time (%): Pump Unit: M	*	*ENG	[0 to 255 / 0 / 1 %/step]	
082	Run Time (%): Pump Unit: C				
083	Run Time (%): Pump Unit: Y				

	Page %: PCU	*ENG			
	Displays the value given by the following formula:				
001	(Current printouts / Target printouts) \times 100. This shows how much of the unit's expected lifetime has been used up.				
091	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%.				
	[0 to 255 / 0 / 1 %/step]				
091	Page %: PCU: Bk		[0 to 255 / 0 / 1 %/step]		
092	Page %: PCU: M				
093	Page %: PCU: C				
094	Page %: PCU: Y				
095	Page %: Development Unit: Bk				
096	Page %: Development Unit: M	*ENG			
097	Page %: Development Unit: C	EING			
098	Page %: Development Unit: Y				
099	Page %: Developer: Bk				
100	Page %: Developer: M				
101	Page %: Developer: C				
102	Page %: Developer: Y				

103	Page %: Image Transfer		
104	Page %: Cleaning Unit		[0 to 255 / 0 / 1 %/step]
105	Page %: Fusing Unit		
106	Page %: Paper Transfer Unit		
107	Page (%): Fusing Roller	*ENG	
108	Page (%): Pressure Roller		
109	Page (%): Pump Unit: Bk		
110	Page (%): Pump Unit: M		
111	Page (%): Pump Unit: C		
112	Page (%): Pump Unit: Y		

7931	[Toner Bottle Bk]
/ 73	Displays the toner bottle information for Bk.

001	Machine Serial ID	
002	Cartridge Ver	
003	Brand ID	
004	Area ID	
005	Product ID	
006	Color ID	
007	Maintenance ID	
008	New Product Information	
009	Recycle Counter	
010	Date	
011	Serial No.	*ENG
012	Toner Remaining	
013	EDP Code	
014	End History	
015	Refill Information	
016	Attachment: Total Counter	
017	Attachment: Color Counter	
018	End: Total Counter	
019	End: Color Counter	
020	Attachment Date	
021	End Date	

7932	[Toner Bottle M]
7932	Displays the toner bottle information for M.

001	Machine Serial ID		
002	Cartridge Ver		
003	Brand ID		
004	Area ID		
005	Product ID		
006	Color ID	*ENG	-
007	Maintenance ID		
008	New Product Information		
009	Recycle Counter		
010	Date		
011	Serial No.		
012	Toner Remaining		_
013	EDP Code		
014	End History		
015	Refill Information		
016	Attachment: Total Counter	*ENG	
017	Attachment: Color Counter	LING	
018	End: Total Counter		
019	End: Color Counter		
020	Attachment Date		
021	End Date		

7022	[Toner Bottle C]	
7933	Displays the toner bottle information for C.	

001	Machine Serial ID		
002	Cartridge Ver		
003	Brand ID		
004	Area ID		
005	Product ID		
006	Color ID	*ENG	-
007	Maintenance ID		
008	New Product Information		
009	Recycle Counter		
010	Date		
011	Serial No.		
012	Toner Remaining		*ENG -
013	EDP Code		
014	End History		
015	Refill Information		
016	Attachment: Total Counter	*FNG	
017	Attachment: Color Counter		
018	End: Total Counter		
019	End: Color Counter		
020	Attachment Date		
021	End Date		

7934	[Toner Bottle Y]	
7934	Displays the toner bottle information for Y.	

001	Machine Serial ID		
002	Cartridge Ver		
003	Brand ID		
004	Area ID		
005	Product ID		
006	Color ID	*ENG	-
007	Maintenance ID		
008	New Product Information		
009	Recycle Counter		
010	Date		
011	Serial No.		
012	Toner Remaining		
013	EDP Code		
014	End History		
015	Refill Information		
016	Attachment: Total Counter	*ENG	*ENG -
017	Attachment: Color Counter	LING	
018	End: Total Counter		
019	End: Color Counter		
020	Attachment Date		
021	End Date		

7935	[Toner Bottle Log 1: Bk]
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001	Serial No.		
002	Attachment Date	*ENG	Displays the toner bottle information
003	Attachment: Total Counter	LING	log 1 for Bk.
004	Refill Information		
011	Serial No.		
012	Attachment Date	*ENG	Displays the toner bottle information
013	Attachment: Total Counter	LING	log 2 for Bk.
014	Refill Information		
021	Serial No.		
022	Attachment Date	*ENG	Displays the toner bottle information log 3 for Bk.
023	Attachment: Total Counter	LING	
024	Refill Information		
031	Serial No.		
032	Attachment Date	*ENG	Displays the toner bottle information
033	Attachment: Total Counter	EING	log 4 for Bk.
034	Refill Information		
041	Serial No.		
042	Attachment Date	*ENG	Displays the toner bottle information
043	Attachment: Total Counter	EING	log 5 for Bk.
044	Refill Information		

7936	[Toner Bottle Log 1: M]		
001	Serial No.		
002	Attachment Date	*5.10	Displays the toner bottle information
003	Attachment: Total Counter	*ENG	log 1 for M.
004	Refill Information		

011	Serial No.		Displays the toner bottle information
012	Attachment Date	*ENG	
013	Attachment: Total Counter	ENG	log 2 for M.
014	Refill Information		
021	Serial No.		
022	Attachment Date	*ENG	Displays the toner bottle information
023	Attachment: Total Counter	EING	log 3 for M.
024	Refill Information		
031	Serial No.		
032	Attachment Date	*ENG	Displays the toner bottle information
033	Attachment: Total Counter	EING	log 4 for M.
034	Refill Information		
041	Serial No.		
042	Attachment Date	*ENG	Displays the toner bottle information
043	Attachment: Total Counter	EING	log 5 for M.
044	Refill Information		

7937	[Toner Bottle Log 1: C]		
001	Serial No.		
002	Attachment Date	*ENG	Displays the toner bottle information
003	Attachment: Total Counter		log 1 for C.
004	Refill Information		
011	Serial No.		
012	Attachment Date	*ENG	Displays the toner bottle information
013	Attachment: Total Counter	EING	log 2 for C.
014	Refill Information		

021	Serial No.		
022	Attachment Date	*ENG	Displays the toner bottle information
023	Attachment: Total Counter	EING	log 3 for C.
024	Refill Information		
031	Serial No.		
032	Attachment Date	*ENG	Displays the toner bottle information
033	Attachment: Total Counter	LING	log 4 for C.
034	Refill Information		
041	Serial No.		
042	Attachment Date	*ENG	Displays the toner bottle information
043	Attachment: Total Counter	EING	log 5 for C.
044	Refill Information		

7938	[Toner Bottle Log 1: Y]		
001	Serial No.		
002	Attachment Date	*ENG	Displays the toner bottle information
003	Attachment: Total Counter	ENG	log 1 for Y.
004	Refill Information		
011	Serial No.		
012	Attachment Date	*ENG	Displays the toner bottle information log 2 for Y.
013	Attachment: Total Counter	ENG	
014	Refill Information		
021	Serial No.		
022	Attachment Date	*ENG	Displays the toner bottle information
023	Attachment: Total Counter	ENG	log 3 for Y.
024	Refill Information		

031	Serial No.		
032	Attachment Date	*ENG	Displays the toner bottle information
033	Attachment: Total Counter		log 4 for Y.
034	Refill Information		
041	Serial No.		
042	Attachment Date	*ENG	Displays the toner bottle information
043	Attachment: Total Counter	EING	log 5 for Y.
044	Refill Information		

[Unit Replacement Date]			
7930	Displays the replacement date of each PM unit.		
001	Image Transfer Belt		
002	Cleaning Unit		
003	Paper Transfer Unit		
004	Fusing Unit		
005	Toner Collection Bottle		
006	AIT:Bk		
007	AIT:M		
008	AIT:C	*ENG	-
009	AIT:Y		
010	Fusing Roller		
011	Pressure Roller		
012	Pump Unit: Bk		
013	Pump Unit: M		
014	Pump Unit: C		
015	Pump Unit: Y		

7951	[Remaining Day Counter]				
7751	Displays the remaining unit life of each PM unit.				
001	Page: PCU: Bk				
002	Page: PCU: M				
003	Page: PCU: C				
004	Page: PCU: Y				
005	Page: Development Unit: Bk				
006	Page: Development Unit: M	*ENG	[0 to 255 / 255 / 1 day/step]		
007	Page: Development Unit: C	ENG			
008	Page: Development Unit: Y				
009	Page: Developer: Bk				
010	Page: Developer: M				
011	Page: Developer: C				
012	Page: Developer: Y				
013	Page: Image Transfer				
014	Page: Cleaning Unit				
015	Page: Fusing Unit	*ENG	[O.t. 255 / 255 / 1 dm./stm]		
016	Page: Paper Transfer Unit	ENG	[0 to 255 / 255 / 1 day/step]		
017	Page: Fusing Roller				
018	Page: Pressure Roller				

031	Rotation: PCU: Bk		
032	Rotation: PCU: M		
033	Rotation: PCU: C		
034	Rotation: PCU: Y		
035	Rotation: Development Unit: Bk		
036	Rotation: Development Unit: M	*5510	[0. 055 / 055 /1 /.]
037	Rotation: Development Unit: C	*ENG	[0 to 255 / 255 / 1 day/step]
038	Rotation: Development Unit: Y		
039	Rotation: Developer: Bk		
040	Rotation: Developer: M		
041	Rotation: Developer: C		
042	Rotation: Developer: Y		
043	Rotation: Image Transfer	*ENG	[0 to 255 / 255 / 1 day/step]
044	Rotation: Cleaning Unit		
045	Rotation: Fusing Unit		
046	Rotation: Paper Transfer Unit		
047	Measurement: Toner Collection bottle		
048	Rotation: Fusing Roller		
049	Rotation: Pressure Roller		

101	Minimum: PCU: Bk		
102	Minimum: PCU: M		
103	Minimum: PCU: C		
104	Minimum: PCU: Y		
105	Minimum: Development Unit: Bk		
106	Minimum: Development Unit: M		
107	Minimum: Development Unit: C		Displays one of the three, Remaining
108	Minimum: Development Unit: Y		Day Counter: Rotation or Runtime, or Remaining Day Counter: Page, which
109	Minimum: Developer: Bk	*5.10	is the minimum value.
110	Minimum: Developer: M	*ENG	[0 to 255 / 255 / 1 day/step] For toner collection bottle, this SP is
111	Minimum: Developer: C		not displayed because its Remaining Day Counters is calculated with its weights only.
112	Minimum: Developer: Y		
113	Minimum: Image Transfer		
114	Minimum: Cleaning Unit		
115	Minimum: Fusing Unit		
116	Minimum: Paper Transfer Unit		
117	Minimum: Fusing Roller		
118	Minimum: Pressure Roller		
119	Minimum: Pump Unit: Bk		Disalas saiskas Danasiais sa Dana
120	Minimum: Pump Unit: M	*ENG	Displays either Remaining Day Counter: time or Page, which is less
121	Minimum: Pump Unit: C	ENG	value. [0 to 255 / 255 / 1 day/step]
122	Minimum: Pump Unit: Y		[0 10 233 / 233 / 1 ddy/ siep]

	7952	[PM Yield Setting]					
		Adjusts the unit yield of each PM unit.					
	001	Rotation: Image Transfer Belt	*CTL	[0 to 999999999 / 256597000 / 1 mm/step]			

002	Rotation: Cleaning Unit	*CTL	[0 to 999999999 / 128299000 / 1 mm/step]
003	Rotation: Fusing Unit	*CTL	[0 to 99999999 / 155595000 / 1 mm/step]
004	Rotation: Paper Transfer Unit	*CTL	[0 to 999999999 / 192448000 / 1 mm/step]
011	Page: Image Transfer Belt	*CTL	[0 to 999999 / 320000 / 1 sheet/step]
012	Page: Cleaning Unit	*CTL	[0 to 999999 / 160000 / 1 sheet/step]
013	Page: Fusing Unit	*CTL	[0 to 999999 / 160000 / 1 sheet/step]
014	Page: Paper Transfer Unit	*CTL	[0 to 999999 / 240000 / 1 sheet/step]
021	Day Threshold: PCU: Bk		
022	Day Threshold: PCU: M		
023	Day Threshold: PCU: C		
024	Day Threshold: PCU: Y		
025	Day Threshold: Development Unit: Bk		
026	Day Threshold: Development Unit: M	* 671	Adjusts the threshold day for the near end fro each PM unit.
027	Day Threshold: Development Unit: C	*CTL	[1 to 30 / 15 / 1 day/step] These threshold days are used for @Remote alarms.
028	Day Threshold: Development Unit: Y		
029	Day Threshold: Developer: Bk		
030	Day Threshold: Developer: M		
031	Day Threshold: Developer: C		
032	Day Threshold: Developer: Y		

033 034 035 036	Day Threshold: Image Transfer Belt Day Threshold: Cleaning Unit Day Threshold: Fusing Unit Day Threshold: Paper Transfer Unit	*CTL	Adjusts the threshold day for the near end fro each PM unit. [1 to 30 / 15 / 1 day/step] These threshold days are used for @Remote alarms.
037	Day Threshold: Toner Collection Bottle		
038	Rotation: PCU Bk		
039	Rotation: PCU M	*CTL	[0 to 000000000 / 0 / 1 mm /stan]
040	Rotation: PCU C	CIL	[0 to 999999999 / 0 / 1 mm/step]
041	Rotation: PCU Y		
042	Rotation: Development Unit: Bk		
043	Rotation: Development Unit: M	*CTL	[0 to 999999999 / 0 / 1 mm/step]
044	Rotation: Development Unit: C		
045	Rotation: Development Unit: Y		
046	Rotation: Developer: Bk		
047	Rotation: Developer: M	*CTL	[0 to 999999999 / 0 / 1 mm/step]
048	Rotation: Developer: C	CIL	[0 10 77777777 0 / 1 mm/siep]
049	Rotation: Developer: Y		
050	Page: PCU: Bk		
051	Page: PCU: M	*CTL	[0 to 999999 / 0 / 1 sheet/step]
052	Page: PCU: C		[O IO 333333 / O / I silee!/sieb]
053	Page: PCU: Y		

054	Page: Development Unit: Bk	*CTL	[0 to 999999 / 0 / 1 sheet/step]
055	Page: Development Unit: M		
056	Page: Development Unit: C		
057	Page: Development Unit: Y		
058	Page: Developer: Bk		
059	Page: Developer: M	*CTL	[0 to 999999 / 0 / 1 sheet/step]
060	Page: Developer: C	CIL	
061	Page: Developer: Y		

7953	[Operation Env. Log: PCU: Bk]			
	Displays the PCDU rotation distance in each specified operation environment.			
	T: Temperature (°C), H: Relative Humidity (%)			
001	T<=0	T<=0		
002	0 <t<=5:0<=h<30< td=""><td rowspan="3"></td><td rowspan="3"></td></t<=5:0<=h<30<>			
003	0 <t<=5:30<=h<70< td=""></t<=5:30<=h<70<>			
004	0 <t<=5:70<=h<=100< td=""></t<=5:70<=h<=100<>			
005	5 <t<15:0<=h<30< td=""><td>*CTL</td><td>[0 to 99999999 / - / 1 mm/step]</td></t<15:0<=h<30<>	*CTL	[0 to 99999999 / - / 1 mm/step]	
006	5 <t<15:30<=h<55< td=""><td>CIL</td><td>[0 10 4444444 / - / 1 mm/sieb]</td></t<15:30<=h<55<>	CIL	[0 10 4444444 / - / 1 mm/sieb]	
007	5 <t<15:55<=h<80< td=""><td></td><td></td></t<15:55<=h<80<>			
008	5 <t<15:80<=h<=100< td=""><td></td><td></td></t<15:80<=h<=100<>			
009	15<=T<25:0<=H<30			
010	15<=T<25:30<=H<55			

011	15 - 7 - 25 - 55 - 11 - 20		
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	*CTL	[0 to 99999999 / - / 1 mm/step]
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. Log Clear]		
7934	Clears the operation environment log.		
001		-	

7955	Fusing Stop			
001	Near End: Page	-	[1 to 999999 / 318000 / 1 sheet/step]	
001	Displays the threshold sheet for the heating roller near end.			
002	End: Page	-	[1 to 999999 / 330000 / 1 sheet/step]	
002	Displays the threshold sheet for the heating roller end.			
003	Near End: Rotation	-	[0 to 999999999 / C3a: 173327000, C3b: 162570000 / 1 mm/step]	
	Displays the threshold distance for the heating roller near end.			
004	End: Rotation	-	[0 to 999999999 / C3a: 179868000, C3b: 168705000 / 1 mm/step]	
	Displays the threshold distanc	e for the	heating roller end.	

Main SP Tables-8

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.		
F:	Fax application.	Totals (pages, jobs, etc.) executed for each application	
P:	Print application.	when the job was not stored on the document server.	
S:	Scan application.		

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
С	Cyan
ColCr	Color Create
ColMode	Color Mode
Comb	Combine
Comp	Compression
Deliv	Delivery

Abbreviation	What it means	
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)	
lFax	Internet Fax	
ImgEdt	Image Edit performed on the original with the copier GUI, e.g. border removal, adding stamps, page numbers, etc.	
К	Black (YMCK)	
LS	Local Storage. Refers to the document server.	
LSize	Large (paper) Size	
Mag	Magnification	
МС	One color (monochrome)	
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	

Abbreviation	What it means			
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.			
Svr	Server			
TonEnd	Toner End			
TonSave	Toner Save			
TXJob	Send, Transmission			
YMC	Yellow, Magenta, Cyan			
YMCK	Yellow, Magenta, Cyan, Black			



• All of the Group 8 SPs are reset with SP5 801 1 Memory All Clear.

8 001	T:Total Jobs	*CTL	These SPs count the number of times each application is
8 002	C:Total Jobs	*CTL	used to do a job.
8 003	F:Total Jobs	*CTL	[0 to 9999999 / 0 / 1] Note: The L: counter is the total number of times the other
8 004	P:Total Jobs	*CTL	applications are used to send a job to the document server,
8 005	S:Total Jobs	*CTL	plus the number of times a file already on the document server is used.
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	
8 012	C:Jobs/LS	*CTL	These SPs count the number of jobs stored to the document
8 013	F:Jobs/LS	*CTL	server by each application, to reveal how local storage is being used for input.
8 014	P:Jobs/LS	*CTL	[0 to 9999999
8 015	S:Jobs/LS	*CTL	The L: counter counts the number of jobs stored from within
8 016	L:Jobs/LS	*CTL	the document server mode screen at the operation panel.
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.

8 021	T:Pjob/LS	*CTL	
8 022	C:Pjob/LS	*CTL	These SPs reveal how files printed from the document
8 023	F:Pjob/LS	*CTL	server were stored on the document server originally.
8 024	P:Pjob/LS	*CTL	[0 to 9999999/ 0 / 1] The L: counter counts the number of jobs stored from
8 025	S:Pjob/LS	*CTL	within the document server mode screen at the
8 026	L:Pjob/LS	*CTL	operation panel.
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 03 1	T:Pjob/DesApl	*CTL	
8 032	C:Pjob/DesApl	*CTL	These SPs reveal what applications were used to
8 033	F:Pjob/DesApl	*CTL	output documents from the document server.
8 034	P:Pjob/DesApl	*CTL	[0 to 9999999/ 0 / 1]
8 035	S:Pjob/DesApl	*CTL	The L: counter counts the number of jobs printed from within the document server mode screen at the
8 036	L:Pjob/DesApl	*CTL	operation panel.
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
8 042	C:TX Jobs/LS	*CTL	the document server that were later accessed for transmission over the telephone line or over a
8 043	F:TX Jobs/LS	*CTL	network (attached to an e-mail, or as a fax image by I-Fax).
8 044	P:TX Jobs/LS	*CTL	[0 to 9999999/ 0 / 1]
8 045	S:TX Jobs/LS	*CTL	Note: Jobs merged for sending are counted
8 046	L:TX Jobs/LS	*CTL	separately. The L: counter counts the number of jobs scanned
8 047	O:TX Jobs/LS	*CTL	from within the document server mode screen at the operation panel.

- 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 email, the O: counter increments.

8 051	T:TX Jobs/DesApl	*CTL	The CD countries and the countries of th
8 052	C:TX Jobs/DesApl	*CTL	These SPs count the applications used to send files from the document server over the telephone line or
8 053	F:TX Jobs/DesApl	*CTL	over a network (attached to an e-mail, or as a fax image by I-Fax). Jobs merged for sending are
8 054	P:TX Jobs/DesApl	*CTL	counted separately.
8 055	S:TX Jobs/DesApl	*CTL	[0 to 9999999/ 0 / 1] The L: counter counts the number of jobs sent from
8 056	L:TX Jobs/DesApl	*CTL	within the document server mode screen at the
8 057	O:TX Jobs/DesApl	*CTL	operation panel.

• If the send is started from Desk Top Binder or Web Image Monitor, for example, then the O: counter increments.

	T:FIN Jobs	*CTL	[0 to 9999999/ 0 / 1]		
8 061	These SPs total the finishing methods. The finishing method is specified by the application.				
	C:FIN Jobs	*CTL	[0 to 9999999/ 0 / 1]		
8 062	These SPs total finishing methods for copy jobs only. The finishing method is specified by the application.				

	F:FIN Job	os	*CTL	[0 to 9999999/ 0 / 1]	
8 063	These SPs total finishing methods for fax jobs only. The finishing method is sp by the application.				
	Note: Fin	ishing teatures to	or tax jobs	are not available at this time.	
	P:FIN Jok	os	*CTL	[0 to 9999999/ 0 / 1]	
8 064		s total finishing m oplication.	ethods for	print jobs only. The finishing method is specified	
	S:FIN Jol	os	*CTL	[0 to 9999999/ 0 / 1]	
8 065	by the ap	pplication.		scan jobs only. The finishing method is specified	
	Note: Fin	ishing features fo	or scan job	s are not available at this time.	
	L:FIN Job	os	*CTL	[0 to 9999999/ 0 / 1]	
8 066	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.				
	O:FIN Jo	bs	*CTL	[0 to 9999999/ 0 / 1]	
8 067		-		jobs executed by an external application, over specified by the application.	
8 06x 1	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 2	Stack	Number of jobs	s started ou	ut of Sort mode.	
8 06x 3	Staple	Number of jobs started in Staple mode.			
8 06x 4	Booklet	Number of jobs started in Booklet mode. If the machine is in staple mode, the Staple counter also increments.			
8 06x 5	Z-Fold	Number of jobs started In any mode other than the Booklet mode and set for folding (Z-fold).			
8 06x 6	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 7	Other	Reserved. Not a	used.		

	T:Jobs/PGS	*CTL	[0 to 9	999999/0/1]		
8 07 1	These SPs count the number of jobs broken down by the number of pages in the job, regardless of which application was used.					
	C:Jobs/PGS	*CTL	[0 to 9	999999/0/1]		
8 072	These SPs count and calc	culate the num	ber of c	opy jobs by size based on the number		
	F:Jobs/PGS	*CTL	[0 to 9	999999/ 0 /1]		
8 073	These SPs count and calc	culate the num	ber of fo	ax jobs by size based on the number		
	P:Jobs/PGS	*CTL	[0 to 9	999999/ 0 /1]		
8 074	These SPs count and calcof pages in the job.	culate the num	nber of p	rint jobs by size based on the number		
	S:Jobs/PGS		[0 to 9	[0 to 9999999/ 0 / 1]		
8 075	These SPs count and calculate the number of scan jobs by size based on the number of pages in the job.					
	L:Jobs/PGS	*CTL	[0 to 9	999999/ 0 /1]		
8 076	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.					
	O:Jobs/PGS	*CTL	[0 to 9	999999/ 0 /1]		
8 077	These SPs count and calc Monitor, Palm 2, etc.) by			Other" application jobs (Web Image mber of pages in the job.		
8 07x 1	1 Page	8 07x	8	21 to 50 Pages		
8 07x 2	2 Pages	8 07x	9	51 to 100 Pages		
8 07x 3	3 Pages	8 07x	10	101 to 300 Pages		
8 07x 4	4 Pages	8 07x	11	301 to 500 Pages		
8 07x 5	5 Pages	8 07x	12	501 to 700 Pages		
8 07x 6	6 to 10 Pages	8 07x	13	701 to 1000 Pages		
8 07x 7	11 to 20 Pages	8 07x	14	1001 to 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.

	T:FAX TX Jobs	*CTL	[0 to 9999999/ 0 / 1]		
8 111	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.				
	[0 to 9999999/ 0 / 1]				
8 113	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.				
8 11x 1	B/W				
8 11x 2	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.

	T:IFAX TX Jobs	*CTL	[0 to 9999999/ 0 / 1]			
8 121	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	Note: Color fax sending is not available at this time.				
	F: IFAX TX Jobs	[0 to 9999999/ 0 / 1]				
8 123	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 1	B/W					
8 12x 2	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/ 0 / 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/ 0 / 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 1	B/W		
8 13x 2	Color		
8 13x 3	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).

	T:Deliv Jobs/Svr	*CTL	[0 to 9999999/ 0 / 1]			
8 141	These SPs count the total number of jobs (color or black-and-white) scanned and sent to a Scan Router server.					
	S: Deliv Jobs/Svr	*CTL	[0 to 9999999/ 0 / 1]			
8 145	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 1	B/W					
8 14x 2	Color					
8 14x 3	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.

	T:Deliv Jobs/PC	*CTL	[0 to 9999999/ 0 / 1]
8 151	to a folder on a PC (Scan-to	o-PC).	bs (color or black-and-white) scanned and sent 8 155 perform identical counts.
	S:Deliv Jobs/PC	*CTL	[0 to 9999999/ 0 / 1]
8 155	These SPs count the total number of jobs (color or black-and-white) with Scan-to-PC.		

8 15x 1	B/W
8 15x 2	Color
8 15x 3	ACS

- 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	T:PCFAX TX Jobs	*CTL	These SPs count the number of PC Fax transmission
8 163	F:PCFAX TX Jobs	*CTL	jobs. A job is counted from when it is registered for sending, not when it is sent. [0 to 9999999 / 0 / 1] Note: At the present time, these counters perform identical counts.

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.		
8 175	S:Deliv Jobs/WSD	*CTL	[0 to 9999999/ 0 / 1]		
-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		
8 185	S:Scan to Media Jobs	*CTL	the scanner application. [0 to 9999999/ 0 / 1]		
-001	B/W				
-002	Color				
-003	ACS				

8 191	T:Total Scan PGS	*CTL	
8 192	C:Total Scan PGS	*CTL	These SPs count the pages scanned by each
8 193	F:Total Scan PGS	*CTL	application that uses the scanner to scan images.
8 195	S:Total Scan PGS	*CTL	[0 to 9999999/ 0 / 1]
8 196	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 3 B5 pages and 1 A3 page are scanned with the scanner application but not stored, the S: count is 4.
- 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.

	T:LSize Scan PGS	*CTL	[0 to 9999999/ 0 / 1]
8 201	jobs. Large size paper (A3/D	LT) scanned	pages input with the scanner for scan and copy for fax transmission are not counted. SMC Report, and in the User Tools display.
	F: LSize Scan PGS	*CTL	[0 to 9999999/ 0 / 1]
8 203	transmission.		pages input with the scanner for fax SMC Report, and in the User Tools display.
	S:LSize Scan PGS	*CTL	[0 to 9999999/ 0 / 1]
8 205	Large size paper (A3/DLT) so	anned for fa	pages input with the scanner for scan jobs only. x transmission are not counted. SMC Report, and in the User Tools display.

8 211	T:Scan PGS/LS	*CTL	These SPs count the number of pages scanned into the
8 212	C:Scan PGS/LS	*CTL	document server .
8 213	F:Scan PGS/LS	*CTL	[0 to 9999999/ 0 / 1] The L: counter counts the number of pages stored from
8 215	S:Scan PGS/LS	*CTL	within the document server mode screen at the operation panel, and with the Store File button from
8 216	L:Scan PGS/LS	*CTL	within the Copy mode screen

- 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.

	ADF Org F	eeds	*CTL	[0 to 9999999/ 0 / 1]		
8 221 These SPs count the number of scanning.				of pages fed through the ADF for front and back side		
8 221 1	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 2	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.

	Scan PGS/Mode	*CTL	[0 to 9999999/ 0 / 1]	
8 23 1	These SPs count the number work load on the ADF.	unt the number of pages scanned by each ADF mode to determine the ADF.		
8 231 1	Large Volume		ctable. Large copy jobs that cannot be loaded in DF at one time.	
8 231 2	SADF	Selec	ctable. Feeding pages one by one through the ADF.	
8 231 3	Mixed Size	Selec	table. Select "Mixed Sizes" on the operation I.	
8 231 4	Custom Size	Selec	ctable. Originals of non-standard size.	
8 231 5	Platen		mode. Raising the ADF and placing the original tly on the platen.	
8 231 6	Mixed 1 side/2 side	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.

	T:Scan PGS/Org	*CTL	[0 to 9999999/ 0 / 1]
8 241	These SPs count the total numb regardless of which applicatio		ed pages by original type for all jobs,
8 242	C:Scan PGS/Org	*CTL	[0 to 9999999/ 0 / 1]
0 242	These SPs count the number of	pages scan	ned by original type for Copy jobs.
0.040	F:Scan PGS/Org	*CTL	[0 to 9999999/ 0 / 1]
8 243	These SPs count the number of	pages scan	ned by original type for Fax jobs.
8 245	S:Scan PGS/Org	*CTL	[0 to 9999999/ 0 / 1]
0 243	These SPs count the number of	pages scan	ned by original type for Scan jobs.

	L:Scan PGS/C)rg	*CTL	[0 to 9999999/ 0 / 1]					
8 246	server mode so	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							
		8 241	8 242	8 243	8 245	8 246			
8 24x 1: Te	xt	Yes	Yes	Yes	Yes	Yes			
8 24x 2: Text/Photo		Yes	Yes	Yes	Yes	Yes			
8 24x 3: Photo		Yes	Yes	Yes	Yes	Yes			
8 24x 4: GenCopy, Pale		Yes	Yes	No	Yes	Yes			
8 24x 5: Map		Yes	Yes	No	Yes	Yes			
8 24x 6: Normal/Detail Ye		Yes	No	Yes	No	No			
8 24x 7: Fine/Super Fine		Yes	No	Yes	No	No			
8 24x 8: Binary		Yes	No	No	Yes	No			
8 24x 9: Grayscale		Yes	No	No	Yes	No			
8 24x 10: Color		Yes	No	No	Yes	No			
8 24x 11: C	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	T:Scan PGS/ImgEdt	*CTL	These SPs show how many times Image Edit featur	
8 252	C:Scan PGS/ImgEdt	*CTL	have been selected at the operation panel for each application. Some examples of these editing features	
8 254	P:Scan PGS/ImgEdt	*CTL	are:	
8 255	S : Scan PGS/ImgEdr	*CTL	Erase> Border Erase> Center	
8 256	L:Scan PGS/ImgEdt	*CTL	Image Repeat	
	O:Scan PGS/ImgEdt	*CTL	Centering	
			 Positive/Negative 	
8 257			[0 to 9999999/ 0 / 1]	
			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.	

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:Scan PGS/ColCr	*CTL	-	
8 262	C:Scan PGS/ ColCr	*CTL	-	
8 265	S:Scn PGS/Color	*CTL	-	
8 266	L:Scn PGS/ColCr	*CTL	-	
8 26x 1	Color Conversion	These SPs show how many times color creation		
8 26x 2	Color Erase			
8 26x 3	Background	features have been selected at the operation pane		
8 26x 4	Other			

8 281	T:Scan PGS/TWAIN	*CTL	These SPs count the number of pages scanned using	
8 285	S:Scan PGS/TWAIN	*CTL	a TWAIN driver. These counters reveal how the TWAIN driver is used for delivery functions. [0 to 9999999 / 0 / 1] Note: At the present time, these counters perform identical counts.	

8 291	T:Scan PGS/Stamp	*CTL	These SPs count the number of pages stamped with
8 293	F:Scan PGS/Stamp	*CTL	the stamp in the ADF unit. [0 to 9999999 / 0 / 1]
8 295	S:Scan PGS/Stamp	*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

	T:Scan PGS/Size	*CTL	[0 to 9999999/ 0 / 1]				
8 301	,	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].					
	C:Scan PGS/Size	*CTL	[0 to 9999999/ 0 / 1]				
8 302	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].						
	F:Scan PGS/Size	*CTL	[0 to 9999999/ 0 / 1]				
8 303	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].						
	S:Scan PGS/Size	*CTL	[0 to 9999999/ 0 / 1]				
8 305	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].						
	L:Scan PGS/Size	*CTL	[0 to 9999999/ 0 / 1]				
8 306	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].						

8 30x 1	A3
8 30x 2	A4
8 30x 3	A5
8 30x 4	B4
8 30x 5	B5
8 30x 6	DLT
8 30x 7	LG
8 30x 8	LT
8 30x 9	НІТ
8 30x 10	Full Bleed
8 30x 254	Other (Standard)
8 30x 255	Other (Custom)

	T:Scan PGS/Rez	*CTL	[0 to 9999999/ 0 / 1]		
8 311	These SPs count by resolution setting the total number of pages scanned by applications that can specify resolution settings.				
S: Scan PGS/Rez		*CTL	[0 to 9999999/ 0 / 1]		
8 315	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.				
8 31x 1	1200dpi <				
8 31x 2	600dpi to 1199dpi				
8 31x 3	400dpi to 599dpi				
8 31x 4	200dpi to 399dpi				
8 31x 5	< 199dpi				

- 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	T:Total PrtPGS	*CTL
8 382	C:Total PrtPGS	*CTL
8 383	F:Total PrtPGS	*CTL
8 384 P:Total PrtPGS		*CTL
8 385 S:Total PrtPGS		*CTL
8 386 L:Total PrtPGS		*CTL
8 387	O:Total PrtPGS	*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/ 0 / 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.

- When the A3/DLT double count function is switched on with SP5104, 1 A3/DLT page is counted as 2.
- When several documents are merged for a print job, the number of pages stored are 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.

	LSize PrtPGS	*CTL	[0 to 9999999/ 0 / 1]		
8 391	These SPs count pages printed on paper sizes A3/DLT 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	T:PrtPGS/LS	*CTL	
8 402	C:PrtPGS/LS	*CTL	These SPs count the number of pages printed from the document server. The counter for the application
8 403	F:PrtPGS/LS	*CTL	used to print the pages is incremented. The L: counter counts the number of jobs stored from
8 404	P:PrtPGS/LS	*CTL	within the document server mode screen at the
8 405	S:PrtPGS/LS	*CTL	operation panel. [0 to 9999999/ 0 / 1]
8 406	L:PrtPGS/LS	*CTL	[5.5, 5, .]

- 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	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 9999999/0/1]
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8 421	T:PrtPGS/Dup Comb	*CTL	[0 to 9999999/ 0 / 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.					
	C:PrtPGS/Dup Comb	*CTL	[0 to 9999999/ 0 / 1]			
8 422	These SPs count by binding and combine, and n-Up settings the number of pages processed for printing by the copier application.					
	F:PrtPGS/Dup Comb	*CTL	[0 to 9999999/ 0 / 1]			
8 423	These SPs count by binding and combine, and n-Up settings the number of pages processed for printing by the fax application.					
	P:PrtPGS/Dup Comb	*CTL	[0 to 9999999/ 0 / 1]			
8 424	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/ 0 / 1]			
	These SPs count by binding and combine, and n-Up settings the number of pages processed for printing by the scanner application.					

	L:PrtPGS/Dup Comb		*CTL	[0 to 9999999/ 0 / 1]		
8 426	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.					
	O:PrtPGS/Dup Comb		*CTL	[0 to 9999999/ 0 / 1]		
8 427	These SPs count by bin processed for printing			oine, and n-Up settings the number of pages cations		
8 42x 1	Simplex> Duplex					
8 42x 2	Duplex> Duplex					
8 42x 3	Book> Duplex					
8 42x 4	Simplex Combine					
8 42x 5	Duplex Combine					
8 42x 6	2in1	2 pag	ges on 1	side (2-Up)		
8 42x 7	4 in 1	4 pages on 1 side (4-Up)				
8 42x 8	6 in 1	6 pag	ges on 1	side (6-Up)		
8 42x 9	8 in 1	8 pages on 1 side (8-Up)				
8 42x 10	9 in 1	9 pag	ges on 1	side (9-Up)		
8 42x 11	16 in 1	16 pc	ages on	1 side (16-Up)		
8 42x 12	Booklet					
8 42x 13	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:

Вос	oklet	Mag	azine
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

	T:PrtPGS/ImgEdt		*CTL	[0 to 9999999/ 0 / 1]	
8 431	These SPs count the total number of pages output with the three features below, regardless of which application was used.				
	C:PrtPGS/ImgEdt		*CTL	[0 to 9999999/ 0 / 1]	
8 432	These SPs count the to the copy application.	tal num	ber of pa	ges output with the three features below with	
	P:PrtPGS/ImgEdt		*CTL	[0 to 9999999/ 0 / 1]	
8 434	These SPs count the total number of pages output with the three features below the print application.				
	L:PrtPGS/ImgEdt		*CTL	[0 to 9999999/ 0 / 1]	
8 436	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.				
	O:PrtPGS/ImgEdt		*CTL	[0 to 9999999/ 0 / 1]	
8 437	These SPs count the to	tal num	ber of pa	ges output with the three features below with	
8 43x 1	Cover/Slip Sheet	Total number of covers or slip sheets inserted. The count for a cover printed on both sides counts 2.			
8 43x 2	Series/Book	The number of pages printed in series (one side) or printed as a book with booklet right/left pagination.			
8 43x 3	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/ 0 / 1]				
0 441	These SPs count by print paper size the number of pages printed by all applications.						
	C:PrtPGS/Ppr Size	*CTL	[0 to 9999999/ 0 / 1]				
8 442	These SPs count by print pa	per size th	ne number of pages printed by the copy				
	F:PrtPGS/Ppr Size	*CTL	[0 to 9999999/ 0 / 1]				
8 443	These SPs count by print paper size the number of pages printed by the fax application.						
	P:PrtPGS/Ppr Size	*CTL	[0 to 9999999/ 0 / 1]				
8 444	These SPs count by print paper size the number of pages printed by the printer application.						
	S:PrtPGS/Ppr Size	*CTL	[0 to 9999999/ 0 / 1]				
8 445	These SPs count by print paper size the number of pages printed by the scanner application.						
	L:PrtPGS/Ppr Size	*CTL	[0 to 9999999/ 0 / 1]				
8 446	These SPs count by print paper size the number of pages printed from within the document server mode window at the operation panel.						
	O:PrtPGS/Ppr Size	*CTL	[0 to 9999999/ 0 / 1]				
8 447	These SPs count by print paper size the number of pages printed by Other applications.						

8 44x 1	A3
8 44x 2	A4
8 44x 3	A5
8 44x 4	B4
8 44x 5	B5
8 44x 6	DLT
8 44x 7	LG
8 44x 8	LT
8 44x 9	HLT
8 44x 10	Full Bleed
8 44x 254	Other (Standard)
8 44x 255	Other (Custom)

• These counters do not distinguish between LEF and SEF.

0.451	PrtPGS/Ppr Tray		*CTL	[0 to 9999999/ 0 / 1]		
8 451	These SPs count t	These SPs count the number of sheets fed from each paper feed station.				
8 451 1	Bypass Tray	Bypass Tray				
8 451 2	Tray 1	Copier				
8 451 3	Tray 2	Copier				
8 451 4	Tray 3	Paper Tray Unit (Option)				
8 451 5	Tray 4	Paper Tray Unit (Option)				
8 451 6	Tray 5	LCT (Option)				
8 451 7	Tray 6	Currently not used.				
8 451 8	Tray 7	Currently not used.				
8 451 9	Tray 8	Currently not used.				
8 451 10	Tray 9	Currently not used.				

	T:PrtPGS/Ppr Type	*CTL	[0 to 9999999/ 0 / 1]			
	These SPs count by paper type	the numb	er pages printed by all applications.			
8 461	 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, cha	pter cover	s, slip sheets) are also counted.			
	During duplex printing, printed on one side count		ed on both sides count as 1, and a page			
8 462	C:PrtPGS/Ppr Type	*CTL	[0 to 9999999/ 0 / 1]			
0 402	These SPs count by paper type	the numb	er pages printed by the copy application.			
8 463	F:PrtPGS/Ppr Type	*CTL	[0 to 9999999/ 0 / 1]			
0 403	These SPs count by paper type	the numb	er pages printed by the fax application.			
8 464	P:PrtPGS/Ppr Type	*CTL	[0 to 9999999/ 0 / 1]			
8 404	These SPs count by paper type the number pages printed by the printer application					
	L:PrtPGS/Ppr Type	*CTL	[0 to 9999999/ 0 / 1]			
8 466	These SPs count by paper type the number pages printed from within the document server mode window at the operation panel.					
8 46x 1	Normal	Normal				
8 46x 2	Recycled					
8 46x 3	Special					
8 46x 4	Thick					
8 46x 5	Normal (Back)					
8 46x 6	Thick (Back)					
8 46x 7	OHP					
8 46x 8	Other					
	PrtPGS/Mag	*CTL	[0 to 9999999/ 0 / 1]			
8 471	. 0		1 - 1 - 1			
	These SPs count by magnification rate the number of pages printed.					

8 471 1	< 49%
8 471 2	50% to 99%
8 471 3	100%
8 471 4	101% to 200%
8 471 5	201% <

- 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	T:PrtPGS/TonSave	*CTL			
8 484	P:PrtPGS/TonSave	*CTL			
	These SPs count the number of pages printed with the Toner Save feature switched on.				
	Note: These SPs return the same results as this SP is limited to the Print application.				
	[0 to 9999999/ 0 / 1]				

8 491	T:PrtPGS/Col Mode	*CTL	
8 492	C:PrtPGS/Col Mode	*CTL	
8 493	F:PrtPGS/Col Mode	*CTL	These SPs count the number of pages printed in the Color Mode by each application.
8 496	L:PrtPGS/Col Mode	*CTL	, ""
8 497	O:PrtPGS/Col Mode	*CTL	
8 49x 1	B/W		
8 49x 2	Single Color		

8 49x 3	Two Color	
8 49x 4	Full Color	

8 501	T:PrtPGS/Col Mode	*CTL	
8 504	P:PrtPGS/Col Mode	*CTL	These SPs count the number of pages printed in the Color Mode by the print application.
8 507	O:PrtPGS/Col Mode	*CTL	, , , , , , , , , , , , , , , , , , , ,
8 50x 1	B/W		
8 50x 2	Mono Color		
8 50x 3	Full Color		
8 50x 4	Single Color		
8 50x 5	Two Color		

8 511	T:PrtPGS/Emul	*CTL	[0 to 9999999/ 0 / 1]		
0311	These SPs count by printer emulation mode the total number of pages printed.				
0.514	P:PrtPGS/Emul	*CTL	[0 to 9999999/ 0 / 1]		
8 514	These SPs count by printer emulation mode the total number of pages printed.				

8 514 1	RPCS
8 514 2	RPDL
8 514 3	PS3
8 514 4	R98
8 514 5	R16
8 5 1 4 6	GL/GL2
8 514 7	R55
8 514 8	RTIFF
8 514 9	PDF
8 514 10	PCL5e/5c
8 514 11	PCL XL
8 514 12	IPDL-C
8 514 13	BM-Links
8 514 14	Other

- \bullet 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 / 0 / 1]	
	These SPs count by finishing mode the total number of pages printed by all applications.			
	C:PrtPGS/FIN	*CTL	[0 to 9999999 / 0 / 1]	
8 522	These SPs count by finishing mode the total number of pages printed by the Copy application.			
	F:PrtPGS/FIN	*CTL	[0 to 9999999 / 0 / 1]	
8 523	These SPs count by finishing mode the total number of pages printed by the Fa application. NOTE: Print finishing options for received faxes are currently not available.			

	P:PrtPGS/FIN	*CTL	[0 to 9999999 / 0 / 1]		
8 524	These SPs count by finishing mode the total number of pages printed by the Print application.				
	S:PrtPGS/FIN	*CTL	[0 to 9999999 / 0 / 1]		
8 525	These SPs count by finishing mode the total number of pages printed by the Scanner application.				
	L:PrtPGS/FIN	*CTL	[0 to 9999999 / 0 / 1]		
8 526	These SPs count by finishing mode the total number of pages printed from within the document server mode window at the operation panel.				
8 52x 1 Sort					
8 52x 2	Stack				
8 52x 3 Staple					
8 52x 4	Booklet				
8 52x 5 Z-Fold					
8 52x 6	Punch				
8 52x 7	Other				

U 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 / 0 / 1]	
	T-Counter		*CTI	[0 to 9999999 / 0 / 1]

	T:Counter	*CTL	[0 to 9999999 / 0 / 1]
8 581	application used. In addit	ion to being	en down by color output, regardless of the displayed in the SMC Report, these counters lisplay on the copy machine.

8 581 1	Total
8 581 2	Total: Full Color
8 581 3	B&W/Single Color
8 581 4	Development: CMY
8 581 5	Development: K
8 581 6	Copy: Color
8 581 7	Copy: B/W
8 581 8	Print: Color
8 581 9	Print: B/W
8 581 10	Total: Color
8 581 11	Total: B/W
8 581 12	Full Color: A3
8 581 13	Full Color: B4 JIS or Smaller
8 581 14	Full Color Print
8 581 15	Mono Color Print
8 581 16	Full Color GPC
8 581 17	Twin Color Mode Print
8 581 18	Full Color Print (Twin)
8 581 19	Mono Color Print (Twin)
8 581 20	Full Color Total (CV)
8 581 21	Mono Color Total (CV)
8 581 22	Full Color Print (CV)

8 582	C:Counter	*CTL	[0 to 9999999/ 0 / 1]
	These SPs count the total output of the copy application broken down by color output.		

8 582 1	B/W
8 582 2	Single Color
8 582 3	Two Color
8 582 4	Full Color

8 583	F:Counter	*CTL	[0 to 9999999/ 0 / 1]
	These SPs count the total output of the fax application broken down by color output.		
8 583 1	B/W		
8 583 2	Single Color		

8 584	P:Counter	*CTL	[0 to 9999999/ 0 / 1]		
	These SPs count the total o	output of the	print application broken down by color output.		
8 584 1	B/W				
8 584 2	Mono Color				
8 584 3	Full Color				
8 584 4	Single Color				
8 584 5	Two Color				

8 586	L:Counter	*CTL	[0 to 9999999/ 0 / 1]		
	These SPs count the total o	count the total output of the local storage broken down by color output.			
8 582 1	B/W				
8 582 2	Single Color				
8 582 3	Two Color				
8 582 4	Full Color				

	O:Counter	*CTL	[0 to 9999999/ 0 / 1]
8 591			per use, number of duplex pages printed, tals are for Other (O:) applications only.

8 591 1	A3/DLT
8 591 2	Duplex

	T: Coverage Counter	*CTL		[0 to 9999999/ 0 / 1]	
8 601	These SPs count the total c	ese SPs count the total coverage for each color and the total printout page			
8 601 1	B/W				
8 601 2	Color				
8 601 11	B/W Printing Pages				
8 601 12	Color Printing Pages	-			
8 601 21	Coverage Counter 1				
8 601 22	Coverage Counter 2				
8 601 23	Coverage Counter 3				

0.417	SDK Apli Counter	*CTL	[0 to 9999999/ 0 / 1]
8 617	These SPs count the total pri	ntout pages fo	r each SDK applicaion.
8 617 1	SDK-1		
8 617 2	SDK-2		
8 617 3	SDK-3		
8 617 4	SDK-4	-	
8 617 5	SDK-5		
8 617 6	SDK-6		

	T:FAX TX PGS	*CTL	[0 to 9999999/ 0 / 1]
8 631	These SPs count by color monumber.	ode the numb	er of pages sent by fax to a telephone

		F:FAX TX PGS	*CTL	[0 to 9999999/ 0 / 1]		
8 633		These SPs count by color mode the number of pages sent by fax to a telephone number.				
	8 63x 1	B/W				
	8 63x 2 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.

	T:IFAX TX PGS	*CTL	[0 to 9999999/ 0 / 1]			
8 641	These SPs count by color mode the number of pages sent by fax to as fax imausing I-Fax.					
	F:IFAX TX PGS	*CTL	[0 to 9999999/ 0 / 1]			
8 643	umber of pages sent by Fax as fax images using					
8 64x 1	B/W					
8 64x 2	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.

	T:S-to-Email PGS *CTL [0 to 9999999/ 0 / 1]				
8 651	These SPs count by color mode the total number of pages attached to an e-mail both the Scan and document server applications.				
	S:S-to-Email PGS	*CTL	[0 to 9999999/ 0 / 1]		
8 655	These SPs count by color mode the total number of pages attached to an e- the Scan application only.				
8 65x 1	B/W				
8 65x 2	Color				

UNote

- 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.).

	T:Deliv PGS/Svr	*CTL	[0 to 9999999/ 0 / 1]		
8 661	tal number of pages sent to a Scan Router ons.				
	S:Deliv PGS/Svr	*CTL	[0 to 9999999/ 0 / 1]		
8 665	These SPs count by color m server by the Scan applicat		tal number of pages sent to a Scan Router		
8 66x 1	B/W				
8 66x 2	Color				

U 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.

	T:Deliv PGS/PC	*CTL	[0 to 9999999/ 0 / 1]			
8 671	,	ese SPs count by color mode the total number of pages sent to a folder on a PC can-to-PC) with the Scan and LS applications.				
	S: Deliv PGS/PC *CTL [0 to 9999999/ 0 / 1] These SPs count by color mode the total number of pages sent with Scan-to-P the Scan application.					
8 675						
8 67x 1	B/W					
8 67x 2	Color					

8 681	T:PCFAX TXPGS	*CTL	These SPs count the number of pages sent by PC Fax.
8 683	F:PCFAX TXPGS	*CTL	These SPs are provided for the Fax application only, so the counts for SP8 681 and SP8 683 are the same. [0 to 9999999/0/1]

- 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	T:TX PGS/LS	*CTL	These SPs count the number of pages sent from the
8 692	C:TX PGS/LS	*CTL	document server. The counter for the application that was used to store the pages is incremented.
8 693	F:TX PGS/LS	*CTL	[0 to 999999/ 0 / 1]
8 694	P:TX PGS/LS	*CTL	The L: counter counts the number of pages stored from within the document server mode screen at the operation
8 695	S:TX PGS/LS	*CTL	panel. Pages stored with the Store File button from within
8 696	L:TX PGS/LS	*CTL	the Copy mode screen go to the C: counter.



- 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.

	TX PGS/Port	*CTL	[0 to 9999999/ 0 / 1]
8 701			ges sent by the physical port used to send them. For ent to 4 destinations via ISDN G4, the count for
8 701 1	PSTN-1		
8 701 2	PSTN-2		
8 701 3	PSTN-3		
8 701 4	ISDN (G3,G4)		
8 701 5	Network		

8 711	T:Scan PGS/Comp	*CTL	[0 to 9999999/ 0 / 1]
0.715	S:Scan PGS/Comp	*CTL	[0 to 9999999/ 0 / 1]
8 715	These SPs count the num	ber of pag	ges sent by each compression mode.
8 7 1 5 1	JPEG/JPEG2000		
8 715 2	TIFF(Multi/Single)		
8 715 3	PDF		
8 715 4	Other		
8 715 5	PDF/Comp		

8 721	T:Deliv PGS/WSD	*CTL	[0 to 0000000 / 0 / 1]			
8 725	S: Dvliv PGS/WSD	*CTL	[0 to 9999999/ 0 / 1]			
0 / 23	These SPs count the number of pages scanned by each scanner mode.					
x 1	B/W	-				
x 2 Color		-				

8 73 1	T:Scan PGS/Media	*CTL	[0 to 9999999/ 0 / 1]		
	S:Scan PGS/Media	*CTL	[0 10 9999999/ 0/ 1]		
8 735	These SPs count the number of pages scanned and saved in a meia by each scanner mode.				
x 1	B/W	-			
x 2	Color	-			

	RX PGS/Port	*CTL	[0 to 9999999/ 0 / 1]		
8 741	These SPs count the num them.	number of pages received by the physical port used to re			
8 741 1	PSTN-1	-			
8 741 2	PSTN-2	-			
8 741 3	PSTN-3	-			
8 741 4	ISDN (G3,G4)	-			
8 741 5	Network	-			

	Dev Counter	*CTL	[0 to 9999999/ 0 / 1]	
8 771	These SPs count the frequen	,	umber of rotations of the development rollers)	
8 771 1	Total			
8 771 2				
8 771 3				
8 771 4	М			
8 771 5	С			

	Toner_Bottle_Info. *ENG [0 to 9999999/ 0 / 1]			
8 781	These SPs display the num	hese SPs display the number of already replaced toner bottles.		
	NOTE: Currently, the date SP8-781-001 through 00		3-011 through 014 and the data in ame.	

8 781 1	Toner: BK	The number of black-toner bottles	
8 781 2	Toner: Y	The number of yellow-toner bottles	
8 781 3	Toner: M	The number of magenta-toner bottles	
8 781 4	Toner: C	The number of cyan-toner bottles	

8 791	LS Memory Remain	*CTL	This SP displays the percent of space available on the document server for storing documents. [0 to 100 / 0 / 1]
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	Toner Remain	*CTL	[0 to 100/ 0 /1]			
8 801	These SPs display the percent of toner remaining for each color. This SP allows the user to check the toner supply at any time.					
	•		ng remaining toner supply (1% steps) is better t can only measure in increments of 10 (10%			
8 801 1 K						
8 801 2	Υ					
8 801 3	3 801 3 M					
8 801 4	С					

	CVr Cnt: 0-10%	*ENG	[0 to 9999999/ 0 / 1]	
8 851	These SPs display the num is from 0% to 10%.	nber of scanned she		eets on which the coverage of each color
8 851 11	0 to 2%: BK	8 8 5	5131	5 to 7%: BK
8 851 12	0 to 2%: Y	8 851 32		5 to 7%: Y
8 851 13	0 to 2%: M	8 851 33		5 to 7%: M
8 851 14	0 to 2%: C	8 8 5	51 34	5 to 7%: C
8 851 21	3 to 4%: BK	8 851 41		8 to 10%: BK
8 851 22	3 to 4%: Y	8 8 5	51 42	8 to 10%: Y

8 851 23	3 to 4%: M	8 851 43	8 to 10%: M
8 851 24	3 to 4%: C	8 851 44	8 to 10%: C

	CVr Cnt: 11-20%	*ENG	[0 to 9999999/ 0 / 1]	
8 861	These SPs display the number of scanned sheets on which the coverage of each cois from 11% to 20%.			
8 861 1	ВК	BK		
8 861 2	Υ			
8 861 3	М			
8 861 4	С			

	CVr Cnt: 21-30%	*ENG	[0 to 9999999/ 0 / 1]		
8 871	These SPs display the number of scanned sheets on which the coverage of each cois from 21% to 30%.				
8 871 1	ВК	BK			
8 871 2	Υ				
8 871 3	М				
8 871 4	С				

	CVr Cnt: 31%-	*ENG	[0 to 9999999/ 0 / 1]		
These SPs display the number of scanned sheets on which the coverage of earlies 31% or higher.					
8 881 1	ВК	BK			
8 881 2	Υ				
8 881 3	М				
8 881 4	С				

8 891	Page/Toner Bottle	*ENG	[0 to 9999999/ 0 / 1]
	These SPs display the amount of the remaining current toner for each color.		

8 891 1	BK
8 891 2	Υ
8 891 3	М
8 891 4	С

8 901	Page/Toner_prev1	*ENG	[0 to 9999999/ 0 / 1]	
0 901	These SPs display the amou	unt of the remaining previous toner for each color.		
8 901 1	ВК			
8 901 2	Υ			
8 901 3	М			
8 901 4	С			

Page/Toner_prev2		*ENG	[0 to 9999999/ 0 / 1]	
0 911	These SPs display the amou	ount of the remaining 2nd previous toner for each color.		
8 911 1	ВК			
8 911 2	Υ			
8 911 3	М			
8 911 4	С	С		

8 921	Cvr Cnt/Total	*CTL	[0 to 9999999/ 0 / 1]	
		Displays the total coverage and total printout number for each color.		

8 921 1	Coverage (%) Bk
8 921 2	Coverage (%) Y
8 921 3	Coverage (%) M
8 921 4	Coverage (%) C
8 921 11	Coverage /P: Bk
8 921 12	Coverage /P: Y
8 921 13	Coverage /P: M
8 921 14	Coverage /P: C

	Machine Status	*CTL	[0 to 9999999/ 0 / 1]	
8 941	These SPs are useful for	ount of time the machine spends in each operation mode. customers who need to investigate machine operation for mpliance with ISO Standards.		
8 941 1	Operation Time	Engine operation time. Does not include time while controller is saving data to HDD (while engine is not operating).		
8 941 2	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 3	Energy Save Time	Includes time while the machine is performing background printing.		
8 941 4	Low Power Time	Includes time in Energy Save mode with Engine on. Includes time while machine is performing background printing.		
8 941 5	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 6	SC	Total time when SC errors have been staying.		
8 941 7	PrtJam	Total time when paper jams have been staying during printing.		
8 941 8	OrgJam	Total time when original jams have been staying during scanning.		

8 941 9 Su	upply PM Unit End	Total time when toner end has been staying
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0.051	AddBook Register	*CTL			
8 951	These SPs count the r	anages data registration.			
8 951 1	User Code/User ID	User code registrations.			
8 951 2	Mail Address	Mail address	registrations.		
8 951 3	Fax Destination	Fax destination	on registrations.	[0 to 9999999/ 0 / 1]	
8 951 4	Group	Group destin	ation registrations.	[0 10 99999997 0 / 1]	
8 951 5	Transfer Request	Fax relay destination registrations for relay TX.			
8 951 6	F-Code	F-Code box registrations.			
8 951 7	Copy Program	Copy application registrations with the Program (job settings) feature.			
8 951 8	Fax Program		on registrations with job settings) feature.		
8 951 9	Printer Program	Printer application registrations with the Program (job settings) feature.		[0 to 255 / 0 / 255]	
8 951 10	Scanner Program	Scanner application registrations with the Program (job settings) feature.			

8 999	Admin. Counter List	*CTL	[0 to 9999999/ 0 / 1]	
	Displays the total coverage and total printout number for each color.			

8 999 1	Total	
8 999 2	Copy: Full Color	
8 999 3	Copy: BW	
8 999 4	Copy: Single Color	
8 999 5	Copy: Two Color	
8 999 6	Printer Full Color	
8 999 7	Printer BW	
8 999 8	Printer Single Color	
8 999 9	Printer Two Color	
8 999 10	Fax Print: BW	
8 999 12	A3/DLT	
8 999 13	Duplex	
8 999 14	Coverage: Color (%)	
8 999 15	Coverage: BW (%)	
8 999 16	Coverage: Color Print Page (%)	
8 999 17	Coverage: BW Print Page (%)	
8 999 101	Transmission Total: Color	
8 999 102	Transmission Total: BW	
8 999 103	FAX Transmission	
8 999 104	Scanner Transmission: Color	
8 999 105	Scanner Transmission: BW	

5

Main SP Tables-9

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								

Copier

		Reading		
5803	Description	0	1	
5803 1	2nd Tray Size Detection	See table 2 following this table.		
5803 2	1st Tray Set Detection	Set	Not set	
5803 3	1st Tray Paper Height Sensor 1	See table 1 following	g this table.	
5803 4	1st Tray Paper Height Sensor2	See table 1 following	g this table.	
5803 5	2nd Tray Paper Height Sensor 1	See table 1 following	g this table.	
5803 6	2nd Tray Paper Height Sensor2	See table 1 following this table.		
5803 7	1st Tray Paper End Detection	No paper	Paper remaining	
5803 8	2nd Tray Paper End Detection	No paper	Paper remaining	
5803 9	1st Tray Upper Limit Sensor	Not upper limit	Upper limit	
5803 10	2nd Tray Upper Limit Sensor	Not upper limit	Upper limit	
5803 11	Bypass Paper Width Detection	See table 3 following this table.		
5803 12	Bypass Paper End Detection	No paper	Paper remaining	
5803 13	Bypass Paper Length Detection See table 3 following this table.		g this table.	
5803 14	1st Paper Feed Sensor	Paper detected	Paper not detected	
5803 15	2nd Paper Feed Sensor	Paper detected	Paper not detected	

5803 16	Exit Sensor	Paper detected	Paper not detected
5803 17	Tray Full Exit Sensor	Paper not full	Paper full
5803 18	Fusing Exit Sensor	Paper not detected	Paper detected
5803 19	Fusing Entrance Sensor	Paper detected	Paper not detected
5803 20	1st Feed Sensor	Paper detected	Paper not detected
5803 21	2nd Feed Sensor	Paper detected	Paper not detected
5803 22	Duplex Exit Sensor	Paper detected	Paper not detected
5803 23	Registration Sensor	Paper detected	Paper not detected
5803 24	Duplex Entrance Sensor	Paper detected	Paper not detected
5803 25	Junction Sensor	Paper detected	Paper not detected
5803 26	2nd Tray Set Detection	Set	Not set
5803 30	Toner End Sensor: Bk	Toner end	Toner remaining
5803 31	Toner End Sensor: M	Toner end	Toner remaining
5803 32	Toner End Sensor: C	Toner end	Toner remaining
5803 33	Toner End Sensor: Y	Toner end	Toner remaining
5803 34	Drum Phase Sensor: Bk	Actuator not detected	Actuator detected
5803 35	Drum Phase Sensor: M	Actuator not detected	Actuator detected
5803 36	Drum Phase Sensor: C	Actuator not detected	Actuator detected
5803 37	Drum Phase Sensor: Y	Actuator not detected	Actuator detected
5803 38	Interlock Release Detection 1	Front door open	Front door closed
5803 39	Interlock Release Detection 2	Front door open	Front door closed
5803 40	Right Door	Closed	Open
5803 41	Duplex Cover	Closed	Open

5803 43 Toner Collection Full Sensor Not full Full 5803 46 ITB New Unit Detection Not new New 5803 50 Airflow Fan: Front: Lock Normal Lock 5803 51 Airflow Fan: Rear: Lock Normal Lock 5803 52 Fusing Exit Fan: Lock Normal Lock 5803 53 2nd Duct Fan: Lock Normal Lock 5803 54 3rd Duct Fan: Lock Normal Lock 5803 55 Paper Exit Fan: Lock Normal Lock 5803 56 Fusing Coil Fan: Lock Normal Lock 5803 57 IH Power Supply Cooling Fan: Lock Normal Lock 5803 60 ITB Contact Motor Position Not contact Contact 5803 61 Paper Transfer Contact Motor Position Not contact Contact 5803 62 Toner Relay Motor: Lock Normal Lock 5803 63 ITB Drive Motor: Lock Normal Lock 5803 64 K Drum/Development Drive Motor: Lock Normal Lock 5803 65	5803 42	Toner Collection Bottle Set	Set	Not set
5803 46 ITB New Unit Detection Not new New 5803 50 Airflow Fan: Front: Lock Normal Lock 5803 51 Airflow Fan: Rear: Lock Normal Lock 5803 52 Fusing Exit Fan: Lock Normal Lock 5803 53 2nd Duct Fan: Lock Normal Lock 5803 54 3rd Duct Fan: Lock Normal Lock 5803 55 Paper Exit Fan: Lock Normal Lock 5803 56 Fusing Coil Fan: Lock Normal Lock 5803 57 IH Power Supply Cooling Fan: Lock Normal Lock 5803 60 ITB Contact Motor Position Not contact Contact 5803 61 Paper Transfer Contact Motor Position Not contact Contact 5803 62 Toner Relay Motor: Lock Normal Lock 5803 63 ITB Drive Motor: Lock Normal Lock 5803 64 K Drum/Development Drive Motor: Lock Normal Lock 5803 65 M Drum/Development Drive Motor: Lock Normal Lock 5803 66<				
5803 50 Airflow Fan: Front: Lock Normal Lock 5803 51 Airflow Fan: Rear: Lock Normal Lock 5803 52 Fusing Exit Fan: Lock Normal Lock 5803 53 2nd Duct Fan: Lock Normal Lock 5803 54 3rd Duct Fan: Lock Normal Lock 5803 55 Paper Exit Fan: Lock Normal Lock 5803 56 Fusing Coil Fan: Lock Normal Lock 5803 57 IH Power Supply Cooling Fan: Lock Normal Lock 5803 60 ITB Contact Motor Position Not contact Contact 5803 61 Paper Transfer Contact Motor Position Not contact Contact 5803 62 Toner Relay Motor: Lock Normal Lock 5803 63 ITB Drive Motor: Lock Normal Lock 5803 64 K Drum/Development Drive Motor: Lock Normal Lock 5803 65 M Drum/Development Drive Motor: Lock Normal Lock 5803 67 Y Drum/Development Drive Motor: Lock Normal Lock				
5803 51 Airflow Fan: Rear: Lock Normal Lock 5803 52 Fusing Exit Fan: Lock Normal Lock 5803 53 2nd Duct Fan: Lock Normal Lock 5803 54 3rd Duct Fan: Lock Normal Lock 5803 55 Paper Exit Fan: Lock Normal Lock 5803 56 Fusing Coil Fan: Lock Normal Lock 5803 57 IH Power Supply Cooling Fan: Lock Normal Lock 5803 60 ITB Contact Motor Position Not contact Contact 5803 61 Paper Transfer Contact Motor Position Not contact Contact 5803 62 Toner Relay Motor: Lock Normal Lock 5803 63 ITB Drive Motor: Lock Normal Lock 5803 64 K Drum/Development Drive Motor: Lock Normal Lock 5803 65 M Drum/Development Drive Motor: Lock Normal Lock 5803 67 Y Drum/Development Drive Motor: Lock Normal Lock 5803 68 Fusing Exit Motor:Lock Normal Lock	5803 46	IIB New Unit Detection	Not new	New
5803 52 Fusing Exit Fan: Lock Normal Lock 5803 53 2nd Duct Fan: Lock Normal Lock 5803 54 3rd Duct Fan: Lock Normal Lock 5803 55 Paper Exit Fan: Lock Normal Lock 5803 56 Fusing Coil Fan: Lock Normal Lock 5803 57 IH Power Supply Cooling Fan: Lock Normal Lock 5803 60 ITB Contact Motor Position Not contact Contact 5803 61 Paper Transfer Contact Motor Position Not contact Contact 5803 62 Toner Relay Motor: Lock Normal Lock 5803 63 ITB Drive Motor: Lock Normal Lock 5803 64 K Drum/Development Drive Motor: Lock Normal Lock 5803 65 M Drum/Development Drive Motor: Lock Normal Lock 5803 66 C Drum/Development Drive Motor: Lock Normal Lock 5803 67 Y Drum/Development Drive Motor: Lock Normal Lock 5803 80 HVPS:TS:SC Detection SC detected No SC	5803 50	Airflow Fan: Front: Lock	Normal	Lock
5803 53 2nd Duct Fan: Lock Normal Lock 5803 54 3rd Duct Fan: Lock Normal Lock 5803 55 Paper Exit Fan: Lock Normal Lock 5803 56 Fusing Coil Fan: Lock Normal Lock 5803 57 IH Power Supply Cooling Fan: Lock Normal Lock 5803 60 ITB Contact Motor Position Not contact Contact 5803 61 Paper Transfer Contact Motor Position Not contact Contact 5803 62 Toner Relay Motor: Lock Normal Lock 5803 63 ITB Drive Motor: Lock Normal Lock 5803 64 K Drum/Development Drive Motor: Lock Normal Lock 5803 65 M Drum/Development Drive Motor: Lock Normal Lock 5803 66 C Drum/Development Drive Motor: Lock Normal Lock 5803 67 Y Drum/Development Drive Motor: Lock Normal Lock 5803 88 Fusing Exit Motor:Lock Normal Lock 5803 81 HVPS:CB:SC Detection SC detected No SC	5803 51	Airflow Fan: Rear: Lock	Normal	Lock
5803 54 3rd Duct Fan: Lock Normal Lock 5803 55 Paper Exit Fan:Lock Normal Lock 5803 56 Fusing Coil Fan: Lock Normal Lock 5803 57 IH Power Supply Cooling Fan: Lock Normal Lock 5803 60 ITB Contact Motor Position Not contact Contact 5803 61 Paper Transfer Contact Motor Position Not contact Contact 5803 62 Toner Relay Motor: Lock Normal Lock 5803 63 ITB Drive Motor: Lock Normal Lock 5803 64 K Drum/Development Drive Motor: Lock Normal Lock 5803 65 M Drum/Development Drive Motor: Lock Normal Lock 5803 66 C Drum/Development Drive Motor: Lock Normal Lock 5803 67 Y Drum/Development Drive Motor: Lock Normal Lock 5803 68 Fusing Exit Motor:Lock Normal Lock 5803 80 HVPS:TTS:SC Detection SC detected No SC 5803 81 HVPS:D:SC Detection SC detected No SC	5803 52	Fusing Exit Fan: Lock	Normal	Lock
5803 55 Paper Exit Fan: Lock Normal Lock 5803 56 Fusing Coil Fan: Lock Normal Lock 5803 57 IH Power Supply Cooling Fan: Lock Normal Lock 5803 60 ITB Contact Motor Position Not contact Contact 5803 61 Paper Transfer Contact Motor Position Not contact Contact 5803 62 Toner Relay Motor: Lock Normal Lock 5803 63 ITB Drive Motor: Lock Normal Lock 5803 64 K Drum/Development Drive Motor: Lock Normal Lock 5803 65 M Drum/Development Drive Motor: Lock Normal Lock 5803 66 C Drum/Development Drive Motor: Lock Normal Lock 5803 67 Y Drum/Development Drive Motor: Lock Normal Lock 5803 88 Fusing Exit Motor:Lock Normal Lock 5803 80 HVPS:TTS:SC Detection SC detected No SC 5803 81 HVPS:CB:SC Detection SC detected No SC 5803 82 HVPS:D:SC Detection DOM (Dom) Set <td>5803 53</td> <td>2nd Duct Fan: Lock</td> <td>Normal</td> <td>Lock</td>	5803 53	2nd Duct Fan: Lock	Normal	Lock
5803 56 Fusing Coil Fan: Lock Normal Lock 5803 57 IH Power Supply Cooling Fan: Lock Normal Lock 5803 60 ITB Contact Motor Position Not contact Contact 5803 61 Paper Transfer Contact Motor Position Not contact Contact 5803 62 Toner Relay Motor: Lock Normal Lock 5803 63 ITB Drive Motor: Lock Normal Lock 5803 64 K Drum/Development Drive Motor: Lock Normal Lock 5803 65 M Drum/Development Drive Motor: Lock Normal Lock 5803 66 C Drum/Development Drive Motor: Lock Normal Lock 5803 67 Y Drum/Development Drive Motor: Lock Normal Lock 5803 68 Fusing Exit Motor:Lock Normal Lock 5803 80 HVPS:TTS:SC Detection SC detected No SC 5803 81 HVPS:D:SC Detection SC detected No SC 5803 82 HVPS:D:SC Detection Set Not set 5803 84 Fusing Destination Detection: NA Set N	5803 54	3rd Duct Fan: Lock	Normal	Lock
5803 57 IH Power Supply Cooling Fan: Lock Normal Lock 5803 60 ITB Contact Motor Position Not contact Contact 5803 61 Paper Transfer Contact Motor Position Not contact Contact 5803 62 Toner Relay Motor: Lock Normal Lock 5803 63 ITB Drive Motor: Lock Normal Lock 5803 64 K Drum/Development Drive Motor: Lock Normal Lock 5803 65 M Drum/Development Drive Motor: Lock Normal Lock 5803 66 C Drum/Development Drive Motor: Lock Normal Lock 5803 67 Y Drum/Development Drive Motor: Lock Normal Lock 5803 68 Fusing Exit Motor:Lock Normal Lock 5803 80 HVPS:TTS:SC Detection SC detected No SC 5803 81 HVPS:CB:SC Detection SC detected No SC 5803 82 HVPS:D:SC Detection SC detected No SC 5803 83 Fusing Destination Detection: DOM (Dom) Set Not set	5803 55	Paper Exit Fan:Lock	Normal	Lock
5803 60 ITB Contact Motor Position Not contact Contact 5803 61 Paper Transfer Contact Motor Position Not contact Contact 5803 62 Toner Relay Motor: Lock Normal Lock 5803 63 ITB Drive Motor: Lock Normal Lock 5803 64 K Drum/Development Drive Motor: Lock Normal Lock 5803 65 M Drum/Development Drive Motor: Lock Normal Lock 5803 66 C Drum/Development Drive Motor: Lock Normal Lock 5803 67 Y Drum/Development Drive Motor: Lock Normal Lock 5803 68 Fusing Exit Motor:Lock Normal Lock 5803 80 HVPS:TTS:SC Detection SC detected No SC 5803 81 HVPS:CB:SC Detection SC detected No SC 5803 82 HVPS:D:SC Detection SC detected No SC 5803 83 Fusing Destination Detection: DOM (Dom) Set Not set	5803 56	Fusing Coil Fan: Lock	Normal	Lock
5803 61Paper Transfer Contact Motor PositionNot contactContact5803 62Toner Relay Motor: LockNormalLock5803 63ITB Drive Motor: LockNormalLock5803 64K Drum/Development Drive Motor: LockNormalLock5803 65M Drum/Development Drive Motor: LockNormalLock5803 66C Drum/Development Drive Motor: LockNormalLock5803 67Y Drum/Development Drive Motor: LockNormalLock5803 68Fusing Exit Motor:LockNormalLock5803 80HVPS:TTS:SC DetectionSC detectedNo SC5803 81HVPS:CB:SC DetectionSC detectedNo SC5803 82HVPS:D:SC DetectionSC detectedNo SC5803 83Fusing Destination Detection: DOM (Dom)SetNot set5803 84Fusing Destination Detection: NASetNot set	5803 57	IH Power Supply Cooling Fan: Lock	Normal	Lock
5803 62 Toner Relay Motor: Lock Normal Lock 5803 63 ITB Drive Motor: Lock Normal Lock 5803 64 K Drum/Development Drive Motor: Lock Normal Lock 5803 65 M Drum/Development Drive Motor: Lock Normal Lock 5803 66 C Drum/Development Drive Motor: Lock Normal Lock 5803 67 Y Drum/Development Drive Motor: Lock Normal Lock 5803 68 Fusing Exit Motor:Lock Normal Lock 5803 80 HVPS:TTS:SC Detection SC detected No SC 5803 81 HVPS:CB:SC Detection SC detected No SC 5803 82 HVPS:D:SC Detection SC detected No SC 5803 83 Fusing Destination Detection: DOM (Dom) Set Not set 5803 84 Fusing Destination Detection: NA Set Not set	5803 60	ITB Contact Motor Position	Not contact	Contact
5803 63 ITB Drive Motor: Lock Normal Lock 5803 64 K Drum/Development Drive Motor: Lock Normal Lock 5803 65 M Drum/Development Drive Motor: Lock Normal Lock 5803 66 C Drum/Development Drive Motor: Lock Normal Lock 5803 67 Y Drum/Development Drive Motor: Lock Normal Lock 5803 68 Fusing Exit Motor: Lock Normal Lock 5803 80 HVPS:TTS:SC Detection SC detected No SC 5803 81 HVPS:CB:SC Detection SC detected No SC 5803 82 HVPS:D:SC Detection SC detected No SC 5803 83 Fusing Destination Detection: DOM (Dom) Set Not set 5803 84 Fusing Destination Detection: NA Set Not set	5803 61	Paper Transfer Contact Motor Position	Not contact	Contact
5803 64K Drum/Development Drive Motor: LockNormalLock5803 65M Drum/Development Drive Motor: LockNormalLock5803 66C Drum/Development Drive Motor: LockNormalLock5803 67Y Drum/Development Drive Motor: LockNormalLock5803 68Fusing Exit Motor:LockNormalLock5803 80HVPS:TTS:SC DetectionSC detectedNo SC5803 81HVPS:CB:SC DetectionSC detectedNo SC5803 82HVPS:D:SC DetectionSC detectedNo SC5803 83Fusing Destination Detection: DOM (Dom)SetNot set5803 84Fusing Destination Detection: NASetNot set	5803 62	Toner Relay Motor: Lock	Normal	Lock
5803 65 M Drum/Development Drive Motor: Lock Normal Lock 5803 66 C Drum/Development Drive Motor: Lock Normal Lock 5803 67 Y Drum/Development Drive Motor: Lock Normal Lock 5803 68 Fusing Exit Motor: Lock Normal Lock 5803 80 HVPS:TTS:SC Detection SC detected No SC 5803 81 HVPS:CB:SC Detection SC detected No SC 5803 82 HVPS:D:SC Detection SC detected No SC 5803 83 Fusing Destination Detection: DOM (Dom) Set Not set 5803 84 Fusing Destination Detection: NA Set Not set	5803 63	ITB Drive Motor: Lock	Normal	Lock
5803 66C Drum/Development Drive Motor: LockNormalLock5803 67Y Drum/Development Drive Motor: LockNormalLock5803 68Fusing Exit Motor:LockNormalLock5803 80HVPS:TTS:SC DetectionSC detectedNo SC5803 81HVPS:CB:SC DetectionSC detectedNo SC5803 82HVPS:D:SC DetectionSC detectedNo SC5803 83Fusing Destination Detection: DOM (Dom)SetNot set5803 84Fusing Destination Detection: NASetNot set	5803 64	K Drum/Development Drive Motor: Lock	Normal	Lock
5803 67Y Drum/Development Drive Motor: LockNormalLock5803 68Fusing Exit Motor:LockNormalLock5803 80HVPS:TTS:SC DetectionSC detectedNo SC5803 81HVPS:CB:SC DetectionSC detectedNo SC5803 82HVPS:D:SC DetectionSC detectedNo SC5803 83Fusing Destination Detection: DOM (Dom)SetNot set5803 84Fusing Destination Detection: NASetNot set	5803 65	M Drum/Development Drive Motor: Lock	Normal	Lock
5803 68 Fusing Exit Motor:Lock Normal Lock 5803 80 HVPS:TTS:SC Detection SC detected No SC 5803 81 HVPS:CB:SC Detection SC detected No SC 5803 82 HVPS:D:SC Detection SC detected No SC 5803 83 Fusing Destination Detection: DOM (Dom) Set Not set 5803 84 Fusing Destination Detection: NA Set Not set	5803 66	C Drum/Development Drive Motor: Lock	Normal	Lock
5803 80HVPS:TTS:SC DetectionSC detectedNo SC5803 81HVPS:CB:SC DetectionSC detectedNo SC5803 82HVPS:D:SC DetectionSC detectedNo SC5803 83Fusing Destination Detection: DOM (Dom)SetNot set5803 84Fusing Destination Detection: NASetNot set	5803 67	Y Drum/Development Drive Motor: Lock	Normal	Lock
5803 81 HVPS:CB:SC Detection SC detected No SC 5803 82 HVPS:D:SC Detection SC detected No SC 5803 83 Fusing Destination Detection: DOM (Dom) Set Not set 5803 84 Fusing Destination Detection: NA Set Not set	5803 68	Fusing Exit Motor:Lock	Normal	Lock
5803 82 HVPS:D:SC Detection SC detected No SC 5803 83 Fusing Destination Detection: DOM (Dom) Set Not set 5803 84 Fusing Destination Detection: NA Set Not set	5803 80	HVPS:TTS:SC Detection	SC detected	No SC
5803 83 Fusing Destination Detection: DOM (Dom) Set Not set 5803 84 Fusing Destination Detection: NA Set Not set	5803 81	HVPS:CB:SC Detection	SC detected	No SC
5803 84 Fusing Destination Detection: NA Set Not set	5803 82	HVPS:D:SC Detection	SC detected	No SC
	5803 83	Fusing Destination Detection: DOM (Dom)	Set	Not set
5803 87 Fusing New Unit Detection New Not new	5803 84	Fusing Destination Detection: NA	Set	Not set
	5803 87	Fusing New Unit Detection	New	Not new

5803 90	Zero-cross Signal	-	-
5803 91	Fusing Rotation Sensor	Actuator not detected	Actuator detected
5803 92	Fusing Pressue Release Sensor	Not contact	Contact
5803 94	GAVD Open/Close Detection	Closed (LD5V ON)	Open (LD5V OFF)
5803 100	Keycard: Set	Set	Not set
5803 101	Mechanical Counter Bk: Set	Set	Not set
5803 102	Mechanical Counter FC: Set	Set	Not set
5803 103	Key Counter: Set	Set	Not set
5803 110	IOB Version	-	-
5803 200	Scanner HP Sensor	Not HP	HP
5803 201	Platen Cover Sensor	Open	Closed

Table 1: Paper Height Sensor

0: Deactivated, 1: Activated (actuator inside sensor)

Remaining paper	Paper height sensor 1	Paper height sensor 2
Full	0	0
Nearly full	1	0
Near end	1	1
Almost empty	0	1

Table 2: Paper Size Switch (Tray 2)

Switch 1 is used for tray set detection.

0: Pushed, 1: Not pushed

Mod	S	Switch Location		
North America	Europe/Asia	4 (bit0)	3 (bit1)	2 (bit2)

11" x 17" SEF ^{*1} (A3 SEF)	A3 SEF ^{*1} (11" x 17" SEF)	0	0	1
8.5" x 14" SEF ^{*2} (B4 SEF)	B4 SEF ^{*2} (8.5" x 14" SEF)	0	0	0
A4 SEF	A4 SEF	1	1	0
8.5" x 11" SEF	8.5" x 11" SEF	1	1	1
B5 SEF	B5 SEF	0	1	1
11" x 81/2" LEF ^{*3} (A4 LEF)	A4 LEF ^{*3} (11" x 81/2" LEF)	1	0	0
10.5" x 7.25" LEF ^{*4} (B5 LEF)	B5 LEF ^{*4} (10.5" × 7.25" LEF)	0	1	0
A5 LEF	A5 LEF	1	0	1

 $^{^*}$ 1: The machine detects either 11" x 17" SEF or A3 SEF, depending on the setting of SP 5-181-003.

Table 3: Paper Size (By-pass Table)

0: ON, 1: OFF

By-pass Paper Size Sensor						EU/ASIA
bit3	Bit2	Bit1	BitO	Lengin Sensor	Length Sensor NA EU/	
1	1	1	1	1	HLT SEF	A6 SEF
0	1	1	1	1	HLT SEF	A6 SEF
0	0	1	1	1	HLT SEF	A5 SEF
1	0	1	1	1	HLT SEF	A5 SEF
1	0	0	1	0	LT/LG SEF*1	A4 SEF

^{*2:} The machine detects either 8.5" x 14" SEF or B4 SEF, depending on the setting of SP 5-181-004.

 $^{^*}$ 3: The machine detects either 11" x 81/2" LEF or A4 LEF, depending on the setting of SP 5-181-002.

 $^{^*}$ 4: The machine detects either B5 LEF or 10.5" x 7.25" LEF, depending on the setting of SP 5-181-005.

By-pass Pape		er Size Sens	sor	1 1 6		Length Sensor NA EU/ASIA		FIL /ACIA
bit3	Bit2	Bit1	BitO	Length Sensor	INA .	EU/ASIA		
1	0	0	1	1	LT/LG SEF*1	A5 LEF		
1	1	0	1	0	LT/LG SEF*1	A4 SEF		
1	1	0	1	1	LT/LG SEF*1	A5 LEF		
1	1	0	0	0	DLT SEF	A3 SEF		
1	1	0	0	1	LT LEF	A4 LEF		
1	1	1	0	0	DLT SEF	A3 SEF		
1	1	1	0	1	LT LEF	A4 LEF		

^{*1:} The paper size (LT or LG) can be selected with SP1-007-001.

ARDF (D578)

4007	December	Reading		
6007	Description	0	1	
6007 1	Original Length 1 (B5 Detection Sensor)	Paper not detected	Paper detected	
6007 2	Original Length 2 (A4 Detection Sensor)	Paper not detected	Paper detected	
6007 3	Original Length 3 (LG Detection Sensor)	Paper not detected	Paper detected	
6007 4	Original Width 1	Paper not detected	Paper detected	
6007 5	Original Width 2	Paper not detected	Paper detected	
6007 6	Original Width 3	Paper not detected	Paper detected	
60077	Original Width 4	Paper not detected	Paper detected	
6007 8	Original Width 5	Paper not detected	Paper detected	
6007 9	Original Detection	Paper not detected	Paper detected	
6007 10	Separation Sensor	Paper not detected	Paper detected	
6007 11	Skew Correction	Paper not detected	Paper detected	

6007 12	Scan Entrance Secsor	Paper not detected	Paper detected
6007 13	Registration Sensor	Paper not detected	Paper detected
6007 14	Exit Sensor	Paper not detected	Paper detected
6007 15	Feed Cover Sensor	ADF cover close	ADF cover open
6007 16	Lift Up Sensor	ADF cover close	ADF cover open
6007 17	Inverter Sensor	Paper not detected	Paper detected
6007 18	Pick-Up Roller HP Sensor	Not HP	HP
6007 19	Original Set HP Sensor	Original not detected	Original detected
6007 23	Rear Edge Detection (Not used)	-	-

2000/3000-Sheet (Booklet) Finisher (B804, B805)

6140	D.:	D	Read	ing
0140	Bit	Description	0	1
6140 1	Entra	nce Sensor	Paper not detected	Paper detected
6140 2	Proof	Exit Sensor	Paper not detected	Paper detected
61403	Proof	Full Detection Sensor	Not Full	Full
6140 4	Trailing Edge Detection: Shift		Paper not detected* 1	Paper detected* 1
6140 5	Staple Exit Sensor		Paper not detected	Paper detected
6140 6	Shift HP Sensor		Not HP	HP
61407	Shift Exit Sensor		Paper not detected	Paper detected
61408	Exit (Guide Plate HP Sensor	Not HP	HP
6140 9	Pape	r Detection Sensor: Staple	Paper not detected	Paper detected
6140 10	Paper Detection Sensor: Shift		Paper not detected	Paper detected
6140 11	Pape	r Full Sensor: 2000-Sheet	Not Full	Full
6140 12	Oscil	llating Back Roller HP Sensor	Not HP	НР

6140 13	Jogger HP Sensor	Not HP	HP
6140 14	Exit Junction Gate HP Sensor	HP	Not HP
6140 15	Staple Tray Paper Sensor	Paper not detected	Paper detected
6140 16	Staple Moving HP Sensor	Not HP	HP
6140 17	Skew HP Sensor	Not HP	HP
6140 18	Limit SW	Not Limit	Limit
6140 19	DOOR SW	Closed	Open
6140 20	Stapler 1 Rotation	Not HP	HP
6140 21	Staple Detection	Staple not detected	Staple detected
6140 22	Staple Leading Edge Detection	Staple not detected	Staple detected
6140 23	Punch Moving HP Sensor	Not HP	HP
6140 24	Punch Registration HP Sensor	Not HP	HP
6140 25	Punch Registratioin Detection Sensor	Paper not detected	Paper detected
6140 26	Punch Chad Full Sensor	Not Full	Full
6140 27	Punch HP	Not HP	HP
6140 28	Punch Selection DIPSW 1	See	*]
6140 29	Punch Selection DIPSW 2	See	*]
6140 30	Stack Junction Gate Open/Closed HP Sensor	Not HP	НР
6140 31	Leading Edge Detection Sensor	Paper not detected	Paper detected
6140 32	Drive Roller HP Sensor	Not HP	HP
6140 33	Arrival Sensor	Paper not detected	Paper detected
6140 34	Rear Edge Fence HP Sensor	Not HP	НР
6140 35	Folder Cam HP Sensor	Not HP	НР
6140 36	Folder Plate HP Sensor	Not HP	HP
6140 37	Folder Pass Sensor	Paper not detected	Paper detected

6140 38	Saddle Full Sensor: Front	Paper not detected* ²	Paper detected*2
6140 39	Saddle Full Sensor: Rear	Paper not detected* ²	Paper detected*2
6140 40	Saddle Stitch Stapler 1 Rotation: Front	Not HP	HP
6140 41	Saddle Stitch Detection: Front	Staple not detected	Staple detected
6140 42	Saddle Stitch Leading Edge Detection: Front	Staple not detected	Staple detected
6140 43	Saddle Stitch Stapler 1 Rotation: Rear	Not HP	HP
6140 44	Saddle Stitch Detection: Rear	Staple not detected	Staple detected
6140 45	Saddle Stitch Leading Edge Detection: Rear	Staple not detected	Staple detected
6140 46	Full Sensor: 3000-Sheet	Not Full	Full

* 1: Combination of DIP SW 1 and SW 2

DIP SW 1	DIP SW 2	Punch Type
0	0	Japan
1	0	Europe
0	1	North America
1	1	North Europe

 $^{^*}$ 2: Please refer to "Lower Tray (B804 Only)" in the Service Manual for the "2000/3000 (Booklet) Finisher".

1000-Sheet Finisher (D588)

6139 Description	Reading		
0139	6139 Description	0	1
6139 1	Entrance Sensor	Paper detected	Paper not detected

6139 2	Shift Exit Sensor (Lower Tray Exit Sensor)	Paper not detected	Paper detected
61393	Staple Entrance Sensor (Stapler Tray Entrance Sensor)	Paper detected	Paper not detected
6139 4	Staple Moving HP Sensor (Stapler HP Sensor)	Not home position	Home position
6139 5	Jogger HP Sensor (Jogger Fence HP Sensor)	Not home position	Home position
61396	Stack Feed-out Belt HP Sensor	Home position	Not home position
61397	Staple Tray Paper Sensor	Paper not detected	Paper detected
61398	Staple Rotation Sensor (Staple Rotation HP Sensor)	Not home position	Home position
61399	Staple Sensor	Staple detected	Staple not detected
6139 10	Staple READY Detection	Staple detected	Staple not detected
6139 11	Exit Guide Plate HP (Exit Guide Plate HP Sensor)	Not home position	Home position
6139 12	Shift HP Sensor	Not home position	Home position
6139 13	Paper Sensor (Stack Height Sensor)	Output tray not detected	Output tray detected
6139 14	Tray Lower Sensor (Lower Tray Lower Limit Sensor)	Lower limit	Not lower limit
6139 15	Proof Full Sensor (Paper Limit Sensor)	Not full	Full

5

Bridge Unit (D634)/ Side Tray (D635)

4150 Danadallar	Read	ling	
6150	50 Description	0	1
6150 1	Bridge/Left: Exit Sensor	Paper detected	Paper not detected
6150 2	Bridge/Left: Feed Sensor	Paper detected	Paper not detected
61503	Bridge/Left: Set Detection	Set	Not set
61504	Bridge/Left: Exit Cover Detection	Closed	Open
61505	Bridge/Left: Feed Cover Detection	Closed	Open

Internal Shift Tray (D633)

4150	Description	Reading	
6152 Description	0	1	
6152 2	Shift: Position Sensor	Tray position: Front	Tray position: Rear

1 Bin Tray (D632)

6154 Description	Donasiation	Reading	
	0	1	
61541	1 bin: Set Detection	Set	Not set
61542	1 bin: Paper Sensor	Paper detected	Paper not detected

Two-Tray PFU (D580)/ LCIT 2000 (D581)/ LCIT 1200 (D631)

6160 Description	Reading		
	0	1	
61601	Bank: Tray3: Feed Sensor	Paper not detected	Paper detected
61602	Bank: Tray4: Feed Sensor	Paper not detected	Paper detected

61603	Bank: Tray5: Feed Sensor	Paper not detected	Paper detected
61604	Bank: Tray3: Relay Sensor	Paper not detected	Paper detected
61605	Bank: Tray4: Relay Sensor	Paper not detected	Paper detected
61606	Bank: Tray5: Relay Sensor	Paper not detected	Paper detected
61607	Bank: Feed Cover Detection	Closed	Open
6160 11	Bank: Palau: Paper Supply Switch	Closed	Open
6160 12	Bank: Palau: Slide Switch	Closed	Open

Output Check Table

Copier

5804	Display	Description
58043	Drum/Dev Motor: K: HighSpeed	Drum/Development Drive Motor-K: High Speed
5804 4	Drum/Dev Motor: K: MiddleSpeed	Drum/Development Drive Motor-K: Middle Speed
5804 5	Drum/Dev Motor: K: LowSpeed	Drum/Development Drive Motor-M: Low Speed
5804 10	Drum/Dev Motor: M: HighSpeed	Drum/Development Drive Motor- C: High Speed
5804 11	Drum/Dev Motor: M: MiddleSpeed	Drum/Development Drive Motor-Y: Middle Speed
5804 12	Drum/Dev Motor: M: LowSpeed	Drum/Development Drive Motor-Y: Low Speed
5804 17	Drum/Dev Motor: C: HighSpeed	Drum/Development Drive Motor- C: High Speed
5804 18	Drum/Dev Motor: C: MiddleSpeed	Drum/Development Drive Motor-Y: Middle Speed
5804 19	Drum/Dev Motor: C: LowSpeed	Drum/Development Drive Motor-Y: Low Speed

5804 24	Drum/Dev Motor: Y: HighSpeed	Drum/Development Drive Motor- C: High Speed
5804 25	Drum/Dev Motor: Y: MiddleSpeed	Drum/Development Drive Motor-Y: Middle Speed
5804 26	Drum/Dev Motor: Y: LowSpeed	Drum/Development Drive Motor-Y: Low Speed
5804 31	-	See the last of this table.
5804 32	-	See the last of this table.
5804 33	-	See the last of this table.
5804 35	-	See the last of this table.
5804 37	Toner Relay Motor	Toner Transport Motor
5804 40	Image Transfer Motor: HighSpeed	ITB Drive Motor: High Speed
5804 41	Image Transfer Motor: MiddleSpeed	ITB Drive Motor: Middle Speed
5804 42	Image Transfer Motor: LowSpeed	ITB Drive Motor: Low Speed
5804 50	Feed Motor: HighSpeed	Paper Feed Motor: High Speed
5804 51	Feed Motor: IncreaseSpeed	Paper Feed Motor: Increase Speed
5804 52	Feed Motor: MiddleSpeed	Paper Feed Motor: Middle Speed
5804 53	Feed Motor: MiddleIncreaseSpeed	Paper Feed Motor: Middle Increase Speed
5804 54	Feed Motor: LowSpeed	Paper Feed Motor: Low Speed
5804 55	Feed Motor: LowInceraseSpeed	Paper Feed Motor: Low Incerase Speed
5804 60	Regist Motor: HighSpeed	Registration Motor: High Speed
5804 61	Regist Motor: MiddleSpeed	Registration Motor: Middle Speed
5804 62	Regist Motor: LowSpeed	Registration Motor: Low Speed
5804 67	Duplex Feed M:CW:HighSpeed	Duplex/By-pass Motor: CW: High Speed
5804 68	Duplex Feed M:CW:MiddleSpeed	Duplex/By-pass Motor: CW: Middle Speed
5804 69	Duplex Feed Motor: CW: LowSpeed	Duplex/By-pass Motor: CW: Low Speed
5804 74	Duplex Feed M:CCW:HighSpeed	Duplex/By-pass Motor: CCW: High Speed

5804 75	Duplex Feed M:CCW:MiddleSpeed	Duplex/By-pass Motor: CCW: Middle Speed
580476	Duplex Feed Motor: CCW: LowSpeed	Duplex/By-pass Motor: CCW: Low Speed
5804 81	Duplex Reverse M:CW:HighSpeed	Duplex Inverter Motor: CW: High Speed
5804 82	Duplex Reverse M:CW:MiddleSpeed	Duplex Inverter Motor: CW: Middle Speed
5804 83	Duplex Reverse Motor: CW: LowSpeed	Duplex Inverter Motor: CW: Low Speed
5804 88	Duplex Reverse M:CCW:HighSpeed	Duplex Inverter Motor: CCW: High Speed
5804 89	Duplex Reverse M:CCW:MiddleSpeed	Duplex Inverter Motor: CCW: Middle Speed
5804 90	Duplex Reverse Motor: CCW: LowSpeed	Duplex Inverter Motor: CCW: Low Speed
5804 95	ITB Contact Motor	Image Transfer Belt Contact Motor
5804 96	Paper Transfer Contact Motor	Paper Transfer Contact Motor
5804 97	1 st Tray Lift Motor: Up	Tray Lift Motor 1: Lift Up
5804 98	1 st Tray Lift Motor: Down	Tray Lift Motor 1: Lift Down
5804 99	2nd Tray Lift Motor: Up	Tray Lift Motor 2: Lift Up
5804 100	2nd Tray Lift Motor: Down	Tray Lift Motor 2: Lift Down
5804 102	Fusing Pressue Release Motor	Pressure Roller Contact Motor
5804 104	Polygon Moter: LL	Polygon Motor: LL
5804 105	Polygon Moter: L	Polygon Motor: L
5804 107	Polygon Moter: HH	Polygon Motor: HH
5804 110	Air Flow Fan: Front	Ventilation Fan - Front
5804 111	Air Flow Fan:Rear	Ventilation Fan - Rear
5804 112	Fusing Fan:H	Fusing Fan: High Speed

5804 113	Fusing Fan:L	Fusing Fan: Low Speed
5804 114	PSU Cooling Fan	PSU Fan 1: High Speed
5804 115	2nd Duct Fan: H	Duct Fan 2: High Speed
5804 117	3rd Duct Fan: H	Duct Fan 3: High Speed
5804 119	Paper Exit Fan:H	Paper Exit Fan: High Speed
5804 121	Fusing Coil Fan	QSU Fan
5804 122	IH Power Supply Cooling Fan	AC controller board Fan
5804 126	Development Clutch: Bk	Development Clutch-K
5804 127	Development Clutch: M	Development Clutch-M
5804 128	Development Clutch: C	Development Clutch-C
5804 129	Development Clutch: Y	Development Clutch-Y
5804 130	Toner Bottle Clutch: Bk	Toner Bottle Clutch-K
5804 131	Toner Bottle Clutch: M	Toner Bottle Clutch-M
5804 132	Toner Bottle Clutch: C	Toner Bottle Clutch-C
5804 133	Toner Bottle Clutch:Y	Toner Bottle Clutch-Y
5804 134	Toner Supply Pump: Bk	Toner Supply Clutch: Bk
5804 135	Toner Supply Pump: M	Toner Supply Clutch: M
5804 136	Toner Supply Pump: C	Toner Supply Clutch: C
5804 137	Toner Supply Pump: Y	Toner Supply Clutch: Y
5804 138	1 st Paper Feed Clutch	Paper Feed Clutch 1
5804 139	2nd Paper Feed Clutch	Paper Feed Clutch 2
5804 140	Bypass Feed Clutch	By-pass Feed Clutch
5804 141	Bypass Pickup Solenoid	Bypass Pickup Solenoid
5804 143	TD Sensor Shutter Solenoid	ID Sensor Shutter Solenoid
5804 144	Exit Junction Solenoid	Junction Gate 1 Solenoid
5804 145	1 st Feed Pickup Solenoid	1 st Pickup Solenoid

5804 146	2st Feed Pickup Solenoid	2nd Pickup Solenoid
5804 161	PCL: Bk	
5804 162	PCL: M	
5804 163	PCL: C	
5804 164	PCL: Y	
5804 166	HST Sensor:Bk	TD Sensor:Bk
5804 167	HST Sensor: M	TD Sensor: M
5804 168	HST Sensor: C	TD Sensor: C
5804 169	HST Sensor: Y	TD Sensor: Y
5804 170	Toner End Sensor: Bk	Toner End Sensor: Bk
5804 171	Toner End Sensor: M	Toner End Sensor: M
5804 172	Toner End Sensor: C	Toner End Sensor: C
5804 173	Toner End Sensor: Y	Toner End Sensor: Y
5804 174	TM Sensor: Front	ID Sensor: Front
5804 175	TM Sensor: Center	ID Sensor: Center
5804 176	TM Sensor: Rear	ID Sensor: Rear
5804 177	TM Sensor: M	ID Sensor: M
5804 178	TM Sensor: C	ID Sensor: C
5804 179	TM Sensor: Y	ID Sensor: Y
5804 181	PP:Charge AC:Y:HighSpeed	-
5804 182	PP:Charge AC:Y:MiddleSpeed	-
5804 183	PP:Charge AC:Y:LowSpeed	-
5804 186	PP:Development:K	-
5804 187	PP:Development:M	-
5804 188	PP:Development:C	-
5804 189	PP:Development:Y	-

5804 190	PP:Separation	-
5804 192	RFID ON/OFF: K	-
5804 193	RFID ON/OFF: Y	-
5804 194	RFID ON/OFF: C	-
5804 195	RFID ON/OFF: M	-
5804 196	RFID COM ON:K	-
5804 197	RFID COM ON: Y	-
5804 198	RFID COM ON: C	-
5804 199	RFID COM ON: M	-
5804 202	Scanner Lamp	-
5804 216	LD1: K	-
5804 217	LD2: K	-
5804 218	LD1: M	-
5804 219	LD2: M	-
5804 220	LD1: C	-
5804 221	LD2: C	-
5804 222	LD1: Y	-
5804 223	LD2: Y	-
5804 224	PP:ITB:K	PP: Image Transfer Roller: K
5804 225	PP:ITB:M	PP: Image Transfer Roller: M
5804 226	PP:ITB:C	PP: Image Transfer Roller: C
5804 227	PP:ITB:Y	PP: Image Transfer Roller: Y
5804 228	PP:PTR:+	PP: Paper Transfer Roller:+
5804 229	PP:PTR:-	PP: Paper Transfer Roller:-
5804 231	HVPS: ChargeDC: K	-
5804 232	HVPS: ChargeDC: M	-

5804 233	HVPS: ChargeDC: C	-
5804 234	HVPS: ChargeDC: Y	-
5804 237	PP:Charge AC:K:HighSpeed	-
5804 238	PP:Charge AC:K:MiddleSpeed	-
5804 239	HVPS: ChargeAC: K: LowSpeed	-
5804 244	PP:Charge AC:M:HighSpeed	-
5804 245	PP:Charge AC:M:MiddleSpeed	-
5804 246	HVPS: ChargeAC: M: LowSpeed	-
5804 251	PP:Charge AC:C:HighSpeed	-
5804 252	PP:Charge AC:C:MiddleSpeed	-
5804 253	HVPS: ChargeAC: C: LowSpeed	-

Fusing Exit Motor

Note: These SP modes will be moved to Super SP mode in the near future.

