Model AP-C2 Machine Code: D027/D029

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

- 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

 Seep 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

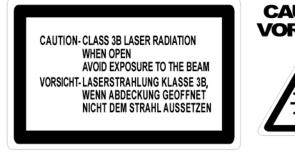
The Center for Devices and Radiological Health (CDRH) prohibits the repair of laser-based optical units in the field. The optical housing unit can only be repaired in a factory or at a location with the requisite equipment. The laser subsystem is replaceable in the field by a qualified Customer Engineer.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

MARNING

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

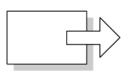


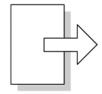


Symbols, Abbreviations and Trademarks

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

| | See or Refer to |
|-----|-----------------|
| (T) | Clip ring |
| Î | Screw |
| | Connector |
| | Clamp |
| C | E-ring |
| SEF | Short Edge Feed |
| LEF | Long Edge Feed |





Short Edge Feed (SEF)

Long Edge Feed (LEF)

Trademarks

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

 ${\sf PostScript}^{\circledR} \ is \ a \ registered \ trademark \ of \ Adobe \ Systems, \ Incorporated.$

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

 $\label{eq:thermat} \mbox{Ethernet}^{\mbox{\scriptsize \&}} \mbox{ is a registered trademark of Xerox Corporation}.$

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

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. Product Information

Specifications

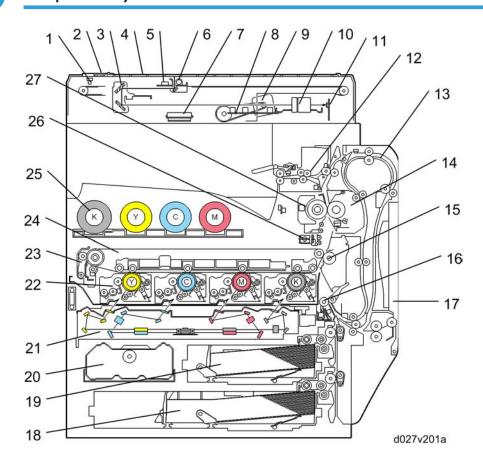
See "Appendices" for the following information:

- Mainframe Specifications
- Printer Specifications
- Scanner Specifications
- Supported Paper Sizes
- Software Accessories
- Optional Equipment

1

Overview

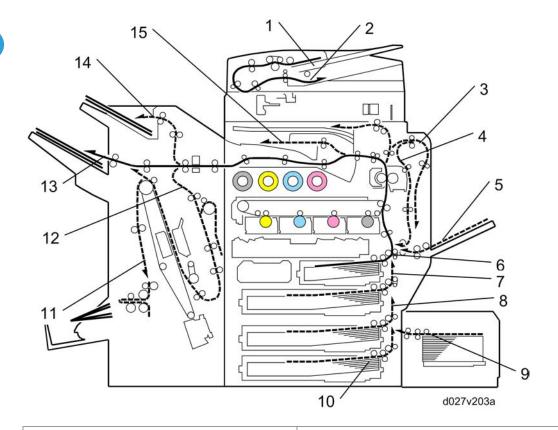
Component Layout



- 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 width sensor
- 8. Original length sensor
- 9. Scanner motor
- 10. Lens block
- 11. Sensor board unit (SBU)
- 12. Decurler rollers
- 13. Duplex unit
- 14. Fusing unit

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

Paper Path

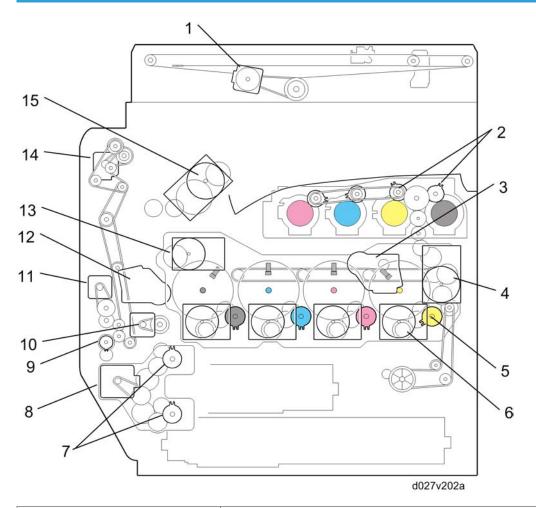


- 1. Original tray
- 2. Original exit tray
- 3. Duplex inverter
- 4. Duplex feed
- 5. By-pass tray feed
- 6. Tray 1 feed
- 7. Tray 2 feed
- 8. Tray 3: Optional paper feed unit/LCT

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

The 2000/3000-sheet (booklet) finisher and 1000-sheet finisher require the bridge unit and one from the two-tray paper feed unit or the LCT.

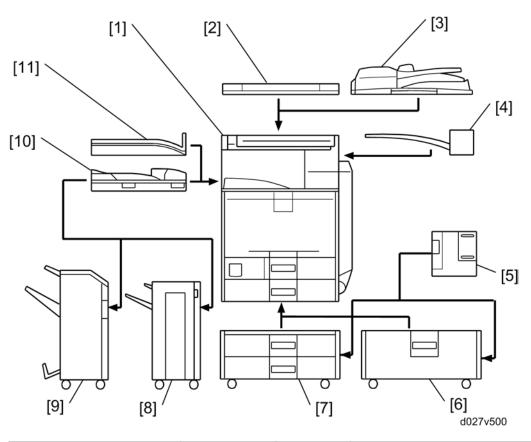
Drive Layout



| 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 PCUs. |
| 4. Toner transport motor: | Drives the toner attraction pumps and the toner collection coils from the PCUs, 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). |

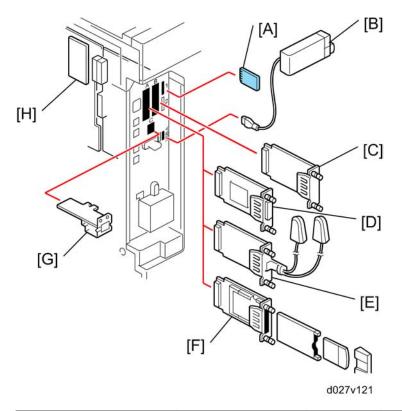
| 6. Drum/Development drive motor (K, Y, M, C) | Drives the color drum unit and development unit (K, Y, M, C). |
|--|---|
| 7. Paper feed clutch | Switches the drive power between tray 1 and tray 2. |
| 8. Paper feed motor: | Drives the paper feed mechanisms (tray 1/tray 2). |
| 9. By-pass feed clutch: | 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. |

Machine Codes and Peripherals Configuration



| Item | Machine Code | Call out | Remarks |
|--------------------------------------|--------------|----------|--|
| Mainframe | D027/D029 | [1] | - |
| Platen cover | G329 | [2] | One from the two |
| ARDF | B802 | [3] | One from the two |
| 2000(booklet)/3000-sheet finisher | B804/B805 | [9] | One from [8] and [9]; Requires [10] and one from [6] and [7] |
| Punch unit: 3/2 holes | B702-17 | - | Requires [9] |
| Punch unit: 4/2 holes | B702-27 | - | Requires [9] |
| Punch unit: 4 holes | B702-28 | - | Requires [9] |

| Item | Machine Code | Call out | Remarks | |
|------------------------------|--------------|----------|--|--|
| | | | One from [8] and [9]; | |
| 1000-sheet finisher | B408 | [8] | Requires [10] and one from [6] and [7] | |
| 2000-sheet LCT | D352 | [6] | One from the two | |
| Two-tray paper feed unit | D351 | [7] | One from the two | |
| 1200-sheet LCT | D353 | [5] | Requires [6] or [7] | |
| 1-bin tray | D414 | [4] | - | |
| Bridge unit | D386 | [10] | One from the two | |
| Shift tray | D388 | [11] | One from the two | |
| Scanner Accessibility Option | D423 | - | - | |



| Item N | achine code Call out | Remark |
|--------|----------------------|--------|
|--------|----------------------|--------|

| USB2.0/SD Slot | D422-01 | [B] | In USB A (front) |
|----------------------------------|--|-------|---|
| Gigabit Ethernet | D377-21 | [G] | - |
| IEEE 1284 | B679-17 | [D] | |
| Wireless LAN (IEEE 802.11a/g) | D377-01 (NA) D377-02 (EU/AA) | . [E] | You can only install one of these |
| Wireless LAN (IEEE 802.11g) | D377-19 | [-] | at a time. |
| Bluetooth | B826-17 | [F] | |
| File Format Converter | D377-04 | [C] | - |
| Copy Data Security Unit | B829-07 | [H] | - |
| PostScript 3 | D413-13 (NA) D413-14 (EU) D413-12 (AA) | [A] | You can only install one of these |
| DataOverwriteSecurity Unit | D377-06 | | in SD slot 1 at a time |
| PictBridge | D413-04 | | |
| VM Card | D430-01 (NA) D430-02 (EU) D430-03 (AA) | - | In SD card slot 2 |
| Browser Unit | D403-05 (NA) D403-06 (EU) D403-07 (AA) | - | In SD card slot 2 Remove it from slot 2 after installing. |
| HDD Encryption Unit | D377-16 | - | 9. |

Guidance for Those Who are Familiar with Predecessor Products

Machine D027/D029 is a successor model to Machine B222/B224. 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

| | D027/D029 | B222/B224 |
|---|---|-------------------------|
| Basic PM Interval | 120K prints | 80K prints |
| PM Operation for PCU | New steps were added to the replacement procedure for the drum unit Turn the development roller counterclockwise. Do SP 1902-001. | - |
| PM Operation for Fusing Unit | Some PM items (such as fusing cleaning felt) are different from the PM items for the previous models. | - |
| Fusing System | Rolle-heating IH system | Belt-heating IH system |
| SD Card Slots | 2 slots | 3 slots |
| Location of Firmware for Printer, Scanner, Netfile, NIB, WebDocBox, WebSys, and DESS | Flash ROM on the controller board | Printer/scanner SD card |

Installation Requirements

2. Installation

Environment

%Rh

90 —

80 —

27C (80.6F) 80%Rh

70 —

60 —

50 —

32C (89.6F) 54%Rh

40 —

10 —

10C (50F) 15%Rh

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1

- 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 2,500 m (8,200 ft.) above sea level.
- 8. Install the machine on a strong, level base. (Inclination on any side must be no more than 5 mm.)
- 9. Do not install the machine in areas that get strong vibrations.

2

Machine Level

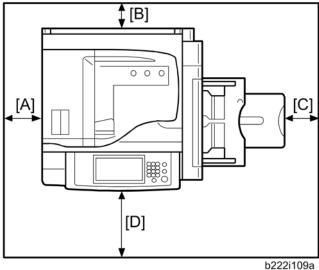
Front to back: Within 5 mm (0.2")

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.



A: Over 100 mm (3.9")

B: Over 100 mm (3.9")

C: Over 550 mm (21.7")

D: Over 750 mm (29.5")

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

Power Requirements

CAUTION

- Insert the plug firmly in the outlet.
- Do not use an outlet extension plug or cord.
- Ground the machine.

9

1. Input voltage level:

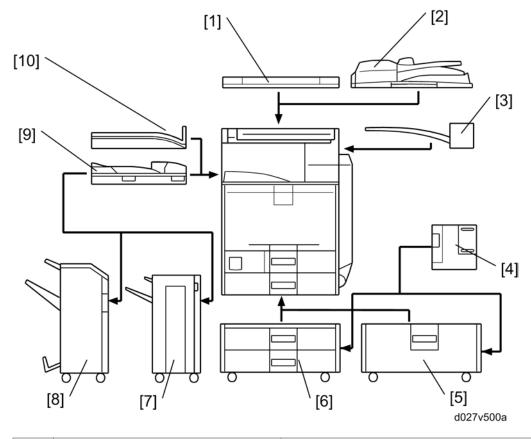
120 V, 60 Hz: More than 12 A

 $220\,V$ to $240\,V,\,50\,Hz/60\,Hz;$ More than $8\,A$

2. Permissible voltage fluctuation: ±10 %

3. Do not put things on the power cord.

Machine Options



| No. | Options | Remarks |
|-----|--------------------------|---------------------------|
| 1 | Platen cover | One from No.1 or No.2 |
| 2 | ARDF | One from INO. 1 or INO. 2 |
| 3 | 1-bin tray unit | - |
| 4 | 1200-sheet LCT | Requires No.5 or No.6 |
| 5 | 2000-sheet LCT | One from No.5, No.6 |
| 6 | Two-tray paper feed unit | One nom No.5, No.6 |

ŋ

| 7 | 1000-sheet finisher | One from No.7, No.8; |
|----|-----------------------------------|--|
| 8 | 2000(booklet)/3000-sheet finisher | Requires No.9 and one from No.5 and No.6 |
| 9 | Bridge unit | One from No.9 or No.10 |
| 10 | Shift tray | One from INO.9 of INO.10 |

Controller Options

| No. | Options | Remarks |
|-----|------------------------------|---|
| 1 | Bluetooth | |
| 2 | IEEE 802.11a/g, g | One from the four (I/F Slot A) |
| 3 | IEEE 1284 | |
| 4 | File Format Converter | I/F Slot B |
| 5 | Gigabit Ethernet | I/F Slot C |
| 6 | PostScript 3 | |
| 7 | PictBridge Option | One from the three (SD card slot 1) |
| 8 | Data Overwrite Security Unit | |
| 9 | Browser Unit | SD card slot 2 (during installation only) |
| 10 | VM Card | SD card slot 2 |
| 11 | HDD Encryption Unit | SD card slot 2 (during installation only) |

Fax Options

| No. | Options | Remarks |
|-----|------------------------------|---------------------------|
| 1 | Fax Option Type C5000 | - |
| 2 | *Hand Set Type 1018 | Requires No. 1. (NA Only) |
| 3 | G3 Interface Unit Type C5000 | - |

^{*:} Child options (Child options require a parent option.)

Other Options

| No. | Options | Remarks |
|-----|---------------------------------|---------|
| 1 | Copy Data Security Unit | - |
| 2 | Optional Counter Interface Unit | - |
| 3 | USB2.0/SD Slot | - |

Copier Installation

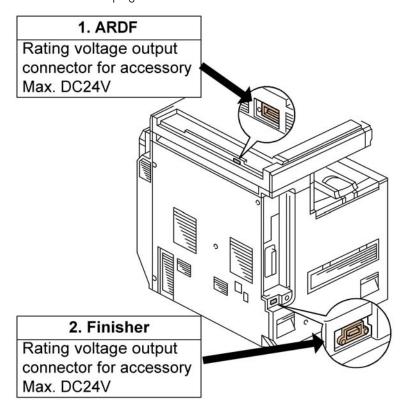
CAUTION

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

Power Sockets for Peripherals

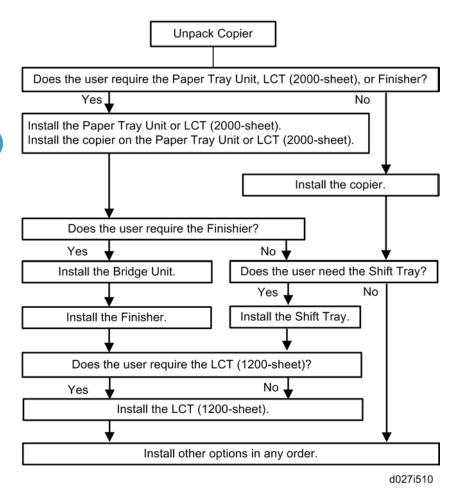
CAUTION

- 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 (B408, B804 or B805). The punch unit is for 2000-sheet booklet finisher (B804) and 3000-sheet finisher (B805).

Installation Procedure

ACAUTION

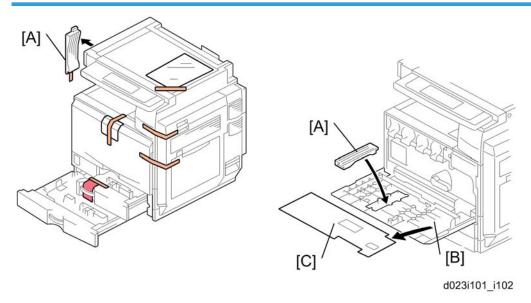
• Remove the tape from the development units before you turn the main switch on. The development units can be severely damaged if you do not remove the tape.

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.



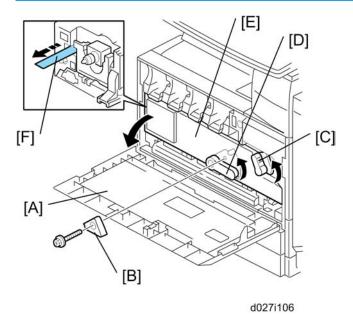
 Keep the shipping retainers after you install the machine. You may need them in the future if you transport the machine to another location.

Tapes and Retainers



- 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 [B].
- 6. Reattach the jam location sheet.
- 7. Close the front door.

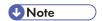
Developer and Toner Bottles



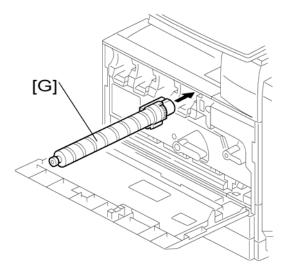
- 1. Open the front door [A].
 - GSA model (-57) and EU models (-27) do not require steps from 2 to 7. Skip to step 8 if you install these models.
- 2. Remove the stopper [B] (F x 1).



- 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 all tapes [F] from the four development units.



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



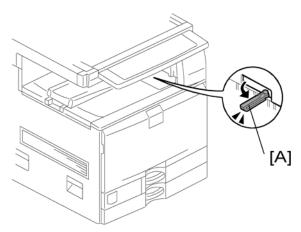
- 9. Install each toner bottle [G] in the machine.
- 10. Close the front door.

Paper Trays

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

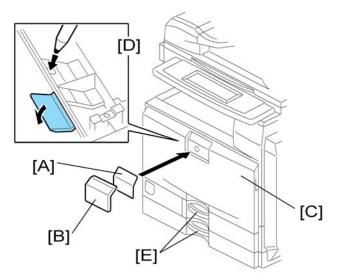


• To move the side guides, first pull out the tray fully. Then push down the green lock at the rear inside the tray.



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

Emblem and Decals



1. Attach the correct emblem [A] and the cover [B] to the front door [C] of the machine, if the emblem is not attached.

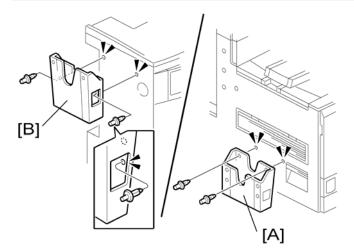


- If you want to change the emblem that has been already attached, remove the panel with an object (not a sharp object) as shown [D], and then install the correct emblem.
- 2. Attach the correct paper tray number and size decals to the paper trays [E].



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.

Manual Pocket Attachment



- 1. Attach the manual pocket [A] to the left side of the copier (snap rivet x 2).
- 2. If a finisher has been installed, attach the manual pocket [B] to the rear side of the finisher (snap rivet x 2).

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 (③) 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 (
SP5-045-001).

| 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. NOTE: You can set this one time only. You cannot change the setting after you have set it for the first time. | "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. | |

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. |
| 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 SP5816-206.
- 7. Check the registration result with SP5816-207.

| Value | Meaning | Solution/Workaround |
|-------|--------------------------------------|---------------------------------|
| 0 | Succeeded | - |
| 1 | Request number error | Check the request number again. |
| 2 | Already registered | Check the registration status. |
| 3 | Communication error (proxy enabled) | Check the network condition. |
| 4 | Communication error (proxy disabled) | Check the network condition. |

| Value | Meaning | Solution/Workaround |
|-------|---|--|
| 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. |
| | -12004 | Attempted setting with illegal entries for certification and ID2. | Check ID2 of the mainframe. |
| Operation Error, Incorrect Setting | -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. |

| 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. |

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 out.
- 5. Do one of the following:
 - Attach shipping tape to the covers and doors.
 - Shrink-wrap the machine tightly.

U Note

- 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.

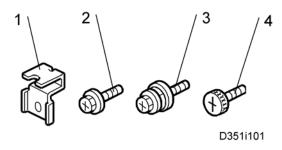
2

Paper Feed Unit Installation (D351)

Accessory Check

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

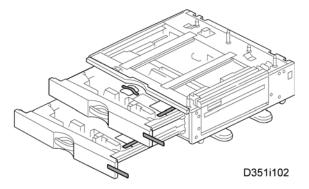
| No. | Description | Q'ty |
|-----|---------------------|------|
| 1 | Securing bracket | 2 |
| 2 | Screw (M4x10) | 2 |
| 3 | Spring Washer Screw | 1 |
| 4 | Knob screw | 3 |



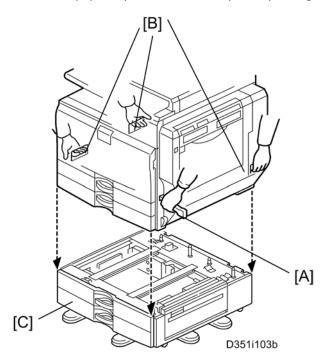
Installation Procedure

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 injury or property damage.
- Do not lift the copier with the paper feed unit installed. The handle and grips may be damaged.



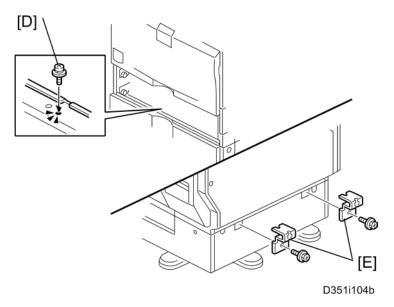
- 1. Remove all tape on the paper feed unit.
- 2. Remove the paper trays and remove all tape and padding.



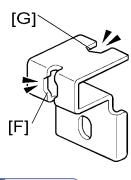
- 3. Grasp the handle [A] and grips [B] of the machine.
- 4. Lift the copier and install it on the paper feed unit [C].



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



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



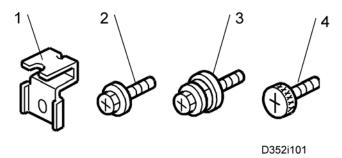
- UNote
 - One of the securing brackets is used as a securing tool (the cutout [F] is used in step 6). But the
 cutout [G] is for attaching the tray heater. Therefore, attach the securing brackets [E] after
 installing the tray heater if you install the tray heater.
- 9. Load paper into the paper feed unit.
- 10. Turn on the main power switch of the machine.
- 11. Check the paper feed unit operation and copy quality.

2000-Sheet LCT

Accessory Check

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

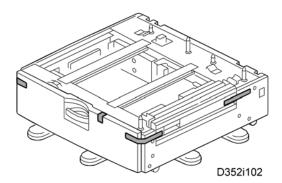
| No. | Description | Q'ty |
|-----|---------------------|------|
| 1 | Securing bracket | 2 |
| 2 | Screw (M4x10) | 2 |
| 3 | Spring washer screw | 1 |
| 4 | Knob screw | 3 |



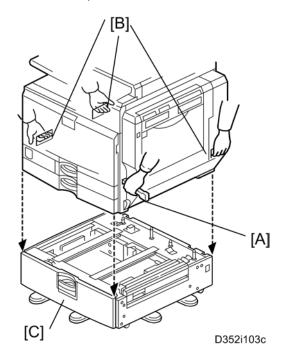
Installation Procedure

ACAUTION

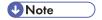
- Turn off the main switch of the copier and unplug the power cord before you start the installation procedure.
- You need two or more persons to lift the copier. The copier is highly unstable when lifted by one person, and may cause injury or property damage.
- Do not lift the copier with the paper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



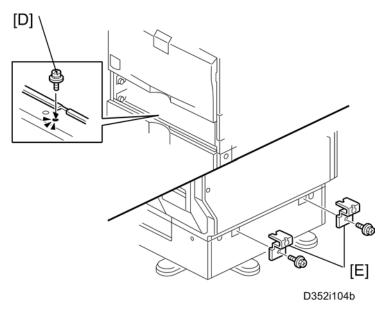
1. Remove all tapes and retainers in the LCT.



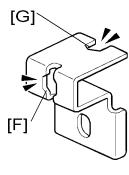
- 2. Grasp the handle [A] and grips [B] of the machine.
- 3. Lift the copier and install it on the LCT [C].



• 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] (\mathscr{F} x 1 each; M4x10).





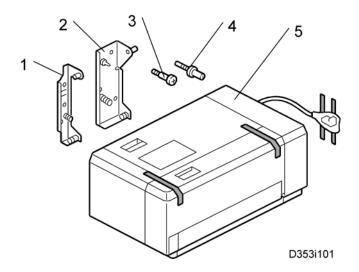
- One of the securing brackets is used as a securing tool (the cutout [F] is used in step 5). But the
 cutout [G] is for attaching the tray heater. Therefore, attach the securing brackets [E] after
 installing the tray heater if you install the tray heater.
- 8. Load paper into the LCT.
- 9. Turn on the main power switch of the machine.
- 10. Check the LCT operation and copy quality.

1200-sheet LCT (D353)

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 |



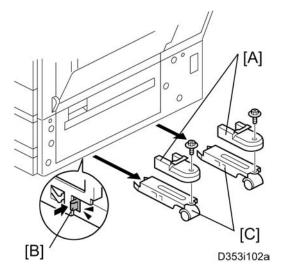
Installation Procedure

ACAUTION

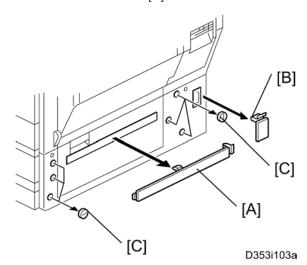
• Unplug the main machine power cord before starting the following procedure.



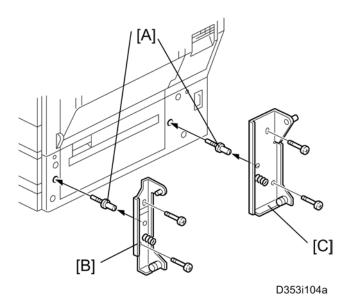
The Paper Tray Unit (D351) or LCT 2000-sheet (D352) must be installed before installing this 1200-sheet LCT.



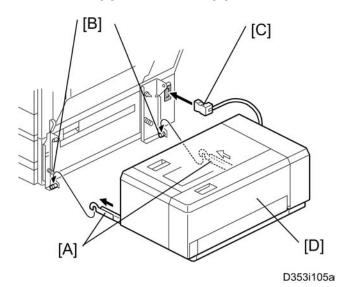
- 1. Unpack the LCT and remove the tapes.
- 2. Remove the stand covers [A].
- 3. Release the locks [B] of the front and rear caster stands.
- 4. Remove the caster stands [C].



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].

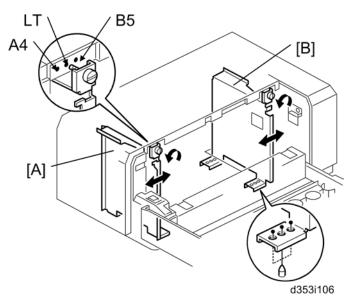


- 8. Pull out the front and rear rails [A], and then hang them on each bracket [B].
- 9. Connect the LCT cable [C] to the main machine.
- 10. Slide the LCT [D] into the main machine.
- 11. Make sure that the front and rear sides of the LCT are closely attached to the main machine.

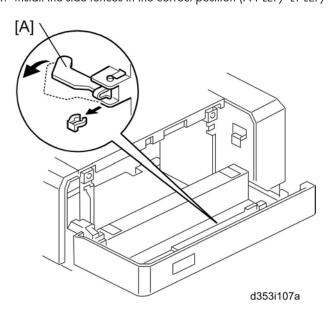
2

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.



- 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.

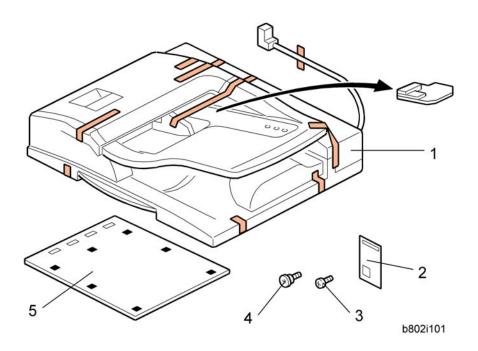
- 6. Close the right door.
- 7. Turn on the main power switch, and then go into the SP mode.
- 8. Input the correct paper size for the 1200-sheet LCT with SP5181-018.

Auto Reverse Document Feeder (B802)

Component Check

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

| No. | Description | Q'ty |
|-----|--------------|------|
| 1 | ARDF | 1 |
| 2 | Decal | 1 |
| 3 | Knob Screw | 2 |
| 4 | Stud Screw | 2 |
| 5 | Platen Plate | 1 |

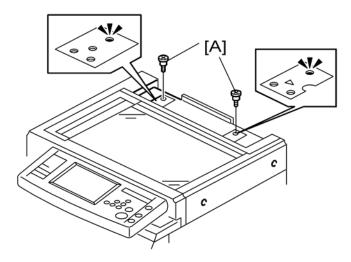


Installation Procedure

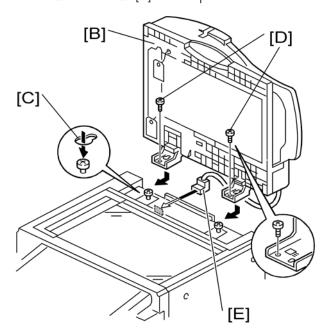
ACAUTION

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

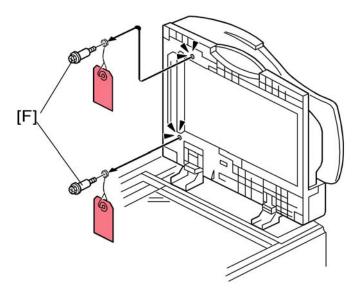
- 1. Remove all tapes and shipping retainers.
- 2. Remove the two screws already installed at the top rear of the machine.



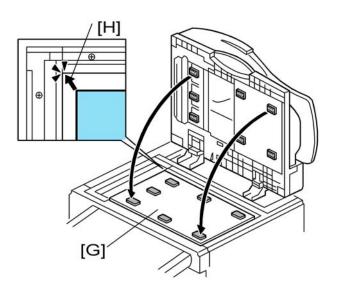
3. Insert the two stud screws [A] on the top of the machine.



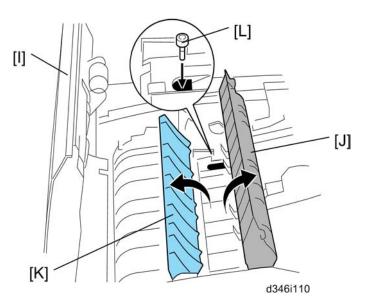
- 4. Mount the ARDF [B] by aligning the screw keyholes [C] in the ARDF support plate over the stud screws.
- 5. Slide the ARDF toward the front of the machine.
- 6. Secure the ARDF with the two knob screws [D].
- 7. Connect the ARDF interface cable [E] to the machine.



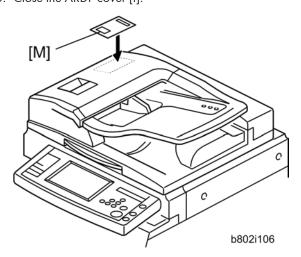
1. Remove two screws [F] from the bottom of the ARDF.



- 2. Peel off the platen plate [G] and place it on the exposure glass.
- 3. Align the rear left corner of the platen plate with the corner [H] on the exposure glass.
- 4. Close the ARDF.
- $5. \;$ Open the ARDF and check that the platen plate is correctly attached.



- 6. Open the ARDF cover [1].
- 7. Open the feed-in guide plate [J] and feed-out guide plate [K].
- 8. Install the stamp [L] into the ARDF.
- 9. Close two guide plates [J] [K].
- 10. Close the ARDF cover [I].



- 11. Attach the decal [M] to the top cover as shown. Choose the language you want.
- 12. Plug in and turn on the main power switch of the machine, and then check the ARDF operation.
- 13. 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 (refer to "Copy Adjustments" in the "Replacements and Adjustments" section).

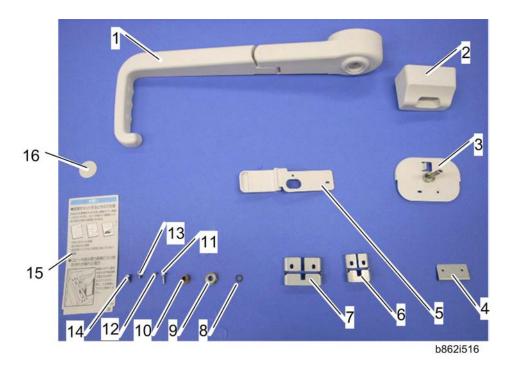
Document Feeder Handle Type 5

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



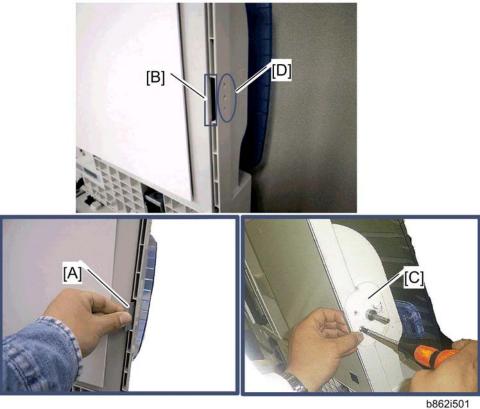
Installation Procedure

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

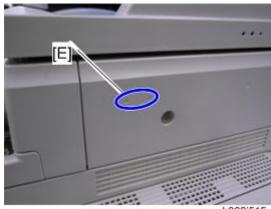
1. Open the ADF unit.



- 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 ($\widehat{\mathscr{E}} \times 2$: M3x8).



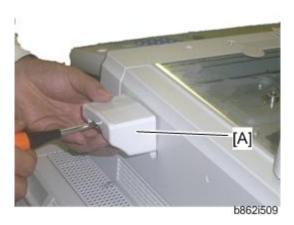
• The two screws must go through the ADF cover and the securing bracket [A].



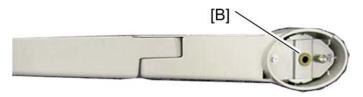
b862i515

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

Installing the DF Handle

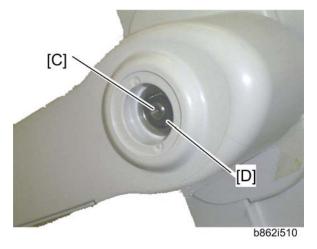


- 1. Attach the holder [A] to the scanner right cover (Tapping Screw M3x12: ${\mathscr{F}}$ x 2).
 - At first, secure the screw at the rear side (away from the operation panel) temporarily and then at the front side temporarily. After that, secure them fully.



b862i513

- 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.



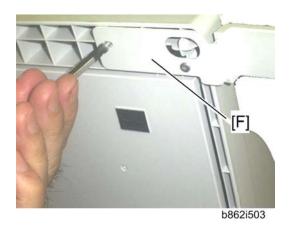
 $4. \ \ In the outside of the handle unit, install the bushing - M6 [C] first, and then the spacer [D].$



5. Secure the handle unit with a screw (\mathscr{F} 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).



b862i505

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



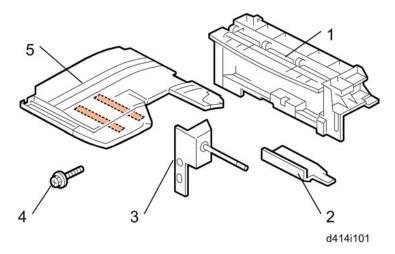
11. Check the operation of the handle unit [J].

1-Bin Tray Unit (D414)

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 | Tray | 1 |



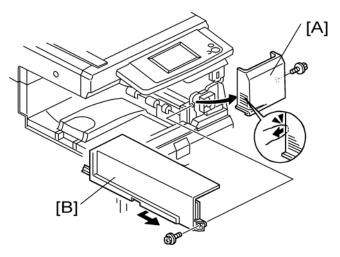
Installation Procedure

ACAUTION

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

If the bridge unit (D386) has already been installed in the machine, remove it before installing 1-bin tray unit (D414). This will make it easier for you to do the following procedure.

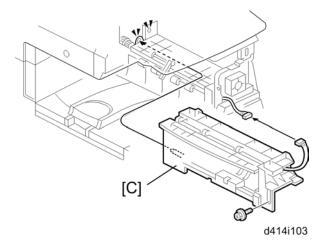
- 1. Remove all tapes.
- 2. Open the right door of the machine.



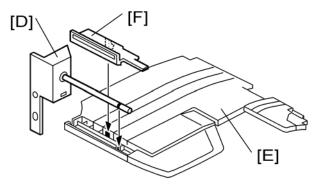
- 3. Remove the front right cover [A] ($\mathscr{F} \times 1$).
- 4. Remove the inner cover [B] (\mathscr{F} x 1).



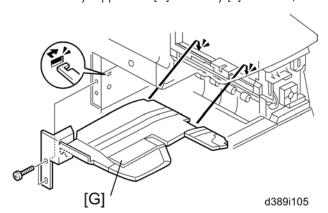
• Keep this screw for step 5.



5. Install the 1-bin tray unit [C] ($\mathbb{Z} \times 1, \mathbb{Z} \times 1, \mathbb{Z} \times 1$ [This screw was removed in step 4]).



6. Attach the tray support bar [D] to the tray [E] as shown, and then attach the end-fence [F].



- 7. Install the tray [G] (with the tray support bar) in the machine (M3 x 16: $\mbox{\ensuremath{\not{\!\!\!\!P}}}\xspace$ x 2).
- 8. Reinstall the front right cover in the machine, and then close the right door of the machine.
- 9. Turn on the main power switch of the machine.
- 10. Check the 1-bin tray unit operation.

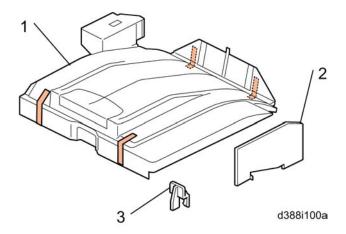
2

Shift Tray Unit (D388)

Component Check

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

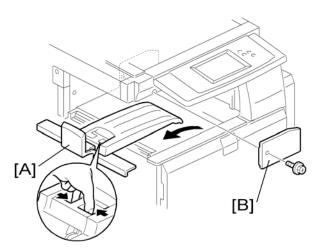
| No. | Description | Q'ty |
|-----|---------------------|------|
| 1 | Shift Tray Unit | 1 |
| 2 | Paper Guide - Small | 2 |
| 3 | Connector Cover | 1 |



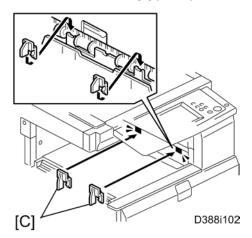
Installation Procedure

ACAUTION

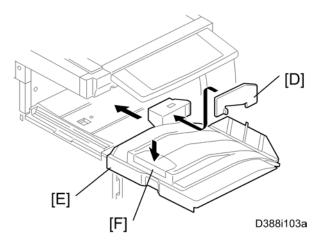
• Unplug the copier power cord before starting the following procedure.



- 1. Remove all tapes.
- 2. Remove the standard tray [A].
- 3. Remove the inner cover [B] (\mathscr{F} x 1).



4. Install the small paper guides [C].



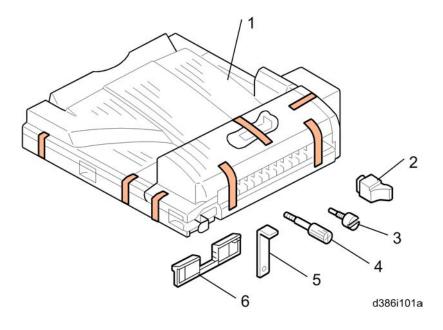
- 5. Attach the connector cover [D] to the shift tray unit [E].
- 6. Install the shift tray unit [E] to the machine.
- 7. Push down the left edge [F] of the shift tray.
- 8. Turn on the main power switch of the machine.
- 9. Check the shift tray unit operation.