Important: Use the procedure below to do the output checks for the fusing exit motor. If you do not follow this procedure, a kink will form in the fusing belt sleeve, and the fusing sleeve belt unit will need to be replaced.

- 1. Do one of the following:
 - Open the right cover of the paper bank
 - Remove one of the toner bottles
 - Pull out the waste toner bottle half-way
 - · Remove the fusing unit

5804

- 2. Enter SP mode.
- 3. Do the following out output checks:
 - SP5-804-031 (Fusing exit motor: High speed)
 - SP5-804-032 (Fusing exit motor: Middle speed)
 - SP5-804-033 (Fusing exit motor: Low speed)
 - SP5-804-035 (Fusing exit motor: Very low speed)
- 4. Without exiting SP mode, turn the main power switch off and then on again.

Important: If you exit SP mode before you turn the main power switch off, the fusing exit motor will stay off when the machine warms up. Heat will be concentrated in one area of the fusing belt sleeve and cause a kink to form. If this happens, you will need to replace the fusing sleeve belt unit.

5. Do the reverse of what you did in step 1 (for example, reattach the fusing unit).

5804 31	Fusing Exit Motor: HighSpeed	Fusing/Paper Exit Motor: High Speed
5804 32	Fusing Exit Motor: MiddleSpeed	Fusing/Paper Exit Motor: Middle Speed
5804 33	Fusing Exit Motor: LowSpeed	Fusing/Paper Exit Motor: Low Speed
5804 35	Fusing Exit Motor: LLowSpeed	Fusing/Paper Exit Motor: LLow Speed

ARDF (D578)

6008	Display	Description
6008 1	Pick-Up Motor Forward	
6008 2	Pick-Up Motor Reverse	

6008 3	Feed Motor Forward	Feed Motor-Forward rotation
6008 4	Feed Motor Reverse	Feed Motor-Reverse rotation
6008 5	Relay Motor Forward	Transport Motor- Forward rotation
6008 7	Inverter Motor Reverse	Transport Motor- Forward rotation
6008 8	Inverter Motor Reverse	-
6008 11	Inverter Solenoid	-
6008 12	Stamp	Stamp Solenoid
6008 13	Fan Motor	-
6008 14	Feed Clutch	-
6008 15	Feed Solenoid	-

1000-Sheet Finisher (D588)

6144	Display	Description
61441	Relay Up Motor	Upper Transport Motor
61442	Relay Down Motor	Lower Transport Motor
61443	Exit Motor	-
61444	Proof Junction Gate SOL	Tray Junction Gate Solenoid
61445	Tray Up Motor	Lower Tray Lift Motor
61446	Jogger Motor	Jogger Fence Motor
61447	Staple Moving Motor	Stapler Motor
61448	Staple Motor	Stapler Hammer
61449	Staple Junction Gate SOL	Stapler Junction Gate Solenoid
6144 10	Positioning Roller Solenoid	Positioning Roller Solenoid
6144 11	Stack Feed-out Motor	-
6144 12	Shift Motor	-

6144 13	Exit Guide Plate Motor	-

2000/3000-Sheet (Booklet) Finisher (B804/B805)

6145	Display	Description
6145 1	Entrance Motor	Finisher Entrance Motor
6145 2	Upper Feed Motor	Upper Transport Motor
6145 3	Lower Feed Motor	Lower Transport Motor
6145 4	Exit Motor	Upper/Proof Tray Exit Motor
6145 5	Knock Roller Motor	Clamp Roller Retraction Motor
6145 6	Shift Motor	Shift Roller Motor
61457	Exit Guide Plate Open/Close Motor	Exit Guide Plate Motor
6145 8	Tray Lift Motor	Upper Tray Lift Motor
6145 9	Oscillating Back Roller Motor	Stacking Sponge Roller Motor
6145 10	Jogger Motor	Jogger Fence Motor
6145 11	Stack Feed-out Motor	Feed Out Belt Motor
6145 12	Staple Moving Motor	Corner Stapler Movement Motor
6145 13	Staple Skew Motor	Corner Stapler Rotation Motor
6145 14	Staple Motor	Corner Stapler EH530
6145 15	Upper Junction Gate Solenoid	Proof Junction Gate Solenoid
6145 16	Lower Junction Gate Solenoid	Stapling Tray Junction Gate Solenoid
6145 17	Knock Solenoid	Stapling Edge Pressure Plate Solenoid
6145 18	Trailing Edge Hold Solenoid	Positioning Roller Solenoid
6145 19	Saddle Stitch Hold Solonoid	Booklet Pressure Roller Solenoid
6145 20	Stack Junction Gate Open/Close Motor	Stack Junction Gate Motor
6145 21	Trailing Edge Fence Moving Motor	Fold Unit Bottom Fence Lift Motor

6145 22	Saddle Stitch Staple Motor: Front	Booklet Stapler EH185R: Front
6145 23	Saddle Stitch Staple Motor: Rear	Booklet Stapler EH185R: Rear
6145 24	Folder Plate Motor	Fold Plate Motor
6145 25	Folder Roller Motor	Fold Roller Motor
6145 26	Drive Roller Oscillating Motor	Positioning Roller Motor
6145 27	Punch Motor	Punch Drive Motor
6145 28	Punch Moving Motor	Punch Movement Motor
6145 29	Punch Registration Detection Motor	Paper Position Sensor Slide Motor

Bridge Unit (D386)/ Side Tray (D634)

6151	Display	Description
6151 1	Bridge/Left: Feed Motor: Current Selection	Bridge: Feed Motor: Current switching signal
61512	Bridge/Left: Feed Motor:Reset	Bridge: Feed Motor:Reset
61513	Bridge/Left: Feed Motor:Enable	Bridge: Feed Motor:Enable
61516	Bridge/Left: Feed Motor: High Speed	Bridge: Feed Motor: High Speed
61517	Bridge/Left: Feed Motor: Middle Speed	Bridge: Feed Motor: Middle Speed
61518	Bridge/Left: Feed Motor: Low Speed	Bridge: Feed Motor: Low Speed
6151 11	Bridge/Left: Junction Solenoid	Bridge: Junction Solenoid

Shift Tray (D633)

6153	Display	Description
6153 1	Shift Tray: Motor	-

5

1 Bin Tray (D632)

6155	Display	Description
6155 1	1 bin: Junction Solenoid	-

Two-Tray PFU (D580)/ LCIT 2000 (D581)/ LCIT 1200 (D631)

6161	Display	Description
61615	Bank1: Feed Motor: HighSpeed	Feed Motor:High Speed (D537/D538)
61616	Bank1: Feed Motor: IncreaseSpeed	Feed Motor: Increase Speed (D537/D538)
61618	Bank1: Feed Motor: MiddleSpeed	Feed Motor: Middle Speed (D537/D538)
61619	Bank1: Feed Motor: LowSpeed	Feed Motor: Low Speed (D537/D538)
6161 10	Bank 1 : Feed Motor: LowIncreaseSpeed	Feed Motor:Low Increase Speed (D537/D538)
6161 15	Bank2: Feed Motor:HighSpeed	Feed Motor:High Speed (D537)
6161 16	Bank2: Feed Motor: IncreaseSpeed	Feed Motor: Increase Speed (D537)
6161 18	Bank2: Feed Motor: MiddleSpeed	Feed Motor: Middle Speed (D537)
6161 19	Bank2: Feed Motor: LowSpeed	Feed Motor: Low Speed (D537)
6161 20	Bank2: Feed Motor: LowIncreaseSpeed	Feed Motor: Low Increase Speed (D537)
6161 30	Bank:Tray3: PU Solenoid	Pick-up Solenoid (D537/ D538)
616131	Bank:Tray4: PU Solenoid	Pick-up Solenoid (D537/ D539)
616132	Bank:Tray5: PU Solenoid	Pick-up Solenoid (D539)
6161 35	Bank:Tray3: Feed Clutch	Pick-up Solenoid (D537/ D538)
616136	Bank:Tray4: Feed Clutch	Pick-up Solenoid (D537/ D539)

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Printer Service Mode

Bank:Tray5: Feed Clutch

SP1-XXX (Service Mode)

1001	Bit Swi	Bit Switch		
001	Bit Swi	tch 1	0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	DFU	-	-
	bit 3	No I/O Timeout	0: Disable	1: Enable
		Enable: The MFP I/O Timeout setting will have no effect. 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. For details, see "Card Save Function" (** p.740).		or details, see
	bit 5	DFU	-	-
	bit 6	DFU	-	-
	bit 7	[RPCS,PCL]: Printable area frame border	0: Disable	1: Enable
		Enable: The machine prints all RPCS and PCL jobs w printable area.	ith a border on	the edges of the

1001 Bit Switch

5

002	Bit Switch 2		0	1	
	bit 0	DFU	-	-	
	bit 1	DFU	-	-	
	bit 2	Applying a collation Type	Shift Collate	Normal Collate	
		A collation type (shift or normal) will be applied to all jobs that do not already have a 'Collate Type' configured.			
		↓ Note			
		If #5-0 is enabled, this Bit Switch has no effect.			
	bit 3	[PCL5e/c,PS]: PDL Auto Switching	0: Enable	1: Disable	
		Disable: The MFPs ability to change the PDL processor mid-job.			
		Some host systems submit jobs that contain both PS of switching is disabled, these jobs will not be printed p	-	f Auto PDL	
	bit 4	DFU	-	-	
	bit 5	DFU	-	-	
	bit 6	DFU	-	-	
	bit 7	DFU	-	-	

1001	Bit Switch
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003	Bit Swit	Bit Switch 3		1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	[PCL5e/c]: Legacy HP compatibility	0: Disable	1: Enable
		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"</esc></esc>		
	bit 3	DFU	-	-
	bit 4	DFU	-	-
	bit 5	DFU	-	-
	bit 6	DFU	-	-
	bit 7	DFU	-	-

1001	Bit Swit	Bit Switch				
004	Bit Switch 4 DFU		0	1		
	bit 0	DFU	-	-		
	bit 1	DFU	-	-		
	bit 2	DFU	-	-		
	bit 3	IPDS print-side reversal	0: Disable	1: Enable		
	If enabled, the simplex pages of IPDS jobs will be printed on the front sid of printing on the back side of the page. This might reduce printing speed					
	bit 4	DFU	-	-		
	bit 5	DFU	-	-		
	bit 6	DFU	-	-		
	bit 7	DFU	-	-		

1001	Bit Switch		
005	Bit Switch 5	0	1

	Show "Collate Type", "Staple Type" and "Punch Type" buttons on the operation panel.	Disable	Enable
bit 0	If enabled, users will be able to configure a Collate Type from the operation panel. The available types configured options.		
	After enabling the function, the settings will appear u	ınder:	
	"User Tools → Printer Features → System"		
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 pasingle copy is output by default. Using this BitSw, the print all copies even if a paper mismatch occurs.		. ,
bit 2	DFU	-	-
bit 3	[PS] PS Criteria	Pattern3	Pattern 1
	Change the number of PS criterion used by the PS ir job is PS data or not.	nterpreter to de	termine whether a
	Pattern3: includes most PS commands.		
	Pattern1: A small number of PS tags and headers		
bit 4	Increase max number of the stored jobs to 1000 jobs.	Disable (100)	Enable (1000)
	Enable: Changes the maximum number of jobs that Job Type settings to 1000. The default is 100.	t can be store	d on the HDD via
bit 5	Face-up output	Disable	Enable
	Enable: All print jobs will be output face-up in the de	estination tray.	
bit 6	Method for determining the image rotation for the edge to bind on.	0: Disable	1: Enable
	If enabled, the image rotation will be performed as to older models for the binding of pages of mixed orien	•	e specifications of
	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)
1001	Bit Swit	tch		
006	Bit Swit	rch 6 DFU	-	-
1001	Bit Swit	rch		
007	Bit Swit	tch 7	0	1
		Print path	0: Disable	1: Enable
	bit 0	If enabled, simplex pages (in mixed simplex/duplex page of an odd paged duplex job (PS, PCL5, PCL6) duplex unit. Not having to switch paper paths incred	, are always ro	outed through the
	bit 1 to 7	DFU	-	-
	ı			
1001	Bit Swit	tch		
008	Bit Swit	rch 8	0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	DFU	-	-
	bit 3	[PCL,PS]: Allow BW jobs to print without requiring User Code	Disable	Enable
		Enable: BW jobs submitted without a user code vauthentication is enabled.	will be printed	even if usercode
		Note		
		Color jobs will not be printed without a valid us	er code.	
	bit 4	DFU	-	-

bit 5

bit 6

bit 7

DFU

DFU

DFU

1001	Bit Switch			
005	Bit Swi	tch 9	0	1
	bit 0	PDL Auto Detection timeout of jobs submitted via USB or Parallel Port (IEEE 1284).	"Disabled (Immediatel y)"	"Enabled (10 seconds)"
	DII O	To be used if PDL auto-detection fails. A failure of PD necessarily mean that the job can't be printed. This be to time-out immediately (default) upon failure or to w	oit switch tells th	e device whether
	bit 1	DFU	-	-
	bit 2	Job Cancel	Disabled (Not cancelled)	Enabled (Cancelled)
		If this bit switch, all jobs will be cancelled after a jam Note: If this bitsw is enabled, printing under the follo problems: - Job submission via USB or Parallel Port - Spool printing (WIM >Configuration > Device Sett	wing condition	s might result in
	bit 3	PCL/PS bypass tray paper rotation (SEF/LEF)	0: Disable	1: Enable
		This bitsw causes the device to revert to the behavior takes effect if "Bypass Tray Setting Priority" = "Driver Previous spec (bitsw=1): If a standard sized paper metray, the MFP always prompted for SEF paper. If this bitsw=0 (default) then in the event of a standard MFP will always prompt for paper of the rotation (SI bypass tray paper setting or by the bypass tray sens	/Command". nismatch occurr d sized paper EF/LEF) determ	red in the bypass
	Bit 4 to 7	DFU	-	-

10	003	[Clear Setting]
1	002.1	Initialize Printer System
1003 1	Initializes settings in the "System" menu of the user mode.	
1	003 3	Delete Program

1004	[Print Summary]
10041	Print Summary
1004 1	Prints the service summary sheet (a summary of all the controller settings).

1005	[Display Version]
1005	Disp. Version
1005	Displays the version of the controller firmware.

1006	[Sample/Locked Print]	*CTL	0: Linked, 1: On	
1006 1	enabled or disabled in accord	ance with	er. When you select "0," the document server is Copy Service Mode SP5-967. When you select ardless of Copy Service Mode SP5-967.	

	[Data Recall]		
1101	Recalls a set of gamma settings. This can be either a) the factory setting, b) the previous setting, or c) the current setting.		
11011	Factory		
1101 2	Previous	*CTL	
11013	Current		
1101 4	ACC		

1102	[Resolution Setting]
1102	Selects the printing mode (resolution) for the printer gamma adjustment.
11021	2400x600 Photo , 1800x600 Photo, 600 x 600 Photo, 2400x600 Text, 1800x600, Text, 600x600 Text

1103	[Test Page]
1103	Prints the test page to check the color balance before and after the gamma adjustment.
1103 1	Color Gray Scale
1103 2	Color Pattern

1104	[Gamma Adjustment]			
1104	Adjusts the printer gamma for the mode selected in the "Mode Selection" m			
11041	Black: Highlight		[0 to 30 / 15 / 1/step]	
11042	Black: Shadow	*CTL		
11043	Black: Middle	CIL		
11044	Black: IDmax			
1104 21	Cyan: Highlight			
1104 22	Cyan: Shadow	*CTL	[0 to 30 / 15 / 1/step]	
1104 23	Cyan: Middle	CIL		
1104 24	Cyan: IDmax			
1104 41	Magenta: Highlight		[0 to 30 / 15 / 1/step]	
1104 42	Magenta: Shadow	*CTL		
1104 43	Magenta: Middle	CIL		
1104 44	Magenta: IDmax			
110461	Yellow: Highlight			
1104 62	Yellow: Shadow	*CTL	[0 to 20 / 15 / 1 /ston]	
1104 63	Yellow: Middle		[0 to 30 / 15 / 1/step]	
1104 64	Yellow: IDmax			

	[Save Tone Control Value]
1105	Stores the print gamma adjusted with the "Gamma Adj." menu item as the current setting. Before the machine stores the new "current setting", it moves the data currently stored as the "current setting" to the "previous setting" memory storage location.
1105 1	Save Tone Control Value

	1104	[Toner Limit]	
1106	1100	Adjusts the maximum toner amount for image development.	

1106 1 Toner Limit Value	*CTL	[100 to 400 / 260 / 1 %/step]
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Scanner SP Mode

SP1-xxx (System and Others)

1004	[Compression Type]		
1004	Selects the compression type for binary picture processing.		
1004 1	Compression Type	*CTL	[1 to 3 / 1 / 1/step] 1: MH, 2: MR, 3: MMR

[Erase Margin(Remote scan)]

Creates an erase margin for all edges of the scanned image.

If the machine has scanned the edge of the original, create a margin. This SP is activated only when the machine uses TWAIN scanning.

1005 1 Range from 0 to 5 mm *CTL [0 to 5 / 0 / 1 mm/step]

	1009	[Remote scan disable]		
		Enable or disable remote sco	an.	
	1009 1	0:enable 1:desable	*CTL	[0 or 1 / 0 / -] 0: enable, 1: disable

1010	[Non Display Clear Light PDF]			
	Enable or disable remote scan.			
10101	Non Display ClearLight PDF	*CTL	[0 or 1 / 0 / -] 0: Display, 1: No display	

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SP2-XXX (Scanning-image quality)

	[Compression Level(Grayscale)]				
2021	Selects the compression ratio for grayscale processing mode (JPEG) for the three settings that can be selected at the operation panel.				
2021 1	Comp1:5-95		[5 to 95 / 20 / 1 /step]		
2021 2	Comp2:5-95		[5 to 95 / 40 / 1 /step]		
2021 3	Comp3:5-95	*CTL	[5 to 95 / 65 / 1 /step]		
2021 4	Comp4:5-95		[5 to 95 / 80 / 1 /step]		
2021 5	Comp5:5-95		[5 to 95 / 95 / 1 /step]		

	[Compression ratio of ClearLightPDF]				
2024	Selects the compression ratio for clearlight PDF for the two settings that can be selected at the operation panel.				
2024 1	Compression Ratio (Normal)	*CTL	[5 to 95 / 25 / 1 /step]		
2024 2	Compression Ratio (High)		[5 to 95 / 20 / 1 /step]		

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 (lower) on the left rear side of the controller box.

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	BCU 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
NetworkSupport		Controller Board	NetworkSupport
Language 1		LCDC	Language 1
Language 2		LCDC	Language2
RPCS		Controller Board	RPCS
MediaPrint:JPEG/TIFF		Controller Board	MediaPrint:JPEG/ TIFF
FONT		Controller Board	FONT
FONT1		Controller Board	FONT1
NetworkDocBox		Controller Board	NetworkDocBox
Printer		Controller Board	Printer
Scanner		Controller Board	Scanner
Websupport		Controller Board	Websupport
WebUapl		Controller Board	WebUapl

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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.

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 "D142" folder onto the card.

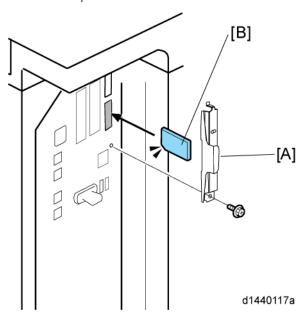
If the card already contains folders up to "D142", copy the necessary firmware files (e.g. D142xxxx.fwu) into this folder.



 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] (F x 1).
- 3. Insert the SD card into SD Card Slot 2 (lower). Make sure the label on the SD card faces [B] the front 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.



- 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.

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- 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.



- 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.

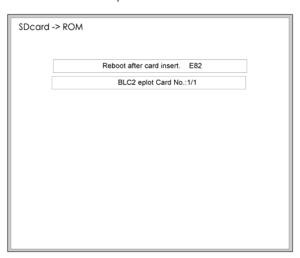
Add: For details, refer to the Troubleshooting for Error Messages

RTB 26

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. (F) p.721)

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

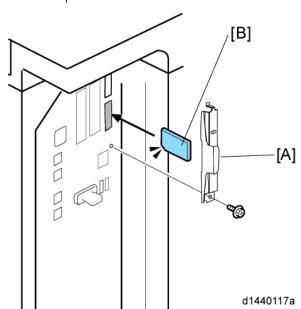
If the ROM update is interrupted as a result of accidental loss of power while the firmware is updating, then the correct operation of the machine cannot be guaranteed after the machine is switched on again. If the ROM update does not complete successfully for any reason, then in order to ensure the 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.

Updating the LCDC for the Operation Panel

Do the following procedure to update the LCDC (LCD Control Board).

1. Turn the copier main switch off.



- 2. Remove the SD slot cover [A] (*x 1).
- 3. Insert the SD card into SD Card Slot 2 (lower).
- 4. Switch the copier main switch on.
- 5. The initial screen opens in English after about 45 seconds.
- 6. Touch "Ope Panel.xx".
- 7. "xx" differs depending on the destination.
- 8. Touch "UpDate(#) or ($^{\textcircled{\tiny +}}$) to start the update.
- 9. Downloading starts after about 9 seconds.

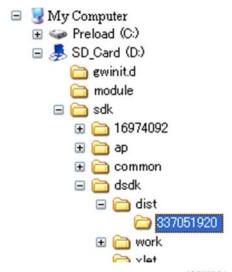
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- 10. The operation panel goes off and the main power on key flashes in red at 0.5 s intervals when the data is downloading. The same key starts flashing in green at 1 s intervals when the update is finished.
- 11. Switch the copier main power switch off and remove the SD card. Then switch the copier on.

Update Procedure for App2Me Provider

Follow this procedure to update App 2 Me if a new version is available.

- 1. Push the [User/Tools] key on the operation panel.
- 2. If an administrator setting is registered for the machine, Step 3 and Step 4 are required. Otherwise, skip to step 5.
- 3. Push [Login/Logout] on the operation panel.
- 4. Login with the administrator user name and password.
- 5. Touch "Extended Feature Settings" twice on the LCD.
- 6. Touch each of the applications until the status changes to "Stop".
- 7. Turn the machine off, and then remove the VM Card.



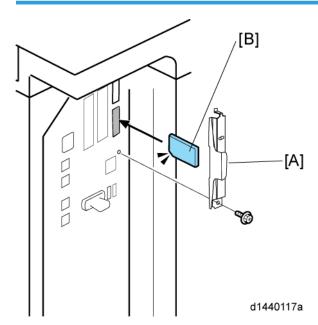
- d377i501
- 8. Prepare the newer App2Me Provider zip file from the Firmware Download Center, and then unzip the zip file. (The folder name is "337051920".)
- Copy the App2Me Provider folder into the specified path for the VM card. The path is:
 "SD_Card Drive\sdk\dsdk\dist\337051920"
- 10. Turn the SD card label face to the front of the machine, and then push it slowly into Slot 2 (lower) until you hear a click.

- 11. Turn the main power switch on.
- 12. Press [User Tools] on the operation panel.
- 13. Touch the "Extended Feature Settings" button twice.
- 14. Touch the "Extended Feature Info" tab on the LCD.
- 15. Touch the "App2Me" line.
- 16. Set the setting of the "Auto Start" to "On".
- 17. Touch the "Exit" button.
- 18. Exit the [User Tools/Counter] settings.

Important

- App2Me and all other running applications on the VM card must be shut down before removing the VM card in order to update the firmware, back up NVRAM, install the browser unit, or execute application move or undo with SP5873.
- After the VM card is re-inserted, App2Me (and any other VM card applications used by the customer) must be switched on after the machine is switched on.

Browser Unit Update Procedure



- 1. Remove the slot cover [A] for SD cards (*\beta x 1).
- 1. Turn the SD-card label face of the browser unit to the front of the machine. Then push it slowly into slot 2 (lower) until you hear a click.
- 2. Plug in and turn on the main power switch.

- 3. 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
- 4. Push the "Login/ Logout" key.
- 5. Login with the administrator user name and password.
- 6. Touch "Extended Feature Settings" twice on the LCD.
- 7. Touch "Uninstall" on the LCD.
- 8. Touch the "Browser" line
- 9. Confirmation message appears on the LCD.
- 10. Touch "Yes" to proceed.
- 11. Reconfirmation message appears on the LCD.
- 12. Touch "Yes" to uninstall the browser unit.
- 13. You will see "Uninstalling the extended feature... Please wait.", and then "Completed".
- 14. Touch "Exit" to go back to the setting screen.
- 15. Exit "User/Tools" setting, and then turn off the main power switch.
- 16. Remove the SD card of the browser unit from SD card slot 2 (lower).
- 17. Overwrite the updated program in the "sdk" folder of the browser unit application with PC.
- 18. Do the "Installation Procedure" to install the browser unit.

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

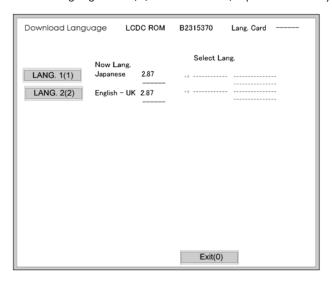
Code	Meaning	Solution
20	Cannot map logical address	Make sure the SD card is inserted correctly.
21	Cannot access memory	HDD connection incorrect or replace hard disks.
22	Cannot decompress compressed data	Incorrect ROM data on the SD card, or data is corrupted.
23	Error occurred when ROM update program started	Controller program abnormal. If the second attempt fails, replace controller board.

Code	Meaning	Solution	
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 BCU 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.	

Installing Another Language

Many languages are available. But you can only switch between two languages at a time. Do the following procedure to select the two languages you want. You can select both of the languages you want from the user interface on the operation panel.

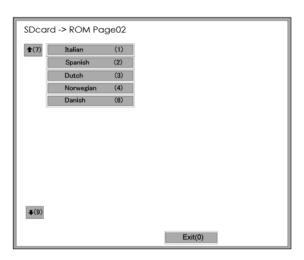
- 1. Switch the copier main power switch off.
- 2. Remove the SD slot cover (* x 1).
- 3. Insert the SD card with the language data into SD Card Slot 2.
- 4. Switch the copier main power switch on. The initial screen opens after about 45 seconds.
- 5. Touch "Language Data (2)" on the screen (or press the "2" key).



6. Touch "LANG. 1(1)" or "LANG. 2(2)"

Key	What it does	
LANG. 1(1)	Touch this button on the screen (or press the "1" key on the 10-key pad) to open the next screen so you can select the 1st language.	
LANG. 1(2)	Touch this button on the screen (or press the "2" key on the 10-key pad) to open the next screen so you can select the 2nd language.	
Exit (O)	Touch this key on the screen (or press the "0" key on the 10-key pad) to quit the update procedure and return to normal screen.	

7. Touch "LANG 1(1)" to select the 1st Language. Touch "LANG (2)" to select the 2nd Language.



- 8. Touch the appropriate button on the screen (or press the number on the 10-keypad) to select a language as the 1st (or 2nd) language.
 - If a language is already selected, it will show in reverse.
 - Touching "Exit (0)" returns you to the previous screen.
- 9. If you do not see the language that you want to select, touch "↑ (7)" or "↓ (9)" on the screen (or press the "7" or "9" key) to show more choices.

The Download Screen opens after you select a language.

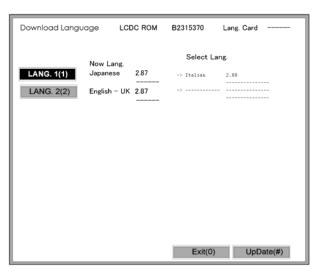
The 1st or 2nd language selected for updating shows.

The following show to right of the selection:

- 1. The first column shows the language currently selected.
- 2. The 2nd column shows the language selected to replace that language.

The example below shows that the download will replace "Japanese" with "Italian" as the 1st language.





10. Touch "Update(#)" on the screen (or press 🖱) to start the download.

Another screen with a progress bar does not show when the language is downloading.

The following occur at the time the language is downloading:

- The operation panel switches off.
- The LED on the power on key flashes rapidly.
- 11. After the message of installation completed has shown on the LCD, switch the copier main power switch off. Then remove the SD card from the slot.
- 12. Switch the copier main power switch on to resume normal operation.

Reboot/System Setting Reset

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.

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.



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

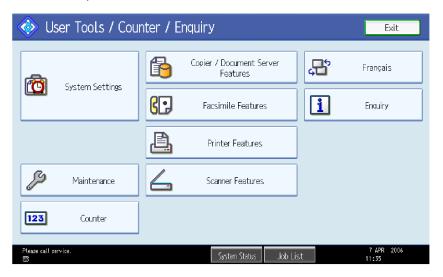
Use the following procedure to reset the copy settings in the UP mode to their defaults.

- Press User Tools/Counter
- 2. Hold down @ and then press Copier/Document Server Settings.





• 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.

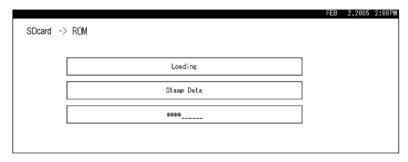
Downloading Stamp Data

The stamp data should be downloaded from the controller firmware to the hard disks at the following times:

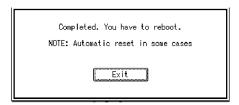
• After the hard disks have been replaced.

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

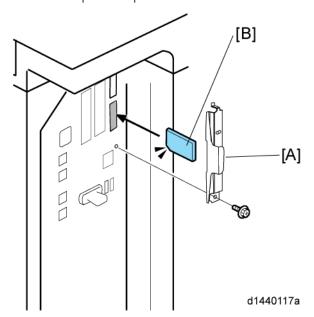
NVRAM Data Upload/Download

Uploading Content of NVRAM to an SD card

Do the following procedure to upload SP code settings from NVRAM to an SD card.



- 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
- 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 [A] (*x 1).
- 4. Insert the SD card [B] 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 coped to an NVRAM folder on the SD card when the upload procedure is finished. The file is saved to the path and the following filename:

NVRAM\<serial number>.NV

Here is an example with Serial Number "K5000017114":

NVRAM\K5000017114.NV

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.

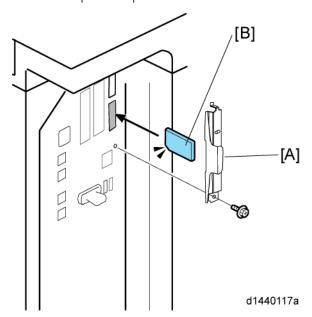


• You can upload NVRAM data from more than one machine to the same SD card.

Downloading an SD Card to NVRAM

Do the following procedure to download SP data from an SD card to the NVRAM in the machine.

- The NVRAM data down load 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 [A] (* x 1).
- 3. Insert the SD card [B] 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.





 The serial number of the file on the SD card must match the serial number of the machine for the NVRAM data to download successfully. The download fails if the serial numbers do not match.

This procedure does not download the following data to the NVRAM:

- Total Count
- C/O, P/O Count

Address Book Upload/Download

Information List

The following information is possible to be uploaded and downloaded.

Information			
 Registration No. User Code E-mail Protection Code Fax Destination Fax Option Group Name Key Display 	 Select Title Folder Local Authentication Folder Authentication Account ACL New Document Initial ACL LDAP Authentication 		

Download

- 1. Prepare a formatted SD card.
- 2. Make sure that the write-protection on the SD card is off.
- 3. Turn off the main power switch of the main machine.
- 4. Remove the SD slot cover at the left rear side of the machine (\mathcal{F} x 1).
- 5. Install the SD card into the SD card slot 2 (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 form the SD card slot 2.
- 11. Install the SD slot cover.



- 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

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 (\mathcal{F} x 1).
- 3. Install the SD card, which has already been uploaded, into the SD card slot 2.
- 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 form the SD card slot 2.
- 9. Install the SD slot cover.



- 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.

Using the Debug Log

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:

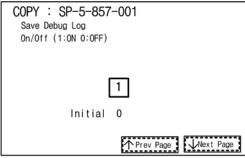
- Switching on the debug feature so error information is saved directly to the HDD for later retrieval.
- Copying the error information from the HDD to an SD card.

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.

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".

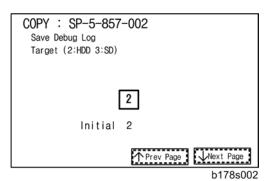


h178s001

3. On the control panel keypad, press "1". Then press . This switches the Save Debug Log feature on.



• 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 ...



- 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.

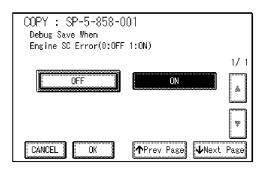


• More than one event can be selected.

Example 1: To Select Items 1, 2, 4

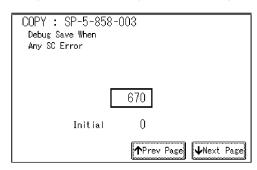
Touch the appropriate items(s). Press "ON" for each selection. This example shows "Engine SC Error" selected.





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.





- For details about SC code numbers, please refer to the SC tables in Section 4. "Troubleshooting".
- 6. Select one or more memory modules for reading and recording debug information. Touch "5859".

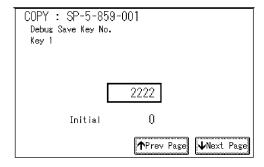
Under "5859" press the necessary key item for the module that you want to record.

Enter the appropriate 4-digit number. Then press ...



• 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.



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.	Сору	Printer	Scanner	Web	
1		2222 (S	iCS)		
2		14000 (SRM)		
3		256 (IN	ΛH)		
4		1000 (ECS)			
5		1025 (MCS)			
6	4848 (COPY) 4400 (GPS) 5375 (Scan) 5682 (NFA)				
7	2224 (IPU) 4500 (PDL) 5682 (NFA) 6600 (WebDB)				
8	4600 (GPS-PM) 3000 (UCS) 3300 (PTS)				
9	2000 (NCS) 2000 (NCS) 6666 (WebSys)				
10	2224 (IPU) 4126 (DCS) 2000 (NCS)				



• 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 Langua		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)

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 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.

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 (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.

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.



- 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.

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.

Card Save Function

Overview

Card Save:

• The Card Save function is used to save print jobs received by the printer on an SD card with no print output. Card Save mode is toggled using printer Bit Switch #1 bit number 4. Card Save will remain enabled until the SD card becomes full, or until all file names have been used.

- Captures are stored on the SD card in the folder /prt/cardsave. File names are assigned
 sequentially from PRT00000.prn to PRT99999.prn. An additional file PRT.CTL will be created. This
 file contains a list of all files created on the card by the card save function.
- Previously stored files on the SD card can be overwritten or left intact. Card Save SD has "Add" and "New" menu items.
 - Card Save (Add): Appends files to the SD Card. Does not overwrite existing files. If the card
 becomes full or if all file names are used, an error will be displayed on the operation panel.
 Subsequent jobs will not be stored.
 - Card Save (New): Overwrites files in the card's /prt/cardsave directory.

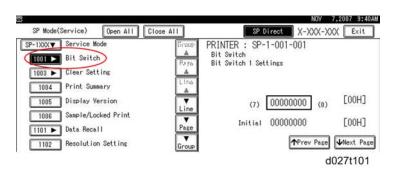
Limitation:

Card Save cannot be used with PJL Status Readback commands. PJL Status Readbacks will not
work. In addition they will cause the Card Save to fail.

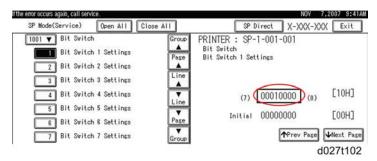
Procedure

- 1. Turn the main power switch OFF.
- 2. Insert the SD card into slot 2. Then turn the power ON.
- 3. Enter SP mode.
- 4. Select the "Printer Sp".
- 5. Select SP-1001 "Bit Switch".

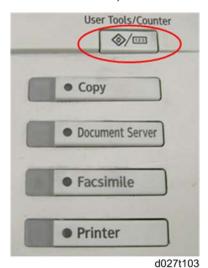




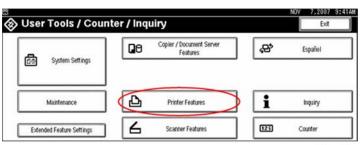
6. Select "Bit Switch 1 Settings" and use the numeric keypad to turn bit 4 ON and then press the "#" button to register the change. The result should look like: 00010000. By doing this, Card Save option will appear in the "List/Test Print" menu.



- 7. Press "Exit" to exit SP Mode.
- 8. Press the "User Tools/Counter" button.

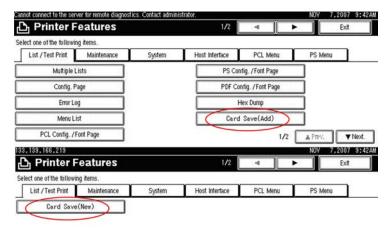


9. Select "Printer Features".



d027t105

 Card Save (Add) and Card Save (New) should be displayed on the screen. Select Card Save (Add) or Card Save (New).



2/2 ▲ Prev. ▼ Next d027t106

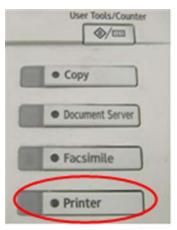
11. Press "OK" and then exit the "User Tools/Counter" menu.



d027t107

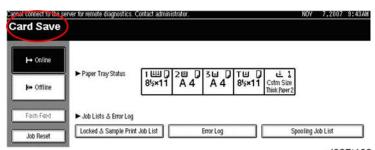
12. Press the "Printer" button.





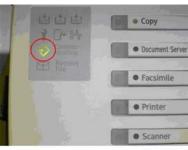
d027t108

13. Card Save should be displayed in the top left of the display panel.



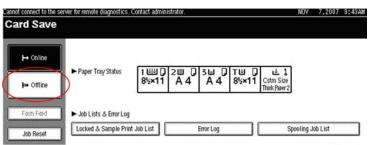
d027t109

14. Send a job to the printer. The Communicating light should start blinking as shown below.



d027t110

- 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" button to exit Card Save mode.



d027t111

- 17. Change the Bit Switch Settings back to the default **0000000**. Press the "#" button in the numeric keypad to register the changes.
- 18. Remove the SD card after the main power switch is turned off.

Error Messages

Card Save error messages:

- Init error: A card save process (e.g. card detection, change to kernel mode) failed to initialize.
- Card not found: Card cannot be detected in the slot.
- No memory: Insufficient working memory to process the job.
- Write error: Failed to write to the card.
- Other error: An unknown error occurred.

If an error occurs, pressing "OK" will cause the device to discard the job and return to the ready state.

5

SMC List Card Save Function

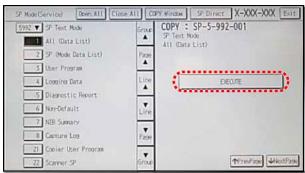
Overview

SMC List Card Save

 The SMC List Card Save (SP Text Mode) function is used to save the SMC list as CSV files to the SD-card inserted into service slot 2 or the operation panel card slot.

Procedure

- 1. Turn the main power switch OFF.
- 2. Insert the SD card into slot 2 or the operation panel SD-card slot. Then turn the power ON.
- 3. Enter SP mode.
- 4. Select "Copy SP".



d1440127

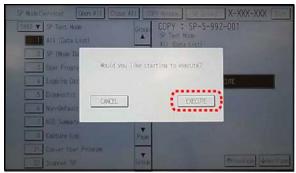
- 5. Select SP-5992 "SP Text Mode".
- 6. Select a detail SP number shown below to save data on the SD card.

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	

Detail No.	SMC Categories to Save	
005	Diagnostic Report	
006	Non-Default	
007	NIB Summary	
008	Capture Log	
021	Copier User Program	
022	Scanner SP	
023	023 Scanner User Program	
024	4 SDK/J Summary	
025 SDK/J Application Info		
026	Printer SP	

7. Press [EXECUTE].



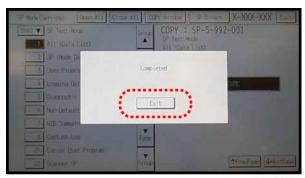
d1440128

8. Press [EXECUTE] again to start. Press [CANCEL] to cancel the saving.



d1440130

9. "It is executing it" is shown on the screen while executing.



d1440129

10. Wait for 2 to 3 minutes until "Completed" is shown.

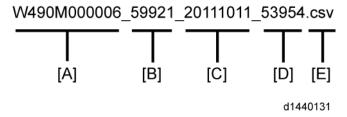


- The SMC list saving may take from 2 to 3 minutes to complete.
- Press [CANCEL] to abort executing.
- 11. Press [Exit] to exit from SP mode.

File Names of the Saved SMC Lists

The SMC list data saved on the SD-card will be named automatically. The file naming rules are as follows.

Example:



A:

Machine serial number (fixed for each machine)

B:

SP number saved in this file.

First four digits (5992) in this part are fixed. The other one or two digits are the detail SP number. 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.



 A folder named by the machine serial number will be created on the SD card when this function is executed.

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.

6. Troubleshooting

Service Call

Service Call Conditions

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.
RTB 31 Correction	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.
	В	The error involves one or some specific units. The machine operates as usual, excluding the related units.	Turn the operation switch off and on.
		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.



• If the problem concerns electrical circuit boards, first disconnect then reconnect the connectors before you replace the PCBs.

SC Code Classification

The table shows the classification of the SC codes:

Class 1	Section	SC Code	Detailed section
1XX	Camping	100 -	Scanner
IXX	Scanning	190 -	Unique for a specific model
		200 -	Polygon motor
		220 -	Synchronization control
2XX	1	230 -	FGATE signal related
2//	Laser exposure	240 -	LD control
		280 -	Unique for a specific model
		290 -	Shutter
	Image development 1	300 -	Charge
3XX		330 -	Drum potential
344		350 -	Development
		380 -	Unique for a specific model
		400 -	Image transfer
	Image development 2	420 -	Paper separation
4XX		430 -	Cleaning
4^^		440 -	Around drum
		460 -	Unit
		480 -	Others

О

Class 1	Section	SC Code	Detailed section
		500 -	Paper feed
5XX	Paper feed / Fusing	515 -	Duplex
		520 -	Paper transport
		530 -	Fan motor
5XX	Paper food / Fusing	540 -	Fusing
3//	Paper feed / Fusing	560 -	Others
		570 -	Unique for a specific model
		600 -	Electrical counters
		620 -	Mechanical counters
	Communication	630 -	Account control
6XX		640 -	CSS
		650 -	Network
		670 -	Internal data processing
		680 -	Unique for a specific model
		700 -	Original handling
7XX	Peripherals	720 -	Two-tray finisher
		740 -	Booklet finisher
		800 -	Error after ready condition
ovv	Controller	820 -	Diagnostics error
8XX		860 -	Hard disk
		880 -	Unique for a specific model
		900 -	Counter
9XX	Others	920 -	Memory
		990 -	Others

Service Call Tables - 1

SC1xx: Scanning

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	Exposure lamp error
		The peak white level is less than 64/255 digits (8 bits) when scanning the shading plate.
		Exposure lamp defective
		LED relay board defective
		Exposure lamp connector defective
101		Standard white plate dirty
		Scanner mirror or scanner lens out of position or dirty
		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 LED relay board.
		5. Replace the scanner mirror(s) or scanner lens.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	Scanner home position error 1
		The scanner home position sensor does not detect the "OFF" condition during operation.
		Scanner motor driver defective
		Scanner motor defective
120		Harness between SIO board and scanner motor disconnected
120		Scanner HP sensor defective
		Harness between SIO and HP sensor disconnected
		Check the cable connection between the SIO board and scanner motor.
		2. Check the cable connection between the SIO and HP sensor.
		3. Replace the scanner motor.
		4. Replace the HP sensor.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	Scanner home position error 2
		The scanner home position sensor does not detect the "ON" condition during operation.
		Scanner motor driver defective
		Scanner motor defective
121		Harness between SIO board and scanner motor disconnected
121		Scanner HP sensor defective
		Harness between SIO and HP sensor disconnected
		Check the cable connection between the SIO board and scanner motor.
		2. Check the cable connection between the SIO and HP sensor.
		3. Replace the scanner motor.
		4. Replace the HP sensor.

No.	Туре	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.
		Harness disconnected Defective SBU
		Check the cable connection Replace the SBU.

No.	Туре	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.
		Dirty exposure glass or optics section
		SBU board defective
		Exposure lamp defective
		LED relay board defective
		Scanner motor defective
		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 IPU.
		4. Replace the exposure lamp.
		5. Replace the scanner motor.
		6. Replace the SBU board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	SBU communication error
144		The SBU connection cannot be detected at power on or recovery from the energy save mode.
		Defective SBU
		Defective harness
		Defective detection port on the BCU
		1. Replace the harness.
		2. Replace the SBU.
		3. Replace the BCU.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
161		IPU error
	D	The error result of self-diagnostic by the ASIC on the IPU is detected.
		Defective IPU
-01		Defective connection between IPU and SBU
		1. Check the connection between IPU and SBU.
		2. Replace the IPU.
	D	The machine detects an error during an access to the Ri.
-02		Defective IPU board
		Replace the IPU board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	Copy Data Security Unit error
		The copy data security board is not detected when the copy data security function is set "ON" with the initial setting.
165		A device check error occurs when the copy data security function is set "ON" with the initial setting.
		 Incorrect installation of the copy data security board Defective copy data security board
		Reinstall the copy data security board. Replace the copy data security board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	Serial Number Mismatch
		Serial number stored in the memory does not have the correct code.
195		NVRAM defective BCU replaced without original NVRAM
		 Check the serial number with SP5-811-002. If the stored serial number is incorrect, contact your supervisor.

SC 2xx: Exposure

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	Polygon motor error 1: ON timeout
		The polygon mirror motor does not reach the targeted operating speed within the specified time after turning on or changing speed
202		 Defective or disconnected harness to polygon motor driver board Defective polygon motor driver board Defective polygon motor.
		 Replace the polygon motor. Replace the laser optics housing unit. Replace the harness. Replace the IPU.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
203	D	Polygon motor error 2: OFF timeout
		The polygon mirror motor does leave the READY status within 3 seconds after the polygon motor switches off.
		 Disconnected or defective harness to polygon motor driver board Defective polygon motor driver board Defective polygon motor
		Check or replace the harness. Replace the polygon motor. Replace the IPU.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	Polygon motor error 3: XSCRDY signal error
		The SCRDY_N signal goes HIGH (inactive) while the laser diode is firing.
		Disconnected or defective harness to polygon motor driver board
204		Defective polygon motor
		Defective polygon motor driver board
		1. Check or replace the harness.
		2. Replace the polygon motor.
		3. Replace the IPU.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
210 -01	С	Laser synchronizing detection error: end position [K]
-02	С	Laser synchronizing detection error: end position [C]
-03	С	Laser synchronizing detection error: end position [M]
-04	С	Laser synchronizing detection error: end position [Y]
		The laser synchronizing detection signal for the end position of LDB [K], [C], [M], [Y] is not detected for one second after the LDB unit turned on when detecting the main scan magnification.
		 Disconnected or defective harness to synchronizing detector for end position Defective synchronizing detector board Defective LD board or driver Defective IPU
		 Check the connectors. Replace the harness of the LD board. Replace the laser optics housing unit. Replace the IPU.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
220 -01	D	Laser synchronizing detection error: start position [K]: LD1
-02	D	Laser synchronizing detection error: start position [C]: LD1
-03	D	Laser synchronizing detection error: start position [M]: LD1
-04	D	Laser synchronizing detection error: start position [Y]: LD1
		The laser synchronizing detection signal for the start position of the LDB [K], [C], [M], [Y] is not output for two seconds after LDB unit turns on while the polygon motor is rotating normally.
		Disconnected cable from the laser synchronizing detection unit or defective connection
		Defective laser synchronizing detector
		Defective LDB
		Defective IPU
		1. Check the connectors.
		2. Replace the laser-synchronizing detector.
		3. Replace the LDB.
		4. Replace the IPU.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
230	D	FGATE ON error: K
-02	D	FGATE ON error: C
-03	D	FGATE ON error: M
-04	D	FGATE ON error: Y

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		The PFGATE ON signal does not assert within 5 seconds after processing the image in normal job or MUSIC for start position [K], [C], [M], [Y].
		Defective ASIC (Lupus)
		Poor connection between controller and IPU
		Defective IPU
		Check the connection between the controller board and the IPU.
		2. Replace the IPU.
		3. Replace the controller board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
231 -01	D	FGATE OFF error: K
-02	D	FGATE OFF error: C
-03	D	FGATE OFF error: M
-04	D	FGATE OFF error: Y
		 The PFGATE ON signal still asserts within 5 seconds after processing the image in normal job or MUSIC for end position [K], [C], [M], [Y]. The PFGATE ON signal still asserts when the next job starts.
		See SC 230 for troubleshooting details.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
240 -01	С	LD error: K
-02	С	LD error: C
-03	С	LD error: M
-04	С	LD error: Y

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		The IPU detects LDB error a few times consecutively when LDB unit turns on after LDB initialization.
		Worn-out LD Disconnected or broken harness of the LD
		Replace the harness of the LD.
		2. Replace the laser optics housing unit.
		3. Replace the IPU.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		GAVD communication error
		The 12C bus device ID is not identified during initialization.
	D	A device-status error occurs during 12C bus communication.
		The 12C bus communication is not established due to an error other than a buffer shortage.
		Loose connection
270		Defective GAVD
		Defective BCU
		Defective controller board
		1. Turn the power switch off and on.
		2. Check the cable connection.
		3. Replace the laser optics-housing unit.
		4. Replace the BCU.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		Line position adjustment (MUSIC) error
		Line position adjustment fails four consecutive times.
		Pattern sampling error (insufficient image density)
		Defective ID sensors for the line position adjustment
		Defective image transfer belt unit
	D	Defective PCDU(s)
285		Defective laser optics housing unit
		 Check and reinstall the image transfer belt unit and PCDUs.
		2. Check if each toner bottle has enough toner.
		3. Replace the ID sensor.
		4. Replace the image transfer belt unit.
		5. Replace the PCDU(s).
		6. Replace the laser optics housing unit.

SC3xx: Image Processing – 1

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
312 -01	D	Charge P.P. output error: K
-02	D	Charge P.P. output error: C
-03	D	Charge P.P. output error: M
-04	D	Charge P.P. output error: Y

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		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 been turned on.
		Disconnected or broken harnesses of the HVPS
		Defective PCDU
		Defective HVPS
		1. Check or replace the harnesses of the HVPS.
		2. Reinstall or replace the PCDU.
		3. Replace the HVPS.

SC3xx: Image Processing – 2

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
360 -01	D	TD sensor adjustment error: K
-02	D	TD sensor adjustment error: C
-03	D	TD sensor adjustment error: M
-04	D	TD sensor adjustment error: Y
		During TD sensor initialization, the output value of the black, cyan, magenta, or yellow TD sensor is not within the range of the specified value with SP3-238-001 to -004 (default: $2.5V$) \pm 0.2V
		 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 Remove the heat seal from each PCDU. Replace the defective PCDU.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
361 -01	D	TD sensor (Vt high) error 1: K
-02	D	TD sensor (Vt high) error 1: C
-03	D	TD sensor (Vt high) error 1: M
-04	D	TD sensor (Vt high) error 1: Y
		 The Vt value of the black, magenta, cyan, or yellow TD sensor exceeds the specified value (default: 4.7V) with SP3-020-002 for twenty counts. The [Vt - Vtref] value of the black, magenta, cyan, or yellow TD sensor exceeds the specified value (default: 5.0V) with SP3-020-001.
-	-	 Black, magenta, cyan, or yellow TD sensor disconnected Harness between TD sensor and PCDU defective Defective TD sensor.
		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.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
362 -01	D	TD sensor (Vt low) error 2: K
-02	D	TD sensor (Vt low) error 2: C
-03	D	TD sensor (Vt low) error 2: M
-04	D	TD sensor (Vt low) error 2: Y

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		The Vt value of the black, magenta, cyan, or yellow TD sensor is below the specified value with SP3-020-004 (default: 0.5V) for 10 counts.
		 TD sensor harness disconnected, loose, defective A drawer connector disconnected, loose, defective TD sensor defective
		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.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	ID sensor adjustment error
370		When the Vsg error counter reaches "3", the machine detects "SC370". The Vsg error counter counts "1" when the Vsg detected by ID sensor is more than the value (default: 4.5V) specified with SP3-324-005 or less than the value (default: 3.5V) specified with SP3-324-006.
		Dirty or defective ID sensor ID sensor detection surface dirty
		 Check the harness of the ID sensor. Clean or replace the ID sensor. Note
		 After replacing the ID sensor, input the ID sensor correction coefficient with SP3362-013 to -018. For details, refer to "ID sensor board" in the Replacement and Adjustment section.
		3. Replace the BCU.
		4. Replace the ITB unit.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
390 -01	С	Drum gear position sensor error: K

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
396 -01	D	Drum/Development motor error: K
-02	D	Drum/Development motor error: C
-03	D	Drum/Development motor error: M
-04	D	Drum/Development motor error: Y
		The machine detects a High signal from the drum/development motor for 2 seconds after the drum/development motor turned on.
		 Overload on the drum/development motor Defective drum/development motor Defective harness Shorted 24 V fuse on the PSU Defective interlock system
		 Check or replace the harness. Replace the drum/development motor. Replace the 24V fuse on the PSU.

SC4xx: Image Processing - 3

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		Image transfer unit motor error
		The motor LOCK signal is not detected for more than two seconds while the motor START signal is on.
441	D	Motor overload Defective image transfer unit motor
		Replace the image transfer belt unit. Replace the IOB.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		Image transfer belt contact motor error
		The image transfer belt contact sensor does not detect the movement of actuator at the sensor while the polygon motor rotates.
		Dirty image transfer belt contact sensor
442	D	Defective image transfer belt contact motor
		Disconnected connector of image transfer belt contact sensor or motor
		Disconnected cable
		Replace the image transfer belt contact sensor.
		Replace the image transfer belt contact motor.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	С	Image transfer unit error
		The machine detects the encoder sensor error.
		Defective encoder sensor
443		Image transfer unit installation error
		Defective image transfer unit motor
		Check if the image transfer unit is correctly set.
		2. Replace the image transfer unit motor.
		3. Replace the image transfer unit.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		Paper transfer unit contact error
		The paper transfer unit contact sensor does not detect the movement of actuator at the sensor while the polygon motor rotates.
		Defective paper transfer unit contact sensor
		Defective paper transfer unit contact motor
452	D	Broken +24V fuse on PSU
432		Defective IOB
		1. Check the connection between the paper transfer unit and PSU.
		2. Replace the paper transfer unit contact sensor.
		3. Replace the paper transfer unit contact motor.
		4. Replace the +24V fuse on the PSU.
		5. Replace the IOB.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		Separation power pack output error
		An interrupt checks the status of the power pack every 20 ms. This SC is issued if the BCU detects a short in the power pack 10 times at D(ac).
460	D	 Damaged insulation on the high-voltage supply cable Damaged insulation around the high-voltage power supply.
		Replace the high-voltage supply cable.
		Replace the high-voltage power supply unit.
		3. Replace the IOB.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		Toner transport motor error
		The LOCK signal is not detected for 2 seconds when the transport motor turns on.
		Toner transport motor overload
		Disconnected or broken harness
		Defective toner transport motor
490	D	Opened +24V fuse on the PSU
		Defective interlock switch
		1. Check or replace the harness.
		2. Replace the toner transport motor.
		3. Replace the +24V fuse on the PSU.
		4. Replace the interlock switch.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	High voltage power: Drum/ development bias output error
		An error signal is detected for 0.2 seconds when charging the drum or development.
491		 High voltage leak Broken harness Defective drum unit or development unit Defective high voltage supply unit
		 Check or replace the harness. Replace the drum unit or paper transfer unit. Replace the high voltage supply unit.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		High voltage power: Image transfer/paper transfer bias output error
		An error signal is detected for 0.2 seconds when charging the separation, image transfer bet or paper transfer roller.
492	С	 High voltage leak Broken harness Defective image transfer belt unit or paper transfer unit Defective high voltage supply unit 1. Check or replace the harness.
		Replace the image transfer belt unit or paper transfer unit. Replace the high voltage supply unit.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
498	С	Temperature and humidity sensor error 2 • The thermistor output of the temperature sensor was not within the prescribed
		range (more than 0.5 V to less than 3.0 V). • The thermistor output of the humidity sensor was not within the prescribed range (less than 2.4V).
		Temperature and humidity sensor harness disconnected, loose, defective Temperature and humidity sensor defective
		Check the connector and harness. Replace the temperature/humidity sensor.

SC5xx: Paper Feed and Fusing

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
501	В	Paper Tray 1 error
502	В	Paper Tray 2 error

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		When the tray lift motor rotates counterclockwise, (if the upper limit is not detected within 10 seconds), the machine asks the user to reset the tray.
		 When the tray lift motor rotates clockwise, (if the upper limit is not detected within 1.5 seconds), the machine asks the user to reset the tray.
		If one of these conditions occurs three consecutive times, the SC is generated.
		Disconnected or defective paper lift sensor
		Disconnected or defective tray lift motor
		Defective bottom plate lift mechanism
		Too much paper in the tray
		Defective IOB
		Check if the paper is not loaded too much.
		2. Check if the bottom plate smoothly moves up and down manually.
		3. Check and / or replace the tray lift motor / paper lift sensor.
		4. Replace the IOB.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		Tray 3 error (Paper Feed Unit or LCT)
		This SC is generated if the following condition occurs.
		For the paper feed unit:
		When the tray lift motor is turned on, the upper limit is not detected within 15 seconds
		For the LCT:
		The upper or lower limit is not detected within 8 seconds when the tray lift motor is turned on to lift or lower the tray.
		This SC is generated too if the following condition occurs 3 consecutive times.
		For the paper feed unit:
		When the tray lowers, the tray lift sensor does not go off within 1.5 sec.
	В	For the LCT:
503		When the main switch is turned on or when the LCT is set, if the end fence is not in the home position (home position sensor ON), the tray lift motor stops.
303		If the upper limit does not go off for 1.5 seconds even the tray lift motor turns on to lower the tray after the upper limit has been detected at power on.
		For the paper feed unit:
		Defective tray lift motor or connector disconnection
		Defective lift sensor or connector disconnection
		For the LCT:
		Defective stack transport clutch or connector disconnection
		Defective tray motor or connector disconnection
		Defective end fence home position sensor or connector disconnection
		Defective upper limit sensor or connector disconnection
		Defective tray lift motor or connector disconnection
		1. Check the cable connections.
		2. Check and/or replace the defective component.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		Tray 4 error (Paper Feed Unit or LCT)
		This SC is generated if the following condition occurs.
		For the two-tray paper feed unit
		When the tray lift motor is turned on, the upper limit is not detected within 15 seconds.
		For the LCT
		If the upper or lower limit is not detected within 8 seconds when the tray lift motor is turned on to lift up or lower the tray.
		This SC is generated too if the following condition occurs 3 consecutive times.
		For the two-tray paper feed unit
		When the tray lowers, the tray lift sensor does not go off within 1.5 sec.
		For the LCT
504	В	If the upper limit does not go off for 1.5 seconds even the tray lift motor turns on to lower the tray after the upper limit has been detected at power on.
		For the two-tray paper feed unit:
		Defective tray lift motor or connector disconnection
		Defective lift sensor or connector disconnection
		For the LCT:
		Defective stack transport clutch or connector disconnection
		Defective tray motor or connector disconnection
		Defective end fence home position sensor or connector disconnection
		Defective upper limit sensor or connector disconnection
		Defective tray lift motor or connector disconnection
		1. Check the cable connections.
		2. Check and/or replace the defective component.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		Tray 5 error (Optional Paper Feed Unit or LCT)
		This SC is generated if the following condition occurs.
		For the two-tray paper feed unit
	В	When the tray lift motor is turned on, the upper limit is not detected within 15 seconds.
		For the LCT 1200-sheet
		If the upper or lower limit is not detected within 8 seconds when the tray lift motor is turned on to lift up or lower the tray.
505		This SC is generated too if the following condition occurs 3 consecutive times.
		For the two-tray paper feed unit
		When the tray lowers, the tray lift sensor does not go off within 1.5 sec.
		For the LCT 1200-sheet
		If the upper limit does not go off for 1.5 seconds even the tray lift motor turns on to lower the tray after the upper limit has been detected at power on.
		Defective tray lift motor or connector disconnection
		Defective lift sensor or connector disconnection
		1. Turn the power switch off and on.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
520 -01		Registration motor error
-02		Paper feed motor error
	С	The IOB does not receive the lock signal.
		Motor overload
		Defective registration motor
		Disconnected or broken harness
		Defective IOB
		1. Check the cable connection.
		2. Replace the harness.
		3. Replace the registration motor.
		4. Replace the IOB.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		Fusing fan error
		The IOB does not receive the lock signal 100 ms after turning on the fusing fan.
530	D	Defective fusing fan motor or connector disconnection
		Defective IOB
		 Check the connector and/or replace the fusing fan motor.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	QSU fan error
531		The machine does not detect the fan motor lock signal for 100 ms while the QSU fan turns on.
		 Disconnected harness Overload on the QSU fan motor Defective QSU fan motor Defective IOB
		Check or replace the harness. Replace the QSU fan.
		Replace the QSU fan. Replace the IOB.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
532 -01	D	Ventilation fan (at the left side of the machine) motor error: front end
-02	D	Ventilation fan (at the left side of the machine) motor error: rear end
		The IOB does not receive the lock signal for 100 ms after turning on the ventilation fan motor in the front end or rear end.
		 Defective ventilation fan motor in the front end or rear end Defective IOB
		 Replace the ventilation fan (at the left side of the machine) motor in the front end or rear end. Replace the IOB.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	Second duct fan error 1
		The machine does not detect the fan motor lock signal for 100 ms while the second duct fan turns on.
		Disconnected harness
533		Overload on the second duct fan motor
-01		Defective second duct motor
		Defective IOB
		1. Check or replace the harness.
		2. Replace the second duct fan.
		3. Replace the IOB.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	Third duct fan error
534 -01		The machine does not detect the fan motor lock signal for 100 ms while the third duct fan turns on.
		 Disconnected harness Overload on the third duct fan motor Defective third duct motor Defective IOB
		1. Check or replace the harness.
		Replace the third duct fan. Replace the IOB.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	Paper exit fan error
535		The machine does not detect the fan motor lock signal for 100 ms while the paper exit fan turns on.
		 Disconnected harness Overload on the paper exit fan motor Defective paper exit motor Defective IOB
		Check or replace the harness. Replace the paper exit fan.
		3. Replace the IOB.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	AC controller board fan error
538		The machine does not detect the fan motor lock signal for 100 ms while the AC controller board fan turns on.
		 Disconnected harness Overload on the AC controller board fan motor Defective AC controller board fan motor Defective IOB
		 Check or replace the harness. Replace the AC controller board fan.
		 Replace the AC controller board fan. Replace the IOB.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)	
	D	Fusing/Paper exit motor error	
		The IOB does not receive the lock signal 100 ms after turning on the fusing/paper exit motor.	
		Motor overload	
540		Defective fusing/paper exit motor	
		Shorted +24V fuse on the PSU	
		1. Check or replace the harness.	
		2. Replace the fusing/paper exit motor.	
		3. Replace the +24V fuse on the PSU.	

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)	
	A	Heating roller thermopile error	
		The temperature detected by the heating roller thermopile does not reach 0°C for 6 seconds.	
541		 Loose connection of the heating roller thermopile Defective heating roller thermopile Defective thermopile 	
		Check if the heating roller thermopile is firmly connected. Replace the heating roller thermopile.	

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)	
	A	Heating roller warm-up error 1	
		• The heating roller temperature does not reach 80°C for 20 seconds after the inverter turned on.	
542		The center temperature of the heating roller does not reach the ready temperature for 90 seconds after the fusing lamp turned on.	
		Dirty or defective thermopile	
		1. Check if the heating roller thermopile is firmly connected.	
		2. Replace the thermopile.	

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)	
543	A	Heating roller overheat: Center (software error)	
		The detected fusing temperature stays at 215°C for 1 second for 10 consecutive times.	
		Defective AC controller board	
		Defective IOB	
		Defective IPU	
		Replace the AC controller board.	
		2. Replace the IOB.	
		3. Replace the IPU.	

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		Heating roller overheat: Center (hardware error)
ections		During stand-by mode or a print job, the detected heating roller temperature reaches 220°C.
		Defective AC controller board
		Defective IOB
		Defective IPU
		Defective fusing control system
544	A	Related SC code: SC 543
		1. Replace the AC controller board.
		2. Replace the IOB.
		3. Replace the IPU.
		4. Replace the fusing unit and reset the counter of the fusing unit using SP3-902-014.
		₩ Important
		The fusing unit cannot be used because an abnormal high temperature was detected.
		 After this SC occurs, the counter reset of the fusing unit should be done manually using SP3-902-014 because the counter reset is not done automatically.
	ections	ections

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)	
	Α	Fusing Heater error: Center	
		The fusing heater keeps full power for 23 seconds or more.	
545		Defective thermistorsDisconnected cables	
		 Replace the thermistors. Check and replace the cables. 	

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)	
	D	Zero cross error	
		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 3 seconds even though the heater relay is on after turning on the main power or closing the front door. 	
547		 The detection error occurs twice or more in the 11 zero cross signal detections. This error is defined when the detected zero cross signal is 39 or less. 	
34/		Defective fusing relay	
		Defective fusing relay circuit	
		Shorted +24V fuse on the PSU	
		Unstable power supply	
		1. Check the power supply source.	
		2. Replace the +24V fuse on the PSU.	
		3. Replace the AC controller board.	

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)	
	A	Fusing heater connection error	
		The heating roller rotation sensor detects the target temperature as 50°C for 5 seconds or more after the fusing/paper exit motor has turned on.	
549		Broken heater cables Defective connectors	
		Check the cable connection. Replace the heater cables.	

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)	
	A	Heating roller thermistor error	
		The temperature at the end of the heating roller measured by the heating roller thermistor does not reach 0°C for 7 seconds.	
551		Loose connection of pressure roller thermistor Defective heating roller thermistor	
		Related SC code: SC 541	
		Check that the heating roller thermistor is firmly connected.	
		2. Replace the heating roller thermistor.	

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)	
	A	Heating roller warm-up error 2	
		• The heating roller temperature does not reach 80°C for 20 seconds after the inverter turned on.	
		The temperature at the end of the heating roller does not reach the ready temperature for 89 seconds after the fusing lamp turned on.	
552		Defective heating roller thermistor Defective inverter	
		Related SC code: SC 542	
		 Check if the heating roller thermistor is firmly connected. Replace the inverter. 	

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)		
	Α	Heating roller overheat: End (software error)		
		The detected heating roller temperature stays at 215°C or more for 1 second for 10 consecutive times.		
553		 Defective AC controller board Defective IOB Defective IPU 		
		Related SC code: SC 543		
		 Replace the AC controller board. Replace the IOB. 		
		3. Replace the IPU.		

6	No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
SC554	ections		Heating roller overheat : End (hardware error)
RTB 31: Corre RTB 39			The heating roller thermistor detects 220°C or more.
			Defective AC controller board
			Defective IOB
	554	Α	Defective IPU
			Defective fusing control system
			1. Replace the AC controller board.
			2. Replace the IOB.
			3. Replace the IPU.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)	
	A	Fusing Heater error: End	
		The fusing heater keeps full power for 19 seconds or more.	
555		Defective thermistors Disconnected cables	
		Replace the thermistors. Check and replace the cables.	

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		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 SC557 occurs.
557	С	Noise (High frequency) Defective AC control board
		Check the power supply source. Replace the AC control board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)	
		Consecutive fusing jam	
		The paper jam counter for the fusing unit reaches 3 times. The paper jam counter is cleared if the paper is fed correctly.	
559	А	This SC is activated only when SP1-159-001 is set to "1" (default "0").	
		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.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)	
		Pressure roller thermistor error: End	
		The temperature at the end of the pressure roller measured by the thermistor does not reach 0°C for 37 seconds.	
561	A	Loose connection of the thermistorDefective thermistor	
		 Check if the thermistor is firmly connected. Replace the thermistor at the end of the pressure roller. 	

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)	
		Pressure roller thermistor warm-up error: End	
		The heating roller rotation sensor does not reach 20°C for 100 seconds after the fusing/paper exit motor has turned on with sheets of 257 mm or more in width.	
562	А	Dirty thermopile lensesDefective thermistor	
		1. Clean the thermopile lenses.	
		2. Replace the thermistor at the end of the pressure roller.	

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)	
		Pressure roller overheat: End (software error)	
		The detected pressure roller temperature stays at 215°C or more for 1 second for 10 consecutive times.	
		Defective AC controller board	
563	Α	Defective IOB	
		Defective IPU	
		Replace the AC controller board.	
		2. Replace the IOB.	
		3. Replace the IPU.	

	No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
SC564 RTB 31: Corre	ections		Pressure roller overheat: End (hardware error)
RTB 39			The thermistor detects 220°C or more.
			Defective AC controller board
			Defective IOB
			Defective IPU
			Defective fusing control system
	564	А	1. Replace the AC controller board.
			2. Replace the IOB.
			3. Replace the IPU.
			4. Replace the fusing unit and reset the counter of the fusing unit using SP3-902-014.
			€ Important
			 The fusing unit cannot be used because an abnormal high temperature was detected.
			 After this SC occurs, the counter reset of the fusing unit should be done manually using SP3-902-014 because the counter reset is not done automatically.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)	
569	D	Pressure roller contact sensor error Pressure roller contact sensor does not detect the pressure roller position three times. • Broken or defective pressure roller contact sensor • Deformed or broken pressure roller contact sensor feeler • Defective pressure roller contact motor • Defective fusing unit 1. Check or replace the harness of the pressure roller contact sensor. 2. Replace the pressure roller contact sensor. 3. Replace the pressure roller contact motor.	

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)	
		Fusing shutter sensor error	
		Fusing shutter plate home position sensor error is detected three consecutive times.	
569 -01	D	 Defective fusing shutter plate home position sensor Defective connectors 	
		Check or replace the harness of the fusing shutter plate home position sensor.	
		2. Replace the fusing shutter plate home position sensor.	

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)	
	Α	Pressure roller thermistor error: Center	
<i>57</i> 1 -00		The center temperature of the pressure roller measured by the thermistor does not reach 0°C for 37 seconds.	
		Loose connection of the thermistor Defective thermistor	
		 Check if the thermistor is firmly connected. Replace the center thermistor. 	

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)	
	A	Pressure roller thermistor warm-up error: Center	
572 -02		The center temperature of the pressure roller measured by the thermistor does not reach 20°C within 100 seconds after the heater turns on.	
		Dirty thermopile lenses Defective thermistor	
		 Clean the thermopile lenses. Replace the thermistor at the end of the pressure roller. 	

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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)		
		Pressure roller overheat : Center (software error)		
		The detected pressure roller temperature stays at 215°C or more for 1 second for 10 consecutive times.		
573	А	Defective IOB Defective IPU		
		1. Replace the IOB.		
		2. Replace the IPU.		

	No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
SC574 RTB 31: Correcti RTB 39	tions		Pressure roller overheat : Center (hardware error)
			The thermistor detects 220°C or more.
			Defective IOB
	574	A	Defective IPU
			Defective fusing control system
			1. Replace the IOB.
			2. Replace the IPU.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
581	Α	NC sensor broken: Center
		The sensor detects -17°C or less for 100 seconds.
		Broken cables of thermopile or thermistor
		Defective connection of connectors
		Check and replace the connection of the cables and connectors.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
591	A	NC sensor broken: End
		The sensor detects -17°C or less for 100 seconds.
		Broken cables of thermopile or thermistor
		Defective connection of connectors
		Check and replace the connection of the cables and connectors.

SC6xx: Device Communication

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
610	D	Mechanical counter error: K
		This SC is only for NA models. The machine detects the mechanical counter error when SP5-987-001 is set to "1 (ON)".
		Disconnected mechanical counter Defective mechanical counter
		Check or replace the mechanical counter.

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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	ARDF communication error
		After the ARDF is detected, the break signal occurs or communication timeout occurs.
		Incorrect installation of ARDF
620		ARDF defective
		IPU board defective
		External noise
		1. Check the cable connection of the ARDF.
		2. Shut out the external noise.
		3. Replace the ARDF.
		4. Replace the IPU board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
621	D	Finisher communication error
622	D	Paper tray unit communication error
		While the IOB communicates with an optional unit, an SC code is displayed if one of following conditions occurs.
		 The IOB receives the break signal which is generated by the peripherals only just after the main switch is turned on.
		 When the IOB does not receive an OK signal from a peripheral 100ms after sending a command to it. The IOB resends the command. The IOB does not receive an OK signal after sending the command 3 times.
		Cable problemsIOB problemsBCU problems
		 PSU problems in the machine Main board problems in the peripherals
		 Check if the cables of peripherals are correctly connected. Replace the IOB or main board of peripherals. Replace the BCU if no power is supplied to peripherals.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
632	В	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.
		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.
		1. Check if the setting of the SP5113 is correctly set.
		Check the connection between the main machine and optional counter device.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	В	Counter device error 2
633		After communication is established, the controller receives the brake signal from the accounting device.
		 Serial line between the optional counter device, the relay board and copier control board is disconnected or damaged. Make sure that SP5113 is set to enable the optional counter device.
		 Check if the setting of the SP5113 is correctly set. Check the connection between the main machine and optional counter device.

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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
634	В	Counter device error 3
		A backup RAM error was returned by the counter device.
		Counter device control board defective
		Backup battery of counter device defective
		Replace the counter device.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	В	Counter device error 4
635		A backup battery error was returned by the counter device.
		Counter device control board defective
		Backup battery of counter device defective
		Replace the counter device.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
636	D	SD Card Error

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		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. There is no DESS module in the machine.
		 No expanded authentication module Defective SD card Defective file of the expanded authentication module No DESS module
01	-	 Install the expanded authentication module. Install the SD card.
		 Install the DESS module. Set the super service SP as follows and turn the main switch off and on. User limitation: Set SP5-401-160 (expanded authentication management setting) to 0. User limitation: Set SP5-401-161 (expanded authentication management detailed setting) to 0. Execute SP5-876-1 (security all clear). If this is a mass-produced machine, replace the NVRAM on the controller board.
	-	Version error
00		The version of the expanded authentication module is not correct.
02		Incorrect module version
		Install the correct file of the expanded authentication module.
		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.
11		Create the usercode files with the User Setting Tool "IDissuer.exe" and store the files in the root folder of the SD card.
		 Make sure the eccm.mod file is in the root folder of the SD card.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
637	D	Tracking information notice error
		Ttracking application error
		Tracking information is lost.
-001		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.
		Management server error
-002		Tracking information is lost.
		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.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
640	-	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.
		Hard error with PCI
		1. Turn the main switch off and on.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
641	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.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	Engine serial communication error
		An error occurs in serial communication with engine.
		SC641-001: Timeout error
641		• SC641-002: Retry over
		SC641-003: Download error
		• SC641-004: UART error
		Turn the main switch off and on.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)	
650	В	Communication error of the remote service modem (Cumin-M)	
	Authentication error		
		The authentication for the Cumin-M fails at a dial up connection.	
		Incorrect SP settings	
-01		Disconnected telephone line	
		Disconnected modem board	
		Disconnected wireless LAN card	
		1. Check and set the correct user name (SP5-816-156) and password (SP5-816-157).	

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)		
		Incorrect modem setting		
0.4		Dial up fails due to the incorrect modem setting.		
-04		Same as -01		
		1. Check and set the correct AT command (SP5-816-160).		
		Communication line error		
-05		The supplied voltage is not sufficient due to the defective communication line or defective connection.		
		Same as -01		
		Consult with the user's local telephone company.		
		No modem board		
		Modem board is not installed even though the setting at Cumin-M (During the operation)		
-13		Same as -01		
		1. Install the modem board if it is not installed.		
		 Check correct setting value for modem driver (SP5-816-160, SP5-816-165 to 171, SP5-816-188 and 189). 		
		3. Replace the modem board.		
		The modem board is installed		
		The modem board is installed even though the setting at Cumin-N. Or wired/wireless LAN is not working normally.		
-14		Same as -01		
		1. Uninstall the modem board if it is installed.		
		2. Check that the wired/wireless LAN is working properly.		

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)	
651	С	ncorrect dial up connection	
-01		Chat program parameter error	

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)	
-02		Chat program execution error	
		An unexpected error occurs when the modem (Cumin-M) tries to call the center with a dial up connection.	
		Caused by a software bug	
		No action required because this SC does not interfere with operation of the machine.	

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)	
		Remote service ID2 mismatching	
		ID2 for @Remote certification is mismatching between the controller board and NVRAM.	
652	D	Used controller board installed Used NVRAM installed	
		An unexpected error occurs when the modem (Embedded RCG-M) tries to call the center with a dial up connection.	
		Install the correct controller board or anew controller board.	
		2. Install the correct NVRAM or new NVRAM.	

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)	
	D	Incorrect remote service ID2	
		ID2 stored in the NVRAM is incorrect.	
653		Used NVRAM installed An unexpected error occurs when the modem (Embedded RCG-M) tries to call	
		the center with a dial up connection	
		1. Clear the ID2 in the NVRAM, and then input a correct ID2.	

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)			
		Engine start up error			
		The BCU fails to respond within the prescribed time when the machine is turned on.			
670	D	Connections between BCU and controller board are loose, disconnected, or damaged.			
		Replace the BCU Replace the controller board			

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)	
		Controller start up error	
		 After the machine is powered on, the communication between the controller and the operation panel is not established, or communication with controller is interrupted after a normal startup. 	
		 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. 	
672	D	After the controller issues a command to check the communication line with the controller at 30-second intervals, the controller fails to respond twice.	
		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.	
		1. Check the setting of SP5-875-001. If the setting is set to "1 (OFF)", change it to "0 (ON)"	

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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)		
682	D	Memory chip at TD sensor: Communication error		
		Retry of memory chip communication fails three times after the machine has detected the memory chip communication error.		
		Damaged memory chip data		
		Disconnected inter face		
		No memory chip on the development unit		
		Noise		
		1. Replace the PCDU.		
		2. Replace the BCU.		

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)		
687	D	Memory address command error		
		The BCU does not receive a memory address command from the controller 120 seconds after paper is in the position for registration.		
		Loose connection Defective controller		
		Defective BCU		
		Check if the controller is firmly connected to the BCU.		
		2. Replace the controller.		
		3. Replace the BCU.		

Service Call Tables - 7

SC7xx: Peripherals

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)		
720 -24	В	Finisher exit guide plate motor error		
		After moving away from the guide plate position sensor, the exit guide is not detected at the home position within the prescribed time. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.		
		 Guide plate motor disconnected, defective Guide plate motor overloaded due to obstruction Guide plate position sensor disconnected, defective 		
		 Check the connections and cables for the components mentioned above. Check for blockages in the guide plate motor mechanism. Replace the guide plate position sensor and/or guide plate motor Replace the finisher main board. 		

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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	В	Finisher jogger motor error
		The jogger fences move out of the home position but the HP sensor output does not change within the specified number of pulses.
		The 1st failure issues an original jam message, and the 2nd failure issues this SC code.
700		Jogger HP sensor disconnected, defective
720 -30		Jogger motor disconnected, defective
-30		Jogger motor overloaded due to obstruction
		Finisher main board and jogger motor
		Check the connections and cables for the components mentioned above.
		2. Check for blockages in the jogger motor mechanism.
		3. Replace the jogger HP sensor and/or jogger motor.
		4. Replace the finisher main board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	В	Stack feed-out motor error
		The stack feed-out HP sensor does not detect the home position of the stack feed-out belt 3000ms after the stack feed-out belt has moved to its home position.
		The stack feed-out HP sensor does not turn off 200 ms after the stack feed- out belt has moved from its home position.
		The 1st detection failure causes a jam error, and the 2nd failure causes this SC code.
720		Defective stack feed-out HP sensor
-41		Overload on the stack feed-out motor
		Defective stack feed-out motor
		Defective main board
		Disconnected or defective harness
		Check the connections and cables for the components mentioned above.
		Check for blockages in the stack feed-out motor mechanism.
		3. Replace the stack feed-out HP sensor and/or stack feed-out motor.
		4. Replace the finisher main board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		Finisher stapler movement motor error
		The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.
		For the 2000/3000-sheet (booklet) finisher
		Staple movement is not finished for a certain time.
		For the 1000-sheet finisher
720	В	 The stapler HP sensor is not activated within the specified time after the stapler motor turned on. (First detection: jam error, consecutive twice detection SC code).
-42		Motor overload
		Loose connection of the stapler home position sensor
		Loose connection of the stapler movement motor
		Defective stapler home position sensor
		Defective stapler movement motor
		Check the connection of the stapler movement motor.
		2. Check the connection of the stapler home position sensor.
		3. Replace the stapler home position sensor.
		4. Replace the stapler movement motor.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		Finisher corner stapler motor error
		The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.
		For the 2000/3000-sheet (booklet) finisher
		Staple movement is not finished after a certain time.
		For the 1000-sheet finisher
	В	The stapler motor does not switch off within the prescribed time after operating.
720 -44		 The HP sensor of the staple unit does not detect the home position after the staple unit moves to its home position.
-44		The HP sensor of the staple unit detects the home position after the staple unit moves from its home position.
		Staple jam
		Motor overload
		Defective stapler motor
		Check the connections and cables for the components mentioned above.
		2. Replace the HP sensor and/or stapler motor
		3. Replace the finisher main board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	В	Finisher folder plate motor error
720 -52		The folder plate moves but is not detected at the home position within the specified time. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.
		 Folder plate HP sensor disconnected, defective Folder plate motor disconnected, defective Folder plate motor overloaded due to obstruction.
		 Check the connections and cables for the folder plate motor and HP sensor. Check for blockages in the folder plate motor mechanism. Replace the folder plate HP sensor and/or folder plate motor Replace the finisher main board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	В	Fold unit bottom fence motor error
720 -53		The bottom fence of the fold unit moves but is not detected at the home position within the specified time. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code. • Motor harness disconnected, loose, defective • Defective motor
		 Check the connections to the fold unit bottom fence motor. Replace the fold unit bottom fence motor.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
720 -58	В	Clamp roller retraction motor error 1
		The clamp roller retraction motor moves but is not detected at the home position within the specified time.
		The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.
		Motor harness disconnected, loose, defective Defective motor
		Check the connections to the clamp roller retraction motor.
		2. Replace the clamp roller retraction motor.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
720 -59	В	Clamp roller retraction motor error 2
		The drive roller swing motor moves but is not detected at the home position within the specified time.
		The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.
		 Motor harness disconnected, loose, defective Defective motor
		 Check the connections to the drive roller swing motor. Replace the drive roller swing motor.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	В	1000/2000/3000-sheet (booklet) finisher: Tray lift motor error
720 -70		The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.
		The upper tray paper height sensor does not change its status with the specified time after the tray raises or lowers.
		 Motor overload Loose connection of the shift tray motor Defective shift tray motor
		Check the connections to the shift tray motor. Replace the shift tray motor.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
720 -71	В	Finisher Tray 1 shift motor error
		The shift roller HP sensor of the upper tray does not activate within the prescribed time after the shift tray starts to move toward or away from the home position. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.
		 Shift tray HP sensor of the upper tray disconnected, defective Shift tray motor of the upper tray is disconnected, defective Shift tray motor of the upper tray overloaded due to obstruction
		 Check the connections and cables for the components mentioned above. Check for blockages in shift motor mechanism. Replace the shift tray HP sensor and/or shift motor Replace the finisher main board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
720 -80	В	Punch movement motor error
		The punch unit moves but is not detected at the home position within the specified time. The 1st detection failure issues a jam error, and the 2 nd failure issues this SC code.
		Motor harness disconnected, loose, defective Defective motor
		Check the connections to the punch movement motor. Replace the punch movement motor

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
720 -81	В	Paper position sensor slide motor error
		The paper position sensor moves but is not detected at the home position within the specified time. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.
		 Motor harness disconnected, loose, defective Defective motor
		Check the connections to the paper position sensor slide motor. Replace the paper position sensor slide motor.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
722 -10		Paper feed motor error: proof tray
-14		Paper feed motor error: lower tray
-17		Paper feed motor error: inner tray
	В	Motor driver error signal is output.
		 Motor harness disconnected, loose, defective Defective motor Overload on the motor
		Check the connections to the paper feed motor. Replace the paper feed motor.

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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	В	Finisher front jogger motor error (D585)
		The jogger fences of the 500-sheet finisher (D585) move out of the home position but the HP sensor output does not change within the specified number of pulses. The 1st failure issues an original jam message, and the 2nd failure issues this SC code.
724 -31		 Jogger HP sensor disconnected, defective Front jogger motor disconnected, defective Front jogger motor overloaded due to obstruction Finisher main board and front jogger motor defective
		 Check or replace the harness. Check for blockages in the front jogger motor mechanism. Replace the jogger HP sensor. Replace the front jogger motor. Replace the finisher main board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	В	Finisher rear jogger motor error (D585)
		The jogger fences of the 500-sheet finisher (D585) move out of the home position but the HP sensor output does not change within the specified number of pulses. The 1st failure issues an original jam message, and the 2nd failure issues this SC code.
724 -32		 Jogger HP sensor disconnected, defective Rear Jogger motor disconnected, defective Rear Jogger motor overloaded due to obstruction Finisher main board and rear jogger motor defective
		 Check or replace the harness. Check for blockages in the rear jogger motor mechanism. Replace the jogger HP sensor. Replace the rear jogger motor. Replace the finisher main board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		Positioning roller arm motor error
		The positioning roller HP sensor does not turn on or off for a certain time at power-on. The positioning roller HP sensor does not turn on or off for a certain time when the
		positioning roller returns to its home position from the lower position.
	В	The 1st detection failure causes a jam error, and the 2nd failure causes this SC code.
724		Disconnected or defective harness
-33		Overload on the positioning roller arm motor
		Defective positioning roller arm motor
		Defective positioning roller HP sensor
		1. Check or replace the harness.
		Check for blockages in the positioning roller arm mechanism.
		3. Replace the positioning roller arm motor.
		4. Replace the positioning roller HP sensor.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	В	Stack pressure solenoid error
		The stack pressure solenoid in the finisher is not operating.
		Solenoid harness loose, broken
		Solenoid obstructed
724		Stack height sensor dirty, harness loose, broke
-38		Solenoid defective
		Stack height sensor defective
		1. Check or replace the solenoid harness.
		Check for blockages in the stack pressure mechanism.
		3. Replace the stack height sensor.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	В	Stack feed-out motor error
		The stack feed-out HP sensor does not detect the home position of the stack feed-out belt for a certain time after the stack feed-out belt has moved to its home position.
		The stack feed-out HP sensor does not turn off for a certain time after the stack feed-out belt has moved from its home position.
		The 1st detection failure causes a jam error, and the 2nd failure causes this SC code.
724		Defective stack feed-out HP sensor
-41		Overload on the stack feed-out motor
		Defective stack feed-out motor
		Defective main board
		Disconnected or defective harness
		1. Check or replace the harness.
		2. Check for blockages in the stack feed-out mechanism.
		3. Replace the stack feed-out HP sensor.
		4. Replace the stack feed-out motor.
		5. Replace the main board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	В	Finisher corner stapler motor error
		The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.
		The stapler HP sensor does not detect "ON"/"OFF" signal even the stapler moves from the "OFF"/"ON" position for 0.6 seconds.
724		The stapler HP sensor does not detect "ON" when a stapling job is commanded or the stapler moves.
-44		Staple jamMotor overloadDefective stapler motor
		Check the connections and cables for the components mentioned above.
		2. Replace the HP sensor and/or stapler motor3. Replace the finisher main board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	В	Finisher stapler movement motor error
		The stapler HP sensor does not detect "OFF" signal even the stapler moves from the "ON" position for 0.35 seconds.
		The stapler HP sensor does not detect "ON" signal even the stapler moves from the "OFF" position for 5.5 seconds.
		Motor overload
724		Loose connection of the stapler home position sensor
-42		Loose connection of the stapler movement motor
		Defective stapler home position sensor
		Defective stapler movement motor
		Check the connection of the stapler movement motor.
		2. Check the connection of the stapler home position sensor.
		3. Replace the stapler home position sensor.
		4. Replace the stapler movement motor.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	В	500-sheet finisher: Tray lift motor error
724 -70		 Motor overload Loose connection of the shift tray motor Defective shift tray motor
		 Check the connections to the tray lift motor. Replace the tray lift motor.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	В	Upper limit switch error (D585)
724 -85		The upper limit switch of the 500-sheet finisher (D585) is pushed due to tray lift error or some problems.
		Upper limit switch pulled up Defective upper limit swtich
		1. Check the harness.
		Check for blockage around the upper limit switch.
		3. Replace the upper limit switch.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
770	В	Shift motor error
		The shift motor HP sensor does not detect any change for 1.86 seconds after the shift motor has turned on at power on or during its operation.
		Defective shift motor Defective shift motor HP sensor
		Check the connections to the shift motor and the shift motor HP sensor.
		2. Replace the shift motor or the shift motor HP sensor.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	Bridge unit error
		The machine recognizes the finisher, but does not recognize the bridge unit.
<i>7</i> 91		Defective connector Broken harness
		Check the connections between the bridge unit and the machine.
		Install a new bridge unit.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	В	Finisher error
		The machine does not recognize the finisher, but recognizes the bridge unit.
		Defective connector
792		Defective harness
		Incorrect installation
		Check the connections between the finisher and the machine.
		2. Install a new finisher.

Service Call Tables - 8

SC8xx: Overall System

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	Energy saving I/O sub-system error
816		The energy saving I/O sub-system detects an error.
		Controller board defective
		Replace the controller board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	Monitor error
817		This is a file detection and electronic file signature check error when the boot loader attempts to read the self-diagnostic module, system kernel, or root system files from the OS Flash ROM, or the items on the SD card in the controller slot are false or corrupted.
		OS Flash ROM data defective SD card data defective
		Change the controller firmware. Use another SD card.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	Fatal kernel error
819		Due to a control error, a RAM overflow occurred during system processing. One of the following messages was displayed on the operation panel.
	[0x5032]	"0x455252nn" → HAIC-P2 error
	[0x5245]	"0x53554D45" → Link up error
	[0x5355]	"0x5350454E44" → L2 status time out
	[0x696e]	"0x69742064" → gwinit process ending
	[0x766d]	"0x5f706167" → VM is full
		Other error cord → Error in the OS
		System program defective
		Controller board defective
		Optional board defective
		1. Replace the controller firmware.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
821	D	Self-diagnostics error: ASIC

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		ASIC register check error
	[0000]	The write-&-verify check has occurred in the ASIC.
	[OBOO]	Defective ASIC device
		1. Replace the controller board.
		ASIC detection error
	[OBO6]	The I/O ASIC for system control is not detected.
		Defective ASIC
		Defective North Bridge and PCII/F
		1. Replace the controller board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
822	В	Self-diagnostics error: HDD
		HDD timeout
		Check performed only when HDD is installed:
		HDD device busy for over 31 seconds.
		 After a diagnostic command is set for the HDD, but the device remains busy for over 6 seconds.
	[3003]	Defective HDD device
		Defective HDD connector
		Defective ASIC device
		1. Replace or uninstall the HDD device.
		2. Replace the HDD connector.
		3. Replace the controller board.
		Diagnostics command error
	[2004]	Result of the issuance of diagnostic command is error.
	[3004]	Defective HDD device
		1. Replace or remove the HDD device.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		HDD timeout (First machine)
		HDD device busy for over 31 seconds.
		Mandolin is not detected.
		After a diagnostic command is set for the HDD, but the device remains busy for over 6 seconds.
	[3013]	Defective HDD device
		Defective HDD connector
		Defective ASIC device
		1. Replace or remove the HDD device.
		2. Replace the HDD connector
		3. Replace the controller board
		Diagnostics command error (First machine)
		Result of the issuance of diagnostic command is error.
		Mandolin is not detected.
	[3014]	A w/r/c error of the HDD register
		Defective HDD device
		1. Replace the HDD device.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
823	В	Self-diagnostics error: NIC
		MAC address check sum error
	[6101]	The result of the MAC address check sum does not match the check sum stored in ROM.
		Defective SEEP ROMDefective I2C bus (connection)
		1. Replace the controller board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		PHY IC error
		The PHY IC on the controller cannot be correctly recognized.
	[6104]	Defective PHY chip
		Defective ASIC MII I/F
		1. Replace the controller board.
		PHY IC loop-back error
	[6105]	An error occurred during the loop-back test for the PHY IC on the controller.
		Defective PHY chip
		Defective MAC of ASIC (SIMAC/COMIC/CELLO)
		Defective I/F with the PHY board
		Defective solder on the PHY board
		1. Replace the controller board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
824	D	Self-diagnostics error: NVRAM (resident)
		NVRAM verify error
		NVRAM device does not exist or NVRAM device is damaged.
		No NVRAM device
	[1401]	Destructive NVRAM device
		NVRAM backup battery exhausted
		NVRAM socket damaged
		1. Replace the NVRAM device.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
833	D	Self-diagnostic error: Engine I/F ASIC

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		ASIC (Mandolin) for engine control could not be detected. After the PCI configuration, the device ID for the ASIC could not be checked.
	[OF30]	 Defective ASIC (Mandolin) for system control Defective North Bridge and AGPI/F
		1. Replace the Engine I/F board (mother board).
		Could not initialize or read the bus connection.
	[50B1]	Defective connection busDefective SSCG
		1. Replace the Engine I/F board (mother board).
		Value of the SSCG register is incorrect.
	[50B2]	Defective connection busDefective SSCG
		1. Replace the Engine I/F board (mother board).

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
834	D	Self-diagnostic error: Optional memory
		An error occurs after write/verify check for optional RAM on the engine I/F board (mother board).
	[5101]	Defective memory device
		1. Replace the Engine I/F board (mother board).

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
838	D	Self-diagnostic error: Clock generator

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	[2701]	A verify error occurred when setting data was read from the clock generator via the I2C bus
		Defective clock generator
		Defective I2C bus
		Defective I2C port on the CPU
		1. Replace the controller board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
840	D	EEPROM access error
		During the I/O processing, reading error is occurred. The 3rd reading failure issues this SC code.
		During the I/O processing, writing error is occurred.
		Defective EEPROM
		1. Replace the EEPROM.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
841		EEPROM read error
		Mirrored data of the EEPROM is different from the original data in EEPROM.
	D	Data in the EEPROM is overwritten for some reason.
		1. Turn the main switch off and on.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
842	С	Nand-Flash updating verification error
		A writing error for the module written in Nand-Flash occurs when the remote ROM and ROM are updating.
		Damaged Nand-Flash
		1. Turn the main switch off and on.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	В	Network I/F error
850		Inoperative
		1. Turn the main switch off and on.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
853	В	Bluetooth device connection error (The Bluetooth interface unit was installed while the machine was turned on.) The Bluetooth interface unit was installed while the machine was turned on. Turn off the main power switch, and then confirm that the Bluetooth interface unit was installed correctly. And then, turn on the main power switch again.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
854	В	Bluetooth device removed (The Bluetooth interface unit was removed while the machine was turned on.)
		The Bluetooth interface unit was removed while the machine was turned on.
		Turn off the main power switch, and then confirm that the Bluetooth interface unit was installed correctly.
		And then, turn on the main power switch again.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
855	В	Hardware Problem:wireless LAN board
		The wireless LAN board can be accessed, but an error was detected.
		Loose connection Defective wireless LAN card
		Defective wireless LAIN card
		Make sure that the Wireless LAN connection is good
		2. Replace the wireless LAN card.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
858	А	Data encryption conversion error
030		A serious error occurs when data is encrypted to update an encryption key.
		Encryption key acquisition error:
-00		The controller fails to get a new encryption key.
		Defective controller board
		Replace the controller board.
		Encryption key setting for HDD error:
		The controller fails to copy a new encryption key to the HDD.
-01		Defective SATA chip on the controller board
		1. Turn the machine power off and on.
		2. If the error reoccurs, replace the controller board.
		NVRAM data encryption error 1:
00		An error occurs while the NVRAM data is encrypted.
-02		Defective SATA chip on the controller board
		1. Replace the NVRAM.
		NVRAM data encryption error 2:
		An error occurs before the NVRAM data is encrypted.
-30		Defective controller board
		1. Turn the machine power off and on.
		2. If the error reoccurs, replace the controller board.
		Other error:
-31		A serious error occurs while the data is encrypted.
		Same as SC991

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
0.50	В	HDD data encryption error
859		Encryption of data on the hard disk failed.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		HDD check error: The HDD is not correctly installed.
-08		 No HDD installed Unformatted HDD The encryption key on the controller is different from the one on the HDD Install the HDD correctly. Initialize the HDD.
-09	Power failure during the data encryption: The data encryption (NVRAM and HDD) has not been completed. • Power failure during the data encryption 1. Initialize the HDD.	
-10		Data read/write error: The DMAC error is detected twice or more. Same as SC863.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	HDD startup error at main power on
		HDD is connected but a driver error is detected. The driver does not respond with the HDD within 30 seconds.
860		 HDD not initialized Label data is corrupted Defective HDD
		1. Initialize the HDD with SP5-832-001.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		HDD: Reboot error
		The HDD does not become ready within 30 seconds after the power is supplied to the HDD.
		Disconnection of the cables between HDD and HDC
861	D	Disconnection of the power supply connector
		Defective HDD
		Defective HDC
		1. Turn the main power switch on.
		2. Replace the HDD or the controller board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)	
		Bad sector number error	
		The number of bad sectors in the HDD (image data area) goes over 101.	
862	D	Defective HDD	
		1. Format the HDD with SP4-911-002 and replace with the alternate sector.	
		2. Replace the HDD.	

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	HDD: Read error
		The data stored in the HDD cannot be read correctly.
863		Defective HDD Defective controller
		Replace the HDD.
		2. Replace the controller.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	HDD: CRC error
		While reading data from the HDD or storing data in the HDD, data transmission fails.
864		Defective HDD
		1. Format the HDD.
		2. Replace the HDD.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		HDD: Access error
0.7.5	D	An error is detected while operating the HDD.
865		Defective HDD
		1. Replace the HDD.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	В	SD card authentication error
044		A correct license is not found in the SD card.
866		SD-card data is corrupted.
		1. Store correct data in the SD card.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	SD card error
867		The SD card is ejected from the slot.
007		1. Install the SD card.
		2. Turn the main switch off and on.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	В	Address book error
		Address book data stored on the hard disk was detected as abnormal when it was accessed from either the operation panel or the network.
		Defective software program
		Defective HDD
		Incorrect path to the server
870		Incorrect encryption setting or encryption key
		Damaged address book data
		Mount correctly the media that stores the address book data and turn the main power switch off and on.
		2. Initialize the address book data (SP5-846-050).
		3. Initialize the partition for the HDD address book (Turn the main power switch off and on) (SP5-832-006).
		4. Replace the HDD.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	В	HDD mail data error
872		An error is detected in the HDD at power on.
		Defective HDD
		Power failure during an access to the HDD
		1. Turn the main power switch off and on.
		2. Initialize the HDD partition (SP5-832-007).
		3. Replace the HDD.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
873	В	HDD mail transfer error
		An error is detected in the HDD at machine initialization.
		Defective HDD
		Power failure during an access to the HDD
		1. Initialize the HDD partition (SP5-832-008).
		2. Replace the HDD.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	Delete All error: Data area
		A data error is detected for the HDD/NVRAM after the Delete All option has been used.
		Note
874		The source of this error is the Data Overwrite Security Unit running from an SD card.
		 Data Overwrite Security Unit (SD card) not installed Defective HDD
		Turn the main switch off/on and try the operation again. Install the Data Overwrite Security Unit (D377) again.
		3. Replace the HDD.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
875	D	Delete All error: HDD
		An error occurs while the machine deletes data from the HDD. ••• Note
		The source of this error is the Data Overwrite Security Unit (D377) running from an SD card.
		The logical format for the HDD fails.
		1. Turn the main switch off/on and try the operation again

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	Log Data Error
876		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.
		Log Data Error 1
-01		Damaged log data file in the HDD
		1. Initialize the HDD with SP5-832-004.
		Log Data Error 2
-02		An encryption module not installed
		1. Replace or set again the encryption module.
		2. Disable the log encryption setting with SP9-730-004 ("0" is off.).
		Log Data Error 3
-03		Invalid log encryption key due to defective NVRAM data
		1. Initialize the HDD with SP5-832-004.
		2. Disable the log encryption setting with SP9-730-004 ("0" is off.)
		Log Data Error 4
-04		Unusual log encryption function due to defective NVRAM data
		1. Initialize the HDD with SP5-832-004.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		Log Data Error 5
-0.5		Installed NVRAM or HDD which is used in another machine.
		Reinstall the previous NVRAM or HDD.
		2. Initialize the HDD with SP5-832-004.
		Log Data Error 99
-99		Other than the above causes
		1. Ask your supervisor.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
877	В	HDD Data Overwrite Security SD card error
		The 'all delete' function cannot be executed but the Data Overwrite Security Unit (D377) is installed and activated.
		Defective SD card SD card not installed
		Replace the NVRAM and then install the new SD card.
		2. Check and reinstall the SD card.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
878	D	TPM electronic recognition error
		The system firmware is not authenticated by TPM (security chip).
		Incorrect updating for the system firmware
		Incorrect operating of the USB flash
		Defective flash ROM on the controller board
		Replace the controller board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
881	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.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	Software performance error
899		If the processing program shows abnormal performance and the program is abnormally ended, this SC is issued.
		Controller board defective Software defective
		1. Replace the controller board.
		2. Turn the main switch off and on.

3. Update the firmware on the controller.

6

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Service Call Tables - 9

SC9xx: Miscellaneous

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	Electric counter error
		The total count contains something that is not a number.
		NVRAM incorrect type
		Defective NVRAM
900		NVRAM data scrambled
		Unexpected error from external source
		Check the connection between the NVRAM and controller.
		2. Replace the NVRAM.
		3. Replace the controller board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
910		External Controller Error 1
911		External Controller Error 2
912		External Controller Error 3
913	В	External Controller Error 4
914		External Controller Error 5
		The external controller alerted the machine about an error.
		1. Please refer to the instructions for the external controller (application).

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
915	А	External Controller Error 6
		Egrt board error
		The external controller alerted the machine about an error.
		1. Replace the Egret controller board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
919	D	External Controller down
		While EAC (External Application Converter), the conversion module, was operating normally, the receipt of a power line interrupt signal from the FLUTE serial driver was detected, or BREAK signal from the other station was detected.
		 Power outage at the EFI controller EFI controller was rebooted Connection to EFI controller loose
		1. Turn the main power switch off and on.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
920	В	Printer application error
-00		No response when starting up the PM
-01		Timeout error during the PM operation
-02		Working memory error
-03		Cannot start-up the filtering process
-04		Abnormal exit from the filtering process
		An error is detected in the printer application program and operation cannot continue.
		Defective software Unexpected hardware resource (e.g., memory shortage)
		Software defective; turning on and off the main power switch Insufficient memory; additional memory

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
921	В	Printer font error
		A necessary font is not found when starting up the printer application.
		A necessary font is not found in the SD card.
		1. Turn the main power switch off and on.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
925	В	NetFile function error
-00		HDD is defective
-01		NetFile management file is broken
		The NetFile file management on the HDD cannot be used, or a NetFile management file is corrupted and operation cannot continue.
		The HDDs are defective and they 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 status codes are displayed below the SC code.
		1. Refer to the four procedures below (Recovery from SC 925).

Here is a list of HDD 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
(-13)	Device file does not exist

Recovery from SC 925

Procedure 2

If the machine shows SC codes for HDD errors (SC860 to SC865) with SC 925, do the recovery procedures for SC860 to SC865.

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

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

SP5832-011 (HDD Formatting – Ridoc I/F).

- 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.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
	D	Software performance error
		The software makes an unexpected operation.
		Defective software
990		Defective controller
		Software error
		1. Turn the main switch off and on.
		2. Reinstall the controller and/or engine main firmware.
		Note
		See Note 1 at the end of the SC table.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
991	С	Software continuity error
		The software has attempted to perform an unexpected operation. However, unlike SC 990, the object of the error is continuity of the software.
		Software program error Internal parameter incorrect Insufficient working memory
		1. This SC is not displayed on the LCD (logging only).

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
992	D	Undefined error
		Defective software program
		An error undetectable by any other SC code occurred
		1. Turn the main power switch off and on.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
994	С	Operation panel management records exceeded
		An error occurred because the number of records exceeded the limit for images managed in the service layer of the firmware. This can occur if too many application screens open on the operation panel.
		No action required because this SC does not interfere with operation of the machine.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
995	D	CPM setting error
		Defective BCU NVRAM Replacement error
-01		 Install the previous NVRAM Input the serial number with SP5-811-004, and turn the main power switch off and on.
		Defective NVRAM Defective controller
-02		 Update the controller firmware. Install a new NVRAM, and turn off and on the main power switch after SC995-002 has occurred.
-03		Incorrect type controller installed Defective controller
		1. Replace the controller with the correct type.
-04		Incorrect model controller installed.
-04		1. Replace the controller with the correct model.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
997	В	Application function selection error
		The application selected by the operation panel key works abnormally (No response, abnormal ending).
		 Software (including the software configuration) defective An option required by the application (RAM, DIMM, board) is not installed. Nesting of the fax group addresses is too complicated.
		Check the devices necessary for the application program. If necessary devices have not been installed, install them. Check that application programs are correctly configured.
		3. For a fax operation problem, simplify the nesting of the fax group addresses.
		Take necessary countermeasures specific to the application program. If the logs can be displayed on the operation panel, see the logs.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		Application start error
		No applications start within a specified time after the power is turned on.
		Loose connection of RAM-DIMM, ROM-DIMM
		Defective controller
998 D	D	Software problem
		1. Check the setting of SP5-875-001. If the setting is set to "1 (OFF)", change it to "0 (ON)".
		2. Check if the RAM-DIMM and ROM-DIMM are correctly connected.
		3. Reinstall the controller system firmware.
		4. Replace the controller board.

Note 1

If a problem always occurs in a specific condition (for example, printer driver setting, image file), the problem may be caused by a software error. In this case, the following data and information needs to be sent back to your product specialist. Please understand that it may take some time to get a reply on how to solve the problem, because in some cases the design staff in Japan must analyze the data.

- Symptom / Possible Causes / Action taken
- Summary sheet (SP mode "Printer SP", SP1-004 [Print Summary])

- SMC All (SP5-990-001)
- SMC Logging (SP5-990-004)
- Printer driver settings used when the problem occurs
- All data displayed on the screen (SC code, error code, and program address where the problem is logged.)
- Image file which causes the problem, if possible

Process Control Error Conditions

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.	 A cover was opened or the main switch was turned off during the initialization. 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.	Make sure that the heat seal on the development unit is not removed. Defective TD sensor
7	Vcnt error 1	Vcnt is less than 4.7V when Vcnt is Vt target ±0.2V.	 Defective TD sensor Vt target settings are not correct. 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 ±0.2V.	Make sure that the heat seal on the development unit is not removed. Defective TD sensor
9	Vcnt error 3	Vcnt is less than 4.7V.	 Make sure that the heat seal on the development unit is not removed Defective TD sensor Vt target settings are not correct. Toner density error

• 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.

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.	Defective development unit Vt maximum error and an image is faint: 1. Replace the toner supply pump unit. Vt maximum error and an image is O.K: 1. Replace the development unit. 2. Replace the IOB board. Vt minimum error: 1. Replace the development unit. 2. Replace the JOB board.
53	ID sensor coefficient (K5) detection error	Not enough data can be sampled.	 Solid image is not sufficient density: Retry the process control. Replace the ID sensors. Replace the IOB board. Solid image is O.K. Replace the ID sensors. Replace the IOB board. ID sensor is dirty: Clean the ID sensors. Retry the process control.

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.	 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 < Gamma	 ID sensor pattern density is too high. Hardware defective. Same as 53
56	Gamma error: Minimum	Gamma is out of range. Gamma < 0.15	 ID sensor pattern density is too low. Hardware defective. Same as 53 Replace the toner supply pump unit.
57	Vk error: Maximum	Vk is out of range. 150 < Vk	 ID sensor pattern density is too low. Hardware defective. Same as 53
58	Vk error: Minimum	Vk is out of range. Vk < -150	 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.	 ID sensor pattern density is too high or low. Hardware defective Same as 53
99	Unexpected error	Process control fails.	Power Failure Check the power source.

SP3-325-001 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 ±0.5V.	 Dirty ID sensor (toner, dust, or foreign material) Dirty transfer belt Scratched image transfer belt Defective ID sensor Poor connection Defective IOB Clean the ID sensor. Check the belt cleaning. Clean or replace the transfer belt. Replace the image transfer belt. Replace the ID sensor. Check the connection. Replace the IOB board.
3	ID sensor output error	ID sensor output is more than "Voffset Threshold" (SP3-324-004)	 Defective ID sensor Poor connection Defective IOB Replace the ID sensor. Check the connection. Replace the IOB board.
9	Vsg Adjustment error	Vsg adjustment has not been completed.	Other cases Retry SP3-321-010.

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	-	-

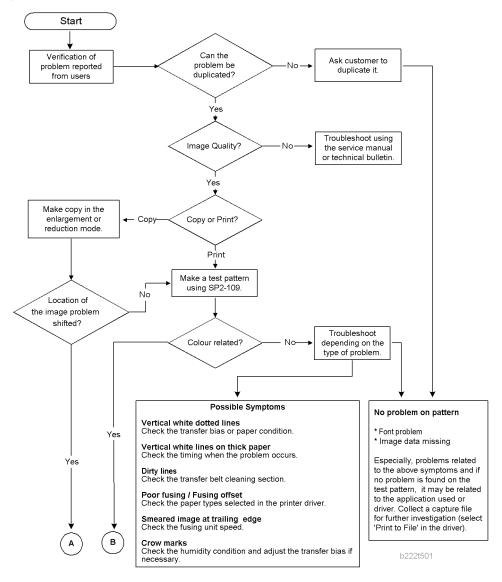


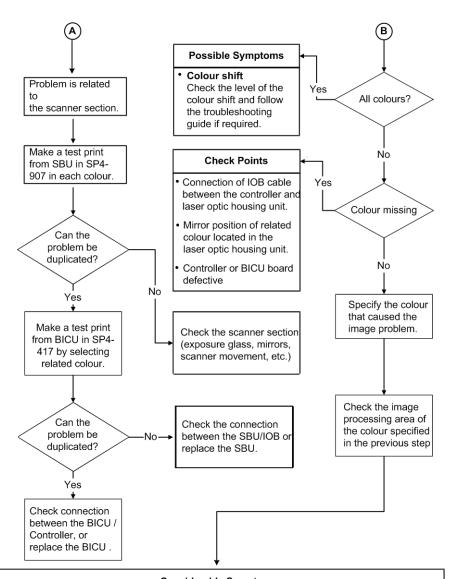
• For details, see "Troubleshooting Guide - Line Position Adjustment" section. (** p.846)

Troubleshooting Guide

Image Quality

The following work-flow shows the basic troubleshooting steps for the image quality problems on this product.





Considerable Symptoms

Toner blasting

Check which colour is blasting and adjust the toner limit or transfer bias.

Image density change

Check when the problem is reported and follow the necessary steps.

Dirty Background

Check in which condition the problem is reported, and follow the required procedure.

Colour vertical bands/lines/dirty background

Check the OPC drum and/or development unit.

Colour shift

Check the level of the colour shift and follow the troubleshooting guide if required.

Colour lines/bands/dirty background

When the PCU/development unit is close to its life end, the developer or the cleaning blade of the PCU wears out, causing vertical colour lines, bands, or dirty background. Check the related colour unit and replace it if necessary.

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Line Position Adjustment

When there are color registration errors on the output, do the line position adjustment as follows.



• Use A3/DLT size paper for this adjustment.

Test

- 1. Do SP2-111-003 (Mode c: rough adjustment).
- 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 A3/DLT paper on the by-pass tray.



- 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	Defective laser optics housing unit shutter
density	Defective image processing unit
	Low density of test pattern
	Defective IPU
	1. Replace the shutter motor.
	2. Replace the high voltage power supply unit.
	Do the forced process control (SP3-011-001) or supply some toner (SP3-015-xxx).
	4. Replace the IPU.
Normal image, but with color	Defective ID sensor shutter
registration errors	Defective ID sensor
	Defective IPU
	1. Replace the ID sensor shutter solenoid.
	2. Replace the ID sensor.
	3. Replace the IPU.

• Result: "1" in SP2-194-007

• One of results: "5" (Out of adjustable range) in SP2-194-010, -011, -012.

Test pattern check	Possible cause/Countermeasure
The main scan registrations of Y, M, C are shifted by more than ±15 mm from the main scan registration of K.	 Defective laser optics housing unit Defective IPU Replace the laser optics housing unit. Replace the IPU.
The sub scan registrations of Y, M, C are shifted by more than ±20 mm from the sub scan registration of K.	 Defective image transfer belt Defective drive units Defective IPU Replace the image transfer belt. Replace the drum motor. Replace the IPU.

Test pattern check	Possible cause/Countermeasure
The main scan registration is shifted by more than ±0.66 mm, but only at the central area of the image on the output.	 Defective ID sensor at center Deformed center area on the image transfer belt Defective IPU Replace the ID sensor. Replace the image transfer belt. Replace the IPU.
The skew for Y, M, C is more than ±0.75 mm from the main scan registration of K	 Defective PCDU Defective laser optics housing unit Defective IPU Reinstall or replace the PCDU. Replace the laser optics housing unit. Replace the IPU.
Others	 Skew correction upper limit error Defective IPU Defective laser optics housing unit Replace the IPU. Replace the laser optics housing unit.

• Result: "1" in SP2-194-007

• Result: "0" in SP2-194-010, -011, -012.

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

Test pattern check	Possible cause/Countermeasure
White image, Abnormal image, Low density	 Defective laser optics housing unit shutter Defective image processing unit Low density of test pattern Defective IPU Replace the shutter motor.
	 Replace the high voltage power supply unit. Do the forced process control (SP3-011-001) or supply some toner (SP3-015-xxx). Replace the IPU.
Normal image, but with color registration errors	 Defective ID sensor shutter Defective ID sensor Defective IPU Replace the ID sensor shutter solenoid. Replace the ID sensor. Replace the IPU.

• 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	• Low pattern density Do the forced process control (SP3-011-001) or supply some toner (SP3-015-xxx).
The main scan registrations of Y, M, C are shifted by more than ±1.4 mm from the main scan registration of K.	 No defective component Defective laser optics housing unit Defective IPU Do SP2-111-003 again. Replace the laser optics housing unit. Replace the IPU.

Test pattern check	Possible cause/Countermeasure
The sub scan registrations of Y, M, C are shifted by more than ±1.4mm from the sub scan registration of K.	 No defective component Defective image transfer belt Defective drive units Defective IPU 1. Do SP2-111-003 again. 2. Replace the image transfer belt. 3. Replace the drum motor. 4. Replace the IPU.
The main scan registration is shifted by more than ±0.66 mm, but only at the central area of the image on the output.	 Defective ID sensor at center Deformed center area on the image transfer belt Defective IPU Replace the ID sensor. Replace the image transfer belt. Replace the IPU.
The skew for Y, M, C is more than ± 0.75 mm from the main scan registration of K. – at the end of the scan line?	 Defective PCDU Defective laser optics housing unit Defective IPU Reinstall or replace the PCDU. Replace the laser optics housing unit. Replace the IPU.
Others	 Skew correction upper limit error Defective IPU Defective laser optics housing unit Replace the IPU. Replace the laser optics housing unit.

- Result: "0" in SP2-194-007
- Result: No color registration errors in SP2-194-010, -011, -012

Test pattern check	Possible cause/Countermeasure
The main scan registration of K is shifted.	Abnormal SP setting value of main scan: K Adjust the value with SP2-101-001.
The main scan length of K is shifted.	Abnormal SP setting value of main scan length detection: K Adjust the value with SP2-185-001.

- Result: "0" in SP2-194-007
- Result: Color registration errors in SP2-194-010, -011, -012

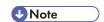
Test pattern check	Possible cause/Countermeasure
Low image density on the output	Low pattern density Do the forced process control (SP3-011-001) or supply some toner (SP3-015-xxx).
The main scan registration is shifted, but only at the central area of the image on the output.	 Defective ID sensor at center Deformed center area on the image transfer belt Defective IPU Replace the ID sensor. Replace the image transfer belt. Replace the IPU.
The main scan registrations of Y, M, C are shifted.	 Defective laser optics housing unit Defective ID sensor Defective IPU Incorrect SP value Replace the laser optics housing unit. Replace the ID sensor. Replace the IPU. Adjust the value with SP2-182-004 to -021.

Test pattern check	Possible cause/Countermeasure
The sub scan registrations of Y, M, C are shifted.	 Defective image transfer belt Defective drive units Defective ID sensor Defective IPU Incorrect SP value Replace the image transfer belt. Replace the ID sensor. Replace the drum motor.
	4. Replace the IPU.5. Adjust the value with SP2-182-022 to -039.
The skew of Y, M, C is different.	 Defective PCDU Defective laser optics housing unit Defective IOB Reinstall or replace the PCDU. Replace the laser optics housing unit. Replace the IOB.
The sub scan lines are shifted. Shifted lines appear cyclically.	 Defective PCDU Defective drive unit Drum phase adjustment error 1. Do SP1-902-001 (Drum phase adjustment); see Replacement and Adjustment – Drive Unit – Gear Unit for details. 2. Reinstall or replace the PCDU. 3. Check or replace the drive unit.

Stain on the Outputs

If a stain appears at the edge of the output, do the following procedure.

1. Execute the fusing cleaning mode with SP1123-002.

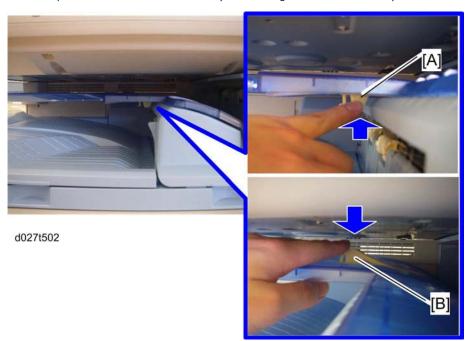


• It takes 160 seconds to complete the fusing cleaning mode.

2. Make a sample copy, and then check if a stain appears on the output.

Stack Problem in the 1-Bin Tray

If a stack problem occurs on the 1-bin tray, raise the guide on the 1-bin tray.



If a stack problem occurs;

• Push the guide to lift the guide [A].

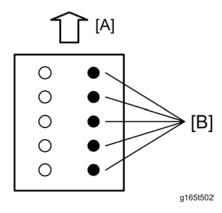
If another type or size of paper is used;

• Press down the guide [B].

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

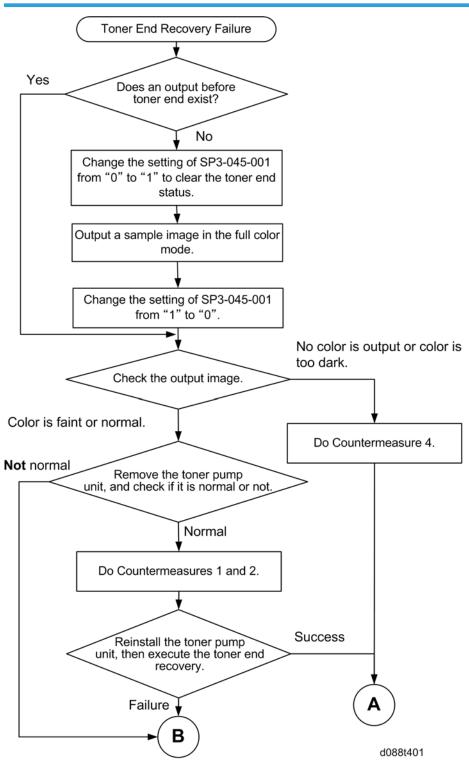
- Colored spots at 47-mm intervals: Development roller
- Abnormal image at 51-mm intervals: ITB drive or bias roller
- Abnormal image at 85-mm intervals: Paper transfer roller
- Colored spots at 119-mm intervals: Drum
- Abnormal image at 101-mm intervals: Fusing unit (Pressure roller)
- Abnormal image at 107-mm intervals: Fusing unit (Heating roller)

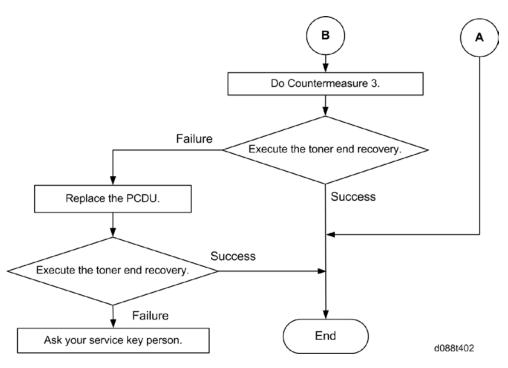
Toner End Recovery Error

If the toner end message on the LCD is displayed in the following conditions, there are some possible causes. Check the machine referring to the flow chart for the toner end recovery error.

- After a new toner bottle has been installed in the machine
- When a displayed color toner bottle still has toner inside

Flow Chart for the Toner End Recovery Error





Countermeasure 1

- 1. Check if the toner supply tube is bent or disconnected.
- 1. Straighten the toner supply tube or connect it correctly.

Countermeasure 2

- 1. Remove the target color toner bottle.
- 1. Disconnect the toner supply tube from the toner pump unit.
- 2. Remove the blocked toner in the toner supply tube with a vacuum cleaner.

Countermeasure 3

• Replace the toner pump unit (pr p.245).

Countermeasure 4

• Replace the PCDU (** p.236).

Toner Bottles Detection Error

If the no toner bottles message is displayed on the LCD when turning on the main power switch, or SC 681-11 to 14 occurs during operation, deformed detection terminals of toner bottles may cause a toner bottle ID communication error. If this occurs, follow the countermeasure below.

Countermeasure 1

• Replace the toner bottles.

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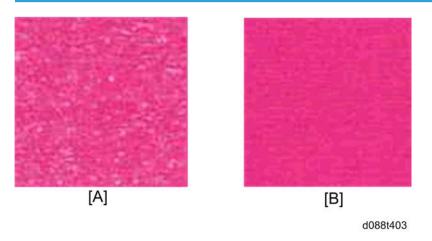
Countermeasure 2

Replace the toner bottle detection board (preprint p.362).



When replacing the toner bottle detection board, make sure not to deform the toner bottle
detection terminals. This error does not occur if toner bottles are replaced correctly.

Solid Image or Halftone Image Error



The toner density of a solid image or halftone image may not be uniform ([A]: problem output, [B]: normal output) if a large amount of sheets is printed at low coverage. If this occurs, follow the countermeasure below.

Recovery Procedure

- 1. Enter the SP mode.
- 1. Set SP3-044-xxx (Toner Supply Type) to "1: PID (Vref Fixed)".
 - Chose a target color SP number from -001 (Bk), -002 (Magenta), -003 (Cyan), and -004 (Yellow).
- 2. Set SP3-222-xxx (Vtref: Display/Set) to "4V".
 - Chose a target color SP number from -001 (Bk), -002 (Magenta), -003 (Cyan), and -004 (Yellow).
- 3. Set SP2-109-003 (Test Pattern; Pattern Selection) to "23: Full Dot Pattern".
- 4. Set SP2-109-005 (Test Pattern; Color Selection) to "1: All Color (black)", "2: Magenta", "3: Cyan", or "4: Yellow".
 - · Chose a target color selection number.
- 5. Press "Copy Window" on the LCD.

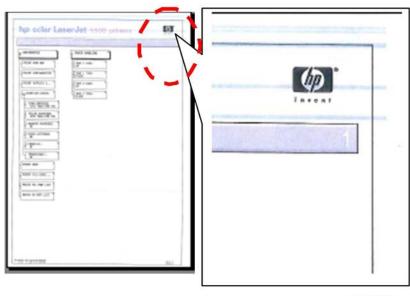
- 6. Copy 20 sheets for A4 size or 30 sheets for A3 size, and then check the setting of SP3-222-xxx (Vtref: Display/Set).
 - If the setting of this SP is more than 4V, go to next step. If not, copy again until the setting of this SP is more than 4V.
- 7. Return the setting of SP3-044-xxx (Toner Supply Type) to "4: MBD (Vref_Control)".
 - Return the setting of the SP which you have changed in step 2 before.
- 8. Execute SP3-015-xxx (Forced Toner Supply: Execute) twice.
 - Chose a target color SP number from -003 (Bk), -004 (Magenta), -005 (Cyan) and -006 (Yellow).
- 9. Execute the SP3-011-002 (Process Cont. Manual Execution; Density Adjustment).

Problem Prevention Procedure

• Set the setting of SP3-516-025 (Refresh Mode; Job End Area Coefficient) to "0.5".

Faulty Cleaning

Black or color lines (2-3mm)



d088t404

Possible Cause:

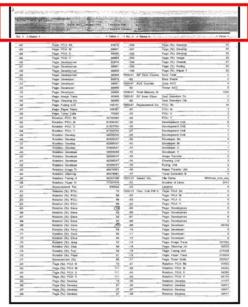
Wear of the cleaning blade at a specific point by image creation in the same place many times.

6

Solution:

Replace the drum unit.

Band Image Between 20mm and 30mm



d088t405

Possible Cause:

Developer wear with time

Solution:

Replace the developer or the development unit.

Damaged Lift Sensor Switch or Motor

SC798 is displayed when the SR3070 (D585) is unpacked or installed, or later during machine operation if the lift sensor switch or motor was damaged during machine installation.

Cause

- The section of the exit tray circled in the photo below is contacted (hit) during the shipping process.
- The customer lifts the tray all the way up.



Solution

If the symptom occurs at machine installation, do Procedure 1 below.

If the symptom occurs during machine operation after installation, do Procedure 2 below.

Procedure 1

Do this procedure if the symptom occurs at machine installation.

1. Turn off the main power switch.



2. Shift tray (🗗 x 2)







3. Shift tray bracket (🗗 x 2)

Screws:



Connecter:

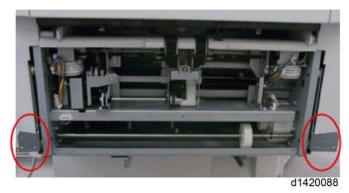


d1420086

4. End fence (🗗 x 3, 📬 x 1)



5. Snap attached beside the gear (snap x 1)



- 6. Push down the two tray support plates (left and right sides) all the way.
- 7. Attach the above gear and snap (snap x 1).
- 8. Attach all parts and connectors that you removed in steps 1 4.

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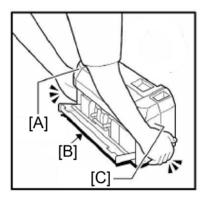
9. Turn on the main power switch and make sure that SC798 does not occur.

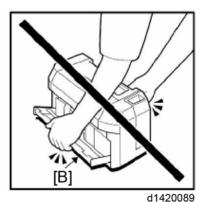
Procedure 2

Do this procedure if the symptom occurs after installation, during regular operation.

- 1. Check the tray position.
- 2. Check the position and ON-OFF response of the tray lift sensor switch.
- 3. Check the tray lift motor and tray lift sensor harness.
- 4. Remove and reattach the tray lift motor.
- 5. Replace the tray lift motor or tray lift sensor.

Whenever you lift or carry the SR3070, always hold it by the bottom edges of the front cover [C] and rear cover [A], as the figure left below. If you do not, SC798 will occur when you attach the finisher. DO NOT hold the finisher by the tray holder [B], as the figure right below.





Encryption Key Restoration for NVRAM

How to restore the old encryption key to the machine

The following message appears after the controller board is replaced, or after the hard disk and controller board are replaced. In such cases, it is necessary to restore the encryption key to the new controller board.

SD card for restoration is required.

Turn the main power switch off and set the SD card, then turn the main power switch on.

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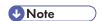
To do this, follow the procedure below.

- 1. Prepare an SD card that has been initialized in FAT16 format.
- 2. Using a PC, create a folder in the SD card and name it "restore_key".
- 3. Create a folder in the "restore_key" folder and name it the same as machine's serial number, "xxxxxxxxxxx" (11 digits).
- 4. Create a text file called "key_xxxxxxxxxxxxxxtt" and save it in the "xxxxxxxxxxx" folder. Write the encryption key in the text file.

/restore_key/xxxxxxxxxxx/key_xxxxxxxxxxxxtxt



- Ask an Administrator to enter the encryption key. The key has already been printed out by the
 user and may have been saved in the "key_xxxxxxxxxxxxxxtt" file. (The function of back-up the
 encryption key to the SD card directly is provided 11A products or later.)
- 5. Turn on the machine's main power switch.
- Confirm that a message is displayed on the LCD telling to insert the SD card that contains the encryption key.
- 7. Turn off the main power switch.
- 8. Insert the SD card that contains the encryption key into Slot 2 (the lower slot).
- 9. Turn on the main power switch.



- The machine will automatically restore the encryption key to the flash memory on the controller board.
- 10. Turn off the main power switch when the machine has returned to normal status.
- 11. Remove the SD card from Slot 2.

How to do a forced start up with no encryption key

If the encryption key back-up has been lost, follow the procedure below to do a forced start-up.



- The HDD will be formatted after the forced start-up.
- Encrypted data will be deleted.
- User settings will be cleared.
- 1. Prepare an SD card.
- 2. Create a directory named "restore_key" inside the root directory of the SD card. Then, save the "nvram_key.txt" file using the following name:

/restore_key/nvram_key.txt

3. Create a text file and write "nvclear".



- Write this string at the head of the file.
- Use all lower-case letters.
- Do not use quotation marks or blank spaces.
- It is judged that a forced start has been selected when the content of "nvclear" is executed and
 the machine shifts to the alternate system (forced start).
- 4. Confirm that a message is displayed on the LCD telling to insert the SD card that contains the encryption key.
- 5. Turn off the main power switch.
- 6. Insert the SD card that contains the encryption key into Slot 2 (the lower slot).
- 7. Turn on the main power switch.
- 8. Turn on the main power switch, the machine automatically clear the HDD encryption.
- 9. Turn off the main power switch when the machine has returned to normal status.
- 10. Remove the SD card from Slot 2.
- 11. Turn on the main power switch.
- 12. Memory clear SP5-801-xx (Exclude SP-5-801-001: All Clear and SP-5-801-002: Engine), and clear SP5-846-046: address book.
- 13. Set necessary user settings in User Tools key.

Fax Icon is not Displayed

When the fax unit is installed on the machine, the fax icon [A] is displayed on the home screen of the operation panel, as shown below. (The figure shown below is an example of the home screen. The location of each icon depends on the settings.)



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If the fax icon is not displayed (as shown below), the FCU should be replaced. Refer to the Fax service manual for the FCU replacement procedure.



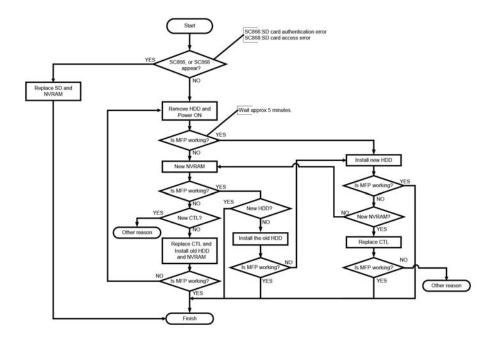
Other Symptoms

The following pages explain troubleshooting for the following symptoms:

- SC 861 (HDD reboot error) to 865 (HDD access error)
- Any SC that indicates a defective controller board
- "Please wait" remains on display

Flowchart for the error

Test the machine using the flow chart below, to determine which parts are causing the problem.



d1420102

Countermeasure list for the error

The following table shows what to do in each case: For example, if only the controller and HDD were found to be defective, then it is No 4 in the table below.

HDD Encryption OFF *1

HDD Encryption OFF					
CTL	HDD	NVRAM	SD Card	Action	No
R	R	R	R	Replace CTL / HDD / SD card / NVRAM	1
R	R	R	(R)	Replace CTL / HDD / SD card / NVRAM	2
R	R	-	R	Replace CTL / HDD / SD card	3
R	R	-	-	Replace CTL / HDD	4
R	-	R	R	Replace CTL / SD card / NVRAM	5
R	-	R	(R)	Replace CTL / SD card / NVRAM	6
R	-	-	R	Replace CTL / SD card	7
R	-	-	-	Replace CTL	8

CTL	HDD	NVRAM	SD Card	Action	No
-	R	R	R	Replace HDD / SD card / NVRAM	9
-	R	R	(R)	Replace HDD / SD card / NVRAM	10
-	R	-	R	Replace HDD / SD card	11
-	R	-	-	Replace HDD	12
-	-	R	R	Replace SD card / NVRAM	13
-	-	R	(R)	Replace SD card / NVRAM	14
-	-	-	R	Replace SD card	15

HDD Encryption ON *1

CTL	HDD	NVRAM	SD Card	Action	No
R	R	R	R	Replace CTL / HDD/SD card / NVRAM.	1
R	R	R	(R)	Replace CTL / HDD/SD card / NVRAM.	2
R	R	-	R	Replace CTL / HDD/SD card.	3
R	R	-	-	Replace CTL / HDD.	4
R	-	R	R	Replace CTL / SD Card/NVRAM, then the HDD is automatically formatted.	5
R	-	R	(R)	Replace CTL / SD Card/NVRAM, then the HDD is automatically formatted.	6
R	-	-	R	Replace CTL, then restore the old encryption key, then replace SD card.	7
R	-	-	-	Replace CTL, then restore the old encryption key.	8
-	R	R	R	Replace HDD / SD card / NVRAM.	9
-	R	R	(R)	Replace HDD / SD card / NVRAM.	10
-	R	-	R	Replace HDD / SD card.	11
-	R	-	-	Replace HDD.	12

CTL	HDD	NVRAM	SD Card	Action	No
-	-	R	R	Replace SD card / NVRAM.	13
-	-	R	(R)	Replace SD card / NVRAM.	14
-	-	-	R	Replace SD card.	15

(legends)

- : Not defective parts
- R: Defective parts, must replace
- (R): Not defective parts but must be replaced
- * 1: Data Overwrite Security (ON/OFF) does not affect the combination table.

Jam Detection

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.

Jam Codes and Display Codes

SP7-504 shows how many jams occurred at each location.

Jam Code SP	Display	Description	LCD Display
75043	Tray 1: ON	Paper is not fed from tray 1.	А
7504 4	Tray 2: ON	Paper is not fed from tray 2.	А
7504 5	Tray 3: ON	Paper is not fed from tray 3 (LCT).	Y
7504 6	Tray 4: ON	Paper is not fed from tray 4.	Y
75047	LCT: ON	Paper is not fed from LCT.	U
7504 8	Bypass: ON	Paper is not fed from the by-pass tray.	А
7504 9	Duplex: ON	Paper is jammed at the duplex unit.	Z
7504 10	-	-	-
7504 11	Vertical Transport 1: ON	Vertical transport sensor 1 does not detect paper from tray 1.	A

Jam Code SP	Display	Description	LCD Display
7504 12	Vertical Transport 2: ON	Vertical transport sensor 2 does not detect paper from tray 2.	A
7504 13	Bank Transport 1	Vertical transport sensor 3 does not detect paper from tray 3 (LCT).	Υ
7504 14	-	Vertical transport sensor 4 does not detect paper from tray 4.	Υ
7504 15	-	-	-
7504 16	-	-	-
7504 17	Registration: ON	Registration sensor does not detect paper.	А
7504 18	Fusing Entrance: ON	Fusing entrance sensor does not detect paper.	В
7504 19	Fusing Exit: ON	Fusing exit sensor does not detect paper.	В
7504 20	Paper Exit: ON	Paper exit sensor does not detect paper.	С
7504 21	Relay Exit: ON	Tray exit sensor (bridge unit) does not detect paper.	D
7504 22	Relay Transport: ON	Relay sensor (bridge unit) does not detect paper.	D
7504 23	-	-	-
7504 24	Junction Gate Feed: ON	Junction gate jam sensor does not detect paper.	С
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 27	Duplex Entrance: ON (Out)	Duplex entrance sensor does not detect paper again after paper has passed this sensor.	Z
7504 28	-	-	-
7504 51	SEF Sensor 1	Vertical transport sensor 1 does not turn off.	А
7504 52	SEF Sensor 2	Vertical transport sensor 2 does not turn off.	А

Jam Code SP	Display	Description	LCD Display
7504 53	Bank SEF Sensor 1	Vertical transport sensor 3 does not turn off.	Υ
7504 54	Bank SEF Sensor 2	Vertical transport sensor 4 does not turn off.	Υ
7504 55	-	-	-
7504 56	-	-	-
7504 57	Regist Sensor	Registration sensor does not turn off.	В
7504 58	LCT Sensor	LCT sensor does not turn off.	U
7504 59		-	-
7504 60	Exit Sensor	Paper exit sensor does not turn off.	С
7504 61	Relay Exit Sensor	Tray exit sensor (bridge unit) does not turn off.	D
7504 62	Relay Sensor	Relay sensor (bridge unit) does not turn off.	D
7504 63	-	-	-
7504 64	Junction Gate Feed: OFF	Junction gate jam sensor does not turn off.	С
7504 65	Duplex Exit Sensor	Duplex exit sensor does not turn off.	Z
7504 66	Duplex Entrance: OFF (In)	Duplex entrance sensor does not turn off.	Z
7504 67	Duplex Entrance: OFF (Out)	Duplex entrance sensor does not turn off after paper has passed this sensor.	Z
7504 68	-	-	-
7504 100	Finisher Entrance (D588)	Paper does not reach to the entrance sensor or stay at the entrance sensor.	R1-R2
7504 101	Finisher Shift Tray Exit (D588)	Paper does not reach to the lower tray exit sensor or stay at the lower tray exit sensor.	R1-R2
7504 102	Finisher Staple (D588)	Paper does not reach to the staple tray entrance sensor or stay at the staple tray entrance sensor.	R3-R5

Jam Code SP	Display	Description	LCD Display
7504 103	Finisher Exit (D588)	Lower tray exit sensor does not detect paper after the stack feed-out belt has fed paper. Lower tray exit sensor still detects paper after the stack feed-out belt has returned to the home position.	R3-R5
7504 104	-	-	-
7504 105	Finisher Tray Lift Motor (D588)	Stack height sensor does not detect paper after the lower tray has lifted up. Stack height sensor still detects paper after the lower tray has lifted down.	R1-R2
7504 106	Finisher Jogger Motor (D588)	Jogger fence HP sensor does not turn off after the jogger fence has moved from its home position. Jogger fence HP sensor does not turn on after the jogger fence has returned to its home position.	R3-R5
7504 107	Finisher Shift Motor (D588)	Shift roller HP sensor does not turn off after the shift roller has moved from its home position. Shift roller HP sensor does not turn on after the shift roller has returned to its home position.	R1-R2
7504 108	Finisher Staple Motor (D588)	Stapler HP sensor does not turn off after the stapler has moved from its home position. Stapler HP sensor does not turn on after the stapler has returned to its home position.	R3-R5
7504 109	Finisher Exit Motor (D588)	Stack feed-out belt HP sensor does not turn off after the stack feed-out belt has moved from its home position. Stack feed-out belt HP sensor does not turn on after the stack feed-out belt has returned to its home position.	R3-R5
7504 130	-	-	R1-R3
7504 131	-	-	R1-R3

Jam Code SP	Display	Description	LCD Display
7504 132	-	-	R1-R3
7504 133	-	-	R4-R6
7504 134	-	-	R4-R6
7504 135	-	-	R7-R11
7504 136	-	-	R7-R11
7504 137	-	-	R1-R3
7504 138	-	-	R7-R11
7504 139	-	-	R1-R3
7504 140	-	-	R1-R3
7504 141	-	-	R7-R11
7504 142	-	-	R1-R3
7504 143	-	-	R7-R11
7504 144	-	-	R7-R11
7504 145	-	-	R7-R11
7504 146	-	-	R7-R11
7504 147	-	-	R7-R11
7504 148	-	-	R7-R11
7504 160	-	Paper does not reach the entrance sensor.	R1
7504 161	-	Paper stays at the entrance sensor.	R1
7504 162	-	Exit problem at the exit tray	R2
7504 163	-	Exit home position sensor does not change after the positioning roller has driven.	R1
7504 164	-	Jogger home position sensor does not change after the jogger motor (front) has driven.	R1

Jam Code SP	Display	Description	LCD Display
7504 165	-	Jogger home position sensor does not change after the jogger motor (rear) has driven.	R1
7504 166	-	Exit home position sensor does not change after the exit motor has driven.	R1
7504 167	-	Stapler movement home position sensor does not change after the stapler movement motor has driven.	R1
7504 168	-	Stapler home position sensor does not change after the stapler motor has driven.	R1
7504 169	-	Paper height sensor does not change after the tray lift motor has driven.	R1
7504 170	-	Paper height sensor does not turn off after the solenoid has turned on.	R1
7504 191	Finisher Entrance: EUP (B804/B805)	Paper does not reach the finisher entrance sensor or stays at the finisher entrance sensor.	R1-R4
7504 192	Finisher Proof Exit: EUP (B804/B805)	Paper does not reach the proof tray exit sensor or stays at the proof tray exit sensor.	R1-R4
7504 193	Finisher Shift Tray Exit: EUP (B804/B805)	Paper does not reach the upper tray exit sensor or stays at the upper tray exit sensor.	R1-R4
7504 194	Finisher Stapler Exit: EUP (B804/B805)	Stapling tray paper sensor does not turn on after the finisher entrance sensor has turned on. Stapling tray paper sensor does not turn off after it has turned on.	R5-R7
7504 195	Finisher Exit: EUP (B804/ B805)	Upper tray exit sensor does not turn on while the stack feed-out belt is turned on. Upper tray exit sensor does not turn off after the stack feed-out belt has returned to its home position.	R8-R12
7504 196	-	-	-
7504 197	-	-	-

Jam Code SP	Display	Description	LCD Display
7504 198	Finisher Folder: EUP (B804 only)	Fold bottom fence HP sensor does not turn on after the fold roller motor has stopped. Fold unit exit sensor does not turn on after the fold rollers have stopped. Fold unit exit sensor does not turn off after the fold rollers have stopped.	R8-R12
7504 199	Finisher Tray Motor: EUP (B804/B805)	Upper tray limit sensor does not turn on after the upper tray has lifted up. Upper tray limit sensor does not turn off after the upper tray has moved down.	R1-R4
7504 200	Finisher Jogger Motor: EUP (B804/B805)	Jogger fence HP sensor does not turn on/off after the jogger motor has turned on. Stack feed out belt HP sensor does not turn on/off after the feed out belt motor has turned on.	R8-R12
7504 201	Finisher Shift Motor: EUP (B804/B805)	Shift roller HP sensor does not turn on/off after the shift roller motor has turned on. Exit guide plate HP sensor does not turn on/off after the exit guide plate motor has turned on. Stacking roller HP sensor does not turn on/off after the stacking sponge roller motor has turned on.	R1-R4
7504 202	Finisher Staple Moving Motor: EUP (B804/ B805)	Corner stapler HP sensor does not turn on/off after the corner stapler movement motor has turned on. Stapler rotation HP sensor does not turn on/off after the corner stapler rotation motor has turned on.	R8-R12
7504 203	Finisher Staple Motor: EUP (B804/B805)	Corner stapler does not finish stapling after a specified time. Booklet stapler does not finish stapling after a specified time.	R8-R12

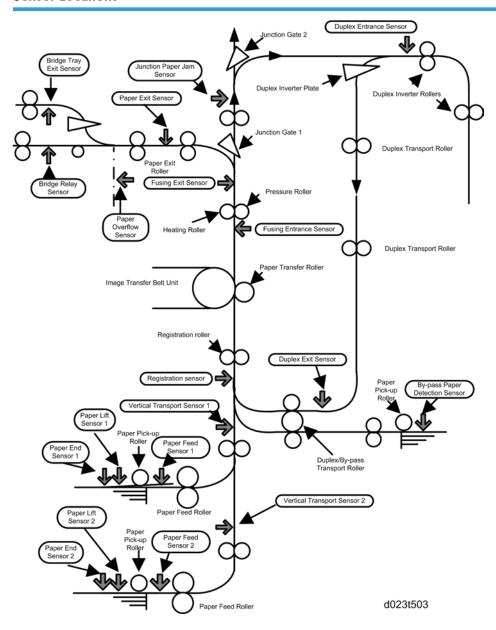
Jam Code SP	Display	Description	LCD Display
7504 204	Finisher Folder Motor: EUP (B804 only)	Fold plate HP sensor does not turn on/off after the fold plate motor has turned on. Clamp roller HP sensor does not turn on/off after the clamp roller retraction motor has turned on. Fold bottom fence HP sensor does not turn on/off after the fold unit bottom fence lift motor has turned on. Stack junction gate HP sensor does not turn	R8-R12
		on/off after the stack junction gate motor has turned on.	
7504 205	-	-	-
7504 206	Finisher Punch Motor: EUP (B804/B805)	Punch encoder sensor does not turn on/off after the punch drive motor has turned on. Punch movement HP sensor does not turn on/off after the punch movement motor has turned on. Paper position slide HP sensor does not turn on/off after the paper position sensor slide motor has turned on.	R1-R4
7504 230	-	Finisher does not send the paper exit finish bin number.	R1-R3
7504 231	-	Finisher does not keep on accepting paper because of insufficient data or command from the main frame.	R1

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

Size Code	Paper Size	Size Code	Paper Size
38	LT LEF	164	LG SEF
44	HLT LEF	166	LT SEF
132	A3 SEF	172	HLT SEF
133	A4 SEF	255	Others
134	A5 SEF	-	-

Sensor Locations



Electrical Component Defects

Sensors



• The CN numbers in the following table are the connector numbers on the IOB.

No.	Sensor Name/ Sensor Board Name	Activ e	CN	Condition	Symptom
SW1	Right Door Open Switch			Open	"Open Cover" is displayed.
3001	Right Door Open Switch	L	CN204/1	Shorted	"Open cover" cannot be detected.
S9	Duplex Door	L	CN232/B11	Open	"Open Cover" is displayed.
39	Duplex Dool	L	CINZ3Z/BII	Shorted	"Open cover" cannot be detected.
	ID Sensor: Front	А	CN219/1	Open/ Shorted	SC370
S1	ID Sensor: Center and K	А	CN219/2	Open/ Shorted	SC370
	ID Sensor: Rear	А	A CN219/3	Open/ Shorted	SC370
S12	Danishashian Canan	L	CN1224/A2	Open	Jam A (Jam8, 17)
312	Registration Sensor	L	CN224/A2	Shorted	Jam A, B (Jam1)
S30	Drum Gear Position Sensor-K	Н	CN222/A2	Open/ Shorted	SC390-01/SC396-01
S31	Drum Gear Position Sensor-C	Н	CN222/A5	Open/ Shorted	SC390-02/SC396-02
S32	Drum Gear Position Sensor-M	Н	CN222/A8	Open/ Shorted	SC390-03/SC396-03

No.	Sensor Name/ Sensor Board Name	Activ e	CN	Condition	Symptom		
\$33	Drum Gear Position Sensor-Y	Н	CN222/A11	Open/ Shorted	SC390-04/SC396-04		
S26 S27	Toner End Sensor - K Toner End Sensor - Y		CN207/ B14	Open	Toner end cannot be detected.		
S28 S29	Toner End Sensor - C Toner End Sensor - M	L	CN207/B3 CN207/B9 CN207/B6	Shorted	Toner end is detected when there is enough toner.		
S34	Image Transfer Belt Rotation Sensor	H/L	CN206/3	Open/ Shorted	SC443		
S19	Vertical Transport	L	CN230/A7	Open	Jam A (Jam3, 11)		
319	Sensor 1	L	CINZ30/A/	Shorted	Jam A, B (Jam1)		
S20	Paper End	L	L	L	CN230/	Open	Paper end is not detected when there is no paper in the paper tray.
S24	Sensor 1, 2				_		A10, B10
S21 S25	Paper Lift Sensor 1, 2	Н	CN230/ A13, B13	Open/ Shorted	SC501, SC502		
S23	Vertical Transport	L	CN1020 /D7	Open	Jam A (Jam4, 12)		
323	Sensor 2	L	CN230/B7	Shorted	Jam A, B (Jam1)		
S14 S15	Tray 1 Paper Height Sensor 1, 2	L	CN224/ B2, B5	Open/ Shorted	Remaining paper volume on the LCD is wrong.		
S16 S17	Tray 2 Paper Height Sensor 1, 2	L	CN224/ B10, B13	Open/ Shorted	Remaining paper volume on the LCD is wrong.		
S18	Tray 1 Paper Feed Sensor	L	CN230/A4	Open/ Shorted	Jam A, B		

No.	Sensor Name/ Sensor Board Name	Activ e	CN	Condition	Symptom
S22	Tray 2 Paper Feed Sensor	L	CN230/B4	Open/ Shorted	Jam A, B
SW4	Tray 1 Set Switch	L	CN224/A9	Open	Tray 1 is not detected when tray 1 is set.
3444	Tray I Sel Swiich	L	CINZZ4/A9	Shorted	Tray 1 is detected when tray 1 is not set.
S11	By-pass Paper Size Sensor	L	CN232/ B16, B17, B19, B20	Open/ Shorted	Paper size error
\$\\\2	SW2 By-pass Paper Detection Sensor	L	CN232/ A10	Open	Paper on the by-pass tray is not detected when paper is set.
344.2		L		Shorted	Paper on the by-pass tray is detected when paper is not set.
S10	By-pass Paper Length	L	CN232/	Open	Paper size error
310	Sensor	L	B14	Shorted	Tuper size error
S8	Eusing Entrance Conser	L	CN232/B2	Open	Jam C (Jam 18)
36	Fusing Entrance Sensor	L	CN232/ B2	Shorted	Jam C (Jam 1)
S6	Dunlay Entrance Sancer	L	CN232/A2	Open	Jam Z (Jam 26/27)
30	Duplex Entrance Sensor	L	CN232/AZ	Shorted	Jam Z (Jam 1)
S7	Duplex Exit Sensor	L	CN1222 /B0	Open	Jam Z (Jam 25)
37	Duplex Exil Sensor	L	CN232/B8	Shorted	Jam Z (Jam 1)
S39	TD Sensor - K	A	CN227/A7	Open/ Shorted	SC360-01
S40	TD Sensor - C	А	CN227/ A15	Open/ Shorted	SC360-02

No.	Sensor Name/ Sensor Board Name	Activ e	CN	Condition	Symptom
S41	TD Sensor - M	А	CN227/B7	Open/ Shorted	SC360-03
S42	TD Sensor - Y	А	CN227/ B15	Open/ Shorted	SC360-04
S4	Fusing Exit Sensor	L	CN204/12	Open	Jam C (Jam 19)
34	Tusing Exil Sensor	L	CIN204/ 12	Shorted	Jam C (Jam 1)
				Open	Waste toner near full indicated when it is not near full.
\$13	Waste Toner Sensor	Н	CN224/A5	Shorted	Waste toner near full cannot be detected when the waste toner bottle is nearly full.
CIA/O	Waste Toner Bottle Set		L CN224/A7	Open	Waste toner bottle is not detected when the waste toner bottle is set.
SW3	Switch	L		Shorted	Waste toner bottle is detected when the waste toner bottle is not set.
SW5	Tray 2 Paper Size Switch	L	CN224/ A11, A12, A13, A15	Open/ Shorted	Paper size error
\$35	Temperature/ Humidity Sensor	A	CN234/6, 8	Open/ Shorted	SC498 Printed image has some problems such as rough image, dirty background, weak image or poor fusing.
S36	Thermopile Center, Edge	A	CN212/3, 6	Open/ Shorted	SC541, SC551

No.	Sensor Name/ Sensor Board Name	Activ e	CN	Condition	Symptom
THI	Thermistor - Pressure Roller Center, Edge	А	CN212/21,	Open/ Shorted	SC561, SC571
S3	Paper Exit Sensor	L	CN204/9	Open	Jam C (Jam 20)
33	raper Extr Sensor	L	CIN204/ 9	Shorted	Jam C (Jam 1)
\$5	Day or Overflow Server	L	CN204/15	Open	Paper overflow message is not displayed when the paper overflow condition still remains.
33	Paper Overflow Sensor	L	CN204/15	Shorted	Paper overflow message is displayed when the paper overflow condition does not remain.
S41	Original Width Sensor 1	А	CN313/14 SIO	Open/ Shorted	Original paper size cannot be detected.
541	Original Width Sensor 2	А	CN313/11 SIO	Open/ Shorted	Original paper size cannot be detected.
6.40	Original Length Sensor	А	CN313/8 SIO	Open/ Shorted	Original paper size cannot be detected.
S42	Original Length Sensor	А	CN313/5 SIO	Open/ Shorted	Original paper size cannot be detected.
\$43	Original Length Sensor	А	CN313/2 SIO	Open/ Shorted	Original paper size cannot be detected.
520	Carrage LID Common	LI	CN318/2	Open	SC120
S39	Scanner HP Sensor	Н	SIO	Shorted	SC121
S40	Platen Cover Sensor	L	CN318/5 SIO	Open/ Shorted	Platen cover open cannot be detected.

No.	Sensor Name/ Sensor Board Name	Activ e	CN	Condition	Symptom
S2	Junction Paper Jam Sensor	L	CN204/6	Open/ Shorted	Jam C (Jam 24/64)
-	NC Sensor Center, Edge	А	CN212/14,9	Open/ Shorted	SC581, SC591

Blown Fuse Conditions

Power Supply Unit

F	Rat	ring	Company to the control of the contro
Fuse 115V 220V - 240V		220V - 240V	Symptom when turning on the main switch
FU1	15A/250V	8A/250V	No response. (5V power to the PSU is not supplied.)
FU2	15A/250V	6.3A/250V	No response. (5V power to the IPU and controller is not supplied.)
FU3*1	2A/250V	1A/250V	5V power to the scanner heater and tray heater is not supplied.
FU4*1	5A/250V	5A/250V	5VE power to the SIO and IOB is not supplied.
FU5*1	5A/250V	5A/250V	5V power to the IOB not supplied.
FU6*1	5A/250V	5A/250V	5V power to the IPU not supplied.
FU7	8A/250V	8A/250V	24VS power to the IOB not supplied.
FU8	8A/250V	8A/250V	24VS power to the IOB not supplied.
FU9	8A/250V	8A/250V	24V power to the IOB and IPU not supplied.
FU10	8A/250V	8A/250V	24V power to the SIO not supplied.
FU11	8A/250V	8A/250V	24V power to the PFU or LCT and finisher not supplied.

 $^{^{\}star}$ 1 Replace the whole board or unit if this fuse blows, because it is soldered.

ACAUTION

• For continued protection against risk of fire, replace only with same type and rating of fuse.

3

Scanner Test Mode

SBU Test Mode

Output the SBU test pattern with SP4-807-001 to make sure the scanner SBU operates correctly. The SBU test pattern prints out after you have set the SP mode settings and pressed the start key.

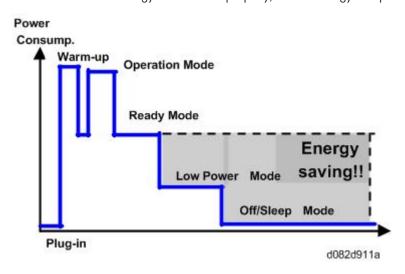
- The CCD on the SBU board may be defective if the copy is abnormal but the SBU test pattern is normal.
- The following can be the cause if the copy is abnormal and the SBU test pattern is also abnormal:
 - The harness may not be correctly connected between the SBU and the IPU.
 - The IPU or SBU board may be defective.

7. Energy Saving

Energy Save

Energy Saver Modes

Customers should use energy saver modes properly, to save energy and protect the environment.



The area shaded grey in this diagram represents the amount of energy that is saved when the timers are at the default settings. If the timers are changed, then the energy saved will be different. For example, if the timers are all set to 240 min., the grey area will disappear, and no energy is saved before 240 min. expires.

Timer Settings

The user can set these timers with User Tools (System settings > Timer setting)

- Energy saver timer (1 240 min): Low Power Mode. Default setting: 1 min (for NA and EU)/10 min (others).
- Auto off timer (1 240 min): Off/Sleep Mode. Default setting: 1 min (for NA and EU)/16 min (others).

Normally, Energy Saver timer < Auto Off timer. But, for example, if Auto Off timer < or = Energy Saver timer, the machine goes immediately to Off mode when the Auto Off timer expires. It skips the Energy Saver mode.

Example

• Low power: 15 min.

- Auto Off: 1 min.
- The machine goes to Off mode after 1 minute. Low Power mode is not used.

Return to Stand-by Mode

Low Power Mode

The recovery time depends on the model and the region.

• C3a, b: 10 sec. or less.

Off/Sleep Mode

Recovery time.

• C3a, b: 10 sec. or less.

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.

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
- 8941-004: Low power mode
- 8941-005: Off/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)

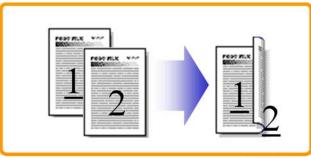
Paper Save

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:

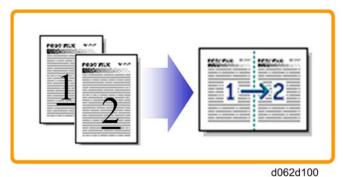
Reduce paper volume in half!



d062d102

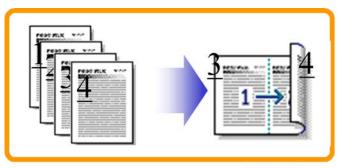
2. Combine mode:

Reduce paper volume in half!



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 \times 3/2

$$A = ((2) + (3) + (4))/2 + (5) + (6) \times 3/2$$

- Number of printed original images: B
 - = Total counteró + Number of pages in Single-sided with combine mode + Number of pages in Duplex with combine mode

$$B = (1) + (5) + (6)$$

- (1) Total counter: SP 8581 001 (pages)
- (2) Single-sided with duplex mode: SP 8421 001 (pages)
- (3) Double-sided with duplex mode: SP 8421 002 (pages)
- (4) Book with duplex mode: SP 8421 003 (pages)
- (5) Single-sided with combine mode: SP 8421 004 (pages)

/

• (6) Duplex with combine mode: SP 8421 005 (pages)

Model AT-C3 Machine Code: D111/D142

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1. Appendices

General Specifications

Main Frame

Configuration:	Desktop
Print Process:	Laser beam scanning & Dry electrostatic transfer system 4 drums tandem method
Number of scans:	1
Resolution:	Scan: 600 dpi Print: 1,200 dpi
Gradation:	Scan: 600dpi / 10bits/pixel Print: 600dpi / 4 bits/pixel
Original type:	Sheets, book, objects
Maximum original size:	A3/11" x 17"
Original reference position:	Left rear corner, ad hoc lists

	Plain (ADF 1 to 1, LT/ A4 LEF)
	C3a: 30 cpm (color/black & white)
	C3b: 35 cpm (color/black & white)
	Thick 1 (169 g/m ² or less)
	C3a: 17.5 cpm (color/black & white)
	C3b 17.5 cpm (color/black & white)
	Thick 2 (220 g/m ² or less)
	C3a: 17.5 cpm (color/black & white)
	C3b 17.5 cpm (color/black & white)
Copy speed:	Thick 3 (256 g/m ² or less)
	C3a: 17.5 cpm (color/black & white)
	C3b 17.5 cpm (color/black & white)
	Thick 4 (300 g/m ² or less)
	C3a: 15 cpm (color/black & white) from By-pass
	C3b: 15 cpm (color/black & white) from By-pass
	OHP, Glossy (1200 dpi)
	C3a: 17.5 cpm (color/black & white)
	C3b 17.5 cpm (color/black & white)
	Color
	C3a: 7.3 seconds or less (A4/LT LEF)
F	C3b: 7.2 seconds or less (A4/LT LEF)
First copy (normal mode):	Black & white
	C3a: 4.7 seconds or less (A4/LT LEF)
	C3b: 4.8 seconds or less (A4/LT LEF)
Warm-up time:	22.1 seconds or less (23°C)
	Standard tray: 550 sheets x 2 + 100
Print Paper Capacity:	By-pass tray: 100 sheets (Normal), 40 sheets (Thick 1: 106 - 169g/m ²), 20 sheets (Thick 2/3: 170 - 256 g/m ²), 16 sheets (Thick 4: 257 - 300 g/m ²), 35 sheets (Postcard)
(80 g/m², 20 lb)	Optional paper feed tray: 550 sheets x 2
	2000-sheet LCT: 2000 sheets
	1200-sheet LCT: 1200 sheets
L	

	(Refer to "Supported Paper Sizes".)			
	-	Minimum	Maximum	
	Tray 1	A4/8.5" x 11" (LEF)		
	Tray 2 A5 (LEF)/ 8.5" x 11"		A3/11" x 17"	
	By-pass	90 x 148 mm	305 x 600 mm	
Print Paper Size:	Optional Tray	A5 (LEF)/ 8.5" x 11"	A3/11" x 17"	
	2000-sheet LCT	A4/8.5">	< 11" (LEF)	
	1200-sheet LCT	B5 (LEF)/ 257 x 182mm	A4 (LEF)/ 297 x 210mm	
	Envelope feeder	A6 (SEF)/ Postcard	A4/LT (SEF)	
	Standard tray: 60 to 25	66 g/m² (16 to 68 lb)		
	Optional paper tray: 60 to 256 g/m² (16 to 68 lb)			
Printing Paper Weight:	By-pass tray: 60 to 300 g/m² (16 to 79.8 lb)			
	Duplex unit: 60 to 169 g/m ² (16 to 45 lb)			
	LCT 1200: 60 to 216 g/m ² (10 to 5711b)			
	Standard exit tray: 500	sheets or more (face dov	vn)* ¹	
	Shift Tray: 250 sheets (80 g/m²)			
	1-bin Tray: 125 (80 g/m²)			
Output Paper Capacity:	500-sheet finisher 500 (80 g/m²)			
	1000-sheet finisher: 250 + 1000 sheets (80 g/m²)			
	1000-sheet booklet finisher: 100 + 1000 sheets (80 g/m²)			
	* 1: T6200, A4 LEF			
Continuous copy:	Up to 999 sheets			

	Arbitrary: From 25 to 400% (1% step)				
	Fixed:				
	North Ame	erica	Europe		
	25%		25%		
	50%		50%		
	65%		61%		
	73%			71%	
Zoom:	78%			82%	
Zoom:	85%			87%	
	93%		93%		
	100%		100%		
	121%		115%		
	129%		122%		
	155%		141%		
	200%	200%		200%	
	400%		400%		
Memory:	Standard: 1.5 GB				
Power Source:	120 V – 127 V, 60 Hz: More than 12A (for North America)				
Tower dedice.	220 V – 240 V, 50,	/60 Hz: More th	an 10A (f	for Europe/Asia)	
	-	120V		220 - 240V	
Power Consumption:	Maximum	1584 W o	r less	1700 W or less	
·	Energy Saver (Sleep Mode)	1.2 W or	less	1.6 W or less	

	Model	State	Mainframe	Complete system (* 1)
	C3a	Standby	40 dB(A) or Less	44 dB(A) or Less
		Operating	B/W: 66.5 dB(A) or Less	-
Noise Emission: (Sound Power Level)			Color: 67.0 dB(A) or Less	Color: 70.4 dB(A) or Less
	СЗЬ	Standby	40 dB(A) or Less	46.9 dB(A) or Less
		Operating	B/W: 68.3 dB(A) or Less	-
		Operaling	Color: 68.5 dB(A) or Less	Color: 71.9 dB(A) or Less

(*1) The complete system consists of mainframe, ARDF, finisher, and LCT.

The above measurements were made in accordance with Ricoh standard methodology.

Dimensions (W \times D \times H):

Copier: 670 x 682 x 760 mm (26.4" x 26.9" x 29.9")

Copier + PFU or LCT: 670 x 671 x 1020 mm (26.4" x 26.4" x 40.2")

Weight: Less than 120 kg (265 lb.) [with ARDF excluding toner]

Printer

	PCL 6/5c
	RPCS (Refined Printing Command Stream)
	Adobe PostScript 3 (optional)
Printer Languages:	PDF Direct
	IPDS (optional)
	PictBridge (optional)
	MediaPrint: JPEG/TIFF (optional)

	PCL 5c:
	300 x 300 dpi : Available only in B/W mode
	600 x 600 dpi : Fast (1 bit), Standard (2 bits), Fine (4 bits)
	PCL 6:
Resolution and	600 x 600 dpi : Fast (1 bit), Standard (2 bits), Fine (4 bits) / 1200 x 1200 dpi
Gradation:	RPCS:
	600 x 600 dpi, 1,800 x 600 dpi*, 9600 dpi x 600 dpi*
	*1,800 x 600 dpi = 600 x 600 dpi (2 bits)
	9600 dpi x 600 dpi = 600 x 600 dpi (4 bits)
	PS3:
	600 x 600 dpi : Fast (1 bit), Standard (2 bits), Fine (4 bits)
	C3a:
	30 ppm in Plain/Middle Thick mode
D	17.5 ppm in Thick/OHP mode (depending on paper type)
Printing speed:	C3b:
	35 ppm in Plain/Middle Thick mode
	17.5 ppm in Thick/OHP mode (depending on paper type)
	PCL 6/5c (Standard):
	45 Compatible fonts
	13 International fonts
Resident Fonts:	1 Bitmap font
	Adobe PostScript 3 (Optional)/PDF (Standard):
	136 fonts (24 Type 2 fonts, 112 Type 14 fonts)
	IPDS (Optional):
	108 fonts

	USB 2.0 Type A and Type B: Standard USB Host (PictBridge): Optional Ethernet (100 Base-TX/10 Base-T): Standard
Host Interfaces:	Gigabit Ethernet (1000 Base-T): Optional
	IEEE1284 parallel x 1: Optional
	IEEE802.11a/b/g (Wireless LAN): Optional
	Bluetooth (Wireless): Optional
Network Protocols:	TCP/IP (IPv6), IPX/SPX

Scanner

Standard Scanner Resolution:	Main scan/Sub scan 600 dpi
Available scanning Resolution Range:	Twain Mode: 100 to 1200 dpi Delivery Mode: 100/200/300/400/600 dpi
Grayscales:	1 bit or 8 bits/pixel each for RGB
Scanning Throughput (ARDF mode):	Scan to E-mail / Folder: BW: 51 ipm (A4LEF / BW Text (Print) / 200dpi / Compression: On (MH)) FC: 51 ipm (A4LEF / FC Text / Photo / 200dpi / Compression: Standard)
Interface:	Ethernet (100 Base-TX/10 Base-T/1000 Base-T for TCP/IP), Wireless LAN, GigaEthernet
Compression Method:	B&W: TIFF (MH, MR, MMR) Gray Scale, Full Color: JPEG

Supported Paper Sizes

Paper Feed

North America

BT: By-pass Tray, T1: Tray 1, T2/3/4: Tray 2/3/4, LCT 2000: Large Capacity Tray: 2000-sheet, LCT 1200: Large Capacity Tray: 1200-sheet, DU: Duplex Unit

Paper	Size (W x L)	ВТ	TI	T2/3/ 4	LCT 2000	LCT 1200	DU
A3 W	12" x 18"	М	-	-	-	-	-
A3 SEF	297 x 420mm	М	-	М	-	-	М
A4 SEF	210 x 297mm	М	-	Α	-	-	М
A4 LEF	297 x 210mm	М	S	М	S	S	М
A5 SEF	148 x 210mm	М	-	-	-	-	-
A5 LEF	210 x 148mm	М	S	Α	-	-	М
A6 SEF	105 x 148mm	М	-	-	-	-	-
B4 SEF	257 x 364mm	М	-	М	-	-	М
B5 SEF	182 x 257mm	М	-	Α	-	-	М
B5 LEF	257 x 182mm	М	S	М	-	S	М
B6 SEF	128 x 182mm	М	-	-	-	-	-
Ledger	11" x 17"	Α	-	Α	-	-	М
Letter SEF	8.5" x 11"	Α	-	Α	-	-	М
Letter LEF	11" x 8.5"	Α	М	Α	М	М	М
Legal SEF	8.5" x 14"	М	-	А	-	-	М
Government Legal SEF	8.25" x 14"	М	-	М	-	-	М
Half Letter SEF	5.5" x 8.5"	А	-	-	-	-	-

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Paper	Size (W x L)	ВТ	TI	T2/3/	LCT 2000	LCT 1200	DU
Executive SEF	7.25" x 10.5"	М	-	М	-	-	М
Executive LEF	10.5" x 7.25"	М	-	Α	-	-	М
F SEF	8" x 13"	М	-	М	-	-	М
Foolscap SEF	8.5" x 13"	М	-	М	-	-	М
	8.25" x 13"	М	-	М	-	-	М
F 1: CFF	11" x 15"	М	-	М	-	-	М
Folio SEF	10" x 14"	М	-	М	-	-	М
	8" x 10"	М	-	М	-	-	М
8K	267 x 390mm	М	-	М	-	-	М
16K SEF	195 x 267mm	М	-	М	-	-	М
16K LEF	267 x 195mm	М	-	М	-	-	М
Custom		М	-	М	-	-	-
Com 10 Env.	4.125" x 9.5"	М	-	-	-	-	-
Monarch Env.	3.875" x 7.5"	М	-	-	-	-	-
C6 Env.	114 x 162mm	М	-	-	-	-	-
C5 Env.	162 x 229mm	М	-	-	-	-	-
DL Env.	110 x 220mm	М	-	-	-	-	-

Remarks:

А	Supported: the sensor detects the paper size.
М	Supported: the user specifies the paper size.
S	Supported: depends on a technician adjustment
-	Not supported

Europe/ Asia

BT: By-pass Tray, T1: Tray 1, T2/3/4: Tray 2/3/4, LCT 2000: Large Capacity Tray: 2000-sheet, LCT 1200: Large Capacity Tray: 1200-sheet, DU: Duplex Unit

Paper	Size (W x L)	ВТ	Tl	T2/3/	LCT 2000	LCT 1200	DU
A3 W	12" x 18"	М	-	-	-	-	-
A3 SEF	297 x 420mm	Α	-	Α	-	-	М
A4 SEF	210 x 297mm	Α	-	Α	-	-	М
A4 LEF	297 x 210mm	Α	М	Α	М	S	М
A5 SEF	148 x 210mm	Α	-	-	-	-	-
A5 LEF	210 x 148mm	Α	S	Α	-	-	М
A6 SEF	105 x 148mm	Α	-	-	-	-	-
B4 SEF	257 x 364mm	М	-	Α	-	-	М
B5 SEF	182 x 257mm	М	-	Α	-	-	М
B5 LEF	257 x 182mm	М	S	Α	-	S	М
B6 SEF	128 x 182mm	М	-	-	-	-	-
Ledger	11" x 17"	М	-	М	-	-	М
Letter SEF	8.5" x 11"	М	-	Α	-	-	М
Letter LEF	11" x 8.5"	М	S	М	S	S	М
Legal SEF	8.5" x 14"	М	-	М	-	-	М
Government Legal SEF	8.25" x 14"	М	-	М	-	-	М
Half Letter SEF	5.5" x 8.5"	М	-	-	-	-	-
Executive SEF	7.25" x 10.5"	М	-	М	-	-	М
Executive LEF	10.5" x 7.25"	М	-	М	-	-	М
F SEF	8" x 13"	М	-	М	-	-	М
Foolscap SEF	8.5" x 13"	М	-	М	-	-	М

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Paper	Size (W x L)	ВТ	TI	T2/3/	LCT 2000	LCT 1200	DU
	8.25" x 13"	М	-	М	-	-	М
F 1: CFF	11" x 15"	М	-	М	-	-	М
Folio SEF	10" x 14"	М	-	М	-	-	М
	8" x 10"	М	-	М	-	-	М
8K	267 x 390mm	М	-	М	-	-	М
16K SEF	195 x 267mm	М	-	М	-	-	М
16K LEF	267 x 195mm	М	-	М	-	-	М
Custom		М	-	М	-	-	-
Com 10 Env.	4.125" x 9.5"	М	-	-	-	-	-
Monarch Env.	3.875" x 7.5"	М	-	-	-	-	-
C6 Env.	114 x 162mm	М	-	-	-	-	-
C5 Env.	162 x 229mm	М	-	-	-	-	-
DL Env.	110 x 220mm	М	-	-	-	-	-

Remarks:

А	Supported: the sensor detects the paper size.
М	Supported: the user specifies the paper size.
S	Supported: depends on a technician adjustment
-	Not supported

Paper Exit

1000-Sheet Booklet Finisher

MF: Main Frame, Prf: Proof, Clr: Clear, Shf: Shift, Stp: Staple, SS: Saddle Stitch, 2/3 P: 2/3 Holes Punch, 4 P: 4 Holes Punch, N4P: North Europe 4 Holes Punch

D	C: /\/ 1\	ME			1000	O-sheet	bookl	et finisher	,	
Paper	Size (W x L)	MF	Prf	Clr	Shf	Stp	SS	2/3 P	4 P	N4P
A3 W	12" x 18"	Υ	Υ	Υ	-	-	-	Υ	Υ	Υ
A3 SEF	297 x 420 mm	Υ	Υ	Υ	Υ	30	30	Υ	Υ	Υ
A4 SEF	210 x 297 mm	Υ	Υ	Υ	Υ	50	50	-	-	Y
A4 LEF	297 x 210 mm	Υ	Υ	Υ	Υ	50	50	Υ	Υ	Υ
A5 SEF	148 x 210 mm	Υ	Υ	Υ	Υ	-	-	-	-	Y
A5 LEF	210 x 148 mm	Υ	Υ	Υ	Υ	-	-	-	-	Y
A6 SEF	105 x 148 mm	Υ	Υ	Υ	-	-	-	-	-	-
B4 SEF	257 x 364 mm	Υ	Υ	Υ	Υ	30	30	Y	Υ	Υ
B5 SEF	182 x 257 mm	Υ	Υ	Υ	Υ	50	50	-	-	Υ
B5 LEF	257 x 182 mm	Υ	Υ	Υ	Υ	50	50	Y	Υ	Υ
B6 SEF	128 x 182 mm	Υ	Υ	Υ	-	-	-	-	-	Υ
Ledger	11" x 17"	Υ	Υ	Υ	Υ	30	30	Y	Υ	Υ
Letter SEF	8.5" x 11"	Υ	Υ	Υ	Υ	50	50	-	-	Υ
Letter LEF	11" x 8.5"	Υ	Υ	Υ	Υ	50	-	Y	Υ	Υ
Legal SEF	8.5" x 14"	Υ	Υ	Υ	Υ	30	30	-	-	Υ
Government Legal SEF	8.25" x 14"	Y	Υ	Y	Y	30	30	Y	Y	Y
Half Letter SEF	5.5" x 8.5"	Υ	Υ	Υ	Υ	-	-	-	-	Y
Executive SEF	7.25" x 10.5"	Υ	Υ	Υ	Y	50	-	-	-	Y
Executive LEF	10.5" x 7.25"	Υ	Υ	Υ	Υ	50	-	Υ	Υ	Υ
F SEF	8" x 13"	Υ	Υ	Υ	Υ	30	-	-	-	Υ
Foolscap SEF	8.5" x 13"	Υ	Υ	Υ	Υ	30	-	-	-	Υ

D	S: (\A/ 1\	MF	1000-sheet booklet finisher									
Paper	Size (W x L)	NIF	Prf	Clr	Shf	Stp	SS	2/3 P	4 P	N4P		
	8.25" x 13"	Υ	Υ	Υ	Υ	30	-	-	-	Υ		
Folio SEF	11" x 15"	Υ	Υ	Υ	Υ	30	-	Υ	Υ	Υ		
FOIIO SEF	10" x 14"	Υ	Υ	Υ	Υ	30	-	Υ	-	Υ		
	8" x 10"	Υ	Υ	Υ	Υ	30	-	-	-	Υ		
8K	267 x 390 mm	Υ	Υ	Υ	Υ	30	-	Υ	Υ	Υ		
16K SEF	195 x 267 mm	Υ	Υ	Υ	Υ	50	-	-	-	Υ		
16K LEF	267 x 195 mm	Υ	Υ	Υ	Υ	50	-	Υ	Υ	Υ		
Custom		Υ	Υ	Υ	-	-	-	-	-	-		
Com 10 Env.	4.125" x 9.5"	Υ	Υ	-	-	-	-	-	-	-		
Monarch Env.	3.875" x 7.5"	Υ	Υ	-	-	-	-	-	-	-		
C6 Env.	114 x 162 mm	Υ	Υ	Υ	-	-	-	-	-	-		
C5 Env.	162 x 229 mm	Υ	Υ	Υ	-	-	-	-	-	-		
DL Env.	110 x 220 mm	Y	Υ	Υ	-	-	-	-	-	-		

Remarks:

Y	Supported
30	Output up to 30 sheets
50	Output up to 50 sheets
-	Not supported

1000-Sheet Finisher and 500-Sheet Finisher

MF: Main Frame, Prf: Proof, Clr: Clear, Shf: Shift, Stp: Staple

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	Size		10)00-sh	eet finis	her	500-	sheet fi	nisher	1 D:-	Cl vic
Paper	(W x L)	MF	Prf	Clr	Shf	Stp	Clr	Shf	Stp	1-Bin	Shift
A3 W	12" x 18"	Υ	Υ	Υ	-	-	-	-	-	-	Y
A3 SEF	297 x 420 mm	Y	Y	Y	Y	30	Y	Y	30	Y	Y
A4 SEF	210 x 297 mm	Y	Y	Υ	Y	50	Y	Y	50	Y	Y
A4 LEF	297 x 210 mm	Υ	Y	Y	Y	50	Y	Y	50	Y	Y
A5 SEF	148 x 210 mm	Y	Y	Υ	Y	-	Υ	Y	-	Y	Y
A5 LEF	210 x 148 mm	Y	Y	Υ	Y	-	Υ	Y	-	Y	Y
A6 SEF	105 x 148 mm	Y	-	-	-	-	Υ	-	-	-	Y
B4 SEF	257 x 364 mm	Y	Υ	Y	Y	30	Υ	Y	30	Y	Y
B5 SEF	182 x 257 mm	Y	Y	Υ	Y	50	Υ	Y	50	Y	Y
B5 LEF	257 x 182 mm	Y	Υ	Y	Y	50	Υ	Y	50	Y	Y
B6 SEF	128 x 182 mm	Y	Υ	-	-	-	Υ	-	-	Y	Y
Ledger	11" x 17"	Υ	Υ	Υ	Υ	30	Υ	Υ	30	Y	Y
Letter SEF	8.5" x 11"	Υ	Υ	Υ	Y	50	Υ	Υ	50	Y	Y
Letter LEF	11" x 8.5"	Υ	Υ	Y	Y	50	Υ	Y	50	Y	Y
Legal SEF	8.5" x 14"	Υ	Υ	Υ	Υ	30	Υ	Υ	30	Y	Y
Government Legal SEF	8.25" x 14"	Υ	Y	Y	Y	-	Y	Y	30	Y	Y

D	Size	A 4 F	10	00-sh	eet finis	her	500-	sheet fi	nisher	1 0.	Cl ·fr
Paper	(W × L)	MF	Prf	Clr	Shf	Stp	Clr	Shf	Stp	1-Bin	Shift
Half Letter SEF	5.5" x 8.5"	Y	Y	Y	Y	-	Υ	Y	-	Y	Y
Executive SEF	7.25" x 10.5"	Y	Y	Y	Y	50	Y	Y	50	Y	Y
Executive LEF	10.5" x 7.25"	Y	Y	Y	Y	50	Y	Y	50	Y	Y
F SEF	8" x 13"	Υ	Υ	Υ	Υ	30	Υ	Y	30	Υ	Υ
Foolscap SEF	8.5" x 13"	Υ	Υ	Υ	Υ	30	Υ	Υ	30	Υ	Υ
	8.25" x 13"	Y	Υ	Y	Y	30	Y	Y	30	Y	Υ
Folio SEF	11" x 15"	Υ	Υ	Υ	Υ	30	Υ	Y	30	Υ	Υ
	10" x 14"	Υ	Υ	Y	Υ	30	Υ	Υ	30	Υ	Υ
	8" x 10"	Υ	Υ	Υ	Υ	30	Υ	Υ	30	Υ	Υ
8K	267 x 390 mm	Y	Y	Y	Y	30	Υ	Y	30	Y	Υ
16K SEF	195 x 267 mm	Y	Υ	Y	Y	50	Y	Y	50	Y	Υ
16K LEF	267 x 195 mm	Y	Υ	Y	Y	50	Y	Y	50	Y	Υ
Custom		Υ	Υ	-	-	-	-	-	-	-	Υ
Com 10 Env.	4.125" x 9.5"	Y	-	-	-	-	Υ	Y	-	Y	Υ
Monarch Env.	3.875" x 7.5"	Y	-	-	-	-	-	-	-	Y	Υ
C6 Env.	114 x 162 mm	Y	Υ	-	-	-	-	-	-	Y	Υ
C5 Env.	162 x 229 mm	Y	Y	-	-	-	-	-	-	Y	Υ

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Paper	Size	MF	1000-sheet finisher 500-sheet finisher							1-Bin	Shift
rapei	(W × L)	7411	Prf	Clr	Shf	Stp	Clr	Shf	Stp	I-BIN	JIIII
DL Env.	110 x 220 mm	Y	Y	-	-	-	-	-	-	Y	Υ

Remarks:

Y	Supported
30	Output up to 30 sheets
50	Output up to 50 sheets
-	Not supported

Platen/ARDF Original Size Detection

Size	Platen	ARDF	Platen	ARDF
(width x length) [mm]	Inches	Inches	Metric	Metric
A3 (297 x 420) L	-	Y	γ*3	Y
B4 (257 x 364) L	-	-	γ*3	Υ
A4 (210 x 297) L	Y*1	Y	Y*3	Υ
A4 (297 x 210) S	Y*3	Y	Y*3	Y
B5 (182 x 257) L	-	-	Y*3	Υ
B5 (257 x 182) S	-	-	Y*3	Υ
A5 (148 x 210) L	-	-	_*1	Y
A5 (210 x 148) S	-	-	_*1	Y
B6 (128 x 182) L	-	-	-	-
B6 (182 x 128) S	-	-	-	-
11" x 17" (DLT)	Y	Y*2	-	Y*2
11" x 15"	-	Y*2	-	-

10" x 14"	-	Y	-	-
8.5" x 14" (LG)	Υ	Y*2	-	-
8.5" x 13" (F4)	-	Y*2	Y*4	Y*4
8.25" x 13"	-	-	Y*4	Y*4
8" x 13"(F)	-	-	Y*4	Y*4
8.5" x 11" (LT)	γ*3	Y*2	Y*3	Y*2
11" x 8.5" (LT)	γ*3	Y*2	Y*3	Y*2
8" x 10"	-	Y*2	-	-
5.5" x 8.5" (HLT)	_*1	Y	-	-
8.5" x 5.5" (HLT)	_*1	Y	-	-
8K (267 x 390)	-	-	Y*3	Y*2
16K L (195 x 267)	-	-	Y*3	Y*2
16K S (267 x 195)	-	-	Y*3	Y*2
7.25" x 10.5" (Executive)	-	Y	-	-
10.5" x 7.25" (Executive)	-	Y*2	-	-

 $^{^*}$ 1: Use SP4-303 to detect original sizes as A5 lengthwise/HLT when the message "Can-t detect original size" shows.

^{*2:} The machine can detect the paper size depending on the setting of SP6-016-1.

^{*3:} The machine can detect the paper size depending on the setting of SP4-305-1.

^{*4:} The machine can detect the paper size depending on the setting of SP5-126-1.

Software Accessories

The printer drivers and utility software are provided as following two CD-ROMs;

- 1: Printer Drivers and Utilities CD-ROM
- 2: Scanner/PostScript® Drivers and Utilities CD-ROM.

An auto-run installer lets you to select the components you want to install.

Printer Drivers

Printer Language	Windows 2000, XP, Server 2003, Vista, Server 2008, 7	MacOS8.6 to 9.x, MacOSX10.1 or later
PCL5c / PCL6	Yes	No
PS3	Yes	Yes
RPCS	No	No

U Note

- The PCL5c/6 and PS3 drivers are provided on the printer drivers CD-ROM.
- The PS3 drivers are all genuine Adobe PS drivers, except for Windows 2000/XP/2003/Vista/7.
 Windows 2000 uses Microsoft PS. A PPD file for each operating system is provided with the driver.
- The PPD installer for Macintosh supports Mac OS X 10.1 or later versions.
- The LAN Fax driver lets you fax documents directly form your PC. Address Book Editor and Cover Sheet Editor are to be installed as well. (These require the optional fax unit.)