Bridge Unit (D386)

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 |



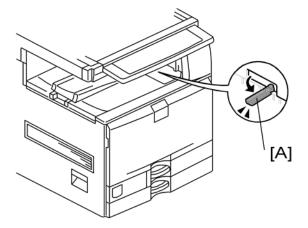
Installation Procedure

ACAUTION

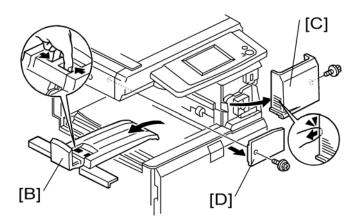
• Unplug the copier power cord before starting the following procedure.



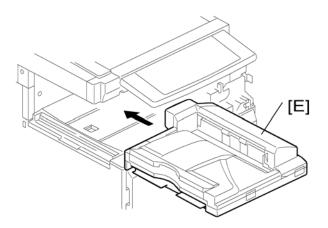
- 1. If you will install the 1-bin tray (D414) in the machine, install the 1-bin tray before you install the bridge unit (D386). This will make it easier for you to do the following procedure.
- 2. If you will install a finisher (B408, B804 or B805) in the machine, install the finisher after you install the bridge unit (D386).
- 1. Remove all tapes.



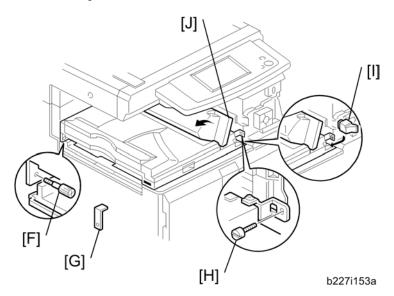
- 2. If the sensor feeler [A] is out, fold it into the machine.
- 3. Open the right door of the machine.



- 4. Remove the inner tray [B].
- 5. Remove the front right cover [C] ($\mathscr{F} \times 1$).
- 6. Remove the connector cover [D] ($\mathscr{F} \times 1$).



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



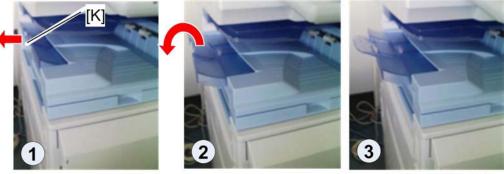
- 8. Secure the bridge unit with the knob screw [F] and screw [H].
- 9. Attach the frame cover [1].
- 10. Reinstall the front right cover in the machine. Then close the right door of the machine.



- Open the bridge unit cover [J] when installing the front right cover. Otherwise, the bridge unit cover is an obstacle for attaching the front right cover.
- 11. Install the optional finisher (refer to the finisher installation procedure).



• If you will not install the finisher at this time, install the holder bracket [G]. Otherwise, the customer will damage the bridge unit if they pull up the bridge unit tray. When you install the finisher, you will need this bracket during the installation procedure.



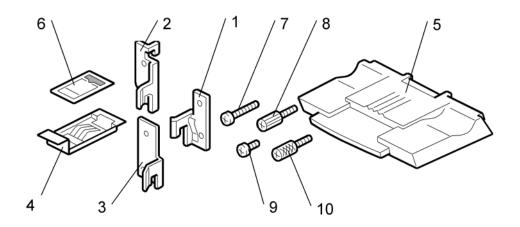
- d386i509b
- 12. Pull the extension tray [K] only if the 1000-sheet finisher (B408) is to be installed in the main machine.
- 13. Turn on the main power switch of the machine.
- 14. Check the bridge unit operation.

1000-Sheet Finisher (B408)

Accessory Check

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

| No. | Description | Q'ty |
|-----|-------------------------------|------|
| 1 | Front Joint Bracket | 1 |
| 2 | Rear Joint Bracket (Not used) | 1 |
| 3 | Rear Joint Bracket | 1 |
| 4 | Grounding Plate | 1 |
| 5 | Copy Tray | 1 |
| 6 | Staple Position Decal | 1 |
| 7 | Screw - M4 x 14 | 4 |
| 8 | Knob Screw - M4 x 10 | 1 |
| 9 | Screw - M3 x 8 | 1 |
| 10 | Knob Screw - M3 x 8 | 1 |



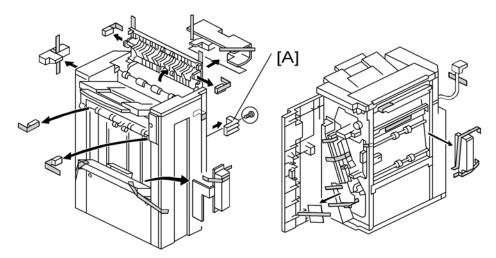
Installation Procedure

ACAUTION

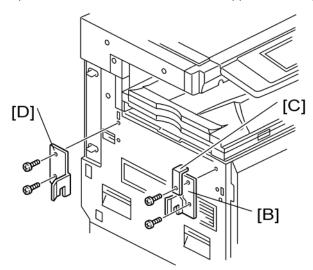
• Unplug the main machine power cord before starting the following procedure.

If this finisher will be installed on the D027 or D029 copier, the following options must be installed before installing this finisher.

- Bridge Unit (D386)
- Paper Feed Unit (D351) or LCT (D352)



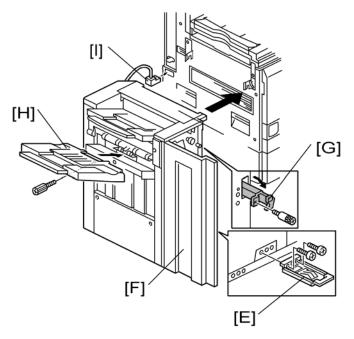
1. Unpack the finisher, and then remove the stopper [A] and tapes (\mathscr{F} x 1).



2. Install the front joint bracket [B], holder bracket [C] (\mathscr{F} x 2 - M4 x 14), and rear joint bracket [D] (\mathscr{F} x 2 - M4 x 14).



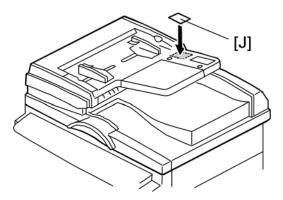
• The holder bracket [C] must be placed outside the front joint bracket [B]. The holder bracket is provided with the bridge unit (D386).



1. Install the grounding plate [E] on the finisher ($\mathscr{F} \times 2 - M3 \times 8$).



- Use the screw removed in step 1 and the screw from the accessory box.
- 2. Open the front door [F] of the finisher, and then pull the locking lever [G] (1 knob screw M3 x 8).
- 3. Align the finisher on the joint brackets, and lock it in place by pushing the locking lever.
- 4. Secure the locking lever (1 knob screw M3 x 8).
- 5. Close the front door.
- 6. Install the copy tray [H] (1 knob screw M4 x 10).
- 7. Connect the finisher cable [1] to the main machine below the right rear handle.



- 8. Attach the staple position decal [J] to the ARDF as shown.
- 9. Turn on the main power switch and check the finisher operation.

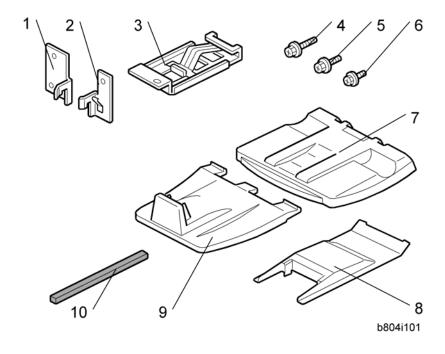
2

2000 (Booklet)/ 3000-Sheet Finisher (B804/B805)

Accessory Check

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

| No. | Description | Q'ty |
|-----|----------------------------------|------|
| 1 | Rear Joint Bracket | 1 |
| 2 | Front Joint Bracket | 1 |
| 3 | Ground Plate | 1 |
| 4 | Tapping screws - M4 x14 | 4 |
| 5 | Tapping screws - M3 x 8 | 1 |
| 6 | Tapping screws - M3 x 6 | 6 |
| 7 | Upper output tray | 1 |
| 8 | Support Tray | 1 |
| 9 | Lower output tray (B804 Only) | 1 |
| 10 | Cushion (with double-sided tape) | 1 |

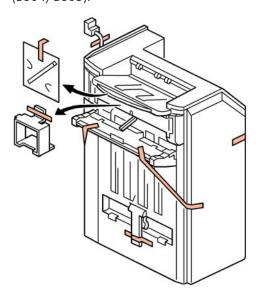


Installation Procedure

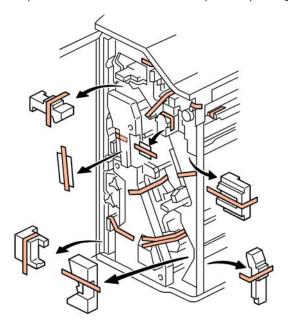
ACAUTION

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

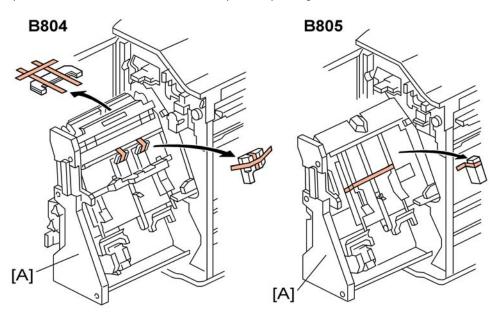
The bridge unit (D386) and optional paper feed unit (D351) must be installed before installing this finisher (B804/B805).



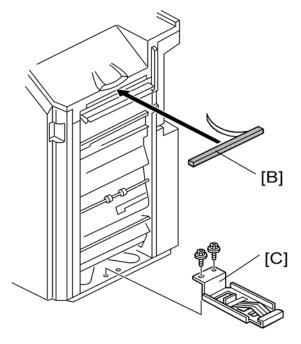
1. Unpack the finisher and remove all tapes and packing materials from the finisher.



2. Open the front door, and then remove all tapes and packing materials from the inside of the finisher.



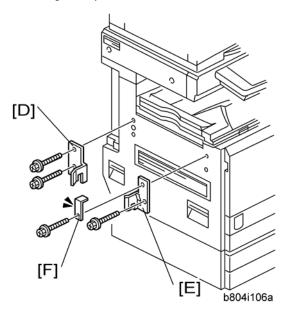
3. Pull out the jogger unit [A], and then remove all tapes and retainers.



1. Attach the cushions [B] to the finisher.



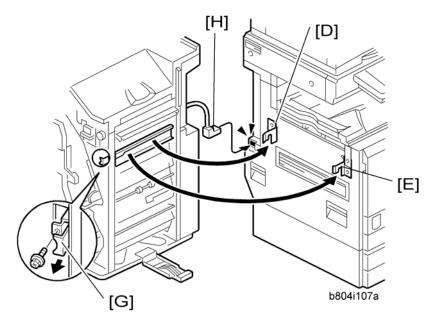
- Make sure that the cushion is placed within 0 to 1 mm from the edge of the cover.
- 2. Install the ground plate [C] on the finisher ($\mathscr{F} \times 2$; M3x6).



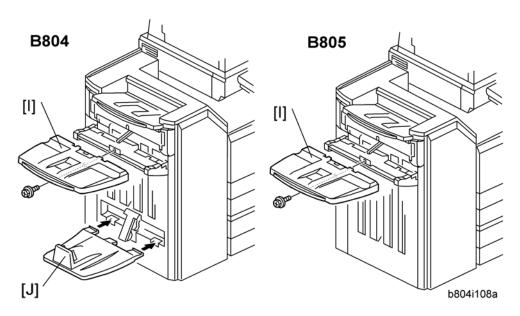
- 3. Attach the rear joint bracket [D] (${\widehat{\!\!\mathcal{F}}}^2\times 2;\,M4x4$).
- 4. Attach the front joint bracket [E] and the holder bracket [F] (\hat{F} x 2; M4x14).



• The holder bracket [F] must be placed outside the front joint bracket [E]. The holder bracket is provided with the bridge unit (D386).

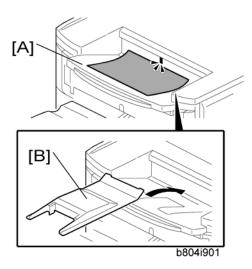


- 5. Pull the lock lever [G] (Long knob screw x 1).
- 6. Slowly push the finisher to the left side of the machine, keeping its front door open until the brackets [D] [E] go into their slots.
- 7. Push the lock lever [G], and then secure it (Long knob screw x 1).
- 8. Close the front door of the finisher.
- 9. Connect the finisher connector [H] to the machine.



- 10. Install the upper output tray [I] (\mathscr{F} x 1; M3x8).
- 11. Only for B804, install the lower output tray [J].
- 12. Turn on the main power switch of the machine.
- 13. Check the finisher operation.

Support Tray Installation



If a stacking problem occurs several times on the upper output tray [A], put the support tray [B] on the tray as shown.





• Keep this tray in the manual pocket if this tray does not need to be installed.

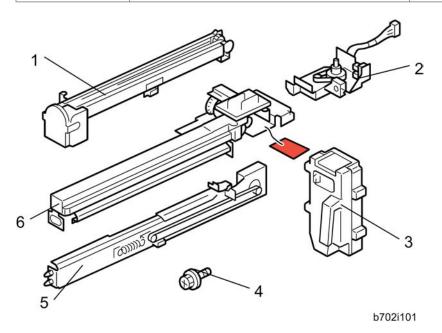
Punch Unit

The Punch Unit B702 is installed in the 2000-Sheet Booklet (B804) Finisher/3000-Sheet Finisher (B805).

Component Check

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

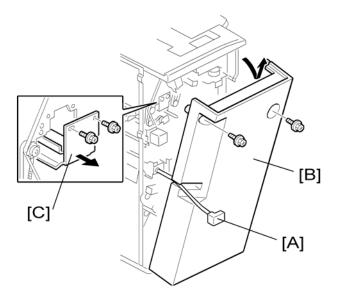
| No. | Description | Q'ty |
|-----|-----------------------------|------|
| 1 | Punchout Waste Unit | 1 |
| 2 | Slide Drive Unit | 1 |
| 3 | Punch Waste Hopper | 1 |
| 4 | Screws: M3 x 6 | 5 |
| 5 | Side-to-Side Detection Unit | 1 |
| 6 | Punching Unit | 1 |



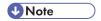
Installation Procedure

ACAUTION

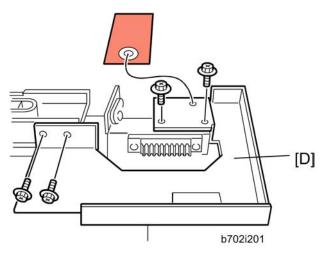
• Unplug the main machine power cord before starting the following procedure. If the 2000-sheet booklet/3000-sheet finisher has been installed, disconnect it and pull it away from the machine.



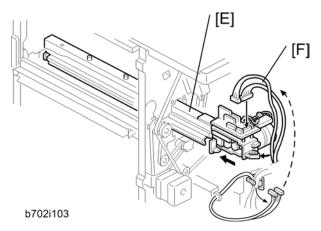
- 1. If the finisher is connected to the copier, disconnect the power connector [A] and move the finisher away from the copier.
- 2. Remove the rear cover [B] ($\mathscr{F} \times 2$) and open the front door.



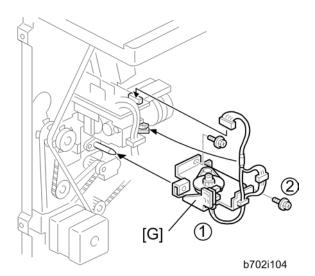
- At the bottom of the rear cover, make sure to disconnect the tabs that attach the cover to the frame.
- 3. Remove the guide plate [C] ($\hat{\mathbb{F}}$ x 2).



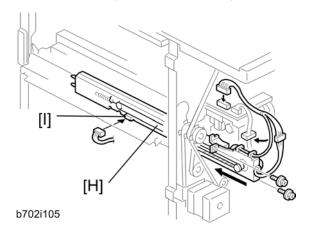
4. Remove the shipping retainer [D] (F x 4).



- 5. Move the punch unit [E] along its rails into the finisher. Make sure that the pin engages correctly at the front and rear.
- - The cables [F] are coiled and attached to the PCB.



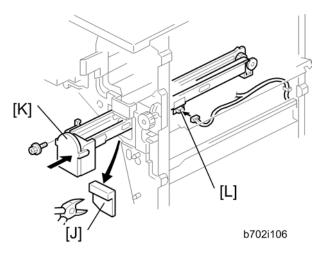
- 7. Attach the slide drive unit [G] to the finisher and connect it to the punch unit (x 2, x 1). Push in the slide drive unit at 1 when you attach the screw 2.
- 8. Make sure that the punch unit moves freely and is not blocked by the screws.



- 9. Put the side-to-side detection unit [H] in the machine. Make sure that the two pins are engaged correctly at the front.
- 10. Make sure that the side-to-side detection unit moves smoothly on its rails. If it does not, make sure that the rails are aligned with their grooves.
- 11. Attach the side-to-side detection unit and connect it at the rear (\mathscr{F} x 2, $\overset{\smile}{\hookrightarrow}$ x 1, $\overset{\smile}{\Longrightarrow}$ x 1).
- 12. Pull the short connector out of the connector [I] then connect the cable of the finisher (🗐 x 1).



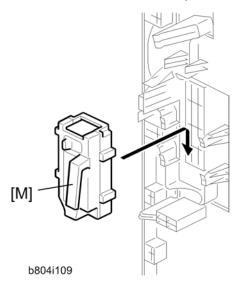
• This is the 3-pin connector.



- 13. At the front, use a pair of wire cutters to remove the part [J] of the cover.
- 14. Install the punch-waste transport unit [K] in the finisher.
- 15. Make sure that the punch-waste transport unit moves smoothly on its rails. If it does not, make sure that the rails are aligned with the grooves.
- 16. Remove the short connector from the connector [L].



- This is the 4-pin connector.
- 17. Connect the cable and attach the punch-waste transport unit (□ x 1, □ x 1, ♠ x 1).



- 18. Set the hopper [M] in its holder.
- 19. Reassemble the finisher, and then install it on the main machine.
- 20. Connect the power cord to the outlet, and then turn the main power switch on.

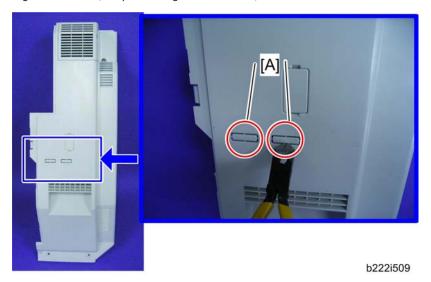
2

21. Check the punch unit operation.

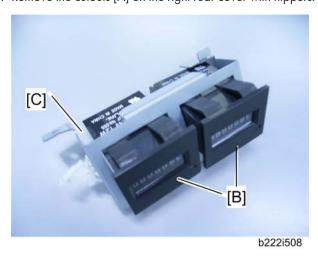
Mechanical Counter (NA Only)

Installation Procedure

- 1. Rear cover (see p.161 "Rear Cover")
- 2. Right rear cover (see p. 162 "Right Rear Cover")

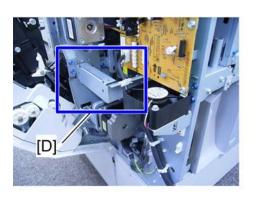


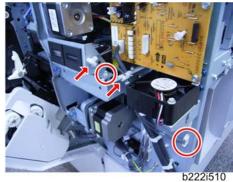
3. Remove the cutouts [A] on the right rear cover with nippers.



4. Attach the mechanical counters [B] to the bracket [C] and connect the harness to each mechanical counter.

2

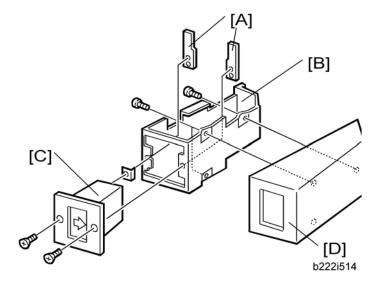




- 5. Attach the mechanical counter bracket to the frame [D] ($\mbox{$\not \sim$} \times 1, \mbox{$\not \sim$} \times 2, \mbox{$\not \sim$} \times 1).$
- 6. Reassemble the machine.
- 7. Plug in the machine and turn on the main power switch.
- 8. Enter the SP mode.
- 9. Set SP5987-001 to "1: ON".
- 10. Exit the SP mode, and then turn the machine off and on.

Key Counter Bracket

Installation Procedure

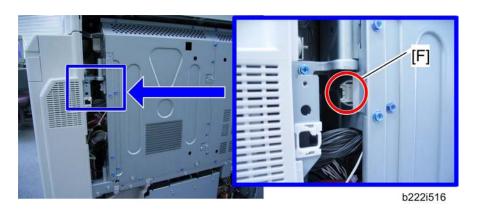


- 1. Hold the key counter plate nuts [A] on the inside of the key counter bracket [B] and insert the key counter holder [C].
- 2. Secure the key counter holder to the bracket (\mathscr{F} x 2).
- 3. Install the key counter cover [D] ($\mathscr{F} \times 2$).
- 4. Rear cover (p.161 "Rear Cover")

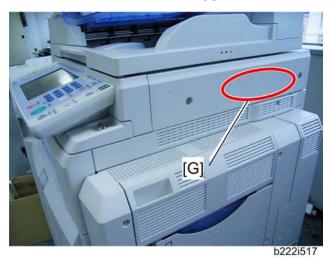


5. Cut off the part [E] of the rear cover.

9



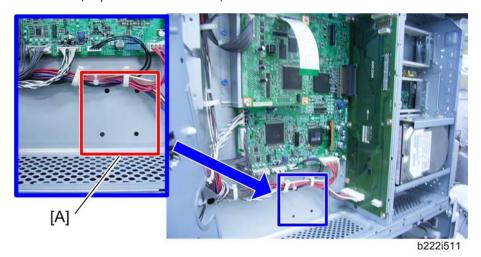
6. Connect the harness to the connector [F] inside the machine.



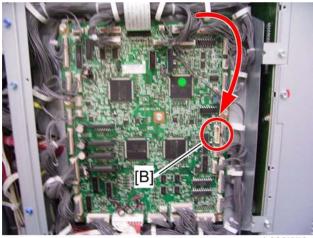
- 7. Peel off double sided tape on the key counter bracket and attach the key counter to the scanner right cover [G].
- 8. Reassemble the machine.

Installation Procedure

- 1. Rear cover (p.161 "Rear Cover")
- 2. IOB bracket (p.293 "Controller Box")



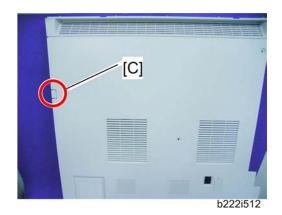
- 3. Install the four stud stays in the location [A] in the controller box.
- 4. Install the key counter interface board on the four stud stays in the controller box.
- 5. Connect the harness to CN3 on the key counter interface board.



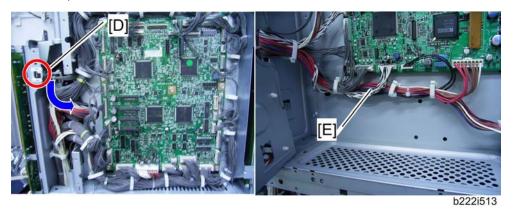
b222i676

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

2



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

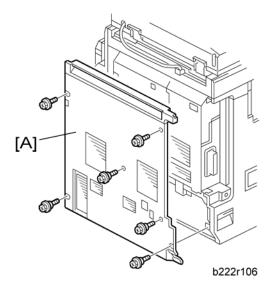


- 8. Clamp the harness from the counter device with the clamp [D] and put it as shown by the blue arrow (x 1).
- 9. Route the harness from the counter device in the same way as the other harnesses [E] ($\stackrel{\smile}{\sqsubseteq}$ x 3).
- 10. Connect the harness from the counter device to CN4 on the key counter interface board.
- 11. Reattach the IOB bracket (p.293 "Controller Box").
- 12. Reassemble the machine.

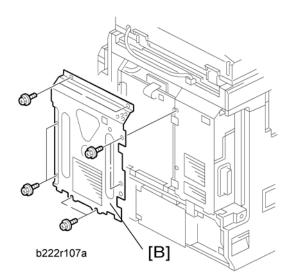
ACAUTION

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

Copy Data Security Unit Type F (B829)



1. Remove the rear cover [A] of the machine ($\hat{\mathscr{F}} \times 5$).



2. Remove the controller box right cover [B] ($\hat{\mathscr{E}}$ x 8).



b222i507

- 3. Attach the ICIB-3 (copy data security board) to CN 508 [C] on the BICU (\mathscr{F} 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 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.

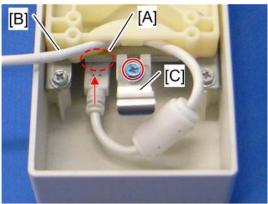
Make sure that the machine can recognize the option (see 'Check All Connections' at the end of this section).

Accessory Check

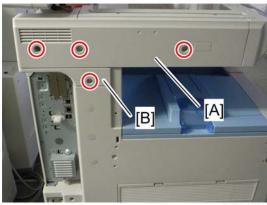
Check the quantity and condition of the accessories against the following list.

| No. | Description | Q'ty |
|-----|--------------------------|------|
| 1 | USB2.0/SD Slot | 1 |
| 2 | Ground Plate | 1 |
| 3 | USB Cable | 1 |
| 4 | Screw: M3 x 6 blue | 1 |
| 5 | Screw: M3 x 8 | 4 |
| 6 | Screw: M3 x 6 (Not used) | 1 |
| 7 | Bracket (Not used) | 1 |

Installation Procedure

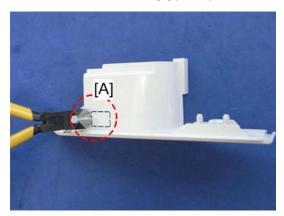


- d027i111
- 1. Connect the USB cable [B] to the USB slot [A] in the USB2.0/SD Slot as shown above.
- 2. Attach the ground plate [C] to the bracket of the USB2.0/SD Slot (${\mathscr F}$ x 1: M3x6 blue).



d027i110

- 3. Remove the scanner left cover [A] (\mathscr{F} x 3).
- 4. Remove the left frame cover [B] ($\hat{\beta}^{x} \times 1$).



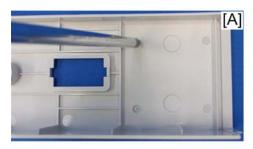
d027i112

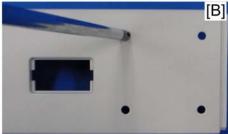
- 5. Remove the part [A] of the left frame cover with pliers or a similar tool.
- 6. Reinstall the left frame cover ($\hat{\mathscr{F}}$ x 1).



d027i113

7. Remove the part [A] on the scanner left cover.



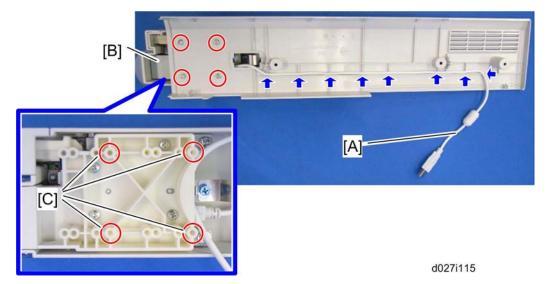


d027i113a

8. Make four holes in the scanner left cover with a screwdriver as shown [A].



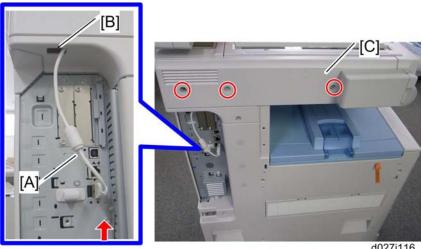
• Smooth the four holes in the scanner left cover as shown [B].



- 9. Route the USB cable [A] through the gaps in the left scanner cover.
- 10. Secure the USB2.0/SD Slot [B] with the left scanner cover as shown above (\mathscr{F} x 4: M3x8).



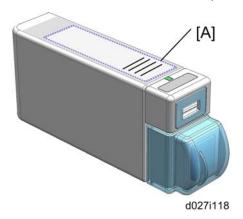
• Use the screw holes [C] as shown above.



- d027i116
- 11. Put the USB cable [A] through the cutout [B] in the left frame cover.
- 12. Attach the scanner left cover [C] to the mainframe, and then connect the USB cable [A] to USB-A (front side) as shown above ($\mathscr{F} \times 3$).



- Make sure that the USB cable is inserted in USB-A (front side).
- 13. Plug in and turn on the mainframe.
- 14. Enter the SP mode, and then change the setting of SP1013-001 from "0" to "1".
- 15. Exit the SP mode, and then check the operation of the USB2.0/SD Slot.



16. Attach the decal [A] to the USB2.0/SD Slot as shown above.

Testing the SD Card/USB Slot

1. Insert an SD card or USB memory device in the slot.

You can connect only one removable memory device at a time.

2. Close the media slot cover.

If you leave the cover open, static electricity conducted through an inserted SD card could cause the machine to malfunction.

3. Make sure that no previous settings remain.

If a previous setting remains, press the [Clear Modes] key.

- 4. Place an original on the exposure glass.
- 5. Press [Store File].
- 6. Press [Store to Memory Device].
- 7. Press [OK].
- 8. Press the [Start] key.

When writing is complete, a confirmation message appears.

- 9. Press [Exit].
- 10. Remove the memory device from the media slot.



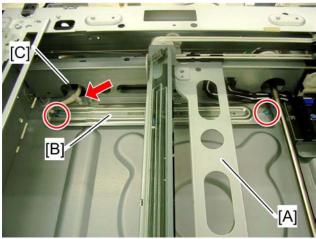
• Do not remove the memory device while writing is in process.

2

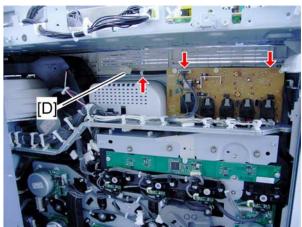
Anti-Condensation Heater (Scanner)

Installation Procedure

- 1. Remove the ARDF or platen cover (p.52 "Auto Reverse Document Feeder (B802)")
- 2. Remove the rear cover (p. 161 "Rear Cover").
- 3. Remove the ARDF exposure glass and exposure glass with left scale (p.168 "Exposure Glass").
- 4. Remove the scanner rear frame (p.172 "Scanner Motor")

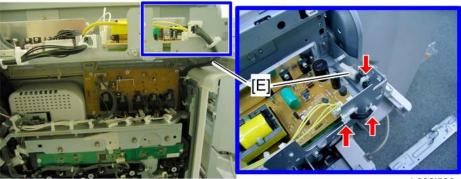


- b222i518
- 5. Move the scanner carriage [A] to the right side by rotating the scanner motor.
- 6. Install the heater [B] in the scanner unit ($\mbox{\ensuremath{\not\sim}} \times 2, \mbox{\ensuremath{\not\sim}} \times 1)$
- 7. Put the cable through the cutout [C].



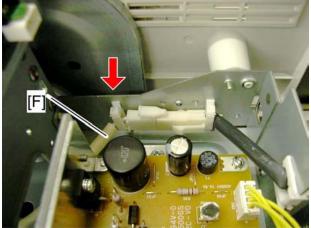
b222i519

8. Release the heater relay cable [D] ($\stackrel{\sim}{\sqsubseteq}$ x 3).



b222i520

9. Route the heater relay cable [E] as shown (🖫 x 3).

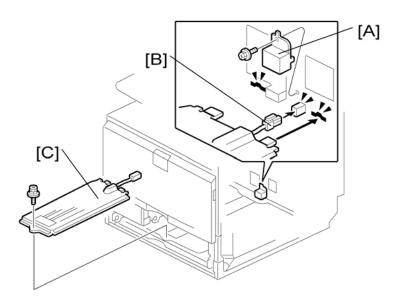


b222i521

- 11. Reassemble the machine.

Tray Heater

Installation Procedure

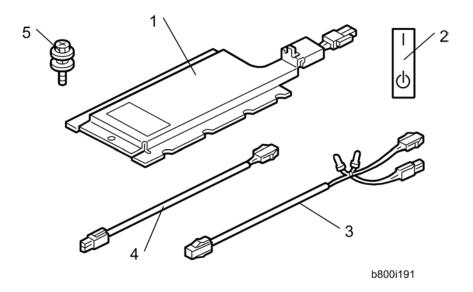


- 1. Remove trays 1 and 2 from the machine.
- 2. Remove the connector cover [A] ($\mbox{\empsilon} \times 1$).
- 3. Connect the connector [B] of the heater to the connector of the main machine.
- 4. Install the heater [C] inside the machine ($\ensuremath{\widehat{\mathcal{F}}} \times 1)$
- 5. Reassemble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

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 D351/D352) | 1 |
| 5 | Screw M4 x 10 | 2 |
| - | Installation procedure | 1 |

Anti-Condensation Heater Type A



Installation Procedure

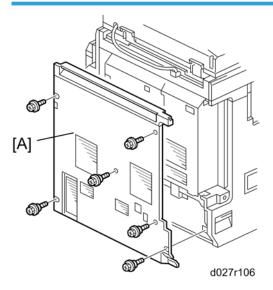
ACAUTION

- Unplug the machine power cord before starting the following procedure.
- Do the following procedure not to damage any harnesses.

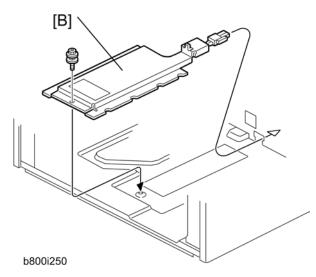
2

• Check that any harnesses are not damaged nor pinched after installation.

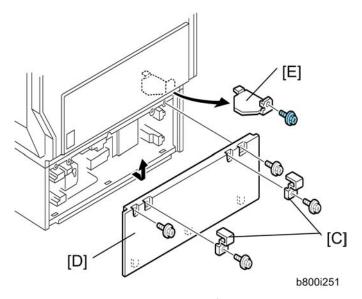
For installing the tray heater in D351



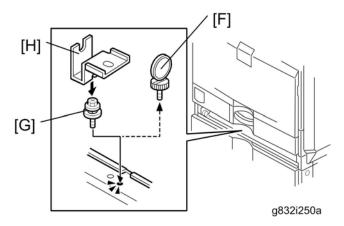
- 1. Rear cover [A] (\$\hat{\beta} \times 6)
- 2. Pull out the two trays in the optional paper feed unit.



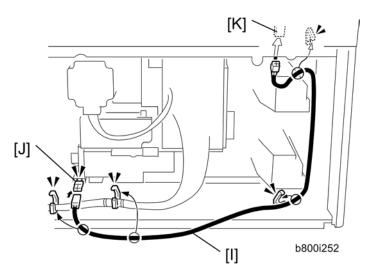
3. Install the tray heater [B] in the optional paper feed unit ($\mbox{\ensuremath{\not{\!\!\!\!P}}}\xspace x 1$).



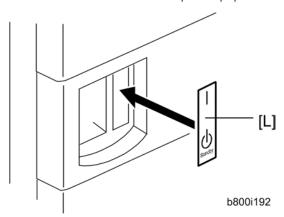
- 4. Remove the two securing brackets [C] ($\mathscr{F} \times 1$ each), and then the rear cover [D] of the optional paper feed unit ($\mathscr{F} \times 2$).
- 5. Remove the harness cover bracket [E] (\mathscr{F} x 1).



- 6. Pull out tray 2 from the mainframe.
- 7. Replace the shoulder screw [F] with the washer screw [G], using securing bracket [H] ($\hat{\mathscr{E}}$ 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.
- 10. Connect the harness [I] to the connector [K] of the mainframe.
- 11. Reassemble the mainframe and optional paper feed unit.



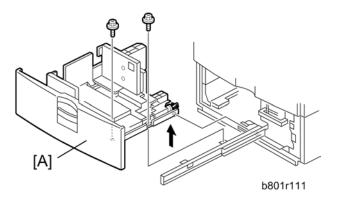
12. Attach the on/standby decal [L] to the right-hand side of the main power switch.

For Installing the Tray Heater in D352

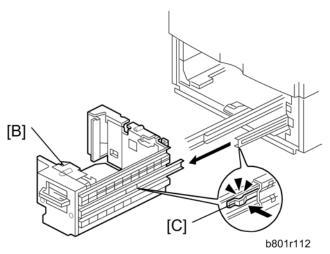
- 1. Remove the rear cover of the mainframe (step 1 in "For Installing the Tray Heater in D321").
- 2. Pull out the LCT drawer.



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



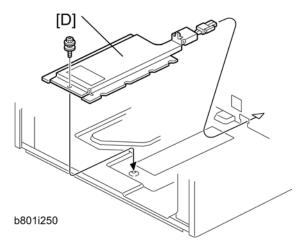
3. Left tray [A] (F x 2)



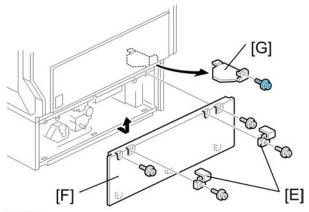
4. Remove the right tray [B] while pressing down the stopper [C].



• 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.

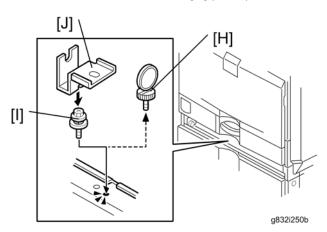


5. Install the tray heater [D] in the optional LCT ($\ensuremath{\mathscr{F}}$ x 1).

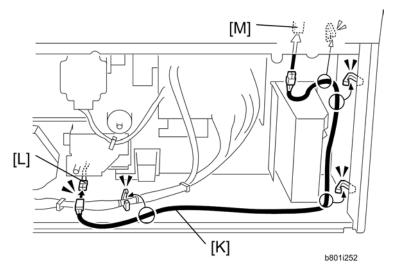


b801i251

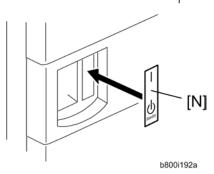
- 6. Remove the two securing brackets [E] ($\hat{\mathscr{F}} \times 1$ each), and the then rear cover [F] of the optional LCT ($\hat{\mathscr{F}} \times 2$).
- 7. Remove the harness cover bracket [G] ($\hat{\beta}^{x} \times 1$).



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



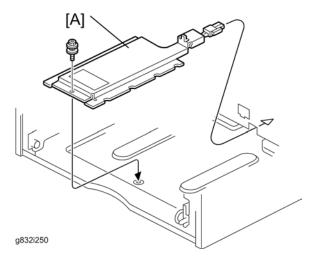
- 10. Connect the harness [K] to the connector [L] of the tray heater.
- 11. Route the harness [K] as shown and clamp it with four clamps ($\mbox{$\stackrel{\frown}{\cong}$} \times 4$).
- 12. Connect the harness [K] to the connector [M] of the mainframe.
- 13. Reassemble the mainframe and optional LCT.



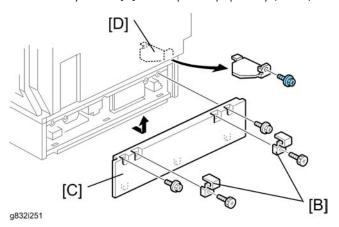
- 14. Reassemble the mainframe and optional paper feed unit.
- 15. Attach the on/standby decal [N] to the right-hand side of the main power switch.

For Installing the Tray Heater in D387

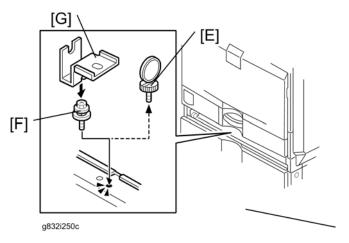
- 1. Remove the rear cover of the mainframe (step 1 in "For Installing the Tray Heater in D321").
- 2. Pull out the tray in the optional paper tray.



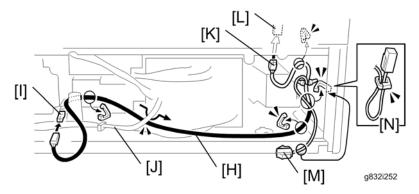
3. Install the tray heater [A] in the optional paper tray ($\ensuremath{\mathcal{P}}$ x 1).



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



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



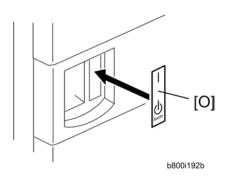
- 1. Connect the harness [H] to the connector [I] of the tray heater.
- 2. Route the harness [H] as shown and clamp it with four clamps ($\mathscr{F} \times 4$).



- Make sure that the harness [H] is placed below the harness [J].
- 3. 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.
- 4. Clamp the other harness [M] of the two-way harness as shown [N] if you do not install another optional paper feed unit.
- 5. Reassemble the mainframe and optional paper tray.

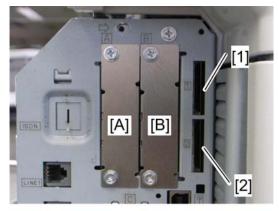


 $6. \ \, \text{Attach the on/standby decal [O] to the right-hand side of the main power switch.}$

2

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).



Controller Options

d027i400

I/F Card Slots

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

SD Card Slots

- Slot 1 is used for one of the optional applications: PostScript 3, Data Overwrite Security Unit, PictBridge
- Slot 2 is used for installing the Browser Unit, HDD Encryption unit, VM card 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 copy application programs from one SD card to another SD card.

Slot 1 is used to store application programs. But there are 3 possible applications (PostScript 3, DOS unit, PictBridge). You cannot run application programs from Slot 2. However you can move application programs from Slot 2 to Slot 1 with the following procedure.

For this model, the printer/scanner card in slot 1 has enough space for the PictBridge and the DOS applications. Use the card that is already in slot 1 (printer/scanner card). Do not remove the printer/scanner card from slot 1.

Make sure that the target SD card has enough space.

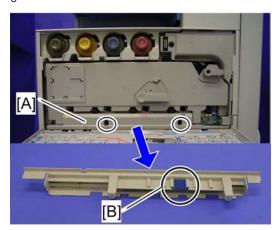
- 1. Enter SP5873 "SD Card Appli Move".
- 2. Then move the application from the SD Card in Slot 2 to the SD Card in Slot 1.



- Do steps 1-2 again if you want to move another application program.
- 3. Exit the SP mode.

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 copy the application program from one card to another card.
- Do not use the SD card if it has been used before for other purposes. Normal operation is not guaranteed when such an SD card is used.



• Remove the cover [A] ($\mathscr{F} \times 2$), and then keep the SD card in the place [B] after you copy 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.
- You cannot copy PostScript application and VM card to another SD card. You have to copy the other
 application (PictBridge, DOS Unit) to the SD card that stores the PostScript application or VM card.

Move Exec

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

- 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 an SD card is in SD Card Slot 1. The application program is copied to this SD card.
- 3. Insert the SD card with the application program in SD Card Slot 2. The application program is copied from this SD card.
- 4. Turn the main switch on.
- 5. Start the SP mode.
- Select SP5-873-001 "Move 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.
- 10. Turn the main switch on.
- 11. Check that the application programs run normally.

Undo Exec

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

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. Insert the original SD card in SD Card Slot 2. The application program is copied back into this card.
- 3. Insert the SD card with the application program in SD Card Slot 1. 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.



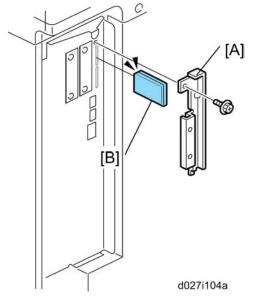
- This step assumes that the application programs in the SD card are used by the machine.
- 10. Turn the main switch on.
- 11. Check that the application programs run normally.
- 12. Make sure that the machine can recognize the option (see 'Check All Connections' at the end of this section).

PostScript 3

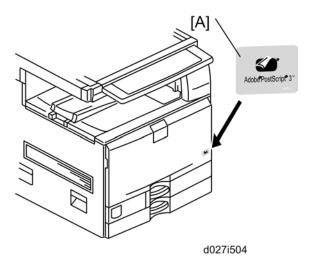
The PostScript3 application and fonts cannot be moved to another SD card. However, other applications can be moved onto the PostScript3 SD card.

ACAUTION

• 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 ($\hat{\mathscr{E}}$ x 1).
- 2. Turn the SD-card label face [B] to the rear of the machine. Then push it slowly into slot 1 until you hear a click.
- 3. Attach the slot cover [A] ($\mbetee \mbox{$\not \! E$} \times 1$).

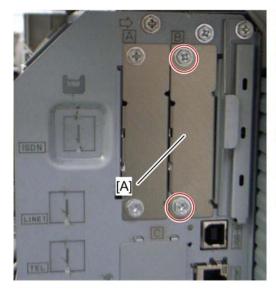


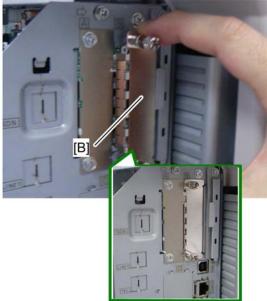
- 4. Attach the "Adobe PostScript 3" decal [A] to the front door.
- 5. Make sure that the machine can recognize the option (see 'Check All Connections' at the end of this section).

File Format Converter

ACAUTION

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





D027i402

- 1. Remove the slot cover [A] (\mathscr{F} 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).

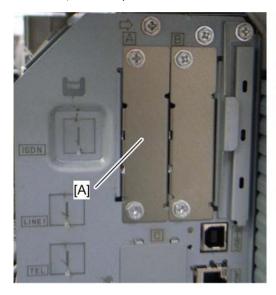
IEEE1284

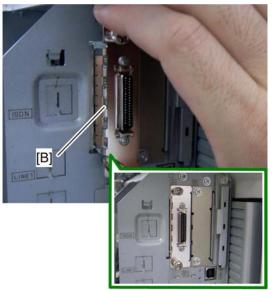
Installation Procedure

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), IEEE 1284, Bluetooth).





D027i404

- 1. Remove the slot cover [A] ($\hat{\mathscr{F}} \times 2$).
- 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).

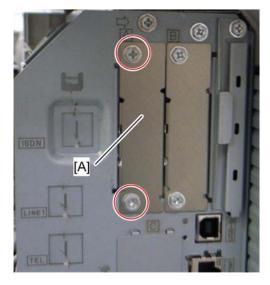
IEEE 802.11 a/g, g (Wireless LAN)

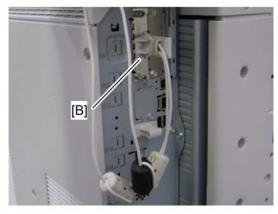
Installation Procedure

ACAUTION

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

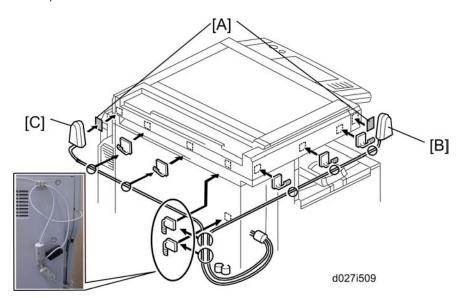
You can only install one of the following network interfaces at one time: (IEEE 802.11 a/g, g (Wireless LAN), IEEE1284, Bluetooth).





d027i403a

- 1. Remove the slot cover [A] from the board slot ($\hat{\mathscr{E}}$ 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).



- 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.
- 8. Wire the cables and clamp them ($\frac{1}{2}$ x 7).

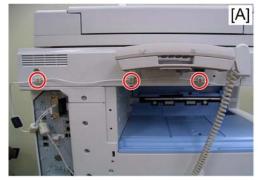


• Make sure that the cables are not slack. Keep them wired tightly along the covers.

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





d027i511

- Refer to the above picture [A] when installing the handset.
- Refer to the above picture [B] when installing the handset and the USB2.0/SD.

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.
- 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", "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.

Range: 1 to 14 (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. Transmission Speed. Press the Next button to show more settings. Then select the transmission speed for the mode: Auto, 11 Mbps, 5.5 Mbps, 2 Mbps, 1 Mbps (default: Auto). This setting should match the distance between the closest machine or access point. This depends on which mode is selected.



- For the Ad Hoc Mode, this is the distance between the machine and the closest PC in the network.
 For the Infrastructure Mode, this is the distance between the machine and the closest access point.
- 11 Mbps: 140 m (153 yd.)
- 5.5 Mbps: 200 m (219 yd.)
- 2 Mbps: 270 m (295 yd.)
- 1 Mbps: 400 m (437 yd.)
- 10. 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.

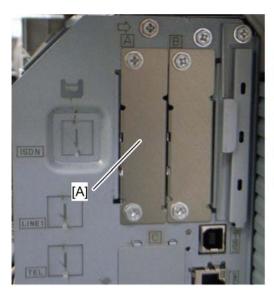
| SP No. | Name | Function |
|----------|----------------|---|
| 5840-006 | Channel MAX | Sets the maximum range of the channel settings for the country. |
| 5840-007 | Channel MIN | Sets the minimum range of the channels settings allowed for your country. |
| 5840-011 | WEP Key Select | Used to select the WEP key (Default: 00). |
| UP mode | Name | Function |
| | SSID | Used to confirm the current SSID setting. |
| | WEP Key | Used to confirm the current WEP key setting. |
| | WEP Mode | Used to show the maximum length of the string that can be used for the WEP Key entry. |

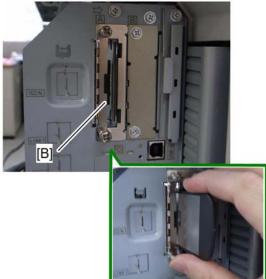
Bluetooth

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, Bluetooth).





D027i405

- 1. Remove the slot cover [A] ($\hat{\mathbb{F}}$ x 2).
- 2. Install the Bluetooth board [B] (Knob-screw x 2) into the slot A.
- 3. Insert the Bluetooth card into the Bluetooth card adaptor.
- 4. Install the Bluetooth card adaptor on the Bluetooth board.
- 5. Attach the antenna cap to the Bluetooth board.
- 6. Make sure that the machine can recognize the option (see 'Check All Connections' at the end of this section).

Data Overwrite Security Unit Type H (D377)

Before You Begin the Procedure

 Confirm that the DataOverwriteSecurity unit SD card is the correct type for the machine. The correct type for this machine is "Type H".



- If you install any version other than "Type H", you will have to replace the NVRAM and do this
 installation procedure again.
- 2. Make sure that the following settings are not at their factory default values:
 - Supervisor login password
 - · Administrator login name
 - · Administrator login password

2

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

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

[System Settings] – [Administrator Tools] – [Administrator Authentication Management] - [Admin. Authentication]

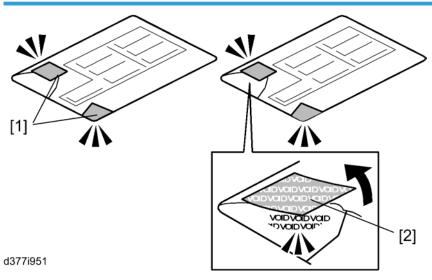
If this setting is OFF, tell the customer this setting must be ON before you do the installation procedure.

4. 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.

Seal Check and Removal



ACAUTION

- You must check the box seals to make sure that they were not removed after the items were sealed in the box at the factory before you do the installation.
- 1. Check the box seals [1] on each corner of the box.
 - Make sure that a tape is attached to each corner.
 - The surfaces of the tapes must be blank. If you see "VOID" on the tapes, do not install the components in the box.
- 2. If the surfaces of the tapes do not show "VOID", remove them from the corners of the box.
- 3. You can see the "VOID" marks [2] when you remove each seal. In this condition, they cannot be attached to the box again.

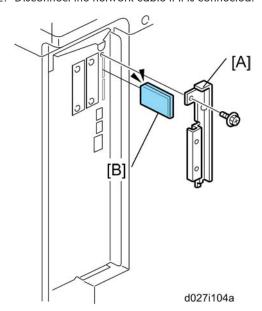
Installation Procedure

ACAUTION

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



- You must install the DataOverwriteSecurity unit in SD Card slot 1. However, the Postscript option and
 others are also installed in SD Card slot 1. You must do the "SD Card Appli Move" procedure first if
 you want to install the DataOverwriteSecurity unit.
- 1. Turn off the main power switch if the machine is turned on.
- 2. Disconnect the network cable if it is connected.



- 3. Remove the slot cover [A] for SD cards ($\mathscr{F} \times 1$).
- 4. Turn the SD-card label face [B] to the rear of the machine. Then push it slowly into slot 1 until you hear a click.
- 5. Connect the network cable if it needs to be connected.
- 6. Turn on the main power switch.
- 7. Go into the SP mode and push "EXECUTE" with SP5-878-001.
- 8. Exit the SP mode and turn off the operation switch. Then turn off the main power switch.
- 9. Turn on the machine power.
- 10. Do SP5990-005 (SP print mode Diagnostic Report).
- 11. Make sure the ROM number and firmware version in area [a] of the diagnostic report are the same as those in area [b].

- [a]: "ROM Number/Firmware Version" "HDD Format Option"
- [b]: "Loading Program" "GW5a_zoffym"

| Diagnostic Report: | "ROM No. / Firmware Version" [a] | "Loading Program" [b] |
|------------------------------|--|----------------------------------|
| Data Overwrite Security Unit | HDD Format Option: D3775912 / 1.00m | GW5a_zoffym: D3775912 / 1.00m |

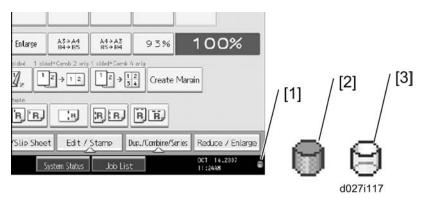


- The ROM number and firmware version number change when the firmware is upgraded. However, the important thing is to make sure the numbers in [a] are the same as the numbers in [b].
- If the ROM numbers are not the same, or the version numbers are not the same, this means the unit was not installed correctly.

If this happens:

Make sure of the unit type (must be Type H).

- 12. Go into the User Tools mode, and select System Settings> Administrator Tools> Auto Erase Memory Setting> On.
- 13. Exit the User Tools mode.



- 14. Check the display and make sure that the overwrite erase icon [1] shows.
- 15. Check the overwrite erase icon.
 - The icon [2]: This icon is lit when there is temporary data to be overwritten, and blinks during overwriting.
 - The icon [3]: This icon is lit when there is no temporary data to be overwritten.

HDD Encryption Unit

Before You Begin the Procedure

- 1. Make sure that the following settings 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] > "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:

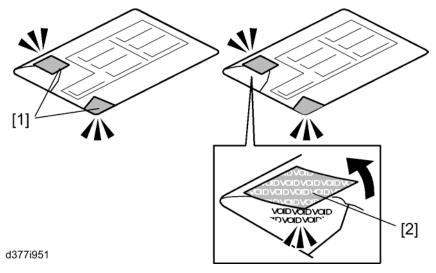
[User Tools]>"System Settings">"Administrator Tools">"Administrator Authentication Management">
"Available Settings"



• "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.

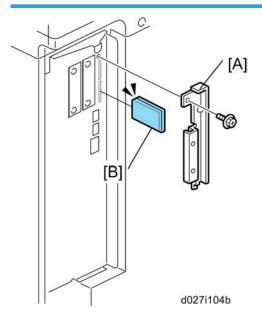
Seal Check and Removal



ACAUTION

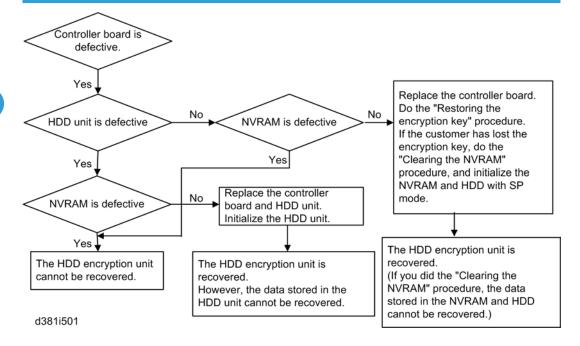
- You must check the box seals to make sure that they were not removed after the items were sealed in the box at the factory before you do the installation.
- 1. Check the box seals [1] on each corner of the box.
 - Make sure that a tape is attached to each corner.
 - The surfaces of the tapes must be blank. If you see "VOID" on the tapes, do not install the components in the box.
- 2. If the surfaces of the tapes do not show "VOID", remove them from the corners of the box.
- 3. You can see the "VOID" marks [2] when you remove each seal. In this condition, they cannot be attached to the box again.

Installation Procedure



- 1. Remove the SD card slot cover [A] ($\hat{\mathscr{F}} \times 1$).
- 2. Turn the SD-card label [B] to face the rear of the machine. Then push it slowly into slot 2 until you hear a click.
- 3. Turn on the main power switch, and then enter the SP mode.
- 4. Select SP5878-002, and then press "Execute" on the LCD.
- 5. Exit the SP mode after "Completed" is displayed on the LCD.
- 6. Turn off the main power switch.
- 7. Remove the SD card from slot 2.
- 8. Attach the SD card slot cover [A] ($\mathscr{F} \times 1$).

Recovery from a Device Problem



Restoring the Encryption key

When replacing the controller board for a model in which the HDD encryption unit has been installed, updating the encryption key is required.

- 1. Prepare an SD card which is initialized.
- 2. Make the "restore_key" folder in the SD card.
- 3. Make an "nvram_key.txt" file in the "restore_key" folder in the SD card.
- 4. Ask an administrator to input the encryption key (this has been printed out earlier by the user) into the "nvram_key.txt" file.
- 5. Remove only the HDD unit (p.302 "HDD").
- 6. Turn on the main power switch.
- 7. Confirm that the prompt on the LCD tells you to install the SD card (storing the encryption key) in the machine.
- 8. Turn off the main power switch.
- 9. Insert the SD card that contains the encryption key into slot 2.
- 10. Turn on the main power switch, and the machine automatically restores the encryption key in the flash memory on the controller board.
- 11. Turn off the main power switch after the machine has returned to normal status.
- 12. Remove the SD card from slot 2.

13. Reinstall the HDD unit.

Clearing the NVRAM

When replacing the controller board for a model in which the HDD encryption unit has been installed and a customer has lost the encryption key, clearing the NVRAM is required to recover the HDD encryption unit.

- 1. Prepare an SD card which is initialized.
- 2. Make the "restore_key" folder in the SD card.
- 3. Make an "nvram_key.txt" file in the "restore_key" folder in the SD card.
- 4. Input "nyclear" into the "nyram key.txt" file.
- 5. Turn on the main power switch.
- 6. Confirm that the prompt on the LCD tells you to install the SD card (storing the encryption key) in the machine.
- 7. Turn off the main power switch.
- 8. Insert the SD card that contains "nyclear" into slot 2.
- 9. Turn on the main power switch, and the machine automatically restores the encryption key in the flash memory on the controller board.
- 10. Turn off the main power switch after the machine has returned to normal status.
- 11. Remove the SD card from slot 2.
- 12. Turn on the main power switch.
- 13. Initialize the NVRAM (SP5801-001) and HDD unit (SP5832-001) with SP mode.
- 14. The user must enable the HDD encryption unit with a user tool.

PictBridge



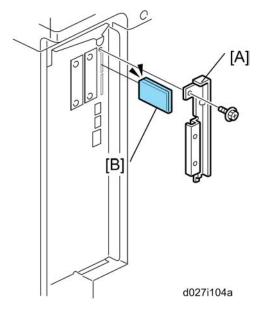
ACAUTION

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



 You must install the PictBridge option in SD Card slot 1. However, the Postscript option and the DataOverwriteSecurity unit option are also installed in SD Card slot 1. You must do the SD Card Appli move procedure first if you have the postscript or data overwrite security unit option installed and you want to install the PictBridge unit.

You must install the USB Host Interface when using the PictBridge unit.



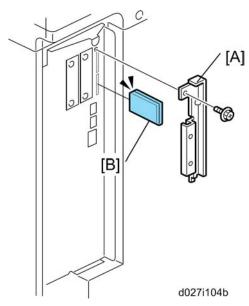
- 1. Remove the SD-card slot cover [A] for SD cards (\mathscr{F} x 1).
- 2. Turn the SD-card label face [B] to the rear of the machine. Then push it slowly into slot 1 until you hear a click.
- 3. Attach the SD-card slot cover [A] ($\mathscr{F} \times 1$).
- 4. Make sure that the machine can recognize the option (see 'Check All Connections' at the end of this section).

VM Card Type I

The VM card application cannot be moved to another SD card. However, other applications can be moved onto the VM card.

Installation Procedure

1. Switch the machine off.



- 2. Remove the SD card slot cover [A] (\$\beta\$ x1).
- 3. Turn the SD-card label face [B] to the rear of the machine. Then push it slowly into slot 2 until you hear a click.
- 4. Reattach the SD card slot cover.
- 5. Switch the machine on.
- 6. On the operation panel, remove the bottom blank keytop and replace it with the keytop provided.
- 7. Attach the decal to the copier.

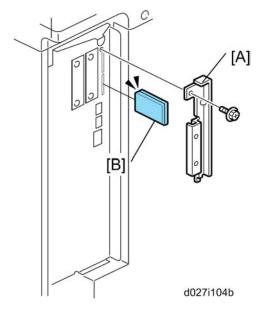
Browser Unit Type B

Installation Procedure

ACAUTION

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

SD card slot 2 is basically used only for service maintenance. Do not leave an SD card in slot 2 after installing an application.



Browser unit RTB 2
Installation procedure was modified

- 1. Remove the slot cover [A] for SD cards ($\mathscr{F} \times 1$).
- 2. Turn the SD-card label face [B] to the rear of the machine. Then push it slowly into slot 2 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 from slot 2.
- 23. Attach the slot cover [1] (x 1).
- 24. Keep the SD card in the place (p.328 "SD Card Appli Move") after you install the application program from the card to HDD. This is because: The SD card can be the only proof that the user is licensed to use the application program. You may need to check the SD card and its data to solve a problem in the future.

Update Procedure

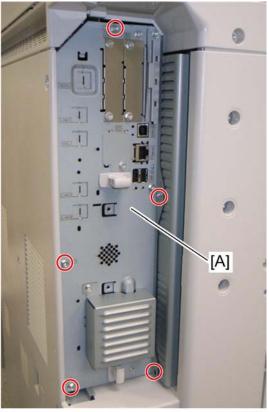
- 1. Remove the slot cover [1] for SD cards ($\mathscr{F} \times 1$).
- 2. Turn the SD-card label face to the rear of the machine. Then push it slowly into slot 2 [2] until you hear a click.
- 3. Plug in and turn on the main power switch.
- 4. Push the "User Tools" key.
 - If an administrator setting is registered for the machine, step 5 and 6 are required. Otherwise,
 skip to the step 7
- 5. Push the "Login/Logout" key.
- 6. Login with the administrator user name and password.
- 7. Touch "Extended Feature Settings" twice on the LCD.
- 8. Touch "Uninstall" on the LCD.
- 9. Touch the "Browser" line
- 10. Confirmation message appears on the LCD.
- 11. Touch "Yes" to proceed.
- 12. Reconfirmation message appears on the LCD.
- 13. Touch "Yes" to uninstall the browser unit.
- 14. You will see "Uninstalling the extended feature... Please wait.", and then "Completed".
- 15. Touch "Exit" to go back to the setting screen.
- 16. Exit "User/Tools" setting, and then turn off the main power switch.
- 17. Remove the SD card from SD card slot 2.

- 18. Overwrite the updated program in the "sdk" folder of the browser unit application with PC.
- 19. Do the "Installation Procedure" to install the browser unit.

Gigabit Ethernet

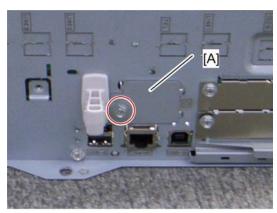
ACAUTION

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



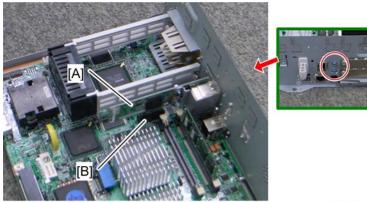
d027i075

1. Pull out the controller board [A] ($\mathscr{F} \times 5$).



d027i409

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



d027i410

- 3. Attach the Gigabit Ethernet controller [A] into the slot [B] (\mathscr{F} x 2).
- 4. Reassemble the machine.
- 5. 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.

2

3. Preventive Maintenance

Maintenance Tables

See "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.

| ltem | SP |
|--|-------------------|
| | Black: 3902-005 |
| Developer | Yellow: 3902-006 |
| Developer | Cyan: 3902-007 |
| | Magenta: 3902-008 |
| | Black: 3902-009 |
| Drum Unit | Yellow: 3902-010 |
| | Cyan: 3902-011 |
| | Magenta: 3902-012 |
| Fusing Unit Parts (not necessary for complete fusing units; see below) | 3902-014 |
| Image Transfer Belt Cleaning Unit | 3902-015 |
| Paper Transfer Unit | 3902-016 |
| Toner Collection Bottle (if not full or near-full) | 3902-017 |

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

- PCU
- Development unit
- · Complete fusing unit
- Toner Collection Bottle (if full or near-full)

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.

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.



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

Z

Image Adjustment

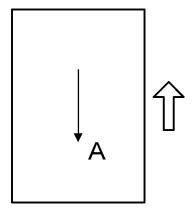
Scanning

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.

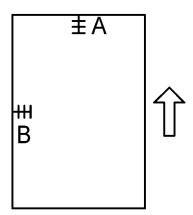
Scanner sub-scan magnification



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%.

Scanner leading edge and side-to-side registration



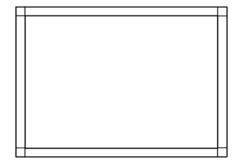
A: Leading Edge Registration

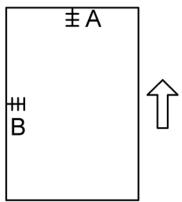
- 1. Put the test chart on the exposure glass. Then make a copy from one of the feed stations.
- 2. Check the leading edge and side-to-side registration. Adjust the following SP modes if necessary. Standard: 0 ± 2mm for the leading edge registration, 0 ± 2.5mm for the side-to-side registration.

| | 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 Registration | ± 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

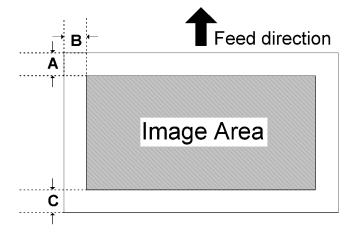
- 1. Put the temporary test chart on the ARDF. Then make a copy from one of the feed stations.
- 2. Check the magnification ratio. Adjust with SP6-017-001 if necessary.

• Standard: ±1.0%

• Reduction mode: ±1.0%

• Enlargement mode: ±1.0%

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

Adjustment Procedure

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

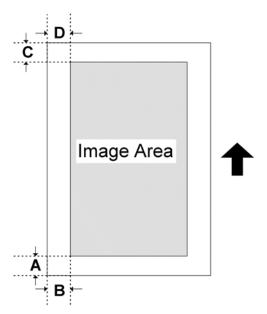


- Registration can change slightly as shown on the previous page. Print some pages of the 1-dot trimming pattern for step 3 and 4. Then average the leading edge and side-to-side registration values, and adjust each SP mode.
- 3. Do the leading edge registration adjustment.
 - 1) Check the leading edge 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 -010 if necessary.

• Leading edge: 1.5 to 5.0 mm,

• Side-to-side: 0.5 to 4.0 mm,

• Trailing edge: 0.5 to 0.6 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.



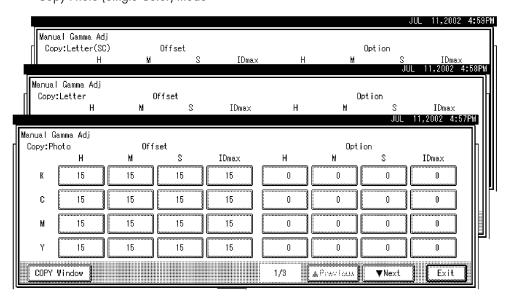
• Never change "Option" values (default value is 0).

| Highlight (Low ID) | Levels 2 through 5 in the C4 chart 10-level scale |
|--------------------|---|
| Middle (Middle ID) | 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. |

4

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

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



- Adjustment Procedure -

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

| 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. | |
| 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 (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. |
| 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 -

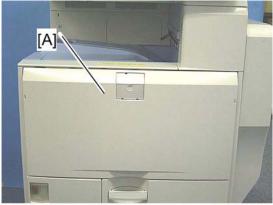
- 1. Do ACC for the printer mode.
- 2. Turn the main power off and on.
- 3. Enter SP mode.
- 4. Select "Printer SP".
- 5. Select SP1-102-001. Then select the necessary print mode to adjust.
- 6. Choose SP1-103-1 to print out a tone control test sheet if you want to examine the image quality for these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

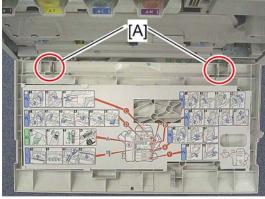
Exterior Covers

Front Door



b222r512

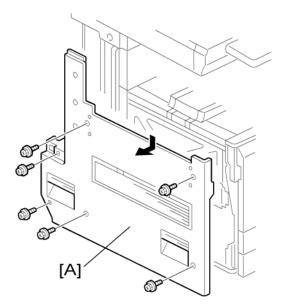
1. Open the front door [A].



d027r513

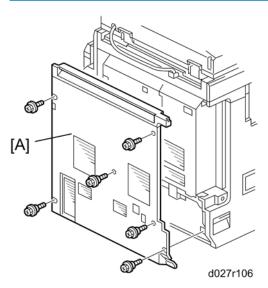
2. Remove the two pins [A], and then remove the front cover.

Left Cover



1. Left cover [A] (🛱 x 6)

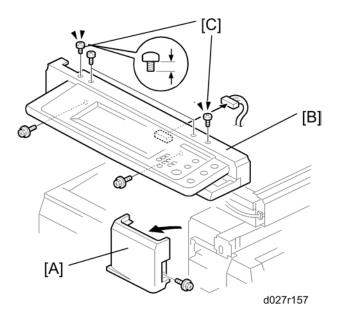
Rear Cover



1. Rear cover [A] (🛱 x 6)

- 1. Rear cover [A] (🛱 x 6)
- 2. Open the right door [B].
- 3. Scanner right cover [C] (x 2)
- 4. Right top cover [D] (F x 1)
- 5. Right rear cover [E] (\$\hat{k}^2 \times 3)

Operation Panel



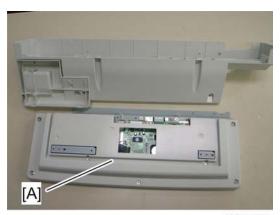
- 1. Open the right door.
- 2. Front right cover [A] ($\mathscr{F} \times 1$)
- 3. Operation panel with the scanner front cover [B] ($\mbox{$\hat{\mathcal{E}}$} \times 5$, $\mbox{$\mathbb{Z}$} \times 1$, $\mbox{$\hat{\mathbb{Z}}$} \times 1$)



• The two screws [C] are shorter than the other screws installed in the inner two screw holes. Make sure that the two screws [C] are installed in the outer screw holes in the scanner front cover.



4. Scanner front cover [A] ($\mathscr{F} \times 2$)

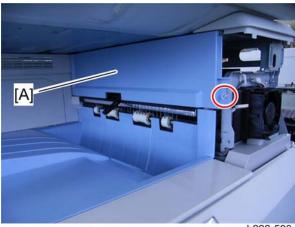


d027r515

5. Operation panel [A]

Paper Exit Cover

1. Front right cover (p.163 "Operation Panel")

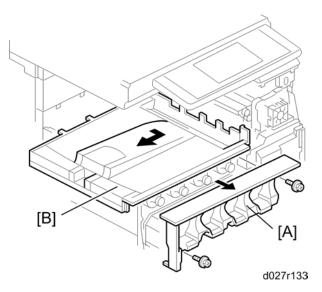


b222r593

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

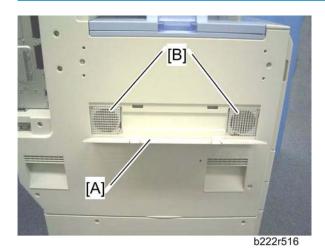
Inner Tray

- 1. Remove the image transfer belt unit.
- 2. Paper exit cover (p.164 "Paper Exit Cover")
- 3. Left cover (p.161 "Left Cover")



- 4. Toner cartridge cover [A] ($\mathscr{F} \times 2$)
- 5. Inner tray [B]

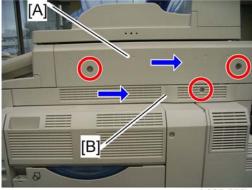
Dust Filter



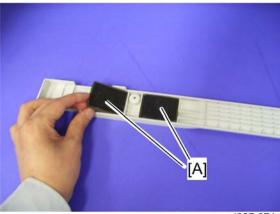
- 1. Dust filter cover [A]
- 2. Two dust filters [B]

Ozone Filter

Ozone filters for the scanner unit



- b222r670
- 1. Scanner right cover [A] ($\mathscr{F} \times 2$)
- 2. Right top cover [B] (🛱 x 1)



d027r671

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

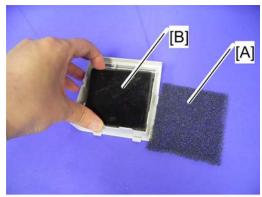
4

Ozone filter for the IH inverter



b222r672

1. IH inverter fan cover [A] (hook)

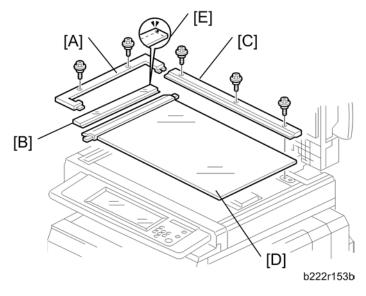


d027r673

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

Scanner Unit

Exposure Glass



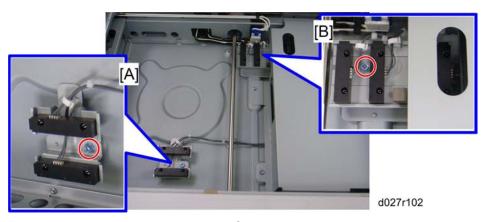
- 1. Glass cover [A] (🛱 x 2)
- 2. ARDF exposure glass [B]
- 3. Rear scale [C] (\$\hat{\beta} \text{ x 3})
- 4. Exposure glass with left scale [D]



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

Original Length/Width Sensors

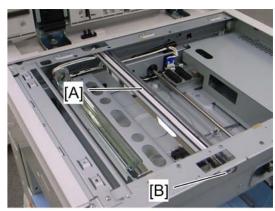
1. Exposure glass with left scale (p.168 "Exposure Glass")



- 2. Original width sensors [A] ($\mbox{\ensuremath{\beta}}\xspace x 1, \mbox{\ensuremath{\Box}}\xspace\xspace x 2, \mbox{\ensuremath{\Box}}\xspace\xspace\xspace x 1)$
- 3. Original length sensors [B] (*\begin{aligned} x 1, \begin{aligned} \pi x 3, \lefta x 2) \end{aligned}

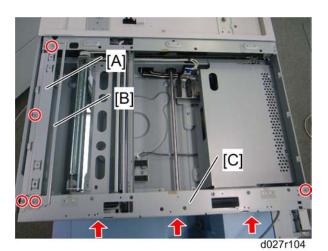
Exposure Lamp

- 1. Operation panel with scanner front cover (p.163 "Operation Panel")
- 2. Exposure glass (p.168 "Exposure Glass")

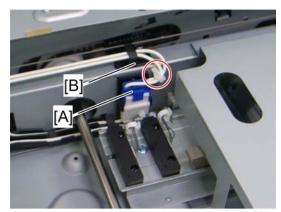


d027r103

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

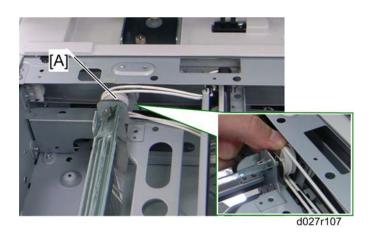


- 4. Scanner left stays [A] and [B] ($\mathscr{F} \times 3$)
- 5. Scanner front frame [C] ($\mathscr{F} \times 5$)

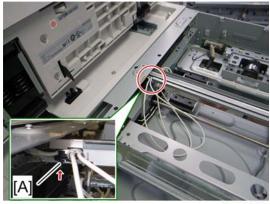


d027r105

- 6. Disconnect the connector [A] (\mathbb{Z} x 1, \mathbb{Z} x 1).
- 7. Remove the clamp bracket [B] (\$\hat{k}^2 \times 1).

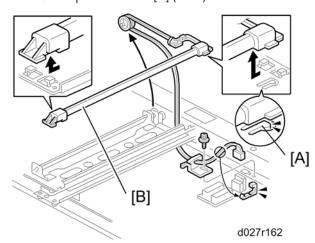


8. Remove the pulley [A].



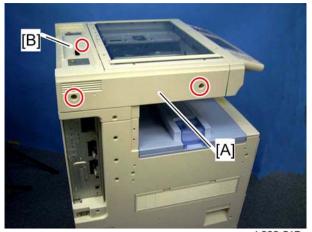
d027r108

9. Remove the plastic bracket [A] (hook).



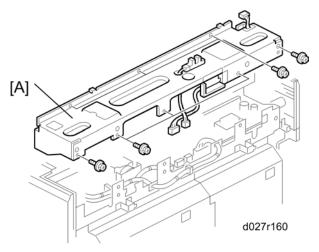
- 10. Hold down the snap [A], and then slide the exposure lamp [B] to the front side.
- 11. Exposure lamp [B]

Scanner Motor

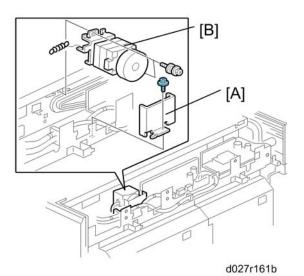


b222r517

- 1. Scanner left cover [A] (\$\hat{F} \times 2)
- 2. Scanner rear cover [B] (Fx 1)



3. Scanner rear frame [A] (♠ x 8, ♥ x 3, ♣ x 1)



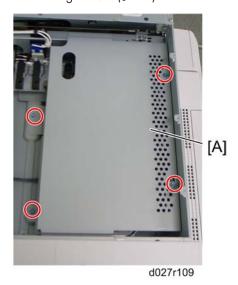
- 4. Scanner motor bracket [A] (F x 1)
- 5. Scanner motor [B] (\mathscr{F} x 2, $\overset{\triangle}{\bowtie}$ x 1, spring x 1, belt x 1)

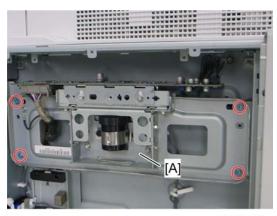


 After replacing the scanner motor, do the image adjustments in the following section of the manual ("Scanning" in the p.149 "Image Adjustment" section).