Scanner and LAN Fax drivers

Printer Language	Windows 2000, XP, Server 2003, Vista, 7	MacOS8.6 to 9.x, MacOSX10.1 or later
Network TWAIN	Yes	No
LAN-FAX	Yes	No

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- The Network TWAIN and LAN Fax drivers are provided on the scanner drivers CD-ROM.
- This software lets you fax documents directly form your PC. Address Book Editor and Cover Sheet Editor are to be installed as well. (These require the optional fax unit.)

Utility Software

Software	Description
Font Manager (2000/XP/Server 2003/7)	A font management utility with screen fonts for the printer This is provided on the printer drivers CD-ROM.
Smart Device Monitor for Admin (2000/XP/Server 2003/Vista/7)	A printer management utility for network administrators. NIB setup utilities are also available. This is provided on the printer drivers CD-ROM.
DeskTopBinder – SmartDeviceMonitor for Client (2000/XP/Server 2003/ Vista/7)	A printer management utility for client users. A utility for peer-to-peer printing over a NetBEUI or TCP/IP network. A peer-to-peer print utility over a TCP/IP network. This provides the parallel printing and recovery printing features. This is provided on the printer drivers CD-ROM.
Printer Utility for Mac (Mac)	A utility for peer-to-peer printing over a NetBEUI or TCP This software provides several convenient functions for printing from Macintosh clients. This is provided on the scanner drivers CD-ROM.
DeskTopBinder Lite (2000/XP/Server 2003/7)	DeskTopBinder Lite itself can be used as personal document management software and can manage both image data converted from paper documents and application files saved in each client's PC. This is provided on the scanner drivers CD-ROM.

Optional Equipment

ARDF (D578)

	Simplex	Size	A3 to A5, DLT to HLT	
D C: ()4/ : 1:		Weight	40 to 128 g/m² (10 to 34 lb.)	
Paper Size/Weight:	Duplex	Size	A3 to A5, DLT to HLT	
		Weight	52 to 10	05 g/m ² (14 to 28 lb.)
Table Capacity:	50 sheets (80 g/m ² , 20 l	b)	
Original Standard Position:	Rear left co	rner		
Separation:	Feed belt a	nd separation	roller	
Original Transport:	Roller transport			
Original Feed Order:	From the top original			
	Сору	-		32 to 200 %
Supported Magnification Ratios:	Fax	Color		32.6 to 200 %
		Black & white		48.9 to 200 %
Power Source:	DC 24V, 5V from the scanner unit			
Power Consumption:	50 W or less			
Dimensions (W × D × H):	550 mm x 491 mm x 120 mm (21.7" x 19.3" x 4.7")			
Weight:	10 kg (22 lb.)			

Paper Feed Unit (D580)

Paper Feed System:	FRR
Paper Height Detection:	5 steps (100%, 70%, 30%, 10% (Near end), and Empty)
Capacity:	500 sheets x 2 trays
Paper Weight:	60 to 256 g/m² (16 to 68 lb.)

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Paper Size:	A3 SEF to A5, DLT SEF to HLT
Power Source:	DC 24V, 5V (from the main frame)
Power Consumption:	Less than 60 W (Max.)/ Less than 35 W (Ave,)
Dimensions (W x D x H):	580 mm x 620 mm x 260 mm (22.8" x 24.4" x 10.2")
Weight:	26 kg (57.3 lb.)

LCT 2000-sheet (D581)

Paper Size:	A4 LEF/LT LEF
Paper Weight:	60 g/m² to 256 g/m² (16 lb. to 68 lb.)
Tray Capacity:	2,000 sheets (80 g/m², 20lb.)
Remaining Paper Detection:	5 steps (100%, 70%, 30%, 10%, Empty): Right Tray 4 steps (100%, 70%, 30%, Empty): Left Tray
Power Source:	DC 24 V, 5 V (from copier/printer)
Power Consumption:	55 W (Max.)/30 W (Ave.)
Weight:	26 kg (57.3 lb.)
Size (W x D x H):	580 mm x 620 mm x 260 mm (22.8" x 24.4" x 10.2")

LCT 1200-sheet (D631)

Paper Size:	A4 LEF/ LT LEF/ B5 LEF
Paper Weight:	60 g/m ² to 216 g/m ² (16 lb to 57 lb.)
Tray Capacity:	1,200 sheets (80 g/m², 20lb)
Remaining Paper Detection:	5 steps (100%, 75%, 30%, 10%, End)
Power Source:	24 Vdc, 5 Vdc (from copier/printer)
Power Consumption:	55 W (Max)/ 25 W (Ave.)
Weight:	14 kg (30.8 lb.)

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	348 mm x 540 mm x 290 mm
Size (W x D x H):	(13.7" x 21.3" x 11.4")

1000-Sheet Booklet Finisher & Punch Unit (D589)

	No punch mode:
	A3/11" x 17" to A5/8.5" x 5.5" (LEF)
	Punch mode:
	2 holes: A3/11" x 17" to B6/5.5" x 8.5" (SEF) or A4/8.5" x 11" to A5/8.5" x 5.5" (LEF) 3 holes:
Print Paper Size:	A3, B4, 11" x 17" (SEF) or A4, B5, 8.5" x 11" (LEF)
	4 holes (Europe):
	A3, B4, 11" x 17" (SEF) or A4, B5, 8.5" x 11" (LEF)
	4 holes (North Europe):
	A3/11" x 17" to B6/5.5" x 8.5" (SEF)
	Staple mode:
	A3/11" x 17" to B5/8.5" x 11"
	No punch mode:
	52 to 256 g/m² (14 to 68 lb.) (Shift tray)
	52 to 105 g/m² (14 to 28 lb.) (Proof tray)
D	Punch mode:
Paper Weight:	52 to 163 g/m ² (14 to 43 lb.)
	Staple mode:
	64 to 90 g/m² (17 to 24 lb.)
	Label/Thick paper/OHP cannot be stapled
	[Proof tray]
	100 sheets: A4, 8.5" x 11" or less
Town Community	50 sheets: B4, 8.5" x 14" or more
Tray Capacity:	[Shift tray]
	1000 sheets: A4, 8.5" x 11" (LEF) or smaller
	500 sheets: B4, 8.5" x 14" or larger

Staple capacity:	Single size: 50 sheets: A4, 8.5" x 11" or smaller 30 sheets: B4, 8.5" x 14" or larger		
Staple position:	3 positions 1-staple: 2 positions (Top Left, Top Right) 2-staples: 1 positions		
Staple replenishment:	Cartridge (5000 staples)		
Power consumption:	60 W		
Dimensions (W x D x H):	535 mm x 600 mm x 930 mm (21.1" x 23.6" x 36.6")		
Weight	Without punch unit:	48 kg (105.8 lb.)	
	With punch unit:	50 Kg (110.3 lb.)	

1000-Sheet Finisher (D588)

Upper Tray

Paper Size:	A3 to A6 11" x 17" to 5.5" x 8.5"
Paper Weight:	60 to 157 g/m² (16 to 42 lb.)
	250 sheets (A4 LEF/8.5" x 11" SEF or smaller)
Paper Capacity:	50 sheets (A4, 8.5" x 11" or smaller)
	30 sheets (B4, 8.5" x 14" or larger)

Lower Tray

D. Ci	No staple mode:
	A3 to B5, DLT to HLT
Paper Size:	Staple mode:
	A3, B4, A4, B5, DLT to LT

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Paper Weight:	No staple mode: 60 to 157 g/m ² (16 to 42 lb) Staple mode: 64 to 90 g/m ² (17 to 24 lb)			
Stapler Capacity:	30 sheets (A3, B4, DLT, LG) 50 sheets (A4, B5 LEF, LT)			
	No staple mode: 1,000 sheets (A4/LT or smaller: 80 g/m ² , 20 lb.) 500 sheets (A3, B4, DLT, LG: 80 g/m ² , 20 lb.) Staple mode: (80 g/m ² , 20 lb., number of sets)			
	Set Size	00	10 to 50	-
Paper Capacity:	Size	2 to 9	10 to 30	31 to 50
	A4/LT LEF B5 LEF	100	100 to 20	100 to 20
	A4/LT SEF	100	50 to 10	50 to 10
	A3, B4, DLT, LG	50	50 to 10	-
Staple positions:	1 Staple: 2 positions (Front, Rear) 2 Staples: 2 positions (Upper, Left)			
Staple Replenishment:	Cartridge (5,000 staples/cartridge)			
Power Source:	DC 24 V, 5 V (from the copier/printer)			
Power Consumption:	50 W			
Weight:	25 kg (55.2 lbs)			
Dimensions (W x D x H):	527 x 520 x 790 mm (20.8" x 20.5" x 31.1")			

500-Sheet Finisher (D585)

Paper Size:	A3 to B6 (SEF)
Paper Weight:	$52 \text{ to } 128 \text{ g/m}^2 (14 \text{ to } 34 \text{ lb.})$
Trave Camacibu	500 sheets: A4, LT or smaller
Tray Capacity:	250 sheets: B4, LG or larger

Staple capacity:	30 sheets (A3, B4, DLT, LG) 50 sheets (A4, LT or smaller)
Staple position:	3 positions 1-staple: 2 positions (Top right-oblique, Top left-oblique) 2-staples: 1 positions (Left)
Staple replenishment:	Cartridge (5000 staples)

500-Sheet Finisher

Target Line Speed	77 mm/sec. to 205 mm/sec		
Target CPM	35 cpm		
Face-down Output Size	12"x18", A3 SEF to A6 SEF, DLT to HLT SEF Shift sizes: A3 SEF to B5 SEF A5, B6, A6 SEF labels possible		
Paper Thickness	52 g/m ² (45 K) to 157 g Up to 253 g/m ² (220K)		
Stapling			
Stack Height for Stapling	50 sheets: A4, LT and smaller 30 sheets: B4, LG and larger		
Size	A3 SEF to B5 SEF (can be mixed if same width)		
Stack Thickness	64g/m ² (45 K) to 157 g/m (135 K)		
Stapling Positions	Front/Oblique: 1, Front/Parallel: 1 Rear/Oblique: 1, Rear/Parallel: 1, 2 locations		
Output Tray Capacity			
Non-staple Mode	de 500 sheets: A4, LT and smaller		
Staple Mode	250 sheets: B4, LG and larger Stack Size (Stapling)	Stacks	Size

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	2 to 9 Sheets	55 to 46	A4, B5, LT LEF
	10 to 50 Sheets	45 to 10	
	2 to 9 Sheets	55 to 27	
	10 to 50 Sheets	25 to 8	A4, B5, LT SEF
	2 to 9 Sheets	55 to 27	10.54.517.10
	10 to 30 Sheets	25 to 8	A3, B4, DLT, LG
Stacking	Non-Stapling Mode	Vertical: 15 mm or less	
		Horizontal: 15 mm or less	
Jogging Precision	'		
2 to 30 Sheets	2 mm		
31 to 50 Sheets	3 mm		
Dimensions (W x D x H)	396 x 551 x 276 mm (15.6 x 21.7 x 10.9 in.)		
Weight	12 kg (26.4 lb)		

Bridge Unit (D634)

	Standard sizes
	A6 SEF to A3, HLT to DLT
Paper Size:	Non-standard sizes
	Width: 90 to 305 mm
	Length: 148 to 600 mm
Paper Weight:	52 g/m² to 256 g/m², 16 lb. to 68 lb.
Paper Capacity:	125 sheets (80 g/m ² , 20 lb.): B4 or larger 250 sheets (80 g/m ² , 20 lb.): A4 or smaller
Power Source:	DC 24 V, 5 V (form the copier/printer)
Dimensions (W x D x H):	415 mm x 412 mm x 111 mm (16.3" x 16.2" x 4.4")
Weight	5 kg (11 lb.)

Shift Tray (D633)

Paper Capacity:	250 sheet (A4/ 8 _{1/2} " x 11 _{1/2} " or smaller: 80g/m ² / 20 lbs) 125 sheet (B4 8 _{1/2} " x 11 _{1/2} " or larger: 80g/m ² / 20 lbs)
Paper Size:	Standard sizes A6 SEF to A3, HLT to DLT Non-standard sizes Width: 90 to 305 mm Length: 148 to 600 mm
Paper Weight:	52-256 g/m ² / 14 - 68 lbs
Power Consumption:	Max 10W (Power is supplied from the mainframe.)
Dimension (W x D x H):	423 mm x 468 mm x 114 mm (16.7" x 18.4" x 4.5")
Weight:	Approx. 2kg (4.4lbs)

1-bin Tray Unit (D632)

Paper Size:	Standard Size: A3 /DLT to A5/ HLT SEF
Paper Weight:	60 to 169 g/m ² , 16 to 45 lb.
Tray Capacity:	125 sheets (80 g/m², 20 lb., A4)
Power Source:	DC 24 V, 5 V (from the copier)
Power Consumption:	Less than 1 W
Weight:	1.7 kg
Size (W x D x H):	565 mm x 410 mm x 115 mm (22.2" x 16.1" x 4.5")

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2. Preventive Maintenance Tables

Maintenance Tables

Preventive Maintenance Items

Chart: A4 (LT)/5%

Mode: 3 copies / original (prints/job)

Ratio 30%

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

ltem	150K	200K	300K	600K	EM	Remarks
Scanner RTB 26 Scanner PM	is 300k, n	ot 200k				
Reflector		С				Optics cloth
1st/2nd/3rd mirrors		С				Optics cloth
Exposure Glass		С			С	Ricoh exposure glass cleaner
ADF Exposure Glass		С			С	Ricoh exposure glass cleaner
PCDU						
PCDU - K			R			
PCDU - Y, M, C	R					
Toner collection bottle	R					Replace when the waste toner bottle full message appears.
Dev. Unit - K				R		
Dev. Unit - Y, M, C					R: 480K	

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RTB 26

ltem	150K	200K	300K	600K	EM	Remarks
Developer - K			R			
Developer - Y, M, C					R: 240	
Transfer						
Image Transfer Belt- cleaning Unit			R			
Image Transfer Belt				R		
Paper Transfer Roller Unit			R			
Fusing						
Heating Sleeve Belt Unit			R			
Pressure Roller			R			
Pressure Roller Bearing			R, C			S552R
Entrance Guide Plate			С		С	
Exit Guide Plate			С		С	
Exit Separation Plate			С		С	
Thermopile			С		С	Cotton swab with alcohol
Fusing Drive Gear					С	Replace if worn.
Pressure Roller Gear					С	Replace if worn.
Idler Gear					С	Replace if worn.
Paper Path						
Registration Roller					С	Damp cloth
Registration Sensor					С	Dry cloth
Paper Dust Container					С	
Vertical Transport Roller					С	Damp cloth
Vertical Transport Sensor					С	Dry cloth

ltem	150K	200K	300K	600K	EM	Remarks
Paper Feed Sensor					С	Dry cloth
Feed Roller					С	Dry cloth
Separation Roller					С	Dry cloth
Pick-up Belt					С	Damp cloth
Inverter Roller					С	Damp cloth
Fusing Exit Sensor					С	Dry cloth
Junction Paper Jam Roller					С	Dry cloth
Junction Paper Jam Sensor					С	Dry cloth
Duplex Unit						
Duplex Transport Roller					С	Damp cloth
Duplex Entrance Sensor					С	Dry cloth
Duplex Exit Sensor					С	Dry cloth
Duplex Exit Roller					С	Damp cloth
Miscellaneous						
Ozone Filter			R			
Exhaust Filter			R			
Toner Scatterproof Filter			R			See the last of this section for the toner scatterproof filter removal procedure.
Dust Glass					С	
ID Sensor					С	

ARDF (D578)

Item	EM	Remarks
Sensors	С	Blower brush

ltem	EM	Remarks
Platen Sheet Cover	С	Damp cloth; alcohol (Replace if required.)
White Plate	С	Dry or damp cloth
Drive Gear	L	Grease G501
Transport Roller	С	Damp cloth; alcohol
Exit Roller	С	Damp cloth; alcohol
Inverter Roller	С	Damp cloth; alcohol
Idle Rollers	С	Damp cloth; alcohol

Two-tray Paper Feed Unit (D580)

ltem	EM	Remarks
Feed Roller	С	Dry cloth
Separation Roller	С	Dry cloth
Pick-up Belt	С	Damp cloth
Paper Feed Sensor	С	Dry cloth
Relay Sensor	С	Dry cloth
Relay Roller	С	Damp cloth
Bottom Plate Pad	С	Damp cloth

1200-sheet LCT (D631)

ltem	EM	Remarks
Feed Roller	С	Dry cloth
Separation Roller	С	Dry cloth
Pick-up Roller	С	Dry cloth
Paper Feed Sensor	С	Dry cloth

ltem	EM	Remarks
Relay Sensor	С	Dry cloth
Relay Roller	С	Damp cloth
Bottom Plate Pad	С	Damp cloth

2000-sheet LCT (D581)

ltem	EM	Remarks
Feed Roller	С	Dry cloth
Separation Roller	С	Dry cloth
Pick-up Belt	С	Damp cloth
Paper Feed Sensor	С	Dry cloth
Relay Sensor	С	Dry cloth
Relay Roller	С	Damp cloth
Bottom Plate Pad	С	Damp cloth

1000-Sheet Booklet Finisher (D589)

ltems	EM	Remarks
Rollers	С	Damp cloth
Discharge Brush	С	Dry cloth
Sensors	С	Blower brush

1000-Sheet Booklet Finisher Punch Kit (B807)

ltems	EM	Remarks
Punch Chads	С	Discard chads.

1000-Sheet Finisher (D588)

ltems	EM	Remarks
Rollers	С	Damp cloth
Discharge Brush	С	Dry cloth
Sensors	С	Blower brush

1 Bin Tray (D632)

ltems	EM	Remarks
Rollers	С	Damp cloth
Tray	С	Damp cloth
Sensor	С	Blower brush
Bearing	С	S552R

Bridge Unit (D634)

ltems	EM	Remarks
Rollers	С	Damp cloth

Shift Tray (D633)

ltems	EM	Remarks
Tray	С	Damp cloth

One-tray Paper Feed Unit (D579)

ltem	EM	Remarks
Feed Roller	С	Dry cloth
Separation Roller	С	Dry cloth

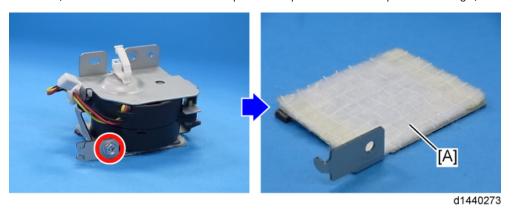
ltem	EM	Remarks
Pick-up Roller	С	Dry cloth
Paper Feed Sensor	С	Dry cloth
Relay Sensor	С	Dry cloth
Relay Roller	С	Damp cloth
Bottom Plate Pad	С	Damp cloth

Side Tray (D635)

ltems	EM	Remarks
Rollers	С	Damp cloth
Sensors	С	Blower brush

Toner Scatterproof Filter Removal Procedure

1. QSU fan (See "QSU Fan" in the "Main Chapters: 4. Replacement and Adjustment: Fusing".)



2. Toner scatterproof filter [A] (** x 1)

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

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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).

Mainframe

ltem	240K	480K	600K	1500K	2000K	Remarks
Dev. Unit - K			R			
Dev. Unit - Y, M, C		R				
Developer - Y, M, C	R					
ITB Unit			R			
Toner Supply Unit - K					R	
Toner Supply Unit - Y, M, C				R		

ARDF

ltem	80K	120K	240K	Remarks
Pick-up Roller		R		Number of originals
Feed Belt		R		Number of originals
Separation Roller		R		Number of originals

3. SP Mode Tables

Main SP Tables-1

SP1-XXX (Feed)

1001	[Leading Edge Registration] Lea (Tray Location, Paper Type, Col Thick 3		Registration Adjustment Paper Type 🗦 Thin, Plain, Thick 1, Thick 2 or	
	Adjusts the leading edge registration by changing the registration motor operation timing for each mode.			
002	Tray: Plain	*ENG		
003	Tray: Middle Thick	*ENG		
004	Tray: Thick 1	*ENG		
005	Tray: Thick 2	*ENG		
007	By-pass: Plain	*ENG		
008	By-pass: Middle Thick	*ENG		
009	By-pass: Thick 1	*ENG	[-9 to 9 / 0.0 / 0.1 mm/step]	
010	By-pass: Thick 2	*ENG		
011	By-pass: Thick 3	*ENG		
013	Duplex: Plain	*ENG		
014	Duplex: Middle Thick	*ENG		
015	Duplex: Thick 1	*ENG		

016	Tray: Thick 3	*ENG	
017	Tray: Plain: 1 200	*ENG	
018	Tray: Middle Thick: 1200	*ENG	
019	Tray: Thick 1:1200	*ENG	
020	By-pass: Plain: 1 200	*ENG	[0 + 0 / 00 / 0] / + -]
021	By-pass: Middle Thick: 1200	*ENG	[-9 to 9 / 0.0 / 0.1 mm/step]
022	By-pass: Thick 1:1200	*ENG	
023	Duplex: Plain:1200	*ENG	
024	Duplex: Middle Thick:1200	*ENG	
025	Duplex: Thick 1:1200	*ENG	
026	Tray: Thin	*ENG	
027	By-pass: Thin	*ENG	
028	Duplex: Thin	*ENG	
029	Tray: Thin: 1200	*ENG	
030	By-pass: Thin: 1200	*ENG	
031	Duplex: Thin: 1200	*ENG	

	[Side to Side Registration] Side-to-Side Registration Adjustment
1002	Adjusts the side-to-side registration by changing the laser main scan start position for each mode.

001	By-pass Table	*ENG	
002	Paper Tray 1	*ENG	
003	Paper Tray 2	*ENG	
004	Paper Tray 3	*ENG	[44- 4 / 00 / 0] /]
005	Paper Tray 4	*ENG	[-4 to 4 / 0.0 / 0.1 mm/step]
006	Duplex	*ENG	
007	Paper Tray 5	*ENG	
008	Large Capacity Tray	*ENG	

	[Paper Buckle] Paper Buckle Adjustment				
1003	(Tray Location, Paper Type, Color mode), Paper Type D Plain, Thick, Thick 1				
Adjusts the amount of paper buckle at the registration roller by changing the timing.			roller by changing the paper feed		
002	Paper Tray 1: Plain	*ENG	[-9 to 5 / -2 / 1 mm/step]		
003	Tray 1: Middle Thick	*ENG	[-9 to 5 / -1 / 1 mm/step]		
004	Paper Tray 1: Thick 1	*ENG	[0 + 5 / 2 /] /]		
007	Paper Tray2/3/4/5/LCT: Plain	*ENG	[-9 to 5 / -2 / 1 mm/step]		
800	Tray 2/3/4/5/LCT: Middle Thick	*ENG	[-9 to 5 / -1 / 1 mm/step]		
009	Paper Tray2/3/4/5/LCT: Thick 1	*ENG	[-9 to 5 / -2 / 1 mm/step]		
012	By-pass: Plain	*ENG	[O to 5 / 1 / 1 mm /ston]		
013	By-pass: Middle Thick	*ENG	[-9 to 5 / -1 / 1 mm/step]		
014	By-pass: Thick 1	*ENG	[-9 to 5 / -2 / 1 mm/step]		
018	Duplex: Plain	*ENG	[O to 5 / 1 / 1 mm /stor]		
019	Duplex: Middle Thick	*ENG	[-9 to 5 / -1 / 1 mm/step]		
020	Duplex: Thick 1	*ENG	[-9 to 5 / -2 / 1 mm/step]		

021 Paper Tray 1: Plain: 1200 *ENG 022 Tray 1: Middle Thick: 1200 *ENG	
022 Tray 1: Middle Thick: 1200 *ENG	
023 Tray 2/3/4/5LCT: Plain: 1200 *ENG	
024 Tray 2/3/4/5LCT: Mid: 1200 *ENG [-9 to 5 / 0 / 1 mm/step]	
025 By-pass: Plain: 1200 *ENG	
026 By-pass: Middle Thick: 1200 *ENG	
027 Paper Tray 1: Thick 1: 1200 *ENG	
028 Paper Tray2/3/4/5/LCT: Thick 1:1200 *ENG [-9 to 5 / -2 / 1 mm/step]	
029 By-pass: Thick 1: 1200 *ENG	
030 Duplex: Plain: 1200 *ENG	
031 Duplex: Middle Thick: 1200 *ENG [-9 to 5 / 0 / 1 mm/step]	
032 Duplex: Thick 1: 1200 *ENG [-9 to 5 / -2 / 1 mm/step]	

1007	[By-Pass Size Detection] By-Pass Size Detection Display		
	LG *ENG [0 or 1 / 0 / -] 0: OFF, 1: ON		
001	Enables or disables the automatic paper size detection function of the by-pass tray. This SP determines what paper size the machine detects if the detected size is less than 8.5". 0: OFF (Letter/SEF), 1: ON (Legal/SEF)		

1101	[Reload Permit Setting]		
1101	Specifies the settings of the rela	oad permit	for cold temperature in color mode.
001	Pre-rotation Start Temp.	*ENG	[-50 to 200 / -50 / 1 deg/step]
002	Reload Target Temp.:Center	*ENG	[0 to 180 / 145 / 1 deg/step]
003	Reload Target Temp.:Press	*ENG	[0 to 200 / 120 / 1 deg/step]
004	Temp.:Delta:Cold:Center	*ENG	[0 to 200 / 5 / 1 deg/step]
005	Temp.:Delta:Cold:End	*ENG	[40 to 200 / 5 / 1 deg/step]

006	Temp.:Delta:Cold:Press	*ENG	[0 to 200 / 80 / 1 deg/step]	
	[Forced Ready Set]			
	Specifies the setting of the forced reload permit for cold temperature in color mo			
007	Forced Reload Time :Cold	*ENG	[0 to 100 / 9 / 1 sec/step]	
	[Reload Permit Setting]			
	Specifies the settings of the rela	oad permit	for warm temperature in color mode.	
800	Temp.:Delta:Warm:Center	*ENG	[0 to 200 / 5 / 1 deg/step]	
009	Temp.:Delta:Warm:End	*ENG	[0 to 200 / 5 / 1 deg/step]	
010	Temp.:Delta:Warm:Press	*ENG	[0 to 200 / 80 / 1 deg/step]	
	[Reload Permit Setting]			
Specifies the setting of the forced reload permit for warm temperature in colo			permit for warm temperature in color mode.	
011	Forced Reload Time:Warm	*ENG	[0 to 100 / 9 / 1 sec/step]	
	[Reload Permit Setting]			
	Specifies the settings of the rela	oad permit	for hot temperature in color mode.	
012	Temp.:Delta:Hot:Center	*ENG	[0 to 200 / 5 / 1 deg/step]	
013	Temp.:Delta:Hot:End	*ENG	[0 to 200 / 5 / 1 deg/step]	
014	Temp.:Delta:Hot:Press	*ENG	[0 to 200 / 80 / 1 deg/step]	
	[Reload Permit Setting]			
	Specifies the setting of the force	ed reload p	permit for hot temperature in color mode.	
015	Forced Reload Time:Hot	*ENG	[0 to 100 / 9 / 1 sec/step]	
	[Reload Permit Setting Temp.]			
	Specifies the settings of the rela	oad permit	for cold temperature in BW mode.	
016	Temp.:Delta:Cold:BW:Center	*ENG	[0 to 200 / 5 / 1 deg/step]	
017	Temp.:Delta:Cold:BW:End	*ENG	[0 to 200 / 5 / 1 deg/step]	
018	Temp.Delta:Cold:BW:Press	*ENG	[0 to 200 / 80 / 1 deg/step]	
	[Reload Permit Setting]			
	Specifies the setting of the forced reload permit for cold temperature in BW mode.			

019	Forced Reload Time:Cold:BW	*ENG	[0 to 100 / 9 / 1 sec/step]	
	[Reload Permit Setting] Specifies the settings of the reload permit for cold temperature in BW mode 2.			
020	Temp.:Delta:Cold:BW2:Cent	*ENG	[0 to 200 / 15 / 1 deg/step]	
021	Temp.:Delta:Cold:BW2:End	*ENG	[40 to 200 / 100 / 1 deg/step]	
022	Temp.Delta:Cold:BW2:Press	*ENG	[0 to 200 / 100 / 1 deg/step]	
	[Forced Ready Set] Specifies the setting of the forced reload permit for cold temperature in BW mode 2.			
023	Time:Cold:BW2	*ENG	[0 to 100 / 30 / 1 sec/step]	

1102	[Feed Permit Setting]				
1102	Specified the settings of the paper feeding timing.				
001	Temp.:Lower Delta:Center	*ENG	[0 to 200 / 10 / 1 deg/step]		
002	Temp.:Lower Delta:End	*ENG	[0 to 200 / 10 / 1 deg/step]		
003	Temp.:Upper Delta:Center	*ENG	[0 to 200 / 30 / 1 deg/step]		
004	Temp.:Upper Delta:End	*ENG	[0 to 200 / 30 / 1 deg/step]		
005	Temp.:Lower Delta:Press	*ENG	[0 to 200 / 100 / 1 deg/step]		
006	Rotation Time	*ENG	[0 to 100 / 0 / 1 sec/step]		
007	Temp.:Lower Delta:Center:Sp.1	*ENG	[0 to 200 / 5 / 1 deg/step]		
800	Temp.:Lower Delta:End:Sp.1	*ENG	[0 to 200 / 5 / 1 deg/step]		
009	Temp.:Upper Delta:Center:Sp.1	*ENG	[0 to 200 / 30 / 1 deg/step]		
010	Temp.:Upper Delta:End:Sp.1	*ENG	[0 to 200 / 30 / 1 deg/step]		
011	Temp.:Lower Delta:Press:Sp.	*ENG	[0 to 200 / 15 / 1 deg/step]		

012	Rotation Time:Sp.1	*ENG	[0 to 100 / 0 / 1 sec/step]
013	Temp.:Lower Delta:Center:Sp.2	*ENG	[0 to 200 / 5 / 1 deg/step]
014	Temp.:Lower Delta:End:Sp.2	*ENG	[0 to 200 / 5 / 1 deg/step]
015	Temp.:Upper Delta:Center:Sp.2	*ENG	[0 to 200 / 15 / 1 deg/step]
016	Temp.:Upper Delta:End:Sp.2	*ENG	[0 to 200 / 15 / 1 deg/step]
017	Temp.:Lower Delta:Press:Sp.	*ENG	[0 to 200 / 100 / 1 deg/step]
018	Rotation Time:Sp2	*ENG	[0 to 100 / 0 / 1 sec/step]
019	Feed Permit Time	*ENG	[0 to 200 / 60 / 1 sec/step]

1105	[Print Target Temp]				
	(Printing Mode, Roller Type, [Color], Simplex/Duplex) Roller Type → Center and Ends: Heating roller, Pressure → Pressure roller Paper Type → Plain, Thin, Thick, OHP, Middle Thick, Special				
001	Plain 1:FC:Center	*ENG	[100 to 180 / 140 / 1 deg/step]		
001	Specifies the heating roller targ	get tempero	ature for the ready condition in full color printing.		
	Plain 1:FC:Press	*ENG	[0 to 200 / 120 / 1 deg/step]		
002	Specifies the pressure roller target temperature for the ready condition in full color printing.				
003	Plain 1:BW:Center	*ENG	[180 to 100 / 140 / 1 deg/step]		
003	Specifies the heating roller target temperature for the ready condition in BW printing.				
004	Plain 1:BW:Press	*ENG	[0 to 200 / 120 / 1 deg/step]		
004	Specifies the pressure roller target temperature for the ready condition in BW printing.				
005	Plain2:FC:Center	*ENG	[100 to 180 / 145 / 1 deg/step]		
003	Specifies the heating roller target temperature for the ready condition in full color printing.				

	Plain2:FC:Press	*ENG	[0 to 200 / 120 / 1 deg/step]	
006	Specifies the pressure roller target temperature for the ready condition in full coloe printing.			
007	Plain2:BW:Center	*ENG	[100 to 180 / 140 / 1 deg/step]	
007	Specifies the heating roller targ	get tempero	ature for the ready condition in BW printing.	
008	Plain2:BW:Press	*ENG	[0 to 200 / 120 / 1 deg/step]	
000	Specifies the pressure roller tar	get temper	rature for the ready condition in BW printing.	
009	Thin:FC:Center	*ENG	[100 to 180 / 135 / 1 deg/step]	
010	Thin:FC:Press	*ENG	[0 to 200 / 120 / 1 deg/step]	
011	Thin:BW:Center	*ENG	[100 to 180 / 135 / 1 deg/step]	
012	Thin:BW:Press	*ENG	[0 to 200 / 120 / 1 deg/step]	
013	M-thick:FC:Center	*ENG	[100 to 180 / 150 / 1 deg/step]	
014	M-thick:FC:Press	*ENG	[0 to 200 / 120 / 1 deg/step]	
015	M-thick:BW:Center	*ENG	[100 to 180 / 150 / 1 deg/step]	
016	M-thick:BW:Press	*ENG	[0 to 200 / 120 / 1 deg/step]	
017	Thick 1:FC:Center	*ENG	[100 to 180 / 148 / 1 deg/step]	
018	Thick 1:FC:Press	*ENG	[0 to 200 / 120 / 1 deg/step]	
019	Thick 1:BW:Center	*ENG	[100 to 180 / 148 / 1 deg/step]	
020	Thick 1:BW:Press	*ENG	[0 to 200 / 120 / 1 deg/step]	
021	Thick2:FC:Center	*ENG	[100 to 180 / 158 / 1 deg/step]	
022	Thick2:FC:Press	*ENG	[0 to 200 / 120 / 1 deg/step]	
023	Thick2:BW:Center	*ENG	[100 to 180 / 158 / 1 deg/step]	
024	Thick2:BW:Press	*ENG	[0 to 200 / 120 / 1 deg/step]	
025	Thick3:FC:Center	*ENG	[100 to 180 / 163 / 1 deg/step]	
026	Thick3:FC:Press	*ENG	[0 to 200 / 120 / 1 deg/step]	
027	Thick3:BW:Center	*ENG	[100 to 180 / 163 / 1 deg/step]	

028	Thick3:BW:Press	*ENG	[0 to 200 / 120 / 1 deg/step]
029	Special 1:FC:Center	*ENG	[100 to 180 / 145 / 1 deg/step]
030	Special1:FC:Press	*ENG	[0 to 200 / 120 / 1 deg/step]
031	Special 1:BW:Center	*ENG	[100 to 180 / 145 / 1 deg/step]
032	Special1:BW:Press	*ENG	[0 to 200 / 120 / 1 deg/step]
033	Special2:FC:Center	*ENG	[100 to 180 / 168 / 1 deg/step]
034	Special2:FC:Press	*ENG	[0 to 200 / 120 / 1 deg/step]
035	Special2:BW:Center	*ENG	[100 to 180 / 168 / 1 deg/step]
036	Special2:BW:Press	*ENG	[0 to 200 / 120 / 1 deg/step]
037	Special3:FC:Center	*ENG	[100 to 180 / 158 / 1 deg/step]
038	Special3:FC:Press	*ENG	[0 to 200 / 120 / 1 deg/step]
039	Special3:BW:Center	*ENG	[100 to 180 / 158 / 1 deg/step]
040	Special3:BW:Press	*ENG	[0 to 200 / 120 / 1 deg/step]
041	Envelop:Center	*ENG	[100 to 180 / 168 / 1 deg/step]
042	Envelop:Press	*ENG	[0 to 200 / 120 / 1 deg/step]
101	Plain 1:FC:Center:Low Speed	*ENG	[100 to 180 / 133 / 1 deg/step]
102	Plain1:FC:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
103	Plain 1:BW:Center:Low Speed	*ENG	[100 to 180 / 133 / 1 deg/step]
104	Plain1:BW:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
105	Plain2:FC:Center:Low Speed	*ENG	[100 to 180 / 138 / 1 deg/step]
106	Plain2:FC:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
107	Plain2:BW:Center:Low Speed	*ENG	[100 to 180 / 138 / 1 deg/step]
108	Plain2:BW:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
109	M-thick:FC:Center:Low Speed	*ENG	[100 to 180 / 143 / 1 deg/step]

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110	M-thick:FC:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
111	M-thick:BW:Center:Low Speed	*ENG	[100 to 180 / 143 / 1 deg/step]
112	M-thick:BW:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
113	Thick 1:FC:Center:Low Speed	*ENG	[100 to 180 / 148 / 1 deg/step]
114	Thick 1:FC:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
115	Thick 1:BW:Center:Low Speed	*ENG	[100 to 180 / 148 / 1 deg/step]
116	Thick 1:BW:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
117	Special 1:FC:Center:Low Speed	*ENG	[100 to 180 / 138 / 1 deg/step]
118	Special 1:FC:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
119	Special 1:BW:Center:Low Speed	*ENG	[100 to 180/ 138 / 1 deg/step]
120	Special 1:BW:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
121	Special2:FC:Center:Low Speed	*ENG	[100 to 180 / 148 / 1 deg/step]
122	Special2:FC:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
123	Special2:BW:Center:Low Speed	*ENG	[100 to 180 / 148 / 1 deg/step]
124	Special2:BW:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
125	Plain 1: Glossy: Center	*ENG	[100 to 180 / 138 / 1 deg/step]
126	Plain 1: Glossy: Press	*ENG	[0 to 200 / 120 / 1 deg/step]
127	Plain2:Glossy:Center	*ENG	[100 to 180 / 143 / 1 deg/step]
128	Plain2:Glossy:Press	*ENG	[0 to 200 / 120 / 1 deg/step]

M-thick:Glossy:Center	*ENG	[100 to 180 / 148 / 1 deg/step]
M-thick:Glossy:Press	*ENG	[0 to 200 / 120 / 1 deg/step]
OHP:Center	*ENG	[100 to 180 / 158 / 1 deg/step]
OHP:Press	*ENG	[0 to 200 / 120 / 1 deg/step]
Envelop:Center:Low Speed	*ENG	[100 to 180 / 163 / 1 deg/step]
Envelop:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
Thin:FC:Center:Low Speed	*ENG	[100 to 180 / 128 / 1 deg/step]
Thin:FC:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
Thin:BW:Center:Low Speed	*ENG	[100 to 180 / 128 / 1 deg/step]
Thin:BW:Press:Low Speed	*ENG	[0 to 200 / 120 / 1 deg/step]
Thick4:FC:Center	*ENG	[100 to 180 / 168 / 1 deg/step]
Thick4:FC:Press	*ENG	[0 to 200 / 120 / 1 deg/step]
Thick4:BW:Center	*ENG	[100 to 180 / 168 / 1 deg/step]
Thick4:BW:Press	*ENG	[0 to 200 / 120 / 1 deg/step]
	M-thick:Glossy:Press OHP:Center OHP:Press Envelop:Center:Low Speed Envelop:Press:Low Speed Thin:FC:Center:Low Speed Thin:FC:Press:Low Speed Thin:BW:Center:Low Speed Thin:BW:Center:Low Speed Thick4:FC:Center Thick4:FC:Press Thick4:BW:Center	M-thick:Glossy:Press *ENG OHP:Center *ENG OHP:Press *ENG Envelop:Center:Low Speed *ENG Envelop:Press:Low Speed *ENG Thin:FC:Center:Low Speed *ENG Thin:FC:Press:Low Speed *ENG Thin:BW:Center:Low Speed *ENG Thin:BW:Center:Low Speed *ENG Thick4:FC:Center *ENG Thick4:FC:Center *ENG Thick4:FC:Press *ENG Thick4:BW:Center *ENG

1106	[Fusing Temp. Display]		
001	Heat Center	-	[-10 to 250 / - / 1 deg/step]
002	Heat End	-	Displays the temperature of the heating roller.
003	Press Center	-	[-10 to 250 / - / 1 deg/step]
004	Press End	-	Displays the temperature of the heating roller.

1107	[Standby Target Temp. Setting]				
	Stanby/Preheat1:Center	*ENG	[0 to 125 / 90 / 1 sec/step]		
001	Specifies the time that the fusing heater turns off after the fusing unit temperature has reached its target temperature.				
000	Stanby/Preheat1: Press	*ENG	[0 to 125 / 90 / 1 deg/step]		
002	Specifies the temperature of the pressure roller for the ready or energy save 1 mode.				

003	Preheat2:Center	*ENG	[0 to 125 / 90 / 1 sec/step]		
003	Specifies the temperature of the heating roller for the ready or energy save 2 mode.				
004	Preheat2:Press	*ENG	[0 to 125 / 90 / 1 deg/step]		
004	Specifies the temperature of the	e pressure r	roller for the energy save 2 mode.		
005	Low Power:Center	*ENG	[0 to 125 / 90 / 1 sec/step]		
003	Specifies the temperature of the heating roller for the low power mode.				
006	Low Power:Press	*ENG	[0 to 125 / 60 / 1 deg/step]		
000	Specifies the temperature of the pressure roller for the low power mode.				
007	Print Ready:Center	*ENG	[0 to 180 / 145 / 1 deg/step]		
007	Specifies the temperature of the heating roller for the print ready condition.				
000	Print Ready:Press	*ENG	[0 to 200 / 120 / 1 deg/step]		
800	Specifies the temperature of the	e pressure r	roller for the print ready condition.		

1108	[After Reload/Job Target Temp.]			
001	Center	*ENG	[0 to 180 / 145 / 1 deg/step]	
001	Specifies the temperature of the heating roller after re-load or job.			
002	Press	*ENG	[0 to 200 / 120 / 1 deg/step]	
002	Specifies the temperature of the pressure roller after re-load or job.			

1111	[Environment Correction:Fusing]				
	Temp.: Threshold: Low	*ENG	[0 to 100 / 17 / 1 deg/step]		
001	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.				
	Temp.: Threshold: High	*ENG	[0 to 100 / 30 / 1 deg/step]		
Specifies the threshold temperature for high temperature. If the fusing temperature, the machine executes the fusing mode for high temperature.		• •			

	Low Temp. Correction	*ENG	[0 to 15 / 5 / 1 deg/step]		
003	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.				
	High Temp. Correction	*ENG	[0 to 15 / 0 / 1 deg/step]		
004	-	e target temperature. If the fusing temperature is ature is added to the target temperature.			
005	Job Low Temp. Correction	*ENG	[0 to 100 / 5 / 0.1 deg/step]		
006	Job High Temp. Correction	*ENG	[0 to 100 / 0 / 0.1 deg/step]		
007	Job Low Temp. Correction:Sp.	*ENG	[0 to 100 / 5 / 0.1 deg/step]		
008	Job High Temp. Correction:Sp.	*ENG	[0 to 100 / 0 / 0.1 deg/step]		

1113	[Curl Correction]				
001	Execute Pattern	*ENG	[0 to 2 / 0 / 1 /step] 0: Off, 1: On (No Decurl), 2: On		
	Selects the curl correction type				
002	Humidity:Threshold:M-humid	*ENG	[0 to 100 / 1 / 1 %/step]		
002	Specifies the threshold betwee	n low and	middle humidity.		
003	Humidity:Threshold:H-humid	*ENG	[0 to 100 / 65 / 1 %/step]		
003	Specifies the threshold between middle and high humidity.				
004	Permit Temp.:Delta:Press:M- humid	*ENG	[0 to 200 / 60 / 1 deg/step]		
	Specifies the threshold temperature for the curl control in middle humidity.				
005	Permit Temp.:Delta:Press:H- humid	*ENG	[0 to 200 / 50 / 1 deg/step]		
	Specifies the threshold temperature for the curl control in high humidity.				
006	Permit Temp.:Delta:Press:M- humid:No Decurl	*ENG	[0 to 200 / 50 / 1 deg/step]		

	Specifies the threshold temperature for the no curl control in middle humidity.				
007	Permit Temp.:Delta:Press:H- humid:No Decurl	*ENG	[0 to 200 / 40 / 1 deg/step]		
	Specifies the threshold tempero	ature for th	e no curl control in high humidity.		
	CPM:M-humid	*ENG	[0 to 100 / 80 / 1 %/step]		
800	Specifies the CPM ratio of the decurl control against to the normal operation in middle humidity.				
	CPM:H-humid	*ENG	[0 to 100 / 65 / 1 %/step]		
009	Specifies the CPM ratio of the decurl control against to the normal operation in high humidity.				
	CPM:M-humid:No Decurl	*ENG	[0 to 100 / 80 / 1 %/step]		
010	Specifies the CPM ratio against of the no decurl control to the normal operation in middle humidity.				
	CPM:H-humid:No Decurl	*ENG	[0 to 100 / 65 / 1 %/step]		
011	Specifies the CPM ratio agains humidity.	t of the no	decurl control to the normal operation in high		

1115	[Target Temp. Correction]				
001	Temp.:Delta:End	*ENG	[-100 to 100 / 0 / 1 deg/step]		
001	Specifies the different temperature between end and center of the heating roller.				

1124	[CPM Down Setting]				
1124	Specifies the settings for the CPM down mode.				
	Low:Down Temp.	*ENG	[-50 to 0 / -20 / 1 deg/step]		
001	Specifies the CPM down threshold temperature for the low temperature condition. fusing temperature decreases -20°C (adjustable) below the target temperature, the machine enters the CPM down mode.				

	Low:Up Temp.	*ENG	[-50 to 0 / -15 / 1 deg/step]		
002			ture for the low temperature condition. If the fus a) below the target temperature, the machine		
	Low:1st CPM	*ENG	[10 to 100 / 80 / 1 %/step]		
003	Specifies the 1st CPM down recondition.	ation agair	nst the normal CPM in the low temperature		
	Low :2nd CPM	*ENG	[10 to 100 / 65 / 1 %/step]		
004	Specifies the 2nd CPM down condition.	ration aga	inst the normal CPM in the low temperature		
	Low :3rd CPM	*ENG	[10 to 100 / 50 / 1 %/step]		
005	Specifies the 3rd CPM down ration against the normal CPM in the low temperature condition.				
	High: 1 st CPM	*ENG	[10 to 100 / 80 / 1 %/step]		
006	Specifies the 1st CPM down ration against the normal CPM in the high temperature condition.				
	High:2nd CPM	*ENG	[10 to 100 / 50 / 1 %/step]		
007	Specifies the 3rd CPM down ration against the normal CPM in the high temperature condition.				
	High:3rd CPM	*ENG	[10 to 100 / 30 / 1 %/step]		
Specifies the 1st CPM down ration against the normal condition.		nst the normal CPM in the high temperature			
009	High: 1 st CPM Down Temp.:A3:Press End	*ENG	[100 to 250 / 180 / 1 deg/step]		
	Specifies the heating roller temperature for 1st CPM down of A3 paper size.				
010	High:2nd CPM Down Temp.:A3:Press End	*ENG	[100 to 250 / 185 / 1 deg/step]		
010		. (or 2nd CPM down of A3 paper size.		

011	High:3rd CPM Down Temp.:A3:Press End	*ENG	[100 to 250 / 190 / 1 deg/step]		
	Specifies the heating roller ten	nperature f	or 3rd CPM down of A3 paper size.		
012	High: 1 st CPM Down Temp.:DLT:Press End	*ENG	[100 to 250 / 180 / 1 deg/step]		
	Specifies the heating roller ten	nperature f	or 1st CPM down of DLT paper size.		
013	High:2nd CPM Down Temp.:DLT:Press End	*ENG	[100 to 250 / 185 / 1 deg/step]		
	Specifies the heating roller ten	nperature f	or 2nd CPM down of DLT paper size.		
014	High:3rd CPM Down Temp.:DLT:Press End	*ENG	[100 to 250 / 190 / 1 deg/step]		
	Specifies the heating roller ten	nperature f	or 3rd CPM down of DLT paper size.		
015	High: 1 st CPM Down Temp.:B4:Press End	*ENG	[100 to 250 / 145 / 1 deg/step]		
	Specifies the pressure roller temperature for 1st CPM down of B4 paper size.				
016	High:2nd CPM Down Temp.:B4:Press End	*ENG	[100 to 250 / 155 / 1 deg/step]		
	Specifies the pressure roller temperature for 2nd CPM down of B4 paper size.				
017	High:3rd CPM Down Temp.:B4:Press End	*ENG	[100 to 250 / 160 / 1 deg/step]		
	Specifies the pressure roller temperature for 3rd CPM down of B4 paper size.				
018	High: 1 st CPM Down Temp.:LT:Fuser End	*ENG	[100 to 250 / 190 / 1 deg/step]		
	Specifies the pressure roller temperature for 1st CPM down of LT paper size.				
019	High:2nd CPM Down Temp.:LT:Fuser End	*ENG	[100 to 250 / 195 / 1 deg/step]		
	Specifies the pressure roller te	mperature	for 2nd CPM down of LT paper size.		
020	High:3rd CPM Down Temp.:LT:Fuser End	*ENG	[100 to 250 / 200 / 1 deg/step]		
	Specifies the pressure roller te	mperature	for 3rd CPM down of LT paper size.		

021	High: 1 st CPM Down Temp.:A4:Fuser End	*ENG	[100 to 250 / 190 / 1 deg/step]		
	Specifies the pressure roller te	mperature	for 1st CPM down of A4 paper size.		
022	High:2nd CPM Down Temp.:A4:Fuser End	*ENG	[100 to 250 / 195 / 1 deg/step]		
	Specifies the pressure roller te	mperature	for 2nd CPM down of A4 paper size.		
023	High:3rd CPM Down Temp.:A4:Fuser End	*ENG	[100 to 250 / 200 / 1 deg/step]		
	Specifies the pressure roller te	mperature	for 3rd CPM down of A4 paper size.		
024	High: 1 st CPM Down Temp.:B5:Press End	*ENG	[100 to 250 / 200 / 1 deg/step]		
	Specifies the pressure roller te	mperature	for 1st CPM down of B5 paper size.		
025	High:2nd CPM Down Temp.:B5:Press End	*ENG	[100 to 250 / 205 / 1 deg/step]		
	Specifies the pressure roller te	mperature	for 2nd CPM down of B5 paper size.		
026	High:3rd CPM Down Temp.:B5:Press End	*ENG	[100 to 250 / 210 / 1 deg/step]		
	Specifies the pressure roller temperature for 3rd CPM down of B5 paper size.				
027	High: 1 st CPM Down Temp.:A5:Press End	*ENG	[100 to 250 / 200 / 1 deg/step]		
	Specifies the pressure roller temperature for 1st CPM down of A5 paper size.				
028	High:2nd CPM Down Temp.:A5:Press End	*ENG	[100 to 250 / 205 / 1 deg/step]		
	Specifies the pressure roller temperature for 2nd CPM down of A5 paper size.				
029	High:3rd CPM Down Temp.:A5:Press End	*ENG	[100 to 250 / 210 / 1 deg/step]		
	Specifies the pressure roller te	mperature	for 3rd CPM down of A5 paper size.		
030	High: 1 st CPM Down Temp.:B6:Press End	*ENG	[100 to 250 / 200 / 1 deg/step]		
	Specifies the pressure roller te	mperature	for 1st CPM down of B6 paper size.		

031	High:2nd CPM Down Temp.:B6:Press End	*ENG	[100 to 250 / 205 / 1 deg/step]		
	Specifies the pressure roller te	mperature	for 2nd CPM down of B6 paper size.		
032	High:3rd CPM Down Temp.:B6:Press End	*ENG	[100 to 250 / 210 / 1 deg/step]		
	Specifies the pressure roller te	mperature	for 3rd CPM down of B6 paper size.		
033	High: 1 st CPM:Down Temp.:A6:Press Center	*ENG	[100 to 250 / 200 / 1 deg/step]		
	Specifies the pressure roller te	mperature	for 1st CPM down of A6 paper size.		
034	High:2nd CPM:Down Temp.:A6:Press Center	*ENG	[100 to 250 / 205 / 1 deg/step]		
	Specifies the pressure roller te	mperature	for 2nd CPM down of A6 paper size.		
035	High:3rd CPM:Down Temp.:A6:Press Center	*ENG	[100 to 250 / 210 / 1 deg/step]		
	Specifies the pressure roller te	mperature	for 3rd CPM down of A6 paper size.		
0.5.1	Judging Interval	*ENG	[0 to 250 / 5 / 1 sec/step]		
051	Specifies the interval for CPM down judgment.				
101	High: 1 st CPM Down Time: A3	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller temperature for 1st CPM down of A3 paper size.				
102	High:2nd CPM Down Time:A3	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller temperature for 2nd CPM down of A3 paper size.				
103	High:3rd CPM Down Time:A3	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller temperature for 3rd CPM down of A3 paper size.				
104	High:1st CPM:Down Time:DLT	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller te		(1 · CD) (D) T		

105	High :2nd CPM:Down Time:DLT	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller to	emperature	for 2nd CPM down of DLT.		
106	High :3rd CPM:Down Time:DLT	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller to	emperature	for 3rd CPM down of DLT.		
107	High:1st CPM:Down Time:B4	*ENG	[0 to 10,000 / C3c: 30, C3d: 20 / 1 sec/ step]		
	Specifies the pressure roller to	emperature	for 1st CPM down of B4 paper size.		
108	High :2nd CPM:Down Time:B4	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller to	emperature	e for 2nd CPM down of B4 paper size.		
109	High :3rd CPM:Down Time:B4	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller temperature for 3rd CPM down of B4 paper size.				
110	High:1st CPM:Down Time:LT	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller temperature for 1st CPM down of LT.				
111	High :2nd CPM:Down Time:LT	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller temperature for 2nd CPM down of LT.				
112	High :3rd CPM:Down Time:LT	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller temperature for 3rd CPM down of LT.				
113	High:1st CPM:Down Time:A4	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller to	emperature	for 1st CPM down of A4 paper size.		
114	High :2nd CPM:Down Time:A4	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller to	emperature	e for 2nd CPM down of A4 paper size.		

115	High :3rd CPM:Down Time:A4	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller te	mperature	for 3rd CPM down of A4 paper size.		
116	High:1st CPM:Down Time:B5	*ENG	[0 to 10,000 / C3c: 30, C3d: 20 / 1 sec/ step]		
	Specifies the pressure roller te	mperature	for 1st CPM down of B5 paper size.		
117	High :2nd CPM:Down Time:B5	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller te	mperature	for 2nd CPM down of B5 paper size.		
118	High :3rd CPM:Down Time:B5	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller te	mperature	for 3rd CPM down of B5 paper size.		
119	High:1st CPM:Down Time:A5	*ENG	[0 to 10,000 / C3c: 40, C3d: 20 / 1 sec/ step]		
	Specifies the pressure roller temperature for 1st CPM down of A5 paper size.				
120	High :2nd CPM:Down Time:A5	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller temperature for 2nd CPM down of A5 paper size.				
121	High :3rd CPM:Down Time:A5	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller temperature for 3rd CPM down of A5 paper size.				
122	High:1st CPM:Down Time:B6	*ENG	[0 to 10,000 / C3c: 40, C3d: 20 / 1 sec/ step]		
	Specifies the pressure roller temperature for 1st CPM down of B6 paper size.				
123	High :2nd CPM:Down Time:B6	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller te	mperature	for 2nd CPM down of B6 paper size.		
124	High :3rd CPM:Down Time:B6	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller te	mperature	for 3rd CPM down of B6 paper size.		

125	High:1st CPM:Down Time:A6	*ENG	[0 to 10,000 / C3c: 40, C3d: 20 / 1 sec/ step]		
	Specifies the pressure roller to	emperature	for 1st CPM down of A6 paper size.		
126	High :2nd CPM:Down Time:A6	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller to	emperature	for 2nd CPM down of A6 paper size.		
127	High :3rd CPM:Down Time:A6	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller to	emperature	for 3rd CPM down of A6 paper size.		
151	High:1st CPM:Down Time:A3:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller to	emperature	for 1st CPM down of A3 paper size.		
152	High :2nd CPM:Down Time:A3:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller temperature for 2nd CPM down of A3 paper size.				
153	High :3rd CPM:Down Time:A3:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller temperature for 3rd CPM down of A3 paper size.				
154	High:1st CPM:Down Time:DLT:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller temperature for 1st CPM down of DLT.				
155	High :2nd CPM:Down Time:DLT:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller temperature for 2nd CPM down of DLT.				
156	High :3rd CPM:Down Time:DLT:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller to	emperature	for 3rd CPM down of DLT.		
157	High:1st CPM:Down Time:B4:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller to	emperature	o for 1st CPM down of B4 paper size.		

158	High :2nd CPM:Down Time:B4:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]			
	Specifies the pressure roller temperature for 2nd CPM down of B4 paper size.					
159	High :3rd CPM:Down Time:B4:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]			
	Specifies the pressure roller te	mperature	for 3rd CPM down of B4 paper size.			
160	High:1st CPM:Down Time:LT:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]			
	Specifies the pressure roller te	mperature	for 1st CPM down of LT.			
161	High :2nd CPM:Down Time:LT:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]			
	Specifies the pressure roller te	mperature	for 2nd CPM down of LT.			
162	High :3rd CPM:Down Time:LT:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]			
	Specifies the pressure roller temperature for 3rd CPM down of LT.					
163	High:1st CPM:Down Time:A4:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]			
	Specifies the pressure roller temperature for 1st CPM down of A4 paper size.					
164	High :2nd CPM:Down Time:A4:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]			
	Specifies the pressure roller temperature for 2nd CPM down of A4 paper size.					
165	High :3rd CPM:Down Time:A4:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]			
	Specifies the pressure roller temperature for 3rd CPM down of A4 paper size.					
166	High:1st CPM:Down Time:B5:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]			
	Specifies the pressure roller te	mperature	for 1st CPM down of B5 paper size.			
167	High :2nd CPM:Down Time:B5:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]			
	Specifies the pressure roller te	mperature	for 2nd CPM down of B5 paper size.			

168	High :3rd CPM:Down Time:B5:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller te	emperature	for 3rd CPM down of B5 paper size.		
169	High:1st CPM:Down Time:A5:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller te	emperature	for 1st CPM down of A5 paper size.		
170	High :2nd CPM:Down Time:A5:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller te	mperature	for 2nd CPM down of A5 paper size.		
171	High :3rd CPM:Down Time:A5:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller to	mperature	for 3rd CPM down of A5 paper size.		
172	High :1st CPM:Down Time:B6:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller temperature for 1st CPM down of B6 paper size.				
173	High :2nd CPM:Down Time:B6:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller temperature for 2nd CPM down of B6 paper size.				
174	High :3rd CPM:Down Time:B6:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller temperature for 3rd CPM down of B6 paper size.				
175	High:1st CPM:Down Time:A6:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller temperature for 1st CPM down of A6 paper size.				
176	High :2nd CPM:Down Time:A6:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the pressure roller te	emperature	for 2nd CPM down of A6 paper size.		
1 <i>77</i>	High :3rd CPM:Down Time:A6:Low Speed	*ENG	[0 to 10,000 / 10,000 / 1 sec/step]		
	Specifies the proceure reller to	mporaturo	for 3rd CPM down of A6 paper size.		

1125	[CPM Down Setting]				
1125	Specifies the settings for the CPM down mode.				
001	High:1st CPM:A3:Large Size:Normal Speed	*ENG	[0 to 100 / 80 / 1 %/step]		
	Specifies the pressure roller to	emperature	for 1st CPM down of A3 Large paper size.		
002	High :2nd CPM:A3:Large Size:Normal Speed	*ENG	[0 to 100 / 50 / 1 %/step]		
	Specifies the pressure roller to	emperature	for 2nd CPM down of A3 Large paper size.		
003	High :3rd CPM:A3:Large Size:Normal Speed	*ENG	[0 to 100 / 30 / 1 %/step]		
	Specifies the pressure roller to	emperature	for 3rd CPM down of A3 Large paper size.		
004	High:1st CPM:A3:Small Size:Normal Speed	*ENG	[0 to 100 / 80 / 1 %/step]		
	Specifies the pressure roller temperature for 1st CPM down of A3 Small paper size.				
005	High :2nd CPM:A3:Small Size:Normal Speed	*ENG	[0 to 100 / 50 / 1 %/step]		
	Specifies the pressure roller temperature for 2nd CPM down of A3 Small paper size.				
006	High :3rd CPM:A3:Small Size:Normal Speed	*ENG	[0 to 100 / 30 / 1 %/step]		
	Specifies the pressure roller temperature for 3rd CPM down of A3 Small paper size.				
007	High:1st CPM:DLT:Large Size:Normal Speed	*ENG	[0 to 100 / 80 / 1 %/step]		
	Specifies the pressure roller temperature for 1st CPM down of DLT Large paper size.				
008	High :2nd CPM:DLT:Large Size:Normal Speed	*ENG	[0 to 100 / 50 / 1 %/step]		
	Specifies the pressure roller to	emperature	for 2nd CPM down of DLT Large paper size.		
009	High :3rd CPM:DLT:Large Size:Normal Speed	*ENG	[0 to 100 / 30 / 1 %/step]		
	Specifies the pressure roller to	emperature	for 3rd CPM down of DLT Large paper size.		

010	High :1st CPM:DLT:Small Size:Normal Speed	*ENG	[0 to 100 / 80 / 1 %/step]		
	Specifies the pressure roller to	emperature	for 1st CPM down of DLT Small paper size.		
011	High :2nd CPM:DLT:Small Size:Normal Speed	*ENG	[0 to 100 / 50 / 1 %/step]		
	Specifies the pressure roller to	emperature	for 2nd CPM down of DLT Small paper size.		
012	High :3rd CPM:DLT:Small Size:Normal Speed	*ENG	[0 to 100 / 30 / 1 %/step]		
	Specifies the pressure roller to	emperature	for 3rd CPM down of DLT Small paper size.		
013	High:1st CPM:B4:Large Size:Normal Speed	*ENG	[0 to 100 / C3c: 90, C3d: 75 / 1 %/step]		
	Specifies the pressure roller to	emperature	for 1st CPM down of B4 Large paper size.		
014	High :2nd CPM:B4:Large Size:Normal Speed	*ENG	[0 to 100 / 50 / 1 %/step]		
	Specifies the pressure roller temperature for 2nd CPM down of B4 Large paper size.				
015	High :3rd CPM:B4:Large Size:Normal Speed	*ENG	[0 to 100 / 30 / 1 %/step]		
	Specifies the pressure roller temperature for 3rd CPM down of B4 Large paper size.				
016	High:1st CPM:B4:Small Size:Normal Speed	*ENG	[0 to 100 / C3c: 90, C3d: 75 / 1 %/step]		
	Specifies the pressure roller temperature for 1st CPM down of B4 Small paper size.				
017	High :2nd CPM:B4:Small Size:Normal Speed	*ENG	[0 to 100 / 50 / 1 %/step]		
	Specifies the pressure roller temperature for 2nd CPM down of B4 Small paper size.				
018	High :3rd CPM:B4:Small Size:Normal Speed	*ENG	[0 to 100 / 30 / 1 %/step]		
	Specifies the pressure roller to	emperature	for 3rd CPM down of B4 Small paper size.		
019	High :1st CPM:LT:Large Size:Normal Speed	*ENG	[0 to 100 / 80 / 1 %/step]		
	Specifies the pressure roller to	emperature	of or 1st CPM down of LT Large paper size.		

020	High :2nd CPM:LT:Large Size:Normal Speed	*ENG	[0 to 100 / 50 / 1 %/step]		
	Specifies the pressure roller te	mperature	for 2nd CPM down of LT Large paper size.		
021	High :3rd CPM:LT:Large Size:Normal Speed	*ENG	[0 to 100 / 30 / 1 %/step]		
	Specifies the pressure roller te	mperature	for 3rd CPM down of LT Large paper size.		
022	High:1st CPM:LT:Small Size:Normal Speed	*ENG	[0 to 100 / 80 / 1 %/step]		
	Specifies the pressure roller te	mperature	for 1st CPM down of LT Small paper size.		
023	High :2nd CPM:LT:Small Size:Normal Speed	*ENG	[0 to 100 / 50 / 1 %/step]		
	Specifies the pressure roller te	mperature	for 2nd CPM down of LT Small paper size.		
024	High :3rd CPM:LT:Small Size:Normal Speed	*ENG	[0 to 100 / 30 / 1 %/step]		
	Specifies the pressure roller temperature for 3rd CPM down of LT Small paper size.				
025	High:1st CPM:A4:Large Size:Normal Speed	*ENG	[0 to 100 / 80 / 1 %/step]		
	Specifies the pressure roller temperature for 1st CPM down of A4 Large paper size.				
026	High :2nd CPM:A4:Large Size:Normal Speed	*ENG	[0 to 100 / 50 / 1 %/step]		
	Specifies the pressure roller temperature for 2nd CPM down of A4 Large paper size.				
027	High :3rd CPM:A4:Large Size:Normal Speed	*ENG	[0 to 100 / 30 / 1 %/step]		
	Specifies the pressure roller temperature for 3rd CPM down of A4 Large paper size.				
028	High:1st CPM:A4:Small Size:Normal Speed	*ENG	[0 to 100 / 80 / 1 %/step]		
	Specifies the pressure roller temperature for 1st CPM down of A4 Small paper size.				
029	High :2nd CPM:A4:Small Size:Normal Speed	*ENG	[0 to 100 / 50 / 1 %/step]		
	Specifies the pressure roller te	mperature	for 2nd CPM down of A4 Small paper size.		

030	High :3rd CPM:A4:Small Size:Normal Speed	*ENG	[0 to 100 / 30 / 1 %/step]		
	Specifies the pressure roller te	mperature	for 3rd CPM down of A4 Small paper size.		
031	High:1st CPM:B5:Large Size:Normal Speed	*ENG	[0 to 100 / C3c:80, C3d: 70 / 1 %/step]		
	Specifies the pressure roller te	mperature	for 1st CPM down of B5 Large paper size.		
032	High :2nd CPM:B5:Large Size:Normal Speed	*ENG	[0 to 100 / 50 / 1 %/step]		
	Specifies the pressure roller te	mperature	for 2nd CPM down of B5 Large paper size.		
033	High :3rd CPM:B5:Large Size:Normal Speed	*ENG	[0 to 100 / 30 / 1 %/step]		
	Specifies the pressure roller te	mperature	for 3rd CPM down of B5 Large paper size.		
034	High :1st CPM:B5:Small Size:Normal Speed	*ENG	[0 to 100 / C3c:80, C3d: 70 / 1 %/step]		
	Specifies the pressure roller te	mperature	for 1st CPM down of B5 Small paper size.		
035	High :2nd CPM:B5:Small Size:Normal Speed	*ENG	[0 to 100 / 50 / 1 %/step]		
	Specifies the pressure roller temperature for 2nd CPM down of B5 Small paper size.				
036	High :3rd CPM:B5:Small Size:Normal Speed	*ENG	[0 to 100 / 30 / 1 %/step]		
	Specifies the pressure roller temperature for 3rd CPM down of B5 Small paper size.				
037	High:1st CPM:A5:Normal Speed	*ENG	[0 to 100 / C3c: 85, C3d: 65 / 1 %/step]		
	Specifies the pressure roller te	mperature	for 1st CPM down of A5 paper size.		
038	High :2nd CPM:A5:Normal Speed	*ENG	[0 to 100 / 50 / 1 %/step]		
	Specifies the pressure roller te	mperature	for 2nd CPM down of A5 paper size.		
039	High :3rd CPM:A5:Normal Speed	*ENG	[0 to 100 / 30 / 1 %/step]		
	Specifies the pressure roller te	mperature	for 3rd CPM down of A5 paper size.		

040	High:1stCPM:B6:Normal Speed	*ENG	[0 to 100 / C3c: 85, C3d: 65 / 1 %/step]		
	Specifies the pressure roller te	mperature	for 1st CPM down of B6 paper size.		
041	High :2nd CPM:B6:Normal Speed	*ENG	[0 to 100 / 50 / 1 %/step]		
	Specifies the pressure roller te	mperature	for 2nd CPM down of B6 paper size.		
042	High :3rd CPM:B6:Normal Speed	*ENG	[0 to 100 / 30 / 1 %/step]		
	Specifies the pressure roller te	mperature	for 3rd CPM down of B6 paper size.		
043	High:1st CPM:A6:Normal Speed	*ENG	[0 to 100 / C3c: 85, C3d: 65 / 1 %/step]		
	Specifies the pressure roller te	mperature	for 1st CPM down of A6 paper size.		
044	High :2nd CPM:A6:Normal Speed	*ENG	[0 to 100 / 50 / 1 %/step]		
	Specifies the pressure roller temperature for 2nd CPM down of A6 paper size.				
045	High :3rd CPM:A6:Normal Speed	*ENG	[0 to 100 / 30 / 1 %/step]		
	Specifies the pressure roller temperature for 3rd CPM down of A6 paper size.				
101	High:1st CPM:A3:Large Size:Middle Speed	*ENG	[0 to 100 / 80 / 1 %/step]		
	Specifies the pressure roller temperature for 1st CPM down of A3 Large paper size.				
102	High :2nd CPM:A3:Large Size:Middle Speed	*ENG	[0 to 100 / 50 / 1 %/step]		
	Specifies the pressure roller temperature for 2nd CPM down of A3 Large paper size.				
104	High:1st CPM:A3:Small Size:Middle Speed	*ENG	[0 to 100 / 80 / 1 %/step]		
	Specifies the pressure roller temperature for 1st CPM down of A3 Small paper size.				
105	High:2nd CPM:A3:Small Size:Middle Speed	*ENG	[0 to 100 / 50 / 1 %/step]		
	Specifies the pressure roller te	mperature	for 2nd CPM down of A3 Small paper size.		

107	High: 1 st CPM:DLT:Large Size:Middle Speed	*ENG	[0 to 100 / 80 / 1 %/step]		
	Specifies the pressure roller to	emperature	for 1st CPM down of DLT Large paper size.		
108	High:2nd CPM:DLT:Large Size:Middle Speed	*ENG	[0 to 100 / 50 / 1 %/step]		
	Specifies the pressure roller to	emperature	for 2nd CPM down of DLT Large paper size.		
110	High: 1 st CPM:DLT:Small Size:Middle Speed	*ENG	[0 to 100 / 80 / 1 %/step]		
	Specifies the pressure roller to	emperature	for 1st CPM down of DLT Small paper size.		
111	High:2nd CPM:DLT:Small Size:Middle Speed	*ENG	[0 to 100 / 50 / 1 %/step]		
	Specifies the pressure roller to	emperature	for 2nd CPM down of DLT Small paper size.		
113	High: 1 st CPM:B4:Large Size:Middle Speed	*ENG	[0 to 100 / 80 / 1 %/step]		
	Specifies the pressure roller temperature for 1st CPM down of B4 Large paper size.				
114	High:2nd CPM:B4:Large Size:Middle Speed	*ENG	[0 to 100 / 50 / 1 %/step]		
	Specifies the pressure roller temperature for 2nd CPM down of B4 Large paper size.				
116	High:1st CPM:B4:Small Size:Middle Speed	*ENG	[0 to 100 / 80 / 1 %/step]		
	Specifies the pressure roller temperature for 1st CPM down of B4 Small paper size.				
11 <i>7</i>	High:2nd CPM:B4:Small Size:Middle Speed	*ENG	[0 to 100 / 50 / 1 %/step]		
	Specifies the pressure roller temperature for 2nd CPM down of B4 Small paper size.				
119	High:1st CPM:LT:Large Size:Middle Speed	*ENG	[0 to 100 / 80 / 1 %/step]		
	Specifies the pressure roller to	emperature	for 1st CPM down of LT Large paper size.		
120	High:2nd CPM:LT:Large Size:Middle Speed	*ENG	[0 to 100 / 50 / 1 %/step]		
	Specifies the pressure roller to	emperature	for 2nd CPM down of LT Large paper size.		

122	High: 1 st CPM:LT:Small Size:Middle Speed	*ENG	[0 to 100 / 80 / 1 %/step]			
	Specifies the pressure roller temperature for 1st CPM down of LT Small paper size.					
123	High:2nd CPM:LT:Small Size:Middle Speed	*ENG	[0 to 100 / 50 / 1 %/step]			
	Specifies the pressure roller te	mperature	for 2nd CPM down of LT Small paper size.			
125	High: 1 st CPM:A4:Large Size:Middle Speed	*ENG	[0 to 100 / 80 / 1 %/step]			
	Specifies the pressure roller te	mperature	for 1st CPM down of A4 Large paper size.			
126	High:2nd CPM:A4:Large Size:Middle Speed	*ENG	[0 to 100 / 50 / 1 %/step]			
	Specifies the pressure roller te	mperature	for 2nd CPM down of A4 Large paper size.			
128	High: 1 st CPM:A4:Small Size:Middle Speed	*ENG	[0 to 100 / 80 / 1 %/step]			
	Specifies the pressure roller temperature for 1st CPM down of A4 Small paper size.					
129	High:2nd CPM:A4:Small Size:Middle Speed	*ENG	[0 to 100 / 50 / 1 %/step]			
	Specifies the pressure roller temperature for 2nd CPM down of A4 Small paper size.					
131	High: 1 st CPM:B5:Large Size:Middle Speed	*ENG	[0 to 100 / 80 / 1 %/step]			
	Specifies the pressure roller temperature for 1st CPM down of B5 Large paper size.					
132	High:2nd CPM:B5:Large Size:Middle Speed	*ENG	[0 to 100 / 50 / 1 %/step]			
	Specifies the pressure roller temperature for 2nd CPM down of B5 Large paper size.					
134	High:1st CPM:B5:Small Size:Middle Speed	*ENG	[0 to 100 / 80 / 1 %/step]			
	Specifies the pressure roller temperature for 1st CPM down of B5 Small paper size.					
135	High:2nd CPM:B5:Small Size:Middle Speed	*ENG	[0 to 100 / 50 / 1 %/step]			
	Specifies the pressure roller te	mperature	for 2nd CPM down of B5 Small paper size.			

13 <i>7</i>	High: 1 st CPM: A5: Middle Speed	*ENG	[0 to 100 / 80 / 1 %/step]		
	Specifies the pressure roller te	emperature	for 1st CPM down of A5 paper size.		
138	High:2nd CPM:A5:Middle Speed	*ENG	[0 to 100 / 50 / 1 %/step]		
	Specifies the pressure roller te	emperature	for 2nd CPM down of A5 paper size.		
140	High: 1 st CPM:B6:Middle Speed	*ENG	[0 to 100 / 80 / 1 %/step]		
	Specifies the pressure roller te	mperature	for 1st CPM down of B6 paper size.		
141	High:2nd CPM:B6:Middle Speed	*ENG	[0 to 100 / 50 / 1 %/step]		
	Specifies the pressure roller te	mperature	for 2nd CPM down of B6 paper size.		
143	High:1st CPM:A6:Middle Speed	*ENG	[0 to 100 / 80 / 1 %/step]		
	Specifies the pressure roller temperature for 1st CPM down of A6 paper size.				
144	High:2nd CPM:A6:Middle Speed	*ENG	[0 to 100 / 50 / 1 %/step]		
	Specifies the pressure roller temperature for 2nd CPM down of A6 paper size.				
201	High:1st CPM:A3:Large Size:Low Speed	*ENG	[0 to 100 / 80 / 1 %/step]		
	Specifies the pressure roller temperature for 1st CPM down of A3 Large paper size.				
204	High:1st CPM:A3:Small Size:Low Speed	*ENG	[0 to 100 / 80 / 1 %/step]		
	Specifies the pressure roller temperature for 1st CPM down of A3 Small paper size.				
207	High: 1 st CPM:DLT:Large Size:Low Speed	*ENG	[0 to 100 / 80 / 1 %/step]		
	Specifies the pressure roller te	mperature	for 1st CPM down of DLT Large paper size.		
210	High:1st CPM:DLT:Small Size:Low Speed	*ENG	[0 to 100 / 80 / 1 %/step]		
	Specifies the pressure roller te	emperature	for 1st CPM down of DLT Small paper size.		

213	High:1st CPM:B4:Large Size:Low Speed	*ENG	[0 to 100 / 80 / 1 %/step]			
	Specifies the pressure roller te	mperature	for 1st CPM down of B4 Large paper size.			
216	High:1st CPM:B4:Small Size:Low Speed	*ENG	[0 to 100 / 80 / 1 %/step]			
	Specifies the pressure roller temperature for 1st CPM down of B4 Small paper size.					
219	High: 1 st CPM:LT:Large Size:Low Speed	*ENG	[0 to 100 / 80 / 1 %/step]			
	Specifies the pressure roller temperature for 1st CPM down of LT Large paper size.					
222	High:1st CPM:LT:Small Size:Low Speed	*ENG	[0 to 100 / 80 / 1 %/step]			
	Specifies the pressure roller temperature for 1st CPM down of LT Small paper size.					
225	High :1st CPM:A4:Large Size:Low Speed	*ENG	[0 to 100 / 80 / 1 %/step]			
	Specifies the pressure roller temperature for 1st CPM down of A4 Large paper size.					
228	High:1st CPM:A4:Small Size:Low Speed	*ENG	[0 to 100 / 80 / 1 %/step]			
	Specifies the pressure roller temperature for 1st CPM down of A4 Small paper size.					
231	High :1st CPM:B5:Large Size:Low Speed	*ENG	[0 to 100 / 80 / 1 %/step]			
	Specifies the pressure roller temperature for 1st CPM down of B5 Large paper size.					
234	High :1st CPM:B5:Small Size:Low Speed	*ENG	[0 to 100 / 80 / 1 %/step]			
	Specifies the pressure roller temperature for 1st CPM down of B5 Small paper size.					
237	High:1st CPM:A5:Low Speed	*ENG	[0 to 100 / 80 / 1 %/step]			
	Specifies the pressure roller temperature for 1st CPM down of A5 paper size.					
240	High : 1 st CPM:B6:Low Speed	*ENG	[0 to 100 / 80 / 1 %/step]			
	Specifies the pressure roller temperature for 1st CPM down of B6 paper size.					

243	High:1st CPM:A6:Low Speed	*ENG	[0 to 100 / 80 / 1 %/step]	
	Specifies the pressure roller temperature for 1st CPM down of A6 paper size.			

1141	[Fusing SC Issue Time Info]		
001	SC Number	*ENG	Displays the issued SC number.
101	Htg Roller:Ctr Det1	*ENG	
102	Htg Rolloer:End Det1	*ENG	
103	Htg Roller:Ctr Det1	*ENG	
104	Htg Roller:End Det1	*ENG	
151	Htg Roller:Ctr Det2	*ENG	[504-200 / /1 /]
152	Htg Rolloer:End Det2	*ENG	[-50 to 300 / - / 1 deg/step] Displays the temperature at the center
153	Press Roller:Ctr Det2	*ENG	of the heating roller when an SC was issued.
154	Press Roller:End Det2	*ENG	issued.
201	Htg Roller:Ctr Det3	*ENG	
202	Htg Rolloer:End Det3	*ENG	
203	Press Roller:Ctr Det3	*ENG	
204	Press Roller:End Det3	*ENG	

1142	[Fusing Jam Detection]				
	SC Display	*ENG	[0 or 1 / 0 / -]		
Enables or disables the fusing consecutive jam (three times) SC detection.					
	0: No detection, 1: Detection): No detection, 1: Detection			

	1151	[Pressure Setting]				
		Pressure Change ON/OFF	*ENG	[0 or 1 / 1 / -]		
	001	Enables or disables the pressure switching control for the fusing unit.				
		0: OFF , 1: ON				

002	Pressure Position 1	*ENG	[0 to 10,000 / 420 / 10 msec/step]			
	Specifies the rotation time of the pressure roller contact motor for the pressure position 1.					
000	Pressure Position2	*ENG	[0 to 10,000 / 660 / 10 msec/step]			
003	Specifies the rotation time of the pressure roller contact motor for the pressure position 2.					
004	Pressure Position3	*ENG	[0 to 10,000 / 2130 / 10 msec/step]			
004	Specifies the rotation time of the pressure roller contact motor for the pressure position 3.					
	Depressure Position	*ENG	[0 to 10,000 / 220 / 10 msec/step]			
005	Specifies the rotation time of the pressure roller contact motor for the depression position (no pressure).					
	Shift Time	*ENG	[0 to 3600 / 60 / 1 sec/step]			
011	Specifies the timing for depressing the fusing unit. If the machine does not get any jobs for specified time by this SP after copying or printing, the machine depresses the fusing unit.					
101	Pressure:Plain 1/2	*ENG	[0 to 3 / 3 / 1 /step]			
	Sets the default pressure position of the fusing unit for each paper type in normal speed. 0: Depression position (no pressure) 1: Position 1 (less pressure) 2: Position 2 3: Position 3 (strongest pressure)					
102	Pressure:Thin	*ENG	[0 to 3 / 3 / 1 /step]			
103	Pressure:M-thick	*ENG	[0 to 3 / 3 / 1 /step]			
104	Pressure:Thick1	*ENG	[0 to 3 / 3 / 1 /step]			
105	Pressure:Thick2	*ENG	[0 to 3 / 3 / 1 /step]			
106	Pressure:Thick3	*ENG	[0 to 3 / 3 / 1 /step]			
107	Pressure:Special 1	*ENG	[0 to 3 / 3 / 1 /step]			
108	Pressure:Special2	*ENG	[0 to 3 / 3 / 1 /step]			
109	Pressure:Special3	*ENG	[0 to 3 / 3 / 1 /step]			
	'					

151	Pressure:Plain 1/2:Low Speed	*ENG	[0 to 3 / 3 / 1 /step]				
	Sets the default pressure position of the fusing unit for each paper type in low speed.						
	O: Depression position (no pressure)						
	1: Position 1 (less pressure)						
	2: Position 2						
	3: Position 3 (strongest pressure)						
152	Pressure:M-thick:Low Speed	*ENG	[0 to 3 / 3 / 1 /step]				
153	Pressure:Thick1:Low Speed	*ENG	[0 to 3 / 3 / 1 /step]				
154	Pressure:Special1:Low Speed	*ENG	[0 to 3 / 3 / 1 /step]				
155	Pressure:Special2:Low Speed	*ENG	[0 to 3 / 3 / 1 /step]				
156	Pressure:Plain 1/2:Glossy	*ENG	[0 to 3 / 3 / 1 /step]				
157	Pressure:M-thick:Glossy	*ENG	[0 to 3 / 3 / 1 /step]				
158	Pressure:OHP	*ENG	[0 to 3 / 3 / 1 /step]				
159	Pressure:Envelope:Low Speed	*ENG	[0 to 3 / 3 / 1 /step]				
160	Pressure:Thin:Low Speed	*ENG	[0 to 3 / 3 / 1 /step]				
	Pressure:Thick4	*ENG	[0 to 3 / 3 / 1 /step]				
	Sets the default pressure position of the fusing unit for thick 4 paper.						
161	0: Depression position (no pressure)						
	1: Position 1 (less pressure)						
	2: Position 2						
	3: Position 3 (strongest pressure)						
	Pressure:Postcard	*ENG	[0 to 3 / 3 / 1 /step]				
	Sets the default pressure position of the fusing unit for postcard.						
162	0: Depression position (no pressure)						
102	1: Position 1 (less pressure)						
	2: Position 2						
	3: Position 3 (strongest pressure)						

201	Filler Edge Detection Counter	ENG	[0 to 9,000,000 / - / 1 /step]
201	Displays the detection time for the edge	e of the pre	essure roller actuator.

1152	[Fusing Nip Band Check]				
	Execute	-	[0 or 1 / 0 / 1]		
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 install a new fusing unit.					
002	Pre-idling Time	*ENG	[0 to 999 / 300 / 1 sec/step]		
002	Specifies the fusing rotation time before executing SP1109-001.				
003	[0 to 100 / 20 / 1 sec/step]				
Specifies the time for measuring the nip.					
00.4	Pressure Position	* ENG	[1 to 3 / 3 / 1]		
004	Specifies the pressure position for measuring the nip.				

1153	[Fuser Cleaning]			
001	Compulsion execution	-	Execute the fusing cleaning mode.	
	Operation interval	*ENG	[1 to 300 / 0 / 1 K/step]	
002	Adjusts the execution interval for 1K= 100 sheets	g cleaning mode.		
003	Control Temp.	*ENG	[0 to 200 / 180 / 1°C/step]	
003	Specifies the heating roller temperature for the fusing cleaning mode.			
004	Page Count	*ENG	[1 to 300000 / - / 1 page/step]	
004	Displays the page counter for the fusing cleaning mode.			

1801	[Motor Speed Adj.]		
001	Registration:Plain:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]
002	Registration:Plain:High	*ENG	[-2 to 2 / -0.1 / 0.1 %/step]

003	Registration:Middle Thick:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]
004	Registration:Middle Thick:Mid	*ENG	[24. 2 / 21 / 0.1 % / 4]
005	Registration:Middle Thick:High	*ENG	[-2 to 2 / -0.1 / 0.1 %/step]
006	Registration:Thick 1:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]
007	Registration:Thick1:Mid	*ENG	[-2 to 2 / -0.1 / 0.1 %/step]
008	Registration:Thick 2:Low	*ENG	[0,0/11/019//]
009	Registration:Thick 3:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]
010	Duplex CW:Plane:Low	*ENG	
011	Duplex CW:Normal:High	*ENG	
012	Duplex CW:Middle Thick:Low	*ENG	
013	Duplex CW:Middle Thick:Mid	*ENG	
014	Duplex CW:Middle Thick:High	*ENG	[-4 to 4 / 0.0 / 0.1 %/step]
015	Duplex CW:Thick1:Low	*ENG	
016	Duplex CW:Thick1:Mid	*ENG	
017	Duplex CW:Thick2:Low	*ENG	
018	Duplex CW:Thick3:Low	*ENG	
019	Duplex CCW:Normal:High	*ENG	
020	Duplex CCW:Middle Thick:Mid	*ENG	[4-4/00/019//1
021	Duplex CCW:Middle Thick:high	*ENG	[-4 to 4 / 0.0 / 0.1 %/step]
023	Duplex CCW:Thick1:Mid	*ENG	
024	Reverse CW:Normal:High	*ENG	[-4 to 4 / -0.5 / 0.1%/step]
025	Reverse CW:Middle Thick:Mid	*ENG	[-4 to 4 / 0 / 0.1 %/step]
026	Reverse CW:Middle Thick:High	*ENG	[-4 to 4 / -0.5 / 0.1%/step]
	·		

1			1
028 I	Reverse CW:Thick1:Mid	*ENG	
029	Reverse CCW:Normal:High	*ENG	
030	Reverse CCW:Middle Thick:Mid	*ENG	[-4 to 4 / 0 / 0.1 %/step]
031	Reverse CCW:Middle Thick:High	*ENG	
033	Reverse CCW:Thick1:Mid	*ENG	
034	Feed:Plain:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]
035	Feed:Plain:High	*ENG	[-2 to 2 / -0.1 / 0.1 %/step]
036	Feed:Middle thick:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]
037	Feed:Middle thick:Mid	*ENG	[0.0/01/019//]
038 I	Feed:Middle thick:High	*ENG	[-2 to 2 / - 0.1 / 0.1 %/step]
039	Feed:Thick 1:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]
040 I	Feed:Thick 1:Mid	*ENG	[-2 to 2 / -0.1 / 0.1 %/step]
041 I	Feed:Thick 2:Low	*ENG	
042	Feed:Thick 3:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]
043	Bridge Motor:Low	*ENG	
044	Bridge Motor:Mid	*ENG	[-4 to 4 / 0 / 0.1 %/step]
045	Bridge Motor:High	*ENG	
060 1	KOpcDevMot:High	*ENG	
061 1	KOpcDevMot:Mid	*ENG	[-4 to 4 / -0.3 / 0.01 %/step]
062	KOpcDevMot:Low	*ENG	
063	MOpcDevMot:High	*ENG	[-10 to 10 / 0 / 1 step/step]
064	MOpcDevMot:Mid	*ENG	[-9 to 9 / 0 / 1 step/step]
065	MOpcDevMot:Low	*ENG	[-14 to 14 / 0 / 1 step/step]
066	COpcDevMot:High	*ENG	[-10 to 10 / 0 / 1 step/step]
067	COpcDevMot:Mid	*ENG	[-9 to 9 / 0 / 1 step/step]
068	COpcDevMot:Low	*ENG	[-14 to 14 / 0 / 1 step/step]

069	YOpcDevMot:High	*ENG	[-10 to 10 / 0 / 1 step/step]			
070	YOpcDevMot:Mid	*ENG	[-9 to 9 / 0 / 1 step/step]			
071	YOpcDevMot:Low	*ENG	[-14 to 14 / 0 / 1 step/step]			
072	Fusing: High	*ENG	[-4 to 4 / -0.6 / 0.01 %/step]			
073	Fusing: Mid	*ENG	[-4 to 4 / -0.8 / 0.01 %/step]			
074	Fusing: Low	*ENG	[-4 to 4 / -0.3 / 0.01 %/step]			
075	TransferMot:High	*ENG				
076	TransferMot:Mid	*ENG	[-4 to 4 / -0.1 / 0.01 %/step]			
077	TransferMot:Low	*ENG				
078	TonerMot	*ENG	[-30 to 30 / 10 / 5 %/step]			
079	Fusing: 1200	*ENG	[-4 to 4 / -0.6 / 0.01 %/step]			
100	Drum Adjust	*ENG	[0 or 1 / 1 / 1] 0: Off, 1: On			
	Enables or disables the drum amplitude adjustment.					
101	MOpcDevMot:High	*ENG				
102	COpcDevMot:High	*ENG	[-7 to 7 / 0 / 1 step/step]			
103	YOpcDevMot:High	*ENG				
104	MOpcDevMot:Mid	*ENG				
105	COpcDevMot:Mid	*ENG	[-7 to 7 / 0 / 1 step/step]			
106	YOpcDevMot:Mid	*ENG				
107	MOpcDevMot:Low	*ENG				
108	COpcDevMot:Low	*ENG	[-14 to 14 / 0 / 1 step/step]			
109	YOpcDevMot:Low	*ENG				
110	MOpcDevMot:1200	*ENG				
111	COpcDevMot: 1200	*ENG	[-7 to 7 / 0 / 1 step/step]			
112	YOpcDevMot: 1200	*ENG				

120	Long:Registration:Plain:High	*ENG	[-2 to 2 / -0.1 / 0.1 %/step]
121	Long:Registration:Plain:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]
122	Long:Registration:Middle Thick:High	*ENG	
123	Long:Registration:Middle Thick:Middle	*ENG	[-2 to 2 / -0.1 / 0.1 %/step]
124	Long:Registration:Middle Thick:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]
125	Long:Registration:Thick 1:Middle	*ENG	[-2 to 2 / -1 / 0.1 %/step]
126	Long:Registration:Thick 1:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]
127	Long:Registration:Thick 2:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]
128	Long:Registration:Thick 3:Low	*ENG	[-2 to 2 / -1.1 / 0.1 %/step]
129	Long:Fusing:Plain:High	*ENG	[-4 to 4 / 1.9 / 0.01 %/step]
130	Long:Fusing:Plain:Low	*ENG	[-4 to 4 / 2.1 / 0.01 %/step]
131	Long:Fusing:Middle Thick:High	*ENG	[-4 to 4 / 1.9 / 0.01 %/step]
132	Long:Fusing:Middle Thick:Middle	*ENG	[-4 to 4 / 1.4 / 0.01 %/step]
133	Long:Fusing:Middle Thick:Low	*ENG	[-4 to 4 / 2.1 / 0.01 %/step]
134	Long:Fusing:Thick 1:Middle	*ENG	[-4 to 4 / 2.0 / 0.01 %/step]
135	Long:Fusing:Thick 1:Low	*ENG	[-4 to 4 / 1.7 / 0.01 %/step]
136	Long:Fusing:Thick 2:Low	*ENG	[-4 to 4 / 1.7 / 0.01 %/step]
137	Long:Fusing:Thick 3:Low	*ENG	[-4 to 4 / 1.7 / 0.01 %/step]

1902	[Amplitude Control]		
001	Execute	*ENG	Execute the drum phase adjustment.
002	Result	*ENG	[0 to 3 / 0 / 1] Displays the result of the drum phase adjustment. 0: Successfully done 2: Sampling failure 3: Insufficient detection number

			[0 or 1 / 1 / -]	
003	Auto Execution	*ENG	Turns the automatic drum phase adjustment on or off.	
			0: Off, 1: On	

1950	[Fan Cooling Time Set] Adjust the rotation time for each fan motor after a job end.				
002	Fusing Exit Fan	*ENG			
006	Main Suction Fan	*ENG			
007	Paper Exit Fan	*ENG			
008	PSU Fan	*ENG			
009	QSU Heater Cooling Fan	*ENG	[0 to 120 / 0 / 0.1 min./step]		
010	AC Control board Cooling Fan	*ENG			
011	Second Duct Fan	*ENG			
012	Toner Supply Cooling Fan	*ENG			

1051	[Fan Start Time Set]			
1951	Adjust the start time for each fa	adjust the start time for each fan motor after a job end.		
002	Fusing Exit Fan	*ENG	[0 to 900 / 0 / 1 sec/step]	
006	Main Suction Fan	*ENG	[0 to 900 / 120 / 1 sec/step]	
007	Paper Exit Fan	*ENG	[0 to 900 / 0 / 1 sec/step]	
800	PSU Fan	*ENG	[0 to 900 / 120 / 1 sec/step]	
009	Fusing IH Coil Fan	*ENG		
010	IH Power Supply Fan	*ENG	[0 to 900 / 0 / 1 sec/step]	
011	Second Duct Fan	*ENG	[0 10 700 / 0 / 1 sec/ siep]	
012	Third Duct Fan	*ENG		

1952		[Fan Control Off Mode Time Set]			
	1932	Specifies the time for fan control off mode.			
	001	1 - *ENG [0 to 60 / 10 / 1 min./step]		[0 to 60 / 10 / 1 min./step]	

1953	[Extra Fan Control]			
1953	Configures the settings of extra	fan contro	l.	
001	Extra Fan Cooling State	Cooling State *ENG	[0 or 1 / 0 / 1 /step] 0: Off, 1: On	
	Displays the extra fan cooling i	s On or Of	f.	
002	Extra Fan Cooling: Time: Threshold	*ENG	[0 to 180 / C2.5a: 110, C2.5b: 100 / 1 min./step]	
003	Extra Fan Cooling: Rotat: Threshold	*ENG	[0 to 999999999 / 0 / 1 min./step]	
004	Extra Fan Cooling: Start Date	*ENG	Displays the execution time and date of the extra fan cooling.	
005	Extra Fan Cooling Time	*ENG	[0 to 120 / 30 / 0.1 min./step]	
Specifies the execution time for the extra fan cooling.		an cooling.		