Sensor Board Unit (SBU)

- 1. Exposure glass (p.168 "Exposure Glass")
- 2. Scanner right cover (x 2)





d027r110

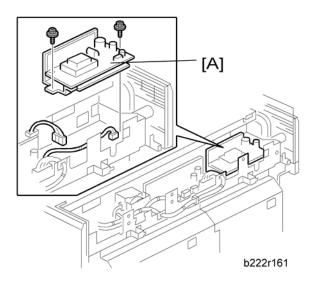
When reassembling

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.

Exposure Lamp Stabilizer

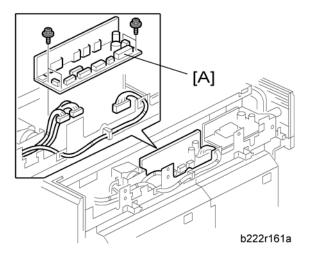
- 1. Scanner rear cover (p.172 "Scanner Motor")
- 2. Scanner rear frame (p.172 "Scanner Motor")



3. Exposure lamp stabilizer [A] ($\hat{F} \times 2$, $\Box V \times 2$)

SIO (Scanner In/Out) Board

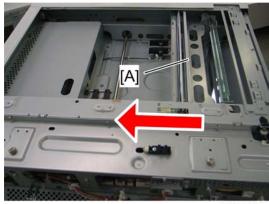
- 1. Scanner rear cover (p.172 "Scanner Motor")
- 2. Scanner rear frame (p.172 "Scanner Motor")



3. SIO board with bracket [A] ($\mbox{\em (A)} \times 4$, All $\mbox{\em (A)} \times 4$)

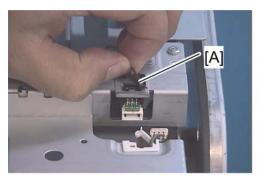
Scanner HP Sensor

1. Scanner left cover and Scanner rear cover (p.172 "Scanner Motor")



d027r111

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



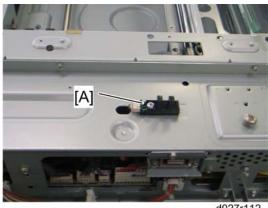


d027r524

- 4. Remove the mylar [A]
- 5. Remove the scanner HP sensor [B] (\mathscr{F} x 1, three snaps)

Platen Cover Sensor

1. Scanner left cover and Scanner rear cover (p.172 "Scanner Motor")

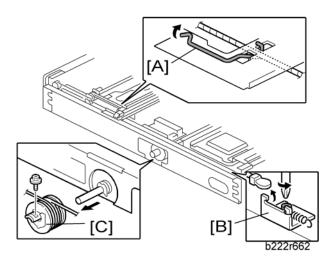


d027r112

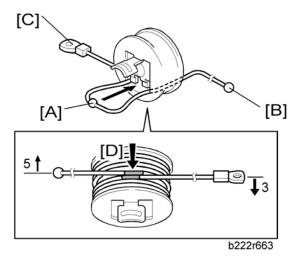
2. Platen cover sensor [A] ($\mathscr{F} \times 1$, $\mathsf{T} = \mathsf{T} \times 1$)

Front Scanner Wire

- 1. Operation panel with the scanner front cover (p.163 "Operation Panel")
- 2. Front frame (p.169 "Exposure Lamp")
- 3. To make reassembly easy, slide the 1st scanner carriage to the right.



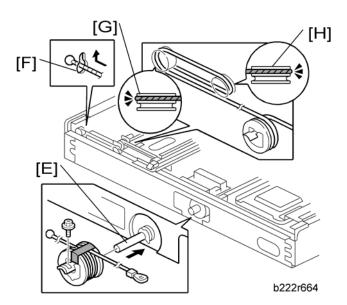
- 4. Front scanner wire clamp [A]
- 5. Front scanner wire bracket [B] ($\mathscr{F} \times 1$)
- 6. Front scanner wire and scanner drive pulley [C] (F x 1)



- 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.



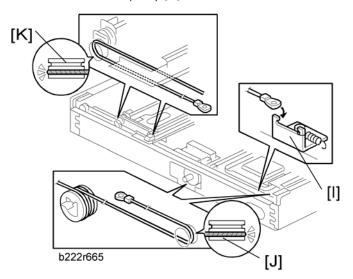
• The two red marks [D] come together when you have done this. Stick the wire to the pulley with tape. This lets you easily handle the assembly at the time of installation.



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



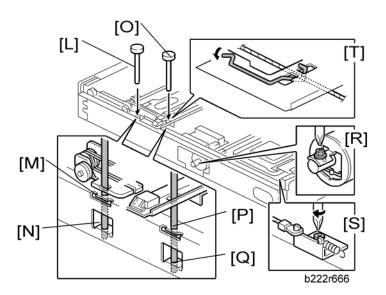
- Do not attach the pulley to the shaft with the screw at this time.
- 5. Insert the left end into the slit [F]. The end should go via the rear track of the left pulley [G] and the rear track of the movable pulley [H].



6. Hook the right end onto the front scanner wire bracket [1]. The end should go via the front track of the right pulley [J] and the front track of the movable pulley [K].



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



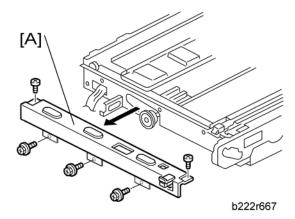
- 8. Insert a scanner-positioning pin [L] through the 2nd carriage hole [M] and the left holes [N] in the front rail. Insert another scanner positioning pin [O] through the 1st carriage hole [P] and the right holes in the front rail [Q].
- 9. Insert two more scanner positioning pins through the holes in the rear rail.
- 10. Screw the drive pulley to the shaft [R].
- 11. Screw the scanner wire bracket to the front rail [S].
- 12. Install the scanner wire clamp [T].
- 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.
- After replacing the scanner wire, do the image adjustments in the following section of the manual
 "Scanning" in the p.149 "Image Adjustment" section).

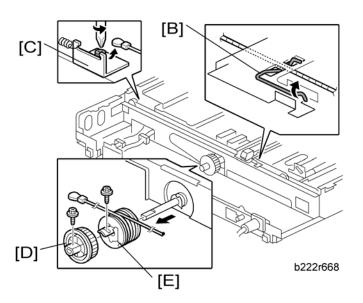
Rear Scanner Wire

- 1. Exposure glass (p.168 "Exposure Glass")
- 2. Scanner rear frame (p.172 "Scanner Motor")
- 3. Scanner motor (p.172 "Scanner Motor")
- 4. IOB with bracket (p.296)



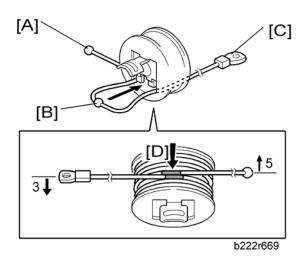
5. Rear rail frame [A] (F x 5)

4



- 6. To make reassembly easy, slide the first scanner to the center.
- 7. Rear scanner wire clamp [B]
- 8. Rear scanner wire bracket [C] ($\mathscr{F} \times 1$)
- 9. Scanner motor gear [D] (\$\hat{F} \times 1)
- 10. Rear scanner wire and scanner drive pulley [E] ($\hat{\mathbb{F}}$ x 1)

Reassembling the Rear Scanner Wire



- 1. Position the center ball [B] in the middle of the forked holder.
- 2. Pass the end with the ball [A] through the right square hole from the front.

- 3. Position the center ball [B] in the middle of the notch, as shown by the arrow.
- 4. Pass the ball end [A] through the drive pulley notch.
- 5. Wind the end with the ring [C] clockwise (shown from the machine's front) three times; wind the ball end [A] clockwise (shown from the machine's front) five times.



- The two red marks [D] should meet when you have done this.
- 6. Stick the wire to the pulley with tape, so you can easily handle the pulley and wire during installation.
- 7. Install the drive pulley on the shaft.



- Do not screw the pulley onto the shaft yet.
- 8. 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.
- 9. Perform steps 8 through 13 in "Reassembling the Front Scanner Wire".



After replacing the scanner wire, do the image adjustments in the following section of the manual
 "Scanning" in the p. 149 "Image Adjustment" section).

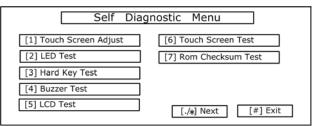
Touch Panel Position Adjustment



- 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.

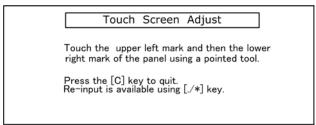
Do not use items [2] to [9] on the Self-Diagnostic Menu. These items are for design use only.

1. Press pre



b178r548

- 2. On the touch screen press "Touch Screen Adjust" (or press 1).
- 3. Use a pointed (not sharp) tool to press the upper left mark ${}^{\circ}$ K.



b178r549

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

Laser Optics

WARNING

• 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.

Laser Optics Housing Unit

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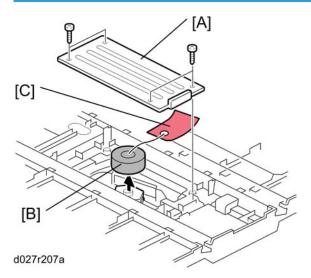
 Before installing a new laser optics housing unit, remove the sponge padding and the tag from the new unit.

U 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.

4

Preparing the new laser optics housing unit



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

Before removing the old laser optics housing unit

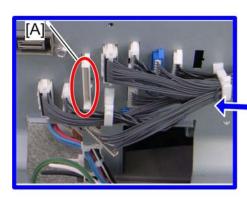
Do the following settings before removing the laser optics housing unit. These are adjustments for skew adjustment motors in the laser optics housing unit.

- 1. Plug in and turn on the main power switch of the copier.
- 2. Enter the SP mode.
- 3. Execute SP9511-001 to clear the L2 lens positioning motor setting for Magenta.
- 4. Execute SP9511-002 to clear the L2 lens positioning motor setting for Cyan.
- 5. Execute SP9511-003 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.

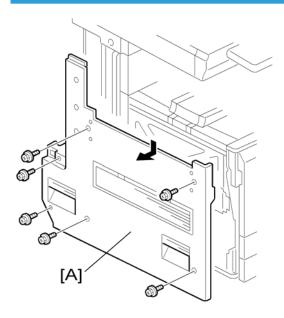




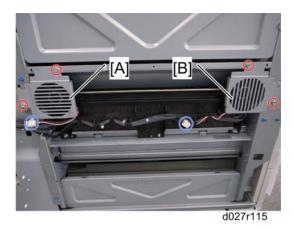
d027r610

- 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.

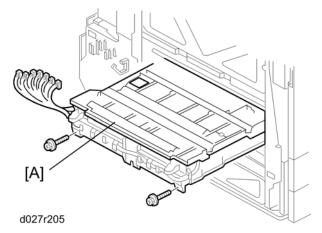
Removing the old laser optics housing unit



1. Left cover [A] (🛱 x 6)



- 2. Rear fan bracket [A] for the laser housing optics unit (\$\hat{x} \times 2, \bigsilon x 1)
- 3. Front fan bracket [B] for the laser housing optics unit (\mathscr{F} x 2, $\mathrel{\mathbb{Z}}$ x 1)

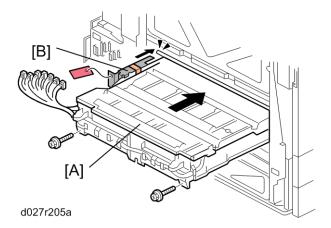


4. Remove the old laser optics housing unit [A] ($\mbox{$\widehat{\mathcal{F}}$} \times 2$, All $\mbox{$\mathbb{Z}^{0}$}$'s, $\mbox{$\mathbb{Z}$} \times 3$)

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.

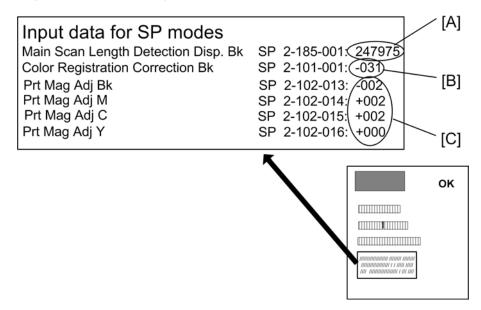


- 1. Push the new laser optics housing unit [A] slowly into the copier until the bracket [B] bumps against the frame of the copier.
- 2. Remove the bracket [B], and then push the new laser optics housing unit fully into the copier ($\mathscr{F} \times 2$, All \mathbb{Z} 's, $\mathbb{R} \times 3$).
- 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.

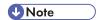


2. Adjust the main scan magnification for K, M, C, Y.

• Input the standard values [C] provided with a new laser optics housing unit for the main scan magnification adjustment with SP2-102-013, 014, 015, 016.



- The values [C] are different for each laser optics housing unit.
- 3. Adjust the main scan magnification only for black (K).
 - 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.
- 4. Adjust the main scan registration only for black (K).
 - Input the registration value [B] provided with a new laser optics housing unit for the main scan registration adjustment with SP2101-001.

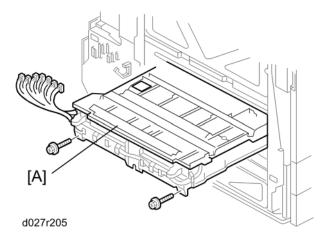


- The value [B] is different for each laser optics housing unit.
- Print the test pattern (14: 1-dot trimming pattern in the SP2-109-003).
- Check that the left trim margin is within 2 ± 1 mm. If not, change the registration value for the main scan registration adjustment.
- 5. Select "0" with SP2-109-003 after printing the "1-dot trimming pattern.
- 6. 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.

7. Exit the SP mode.

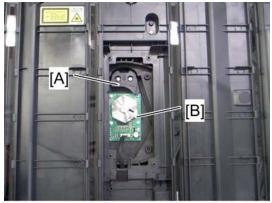
After you replace the housing unit, do the adjustments in the following section of the manual: Image Adjustment – Registration.



1. Laser optics housing unit [A] (p.184 "Laser Optics Housing Unit")



2. Polygon mirror motor cover [A] of the laser optics housing unit ($\hat{\mathscr{F}} \times 4)$



d027r117

- 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 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.

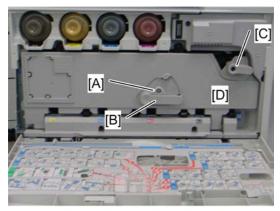
After you replace the motor, do the adjustments in the following section of the manual: Image Adjustment – Registration.

Image Creation

PCU



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



d027r118

- 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].



d027r119

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

4

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".

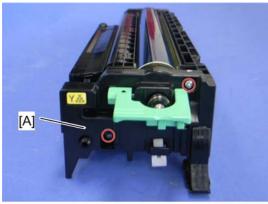
Black: 3902-009Yellow: 3902-010

• Cyan: 3902-011

• Magenta: 3902-012

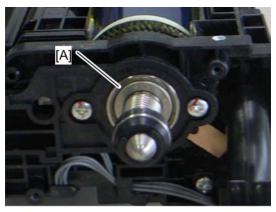


- If you do this, then the machine will reset the PM counter for the drum unit automatically, after you turn the power on again.
- 2. Turn the machine power off.
- 3. PCU (p.192 "PCU")



d027r120

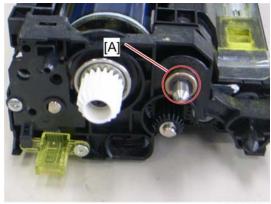
4. Front cover [A] (\$\hat{x} \times 2)



d027r121

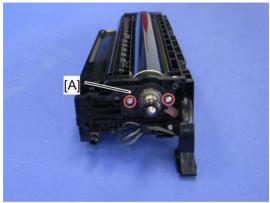


• Do not touch the bearing [A] after removing the front cover. The bearing is properly applied with lubricant.



d027r122

5. Remove the bushing [A] of the development roller at the rear of the PCU ($\mathbb C$ x 1).

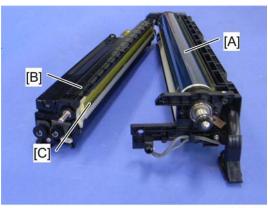


d027r123

6. Remove the front joint [A] (♀ x 2, □ x 1).



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

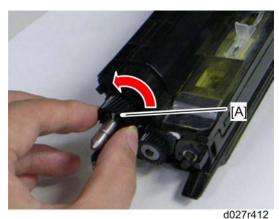


d027r124

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.



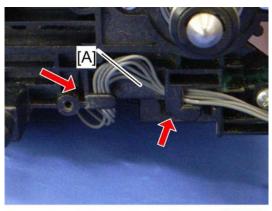
A CASTAGORIA O CITODOSCO

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 PCU:



d027r681

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

Developer

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

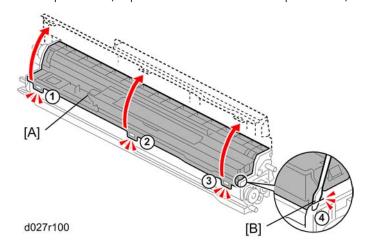
Black: 3902-005

Yellow: 3902-006 Cyan: 3902-007

Magenta: 3902-008

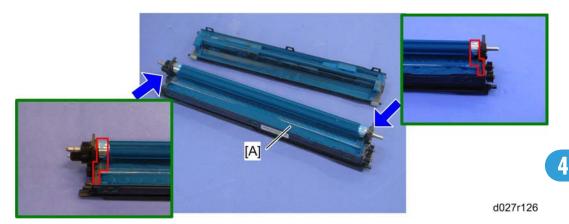
2. Turn the machine power off.

3. Development unit (p.193 "Drum Unit and Development Unit")



- 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 $ext{@}$.

• 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).

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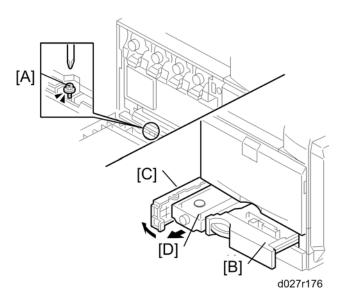
- Keep the developer off at both ends of the development unit enclosed in red lines in the diagram.
- 7. Turn the machine power on. The machine initializes the developer and resets the PM counter for the developer. (For details of the developer initialization result, see "Developer Initialization Result" 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.



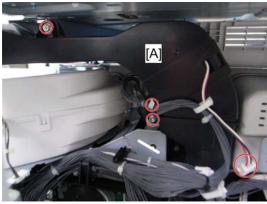
- If you do this, then the machine will reset the PM counter for the bottle automatically, after you turn
 the power on again.
- If the bottle is in a full or near-full condition, it is not necessary to do this.
- 1. Turn off the main power switch.



- 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].

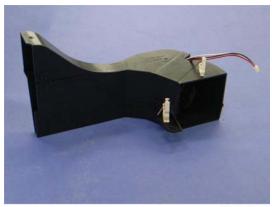
Second Duct Fan

- 1. Rear cover (p.161 "Rear Cover")
- 2. Right rear cover (p.162 "Right Rear Cover")
- 3. Open the controller box (p.293 "Controller Box")



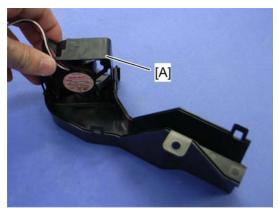
d027r127

4. Second duct [A] ($\mathscr{F} \times 2$, $\mathrel{\mathbb{Z}} \times 1$, $\mathrel{\mathbb{Z}} \times 2$)



d027r128

5. Split the second duct (4 hooks).



d027r129

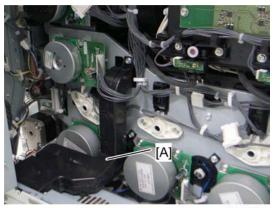
6. Second duct fan [A]

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.161 "Rear Cover")
- 2. Right rear cover (p.162 "Right Rear Cover")
- 3. Open the controller box (p.293 "Controller Box")



d027r130

4. Third duct [A] (\$\begin{aligned} x 2, \quad \quad x 1 \end{aligned}\$



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.

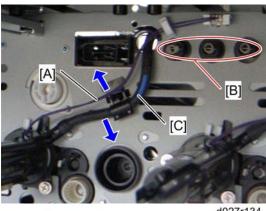


d027r132

- 1. Rear cover (p.161 "Rear Cover")
- 2. Image transfer belt unit (p.207 "Image Transfer Belt Unit")
- 3. All PCUs (p.192 "PCU")
- 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.

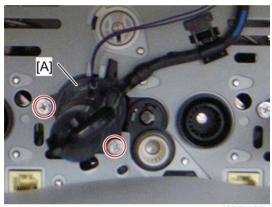


d027r134

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].



d027r135

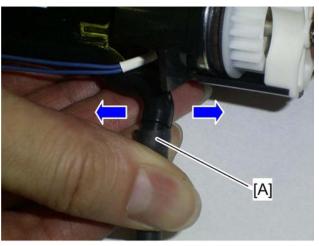
7. Remove the toner pump unit [A] ($\mathscr{F} \times 2$)





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.

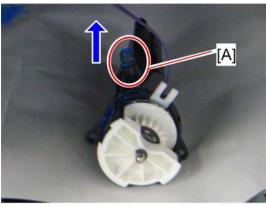


d027r705

- 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.

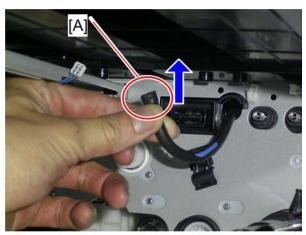


• If not, the toner may scatter away and fall down.



d027r137

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

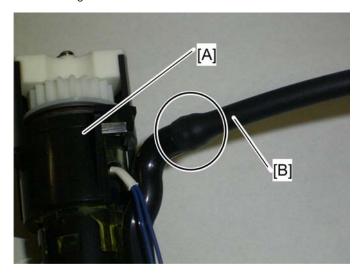


d027r707

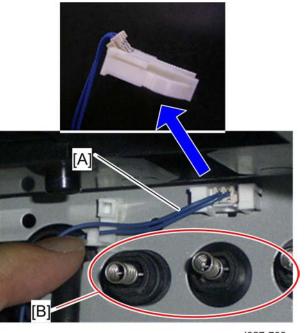
11. Keep the opening [A] of the toner supply tube up, and then clip the opening of the toner supply.

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

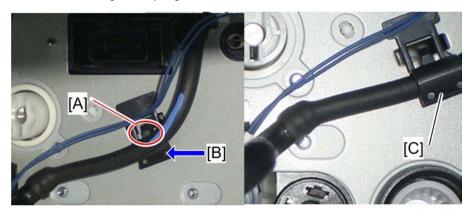
4. Connect the harness [A] to the connector of the machine.



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



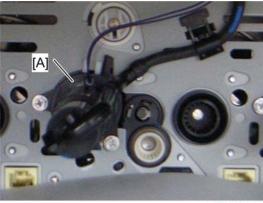
• Avoid touching these spring terminals [B].



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".

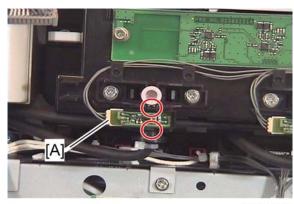
• Be careful when you lift the edge of the holder, because the holder is easily broken.



d027r135a

8. Insert the toner pump unit [A] into the rear frame of the machine ($\hat{\mathscr{E}} \times 2$).

Toner End Sensor



d027r042

- 1. Rear cover (p.161 "Rear Cover")
- 2. Open the controller box (p.293 "Controller Box")
- 3. Toner end sensor [A] (\mathbb{Z}^{\parallel} x 1, 2 hooks each)

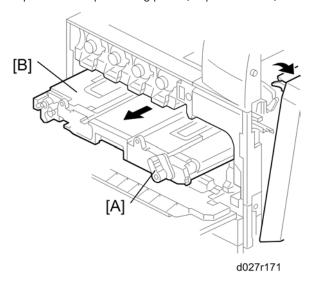
4

4

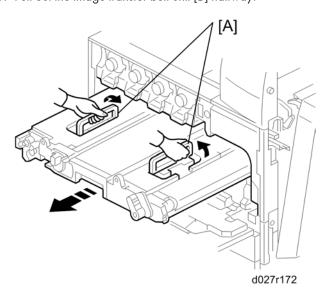
Image Transfer

Image Transfer Belt Unit

- 1. Open the right door.
- 2. Open the front door.
- 3. Open the drum positioning plate. (p.192 "PCU")



- 4. Turn the image transfer belt unit lock lever [A] counterclockwise.
- 5. Pull out the image transfer belt unit [B] halfway.



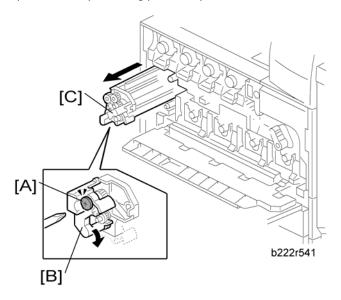
6. Grasp the handles [A], and then pull out the image transfer belt unit fully.

Image Transfer Belt Cleaning Unit

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



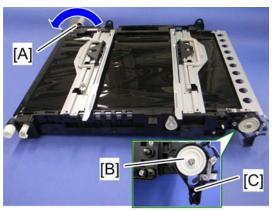
- If you do this, then the machine will reset the PM counter for the belt cleaning unit automatically, after you turn the power on again.
- Do not use SP3902-015 or 013 if you replace the complete ITB unit.
- 2. Turn off the main power switch.
- 3. Open the right door.
- 4. Open the front door.
- 5. Open the drum positioning plate. (p.192 "PCU")



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

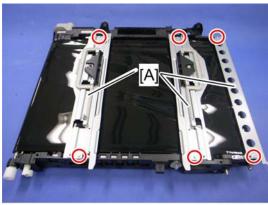
Image Transfer Belt

- 1. Image transfer belt cleaning unit (p.208 "Image Transfer Belt Cleaning Unit")
- 2. Image transfer belt unit (p.207 "Image Transfer Belt Unit")



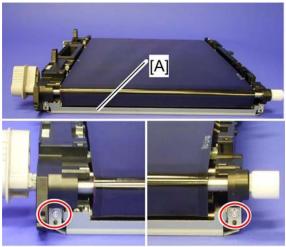
d027r138

- 3. Turn the image transfer unit contact lover [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) ($\mbox{\ensuremath{\not{\!\!\!E}}}\xspace x 1).$



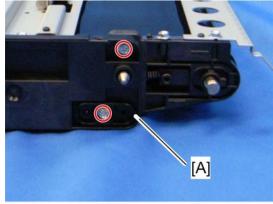
d027r139

6. Three stays [A] (🛱 x 6)



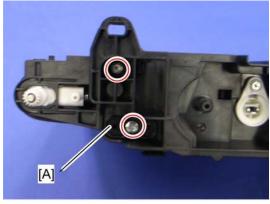
d027r545

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



d027r545a

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



d027r140

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



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.

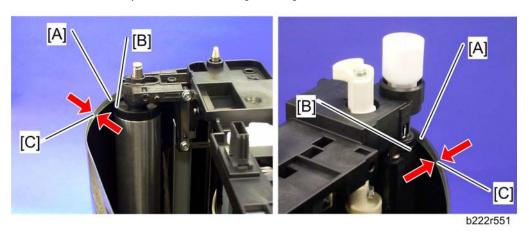


UOZ

When reinstalling the image transfer belt

12. Image transfer belt [A]

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

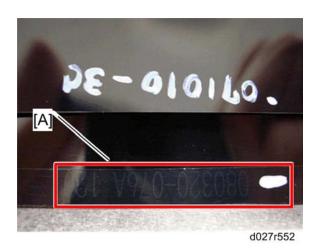


• There is a rim [A] at each edge of the transfer belt. The ends of all the rollers ([B] for example) in the transfer belt unit must be between the two rims.

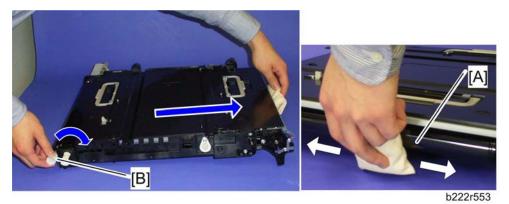


• There are two rims (width [C]: about 5 mm) on the underside of the front and rear edges of the image transfer belt.





 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.

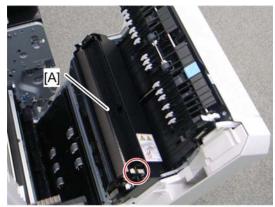
Paper Transfer

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.



d027r141

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

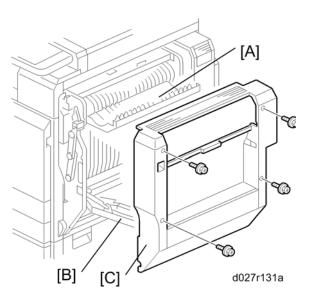
Paper Transfer Unit

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

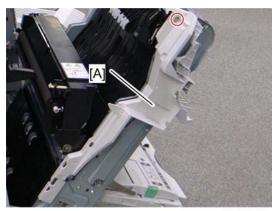


- If you do this, then the machine will reset the PM counter for the paper transfer unit automatically, after you turn the power on again.
- 1. Turn off the main power switch.

/

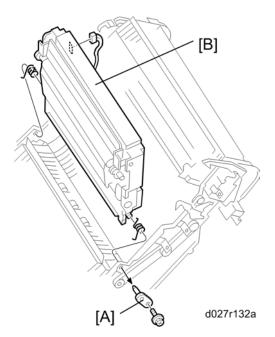


- 1. Open the duplex door [A].
- 2. Open the by-pass tray [B]
- 3. Right door cover [C] ((2 x 4)
- 4. Open the right door.



d027r143

5. Right door inner cover [A] ($\hat{\mathcal{F}}$ x 1)



- 1. Pivot bracket [A] (🛱 x 1)
- 2. Paper transfer unit [B] (□ x 1, 2 springs)

High Voltage Supply Board - Discharge Plate

1. Open the right door.



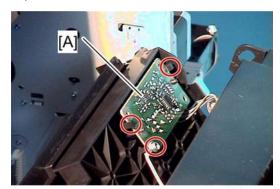
d027r144

2. Release the front [A] and rear pivots of the paper transfer roller case.



d027r557

3. Paper transfer roller case [A]

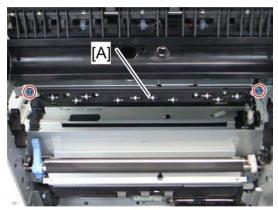


d027r558

4. High voltage supply board [A] ($\mathscr{F} \times 3$, x = 1, ground cable x = 1)

ID Sensor Board

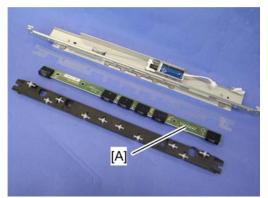
- 1. K PCU (p.192 "PCU")
- 2. Open the right door.
- 3. Fusing unit (p.244 "Fusing Unit")
- 4. Image transfer belt unit (p.207 "Image Transfer Belt Unit")



d027r145

5. ID sensor unit [A] ($\hat{\mathscr{F}} \times 2$, $\mathbb{Z} \times 2$, $\mathbb{Z} \times 1$)



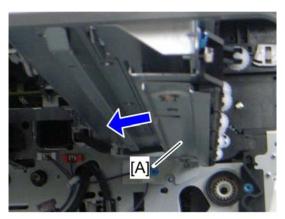


d027r146

6. ID sensor board [A] (\$\hat{k}^2 x 6)

Cleaning for ID sensors

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



d027r147

- 1. K PCU (p.192 "PCU")
- 2. Fusing unit (p.244 "Fusing Unit")
- 3. Image transfer belt unit (p.207 "Image Transfer Belt Unit")
- 4. Slide the ID sensor shutter [A] to the left side.
- 5. Clean the ID sensors keeping the ID sensor shutter to the left.

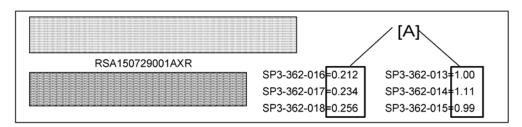
After installing a new ID sensor unit/board

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

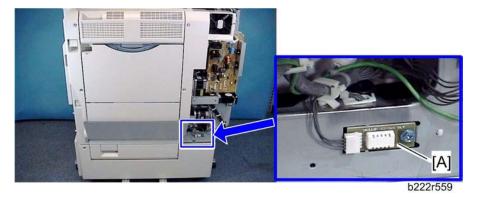


- For example, input "1.00" with SP3-362-013.
- 4. Exit the SP mode.



Temperature and Humidity Sensor

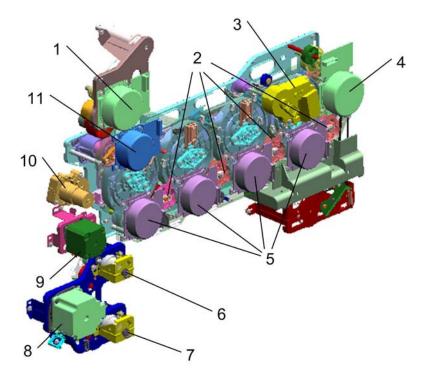
- 1. Rear cover (p.161 "Rear Cover")
- 2. Right rear cover (p.162 "Right Rear Cover")



3. Temperature and humidity sensor [A] ($\mbox{\ensuremath{\not}\sl P} \times 1$, $\mbox{\ensuremath{\sl P} \hspace{-0.07cm} =} \times 1$

4

Drive Unit



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

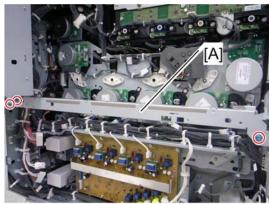
- 7. Paper feed clutch Tray 2
- 8. Paper feed motor
- 9. Registration motor
- 10. Paper transfer contact motor
- 11. ITB drive motor

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

- 1. All PCU's
- 2. Image transfer belt unit (p.207 "Image Transfer Belt Unit")
- 3. Rear cover (p.161 "Rear Cover")
- 4. Controller box (p.293 "Controller Box")
- 5. Third duct (p.199 "Third Duct Fan")
- 6. Left cover (p.161 "Left Cover")
- 7. PSU bracket (p.298 "PSU")



d027r148

8. Remove the rear stay [A] (\mathscr{F} x 3).



d027r149

9. Remove ten clamps (blue arrows).



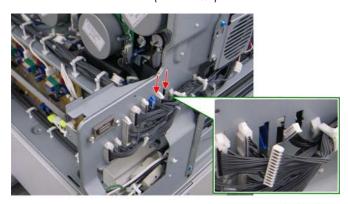
d027r150

10. Release seven clamps and turn each harness aside.



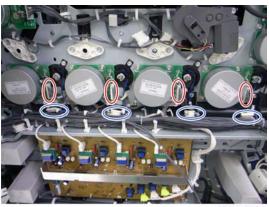
d027r151

11. Disconnect four connectors (red arrows).



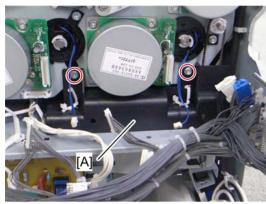
d027r152

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



d027r153

- 13. Disconnect each connector (red circles) from the drum/development drive motors ($\mathbb{Z} \times 1$, $\mathbb{R} \times 1$ each).
- 14. Disconnect each connector (blue circles) from the development clutches (\mathbb{Z} x 1 each).



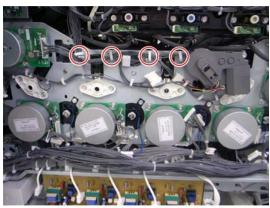
d027r155

15. Cover [A] (x 2)



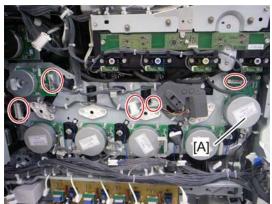
d027r156

16. Disconnect eight connectors from the high voltage supply board ($\mathbb{Z} \times 8$, $\times \times 2$).



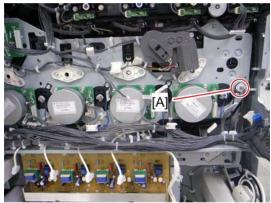
d027r157h

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

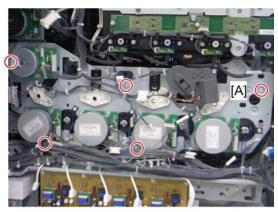


d027r158

- 18. Disconnect five connectors (red circles) (x 5).
- 19. Toner transport motor [A] ($\mathscr{F} \times 3$)



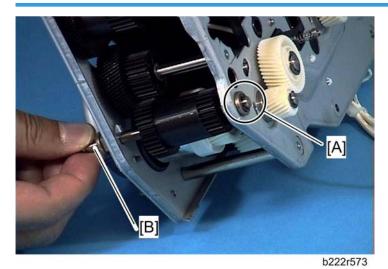
d027r159



d027r160a

21. Gear unit [A] (x 8)

When installing the drive unit



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 "Copy 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, 1: Failure due to no sampling data,
 - 2: Failure due to insufficient number of pattern detections

When the result of this adjustment is "1" or "2":

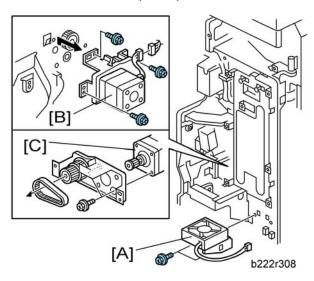
- Check that all the PCUs are correctly set and that the image transfer belt unit is correctly set.
- Do "Amplitude Control" again after checking the PCUs and image transfer belt unit.

When the result is still "1" or "2" after checking the PCUs and image transfer belt unit:

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

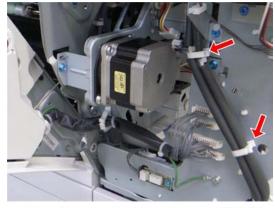
Registration Motor

- 1. Rear cover (p.161 "Rear Cover")
- 2. Right rear cover (p.162 "Right Rear Cover")
- 3. Ventilation duct (p.298 "PSU")
- 4. Turn the harnesses aside (🛱 x 5)



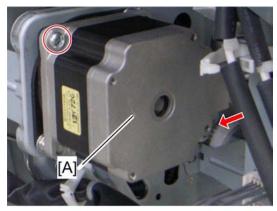
- 5. Fusing power supply board fan bracket [A] (\$\hat{\varepsilon} \text{ x 2, } \mathbb{2} \text{ x 1)}
- 6. Registration motor assembly [B] (₱ x 3, x 1)
- 7. Registration motor [C] (F x 2, timing belt)

- 1. Rear cover (p.161 "Rear Cover")
- 2. Right rear cover (p.162 "Right Rear Cover")



d027r161

3. Release the two clamps ($\stackrel{\frown}{\bowtie} \times 2$)

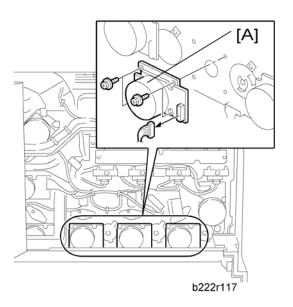


d027r162a

4. Paper feed motor [A] ($\mathbb{Z} \times 1$, $\mathscr{F} \times 2$, timing belt)

Drum/Development Motors for M, C, and Y

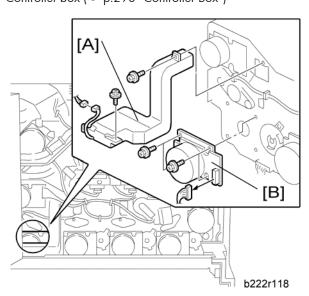
- 1. Rear cover (p.161 "Rear Cover")
- 2. PSU bracket (p.298 "PSU")
- 3. Open the controller box.



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

Drum/Development Motor-K

- 1. Rear cover (p.161 "Rear Cover")
- 2. PSU bracket (p.298 "PSU")
- 3. Controller box (p.293 "Controller Box")

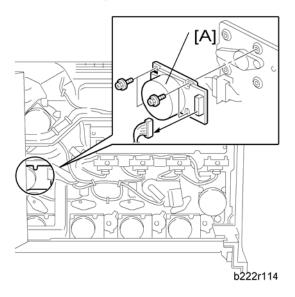


4. Third duct [A] (♠ x 2, 🗐 x 1)

ITB Drive Motor

- 1. Rear cover (p.161 "Rear Cover")
- 2. Controller box (p.293 "Controller Box")

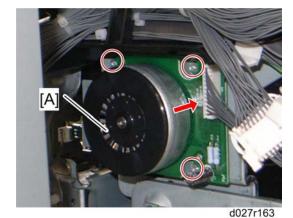
5. Drum/Development motor-K [B] (\mathscr{F} x 4, \bowtie x 1)



3. ITB drive motor [A] ($\hat{\mathscr{E}} \times 4$, $\mathbb{Z} \times 1$)

Fusing/Paper Exit Motor

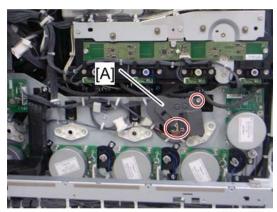
- 1. Rear cover (p.161 "Rear Cover")
- 2. Controller box (p.293 "Controller Box")



3. Fusing/paper exit motor [A] (♠ x 3, 🗐 x 1)

Image Transfer Belt Contact Motor

- 1. Rear cover (p.161 "Rear Cover")
- 2. Controller box (p.293 "Controller Box")

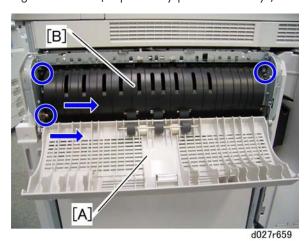


d027r164

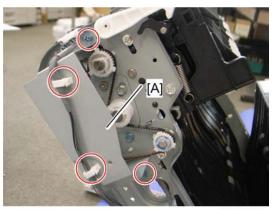
3. Transfer belt contact motor [A] (№ x 2, 🖾 x 2)

Duplex Inverter Motor

- 1. Open the right door.
- 2. Right door cover (p.276 "By-pass Bottom Tray")

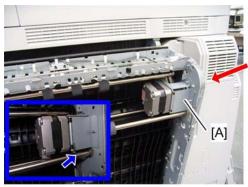


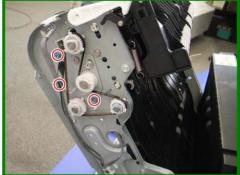
- 3. Duplex door [A] (2 hooks)
- 4. Duplex guide plate [B] (🖗 x 3, 2 hooks)



d027r166

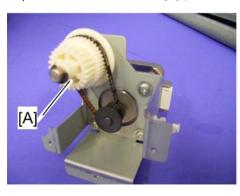
5. Duplex inverter motor bracket cover [A] ($\widehat{\mathscr{E}}^2 \times 2$, $\widehat{\mathscr{E}}^2 \times 2$)

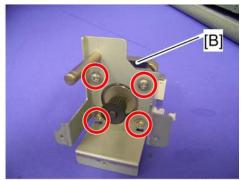




d027r660b

6. Duplex inverter motor bracket [A] (ℰ x 3, 🗐 x 1, 🗟 x 1)



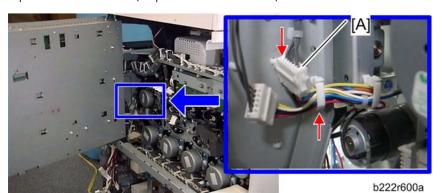


d027r661

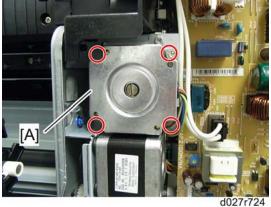
- 7. Gear [A] (© x 1, belt x 1)
- 8. Duplex inverter motor [B] ($\mathscr{F} \times 4$)

Pressure Roller Contact Motor

- 1. Rear cover (p.161 "Rear Cover")
- 2. Right rear cover (p.162 "Right Rear Cover")
- 3. Open the controller box (p.293 "Controller Box")



4. Disconnect the connector (♀ x 1).



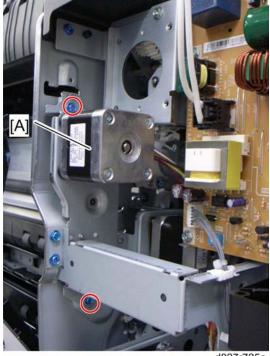
5. Pressure roller contact motor [A] (F x 4)

Duplex/By-pass Motor

- 1. Rear cover (p.161 "Rear Cover")
- 2. Right rear cover (p.162 "Right Rear Cover")
- 3. Open the controller box (p.293 "Controller Box").
- 4. Pressure roller contact motor (**p**.233 "Pressure Roller Contact Motor")

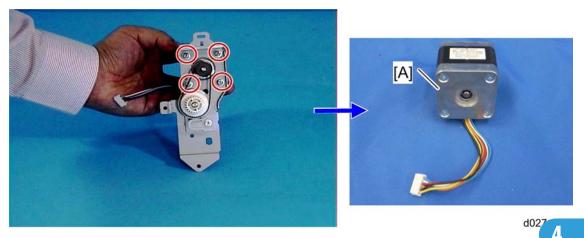


5. Disconnect the connector [A] ($\mathbb{P} \times 1$, $\mathbb{R} \times 1$)



d027r725a

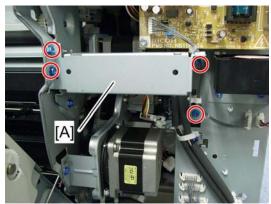
6. Duplex/by-pass motor bracket [A] ($\mbox{\ensuremath{\beta}}\mbox{ x 2)}$



7. Duplex/by-pass motor [A] (\mathscr{F} x 4, belt x 1)

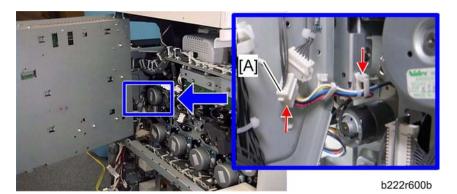
Paper Transfer Contact Motor

- 1. Rear cover (p.161 "Rear Cover")
- 2. Right rear cover (p.162 "Right Rear Cover")
- 3. Open the controller box (p.293 "Controller Box")

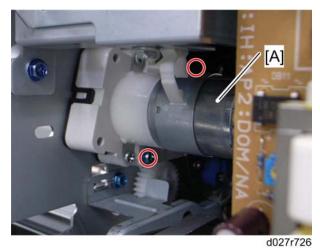


d027r723

- 4. Stay [A] (F x 4)
- 5. Pressure roller contact motor (p.233 "Pressure Roller Contact Motor")
- 6. Duplex/by-pass motor bracket (p.233 "Duplex/By-pass Motor")



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



8. Paper transfer contact motor [A] ($\mathscr{F} \times 2$)

NOTE:

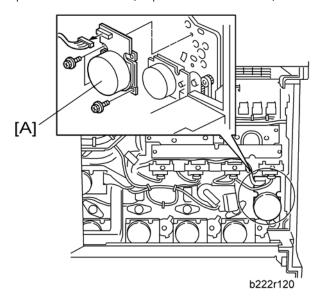
The picture below shows how to use the screwdriver to remove the screws of the paper transfer contact motor.



d027r727

Toner Transport Motor

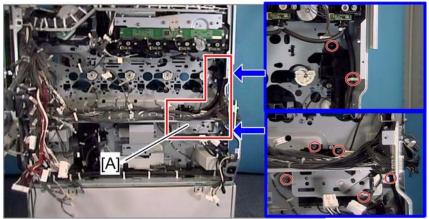
- 1. Rear cover(p.161 "Rear Cover")
- 2. Open the controller box (p.293 "Controller Box")



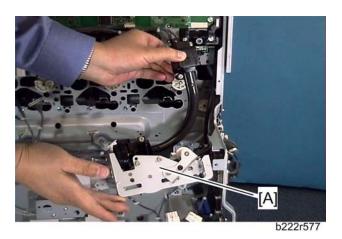
3. Toner transport motor [A] ($\mathscr{F} \times 3$, $\square \times 1$)

Toner Collection Unit

1. Gear Unit (🖝 p.222 "Gear Unit")



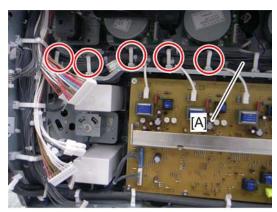
b222r576



2. Toner collection unit [A] ($\hat{\mathscr{E}}$ x 6, $\stackrel{\smile}{\hookrightarrow}$ x 1)

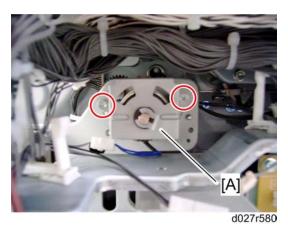
Paper Feed Clutches

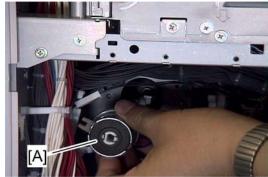
- 1. Rear cover (p.161 "Rear Cover")
- 2. PSU bracket (p.298 "PSU")



d027r578

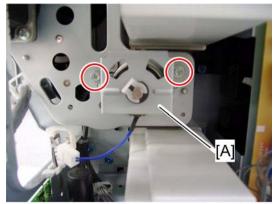
3. Release five clamps, and then turn the harness [A] aside.





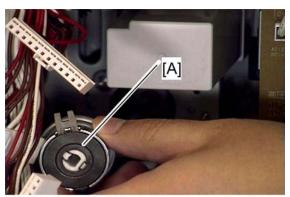
d027r581

5. Paper feed clutch 1 [A]



d027r582

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



d027r583

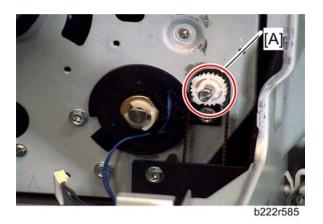
7. Paper feed clutch 2 [A]

Development Clutch-Y

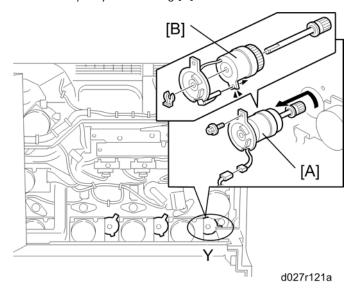
- 1. Rear cover (p.161 "Rear Cover")
- 2. PSU bracket (p.298 "PSU")
- 3. Open the controller box. (p.293 "Controller Box").
- 4. Drum/development motor-Y (\P p.228 "Drum/Development Motors for M, C, and Y")



5. Disconnect the connector [A] (□ x 1).



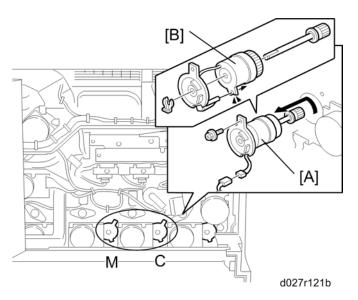
6. Remove the pulley and bushing [A].



- 7. Turn the development clutch unit [A] counter-clockwise and then pull it out ($\mathscr{F} \times 1$).
- 8. Development clutch-Y [B] (x 1)

Development Clutches for M and C

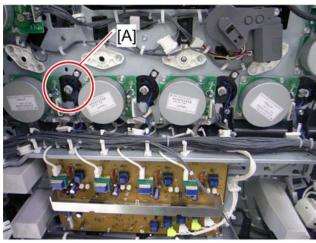
- 1. Rear cover (p.161 "Rear Cover")
- 2. PSU bracket (p.298 "PSU")
- 3. Open the controller box (p.293 "Controller Box").
- 4. Drum/development motors for M and C (p.228 "Drum/Development Motors for M, C, and Y")
- 5. Disconnect the connector for each development clutch ($\mathbb{Z}^{\parallel} \times 1$).



- 6. Turn the development clutch unit [A] counter-clockwise and then pull it out (\mathscr{F} x 1).
- 7. Development clutches for M and C [B] ($\langle \overline{\rangle} \rangle \times 1$)

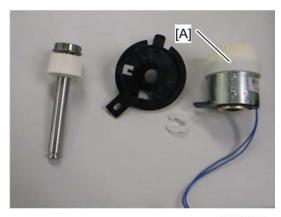
Development Clutch-K

- 1. Rear cover (p.161 "Rear Cover")
- 2. PSU bracket (p.298 "PSU")
- 3. Controller box (p.293 "Controller Box")
- 4. Drum/development motor-K (p.229 "Drum/Development Motor-K")



d027r586

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



d027r167

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

PM Parts

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

| PM Parts | Replacement Procedure |
|----------------------------|---|
| Heating Roller | ▼ p.245 "Heating Roller and Heating Roller Bearing" |
| -Bearing | ▼ p.245 "Heating Roller and Heating Roller Bearing" |
| Pressure Roller | p.254 "Pressure Roller and Pressure Roller Bearing" |
| -Bearing | p.254 "Pressure Roller and Pressure Roller Bearing" |
| Heating Roller Thermistor | ▼ p.257 "Heating Roller Thermistor" |
| Pressure Roller Thermistor | p.259 "Pressure Roller Thermistor" |
| Lower Cover | |
| Stripper Plate | ▼ p.245 "Heating Roller and Heating Roller Bearing" |
| Entrance Guide Plate | ▼ p.258 "Pressure Roller Thermostat" |
| Exit Guide Plate | |
| Fusing Cleaning Felt | ▼ p.251 "Fusing Cleaning Felt" |
| Thermopile | ☞ p.263 "Thermopile" |

Fusing Unit

ACAUTION

- 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 install a lot of new parts in the fusing unit (at PM for example), then set SP 3902-014 to "1".



• If you do this, then the machine will reset the PM counter for the fusing unit automatically, after you turn the power on again.

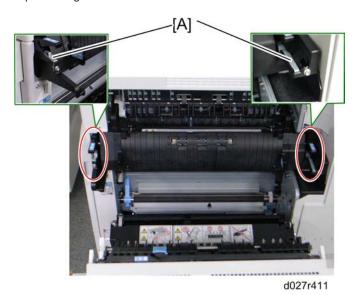
4

Do not do this if you replace the complete fusing unit. This is because the fusing unit has a new detection mechanism.

2. Turn off the main power switch.

RTB 30: New unit detection mechanism for the fusing unit - procedure for replacing a complete fusing unit





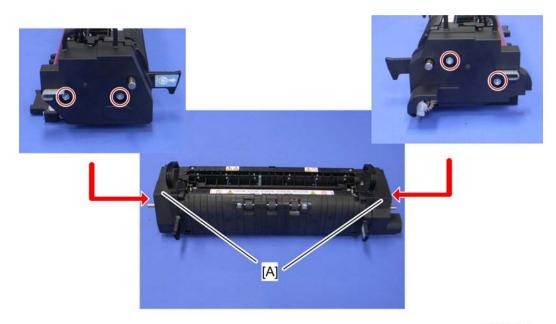
4. Loosen the screws to remove the stays [A] (\mathscr{F} x 1 each).



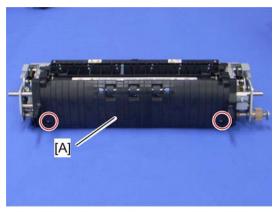
5. Pull out the fusing unit [A].

Heating Roller and Heating Roller Bearing

1. Fusing unit (p.244 "Fusing Unit")

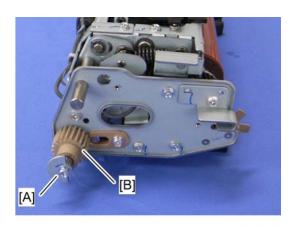


d027r186



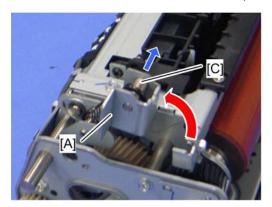
d027r190

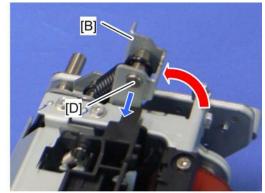
3. Fusing right cover [A] (\mathscr{F} x 2; Stepped screws)



d027r187

4. Pressure roller contact shaft actuator [A] and pressure roller contact shaft gear [B] (\mathscr{F} x 1, \mathbb{C} x 1)



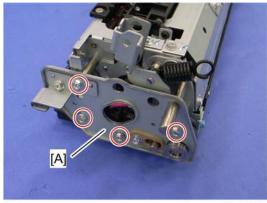


d027r191

5. Turn both pressure levers [A] [B], and pull out pins [C] [D].

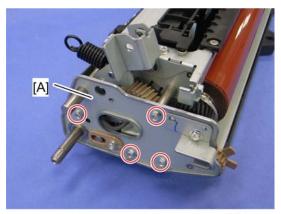
ACAUTION

• If the pins [C] [D] are not pulled out in this step, the fusing unit frames may become bent.



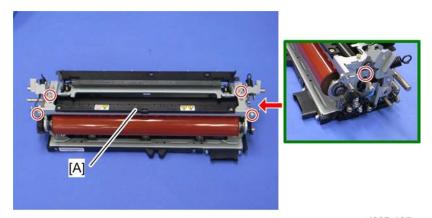
d027r188

6. Front bracket [A] (🛱 x 4)



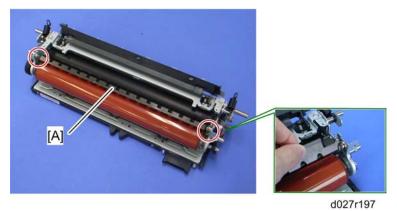
d027r189

7. Rear bracket [A] (🛱 x 4)

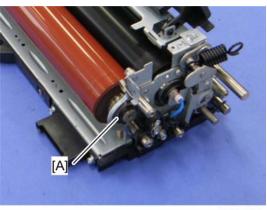


d027r195

8. Top stay [A] (🛱 x 5)

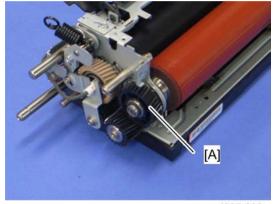


9. Stripper plate [A] (two springs)



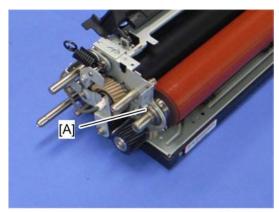
d027r208

10. Heating roller bearing [A] at the front side ($\mathbb{C} \times 1$)



d027r209

11. Heating roller gear [A] (\mathbb{C} x 1)



d027r217

12. Heating roller bearing [A] at the rear side

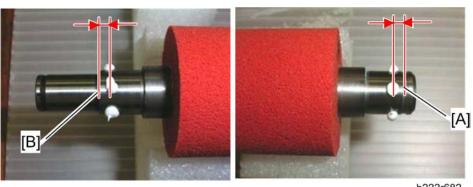
d027r210

13. Heating roller [A]



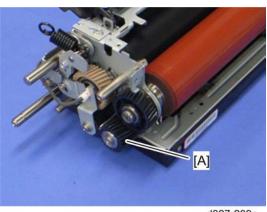
 The surface of the heating roller is fragile, so the heating roller must be covered with a sheet of paper when it is placed on a table or floor.

When re-installing the heating roller



b222r682

- 1. Apply three spots of "Barrierta S552R" (the diameter of each spot must be about 3 mm in diameter, and approximately 0.1 g in weight) to the front shaft of the heating roller at 2 3 mm from the notch [A].
- 2. Apply three spots of "Barrierta S552R" (the diameter of each spot must be about 3 mm in diameter, and approximately 0.1 g in weight) to the rear shaft of the heating roller at 2 3 mm from the edge [B] (rear side of the heating roller).



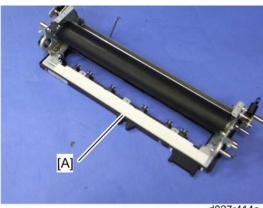
d027r209a



• Do not wipe off the grease of the new idle gear when replacing the idle gear [A]. (The actual idle gear [A] is white.)

Fusing Cleaning Felt

- 1. Fusing unit (p.244 "Fusing Unit")
- 2. Heating roller (ightharpoonup p.245 "Heating Roller and Heating Roller Bearing")



d027r414a

3. Remove the fusing cleaning felt [A].





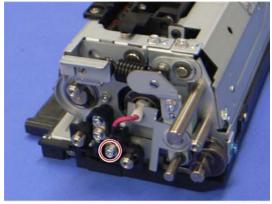
Attach the fusing cleaning felt [A], aligning both edges of the fusing cleaning felt with the red lines on the bottom cover.



• Make sure that the fusing cleaning felt is correctly attached to the frame. Otherwise, dust from the IH coil unit may fall on the paper in the fusing unit and the output becomes dirty.

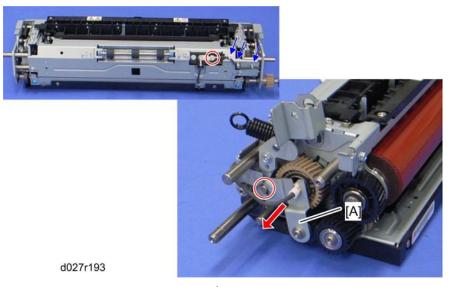
Fusing Lamp

- 1. Fusing unit (p.244 "Fusing Unit")
- 2. Front bracket (p.245 "Heating Roller and Heating Roller Bearing")
- 3. Rear bracket (p.245 "Heating Roller and Heating Roller Bearing")

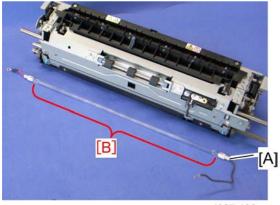


d027r192

4. Front terminal of the fusing lamp ($\mathscr{F} \times 1$)



- 5. Rear terminal of the fusing lamp ($\mathscr{F} \times 1$, $\overset{\triangle}{\hookrightarrow} \times 3$)
- 6. Fusing lamp rear bracket [A] (F x 1)



d027r193a

7. Fusing lamp [A]

ACAUTION

- Remove the fusing lamp without touching the glass part [B].
- Pay attention to the direction of the fusing lamp during the re-installation.

Fusing Drive Gear

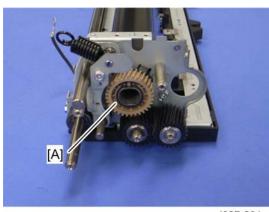
- 1. Heating roller (p.245 "Heating Roller and Heating Roller Bearing")
- 2. Fusing lamp rear bracket (p.252 "Fusing Lamp")

d027r201a

3. Fusing drive gear [A] (\mathbb{C} x 1)

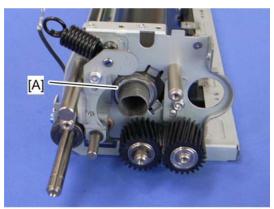
Pressure Roller and Pressure Roller Bearing

- 1. Heating roller(**☞** p.245 "Heating Roller and Heating Roller Bearing")
- 2. Fusing lamp (p.252 "Fusing Lamp")



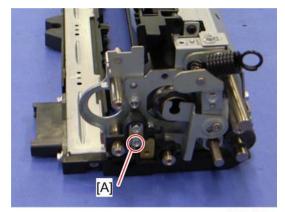
d027r201

3. Pressure roller gear [A] at the rear side ($\langle\!\langle\bar{\rangle}\!\rangle$ x 1)



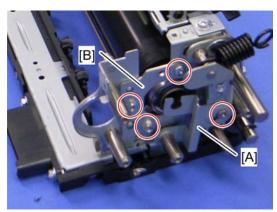
d027r216

4. Pressure roller bearing [A] at the rear side



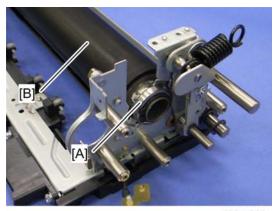
d027r198

5. Front terminal [A] (Fx 1)



d027r199

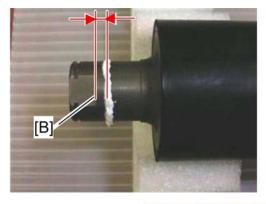
- 6. Lamp holder front bracket [A] (\mathscr{F} x 1)
- 7. Pressure roller bracket [B] at the front side ($\hat{\mathscr{F}} \times 2$, binding screw x 1)

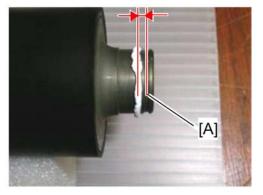


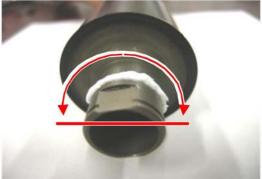
d027r200

- 8. Pressure roller bearing [A] at the front side (\mathbb{C} x 1)
- 9. Pressure roller [B]

When re-installing the pressure roller

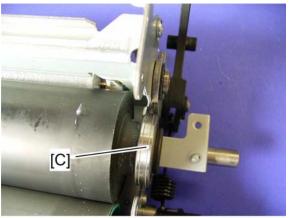






b222r683

1. Apply "Barrierta S552R" to the front shaft of the pressure roller at 2 mm from the notch [A], and to the rear shaft of the pressure roller at 2 mm from the edge [B]. (Apply the lubricant to half of the circumference of the pressure roller, as shown in the lower of the three above diagrams.)

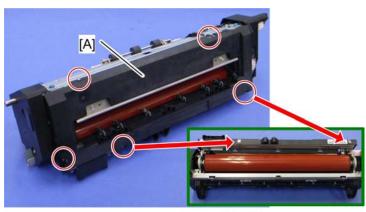


b222r648

2. Make sure that pressure roller bearing [A] at the front side is set as shown above.

Heating Roller Thermistor

- 1. Fusing unit (p.244 "Fusing Unit")
- 2. Fusing right cover (p.252 "Fusing Lamp")



d027r211

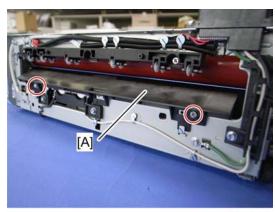
3. Fusing bottom cover [A] ($\mathscr{F} \times 5$)

d027r212

4. Heating roller thermistor with bracket [A] (ॐ x 1, 록 x 1)

Pressure Roller Thermostat

- 1. Fusing unit (p.244 "Fusing Unit")
- 2. Fusing right cover (p.245 "Heating Roller and Heating Roller Bearing")
- 3. Fusing bottom cover (p.257 "Heating Roller Thermistor")

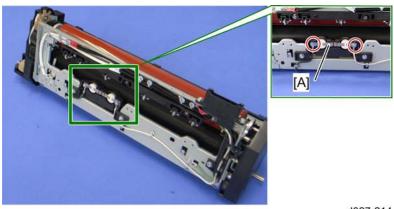


d027r213

4. Entrance guide plate [A] (\mathscr{F} x 2)



• The entrance guide plate must be removed with the orientation of the fusing unit as shown above, to protect the surface of the heating roller from damage.

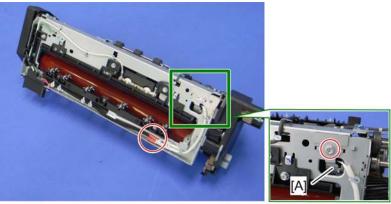


d027r214

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

Pressure Roller Thermistor

- 1. Fusing unit (p.244 "Fusing Unit")
- 2. Fusing right cover (p.245 "Heating Roller and Heating Roller Bearing")
- 3. Fusing bottom cover (p.257 "Heating Roller Thermistor")



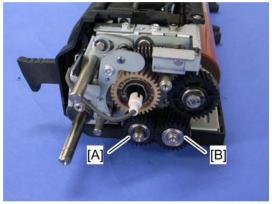
d027r215

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

One-way Clutch Gear and Idle Gear

- 1. Fusing unit (p.244 "Fusing Unit")
- 2. Rear fusing cover (p.245 "Heating Roller and Heating Roller Bearing")
- 3. Pressure roller contact shaft actuator and pressure roller contact shaft gear (**☞** p.245 "Heating Roller and Heating Roller Bearing")

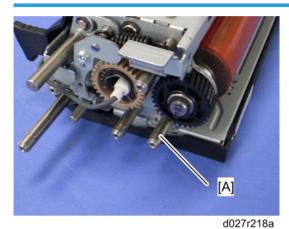
- 4. Rear bracket (p.245 "Heating Roller and Heating Roller Bearing")
- 5. Fusing lamp rear bracket (p.252 "Fusing Lamp")



d027r218

6. One-way clutch gear [A] (\mathbb{C} x 1) and idle gear [B]

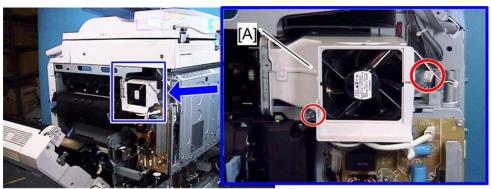
When re-installing the idle gear



1. Apply one spot of "Barrierta S552R" (the diameter of the spot must be about 3 mm in diameter, and approximately 0.1 g in weight) to the idle gear shaft [A].

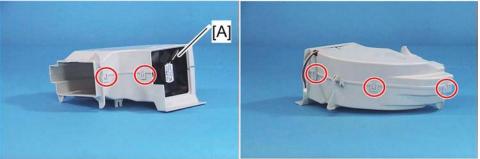
Fusing Fan

- 1. Rear cover (p.161 "Rear Cover")
- 2. Right rear cover (p.162 "Right Rear Cover")



b222r588

3. Fusing duct [A] (♠ x 1, 🗐 x 1)



d027r589

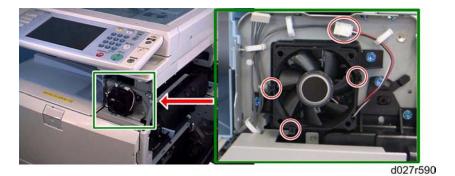
4. Fusing fan [A] (hook x 5)

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.163 "Operation Panel")



3. Paper exit fan [A] ($\mathbb{Z} \times 1, hook \times 3$)

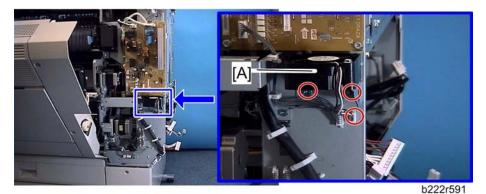
When installing the paper exit fan



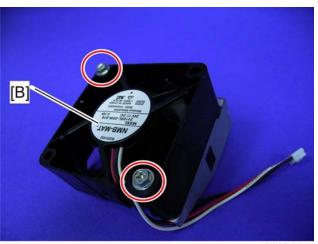
• Make sure that the paper exit fan is installed with its decal facing the rear of the machine.

IH (Induction Heating) Inverter Fan

- 1. Rear cover (p.161 "Rear Cover")
- 2. Right rear cover (p.162 "Right Rear Cover")



3. IH inverter fan bracket [A] (🛱 x 2, 🗐 x 1)



b222r592

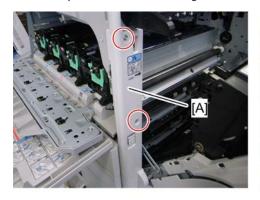
4. IH inverter fan [B] (🖗 x 2)

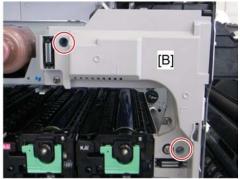
When installing the IH inverter fan

Make sure that the IH inverter fan is installed with its decal facing the upper side of the machine.

Thermopile

- 1. Open the right door.
- 2. Front right cover (p.163 "Operation Panel")
- 3. Pull out trays 1 and 2, and the image transfer belt unit.

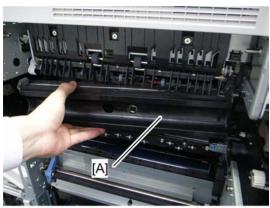




d027r219

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

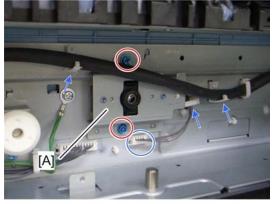
5. Bracket [A] (\$\hat{\beta} \times 1)



d027r223

6. IH coil unit [A]

• First, release the front side of the IH coil unit.



d027r224

7. Thermopile bracket [A] ($\ensuremath{\widehat{\mathcal{F}}} \times 2$, $\ensuremath{\mathbb{Z}} \times 1$, $\ensuremath{\buildrel \times} \times 3$)

4

8. Thermopile (Fx 2)

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.
- Do not push the thermostats on the IH coil unit. If you do, the thermostats will be opened. In that case, the IH coil unit must be replaced.



d027r617

1. Fusing unit (p.244 "Fusing Unit")

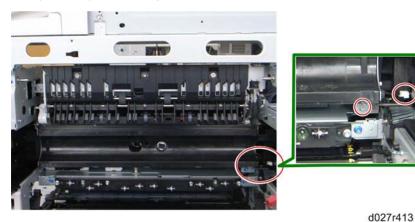


d027r415

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

Pressure Roller HP Sensor

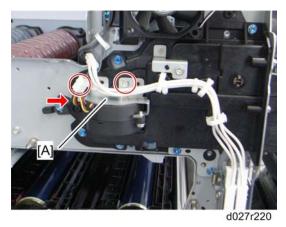
1. Open the right door.



3. Pressure roller HP sensor (♠ x 1, □ x 1)

IH Coil Fan

- 1. Open the right door.
- 2. Front right cover (p.163 "Operation Panel")
- 3. Pull out trays 1 and 2, and the image transfer belt unit (p.263 "Thermopile")
- 4. Right front cover and front inner cover (ightharpoonup p.263 "Thermopile")



- 5. IH coil fan bracket [A] (♠ x 1, ♥ x 1, ♠ x 1)
- 6. IH coil fan (🕏 x 2)

IH Coil Unit

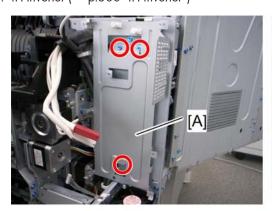
ACAUTION

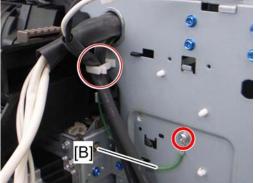
• Do not push the thermostats on the IH coil unit. If you do, the thermostats will be opened. In that case, the IH coil unit must be replaced.



d027r617

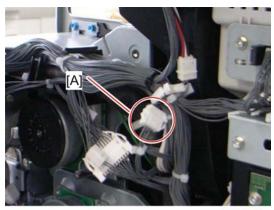
- 1. Fusing unit (p.244 "Fusing Unit")
- 2. Rear cover (p.161 "Rear Cover")
- 3. Right rear cover (p.162 "Right Rear Cover")
- 4. Open the controller box (p.293 "Controller Box").
- 5. Fusing duct (p.260 "Fusing Fan")
- 6. IH inverter (p.300 "IH Inverter")





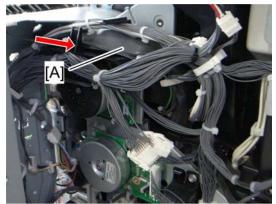
d027r618

- 7. IH inverter bracket [A] (F x 3)
- 8. Ground cable [B] (x 1, 2 x 1)



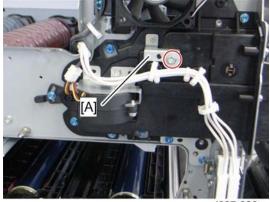
d027r221

9. Remove the connector [A].



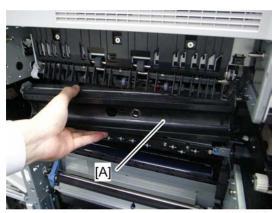
d027r222

10. Pull the Harness [A] in the arrow direction.



d027r220a

11. Bracket [A] (🛱 x 1)



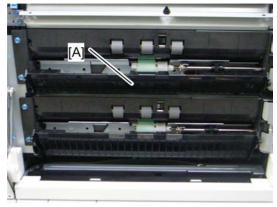
d027r223

12. IH coil unit [A] (First, release the front side of the IH coil unit.)

Paper Feed

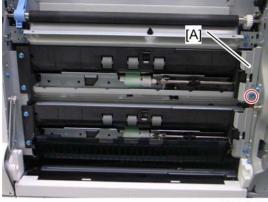
Paper Feed Unit

- 1. Rear cover (p.161 "Rear Cover")
- 2. Right rear cover (p.162 "Right Rear Cover")
- 3. Duplex unit (p.285 "Duplex Unit")
- 4. Pull out tray 1 and tray 2.



d027r168

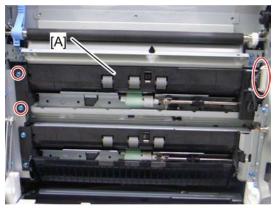
5. Paper guide plate [A] (hook x 2)



d027r169

6. Harness cover [A] (🛱 x 1)

Λ



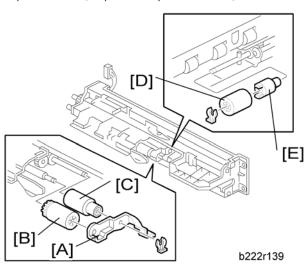
d027r170

7. Paper feed unit [A] (⋛ x 2, 🗐 x 1)

Pick-Up, Feed and Separation Rollers

Tray 1 and Tray 2

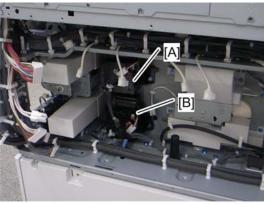
1. Paper feed unit (p.270 "Paper Feed Unit")



- 2. Roller holder [A] (⟨⟨⟨⟩ x 1)
- 3. Pick-up roller [B]
- 4. Feed roller [C]
- 5. Separation roller [D] and torque limiter [E] ($\langle \overline{\rangle} \rangle \times 1$)

Tray Lift Motor

- 1. Rear cover (p.161 "Rear Cover")
- 2. PSU bracket (p.298 "PSU")
- 3. High voltage supply board bracket (p.299 "High Voltage Supply Board Bracket")

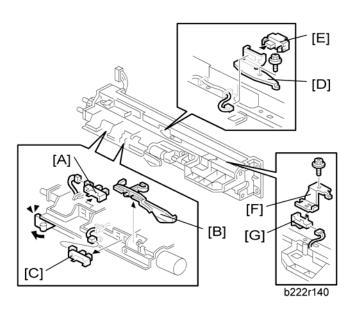


d027r173

4. Tray lift motor 1 [A] or 2 [B] ($\widehat{\mathscr{E}} \times 2$, $\ \ \stackrel{\square}{\sqsubseteq} \times 3$, $\ \stackrel{\square}{\hookrightarrow} \times 1$ each)

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

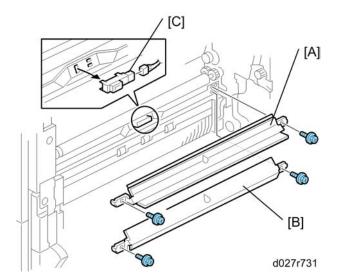
- 1. Rear cover (p.161 "Rear Cover")
- 2. Right rear cover (p.162 "Right Rear Cover")
- 3. Paper feed unit (p.270 "Paper Feed Unit")



- 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] (F 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)