1954	[Extra Fan Control]		
1934	Configures the settings of extra	Configures the settings of extra fan control.	
002	Fan Cooling Time:Fusing Exit Fan:Initial	*ENG	[0 to 120 / 0 / 0.1 min./step]
006	Fan Cooling Time:Main Suction Fan:Initial	*ENG	[0 to 120 / 0 / 0.1 min./step]
007	Fan Cooling Time:Paper Exit Fan:Initial	*ENG	[0 to 120 / 0 / 0.1 min./step]
008	Fan Cooling Time:PSU Fan:Initial	*ENG	[0 to 120 / 0 / 0.1 min./step]
009	Fan Cooling Time:Fusing IH Coil Fan:Initial	*ENG	[0 to 120 / 0 / 0.1 min./step]

010	Fan Cooling Time:IH Power Supply Fan:Initial	*ENG	[0 to 120 / 0 / 0.1 min./step]
011	Fan Cooling Time:Second Duct Fan:Initial	*ENG	[0 to 120 / 0 / 0.1 min./step]
012	Fan Cooling Time:Third Duct Fan:Initial	*ENG	[0 to 120 / 0 / 0.1 min./step]

Main SP Tables-2

SP2-XXX (Drum)

	[Charge DC Voltage] Charge Roller DC Voltage Adjustment				
	(Paper Type, Process Speed, Color)				
	Paper Type 🤿 Plain, Thick 1, Thick 2				
	Plain: High speed, Thick 1: Mid	ddle speed	, Thick 2&FINE: Low speed		
2005	Adjusts the DC component of t	he charge i	roller bias in the various print modes.		
Charge bias (DC component) is automatically adjusted during process control; the adjusting these settings does not effect while process control mode (SP3-041-1 DON) is activated. When deactivating process control mode with SP3-041-1, the value of these SP modes are used for printing.			ile process control mode (SP3-041-1 Default:		
001	Plain: Bk	*ENG			
002	Plain: M	*ENG			
003	Plain: C	*ENG			
004	Plain: Y	*ENG			
005	Thick 1: Bk	*ENG			
006	Thick 1: M	*ENG	[0 to 1000 / 690 / 10 –V/step]		
007	Thick 1: C	*ENG	[0 to 1000 / 090 / 10 – v / step]		
008	Thick 1: Y	*ENG			
009	Thick 2&FINE: Bk	*ENG			
010	Thick 2&FINE: M	*ENG			
011	Thick 2&FINE: C	*ENG			
012	Thick 2&FINE: Y	*ENG			
	[Charge DC: Correction]				
013	PCU:Plain	*ENG	[-100 to 100 / C3c: -26, C3d: -28 / 1 -V/ step]		
014	PCU:Thick 1	*ENG	[-100 to 100 / -29 / 1 -V/step]		

015	PCU:Thick 2&FINE	*ENG	[-100 to 100 / -28 / 1 -V/step]
016	HVP:Plain	*ENG	[-100 to 100 / 20 / 1 -V/step]
017	HVP:Thick 1	*ENG	[-100 to 100 / 20 / 1 -V/step]
018	HVP: Thick 2&FINE	*ENG	[-100 to 100 / 29 / 1 -V/step]

2006	[Charge AC Voltage] Charge Roller AC Voltage Adjustment (Paper Type, Process Speed, Color) Paper Type Plain, Thick 1, Thick 2 Plain: High speed, Thick 1: Middle speed, Thick 2&FINE: Low speed Adjusts the AC component of the charge roller bias in the various print modes. Charge bias (AC component) is adjusted by environment correction (SP2-007-xxx to SP2-011-xxx). These SPs are activated only when SP2-012-1 is set to "1: manual control".		
001	Plain: Bk	*ENG	[0 to 3 / 1.9 / 0.01 KV/step]
002	Plain: M	*ENG	[0 to 3 / 1.9 / 0.01 KV/step]
003	Plain: C	*ENG	[0 to 3 / 1.9 / 0.01 KV/step]
004	Plain: Y	*ENG	[0 to 3 / 1.9 / 0.01 KV/step]
005	Thick 1: Bk	*ENG	[0 to 3 / 1.9 / 0.01 KV/step]
006	Thick 1: M	*ENG	[0 to 3 / 1.9 / 0.01 KV/step]
007	Thick 1: C	*ENG	[0 to 3 / 1.9 / 0.01 KV/step]
008	Thick 1: Y	*ENG	[0 to 3 / 1.9 / 0.01 KV/step]
009	Thick 2&FINE: Bk	*ENG	[0 to 3 / 1.9 / 0.01 KV/step]
010	Thick 2&FINE: M	*ENG	[0 to 3 / 1.9 / 0.01 KV/step]
011	Thick 2&FINE: C	*ENG	[0 to 3 / 1.9 / 0.01 KV/step]
012	Thick 2&FINE: Y	*ENG	[0 to 3 / 1.9 / 0.01 KV/step]

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001 AC Voltage *ENG	Selects the AC voltage control type. [0 or 1 / 0 / 1 /step] 0: Process control 1: Manual control (AC voltages are decided with SP2006.)
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2013	[Environmental Correction: PC	U]	
001	Current Environmental FC: Display	*ENG	Displays the environmental condition, which is measured in absolute humidity. [1 to 5 / - / 1 /step] 1: LL (LL <= 4.3 g/m³) 2: ML (4.3 < ML <= 11.3 g/m³) 3: MM (11.3 < MM <= 18.0 g/m³) 4: MH (18.0 < MH <= 24.0 g/m³) 5: HH (24.0 g/m³ < HH)
002	Forced Setting	*ENG	Selects the environmental condition manually. [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	*ENG	Changes the humidity threshold between LL and ML. [0 to 100 / 3.0 / 0.01 g/m ³ /step]
004	Absolute Humidity: Threshold 2	*ENG	Changes the humidity threshold between ML and MM. [0 to 100 / 8.0 / 0.01 g/m³/step]
005	Absolute Humidity: Threshold	*ENG	Changes the humidity threshold between MM and MH. [0 to 100 / 15.0 / 0.01 g/m³/step]
006	Absolute Humidity: Threshold	*ENG	Changes the humidity threshold between MH and HH. [0 to 100 / 22.0 / 0.01 g/m ³ /step]

007	Current Temp. FC: Display	*ENG	Displays the current temperature. [0 to 100 / - / 1 deg/step]
008	Current Relative Humidity FC: Display	*ENG	Displays the current relative humidity. [0 to 100 / - / 1%RH/step]
009	Current Absolute Humidity FC: Display	*ENG	Displays the absolute humidity. [0 to 100 / - / 0.01 g/m ³ /step]
010	Previous Environmental Bk: 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. Bk: Display	*ENG	Displays the previous temperature. [0 to 100 / - / 1 deg/step]
012	Previous Relative Humidity Bk: Display	*ENG	Displays the previous relative humidity. [0 to 100 / - / 1%RH/step]
013	Previous Absolute Humidity Bk: Display	*ENG	Displays the previous absolute humidity. [0 to 100 / - / 0.01 g/m³/step]

2015	[Charge AC Adj: Result] Displays a result of the AC charge adjustment.		
001	Bk	*ENG	[0 to 9 / 0 / 1 /step]
002	М	*ENG	0: Success
003	С	*ENG	1: Out of tolerance range 2: Out of adjustable range
004	Υ	*ENG	3: Adjustment incompleted

	[Color Registration Correction] FA
2101	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. For details, see "Laser Optics Housing Unit" in the "Main chapters: 4. Replacement and Adjustment: Laser Optics". The value should be provided with the new laser optics housing unit.

001	Main Dot: Bk	*ENG	
002	Main Dot: Ma	*ENG	[512 to 511 / 0 / 1 dot /ston]
003	Main Dot: Cy	*ENG	[-512 to 511 / 0 / 1 dot/step]
004	Main Dot: Ye	*ENG	
005	Sub Line: Bk	*ENG	
006	Sub Line: Ma	*ENG	[-16384 to 16383 / 0 / 1 line/step]
007	Sub Line: Cy	*ENG	[-10304 to 10303 / 0 / 1 time/ step]
008	Sub Line: Ye	*ENG	

2103	[Erase Margin Adjustment] (Area, Paper Size)				
2103	Adjusts the erase margin by deleting image data at the margins.				
001	Lead Edge Width	*ENG	[04-00/42/01/]		
002	Trail. Edge Width	*ENG	[0 to 9.9 / 4.2 / 0.1 mm/step]		
003	Left	*ENG	[0+, 00 / 2 / 0.1 / +]		
004	Right	*ENG	[0 to 9.9 / 2 / 0.1 mm/step]		
006	Duplex Trail. L Size	*ENG	[0 to 4 / 1 / 0.1 mm/step]		
007	Duplex Trail. M Size	*ENG	[0 to 4 / 0.8 / 0.1 mm/step]		
800	Duplex Trail. S Size	*ENG	[0 to 4 / 0.6 / 0.1 mm/step]		
009	Duplex Left Edge	*ENG	[04-15/02/01/]		
010	Duplex Right Edge	*ENG	[0 to 1.5 / 0.3 / 0.1 mm/step]		
011	Duplex Trail. L Size:Thick	*ENG	[0 to 4 / 1 / 0.1 mm/step]		
012	Duplex Trail. M Size:Thick	*ENG	[0 to 4 / 0.8 / 0.1 mm/step]		
013	Duplex Trail. S Size:Thick	*ENG	[0 to 4 / 0.6 / 0.1 mm/step]		
014	Duplex Left Edge:Thick	*ENG	[O to 1.5 / 0.3 / O.1 mm /st1		
015	Duplex Right Edge:Thick	*ENG	[0 to 1.5 / 0.3 / 0.1 mm/step]		

016	Lead Edge Width: Thin	*ENG	[0+-00/40/01/1
017	Trail. Edge Width: Thin	*ENG	[0 to 9.9 / 4.2 / 0.1 mm/step]
018	Duplex Trail. L Size: Thin	*ENG	[0 to 4 / 1 / 0.1 mm/step]
019	Duplex Trail. M Size: Thin	*ENG	[0 to 4 / 0.8 / 0.1 mm/step]
020	Duplex Trail. S Size: Thin	*ENG	[0 to 4 / 0.6 / 0.1 mm/step]

	[LD Power Adj.] (Process Speed, Color)				
2105	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 to 120 / 100 / 1%/step]		
002	High Speed: Ma	*ENG	Decreasing a value makes lines thinner on		
003	High Speed: Cy	*ENG	the output. Increasing a value makes lines thicker on the		
004	High Speed: Ye	*ENG	output.		
005	Middle Speed: Bk	*ENG	[50 to 120 / 100 / 1%/step]		
006	Middle Speed: Ma	*ENG	Decreasing a value makes lines thinner on		
007	Middle Speed: Cy	*ENG	the output. Increasing a value makes lines thicker on the		
008	Middle Speed: Ye	*ENG	output.		
009	Low Speed: Bk	*ENG	[50 to 120 / 100 / 1%/step]		
010	Low Speed: Ma	*ENG	Decreasing a value makes lines thinner on		
011	Low Speed: Cy	*ENG	the output. Increasing a value makes lines thicker on the		
012	Low Speed: Ye	*ENG	output.		

	2109	[Test Pattern]				
Generates the test pattern using "COPY Window" tab in the LCD.		dow" tab in the LCD.				
	003	Pattern Selection	-	[0 to 23 / 0 / 1/step]		

	0 None		11. Independent Pattern (1 dot)
	1: Vertical Line (1dot)		12. Independent Pattern (2dot)
	2: Vertical Line (2dot)		13. Independent Pattern (4dot)
	3: Horizontal (1dot)		14. Trimming Area
	4: Horizontal (2dot)		16: Hound's Tooth Check (Horizontal)
	5: Grid Vertical Line		17: Band (Horizontal)
	6: Grid Horizontal Line		18: Band (Vertical)
	7: Grid pattern Small		19: Checker Flag Pattern
	8: Grid pattern Large		20: Grayscale Vertical Margin
	9: Argyle Pattern Small		21: Grayscale Horizontal Margin
	10: Argyle Pattern Large		23: Full Dot Pattern
005	Color Selection	-	Specifies the color for the test pattern. [1 to 4 / 1 / 1/step] 1: All colors, 2: Magenta, 3: Yellow, 4: Cyan
006	Density: Bk	-	Specifies the color density for the test pattern.
007	Density: Ma	'	[0 to 15 / 15 / 1 /step]
008	Density: Cy	-	0: Lightest density
009	Density: Ye	-	15: Darkest density

2111	[Forced Line Position Adj.]		
001	Mode a	-	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	-	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	-	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.

2112	[TM/ID Sensor Check] ID Sensor Check FA		
001	Execute	-	[O or 1 / 0 / 1 /step] This SP is used to check the ID sensors at the factory. The results of this SP are displayed in SP2140 to SP2145.

2117	[Skew Adjustment]				
	Specifies a skew adjustment value for the skew motor M, C or Y.				
2117	These SPs must be used when a new laser optics housing unit is installed or when SC2.585 occurs. For details, see "Laser Optics Housing Unit" in the "Main chapters: 4. Replacement and Adjustment: Laser Optics".				
001	Pulse: M	*ENG			
002	Pulse: C	*ENG	[-50 to 50 / 0 / 1 pulse/step]		
003	Pulse: Y	*ENG			

2118	[Skew Adjustment]		
001	Execute: M	*ENG	Changes the current skew adjustment values to
002	Execute: C	*ENG	the values specified with SP2117. These SPs must be used when a new laser optics
003	Execute: Y	*ENG	housing unit is installed or when SC2.585 occurs. For details, see "Laser Optics Housing Unit" in the "Main chapters: 4. Replacement and Adjustment: Laser Optics".

2119	[Skew Adjustment Display]			
2119	Displays the current skew adjustment value for each skew motor.			
001	М	*ENG		
002	С	*ENG	[-50 to 50 / - / 1 pulse/step]	
003	Υ	*ENG		

	[Area Mag. Correction] LD Pulse Area Correction (Color, Area) FA				
2150	Adjusts the magnification for each area. The main scan (297 mm) is divided into 8 areas. Area 1 is at the front side of the machine (left side of the image) and area 8 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	e image sh	ift to the right side on the print.		
	1 pulse = 1/16 dot				
027	Area O: Bk	*ENG	[-255 to 255 / 0 / 1 sub-dot/step]		
028	Area 1: Bk	*ENG			
029	Area 2: Bk	*ENG			
030	Area 3: Bk	*ENG			
031	Area 4: Bk	*ENG	Adjusts the area magnification for LD 0.		
032	Area 5: Bk	*ENG	[-255 to 255 / 0 / 1 sub-dot/step]		
033	Area 6: Bk	*ENG			
034	Area 7: Bk	*ENG			
035	Area 8: Bk	*ENG			
036	Area 9: Bk	*ENG			
037	Area 10: Bk	*ENG	Not used		
038	Area 11: Bk	*ENG	I NOI USEA		
039	Area 12: Bk	*ENG			
079	Area 0: Ma	*ENG	[-255 to 255 / 0 / 1 sub-dot/step]		

Area 1: Ma	*ENG	
Area 2: Ma	*ENG	
Area 3: Ma	*ENG	
Area 4: Ma	*ENG	Adjusts the area magnification for LD 0.
Area 5: Ma	*ENG	[-255 to 255 / 0 / 1 sub-dot/step]
Area 6: Ma	*ENG	
Area 7: Ma	*ENG	
Area 8: Ma	*ENG	
Area 9: Ma	*ENG	
Area 10: Ma	*ENG	
Area 11: Ma	*ENG	Not used
Area 12: Ma	*ENG	
Area 0: Cy	*ENG	[-255 to 255 / 0 / 1 sub-dot/step]
Area 1: Cy	*ENG	
Area 2: Cy	*ENG	
Area 3: Cy	*ENG	
Area 4: Cy	*ENG	Adjusts the area magnification for LD 0.
Area 5: Cy	*ENG	[-255 to 255 / 0 / 1 sub-dot/step]
Area 6: Cy	*ENG	
Area 7: Cy	*ENG	
Area 8: Cy	*ENG	
Area 9: Cy	*ENG	
Area 10: Cy	*ENG	
Area 11: Cy	*ENG	Not used
Area 12: Cy	*ENG	
Area 0: Ye	*ENG	[-255 to 255 / 0 / 1 sub-dot/step]
	Area 2: Ma Area 3: Ma Area 4: Ma Area 5: Ma Area 6: Ma Area 7: Ma Area 8: Ma Area 10: Ma Area 11: Ma Area 12: Ma Area 2: Cy Area 2: Cy Area 3: Cy Area 4: Cy Area 5: Cy Area 6: Cy Area 7: Cy Area 7: Cy Area 7: Cy Area 10: Cy Area 11: Cy Area 11: Cy Area 12: Cy	Area 2: Ma *ENG Area 3: Ma *ENG Area 4: Ma *ENG Area 5: Ma *ENG Area 6: Ma *ENG Area 7: Ma *ENG Area 8: Ma *ENG Area 9: Ma *ENG Area 10: Ma *ENG Area 11: Ma *ENG Area 2: Cy *ENG Area 2: Cy *ENG Area 3: Cy *ENG Area 5: Cy *ENG Area 5: Cy *ENG Area 6: Cy *ENG Area 7: Cy *ENG Area 9: Cy *ENG Area 10: Cy *ENG Area 11: Cy *ENG

184	Area 1: Ye	*ENG	
185	Area 2: Ye	*ENG	
186	Area 3: Ye	*ENG	
187	Area 4: Ye	*ENG	Adjusts the area magnification for LD 0.
188	Area 5: Ye	*ENG	[-255 to 255 / 0 / 1 sub-dot/step]
189	Area 6: Ye	*ENG	
190	Area 7: Ye	*ENG	
191	Area 8: Ye	*ENG	
192	Area 9: Ye	*ENG	
193	Area 10: Ye	*ENG	Not used
194	Area 11: Ye	*ENG	INOI used
195	Area 12: Ye	*ENG	

	[Area Shad. Correct. Setting] FA
	Adjusts the area correction value for each LD power.
2152	The main scan is divided into 16 areas. However, the image areas are limited from area 1 to area 14.
	For BK and Magenta, area 1 is at the rear side of the machine (left side of the image) and area 14 is at the front side of the machine (right side of the image).
	For Cyan and Yellow, area 1 is at the front side of the machine (right side of the image) and area 14 is at the rear side of the machine (left side of the image).

001	Area 0: Bk	*ENG	
002	Area 1: Bk	*ENG	
003	Area 2: Bk	*ENG	
004	Area 3: Bk	*ENG	
005	Area 4: Bk	*ENG	
006	Area 5: Bk	*ENG	
007	Area 6: Bk	*ENG	
800	Area 7: Bk	*ENG	This is for the synchronizing detection board. [50 to 150 / 100 / 1 %/step]
009	Area 8: Bk	*ENG	[20 10 130 / 100 / 1 /b/ 310p]
010	Area 9: Bk	*ENG	
011	Area 10: Bk	*ENG	
012	Area 11: Bk	*ENG	
013	Area 12: Bk	*ENG	
014	Area 13: Bk	*ENG	
015	Area 14: Bk	*ENG	
016	Area 15: Bk	*ENG	This is out of the image area. [50 to 150 / 100 / 1 %/step]
033	Area 0: Ma	*ENG	This is for the synchronizing detection board. [50 to 150 / 100 / 1 %/step]

Area 1: Ma	*ENG	
Area 2: Ma	*ENG	
Area 3: Ma	*ENG	
Area 4: Ma	*ENG	
Area 5: Ma	*ENG	
Area 6: Ma	*ENG	
Area 7: Ma	*ENG	[50 to 150 / 100 / 1 %/step]
Area 8: Ma	*ENG	[20 to 120 / 100 / 1 %/ steb]
Area 9: Ma	*ENG	
Area 10: Ma	*ENG	
Area 11: Ma	*ENG	
Area 12: Ma	*ENG	
Area 13: Ma	*ENG	
Area 14: Ma	*ENG	
Area 15: Ma	*ENG	This is out of the image area. [50 to 150 / 100 / 1 %/step]
Area 0: Cy	*ENG	This is for the synchronizing detection board. [50 to 150 / 100 / 1 %/step]
	Area 2: Ma Area 3: Ma Area 4: Ma Area 5: Ma Area 6: Ma Area 7: Ma Area 8: Ma Area 9: Ma Area 10: Ma Area 11: Ma Area 12: Ma Area 13: Ma Area 14: Ma Area 15: Ma	Area 2: Ma *ENG Area 3: Ma *ENG Area 4: Ma *ENG Area 5: Ma *ENG Area 6: Ma *ENG Area 7: Ma *ENG Area 8: Ma *ENG Area 9: Ma *ENG Area 10: Ma *ENG Area 11: Ma *ENG Area 12: Ma *ENG Area 13: Ma *ENG Area 14: Ma *ENG Area 15: Ma *ENG

066	Area 1: Cy	*ENG	
067	Area 2: Cy	*ENG	
068	Area 3: Cy	*ENG	
069	Area 4: Cy	*ENG	
070	Area 5: Cy	*ENG	
071	Area 6: Cy	*ENG	
072	Area 7: Cy	*ENG	[50 to 150 / 100 / 1 %/step]
073	Area 8: Cy	*ENG	[20 to 130 / 100 / 1 %/ sieb]
074	Area 9: Cy	*ENG	
075	Area 10: Cy	*ENG	
076	Area 11: Cy	*ENG	
077	Area 12: Cy	*ENG	
078	Area 13: Cy	*ENG	
079	Area 14: Cy	*ENG	
080	Area 15: Cy	*ENG	This is out of the image area. [50 to 150 / 100 / 1 %/step]
097	Area 0: Ye	*ENG	This is for the synchronizing detection board. [50 to 150 / 100 / 1 %/step]

098	Area 1: Ye	*ENG	
099	Area 2: Ye	*ENG	
100	Area 3: Ye	*ENG	
101	Area 4: Ye	*ENG	
102	Area 5: Ye	*ENG	
103	Area 6: Ye	*ENG	
104	Area 7: Ye	*ENG	[FO. 150 / 100 / 1 % /]
105	Area 8: Ye	*ENG	[50 to 150 / 100 / 1 %/step]
106	Area 9: Ye	*ENG	
107	Area 10: Ye	*ENG	
108	Area 11: Ye	*ENG	
109	Area 12: Ye	*ENG	
110	Area 13: Ye	*ENG	
111	Area 14: Ye	*ENG	
112	Area 15: Ye	*ENG	This is out of the image area. [50 to 150 / 100 / 1 %/step]

	[Line Position Adj. Result]				
	Displays the values for each correction.				
	"Paper Int. Mag: Subdot" indicates the magnification correction value between two sheets of paper.				
2181	"Mag.Cor. Subdot" indicates the magnification correction value.				
2101	"M. Scan Erro." indicates the shift correction value in the main scan direction.				
	"S. Scan Erro." Indicates the shift correction value in the sub scan direction.				
	"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.				
	Bk: Black, M: Magenta, C: Cyan, Y: Yellow				
001	Paper Int. Mag: Subdot: Bk *ENG [-32768 to 32767 / - / 1 pulse/step]				

002	Mag.Cor. Subdot: Bk	*ENG	[-32768 to 32767 / - / 1 pulse/step]
003	Skew: M	*ENG	[-5000 to 5000 / - / 0.001 um/step]
005	M. Scan Erro.: Left: M	*ENG	
006	M. Scan Erro.: Center: M	*ENG	
007	M. Scan Erro.: Right: M	*ENG	
008	S. Scan Erro.: Left: M	*ENG	[-5000 to 5000 / - / 0.001 um/step]
009	S. Scan Erro.: Center: M	*ENG	
010	S. Scan Erro.: Right: M	*ENG	-
011	M. Cor.: Dot: M	*ENG	[-512 to 511 / - / 1 dot/step]
012	M. Cor.: Subdot: M	*ENG	[-15 to 15 / - / 1 pulse/step]
013	Paper Int. Mag: Subdot: M	*ENG	
014	Mag.Cor. Subdot: M	*ENG	
015	M. Left Mag.: Subdot: M	*ENG	[-32768 to 32767 / - / 1 pulse/step]
016	M. Right Mag.: Subdot: M	*ENG	
017	S. Cor.: 600 Line: M	*ENG	[-16384 to 16383 / - / 1 line/step]
018	S. Cor.: 600 Sub: M	*ENG	[-1 to 1 / - / 0.001 line/step]
019	S. Cor.: 1200 Line: M	*ENG	[-16384 to 16383 / - / 1 line/step]
020	S. Cor.: 1200 Sub: M	*ENG	[-1 to 1 / - / 0.001 line/step]
021	Skew: C	*ENG	[-5000 to 5000 / - / 0.001 um/step]
023	M. Scan Erro.: Left: C	*ENG	
024	M. Scan Erro.: Center: C	*ENG	
025	M. Scan Erro.: Right: C	*ENG	[5000 , 5000 / /0.00] / .]
026	S. Scan Erro.: Left: C	*ENG	[-5000 to 5000 / - / 0.001 um/step]
027	S. Scan Erro.: Center: C	*ENG	
028	S. Scan Erro.: Right: C	*ENG	
029	M. Cor.: Dot: C	*ENG	[-512 to 511 / - / 1 dot/step]

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030	M. Cor.: Subdot: C	*ENG	[-15 to 15 / - / 1 pulse/step]
031	Paper Int. Mag: Subdot: C	*ENG	
032	Mag.Cor. Subdot: C	*ENG	[-32768 to 32767 / - / 1 pulse/step]
033	M. Left Mag.: Subdot: C	*ENG	[-327 00 10 327 07 / -/ 1 poise/ siep]
034	M. Right Mag.: Subdot: C	*ENG	
035	S. Cor.: 600 Line: C	*ENG	[-16384 to 16383 / - / 1 line/step]
036	S. Cor.: 600 Sub: C	*ENG	[-1 to 1 / - / 0.001 line/step]
037	S. Cor.: 1200 Line: C	*ENG	[-16384 to 16383 / - / 1 line/step]
038	S. Cor.: 1200 Sub: C	*ENG	[-1 to 1 / - / 0.001 line/step]
039	Skew: Y	*ENG	
041	M. Scan Erro.: Left: Y	*ENG	
042	M. Scan Erro.: Center: Y	*ENG	
043	M. Scan Erro.: Right: Y	*ENG	[-5000 to 5000 / - / 0.001 um/step]
044	S. Scan Erro.: Left: Y	*ENG	
045	S. Scan Erro.: Center: Y	*ENG	
046	S. Scan Erro.: Right: Y	*ENG	
047	M. Cor.: Dot: Y	*ENG	[-512 to 511 / - / 1 dot/step]
048	M. Cor.: Subdot: Y	*ENG	[-15 to 15 / - / 1 pulse/step]
049	Paper Int. Mag: Subdot: Y	*ENG	
050	Mag.Cor. Subdot: Y	*ENG	[007/0, 007/7 / / 1
051	M. Left Mag.: Subdot: Y	*ENG	[-32768 to 32767 / - / 1 pulse/step]
052	M. Right Mag.: Subdot: Y	*ENG	
053	S. Cor.: 600 Line: Y	*ENG	[-16384 to 16383 / - / 1 line/step]
054	S. Cor.: 600 Sub: Y	*ENG	[-1 to 1 / - / 0.001 line/step]
055	S. Cor.: 1200 Line: Y	*ENG	[-16384 to 16383 / - / 1 line/step]
056	S. Cor.: 1200 Sub: Y	*ENG	[-1 to 1 / - / 0.001 line/step]

2102	[Line Position Adj. Offset]					
2182	(Color) M. Scan: Main scan, S. Scan: Sub-scan					
001	M Magnification	*ENG				
002	C Magnification	*ENG	Adjusts the line position manually. [-1 to 1 / 0 / 0.001%/step]			
003	Y Magnification	*ENG	[/ • / •			
	When line shifts are not corrected by the	ne automat	ric line position adjustment, do this SP.			
	Increasing a value reduces the image i					
	Decreasing a value enlarges the image	e in the ma	in scan direction.			
004	M. Scan: High: Dot: M	*ENG	[-512 to 511 / 0 / 1 dot/step]			
005	M. Scan: High: Subdot: M	*ENG	[-15 to 15 / 0 / 1 pulse/step]			
006	M. Scan: Medium: Dot: M	*ENG	[-512 to 511 / 0 / 1 dot/step]			
007	M. Scan: Medium: Subdot: M	*ENG	[-15 to 15 / 0 / 1 pulse/step]			
008	M. Scan: Low: Dot: M	*ENG	[-512 to 511 / 0 / 1 dot/step]			
009	M. Scan: Low: Subdot: M	*ENG	[-15 to 15 / 0 / 1 pulse/step]			
010	M. Scan: High: Dot: C	*ENG	[-512 to 511 / 0 / 1 dot/step]			
011	M. Scan: High: Subdot: C	*ENG	[-15 to 15 / 0 / 1 pulse/step]			
012	M. Scan: Medium: Dot: C	*ENG	[-512 to 511 / 0 / 1 dot/step]			
013	M. Scan: Medium: Subdot: C	*ENG	[-15 to 15 / 0 / 1 pulse/step]			
014	M. Scan: Low: Dot: C	*ENG	[-512 to 511 / 0 / 1 dot/step]			
015	M. Scan: Low: Subdot: C	*ENG	[-15 to 15 / 0 / 1 pulse/step]			
016	M. Scan: High: Dot: Y	*ENG	[-512 to 511 / 0 / 1 dot/step]			
017	M. Scan: High: Subdot: Y	*ENG	[-15 to 15 / 0 / 1 pulse/step]			
018	M. Scan: Medium: Dot: Y	*ENG	[-512 to 511 / 0 / 1 dot/step]			
019	M. Scan: Medium: Subdot: Y	*ENG	[-15 to 15 / 0 / 1 pulse/step]			
020	M. Scan: Low: Dot: Y	*ENG	[-512 to 511 / 0 / 1 dot/step]			
021	M. Scan: Low: Subdot: Y	*ENG	[-15 to 15 / 0 / 1 pulse/step]			

022	S. Scan: High: Line: M	*ENG	[-16384 to 16383 / 0 / 1 line/step]
023	S. Scan: High: Subline: M	*ENG	[-1 to 1 / 0 / 0.001 /line]
024	S. Scan: Medium: Line: M	*ENG	[-16384 to 16383 / 0 / 1 line/step]
025	S. Scan: Medium: Subline: M	*ENG	[-1 to 1 / 0 / 0.001 /line]
026	S. Scan: Low: Line: M	*ENG	[-16384 to 16383 / 0 / 1 line/step]
027	S. Scan: Low: Subline: M	*ENG	Not used
028	S. Scan: High: Line: C	*ENG	[-16384 to 16383 / 0 / 1 line/step]
029	S. Scan: High: Subline: C	*ENG	[-1 to 1 / 0 / 0.001 /line]
030	S. Scan: Medium: Line: C	*ENG	[-16384 to 16383 / 0 / 1 line/step]
031	S. Scan: Medium: Subline: C	*ENG	[-1 to 1 / 0 / 0.001 /line]
032	S. Scan: Low: Line: C	*ENG	[-16384 to 16383 / 0 / 1 line/step]
033	S. Scan: Low: Subline: C	*ENG	Not used
034	S. Scan: High: Line: Y	*ENG	[-16384 to 16383 / 0 / 1 line/step]
035	S. Scan: High: Subline: Y	*ENG	[-1 to 1 / 0 / 0.001 /line]
036	S. Scan: Medium: Line: Y	*ENG	[-16384 to 16383 / 0 / 1 line/step]
037	S. Scan: Medium: Subline: Y	*ENG	[-1 to 1 / 0 / 0.001 /line]
038	S. Scan: Low: Line: Y	*ENG	[-16384 to 16383 / 0 / 1 line/step]
039	S. Scan: Low: Subline: Y	*ENG	Not used

	[Main Scan Length Target Display]
	Displays/adjusts the target value for the main scan length correction of the line position adjustment.
2185	After replacing the laser optics housing unit, input the standard value for Bk provided with the new unit. For details, see "Laser Optics Housing Unit" in the "Main chapters: 4. Replacement and Adjustment: Laser Optics". It is not necessary to input the values for the other colors; these are automatically adjusted after doing the line position adjustment.

001	Bk	*ENG	
002	М	*ENG	[0.4- 0.44447 / 0.40440 / 1
003	С	*ENG	[0 to 266667 / 249449 / 1 sub-dot/step]
004	Υ	*ENG	

2193	[MUSIC Condition Set] Line Position Adjustment: Condition Setting				
001	Auto Execution	*ENG	[0 or 1 / 1 / 1] 0: OFF, 1: ON		
	Enables/disables the automatic	line positic	on adjustment		
	Page: Job End: BW+FC	*ENG	[0 to 999 / 500 / 1 page/step]		
002	Adjusts the threshold of the line p	position ad	justment for BW and color printing mode after		
003	Page: Job End: FC	*ENG	[0 to 999 / 200 / 1 page/step]		
003	Adjusts the threshold of the line p	position ad	justment for color printing mode after job end.		
	Page: Interrupt: BW+FC	*ENG	[0 to 999 / 200 / 1 page/step]		
004	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 / 1 page/step]		
005	Adjusts the threshold of the line position adjustment for color printing mode during jobs.				
	Page: Stand-By: BW	*ENG	[0 to 999 / 100 / 1 page/step]		
006	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.				
	Page: Stand-By: FC	*ENG	[0 to 999 / 100 / 1 page/step]		
007	Adjusts the threshold of the line position adjustment for FC printing mode in stand-by				

	Temp.		*ENG	[0 to 100 / 5 / 1deg/step]	
008	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.				
	Time		*ENG	[1 to 1440 / 300 / 1 minute/step]	
009	· •			on adjustment (Mode b: adjustment once). The s on the combinations of several conditions.	
	Magnification		*ENG	[0 to 10 / 0.1 / 0.01%/step]	
010	Adjusts the magnification threshold for line position adjustment. If the length of scan is changed by this amount since the previous MUSIC, then MSUIC is don				
	Temp. 2		*ENG	[0 to 100 / 10 / 1deg/step]	
011	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.				
	Time 2	*EN	VG	[1 to 9999 / 600 / 1 minute/step]	
012	Adjust the time threshold for the line position adjustment (Mode a: adjustment timing for line position adjustment depends on the combinations of several co				
	Page: Power ON:BW+FC	*EN	١G	[0 to 999 / 200 / 1 page/step]	
013	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]		
001	Displays the year of the last MUSIC execution.				
002	Month	*ENG	[1 to 12 / - / 1 month/step]		
002	Displays the month of the last MUSIC execution.				
003	Day	*ENG	[1 to 31 / - / 1 day/step]		
003	Displays the date of the last MUSIC execution.				

004	Hour	*ENG	[0 to 23 / - / 1 hour/step]		
004	Displays the time (hour) of the last MUSIC execution.				
005	Minute	*ENG	[0 to 59 / - / 1 minute/step]		
005	Displays the time (minute) of	the last MI	JSIC execution.		
007	Temperature	*ENG	[0 to 100 / - / 1 deg/step]		
006	Displays the temperature of t	he last MU	ISIC execution.		
007	Execution Result	*ENG	[0 or 1 / - / 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: M	*ENG	[0 to 9 / - / 1 /step]		
011	Error Result: C	*ENG	0: Not done		
012	Error Result: Y	*ENG	1: Completed successfully 2: Cannot detect patterns 3: Fewer lines on the pattern than the target 4: Not used 5: Out of the adjustment range 6 to 9: Not used		

2198		[Music A/D Interval]		
ADC Trigger Counter				
	001	ADC Trigger Counter	*ENG	[7.5 to 20 / 10 / 0.1 µs/step]

2220	[Skew Origin Set]				
2220	Executes the skew motor initialization in the laser optics unit.				
001	M: Skew Motor	*ENG	-		
002	C: Skew Motor	*ENG	-		
003	Y: Skew Motor	*ENG	-		

	[LD Power] LD Power Control				
2221	Adjusts the fixed LD power for each line speed and color.				
	These SPs are activated only when SP3-041-002 is set to "0".				
	Plain: High speed, Thick 1: Middle speed, Thick 2&Fine: Low speed				
001	Plain: Bk *ENG				
002	Plain: M	*ENG			
003	Plain: C	*ENG			
004	Plain: Y	*ENG			
005	Thick 1: Bk	*ENG			
006	Thick 1: M	*ENG	[0 to 200 / 100 / 1%/step]		
007	Thick 1: C	*ENG	Increasing this value makes the image density darker.		
008	Thick 1: Y	*ENG			
009	Thick 2&FINE: Bk	*ENG			
010	Thick 2&FINE: M	*ENG			
011	Thick 2&FINE: C	*ENG			
012	Thick 2&FINE: Y	*ENG			

	[Development DC Vias] Development DC Bias Adjustment
	Adjusts the development bias.
2229	Development bias is automatically adjusted during process control; therefore, adjusting these settings has no effect while Process Control (SP3-041-001 Default: ON) is activated.
	After deactivating Process Control with SP3-041-001, the values in these SP modes are used for printing.
	Plain: High speed, Thick 1: Middle speed, Thick 2&Fine: Low speed

001	Plain: Bk	*ENG
002	Plain: M	*ENG
003	Plain: C	*ENG
004	Plain: Y	*ENG
005	Thick 1: Bk	*ENG
006	Thick 1: M	*ENG
007	Thick 1: C	*ENG
008	Thick 1: Y	*ENG
009	Thick 2&FINE:Bk	*ENG
010	Thick 2&FINE:M	*ENG
011	Thick 2&FINE:C	*ENG
012	Thick 2&FINE:Y	*ENG

[0 to 800 / **550** / 10 -V/step]

2241	[Temperature/Humidity: Display]		
Displays the environment temperature and humidit			and humidity.
001	Temperature	-	[-50 to 450 / - / 0.1 deg/step]
002	Relative Humidity	-	[0 to 1000 / - / 0.1 %RH/step]
003	Absolute Humidity	-	[0 to 100 / - / 0.01 g/m ³ /step]
004	AIT Temperature	-	[0 to 70 / - / 0.1 deg/step]
005	Correction Coefficient A	-	[0 to 70 / 1 / 0.1/step]
006	Correction Coefficient B	-	[-70 to 70 / 0 /0.1/step]

2242	[TS Operation Env. Log]		
Displays TS Operation Env. logs.			
001	TS <= 40	-	[0 to 99999999 / - / 1/mm]
002	40 < TS <= 45	-	[0 to 99999999 / - / 1/mm]
003	45 < TS	-	[0 to 99999999 / - / 1/mm]

004 Log Clear	[0 to 1 / 0 / 1/step] - 1: Clear
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2302	[Environmental Correction: Transfer]		
2302	Environmental Correction: Image Transfer Belt Unit		fer Belt Unit
001	Current Environmental Display	-	Displays the current environment condition.
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 to 100 / 4 / 0.01 g/m ³ /step]
004	Absolute Humidity: Threshold 2	*ENG	Adjusts the threshold value between ML and MM. [0 to 100 / 8 / 0.01 g/m ³ /step]
005	Absolute Humidity: Threshold 3	*ENG	Adjusts the threshold value between MM and MH. [0 to 100 / 16 / 0.01 g/m³/step]
006	Absolute Humidity: Threshold 4	*ENG	Adjusts the threshold value between MH and HH. [0 to 100 / 24 / 0.01 g/m ³ /step]
007	Temp Threshold	*ENG	[-5 to 30 / 5 / 1 deg/step]

2308	[Paper Size Correction]			
	Adjusts the threshold value for the paper size correction.			
001	Threshold 1	*ENG	[0 to 350 / 297 / 1 mm/step] Threshold 1 ≤ paper: Paper is detected as "S1" size.	

002	Threshold 2	*ENG	[0 to 350 / 257 / 1 mm/step] Threshold 2 ≤ paper ≤ Threshold 1: Paper is detected as "S2" size.
003	Threshold 3	*ENG	[0 to 350 / 210 / 1 mm/step] Threshold 3 ≤ paper ≤ Threshold 2: Paper is detected as "S3" size.
004	Threshold 4	*ENG	[0 to 350 / 148 / 1 mm/step] Threshold 4 ≤ paper ≤ Threshold 3: Paper is detected as "S4" size. Paper ≤ Threshold 4: Paper is detected as "S5" size.

2311	[Non Image Area: Bias]		
001	Image Transfer	*ENG	Adjusts the bias of the image transfer belt between images. This value is added to the value of the image transfer belt bias. [10 to 250 / 100 / 5 %/step]
002	Paper Transfer	*ENG	Adjusts the bias of the paper transfer roller between images. [0 to 2100 / 500 / 100 V/step]

2326	[Transfer Roller CL: Bias] Transfer Roller Cleaning: Bias Adjustment				
	Positive	*ENG	[0 to 2100 / 500 / 100 V /step]		
001	Adjusts the positive voltage of the paper transfer roller for cleaning the paper transfer roller.				
	Negative	*ENG	[10 to 400 / 100 / 10 %/step]		
002	Adjusts the negative current of the paper transfer roller for cleaning the paper transfer roller.				
	Positive	*ENG	[0 to 2100 / 2000 / 100 V/step]		
003	Adjusts the negative current limit of the paper transfer roller for cleaning the paper transfer roller.				

004 Negative	*ENG	[10 to 400 / 100 / 10 %/step]	
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2351	[Common: BW: Bias] Plain: High speed, Thick 1: Middle speed, Thick 2&Fine: Low speed			
001	ITB unit: Plain	*ENG	[0 to 80 / 25 / 1 µA]	
001	Adjusts the current for the image transfer belt in B/W mode for plain paper.			
002	ITB unit: Thick 1	*ENG	[0 to 80 / 12 / 1 µA]	
002	Adjusts the current for the image transfer belt in B/W mode for thick 1 paper.			
	ITB unit: Thick 2 & FINE	*ENG	[0 to 80 / 12 / 1 µA]	
003	Adjusts the current for the image transfer belt in B/W mode for thick 2 paper or FINE mode.			

2357	[Common: FC: Bias] Image Transfer Belt: Full Color: Bias Adjustment Plain: High speed, Thick 1: Middle speed, Thick 2&Fine: Low speed		
001	ITB unit: Plain: Bk	*ENG	[0 to 80 / 22 / 1 µA]
	Adjusts the current for the image transfer belt for Black in full color mode for plain paper.		
002	ITB unit: Plain: M	*ENG	[0 to 80 / 25 / 1 µA]
	Adjusts the current for the image transfer belt for Magenta in full color mode for plain paper.		
003	ITB unit: Plain: C	*ENG	[0 to 80 / 22 / 1 µA]
	Adjusts the current for the image transfer belt for Cyan in full color mode for plain paper.		
004	ITB unit: Plain: Y	*ENG	[0 to 80 / 28 / 1 µA]
	Adjusts the current for the image transfer belt for Yellow in full color mode for plain paper.		
005	ITB unit: Thick 1: Bk	*ENG	[0 to 80 / 11 / 1 µA]
	Adjusts the current for the image transfer belt for Black in full color mode for thick 1 paper.		
006	ITB unit: Thick 1: M	*ENG	[0 to 80 / 12 / 1 µA]
	Adjusts the current for the image transfer belt for Magenta in full color mode for thick 1 paper.		

007	ITB unit: Thick 1: C	*ENG	[0 to 80 / 11 / 1 µA]			
007	Adjusts the current for the image transfer belt for Cyan in full color mode for thick 1 paper.					
	ITB unit: Thick 1: Y	*ENG	[0 to 80 / 14 / 1 µA]			
008	Adjusts the current for the image transfer belt for Yellow in full color mode for thick 1 paper.					
	ITB unit: Thick 2 & FINE: Bk	*ENG	[0 to 80 / 11 / 1 µA]			
009	Adjusts the current for the image transfer belt for Black in full color mode for Thick 2 and fine.					
	ITB unit: Thick 2 & FINE: M	*ENG	[0 to 80 / 12 / 1 µA]			
010	Adjusts the current for the image transfer belt for Magenta in full color mode for Thick 2 and fine.					
	ITB unit: Thick 2 & FINE: C	*ENG	[0 to 80 / 11 / 1 µA]			
011	Adjusts the current for the image transfer belt for Cyan in full color mode for Thick 2 and fine.					
	ITB unit: Thick 2 & FINE: Y	*ENG	[0 to 80 / 14 / 1 µA]			
012	Adjusts the current for the image transfer fine.	belt for Yello	w in full color mode for Thick 2 and			

2360	[Common: BW Env. Correction]		
001	ITB unit: Plain	*ENG	
002	ITB unit: Thick 1	*ENG	[1 to 60 / 1 / 1 /step]
003	ITB unit: Thick 2	*ENG	
004	ITB unit: Plain: Bk	*ENG	[1 to 60 / 13 / 1 /step]
005	ITB unit: Plain: M	*ENG	
006	ITB unit: Plain: C	*ENG	[1 to 60 / 2 / 1 /step]
007	ITB unit: Plain: Y	*ENG	
008	ITB unit: Thick 1: Bk	*ENG	[1 to 60 / 31 / 1 /step]
009	ITB unit: Thick 1: M	*ENG	[1 to 60 / 1 / 1 /step]

010	ITB unit: Thick 1: C	*ENG	[1 to 60 / 2 / 1 /step]
011	ITB unit: Thick 1: Y	*ENG	[1 10 00 / 2 / 1 / siep]
012	ITB unit: Thick 2: Bk	*ENG	[1 to 60 / 31 / 1 /step]
013	ITB unit: Thick 2: M	*ENG	[1 to 60 / 1 / 1 /step]
014	ITB unit: Thick 2: C	*ENG	[1 to 60 / 2 / 1 /step]
015	ITB unit: Thick 2: Y	*ENG	[1 to 60 / 2 / 1 /step]

	[Plain: Bias]			
2401	Adjusts the DC voltage of the discharge plate for plain paper. Plain: High speed, Thick 1: Middle speed, Thick 2&Fine: Low speed			
001	Separation DC: Plain: 1st Side	*ENG	[0 to 4000 / 3500 / 10 –V/step]	
002	Separation DC: Plain: 2nd Side	*ENG	[0 to 4000 / 3500 / 10 –V/step]	
003	Separation DC: 1200: 1st Side	*ENG	[0 to 4000 / 3500 / 10 –V/step]	
004	Separation DC: 1200: 2nd Side	*ENG	[0 to 4000 / 3500 / 10 –V/step]	

	[Plain: Bias: BW]			
2403	Adjusts the current for the paper transfer roller for plain paper in black-and-white mode. Plain: High speed, Thick 1: Middle speed, Thick 2&Fine: Low speed			
001	Paper Transfer: Plain: 1st Side	*ENG	[0 to 250 / 22 / 1 - µA / step]	
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 10 230 / 22 / 1 -*A / siep]	
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 250 / 7 / 1 - µA /step]	
004	Paper Transfer: 1200: 2nd Side	*ENG	[0 to 250 / 12 / 1 - µA / step]	

	[Plain: Bias: FC]		
2407	Adjusts the current for the paper transfer roller for plain paper in full color mode. Plain: High speed, Thick 1: Middle speed, Thick 2&Fine: Low speed		
001	Paper Transfer: Plain: 1st Side	*ENG	[0 to 250 / 27 / 1 - µA / step]
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 250 / 33 / 1 - µA / step]
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 250 / 10 / 1 – µA /step]
004	Paper Transfer: 1200: 2nd Side	*ENG	[0 to 250 / 12 / 1 - µA /step]

	[Plain: Paper Size Correction]			
2411	Adjusts the size correction coefficient for the paper transfer roller current for each paper size. SP2403 and SP2407 are multiplied by these SP values.			
Plain: High speed, Thick 1: Middle speed, Thick 2&Fine: Low speed			hick 2&Fine: Low speed	
001	Paper Transfer: Plain : 1st Side: S1	*ENG		
002	Paper Transfer: Plain: 2nd Side: S1	*ENG	[100 to 600 / 100 / 5%/step]	
003	Paper Transfer: 1200: 1st Side: S1	*ENG	S1 size > 297 mm (Paper width)	
004	Paper Transfer: 1200: 2nd Side: S1	*ENG		
005	Paper Transfer: Plain: 1st Side: S2	*ENG	[100 to 600 / 105 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)	
006	Paper Transfer: Plain: 2nd Side: S2	*ENG	[100 to 600 / 120 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)	
007	Paper Transfer: 1200: 1st Side: S2	*ENG	[100 to 600 / 120 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)	

008	Paper Transfer: 1200: 2nd Side: S2	*ENG	[100 to 600 / 150 / 5%/step]
009	Paper Transfer: Plain: 1st Side: S3	*ENG	[100 to 600 / 110 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)
010	Paper Transfer: Plain: 2nd Side: S3	*ENG	[100 to 600 / 140 / 5%/step]
011	Paper Transfer: 1200: 1st Side: S3	*ENG	275 mm > S3 size > 210 mm (Paper width)
012	Paper Transfer: 1200: 2nd Side: S3	*ENG	[100 to 600 / 300 / 5%/step]
013	Paper Transfer: Plain: 1st Side: S4	*ENG	[100 to 600 / 115 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
014	Paper Transfer: Plain: 2nd Side: S4	*ENG	[100 to 600 / 160 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
015	Paper Transfer: 1200: 1st Side: S4	*ENG	[100 to 600 / 240 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
016	Paper Transfer: 1200: 2nd Side: S4	*ENG	[100 to 600 / 340 / 5%/step]
017	Paper Transfer: Plain: 1st Side: S5	*ENG	[100 to 600 / 120 / 5%/step] 148 mm > S5 size (Paper width)
018	Paper Transfer: Plain: 2nd Side: S5	*ENG	[100 to 600 / 180 / 5%/step] 148 mm > S5 size (Paper width)
019	Paper Transfer: 1200: 1st Side: S5	*ENG	[100 to 600 / 300 / 5%/step] 148 mm > S5 size (Paper width)
020	Paper Transfer: 1200: 2nd Side: S5	*ENG	[100 to 600 / 400 / 5%/step]

	[Plain: Leading Edge Correction] Plain Paper: Leading Edge Correction			
2421	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode. SP2403 and SP2407 are multiplied by these SP values.			
	♥ Note			
	The paper leading edge	e area can b	e adjusted with SP2422.	
001	Paper Transfer: Plain: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]	
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]	
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 400 / 100 / 5% /stan]	
004	Paper Transfer: 1200: 2nd side	*ENG	[0 to 400 / 100 / 5%/step]	
	Adjusts the correction to the mode. SP2401 is multiplied		ate current at the paper leading edge in each values.	
2421	₩Note			
	The paper leading edge area can be adjusted with SP2422.			
005	Separation DC: Plain: 1st Side	*ENG		
006	Separation DC: Plain: 2nd Side	*ENG	[0 to 400 / 100 / 5% /stan]	
007	Separation DC: 1200: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]	
008	Separation DC: 1200: 2nd Side	*ENG		

		[Plain: Switch Timing: Lead. Edge]	
	2422	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.	
		Plain: High speed, Thick 1: Middle speed, Thick 2&Fine: Low speed	

001	Paper Transfer: Plain: 1st Side	*ENG	
002	Paper Transfer: Plain: 2nd Side	*ENG	
003	Paper Transfer: 1200: 1st Side	*ENG	
004	Paper Transfer: 1200: 2nd side	*ENG	[0 to 50 / 0 / 2 mm /stan]
005	Separation DC: Plain: 1st Side	*ENG	[0 to 50 / 0 / 2 mm/step]
006	Separation DC: Plain: 2nd Side	*ENG	
007	Separation DC: 1200: 1st Side	*ENG	
008	Separation DC: 1200: 2nd Side	*ENG	

[Plain: Trailing Edge Correction] Plain Paper: Trailing Edge Correction

Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode. SP2403 and SP2407 are multiplied by these SP values.

Note

The paper trailing edge area can be adjusted with SP2424.

001	Paper Transfer: Plain: 1st Side	*ENG	
002	Paper Transfer: Plain: 2nd Side	*ENG	
003	Paper Transfer: 1200: 1st Side	*ENG	
004	Paper Transfer: 1200: 2nd side	*ENG	[0 to 400 / 100 / 5% /stan]
005	Separation DC: Plain: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]
006	Separation DC: Plain: 2nd Side	*ENG	
007	Separation DC: 1200: 1st Side	*ENG	
008	Separation DC: 1200: 2nd Side	*ENG	

	[Plain: Switch Timing: Trail. Edge]			
2424	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. Plain: High speed, Thick 1: Middle speed, Thick 2&Fine: Low speed			
001	Paper Transfer: Plain: 1st Side *ENG			
002	Paper Transfer: Plain: 2nd Side	*ENG		
003	Paper Transfer: 1200: 1st Side	*ENG		
004	Paper Transfer: 1200: 2nd side	*ENG	[04-50/0/2/]	
005	Separation DC: Plain: 1st Side	*ENG	[0 to 50 / 0 / 2 mm/step]	
006	Separation DC: Plain: 2nd Side	*ENG		
007	Separation DC: 1200: 1st Side	*ENG		
008	Separation DC: 1200: 2nd Side	*ENG		

	[Thin: Bias]			
2451	per. : Low speed			
001	Separation DC: Plain: 1st Side	*ENG		
002	Separation DC: Plain: 2nd Side	ENG	[0 to 4000 / 3500 / 10 -V/	
003	Separation DC: 1200: 1st Side	*FNG	step]	
004	Separation DC: 1200: 2nd Side	ENG		

	[Thin: Bias: BW]		
Adjusts the current for the paper transfer roller for thin paper in black-and-white Plain: High speed, Thick 1: Middle speed, Thick 2&Fine: Low speed			
001	Paper Transfer: Plain: 1st Side	*ENG	[0.4- 0.50 / 22 / 1 4 /-41
002	Paper Transfer: Plain: 2nd Side		[0 to 250 / 22 / 1 - µA /step]
003	Paper Transfer: 1200: 1st Side	*ENG	[0.4- 0.50 / 11 / 1 4 / 41
004	Paper Transfer: 1200: 2nd Side		[0 to 250 / 11 / 1 - µA /step]

	[Thin: Bias: FC]		
2457	Adjusts the current for the paper transfer roller for thin paper in full color mode. Plain: High speed, Thick 1: Middle speed, Thick 2&Fine: Low speed		
001	Paper Transfer: Plain: 1st Side	*5.10	[0 250 / 20 / 1 4 /1
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 250 / 30 / 1 - µA / step]
003	Paper Transfer: 1200: 1st Side	*ENG	[0 250 / 15 / 1 /]
004	Paper Transfer: 1200: 2nd Side		[0 to 250 / 15 / 1 - µA /step]

	[Thin: Paper Size Correction]
2461	Adjusts the size correction coefficient for the paper transfer roller current for each paper size. SP2453 and SP2457 are multiplied by these SP values. Plain: High speed

001	Paper Transfer: Plain: 1st Side: S1	*ENG	[100 to 600 / 100 / 5%/step]
002	Paper Transfer: Plain: 2nd Side: S1	LING	S1 size > 297 mm (Paper width)
005	Paper Transfer: Plain: 1st Side: S2		[100 to 600 / 120 / 5%/step]
006	Paper Transfer: Plain: 2nd Side: S2	*ENG	297 mm > S2 size > 275 mm (Paper width)
009	Paper Transfer: Plain: 1st Side: S3		[100 to 600 / 140 / 5%/step]
010	Paper Transfer: Plain: 2nd Side: S3	*ENG	297 mm > S2 size > 275 mm (Paper width)
013	Paper Transfer: Plain: 1st Side: S4		[100 to 600 / 160 / 5%/step]
014	Paper Transfer: Plain: 2nd Side: S4	*ENG	297 mm > S2 size > 275 mm (Paper width)
017	Paper Transfer: 1st Side: S5	*ENG	[100 to 600 / 100 / 5% /ston]
018	Paper Transfer: 2nd Side: S5	EING	[100 to 600 / 180 / 5%/step]

	[Thin: Leading Edge Correction] Thin Paper: Leading Edge Correction		
	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode. SP2453 and SP2457 are multiplied by these SP values.		
2471	Plain: High speed, 1200: Low speed		
	●Note		
	 The paper leading edge area can be adjusted with SP2472. 		
001	Paper Transfer: Plain: 1st Side	*ENG	
002	Paper Transfer: Plain: 2nd Side		[0.4-400/100/59//44]
003	Paper Transfer: 1200: 1st Side	*FNG	[0 to 400 / 100 / 5%/step]
004	Paper Transfer: 1200: 2nd Side	EING	
2471	Adjusts the correction to the discharge plate current at the paper leading edge in each mode. SP2451 is multiplied by these SP values.		
24/	Note		
	The paper leading edge area can be adjusted with SP2472.		

005	Separation DC: Plain: 1st Side	*ENG	
006	Separation DC: Plain: 2nd Side		[0. 400 / 100 / 50/ / .]
007	Separation DC: 1200: 1st Side	*FNIC	[0 to 400 / 100 / 5%/step]
800	Separation DC: 1200: 2nd Side	*ENG	

	[Thin: Switch Timing: Lead. Edge]		
2472	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. Plain: High speed, 1200: Low speed,		
001	Paper Transfer: Plain: 1st Side	*ENG	
002	Paper Transfer: Plain: 2nd Side	ENG	
003	Paper Transfer: 1200: 1st Side	*ENG	
004	Paper Transfer: 1200: 2nd Side	ENG	[0.1. 50 / 0./2 / 1]
005	Separation DC: Plain: 1st Side	*[NC	[0 to 50 / 0 / 2 mm/step]
006	Separation DC: Plain: 2nd Side	*ENG	
007	Separation DC: 1200: 1st Side	*ENC	
800	Separation DC: 1200: 2nd Side	*ENG	

	[Thin: Trailing Edge Correction] Thin Paper: Trailing Edge Correction			
2.472	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode. SP2453 and SP2457 are multiplied by these SP values.			
2473	Plain: High speed, 1200: Low speed			
	♥ Note			
The paper trailing edge area can be adjusted with SP2474.			l with SP2474.	
001	Paper Transfer: Plain: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]	
002	Paper Transfer: Plain: 2nd Side			
003	Paper Transfer: 1200: 1st Side	*ENG	[0.4-400 / 100 / 5% / 4]	
004	Paper Transfer: 1200: 2nd Side		[0 to 400 / 100 / 5%/step]	

005	Separation DC: Plain: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]
006	Separation DC: Plain: 2nd Side		
007	Separation DC: 1200: 1st Side	*ENG	[0.4.400 / 100 / 59/ / 4]
008	Separation DC: 1200: 2nd Side		[0 to 400 / 100 / 5%/step]

	[Thin: Switch Timing: Trail. Edge]		
Adjusts the bias/voltage switch timing of the paper transfer roller/discharge pl paper trailing edge between the erase margin area and the image area. Plain: High speed, 1200: Low speed			
001	Paper Transfer: Plain: 1st Side		
002		*ENG	
002	Paper Transfer: Plain: 2nd Side		[0 to 50 / 0 / 2 mm/step]
003	Paper Transfer: 1200: 1st Side	*ENG	
004	Paper Transfer: 1200: 2nd Side	LINO	
005	Separation DC: Plain: 1st Side	*5510	
006	Separation DC: Plain: 2nd Side	*ENG	[0.50 / 0 / 1 /]
007	Separation DC: 1200: 1st Side	*5510	[0 to 50 / 0 / 1 mm/step]
008	Separation DC: 1200: 2nd Side	*ENG	

2480	[Thin: Environment Correction] Plain: High speed, 1200: Low speed		
001	Separation DC: Plain: 1st Side	*ENG	[1 to 60 / 26 / 1 /step]
002	Separation DC: Plain: 2nd Side	EING	
003	Paper Transfer: Plain: BW: 1st Side	*ENG	[1 to 60 / 11 / 1 /step]
004	Paper Transfer: Plain: BW: 2nd Side	EING	
005	Paper Transfer: Plain: FC: 1st Side	*ENG	[] + +0 /1 /1 /+]
006	Paper Transfer: Plain: FC: 2nd Side	"ENG	[1 to 60 / 1 / 1 /step]

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007	Separation DC: 1200: 1st Side	*ENG	[1 to 60 / 26 / 1 /step]
008	Separation DC: 1200: 2nd Side		
009	Paper Transfer: 1200: BW: 1st Side		
010	Paper Transfer: 1200: BW: 2nd Side	*ENG	[1 to 60 / 11 / 1 /step]
011	Paper Transfer: 1200: FC: 1st Side	*ENG	[14, 40 / 1 / 1 / 44, 1]
012	Paper Transfer: 1200: FC: 2nd Side		[1 to 60 / 1 / 1 /step]

2481	[Glossy: Bias]		
001	Separation DC: 1st Side	*ENG	[0 to 4000 / 3500 / 10 -V/step]
001	Adjusts the DC voltage of the discharge plate for glossy paper.		

2482	[Glossy: Bias: BW]		
001	Paper Transfer: 1st Side	*ENG	[0 to 250 / 12 / 1 - µA / step]
	Adjusts the current for the paper trans	current for the paper transfer roller for glossy paper in black-and-white mode.	

2483	[Glossy: Bias: FC]		
001	Paper Transfer: 1st Side	*ENG	[0 to 250 / 15 / 1 - #A / step]
001	Adjusts the current for the paper transfer roller for glossy paper in full color mode.		

2484	[Glossy: Paper Size Correction]		
001	Paper Transfer: 1st Side: S1	*ENG	[100 to 600 / 100 / 5%/step]
005	Paper Transfer: 1st Side: S2	*ENG	[100 to 600 / 120 / 5%/step]
009	Paper Transfer: 1st Side: S3	*ENG	[100 to 600 / 140 / 5%/step]
013	Paper Transfer: 1st Side: S4	*ENG	[100 to 600 / 160 / 5%/step]
017	Paper Transfer: 1st Side: S5	*ENG	[100 to 600 / 180 / 5%/step]

2485	[Plain: Leading Edge Correction]
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001	Paper Transfer: 1st Side	*ENG	[10 to 400 / 100 / 5%/step]
005	Separation DC: 1st Side	*ENG	[10 to 400 / 100 / 5%/step]]

2486	[Plain: Switch Timing: Lead. Edge]		
001	Paper Transfer: 1st Side	*ENG	[0 to 50 / 0 / 2 mm/step]
005	Separation DC: 1st Side	*ENG	[O to 30 / O / 2 mm/ step]

2487	[Plain: Trailing Edge Correction]		
001	Paper Transfer: 1st Side	*ENG	[0 to 400 / 100 / 5 %/step]
005	Separation DC: 1st Side	*ENG	[0 to 400 / 100 / 3 %/ step]

2	2488	[Plain:SwitchTiming:Trail. Edge]		
	001	Paper Transfer: 1st Side	*ENG	[0 + 50 / 0 / 2 / +]
	005	Separation DC: 1st Side	*ENG	[0 to 50 / 0 / 2 mm/step]

2489	[Glossy: Environment Correction]		
001	Separation DC: 1st Side	*ENG	[1 to 60 / 26 / 1 /step]
003	Paper Transfer: BW: 1st Side	*ENG	[1 to 60 / 11 / 1 /step]
005	Paper Transfer: FC: 1st Side	*ENG	[1 to 60 / 1 / 1 /step]

	[Thick 1: Bias]			
2501	Adjusts the DC voltage of the discharge plate for thick 1 paper. Plain: High speed, 1200: Low speed			
001	Separation DC: Plain: 1st Side	*ENG		
002	Separation DC: Plain: 2nd Side	*ENG	[0 to 4000 / 3500 / 10 –V/step]	
003	Separation DC: 1200: 1st Side	*ENG		

	[Thick 1: Bias: BW]				
Adjusts the current for the paper transfer roller for thick 1 paper in black-and-when Plain: High speed, 1200: Low speed					
001	Paper Transfer: Plain: 1st Side	*ENG	[0+, 250 / 10 / 1 14 / 4 1		
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 250 / 12 / 1 - µA /step]		
003	Separation DC: 1200: 1st Side	*ENG	[0 to 250 / 12 / 1 - µA / step]		

	[Thick 1: Bias: FC]				
2507	Adjusts the current for the paper trans Plain: High speed, 1200: Low speed	ansfer roller for thick 1 paper in full color mode. ed			
001	Paper Transfer: Plain: 1st Side	*ENG	[0., 0.50 / 1.5 / 1. 4. / 1. 1		
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 250 / 15 / 1 - µA /step]		
003	Separation DC: 1200: 1st Side	*ENG	[0 to 250 / 15 / 1 - µA / step]		

	[Thick 1: Paper Size Correction]			
2511	transfer roller current for each paper SP values.			
001	Paper Transfer: Plain: 1st Side: S1	*ENG	[100 to 600 / 100 / 5%/step]	
002	Paper Transfer: Plain: 2nd Side: S1	*ENG	S1 size > 297 mm (Paper width)	
003	Paper Transfer: 1200: 1st Side: S1	*ENG	[100 to 600 / 100 / 5%/step] S1 size > 297 mm (Paper width)	
005	Paper Transfer: Plain: 1st Side: S2	*ENG	[100 to 600 / 105 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)	
006	Paper Transfer: Plain: 2nd Side: S2	*ENG	[100 to 600 / 130 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)	

007	Paper Transfer: 1200: 1st Side: S2	*ENG	[100 to 600 / 120 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)
009	Paper Transfer: Plain: 1st Side: S3	*ENG	[100 to 600 / 110 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)
010	Paper Transfer: Plain: 2nd Side: S3	*ENG	[100 to 600 / 160 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)
011	Paper Transfer: 1200: 1st Side: S3	*ENG	[100 to 600 / 140 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)
013	Paper Transfer: Plain 1: 1st Side: S4	*ENG	[100 to 600 / 115 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
014	Paper Transfer: Plain: 2nd Side: S4	*ENG	[100 to 600 / 190 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
015	Paper Transfer: 1200: 1st Side: S4	*ENG	[100 to 600 / 160 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
017	Paper Transfer: Plain 1: 1st Side: S5	*ENG	[100 to 600 / 120 / 5%/step] 148 mm > S5 size (Paper width)
018	Paper Transfer: Plain: 2nd Side: S5	*ENG	[100 to 600 / 220 / 5%/step] 148 mm > S5 size (Paper width)
019	Paper Transfer: 1200: 1st Side: S5	*ENG	[100 to 600 / 180 / 5%/step] 148 mm > S5 size (Paper width)

	[Thick 1: Leading Edge Correction] Thick 1 Paper: Leading Edge Correction				
	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode. SP2502 and SP2507 are multiplied by these SP values.				
2521	Plain: High speed, 1200: Low speed				
	Note				
	The paper leading edge area can be adjusted with SP2522.				
001	Paper Transfer: Plain: 1st Side	*ENG	[0.1., 400, / 100, / 59/ / 1]		
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]		
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]		
005	Separation DC: Plain: 1st Side	*ENG	[0. 400 / 100 / 50/ / .]		
006	Separation DC: Plain: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]		
007	Separation DC: 1200: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]		

	[Thick 1: Switch Timing: Lead. Edge]					
2522	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.					
	Plain: High speed, 1200: Low speed					
001	Paper Transfer: Plain 1: 1st Side	*ENG				
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 50 / 0 / 2 mm/step]			
003	Paper Transfer: 1200: 1st Side	*ENG				
005	Separation DC: Plain 1: 1st Side	*ENG				
006	Separation DC: Plain 1: 2nd Side	*ENG	[0 to 50 / 0 / 2 mm/step]			
007	Separation DC: 1200: 1st Side	*ENG				

	[Thick 1: Trail. Edge Correction] Thick 1 Paper: Trailing Edge Correction				
	Adjusts the correction coefficient to the paper transfer roller current for the paper trailing edge in each mode. SP2502 and SP2507 are multiplied by these SP values.				
2523	Plain: High speed, 1200: Low speed				
	₩Note				
	 The paper trailing edge area can be adjusted with SP2524. 				
001	Paper Transfer: Plain: 1st Side	*ENG			
002	Paper Transfer: Plain: 2nd Side	*ENG	[0+, 400 / 100 / 59/ / +]		
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]		
005	Separation DC: Plain: 1st Side	*ENG			
006	Separation DC: Plain: 2nd Side	*ENG	[0400 / 100 / 59/ /]		
007	Separation DC: 1200: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]		

	[Thick 1: Sw Timing: Trail. Edge]					
Adjusts the bias/voltage switch timing of the paper transfer roller/discharge plate paper trailing edge between the erase margin area and the image area.						
	Plain: High speed, 1200: Low speed					
001	Paper Transfer: Plain: 1 st Side	*ENG				
002	Paper Transfer: Plain: 2nd Side	*ENG				
003	Paper Transfer: 1200: 1st Side	*ENG	[0.4. 50 / 0 / 1 / 4]			
005	Separation DC: Plain: 1st Side	*ENG	[0 to 50 / 0 / 1 mm/step]			
006	Separation DC: Plain: 2nd Side	*ENG				
007	Separation DC: 1200: 1st Side	*ENG				

2530	[Thick 1: Environment Correction] Plain: High speed, 1200: Low speed			
001	Separation DC: Plain: 1st Side	*ENG	[] to 40 / 22 / 1 /ston]	
002	Separation DC: Plain: 2nd Side	*ENG	[1 to 60 / 22 / 1 /step]	

003	Paper Transfer: Plain: BW: 1st Side	*ENG	[1 to 60 / 11 / 1 /step]
004	Paper Transfer: Plain: BW:2nd Side	*ENG	[1 to 00 / 11 / 1 / step]
005	Paper Transfer: Plain: FC: 1st Side	*ENG	[1 to 60 / 1 / 1 /step]
006	Paper Transfer: Plain: FC:2nd Side	*ENG	[1 to 60 / 11 / 1 /step]
007	Separation DC: 1200: 1st Side	*ENG	[1 to 60 / 22 / 1 /step]
009	Paper Transfer: 1200: BW: 1st Side	*ENG	[1 to 60 / 11 / 1 /step]
011	Paper Transfer: 1200: FC: 1st Side	*ENG	[1 to 60 / 1 / 1 /step]

2551	[Thick 2: Bias]		
2551	Adjusts the DC voltage of the discharge plate for thick 2 paper.		
001	Separation DC: 1st Side	*ENG	[0.1.4000 / 2500 / 10.1//]
002	Separation DC: 2nd Side	*ENG	[0 to 4000 / 3500 / 10 -V/step]

2553	[Thick 2: Bias: BW]			
2555	Adjusts the current for the paper transfer roller for		for thick 2 paper in black-and-white mode.	
001	Paper Transfer: 1st Side *EN		[0 to 250 / 7 / 1 – µA / step]	
002	Paper Transfer: 2nd Side	*ENG	[0 to 250 / 12 / 1 – µA /step]	

2558	[Thick 2: Bias: FC]			
2336	Adjusts the current for the paper transfer roller for thick 2 paper in full color mode.		for thick 2 paper in full color mode.	
001	Paper Transfer: 1st Side	*ENG	[0 to 250 / 16 / 1 – µA /step]	
002	Paper Transfer: 2nd Side	*ENG	[0 to 250 / 15 / 1 – µA /step]	

	[Thick 2: Paper Size Correction]		
Adjusts the size correction coefficient t size. SP2553 and SP2558 are multip		or the paper transfer roller current for each paper ied by these SP values.	
001	Paper Transfer: 1st Side: S1	*ENG	[100 to 600 / 100 / 5%/step]
002	Paper Transfer: 2nd Side: S1	*ENG	S1 size > 297 mm (Paper width)

003	Paper Transfer: 1st Side: S2	*ENG	[100 to 600 / 105 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)
004	Paper Transfer: 2nd Side: S2	*ENG	[100 to 600 / 160 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)
005	Paper Transfer: 1st Side: S3	*ENG	[100 to 600 / 110 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)
006	Paper Transfer: 2nd Side: S3	*ENG	[100 to 600 / 260 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)
007	Paper Transfer: 1st Side: S4	*ENG	[100 to 600 / 120 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
008	Paper Transfer: 2nd Side: S4	*ENG	[100 to 600 / 430 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
009	Paper Transfer: 1st Side: S5	*ENG	[100 to 600 / 140 / 5%/step] 148 mm > S5 size (Paper width)
010	Paper Transfer: 2nd Side: S5	*ENG	[100 to 600 / 600 / 5%/step] 148 mm > S5 size (Paper width)

	[Thick 2: Leading Edge Correction] Thick 2 Paper: Leading Edge Correction				
2571	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode. SP2553 and SP2558 are multiplied by these SP values.				
	Note				
	 The paper leading edge area can be adjusted with SP2572. 				
001	Paper Transfer: 1st Side	*ENG	[0.4-400 / 100 / 59/ /]		
002	Paper Transfer: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]		

2571	Adjusts the correction to the discharge plate current at the paper leading edge in each mode. SP2551 is multiplied by these SP values. • The paper leading edge area can be adjusted with SP2572.		
003	Separation DC: 1st Side	*ENG	[0.4-400/100/59//44]
004	Separation DC: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]

	[Thick 2: Sw Timing: Lead. Edge]			
2572	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: 1st Side	*ENG		
002	Paper Transfer: 2nd Side	*ENG	[0. 50 / 0 / 0 / 1	
003	Separation DC: 1st Side	*ENG	[0 to 50 / 0 / 2mm/step]	
004	Separation DC: 2nd Side	*ENG		

	[Thick 2: Trail. Edge Correction] Thick 2 Paper: Trailing Edge Correction				
2573	Adjusts the correction to the paper transfer roller current for the paper trailing edge in each mode. SP2553 and SP2558 are multiplied by these SP values. ••• Note				
	 The paper trailing edge area can be adjusted with SP2574. 				
001	Paper Transfer: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]		
002	Paper Transfer: 2nd Side	*ENG	[0 10 400 / 100 / 3 % / siep]		
003	Separation DC: 1st Side	DC: 1st Side *ENG [0 to 400 / 100 / 5%/step]			
004	Separation DC: 2nd Side		[0 to 400 / 100 / 5%/step]		

	[Thick 2: Trail. Edge Correction]
2574	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	Paper Transfer: 1st Side	*ENG	
002	Paper Transfer: 2nd Side	*ENG	[0.4.50 / 0./2/4]
003	Separation DC: 1st Side	*ENG	[0 to 50 / 0 / 2 mm/step]
004	Separation DC: 2nd Side	*ENG	

2580	[Thick 2 Environment Correction]			
001	Separation DC: 1st Side	*ENG	[] to 60 / 22 /] /ston]	
002	Separation DC: 2nd Side	*ENG	[1 to 60 / 22 / 1 /step]	
003	Paper Transfer: BW: 1st Side	*ENG	[0. 70 / 11 / 1 / .]	
004	Paper Transfer: BW: 2nd Side	*ENG	[0 to 60 / 11 / 1 /step]	
005	Paper Transfer: FC: 1st Side	*ENG	[1 to 60 / 53 / 1 /step]	
006	Paper Transfer: FC: 2nd Side	*ENG	[1 to 60 / 11 / 1 /step]	

2601	[OHP: Bias]			
	Adjusts the DC voltage of the discharge plate for OHP.			
001	Separation DC	*ENG	[0 to 4000 / 3500 / 10 –V/step]	

2402	[OHP: Bias: BW]					
	2603	Adjusts the current for the paper transfer roller for OHP in black-and-white mode.				
	001	Paper Transfer	*ENG	[0 to 250 / 12 / 1 - µA /step]		

2608	[OHP: Bias: FC]					
	2006	Adjusts the current for the paper transfer roller for OHP in full color mode.				
	001	Paper Transfer	*ENG	[0 to 250 / 15 / 1 - µA / step]		

	[OHP: Paper Size Correction]	
	2611	Adjusts the size correction coefficient for the paper transfer roller current for each paper size. SP2603 and SP2608 are multiplied by these SP values.

001	Paper Transfer: S1	*ENG	[100 to 600 / 100 / 5%/step] S1 size > 297 mm (Paper width)
002	Paper Transfer: S2	*ENG	[100 to 600 / 140 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)
003	Paper Transfer: S3	*ENG	[100 to 600 / 200 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)
004	Paper Transfer: S4	*ENG	[100 to 600 / 260 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
005	Paper Transfer: S5	*ENG	[100 to 600 / 330 / 5%/step] 148 mm > S5 size (Paper width)

2621	[OHP: Leading Edge Correction]					
	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode. SP2603 and SP2608 are multiplied by these SP values.					
	↓ Note					
	The paper leading edge area can be adjusted with SP2622.					
001	Paper Transfer	*ENG	ING [0 to 400 / 100 / 5%/step]			
	Adjusts the correction to the discharge plate current at the paper leading edge in each mode. SP2601 is multiplied by these SP values.					
2621	Note					
	The paper leading edge area can be adjusted with SP2622.					
002	Separation DC	*ENG [0 to 400 / 100 / 5%/step]				

2622	[OHP: Switch Timing: Leading Edge]				
	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	*ENG	[0 to 50 / 0 / 2 mm /ston]		
002	Separation DC	*ENG	[0 to 50 / 0 / 2 mm/step]		

	[OHP: Trailing Edge Correction]				
2623	Adjusts the correction to the paper transfer roller current for the paper trailing edge in each mode. SP2603 and SP2608 are multiplied by these SP values.				
	↓ Note				
	 The paper trailing edge area can be adjusted with SP2624. 				
001	Paper Transfer	*ENG	[0.4-400 / 100 / 5% /.4]		
002	Separation DC	*ENG	[0 to 400 / 100 / 5%/step]		

	[OHP: Trailing Edge Correction]				
2624	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	Paper Transfer				
002	OO2 Separation DC		[0 to 50 / 0 / 2 mm/step]		

2630	[OHP: Environment Correction]		
001	Separation DC	*ENG	[1 to 60 / 22 / 1 /step]
002	Paper Transfer: BW	*ENG	[1 to 60 / 11 / 1 /step]
003	Paper Transfer: FC	*ENG	[1 to 60 / 1 / 1 /step]

2650	[Thick3: Bias]					
	2030	Adjusts the DC voltage of the discharge plate for thick paper 3.				
	001	Separation DC: 1st Side	*ENG	[0+, 2500 / 0 / 10 / / +]		
	002	Separation DC: 2nd Side	*ENG	[0 to 3500 / 0 / 10 –V/step]		

2651	[Thick3: Bias: BW]						
	2031	Adjusts the current for the paper transfer roller for thick paper 3 in black-and-white mode.					
	001	Paper Transfer: 1st Side	*ENG	[0 to 250 / 10 / 1 - µA / step]			
	002	Paper Transfer: 2nd Side	*ENG	[0 to 250 / 12 / 1 - µA / step]			

2652	[Thick3: Bias: FC]		
2032	Adjusts the current for the paper transf	current for the paper transfer roller for thick paper 3 in full color mode.	
001	Paper Transfer: 1st Side	*ENG	[0 to 250 / 11 / 1 - µA /step]
002	Paper Transfer: 2nd Side	*ENG	[0 to 250 / 15 / 1 - µA / step]

	[Thick3: Paper Size Correction]		
2653	Adjusts the size correction coefficient for the paper transfer roller current for each paper size. SP2651 and SP2652 are multiplied by these SP values.		
001	Paper Transfer: 1st Side: S1	*ENG	[100 to 600 / 100 / 5%/step] S1 size > 297 mm (Paper width)
002	Paper Transfer: 1st Side: S2	*ENG	[100 to 600 / 100 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)
003	Paper Transfer: 1st Side: S3	*ENG	[100 to 600 / 100 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)
004	Paper Transfer: 1st Side: S4	*ENG	[100 to 600 / 160 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
005	Paper Transfer: 1st Side: S5	*ENG	[100 to 600 / 100 / 5%/step] 148 mm > S5 size (Paper width)
006	Paper Transfer: 2nd Side: S1	*ENG	[100 to 600 / 260 / 5%/step] S1 size > 297 mm (Paper width)
007	Paper Transfer: 2nd Side: S2	*ENG	[100 to 600 / 100 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)
008	Paper Transfer: 2nd Side: S3	*ENG	[100 to 600 / 430 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)

009	Paper Transfer: 2nd Side: S4	*ENG	[100 to 600 / 100 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
010	Paper Transfer: 2nd Side: S5	*ENG	[100 to 600 / 600 / 5%/step] 148 mm > S5 size (Paper width)

	[Thick 3: Leading Edge Correction] Thick 3 Paper: Leading Edge Correction		
2654	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode. SP2651 and SP2652 are multiplied by these SP values.		
	 Note The paper leading edge area can be adjusted with SP2655. 		
001	Paper Transfer: 1st Side	*ENG	[0 to 400 / 100 / 5% /stom]
002	Separation DC: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]
2654	Adjusts the correction to the discharge plate current at the paper leading edge in each mode. SP2650 is multiplied by these SP values.		
	The paper leading edge area can be adjusted with SP2655.		th SP2655.
003	Paper Transfer: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]
004	Separation DC: 2nd Side	*ENG	[0 10 400 / 100 / 3 % / siep]

	[Thick 3: Sw Timing: Lead. Edge]		
2655	Adjusts the bias/ voltage switch timing of the paper transfer roller/ discharge plate at paper leading edge between the erase margin area and the image area.		
001	Paper Transfer: 1st Side	*ENG	
002	Separation DC: 1st Side	*ENG	[0.4-50./0./2/.4]
003	Paper Transfer: 2nd Side	*ENG	[0 to 50 / 0 / 2 mm/step]
004	Separation DC: 2nd Side	*ENG	

	[Thick 3: Trail. Edge Correction] Thick 3 Po	aper: Trailing	Edge Correction
2656	Adjusts the correction to the paper transfer roller current for the paper trailing edge in each mode. SP2651 and SP2652 are multiplied by these SP values.		
Note			
	 The paper trailing edge area can be adjusted with SP2657. 		
001	Paper Transfer: 1st Side	*ENG	
002	Paper Transfer: 2nd Side	*ENG	[0 + 400 / 100 / 59/ / +]
003	Separation DC: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]
004	Separation DC: 2nd Side	*ENG	

	[Thick 3: Trail. Edge Correction]			
2657	Adjusts the bias/voltage switch timing of the paper transfer roller/discharge plate at t paper trailing edge between the erase margin area and the image area.			
001	Paper Transfer: 1st Side	*ENG		
002	Paper Transfer: 2nd Side	*ENG	[0, 50/0/0 /,]	
003	Separation DC: 1st Side	*ENG	[0 to 50 / 0 / 2 mm/step]	
004	Separation DC: 2nd Side	*ENG		

	[Thick 3: Environment Correction] Thick 3 Paper: MM Environment Coefficient Adjustment		
Adjusts the environment coefficient for each mode. When the envir MM, SP2651 and SP2652 are multiplied by these SP values.			
001	Separation DC: 1st Side	*ENG	
002	Separation DC: 2nd Side	*ENG	[1 to 60 / 22 / 1 /step]
2660	Adjusts the environment coefficient for each mode. When the environment is detected as MM, SP2650 is multiplied by these SP values.		
003	Paper Transfer: BW: 1st Side	*ENG	[] to 60 / 11 / 1 /stop]
004	Paper Transfer: BW: 2nd Side	*ENG	[1 to 60 / 11 / 1 /step]
005	Paper Transfer: FC: 1st Side	*ENG	[1 to 60 / 55 / 1 /step]

006 Paper Transfer: FC: 2nd Side *ENG [1 to 60 / 11 / 1 /step]
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2670	[Thick4: Bias]			
20/0	Adjusts the DC voltage of the discharge plate for thick paper 4.			
001	Separation DC: 1st Side	*ENG	[0 to 4000 / 3500 / 10 –V/step]	
002	Separation DC: 2nd Side	*ENG	[0 10 4000 / 3300 / 10 - v / siep]	

2471	[Thick4: Bias: BW]		
Adjusts the current for the paper transfer roller for thick paper 4 in black-and-white		ck paper 4 in black-and-white mode.	
001	Paper Transfer: 1st Side	*ENG	[0 to 250 / 10 / 1 - µA / step]
002	Paper Transfer: 2nd Side	*ENG	[0 to 250 / 12 / 1 - µA / step]

2672	[Thick4: Bias: FC]		
2072	Adjusts the current for the paper transfer roller for thick paper 4 in full color mode.		hick paper 4 in full color mode.
001	Paper Transfer: 1st Side	*ENG	[0 to 250 / 11 / 1 - 4 A / step]
002	Paper Transfer: 2nd Side	*ENG	[0 to 250 / 15 / 1 - µA / step]

	[Thick4: Paper Size Correction]			
2673	Adjusts the size correction coefficient for the paper transfer roller current for each paper size. SP2671 and SP2672 are multiplied by these SP values.			
001	Paper Transfer: 1st Side: S1	*ENG	[100 to 600 / 100 / 5%/step] S1 size > 297 mm (Paper width)	
002	Paper Transfer: 2nd Side: S1	*ENG	[100 to 600 / 100 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)	
003	Paper Transfer: 1st Side: S2	*ENG	[100 to 600 / 100 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)	

004	Paper Transfer: 2nd Side: S2	*ENG	[100 to 600 / 160 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
005	Paper Transfer: 1st Side: S3	*ENG	[100 to 600 / 100 / 5%/step] 148 mm > S5 size (Paper width)
006	Paper Transfer: 2nd Side: S3	*ENG	[100 to 600 / 260 / 5%/step] S1 size > 297 mm (Paper width)
007	Paper Transfer: 1st Side: S4	*ENG	[100 to 600 / 100 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)
008	Paper Transfer: 2nd Side: S4	*ENG	[100 to 600 / 430 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)
009	Paper Transfer: 1st Side: S5	*ENG	[100 to 600 / 100 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
010	Paper Transfer: 2nd Side: S5	*ENG	[100 to 600 / 600 / 5%/step] 148 mm > S5 size (Paper width)

	[Thick 4: Leading Edge Correction] Thick 4 Paper: Leading Edge Correction			
Adjusts the correction to the paper transfer roller current at the paper leading 6 each mode. SP2671 and SP2672 are multiplied by these SP values.				
	 Note The paper leading edge area can be adjusted with SP2675. 			
001	Paper Transfer: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]	
002	Separation DC: 1st Side	*ENG	[0 10 400 / 100 / 3 % / siep]	
2674	Adjusts the correction to the discharge plate current at the paper leading edge in each mode. SP2670 is multiplied by these SP values. Note			
The paper leading edge area can be adjusted with SP2655.			th SP2655.	