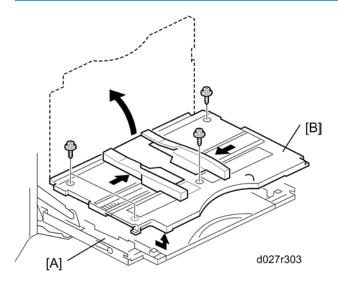
Registration Sensor

- 1. Rear cover (p.161 "Rear Cover")
- 2. Right rear cover (p.162 "Right Rear Cover")

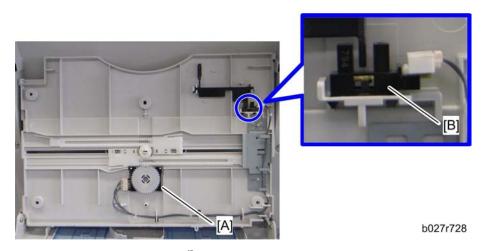


- 3. Paper guide plate 1 [A] and 2 [B] ($\mbox{\ensuremath{\beta}}\mbox{ x 2 each})$
- 4. Registration sensor [C] (□ x 1, hook)

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

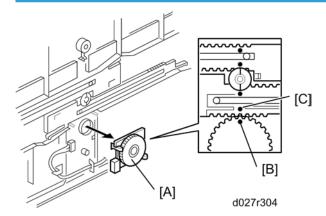


- 1. Open the by-pass tray [A].
- 2. Move the side fences to the center.
- 3. By-pass tray cover [B] (🛱 x 4)



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

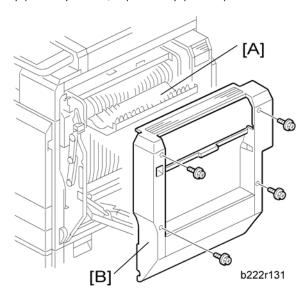
- Display on the LCD -

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

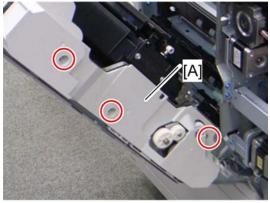
| B4 SEF | 00001100 | B6 SEF | 00000011 |
|--------|----------|----------------|----------|
| A4 SEF | 00001101 | A6 SEF | 00000111 |
| B5 SEF | 00001001 | Smaller A6 SEF | 00001111 |

By-pass Bottom Tray

- 1. Open the right door.
- 2. By-pass tray cover (p.274 "By-pass Paper Size Sensor and By-pass Paper Length Sensor")



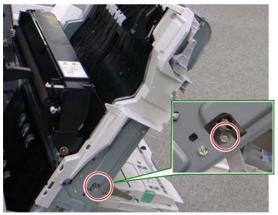
- 3. Open the duplex door [A].
- 4. Right door cover [B] (🛱 x 4)



d027r174

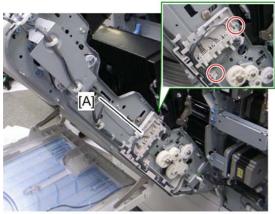
Δ

5. Right door rear cover [A] (🛱 x 3)



d027r175

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



d027r177

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

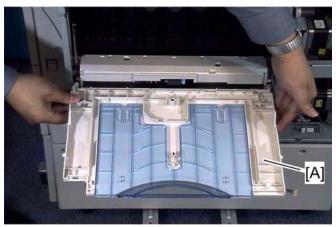


d027r178

8. Remove the screw at the rear side.



9. Release the front [A] and rear [B] arms ($\langle\!\!\langle\bar{\rangle}\!\!\rangle$ x 1 each).

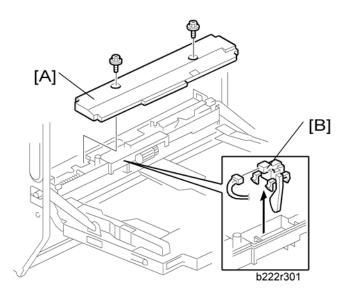


d027r598

10. By-pass bottom tray [A]

By-pass Paper End Sensor

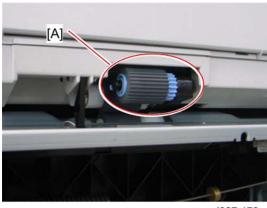
1. Right door cover (p.276 "By-pass Bottom Tray")



- 2. By-pass feed unit cover [A] ($\hat{\mathbb{F}}$ x 2).
- 3. By-pass paper end sensor [B] (□ x 1, hook)

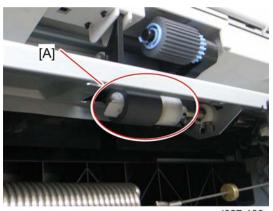
By-pass Pick-up, Feed and Separation Roller, Torque Limiter

1. Right door cover (p.276 "By-pass Bottom Tray")



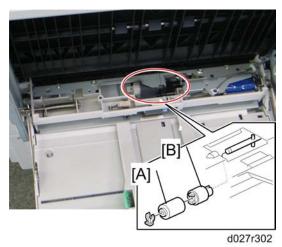
d027r179

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



d027r180

- 3. By-pass feed roller [A] (⟨⟨⟨⟩⟩ x 1)
- 4. By-pass feed unit cover (p.278 "By-pass Paper End Sensor")

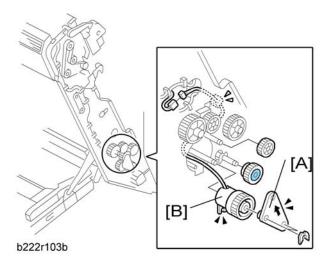


5. By-pass separation roller [A] (⟨⟨⟨⟩ x 1)

6. Torque limiter [B]

By-pass Feed Clutch

- 1. Open the right door.
- 2. Right door rear cover (p.276 "By-pass Bottom Tray")

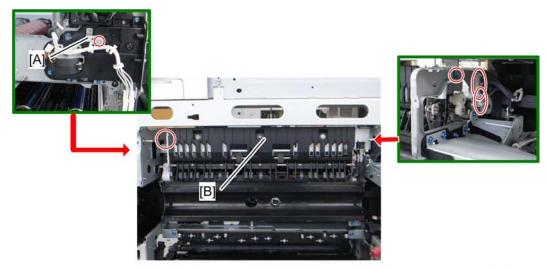


- 3. By-pass feed clutch holder [A] ((() x 2)
- 4. By-pass feed clutch [B] (□ x 1, □ x 1)

Paper Exit Unit

- 1. Fusing Unit (p.244 "Fusing Unit")
- 2. Front right cover (p.163 "Operation Panel")
- 3. Image transfer belt unit (p.207 "Image Transfer Belt Unit")
- 4. Inner Tray (p.164 "Inner Tray")
- 5. Thermopile (p.263 "Thermopile")
- 6. Rear cover (p.161 "Rear Cover")
- 7. Right rear cover (p.162 "Right Rear Cover")
- 8. Fusing duct (p.260 "Fusing Fan")
- 9. Open the controller box (p.293 "Controller Box").

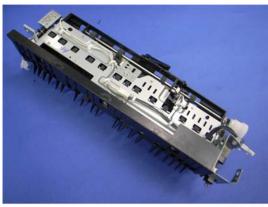




d027r181

- 10. Gear cover [A] (\$\hat{\beta} \times 1)
- 11. Paper exit unit [B] (🖗 x 2, 🗐 x 2)

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



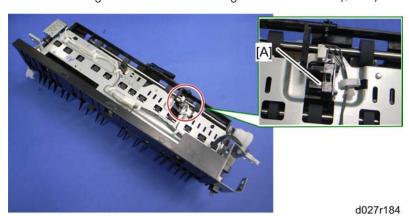
d027r182

1. Paper exit unit (p.281 "Paper Exit Unit")

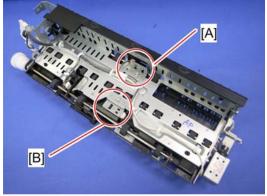


d027r183

- 2. Fusing exit sensor bracket [A] (♠ x 1, x 1)
- 3. Remove the fusing exit sensor from the fusing exit sensor bracket (${\mathscr F}$ x 1)



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



d027r185

5. Junction paper jam sensor bracket [A] (ℰx 1, ➪ x 1)

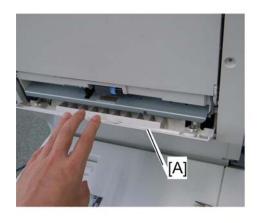
- 6. Remove the junction paper jam sensor from the junction paper jam sensor bracket (hook)
- 7. Paper exit sensor bracket [B] (⋛x 1, 🗐 x 1)
- 8. Remove the paper exit sensor from the paper exit sensor bracket (hook)

4

Duplex Unit

Duplex Unit

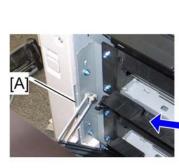
- 1. Rear cover (p.161 "Rear Cover")
- 2. Right rear cover (p.162 "Right Rear Cover")





d027r554a

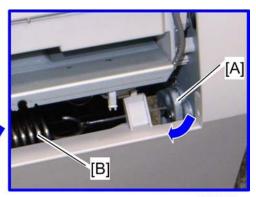
- 3. Open the lower door [A] of the duplex unit.
- 4. Release the tab [B] and remove the lower door (spring x 2).
- 5. Open the right door.





d027r555a

- 7. Keep the right door fully open.

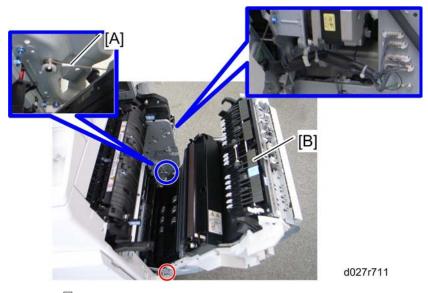


d027r556a

8. Push up the duplex unit a little bit, while pressing the bracket [A] to lock the spring [B].



• Do not let the duplex unit open fully before releasing the wire (step 9). Otherwise, the lock for the spring [B] is released.



- 9. Wire [A] (((() x 1)
- 10. Duplex unit [B] ($\mbox{$\hat{\mathcal{E}}$} \times 1$, Stud screw x 1, $\mbox{$\hat{\mathbb{H}}$} \times 1$, $\mbox{$\mathbb{T}$} \times 4$, ground cable x 1)

Duplex Door Sensor

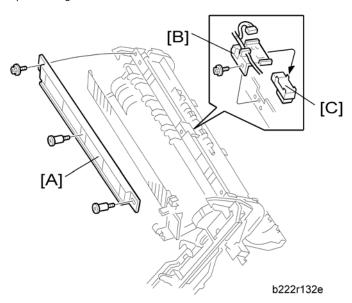
- 1. Right door cover (p.285 "Duplex Unit")
- 2. Open the right door.



3. Duplex door sensor [A] (□ x 1, hook)

Duplex Entrance Sensor

- 1. Right door cover (p.285 "Duplex Unit")
- 2. Open the right door.

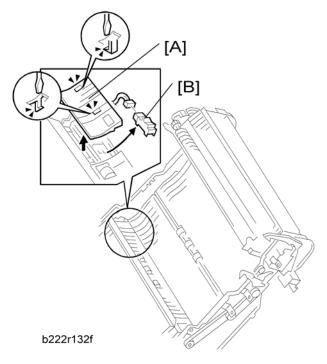


- 3. Duplex entrance guide [A] ($\hat{\mathscr{E}}$ x1, stepped screw x 2)
- 4. Duplex entrance sensor bracket [B] (ℰ x 1, 🖼 x 1)

5. Duplex entrance sensor [C] (hook)

Duplex Exit Sensor

1. Paper transfer unit (p.214 "Paper Transfer Unit")

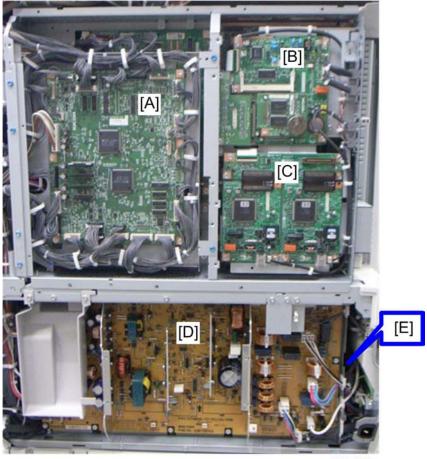


- 2. Guide plate [A] (two hooks)
- 3. Duplex exit sensor [B] (□ x 1, hook)

Electrical Components

Boards

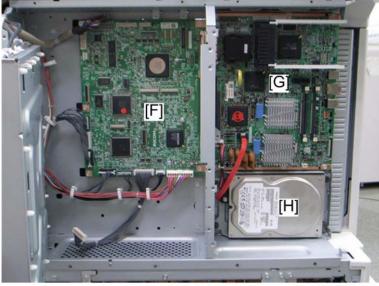
Controller Box closed



d027r729

| [A] | IOB |
|-----|---|
| [B] | FCU (Option) |
| [C] | G3 Interface Unit (Option) |
| [D] | PSU |
| [E] | High Voltage Supply Board (Behind the PSU [D]) |

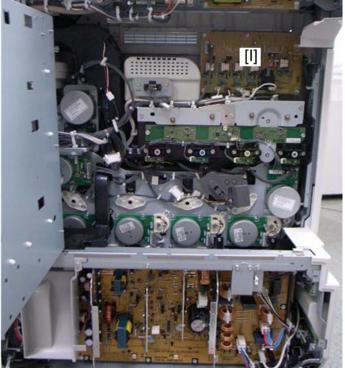
Behind the IOB, FCU and G3 Interface Unit



d027r729a

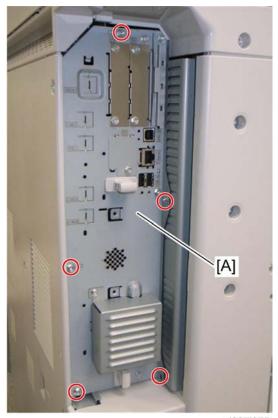
| [F] | BICU |
|-----|------------------|
| [G] | Controller Board |
| [H] | HDD |

Controller Box Open



d027r730

[I] ITB Power Supply Board

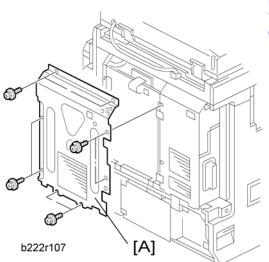


d027i075

1. Controller unit [A] (🛱 x 5)

Controller Box Right Cover

1. Rear cover (p.161 "Rear Cover")



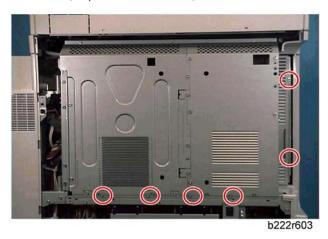
D144 RTB 89
Take caution when removing the controller board cover, because the edges of the cover are sharp.

2. Controller box right cover [A] (F x 8)

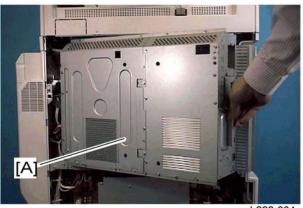
Controller Box

When opening the controller box

1. Rear cover (p.161 "Rear Cover")



2. Remove six screws (red circles).



b222r604

3. Open the controller box [A].

When removing the controller box

- 1. Rear cover (p.161 "Rear Cover")
- 2. Right rear cover (p.162 "Right Rear Cover")
- 3. Controller box right cover (p.292 "Controller Box Right Cover ")



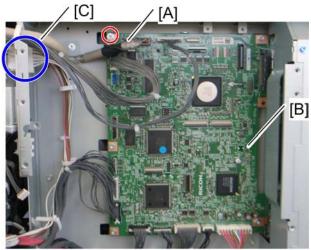
d027r714

4. Remove the controller box stay [A] ($\widehat{\mathscr{E}}^{\imath} \times 4).$



d027r713

5. Move the IOB bracket [A] aside (ℰ x 4, ➡ x All).



d027r715

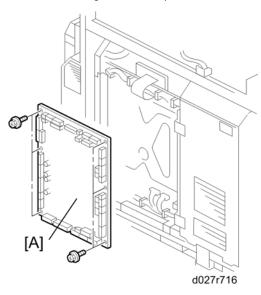
- 6. Disconnect the scanner interface cable [A] (ground cable)
- 7. Release all clamps on the controller box frame.
- 8. Disconnect all connectors on the BICU [B] board.
- 9. Disconnect the connector [C] at the outer controller box and at the inner controller box.



10. Lift up the controller box [A], and then remove it.

IOB (In/Out Board)

- 1. Rear cover (p.161 "Rear Cover")
- 2. Controller box right cover (p.292 "Controller Box Right Cover ")

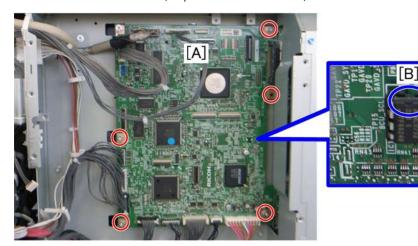


3. IOB [A] (⋛ x 6, All 🗐 s)

BICU

1. Rear cover (p.161 "Rear Cover")

- 2. Controller box right cover (p.292 "Controller Box Right Cover ")
- 3. Disconnect the harness (CN225) on the IOB board.
- 4. Move the IOB bracket aside (p.293 "Controller Box")



d027r715a

5. BICU [A] (ℱ x 5, 🖼 x All)



• Make sure the NVRAM is correctly installed on the BICU. Insert the NVRAM in the NVRAM slot with the "half-moon" pointing [B] to the upward side.

When installing the new BICU

Remove the NVRAM from the old BICU. Then install it on the new BICU after you replace the BICU. Replace the NVRAM (p. p.304 "NVRAM Replacement Procedure") if the NVRAM on the old BICU is defective.



Make sure you print out the SMC reports ("SP Mode Data" and "Logging Data") before you replace
the NVRAM.

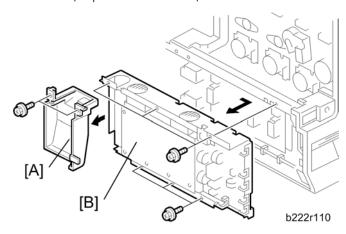
ACAUTION

- 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 BICU are the same for the new BICU when. Do not change the DIP switches on the BICU in the field.
- Make sure the serial number is input in the machine for the NVRAM data, if not, SC 995-001 occurs.

PSU

PSU bracket

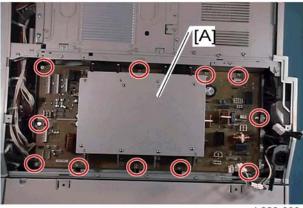
1. Rear cover (p.161 "Rear Cover")



- 2. Ventilation duct [A] (Fx 2)
- 3. PSU bracket [B] (∮x 6, ⊜x All, ₡ x All)

PSU board

- 1. Rear cover (p.161 "Rear Cover")
- 2. Ventilation duct (p.298 "PSU")



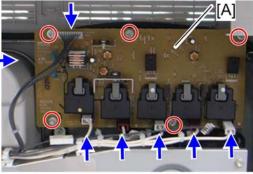
b222r608

3. PSU board [A] ($\mbox{\it F} \times 11$, all $\mbox{\it II} \mbox{\it s}$, all $\mbox{\it II} \mbox{\it s}$

ITB Power Supply Board

- 1. Rear cover (p.161 "Rear Cover")
- 2. Open the controller box (p.293 "Controller Box")



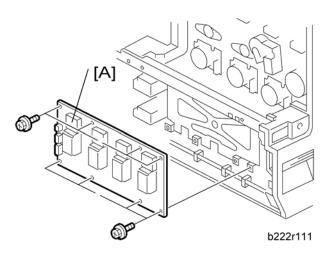


d027r717

3. ITB power supply board [A] ($\mathscr{F} \times 5$, $\mathrel{\blacksquare}^{\parallel} \times 6$)

High Voltage Supply Board

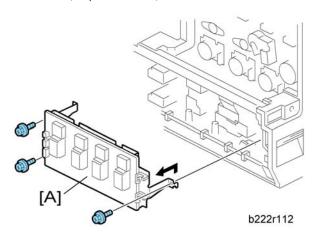
- 1. Rear cover (p.161 "Rear Cover")
- 2. PSU bracket (p.298 "PSU")



3. High voltage supply board [A] ($\mbox{\ensuremath{\not\sim}} \times 8$, All $\mbox{\ensuremath{\not\sim}} \mbox{\ensuremath{s}} \times 2)$

High Voltage Supply Board Bracket

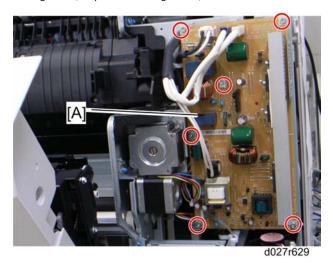
1. Rear cover (p.161 "Rear Cover")



3. High voltage supply board bracket [A] ($\mbox{\ensuremath{\beta}}\mbox{ x 3, }\mbox{\ensuremath{\Box}}\mbox{\ensuremath{\Box}}\mbox{ x All, }\mbox{\ensuremath{\Box}}\mbox{\ensuremath{\Delta}}\mbox{ x 2)}$

IH Inverter

- 1. Rear cover (p.161 "Rear Cover")
- 2. Right rear cover (p.162 "Right Rear Cover")
- 3. Fusing duct (p.260 "Fusing Fan"")



4. IH inverter [A] (♠ x 6, 🗐 x 5)

Controller Board

1. Controller unit (p.292 "Controller Unit")



d027r720



3. Interface rails [A], NV-RAM [B], RAM-DIMM [C]

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 (p.304 "NVRAM Replacement Procedure") if the NVRAM on the old controller board is defective.



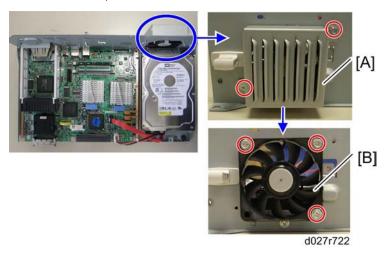
Make sure you print out the SMC reports ("SP Mode Data" and "Logging Data") before you replace
the NVRAM.

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.292 "Controller Unit")



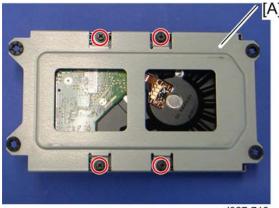
- 2. HDD fan cover [A] (🛱 x 2)
- 3. HDD fan [B] (🖗 x 3, 🗐 x 1)

HDD

1. Controller unit (p.292 "Controller Unit")



2. Remove the HDD [A] with the bracket ($\hat{\mathscr{E}} \times 4$, $\mathbb{Z} \times 2$).



3. Remove the HDD from the bracket [A] ($\mathscr{F} \times 4$).

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 DataOverwriteSecurity feature, the DOS function must be set up again. For more, see p.116 "Controller Options".

If the customer is using the optional Browser Unit, this unit must be installed again. For more, see p.116 "Controller Options".

NVRAM Replacement Procedure

NVRAM on the BICU

- 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 2. 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 BICU 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 195 or "Fusing Unit Setting Error" can be shown until the serial number and destination code are correctly programmed.

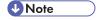
- 11. Turn the main switch off and on.
- 12. Copy the data from the SD card to the NVRAM (SP5-825-001) if you have successfully copied them to the SD card.
- 13. Turn the main switch off. Then remove the SD card from SD card slot 2.
- 14. Turn the main switch on.
- 15. Specify the SP and UP mode settings.
- 16. Do the process control self-check.
- 17. Do ACC for the copier application program.
- 18. Do ACC for the printer application program.

NVRAM on the Controller

- 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. Then put a blank formatted SD card into SD card slot 2.
- 4. Turn the main switch on.
- 5. Copy the NVRAM data (SP5-824-001) and the address book data in the HDD (SP5846-051) to an SD card if possible.



- An error message shows if local user information cannot be stored in an SD card because the capacity is not enough.
- You cannot do this procedure if the SD card is write-protected.
- 6. Enter SP mode. Then print out the SMC reports (SP5-990-001) if possible.
- 7. Turn off the main switch. Then unplug the power cord.
- 8. Replace the NVRAM on the controller. Then reassemble the machine.
- 9. Check if the serial number shows on the operation panel. (SP5-811-002). Input the serial number if it does not show. (Contact your supervisor about this setting.)
- 10. Plug in the power cord. Then turn the main switch on.
- 11. Copy the data from the SD card to the NVRAM (SP5-825-001) and HDD (SP5-846-52) if you have successfully copied them to the SD card.



- The counter data in the user code information clears even if step 11 is done correctly.
- An error message shows if the download is incomplete. However, you can still use the part of the address book data that has already been downloaded in step 11.

- An error message shows when the download data does not exist in the SD card, or, if it is already deleted.
- You cannot do this procedure if the SD card is write-protected.
- 12. Go out of SP mode. Then turn the main switch off. Then remove the SD card from SD card slot 2.
- 13. Turn the main switch on.
- 14. Specify the SP and UP mode settings.
- 15. Do ACC for the copier application program.
- 16. Do ACC for the printer application program.

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. | |

BICU Board

| DIP SW No. | OFF | ON |
|------------|------------------------------|--------------------------|
| 1 and 2 | Factory Use Only: Do not cha | nge the switch settings. |

5. System Maintenance Reference

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

- 1. Press the "Clear Mode" key (©®).
- 2. Use keypad to enter "107" (107).
- 3. Hold down "Clear/Stop" ($^{\text{\tiny CO}}$) for 3 seconds at least.
- 4. Enter the Service Mode.

Exiting SP Mode

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

Types of SP Modes

• System SP: SP modes related to the engine functions

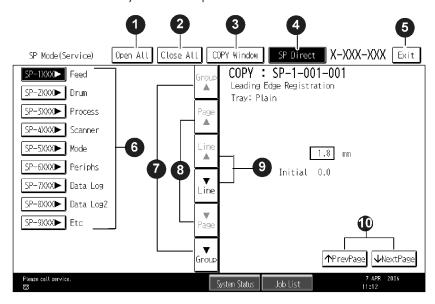
- Printer SP: SP modes related to the controller functions
- Scanner SP: SP modes related to the scanner functions
- Fax SP: SP modes related to the fax functions

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



SP Mode Button Summary

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



Opens all SP groups and sublevels.

2 Closes all open groups and sublevels and restores the initial SP mode display. Opens the copy window (copy mode) so you can make test copies. Press SP Mode (highlighted) 6 in the copy window to return to the SP mode screen, 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 4 SP Mode number.) 0 Press two times to leave the SP mode and return to the copy window to resume normal operation. 0 Press any Class 1 number to open a list of Class 2 SP modes. 0 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). 0 Press to scroll the show the previous or next line (line by line). 0 Press to move the highlight on the left to the previous or next selection in the list.

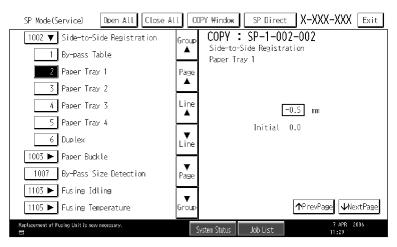
Switching Between SP Mode and Copy Mode for Test Printing

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

Selecting the Program Number

Program numbers have two or three levels.

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





- Refer to the Service Tables for the range of allowed settings.
- 1. Do this procedure to enter a setting:
 - Press to toggle between plus and minus and use the keypad to enter the appropriate number.
 The number you enter writes over the previous setting.
 - Press # to enter the setting. (The value is not registered if you enter a number that is out of range.)
 - Press "Yes" when you are prompted to complete the selection.
- 2. If you need to perform a test print, press Copy Window to open the copy window and select the settings for the test print. Press Start (*) and then press SP Mode (highlighted) in the copy window to return to the SP mode display.
- 3. Press Exit two times to return to the copy window when you are finished.

Exiting Service Mode

Press the Exit key on the touch-panel.

Service Mode Lock/Unlock

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

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

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

• This unlocks the machine and lets you get access to all the SP codes.

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

Remarks

Display on the Control Panel Screen

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

Paper Weight

Thin paper: $52-59 \text{ g/m}^2$

Plain Paper: 60-90 g/m², 16-24lb.

Middle Thick: $91-105 \text{ g/m}^2$, 24-28 lb.

Thick Paper 1: 106-169 g/m², 28.5-44.9lb.

Thick Paper 2: 170-220 g/m², 45-58lb.
Thick Paper 3: 221-256 g/m², 59lb-68lb

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 |
|------------|--|
| | L: Low speed (77 mm/s) |
| S: Simplex | M: Middle speed (154 mm/s) |
| D: Duplex | H: High speed (C2d: 230, C2c 205 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 BICU board
- CTL: NVRAM on the controller board

The settings of each SP mode are explained in the right-hand column of the SP table in the following way.

[Adjustable range / Default setting / Step] Alphanumeric



• 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.

Firmware Update

To update the firmware for this machine, you must have the new version of the firmware downloaded onto an SD (Secure Digital) Card. The SD Card is inserted into SD Card Slot 2 on the left rear side of the controller box.

Type of Firmware

There are 19 types of firmware as shown below.

| Type of firmware | Function | Location of firmware | Message shown |
|----------------------------|--|-----------------------------------|---------------|
| Engine | Printer engine control | BICU Flash ROM | Engine |
| System/Copy Application | Operating system | Flash ROM on the controller board | System/Copy |
| Netfile Application | Feature application | Flash ROM on the controller board | NetworkDocBox |
| Printer Application | Feature application | Flash ROM on the controller board | SD Printer |
| Scanner Application | Feature application | Flash ROM on the controller board | SD Scanner |
| Fax Application | Feature application | Flash ROM on the controller board | Fax |
| NIB | Network Interface | Flash ROM on the controller board | Network |
| Operation Panel | Panel control | Operation Panel | OpePanel. |
| Jam Animation | Jam animation | Flash ROM on the controller board | Animation |
| Fax FCU | Fax control | FCU | GWFCU 3-3 |
| Remote Fax | Fax control | Flash ROM on the controller board | Fax (option) |
| Language (16 languages) | Language firmware Two languages can be selected from 16 languages. | Operation Panel | LANG |

| WebDocBox | Document server application | Flash ROM on the controller board | Web Uapl |
|-----------------------------|---|-----------------------------------|-----------------|
| WebSys | Web Service application | Flash ROM on the controller board | Web Support |
| PS3 | Page description language (PostScript3) | PS3 SD card | Option PS3 |
| PictBridge | PictBridge control | PictBridge SD card | Option PctBrgd |
| DESS | Security control | Flash ROM on the controller board | Security Module |
| ARDF | ARDF control | ARDF | ADF |
| Finisher (B804/805 only) | Finisher control | Finisher (B804/805only) | Finisher |

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 ① 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 "D027" folder onto the card.

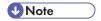
If the card already contains folders up to "D027", copy the necessary firmware files (e.g. D027xxxx.fwu) into this folder.



 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 (x 1).
- 3. Insert the SD card into SD Card Slot 2. Make sure the label on the SD card faces 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. | |



- 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 three seconds intervals when the update is finished.
- 9. The "Update is Done" message appears on the operation panel after completing the updating. The message differs depending on the firmware that has been updated.
- 10. Switch the copier main power switch off when you see the "Update is Done" message or follow the procedure that is displayed on the operation panel.
- 11. Press in the SD card to release it. Then remove it from the slot.
- 12. Switch the copier on for normal operation.

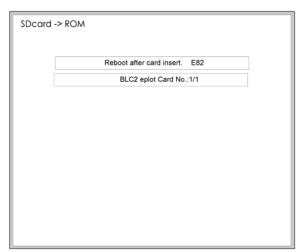
Error Messages

An error message shows in the first line if an error occurs during the download.

The error code consists of the letter "E" and a number. The example above shows error "E24" displayed. For details, refer to the Error Message Table. ("Handling Firmware Update Errors" in this section)

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 (F x 1).
- 3. Insert the SD card into SD Card Slot 2.
- 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 (#) to start the update.
- 9. Downloading starts after about 9 seconds.
- 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.

Handling Firmware Update Errors

An error message shows in the first line if an error occurs during a download. The error code consists of the letter "E" and a number ("E20", for example).

Error Message Table

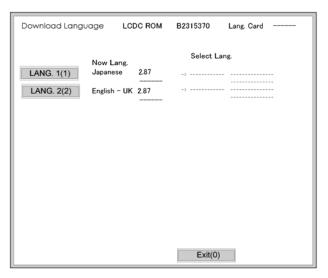
| Code | Meaning | Solution |
|------|----------------------------|---|
| 20 | Cannot map logical address | Make sure the SD card is inserted correctly. |
| 21 | Cannot access memory | HDD connection incorrect or replace hard disks. |

| 22 | Cannot decompress compressed data | Incorrect ROM data on the SD card, or data is corrupted. |
|----|--|--|
| 23 | Error occurred when ROM update program started | Controller program abnormal. If the second attempt fails, replace controller board. |
| 24 | SD card access error | Make sure SD card inserted correctly, or use another SD card. |
| 30 | No HDD available for stamp data download | HDD connection incorrect or replace hard disks. |
| 31 | Data incorrect for continuous download | Insert the SD card with the remaining data required for the download, the re-start the procedure. |
| 32 | Data incorrect after download interrupted | Execute the recovery procedure for the intended module download, then repeat the installation procedure. |
| 33 | Incorrect SD card version | Incorrect ROM data on the SD card, or data is corrupted. |
| 34 | Module mismatch - Correct module is not on the SD card) | SD update data is incorrect. Acquire the correct data (Japan, Overseas, OEM, etc.) then install again. |
| 35 | Module mismatch – Module on SD card is not for this machine | SD update data is incorrect. The data on the SD card is for another machine. Acquire correct update data then install again. |
| 36 | Cannot write module – Cause other than E34, E35 | SD update data is incorrect. The data on the SD card is for another machine. Acquire correct update data then install again. |
| 40 | Engine module download failed | Replace the update data for the module on the SD card and try again, or replace the BICU board. |
| 42 | Operation panel module download failed | Replace the update data for the module on the SD card and try again, or replace the LCDC. |
| 43 | Stamp data module download failed | Replace the update data for the module on the SD card and try again, or replace the hard disks. |
| 44 | Controller module download failed | Replace the update data for the module on the SD card and tray again, or replace controller board. |
| 50 | Electronic confirmation check failed | SD update data is incorrect. The data on the SD card is for another machine. Acquire correct update data then install again. |

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.

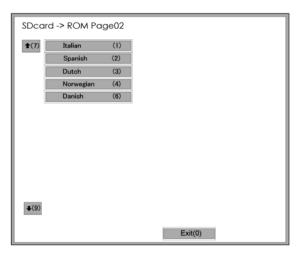
- 1. Switch the copier main power switch off.
- 2. Remove the SD slot cover (x 1).
- 3. Insert the SD card with the language data into SD Card Slot 2.
- 4. Switch the copier main power switch on. The initial screen opens after about 45 seconds.
- 5. Touch "Language Data (2)" on the screen (or press 2).



6. Touch "LANG. 1(1)" or "LANG. 2(2)"

| Key | What it does | |
|------------|--|--|
| LANG. 1(1) | Touch this button on the screen (or press ① 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 ② on the 10-key pad) to open the next screen so you can select the 2nd language. | |
| Exit (0) | Touch this key on the screen (or press ① 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 ⑦ or ⑨) to show more choices.

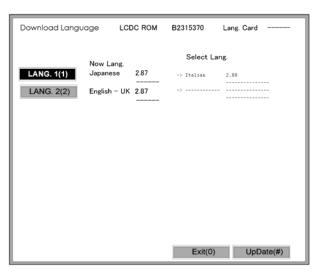
The Download Screen opens after you select a language.

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 $^{\textcircled{\#}}$) 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 (**) (#*) 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

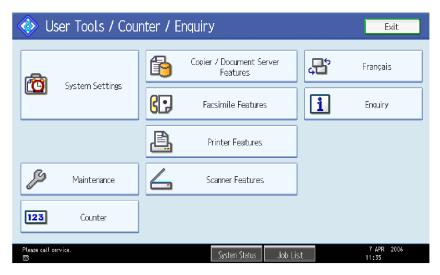
Use the following procedure to reset the copy settings in the UP mode to their defaults.

- 1. Press User Tools/Counter @/12.
- 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.

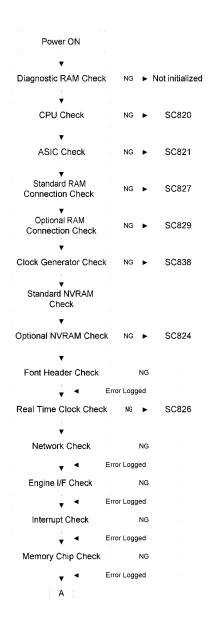
Controller Self-Diagnostics

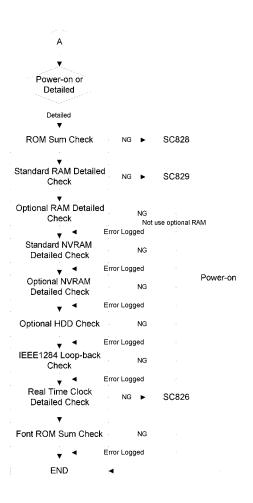
Overview

There are three types of self-diagnostics for the controller.

- 1. Power-on self-diagnostics: The machine automatically starts the self-diagnostics just after the power has been turned on.
- 2. SC detection: The machine automatically detects SC conditions at power-on or during operation.

The following shows the workflow of the power-on and detailed self-diagnostics.





SD Card Appli Move

Overview

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

Slot 1 and Slot 2 are used to store application programs. However, more than two optional applications are supplied for this machine. In that case, you can move application programs from Slot 2 to Slot 1 with the following procedure.

Consider the following limitations when you try to merge SD cards.

- PostScript3 cannot be moved to the other SD card.
- The destination SD card should have the largest memory size of all the application SD cards. Refer
 to the following table for the memory size of each SD card.

Outline of SD Card Appli Move:

1. Choose a SD card with enough space.

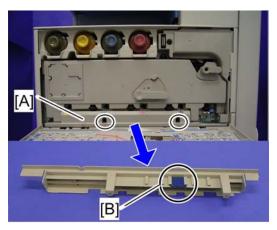


- Do not use an SD card if it has been used on a computer. Normal operation is not guaranteed
 when such an SD card is used.
- Enter SP5873 "SD Card Appli Move". Then move the application from the SD Card in Slot 2 to the card in slot 1.
- 3. Exit the SP mode

Use caution 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 copy the application program from one card to another card.



- 4. Remove the cover [A] (Fx 2).
- 5. Keep the SD card in the place [B] after you have copied the application program from one card to another card. This is done for the following reasons:
 - 1) The SD card can be the only proof that the user is licensed to use the application program.
 - 2) You may need to check the SD card and its data to solve a problem in the future.

Move Exec

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

Mportant (

- Do not turn ON the write protect switch of an 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 an SD card is in SD Card Slot 1. The application program is copied into this SD card.
- 3. Insert the SD card (having stored the application program) to SD Card Slot 2. The application program is copied from this 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 SD card from SD Card Slot 2.
- 10. Turn the main switch on.

11. Check that the application programs run normally.

Undo Exec

The menu "Undo Exec" (SP5-873-002) lets you copy back application programs from an SD card to the original SD card. You can use this program when, for example, you have mistakenly copied some programs by using Move Exec (SP5-873-001).



- Do not turn ON the write protect switch of an 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. The application program is copied back into this card.
- 3. Insert the SD card (having stored the application program) to SD Card Slot 1. 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.



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

5

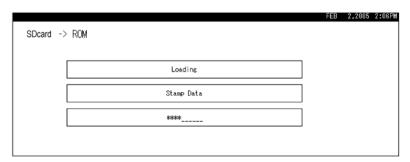
Downloading Stamp Data

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.

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 ($\mathscr{F} \times 1$).
- 4. Insert the SD card into SD card slot 2. 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 BICU is defective.
- Do the download procedure again if the download fails.
- Do the following procedure if the second attempt fails:
- Enter the NVRAM data manually using the SMC print you created before uploading the NVRAM data.
- 1. Switch the copier main power switch off.

5

- 2. Remove the SD slot cover (x 1).
- 3. Insert the SD card with the NVRAM data into SD Card Slot 2.
- 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. | Select Title | | | |
| User Code | 0 515 51 11115 | | | |
| • E-mail | Folder | | | |
| Protection Code | Local Authentication | | | |
| Fax Destination | Folder Authentication | | | |
| Fax Option | Account ACL | | | |
| · | New Document Initial ACL | | | |
| Group Name | LDAP Authentication | | | |
| Key Display | | | | |

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 ($\hat{F} \times 1$).
- 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.

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 ($\mathscr{F} \times 1$).
- 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.

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:

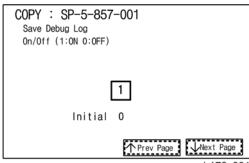
- Switching on the debug feature so error information is saved directly to the HDD for later retrieval.
- Copying the error information from the HDD to an SD card.

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.

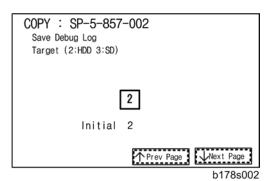
- 1. Enter the SP mode and switch the Save Debug Log feature on.
 - Press then use the 10-key pad to enter (1)(0)(7).
 - Press and hold down ® for more than 3 seconds.
 - Touch "Copy SP".
 - On the LCD panel, open SP5857.
- 2. Under "5857 Save Debug Log", touch "1 On/Off".



3. On the control panel keypad, press "1". Then press #. This switches the Save Debug Log feature on.



• 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.
- 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.

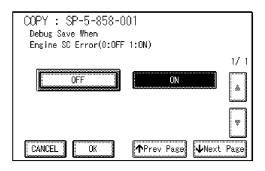
| 1 | Engine SC Error | Saves data when an engine-related SC code is generated. |
|---|---------------------|---|
| 2 | Controller SC Error | Saves debug data when a controller-related SC Code is generated. |
| 3 | Any SC Error | Saves data only for the SC code that you specify by entering code number. |
| 4 | Jam | Saves data for jams. |



• More than one event can be selected.

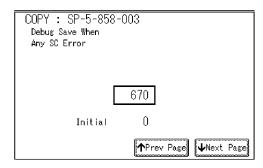
Example 1: To Select Items 1, 2, 4

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 $\stackrel{\text{\tiny{$\#$}}}{=}$. This example shows an entry for SC670.



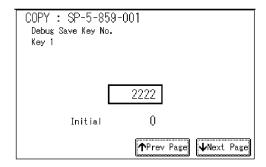


- For details about SC code numbers, please refer to the SC tables in Section 4. "Troubleshooting".
- 6. Select one or more memory modules for reading and recording debug information. Touch "5859".
 Under "5859" press the necessary key item for the module that you want to record.
 Enter the appropriate 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 (SCS) | | | |
| 2 | | 14000 (SRM) | | |
| 3 | 256 (IMH) | | | |
| 4 | 1000 (ECS) | | | |
| 5 | 1025 (MCS) | | | |
| 6 | 4848 (COPY) | 4400 (GPS) | 5375 (Scan) | 5682 (NFA) |
| 7 | 2224 (BICU) | 4500 (PDL) | 5682 (NFA) | 6600 (WebDB) |
| 8 | | 4600 (GPS-PM) | 3000 (UCS) | 3300 (PTS) |
| 9 | | 2000 (NCS) | 2000 (NCS) | 6666 (WebSys) |
| 10 | | 2224 (BICU) | 4126 (DCS) | 2000 (NCS) |



• The default settings for Keys 1 to 10 are all zero ("0").

Key to Acronyms

| Rey 10 Actonyms | | | |
|-----------------|---------------------------------|---------|---------------------------------------|
| Acronym | Meaning | Acronym | Meaning |
| ECS | Engine Control Service | NFA | Net File Application |
| GPS | GW Print Service | PDL | Printer Design Language |
| GSP-PM | GW Print Service – Print Module | PTS | Print Server |
| IMH | Image Memory Handler | SCS | System Control Service |
| MCS | Memory Control Service | SRM | System Resource Management |
| NCS | Network Control Service | WebDB | Web Document Box (Document Server) |

1. 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.

- 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.

New 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:

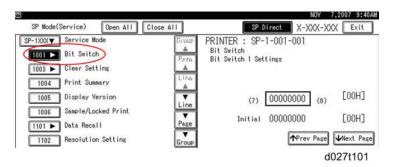
- The Card Save function is used to save print jobs received by the printer on an SD card with no print
 output. Card Save mode is toggled using printer Bit Switch #1 bit number 4. Card Save will remain
 enabled until the SD card becomes full, or until all file names have been used.
- Captures are stored 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:

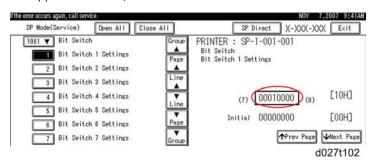
Card Save cannot be used with PJL Status Readback commands. PJL Status Readbacks will not work.
 In addition they will cause the Card Save to fail.

Procedure

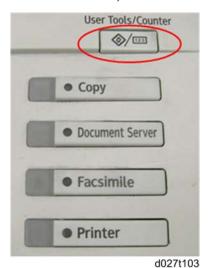
- 1. Turn the main power switch OFF.
- 2. Insert the SD card into slot 2. Then turn the power ON.
- 3. Enter SP mode.
- 4. Select the "Printer Sp".
- 5. Select SP-1001 "Bit Switch".



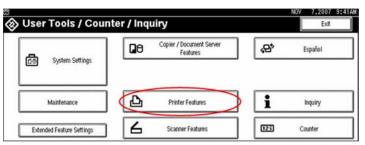
6. Select "Bit Switch 1 Settings" and use the numeric keypad to turn bit 4 ON and then press the "#" button to register the change. The result should look like: 00010000. By doing this, Card Save option will appear in the "List/Test Print" menu.



- 7. Press "Exit" to exit SP Mode.
- 8. Press the "User Tools/Counter" button.

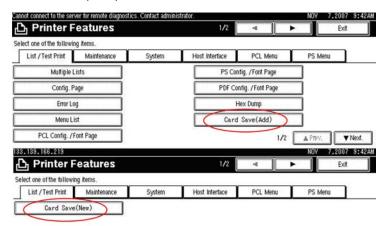


9. Select "Printer Features".



d027t105

 Card Save (Add) and Card Save (New) should be displayed on the screen. Select Card Save (Add) or Card Save (New).



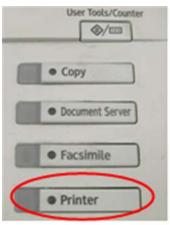
2/2 ▲ Prev. ▼ Next d027t106

11. Press "OK" and then exit the "User Tools/Counter" menu.



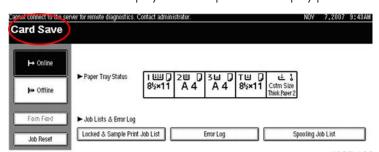
d027t107

12. Press the "Printer" button.



d027t108

13. Card Save should be displayed in the top left of the display panel.



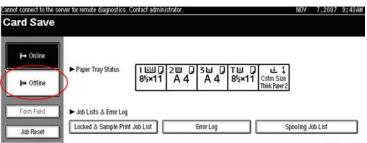
d027t109

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/Stop" 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.

6. Troubleshooting

Service Call Conditions

See the Appendices for the following information:

• SC Tables

Process Control Error Conditions

See the Appendices for the following information:

- Developer Initialization Result
- Process Control Self-Check Result
- Line Position Adjustment Result

6

Troubleshooting Guide

See the Appendices for the following information:

- Image Quality
- Line Position Adjustment

Image Problems

Stain on the outputs

If a stain appears at the edge of the output, do the following procedure.

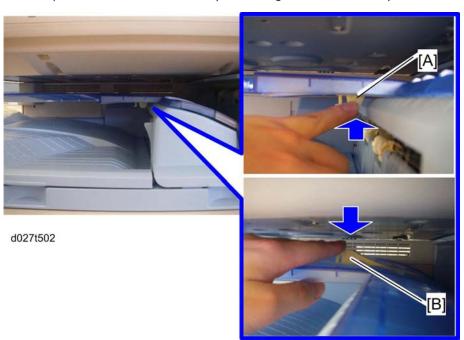
1. Execute the fusing cleaning mode with SP1123-002.



- 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.



0

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].

Jam Detection

See the Appendices for the following information:

- Paper Jam Display
- Jam Codes and Display Codes (Paper Size Code)
 (Sensor Locations)

Electrical Component Defects

See the Appendices for the following information:

- Sensors
- Blown Fuse Conditions (Power Supply Unit) (IH Inverter)

6

Scanner Test Mode

SBU Test Mode

Output the SBU test pattern with SP4-807-001 to make sure the scanner SBU control operates correctly. The SBU test pattern prints out after you have set the SP mode settings and pressed the start key.

- The CCD on the SBU board may be defective if the copy is abnormal and the SBU test pattern is normal.
- The followings can be the cause if the copy is normal and the SBU test pattern is abnormal:
 - The harness may not be correctly connected between the SBU and the BICU.
 - The BICU or SBU board may be defective.

IPU Test Mode

You can check the BICU board with the SP mode menu, SP4-904-1.

If no error is detected, the test ends. Then the completion code shows in the operation panel display. If an error is detected, the test is interrupted. Then an error code shows. The table below lists the completion and error codes.

SP4-904-1 Register Access

There are 16 bits switches in this SP. Each bit indicates a different CPU. The error result is displayed on the operation panel as a decimal number.

0: Normal, 1: Error

SP4-904-2 Image Path

There are 16 bits switches in this SP. Each bit indicates a different CPU path. The error result is displayed on the operation panel as a decimal number.

0: Normal, 1: Error

Errors may be caused by the following problems:

- 1. Short circuit on the signal lines
 - When the BICU board is installed, a pin or two on the ASIC is damaged.
 - · Some conductive matter or object is trapped among the pins.
 - Condensation
- 2. Destruction of circuit elements

- Over current or a defective element breaks the circuit.
- 3. Abnormal power supply
 - The required voltage is not supplied to the devices.
- 4. Overheat/overcooling
 - The environment is inappropriate for the board (the scanner unit).
- 5. Static electricity
 - Static electricity of a high voltage occurs during the test.
- 6. Others
 - The scanner and BICU are incorrectly connected.

When you have completed a check, turn the main switch off and on before you do another check. When you have completed all necessary checks, turn the main switch off and on.

MEMO

MEMO



Model AP-C2 Machine Code: D027/D029

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1. Appendixe: 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: 600 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 |
| Copy speed: | Normal (ADF 1 to 1, LT/ A4 LEF) C2c: 40 cpm (color/black & white) C2d: 50 cpm (color/black & white) Thick 1 (169 g/m² or less) C2c: 25 cpm (color/black & white) C2d 25 cpm (color/black & white) Thick 2 (220 g/m² or less) C2c: 17.5 cpm (color/black & white) C2d 17.5 cpm (color/black & white) Thick 3 (256 g/m² or less) C2c: 17.5 cpm (color/black & white) C2d 17.5 cpm (color/black & white) C4d 17.5 cpm (color/black & white) C5d 17.5 cpm (color/black & white) |

| C2c | | | | |
|---|--|--|--|--|
| Color: 6.5 seconds or less (A4/LT LEF) Black & white: 3.9 seconds or less (A4/LT LEF) C2d | | | | |
| | | | | |
| C2c: 34 seconds or less | s (20°C) | | | |
| C2d: 51 seconds or les | s (20°C) | | | |
| Standard tray: 550 she | ets x 2 | | | |
| 1 | | _ | | |
| | , | | | |
| 1200-sheet LCT: 1200 | sheets | | | |
| (Refer to "Supported Po | per 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 | | |
| Optional Tray | A5 (LEF)/ 8.5" x 11" | A3/11" x 17" | | |
| 2000-sheet LCT | A4/8.5" > | (1 1" (LEF) | | |
| 1200-sheet LCT | B5 (LEF)/ A4 (LEF | | | |
| | | | | |
| , | | | | |
| | | | | |
| | | | | |
| 1200-sheet LCT : 60 to 216 g/m ² (10 to 571lb) | | | | |
| | Color: 6.5 seconds or leaded to the Black & white: 3.9 seconds or leaded to the Black & white: 3.5 seconds or leaded to the Black & white: 3.5 seconds or leaded to the Black & white: 3.5 seconds or leaded to the By-pass tray: 100 sheet m²), 20 sheets (Thick 2, Optional paper feed tray 2000-sheet LCT: 2000 1200-sheet LCT: 1200 (Refer to "Supported Parameter Tray 1) Tray 2 By-pass Optional Tray 2000-sheet LCT 1200-sheet LCT Standard tray: 60 to 25 conditional paper tray: 60 by-pass tray: 60 to 25 conditional paper tray: 60 by-pass tray: 60 to 25 conditional paper tray: 60 by-pass tray: 60 to 169 conditional paper tray: 60 by-pass tray: 60 to 169 conditional paper tray: 60 by-pass tray: 60 to 169 conditional paper tray: 60 by-pass tray: 60 to 169 conditional paper tray: 60 by-pass tray: 60 to 169 conditional paper tray: 60 by-pass tray: 60 to 169 conditional paper tray: 60 by-pass tray: 60 to 169 conditional paper tray: 60 by-pass tray: 60 to 169 conditional paper tray: 60 t | Color: 6.5 seconds or less (A4/LT LEF) Black & white: 3.9 seconds or less (A4/LT LEF) C2d Color: 5.9 seconds or less (A4/LT LEF) Black & white: 3.5 seconds or less (A4/LT LEF) C2c: 34 seconds or less (20°C) C2d: 51 seconds or less (20°C) Standard tray: 550 sheets x 2 By-pass tray: 100 sheets (Normal), 40 sheets (Thm²), 20 sheets (Thick 2/3: 170 - 256 g/m²), 35 Optional paper feed tray: 550 sheets x 2 2000-sheet LCT: 2000 sheets (Refer to "Supported Paper Sizes".) - Minimum Tray 1 A4/8.5" > A5 (LEF)/ 8.5" x 11" By-pass 90 x 148 mm Optional Tray A5 (LEF)/ 8.5" x 11" 2000-sheet LCT B5 (LEF)/ 257 x 182mm Standard tray: 60 to 256 g/m² (16 to 68 lb.) Optional paper tray: 60 to 256 g/m² (16 to 68 lb.) Duplex unit: 60 to 169 g/m² (16 to 45 lb.) | | |

| Output Paper Capacity: | Standard exit tray: 500 sheets or more (face down)* 1 Shift Tray: 250 sheets (80 g/m²) 1-bin Tray: 125 (80 g/m²) 1000-sheet finisher 250 + 1000 sheets (80 g/m²) 2000-sheet booklet finisher: 250 + 2000 sheets (80 g/m²) 3000-sheet booklet finisher: 250 + 3000 sheets (80 g/m²) | | | | |
|------------------------|---|-----------------------|--|--|--|
| | *1: T6200, A4 LEF | 3000 sheets (80 g/m²) | | | |
| Continuous copy: | Up to 999 sheets | | | | |
| | Arbitrary: From 25 to 400% (1% ste | p) | | | |
| | Fix | xed: | | | |
| | North America | Europe | | | |
| | 25% | 25% | | | |
| | 50% | 50% | | | |
| | 65% | 61% | | | |
| | 73% | 71% | | | |
| 7 | 78% | 82% | | | |
| Zoom: | 85% | 87% | | | |
| | 93% | 93% | | | |
| | 100% | 100% | | | |
| | 121% | 115% | | | |
| | 129% | 122% | | | |
| | 155% | 141% | | | |
| | 200% | 200% | | | |
| | 400% | 400% | | | |
| Memory: | Standard: 1024 MB | | | | |
| Power Source: | 120 V, 60 Hz: More than 12A (for North America) 220 V – 240 V, 50/60 Hz: More than 8A (for Europe/ASIA) | | | | |

| | _ | | | | |
|---------------------|----------|-----------|----------------|-----------------------|--|
| | - | | 120V | 220 - 240V | |
| Power Consumption: | Maximur | n | 1500 W or less | 1600 W or less | |
| | Energy S | aver | 2.5 W or less | 4.0 W or less | |
| | Model | State | Mainframe | Complete system (* 1) | |
| | | C. II | 40 dB(A) | 49 dB(A) | |
| | | Standby | or Less | or Less | |
| | C2c | | B/W: 70 dB(A) | | |
| | C2c | Operating | or Less | | |
| | | | Color:70dB(A) | Color: 74 dB(A) | |
| Noise Emission: | | | or Less | or Less | |
| (Sound Power Level) | | Crll | 40 dB(A) | 52 dB(A) | |
| | | Standby | or Less | or Less | |
| | C2d | | B/W: 72 dB(A) | | |
| | CZd | O | or Less | - | |
| | | Operating | Color:72dB(A) | Color: 76 dB(A) | |
| | | | or Less | 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 677 x 760 mm (26.4" x 26.7" x 29.9")

Copier + PFU or LCT: 670 x 677 x 1020 mm (26.4" x 26.7" x 40.2")

Weight: Less than 130 kg (286 lb.) [with ARDF excluding toner]

Printer

| | PCL 6/5c RPCS (Refined Printing Command Stream) | | | | |
|--------------------|--|--|--|--|--|
| Printer Languages: | Adobe PostScript 3 (optional) | | | | |
| Trimor Languages. | PDF Direct (optional) | | | | |
| | PictBridge (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: | | | | |
| | 600 x 600 dpi : Fast (1 bit), Standard (2 bits), Fine (4 bits) / | | | | |
| Resolution and | 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) | | | | |
| | C2c: | | | | |
| | 40 ppm in Plain/Middle Thick mode | | | | |
| | 17.5 ppm in Thick/OHP mode (depending on paper type) | | | | |
| Printing speed: | C2d: | | | | |
| | 50 ppm in Plain mode | | | | |
| | 25 ppm in Middle Thick mode | | | | |
| | 17.5 ppm in Thick/OHP mode (depending on paper type) | | | | |
| | PCL 6/5c (Standard): | | | | |
| | 45 Compatible fonts | | | | |
| Pasidant Farter | 13 International fonts | | | | |
| Resident Fonts: | 1 Bitmap font | | | | |
| | Adobe PostScript 3 (Optional): | | | | |
| | 136 fonts (24 Type 2 fonts, 112 Type 14 fonts) | | | | |

| | USB2.0: 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/g, g (Wireless LAN): Optional | | | |
| | Bluetooth (Wireless): Optional | | | |
| Network Protocols: | TCP/IP (IPv4, IPv6), IPX/SPX, AppleTalk (Auto Switching) | | | |

Т

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: 63 ppm (A4LEF / BW Text / Line Art / 200dpi / Compression: On (MH)) FC: 60 ppm (A4LEF / FC Text / Photo / 200dpi / Compression: Standard) |
| Interface: | Ethernet (100 Base-TX/10 Base-T/1000 Base-T for TCP/IP), Wireless LAN, USB2.0/SD Slot |
| 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/ | 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" | А | М | А | М | М | М |
| Legal SEF | 8.5" x 14" | М | - | Α | - | - | М |
| Government Legal SEF | 8.25" x 14" | М | - | М | - | - | М |
| Half Letter SEF | 5.5" x 8.5" | А | - | - | - | - | - |

| Paper | Size (W x L) | ВТ | T1 | T2/3/ 4 | 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 |
| - II OFF | 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 | T1 | T2/3/ 4 | LCT 2000 | LCT 1200 | DU |
|-------------------------|--------------------|----|----|------------|-------------|-------------|----|
| A3 W | 12" x 18" | М | - | - | - | - | - |
| A3 SEF | 297 x 420mm | А | - | 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 | А | - | - | - | - | - |
| A5 LEF | 210 x 148mm | Α | S | Α | - | - | М |
| A6 SEF | 105 x 148mm | А | - | - | - | - | - |
| 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 1 <i>7</i> " | 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 |

| Paper | Size (W x L) | ВТ | TI | T2/3/ 4 | LCT 2000 | LCT 1200 | DU |
|--------------|-----------------|----|----|------------|-------------|-------------|----|
| | 8.25" x 13" | М | - | М | - | - | М |
| Folio SEF | 11" x 15" | М | - | М | - | - | М |
| | 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

2000/3000 Sheet Booklet Finisher (B804/B805)

MF: Main Frame, Prf: Proof, Clr: Clear, Shf: Shift, Stp: Staple, SS: Saddle Stitch,

2P: 2 Holes Punch, N2P: North Europe 2 Holes, 3P: 3 Holes Punch,

Punch 4 P: 4 Holes Punch, N4P: North Europe 4 Holes Punch

| | Size | | 2000/3000-sheet booklet finisher | | | | | | | | |
|------------|-----------------|----|----------------------------------|-----|-----|-----|----|------------|----|-----|-----|
| Paper | (W x L) | MF | Prf | Clr | Shf | Stp | SS | 2P/ N2P | 3P | 4P | N4P |
| A3 W | 12" x 18" | Y | Υ | Υ | Υ | 30 | 15 | - | - | - | - |
| A3 SEF | 297 x 420 mm | Y | Y | Y | Y | 30 | 15 | Y | Y | Y | Y |
| A4 SEF | 210×297 mm | Y | Υ | Υ | Υ | 50 | 15 | Y | - | - | Y |
| A4 LEF | 297×210 mm | Y | Y | Υ | Υ | 50 | - | Y | Y | Y | Y |
| A5 SEF | 148×210 mm | Y | Υ | Υ | Υ | - | - | Y | - | - | Y |
| A5 LEF | 210×148 mm | Υ | Y | Υ | Υ | - | - | Y | - | - | Y |
| A6 SEF | 105×148 mm | Υ | Y | Υ | - | - | - | - | - | - | - |
| B4 SEF | 257×364 mm | Υ | Y | Υ | Υ | 30 | 15 | Y | Y | Y*4 | Y*4 |
| B5 SEF | 182×257 | Y | Υ | Υ | Υ | 50 | 15 | Y | - | - | Y |
| B5 LEF | 257 x 182 mm | Y | Υ | Υ | Υ | 50 | Υ | Y | Y | Y | Y |
| B6 SEF | 128×182 mm | Υ | Y | Υ | - | - | - | - | - | - | - |
| Ledger | 11" x 17" | Υ | Υ | Υ | Υ | 30 | 15 | Υ | Υ | Υ | Υ |
| Letter SEF | 8.5" x 11" | Υ | Υ | Υ | Υ | 50 | 15 | Υ | - | - | Υ |
| Letter LEF | 11" x 8.5" | Υ | Υ | Υ | Υ | 50 | - | Υ | Υ | Υ | Υ |
| Legal SEF | 8.5" x 14" | Y | Υ | Υ | Υ | 30 | 15 | Υ | - | - | Y |
| Government | 8.25" x 14" | Υ | Y | Υ | Y | 30 | - | Y | - | - | Y |

| | Size | | 2000/3000-sheet booklet finisher | | | | | | | | | |
|-----------------|------------------|----|----------------------------------|------|-----|-----|----|------------|-----|-----|-----|--|
| Paper | (W x L) | MF | Prf | Clr | Shf | Stp | SS | 2P/ N2P | 3P | 4P | N4P | |
| Legal SEF | | | | | | | | | | | | |
| Half Letter SEF | 5.5" x 8.5" | Υ | Υ | Υ | Υ | - | - | Υ | - | - | Υ | |
| Executive SEF | 7.25" x 10.5" | Υ | Y | Υ | Υ | 50 | - | Y | - | - | Y | |
| Executive LEF | 10.5" x 7.25" | Y | Y | Y | Υ | 50 | - | Y | Y | Y | Y | |
| F SEF | 8" x 13" | Υ | Υ | Υ | Υ | 30 | - | Υ | - | - | Υ | |
| Foolscap SEF | 8.5" x 13" | Υ | Υ | Υ | Υ | 30 | - | Υ | - | - | Υ | |
| | 8.25" x 13" | Y | Y | Υ | Υ | 30 | - | Υ | - | - | Y | |
| Folio SEF | 11" x 15" | Υ | Υ | Υ | Υ | 30 | - | Υ | Υ | Y | Υ | |
| | 10" x 14" | Υ | Υ | Υ | Υ | 30 | - | Υ | Υ | - | Υ | |
| | 8" x 10" | Υ | Υ | Υ | Υ | 50 | - | Υ | - | - | Υ | |
| 8K | 267 x 390 mm | Υ | Y | Υ | Υ | 30 | - | Υ | Υ | Y | Υ | |
| 16K SEF | 195×267 | Υ | Y | Υ | Υ | 50 | - | Y | - | - | Y | |
| 16K LEF | 267 x 195 | Υ | Y | Υ | Υ | 50 | - | Y | Υ | Y | Y | |
| Custom | | Υ | Υ | Υ | - | - | - | Y*3 | Y*3 | Y*3 | Y*3 | |
| Com 10 Env. | 4.125" x 9.5" | Y | Y*1 | Y* 2 | - | - | - | - | - | - | - | |
| Monarch Env. | 3.875" x | Υ | - | Υ | - | - | _ | - | - | - | - | |

Υ

7.5"

mm

C6 Env.

114 x 162

Υ

| Paper | Size | | 2000/3000-sheet booklet finisher | | | | | | | | |
|---------|---------------|----|----------------------------------|-----|-----|-----|----|------------|----|----|-----|
| | (W × L) | MF | Prf | Clr | Shf | Stp | SS | 2P/ N2P | 3P | 4P | N4P |
| C5 Env. | 162×229 mm | Y | - | Y | - | - | - | - | - | - | - |
| DL Env. | 110×220 mm | Y | - | Y | - | - | - | - | - | - | - |

Remarks:

| Y | Supported |
|----|------------------------|
| 15 | Output up to 15 sheets |
| 30 | Output up to 30 sheets |
| 50 | Output up to 50 sheets |
| - | Not supported |

^{*1:} Minimum 100 mm or more, Maximum 600 mm or less

1000-Sheet Finisher (B408)

MF: Main Frame, Prf: Proof, Clr: Clear, Shf: Shift, Stp: Staple

| Paper | Size (W x L) | MF | | 1 Bin | | | |
|--------|-----------------|------|-----|-------|-----|-----|--------|
| | | 74(1 | Prf | Clr | Shf | Stp | I DIII |
| A3 W | 12" x 18" | Y | Y | Y | Y | 30 | - |
| A3 SEF | 297 x 420 mm | Y | Υ | Y | Y | 30 | Υ |
| A4 SEF | 210 x 297 mm | Y | Υ | Y | Υ | 50 | Υ |
| A4 LEF | 297 x 210 mm | Y | Y | Y | Y | 50 | Υ |

^{*2:} Minimum 100 mm or more, Maximum 600 mm or less

[•] Longer paper (feed length) than DLT (432 mm) is not guaranteed in this mode.

 $^{^{*}}$ 3: Minimum 100 mm for 2P, 230 mm for 3P, 255 mm for 4P, 125 mm for N4P

^{*4:} Corner stapling is not available in this mode.

| D | Size | AAE | | 1 D:- | | | |
|-------------------------|---------------|-----|-----|-------|-----|-----|-------|
| Paper | (W x L) | MF | Prf | Clr | Shf | Stp | 1 Bin |
| A5 SEF | 148 x 210 mm | Υ | Υ | Υ | Y | - | Y |
| A5 LEF | 210 x 148 mm | Υ | Υ | Υ | Υ | - | Υ |
| A6 SEF | 105 x 148 mm | Υ | Υ | - | - | - | - |
| B4 SEF | 257 x 364 mm | Υ | Υ | Υ | Υ | 30 | Υ |
| B5 SEF | 182 x 257 mm | Υ | Υ | Υ | Υ | 50 | Υ |
| B5 LEF | 257 x 182 mm | Υ | Υ | Υ | Υ | 50 | Υ |
| B6 SEF | 128 x 182 mm | Υ | Υ | - | - | - | N |
| Ledger | 11" x 17" | Υ | Υ | Υ | Y | 30 | Y |
| Letter SEF | 8.5" x 11" | Υ | Υ | Υ | Y | 50 | Υ |
| Letter LEF | 11" x 8.5" | Υ | Υ | Υ | Υ | 50 | Υ |
| Legal SEF | 8.5" x 14" | Υ | Υ | Υ | Υ | 30 | Υ |
| Government Legal SEF | 8.25" x 14" | Y | Y | Y | Y | 30 | Y |
| Half Letter SEF | 5.5" x 8.5" | Υ | Υ | Υ | Y | - | Υ |
| 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 | Y |
| F SEF | 8" x 13" | Υ | Υ | Υ | Y | 30 | Y |
| Foolscap SEF | 8.5" x 13" | Υ | Υ | Υ | Y | 30 | Υ |
| | 8.25" x 13" | Υ | Υ | Υ | Y | 30 | Y |
| F 1. CFF | 11" x 15" | Υ | Υ | Υ | Υ | 30 | Υ |
| Folio SEF | 10" x 14" | Υ | Υ | Υ | Υ | 30 | Y |
| | 8" x 10" | Y | Υ | Υ | Υ | 30 | Y |
| 8K | 267 x 390 mm | Y | Y | Y | Y | 30 | Y |
| 16K SEF | 195 x 267 mm | Y | Y | Y | Y | 50 | Y |

| Paper | Size (W x L) | MF | | | 1 Din | | |
|--------------|-----------------|------|-----|-----|-------|-----|-------|
| raper | | 74(1 | Prf | Clr | Shf | Stp | 1 Bin |
| 16K LEF | 267 x 195 mm | Y | Y | Y | Y | 50 | Y |
| Custom | | Y | Υ | - | - | - | - |
| Com 10 Env. | 4.125" x 9.5" | Υ | - | - | - | - | - |
| Monarch Env. | 3.875" x 7.5" | Υ | - | - | - | - | - |
| C6 Env. | 114 x 162 mm | Y | - | - | - | - | - |
| C5 Env. | 162 x 229 mm | Y | - | - | - | - | - |
| DL Env. | 110 x 220 mm | Y | - | - | - | - | - |

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) SEF | - | Y | γ*3 | Y |
| B4 (257 x 364) SEF | - | - | γ*3 | Y |
| A4 (210 x 297) SEF | Y*1 | Y | γ*3 | Y |
| A4 (297 x 210) LEF | γ*3 | Y | γ*3 | Y |
| B5 (182 x 257) SEF | - | - | γ*3 | Y |
| B5 (257 x 182) LEF | - | - | γ*3 | Y |
| A5 (148 x 210) SEF | - | - | _*1 | Y |

^{* 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. In default setting, "Y" is detected. "y" can be detected if you change 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 95/98/ME | Windows NT4.0 | Windows 2000, XP, Server 2003/Vista | MacOS8.6 to 9.x, MacOSX10.1 or later |
|---------------------|---------------------|------------------|--|--|
| PCL5c / PCL6 | Yes | Yes | Yes | No |
| PS3 *2) | Yes | Yes | Yes | Yes |
| RPCS | Yes | Yes | Yes | No |

U Note

- The PCL5c/6 and RPCS drivers are provided on the printer drivers CD-ROM
- The PS drivers are provided on the Scanner/PostScript® Drivers and Utilities CD-ROM.
- The printer drivers for Windows NT 4.0 are only for the Intel x86 platform. There is no Windows NT 4.0 printer driver for the PowerPC, Alpha, or MIPS platforms.
- The PS3 drivers are all genuine Adobe PS drivers, except for Windows 2000/XP/2003/Vista. Windows 2000 uses Microsoft PS. A PPD file for each operating system is provided with the driver.
- The PS3 driver for Macintosh supports Mac OS X 10.1 or later versions.

Scanner and LAN Fax drivers

| Printer Language | Windows 95/98/ME | Windows NT4.0 | Windows 2000, XP, Server 2003/Vista | MacOS8.6 to 9.x, MacOSX10.1 or later |
|---------------------|---------------------|------------------|--|--|
| Network TWAIN | Yes | Yes | Yes | No |

| LAN-FAX | Yes | Yes | Yes | No |
|---------|-----|-----|-----|----|
| | | | | |



- 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 (Win9x/ME, 2000/XP/2003, NT4) | A font management utility with screen fonts for the printer This is provided on the printer drivers CD-ROM |
| Smart Device Monitor for Admin (Win 95/98/Me, NT4, 2000/XP/Server 2003/Vista) | 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 (Win 95/98/Me, NT4, 2000/XP/Server 2003/Vista) | 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 (Win9x/ME, 2000/XP/2003, NT4) | 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 (B802)

| Paper Size/Weight: | | Size | A3 to A5, DLT to HLT | |
|---------------------------------|---|----------------------------|-------------------------------|---------------|
| | Simplex | Weight | 40 to 128 g/m² (11 to 34 lb.) | |
| | | Size | A3 to A5, DLT to HLT | |
| | Duplex | Weight | 52 to 128 g/m² (14 to 34 lb.) | |
| Table Capacity: | 100 sheets | (81.4 g/m ² , 2 | | |
| Original Standard Position: | Rear left corner | | | |
| Separation: | Feed belt and separation roller | | | |
| Original Transport: | Roller transport | | | |
| Original Feed Order: | From the top original | | | |
| | Сору | - | | 32 to 200 % |
| Supported Magnification Ratios: | _ | Color | | 32.6 to 200 % |
| | Fax | Black & white | | 48.9 to 200 % |
| Power Source: | DC 24V, 5V from the scanner unit | | | |
| Power Consumption: | Less than 60W | | | |
| Dimensions (W × D × H): | 570 mm x 520 mm x 135 mm (22.4"x20.5"x5.3") | | | |
| Weight: | Less than 12kg (26.5 lb.) | | | |

Paper Feed Unit (D351)

| 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.) |

| 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 (D352)

| 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 (D353)

| 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.) |

| C: (\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ | C: /\\/ D | 348 mm x 540 mm x 290 mm | |
|--|-------------------|--------------------------|--|
| | Size (W x D x H): | (13.7" x 21.3" x 11.4") | |

3000-Sheet Finisher (B805)

| Finisher | | | | | |
|-----------------------|----------------|---------------------------------|--|--|--|
| Dimension (w x d x h) | | 657 mm x 613 | 657 mm x 613 mm x 960 mm (25.9" x 24.1" x 37.8") | | |
| Weight | | | Less than 54 kg (119 lb.) (no punch unit) Less than 56 kg (123.5 lb.) (with punch unit) | | |
| Power Consu | umption | Less than 96 W | , | | |
| Noise | | Less than 75 db | | | |
| Configuration | n | Console type at | ttached base-unit | | |
| Power Sourc | е | From base-unit | | | |
| | Stack Capacity | | 250 sheets: A4, 8.5" x 11" or smaller 50 sheets: B4, 8.5" x 14 or larger | | |
| Proof Tray | Paper Size | | A5-A3 SEF, A6 SEF, A6 SEF 5.5" x 8.5"-11" x 17" SEF, 12" x 18" SEF | | |
| | Paper Weight | 52 g/m ² - 163 | g/m² (14 lb 43 lb.) | | |
| | Stack Capacity | 3,000 sheets | A4 LEF, 8.5" x 11" LEF | | |
| | | 1,500 sheets | A3 SEF, A4 SEF, B4 SEF, B5, 11" x 17" SEF, 8.5" x 14" SEF, 8.5" x 11" SEF, 12" x 18" SEF | | |
| Cl :f: T | | 500 sheets | A5 LEF | | |
| Shift Tray | | 100 sheets | A5 SEF, B6 SEF, A6 SEF, 5.5" x 8.5" SEF | | |
| | Paper Size | A5 - A3 SEF, A 12" x 18" SEF | 6 SEF, B6 SEF, 5.5" x 8.5"- 11" x 17" SEF, | | |
| | Paper Weight | 52 g/m ² - 256 | 52 g/m ² - 256 g/m ² (14 lb 68 lb.) | | |

| Staple Replenishment | Cartridge exchange / 5000 pins per cartridge | | | |
|--------------------------------------|---|---------------|---------------|--|
| | Paper Size | Pages/Set | Sets | |
| | AAIEE 0 5" 11" IEE | 20 - 50 pages | 150 - 60 sets | |
| | A4 LEF, 8.5" x 11" LEF | 2 - 19 pages | 150 sets | |
| Stapled Stack Capacity (same size) | AASEE DE 05"11"SEE | 15 - 50 pages | 100 - 30 sets | |
| , | A4 SEF, B5, 8.5" x 11" SEF | 2 - 14 pages | 100 sets | |
| | Others | 15 - 30 pages | 100 - 33 sets | |
| | Omers | 2 - 14 pages | 100 sets | |
| Stapled Stack Capacity (mixed sizes) | A4 LEF & A3 SEF, B5 LEF & B4 SEF, 8.5" x11" LEF & 11" x 17" SEF | 2 - 30 pages | 50 set | |

2000-Sheet Booklet Finisher (B804)

| Finisher | |
|---------------------|--|
| Dimension W x D x H | 657 mm x 613 mm x 960 mm (25.9 x 24.1 x 37.8") |
| Weight | Less than 63 kg (138.6 lb.) (no punch unit) |

| | | Le | Less than 65 kg (143 lb.) (with punch unit) | | |
|-------------------|-----------------|------------------|---|------|---|
| Power Consumption | | Le | Less than 96 W | | |
| Noise | | Le | Less than 75 db | | |
| Configuration | | С | onsole type | atto | ached base-unit |
| Power Source | | Fr | om base-un | it | |
| | Stack Capacity | | 250 sheets: A4, 8.5" x 11" or smaller 50 sheets: B4, 8.5" x 14 or larger | | |
| Proof Tray | Paper Size | | | | SEF, A6 LEF " x 17" SEF, 12"x18" SEF |
| | Paper Weight | 5: | 2 g/m² - 1ć | 53 g | g/m² (14 lb 43 lb.) |
| | | | ,000 neets | A | 4 LEF, 8.5" x 11" LEF |
| | Stack Capacity | | .000 neets | 11 | 3 SEF, A4 SEF, B4 SEF, B5 1" x 17" SEF, 8.5" x 14" SEF, 5" x 11" SEF, 12"x18" SEF |
| Shift Tray | | 5 | 500 sheets A | | 5 LEF |
| | | | 100 sheets A5 SEF, B6 SEF, A6 SEF, | | 5 SEF, B6 SEF, A6 SEF, 5.5" x 8.5" SEF |
| | Paper Size | | A5 - A3 SEF, A6 SEF, B6 SEF 5.5" x 8.5" to 11" x 17" SEF, 12" x 18" SEF | | |
| | Paper Weight | 5 | 52 g/m² - 256 g/m² (14 lb 68 lb.) | | |
| Staple | | | | | |
| Paper Size | | | B5-A3, 8.5" x 11" - 11" x 17", 12" x 18" | | |
| Paper Weight | | | 64 g/m ² - 90 g/m ² , 17 lb. Bond - 28 lb. Bond | | |
| Staple Position | | | Top, Bottom, 2 Staple, Top-slant | | 2 Staple, Top-slant |
| | Cama Danas Si | G | | | A4, 8.5" x 11" or smaller |
| Staples Capacity | Same Paper Size | | 30 sheets | | B4, 8.5" x 14" or larger |
| S.apios Sapacity | Mixed Paper S | Mixed Paper Size | | | A4 LEF & A3 SEF, B5 LEF & B4 SEF, 8.5" x 11" LEF & 11" x 17" SEF |

| | | A4 SEF, A3 SEF, B5 SEF, B4 SEF |
|------------------|-----------|---------------------------------|
| Booklet Stapling | 15 sheets | 8.5" x 11" SEF, 8.5" x 14" SEF, |
| | | 11" x 17" SEF, 12" x 18" SEF |

| Staple Replenishment | | Corner staple | 5,000 staples per cartridge |
|-------------------------|--------------------------------|--|-----------------------------|
| | | Booklet staple | 2,000 staples per cartridge |
| | | AAIEE 9.5" 11" IEE | 13 - 50 pages |
| | | A4 LEF, 8.5" x 11" LEF | 2 - 12 pages |
| | Same Size | AA CFF DE 0.5" 11" CFF | 10 - 50 pages |
| Caman Standa | Same Size | A4 SEF, B5, 8.5" x 11" SEF | 2 - 9 pages |
| Corner Staple Capacity | | O.I. | 10 - 30 pages |
| | | Others | 2 - 9 pages |
| | Mixed Size | A4 LEF + A3 SEF B5 LEF + B4 SEF 8.5" x 11" LEF + 11" x 17" SEF | 2 - 30 pages |
| | A4 SEF, A3 SEF, B5 SEF, B4 SEF | | 2 - 5 pages |
| Booklet Staple Capacity | 8.5" x 11" SEF, | 8.5" x 14" SEF, 11" x 17" SEF | 6 - 10 pages |
| , , | 12" x 18" SEF | | 11 - 15 pages |