003	Paper Transfer: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]
004	Separation DC: 2nd Side	*ENG	[0 10 400 / 100 / 3 % / siep]

	[Thick 4: Sw Timing: Lead. Edge]		
Adjusts the bias/voltage switch timing of the paper transfer rol paper leading edge between the erase margin area and the im			
001	Paper Transfer: 1st Side	*ENG	
002	Separation DC: 1st Side	*ENG	[0.1. 50 / 0 / 2 / 1]
003	Paper Transfer: 2nd Side	*ENG	[0 to 50 / 0 / 2 mm/step]
004	Separation DC: 2nd Side	*ENG	

	[Thick 4: Trail. Edge Correction] Thick 4 Po	aper: Trailing	Edge Correction	
2676	Adjusts the correction to the paper transfer roller current for the paper trailing edge in each mode. SP2671 and SP2672 are multiplied by these SP values.			
	Note			
	 The paper trailing edge area can be adjusted with SP2677. 			
001	Paper Transfer: 1st Side	*ENG		
002	Paper Transfer: 2nd Side	*ENG	[0.4400./100./5%//]	
003	Separation DC: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]	
004	Separation DC: 2nd Side	*ENG		

	[Thick 4: Sw Timing: Trail. Edge]		
2677	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	Paper Transfer: 1st Side	*ENG	
002	Paper Transfer: 2nd Side	*ENG	[0.45 50 / 0 / 2 /-45]
003	Separation DC: 1st Side	*ENG	[0 to 50 / 0 / 2 mm/step]
004	Separation DC: 2nd Side	*ENG	

	[Thick 4: Environment Correction] Thick 4 Paper: MM Environment Coefficient Adjustment			
2680	Adjusts the environment coefficient for each MM, SP2671 and SP2672 are multiplied			
001	Separation DC: 1st Side	*ENG	[1. (0 (00 (1 (. 1	
002	Separation DC: 2nd Side	*ENG	[1 to 60 / 22 / 1 /step]	
2680	Adjusts the environment coefficient for each mode. When the environment is detected as MM, SP2670 is multiplied by these SP values.			
003	Paper Transfer: BW: 1st Side	*ENG	[] to 60 / 11 / 1 /stop]	
004	Paper Transfer: BW: 2nd Side	*ENG	[1 to 60 / 11 / 1 /step]	
005	Paper Transfer: FC: 1st Side	*ENG	[1 to 60 / 55 / 1 /step]	
006	Paper Transfer: FC: 2nd Side	*ENG	[1 to 60 / 11 / 1 /step]	

	[Special 1: Bias]			
2751	Adjusts the DC voltage of the discharge plate for special paper 1. Plain: High speed, Thick 1: Middle speed			
001	Separation DC: Plain: 1st Side	*ENG		
002	Separation DC: Plain: 2nd Side	*ENG	[0 to 4000 / 3500 / 10 –V/ step]	
003	Paper Transfer: Thick 1: 1st Side	*ENG		

	[Special 1: Bias: BW]				
2753	Adjusts the current for the paper transfer roller for special paper 1 in black-and-white mode.				
	Plain: High speed				
001	Paper Transfer: Plain: 1st Side	*ENG	[04-250/22/1 4 /1		
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 250 / 22 / 1 - µA / step]		
003	Paper Transfer: Plain: 1st Side	*ENG	[0 to 250 / 11 / 1 - µA /step]		

	[Special 1 : Bias: FC]			
2757	Adjusts the current for the paper transfer roller for special paper 1 in full color mode. Plain: High speed, Fine: Low speed			
001	Paper Transfer: Plain: 1st Side	*ENG	[0 to 250 / 30 / 1 - µA / step]	
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 250 / 33 / 1 - µA / step]	
003	Paper Transfer: Plain: 1st Side	*ENG	[0 to 250 / 15 / 1 - µA / step]	

	[Special 1: Paper Size Correction]		
2761	Adjusts the size correction coefficient for the size. SP2753 and SP2757 are multiplied		
001	Paper Transfer: 1st Side: S1	*ENG	[100 to 600 / 100 / 5%/step]
002	Paper Transfer: 2nd Side: S1	*ENG	S1 size > 297 mm (Paper width)
005	Paper Transfer: 1st Side: S2	*ENG	[100 to 600 / 120 / 5%/step]
006	Paper Transfer: 2nd Side: S2	*ENG	297 mm > S2 size > 275 mm (Paper width)
009	Paper Transfer: 1st Side: S3	*ENG	[100 to 600 / 140 / 5%/step]
010	Paper Transfer: 2nd Side: S3	*ENG	275 mm > S3 size > 210 mm (Paper width)
013	Paper Transfer: 1st Side: S4	*ENG	[100 to 600 / 160 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
014	Paper Transfer: 2nd Side: S4	*ENG	[100 to 600 / 160 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
017	Paper Transfer: 1st Side: S5	*ENG	[100 to 600 / 180 / 5%/step] 148 mm > S5 size (Paper width)
018	Paper Transfer: 2nd Side: S5	*ENG	[100 to 600 / 180 / 5%/step] 148 mm > S5 size (Paper width)

	[Special 1: Leading Edge Correction] Special 1 Paper: Leading Edge Correction				
0.771	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode. SP2753 and SP2757 are multiplied by these SP values.				
2771	Plain: High speed, 1200: Low speed				
	The paper leading edge area can be adjusted with SP2772.				
001	Paper Transfer: Plain: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]		
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]		
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]		
	Adjusts the correction to the discharge pla mode. SP2751 is multiplied by these SP v		at the paper leading edge in each		
2771	₩Note				
	The paper leading edge area can be adjusted with SP2772.				
005	Separation DC: Plain: 1st Side	*ENG	[0.4-400/100/59//]		
006	Separation DC: Plain: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]		
007	Separation DC: 1200: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]		

	[Special 1: Sw Timing: Lead. Edge]		
2772	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. Plain: High speed, 1200: Low speed		
		1	
001	Paper Transfer: Plain: 1st Side	*ENG	[0.4-50./0./2/.4]
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 50 / 0 / 2 mm/step]
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 50 / 0 / 1 mm/step]
005	Separation DC: Plain: 1st Side	*ENG	
006	Separation DC: Plain: 2nd Side	*ENG	[0 to 50 / 0 / 2 mm/step]
007	Separation DC: 1200: 1st Side	*ENG	

	[Special 1: Trail. Edge Correction] Special 1 Paper: Trailing Edge Correction			
0.770	Adjusts the correction to the paper transfer roller current for the paper trailing edge in each mode. SP2753 and SP2757 are multiplied by these SP values.			
2773	Plain: High speed, 1200: Low speed			
	Note			
The paper trailing edge area can be adjusted with SP2774.			vith SP2774.	
001	Paper Transfer: Plain: 1st Side	*ENG		
002	Paper Transfer: Plain: 2nd Side	*ENG		
003	Paper Transfer: 1200: 1st Side	*ENG	[0. 400 / 100 / 50/ / .]	
005	Separation DC: Plain: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]	
006	Separation DC: Plain: 2nd Side	*ENG		
007	Separation DC: 1200: 1st Side	*ENG		

	[Special 1: Sw Timing: Trail. Edge]		
Adjusts the bias/voltage switch timing of the paper transfer roller/discharge plate paper trailing edge between the erase margin area and the image area. Plain: High speed, 1200: Low speed			
001	Paper Transfer: Plain: 1st Side	*ENG	
002	Paper Transfer: Plain: 2nd Side	*ENG	
003	Paper Transfer: 1200: 1st Side	*ENG	[0, 50 / 0 / 2 / 1]
005	Separation DC: Plain: 1st Side	*ENG	[0 to 50 / 0 / 2 mm/step]
006	Separation DC: Plain: 2nd Side	*ENG	
007	Separation DC: 1200: 1st Side	*ENG	

2780	[Special 1: Environment Correction] Plain: High speed, 1200: Low speed		
001	Separation DC: Plain: 1st Side	*ENG	[1 to 60 / 26 / 1 /step]
002	Separation DC: Plain: 2nd Side	*ENG	[1 to 60 / 32 / 1 /step]

003	Paper Transfer: Plain: BW: 1st Side	*ENG	[] +- 40 / 11 / 1 /-+]
004	Paper Transfer: Plain: BW:2nd Side	*ENG	[1 to 60 / 11 / 1 /step]
005	Paper Transfer: Plain: FC: 1st Side	*ENG	[1 to 60 / 1 / 1 /step]
006	Paper Transfer: Plain: FC:2nd Side	*ENG	[1 to 60 / 14 / 1 /step]
007	Separation DC: 1200: 1st Side	*ENG	[1 to 60 / 26 / 1 /step]
009	Paper Transfer: 1200: BW: 1st Side	*ENG	[1 to 60 / 11 / 1 /step]
011	Paper Transfer: 1200: FC: 1st Side	*ENG	[1 to 60 / 1 / 1 /step]

	[Special2: Bias]		
Adjusts the DC voltage of the discharge plate for special paper 2. Plain: High speed, 1200: Low speed			al paper 2.
001	Separation DC: Plain: 1st Side	*ENG	
002	Separation DC: Plain: 2nd Side	*ENG	[0 to 4000 / 3500 / 10 –V/ step]
003	Separation DC: 1200: 1st Side	*ENG	

	[Special2: Bias: BW]			
2803	Adjusts the current for the paper transfer roller for special paper 2 in black-and-white mode.			
	Plain: High speed, 1200: Low speed			
001	Paper Transfer: Plain: 1st Side	*ENG	[0+ 050 / 22 / 1 14 / 4+ 1]	
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 250 / 22 / 1 - µA /step]	
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 200 / 11 / 1 - µA /step]	

	[Special2: Bias: FC] Adjusts the current for the paper transfer roller for special paper 2 in full color mode. Plain: High speed, Thick 2&Fine: Low speed				
001 Paper Transfer: Plain: 1 st Side *ENG [0 t		[0 to 250 / 30 / 1 - µA / step]			
	002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 250 / 33 / 1 - µA /step]	

	[Special2: Paper Size Correction] Adjusts the size correction coefficient for the paper transfer roller current for each paper size. SP2803 and SP2807 are multiplied by these SP values.		
2811			
001	Paper Transfer: 1 st Side: S1	*ENG	[100 to 600 / 100 / 5%/step]
002	Paper Transfer: 2nd Side: S1	*ENG	S1 size > 297 mm (Paper width)
005	Paper Transfer: 1st Side: S2	*ENG	[100 to 600 / 120 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)
006	Paper Transfer: 2nd Side: S2	*ENG	[100 to 600 / 120 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)
009	Paper Transfer: 1st Side: S3	*ENG	[100 to 600 / 140 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)
010	Paper Transfer: 2nd Side: S3	*ENG	[100 to 600 / 140 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)
013	Paper Transfer: 1st Side: S4	*ENG	[100 to 600 / 160 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
014	Paper Transfer: 2nd Side: S4	*ENG	[100 to 600 / 160 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)
017	Paper Transfer: 1st Side: S5	*ENG	[100 to 600 / 180 / 5%/step] 148 mm > S5 size (Paper width)
018	Paper Transfer: 2nd Side: S5	*ENG	[100 to 600 / 180 / 5%/step] 148 mm > S5 size (Paper width)

	[Special 2: Lead Edge Correction] Special 2 Paper: Leading Edge Correction		
0001	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode. SP2803 and SP2807 are multiplied by these SP values.		
2821	Plain: High speed, 1200: Low speed		
	U Note		
	The paper leading edge area can be adjusted with SP2822.		
001	Paper Transfer: Plain: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]
2821	Adjusts the correction to the discharge plate current at the paper leading edge in each mode. SP2801 is multiplied by these SP values. 1 Note The paper leading edge area can be adjusted with SP2822.		
005	Separation DC: Plain: 1st Side	*ENG	
006	Separation DC: Plain: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]
007	Separation DC: 12001st Side	*ENG	

	[Special 2: Sw Timing: Lead. Edge]		
2822	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. Plain: High speed, 1200: Low speed		
001	Paper Transfer: Plain: 1st Side	*ENG	[0 to 50 / 0 / 2 mm/step]
002	Paper Transfer: Plain: 2nd Side	*ENG	
003	Paper Transfer: 1200: 1st Side	*ENG	
005	Separation DC: Plain: 1st Side	*ENG	
006	Separation DC: Plain: 2nd Side	*ENG	
007	Separation DC: 1200: 1st Side	*ENG	

	[Special 2: Trail. Edge Correction] Special 2 Paper: Trailing Edge Correction				
	Adjusts the correction to the paper transfer roller current for the paper trailing edge in each mode. SP2803 and SP2807 are multiplied by these SP values.				
2823	Plain: High speed, 1200: Low speed				
	Note				
	The paper trailing edge area can be a	djusted witl	h SP2824.		
001	Paper Transfer: Plain: 1st Side	*ENG			
002	Paper Transfer: Plain: 2nd Side	*ENG			
003	Paper Transfer: 1200: 1st Side	*ENG	[0.1. 400 / 100 / 59/ / 1]		
005	Separation DC: Plain: 1st Side	*ENG	[0 to 400 / 100 / 5%/step]		
006	Separation DC: Plain: 2nd Side	*ENG			
007	Separation DC: 1200: 1st Side	*ENG			

	[Special 2: Sw Timing: Trail. Edge]			
2824	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. Plain: High speed, 1200: Low speed			
001	Paper Transfer: Plain: 1st Side	*ENG		
002	Paper Transfer: Plain: 2nd Side	*ENG		
003	Paper Transfer: 1200: 1st Side	*ENG	[0.50/0/2/]	
005	Separation DC: Plain: 1st Side	*ENG	[0 to 50 / 0 / 2 mm/step]	
006	Separation DC: Plain: 2nd Side	*ENG		
007	Separation DC: 1200: 1st Side	*ENG		

2830	[Special 2: Environment Correction]		
2830	Plain: High speed, 1200: Low speed		
001	Separation DC: Plain: 1st Side	*ENG	[1 to 60 / 26 / 1 /step]
002	Separation DC: Plain: 2nd Side	*ENG	[1 to 60 / 32 / 1 /step]

003	Paper Transfer: Plain: BW: 1st Side	*ENG	[1 to 60 / 11 / 1 /step]
004	Paper Transfer: Plain: BW:2nd Side	*ENG	[1 to 60 / 11 / 1 /step]
005	Paper Transfer: Plain: FC: 1st Side	*ENG	[1 to 60 / 1 / 1 /step]
006	Paper Transfer: Plain: FC:2nd Side	*ENG	[1 to 60 / 14 / 1 /step]
007	Separation DC: 1200: 1st Side	*ENG	[1 to 60 / 26 / 1 /step]
009	Paper Transfer: 1200: BW: 1st Side	*ENG	[1 to 60 / 11 / 1 /step]
011	Paper Transfer: 1200: FC: 1st Side	*ENG	[1 to 60 / 1 / 1 /step]

	[Special 3: Bias]		
Adjusts the DC voltage of the discharge plate for special paper 3. Plain: High speed, 1200: Low speed			paper 3.
001	Separation DC: Plain: 1st Side	*ENG	
002	Separation DC: Plain: 2nd Side	*ENG	[0 to 4000 / 3500 / 10 –V/
003	Separation DC: 1200: 1st Side	*ENG	

	[Special 3: Bias: BW]		
2852	Adjusts the current for the paper transfer roller for special paper 3 in black-and-white mode.		
	Plain: High speed, 1200: Low speed		
001	Paper Transfer: Plain: 1st Side	*ENG	[0 to 250 / 22 / 1 - µA /step]
002	Paper Transfer: Plain: 2nd Side	*ENG	
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 250 / 11 / 1 - µA / step]

		[Special 3: Bias: FC]			
Adjusts the current for the paper transfer roller for sp Plain: High speed, 1200: Low speed				cial paper 3 in full color mode.	
	001	Paper Transfer: Plain: 1st Side	*ENG	[0 to 250 / 30 / 1 - µA /step]	
	002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 250 / 33 / 1 - µA /step]	

003 Paper Transfer: 1200: 1st Side

	[Special 3: Paper Size Correction]				
2861	Adjusts the size correction coefficient for the paper transfer roller current for each paper size. SP2852 and SP2857 are multiplied by these SP values.				
001	Paper Transfer: 1st Side: S1	*ENG	[100 to 600 / 100 / 5%/step]		
002	Paper Transfer: 2nd Side: S1	*ENG	S1 size > 297 mm (Paper width)		
005	Paper Transfer: 1st Side: S2	*ENG	[100 to 600 / 120 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)		
006	Paper Transfer: 2nd Side: S2	*ENG	[100 to 600 / 120 / 5%/step] 297 mm > S2 size > 275 mm (Paper width)		
009	Paper Transfer: 1st Side: S3	*ENG	[100 to 600 / 140 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)		
010	Paper Transfer: 2nd Side: S3	*ENG	[100 to 600 / 140 / 5%/step] 275 mm > S3 size > 210 mm (Paper width)		
013	Paper Transfer: 1st Side: S4	*ENG	[100 to 600 / 160 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)		
014	Paper Transfer:: 2nd Side: S4	*ENG	[100 to 600 / 160 / 5%/step] 210 mm > S4 size > 148 mm (Paper width)		
017	Paper Transfer:: 1st Side: S5	*ENG	[100 to 600 / 180 / 5%/step] 148 mm > S5 size (Paper width)		
018	Paper Transfer:: 2nd Side: S5	*ENG	[100 to 600 / 180 / 5%/step] 148 mm > S5 size (Paper width)		

	[Special 3: Lead. Edge Correction] Special 3 Paper: Leading Edge Correction				
0071	Adjusts the correction to the paper transfer roller current at the paper leading edge in each mode. SP2852 and SP2857 are multiplied by these SP values.				
2871	Plain: High speed, 1200: Low speed				
	U Note				
	The paper leading edge area can be c	adjusted wi	th SP2872.		
001	Paper Transfer: Plain: 1st Side	*ENG			
002	Paper Transfer: Plain: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]		
003	Paper Transfer: 1200: 1st Side	*ENG			
2871	Adjusts the correction to the discharge plate current at the paper leading edge in each mode. SP2851 is multiplied by these SP values. 2871 Note				
	The paper leading edge area can be adjusted with SP2872.				
005	Separation DC: Plain: 1st Side	*ENG			
006	Separation DC: Plain: 2nd Side	*ENG	[0 to 400 / 100 / 5%/step]		
007	Separation DC: 1200: 1st Side	*ENG			

	[Special 3: Sw Timing: Lead. Edge]			
2872	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.			
Plain: High speed, 1200: Low speed				
001	Paper Transfer: Plain: 1st Side	*ENG		
002	Paper Transfer: Plain: 2nd Side	*ENG		
003	Paper Transfer: 1200: 1st Side	*ENG	[0 to 50 / 0 / 2 mm/step]	
005	Separation DC: Plain: 1st Side	*ENG	[0 10 30 / 0 / 2 mm/ siep]	
006	Separation DC: Plain: 2nd Side	*ENG		
007	Separation DC: 1200: 1st Page	*ENG		

	[Special 3: Trail. Edge Correction] Special 3 Paper: Trailing Edge Correction		
	Adjusts the correction to the paper transfer roller current for the paper trailing edge in each mode. SP2852 and SP2857 are multiplied by these SP values.		
2873	Plain: High speed, 1200: Low speed		
	Note		
The paper trailing edge area can be adjusted with SP2874.			22874.
001	Paper Transfer: Plain: 1st Side	*ENG	
002	Paper Transfer: Plain: 2nd Side	*ENG	
003	Paper Transfer: 1200: 1st Side	*ENG	[0.4- 400 / 100 / 59/ /-4]
005	Separation DC: Plain: 1 st Side	*ENG	[0 to 400 / 100 / 5%/step]
006	Separation DC: Plain: 2nd Side	*ENG	
007	Separation DC: 1200: 1st Page	*ENG	

	[Special 3: Sw Timing: Trail. Edge]				
2874	er roller/discharge plate at the he image area.				
001	Paper Transfer: Plain: 1 st Side	*ENG			
002	Paper Transfer: Plain: 2nd Side	*ENG			
003	Paper Transfer: 1200: 1st Side	*ENG	[0.1. 50 / 0. / 0 / 1]		
005	Separation DC: Plain: 1st Side	*ENG	[0 to 50 / 0 / 2 mm/step]		
006	Separation DC: Plain: 2nd Side	*ENG			
007	Separation DC: 1200: 1st Page	*ENG			

2880	[Special 3: Environment Correction]				
2000	in: High speed, 1200: Low speed				
001	Separation DC: Plain: 1st Side	*ENG	[1 to 60 / 26 / 1 /step]		
002	Separation DC: Plain: 2nd Side	*ENG	[1 to 60 / 32 / 1 /step]		

003	Paper Transfer: Plain: BW: 1st Side	*ENG	[] 40 / 11 / 1 / 44-1]
004	004 Paper Transfer: Plain: BW:2nd Side		[1 to 60 / 11 / 1 /step]
005	Paper Transfer: Plain: FC: 1st Side	*ENG	[1 to 60 / 1 / 1 /step]
006	Paper Transfer: Plain: FC:2nd Side	*ENG	[1 to 60 / 11 / 1 /step]
007	Separation DC: 1200: 1st Side	*ENG	[1 to 60 / 26 / 1 /step]
009	Paper Transfer: 1200: BW: 1st Side	*ENG	[1 to 60 / 11 / 1 /step]
011	Paper Transfer: 1200: FC: 1st Side	*ENG	[1 to 60 / 1 / 1 /step]

	[Dev Rvs Time] Development Roller Reverse Time				
2905	Specified the time of the development roller reverse rotation after the development unit has stopped. The reverse rotation of the development roller is used for removing dust from the development roller.				
001	K *ENG				
002	М	*ENG			
003	С	*ENG	[0 to 200 / 80 / 10 msec/step]		
004	Υ	*ENG			
	[Dev Rvs Threshold Counter]				
005	Specified the threshold distance for the development roller reverse mode. This SP refers to the counters for SP2905-006 to -009.				
	All	*ENG	[0 to 400000 / 4000 / 10 mm/step]		
2905	[Dev Rvs Counter]				
006	K *ENG				
007	М	*ENG	[0+,000000000 / /1 / . 1		
008	С	*ENG	[0 to 999999999 / - / 1 mm/step]		
009	Υ	*ENG			

	[Acs Setting (FC to Bk)]			
2907	Adjusts the threshold for moving away the image transfer belt from the color PCDUs. This SP moves the image transfer belt away from the color PCDUs when the number of B/W image printouts reaches the number of sheets specified with this SP after consecutive full color image printouts in the full color mode. If this SP is set to "0", the image transfer belt does not move away.			
001	Continuous Bk Pages	*ENG	[0 to 10 / 0 / 1 sheet/step]	

2920	[Trans Mot Control]			
	0: Encorder 1 :FG	*ENG	[0 or 1 / 0 / 1 /step]	
001	Selects the speed control mode for the ITB. If SC443 occurs and machine does not recover, change this setting to "1".			
	SC443-00 Count	*ENG	[0 to 3 / 0 / 1 /step]	
002	Displays the number of the ITB encodre error. SC443 is displayed if this counter counts to "3".			

		[SecondaryFB: Threshold] Paper Transfer Roller Feed-back: Threshold Adjustment		
2930		Adjusts the threshold between high resistance (division 1) and low resistance (division 2) at the paper transfer roller. This SP affects SP2931 to SP2939.		
0	001	Voltage	*ENG	[0 to 7000 / 6000 / 10 –V/step]

2960	[Process Interval]			
001	Additional Time	*ENG	[0 to 10 / 0 / 1 sec/step]	
001	Adjusts the additional time for ending the machine's process.			

	2970	[Cleaning After JOB]				
	001	No Refresh	*ENG	[0 to 100 / 33 / 1 /step] 0: No cleaning		
Specifies the threshold sheets for the cleaning of the paper transfer roller with refresh mode.				g of the paper transfer roller without the		

002	Refresh	*ENG	[0 or 1 / 1 / 1 /step]		
002	Konesn	EING	0: No cleaning, 1: Cleaning		
0071					
2971	T1 Non Image Area ON Timin	9			
001	Standard Speed	*ENG	[-400 to 290 / 0 / 10 msec/step]		
	Adjusts the timing for the non-image area bias of the image transfer roller.				
002	Medium Speed	*ENG	[-400 to 290 / 0 / 10 msec/step]		
003	Low Speed	*ENG	[-790 to 410 / 0 / 10 msec/step]		
2972	B/W Image Request Timing				
001	Standard Speed	*ENG	[0 to 4000 / 0 / 10 msec/step]		
002	Medium Speed	*ENG	[0 to 4000 / 0 / 10 msec/step]		
003	Low Speed	*ENG	[0 to 4000 / 0 / 10 msec/step]		
2973	Forced Process Down Threshol	d 			
001	-	*ENG	[0 to 5000 / 0 / 10 page/step]		
0074					
2974	OPC PreCharge Time Control				
001	Standard Speed	*ENG	[0 to 1500 / 136 / 1 msec/step]		
002	Medium Speed	*ENG	[0 to 1500 / 146 / 1 msec/step]		
003	Low Speed	*ENG	[0 to 2600 / 0 / 1 msec/step]		
2980	Continuous Job Page				
001	-	*ENG	[0 to 300 / 100 / 10 page/step]		
002	-	*ENG	[0 to 600 / 30 / 10 sec/step]		
003	-	*ENG	[0 to 600 / 30 / 10 sec/step]		
2990	Print Duty Control				

001	Duty Control State	*ENG	[0 or 1 / - / 1 /step]
	Doily Common Grane	21,10	0: No limit, 1: Limit
002	Exec Interval: Duty Control	*ENG	[60 to 3600 / 300 / 10 min./step]
003	Duty Control Thresh	*ENG	[0 to 999999999 / 0 / 1 mm/step]
004	Forced CPM Down Thresh: No Duty Control	*ENG	[0 to 5000 / 0 / 1 page/step]
005	Drum Stop Time: No Duty Control	*ENG	[300 to 1500 / 500 / 10 msec/step]
006	ITB Stop Time: No Duty Control	*ENG	[300 to 1500 / 500 / 10 msec/step]
007	Forced CPM Down Thresh: Duty Control	*ENG	[0 to 5000 / 1 / 1 page/step]
008	Drum Stop Time: Duty Control	*ENG	[300 to 20000 / 7500 / 10 msec/step]
009	ITB Stop Time: Duty Control	*ENG	[300 to 20000 / 7500 / 10 msec/step]
010	Duty Control: Start Time	*ENG	Displays the time of the duty control execution.
011	Execution Temp. Threshold	*ENG	Sets the threshold of the duty control execution temperature. [20 to 70 / 39.8 / 0.1/step]
012	Cancellation Temp. Threshold	*ENG	Sets the threshold of the duty control cancellation temperature. [0.1 to 20 / 1 / 0.1/step]
013	ON/OFF Setting	*ENG	Turns duty control off or on. 0: OFF 1: ON

Main SP Tables-3

SP3-XXX (Process)

3011	[Process Cont. Manual Execution]			
001	Normal	-	Executes the normal process control manually (potential control). Check the result with SP3-325-001 and 3-012-001 after executing this SP.	
002	Density Adjustment	-	Executes the toner density adjustment manually.	
003	Pre-ACC	-	Executes the process control that is normally done before ACC. The type of process control is selected with SP3-041-004.	
004	Full MUSIC	-	Executes the process control that is normally done at the same time as MUSIC. This SP does the MUSIC (line position adjustment) twice.	
005	Normal MUSIC	-	Executes the process control that is normally done at the same time as MUSIC. This SP does the MUSIC (line position adjustment) once.	

	[Process Cont. Check Result] Process Control Self-check Result
	Displays the result of the latest process control self-check.
	All colors are displayed. The results are displayed in the order "Y C M K"
3012	e.g., 11 (Y) 99 (C) 11 (M) 11 (K): The self-check for Cyan failed but the others were successful.
	See "Process Control Self-Check Result" in the "Main chapters: 6. Troubleshooting: Process Control Error Conditions" for details.

001	History: Latest	*ENG	
002	Result: Latest 1	*ENG	
003	Result: Latest 2	*ENG	
004	Result: Latest 3	*ENG	
005	Result: Latest 4	*ENG	[11114-0000000 / /1/4]
006	Result: Latest 5	*ENG	[1111 to 99999999 / - / 1/step]
007	Result: Latest 6	*ENG	
008	Result: Latest 7	*ENG	
009	Result: Latest 8	*ENG	
010	Result: Latest 9	*ENG	

3013	[T Sensor Initial Set: Exe] Developer Initialization Setting				
001	Execution: ALL	-			
002	Execution: COL	-			
003	Execution: Bk	-	Executes the developer initialization for each		
004	Execution: M	-	color.		
005	Execution: C	-			
006	Execution: Y	-			

3014	[T Sensor Initial Set:Exe] Developer Initialization Result: Display				
	Display: YCMK	*ENG	[0 to 9999 / - / 1 /step] 1: Success, 2 to 9: Failure		
001	Displays the developer initialization result. See "Developer Initialization Result" in the "Main chapters: 6. Troubleshooting: Process Control Error Conditions" for details on the meaning of each code.				
	All colors are displayed. Values are displayed in the order Y C M Bk. e.g., 1 (Y) 2 (C) 1 (M) 1 (Bk): Initialization of Cyan failed but the others succeeded.				

3015	[Forced Toner Supply: Execute] Forced Toner Supply ([Color])					
001	Execution: ALL	-				
002	Execution: COL	-				
003	Execution: Bk	-	Executes the manual toner supply to the			
004	Execution: M	-	development unit.			
005	Execution: C	-				
006	Execution: Y	-				

2014	[Forced Toner Supply: Setting]					
3016	Specifies the manual toner supply time for each color.					
001	Supply Time: Bk	*ENG				
002	Supply Time: M	*ENG	[020 / 4 / 1 /]			
003	Supply Time: C	*ENG	[0 to 30 / 4 / 1 sec/step]			
004	Supply Time: Y	*ENG				

3041	[Process Control Type]				
001	Voltage Control	*ENG	[0 or 1 / 1 / 1/step] Alphanumeric 0: FIXED (Use the fixed values for the charge DC bias and development DC bias set with SP2-005 and SP2-229.) 1: CONTROL		
	Enables or disables potential control.				
002	LD Power Control	*ENG	[0 or 1 / 1 / 1/step] Alphanumeric 0: FIXED (at the value in SP2221-xxx) 1: CONTROL (adjusted by process control)		
	Selects the LD power control mode.				

003	AutoControl Prohibition Set	*ENG	[0 or 1 / 0 / -] 0: Permit, 1: Forbid			
	Enables or disables the automatic process control prohibition.					
004	Pre-ACC Process Control Selects the process control r	*ENG	[0 to 2 / 2 / 1/step] 0: Not Executed 1: Process Control 2: TC Control (TD Adjustment) 3: Not used is done before ACC.			
005	Pattern Calculation Method *ENG* [0 to 2 / 2 / 1/step] 0: FIXED 1: INITIALIZED 2: CALCULATED					
	Selects the process control method.					

3043	[TD Adjustment Mode]				
	Repeat Number: Power ON	*ENG	[0 to 9 / 4 / 1 time/step]		
001	Specifies the maximum number of repeats of the toner density adjustment at power on. O: Disabled, 1 to 3: Repeat number, 4: Repeat three times (No consumption mode) 5: Repeat three times (Toner is supplied only when the toner density is too low, and toner is consumed only when the toner density is too dark.) 6 to 9: Disabled				
	Repeat Number: Initialization	*ENG	[0 to 9 / 3 / 1 time/step]		
002	Specifies the maximum number of repeats of the toner density adjustment at the developer initialization. O: Disabled, 1 to 3: Repeat number, 4: Repeat three times (No consumption mode) 5: Repeat three times (Toner is supplied only when the toner density is too low, and toner is consumed only when the toner density is too dark.) 6 to 9: Disabled				

	Repeat Number: Non-use	*ENG	[0 to 9 / 0 / 1 time/step]			
	Specifies the maximum number of repeats of the toner density adjustment in stand by mode.					
003	0: Disabled, 1 to 3: Repeat number,					
003	4: Repeat three times (No consumption m	ode)				
	5: Repeat three times (Toner is supplied only when the toner density is too low, and toner is consumed only when the toner density is too dark.) 6 to 9: Disabled					
	Repeat Number: ACC	*ENG	[0 to 9 / 3 / 1 time/step]			
	Specifies the maximum number of repeats	of the toner	density adjustment at ACC.			
	0: Disabled, 1 to 3: Repeat number,		, .			
004	4: Repeat three times (No consumption m	iode)				
	5: Repeat three times (Toner is supplied only when the toner density is too low, and toner is consumed only when the toner density is too dark.) 6 to 9: Disabled					
005	Repeat Number: Recovery	*ENG	[0 to 9 / 0 / 1 time/step]			
005	Not used					
	Repeat Number: Job End	*ENG	[0 to 9 / 4 / 1 time/step]			
	Specifies the maximum number of repeats of the toner density adjustment at job end.					
	0: Disabled, 1 to 3: Repeat number,					
006	o. Disablea, 1 to 5. Repeat Holliber,					
006	4: Repeat three times (No consumption m	iode)				
006	·	nly when the	toner density is too low, and tone			
006	4: Repeat three times (No consumption m 5: Repeat three times (Toner is supplied o	nly when the	toner density is too low, and tone			
006	4: Repeat three times (No consumption m 5: Repeat three times (Toner is supplied o consumed only when the toner density is to	nly when the	toner density is too low, and tone [0 to 9 / 0 / 1 time/step]			
006	4: Repeat three times (No consumption m 5: Repeat three times (Toner is supplied o consumed only when the toner density is t 6 to 9: Disabled	nly when the too dark.) *ENG	[0 to 9 / 0 / 1 time/step]			
	4: Repeat three times (No consumption m 5: Repeat three times (Toner is supplied o consumed only when the toner density is t 6 to 9: Disabled Repeat: Interrupt Specifies the maximum number of repeats	nly when the too dark.) *ENG	[0 to 9 / 0 / 1 time/step]			

	Consumption pattern: Bk		*ENG	[O to	255 / 5 / 1 time/step]	
009	Specifies the belt mark generating time for checking the black toner density when toner density is detected to be low at the toner density adjustment.					
	Consumption pattern: M		*ENG	[0 to	255 / 5 / 1 time/step]	
010	Specifies the belt mark generating density is detected to be low at t	-		-	-	
	Consumption pattern: C	*ENG	[0 to	255 / 5	/ 1 time/step]	
011	Specifies the belt mark generating density is detected to be low at t	-			·	
	Consumption pattern: Y	*ENG	[0 to	255 / 5	/ 1 time/step]	
012	Specifies the belt mark generating time for checking the yellow toner density when toner density is detected to be low at the toner density adjustment.					
010	T1 Bias: Bk	*ENG	[0 to	80 / 22	/ 1 µA/step]	
013	Adjusts the image transfer belt bias for Black.					
014	T2 Bias: M	*ENG	[0 to	80 / 25	/ 1 µA/step]	
014	Adjusts the image transfer belt bias for Magenta.					
015	T3 Bias: C	*ENG	[0 to	80 / 22	/ 1 µA/step]	
015	Adjusts the image transfer belt bias for Cyan.					
017	T4 Bias: Y	*ENG	[0 to	80 / 28	/ 1 µA/step]	
016	Adjusts the image transfer belt bias for Yellow.					
017	Developer Mixing Time	*ENG	[0 to	250 / 1	0 / 1 sec/step]	
017	Specifies the developer mixing time at the toner density adjustment.					
	Consumption Pat: LD: DUTY: Bk			*ENG	[0 to 15 / 15 / 1 /step]	
018	Adjusts the LD duty for the toner consumption mode at the toner density adjustment. In toner consumption mode, toner is discharged when the detected development gamma values (SP3611-001) exceed the target values (SP3611-005) by more than the specified thresholds (SP3239-009).					

	Consumption Pat: LD: DUTY: M	*ENG	[0 to 15 / 15 / 1 /step]			
019	Adjusts the LD duty for the toner consumption mode at the toner density adjustment.					
	In toner consumption mode, toner is discharged when the detected development gamma values (SP3611-002) exceed the target values (SP3611-006) by more than the specified thresholds (SP3239-009).					
	Consumption Pat: LD: DUTY: C	*ENG	[0 to 15 / 15 / 1 /step]			
000	Adjusts the LD duty for the toner consumption mode at the toner density adjustment.					
020	In toner consumption mode, toner is discharged when the detected development gamma values (SP3611-003) exceed the target values (SP3611-007) by more than the specified thresholds (SP3239-009).					
	Consumption Pat: LD: DUTY: Y	*ENG	[0 to 15 / 15 / 1 /step]			
	Adjusts the LD duty for the toner consumption mode at the toner density adjustment.					
021	In toner consumption mode, toner is discharged when the detected development gamma values (SP3611-004) exceed the target values (SP3611-008) by more than the specified thresholds (SP3239-009).					

3044	[Toner Supply Type]				
3044	Selects the toner supply method type.				
001	Bk	*ENG	[0 to 4 / 4 / 1/step] Alphanumeric		
002	М	*ENG	0: FIXED (with the supply rates stored with SP 3401)		
003	С	*ENG	1: PID (Vtref_Fixed)		
004	Y	*ENG	2: PID (Vtref_Control) 3: Not used 4: MBD (Vtref_Control)		

	2045	[Toner End Detection: Set]			
Enables/disables the toner alert display on the LCD.				r alert display on the LCD.	
	001	ON/OFF	*ENG	[0 or 1 / 0 / 1/step] 0: Detect, 1: Not Detect	

	[Toner End Recovery]			
3102	s attempted for each color when the TD sensor recovery.			
001	Repeat: Bk	*ENG		
002	Repeat: M	*ENG	[14, 20 / 5 / 15,	
003	Repeat: C	*ENG	[1 to 20 / 5 / 1 time/step]	
004	Repeat: Y	*ENG		

3131	[TE Count m: Display]				
3131	Display the number of toner end detections for each color.				
001	Bk	*ENG			
002	М	*ENG			
003	С	*ENG	[0 to 99 / - / 1 time/step]		
004	Υ	*ENG			

3201	[TD Sensor: Vt Display]				
3201	Display the current voltage of the TD sensor for each color.				
001	Current: Bk	*ENG			
002	Current: M	*ENG	[0.5.5.7.7.0.01.17/]		
003	Current: C	*ENG	[0 to 5.5 / - / 0.01 V/step]		
004	Current: Y	*ENG			

	[Vt Shift: Display/Set]				
3211	Adjusts the Vt correction value for each line speed. Thick 1: 154 mm/sec, Thick 2&Fine: 77 mm/sec				
001	Thick 1 Shift: Bk	*ENG	[0 to 5 / 0.26 / 0.01 V/step]		
002	Thick 1 Shift: M	*ENG	[0 to 5 / 0.26 / 0.01 V/step]		
003	Thick 1 Shift: C	*ENG	[0 to 5 / 0.26 / 0.01 V/step]		

004	Thick 1 Shift: Y	*ENG	[0 to 5 / 0.31 / 0.01 V/step]
005	Thick 2 & FINE Shift: Bk	*ENG	[0 to 5 / 0.26 / 0.01 V/step]
006	Thick 2 & FINE Shift: M	*ENG	[0 to 5 / 0.26 / 0.01 V/step]
007	Thick 2 & FINE Shift: C	*ENG	[0 to 5 / 0.26 / 0.01 V/step]
008	Thick 2 & FINE Shift: Y	*ENG	[0 to 5 / 0.31 / 0.01 V/step]
009	Mid TCShift: Bk	*ENG	
010	Mid TCShift: M	*ENG	[0.5], 0.5 / 0 / 0.01 / /]
011	Mid TCShift: C	*ENG	[-0.5 to 0.5 / 0 / 0.01 V/step]
012	Mid TCShift: Y	*ENG	
013	Low TCShift: Bk	*ENG	
014	Low TCShift: M	*ENG	[0.5 to 0.5 / 0 / 0.01 \/ /1
015	Low TCShift: C	*ENG	[-0.5 to 0.5 / 0 / 0.01 V/step]
016	Low TCShift: Y	*ENG	

3221	[Vtcnt: Display/Set]				
3221	Displays or adjusts the current Vtcnt value for each color.				
001	Current: Bk	*ENG			
002	Current: M	*ENG	[0.5 5 / 2.04 / 0.01 \/ /]		
003	Current: C	*ENG	[0 to 5 / 3.86 / 0.01 V/step]		
004	Current: Y	*ENG			
005-008	Displays or adjusts the Vtcnt value for each color at developer initialization. DFU				
005	Initial: Bk	*ENG			
006	Initial: M	*ENG	[0.5 5 / 2.04 / 0.01 \/ /]		
007	Initial: C	*ENG	[0 to 5 / 3.86 / 0.01 V/step]		
008	Initial: Y	*ENG			

2000	[Vtref: Display/Set]				
3222	Displays or adjusts the current Vtref value for each color.				
001	Current: Bk	*ENG			
002	Current: M	*ENG	[0 5.5./ 2 ./0.01.V/]		
003	Current: C	*ENG	[0 to 5.5 / 3 / 0.01 V/step]		
004	Current: Y	*ENG			
005-008	Displays or adjusts the Vtref value for each color at developer initialization. DFU				
005	Initial: Bk	*ENG			
006	Initial: M	*ENG	[0. 55 / /00] //.]		
007	Initial: C	*ENG	[0 to 5.5 / - / 0.01 V/step]		
008	Initial: Y	*ENG			
009-012	Displays and adjusts Vtref cor	rection by	pixel coverage for each color. DFU		
009	Pixel Correction: Bk	*ENG			
010	Pixel Correction: M	*ENG	[
011	Pixel Correction: C	*ENG	[-5 to 5.5 / - / 0.01 V/step]		
012	Pixel Correction: Y	*ENG			

3239	[Vtref Correction: Setting]	
3239	Adjusts the parameter for Vtref correction at the process control.	

001	(+)Consumption: Bk	*ENG	
002	(+)Consumption: M	*ENG	
003	(+)Consumption: C	*ENG	
004	(+)Consumption: Y	*ENG	[0. 1./004/0017/]
005	(-)Consumption: Bk	*ENG	[0 to 1 / 0.04 / 0.01 V/step]
006	(-)Consumption: M	*ENG	
007	(-)Consumption: C	*ENG	
008	(-)Consumption: Y	*ENG	
009-012	Threshold for development go	amma rank.	
009	P Rank 1 Threshold	*ENG	[0 to 2 / 0.2 / 0.1 /step]
010	P Rank 2 Threshold	*ENG	[0 to 2 / 0.05 / 0.1 /step]
011	P Rank 3 Threshold	*ENG	[-2 to 0 / -0.05 / 0.1 /step]
012	P Rank 4 Threshold	*ENG	[-2 to 0 / -0.2 / 0.1 /step]
013-014	Threshold for image density r	ank on the im	nage transfer belt.
013	T Rank 1 Threshold	*ENG	[-1 to 0 / -0.2 / 0.01 V/step]
014	T Rank 2 Threshold	*ENG	[0 to 1 / 0.2 / 0.01 V/step]
021-028	Sets the correction coefficient	of the Vtref o	correction.
021	Correction Coefficient 1: Bk	*ENG	[0 to 1 / 0.5 / 0.1/step]
022	Correction Coefficient 1: M	*ENG	[0 to 1 / 0.5 / 0.1/step]
023	Correction Coefficient 1: C	*ENG	[0 to 1 / 0.5 / 0.1/step]
024	Correction Coefficient 1: Y	*ENG	[0 to 1 / 0.5 / 0.1/step]
025	Correction Coefficient 2: Bk	*ENG	[0 to 1 / 0.5 / 0.1/step]
026	Correction Coefficient 2: M	*ENG	[0 to 1 / 0.5 / 0.1/step]
027	Correction Coefficient 2: C	*ENG	[0 to 1 / 0.5 / 0.1/step]
028	Correction Coefficient 2: Y	*ENG	[0 to 1 / 0.5 / 0.1/step]
			•

3241	[Background Potential Setting]			
001	Coefficient: Bk	*ENG	These are parameters for calculating the charge	
002	Coefficient: M	*ENG	bias referring to the development bias at process control.	
003	Coefficient: C	*ENG	[-1000 to 1000 / 0 / 1 /step]	
004	Coefficient: Y	*ENG	DC charge bias = Development bias x (1 + 0.001 x these vales) + SP3-241-005 to -008	
005	Offset: Bk	*ENG	These are additional values for calculating the	
006	Offset: M	*ENG	charge bias referring to the development bias at process control.	
007	Offset: C	*ENG	[0 to 255 / 140 / 1 V/step]	
008	Offset: Y	*ENG	DC charge bias = Development bias x (1 + 0.001 x SP3-241-001 to -004) + these values	

3242	[LD Power Setting]				
3242	Adjusts the coefficient for LD power control value at the process control.				
001	StdSpd:Coefficient: Bk	*ENG	[-1000 to 1000 / 118 / 1 /step]		
002	StdSpd:Coefficient: M	*ENG	[-1000 to 1000 / 117 / 1 /step]		
003	StdSpd:Coefficient: C	*ENG	[-1000 to 1000 / 79 / 1 /step]		
004	StdSpd:Coefficient: Y	*ENG	[-1000 to 1000 / 92 / 1 /step]		
005	StdSpd:Offset: Bk	*ENG	[-1000 to 1000 / 47 / 1 /step]		
006	StdSpd:Offset: M	*ENG	[-1000 to 1000 / 41 / 1 /step]		
007	StdSpd:Offset: C	*ENG	[-1000 to 1000 / 72 / 1 /step]		
800	StdSpd:Offset: Y	*ENG	[-1000 to 1000 / 59 / 1 /step]		
009	MidSpd:coef:Bk	*ENG	[-1000 to 1000 / 118 / 1 /step]		
010	MidSpd:Coef:M	*ENG	[-1000 to 1000 / 117 / 1 /step]		
011	MidSpd:Coef:C	*ENG	[-1000 to 1000 / 79 / 1 /step]		
012	MidSpd:Coef:Y	*ENG	[-1000 to 1000 / 92 / 1 /step]		
013	MidSpd:offset:Bk	*ENG	[-1000 to 1000 / 47 / 1 /step]		

MidSpd:offset:M	*ENG	[-1000 to 1000 / 41 / 1 /step]
MidSpd:offset:C	*ENG	[-1000 to 1000 / 72 / 1 /step]
MidSpd:offset:Y	*ENG	[-1000 to 1000 / 59 / 1 /step]
LowSpd:Coef:Bk	*ENG	[-1000 to 1000 / 98 / 1 /step]
LowSpd:Coef:M	*ENG	[-1000 to 1000 / 104 / 1 /step]
LowSpd:Coef:C	*ENG	[-1000 to 1000 / 78 / 1 /step]
LowSpd:Coef:Y	*ENG	[-1000 to 1000 / 84 / 1 /step]
LowSpd:offset:Bk	*ENG	[-1000 to 1000 / 59 / 1 /step]
LowSpd:offset:M	*ENG	[-1000 to 1000 / 45 / 1 /step]
LowSpd:offset:C	*ENG	[-1000 to 1000 / 69 / 1 /step]
LowSpd:offset:Y	*ENG	[-1000 to 1000 / 65 / 1 /step]
	MidSpd:offset:C MidSpd:offset:Y LowSpd:Coef:Bk LowSpd:Coef:M LowSpd:Coef:C LowSpd:Coef:Y LowSpd:offset:Bk LowSpd:offset:Bk	MidSpd:offset:C *ENG MidSpd:offset:Y *ENG LowSpd:Coef:Bk *ENG LowSpd:Coef:M *ENG LowSpd:Coef:C *ENG LowSpd:Coef:Y *ENG LowSpd:offset:Bk *ENG LowSpd:offset:M *ENG LowSpd:offset:M *ENG LowSpd:offset:M *ENG

3251	[Coverage]				
3231	These (-001 to -016) are coefficients for SP3-222-009 to -012.				
001	Latest Pixel: Bk	*ENG			
002	Latest Pixel: M	*ENG	Displays the latest coverage for each color.		
003	Latest Pixel: C	*ENG	[0 to 9999 / - / 1 cm ² /step]		
004	Latest Pixel: Y	*ENG			
005-008	Displays the average coverage of each color for the Vtref correction. "Average S" is defined when the number of developed pages does not reach the number specified with SP3251-017.				
005	Average S: Bk	*ENG			
006	Average S: M	*ENG	[0 to 100 / - / 0.01 %/step]		
007	Average S: C	*ENG	[0 10 100 / - / 0.01 /6/siep]		
008	Average S: Y	*ENG			

	Displays the average coverage of each color for the Vtref correction.					
009-012	"Average M" is defined when the number of developed pages does not reach the number specified with SP3251-018.					
009	Average M: Bk	* E1	ΝG			
010	Average M: M	* E1	ENG [0 + 100 / /0.01 % / +1		100 / /0010//. 1	
011	Average M: C	* E1	ΝG			
012	Average M: Y	* E1	ΝG			
013-016	Displays the average coverage of each color for the Vtref correction. "Average L" is defined when the number of developed pages does not reach the number specified with SP3-251-019.					
013	Average L: Bk	* E1	ΝG			
014	Average L: M	* E1	ΝG	[O.		
015	Average L: C	* E1	ΝG	101	o 100 / - / 0.01 %/step]	
016	Average L: Y	* E1	ΝG			
017-019	Adjusts the threshold for SP3-251-005 to -016.				o -016.	
017	Total Page Setting: S		*EN	1G	[1 to 100 / 10 / 1 sheet/step]	
018	Total Page Setting: M		*EN	1G	[1 to 500 / 10 / 1 sheet/step]	
019	Total Page Setting: L		* EN	1G	[1 to 999 / 50 / 1 sheet/step]	
020-023	Adjusts the threshold fo	r SP3-	251-0)24 t	o -027.	
020	Total Page Setting: S2		*EN	1G	[1 to 100 / 40 / 1 sheet/step]	
021	Total Page Setting: M2		*EN	1G	[1 to 500 / 10 / 1 sheet/step]	
022	Total Page Setting: L2		*EN	1G	[1 to 999 / 50 / 1 sheet/step]	
024-027	Displays the latest coverage ratio for each color.					
024	Latest Coverage: Bk	Latest Coverage: Bk		1G		
025	Latest Coverage: M		*EN	1G	[0 to 100 / - / 0.01 %/step]	
026	Latest Coverage: C		*EN	1G	[0 10 1 00 / • / 0.01 //sep]	
027	Latest Coverage: Y		*EN	1G		

028	orm developer churning or not.		
028	DevMix Threshold	*ENG	[0 to 100 / 20 / 1 %/step]

3311	[ID Sensor DetectValue: Vofset]				
3311	Displays the ID sensor (regular) offset voltage for Vsg adjustments.				
001	Voffset reg: Bk	*ENG	[0 to 5 / - / 0.01 V/step]		
002	Voffset reg: M	*ENG			
003	Voffset reg: C	*ENG	[0 to 5.5 / - / 0.01 V/step]		
004	Voffset reg: Y	*ENG			
005-007	Displays the ID sensor (diffusion) offset voltage for Vsg adjustments.				
005	Voffset dif: M	*ENG			
006	Voffset dif: C	*ENG	[0 to 5.5 / - / 0.01 V/step]		
007	Voffset dif: Y	*ENG			
008-010	Displays the ID sensor offset voltage for Vsg adjustments.				
008	Voffset TM (Front)	*ENG			
009	Voffset TM (Center)	*ENG	[0 to 5.5 / - / 0.01 V/step]		
010	Voffset TM (Rear)	*ENG			

3321	l	[Vsg Adjustment: Execution]			
	010	P/TM Sensor All	-	Execute the ID sensor initialization setting for all sensors	

3322	[Vsg Adjustment Result: Vsg]		
3322	Displays the result value of the Vsg adjustment for each sensor.		

	001	Vsg reg: Bk	*ENG	
	002	Vsg reg: M	*ENG	
	003 Vsg reg: C		*ENG	
	004 Vsg reg: Y		*ENG	
	005 Vsg dif: M		*ENG	10
	006 Vsg dif: C		*ENG	[0
	007	Vsg dif: Y	*ENG	
	008 Vsg TM (Front)		*ENG	
	009 Vsg TM (Center)		*ENG	
010 Vsg TM (Rear)		Vsg TM (Rear)	*ENG	

0 to 5.5 / - / 0.01 V/step]

	[Vsg Adjustment Result]				
3325	Displays the result of the Vsg adjustment. The displayed numbers mean the result of each sensor (sensor for Front, sensor for Bk, sensor for Cyan, sensor for Center, sensor for Magenta, sensor for Yellow and sensor for Rear).				
001	Latest	*ENG			
002	Result: Latest 1	*ENG			
003	Result: Latest 2	*ENG			
004	Result: Latest 3	*ENG	[111 to 999 / - / 1 /step]		
005	Result: Latest 4	*ENG	9: Unexpected error		
006	Result: Latest 5	*ENG	3: Offset voltage error 2: Vsg adjustment value error		
007	Result: Latest 6	*ENG	1: O.K		
008	Result: Latest 7	*ENG			
009	Result: Latest 8	*ENG			
010	Result: Latest 9	*ENG			

0.401	[Fixed Supply Mode]				
3401	Adjusts the toner supply rate in the fixed toner supply mode.				
001	Fixed Rate: Bk	*ENG			
002	Fixed Rate: M	*ENG	[0 to 100 / 5 / 1 %/step]		
003	Fixed Rate: C	*ENG	These SPs are used only when SP3-044 is set to "1".		
004	Fixed Rate: Y	*ENG			

3411	[Toner Supply Rate: Display]				
3411	Displays the current toner supply rate.				
001	Latest: Bk	*ENG			
002	Latest: M	*ENG	[0, 100 / /10//,]		
003	Latest: C	*ENG	[0 to 100 / - / 1 %/step]		
004	Latest: Y	*ENG			

3421	[Toner Supply Range]		
001	Upper Limit: Bk	*ENG	
002	Upper Limit: M	*ENG	Adjusts the toner supply rate during printing.
003	Upper Limit: C	*ENG	[0 to 100 / 100 / 1%/step]
004	Upper Limit: Y	*ENG	
005	Minimum Supply Time: Bk	*ENG	
006	Minimum Supply Time: M	*ENG	Adjusts the minimum toner supply time.
007	Minimum Supply Time: C	*ENG	[0 to 1000 / 0 / 1 msec/step]
008	Minimum Supply Time: Y	*ENG	

3501	[Process Control Target M/A]
3301	Adjusts the target M/A.

001	Maximum M/A: Bk	*ENG	
002	Maximum M/A: M	*ENG	[01/0.4/0.001/2/1
003	Maximum M/A: C	*ENG	[0 to 1 / 0.4 / 0.001 mg/cm ² /step]
004	Maximum M/A: Y	*ENG	

	[ImageQuality Adj. Counter:Disp]				
3510	Displays the total page counter for each adjustment mode.				
001	Potential Control: BW	*ENG			
002	Potential Control: FC	*ENG			
003	Power ON: BW	*ENG			
004	Power ON: FC	*ENG			
005	MUSIC: BW	*ENG	[0. 0000 / /]		
006	MUSIC: FC	*ENG	[0 to 2000 / - / 1 page/step]		
007	Vsg Adj.	*ENG			
800	Charge AC Control	*ENG			
009	MUSIC: Power ON: BW	*ENG			
010	MUSIC: Power ON: FC	*ENG			

3511	[Execution Interval: Setting]					
3311	Adjusts the threshold for each adjustment mode.					
001	Job End: Potential Control: BW	*ENG	[0 to 2000 / 250 / 1 page/step]			
002	Job End: Potential Control: FC	*ENG	[0 to 2000 / 100 / 1 page/step]			
003	Interrupt: Potential Control: BW	*ENG	[0 to 2000 / 500 / 1 page/step]			
004	Interrupt: Potential Control: FC	*ENG	[0 to 2000 / 200 / 1 page/step]			
005	Initial: Potential Control: BW	*ENG	[0 to 2000 / 250 / 1 page/step]			
006	Initial: Potential Control: FC	*ENG	[0 to 2000 / 100 / 1 page/step]			

007	Vsg Adj. Counter	*ENG	[0+, 2000 / 0 / 1 / + - 1
800	Charge AC Control Counter	*ENG	[0 to 2000 / 0 / 1 page/step]
019	Environmental Correction	*ENG	[0 or 1 / 1 / 1 /step] 0: Not Correct (OFF) 1: Correct (ON)
020	Gamma Correction	*ENG	[0 or 1 / 1 / 1 /step] 0: Not Correct (OFF) 1: Correct (ON)
021	Non-use Time Correction	*ENG	[0 or 1 / 1 / 1 /step] 0: Not Correct (OFF) 1: Correct (ON)
022	Correction Coef 1: JE: BW	*ENG	[0 to 1 / 0.2 / 0.01 page/step]
023	Correction Coef 2: JE: BW	*ENG	[0 to 1 / 1 / 0.01/step]
024	Correction Coef 1: JE: FC	*ENG	[0 to 1 / 0.5 / 0.01/step]
025	Correction Coef 2: JE: FC	*ENG	[0 to 1 / 1 / 0.01/step]
026	Cor Coef 1: Interrupt: BW	*ENG	[0 to 1 / 0.1 / 0.01/step]
027	Cor Coef 2: Interrupt: BW	*ENG	[0 to 1 / 1 / 0.01/step]
028	Cor Coef 1: Interrupt: FC	*ENG	[0 to 1 / 0.25 / 0.01/step]
029	Cor Coef 2: Interrupt: FC	*ENG	[0 to 1 / 1 / 0.01/step]
030	Max. Number Cor Threshold	*ENG	[0 to 99 / 5 / 1/step]
031	Max. Number Correction Counter	*ENG	[0 to 255 / - / 1/step]

3512	[Image Quality Adj.: Interval]			
3312	Adjusts the timing for execution of process control and line position adjustment.			
001	During Job	*ENG	[0 to 100 / 30 / 1 page/step]	
002	During Stand-by	*ENG	[0 to 100 / 10 / 1 minute/step]	

	[PCU Motor Stop Time: Bk]			
3513	Displays the last time that the PCDU motors stopped. These are used for process control execution timing.			
001	Year	*ENG	[0 to 99 / - / 1/step]	
002	Month	*ENG	[1 to 12 / - / 1/step]	
003	Date	*ENG	[1 to 31 / - / 1/step]	
004	Hour	*ENG	[0 to 23 / - / 1/step]	
005	Minute	*ENG	[0 to 59 / - / 1/step]	

	[Environmental Display: Job End]			
3514	Displays the environmental conditions for the last job. These are used for process control execution timing.			
001	Temperature *ENG		[-1280 to 1270 / - / 0.1°C/step]	
002	Relative Humidity	*ENG	[0 to 1000 / - / 0.1%RH/step]	
003	Absolute Humidity *ENG		[0 to 1000 / - / 0.1 g/m ³ /step]	
004	AIT Temperature	*ENG	[-1280 to 1270 / - / 0.1 deg/step]	

	[Execution Interval: Display]				
3515	Displays the current interval for process control execution. When the machine calculates the timing for process control, it uses a number of conditions. These are the results after considering all the conditions.				
001	Job End: Pot Control: BW	*ENG	[0 to 2000 / - / 1 page/step]		
002	Job End: Pot Control: FC	*ENG	[0 to 2000 / - / 1 page/step]		
003	3 Interrupt: Pot Control: BW *ENG		[0 to 2000 / - / 1 page/step]		
004	Interrupt: Pot Control: FC	*ENG	[0 to 2000 / - / 1 page/step]		

	[Blade damage prevention mode]			
3517	Adjusts the threshold temperature for preventing the cleaning blade in the transfer belt cleaning unit from being damaged. If the temperature is above this value, toner is applied to the transfer belt at set intervals during the job to prevent the blade from flipping over.			
001	Execution Temp. Threshold	*ENG	[0 to 50 / 40 / 1°C/step]	

3519	[Toner End Prohibition Setting]		
3319	Enables or disables each adjustment at toner near end.		
001	Process Control	*ENG	[0 or 1 / 1 / 1/step]
002	MUSIC	*ENG	0: Permit (adjustment is done even toner near end condition)
003	TC Adj.	*ENG	Forbid (adjustment is not done at toner near end condition)

3520	[ITB Idling Number]			
3320	Specifies the number of the ITB idling rotation for each condition.			
001	Temperature: H	*ENG		
002	Temperature: M	*ENG	[0 or 3 / 0 / 1 revolution/step]	
003	Temperature: L	*ENG		
004	Temperature: L: Power ON	*ENG		

	[Temperature Threshold]			
3521	Specifies the threshold temperature for each condition. These settings affect the conditions of SP3-520.			
	t1: Threshold between L (low temp.) and M (medium temp.)			
	t2: Threshold between M (med	ium temp.)	and H (high temps)	
001	Threshold: t2	*ENG	[20 or 30 / 25 / 1 deg/step]	
002	Threshold: t1			

	[Initial Process Control Set]		
Adjusts the threshold for the process control at power on. When the current condition has changed by more than the values of these S compared with the conditions at the previous operation, the process control executed.		more than the values of these SPs when	
002	Non-use Time Setting	*ENG	[0 to 1440 / 360 / 1 minute/step]
003	Temperature Range	*ENG	[0 to 99 / 10 / 1°C/step]
004	Relative Humidity Range	*ENG	[0 to 99 / 50 / 1 %RH/step]
005	Absolute Humidity Range	*ENG	[0 to 99 / 6 / 1 g/m ³ /step]
006	AIT Temperature Range	*ENG	[0 to 99 / 25 / 1°C/step]
007	Vtref Temperature Range	*ENG	[0 to 99 / 20 / 1°C/step]
	[Rapi_timer]		
100	Time Setting	*ENG	[0 to 255 / 30 / 1 sec/step]
	Adjusts the time-out time for the Rapi timer.		

	[Non-use Time Process Control 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 we compared with the conditions at the previous operation, the process control at stand-by.			more than the values of these SPs when
001	Non-use Time Setting	*ENG	[0 to 1440 / 360 / 1 minute/step]
002	Temperature Range	*ENG	[0 to 99 / 10 / 1°C/step]
003	Relative Humidity Range	*ENG	[0 to 99 / 50 / 1 %RH/step]
004	Absolute Humidity Range	*ENG	[0 to 99 / 6 / 1 g/m ³ /step]
005	Maximum Execution Number	*ENG	Adjusts the maximum execution time for the process control at stand-by. [0 to 99 / 10 / 1 time/step]

3611	[Development Gamma: Display/Set]
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001	Bk (Current)	*ENG	
002	M (Current)	*ENG	Displays the current development gamma for each color.
003	C (Current)	*ENG	[0 to 5 / - / 0.01 mg/cm ² /kV /step]
004	Y (Current)	*ENG	
005	Bk (Target Display)	*ENG	
006	M (Target Display)	*ENG	Displays the target development gamma for each color.
007	C (Target Display)	*ENG	[0 to 5 / - / 0.01 mg/cm ² /kV /step]
800	Y (Target Display)	*ENG	
009	Bk (Standard Target Set)	*ENG	
010	M (Standard Target Set)	*ENG	Displays the standard target development gamma for each color.
011	C (Standard Target Set)	*ENG	[0 to 5 / 0.8 / 0.01 mg/cm ² /kV /step]
012	Y (Standard Target Set)	*ENG	
013	Environmental Correction	*ENG	Turns on or off the environmental correction for target development gamma. [0 or 1 / 1 / -] 0: Not Correct, 1: Correct
014	K (Max Correction)	*ENG	Adjusts the maximum correction value for
015	M (Max Correction)	*ENG	each color. These SPs are effective only
016	C (Max Correction)	*ENG	when the setting of SP3-611-013 is set to "1".
017	Y (Max Correction)	*ENG	[0 to 5 / 0.15 / 0.01 mg/cm ² /kv/ step]
018	K (Max Abs Hum)	*ENG	Adjusts the maximum humidity correction
019	M (Max Abs Hum)	*ENG	value for each color. These SPs are effective only when the setting of SP3-611-013 is set
020	C (Max Abs Hum)	*ENG	to "1".
021	Y (Max Abs Hum)	*ENG	[1 to 99 / 20 / 1 g/m ³ /step]
022	K (Min Correction)	*ENG	[0 to 0.1 / 0 / 0.01 mg/cm ² /kv/ step]

2410	[Vk Display]			
3612	Displays Vk for each color.			
001	Bk	*ENG		
002	М	*ENG	[200+200//11//+]	
003	С	*ENG	[-300 to 300 / - / 1 V/step]	
004	Υ	*ENG		

3621	[Development DC Control: Disp] Plain: High speed, Thick 1: Middle speed, Thick 2 & FINE: Low speed		
3021	Displays the development DC and color.	bias adjusted	l with the process control for each line speed
001	Plain: Bk	*ENG	
002	Plain: M	*ENG	[0 900 / /1 //]
003	Plain: C	*ENG	[0 to 800 / - / 1 -V/step]
004	Plain: Y	*ENG	
005	Thick 1: Bk	*ENG	
006	Thick 1: M	*ENG	[0000 / /1 //]
007	Thick 1: C	*ENG	[0 to 800 / - / 1 -V/step]
008	Thick 1: Y	*ENG	
009	Thick 2 & FINE: Bk	*ENG	
010	Thick 2 & FINE: M	*ENG	[0000 / /1 //]
011	Thick 2 & FINE: C	*ENG	[0 to 800 / - / 1 -V/step]
012	Thick 2 & FINE: Y	*ENG	

	[Charge DC Control: Display] Plain: High speed, Thick 1: Middle speed, Thick 2 & FINE: Low speed	
3631	Displays the charge DC voltage adjusted with the process control for each line speed and color.	

001	Plain: Bk	*ENG	
002	Plain: M	*ENG	[0.4-2000 / /1 ///1
003	Plain: C	*ENG	[0 to 2000 / - / 1 -V/step]
004	Plain: Y	*ENG	
005	Thick 1 & FINE: Bk	*ENG	
006	Thick 1 & FINE: M	*ENG	[0 to 2000 / - / 1 -V/step]
007	Thick 1 & FINE: C	*ENG	[0 10 2000 / • / 1 - v / siep]
800	Thick 1 & FINE: Y	*ENG	
009	Thick 2 & FINE: Bk	*ENG	
010	Thick 2 & FINE: M	*ENG	[0 to 2000 / - / 1 -V/step]
011	Thick 2 & FINE: C	*ENG	[[
012	Thick 2 & FINE: Y	*ENG	

3641	[Charge AC Control: Display] Plain: High speed Displays the charge AC voltage adjusted with the process control for each color.		
001	Plain: Bk	*ENG	
002	Plain: M	*ENG	[0. 0./ /0.01]///.]
003	Plain: C	*ENG	[0 to 3 / - / 0.01 kV/step]
004	Plain: Y	*ENG	

	[LD Power Control: Display]	
3651 Plain: High speed, Thick 1: Middle speed, Thick 2 & FINE: Low		Plain: High speed, Thick 1: Middle speed, Thick 2 & FINE: Low speed
		Displays the LD power adjusted for each environment.

001	Plain: Bk	*ENG	
002	Plain: M	*ENG	[0.1-200 / /1.9//]
003	Plain: C	*ENG	[0 to 200 / - / 1 %/step]
004	Plain: Y	*ENG	
005	Thick 1: Bk	*ENG	
006	Thick 1: M	*ENG	[0.1-200 / /1.9//]
007	Thick 1: C	*ENG	[0 to 200 / - / 1 %/step]
008	Thick 1: Y	*ENG	
009	Thick 2 & FINE: Bk	*ENG	
010	Thick 2 & FINE: M	*ENG	[0 200 / / 1.9 /]
011	Thick 2 & FINE: C	*ENG	[0 to 200 / - / 1 %/step]
012	Thick 2 & FINE: Y	*ENG	

	3 <i>7</i> 10	[HST Concentration Control: Set] TD Sensor: Toner Concentration Control Setting				
		Selects the toner concentration control method by HST memory, which is in the TD sensor.				
	001	Control Method: Selection	*ENG	[0 or 1 / 1 / -] 0: Not Use, 1: Use		

3711	[HST Concentration Control: Bk]		
	Displays the factory settings of the black PCDU.		
001	Vcnt	*ENG	[0 to 5 / - / 0.1 V/step]
002	Vt	*ENG	[0 to 5 / - / 0.1 V/step]
003	Sensitivity: HL	*ENG	[1.22 to 3.77 / - / 0.01 V/step]
004	Sensitivity: HM	*ENG	[0+-0-55 / /0-01 V/+]
005	Sensitivity: ML	*ENG	[0 to 2.55 / - / 0.01 V/step]
006	Set Detection	*ENG	[0 to 5 / - / 0.1 V/step]
007	Without Developer	*ENG	[0 to 5 / - / 0.1 V/step]

008	With Developer	*ENG	[0 to 5 / - / 0.1 V/step]
009	Serial Number 1	*ENG	[0.5.055 / /1.1//]
010	Serial Number 2	*ENG	[0 to 255 / - / 1 V/step]
011	Adjustment: Vt	*ENG	[0 to 5 / - / 0.1 V/step]
012	Adjustment: Vtref	*ENG	[0 to 5 / - / 0.1 V/step]
013	Adjustment: Vtcnt	*ENG	[0 to 5 / - / 0.01 V/step]
014	Adjustment: Gamma	*ENG	[0 to 2.55 / - / 0.01 mg/cm ² /kV /step]
015	Adjustment: Vcnt Result	*ENG	[0 to 9 / - / 1 /step]

3712	[HST Concentration Control: M]		
3/12	Displays the factory settings of the magenta PCDU.		
001	Vcnt	*ENG	[0 to 5 / - / 0.1 V/step]
002	Vt	*ENG	[0 to 5 / - / 0.1 V/step]
003	Sensitivity: HL	*ENG	[1.22 to 3.77 / - / 0.01 V/step]
004	Sensitivity: HM	*ENG	[0 2.55 / /0.01 \//]
005	Sensitivity: ML	*ENG	[0 to 2.55 / - / 0.01 V/step]
006	Set Detection	*ENG	[0 to 5 / - / 0.1 V/step]
007	Without Developer	*ENG	[0 to 5 / - / 0.1 V/step]
800	With Developer	*ENG	[0 to 5 / - / 0.1 V/step]
009	Serial Number 1	*ENG	[0.4- 255 / /1 \//.tom]
010	Serial Number 2	*ENG	[0 to 255 / - / 1 V/step]
011	Adjustment: Vt	*ENG	[0 to 5 / - / 0.1 V/step]
012	Adjustment: Vtref	*ENG	[0 to 5 / - / 0.1 V/step]
013	Adjustment: Vtcnt	*ENG	[0 to 5 / - / 0.01 V/step]
014	Adjustment: Gamma	*ENG	[0 to 2.55 / - / 0.01 mg/cm ² /kV /step]
015	Adjustment: Vcnt Result	*ENG	[0 to 9 / - / 1 /step]

[HST Concentration Control: C]				
3713	Displays the factory settings of the cyan PCDU.			
001	Vcnt	*ENG	[0 to 5 / - / 0.1 V/step]	
002	Vt	*ENG	[0 to 5 / - / 0.1 V/step]	
003	Sensitivity: HL	*ENG	[1.22 to 3.77 / - / 0.01 V/step]	
004	Sensitivity: HM	*ENG	[0.4-2.55 / /0.01 \//.41	
005	Sensitivity: ML	*ENG	[0 to 2.55 / - / 0.01 V/step]	
006	Set Detection	*ENG	[0 to 5 / - / 0.1 V/step]	
007	Without Developer	*ENG	[0 to 5 / - / 0.1 V/step]	
800	With Developer	*ENG	[0 to 5 / - / 0.1 V/step]	
009	Serial Number 1	*ENG	[0.4-255 / /1 \//.4]	
010	Serial Number 2	*ENG	[0 to 255 / - / 1 V/step]	
011	Adjustment: Vt	*ENG	[0 to 5 / - / 0.1 V/step]	
012	Adjustment: Vtref	*ENG	[0 to 5 / - / 0.1 V/step]	
013	Adjustment: Vtcnt	*ENG	[0 to 5 / - / 0.01 V/step]	
014	Adjustment: Gamma	*ENG	[0 to 2.55 / - / 0.01 mg/cm ² /kV /step]	
015	Adjustment: Vcnt Result	*ENG	[0 to 9 / - / 1 /step]	

3714	[HST Concentration Control: Y]		
3714	Displays the factory settings of the yellow PCDU.		
001	Vcnt	*ENG	[0 to 5 / - / 0.1 V/step]
002	Vt	*ENG	[0 to 5 / - / 0.1 V/step]
003	Sensitivity: HL	*ENG	[1.22 to 3.77 / - / 0.01 V/step]
004	Sensitivity: HM	*ENG	[0+-255 / /001 \//+]
005	Sensitivity: ML	*ENG	[0 to 2.55 / - / 0.01 V/step]
006	Set Detection	*ENG	[0 to 5 / - / 0.1 V/step]

007	Without Developer	*ENG	[0 to 5 / - / 0.1 V/step]
008	With Developer	*ENG	[0 to 5 / - / 0.1 V/step]
009	Serial Number 1	*ENG	[0 255 / /1.V/]
010	Serial Number 2	*ENG	[0 to 255 / - / 1 V/step]
011	Adjustment: Vt	*ENG	[0 to 5 / - / 0.1 V/step]
012	Adjustment: Vtref	*ENG	[0 to 5 / - / 0.1 V/step]
013	Adjustment: Vtcnt	*ENG	[0 to 5 / - / 0.01 V/step]
014	Adjustment: Gamma	*ENG	[0 to 2.55 / - / 0.01 mg/cm ² /kV /step]
015	Adjustment: Vcnt Result	*ENG	[0 to 9 / - / 1 /step]

	[Waste Toner Full Detection]			
3800	Displays/ adjusts the toner collection bottle detection settings. These SPs are used for NRS.			
001	Condition	*CTL	[0 to 4 / 0 / 1 /step]	
002	Detection Times	*CTL	[0 to 50 / 0 / 1 /step]	
003	Print Page After Near Full	*CTL	[0 to 1000 / 0 / 1 sheet/step]	
004	Pixel Count After Near Full	*CTL	[0 to 200000 / 0 / 1 cm ² /step]	
005	Pixel Count After Replacement	*CTL	Displays the pixel counter after replacement of toner collection bottle. [0 to 200000 / 0 / 1 cm²/step]	
008	Coefficient	*ENG	[0.1 to 1.5 / 1 / 0.1 /step]	
011	Notice Setting	*ENG	Enables or disables the calling for @Remote. [O or 1 / 1 / -] O: Enable @Remote calling 1: Disable @Remote calling	
		•	ced before the machine detects used toner achine cannot detect toner collection bottle	

near full. In that case, set SP3-902-017 to "1".

	Day Threshold: Toner Collection bottle:NF	*ENG	[1 to 30 / 5 / 1 day/step]		
012	Sets the threshold days for the near-full display. The near-full of the toner collection bottle is displayed after the toner collection full sensor has detected the actuator in the toner collection bottle.				
013	Total:Toner Collection Bottle	*ENG	Displays the total amount of the used toner. [0 to 999999999 / 0 / 1]		
014	Mechanism Full Detection Date	*ENG	Displays the date of the full detection for he toner collection bottle.		

3900	[Waste Toner New Detection]			
3900	Turns toner collection bottle full detection on or off.			
001	ON/OFF Setting	*ENG	[0 or 1 / 1 / -] 0: OFF, 1: ON	

3901	[New PCU Detection]				
3901	Turns new PCDU detection on or off.				
001	ON/OFF Setting	*ENG	[0 or 1 / 1 / -] 0: OFF, 1: ON		

	[Manual New Unit Set]			
3902	Turns the new unit detection flather the use of these counters is exp 3 (Replacement and Adjustment	olained in t	PM unit on or off. he PM section and in the relevant parts of section	
001	Development Unit: Bk	*ENG		
002	002 Development Unit: Y		[0 or 1 / 0 / -]	
003	003 Development Unit: C *ENG 0: OFF, 1: ON			
004	Development Unit: M	*ENG		

005	Developer: Bk	*ENG	
006	Developer: Y	*ENG	[0 or 1 / 0 / -]
007	Developer: C	*ENG	0: OFF, 1: ON
800	Developer: M	*ENG	
009	PCU: Bk	*ENG	
010	PCU: Y	*ENG	[0 or 1 / 0 / -]
011	PCU: C	*ENG	0: OFF, 1: ON
012	PCU: M	*ENG	
013	Image Transfer Unit	*ENG	[0 or 1 / 0 / -]
014	Fusing Unit	*ENG	0: OFF, 1: ON
015	Cleaning Unit	*ENG	Do not use 3902-013 if you only change the cleaning unit.
016	Paper Transfer Unit	*ENG	3902-015: This is for the image transfer belt
017	Toner Collection Bottle	*ENG	cleaning unit.
018	Fusing Roller	*ENG	[0 or 1 / 0 / -]
019	Pressure Roller	*ENG	0: OFF, 1: ON "Fusing Roller" is designated as "Heating Roller" in this manual.
020	Pump Unit: Bk	*ENG	
021	Pump Unit: M	*ENG	[0 or 1 / 0 / -]
022	Pump Unit: C	*ENG	0: OFF, 1: ON
023	Pump Unit: Y	*ENG	

Main SP Tables-4

SP4-XXX (Scanner)

4008	[Sub Scan Mag.Adjustment]		
4006	Adjusts the sub-scan magnification by changing the scanner motor speed.		
001	-	*ENG	[-1.0 to 1.0 / 0 / 0.1%/step] FA

	[L-Edge Regist Adjustment]			
Adjusts the leading edge registration by changing the scanning start timing in t direction.				
001	-	*ENG	[-2.0 to 2.0 / 0 / 0.1 mm/step] FA	

		[S-to-S Regist Adjustment]			
Adjusts the side-to-side registration by changing the scanning start timing in direction.				anging the scanning start timing in the main scan	
	001	-	*ENG	[-2.5 to 2.5 / 0 / 0.1 mm/step] FA	

	[Scanner Erase Margin: Scale]				
4012	Sets the blank margin at each s	ch side for erasing the original shadow caused by the gap e scale.			
001	Book: Leading Edge				
002	Book: Trailing Edge	*ENG	[0 +- 2 0 / 0 / 0 1 /-+] EA		
003	Book: Left	EING	[0 to 3.0 / 0 / 0.1 mm/step] FA		
004	Book: Right				
005	ADF: Leading Edge				
007	ADF: Right	*ENG	[0 to 3.0 / 0 / 0.1 mm/step] FA		
800	ADF: Left				

	[Scanner Free Run]			
4013	Performs the scanner free run v Full color mode / Full Size / A	er free run with the exposure lamp on or off in the following mode.		
001	Lamp: OFF	*ENG	[0 or 1 / 0 / -]	
002	Lamp: ON	LING	0: OFF, 1: ON	

4014	[Scan]		
4014	Execute the scanner free fun w	rith each mode.	
001	HP Detection Enable	-	Scanner free run with HP sensor check.
002	HP Detection Disable	-	Scanner free run without HP sensor check.

4020	[Dust Check]		
001	Dust Detect:On/Off	*ENG	Turns the ADF scan glass dust check on/off. [0 or 1 / 0 / 1 /step] 0: OFF, 1: ON
002	Dust Detect:Lvl	*ENG	Selects the detect level. [0 to 8 / 4 / 1 /step] 0: lowest detection level 8: highest detection level
003	Dust Reject:Lvl	*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
011	Dust Detect:On/Off:Rear	*ENG	Not used
012	Dust Detect:Lvl:Rear	*ENG	Not used

	[APS Operation Check]			
4301	Displays a code that represents the original size detected by the original sensors. See "Input Check Table" (**p.367*).			
001	APS Operation Check	-	-	

4303	[APS Min. Size]		
4303	Specifies the result of the det	ection when the outputs from the original sensors are all OFF.	
001	-	*ENG	[0 to 2 / 0 / 1 /step] 0: No Original 1: A5-Lengthwise (16K SEF if 4305 is set to 3)

420 <i>E</i>	[8K/16K Detection]		
4305	This program enables the machine to automatically recognize the 8K/16K size.		utomatically recognize the 8K/16K size.
			[0 to 3 / 0 / 1 /step]
001 -	_	0: Normal Detection (the machine detects A4/LT size as A4 or LT, depending on the paper size *ENG setting)	
			O: Normal Detection (the machine detects A4/LT size as A4 or LT, depending on the paper size
			2: LT-Sideways A4-Lengthwise
			3: 8K 16K

4308	[Scan Size Detection]		
001	Detection ON/OFF	*ENG	[0 or 1 / 1 / -] 0: OFF 1: ON
	Turns on or off the CCD origi	original size detection. This detection is used only when an ok scanning mode.	

4309	[Scan Size Detect:Setting]
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	Original Density Thresh	*ENG	[0 to 255 / 32 / 1 digit/step]		
001	Specifies the threshold between an original area and non-original area for the scan original size detection in book scanning mode.				
002	Detection Time	*ENG	[20 to 100 / 60 / 20 msec/step]		
002	Specifies the detection time for the scan original size detection in book scanning mode.				
003	Lamp ON:Delay Time	*ENG	[0 to 200 / 40 / 20 msec/step]		
Specifies the lamp on timing for the scan original size detection in book scann		n original size detection in book scanning mode.			
004	LED PWM Duty	*ENG	[0 to 100 / 60 / 1/step]		
004	Sets the LED lamp intensity.				

	[Scan Size Detect Value] Displays the detected value by CCD. Each detection point for paper size and color is displayed on the LCD.		
4310			
001	S1:R	*ENG	
002	\$1:G	*ENG	
003	S1:B	*ENG	
004	S2:R	*ENG	
005	\$2:G	*ENG	[0 to 255 / - / 1 digit/step]
006	S2:B	*ENG	
007	S3:R	*ENG	
008	\$3:G	*ENG	
009	S3:B	*ENG	

	[Scanner Erase Margin]	*ENG	
Set the Mask for Original. These SPs set the area to be masked during platen (book) mode scanning.			
		aten (book) mode scanning.	

001	Book: Leading Edge	
002	Book: Trailing Edge	
003	Book: Left	
004	Book: Right	[0 to 3.0 / 0 / 0.1 mm/step]
005	ADF: Leading Edge	
007	ADF: Right	
800	ADF: Left	

4417	[IPU Test Pattern]		
4417	Selects the IPU test pattern.		
001	Test Pattern Selection	[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 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	Сору		
002	Scanner	*ENG	[0 to 3 / 3 / 1 /step]
003	Fax		

4450	[Scan Image Path Selection]		
001	Black Subtraction ON/OFF	ON/OFF [0 or 1 / 1 / -] 0: OFF, 1: ON	
001	Uses or does not use the black reduction image path.		
000	SH ON/OFF	[0 or 1 / 0 / 1 /step] 0: ON, 1: OFF	
002	Uses or does not use the shading image path.		

4501	[ACC Target Den]		
4301	Selects the ACC result.		
001	Copy: K: Text	*ENG	
002	Copy: C: Text	*ENG	
003	Copy: M: Text	*ENG	
004	Copy: Y: Text	*ENG	[0 to 10 / 5 / 1 /step]
005	Copy: K: Photo	*ENG	10: Darkest density
006	Copy: C: Photo	*ENG	
007	Copy: M: Photo	*ENG	
008	Copy: Y: Photo	*ENG	

4505	[ACC Cor:Bright]		
4303	Adjusts the offset correction for light areas of the ACC pattern.		eas of the ACC pattern.
001	Text:K	*ENG	
002	Text:C	*ENG	[120 + 127 / 0 / 1 / ++]
003	Text:M	*ENG	[-128 to 127 / 0 / 1 /step]
004	Text:Y	*ENG	
005	Photo:K	*ENG	
006	Photo:C	*ENG	[-128 to 127 / 0 / 1 /step]
007	Photo:M	*ENG	[-1201012/ 0 /1/sleb]
008	Photo:Y	*ENG	

4504	[ACC Cor:Dark]		
4506	Adjusts the offset correction for dark areas of the ACC pattern.		s of the ACC pattern.
001	Text:K	*ENG	
002	Text:C	*ENG	[120 - 127 / 0 / 1 /]
003	Text:M	*ENG	[-128 to 127 / 0 / 1 /step]
004	Text:Y	*ENG	
005	Photo:K	*ENG	
006	Photo:C	*ENG	[-128 to 127 / 0 / 1 /step]
007	Photo:M	*ENG	[-12010127 / 0 / 1 / siep]
800	Photo:Y	*ENG	

	[Print Coverage]				
4540	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.				
001-004	RY Phase: Option/R/G/B				
005-008	YR Phase: Option/R/G/B				
009-012	YG Phase: Option/R/G/B				
013-016	GY Phase: Option/R/G/B	*ENG			
017-020	GC Phase: Option/R/G/B				
021-024	CG Phase: Option/R/G/B		Specifies the printer vector correction value. [0 to 255 / 0 / 1 /step]		
025-028	CB Phase: Option/R/G/B				
029-032	BC Phase: Option/R/G/B				
033-036	BM Phase: Option/R/G/B				
037-040	MB Phase: Option/R/G/B				
041-044	MR Phase: Option/R/G/B				
045-048	RM Phase: Option/R/G/B				

4600	[SBU Version Display]		
001	SBU ID	*ENG	Displays the ID of the SBU.
002	GASBU-N ID	*ENG	Displays the ID of the GASBU.
003	VSP5100 ID	*ENG	Displays t he ID of the VSP5100.
4602	[Scanner Memory Access]		
001	Scanner Memory Access	-	Enables the read and write check for the SBU registers.
4603	[AGC Execution]		
001	HP Detection Enable	-	Executes the AGC.
002	HP Detection Disable	-	DFU
4609	[Gray Balance Set: R]		
001	Book Scan	*ENG	[-512 to 511 / -46 / 1 digit/step]
002	DF Scan	*ENG	[-512 to 511 / -46 / 1 digit/step]
4610	[Gray Balance Set: G]		
001	Book Scan	*5.10	[00 / 1 05 / 00 / 1 lb b / 1]
002	DF Scan	*ENG	[-384 to 255 / -20 / 1 digit/step]
4611	[Gray Balance Set: B]		
001	Book Scan	*ENIO	[204], 255 / 20 / 1 27 1
001		- *ENG	[-384 to 255 / -28 / 1 digit/step]

4623	[Black Level Adj. Display] RE: Red Even signal, RO: Red Odd signal		
00	Latest: RE Color	*ENG	Displays the black offset value for the even red signal in the CCD circuit board. [0 to 16383 / 0 / 1 digit/step]

002	Latest: RO Color	*ENG	Displays the black offset value for the odd red signal in the CCD circuit board. [0 to 16383 / 0 / 1 digit/step]
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4624	[Black Level Adj. Display] GE: Green Even signal, GO: Green Odd signal		
001	Latest: GE Color	*ENG	Displays the black offset value for the even green signal in the CCD circuit board. [0 to 16383 / 0 / 1 digit/step]
002	Latest: GO Color	*ENG	Displays the black offset value for the odd green signal in the CCD circuit board. [0 to 16383 / 0 / 1 digit/step]

4625		[Black Level Adj. Display] BE: Blue Even signal, BO: Blue Odd signal		
0	001	Latest: BE Color	*ENG	Displays the black offset value for the even blue signal in the CCD circuit board. [0 to 16383 / 0 / 1 digit/step]
0	002	Latest: BO Color	*ENG	Displays the black offset value for the odd blue signal in the CCD circuit board. [0 to 16383 / 0 / 1 digit/step]

	4628	[Analog Gain Adjust]	Analog Gain Adjust]				
	4028	Displays the gain value of the amplifiers on the controller for Red.					
001 Latest: R Color *ENG [0 to 7 / 0		*ENG	[0 to 7 / 0 / 1 digit/step]				

	4629	[Analog Gain Adjust]	[Analog Gain Adjust]				
		Displays the gain value of the amplifiers on the controller for Green.					
001 Latest: G Color *ENG [0 to 7		*ENG	[0 to 7 / 0 / 1 digit/step]				

4630	Analog Gain Adjust]					
4030	Displays the gain valu	Displays the gain value of the amplifiers on the controller for Blue.				
001	1 Latest: B Color *ENG		[0 to 7 / 0 / 1 digit/step]			

4631	[Digital Gain Adjust]				
4031	Displays the gain value of the amplifiers on the controller for Red.				
001	Latest: RE Color	*ENG	[0 - 1002 / 0 / 1 dimit/]		
002	Latest: RO Color	*ENG	[0 to 1023 / 0 / 1 digit/step]		

1632	[Digital Gain Adjust]				
4032	Displays the gain value of the amplifiers on the controller for Green.				
001	Latest: GE Color	*ENG	[0., 1002 / 0 / 1 /: :: /]		
002	Latest: GO Color	*ENG	[0 to 1023 / 0 / 1 digit/step]		

	4633	[Digital Gain Adjust]				
1		Displays the gain value	of the ampl	ifiers on the controller for Blue.		
	001	Latest: BE Color	*ENG	[0 to 1002 / 0 / 1 district		
	002	Latest: BO Color	*ENG	[0 to 1023 / 0 / 1 digit/step]		

4645	[Scan Adjust Error]		
001	White level	*ENG	[0.1-45525 / /1.4:-:4/.4]
002	Black level	*ENG	[0 to 65535 / - / 1 digit/step]

4647	[Scanner Hard Error]				
4047	Displays the result of the SBU connection check.				
001	Power-ON	*ENG	[0 to 35535 / - / 1 digit /step] 0: OK, Other: SBU connection check failure If the SBU connection check fails, SC144 occurs.		

[Black Level Adj. Display] RE: Red Even signal, RO: Red Odd signal			al
00	Last Correct Value: RE Color	*ENG	Displays the black offset value for the even red signal in the CCD circuit board. [0 to 16383 / 0 / 1 digit/step]
00	Last Correct Value: RO Color	*ENG	Displays the black offset value for the odd red signal in the CCD circuit board. [0 to 16383 / 0 / 1 digit/step]

4655	[Black Level Adj. Display] GE: Green Even signal, GO: Green Odd signal		
001	Last Correct Value: GE Color	*ENG	Displays the black offset value for the even green signal in the CCD circuit board. [0 to 16383 / 0 / 1 digit/step]
002	Last Correct Value: GO Color	*ENG	Displays the black offset value for the odd green signal in the CCD circuit board. [0 to 16383 / 0 / 1 digit/step]

4656	[Black Level Adj. Display] BE: Blue Even signal, BO: Blue Odd signal		
00	Last Correct Value: BE Color	*ENG	Displays the black offset value for the even blue signal in the CCD circuit board. [0 to 16383 / 0 / 1 digit/step]
00	Last Correct Value: BO Color	*ENG	Displays the black offset value for the odd blue signal in the CCD circuit board. [0 to 16383 / 0 / 1 digit/step]

4658	[Analog Gain Adjust]			
	Displays the previous gain value of the amplifiers on the controller for Red.			
001	Last Correct Value: R Color	*ENG	[0 to 7 / 0 / 1 digit/step]	

4659	[Analog Gain Adjust]			
	Displays the previous gain value of the amplifiers on the controller for Green.			
001	Last Correct Value: G Color	*ENG	[0 to 7 / 0 / 1 digit/step]	

4660	[Analog Gain Adjust]			
4000	Displays the previous gain value of the amplifiers on the controller for Blue.			
001	Last Correct Value: B Color	*ENG	[0 to 7 / 0 / 1 digit/step]	

4661	[Digital Gain Adjust] RE: Red Even signal, RO: Red Odd signal			
001	Last Correct Value: RE Color	*ENG	[0 1002 / 0 / 1 / hat/]	
002	Last Correct Value: RO Color	*ENG	[0 to 1023 / 0 / 1 digit/step]	

4662	[Digital Gain Adjust] GE: Green Even signal, GO: Green Odd signal			
001	Last Correct Value: GE Color	*ENG	[01022 / 0 / 1 !::!/]	
002	Last Correct Value: GO Color	*ENG	[0 to 1023 / 0 / 1 digit/step]	

4663	[Digital Gain Adjust] BE: Blue Even signal, BO: Blue Odd signal			
001	Last Correct Value: BE Color	*ENG	[0.4-1022 / 0 / 1 dinit/stand	
002	Last Correct Value: BO Color	*ENG	[0 to 1023 / 0 / 1 digit/step]	

4673	[Black Level Adj. Display] RE: Red Even signal, RO: Red Odd signal			
001	Factory Setting: RE Color	*ENG	Displays the factory setting values of the black level adjustment for the even red signal in the CCD circuit board. [0 to 16383 / - / 1 digit/step]	
002	Factory Setting: RO Color	*ENG	Displays the factory setting values of the black level adjustment for the odd red signal in the CCD circuit board. [O to 16383 / - / 1 digit/step]	

4674	[Black Level Adj. Display] GE: Green Even signal, GO: Green Odd signal			
001	Factory Setting: GE Color	*ENG	Displays the factory setting values of the black level adjustment for the even green signal in the CCD circuit board. [0 to 16383 / - / 1 digit/step]	
002	Factory Setting: GO Color	*ENG	Displays the factory setting values of the black level adjustment for the odd green signal in the CCD circuit board. [0 to 16383 / - / 1 digit/step]	

4675	[Black Level Adj. Display] BE: Blue Even signal, BO: Blue Odd signal			
001	Factory Setting: BE Color	*ENG	Displays the factory setting values of the black level adjustment for the even blue signal in the CCD circuit board. [0 to 16383 / - / 1 digit/step]	
002	Factory Setting: BO Color	*ENG	Displays the factory setting values of the black level adjustment for the odd blue signal in the CCD circuit board. [0 to 16383 / - / 1 digit/step]	

4677	[Analog Gain Adjust]				
40//	Displays the factory setting values of the gain adjustment for Red.				
001	Factory Setting: R Color	*ENG	[0 to 7 / - / 1 digit/step]		

1670	4678	[Analog Gain Adjust]			
4076		Displays the factory setting values of the gain adjustment for Green.			
00	01	Factory Setting: G Color	*ENG	[0 to 7 / - / 1 digit/step]	

	[Analog Gain Adjust]	
4679	Displays the factory setting values of the gain adjustment for Blue.	

001	Factory Setting: B Color	*ENG	[0 to 7 / - / 1 digit/step]

	4690	[Digital Gain Adjust]					
Displays the gain value of the amplifiers on the controller for Red.				e controller for Red.			
	001	Factory Setting: RE Color	*ENG	[01002 / /1			
	002	Factory Setting: RO Color	*ENG	[0 to 1023 / - / 1 digit/step]			

4681	[Digital Gain Adjust]				
4001	Displays the gain value of the ampl	ifiers on the	e controller for Green.		
001	Factory Setting: GE Color	*ENG	[01002 / /1		
002	Factory Setting: GO Color	*ENG	[0 to 1023 / - / 1 digit/step]		

4682	[Digital Gain Adjust]				
Displays the gain value of the amplifiers on the controller for Blue.					
001	Factory Setting: BE Color	*ENG	[0.4-1002 / /1 digit/stan]		
002	Factory Setting: BO Color	*ENG	[0 to 1023 / - / 1 digit/step]		

	[Scan Image Density Adjustm	nent]		
4688	Adjusts the white shading parameter when scanning an image with the ARDF or 1-pass DF.			
	Adjusts the density level if the ID of outputs made in the DF and Platen mode is different.			
001	001 ARDF *ENG [80 to 120 / 98 / 1% / step]		[80 to 120 / 98 / 1%/ step]	
002	1-pass DF	*ENG	[80 to 120 / 98 / 1%/ step]	

	[White Level Peak Read]		
4690	Displays the peak level of the white level scanning. If these scanned white levels are out of the correct range, SC142 may be issued.		
001	RE	*ENG	[0+-1002 / /1 dimit/]
002	RO	*ENG	[0 to 1023 / - / 1 digit/step]

	[White Level Peak Read]		
4691	Displays the peak level of the white level scanning. If these scanned white levels are out of the correct range, SC142 may be issued.		
001	001 GE *ENG		[0 to 1022 / / 1 digit/stan]
002	GO	*ENG	[0 to 1023 / - / 1 digit/step]

	[White Level Peak Read]			
4692	Displays the peak level of the		el scanning. the correct range, SC142 may be issued.	
001	BE	*ENG	[0 to 1023 / - / 1 digit/step]	
002	ВО	*ENG	[0 to 1023 / - / 1 digit/ siep]	

	[Black Level Peak Read]		
4693	Displays the level of the black level scanning. If these scanned black levels are out of the correct range, SC141 may be issued.		
001	RE	*ENG	[0 1002 / /1.d::::/]
002	RO	*ENG	[0 to 1023 / - / 1 digit/step]

	[Black Level Peak Read]				
4694	Displays the level of the black level scanning.				
	If these scanned black levels are out of the correct range, SC141 may be issued.				
001	GE	*ENG			
002	GO	*ENG	[0 to 1023 / - / 1 digit/step]		

		[Black Level Peak Read]				
	4695	Displays the level of the black level scanning.				
		If these scanned black levels are out of the correct range, SC141 may be issued.				
	001	BE	*ENG	[0 + 1002 / /1 dimit/]		
	002	ВО	*ENG	[0 to 1023 / - / 1 digit/step]		

4796	[Low Density Color Correction]			
001	Front Side Turns on or off the low color de	the de *ENG [0 or 1 / 0 / -] O: Off, 1: On Or off the low color density correction for the front side of originals.		
002	Rear Side *ENG ([0 or 1 / 0 / -] 0: Off, 1: On ction for the back side of originals.	

4802	[DF Shading FreeRun]		
001	Lamp OFF		Executes the scanner free run of shading
002	Lamp ON	*ENG	movement with exposure lamp on or off. Press "OFF" to stop this free run. Otherwise, the free run lasts.

4804	[Home Position]		
001	-	*ENG	Executes the scanner HP detection.

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.

4807	[SBU Test Pattern Change]				
			[0 to 255 / 0 / 1 /step]		
			0: Scanning image		
			1: Fixed pattern		
001	-	*ENG	2: Main scanning gradation		
			3: Sub scanning gradation		
			4: Grid pattern		
			(5 to 255 : Scanning images)		

4808	[Factory Setting Input]		
002	Execution Flag	*ENG	[0 or 1 / 0 / 1 /step]

	[Disp ACC Data]				
4902	This SP outputs the final data read at the end of ACC execution.				
-17.52	A zero is returned if there was an error reading the data. [0 to 255 / - / 1 /step]				
001	R DATA 1	*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)		

	[Man Gamma:Pht:Y]			
4918	Adjusts the offset data of the printer gamma for yellow in Photo mode. See "Printer Gamma Correction" in the "Main chapters: 4. Replacement and Adjustment: Image Adjustment" for how to use.			
009	-	*ENG	Enter the manual gamma adjustment screen (-001 to 008).	

4954	[Read/Restore Std]		
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.
003	Read Std Chart	*ENG	Execute the scanning of the A4 standard chart.
004	Set Std Chart	*ENG	Overwrite the standard data.
005	Chromaticity Rank	*ENG	Restores the standard chromaticity rank.

	[IPU Image Pass Selection]				
4991	Selects the image path.				
	Enter the number to be selected using the 10-key pad.				
	RGB Frame Memory	*ENG	[0 to 11 / 2 / 1 /step]		
	0: Scanner input RGB images				
001	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 Detection Level Adj.]			
4994	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	

3

Main SP Tables-5

SP5-XXX (Mode)

5024	[mm/inch Display Selection]			
3024	Display units (mm or inch) for custom paper sizes.			
001	O:mm 1:inch	*CTL	0: mm (Europe/Asia) 1: inch (USA)	

	[Accounting counter]					
5045	Selects the counting method.					
3043	W Note					
	The counting method can be changed only once, regardless of whether the counter value is negative or positive.					
			[0 or 1 / 1 / -]			
001	Counter Method	*CTL	[0 or 1 / 1 / -] 0: Developments	SP 5045		
			1: Prints	Modified		

5047	[Paper Display]				
3047	y on the LCD.				
001	Backing Paper	*CTL	[0 or 1 / 0 / -] 0: OFF, 1: ON		

5051	[TonerRefillDetectionDisplay]				
3031	Enables or disables the toner refill detection display.				
			[O or 1 / O / -] Alphanumeric		
50511	-	*CTL	0: ON		
			1: OFF		

SP5056 Deleted

[Coverage Counter Display]

Display or does not display the coverage counter on the LCD.

*CTL [0 or 1 / 0 / -]
0: Not display, 1: Display

5061	[Toner Remaining Icon Display Change]			
3001	Display or does not display the	does not display the remaining toner display icon on the LCD.		
001	-	*CTL	[0 or 1 / 0 / -] 0: Not display, 1: Display	

5040	[Parts Replacement Alert Display] Display or does not display the PM part yield on the LCD.				
5062					
001	Drum Unit: Bk	*CTL			
002	Drum Unit: M	*CTL	[0 or 1 / 0 / -]		
003	Drum Unit: C	*CTL	0: Not display, 1: Display		
004	Drum Unit: Y	*CTL			
005	Development Unit: Bk	*CTL			
006	Development Unit: M	*CTL	[0 or 1 / 0 / -]		
007	Development Unit: C	*CTL	0: Not display, 1: Display		
008	Development Unit: Y	*CTL			

Deleted 3

009	Developer: Bk	*CTL	
010	Developer: M	*CTL	[0 or 1 / 0 / -]
011	Developer: C	*CTL	0: Not display, 1: Display
012	Developer: Y	*CTL	
013	Image Transfer Belt	*CTL	
014	Image Transfer Cleaning Unit	*CTL	
015	Fusing Unit	*CTL	
016	Paper Transfer Roller Unit	*CTL	[0 or 1 / 0 / -] 0: Not display, 1: Display
017	Waster Toner bottle	*CTL	o. From display, T. Bisplay
018	Fusing Roller	*CTL	
019	Pressure Roller	*CTL	

5066	[PM Parts Display] Display or does not display the "PM parts" button on the LCD.		
001	-	*CTL	[0 or 1 / 0 / -] 0: Not display, 1: Display

	[Part Replacement Operation Type]				
5067	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	Drum Unit: Bk	*CTL			
002	Drum Unit: M	*CTL	[O. Carden] or [1,1], and		
003	Drum Unit: C	*CTL	[0: Service] or [1: User]		
004	Drum Unit: Y	*CTL			

005	Development unit: Bk	*CTL	
006	Development unit: M	*CTL	[0.0 + 1 [1 1 1
007	Development unit: C	*CTL	[0: Service] or [1: User]
008	Development unit: Y	*CTL	
009	Developer: Bk	*CTL	
010	Developer: M	*CTL	[0, Section] on [1, 1]
011	Developer: C	*CTL	[0: Service] or [1: User]
012	Developer: Y	*CTL	
013	Image Transfer Belt	*CTL	[0: Service] or [1: User]
014	Image Transfer Cleaning Unit	*CTL	[0: Service] or [1: User]
015	Fusing Unit	*CTL	[0: Service] or [1: User]
016	Paper Transfer Roller Unit	*CTL	[0: Service] or [1: User]
017	Waste Toner bottle	*CTL	[0: Service] or [1: User]
018	Fusing Roller	*CTL	[0: Service] or [1: User]
019	Pressure Roller	*CTL	[0: Service] or [1: User]

5071	[Set Bypass Paper Size Display]			
	-	*CTL	[0 or 1 / 0 / -] 0: Off, 1: On	
001	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.			

[Home Screen Login]			
3074	Sets the application that appea	the home key is pressed.	
			0: Function disable
091	(0:OFF 1:SDK 2:Reserve)	*CTL	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

3

			Sets the external keyboard type.
			0: None
			1: English (NA)
			2: Turkish
			3: Korean
			4: Chinese (Simplified)
			5: Chinese (Traditional)
			6: English (UK)
			7: French (France)
			8: French (Belgium)
			9: French (Canada)
			10: German
			11: Italian
			12: Spanish
002	Keyboard Type Setting	*CTL	13: Spanish (Latin America)
			14: Dutch
			15: Norwegian
			16: Danish
			17: Swedish
			18: Portuguese
			19: Portuguese (Brazil)
			20: Finnish
			21: Catalan
			22: Portuguese
			23: Hungarian
			24: Czech
			25: Russian
			26: Japanese
			27: Greek

RTB 26c SP5101 added

	[Counter: Size Setting] A3/DLT Double Count (SSP)
5104*	Specifies whether the counter is doubled for A3/DLT. "Yes" counts except from the bypass tray. When "Yes" is selected, A3 and DLT paper are counted twice, that is A4 x2 and LT x2 respectively.
	Default setting: Yes

5113	[Optional Counter Type]			
001	Default Optional Counter Type	*CTL	This program specifies the counter type. O: None, 1: Key card (RK 3, 4) 2: Key card (down), 3: Prepaid card 4: Coin rack, 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]				
3110	This program disables copying.				
001	-	*CTL	[0: Not disabled/ 1: Disabled]		

		[Mode Clear Opt. Counter Removal]			
This program updates the information on the optional counter. When you insan optional counter, check the settings.				n the optional counter. When you install or remove	
	001	*CTL [0: Yes (removed)/ 1: Standby (installed but not used)/ 2: No (not removed)]			

	[Counter Up Timing]			
5121	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]	

5126	[F Size Original Setting]				
3120	Selects F size original setting.				
001	-	*ENG	[0 to 2 / 0 / 1 /step] 0: 8 1/2" x 13" (Foolscap) 1: 8 1/4" x 13" (Folio) 2: 8" x 13" (F)		

5127	[APS Mode]			
This program disables the APS.				
001	- *CTL [0: Not disabled/ 1: Disabled]			

	[Paper Size Type Selection]			
5131	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]	

5148	Size Detection Off	*CTL	[0: OFF/ 1: ON]
	0: Detect		
	1: Not Detect		

	[Bypass Length Setting]				
5150	Determines whether the transfer sheet from the by-pass tray is used or not.				
	Normally the paper length for sub scanning paper from the by-pass tray is limited to mm, but this can be extended with this SP to 1260 mm.				
001	0: OFF 1: ON	*CTL	[0: OFF/ 1: ON]		

5162	[App. Switch Method]	*CTL	[0: Soft Key Set/ 1: Hard Key Set]
001	This program specifies the switch that selects an application program.		

	[Fax Printing Mode at Optional Counter Off]			
5167	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	-	*CTL	[0 or 1 / 0 / -] 0: Automatic printing 1: No automatic printing	

	[CE Login]				
5169	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 / -] 0: Disabled 1: Enabled		

5181	[Size Adjust]				
3101	Adjusts the paper size for each tray.				
001	TRAY 1	*ENG	[0 to 3 / 0 (EU/ASIA), 1 (NA) / 1 /step] 0: A4 LEF, 1: LT LEF, 2: B5 LEF, 3: A5 LEF		
002	TRAY 2: 1	*ENG	[0 or 1 / 0 (EU/ASIA), 1 (NA) / -] 0: A4 LEF, 1: LT LEF		
003	TRAY 2: 2	*ENG	[0 or 1 / 0 (EU/ASIA), 1 (NA) / -] 0: A3, 1: DLT		
004	TRAY 2: 3	*ENG	[0 or 1 / 0 (EU/ASIA), 1 (NA) / -] 0: B4, 1: LG		
005	TRAY 2: 4	*ENG	[0 or 1 / 0 (EU/ASIA), 1 (NA) / -] 0: B5 LEF, 1: Exe LEF		

006	TRAY 3/T-LCT: 1	*ENG	[0 or 1 / 0 (EU/ASIA), 1 (NA) / -] 0: A4 LEF, 1: LT LEF
007	TRAY 3: 2	*ENG	[0 or 1 / 0 (EU/ASIA), 1 (NA) / -] 0: A3, 1: DLT
008	TRAY 3: 3	*ENG	[0 or 1 / 0 (EU/ASIA), 1 (NA) / -] 0: B4, 1: LG
009	TRAY 3: 4	*ENG	[0 or 1 / 0 (EU/ASIA), 1 (NA) / -] 0: B5 LEF, 1: Exe LEF
010	TRAY 4: 1	*ENG	[0 or 1 / 0 (EU/ASIA), 1 (NA) / -] 0: A4 LEF, 1: LT LEF
011	TRAY 4: 2	*ENG	[0 or 1 / 0 (EU/ASIA), 1 (NA) / -] 0: A3, 1: DLT
012	TRAY 4: 3	*ENG	[0 or 1 / 0 (EU/ASIA), 1 (NA) / -] 0: B4, 1: LG
013	TRAY 4: 4	*ENG	[0 or 1 / 0 (EU/ASIA), 1 (NA) / -] 0: B5 LEF, 1: Exe LEF
018	LCT	*ENG	[0 to 2 / 0 (EU/ASIA), 1 (NA) / -] 0: A4LEF, 1: LTLEF, 2: B5LEF

	[RK4]			
5186	Enables or disables the prevention for RK4 (accounting device) disconnection.			
	If the RK4 is disconnected fo	cted for 10 seconds when this SP is set to "1 (Enable)", the machine sheet of paper and stops.		
			[0 or 1 / 0 / 1/step]	
001	-	*ENG	0: Disable	
			1: Enable	

5188	[Copy Nv Version]				
3100	Displays the version number of the NVRAM on the controller board.				
001	-	-	-		

5193	[External Controller Info. Settings]				
			Sets the external controller type. This setting is appropriately adjusted if an external controller is installed in the machine.		
		[0 to 10 / 0 / 1/step]			
001	_	_	0: No external controller installed		
			1: EFI controller		
			2: Ratio controller		
			3: Egret controller		
			4 to 10: Reserved		

5199	[Paper Exit After Staple End.]		
001	-	*CTL	[0 or 1 / 0 / -] 0: OFF, 1: ON
	 Enables or disables the paper feeding out from the finisher without stapling. If this setting is "1: ON", paper is fed out without stapling at the maximum number of the finisher stapling when the machine gets a multiple printing job (over maximum number). If this setting is "0: OFF", paper is fed out with stapling at the maximum number of the 		
	finisher stapling when the machine gets a multiple printing job (over maximum number).		

5212	[Page Numbering]	*CTL	
	This program adjusts the position A "- value" moves the page number positions to the right ed	ımber posit	cond side page numbers. ons to the left edge. A "+ value" moves the page
003	Duplex Printout Right/Left Position	[-10 to 1	0 / 0 / 1 mm/step]
004	Duplex Printout High/Low Position	[-10 to 1	0 / 0 / 1 mm/step]

	[Set Time]				
	Adjusts the RTC (real time clock) time setting for the local time zone.				
	Examples: For Japan (+9 GMT), enter 54	0 (9 hours x 60 min.)		
	DOM: +540 (Tokyo)				
5302	NA: -300 (New York)				
	EU: + 60 (Paris)				
	CH: +480 (Peking)				
	TW: +480 (Taipei)				
	AS: +480 (Hong Kong)				
002	Time Difference	*CTL #	[-1440 to 1440 / -300 / 1 min./step]		

5307	[Summer Time]		
	Setting	[0 to 1 / NA, EU, ASIA / 1 /step] 0: Disabled 1: Enabled NA and EUR: 1, ASIA: 0	
001	Enables or disables the summer time mode. Note		
	 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". 		

	Rule Set (Start)	-	-		
	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 the eight-digit setting for -2 or -3 becomes a seven-digit setting.				
	1st and 2nd digits: The month. [1 to 12]				
003	3rd digit: The week of the month. [1 to 5]				
003	4th digit: The day of the week. [0 to 6 = Sunday to Saturday]				
	5th and 6th digits: The hour. [0	00 to 23]		
	7th digit: The length of the adv	anced ti	me. [0 to 9 / 1 hour /step]		
	8th digit: The length of the advanced time. [0 to 5 / 10 minutes /step]				
	The digits are counted fro	m the le	ft.		
	Make sure that SP5-307-1 is set to "1".				
	For example: 3500010 (EU d	efault)			
	The timer is advanced by 1 ho	ur at am	0:00 on the 5th Sunday in March		
	Rule Set (End)	-	-		
	Specifies the end setting for the summer time mode.				
	There are 8 digits in this SP.				
	1st and 2nd digits: The month. [1 to 12]				
004	3rd digit: The week of the month. [0 to 5]				
004	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".				
	The digits are counted from the left.				
	Make sure that SP5-307-1 is set to "1".				

5404	[User Code Count Clear]		
001	UCodeCtrClr	-	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. BitO O: 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]
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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]

5417	[Access Attack]	
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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]

	[User Authentication]				
5420	These settings should be done with the System Administrator. •• Note				
	These functions are enabled only after the user access feature has been enabled.				
001	001 Copy *CTL		Determines whether certification is required before a user can use the copy applications. [0 to 1 / 0 / 1] 0: On, 1: Off		
			0: On, 1: Off		

	Color Security Setting	*CTL	-				
	Enables or disables the color copy limitation for each copy mode when the user authentication is "ON".						
	0: Enable (default), 1: Disable						
002	BitO: B/W mode						
002	Bit1: Mono color mode	Bit1: Mono color mode					
	Bit2: Two colors mode						
	Bit3: Full color mode						
	Bit4: Automatic color mode						
	Bit5 to 7: Reserved						
			Determines whether certification is required before a user can use the document server.				
011	DocumentServer	*CTL	[0 or 1/ 0 /1]				
			0: On, 1: Off				
021	Fax	*CTL	Determines whether certification is required before a user can use the fax application. [0 or 1/0/1] 0: On, 1: Off				
031	Scanner	*CTL	Determines whether certification is required before a user can use the scan applications. [0 or 1/0/1] 0: On, 1: Off				
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		[0 or 1 / 0 / 1] 0: ON. 1: OFF				
061	SDK2	*CTL	Determines whether certification is required				
071	SDK3		before a user can use the SDK application.				

3

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		

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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	-		
			[0 to 9999 / 0 / 1 /step]		
001	PM Alarm Level	0: Alarm o	ff		
301	OOT TWI Additi Level		: Alarm goes off when Value (1 to 9999) x A counter		
			0/-]		
002	Original Count Alarm	0: No alar	m sounds		
OO2 Ongmar Coom / ii	- 3.1ga. 333.1171.141111		ounds after the number of originals passing ARDF > 10,000		

5504	[Jam Alarm]	*CTL	-

Sets the alarm to sound for the specified jam level (document misfeeds 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)

	[Error Alarm]			
5505	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 wh	en the SC e	rror alarm counter reaches "5".	
001	-	*CTL	[0 to 255 / C3a : 25 , C3b : 35 / 100 copies / step]	

5508*	[CC Call]	*C	TL	-
001*	Jam Remains		0: Disc	able, 1: Enable
001	Enables/disables initiating a call	for a	an una	ttended paper jam.
002*	Continuous Jams		0: Disc	able, 1: Enable
002	Enables/disables initiating a call	for c	consec	utive paper jams.
003*	Continuous Door Open		0: Disable, 1: Enable	
003	Enables/disables initiating a call	whe	nen the front door remains open.	
	Jam Detection: Time Length		[3 to 3	30 / 10 / 1 minute /step]
011*	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".			
	Jam Detection: Continuous Count	on: Continuous Count [2 to		0 / 5 / 1 /step]
012*	Sets the number of consecutive paper jams required to initiate a call. This setting is enabled only when SP5508-004 is set to "1".			

Door Open: Time Length [3 to 30 / 10 / 1 /step] Sets the length of time the door remains open before the machine initiates a cal This setting is enabled only when SP5-508-004 is set to "1".		[3 to 30 / 10 / 1 /step]
		ins open before the machine initiates a call.
		5-508-004 is set to "1".

	[SC/Alarm Setting]	*CTL	-
5515	· ·	-	these SP codes can be set to issue an SC call ched off, the SC call is not issued when an SC
001	SC Call		
002	Service Parts Near End Call		[0 or 1 / 1 / -]
003	Service Parts End Call		0: Off
004	User Call		
006	Communication Test Call		
007	Machine Information Notice		
008	Alarm Notice		[0 or 1 / 1 / -]
009	Non Genuine Tonner Alarm		0: Off
010	Supply Automatic Ordering Call		1: On
011	Supply Management Report Call		
012	Jam/Door Open Call		

	[Individual PM Part Alarm Call] *CTL		-	
5516	With @Remote in use, these SP codes can be set to issue an PM alarm call when one of SP parts reaches its yield.			
001	Disable/Enable Setting (0: Not send, 1: Send)		[0 or 1 / 1 / -]	
001			0: Not send, 1: Send	
004	Percent yield for triggering PM alert		[1 to 255 / 75 / 1 %/step]	

5610	[Base Gamma Control Point: Command]
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004	Factory Setting	*ENG	-
004	Recalls the factory settings.		
005	Restore	*ENG	-
003	Overwrites the current values onto the		settings.
004	Restore	*ENG	-
006	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 correcti	on value of t	he blue signal in two-color mode.	
002	В-М	*ENG	[0 to 128 / 100 / 1 /step] 128: Darkest density	
	Adjusts the Magenta corr	rection 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]	
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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 o	on display on the LCD.	



- 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	Resets all correction data for process control and all software counters, and returns all modes and adjustments to their default values.	
002	Engine	Clears the engine settings.	
003	SCS	Initializes default system settings, SCS (System Control Service) settings, operation display coordinates, and ROM update information.	
004	IMH Memory Clr	Initializes the IMH settings.	
005	Mcs	Initializes the Mcs settings.	
006	Copier Application	Initializes all copier application settings.	
007	Fax Application	Initializes the fax reset time, job login ID, all TX/RX settings, local storage file numbers, and off-hook timer.	

008	Printer Application	The following service settings: • Bit switches • Gamma settings (User & Service) • Toner Limit The following user settings: • 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	Initializes the scanner defaults for the scanner and all the scanner SP modes.	
010	Web Service	Deletes the network file application management files and thumbnails, and initializes the job login ID.	
011	NCS	All setting of Network Setup (User Menu) (NCS: Network Control Service)	
012	R-Fax	Initializes the job login ID, SmartDeviceMonitor for Admin, job history, and local storage file numbers.	
014	Clear DCS Setting	Initializes the DCS (Delivery Control Service) settings.	
015	Clear UCS Setting	Initializes the UCS (User Information Control Service) settings.	
016	MIRS Setting	Initializes the MIRS (Machine Information Report Service) settings.	
017	CCS	Initializes the CCS (Certification and Charge-control Service) settings.	
018	SRM Memory Clr	Initializes the SRM (System Resource Manager) settings.	
019	LCS	Initializes the LCS settings.	
020	Web Uapli	Initializes the web user application settings.	
021	ECS	Initializes the ECS settings.	

[FreeRun] Performs a free run on the copier engine. Note 5802 • 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. B/W A4 LEF 001 002 FC A4 LEF *ENG 003 FC A3 LEF 5803 See "Input Check Table" (** p.367). [Input Check] 0: Unlock 044 Cooling Fan: Lock *ENG 1: Lock 0: Unlock 2nd Duct Fan2: Lock *ENG 045 1: Lock 5804 [Output Check] *ENG See "Output Check Table" (** p.382). 5805 [Anti-Condensation Heater] *ENG 002 0:OFF / 1:ON [SC Reset] Resets a type A service call condition. 5810 **₩** Note • Turn the main switch off and on after resetting the SC code. 001 Fusing SC Reset 002 Hard High Temp. Detection 5811 [MachineSerial] Machine Serial Number Display

002	Display	*ENG	Displays the machine serial number.
004	BCU	ENG	Inputs

5812	[Service Tel. No. Setting]				
	Service	*CTL	-		
001	· ·	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 chara	cters (both	numbers and alphabetic characters can be input).		
	Facsimile	*CTL	-		
002	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).				
	Supply	*CTL	-		
003	Use this to input the telephone number of your supplier for consumables. Enter the number and press #.				
004	Operation	*CTL	-		
	Use this to input the telephone number of your sales agency. Enter the number and press #.				

5816	[Remote Service]	*CTL	-	
	I/F Setting			
	Selects the remote service s	etting.		
001	[0 to 2 / 2 / 1 /step]			
	0: Remote service off			
	1: CSS remote service on			
	2: NRS remote service on			

	CE Call
	Performs the CE Call at the start or end of the service.
	[0 or 1 / 0 / 1 /step]
002	0: Start of the service
	1: End of the service
	Note
	• This SP is activated only when SP 5816-001 is set to "2".
	Function Flag
	Enables or disables the remote service function.
003	[0 to 1 / 0 / 1 /step]
	0: Disabled
	1: Enabled
	SSL Disable
	Controls if RCG (Remote Communication Gate) confirmation is done by SSL during an RCG send for the @Remote over a network interface.
007	[0 or 1 / 0 / 1 /step]
	0: Yes. SSL not used.
	1: No. SSL used.
	RCG Connect Timeout
008	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]
	RCG Write Timeout
009	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]
	RCG Read Timeout
010	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]

	Port 80 Enable	-		
0.1.1	Controls if permission is given to get access to the SOAP method over Port 80 on the @Remote network.			
011	[0 or 1 / 0 / -]			
	0: No. Access denied			
	1: Yes. Access granted.			
	RFU Timing			
	Selects the timing for the re	mote firmware updating.		
013	[0 or 1 / 1 / –]			
	0: Any status of a target mo	achine		
	1: Sleep or panel off mode only			
	RCG – C Registed			
021	This SP displays the RCG-N installation end flag.			
021	0: Installation not completed			
	1: Installation completed			
	Connect Type (N/M)			
	This SP displays and selects the RCG-N connection method.			
023	[0 or 1 / 0 / 1 /step]			
	0: Internet connection			
	1: Dial-up connection			
0.71	C . F . T BELL	Proximity of the expiration of the certification.		
061	61 Cert Expire Timing DFU [0 to 0xffffffff / 0 / 1 /step]			
		This SP setting determines if the proxy server is used when		
		the machine communicates with the service center.		
062	Use Proxy	[0 or 1 / 0 / 1 /step]		
		0: Not use 1: Use		
	1.036			

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. 063 Note • 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. Proxy PortNumber 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 064 RC Gate-N. **Note** • This port number is customer information and is not printed in the SMC report. Proxy User Name This SP sets the HTTP proxy certification user name. **₩** Note 065 • 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. Proxy Password This SP sets the HTTP proxy certification password. Note 066 • 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.

	CERT	:Up State		
	Displays the status of the certification update.			
	0	The certification used by RCG-N 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.		
067	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 an 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.		

	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 certificat	ion update in progress. The current certification has expired.	
068	2	An SSL error notification has been issued. Issued after the certification has expired.		
	3	Notification of shift f	rom a common authentication to an individual certification.	
	4	Notification of a con	nmon certification without ID2.	
	5	Notification that no	certification was issued.	
	6	Notification that GW	VURL does not exist.	
069	CERT	:Up ID	The ID of the request for certification.	
083	Firm l	Jp Status	Displays the status of the firmware update.	
085	5 Firm Up User Check		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		Allows the service technician to confirm the size of the firmware data files during the firmware update execution.	
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: ID2 Code		Displays ID2 for the @Remote certification. Spaces are displayed as underscores (_). Asteriskes (****) 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. Asteriskes (****)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: Strength	Displays cryptic strength of the NRS certification. 1: 512 bit 2: 2048 bit	
	Selection Country		
150	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: • 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		
	Line Type AutomaticJudgment		
151	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. • 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.		

Line Type Judgment Result

Displays a number to show the result of the execution of SP5816 151. Here is a list of what the numbers mean.

- 0: Success
- 1: In progress (no result yet). Please wait.
- 2: Line abnormal
- 152 3: Cannot detect dial tone automatically
 - 4: Line is disconnected
 - 5: Insufficient electrical power supply
 - 6: Line classification not supported
 - 7: Error because fax transmission in progress ioctl() occurred.
 - 8: Other error occurred
 - 9: Line classification still in progress. Please wait.

Selection Dial / Push

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.

[0 or 1 / 0 / 1 /step]

153 0: Tone Dialing Phone

1: Pulse Dialing Phone

Inside Japan "2" may also be displayed:

- 0: Tone Dialing Phone
- 1: Pulse Dialing Phone 10PPS
- 2: Pulse Dialing Phone 20PPS

	Outside Line Outgoing Number
	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).
	 If the execution of SP5816-151 has succeeded and embedded RCG-M has connected to the external line, this SP display is completely blank.
154	 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).
	Dial Up User Name
156	Use this SP to set a user name for access to remote dial up. Follow these rules when setting a user name:
100	Name length: Up to 32 characters
	 Spaces and # allowed but the entire entry must be enclosed by double quotation marks (").
	Dial Up Password
157	Use this SP to set a password for access to remote dial up. Follow these rules when setting a user name:
107	Name length: Up to 32 characters
	 Spaces and # allowed but the entire entry must be enclosed by double quotation marks (").
	Local Phone Number
161	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)
	Linii. 24 nombers (nombers only)

Connection Timing Adjustment Incoming 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 162 number of the embedded RCG-M modem is dialed up and connected. [0 to 24 / 1 / 1 /step] 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. Access Point This is the number of the dial-up access point for RCG-M. If no setting is done for this SP 163 code, then a preset value (determined by the country selected) is used. Default: 0 Allowed: Up to 16 alphanumeric characters Line Connecting 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. [0 to 1 / 0 / 1 /step] 0: Sharing Fax 164 1: No Sharing Fax **Note** • 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. Modem Serial No. 173 This SP displays the serial number registered for the RCG-M. Retransmission Limit 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 174 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.

	FAX TX Priority	-				
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 "O".					
	[0 or 1/ 0 /-]					
	0: Disable, 1: Enable					
200	Manual Polling	-	Executes the manual polling.			
	Regist Status					
	Displays a number that indi	cates the st	atus of the @Remote service device.			
	0: Neither the registered de	evice by the	external nor embedded RCG device is set.			
201		•	g set. Only Box registration is completed. In this g request from the external RCG.			
	2. The embedded RCG deva polling request.	vice is set. I	n this status, the external RCG unit cannot answer			
	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 extern	al 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.				
	Confirm Result					
	Displays a number that indicates the result of the inquiry executed with SP5816 203.					
	0: Succeeded					
	1: Inquiry number error					
	2: Registration in progress					
204	3: Proxy error (proxy enabled)					
	4: Proxy error (proxy disabled)					
	5: Proxy error (Illegal user name or password)					
	6: Communication error					
	7: Certification update erro	r				
	8: Other error					
	9: Inquiry executing					
	8: Other error					

	Confirm Place			
205	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".		
	Register Result			
	Displays a number that indicates the registration result.			
	0: Succeeded			
	2: Registration in progress			
	3: Proxy error (proxy enabled)			
207	4: Proxy error (proxy disabled)			
	5: Proxy error (Illegal user name or password)			
	6: Communication error			
	7: Certification update error			
	8: Other error			
	9: Registration executing			

Error Code

Displays a number that describes the error code that was issued when either SP5816-204 or SP5816-207 was executed.

 $[-2147483647 \text{ to } 2147483647 \ / \ 0 \ / \ - \]$

	Cause	Code	Meaning
	Illegal Modem Parameter	-11001	Chat parameter error
		-11002	Chat execution error
		-11003	Unexpected error
		-12002	Inquiry, registration attempted without acquiring device status.
	Operation Error	-12003	Attempted registration without execution of an inquiry and no previous registration.
208	Operation Error, Incorrect Setting	-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.
	Operation Error, Incorrect Setting	-12008	Update certification failed because mainframe was in use.
		-12009	ID2 mismatch between an individual certification and NVRAM
		-12010	Certification area is not initialized.

		-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
208	Error Caused by Response from GW URL	-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	Instal 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	Sets the IP address of the RCG (Remote Communication Gate) destination for call processing at the remote service center.

	[NV-RAM Data Upload]		
5824	Uploads the UP and SP mode data (except for counters and the serial number) from the NVRAM to an SD card. For details, see "NVRAM Data Upload/Download" in the "Main chapters: 5. System Maintenance".		
001	NV-RAM Data Upload	#	-

	[NV-RAM Data Download]			
Downloads the UP and SP mode data from an SD card to the NVRAM. For "NVRAM Data Upload/Download" in the "Main chapters: 5. System Main				
001	NV-RAM Download	#	-	

5828	[Network Setting]	*CTL	-
050	1284 Compatibility (Centro)	Enables or disables 1284 Compatibility. [O or 1 / 1 / 1 / step] O: Disabled, 1: Enabled	
052	ECP (Centro)	Enables or disables ECP Compatibility. [0 or 1 / 1 / 1 / step] 0: Disabled, 1: Enabled • This SP is activated only when SP5-828-50 is set to "1".	
065	Job Spooling	Enables/disables Job Spooling. [O or 1 / 0 / 1 / step] O: Disabled, 1: Enabled	
066	Job Spooling Clear: Start Time	0: ON (E	t of the job when a spooled job exists at power on. Pata is cleared) Automatically printed)

		Validates or invalidates the job spooling function for each protocol.
		0: Validates
		1: Invalidates
		bitO: LPR
0.40		bit1: FTP
069	Job Spooling (Protocol)	bit2: IPP
		bit3: SMB
		bit4: BMLinkS
		bit5: DIPRINT
		bit6: sftp
		bit7: (Reserved)
		Enables or disables the Telnet protocol.
090	TELNET (0: OFF 1: ON)	[0 or 1 / 1 / –]
		0: Disable, 1: Enable
		Enables or disables the Web operation.
091	Web (0: OFF 1: ON)	[0 or 1 / 1 / -]
		0: Disable, 1: Enable
		This is the IPv6 local address link referenced on the Ethernet or wireless LAN (802.11b) in the format:
145	Active IPv6 Link Local Address	"Link Local Address" + "Prefix Length"
	Address	The IPv6 address consists of a total 128 bits configured in 8 blocks of 16 bits each.

147	Active IPv6 Stateless Address 1	
149	Active IPv6 Stateless Address 2	These SPs are the IPv6 status addresses (1 to 5) referenced
151	Active IPv6 Stateless Address 3	on the Ethernet or wireless LAN (802.11b) in the format: "Status Address" + "Prefix Length"
153	Active IPv6 Stateless Address 4	The IPv6 address consists of a total 128 bits configured in 8 blocks of 16 bits each.
155	Active IPv6 Stateless Address 5	
		This SP is the IPv6 manually set address referenced on the Ethernet or wireless LAN (802.11b) in the format:
156	IPv6 Manual Address	"Manual Set Address" + "Prefix Length"
		The IPv6 address consists of a total 128 bits configured in 8 blocks of 16 bits each.
158	IPvó 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.
161	IPv6 Stateless Auto Setting	Enables or disables the automatic setting for IPv6 stateless. [O or 1 / 1 / 1 / step] O: Disable, 1: Enable
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 Link 1 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] HDD Initialization	*CTL	-
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001	HDD Formatting (ALL)	
002	HDD Formatting (IMH)	
003	HDD Formatting (Thumbnail)	
004	HDD Formatting (Job Log)	
005	HDD Formatting (Printer Fonts)	
006	HDD Formatting (User Info)	Initializes the hard disk. Use this SP mode only if
007	Mail RX Data	there is a hard disk error.
800	Mail TX Data	
009	HDD Formatting (Data for a Design)	
010	HDD Formatting (Log)	
011	HDD Formatting (Ridoc I/F)	

5836	[Capture Setting]	*CTL	-
	Capture Function (0:Off 1:On)		0: Disable, 1: Enable
001	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
002	Displays or does not display the co	apture fu	nction buttons.
	5836-71 to 5836-78, Copier and Printer Document Reduction		Document Reduction
	The following 6 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		0: 1to-1, 1: 1/2, 2: 1/3 , 3: 1/4
072	Reduction for Copy B&W Text		0: 01 , 1: 1/2, 2: 1/3, 3: 1/4, 6: 2/3
073	Reduction for Copy B&W Other		0: 01, 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: 01 , 1: 1/2, 2: 1/3, 3: 1/4, 6: 2/3

076	Reduction for Printer B&W HQ	0: 1to-1, 1: 1/2, 2: 1/3, 3: 1/4
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
	5836-81 to 5836-86, Stored document for	ormat
	The following 6 SP modes set Sets the defa document management server via the MLB	
	Enabled only when optional MLB (Media l	.ink Board) is installed.
081	Format for Copy Color	O: JFIF/JPEG, 1: TIFF/MMR, 2: TIFF/MH, 3: TIFF/MR Note • This SP is not used in this model.
082	Format for Copy B&W Text	O: JFIF/JPEG, 1: TIFF/MMR, 2: TIFF/MH, 3: TIFF/MR
083	Format Copy B&W Other	O: JFIF/JPEG, 1: TIFF/MMR, 2: TIFF/MH, 3: TIFF/MR
084	Format for Printer Color	O: 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
086	Format for Printer B&W HQ	O: JFIF/JPEG, 1: TIFF/MMR, 2: TIFF/MH, 3: TIFF/MR
	Default for JPEG	[5 to 95 / 50 / 1 /step]
091	Sets the JPEG format default for documents the MLB with JPEG selected as the format. Enabled only when optional MLB (Media L	sent to the document management server via Link Board) is installed.

101	Primary srv IP address	ry 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	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.	
	Reso: Copy (Color)	[0 to 3 / 2 / 1/step]	
121	Selects the resolution for color copy mode. This is basically adjusted by the remote system.		
	0: 600dpi/ 1: 300dpi/ 2:	150dpi/ 3: 75dpi	
	Reso: Copy (Mono)	[0 to 5 / 3 / 1/step]	
122	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	
	Reso: Print (Color)	This is basically adjusted by the remote system. [0 to 3 / 2 / 1/step]	
123	Selects the resolution for color print mode. This is basically adjusted by the remote system.		
	0: 600dpi/ 1: 300dpi/ 2:	150dpi/ 3: 75dpi	
	Danas Daint (AA a a a)	This is basically adjusted by the remote system.	
124	Reso: Print (Mono)	[0 to 5 / 3 / 1/step]	
124	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		

Reso: Fax (Color)	This is basically adjusted by the remote system. [0 to 6 / 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				
Reso: Fax (Mono)	This is basically adjusted by the remote system. [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				
Reso: Scan (Color)	This is basically adjusted by the remote system. [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				
Reso: Scan (Mono)	This is basically adjusted by the remote system. [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				
	Selects the resolution for col 0: 600dpi/ 1: 400dpi/ 2: 3 Reso: Fax (Mono) Selects the resolution for BW 0: 600dpi/ 1: 400dpi/ 2: 3 Reso: Scan (Color) Selects the resolution for col system. 0: 600dpi/ 1: 400dpi/ 2: 3 Reso: Scan (Mono) Selects the resolution for BW system.			

5840	[IEEE 802.11]			
	Channel Max	*CTL	[1 to 11 or 13 / 11 or 13 / 1 /step] Europe/Asia: 1 to 13 NA/ Asia: 1 to 11	
006	Sets the maximum number of channels available for data transmission via the wi			

		*CTL	[1 to 11 or 13 / 1 / 1 /step]		
	Channel Min		Europe: 1 to 13		
			NA/ Asia: 1 to 11		
007	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				
	U Note				
	 Do not change the setting 	g.			
			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		
		*CTL	0 x 0D - 12M Fix		
800	Transmission Speed		0 x 0B - 9M Fix		
			0 x 0A - 6M Fix		
			0 x 07 - 11M Fix		
			0 x 05 - 5.5M Fix		
			0 x 08 - 1 M Fix		
			0 x 13 - 0 x FE (reserved)		
			0 x 12 - 72M (reserved)		
			0 x 09 - 22M (reserved)		
			Selects the WEP key.		
			[00 to 11 / 00 / 1 binary]		
0.1.1	WEP key Select	*CTL	00: Key #1		
011			01: Key #2 (Reserved)		
			10: Key #3 (Reserved)		
			11: Key #4 (Reserved)		

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 µm, 1: 9 µm
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.

Setting]	58	
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001	Toner Name Setting: Black		
002	Toner Name Setting: Cyan		
003	Toner Name Setting: Yellow		
004	Toner Name Setting: Magenta		
007	OrgStamp		Specifies supply names. These appear on the screen when the user presses the Inquiry button in the user tools screen.
011	Staple Std 1	*CTL	
012	Staple Std2	CIL	
013	Staple Std3		
014	Staple Std4		
021	Staple Bind 1		
022	Staple Blind2		
023	Staple Blind 3		

5844	[USB]			
001	Transfer Rate	*CTL	0x01: Full speed 0x04: Auto Change	
	Adjusts the USB transfer rate.			
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.	[0 to 65535 / 3670 / 1 /step]			
001	Sets the FTP port number used when image files to the Scan Router Server.				

000	IP Address (Primary)	Range: 000.000.000.000 to 255.255.255.255			
002	Use this SP to set the Scan Router Server address. The IP address under the can be referenced by the initial system setting.				
	Delivery Error Display Time	[0 to 999 / 300 / 1 second /step]			
006	Use this setting to determine the length of time the prompt message is displayed whe test error occurs during document transfer with the NetFile application and an extern device.				
	IP Address (Secondary)	Range: 000.000.000.000 to 255.255.255.255			
008	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.				
	Delivery Server Model	[0 to 4/0/1/step]			
009	by the I/O device.				
	Delivery Svr. Capability	[0 to 255 / - / 1 /ste	·p]		
	Bit7 = 1 Comment information exits				
	Bit6 = 1 Direct specification of mail address possible		Changes the capability of the registered that the I/O device registered.		
	Bit5 = 1 Mail RX confirmation setting possible				
010	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				
	BitO = 1 Sender specification required (if set to 1, Bitó is set to "0")				

	Delivery Svr Capability (Ext)	[0 to 255 / - / 1 /step]		
	Changes the capability of the registered that the I/O device registered.			
011	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			
013	This is used for the scan router progra	m.		
014	Server Port Number (Primary) DFU			
014	This is used for the scan router progra	m.		
015	Server URL Path (Primary) DFU			
013	This is used for the scan router progra	m.		
016	Server Scheme (Secondary) DFU			
010	This is used for the scan router progra	m.		
017	Server Port Number (Secondary) DFU	J		
017	This is used for the scan router progra	m.		
018	Server URL Path (Secondary) DFU			
010	This is used for the scan router program.			
	Rapid Sending Control			
022	Enables or disables the prevention function for the continuous data sending error. [0 to 1 / 1 / -] 0: Disable, 1: Enable			

5846	[UCS Setting]	*CTL	-	
	Machine ID (For Delivery Ser	ver)		Displays ID
001		nged. Th	is ID is created fr	over directory. The value is only on the NIC MAC or IEEE 1394 ary.

	Machine ID Clear (For Delivery Server)			Clears ID
002	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.			
	Maximum Entries	[2000 to 20000/ 2000 / 1 /step]		2000 / 1 /step]
003	Changes the maximum number of e	entries that l	JCS 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.			
	Delivery Server Retry Timer		[0 to 25	55 / 0 / 1 /step]
006	Sets the interval for retry attempts when the delivery server fails to acquire the delivery server address book.			ver fails to acquire the delivery
	Delivery Server Retry Times		[0 to 255 / 0 / 1 /step]	
007	Sets the number of retry attempts when the delivery server fails to acquire the a server address book.		ver fails to acquire the delivery	
	Delivery Server Maximum Entries		[2000 1	to 50000 / 2000 / 1/step]
008	Sets the maximum number account entries of the delivery server user information managed by UCS.		ry server user information	
010	LDAP Search Timeout		[1 to 25	55 / 60 / 1 /step]
010	Sets the length of the timeout for the	e search of	the LDAP	server.
020	WSD Maximum Entries [5 t		[5 to 25	50 / 250 / 1 /step]
Sets the maximum entries for the address k		ddress book	of the W	/SD (WS-scanner).
040	Addr Book Migration (USB → HDD)			
040	Not used in this machine.			

Fill Addr Acl Info.

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.

Procedure

041

- 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.

		Displays the slot number where an address book data is in.		
		[0 to 30 / - /1]		
		0: Unconfirmed		
043	Addr Book Media	1: SD Slot 1		
		2: SD Slot 2		
		4: USB Flash ROM		
		20: HDD		
		30: Nothing		
047	Initialize Local Addr Book	Clears the local address book information, including the user code.		
048	Initialize Delivery Addr Book	Clears the distribution address book information, except the user code.		
049	Initialize LDAP Addr Book	Clears the LDAP address book information, except the user code.		
050	Initialize All Addr Book	Clears all directory information managed by UCS, including all user codes.		

051	Backup All Addr Book	Uploads all directory information to the SD card.	
052	Restore All Addr Book	Downloads all directory information from the SD card.	
		Deletes the address book data from the SD card in the service slot. Deletes only the files that were uploaded from this machine.	
053	Clear Backup Info	This feature does not work if the card is write-protected.	
		 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	indoning.	
060	This SP uses bit switches to set up the fuzzy search options for the UCS local address book. Bit: Meaning		
	Complexity option 1		
	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.		
062	[0 to 32 / 0 / 1 /step] Note		
	 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		
064	Complexity Option 3 DFU		
_			

065	Complexity Option 4 DFU	
091	FTP Auth Port Setting	Specifies the FTP port for getting a distribution server address book that is used in the identification mode. [0 to 65535 / 3671 / 1 /step]
094	Encryption Stat	Shows the status of the encryption function for the address book data.

	[Rep Resolution Reduction]	*CTL	-	
5847	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]			
	SP5847-21 sets the default for JPEG image quality of image files handled by NetFile.			
	"Net files" are jobs to be printed from the document server using a PC and the DeskTopBinder software.			
001	Rate for Copy Color		0: 1x	
002	Rate for Copy B&W Text		1: 1/2x	
003	Rate for Copy B&W Other		2: 1/3x 3: 1/4x	
004	Rate for Printer Color		4: 1/6x	
005	Rate for Printer B&W		5: 1/8x	
			0: 1x	
			1: 1/2x	
006	Rate for Printer Color 1200dpi		2: 1/3x	
	Raid for Fillings Color 1200aps		3: 1/4x	
			4: 1/6x	
			5: 1/8x	
			0: 1x	
			1: 1/2x	
007	Rate for Printer B&W 1200dpi		2: 1/3x	
007	Raic for Filling barr 1200api		3: 1/4x	
			4: 1/6x	
			5: 1/8x	

	Network Quality Default for JPEG
021	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.
	[5 to 95 / 50 / 1 /step]

	[Web Service]	*CTL -		
5848	5848 2 sets the 4-bit switch assignment for the access control setting. 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)	0000: No access control 0001: Denies access to DeskTop Binder. 0010: No writing control		
003	Access Control: Doc. Svr. Print (Lower 4 bits)			
004	Access Control: udirectory (Lower 4 bits)			
007	Access Ctrl: Comm. Log Fax (Lower 4 bits)			
009	Access Ctrl: Job Ctrl (Lower 4 bits)	Switches access control on and off. 0000: No access control		
011	Access Ctrl: Devicemanagement (Lower 4bits)	- 0001: Denies access to DeskTop Binder.		
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]		

210	Setting: LogType: Job1	
211	Setting: LogType: Job2	
212	Setting: LogType: Access	
213	Setting: PrimarySrv	NIA
214	Setting: SecondarySrv	NIA
215	Setting: StartTime	
216	Setting: IntervalTime	
217	Setting: Timing	

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 the printout for the total counter. [0 or 1 / 1 / -] 0: OFF (No Print) 1: ON (Print)		
003	Total Counter	-		

5850	[Address Book Function]	*CTL	-
	Replacement of Circuit Classification Japan Only		
003		G4 line. C	line. This SP allows you to switch all at once Conversely, if for some reason the G4 line ack to G3.

5851	[Bluetooth]	*CTL	-
	mode		
001	Sets the operation mode for the Bluetooth Unit. Press either key.		
	[O:Public] [1: Private]		

[Stamp Data Download] Use this SP to download the fixed stamp data stored in the firmware of the ROM and copy it to the HDD. This SP can be executed as many times as required. This SP must be executed after replacing or formatting the hard disks. • This SP can be executed only with the hard disks installed.

[Remote ROM Update]

Allows the technician to upgrade the firmware using a local port (IEEE1284) when updating the remote ROM.

[O to 1 / O / 1/step]

*CTL O: Disable
1: Enable

5857	[Save Debug Log]	*CTL	-	
	On/Off (1:ON 0:OFF)	0 : OFF,	I: ON	
001	Switches the debug log feature of feature is switched on.	n and off.	The debug log cannot be captured until this	
	Target (2: HDD 3: SD)	2 : HDD,	3: SD Card	
002	Selects the storage device to save debug logs information when the conditions set with SP5-858 are satisfied. [2 to 3 / 2 / 1 / step]			
	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.			
00/	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 4	MB)		
010	010 Copy HDD to SD Card (Latest 4 MB 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 4 MB)
015	Copy SD to SD (Latest 4 MB Any Key)
016	Make HDD Debug
017	Make SD Debug

	[Debug Save When]	*CTL	-
5858	selected by SP5857-002.	· ·	ging information to be saved to the destination mber. Refer to Section 4 for a list of SC error
001	Engine SC Error	copier en	off the debug save for SC codes generated by gine errors. O / 1 / step]
002	Controller SC Error (0: OFF, 1: ON)		off the debug save for SC codes generated by roller errors. 0 / 1 / step]
003	Any SC Error	[0 to 655	35 / 0 / 1 /step]
004	Jam (0: OFF, 1: ON)	•	off the debug save for jam errors. 0 / 1 / step]

5859	[Debug Save Key No.]	*CTL	-
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001	Key 1	
002	Key 2	
003	Key 3	
004	Key 4	These SPs allows on to set up to 10 keys for log files for
005	Key 5	These SPs allow you to set up to 10 keys for log files for functions that use common memory on the controller
006	Key 6	board. [-9999999 to 9999999 / 0 / -]
007	Key 7	[-7777777 10 7777777 0 / -]
008	Key 8	
009	Key 9	
010	Key 10	

5860	[SMTP/POP3/IMAP4]	*CTL	-	
	Partial Mail Receive Timeout			[1 to 168 / 72 / 1 hour/step]
020	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.			
	MDN Response RFC2298 Compliance [0 to 1 / 1 / -]			
021	Determines whether RFC2.5298 compliance is switched on for MDN reply mail. 0: No 1: Yes			itched on for MDN reply mail.
	SMTP Auth. From Field Replac	ement		[0 to 1 / 0 / -]
022	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.			

	SMTP Auth. Direct Setting		[0 or 1 / - / –]		
	Selects the authentication method for SMPT.				
	Bit switch:				
	Bit 0: LOGIN				
025	Bit 1: PLAIN				
023	Bit 2: CRAM MD5				
	Bit 3: DIGEST MD5				
	Bit 4 to 7: Not used				
	↓ Note				
	This SP is activated only when SMTP authorization is enabled by UP mode.				
		Selects by S/M	the MIME header type of an E-mail sent NIME.		
	S/MIME: MIME Header	[0 to 2 ,	/0/1]		
026	Setting	- 0: Micro	osoft Outlook Express standard		
		1: Interr	net Draft standard		
		2: RFC s	standard		

5870	[Common Key Info Writing]		
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	[SD Card Appli Move]		
001	Move Exec	This SP copies the application programs from the original SD card SD card slot 2 to an SD card in SD card slot 1.	
002	Undo Exec	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).	

	[SC Auto Reboot]	5875	
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001	Reboot Setting	*CTL	Enables or disables the automatic reboot function when an SC error occurs. [O or 1/O/-] O: 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	Selects the reboot method for SC. [0 or 1 / 0 / -] 0: Manual reboot, 1: Automatic reboot

5878	[Option Setup]		
001	Data Overwrite Security	-	Enables the Data Overwrite Security unit. Press "EXECUTE" on the operation panel. Then turn the machine off and on.
002	HDD Encryption	-	Installs the HDD Encryption unit.

5881	[Fixed Phrase Block Erasing]		
001	-	-	Deletes the fixed phrase.

	5883	[Line Speed Selection]			
3003		Selects the line speed for middle thick paper.			
	001	Middle Thick	*ENG	[0 or 1 / 0 / 1 /step] 0: MID CARD: Half Speed (115 mm/sec) 1: MID CARD: Normal Speed (C2.5c: 154, C2.5d: 205 mm/sec)	

5885	[Set WIM Function] Web Image Monitor Settings
	Close or disclose the functions of web image monitor.

020	DocSvr Acc Ctrl	*CTL	O: OFF, 1: ON Bit Meaning O: 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	Selects the display type for the document box list. [0 to 2 / 0 / 1] 0: Thumbnail, 1: Icon, 2: Details
051	DocSvr Trans	*CTL	Sets the number of documents to be displayed in the document box list. [5 to 20 / 10 / 1]
100	Set Signature	*CTL	Selects whether the signature is added to the scanned documents with the WIM when they are transmitted by an e-mail. [0 to 2 / 0 / 1/step] 0: Setting for each e-mail 1: Signature for all 2: No signature
101	Set Encrypsion	*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
200	Detect Mem Leak	*CTL	Not Used
201	DocSvr Timeout	*CTL	Not Used

5007	[SD Get Counter]			
5887	This SP determines whether the ROM can be updated.			
001	-	*CTL	This SP sends a text file to an SD card inserted in SD card Slot 2 (lower slot). The operation stores. The file is stored in a folder created in the root directory of the SD card called SD_COUNTER. The file is saved as a text file (*.txt) prefixed with the number of the machine. 1. Insert the SD card in SD card Slot 2 (lower slot).	
			Select SP5887 then touch [EXECUTE]. Touch [Execute] in the message when you are	
			prompted.	

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	-		
3073	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]	
3894	Test Name 1_1	

001 Switch Charge Mode	*ENG	[0 to 2 / 0 / 1/step]
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	[Application Invalidation]			
Enables or disables the printer or scanner application. These SPs are used only when an external controller is installed in the made				
001	Printer	*CTL	[0 or 1 / 0 / -]	
002	Scanner	*CTL	0: Enable 1: Disable	

5907	[Plug & Play Maker/Model Name]
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]
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 confidence of the display.		-	

5967	[Copy Server : Set Function]	*CTL	0: ON, 1: OFF
001	Enables and disables the document ser data from being left in the temporary a must switch the main switch off and on	rea of the H	HDD. After changing this setting, you

5974		[Cherry Server]			
	J7/4	Specifies which version of ScanRouter, "Lite" or "Full", is installed.			
	001	(O:Light 1:Full)	*CTL	[0 or 1 / 0 / –]	

	[Device Setting]		
5985	The NIC and USB support features are built into the GW controller. Use this SP to enab and disable these features. In order to use the NIC and USB functions built into the controller board, these SP codes must be set to "1".		
		[0 to 2 / 0 / 1 /step] 0: Disable, 1: Enable, 2: Function limitation	
	On Board NIC	When the "Function limitation" is set, "On board NIC" is limited only for the NRS or LDAP/NT authentication.	
001		Note	
		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	[0 or 1 / 0 / 1/step] 0: Disable, 1: Enable	

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]	
3990	Prints out the SMC sheets.	

		1
001	All (Data List)	
002	SP (Mode Data List)	-
003	User Program	-
004	Logging Data	-
005	Diagnostic Report	-
006	Non-Default	-
007	NIB Summary	-
008	Capture Log	-
021	Copier User Program	-
022	Scanner SP	-
023	Scanner User Program	-
024	SDK/J Summary	-
025	SDK/J Application Info	-

5992	[SP Text mode]
3992	Exports the SMC sheet data to the SD Card.

001	All (Data List)	-	
002	SP (Mode Data List)	-	
003	User Program -		
004	Logging Data -		
005	Diagnostic Report	-	
006	Non-Default	-	
007	NIB Summary	-	Press "Exec
008	Capture Log	-	data in the
021	Copier User Program	-	
022	Scanner SP	-	
023	Scanner User Program	-	
024	SDK/J Summary	-	
025	SDK/J Application Info	-	
026	Printer SP mode	-	

Press "Execute" key to start exporting the SMC data in the SP mode display.

5998	[Fusing Cont mode] Fusing Control Mode		
3770	Turns the silent fusing warm-up mode on or off.		
001	fast/silent	*ENG	[0 or 1 / 1 / -] 0: Silent (less noise) 1: Fast (less time)

Main SP Tables-6

SP6-XXX (Peripherals)

6006	[ADF Adjustment]		
	Adjusts the side-to-side and leading registration of originals with the ARDF.		
001	Side-to-Side Regist: Front	*ENG	[20to 20 / 0 / 0.1 mm /ston.]
002	Side-to-Side Regist: Rear	ENG	[-3.0 to 3.0 / 0 / 0.1 mm/step]
003	Leading Edge Registration	*ENG	[-5.0 to 5.0 / 0 / 0.1 mm/step]
	Adjusts the amount of paper buckle to correct original skew for the front and rear sides.		
005	Buckle: Duplex Front	*ENG	[-3.0 to 3.0 / 0 / 0.1 mm/step]
006	Buckle: Duplex Rear	ENG	[-2.5 to 2.5 / 0 / 0.1 mm/step]
	Adjusts the erase margin at the original trailing edge.		
007	Rear Edge Erase	*ENG	[-10 to 10 / 0 / 0.1 mm/step]

	[ADF INPUT Check]
6007	Displays the signals received from the sensors and switches of the ARDF. Only Bit 0 is used for ADF input check (**p.367*).

	[ADF OUTPUT Check]
6008	Activates the electrical components for functional check.
It is not possible to activate more than one component at the same time (

6009	[ADF Free Run]				
0009	Performs a DF free run in simplex, dup	olex mode or	stamp mode.		
001	Free Run Simplex Motion	*ENG			
002	Free Run Duplex Motion	*ENG	-		
003	Free Run Stamp Motion	*ENG			

6010	[Stamp Position Adj.] Fax Stamp Position Adjustment			
0		Adjusts the horizontal position of the stamp on the scanned originals.		
	001	-	*ENG	[-5.0 to 5.0 / 0 / 1 mm/step]

	[Original Size Detect Setting]				
6016	Specifies the original size for a size detected by the original sensor, since original cannot recognize all sizes.			sor, since original sensors	
		*ENG	[0 or 1 / - / -] 0: Setting 1, 1: Setting 2		
	-	NA	Setting 1	Setting 2	
			DLT SEF	Folio SEF 11" x 15"	
			LG SEF	Foolscap SEF	
001			LT SEF	US EXE 8" x 10"	
			LT LEF	US EXE LEF	
		EU/ ASIA	DLT SEF	8K 267 x 390 mm	
			LT SEF	16K 195 x 267 mm	
			LT LEF	16K 267 x 195 mm	

6017	[DF Magnification Adj.] DF Magnification Adjustment		
0017	Adjusts the magnification in the sub-scan direction for the ARDF.		
001	-	*CTL	[-5.0 to 5.0 / 0 / 0.1 %/step]

6020	[Skew Correction Moving Setting]		
0020	Turns the original skew correction in the ARDF for all original sizes on or off.		ARDF for all original sizes on or off.
001	-	*ENG	[0 or 1 / 0 / -] 0: Off (only for small original sizes) 1: On (for all original sizes)

(100	[Punch Position: Sub Scan]		
6128	an direction.		
001	Domestic 2Hole (Europe 2Hole)	*ENG	
002	North America 3Hole	*ENG	
003	Europe 4Hole	*ENG	[-7.5 to 7.5 / 0 / 0.5 mm/step]
004	North Europe 4Hole	*ENG	
005	North America 2Hole	*ENG	

4100	[Punch Position: Main Scan]		
Adjusts the punching position in the main scan direction.			
001	Domestic 2Hole (Europe 2Hole)	*ENG	
002	North America 3Hole	*ENG	
003	Europe 4Hole	*ENG	[-2.0 to 2.0 / 0 / 0.4 mm/step]
004	North Europe 4Hole	*ENG	
005	North America 2Hole	*ENG	

4120	[Skew Correction: Buckle Adj.]
6130	Adjusts the paper buckle for each paper size.

001	A3T	*ENG	
002	B4T	*ENG	
003	A4T	*ENG	
004	A4Y	*ENG	
005	B5T	*ENG	
006	B5Y	*ENG	[-5.0 to 5.0 / 0 / 0.25 mm/step]
007	DLT-T	*ENG	[-3.0 to 3.0 / 0 / 0.23 mm/ step]
800	LG-T	*ENG	
009	LT-T	*ENG	
010	LT-Y	*ENG	
011	12*18	*ENG	
012	Other	*ENG	

	[Skew Correction Control]	
6131	Selects the skew correction control for each paper size. These are only activated for B804/B805.	

001	АЗТ	*ENG	
002	B4T	*ENG	
003	A4T	*ENG	
004	A4Y	*ENG	
005	B5T	*ENG	
006	B5Y	*ENG	[0 or 1 / 0 / 1/step]
007	DLT-T	*ENG	0: No (No skew correction) 1: Roller Stop Skew Correction
800	LG-T	*ENG	
009	LT-T	*ENG	
010	LT-Y	*ENG	
011	12*18	*ENG	
012	Other	*ENG	

	[Jogger Fence Fine Adj]
6132	This SP adjusts the distance between the jogger fences and the sides of the stack on the finisher stapling tray in the (Booklet) Finisher B804/B805. The adjustment is done perpendicular to the direction of paper feed.

001	A3T	*ENG	
002	B4T	*ENG	
003	A4T	*ENG	
004	A4Y	*ENG	
005	B5T	*ENG	[-1.5 to 1.5 / 0 / 0.5 mm/step]
006	B5Y	*ENG	+ Value: Increases distance between jogger fences and the sides of the stack.
007	DLT-T	*ENG	- Value: Decreases the distance between the
008	LG-T	*ENG	jogger fences and the sides of the stack.
009	LT-T	*ENG	
010	LT-Y	*ENG	
011	12*18	*ENG	
012	Other	*ENG	

	[Staple Position Adjustment]			
6133	Adjusts the staple position for each finisher (B408/B804/B805). + Value: Moves the staple position to the rear side. - Value: Moves the staple position to the front side.			
001	Finisher 1	*ENG	[-3.5 to 3.5 / 0 / 1/step]	

	[Saddle Stitch Position Adjust]
6134	Use this SP to adjust the stapling position of the booklet stapler when paper is stapled and folded in the Booklet Finisher B804.

001	АЗТ	
002	B4T	[-3.0 to 3.0 / 0 / 0.2 mm/step]
003	A4T	+ Value: Shifts staple position toward the crease.
004	B5T	- Value: Shifts staple position away from the crease.
005	DLT-T	Feed Out
006	LG-T	J
007	LT-T	
008	12*18	$\bigoplus \longleftarrow \rightarrow \bigcirc$
009	Other	

	[Folder Position Adj.]			
6135	This SP corrects the folding position when paper is stapled and folded in the Booklet Finisher B804.			
001	A3T			
002	B4T	[-3.0 to 3.0 / 0 / 0.2 mm/step]		
003	A4T	+ Value: Shifts staple position toward the crease.		
004	B5T	- Value: Shifts staple position away from the crease.		
005	DLT-T	Feed Out		
006	LG-T	\mathcal{I}		
007	LT-T	$\bigoplus \leftarrow \rightarrow \ominus$		
008	12*18			
009	Other			

6136	[Folding Number]			
0130	Sets the number of times that folding is done in the Booklet Finisher B804.			
001	-	[2 to 30 / 2 / 1 time/step]		

(100	[FIN (KIN) INPU	T Check] Finisher (B408) Input	Check	
Displays the signals received from sensors and switches of the booklet finisher				witches of the booklet finisher. (F p.367)	
	[FIN (EUP) INPU	T Check] Finisher (B804/B805) Input Check	
6140	Displays the signo	als received from s	ensors and s	witches of the (booklet) finisher. (庵 p.	
	[FIN (KIN) OUPL	JT Check] Finisher	(B408) Outp	out Check	
6144	Displays the sign	als received from s	ensors and s	witches of the booklet finisher. (F p.382)	
	[FIN (EUP) OUPL	JT Check] Finisher	(B804/B80	5) Output Check	
6145	Displays the signals received from sensors and switches of the (booklet) finisher. (**p. 382)				
	[Max. Pre-Stack Sheet]		*ENG	Number of Pre-Stack Sheets	
6149		umber of sheets se	nt to the pre-s	stack tray.	
	 You may need to adjust this setting or switch it off when feeding thick or slick paper. 				
001	-	[0 to 3 / 3 / 1	sheet/step]		
	[INPUT Check]				
6150				switches of the bridge unit (D386) / side	
	[OUTPUT Check	(1			
6151	Displays the signals received from sensors and switches of the bridge unit (D386)/ side tray (D542) (P p.382).				
	[INPUT Check]				
6152	Displays the signals received from sensors and switches of the shift tray (D388) (** p. 367).				

	[OUTPUT Check]
6153	Displays the signals received from sensors and switches of the shift tray (D388) (**p. 382).
	[INPUT Check]
6154	Displays the signals received from sensors and switches of the 1 bin tray (D536) (**p. 367).
	[OUTPUT Check]
6155	Displays the signals received from sensors and switches of the 1 bin tray (D536) (**p. 382).
001	1 bin: Junction Solenoid
	[INPUT Check]
6160	Displays the signals received from sensors and switches of the two-tray paper feed unit (D537), LCT 2000 (D538) and LCT 1200 (D539) (**p.367*).
	[OUTPUT Check]
6161	Displays the signals received from sensors and switches of the two-tray paper feed unit (D537), LCT 2000 (D538) and LCT 1200 (D539) (p.382).

Main SP Tables-7

SP7-XXX (Data Log)

7401	[Total SC]			
7401	Displays the number of SC codes detected.			
001	SC Counter	*CTL	[0 to 65535 / - / 1/step]	
002	Total SC Counter	*CTL	[0 to 65535 / - / 1/step]	

7403	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.			
001	-			
002	-			
003	-			
004	-			
005	-	*CTL		
006	-	CIL	-	
007	-			
008	-			
009	-			
010	-			

7502	[Total Paper Jam]			
7302	Displays the total number of jams detected.			
001	Jam Counter	* CTL	[0 to 65535 / - / 1/step]	
002	Total Jam Counter	* CTL	[0 to 65535 / - / 1/step]	

3

7502	[Total Original Jam]				
7503	Displays the total number of original jams.				
00	Original Jam counter	*CTL	[0 to 9999 / - / 1 original/step]		
00:	2 Total Original Counter	*CTL	-		

	[Paper Jam Loc] ON: On check, OFF: Off Check			
7504	Displays the number of jams according to the location where jams were detected. • The LCT is counted as the 3rd feed station.			
001	At Power On	*CTL		
003	Tray 1: On	*CTL		
004	Tray 2: On	*CTL		
005	Tray 3: On	*CTL		
006	Tray 4: On	*CTL	For details, see "Jam Detection" in the	
007	LCT : On	*CTL	"Main Chapters: 6. Troubleshooting".	
800	Registration Sn: On (Bypath)	*CTL		
009	Registration Sn: On (Duplex)	*CTL		
011	Vertical Trans. 1: On	*CTL		
012	Vertical Trans. 2: On	*CTL		

013	Vertical Trans. 3: On	*CTL	
014	Vertical Trans. 4: On	*CTL	
017	Registration: On	*CTL	
018	Fusing Entrance: On	*CTL	
019	Fusing Exit: On	*CTL	For details, see "Jam Detection" in the "Main Chapters: 6. Troubleshooting".
020	Paper Exit: On	*CTL	
021	Bridge Tray Exit: On	*CTL	
022	Bridge Relay: On	*CTL	
024	Junction Gate Sensor : On	*CTL	
025	Duplex Exit: On	*CTL	
026	Duplex Entrance: On (In)	*CTL	
027	Duplex Entrance: On (Out)	*CTL	
051	Vertical Trans. 1: Off	*CTL	
052	Vertical Trans. 2: Off	*CTL	
053	Vertical Trans. 3: Off	*CTL	For details, see "Jam Detection" in the
054	Vertical Trans. 4: Off	*CTL	"Main Chapters: 6. Troubleshooting".
057	Registration Sensor: Off	*CTL	
058	LCT Feed Sensor : Off		
060	Paper Exit Off	*CTL	
061	Bridge Tray Exit: Off	*CTL	
062	Bridge Relay: Off	*CTL	

064	Junction Gate Sensor : Off	*CTL	
065	Duplex Exit: Off	*CTL	
066	Duplex Entrance: Off (In)	*CTL	
067	Duplex entrance : Off (Out)	*CTL	
100	Finisher Entrance: KIN	*CTL	
101	Finisher Shift Tray Exit: KIN	*CTL	
102	Finisher Staple: KIN	*CTL	For details, see "Jam Detection" in the "Main Chapters: 6. Troubleshooting".
103	Finisher Exit: KIN	*CTL	
105	Finisher Tray Lift Motor: KIN	*CTL	
106	Finisher Jogger Motor: KIN	*CTL	
107	Finisher Shift Motor: KIN	*CTL	
108	Finisher Staple Motor: KIN	*CTL	
109	Finisher Exit Motor: KIN	*CTL	
191	Finisher Entrance: EUP	*CTL	
192	Finisher Proof Exit: EUP	*CTL	
193	Finisher Shift Tray Exit: EUP	*CTL	
194	Finisher Stapler Exit: EUP	*CTL	
195	Finisher Exit: EUP	*CTL	
198	Finisher Folder: EUP	*CTL	
199	Finisher Tray Motor: EUP	*CTL	For details, see "Jam Detection" in the "Main Chapters: 6. Troubleshooting".
200	Finisher Jogger Motor: EUP	*CTL	
201	Finisher Shift Motor: EUP	*CTL	
202	Finisher Staple Moving Motor: EUP	*CTL	
203	Finisher Staple Motor: EUP	*CTL	
204	Finisher Folder Motor: EUP	*CTL	
206	Finisher Punch Motor: EUP	*CTL	

7505	[Original Jam Det]		
Displays the total number of original jams by location.			
001	At Power On	*CTL	-
003	Skew Correction Sensor: On	*CTL	
004	Registration Sensor: On	*CTL	
005	Original Exit Sensor: On	*CTL	
006	Registration Sensor: On	*CTL	-
007	Original Exit Sensor: On	*CTL	
008	Reverse Sensor: On	*CTL	
053	Skew Correction Sensor: Off	*CTL	
054	Registration Sensor: Off	*CTL	
055	Original Exit Sensor: Off	*CTL	
056	Registration Sensor: Off	*CTL	_
057	Original Exit Sensor: Off	*CTL	
058	Reverse Sensor: Off	*CTL	

7506	[Jam Count by Paper Size]				
7506	Displays the number of jams according to the paper size.				
005	A4 LEF	*CTL			
006	A5 LEF	*CTL			
014	B5 LEF	*CTL	[0 to 9999 / - / 1 sheet/step]		
038	LT LEF	*CTL			
044	HLT LEF	*CTL			

132	A3 SEF	*CTL	
133	A4 SEF	*CTL	
134	A5 SEF	*CTL	
141	B4 SEF	*CTL	
142	B5 SEF	*CTL	[0 to 9999 / - / 1 sheet/step]
160	DLT SEF	*CTL	
164	LG SEF	*CTL	
166	LT SEF	*CTL	
172	HLT SEF	*CTL	
255	Others	*CTL	[0 to 9999 / - / 1 sheet/step]

7507	[Plotter Jam History]		
Displays the 10 most recently detected paper jams.		paper jams.	
001	-		
002	-		
003	-		
004	-		
005	-	*CTL	
006	-	CIL	-
007	-		
800	-		
009	-		
010	-		

7500	[Original Jam History]
7508	Displays the 10 most recently detected original jams.

001	-		
002	-		
003	-		
004	-		
005	-	*CTL	
006	-	CIL	-
007	-		
008	-		
009	-		
010	-		

7404	Part Replacement Operation ON/OFF		
7624	Selects the PM maintenance for each part.		
001	Drum unit: Bk		
002	Drum unit: M		
003	Drum unit: C		
004	Drum unit: Y		
005	Development unit: Bk		
006	Development unit: M	[0 or 1 / 1 / -]	
007	Development unit: C	0: Not PM maintenance 1: PM maintenance	
800	Development unit: Y		
009	Developer: Bk		
010	Developer:M		
011	Developer:C		
012	Developer:Y		

013	Image Transfer Belt	
014	Image Transfer Cleaning Unit	
015	Fusing Unit	[0 or 1 / 1 / -]
016	Paper Transfer Roller Unit	0: Not PM maintenance
017	Waste Toner bottle	1: PM maintenance
018	Fusing Roller	
019	Pressure Roller	

7801	[ROM No/ Firmware Version]				
002	Engine	*CTL	Displays all versions and ROM numbers in the machine.		

	[PM Counter Display] (Page, Unit, [Color])					
7803	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.					
	When a unit is replaced, the machine automatically detects that the new unit is installed. Then, the current PM counter value is automatically moved to the PM Counter - Previous (SP7-906-1 to 10) and is reset to "0".					
	The total number of sheets printed with the last unit replaced can be checked with SP7-906-1 to 10. NOTE: The LCT is counted as the 3rd feed station.					
001	Paper	*CTL	-			

000	n nous ni				
002	Page: PCU: Bk				
003	Page: PCU: M				
004	Page: PCU: C				
005	Page: PCU: Y	*ENG			
006	Page: Development Unit: Bk	LINO			
007	Page: Development Unit: M				
008	Page: Development Unit: C				
009	Page: Development Unit: Y				
010	Page: Developer: Bk				
011	Page: Developer: M				
012	Page: Developer: C				
013	Page: Developer: Y				
014	Page: Image Transfer				
015	Page: Cleaning Unit	*ENG	-		
016	Page: Fusing Unit				
017	Page: Paper Transfer Unit				
018	Page: Toner Collection Bottle				
019	Page: Fusing Roller				
020	Page: Pressure Roller				
	Displays the number of revolutions of motors or clutches for each current maintenance unit.				
	[0 to 9999999 / 0 / 1 revolution/step]				
	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.				
021	-	*ENG			

	Displays the number of pages of the pump unit for each current maintenance unit.				
	[0 to 9999999 / - / 1 page/step]				
	When a unit is replaced, and SP7804-xx moved to the PM Counter - Previous (SP7 number of revolutions made with the last SP7-906-020 to 112.	7-906-020	to 112) and is reset to "0". The total		
021	Page: Pump Unit: Bk				
022	Page: Pump Unit: M	*ENG	[0 to 9999999 / - / 1 page/		
023	Page: Pump Unit: C	LING	step]		
024	Page: Pump Unit: Y				
031	Rotation: PCU: Bk				
032	Rotation: PCU: M				
033	Rotation: PCU: C				
034	Rotation: PCU: Y				
035	Rotation: Development Unit: Bk				
036	Rotation: Development Unit: M	*ENG	[0 to 999999999 / - / 1 mm/		
037	Rotation: Development Unit: C	ENG	step]		
038	Rotation: Development Unit: Y				
039	Rotation: Developer: Bk				
040	Rotation: Developer: M				
041	Rotation: Developer: C				
042	Rotation: Developer: Y				

043	Rotation: Image Transfer	*E	NG		
044	Rotation: Cleaning Unit	*E	NG		
045	Rotation: Fusing Unit	*E	NG		
046	Rotation: Paper Transfer Unit	*E	NG	[0 to 999999999 / - / 1 mm/ step]	
047	Measurement: Toner Collection bottle	*E	NG		,
048	Rotation: Fusing Roller	*E	NG		
049	Rotation: Pressure Roller	*E	NG		
	(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%.				
050	-		*EN	G	
	Displays the running time of the pump unit for each current maintenance unit. [0 to 99999999 / 0 / 1 msec/step] When a unit is replaced, and SP7804-xxx is executed, the current PM counter value is moved to the PM Counter - Previous (SP7-906-020 to 112) and is reset to "0". The total number of revolutions made with the last unit replaced can be checked with SP7-906-020 to 112.				
050	Run Time: Pump Unit : Bk				
051	Run Time: Pump Unit : M		*EN	<u></u>	[0 to 999999999 / - / 1
052	Run Time: Pump Unit : C		EIN	G	msec/step]
053	Run Time: Pump Unit : Y				

061	Rotation (%): PCU: Bk		
062	Rotation (%): PCU: M		
063	Rotation (%): PCU:C		[0 to 255 / - / 1 %/step] (See SP7-803-079 below.)
064	Rotation (%): PCU:Y		
065	Rotation (%): Development Unit: Bk		
066	Rotation (%): Development Unit: M		
067	Rotation (%): Development Unit: C	*ENG	
068	Rotation (%): Development Unit: Y		
	·		
069	Rotation (%): Developer: Bk		
070	Rotation (%): Developer: M		
071	Rotation (%): Developer: C		
072	Rotation (%): Developer: Y		
073	Rotation (%): Image Transfer Belt		
074	Rotation (%): Cleaning Unit		
075	Rotation (%): Fusing Unit		
076	Rotation (%): Paper Transfer Unit	*ENG	[0 to 255 / - / 1 %/step]
077	Measurement (%): Toner Collection bottle		
078	Rotation (%): Fusing Roller		
079	Rotation (%): Pressure Roller		
	Displays the value given by the following form	nula:	
	(Current revolution / Target revolution) \times 100 expected lifetime has been used up.). This shov	vs how much of the unit's
	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%.		
	[0 to 255 / - / 1 %/step]		

	-	*ENG			
	Displays the value given by the following formula:				
000	(Current running time / Target running time) \times 100. This shows how much of the unit's expected lifetime has been used up.				
080	The Run Time (%) counter is based on the runr number of printouts reaches the limit, the macher revolution count lifetime is reached first, the even though the Run Time (%) counter is still left to 255 / - / 1 %/step]	the end condition for that unit. If also enters the end condition,			
080	Run Time(%): Pump Unit: Bk				
081	Run Time(%): Pump Unit: M	*ENIC	[04-255 / /19//4]		
082	Run Time(%): Pump Unit: C	*ENG	[0 to 255 / - / 1 %/step]		
083	Run Time(%): Pump Unit: Y				
091	-				
	Displays the value given by the following formula:				
	(Current printouts / Target printouts) \times 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%.				
	[0 to 255 / - / 1 %/step]				
091	Page (%): PCU: Bk				
092	Page (%): PCU: M		[0 to 255 / - / 1 %/step]		
093	Page (%): PCU: C				
094	Page (%): PCU: Y	*ENG			
095	Page (%): Development Unit: Bk	LING			
096	Page (%): Development Unit:M				
097	Page (%): Development Unit:C				
098	Page (%): Development Unit:Y				

099	Page (%): Developer: Bk				
100	Page (%): Developer: M				
101	Page (%): Developer: C				
102	Page (%): Developer: Y				
103	Page (%): Image Transfer	*5.10	[0 to 255 / - / 1 %/step]		
104	Page (%): Cleaning Unit	*ENG	(See SP7-803-091 below.)		
105	Page (%): Fusing Unit				
106	Page (%): Paper Transfer Unit				
107	Page (%): Fusing Roller				
108	Page (%): Pressure Roller				
109	-	*ENG			
	Displays the value given by the following form	nula:			
	(Current printouts / Target printouts) \times 100. T lifetime has been used up.	outs) × 100. This shows how much of the unit's expected			
	The Page (%) counter is based on printouts, no reaches the limit, the machine enters the end of lifetime is reached first, the machine also enter (%) counter is still less than 100%. [0 to 255 / - / 1 %/step]	condition for that unit. If the revolution cou			
109	Page (%): Pump Unit: Bk				
110	Page (%): Pump Unit: M	*5510	[0.5.055 / /1.9//]		
111	Page (%): Pump Unit: C	*ENG	[0 to 255 / - / 1 %/step]		
112	Page (%): Pump Unit: 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 counter value in SP7-906 (PM Counter - Previous) and reset the value of the current PM counter (SP7-803) to "0".

002	PCU (Drum Unit): Bk	-	-
003	PCU (Drum Unit): M	-	-
004	PCU (Drum Unit): C	-	-
005	PCU (Drum Unit): Y	-	-
006	PCU (Drum Unit): All	-	-
007	Development Unit: Bk	-	-
008	Development Unit: M	-	-
009	Development Unit: C	-	-
010	Development Unit: Y	-	-
011	Development Unit: All	-	-
012	Developer: Bk	-	-
013	Developer: M	-	-
014	Developer: C	-	-
015	Developer: Y	-	-
016	Developer: All	-	-
017	ITB Unit	-	-
018	Cleaning Unit	-	-
019	Fusing Unit	-	-
020	PTR Unit	-	-
021	Toner Collection Bottle	-	-
022	Fusing Roller (Heating Roller)	-	-
023	Pressure Roller	-	-
024	Pump Unit: Bk	-	-
025	Pump Unit: M	-	-
026	Pump Unit: C	-	-
027	Pump Unit: Y	-	-

028	Pump Unit: All	-	-
100	All	-	-

7807	[SC/Jam Counter Reset]		
7 807	Clears the counters related to SC codes and paper jams.		
001	SC/Jam Clear	-	-

7022	[Self-Diagnose Result Display]		
7832 Displays the result of the diagnostics.			
001	Diag. Result	*CTL	-

7835	[ACC Counter]		
001	Сору АСС	*CTL	Displays the ACC exectuion times for each
002	Printer ACC	*CTL	mode.

7836	Total Memory Size
/030	Displays the memory capacity of the controller system.

	[DF Glass Dust Check]				
7852	Counts the number of occurrences (0 to 65,535) when dust was detected on the scanning glass of the ADF or resets the dust detection counter. Counting is done only if SP4-020-1 (ADF Scan Glass Dust Check) is switched on.				
001	Dust Detection Counter	*ENG	[0 to 9999 / - / 1 /step]		
002	Dust Detection Clear Counter	Detection Clear Counter *ENG [0 to 9999 / - / 1 /step]			
003	Dust Detection Counter: Back	*ENG	[0 to 9999 / - / 1 /step]		

7853	[Replacement Counter]	
7633	Displays the PM parts replacement number.	

001	PCU: Bk	*ENG	
002	PCU: M	*ENG	
003	PCU: C	*ENG	
004	PCU: Y	*ENG	
005	Development Unit: Bk	*ENG	
006	Development Unit: M	*ENG	
007	Development Unit: C	*ENG	[0 to 255 / - / 1 /step]
008	Development Unit: Y	*ENG	
009	Developer: Bk	*ENG	
010	Developer: M	*ENG	
011	Developer: C	*ENG	
012	Developer: Y	*ENG	
013	Image Transfer	*ENG	
014	Cleaning Unit	*ENG	
015	Fusing Unit	*ENG	
016	Paper Transfer Unit	*ENG	[0 to 255 / - / 1 /step]
017	Tonner Collection Bottle	*ENG	
018	Fusing Roller	*ENG	
019	Pressure Roller	*ENG	
020	Pump Unit: Bk		
021	Pump Unit: M	*ENIO	[0.5.255 / /1 /]
022	Pump Unit: C	*ENG	[0 to 255 / - / 1 /step]
023	Pump Unit: Y		

[Coverage Range] Sets the color coverage threshold. Coverage rate = Coverage per page / A4 full coverage (dots) x 100 There are three coverage counters: Color 1, Color 2, and Color 3 • [A] 5% (default) is adjustable with SP7855-001. • [B] 20% (default) is adjustable with SP7855-002. [A] [B] Color1 Color2 Color3 7855 Color 200% 0% coverage **Note** • The setting value [B] must be set larger than [A]. The total numbers of printouts (BW printing plus color printing) for each coverage range are displayed with the following SPs. Color1 counter: SP8601-021 • Color2 counter: SP8601-022 • Color3 counter: SP8601-023 001 *CTL [1 to 200 / 5 / 1]Coverage Range 1 *CTL 002 Coverage Range 2 [1 to 200 / 20 / 1]

7906		[Prev. Unit PM Counter]
		(Page or Rotations, Unit, [Color]), Dev.: Development Unit
		Displays the number of sheets printed with the previous maintenance units.

001	Page: PCU: Bk		
002	Page: PCU: M		
003	Page: PCU: C		
004	Page: PCU: Y		
005	Page: Development Unit: Bk		
006	Page: Development Unit: M	*5.10	[0. 0000000 / 0 / 1 / 1]
007	Page: Development Unit: C	*ENG	[0 to 9999999 / 0 / 1 page/step]
008	Page: Development Unit: Y		
009	Page: Developer: Bk		
010	Page: Developer: M		
011	Page: Developer: C		
012	Page: Developer: Y		
013	Page: Image Transfer		
014	Page: Cleaning Unit		
015	Page: Fusing Unit		
016	Page: Paper Transfer Unit	*ENG	[0 to 9999999 / 0 / 1 page/step]
017	Page: Toner Collection Bottle		
018	Page: Fusing Roller		
019	Page: Pressure Roller		
	Displays the number of revolutions for (See SP7-906-031 to 046 below.)	motors or c	clutches in the previous maintenance units.
020	Page: Pump Unit	*ENG	
	Displays the number of sheets printed [0 to 9999999 / 0 / 1 page/step]	with the pre	evious maintenance units.

020	Page: Pump Unit: Bk			
021	Page: Pump Unit: M	*5510	[0.0000000 / 0 / 1 / 1]	
022	Page: Pump Unit: C	*ENG	[0 to 9999999 / 0 / 1 page/step]	
023	Page: Pump Unit: Y			
031	Rotation: PCU: Bk			
032	Rotation: PCU: M			
033	Rotation: PCU: C			
034	Rotation: PCU: Y			
035	Rotation: Development Unit: Bk			
036	Rotation: Development Unit: M	*ENG	[0 to 9999999 / 0 / 1 mm/step]	
037	Rotation: Development Unit: C	EING	(See SP7-906-019 above.)	
038	Rotation: Development Unit: Y			
039	Rotation: Developer: Bk			
040	Rotation: Developer: M			
041	Rotation: Developer: C			
042	Rotation: Developer: Y			
043	Rotation: Image Transfer			
044	Rotation: Cleaning Unit			
045	Rotation: Fusing Unit			
046	Rotation: Paper Transfer Unit	*ENG	[0 to 9999999 / 0 / 1 mm/step]	
047	Measurement: Toner Collection bottle		(See SP7-906-019 above.)	
048	Rotation: Fusing Roller			
049	Rotation: Pressure Roller			
	Displays the number of sheets printed	with the pre	evious maintenance unit or toner cartridge.	
050	Run Time: Pump Unit	*ENG		

	Displays the running time of the previo		nit	
050	Run Time: Pump Unit: Bk			
051	Run Time: Pump Unit: M	*5510	[0., 000000000 / 0 / 1 / .]	
052	Run Time: Pump Unit: C	*ENG	[0 to 999999999 / 0 / 1 msec/step]	
053	Run Time: Pump Unit: Y			
061	Rotation %: PCU:	*ENG		
	Displays the value given by the followi	ng formula	:	
	(Current revolution / Target revolution) \times 100. This shows how much of the unit's expect lifetime has been used up.			
	the limit, the machine enters the end coreached first, the machine also enters to counter is still less than 100%.	otations, not prints. If the number of rotations reache condition for that unit. If the print count lifetime is the end condition, even though the Rotation %		
0.41	[0 to 255 / 0 / 1 %/step]			
061	Rotation %: PCU: BK			
062	Rotation %: PCU:M			
063	Rotation %: PCU:C			
064	Rotation %: PCU:Y	*ENG	[0 to 255 / 0 / 1 %/step]	
065	Rotation %: Development Unit: Bk	EING	[U to 233 / U / 1 /// step]	
066	Rotation %: Development Unit: M			
067	Rotation %: Development Unit: C			
068	Rotation %: Development Unit: Y			

069	Rotation %: Developer: Bk				
070	Rotation %: Developer: M				
071	Rotation %: Developer: C				
072	Rotation %: Developer: Y				
073	Rotation %: Image Transfer Belt				
074	Rotation %: Cleaning Unit	*ENG	[0	[0 to 255 / 0 / 1 %/step]	
075	Rotation %: Fusing Unit		'		
076	Rotation %: Paper Transfer Unit				
077	Measurement %: Toner Collection bottle				
078	Rotation (%): Fusing Roller				
079	Rotation (%): Pressure Roller				
	Displays the value given by the followi (Current count / Yield count) x 100, w counter for the part, and "Yield count"	here "C	urrent		
	Run Time (%): Pump Unit	*	ENG		
	Displays the value given by the followi (Current running time / Target running expected lifetime has been used up.	_		This shows how much of the unit's	
080	The Run Time (%) counter is based on the number of printouts reaches the lim If the revolution count lifetime is reache even though the Run Time (%) counter	it, the mach d first, the r	achine e ma	e enters the end condition for that unit. chine also enters the end condition,	
	[0 to 255 / 0 / 1 %/step]				
080	Run Time (%): Pump Unit: Bk				
081	Run Time (%): Pump Unit: M	*	eng	[0 to 255 / 0 / 1 %/step]	
082	Run Time (%): Pump Unit: C		, ,	L , 5 , 1 .0, 3.5p 1	
083	Run Time (%): Pump Unit: Y				

	Page %: PCU	*ENG				
	Displays the value given by the following formula:					
001	(Current printouts / Target printouts) × 100. This shows how much of the unit's expected lifetime has been used up.					
091	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%.					
	[0 to 255 / 0 / 1 %/step]					
091	Page %: PCU: Bk					
092	Page %: PCU: M		[0 to 255 / 0 / 1 %/step]			
093	Page %: PCU: C					
094	Page %: PCU: Y					
095	Page %: Development Unit: Bk					
096	Page %: Development Unit: M	*ENG				
097	Page %: Development Unit: C	ENG				
098	Page %: Development Unit: Y					
099	Page %: Developer: Bk					
100	Page %: Developer: M					
101	Page %: Developer: C					
102	Page %: Developer: Y					

103	Page %: Image Transfer		
104	Page %: Cleaning Unit		[0 to 255 / 0 / 1 %/step]
105	Page %: Fusing Unit		
106	Page %: Paper Transfer Unit	*ENG	
107	Page (%): Fusing Roller		
108	Page (%): Pressure Roller		
109	Page (%): Pump Unit: Bk		
110	Page (%): Pump Unit: M		
111	Page (%): Pump Unit: C		
112	Page (%): Pump Unit: Y		

7001	[Toner Bottle Bk]		
7931	Displays the toner bottle information fo	for Bk.	
001	Machine Serial ID		
002	Cartridge Ver		
003	Brand ID		
004	Area ID		
005	Product ID		
006	Color ID	*ENG	
007	Maintenance ID		
008	New Product Information		
009	Recycle Counter		
010	Date		
011	Serial No.		

012	Toner Remaining			
013	EDP Code			
014	End History			
015	Refill Information	*ENG		
016	Attachment: Total Counter			
017	Attachment: Color Counter	LING	-	
018	End: Total Counter			
019	End: Color Counter			
020	Attachment Date			
021	End Date			

7020	[Toner Bottle M]			
7932	Displays the toner bottle information for M.			
001	Machine Serial ID			
002	Cartridge Ver			
003	Brand ID			
004	Area ID	l		
005	Product ID			
006	Color ID	*ENG	-	
007	Maintenance ID			
008	New Product Information			
009	Recycle Counter			
010	Date			
011	Serial No.			

012	Toner Remaining		
013	EDP Code	*ENG -	
014	End History		
015	Refill Information		
016	Attachment: Total Counter		*5.10
017	Attachment: Color Counter		-
018	End: Total Counter		
019	End: Color Counter		
020	Attachment Date		
021	End Date		

7022	[Toner Bottle C]			
7933	Displays the toner bottle information for C.			
001	Machine Serial ID			
002	Cartridge Ver			
003	Brand ID			
004	Area ID			
005	Product ID			
006	Color ID	*ENG		
007	Maintenance ID			
008	New Product Information			
009	Recycle Counter			
010	Date			
011	Serial No.			

012	Toner Remaining	*ENG -		
013	EDP Code			
014	End History			
015	Refill Information		*ENG -	
016	Attachment: Total Counter			
017	Attachment: Color Counter			-
018	End: Total Counter			
019	End: Color Counter			
020	Attachment Date			
021	End Date			

7934	[Toner Bottle Y]			
7934	Displays the toner bottle information for Y.			
001	Machine Serial ID			
002	Cartridge Ver			
003	Brand ID			
004	Area ID			
005	Product ID			
006	Color ID	*ENG	-	
007	Maintenance ID			
008	New Product Information			
009	Recycle Counter			
010	Date			
011	Serial No.			

012	Toner Remaining		
013	EDP Code		
014	End History		
015	Refill Information		
016	Attachment: Total Counter	*ENG	*ENG -
017	Attachment: Color Counter		
018	End: Total Counter		
019	End: Color Counter		
020	Attachment Date		
021	End Date		

7935	[Toner Bottle Log 1: Bk]		
001	Serial No.	*ENG	
002	Attachment Date		Displays the toner bottle information
003	Attachment: Total Counter		log 1 for Bk.
004	Refill Information		
011	Serial No.	*ENG	
012	Attachment Date		Displays the toner bottle information
013	Attachment: Total Counter		log 2 for Bk.
014	Refill Information		
021	Serial No.		
022	Attachment Date	*ENG	Displays the toner bottle information
023	Attachment: Total Counter		log 3 for Bk.
024	Refill Information		

031	Serial No.	*ENG	
032	Attachment Date		Displays the toner bottle information
033	Attachment: Total Counter		log 4 for Bk.
034	Refill Information		
041	Serial No.		
042	Attachment Date	*ENG	Displays the toner bottle information
043	Attachment: Total Counter	ENG	log 5 for Bk.
044	Refill Information		

7936	[Toner Bottle Log 1: M]		
001	Serial No.	*ENG	
002	Attachment Date		Displays the toner bottle information
003	Attachment: Total Counter		log 1 for M.
004	Refill Information		
011	Serial No.	*ENG	
012	Attachment Date		Displays the toner bottle information
013	Attachment: Total Counter		log 2 for M.
014	Refill Information		
021	Serial No.		
022	Attachment Date	*ENG	Displays the toner bottle information
023	Attachment: Total Counter	EING	log 3 for M.
024	Refill Information		
031	Serial No.		
032	Attachment Date	*ENG	Displays the toner bottle information
033	Attachment: Total Counter	* *ENG	log 4 for M.
034	Refill Information		

041	Serial No.	*ENG	
042	Attachment Date		Displays the toner bottle information
043	Attachment: Total Counter		log 5 for M.
044	Refill Information		

7937	[Toner Bottle Log 1: C]		
001	Serial No.	*ENG	
002	Attachment Date		Displays the toner bottle information
003	Attachment: Total Counter		log 1 for C.
004	Refill Information		
011	Serial No.	*ENG	
012	Attachment Date		Displays the toner bottle information
013	Attachment: Total Counter		log 2 for C.
014	Refill Information		
021	Serial No.	*ENG	
022	Attachment Date		Displays the toner bottle information
023	Attachment: Total Counter		log 3 for C.
024	Refill Information		
031	Serial No.		
032	Attachment Date	*ENG	Displays the toner bottle information
033	Attachment: Total Counter		log 4 for C.
034	Refill Information		
041	Serial No.		
042	Attachment Date	*ENG	Displays the toner bottle information
043	Attachment: Total Counter	LING	log 5 for C.
044	Refill Information		

7938	[Toner Bottle Log 1: Y]		
001	Serial No.	*ENG	
002	Attachment Date		Displays the toner bottle information
003	Attachment: Total Counter		log 1 for Y.
004	Refill Information		
011	Serial No.	- *ENG	
012	Attachment Date		Displays the toner bottle information
013	Attachment: Total Counter		log 2 for Y.
014	Refill Information		
021	Serial No.	*ENG	Displays the toner bottle information
022	Attachment Date		
023	Attachment: Total Counter		log 3 for Y.
024	Refill Information		
031	Serial No.		
032	Attachment Date	*ENG	Displays the toner bottle information
033	Attachment: Total Counter	LING	log 4 for Y.
034	Refill Information		
041	Serial No.		
042	Attachment Date	*ENG	Displays the toner bottle information
043	Attachment: Total Counter	ENG	log 5 for Y.
044	Refill Information		

7950	[Unit Replacement Date]
1	Displays the replacement date of each PM unit.

001	Image Transfer Belt		
002	Cleaning Unit		
003	Paper Transfer Unit		
004	Fusing Unit		
005	Toner Collection Bottle		
006	AIT:Bk		
007	AIT:M		
008	AIT:C	*ENG	
009	AIT:Y		
010	Fusing Roller		
011	Pressure Roller		
012	Pump Unit: Bk		
013	Pump Unit: M		
014	Pump Unit: C		
015	Pump Unit: Y		

7051	[Remaining Day Counter]	
7951	Displays the remaining unit life of each PM unit.	

001	Page: PCU: Bk		
002	Page: PCU: M		
003	Page: PCU: C		
004	Page: PCU: Y		
005	Page: Development Unit: Bk		
006	Page: Development Unit: M	*ENG	[0 to 255 / 255 / 1 day/step]
007	Page: Development Unit: C	ENG	[0 10 233 / 233 / 1 ddy/siep]
008	Page: Development Unit: Y		
009	Page: Developer: Bk		
010	Page: Developer: M		
011	Page: Developer: C		
012	Page: Developer: Y		
013	Page: Image Transfer		
014	Page: Cleaning Unit		
015	Page: Fusing Unit	*ENG	[0 to 255 / 255 / 1 day/step]
016	Page: Paper Transfer Unit	LING	[0 10 233 / 233 / 1 ddy/ siep]
017	Page: Fusing Roller		
018	Page: Pressure Roller		

031	Rotation: PCU: Bk		
032	Rotation: PCU: M		
033	Rotation: PCU: C		
034	Rotation: PCU: Y		
035	Rotation: Development Unit: Bk		
036	Rotation: Development Unit: M	*5510	[0, 055 / 055 /1] /, 1
037	Rotation: Development Unit: C	*ENG	[0 to 255 / 255 / 1 day/step]
038	Rotation: Development Unit: Y		
039	Rotation: Developer: Bk		
040	Rotation: Developer: M		
041	Rotation: Developer: C		
042	Rotation: Developer: Y		
043	Rotation: Image Transfer		
044	Rotation: Cleaning Unit		
045	Rotation: Fusing Unit		[0 to 255 / 255 / 1 day/step]
046	Rotation: Paper Transfer Unit	*ENG	
047	Measurement: Toner Collection bottle	EING	,, ,,
048	Rotation: Fusing Roller		
049	Rotation: Pressure Roller		

101	Minimum: PCU: Bk		
102	Minimum: PCU: M		
103	Minimum: PCU: C		
104	Minimum: PCU: Y		
105	Minimum: Development Unit: Bk		
106	Minimum: Development Unit: M		
107	Minimum: Development Unit: C		Displays one of the three, Remaining
108	Minimum: Development Unit: Y		Day Counter: Rotation or Runtime, or Remaining Day Counter: Page, which
109	Minimum: Developer: Bk	*ENG	is the minimum value. [0 to 255 / 255 / 1 day/step] For toner collection bottle, this SP is not displayed because its Remaining Day Counters is calculated with its weights only.
110	Minimum: Developer: M		
111	Minimum: Developer: C		
112	Minimum: Developer: Y		
113	Minimum: Image Transfer		
114	Minimum: Cleaning Unit		
115	Minimum: Fusing Unit		
116	Minimum: Paper Transfer Unit		
117	Minimum: Fusing Roller		
118	Minimum: Pressure Roller		
119	Minimum: Pump Unit: Bk		Displays either Remaining Day
120	Minimum: Pump Unit: M	*FNG	Displays either Remaining Day Counter: time or Page, which is less
121	Minimum: Pump Unit: C	ENG	value. [0 to 255 / 255 / 1 day/step]
122	Minimum: Pump Unit: Y		

7952	[PM Yield Setting]				
7932	Adjusts the unit yield of each PM unit.				
001	Rotation: Image Transfer Belt	*CTL	[0 to 99999999 / 256597000 / 1 mm/step]		

002	Rotation: Cleaning Unit	*CTL	[0 to 99999999 / 128299000 / 1 mm/step]
003	Rotation: Fusing Unit	*CTL	[0 to 99999999 / 155595000 / 1 mm/step]
004	Rotation: Paper Transfer Unit	*CTL	[0 to 99999999 / 192448000 / 1 mm/step]
011	Page: Image Transfer Belt	*CTL	[0 to 999999 / 320000 / 1 sheet/step]
012	Page: Cleaning Unit	*CTL	[0 to 999999 / 160000 / 1 sheet/step]
013	Page: Fusing Unit	*CTL	[0 to 999999 / 160000 / 1 sheet/step]
014	Page: Paper Transfer Unit	*CTL	[0 to 999999 / 240000 / 1 sheet/step]
021	Day Threshold: PCU: Bk		
022	Day Threshold: PCU: M		
023	Day Threshold: PCU: C		
024	Day Threshold: PCU: Y		
025	Day Threshold: Development Unit: Bk		
026	Day Threshold: Development Unit: M	* 671	Adjusts the threshold day for the near end fro each PM unit.
027	Day Threshold: Development Unit: C	*CTL	[1 to 30 / 15 / 1 day/step] These threshold days are used for @Remote alarms.
028	Day Threshold: Development Unit: Y		
029	Day Threshold: Developer: Bk		
030	Day Threshold: Developer: M		
031	Day Threshold: Developer: C		
032	Day Threshold: Developer: Y		

033	Day Threshold: Image Transfer Belt		
034	Day Threshold: Cleaning Unit		Adjusts the threshold day for the near end fro
035	Day Threshold: Fusing Unit	*CTL	[1 to 30 / 15 / 1 day/step]
036	Day Threshold: Paper Transfer Unit		These threshold days are used for @Remote alarms.
037	Day Threshold: Toner Collection Bottle		
038	Rotation: PCU Bk		
039	Rotation: PCU M	* CTI	[0.1.000000000 / 0./ 1/.1]
040	Rotation: PCU C	*CTL	[0 to 999999999 / 0 / 1 mm/step]
041	Rotation: PCU Y		
042	Rotation: Development Unit: Bk	*CTL	[0 to 999999999 / 0 / 1 mm/step]
043	Rotation: Development Unit:		
044	Rotation: Development Unit: C		
045	Rotation: Development Unit: Y		
046	Rotation: Developer: Bk		
047	Rotation: Developer: M	* CTI	[0.1.000000000 / 0./1/]
048	Rotation: Developer: C	*CTL	[0 to 999999999 / 0 / 1 mm/step]
049	Rotation: Developer: Y		
050	Page: PCU: Bk		
051	Page: PCU: M	* CTI	[0+,000000 / 0 / 1 1 / 1 1
052	Page: PCU: C	*CTL	[0 to 999999 / 0 / 1 sheet/step]
053	Page: PCU: Y		

054	Page: Development Unit: Bk	*CTL	[0 to 999999 / 0 / 1 sheet/step]
055	Page: Development Unit: M		
056	Page: Development Unit: C		
057	Page: Development Unit: Y		
058	Page: Developer: Bk	*CTL	
059	Page: Developer: M		[0.1.000000 / 0./1.
060	Page: Developer: C		[0 to 999999 / 0 / 1 sheet/step]
061	Page: Developer: Y		

	[Operation Env. Log: PCU: Bk]					
7953	Displays the PCDU rotation distance in each specified operation environment.					
	T: Temperature (°C), H: Relative Humidity (%)					
001	T<=0					
002	0 <t<=5:0<=h<30< td=""><td rowspan="4">*CTL</td><td></td></t<=5:0<=h<30<>	*CTL				
003	0 <t<=5:30<=h<70< td=""><td></td></t<=5:30<=h<70<>					
004	0 <t<=5:70<=h<=100< td=""><td></td></t<=5:70<=h<=100<>					
005	5 <t<15:0<=h<30< td=""><td>[0 to 99999999 / - / 1 mm/step]</td></t<15:0<=h<30<>		[0 to 99999999 / - / 1 mm/step]			
006	5 <t<15:30<=h<55< td=""><td>CIL</td><td>[0 10 4444444 - / 1 mm/ sieb]</td></t<15:30<=h<55<>	CIL	[0 10 4444444 - / 1 mm/ sieb]			
007	5 <t<15:55<=h<80< td=""><td></td><td></td></t<15:55<=h<80<>					
008	5 <t<15:80<=h<=100< td=""><td rowspan="3"></td><td></td></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	*CTL	[0 to 99999999 / - / 1 mm/step]
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. Log Clear]			
7934	Clears the operation environment log.			
001	-	-	-	

7955	Fusing Stop				
001	Near End: Page	-	[1 to 999999 / 318000 / 1 sheet/step]		
001	Displays the threshold sheet for the heating roller near end.				
002	End: Page	-	[1 to 999999 / 330000 / 1 sheet/step]		
002	Displays the threshold sheet for the heating roller end.				
003	Near End: Rotation	-	[0 to 999999999 / C3a: 173327000, C3b: 162570000 / 1 mm/step]		
	Displays the threshold distance for the heating roller near end.				
004	End: Rotation	-	[0 to 999999999 / C3a: 179868000, C3b: 168705000 / 1 mm/step]		
	Displays the threshold distance for the heating roller end.				

Main SP Tables-8

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.		
F:	Fax application.	Totals (pages, jobs, etc.) executed for each application	
P:	Print application.	when the job was not stored on the document server.	
S:	Scan application.		

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		
С	Cyan		
ColCr	Color Create		
ColMode	Color Mode		
Comb	Combine		
Comp	Compression		
Deliv	Delivery		

Abbreviation What it means		
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.	
К	Black (YMCK)	
LS	Local Storage. Refers to the document server.	
LSize	Large (paper) Size	
Mag	Magnification	
МС	One color (monochrome)	
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	

Abbreviation	What it means		
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		
Red (Toner Remaining). Applies to the wide format model A2 on 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.		
Svr	Server		
TonEnd	Toner End		
TonSave	Toner Save		
TXJob	Send, Transmission		
YMC	Yellow, Magenta, Cyan		
YMCK	Yellow, Magenta, Cyan, Black		



• All of the Group 8 SPs are reset with SP5 801 1 Memory All Clear.

8 001	T:Total Jobs	*CTL	These SPs count the number of times each application is used to do a job.
8 002	C:Total Jobs	*CTL	[0 to 9999999/ 0 / 1]
8 003	F:Total Jobs	*CTL	Note
8 004	P:Total Jobs	*CTL	The L: counter is the total number of times the other applications are used to send a job to the document
8 005	S:Total Jobs	*CTL	server, plus the number of times a file already on the
8 006	L:Total Jobs	*CTL	document server is used.

- 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	
8 012	C:Jobs/LS	*CTL	These SPs count the number of jobs stored to the document
8 013	F:Jobs/LS	*CTL	server by each application, to reveal how local storage is
8 014	P:Jobs/LS	*CTL	being used for input. [0 to 9999999 / 0 / 1]
8 015	S:Jobs/LS	*CTL	The L: counter counts the number of jobs stored from within
8 016	L:Jobs/LS	*CTL	the document server mode screen at the operation panel.
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.

8 021	T:Pjob/LS	*CTL	
8 022	C:Pjob/LS	*CTL	These SPs reveal how files printed from the document
8 023	F:Pjob/LS	*CTL	server were stored on the document server originally.
8 024	P:Pjob/LS	*CTL	[0 to 9999999/ 0 / 1] The L: counter counts the number of jobs stored from
8 025	S:Pjob/LS	*CTL	within the document server mode screen at the
8 026	L:Pjob/LS	*CTL	operation panel.
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 03 1	T:Pjob/DesApl	*CTL	
8 032	C:Pjob/DesApl	*CTL	These SPs reveal what applications were used to
8 033	F:Pjob/DesApl	*CTL	output documents from the document server.
8 034	P:Pjob/DesApl	*CTL	[0 to 9999999/ 0 / 1] The L: counter counts the number of jobs printed from
8 035	S:Pjob/DesApl	*CTL	within the document server mode screen at the
8 036	L:Pjob/DesApl	*CTL	operation panel.
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
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

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 9999999/ **0** / 1]

U 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.
- 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 email, the O: counter increments.

8 051	T:TX Jobs/DesApl	*CTL	There CD- accordance are all continuous and to condition
8 052	C:TX Jobs/DesApl	*CTL	These SPs count the applications used to send files from the document server over the telephone line or
8 053	F:TX Jobs/DesApl	*CTL	over a network (attached to an e-mail, or as a fax image by I-Fax). Jobs merged for sending are
8 054	P:TX Jobs/DesApl	*CTL	counted separately.
8 055	S:TX Jobs/DesApl	*CTL	[0 to 9999999/ 0 / 1] The L: counter counts the number of jobs sent from
8 056	L:TX Jobs/DesApl	*CTL	within the document server mode screen at the
8 057	O:TX Jobs/DesApl	*CTL	operation panel.

• If the send is started from Desk Top Binder or Web Image Monitor, for example, then the O: counter increments.

	T:FIN Jobs	*CTL	[0 to 9999999/ 0 / 1]		
8 061	These SPs total the finishing methods. The finishing method is specified by the application.				
	C:FIN Jobs	*CTL	[0 to 9999999/ 0 / 1]		
8 062	These SPs total finishing methods for copy jobs only. The finishing method is specified by the application.				

	F:FIN Job	os	*CTL	[0 to 9999999/ 0 / 1]		
	These SPs total finishing methods for fax jobs only. The finishing method is specified					
8 063		pplication.				
	₩ Note					
	• Finis	shing features for	fax jobs c	rre not available at this time.		
	P:FIN Job	os	*CTL	[0 to 9999999/ 0 / 1]		
8 064		s total finishing m oplication.	ethods for	print jobs only. The finishing method is specified		
	S:FIN Jol	os	*CTL	[0 to 9999999/ 0 / 1]		
8 065		s total finishing m	ethods for	scan jobs only. The finishing method is specified		
	U Note	<u>. </u>				
	• Fini:	shing features for	scan jobs	are not available at this time.		
	L:FIN Job	os	*CTL	[0 to 9999999/ 0 / 1]		
8 066	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.					
	O:FIN Jobs		*CTL	[0 to 9999999/ 0 / 1]		
8 067	These SPs total finishing methods for jobs executed by an external application, over the network. The finishing method is specified by the application.					
8 06x 1	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 2	Stack	Number of jobs started out of Sort mode.				
8 06x 3	Staple	Number of jobs started in Staple mode.				
8 06x 4	Booklet	Number of jobs started in Booklet mode. If the machine is in staple mode, the Staple counter also increments.				
8 06x 5	Z-Fold	Number of jobs started In any mode other than the Booklet mode and set for folding (Z-fold).				
8 06x 6	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 7 Other	Reserved. Not used.
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	T:Jobs/PGS	*CTL	[0 to 9	999999/0/1]		
8 071	These SPs count the number of jobs broken down by the number of pages in the job, regardless of which application was used.					
	C:Jobs/PGS	*CTL	[0 to 9	999999/0/1]		
8 072	These SPs count and calc	culate the nun	nber of co	opy jobs by size based on the number		
	F:Jobs/PGS	*CTL	[0 to 9	999999/ 0 /1]		
8 073	These SPs count and calc of pages in the job.	culate the nur	nber of fo	ax jobs by size based on the number		
	P:Jobs/PGS	*CTL	[0 to 99	999999/0/1]		
8 074	These SPs count and calc of pages in the job.	culate the num	nber of p	rint jobs by size based on the number		
	S:Jobs/PGS *CTL [0 to 9999999/ 0 / 1]					
8 075	These SPs count and calculate the number of scan jobs by size based on the number of pages in the job.					
	L:Jobs/PGS	*CTL	[0 to 99	999999/0/1]		
8 076	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.					
	O:Jobs/PGS	*CTL	[0 to 99	999999/0/1]		
8 077	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.					
8 07x 1	1 Page	8 07x 8		21 to 50 Pages		
8 07x 2	2 Pages	8 07x 9		51 to 100 Pages		
8 07x 3	3 Pages	8 07x 10		101 to 300 Pages		
8 07x 4	4 Pages	8 07x 11		301 to 500 Pages		
8 07x 5	5 Pages	8 07x 12		501 to 700 Pages		
8 07x 6	6 to 10 Pages	8 07x 13		701 to 1000 Pages		

8 07x 7 11 to 20 Pages 8 07x 14 1001 to	Pages
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- 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.

	T:FAX TX Jobs	*CTL	[0 to 9999999/ 0 / 1]		
8 111	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. • Color fax sending is not available at this time.				
	F: FAX TX Jobs	*CTL	[0 to 9999999/ 0 / 1]		
8 113	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.				
8 11x 1	B/W				
8 11x 2	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.

	T:IFAX TX Jobs	*CTL	[0 to 9999999/ 0 / 1]		
8 121	directly or using a file sto	Ps count the total number of jobs (color or black-and-white) sent, either or using a file stored on the document server, as fax images using I-Fax. e lor fax sending is not available at this time.			
	F: IFAX TX Jobs	*CTL	[0 to 9999999/ 0 / 1]		
8 123	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 1	B/W				
8 12x 2	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.

	T:S-to-Email Jobs	*CTL	[0 to 9999999/ 0 / 1]		
8 131	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.				
	S: S-to-Email Jobs	*CTL	[0 to 9999999/ 0 / 1]		
8 135	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 1	B/W				
8 13x 2	Color				
8 13x 3	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).

	T:Deliv Jobs/Svr	*CTL	[0 to 9999999/ 0 / 1]		
8 141	These SPs count the total number of jobs (color or black-and-white) scanned and sent to a Scan Router server.				
	S: Deliv Jobs/Svr	*CTL	[0 to 9999999/ 0 / 1]		
8 145	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 1	B/W				
8 14x 2	Color				
8 14x 3	Ix 3 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.

	T:Deliv Jobs/PC	*CTL	[0 to 9999999/ 0 / 1]		
8 151	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/ 0 / 1]		
	These SPs count the total number of jobs (color or black-and-white) scanned and sent with Scan-to-PC.				
8 15x 1	B/W				
8 15x 2	Color				
8 15x 3	ACS				

- 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	T:PCFAX TX Jobs	*CTL	These SPs count the number of PC Fax transmission
8 163	F:PCFAX TX Jobs	*CTL	jobs. A job is counted from when it is registered for sending, not when it is sent. [0 to 9999999 / 0 / 1] • Note • At the present time, these counters perform identical counts.

• 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.
8 175	S:Deliv Jobs/WSD	*CTL	[0 to 9999999/ 0 / 1]
-001	B/W		
-002	Color		
-003	ACS		

8 181	T:Scan to Media Jobs	*CTL These SPs count the scanned pages in a medi	
8 185	S:Scan to Media Jobs	* 0.71	the scanner application. [0 to 9999999/ 0 / 1]

-0	001	B/W
-0	002	Color
-0	003	ACS

8 191	T:Total Scan PGS	*CTL	
8 192	C:Total Scan PGS	*CTL	These SPs count the pages scanned by each
8 193	F:Total Scan PGS	*CTL	application that uses the scanner to scan images.
8 195	S:Total Scan PGS	*CTL	[0 to 9999999/ 0 / 1]
8 196	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 3 B5 pages and 1 A3 page are scanned with the scanner application but not stored, the S: count is 4.
- 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.

	T:LSize Scan PGS	*CTL	[0 to 9999999/ 0 / 1]		
8 201	These SPs count the total number of large pages input with the scanner for scan and copy jobs. Large size paper (A3/DLT) scanned for fax transmission are not counted.				
	♥ Note				
	These counters are displayed in the SMC Report, and in the User Tools display.				

8 203	F: LSize Scan PGS	*CTL	[0 to 9999999/ 0 / 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	S:LSize Scan PGS	*CTL	[0 to 9999999/ 0 / 1]			
	These SPs count the total number of large pages input with the scanner for scan jobs only. Large size paper (A3/DLT) scanned for fax transmission are not counted.					
	 These counters are displayed in the SMC Report, and in the User Tools display. 					

8 211	T:Scan PGS/LS	*CTL	These SPs count the number of pages scanned into the
8 212	C:Scan PGS/LS	*CTL	document server. [0 to 9999999 / 0 / 1]
8 213	F:Scan PGS/LS	*CTL	The L: counter counts the number of pages stored from
8 215	S:Scan PGS/LS	*CTL	within the document server mode screen at the operation panel, and with the Store File button from
8 216	L:Scan PGS/LS	*CTL	within the Copy mode screen

- 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.

	ADF Org Feeds	*CTL	[0 to 9999999/ 0 / 1]
8 221	These SPs count the number scanning.	of pages	fed through the ADF for front and back side

8 221 1	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
8 221 2	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.

	Scan PGS/Mode	*CTL	[0 to 9999999/ 0 / 1]
8 231	These SPs count the number of pages scanned by each ADF mode to determine the work load on the ADF.		
8 231 1	Large Volume		table. Large copy jobs that cannot be loaded in DF at one time.
8 231 2	SADF	Selec	table. Feeding pages one by one through the ADF.
8 231 3	Mixed Size	Selec	table. Select "Mixed Sizes" on the operation I.
8 231 4	Custom Size	Selec	table. Originals of non-standard size.
8 231 5	Platen		mode. Raising the ADF and placing the original tly on the platen.
8 231 6	Mixed 1side/2side	Simp	lex 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.

	T:Scan PGS/O	rg	rg *CTL [0 to 9999999/ 0 / 1]					
8 241		These SPs count the total number of scanned pages by original type for all jobs, regardless of which application was used.						
0.040	C:Scan PGS/C	Org	*CTL	[0 to 999999	9/0/1]			
8 242	These SPs coun	t the number o	f pages scan	ned by original	type for Copy	jobs.		
0.040	F:Scan PGS/O	rg	*CTL	[0 to 999999	9/0/1]			
8 243	These SPs coun	t the number o	f pages scan	ned by original	type for Fax jo	obs.		
	S:Scan PGS/C)rg	*CTL	[0 to 999999	9/0/1]			
8 245	These SPs coun	t the number o	f pages scan	ned by original	type for Scan	jobs.		
	L:Scan PGS/O	rg	*CTL	[0 to 999999	9/0/1]			
8 246	These SPs count the number of pages scanned and stored from within the docume server mode screen at the operation panel, and with the Store File button from withe Copy mode screen							
		8 241	8 242	8 243	8 245	8 246		
8 24x 1: Text		Yes	Yes	Yes	Yes	Yes		
8 24x 2: Text/Photo		Yes	Yes	Yes	Yes	Yes		
8 24x 3: Photo		Yes	Yes	Yes	Yes	Yes		
8 24x 4: GenCopy, Pale		Yes	Yes	No	Yes	Yes		
8 24x 5: Map		Yes	Yes	No	Yes	Yes		
8 24x 6: Normal/Detail Y		Yes	No	Yes	No	No		
8 24x 7: Fine/Super Fine Yes		Yes	No	Yes	No	No		
8 24x 8: Binary Yes		Yes	No	No	Yes	No		
8 24x 9: Grayscale Yes		Yes	No	No	Yes	No		
8 24x 10: Col	or	Yes	No	No	Yes	No		
		1		-1				

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• 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	T:Scan PGS/ImgEdt	*CTL	These SPs show how many times Image Edit features		
8 252	C:Scan PGS/ImgEdt	*CTL	have been selected at the operation panel for each application. Some examples of these editing features		
8 254	P:Scan PGS/ImgEdt	*CTL	are:		
8 255	S : Scan PGS/ImgEdr	*CTL	Erase> Border		
- 230	o . ocan i ooy inigear	- 312	Erase> Center		
8 256	L:Scan PGS/ImgEdt	*CTL	Image Repeat		
			Centering		
			 Centering Positive/Negative [0 to 9999999/ 0 / 1] Note The count totals the number of times the edit features have been used. A detailed 		
8 257	O:Scan PGS/ImgEdt	*CTL			
			breakdown of exactly which features have been		
			used is not given.		

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.

	i e		
8 261	T:Scan PGS/ColCr	*CTL	-
8 262	C:Scan PGS/ ColCr	*CTL	-
8 265	S:Scn PGS/Color	*CTL	-
8 266	L:Scn PGS/ColCr	*CTL	-
8 26x 1	Color Conversion		
8 26x 2	Color Erase	These SPs	show how many times color creation
8 26x 3	Background	features have been selected at the operation pan	
8 26x 4	Other		

8 281	T:Scan PGS/TWAIN	*CTL	These SPs count the number of pages scanned using
8 285	S:Scan PGS/TWAIN	*CTL	a TWAIN driver. These counters reveal how the TWAIN driver is used for delivery functions. [0 to 9999999 / 0 / 1] • Note • At the present time, these counters perform identical counts.

8 291	T:Scan PGS/Stamp	*CTL	These SPs count the number of pages stamped with
8 293	F:Scan PGS/Stamp	*CTL	the stamp in the ADF unit. [0 to 9999999/ 0 / 1]
8 295	S:Scan PGS/Stamp	*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

	T:Scan PGS/Size	*CTL	[0 to 9999999/ 0 / 1]		
8 301	,	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].			
	C:Scan PGS/Size	*CTL	[0 to 9999999/ 0 / 1]		
8 302	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) is size [SP 8-442].				
	F:Scan PGS/Size	*CTL	[0 to 9999999/ 0 / 1]		
These SPs count by size the total number of pages scanned by the Fax apulse these totals to compare original page size (scanning) and output page 8-443].		, , , , , , ,			
8 305	S:Scan PGS/Size	*CTL	[0 to 9999999/ 0 / 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].				

	L:Scan PGS/Size	*CTL	[0 to 9999999/ 0 / 1]
8 306	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].		
8 30x 1	A3		
8 30x 2	A4		
8 30x 3	A5		
8 30x 4	B4		
8 30x 5	B5		
8 30x 6	DLT		
8 30x 7	LG	-	
8 30x 8	LT		
8 30x 9	НІТ		
8 30x 10	Full Bleed		
8 30x 254	Other (Standard)		
8 30x 255	Other (Custom)		

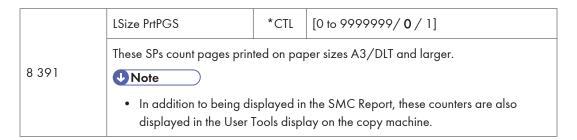
	T:Scan PGS/Rez	*CTL	[0 to 9999999/ 0 / 1]	
8 311	These SPs count by resolu	he total number of pages scanned by in settings.		
8 315	S: Scan PGS/Rez	*CTL	[0 to 9999999/ 0 / 1]	
	These SPs count by resolution setting the total number of pages scanned by applications that can specify resolution settings.			
	 • At the present time, SP8-311 and SP8-315 perform identical counts. 			

8 31x 1	1200dpi <
8 31x 2	600dpi to 1199dpi
8 31x 3	400dpi to 599dpi
8 31x 4	200dpi to 399dpi
8 31x 5	< 199dpi

- 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	T:Total PrtPGS	*CTL	The CD country and a factor of the land
8 382	C:Total PrtPGS	*CTL	These SPs count the number of pages printed by the customer. The counter for the application used for
8 383	F:Total PrtPGS	*CTL	storing the pages increments.
8 384	P:Total PrtPGS	*CTL	[0 to 9999999/ 0 / 1] The L: counter counts the number of pages stored
8 385	S:Total PrtPGS	*CTL	from within the document server mode screen at the operation panel. Pages stored with the Store File
8 386	L:Total PrtPGS	*CTL	button from within the Copy mode screen go to the C: counter.
8 387	O:Total PrtPGS	*CTL	C. Coulliel.

- When the A3/DLT double count function is switched on with SP5104, 1 A3/DLT page is counted as 2.
- When several documents are merged for a print job, the number of pages stored are 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.



8 401	T:PrtPGS/LS	*CTL	
8 402	C:PrtPGS/LS	*CTL	These SPs count the number of pages printed from the document server. The counter for the application
8 403	F:PrtPGS/LS	*CTL	used to print the pages is incremented. The L: counter counts the number of jobs stored from
8 404	P:PrtPGS/LS	*CTL	within the document server mode screen at the
8 405	S:PrtPGS/LS	*CTL	operation panel. [0 to 9999999/ 0 / 1]
8 406	L:PrtPGS/LS	*CTL	[5.5, 5, .]

- 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	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 9999999/0/1]
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	T:PrtPGS/Dup Comb	*CTL	[0 to 9999999/ 0 / 1]			
8 421	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.					
	C:PrtPGS/Dup Comb	*CTL	[0 to 9999999/ 0 / 1]			
8 422	These SPs count by binding and combine, and n-Up settings the number of pages processed for printing by the copier application.					
	F:PrtPGS/Dup Comb	*CTL	[0 to 9999999/ 0 / 1]			
8 423	These SPs count by binding and combine, and n-Up settings the number of pages processed for printing by the fax application.					

	P:PrtPGS/Dup Comb		*CTL	[0 to 9999999/ 0 / 1]	
8 424	These SPs count by binding and combine, and n-Up settings the number of pages processed for printing by the printer application.				
	S:PrtPGS/Dup Comb		*CTL	[0 to 9999999/ 0 / 1]	
8 425	These SPs count by bin processed for printing	-		oine, and n-Up settings the number of pages application.	
	L:PrtPGS/Dup Comb		*CTL	[0 to 9999999/ 0 / 1]	
8 426		-		oine, and n-Up settings the number of pages document server mode window at the	
	O:PrtPGS/Dup Comb		*CTL	[0 to 9999999/ 0 / 1]	
8 427	These SPs count by binding and combine, and n-Up settings the number of pages processed for printing by Other applications				
8 42x 1	Simplex> Duplex				
8 42x 2	Duplex> Duplex				
8 42x 3	Book> Duplex				
8 42x 4	Simplex Combine				
8 42x 5	Duplex Combine				
8 42x 6	2in 1	2 pag	ges on 1	side (2-Up)	
8 42x 7	4 in 1	4 pag	ges on 1	side (4-Up)	
8 42x 8	6 in 1	6 pag	ges on 1	side (6-Up)	
8 42x 9	8 in1	8 pages on 1 side (8-Up)		side (8-Up)	
8 42x 10	9 in 1	9 pages on 1 side (9-Up)		side (9-Up)	
8 42x 11	16 in1	16 p	ages on	1 side (16-Up)	
8 42x 12	Booklet				
8 42x 13	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:

Вос	oklet	Mag	azine
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

	T:PrtPGS/ImgEdt	*CTL	[0 to 9999999/ 0 / 1]			
8 431	These SPs count the total number of pages output with the three features below, regardless of which application was used.					
	C:PrtPGS/ImgEdt	*CTL	[0 to 9999999/ 0 / 1]			
8 432	These SPs count the total number of pages output with the three features below with the copy application.					
	P:PrtPGS/ImgEdt	*CTL	[0 to 9999999/ 0 / 1]			
8 434	These SPs count the total number of pages output with the three features below with the print application.					
	L:PrtPGS/ImgEdt	*CTL	[0 to 9999999/ 0 / 1]			
8 436	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.					
	O:PrtPGS/ImgEdt	*CTL	[0 to 9999999/ 0 / 1]			
8 437	These SPs count the total number of pages output with the three features below with Other applications.					

8 43x 1	Cover/Slip Sheet	Total number of covers or slip sheets inserted. The count for a cover printed on both sides counts 2.
8 43x 2	Series/Book	The number of pages printed in series (one side) or printed as a book with booklet right/left pagination.
8 43x 3	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/ 0 / 1]				
0 441	These SPs count by print paper size the number of pages printed by all applications.						
	C:PrtPGS/Ppr Size	*CTL	[0 to 9999999/ 0 / 1]				
8 442	These SPs count by print pa	per size th	ne number of pages printed by the copy				
	F:PrtPGS/Ppr Size	*CTL	[0 to 9999999/ 0 / 1]				
8 443	These SPs count by print paper size the number of pages printed by the fax application.						
	P:PrtPGS/Ppr Size	*CTL	[0 to 9999999/ 0 / 1]				
8 444	These SPs count by print paper size the number of pages printed by the printer application.						
	S:PrtPGS/Ppr Size	*CTL	[0 to 9999999/ 0 / 1]				
8 445	These SPs count by print paper size the number of pages printed by the scanner application.						
	L:PrtPGS/Ppr Size	*CTL	[0 to 9999999/ 0 / 1]				
8 446	These SPs count by print paper size the number of pages printed from within the document server mode window at the operation panel.						
	O:PrtPGS/Ppr Size	*CTL	[0 to 9999999/ 0 / 1]				
8 447	These SPs count by print paper size the number of pages printed by Other applications.						

8 44x 1	A3
8 44x 2	A4
8 44x 3	A5
8 44x 4	B4
8 44x 5	B5
8 44x 6	DLT
8 44x 7	LG
8 44x 8	LT
8 44x 9	HLT
8 44x 10	Full Bleed
8 44x 254	Other (Standard)
8 44x 255	Other (Custom)

• These counters do not distinguish between LEF and SEF.

0.451	PrtPGS/Ppr Tray		*CTL	[0 to 9999999/ 0 / 1]	
8 451	These SPs count the number of sheets fed from each paper feed station.				
8 451 1	Bypass Tray	Вура	ss Tray		
8 451 2	Tray 1	Copi	Copier		
8 451 3	Tray 2	Copier			
8 451 4	Tray 3	Paper Tray Unit (Option)			
8 451 5	Tray 4	Paper Tray Unit (Option)			
8 451 6	Tray 5	LCT (Option)			
8 451 7	Tray 6	Currently not used.			
8 451 8	Tray 7	Currently not used.			
8 451 9	Tray 8	Currently not used.			
8 451 10	Tray 9	Currently not used.			

	T:PrtPGS/Ppr Type	*CTL	[0 to 9999999/ 0 / 1]			
	These SPs count by paper type the number pages printed by all applications.					
8 461	 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, c	napter cover	s, slip sheets) are also counted.			
	During duplex printing, printed on one side cor		ed on both sides count as 1, and a page			
8 462	C:PrtPGS/Ppr Type	*CTL	[0 to 9999999/ 0 / 1]			
0 402	These SPs count by paper ty	pe the numb	er pages printed by the copy application.			
8 463	F:PrtPGS/Ppr Type	*CTL	[0 to 9999999/ 0 / 1]			
0 403	These SPs count by paper ty	pe the numb	er pages printed by the fax application.			
8 464	P:PrtPGS/Ppr Type	*CTL	[0 to 9999999/ 0 / 1]			
0 404	These SPs count by paper ty	These SPs count by paper type the number pages printed by the printer application.				
	L:PrtPGS/Ppr Type	*CTL	[0 to 9999999/ 0 / 1]			
8 466	These SPs count by paper type the number pages printed from within the document server mode window at the operation panel.					
8 46x 1	Normal					
8 46x 2	Recycled					
8 46x 3	Special					
8 46x 4	Thick					
8 46x 5	Normal (Back)					
8 46x 6	Thick (Back)					
8 46x 7	OHP					
8 46x 8	Other					
	PrtPGS/Mag	*CTL	[0 to 9999999/ 0 / 1]			
8 471		ation rate the	number of pages printed.			
1	These SPs count by magnification rate the number of pages printed.					

8 471 1	< 49%
8 471 2	50% to 99%
8 471 3	100%
8 471 4	101% to 200%
8 471 5	201% <

- 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	T:PrtPGS/TonSave	*CTL	
8 484	P:PrtPGS/TonSave	*CTL	
	These SPs count the number of pages printed with the Toner Save feature switched on.		
	Note: These SPs return the same results as this SP is limited to the Print application.		
	[0 to 9999999/ 0 / 1]		

8 491	T:PrtPGS/Col Mode	*CTL		
8 492	C:PrtPGS/Col Mode	*CTL		
8 493	F:PrtPGS/Col Mode	*CTL	These SPs count the number of pages printed in the Color Mode by each application.	
8 496	L:PrtPGS/Col Mode	*CTL	, 11	
8 497	O:PrtPGS/Col Mode	*CTL		
8 49x 1	B/W			
8 49x 2	Single Color			

8 49x 3	Two Color	
8 49x 4	Full Color	

8 501	T:PrtPGS/Col Mode	*CTL	
8 504	P:PrtPGS/Col Mode	*CTL	These SPs count the number of pages printed in the Color Mode by the print application.
8 507	O:PrtPGS/Col Mode	*CTL	, , , , , , ,
8 50x 1	B/W		
8 50x 2	Mono Color		
8 50x 3	Full Color		
8 50x 4	Single Color		
8 50x 5	Two Color		

0.511	T:PrtPGS/Emul	*CTL	[0 to 9999999/ 0 / 1]	
8 511	These SPs count by printer emulation mode the total number of pages printed.			
0.51.4	P:PrtPGS/Emul	*CTL	[0 to 9999999/ 0 / 1]	
8 514	These SPs count by printer emulation mode the total number of pages printed.			

8 5 1 4 1	RPCS
8 514 2	RPDL
8 514 3	PS3
8 514 4	R98
8 514 5	R16
8 5 1 4 6	GL/GL2
8 514 7	R55
8 5 1 4 8	RTIFF
8 514 9	PDF
8 514 10	PCL5e/5c
8 514 11	PCL XL
8 514 12	IPDL-C
8 514 13	BM-Links
8 514 14	Other

- \bullet 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.

	T:PrtPGS/FIN	*CTL	[0 to 9999999 / 0 / 1]	
8 521	These SPs count by finishing rapplications.	g mode the total number of pages printed by all		
C:PrtPGS/FIN *CTL			[0 to 9999999 / 0 / 1]	
8 522	These SPs count by finishing rapplication.	g mode the total number of pages printed by the Copy		
F:PrtPGS/FIN *CTL		[0 to 9999999 / 0 / 1]		
8 523	These SPs count by finishing mode the total number of pages printed by the application. NOTE: Print finishing options for received faxes are currently not available.		, ,	

	P:PrtPGS/FIN	*CTL	[0 to 9999999 / 0 / 1]	
These SPs count by finishing mode the total number of pages papelication.			otal number of pages printed by the Print	
	S:PrtPGS/FIN	*CTL	[0 to 9999999 / 0 / 1]	
8 525	These SPs count by finishing rapplication.	mode the t	otal number of pages printed by the Scanner	
	L:PrtPGS/FIN	*CTL	[0 to 9999999 / 0 / 1]	
8 526	These SPs count by finishing mode the total number of pages printed from within document server mode window at the operation panel.			
8 52x 1	Sort	Sort		
8 52x 2	Stack			
8 52x 3	Staple			
8 52x 4	Booklet			
8 52x 5	Z-Fold			
8 52x 6	Punch	Punch		
8 52x 7	Other			

U 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	machine.	ounts the amount of staples used by the
	T:Counter		*CTL	[0 to 9999999 / 0 / 1]

		1:Counter	*CIL	[0 to 9999999 / 0 / 1]
These SPs count the total output broken down to application used. In addition to being displayer		displayed in the SMC Report, these counters		
are also displayed in the User Tools display on the copy machine.				isplay on the copy machine.

8 581 1	Total
8 581 2	Total: Full Color
8 581 3	B&W/Single Color
8 581 4	Development: CMY
8 581 5	Development: K
8 581 6	Copy: Color
8 581 7	Copy: B/W
8 581 8	Print: Color
8 581 9	Print: B/W
8 581 10	Total: Color
8 581 11	Total: B/W
8 581 12	Full Color: A3
8 581 13	Full Color: B4 JIS or Smaller
8 581 14	Full Color Print
8 581 15	Mono Color Print
8 581 16	Full Color GPC
8 581 17	Twin Color Mode Print
8 581 18	Full Color Print (Twin)
8 581 19	Mono Color Print (Twin)
8 581 20	Full Color Total (CV)
8 581 21	Mono Color Total (CV)
8 581 22	Full Color Print (CV)

8 582	C:Counter	*CTL	[0 to 9999999/ 0 / 1]
	These SPs count the total output.	output of the	copy application broken down by color

8 582 1	B/W
8 582 2	Single Color
8 582 3	Two Color
8 582 4	Full Color

8 583	F:Counter	*CTL	[0 to 9999999/ 0 / 1]		
	These SPs count the total output of the fax application broken down by color output				
8 583 1	B/W				
8 583 2	Single Color				

8 584	P:Counter	*CTL	[0 to 9999999/ 0 / 1]			
	These SPs count the total output of the print application broken down by color output					
8 584 1	B/W					
8 584 2	Mono Color					
8 584 3	Full Color					
8 584 4	Single Color					
8 584 5	Two Color					

8 586	L:Counter	*CTL	[0 to 9999999/ 0 / 1]		
	These SPs count the total output of the local storage broken down by color output.				
8 582 1	B/W				
8 582 2	Single Color				
8 582 3	Two Color				
8 582 4	Full Color				

	O:Counter	*CTL	[0 to 9999999/ 0 / 1]
8 591			per use, number of duplex pages printed, tals are for Other (O:) applications only.

8 591 1	A3/DLT	
8 591 2	Duplex	

	T: Coverage Counter	*CTL		[0 to 9999999/ 0 / 1]	
8 601	These SPs count the total c	e SPs count the total coverage for each color and the total printout pages for printing mode.			
8 601 1	B/W				
8 601 2	Color				
8 601 11	B/W Printing Pages				
8 601 12	Color Printing Pages	-			
8 601 21	Coverage Counter 1				
8 601 22	Coverage Counter 2				
8 601 23	Coverage Counter 3				

0.717	SDK Apli Counter	*CTL	[0 to 9999999/ 0 / 1]		
8 617	These SPs count the total printout pages for each SDK applicaion.				
8 617 1	SDK-1				
8 617 2	SDK-2				
8 617 3	SDK-3				
8 617 4	SDK-4	-			
8 617 5	SDK-5				
8 617 6	SDK-6				

		T:FAX TX PGS	*CTL	[0 to 9999999/ 0 / 1]
	These SPs count by color mode the number of pages sent by fax to a telephone number.			

	F:FAX TX PGS	*CTL	[0 to 9999999/ 0 / 1]		
8 633 These SPs count by color mode the number.		ode the numb	the number of pages sent by fax to a telephone		
8 63x 1	B/W				
8 63x 2	3x 2 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.

	T:IFAX TX PGS	*CTL	[0 to 9999999/ 0 / 1]			
8 641	These SPs count by color using I-Fax.	Ps count by color mode the number of pages sent by fax to as fax images ax.				
	F:IFAX TX PGS	[0 to 9999999/ 0 / 1]				
8 643	These SPs count by color mode the number of pages sent by Fax as fax images using I-Fax.					
8 64x 1	<u>'</u>					
8 64x 2						

- 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.

	T:S-to-Email PGS	*CTL	[0 to 9999999/ 0 / 1]	
These SPs count by color mode the total number of pages attached to an both the Scan and document server applications.				
S:S-to-Email PGS *CTL			[0 to 9999999/ 0 / 1]	
8 655	These SPs count by color mod the Scan application only.	de the total i	number of pages attached to an e-mail for	
8 65x 1 B/W				
8 65x 2	Color			

U 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.).

	T:Deliv PGS/Svr	*CTL	[0 to 9999999/ 0 / 1]		
8 661	These SPs count by color mode the total number of pages sent to a Scan Router server by both Scan and LS applications.				
	S:Deliv PGS/Svr	*CTL	[0 to 9999999/ 0 / 1]		
8 665	These SPs count by color mode the total number of pages sent to a Scan Router server by the Scan application.				
8 66x 1	8 66x 1 B/W 8 66x 2 Color				
8 66x 2					

₩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.

	T:Deliv PGS/PC	*CTL	[0 to 9999999/ 0 / 1]		
8 671	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.				
	S: Deliv PGS/PC	*CTL	[0 to 9999999/ 0 / 1]		
8 675	These SPs count by color mode the total number of pages sent with Scan-to-PC with the Scan application.				
8 67x 1	8 67x 1 B/W				
8 67x 2	Color				

8 681	T:PCFAX TXPGS	*CTL	These SPs count the number of pages sent by PC Fax.	
8 683	F:PCFAX TXPGS	*CTL	These SPs are provided for the Fax application only, so the counts for SP8 681 and SP8 683 are the same. [0 to 9999999/0/1]	

- 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	T:TX PGS/LS	*CTL	These SPs count the number of pages sent from the
8 692	C:TX PGS/LS	*CTL	document server. The counter for the application that was used to store the pages is incremented.
8 693	F:TX PGS/LS	*CTL	[0 to 999999/ 0 / 1]
8 694	P:TX PGS/LS	*CTL	The L: counter counts the number of pages stored from within the document server mode screen at the operation
8 695	S:TX PGS/LS	*CTL	panel. Pages stored with the Store File button from within
8 696	L:TX PGS/LS	*CTL	the Copy mode screen go to the C: counter.



- 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.

	TX PGS/Port	*CTL	[0 to 9999999/ 0 / 1]
8 701		ges sent by the physical port used to send them. For ent to 4 destinations via ISDN G4, the count for	
8 701 1	PSTN-1		
8 701 2	PSTN-2		
8 701 3	PSTN-3		
8 701 4	ISDN (G3,G4)		
8 701 5	Network		

8 711	T:Scan PGS/Comp	*CTL	[0 to 9999999/ 0 / 1]	
0.715	S:Scan PGS/Comp	*CTL	[0 to 9999999/ 0 / 1]	
8713	8 715 These SPs count the num		ges sent by each compression mode.	
8 7 1 5 1	JPEG/JPEG2000			
8 715 2	TIFF(Multi/Single)			
8 7 1 5 3	PDF			
8 7 1 5 4	Other			
8 715 5	PDF/Comp			

8 721	T:Deliv PGS/WSD	*CTL	[0 to 9999999/ 0 / 1]		
8 725	S: Dvliv PGS/WSD	*CTL	[0 10 9999999/ 0/ 1]		
8 / 23	These SPs count the number of pages scanned by each scanner mode.				
x 1	B/W	-			
x 2	Color	-			

8 731	T:Scan PGS/Media	*CTL	[0 to 9999999/ 0 / 1]		
	S:Scan PGS/Media	*CTL	[0 10 9999999 0/ 1]		
8 735	These SPs count the number of pages scanned and saved in a meia by each scanner mode.				
x 1	B/W	-			
x 2	Color	-			

	RX PGS/Port	*CTL	[0 to 9999999/ 0 / 1]		
8 741	These SPs count the number of pages received by the physical port used to receive them.				
8 741 1	PSTN-1	-			
8 741 2	PSTN-2	-			
8 741 3	PSTN-3	-			
8 741 4	ISDN (G3,G4)	-			
8 741 5	Network	-			

	Dev Counter	*CTL	[0 to 9999999/ 0 / 1]			
8 771	These SPs count the frequency of use (number of rotations of the development rollers) for black and other color toners.					
8 771 1	Total					
8 771 2						
8 771 3						
8 771 4	М					
8 771 5	С					

	Toner_Bottle_Info.	*ENG	[0 to 9999999/ 0 / 1]	
8 781	These SPs display the number of already replaced toner bottles.			
	NOTE: Currently, the date SP8-781-001 through 00		3-011 through 014 and the data in ame.	

8 781 1	Toner: BK	The number of black-toner bottles
8 781 2	Toner: Y	The number of yellow-toner bottles
8 781 3	Toner: M	The number of magenta-toner bottles
8 781 4	Toner: C	The number of cyan-toner bottles

8 791	LS Memory Remain	*CTL	This SP displays the percent of space available on the document server for storing documents. [0 to 100 / 0 / 1]
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	Toner Remain	*CTL	[0 to 100/ 0 /1]		
8 801	These SPs display the percent of toner remaining for each color. This SP allows the user to check the toner supply at any time.				
Note: This precise method of measuring remaining toner supply (1% steps) is than other machines in the market that can only measure in increments of 10 steps).					
8 801 1	K				
8 801 2	Υ				
8 801 3	М				
8 801 4	С				

	CVr Cnt: 0-10%	*ENG	[0 to	9999999/ 0 /1]
8 851	These SPs display the num is from 0% to 10%.	ber of scan	ned she	eets on which the coverage of each color
8 851 11	0 to 2%: BK	8 851 31		5 to 7%: BK
8 851 12	0 to 2%: Y	8 851 32		5 to 7%: Y
8 851 13	0 to 2%: M	8 851 33		5 to 7%: M
8 851 14	0 to 2%: C	8 851 34		5 to 7%: C
8 851 21	3 to 4%: BK	8 851 41		8 to 10%: BK
8 851 22	3 to 4%: Y	8 851 42		8 to 10%: Y

8 851 23	3 to 4%: M	8 851 43	8 to 10%: M
8 851 24	3 to 4%: C	8 851 44	8 to 10%: C

	CVr Cnt: 11-20%	*ENG	[0 to 9999999/ 0 / 1]
These SPs display the number of scanned sheets on which the coverage of e is from 11% to 20%.		ned sheets on which the coverage of each color	
8 861 1	ВК		
8 861 2	Υ		
8 861 3	М		
8 861 4	С		

	CVr Cnt: 21-30%	*ENG	[0 to 9999999/ 0 / 1]	
8 871	These SPs display the num is from 21% to 30%.	umber of scanned sheets on which the coverage of each color		
8 871 1	ВК			
8 871 2	Υ			
8 871 3	М			
8 871 4	С			

	CVr Cnt: 31%-	*ENG	[0 to 9999999/ 0 / 1]
These SPs display the number of scanned sheets on which the coverage is 31% or higher.		ned sheets on which the coverage of each color	
8 881 1	ВК		
8 881 2	Υ		
8 881 3	М		
8 881 4	С		

8 891	Page/Toner Bottle	*ENG	[0 to 9999999/ 0 / 1]
	These SPs display the amount of the remaining current toner for each color.		

8 891 1	ВК
8 891 2	Υ
8 891 3	М
8 891 4	С

8 901	Page/Toner_prev1	*ENG	[0 to 9999999/ 0 / 1]			
6 901	These SPs display the amou	nt of the remo	aining previous toner for each color.			
8 901 1	ВК					
8 901 2	Υ					
8 901 3	М					
8 901 4	С					

8 911	Page/Toner_prev2	*ENG	[0 to 9999999/ 0 / 1]			
0 911	These SPs display the amount of the remaining 2nd previous toner for each co					
8 9 1 1 1	ВК					
8 911 2	Υ					
8 911 3	М					
8 911 4	С					

0.001	Cvr Cnt/Total	*CTL	[0 to 9999999/ 0 / 1]
8 921	Displays the total coverag	ge and total	printout number for each color.

8 921 1	Coverage (%) Bk
8 921 2	Coverage (%) Y
8 921 3	Coverage (%) M
8 921 4	Coverage (%) C
8 921 11	Coverage /P: Bk
8 921 12	Coverage /P: Y
8 921 13	Coverage /P: M
8 921 14	Coverage /P: C

	Machine Status	*CTL	[0 to 9999999/ 0 / 1]				
8 941	These SPs are useful for	ount the amount of time the machine spends in each operation mode. re useful for customers who need to investigate machine operation for at in their compliance with ISO Standards.					
8 941 1	Operation Time	Engine operation time. Does not include time while controller is saving data to HDD (while engine is not operating).					
8 941 2	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 3	Energy Save Time	Includes time while the machine is performing background printing.					
8 941 4	Low Power Time	Includes time in Energy Save mode with Engine on. Includes time while machine is performing background printing.					
8 941 5	Off Mode Time	printing. Does	while machine is performing background sometime machine remains powered ower switches.				
8 941 6	SC	Total time who	en SC errors have been staying.				
8 941 7	PrtJam	Total time when paper jams have been staying during printing.					
8 941 8	OrgJam	Total time who	en original jams have been staying during				

8 941 9	Supply PM Unit End	Total time when toner end has been staying			
9 051	AddBook Register	*CTL			

8 951	AddBook Register		*CTL			
0 931	These SPs count the I	num	ber of even	ts when the machine m	anages data registration.	
8 951 1	User Code/User ID	Us	er code reg	gistrations.		
8 951 2	Mail Address	M	ail address	registrations.		
8 951 3	Fax Destination	Fa	x destinatio	n registrations.	[0 to 9999999/ 0 / 1]	
8 951 4	Group	Gr	roup destind	ation registrations.	[0 10 99999997 0 / 1]	
8 951 5	Transfer Request		x relay desi r relay TX.	tination registrations		
8 951 6	F-Code	F-0	Code box re	egistrations.		
8 951 7	Copy Program		. ,	tion registrations with job settings) feature.		
8 951 8	Fax Program	1	Fax application registrations with the Program (job settings) feature.			
8 951 9	Printer Program	1	Printer application registrations with the Program (job settings) feature.		[0 to 255 / 0 / 255]	
8 951 10	Scanner Program	wi		ication registrations am (job settings)		

8 999	Admin. Counter List	*CTL	[0 to 9999999/ 0 / 1]
0 777	Displays the total coverag	e and total p	printout number for each color.

8 999 1	Total	
8 999 2	Copy: Full Color	
8 999 3	Copy: BW	
8 999 4	Copy: Single Color	
8 999 5	Copy: Two Color	
8 999 6	Printer Full Color	
8 999 7	Printer BW	
8 999 8	Printer Single Color	
8 999 9	Printer Two Color	
8 999 10	Fax Print: BW	
8 999 12	A3/DLT	
8 999 13	Duplex	
8 999 14	Coverage: Color (%)	
8 999 15	Coverage: BW (%)	
8 999 16	Coverage: Color Print Page (%)	
8 999 17	Coverage: BW Print Page (%)	
8 999 101	Transmission Total: Color	
8 999 102	Transmission Total: BW	
8 999 103	FAX Transmission	
8 999 104	Scanner Transmission: Color	
8 999 105	Scanner Transmission: BW	

3

Input and Output Check

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								

Copier

5000	C	Rea	ding
5803	803 Description		1
5803 1	2nd Tray Size Detection	See table 2 following	g this table.
5803 2	1 st Tray Set Detection	Set	Not set
5803 3	1 st Tray Paper Height Sensor 1	See table 1 following	g this table.
5803 4	1 st Tray Paper Height Sensor2	See table 1 following	g this table.
5803 5	2nd Tray Paper Height Sensor 1	See table 1 following	g this table.
5803 6	2nd Tray Paper Height Sensor2	See table 1 following	g this table.
5803 7	1 st Tray Paper End Detection	No paper	Paper remaining
5803 8	2nd Tray Paper End Detection	No paper	Paper remaining
5803 9	1 st Tray Upper Limit Sensor	Not upper limit	Upper limit
5803 10	2nd Tray Upper Limit Sensor	Not upper limit	Upper limit
5803 11	Bypass Paper Width Detection	See table 3 following	g this table.
5803 12	Bypass Paper End Detection	No paper Paper remaining	
5803 13	Bypass Paper Length Detection	See table 3 following	g this table.
5803 14	1st Paper Feed Sensor	Paper detected	Paper not detected
5803 15	2 nd Paper Feed Sensor	Paper detected	Paper not detected

5000	D	Rea	ding
5803	Description	0	1
5803 16	Exit Sensor	Paper detected	Paper not detected
5803 17	Tray Full Exit Sensor	Paper not full	Paper full
5803 18	Fusing Exit Sensor	Paper not detected	Paper detected
5803 19	Fusing Entrance Sensor	Paper detected	Paper not detected
5803 20	1st Feed Sensor	Paper detected	Paper not detected
5803 21	2 nd Feed Sensor	Paper detected	Paper not detected
5803 22	Duplex Exit Sensor	Paper detected	Paper not detected
5803 23	Registration Sensor	Paper detected	Paper not detected
5803 24	Duplex Entrance Sensor	Paper detected	Paper not detected
5803 25	Junction Sensor	Paper detected	Paper not detected
5803 26	2nd Tray Set Detection	Set	Not set
5803 30	Toner End Sensor: Bk	Toner end	Toner remaining
5803 31	Toner End Sensor: M	Toner end	Toner remaining
5803 32	Toner End Sensor: C	Toner end	Toner remaining
5803 33	Toner End Sensor: Y	Toner end	Toner remaining
5803 34	Drum Phase Sensor: Bk	Actuator not detected	Actuator detected
5803 35	Drum Phase Sensor: M	Actuator not detected	Actuator detected
5803 36	Drum Phase Sensor: C	Actuator not detected	Actuator detected
5803 37	Drum Phase Sensor: Y	Actuator not detected	Actuator detected
5803 38	Interlock Release Detection 1	Front door open	Front door closed
5803 39	Interlock Release Detection 2	Front door open	Front door closed

5000	Description	Rea	ding
5803	Description	0	1
5803 40	Right Door	Closed	Open
5803 41	Duplex Cover	Closed	Open
5803 42	Toner Collection Bottle Set	Set	Not set
5803 43	Toner Collection Full Sensor	Not full	Full
5803 46	ITB New Unit Detection	Not new	New
5803 49	Duplex Fan: Lock	Normal	Lock
5803 50	Airflow Fan: Front: Lock	Normal	Lock
5803 51	Airflow Fan: Rear: Lock	Normal	Lock
5803 52	Fusing Exit Fan: Lock	Normal	Lock
5803 53	2nd Duct Fan: Lock	Normal Lo	
5803 54	3rd Duct Fan: Lock	Normal	Lock
5803 55	Paper Exit Fan:Lock	Normal	Lock
5803 56	Fusing Coil Fan: Lock	Normal	Lock
5803 57	IH Power Supply Cooling Fan: Lock	Normal	Lock
5803 58	Airflow Fan: Middle 1: Lock	Not	used
5803 59	Airflow Fan: Middle 2: Lock	Not	used
5803 60	ITB Contact Motor Position	Not contact	Contact
5803 61	Paper Transfer Contact Motor Position	Not contact	Contact
5803 62	Toner Relay Motor: Lock	Normal	Lock
5803 63	ITB Drive Motor: Lock Normal		Lock
5803 64	K Drum/Development Drive Motor: Lock	Normal Lock	
5803 65	M Drum/Development Drive Motor: Lock	rive Motor: Lock Normal Lock	
5803 66	C Drum/Development Drive Motor: Lock	Normal	Lock
5803 67	Y Drum/Development Drive Motor: Lock	Normal	Lock

5002	Description	Rea	ding
5803	Description	0	1
5803 68	Fusing Exit Motor:Lock	Normal	Lock
5803 80	HVPS:TTS:SC Detection	SC detected	No SC
5803 81	HVPS:CB:SC Detection	SC detected	No SC
5803 82	HVPS:D:SC Detection	SC detected	No SC
5803 83	Fusing Destination Detection: DOM (Dom)	Set	Not set
5803 84	Fusing Destination Detection: NA	Set	Not set
5803 87	Fusing New Unit Detection	New	Not new
5803 90	Zero-cross Signal	-	-
5803 91	Fusing Rotation Sensor	Actuator not detected	Actuator detected
5803 92	Fusing Pressure Release Sensor	Not contact	Contact
5803 94	GAVD Open/Close Detection	Closed (LD5V ON)	Open (LD5V OFF)
5803 100	Keycard: Set	Set	Not set
5803 101	Mechanical Counter: Set	Set	Not set
5803 102	Mechanical Counter FC: Set	Set	Not set
5803 103	Key Counter: Set	Set	Not set
5803 110	IOB Version	-	-
5803 200	Scanner HP Sensor	Not HP	HP
5803 201	Platen Cover Sensor	Open	Closed

Table 1: Paper Height Sensor

0: Deactivated, 1: Activated (actuator inside sensor)

Remaining paper	Paper height sensor 1	Paper height sensor 2
Full	0	0
Nearly full	1	0
Near end	1	1
Almost empty	0	1

Table 2: Paper Size Switch (Tray 2)

Switch 1 is used for tray set detection.

0: Pushed, 1: Not pushed

Мо	5	Switch Location		
North America	Europe/Asia	4 (bit0)	3 (bit1)	2 (bit2)
11" x 17" SEF ^{*1} (A3 SEF)	A3 SEF ^{*1} (11" x 17" SEF)	0	0	1
8.5" x 14" SEF ^{*2} (B4 SEF)	B4 SEF ^{*2} (8.5" x 14" SEF)	0	0	0
A4 SEF	A4 SEF	1	1	0
8.5" x 11" SEF	8.5" x 11" SEF	1	1	1
B5 SEF	B5 SEF	0	1	1
11" x 81/2" LEF ^{*3} (A4 LEF)	A4 LEF ^{*3} (11" x 81/2" LEF)	1	0	0
10.5" x 7.25" LEF ^{*4} (B5 LEF)	B5 LEF*4 (10.5" x 7.25" LEF)	0	1	0
A5 LEF	A5 LEF	1	0	1

Мо	S	Switch Location		
North America	Europe/Asia	4 (bit0)	3 (bit1)	2 (bit2)

 $^{^*}$ 1: The machine detects either 11" x 17" SEF or A3 SEF, depending on the setting of SP 5-181-003.

Table 3: Paper Size (By-pass Table)

0: ON, 1: OFF

E	By-pass Paper Size Sensor			1 th	NA	ELL/ACIA
Bit3	Bit2	Bit1	BitO	Length Sensor	INA	EU/ASIA
1	1	1	1	1	HLT SEF	A6 SEF
0	1	1	1	1	HLT SEF	A6 SEF
0	0	1	1	1	HLT SEF	A5 SEF
1	0	1	1	1	HLT SEF	A5 SEF
1	0	0	1	0	LT/LG SEF*1	A4 SEF
1	0	0	1	1	LT/LG SEF*1	A5 LEF
1	1	0	1	0	LT/LG SEF*1	A4 SEF
1	1	0	1	1	LT/LG SEF*1	A5 LEF
1	1	0	0	0	DLT SEF	A3 SEF
1	1	0	0	1	LT LEF	A4 LEF
1	1	0	0	0	DLT SEF	A3 SEF
1	1	1	0	1	LT LEF	A4 LEF

^{* 1:} The paper size (LT or LG) can be selected with SP1-007-001.

 $^{^{*}}$ 2: The machine detects either 8.5" x 14" SEF or B4 SEF, depending on the setting of SP 5-181-004.

 $^{^*}$ 3: The machine detects either 11" x 81/2" LEF or A4 LEF, depending on the setting of SP 5-181-002.

 $^{^*}$ 4: The machine detects either B5 LEF or 10.5" x 7.25" LEF, depending on the setting of SP 5-181-005.

ARDF (D578)

4007	Description	Read	ing
6007	Description	0	1
6007 1	Original Length 1 (B5 Detection Sensor)	Paper not detected	Paper detected
6007 2	Original Length 2 (A4 Detection Sensor)	Paper not detected	Paper detected
6007 3	Original Length 3 (LG Detection Sensor)	Paper not detected	Paper detected
6007 4	Original Width S	Paper not detected	Paper detected
6007 5	Original Width M	Paper not detected	Paper detected
6007 6	Original Width L	Paper not detected	Paper detected
60077	Original Width LL	Paper not detected	Paper detected
6007 8	Original Width 5	Paper not detected	Paper detected
6007 9	Original Detection	Paper not detected	Paper detected
6007 10	Rear Edge Detection	Paper not detected	Paper detected
6007 11	Skew Correction	Paper not detected	Paper detected
6007 12	Scan Entrance Secsor	Paper not detected	Paper detected
6007 13	Registration Sensor	Paper not detected	Paper detected
6007 14	Exit Sensor	Paper not detected	Paper detected
6007 15	Feed Cover	ADF cover close	ADF cover open
6007 16	Lift Up	ADF cover close	ADF cover open
6007 17	Inverter Sensor	Paper not detected	Paper detected
6007 18	Pick-Up Roller HP Sensor	Not HP	HP
6007 19	Original Set HP Sensor	Original not detected	Original detected
6007 23	Rear Edge Detection (Not used)	-	-

2000/3000-Sheet (Booklet) Finisher (B804, B805)

41.40	D.		Read	ling
6140	Bit	Description	0	1
6140 1	Entrand	ce Sensor	Paper not detected	Paper detected
6140 2	Proof E	xit Sensor	Paper not detected	Paper detected
61403	Proof F	ull Detection Sensor	Not Full	Full
61404	Trailing	g Edge Detection: Shift	Paper not detected* 1	Paper detected* 1
6140 5	Staple	Exit Sensor	Paper not detected	Paper detected
61406	Shift HI	P Sensor	Not HP	HP
61407	Shift Ex	cit Sensor	Paper not detected	Paper detected
61408	Exit Gu	iide Plate HP Sensor	Not HP	HP
6140 9	Paper Detection Sensor: Staple		Paper not detected	Paper detected
6140 10	Paper Detection Sensor: Shift		Paper not detected	Paper detected
6140 11	Paper Full Sensor: 2000-Sheet		Not Full	Full
6140 12	Oscillating Back Roller HP Sensor		Not HP	HP
6140 13	Jogger	HP Sensor	Not HP	HP
6140 14	Exit Jun	nction Gate HP Sensor	HP	Not HP
6140 15	Staple	Tray Paper Sensor	Paper not detected	Paper detected
6140 16	Staple	Moving HP Sensor	Not HP	HP
6140 17	Skew H	HP Sensor	Not HP	HP
6140 18	Limit SW		Not Limit	Limit
6140 19	DOOR SW		Closed	Open
6140 20	Stapler	1 Rotation	Not HP	HP
6140 21	Staple	Detection	Staple not detected	Staple detected
6140 22	Staple	Leading Edge Detection	Staple not detected	Staple detected

(140	D.	D	Read	ing
6140	Bit	Description	0	1
6140 23	Punch I	Moving HP Sensor	Not HP	HP
6140 24	Punch I	Registration HP Sensor	Not HP	HP
6140 25	Punch I	Registratioin Detection Sensor	Paper not detected	Paper detected
6140 26	Punch (Chad Full Sensor	Not Full	Full
6140 27	Punch I	HP	Not HP	HP
6140 28	Punch S	Selection DIPSW 1	See	*1
6140 29	Punch S	Selection DIPSW 2	See	*1
6140 30	Stack J Sensor	unction Gate Open/Closed HP	Not HP	HP
6140 31	Leading	g Edge Detection Sensor	Paper not detected	Paper detected
6140 32	Drive R	oller HP Sensor	Not HP	HP
6140 33	Arrival Sensor		Paper not detected	Paper detected
6140 34	Rear Edge Fence HP Sensor		Not HP	HP
6140 35	Folder	Cam HP Sensor	Not HP	HP
6140 36	Folder	Plate HP Sensor	Not HP	HP
6140 37	Folder	Pass Sensor	Paper not detected	Paper detected
6140 38	Saddle	Full Sensor: Front	Paper not detected*2	Paper detected*2
6140 39	Saddle Full Sensor: Rear		Paper not detected*2	Paper detected*2
6140 40	Saddle Stitch Stapler 1 Rotation: Front		Not HP	HP
6140 41	Saddle Stitch Detection: Front		Staple not detected	Staple detected
6140 42	Saddle Front	Stitch Leading Edge Detection:	Staple not detected	Staple detected
6140 43	Saddle	Stitch Stapler 1 Rotation: Rear	Not HP	HP

6140	Bit	Di-ti	Read	ing
0140	DII	Description	0	1
6140 44	Saddle Stitch Detection: Rear		Staple not detected	Staple detected
6140 45	Saddle Rear	Stitch Leading Edge Detection:	Staple not detected	Staple detected
6140 46	Full Sei	nsor: 3000-Sheet	Not Full	Full

* 1: Combination of DIP SW 1 and SW 2

DIP SW 1	DIP SW 2	Punch Type
0	0	Japan
1	0	Europe
0	1	North America
1	1	North Europe

 $^{^*}$ 2: Please refer to "Lower Tray (B804 Only)" in the Service Manual for the "2000/3000 (Booklet) Finisher".

1000-Sheet Booklet Finisher (D589)

(100	D	Reading	
6138	Description	0	1
6138 1	Interference Escape Sensor (Stapler Safety Sensor)	Not interfered	Interfered
6138 2	Staple Moving HP Sensor (Staple Unit HP Sensor)	Not home position	Home position
6138 3	Stuck Relay 1 Release HP Sensor (Stopper S HP Sensor)	Not home position	Home position
6138 4	Exit Junction Gate HP Sensor (Stack Feed Out HP Sensor)	Home position	Not home position

4120	Description	Read	ing
6138		0	1
6138 5	Jogger HP Sensor (Jogger Fence HP Sensor)	Not home position	Home position
6138 6	Staple Tray Paper Sensor (Staple Tray Paper Sensor)	Paper not detected	Paper detected
61387	Rear Edge Fence HP Sensor (Paper Stack Stopper HP Sensor)	Not home position	Home position
61388	Saddle Stitch Exit Sensor	Paper detected	Paper not detected
6138 9	Stuck Relay2 Roller HP Sensor (Clamp Roller HP Sensor)	Home position	Not home position
6138 10	Folder Tray Full Sensor 1 (Bottom Tray HP 1 Sensor)	Full	Not full
6138 11	Folder Tray Full Sensor 2 (Bottom Tray HP 2 Sensor)	Not full	Full
6138 12	Folder Plate HP Sensor (Fold Plate HP Sensor)	Not home position	Home position
6138 13	Saddle Stitch Arrival Sensor (Fold Unit Entrance Sensor)	Paper not detected	Paper detected
6138 14	Folder Cam HP Sensor (Fold Plate Cam HP Sensor)	Not home position	Home position
6138 15	Staple Exit Sensor (Stapler Tray Exit Sensor)	Paper detected	Paper not detected
6138 16	Shift Tray Paper Sensor (Shift Tray Paper Position Sensor)	Shift tray not detected	Shift tray detected
6138 17	Shift Tray Full	Full	Nor full
6138 18	Shift Roller HP Sensor	Not home position	Home position

6138 Description		Read	Reading	
0138	Description	0	1	
6138 20	Entrance Sensor (Finisher Entrance Sensor)	Paper detected	Paper not detected	
6138 21	Shift Exit Sensor (Shift Tray Exit Sensor)	Paper not detected	Paper detected	
6138 22	Proof Exit Sensor (Proof Tray Exit Sensor)	Paper detected	Paper not detected	
6138 23	Exit Guide Plate HP Sensor	Not home position	Home position	
6138 24	Proof Full Sensor (Proof Tray Full Sensor)	Not full	Full	
6138 25	Upper Cover Sensor	Open	Close	
6138 26	Door SW (Front Door Switch)	Close	Open	
6138 27	Clincher Timing Sensor	Enco	der	
6138 28	Clincher HP Sensor	Home position	Not home position	
6138 29	Driver Timing Sensor	Enco	der	
6138 30	Staple Near End	Staple remaining	Staple near end	
6138 31	Self Priming	Staple detected	Staple not detected	
6138 32	Driver HP Sensor	Home position	Not home position	
6138 33	Punch Registration Detection HP Sensor	Not home position	Home position	
6138 34	Punch Moving HP Sensor (Punch Movement HP Sensor)	Not home position	Home position	
6138 35	Punch HP Sensor (Punch HP Sensor)	Home position	Not home position	
6138 36	Punch Pulse Count Sensor (Punch Encoder Sensor)	Encoder		

6138	Description	Reading	
		0	1
6138 37	Punch Chad Full Sensor (Punch Hopper Full Sensor)	Not full	Full
6138 38	Punch Registration Detection Sensor (Paper Position Sensor)	Paper detected	Paper not detected

1000-Sheet Finisher (D588)

6139	Bit Description	Reading		
0139	BIT	Description	0	1
6139 1	Entra	nce Sensor	Paper detected	Paper not detected
6139 2		Exit Sensor er Tray Exit Sensor)	Paper not detected	Paper detected
61393		e Entrance Sensor ler Tray Entrance Sensor)	Paper detected	Paper not detected
6139 4		e Moving HP Sensor ler HP Sensor)	Not home position	Home position
6139 5		er HP Sensor ger Fence HP Sensor)	Not home position	Home position
6139 6	Stack	Feed-out Belt HP Sensor	Home position	Not home position
61397	Stapl	e Tray Paper Sensor	Paper not detected	Paper detected
61398		e Rotation Sensor le Rotation HP Sensor)	Not home position	Home position
6139 9	Stapl	e Sensor	Staple detected	Staple not detected
6139 10	Stapl	e READY Detection	Staple detected	Staple not detected

6139	Bit Description	Reading		
0139	DII	Description	0	1
6139 11		Guide Plate HP Guide Plate HP Sensor)	Not home position	Home position
6139 12	Shift I	HP Sensor	Not home position	Home position
6139 13		r Sensor k Height Sensor)	Output tray not detected	Output tray detected
6139 14	_ ′	Lower Sensor er Tray Lower Limit Sensor)	Lower limit	Not lower limit
6139 15		Full Sensor er Limit Sensor)	Not full	Full

500-Sheet Finisher (D585)

6145	Danadakian	Reading	
0143	Description	0	1
6145 1	Entrance Sensor	Paper detected	Paper not detected
6145 2	Hitroll HP Sensor	Paper not detected	Paper detected
6145 3	Front Jogger HP Sensor (Front Jogger Fence HP Sensor)	Home position	Not home position
6145 4	Rear Jogger HP Sensor (Rear Jogger Fence HP Sensor)	Home position	Not home position
6145 5	Staple Tray Paper Sensor	Paper detected	Paper not detected
6145 6	Staple Moving HP Sensor	Not HP	HP
6145 7	Stack Feed-out Belt HP	Not HP	HP
6145 8	Shift Tray Paper Sensor	Paper detected	Paper not detected
6145 9	Upper Cover Sensor	HP	Not HP
6145 10	Staple Rotation Sensor	HP	Not HP

6145	Description	Reading	
		0	1
6145 11	Staple Near End	HP	Not HP
6145 12	Self Priming	HP	Not HP
6145 13	Shift Tray Limit Sensor	Not full	Full

Bridge Unit (D634) / Side Tray (D635)

4150	Description	Reading	
6150		0	1
6150 1	Bridge/Left: Exit Sensor	Paper detected	Paper not detected
61502	Bridge/Left: Feed Sensor	Paper detected	Paper not detected
61503	Bridge/Left: Shift Set Detection	Set	Not set
61504	Bridge/Left: Exit Cover Detection	Closed	Open
61505	Bridge/Left: Feed Cover Detection	Closed	Open
61506	Left/Left Exit Sensor	Paper detected	Paper not detected

Internal Shift Tray (D633)

6152	Description	Reading	
		0	1
6152 1	Shift:Set Sensor	Set	Not Set
6152 2	Shift: Position Sensor	Tray position: front	Tray position: rear

1 Bin Tray (D632)

6154	Description	Reading	
	Description	0	1
61541	1 bin: Set Sensor	Set	Not Set
61542	1 bin: Paper Sensor	Paper detected	Paper not detected

Two-Tray PFU (D580)/ LCIT 2000 (D581)/ LCIT 1200 (D631)

6160	Description	Reading	
0100	Description	0	1
61601	Bank: Tray3: Feed Sensor	Paper not detected	Paper detected
61602	Bank: Tray4: Feed Sensor	Paper not detected	Paper detected
61603	Bank: Tray5: Feed Sensor	Paper not detected	Paper detected
6160 4	Bank: Tray3: Relay Sensor	Paper not detected	Paper detected
61605	Bank: Tray4: Relay Sensor	Paper not detected	Paper detected
61606	Bank: Tray5: Relay Sensor	Paper not detected	Paper detected
61607	Bank: Feed Cover Detection	Closed	Open
6160 11	Bank: Palau: Paper Supply Switch	Closed	Open
6160 12	Bank: Palau: Slide Switch	Closed	Open

Output Check Table

Copier

5804	Display	Description
5804 3	Drum/Dev Motor: K: HighSpeed	Drum/Development Drive Motor-K: HighSpeed

3

5804	Display	Description
5804 4	Drum/Dev Motor: K: MiddleSpeed	Drum/Development Drive Motor-K: Middle Speed
5804 5	Drum/Dev Motor: K: LowSpeed	Drum/Development Drive Motor-M: Low Speed
5804 10	Drum/Dev Motor: M: HighSpeed	Drum/Development Drive Motor- C: HighSpeed
5804 11	Drum/Dev Motor: M: MiddleSpeed	Drum/Development Drive Motor-Y: Middle Speed
5804 12	Drum/Dev Motor: M: LowSpeed	Drum/Development Drive Motor-Y: Low Speed
5804 17	Drum/Dev Motor: C: HighSpeed	Drum/Development Drive Motor- C: HighSpeed
5804 18	Drum/Dev Motor: C: MiddleSpeed	Drum/Development Drive Motor-Y: Middle Speed
5804 19	Drum/Dev Motor: C: LowSpeed	Drum/Development Drive Motor-Y: Low Speed
5804 24	Drum/Dev Motor: Y: HighSpeed	Drum/Development Drive Motor- C: HighSpeed
5804 25	Drum/Dev Motor: Y: MiddleSpeed	Drum/Development Drive Motor-Y: Middle Speed
5804 26	Drum/Dev Motor: Y: LowSpeed	Drum/Development Drive Motor-Y: Low Speed
5804 31	-	See the last of this table.
5804 32	-	See the last of this table.
5804 33	-	See the last of this table.
5804 35	-	See the last of this table.
5804 37	Toner Relay Motor	Toner Transport Motor
5804 40	Image Transfer Motor: HighSpeed	ITB Drive Motor: HighSpeed
5804 41	Image Transfer Motor: MiddleSpeed	ITB Drive Motor: Middle Speed
5804 42	Image Transfer Motor: LowSpeed	ITB Drive Motor: Low Speed
5804 50	Feed Motor: HighSpeed	Paper Feed Motor: High Speed

5804	Display	Description
5804 51	Feed Motor: IncreaseSpeed	Paper Feed Motor: Increase Speed
5804 52	Feed Motor: MiddleSpeed	Paper Feed Motor: Middle Speed
5804 53	Feed Motor: MiddleIncreaseSpeed	Paper Feed Motor: Middle Increase Speed
5804 54	Feed Motor: LowSpeed	Paper Feed Motor: Low Speed
5804 55	Feed Motor: LowInceraseSpeed	Paper Feed Motor: Low Incerase Speed
5804 60	Regist Motor: HighSpeed	Registration Motor: High Speed
5804 61	Regist Motor: MiddleSpeed	Registration Motor: Middle Speed
5804 62	Regist Motor: LowSpeed	Registration Motor: Low Speed
5804 67	Duplex Feed M:CW:HighSpeed	Duplex/By-pass Motor: CW: High Speed
5804 68	Duplex Feed M:CW:MiddleSpeed	Duplex/By-pass Motor: CW: Middle Speed
5804 69	Duplex Feed Motor: CW: LowSpeed	Duplex/By-pass Motor: CW: Low Speed
580474	Duplex Feed M:CCW:HighSpeed	Duplex/By-pass Motor: CCW: High Speed
5804 75	Duplex Feed M:CCW:MiddleSpeed	Duplex/By-pass Motor: CCW: Middle Speed
580476	Duplex Feed Motor: CCW: LowSpeed	Duplex/By-pass Motor: CCW: Low Speed
5804 81	Duplex Reverse M:CW:HighSpeed	Duplex Inverter Motor: CW: High Speed
5804 82	Duplex Reverse M:CW:MiddleSpeed	Duplex Inverter Motor: CW: Middle Speed
5804 83	Duplex Reverse Motor: CW: LowSpeed	Duplex Inverter Motor: CW: Low Speed
5804 88	Duplex Reverse M:CCW:HighSpeed	Duplex Inverter Motor: CCW: High Speed
5804 89	Duplex Reverse M:CCW:MiddleSpeed	Duplex Inverter Motor: CCW: Middle Speed

5804	Display	Description
5804 90	Duplex Reverse Motor: CCW: LowSpeed	Duplex Inverter Motor: CCW: Low Speed
5804 95	ITB Contact Motor	Image Transfer Belt Contact Motor
5804 96	Paper Transfer Contact Motor	Paper Transfer Contact Motor
5804 97	1st Tray Lift Motor: Up	Tray Lift Motor 1: Lift Up
5804 98	1st Tray Lift Motor: Down	Tray Lift Motor 1: Lift Down
5804 99	2nd Tray Lift Motor: Up	Tray Lift Motor 2: Lift Up
5804 100	2nd Tray Lift Motor: Down	Tray Lift Motor 2: Lift Down
5804 102	Fusing Pressue Release Motor	Pressure Roller Contact Motor
5804 104	Polygon Moter: LL	Polygon Motor: LL
5804 105	Polygon Moter: L	Polygon Motor: L
5804 107	Polygon Moter: HH	Polygon Motor: HH
5804 110	Air Flow Fan: Front	Ventilation Fan – Front
5804 111	Air Flow Fan:Rear	Ventilation Fan – Rear
5804 112	Fusing Fan:H	Fusing Fan: High Speed
5804 113	Fusing Fan:L	Fusing Fan: Low Speed
5804 114	PSU Cooling Fan	PSU Fan 1: High Speed
5804 115	2nd Duct Fan: H	Duct Fan 2: High Speed
5804 117	3rd Duct Fan: H	Duct Fan 3: High Speed
5804 119	Paper Exit Fan:H	Paper Exit Fan: High Speed
5804 121	Fusing Coil Fan	QSU Fan
5804 122	IH Power Supply Cooling Fan	AC controller board Fan
5804 126	Development Clutch: Bk	Development Clutch-K
5804 127	Development Clutch: M	Development Clutch-M
5804 128	Development Clutch: C	Development Clutch-C

5804	Display	Description
5804 129	Development Clutch: Y	Development Clutch-Y
5804 130	Toner Bottle Clutch: Bk	Toner Bottle Clutch-K
5804 131	Toner Bottle Clutch: M	Toner Bottle Clutch-M
5804 132	Toner Bottle Clutch: C	Toner Bottle Clutch-C
5804 133	Toner Bottle Clutch:Y	Toner Bottle Clutch-Y
5804 134	Toner Supply Pump: Bk	Toner Supply Clutch: Bk
5804 135	Toner Supply Pump: M	Toner Supply Clutch: M
5804 136	Toner Supply Pump: C	Toner Supply Clutch: C
5804 137	Toner Supply Pump: Y	Toner Supply Clutch: Y
5804 138	1 st Paper Feed Clutch	Paper Feed Clutch 1
5804 139	2nd Paper Feed Clutch	Paper Feed Clutch 2
5804 140	Bypass Feed Clutch	By-pass Feed Clutch
5804 141	Bypass Pickup Solenoid	Bypass Pickup Solenoid
5804 143	TD Sensor Shutter Solenoid	ID Sensor Shutter Solenoid
5804 144	Exit Junction Solenoid	Junction Gate 1 Solenoid
5804 145	1 st Feed Pickup Solenoid	1 st Pickup Solenoid
5804 146	2nd Feed Pickup Solenoid	2nd Pickup Solenoid
5804 150	Duplex Fan: HighSpeed	-
5804 151	Duplex Fan: LowSpeed	-
5804 152	Air Flow Fan: Middle 1	-
5804 153	Reserve Fan 1: LowSpeed	-
5804 154	Air Flow Fan: Middle 2	-
5804 155	Reserve Fan2: LowSpeed	-
5804 161	PCL: Bk	-
5804 162	PCL: M	-

5804	Display	Description
5804 163	PCL: C	-
5804 164	PCL: Y	-
5804 166	HST Sensor:Bk	TD Sensor:Bk
5804 167	HST Sensor: M	TD Sensor: M
5804 168	HST Sensor: C	TD Sensor: C
5804 169	HST Sensor: Y	TD Sensor: Y
5804 170	Toner End Sensor: Bk	Toner End Sensor: Bk
5804 171	Toner End Sensor: M	Toner End Sensor: M
5804 172	Toner End Sensor: C	Toner End Sensor: C
5804 173	Toner End Sensor: Y	Toner End Sensor: Y
5804 174	TM Sensor: Front	ID Sensor: Front
5804 175	TM Sensor: Center	ID Sensor: Center
5804 176	TM Sensor: Rear	ID Sensor: Rear
5804 177	TM Sensor: M	ID Sensor: M
5804 178	TM Sensor: C	ID Sensor: C
5804 179	TM Sensor: Y	ID Sensor: Y
5804 181	PP:Charge AC:Y:HighSpeed	-
5804 182	PP:Charge AC:Y:MiddleSpeed	-
5804 183	PP:Charge AC:Y:LowSpeed	-
5804 186	PP:Development:K	-
5804 187	PP:Development:M	-
5804 188	PP:Development:C	-
5804 189	PP:Development:Y	-
5804 190	PP:Separation	-
5804 192	RFID ON/OFF: K	-

5804	Display	Description
5804 193	RFID ON/OFF: Y	-
5804 194	RFID ON/OFF: C	-
5804 195	RFID ON/OFF: M	-
5804 196	RFID COM ON:K	-
5804 197	RFID COM ON: Y	-
5804 198	RFID COM ON: C	-
5804 199	RFID COM ON: M	-
5804 202	Scanner Lamp	-
5804 216	LD1: K	-
5804 217	LD2: K	-
5804 218	LD1: Ma	-
5804 219	LD2: Ma	-
5804 220	LD1: Cy	-
5804 221	LD2: Cy	-
5804 222	LD1: Ye	-
5804 223	LD2: Ye	-
5804 224	PP:ITB:K	PP: Image Transfer Roller: K
5804 225	PP:ITB:M	PP: Image Transfer Roller: M
5804 226	PP:ITB:C	PP: Image Transfer Roller: C
5804 227	PP:ITB:Y	PP: Image Transfer Roller: Y
5804 228	PP:PTR:+	PP: Paper Transfer Roller:+
5804 229	PP:PTR:-	PP: Paper Transfer Roller:-
5804 231	PP: ChargeDC: K	-
5804 232	PP: ChargeDC: M	-
5804 233	PP: ChargeDC: C	-

5804	Display	Description
5804 234	PP: ChargeDC: Y	-
5804 237	PP:Charge AC:K:HighSpeed	-
5804 238	PP:Charge AC:K:MiddleSpeed	-
5804 239	HVPS: ChargeAC: K: LowSpeed	-
5804 244	PP:Charge AC:M:HighSpeed	-
5804 245	PP:Charge AC:M:MiddleSpeed	-
5804 246	HVPS: ChargeAC: M: LowSpeed	-
5804 251	PP:Charge AC:C:HighSpeed	-
5804 252	PP:Charge AC:C:MiddleSpeed	-
5804 253	HVPS: ChargeAC: C: LowSpeed	-

5804 Fusing Exit Motor Note: These SP modes will be moved to Super SP mode in the near future. Important: Use the procedure below to do the output checks for the fusing exit motor. If you do not follow this procedure, a kink will form in the fusing belt sleeve, and the fusing sleeve belt unit will need to be replaced. 1. Do one of the following: · Open the right cover of the paper bank · Remove one of the toner bottles Pull out the waste toner bottle half-way • Remove the fusing unit 2. Enter SP mode. -31 to -35 3. Do the following out output checks: • SP5-804-031 (Fusing exit motor: High speed) • SP5-804-032 (Fusing exit motor: Middle speed) SP5-804-033 (Fusing exit motor: Low speed) SP5-804-035 (Fusing exit motor: Very low speed) 4. Without exiting SP mode, turn the main power switch off and then on again. Important: If you exit SP mode before you turn the main power switch off, the fusing exit motor will stay off when the machine warms up. Heat will be concentrated in one area of the fusing belt sleeve and cause a kink to form. If this happens, you will need to replace the fusing sleeve belt unit. 5. Do the reverse of what you did in step 1 (for example, reattach the fusing unit). 580431 Fusing/Paper Exit Motor: HighSpeed Fusing Exit Motor: HighSpeed 580432 Fusing Exit Motor: MiddleSpeed Fusing/Paper Exit Motor: Middle Speed 580433 Fusing Exit Motor: LowSpeed Fusing/Paper Exit Motor: Low Speed 580435 Fusing/Paper Exit Motor: LLowSpeed Fusing Exit Motor: LlowSpeed

ARDF (D578)

6008	Display	Description
6008 1	Pick-Up Motor Forward	-

6008	Display	Description
6008 2	Pick-Up Motor Reverse	-
6008 3	Feed Motor Forward	Feed Motor-Forward rotation
6008 4	Feed Motor Reverse	Feed Motor-Reverse rotation
6008 5	Relay Motor Forward	Transport Motor- Forward rotation
60086	Relay Motor Reverse	Transport Motor- Forward rotation
6008 7	Inverter Motor Reverse	Transport Motor- Forward rotation
6008 8	Inverter Motor Reverse	-
6008 9	Feed Clutch	-
6008 10	Feed Solenoid	Pick-up Solenoid
6008 11	Inverter Solenoid	-
6008 12	Stamp	Stamp Solenoid
6008 13	Fan Motor	-
6008 14	Feed Clutch	-
6008 15	Feed Solenoid	-

1000-Sheet Booklet Finisher (D589)

6143	Display	Description
6143 1	Shift Motor	Shift Tray Motor
6143 2	Entrance Motor	-
6143 3	Staple Relay Motor	Stapler Unit Motor
6143 4	Knock Solenoid	-
6143 5	Junction Gate SOL 1	Proof Tray Gate Solenoid
6143 6	Junction Gate SOL 2	Staple Tray Gate Solenoid
61437	Folder Roller Rotation Motor	Fold Roller Motor

6143	Display	Description
6143 8	Staple Motor	Staple Fold Motor
6143 10	Exit Guide Plate Motor	-
6143 11	Shift Relay Motor	Upper Transport Motor
6143 12	Tray Motor	Shift Tray Motor
6143 13	Stack Feed-out Motor	Positioning Roller Solenoid
6143 14	Stuck Relay1 Motor	Upper Clamp Roller Motor
6143 15	Stuck Relay1 Release Motor	Upper Retraction Motor
6143 16	Rear Edge Fence Drive Motor	Bottom Fence Lift Motor
6143 17	Folder Plate Motor	-
6143 18	Drive Roller Oscillating Motor	Lower Retraction Motor
6143 19	Staple Moving Motor	Staple Unit Driver Motor
6143 20	Jogger Motor	Jogger Motor
6143 21	Punch Registration Moving Motor	Paper Position Sensor Slide Motor
6143 22	Punch Motor	-
6143 23	Punch Moving Motor	Punch Movement Motor

1000-Sheet Finisher (D588)

6144	Display	Description
61441	Relay Up Motor	Upper Transport Motor
61442	Relay Down Motor	Lower Transport Motor
61443	Exit Motor	-
61444	Proof Junction Gate SOL	Tray Junction Gate Solenoid
61445	Tray Up Motor	Lower Tray Lift Motor
61446	Jogger Motor	Jogger Fence Motor

6144	Display	Description
61447	Staple Moving Motor	Stapler Motor
61448	Staple Motor	Stapler Hammer
61449	Staple Junction Gate SOL	Stapler Junction Gate Solenoid
6144 10	Positioning Roller Solenoid	Positioning Roller Solenoid
6144 11	Stack Feed-out Motor	-
6144 12	Shift Motor	-
6144 13	Exit Guide Plate Motor	-

2000/3000-Sheet (Booklet) Finisher (B804/B805)

6145	Display	Description	
6145 1	Entrance Motor	Finisher Entrance Motor	
6145 2	Upper Feed Motor	Upper Transport Motor	
6145 3	Lower Feed Motor	Lower Transport Motor	
6145 4	Exit Motor	Upper/Proof Tray Exit Motor	
6145 5	Knock Roller Motor	Clamp Roller Retraction Motor	
6145 6	Shift Motor	Shift Roller Motor	
61457	Exit Guide Plate Open/Close Motor	Exit Guide Plate Motor	
6145 8	Tray Lift Motor	Upper Tray Lift Motor	
6145 9	Oscillating Back Roller Motor	Stacking Sponge Roller Motor	
6145 10	Jogger Motor	Jogger Fence Motor	
6145 11	Stack Feed-out Motor	Feed Out Belt Motor	
6145 12	Staple Moving Motor	Corner Stapler Movement Motor	
6145 13	Staple Skew Motor	Corner Stapler Rotation Motor	
6145 14	Staple Motor	Corner Stapler EH530	

6145	Display	Description	
6145 15	Upper Junction Gate Solenoid	Proof Junction Gate Solenoid	
6145 16	Lower Junction Gate Solenoid	Stapling Tray Junction Gate Solenoid	
6145 17	Knock Solenoid	Stapling Edge Pressure Plate Solenoid	
6145 18	Trailing Edge Hold Solenoid	Positioning Roller Solenoid	
6145 19	Saddle Stitch Hold Solonoid	Booklet Pressure Roller Solenoid	
6145 20	Stack Junction Gate Open/Close Motor	Stack Junction Gate Motor	
6145 21	Trailing Edge Fence Moving Motor	Fold Unit Bottom Fence Lift Motor	
6145 22	Saddle Stitch Staple Motor: Front	Booklet Stapler EH185R: Front	
6145 23	Saddle Stitch Staple Motor: Rear	Booklet Stapler EH185R: Rear	
6145 24	Folder Plate Motor	Fold Plate Motor	
6145 25	Folder Roller Motor	Fold Roller Motor	
6145 26	Drive Roller Oscillating Motor	Positioning Roller Motor	
6145 27	Punch Motor	Punch Drive Motor	
6145 28	Punch Moving Motor	Punch Movement Motor	
6145 29	Punch Registration Detection Motor	Paper Position Sensor Slide Motor	

500-Sheet Finisher (D585)

6146	Display	Description
61461	Carry Motor	Transport Motor
61462	Hitroll Motor	Positioning Roller Arm Motor
61463	Front Jogger Motor	Front Fence Motor
61464	Rear Jogger Motor	Rear Fence Motor
61465	Staple Moving Motor	Stapler Movement Motor
61466	Stack Feed-out Motor	Feed-Out Belt Motor

6146	Display	Description
61467	Tray Motor	Tray Lift Motor
61468	Staple Motor	Stapler Motor
61469	Stopper Solenoid	Stack Depressor Solenoid

Bridge Unit (D634) / Side Tray (D635)

6151	Display	Description	
6151 1	Bridge/Left: Feed Motor: Current Selection	Bridge: Feed Motor: Current switching signal	
6151 2	Bridge/Left: Feed Motor:Reset	Bridge: Feed Motor:Reset	
61513	Bridge/Left: Feed Motor:Enable	Bridge: Feed Motor:Enable	
6151 6	Bridge/Left: Feed Motor: High Speed	Bridge: Feed Motor: High Speed	
61517	Bridge/Left: Feed Motor: Middle Speed	Bridge: Feed Motor: Middle Speed	
61518	Bridge/Left: Feed Motor: Low Speed	Bridge: Feed Motor: Low Speed	
6151 11	Bridge/Left: Junction Solenoid	Bridge: Junction Solenoid	

Shift Tray (D633)

6153		Display	Description
613	53 1	Shift: Lift-up Motor	-

1 Bin Tray (D632)

6155	Display	Description
6155 1	1 bin: Junction Solenoid	-

Two-Tray PFU (D580) / LCIT 2000 (D581) / LCIT 1200 (D631)

6161	Display	Description	
6161 5	Bank1: Feed Motor: HighSpeed	Feed Motor:High Speed (D580/ D581)	
61616	Bank1: Feed Motor: IncreaseSpeed	Feed Motor: Increase Speed (D580/ D581)	
61617	Bank1: Feed Motor:242mm/s	Feed Motor:242 mm/s (D580/ D581)	
61618	Bank1: Feed Motor: MiddleSpeed	Feed Motor: Middle Speed (D580/ D581)	
61619	Bank1: Feed Motor: LowSpeed	Feed Motor: Low Speed (D580/ D581)	
6161 10	Bank 1 : Feed Motor: LowIncreaseSpeed	Feed Motor:Low Increase Speed (D580/ D581)	
6161 15	Bank2: Feed Motor:HighSpeed	Feed Motor:High Speed (D580)	
6161 16	Bank2: Feed Motor: IncreaseSpeed	Feed Motor: Increase Speed (D580)	
6161 17	Bank2: Feed Motor:242mm/s	Feed Motor:242 mm/s (D631)	
6161 18	Bank2: Feed Motor: MiddleSpeed	Feed Motor: Middle Speed (D580)	
6161 19	Bank2: Feed Motor: LowSpeed	Feed Motor: Low Speed (D580)	
6161 20	Bank2: Feed Motor: LowIncreaseSpeed	Feed Motor: Low Increase Speed (D580)	
616121	Bank2: Feed Motor:154mm/s	Feed Motor:154 mm/s (D631)	
6161 30	Bank:Tray3: PU Solenoid	Pick-up Solenoid (D580/D581 or D579)	
616131	Bank:Tray4: PU Solenoid	Pick-up Solenoid (D580/D631)	
6161 32	Bank:Tray5: PU Solenoid	Pick-up Solenoid (D631)	
6161 35	Bank:Tray3: Feed Clutch	Pick-up Solenoid (D580/D581 or D579)	
6161 36	Bank:Tray4: Feed Clutch	Pick-up Solenoid (D580/D631)	
6161 37	Bank:Tray5: Feed Clutch	Pick-up Solenoid (D631)	

Printer Service Mode

SP1-XXX (Service Mode)

1001	Bit Switch			
001	Bit Swit	tch 1	0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	DFU	-	-
	bit 3	No I/O Timeout	0: Disable	1: Enable
Enable: The MFP I/O Timeout setting will have no effect. I/O Timeout.			ffect. I/O Timed	outs will never
	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. For details, see "Card Save Function" in the "Main chapters: 5. System Maintenance".		
	bit 5 DFU -		-	
	bit 6	DFU	-	-
	bit 7	[RPCS,PCL]: Printable area frame border	0: Disable	1: Enable
		Enable: The machine prints all RPCS and PCL jobs w printable area.	ith a border on	the edges of the

1001	Rit Switch
1001	Bit Switch

002	Bit Swi	tch 2	0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	Applying a collation Type	Shift Collate	Normal Collate
		A collation type (shift or normal) will be applied to a a 'Collate Type' configured.	ll jobs that do r	not already have
		₩Note		
		If #5-0 is enabled, this Bit Switch has no effect.		
	bit 3	[PCL5e/c,PS]: PDL Auto Switching	0: Enable	1: Disable
		Disable: The MFPs ability to change the PDL process	or mid-job.	
		Some host systems submit jobs that contain both PS of switching is disabled, these jobs will not be printed p	-	f Auto PDL
	bit 4	DFU	-	-
	bit 5	DFU	-	-
	bit 6	DFU	-	
	bit 7	DFU	-	-

1001	Bit Switch
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003	Bit Swi	rch 3	0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	[PCL5e/c]: Legacy HP compatibility	0: Disable	1: Enable
		Enable: Uses the same left margin as older HP mode In other words, the left margin defined in the job changed to " <esc>*r1A"</esc>		
	bit 3	DFU	-	-
	bit 4	DFU	-	-
	bit 5	DFU	-	-
	bit 6	DFU	-	-
	bit 7	DFU	-	-

1001	Bit Switch		
004	Bit Switch 4 DFU	-	-

1001	Bit Switch
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005	Bit Swi	tch 5	0	1
		Show "Collate Type", "Staple Type" and "Punch Type" buttons on the operation panel.	Disable	Enable
	bit 0	If enabled, users will be able to configure a Collate Type, Staple Type, and Punch Type from the operation panel. The available types will depend on the device and configured options.		
		After enabling the function, the settings will appear u	ınder:	
		"User Tools → Printer Features → System"		
	bit 1	DFU	-	-
	bit 2	DFU	-	-
	bit 3	[PS] PS Criteria	Pattern3	Pattern 1
		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.		
		Pattern 1: A small number of PS tags and headers		
	bit 4	Increase max number of the stored jobs to 1000 jobs.	Disable (100)	Enable (1000)
		Enable: Changes the maximum number of jobs that Job Type settings to 1000. The default is 100.	t can be stored	d on the HDD via
	bit 5	Face-up output	Disable	Enable
		Enable: All print jobs will be output face-up in the de	stination tray.	
	bit 6	DFU	-	-
	bit 7	DFU	-	-

1001	Bit Switch		
006	Bit Switch 6 DFU	-	-

10	01	Bit Switch		
0	007	Bit Switch 7 DFU	-	-

1001	Bit Switch			
008	Bit Swi	tch 8	0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	DFU	-	-
	bit 3	[PCL,PS]: Allow BW jobs to print without requiring User Code	Disable	Enable
		Enable: BW jobs submitted without a user code vauthentication is enabled. Note Color jobs will not be printed without a valid user.	·	even if usercode
	bit 4	DFU	-	-
	bit 5	DFU	-	-
	bit 6	[PS]: Orientation Auto Detect Function	Enable	Disable
		Disable: Automatically chooses page orientations of Portrait) based on the content printed on the page.	of PostScript jo	bs (Landscape or
	bit 7	[PDF]: Orientation Auto Detect Function	Enable	Disable
		Automatically chooses page orientations of PDF jobs on the content printed on the page.	s (Landscape o	r Portrait) based

1003	[Clear Setting]
1000 1	Initialize Printer System
1003 1	Initializes settings in the "System" menu of the user mode.
1003 3	Delete Program

1004	[Print Summary]
10041	Print Summary
1004 1	Prints the service summary sheet (a summary of all the controller settings).

1005	[Display Version]
1005.1	Disp. Version
1005 1	Displays the version of the controller firmware.

1006	[Sample/Locked Print]	*CTL	0: Linked, 1: On
1006 1	enabled or disabled in accord	ance with	er. When you select "0," the document server is Copy Service Mode SP5-967. When you select ardless of Copy Service Mode SP5-967.

	[Data Recall]			
1101	Recalls a set of gamma settings setting, or c) the current setting	ngs. This can be either a) the factory setting, b) the previous ing.		
11011	Factory			
1101 2	Previous	*CTL		
11013	Current			
1101 4	ACC			

	1102	[Resolution Setting]
Selects the printing mode (resolution) for the printer gamma adjust		Selects the printing mode (resolution) for the printer gamma adjustment.
1102 1 2400x600 Photo , 1800x600 Photo, 600 x 600 Photo, 2400x600 Text, 180 Text, 600x600 Text		2400x600 Photo , 1800x600 Photo, 600 x 600 Photo, 2400x600 Text, 1800x600, Text, 600x600 Text

1103	[Test Page]
1103	Prints the test page to check the color balance before and after the gamma adjustment.
1103 1	Color Gray Scale
1103 2	Color Pattern

1104	[Gamma Adjustment]
1104	Adjusts the printer gamma for the mode selected in the "Mode Selection" menu.

11041	Black: Highlight		
11042	Black: Shadow		
11043	Black: Middle		
11044	Black: IDmax		
1104 21	Cyan: Highlight		
1104 22	Cyan: Shadow		
1104 23	Cyan: Middle		
1104 24	Cyan: IDmax	*CTL	[0 to 30 / 15 / 1/step]
1104 41	Magenta: Highlight		
1104 42	Magenta: Shadow		
1104 43	Magenta: Middle		
1104 44	Magenta: IDmax		
110461	Yellow: Highlight		
1104 62	Yellow: Shadow		
1104 63	Yellow: Middle		
1104 64	Yellow: IDmax		

	[Save Tone Control Value]
1105	Stores the print gamma adjusted with the "Gamma Adj." menu item as the current setting. Before the machine stores the new "current setting", it moves the data currently stored as the "current setting" to the "previous setting" memory storage location.
1105 1	Save Tone Control Value

	1106	[Toner Limit]		
Adjusts the maximum toner amount for image development.		image development.		
	1106 1	Toner Limit Value	*CTL	[100 to 400 / 260 / 1 %/step]

Scanner SP Mode

SP1-XXX (System and Others)

1004	[Compression Type]		
1004	Selects the compression type for binary picture processing.		
1004 1	Compression Type	*CTL	[1 to 3 / 1 / 1/step] 1: MH, 2: MR, 3: MMR

	[Erase margin(Remote scan)]		
Creates an erase margin for all edges of the scanned image.		the scanned image.	
	If the machine has scanned the edge of the original, create a margin. This SP is activated only when the machine uses TWAIN scanning.		
1005 1	Range from 0 to 5 mm	*CTL	[0 to 5 / 0 / 1 mm/step]

1009	[Remote scan disable]	*CTL	[0 or 1 / 0 / -] 0: enable, 1: disable
1009 1	O:enable 1:desable		

1010	[Non Display Clear Light PDF]	*CTL	[0 or 1 / 0 / -] 0: Display, 1: No display
10101	Non Display ClearLight PDF		

SP2-XXX (Scanning-image quality)

		[Compression Level (Gray-scale)]
20	021	Selects the compression ratio for grayscale processing mode (JPEG) for the three settings that can be selected at the operation panel.

3

2021 1	Comp1:5-95	*CTL	[5 to 95 / 20 / 1 /step]
2021 2	Comp2:5-95		[5 to 95 / 40 / 1 /step]
2021 3	Comp3:5-95		[5 to 95 / 65 / 1 /step]
2021 4	Comp4:5-95		[5 to 95 / 80 / 1 /step]
2021 5	Comp5:5-95		[5 to 95 / 95 / 1 /step]

	[Compression ratio of ClearLight PDF]				
2024	Selects the compression ratio for clearlight PDF for the two settings that can be selected at the operation panel.				
2024 1	Compression Ratio (Normal image)	*CTL	[5 to 95 / 25 / 1 /step]		
2024 2	Compression Ratio (High comp image)	CIL	[5 to 95 / 20 / 1 /step]		

3

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.



- 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 [#].
- 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: Magenta, 3: Yellow, 4: Cyan).
- 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.



- 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.).



- 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	11	Independent Pattern (1-dot)
1	Vertial Line (1 dot)	12	Independent Pattern (2-dot)
2	Vertial Line (2dot)	13	Independent Pattern (4-dot)
3	Horizontal Line (1 dot)	14	Triming Area

No.	Pattern	No.	Pattern
4	Horizontal Line (2dot)	16	Tooth Check (Horizontal)
5	Grid Vertical Line	17	Band (Horizontal)
6	Grid Horizontal Line	18	Band (Vertical)
7	Grid Pattern Small	19	Checker Flag Pattern
8	Grid Pattern Large	20	Grayscale (Vertical Margin)
9	Argyle Pattern Small	21	Grayscale (Horizontal Margin)
10	Argyle Pattern Large	23	Full Dot Pattern