Punch Unit (B702) for 2000/3000-Sheet (Booklet) Finisher

| | NA | 2/3 holes switchable |
|---------------------------|-------------|----------------------|
| Available Punch Units | EU | 2/4 holes switchable |
| | Scandinavia | 4 holes |
| | NA 2-holes | Up to 5,000 sheets |
| Punch Waste Replenishment | NA 3-holes | Up to 5,000 sheets |

| | | EU 2-holes | | Up to 14,000 sheets | |
|--------------|---------------------|---------------------|---|------------------------|--|
| | | EU 4-holes | | Up to 7,000 sheets | |
| | | Scandinavia 4-holes | | Up to 7,000 sheets | |
| Paper Weight | | 52 g/m | 52 g/m² - 163 g/m², 14 lb Bond - 43 lb Bond | | |
| | NA 2-holes | SEF | A5 to A3, 5.5 | " x 8.5" to 11" x 17" | |
| | INA Z-noies | LEF | A5 to A4, 5.5 | 5" x 8.5" , 8.5" x 11" | |
| | NA 3-holes | SEF | A3, B4, 11" x 17" | | |
| | | LEF | A4, B5, 8.5" x 11" | | |
| D C: | FILO I | SEF | A5 to A3, 5.5" x 8.5" to 11" x 17" | | |
| Paper Sizes | EU 2-holes | LEF | A5 to A4, 5.5" x 8.5", 8.5" x 11" | | |
| | EU 4-holes | SEF | A3, B4, 11"x17" | | |
| | | LEF | A4, B5, 8.5" x 11" | | |
| | | SEF | A5 to A3, 5.5 | " x 8.5" to 11" x 17" | |
| | Scandinavia 4-holes | | A5 to A4, 5.5 | 5" x 8.5", 8.5" x 11" | |

1000-Sheet Finisher (B408)

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.) |
| Paper Capacity: | 250 sheets (A4 LEF/8.5" x 11" SEF or smaller) 50 sheets (A4, 8.5" x 11" or smaller) 30 sheets (B4, 8.5" x 14" or larger) |

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Lower Tray

| | No staple mode: | | | | |
|-------------------------|--|-------------------------------|---------------------------|-----------|--|
| Paper Size: | A3 to B5, DLT to HLT | | | | |
| , apar 1.21 | Staple mode: | | | | |
| | A3, B4, A4, B5, DLT to | o LT | | | |
| Paper Weight: | No staple mode: 60 to | 157 g/m² (1d | 6 to 42 lb) | | |
| Tuper Weight. | Staple mode: 64 to 90 | g/m ² (17 to 2 | 24 lb) | | |
| | 30 sheets (A3, B4, DL | T, LG) | | | |
| Stapler Capacity: | 50 sheets (A4, B5 LEF, | LT) | | | |
| | No staple mode: | | | | |
| | 1,000 sheets (A4/LT c | or smaller: 80 g | /m ² , 20 lb.) | | |
| | 500 sheets (A3, B4, D | LT, LG: 80 g/m | n ² , 20 lb.) | | |
| | Staple mode: (80 g/m | n ² , 20 lb., numb | per of sets) | | |
| | Set Size | 0.0 | 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) | | | | |
| Sidple positions. | 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") | | | | |

Bridge Unit (D386)

| | 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: | 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) |
| 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 (D388)

| 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) |
|------------------------|--|
| | 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: | 52-256 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

1-bin Tray Unit (D414)

| Paper Size: | Standard Size: A3 /DLT to A5/ HLT SEF | | | | |
|--------------------|---|--|--|--|--|
| Paper Weight: | 60 to 169 g/m², 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") | | | | |

2. Appendix: Preventive Maintenance Tables

Maintenance Tables

Preventive Maintenance Items

Chart: A4 (LT)/5%

Mode: 4 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

| Item | 120K | 240K | 360K | 480K | 600K | EM | Remarks | | |
|----------------------|------|------|------|------|------|----|-----------------------|--|--|
| Scanner | | | | | | | | | |
| Reflector | С | | | | | | Optics cloth | | |
| 1st/2nd/3rd mirrors | С | | | | | | Optics cloth | | |
| Front and Rear Rails | С | | | | | | Dry cloth | | |
| Exposure Glass | С | | | | | С | Dry cloth; alcohol | | |
| ADF Exposure Glass | С | | | | | С | Dry cloth; alcohol | | |
| APS Sensor | С | | | | | | Dry cloth | | |
| PCU | | | | | | | | | |
| Dev. Unit-K | | | | R | | | | | |
| Drum Unit-K, C, M, Y | R | | | | | | | | |
| Developer-K | | R | | | | | | | |

| ltem | 120K | 240K | 360K | 480K | 600K | EM | Remarks |
|---------------------------------------|------|------|------|------|------|-----|--------------------------|
| Transfer | | 1 | | | | | 1 |
| Image transfer belt- cleaning unit | | R | | | | | |
| Paper Transfer Roller Unit | | | R | | | | |
| Toner Collection Bottle | R | | | | | | |
| Fusing | | | | | | | |
| Heating Roller | | R | | | | | |
| -Bearing | | R | | | | | S552R |
| Pressure Roller | | R | | | | | |
| -Bearing | | R/L | | | | | S552R |
| Idle Gear | | | | | | R/L | S552R |
| Heating Roller Thermistor | | С | | | | | |
| Pressure Roller Thermistor | | С | | | | | |
| Lower Cover | | С | | | | | |
| Stripper Plate | | С | | | | | Alcohol |
| Entrance Guide Plate | | С | | | | | Alcohol |
| Exit Guide Plate | | С | | | | | Alcohol |
| Fusing Cleaning Felt | | R | | | | | |
| Thermopile | | С | | | | | Cotton swab with alcohol |
| Paper Path | | | | | | | |
| Registration Roller | | | | | | С | Damp cloth |
| Registration Sensor | | | | | | С | Dry cloth |
| Vertical Transport Roller | | | | | | С | Damp cloth |
| Vertical Transport Sensor | | | | | | С | Dry cloth |

| ltem | 120K | 240K | 360K | 480K | 600K | EM | Remarks |
|------------------------|------|------|------|------|------|----|--------------|
| Paper Feed Sensor | | | | | | С | Dry cloth |
| Pick-up Roller | | | | | | С | Dry cloth |
| Feed Roller | | | | | | С | Dry cloth |
| Separation Roller | | | | | | С | Dry cloth |
| Fusing Entrance Sensor | | | | | | С | Dry cloth |
| Fusing Exit Sensor | | | | | | С | Dry cloth |
| Paper Dust Container | С | | | | | С | |
| Duplex Unit | | | | | | | |
| Inverter Roller | | | | | | С | Damp cloth |
| Transport Roller | | | | | | С | Damp cloth |
| Duplex Entrance Sensor | | | | | | С | Dry cloth |
| Duplex Exit Sensor | | | | | | С | Dry cloth |
| Miscellaneous | | | | | | | |
| Dust Filter | R | | | | | | |
| Dust Glass | | | | | | С | |
| ID Sensor | | | | | | С | Blower Brush |

 $^{^{\}star}$ 1: Clean this thermistor only when it has paper dust.

ARDF (B802)

| ltem | 120K | EM | Remarks |
|--------------------|------|----|--|
| Sensors | | С | Blower brush |
| Platen Sheet Cover | | С | Damp cloth; alcohol (Replace if required.) |
| White Plate | | С | Dry or damp cloth |
| Drive Gear | | L | Grease G501 |

| ltem | 120K | EM | Remarks |
|------------------|------|----|---------------------|
| 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 (D351)

| 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 |
| Relay Sensor | С | Dry cloth |
| Relay Roller | С | Damp cloth |
| Bottom Plate Pad | С | Damp cloth |

1200-sheet LCT (D353)

| Item | EM | Remarks |
|-------------------|----|------------|
| Feed Roller | С | Dry cloth |
| Separation Roller | С | Dry cloth |
| 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 |

2000-sheet LCT (D352)

| 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 |
| Relay Sensor | С | Dry cloth |
| Relay Roller | С | Damp cloth |
| Bottom Plate Pad | С | Damp cloth |

2000/3000-Sheet (Booklet) Finisher (B804/B805)

| Items | EM | Remarks |
|-----------------|----|--------------|
| Rollers | С | Damp cloth |
| Discharge Brush | С | Dry cloth |
| Sensors | С | Blower brush |

2000/3000-Sheet (Booklet) Finisher Punch Kit (B702)

| Items | EM | Remarks |
|-------------|----|----------------|
| Punch Chads | С | Discard chads. |

1000-Sheet Finisher (B408)

| Items | EM | Remarks |
|-----------------|----|--------------|
| Rollers | С | Damp cloth |
| Discharge Brush | С | Dry cloth |
| Sensors | С | Blower brush |

1 Bin Tray (D414)

| Items | EM | Remarks |
|---------|----|--------------|
| Rollers | С | Damp cloth |
| Tray | С | Damp cloth |
| Sensor | С | Blower brush |
| Bearing | С | S552R |

Bridge Unit (D386)

| Items | EM | Remarks |
|---------|----|------------|
| Rollers | С | Damp cloth |

Shift Tray (D388)

| Items | EM | Remarks |
|-------|----|------------|
| Tray | С | Damp cloth |

Other Yield Parts

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

Mainframe

| ltem | 120K | 240K | 480K | 600K | Remarks |
|--------------------|------|------|------|------|---------|
| Dev. Unit-C, M, Y | | | R | | |
| Developer- C, M, Y | | R | | | |
| ITB Unit | | | | R | |

ARDF

| ltem | 80K | 120K | 240K | 320K | Remarks |
|-------------------|-----|------|------|------|---------------------|
| Pick-up Roller | | R | | | Number of originals |
| Feed Belt | | R | | | Number of originals |
| Separation Roller | | R | | | Number of originals |

3. Appendix: Service Call Conditions

SC Tables

Service Call Conditions

Summary

The "SC Table" section shows the SC codes for controller errors and other errors. The latter (not controller errors) are put into four types. The type is determined by their reset procedures. The table shows the classification of the SC codes.

| | Key | Definition | Reset Procedure |
|-------------------|-----|---|---|
| Controller errors | CTL | The error has occurred in the controller. | See "Troubleshooting Procedure" in the table. |
| | 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. |
| Other errors | С | 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.

• If the problem concerns a motor lock, first check the mechanical load before you replace motors or sensors.

SC Code Classification

The table shows the classification of the SC codes:

| Class 1 | Section | SC Code | Detailed section |
|---------|-----------------------------|---------|-----------------------------|
| 1XX | Scanning | 100 - | Scanner |
| 1 | Scanning | 190 - | Unique for a specific model |
| | | 200 - | Polygon motor |
| | | 220 - | Synchronization control |
| 2XX | Less over over | 230 - | FGATE signal related |
| 2^^ | Laser exposure | 240 - | LD control |
| | | 280 - | Unique for a specific model |
| | | 290 - | Shutter |
| | | 300 - | Charge |
| 3XX | Image development 1 | 330 - | Drum potential |
| 3// | | 350 - | Development |
| | | 380 - | Unique for a specific model |
| | | 400 - | Image transfer |
| | | 420 - | Paper separation |
| 4XX | les en en devialen en ent 2 | 430 - | Cleaning |
| 4^^ | Image development 2 | 440 - | Around drum |
| | | 460 - | Unit |
| | | 480 - | Others |
| | | 500 - | Paper feed |
| 5XX | Paper feed / Fusing | 515 - | Duplex |
| | | 520 - | Paper transport |

| Class 1 | Section | SC Code | Detailed section |
|---------|---------------------|---------|-----------------------------|
| | Paper feed / Fusing | 530 - | Fan motor |
| 5XX | | 540 - | Fusing |
| 344 | | 560 - | Others |
| | | 570 - | Unique for a specific model |
| | | 600 - | Electrical counters |
| | | 620 - | Mechanical counters |
| | | 630 - | Account control |
| 6XX | Communication | 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 |
| 8XX | Controller | 820 - | Diagnostics error |
| 0// | | 860 - | Hard disk |
| | | 880 - | Unique for a specific model |
| | | 900 - | Counter |
| 9XX | Others | 920 - | Memory |
| | | 990 - | Others |

SC1xxx: Scanning

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) | | | |
|-----|------|---|--|---|---------------------------------------|
| | | Exposure lamp error | | | |
| | | The peak white level is less than 64/255 digits (8 bits) when scanning the shading plate. | | | |
| | | Exposure lamp defective | | | |
| | | Lamp stabilizer defective | | | |
| | | Exposure lamp connector defective | | | |
| 101 | D | 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 lamp stabilizer. | | | |
| | | 5. Replace the scanner mirror(s) or scanner lens. | | | |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | | 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 | D | Harness between SIO board and scanner motor disconnected |
| | | 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. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | 4. Replace the HP sensor. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) | |
|-----|-----------------------------|---|--|
| | | 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 | Scanner HP sensor defective | D | Harness between SIO board and scanner motor disconnected |
| 121 | | Scanner HP sensor defective | |
| | | Harness between SIO and HP sensor disconnected | |
| | | 1. 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) |
|-----|------|---|
| | | Black level detection error |
| | | The black level cannot be adjusted within the target value during the zero clamp. |
| 141 | D | Harness disconnectedDefective SBU |
| | | Check the cable connection Replace the SBU. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-------|------|--|
| 142 D | | White level detection error |
| | D | The white level cannot be adjusted within the target during auto gain control. |
| 172 | | Dirty exposure glass or optics section |
| | | SBU board defective |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | Exposure lamp defective |
| | | Lamp stabilizer defective |
| | | Scanner motor defective |
| | | 1. Clean the exposure glass, white plate, mirrors, and lens. |
| | | 2. Check if the exposure lamp is lit during initialization. |
| | | 3. Check the harness connection between SBU and BICU. |
| | | 4. Replace the exposure lamp. |
| | | 5. Replace the scanner motor. |
| | | 6. Replace the SBU board. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | D | SBU communication error |
| | | The SBU connection cannot be detected at power on or recovery from the energy save mode. |
| | | Defective SBU |
| 144 | | Defective harness |
| | | Defective detection port on the BICU |
| | | 1. Replace the harness. |
| | | 2. Replace the SBU. |
| | | 3. Replace the BICU. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| 161 | | IPU error |
| | D | The error result of self-diagnostic by the ASIC on the BICU is detected. |
| | | Defective BICU |
| 001 | | Defective connection between BICU and SBU |
| | | 1. Check the connection between BICU and SBU. |
| | | 2. Replace the BICU. |
| 002 | D | The machine detects an error during an access to the Ri. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | Defective BICU board |
| | | Replace the BICU board. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| 165 | 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. |
| | | 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 |
| | | BICU replaced without original NVRAM |
| | | 1. Check the serial number with SP5-811-002. |
| | | If the stored serial number is incorrect, contact your supervisor. |

SC Codes Group 2: Exposure

SC202 RTB 61

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| 202 | D | Polygon motor error 1: ON timeout |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | The polygon mirror motor does not reach the targeted operating speed within the specified time after turning on or changing speed |
| | | Defective or disconnected harness to polygon motor driver board |
| | | Defective polygon motor driver board |
| | | Defective polygon motor. |
| | | Replace the polygon motor. |
| | | 2. Replace the laser optics housing unit. |
| | | 3. Replace the harness. |
| | | 4. Replace the BICU. |

SC203 RTB 61

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | D | Polygon motor error 2: OFF timeout |
| 203 | | 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. |

SC204 RTB 61

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | | 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 | D | Defective polygon motor |
| | | Defective polygon motor driver board |
| | | 1. Check or replace the harness. |
| | | 2. Replace the polygon motor. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| 210 | С | Laser synchronizing detection error: end position [K] |
| 211 | С | Laser synchronizing detection error: end position [Y] |
| 212 | С | Laser synchronizing detection error: end position [M] |
| 213 | С | Laser synchronizing detection error: end position [C] |
| - | - | The laser synchronizing detection signal for the end position of LDB [K], [Y], [M], [C] 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 BICU |
| | | Replace the harness of the LD board. Replace the laser optics housing unit. Replace the BICU. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| 220 | D | Laser synchronizing detection error: start position [K]: LDO |
| 221 | D | Laser synchronizing detection error: start position [K]: LD1 |
| 222 | D | Laser synchronizing detection error: start position [Y]: LDO |
| 223 | D | Laser synchronizing detection error: start position [Y]: LD1 |
| 224 | D | Laser synchronizing detection error: start position [M]: LDO |
| 225 | D | Laser synchronizing detection error: start position [M]: LD1 |
| 226 | D | Laser synchronizing detection error: start position [C]: LD0 |
| 227 | D | Laser synchronizing detection error: start position [C]: LD 1 |
| - | - | The laser synchronizing detection signal for the start position of the LDB [K], [Y], [M], [C] is not output for two seconds after LDB unit turns on while the polygon motor is rotating normally. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | | Disconnected cable from the laser synchronizing detection unit or defective connection |
| | | Defective laser synchronizing detector |
| | | Defective LDB |
| | | Defective BICU |
| | | 1. Check the connectors. |
| | | 2. Replace the laser-synchronizing detector. |
| | | 3. Replace the LDB. |
| | | 4. Replace the BICU. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | D | FGATE ON error: K |
| | | The PFGATE ON signal does not assert within 5 seconds after processing the image in normal job or MUSIC for start position [K]. |
| | | Defective ASIC (Lupus) |
| 230 | | Poor connection between controller and BICU. |
| | | Defective BICU |
| | | Check the connection between the controller board and the BICU. |
| | | 2. Replace the BICU. |
| | | 3. Replace the controller board. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | D | FGATE OFF error: K |
| 231 | | The PFGATE ON signal still asserts within 5 seconds after processing the image in normal job or MUSIC for end position [K]. |
| | | 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) |
|-----|------|---|
| 232 | 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 [Y]. |
| | | See SC 230 for troubleshooting details. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | FGATE OFF error: Y |
| 233 | D | The PFGATE ON signal still asserts within 5 seconds after processing the image in normal job or MUSIC for end position [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) |
|-----|------|---|
| | | FGATE ON error: M |
| 234 | D | The PFGATE ON signal does not assert within 5 seconds after processing the image in normal job or MUSIC for start position [M]. |
| | | See SC 230 for troubleshooting details. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | D | FGATE OFF error: M |
| 235 | | The PFGATE ON signal still asserts within 5 seconds after processing the image in normal job or MUSIC for end position [M]. 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) |
|-----|------|---|
| | | FGATE ON error: C |
| 236 | D | The PFGATE ON signal does not assert within 5 seconds after processing the image in normal job or MUSIC for start position [C]. |
| | | See SC 230 for troubleshooting details. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | | FGATE OFF error: C |
| 237 | D | The PFGATE ON signal still asserts within 5 seconds after processing the image in normal job or MUSIC for end position [C]. The PFGATE ONLY is a least to the contract of the processing the image. |
| | | 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 | С | LD error: K |
| 241 | С | LD error: Y |
| 242 | С | LD error: M |
| 243 | С | LD error: C |
| | | The BICU 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 |
| | | 1. Replace the harness of the LD. 2. Replace the laser optics housing unit. 3. Replace the BICLI. |
| | | 3. Replace the BICU. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | D | Line position adjustment (MUSIC) error |
| | | Line position adjustment fails four consecutive times. |
| | | Pattern sampling error (insufficient image density) |
| 285 | | Defective ID sensors for the line position adjustment |
| | | Defective image transfer belt unit |
| | | Defective PCU(s) |
| | | Defective laser optics housing unit |
| | | Check and reinstall the image transfer belt unit and PCUs. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | 2. Check if each toner bottle has enough toner. |
| | | 3. Replace the ID sensor. |
| | | 4. Replace the image transfer belt unit. |
| | | 5. Replace the PCU(s). |
| | | 6. Replace the laser optics housing unit. |

SC3xx: Image Processing – 1

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| 300 | D | AC charge output error [K] |
| 301 | D | AC charge output error [M] |
| 302 | D | AC charge output error [C] |
| 303 | D | AC charge output error [Y] |
| | | The measured voltage is not proper when IOB measures the charge output for each color. |
| - | - | Disconnected or broken high voltage cable Defective or not installed PCU Defective high voltage power supply 1. Check or replace the connectors. 2. Replace the PCU for the affected color. 3. Replace the high voltage power supply. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| 360 | D | TD sensor (Vt high) error 1: K |
| 361 | D | TD sensor (Vt high) error 1: M |
| 362 | D | TD sensor (Vt high) error 1: C |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| 363 | 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 SP3020-002 for twenty counts. |
| | | The [Vt - Vtref] value of the black, magenta, cyan, or yellow TD sensor exceeds the specified value (default: 5.0V) with SP3020-001. |
| | | Black, magenta, cyan, or yellow TD sensor disconnected |
| - | - | Harness between TD sensor and PCU defective |
| | | Defective TD sensor. |
| | | Check the black, magenta, cyan, or yellow TD sensor connector and harness between the TD sensor and PCU for damage. |
| | | 2. Check the drawer connector. |
| | | 3. Replace the defective PCU. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| 364 | D | TD sensor (Vt low) error 2: K |
| 365 | D | TD sensor (Vt low) error 2: M |
| 366 | D | TD sensor (Vt low) error 2: C |
| 367 | D | TD sensor (Vt low) error 2: Y |
| | - | The Vt value of the black, magenta, cyan, or yellow TD sensor is below the specified value with SP3020-004 (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 PCU for damage. |
| | | Check the drawer connector. Replace the defective PCU. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| 372 | D | TD sensor adjustment error: K |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| 373 | D | TD sensor adjustment error: M |
| 374 | D | TD sensor adjustment error: C |
| 375 | D | TD sensor adjustment error: Y |
| - | - | During TD sensor initialization, the output value of the black, magenta, cyan, or yellow TD sensor is not within the range of the specified value with SP3238-001 to -004 (default: 2.5V) ± 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 PCU. Replace the defective PCU. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| 380 | С | Drum gear position sensor error: K |
| 381 | С | Drum gear position sensor error: M |
| 382 | С | Drum gear position sensor error: C |
| 383 | С | Drum gear position sensor error: Y |
| | | The machine does not detect the drum position signal for 3 seconds at the drum phase adjustment. |
| | | Dirty or defective drum gear position sensor |
| | | Clean the drum gear position sensor. |
| | | 2. Check the harness connection. |
| | | 3. Replace the drum gear position sensor. |
| | | 4. Replace the PCU. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| 396 | D | Drum/Development motor error: K |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| 397 | D | Drum/Development motor error: M |
| 398 | D | Drum/Development motor error: C |
| 399 | 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 |
| | | 1. Check or replace the harness. |
| | | 2. Replace the drum/development motor. |
| | | 3. Replace the 24V fuse on the PSU. |

SC4xx: Image Processing - 2

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | D | ID sensor adjustment error |
| | | When the Vsg error counter reaches "3", the machine detects "SC400". |
| 400 | | The Vsg error counter counts "1" when the Vsg detected by ID sensor is more than the value (default: 4.5V) specified with SP3324-005 or less than the value (default: 3.5V) specified with SP3324-006. |
| | | Dirty or defective ID sensor Defective ID sensor shutter |
| | | 1. Check the harness of the ID sensor. |
| | | 2. Clean or replace the ID sensor. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | 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. |
| | | 1. Replace the IOB. |
| | | 2. Replace the image transfer belt unit. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | D | 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 | | Motor overload Defective image transfer unit motor |
| | | Replace the image transfer belt unit. |
| | | 2. 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. |
| | | 2. Replace the image transfer belt contact motor. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| 443 | | Image transfer unit error |
| | С | The machine detects the encoder sensor error. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | Defective encoder sensor |
| | | 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) |
|-----|------|--|
| | D | 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 | | Broken +24V fuse on PSU |
| 452 | | Defective IOB |
| | | 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) |
|-----|------|--|
| 460 | D | Separation power pack output error |
| | | An interrupt checks the status of the power pack every 20 ms. This SC is issued if the BICU detects a short in the power pack 10 times at D(ac). |
| | | 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. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) | |
|-----|------|---|--|
| | | 3. Replace the IOB. | |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | D | 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 | | 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. |
| | | High voltage leak |
| | | Broken harness |
| 491 | | Defective drum unit or development unit |
| | | Defective high voltage supply unit |
| | | 1. Check or replace the harness. |
| | | 2. Replace the drum unit or paper transfer unit. |
| | | 3. Replace the high voltage supply unit. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| 492 | С | High voltage power: Image transfer/ paper transfer bias output error |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | | An error signal is detected for 0.2 seconds when charging the separation, image transfer bet or paper transfer roller. |
| | | 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. |
| | | 3. 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 (0.2V to 3.5V). |
| | | The thermistor output of the humidity sensor was not within the prescribed range (0.01V to 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 |
| - | - | 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. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | | 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 trayDefective 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) |
| | | For the paper feed unit: |
| | | When the tray lift motor is turned on, the upper limit is not detected within 10 seconds |
| | | For the LCT: |
| | В | SC 503-01 occurs if 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. |
| | | For the paper feed unit: |
| 503-0 | | Defective tray lift motor or connector disconnection |
| 1 | | 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. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | Check and/or replace the defective component. |

| 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 3 consecutive times. |
| | | For the paper feed unit: |
| | | When the tray lowers, the tray lift sensor does not go off within 1.5 sec. |
| | | For the LCT: |
| | В | 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. |
| 503-0 | | 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. |
| 2 | | 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 |
| | | 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) |
| 504-0 | В | For the two-tray paper feed unit When the tray lift motor is turned on, the upper limit is not detected within 10 seconds. If this condition occurs three consecutive times, the SC is generated. 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 • Defective tray lift motor or connector disconnection |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | Defective lift sensor or connector disconnection |
| | | 1. Check the cable connections. |
| | | 2. Check and/or replace the defective component. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-------|------|---|
| | В | Tray 4 error (3 Tray Paper Feed Unit) |
| | | This SC is generated 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. |
| 504-0 | | For the LCT |
| | | 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. Check the cable connections. |
| | | 2. Check and/or replace the defective component. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| 505 | | 5th tray lift malfunction (optional LCT) |
| -01 | В | This SC is generated if the following condition occurs: When the tray lift sensor of the LCT 1200-sheet does not go on after the tray lift motor has turned on to lift the paper tray. When the tray lift sensor of the LCT 1200-sheet does not go off after the tray lift motor has turned on to lower the paper tray. When the tray lift sensor of the LCT 1200-sheet does not go on after the pick-up roller solenoid has turned on at power on. Tray lift motor defective or disconnected Tray lift sensor defective or disconnected |
| | | Check the harness connections. Replace the tray lift motor. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | 3. Replace the tray lift sensor. |
| | | Both tray lift sensor and lower limit sensor are turned on at the same time when the main power is turned on or the right door is closed. |
| | | Tray lift motor defective or disconnected |
| | | Tray lift sensor defective or disconnected |
| -02 | В | Lowe limit sensor defective or disconnected |
| | | 1. Check the harness connections. |
| | | 2. Replace the tray lift motor. |
| | | 3. Replace the tray lift sensor. |
| | | 4. Replace the lower limit sensor. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | | Fusing fan error |
| | | The IOB does not receive the lock signal 10 seconds after turning on the fusing fan. |
| 530 | D | Defective fusing fan motor or connector disconnection |
| | | Defective IOB |
| | | 1. Check the connector and/or replace the fusing fan motor. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| 531 | D | Ventilation fan (at the left side of the machine) motor-front/rear error |
| | | The IOB does not receive the lock signal for 10 seconds after turning on the ventilation fan motor-front/rear. |
| | | Defective ventilation fan motor-front or rear Defective IOB |
| | | Replace the ventilation fan (at the left side of the machine) motor-front or rear. Replace the IOB. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| 532 | D | IH coil fan error |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | | The machine does not detect the fan motor lock signal for 10 seconds while the IH coil fan turns on. |
| | | Disconnected harness |
| | | Overload on the IH coil fan motor |
| | | Defective IH coil fan motor |
| | | Defective IOB |
| | | 1. Check or replace the harness. |
| | | 2. Replace the IH coil fan. |
| | | 3. Replace the IOB. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | D | IH inverter fan error |
| | | The machine does not detect the fan motor lock signal for 10 seconds while the IH inverter fan turns on. |
| 533 | | Disconnected harness Overload on the IH inverter fan motor Defective IH inverter fan motor Defective IOB |
| | | Check or replace the harness. Replace the IH inverter fan. Replace the IOB. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | D | Second duct fan error |
| 534 | | The machine does not detect the fan motor lock signal for 10 seconds while the second duct fan turns on. |
| | | Disconnected harness Overload on the second duct fan motor Defective second duct motor Defective IOB |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | 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 | Paper exit fan error |
| | | The machine does not detect the fan motor lock signal for 10 seconds while the paper exit fan turns on. |
| 535 | | 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. Replace the IOB. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | D | Third duct fan error |
| | | The motor lock signal error is detected for 10 seconds after the motor lock signal was first detected. |
| | | Defective third duct fan motor |
| 536 | | Disconnected or defective harness |
| | | Defective IOB |
| | | Replace the third duct fan motor. |
| | | 2. Check or replace the harness. |
| | | 3. Replace the IOB. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| 540 | D | Fusing/Paper exit motor error |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | | The IOB does not receive the lock signal 2 seconds after turning on the fusing/paper exit motor. |
| | | Motor overload Defective fusing/paper exit motor Shorted +24V fuse on the PSU |
| | | Check or replace the harness. Replace the fusing/paper exit motor. Replace the +24V fuse on the PSU. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | A | Heating roller thermopile error |
| 541 | | The temperature measured by the heating roller thermopile does not reach 0°C for 6 seconds. |
| | | Loose connection of the heating roller thermopile |
| | | Defective heating roller thermopile |
| | | Defective thermopile |
| | | Check if the heating roller thermopile is firmly connected. |
| | | 2. 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 the ready temperature for 190 seconds after the IH inverter on. |
| | | • The heating roller temperature does not reach 80°C for 20 seconds after the IH inverter on. |
| 542 | | Dirty or defective thermopile Defective IH coil unit |
| | | Check if the heating roller thermopile is firmly connected. |
| | | 2. Replace the thermopile. |
| | | 3. Replace the IH coil unit. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | A | Heating roller overheat 1 (software error) |
| | | The detected fusing temperature stays at 245°C for 1 second. |
| | | Defective PSU |
| | | Defective IOB |
| 543 | | Defective BICU |
| | | Related SC code: SC 553 |
| | | 1. Replace the PSU. |
| | | 2. Replace the IOB. |
| | | 3. Replace the BICU. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | A | Heating roller overheat 1 (hardware error) |
| | | During stand-by mode or a print job, the detected heating roller temperature reaches 250 °C. |
| | | Defective PSU |
| | | Defective IOB |
| 544 | | Defective BICU |
| | | Defective fusing control system |
| | | Related SC code: SC 543 |
| | | 1. Replace the PSU. |
| | | 2. Replace the IOB. |
| | | 3. Replace the BICU. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| 547 | 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. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | 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 less than 39. |
| | | Defective fusing relay |
| | | Defective fusing relay circuit |
| | | Shorted +24V fuse on the PSU |
| | | Unstable power supply |
| | | Check the power supply source. |
| | | 2. Replace the +24V fuse on the PSU. |
| | | 3. Replace the PSU |

No. Details (Symptom, Possible Cause, Troubleshooting Procedures) Type Fusing unit rotation error The heating roller rotation sensor does not detect change in the actuator for 0.5 seconds after the fusing/paper exit motor has turned on. Defective fusing/paper exit motor Deformed actuator for the fusing belt sensor Defective fusing belt sensor 548 Broken connection between IH inverter and IOB Α Incorrectly set fusing unit 1. Check if the fusing unit is correctly set. 2. Check or replace the actuator for fusing belt sensor. 3. Replace the fusing belt sensor. 4. Replace the IH inverter. 5. Check the connection between IH inverter and IOB.

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| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| 551 | А | Heating roller thermistor error |
| | | The temperature measured by the heating roller thermistor does not reach 0 °C for 7 seconds. |
| | | Loose connection of pressure roller thermistor |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | 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) |
|-----|------|--|
| 552 | A | Heating roller warm-up error 2 |
| | | The heating roller temperature does not reach the ready temperature for 90 seconds after the IH inverter on. |
| | | • The heating roller temperature does not reach 80°C for 20 seconds after the IH inverter on. |
| | | Defective heating roller thermistor Defective IH inverter |
| | | Related SC code: SC 542 |
| | | Check if the heating roller thermistor is firmly connected. |
| | | 2. Replace the IH inverter. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| 553 | A | Heating roller overheat (software error) |
| | | The detected heating roller temperature stays at 245°C or more for 1 second. |
| | | Defective PSU |
| | | Defective IOB |
| | | Defective BICU |
| | | Related SC code: SC 543 |
| | | 1. Replace the PSU. |
| | | 2. Replace the IOB. |
| | | 3. Replace the BICU. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | A | Heating roller overheat (hardware error) |
| | | The heating roller thermistor detects 250°C or more. |
| | | Defective PSU |
| | | Defective IOB |
| 554 | | Defective BICU |
| | | Defective fusing control system |
| | | 1. Replace the PSU. |
| | | 2. Replace the IOB. |
| | | 3. Replace the BICU. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | С | Zero cross frequency error |
| 557 | | 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. |
| | | Noise (High frequency)Defective PSU |
| | | Check the power supply source. Replace the PSU. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| 559 | A | 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. |
| | | This SC is activated only when SP1159-001 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) |
|-----|------|---|
| 561 | A | Pressure roller thermistor error |
| | | The temperature measured by the thermistor does not reach 0 °C for 37 seconds. |
| | | Loose connection of the thermopile Defective thermopile |
| | | Check if the thermistor is firmly connected. Replace the thermistor. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | A | Pressure roller temperature error |
| | | The temperature of the pressure roller does not reach the ready temperature for 120 seconds after the pressure roller fusing lamp has turned on. |
| | | Dirty thermopile |
| 562 | | Defective pressure roller thermistor |
| | | Defective pressure roller fusing lamp |
| | | 1. Clean the thermopile. |
| | | 2. Replace the thermistor for the pressure roller. |
| | | 3. Replace the pressure roller fusing lamp. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | A | Pressure roller overheat 3 (software error) |
| | | The detected pressure roller temperature stays at 215°C or more for 1 second. |
| 563 | | Defective PSU Defective IOB |
| | | Defective BICU |
| | | 1. Replace the PSU. |
| | | 2. Replace the IOB. |
| | | 3. Replace the BICU. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | A | Pressure roller overheat 3 (hardware error) |
| | | The thermistor detects 220°C or more. |
| | | Defective PSU |
| | | Defective IOB |
| 564 | | Defective BICU |
| | | Defective fusing control system |
| | | 1. Replace the PSU. |
| | | 2. Replace the IOB. |
| | | 3. Replace the BICU. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | A | Pressure roller fusing lamp consecutive full power |
| 565 | | When the fusing unit is not running in the ready condition, the pressure roller fusing lamp keeps ON full power for 180 seconds or more. |
| | | Broken pressure roller fusing lamp Defective pressure roller thermistor |
| | | 1. Replace the pressure roller lamp. |
| | | 2. Replace the pressure roller thermistor. |
| | | 3. Replace the PSU. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | 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 |
| 569 | | Deformed or broken pressure roller contact sensor feeler |
| | | Defective pressure roller contact motor |
| | | Defective fusing unit |
| | | Check or replace the harness of the pressure roller contact sensor. |
| | | 2. Replace the pressure roller contact sensor. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | 3. Replace the pressure roller contact motor. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | D | IH inverter input voltage error |
| | | The IH inverter detects 70V or less/140V or more for 10 seconds. |
| | | Unusual input voltage |
| 581 | | Disconnected CN981 on the IH inverter Defective IH inverter |
| | | Defective in inverter |
| | | 1. Check CN981 on the IH inverter. |
| | | 2. Replace the IH inverter. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | D | IH inverter current error at power on |
| | | The output current from the IH inverter does not reach the proper value when the IH inverter turns on. |
| | | Disconnected power input terminal 1 and 2 |
| 582 | | Defective IH inverter |
| | | Defective IH coil unit |
| | | Defective fusing unit |
| | | 1. Check the power input terminals 1 and 2. |
| | | 2. Replace the IH inverter. |
| | | 3. Replace the IH coil unit. |
| | | 4. Replace the fusing unit. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | | IH coil unit full power (1250W) error |
| 585 | A | The IH coil unit full power (1250W) continues for 220 seconds or more. |
| | | Defective IH inverter |
| | | Defective BICU |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | Defective IOB |
| | | Broken connection between IH inverter and IOB |
| | | Defective thermopile |
| | | 1. Replace the IH inverter. |
| | | 2. Replace the BICU. |
| | | 3. Replace the IOB. |
| | | 4. Check the connection between IH inverter and IOB. |
| | | 5. Replace the thermopile. |

SC6xx: Device Communication

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| 610 | D | Mechanical counter error: K |
| 611 | D | Mechanical counter error: FC |
| - | - | This SC is only for NA models. The machine detects the mechanical counter error when SP5987-001 is set to "1". • Disconnected mechanical counter • Defective mechanical counter 1. Check or replace the mechanical counter. |

| 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. |
| 620 | | Incorrect installation of ARDF |
| | | ARDF defective |
| | | BICU board defective |
| | | External noise |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | 1. Check the cable connection of the ARDF. |
| | | 2. Shut out the external noise. |
| | | 3. Replace the ARDF. |
| | | 4. Replace the BICU 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 problems |
| | | IOB problems |
| | | BICU problems |
| | | PSU problems in the machine |
| | | Main board problems in the peripherals |
| | | Check if the cables of peripherals are correctly connected. |
| | | 2. Replace the IOB or main board of peripherals. |
| | | 3. Replace the BICU if no power is supplied to peripherals. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | D | 2nd Paper Bank communication error |
| 623 | | This SC is not issued for this machine. When a communication error signal between the 1st paper bank and 2nd paper bank is received. |
| | | Loose or disconnected connector |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) | |
|-----|------|--|--|
| | | Check the connection between the main machine and paper feed unit. | |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| | CTL B | Counter device error 1 |
| | | After 3 attempts to send a data frame to the optional counter device via the serial communication line, no ACK signal was received within 100 ms. |
| 632 | | 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. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| | CTL B | Counter device error 2 |
| | | After communication is established, the controller receives the brake signal from the accounting device. |
| 633 | | 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. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| | CTL B | Counter device error 3 |
| | | A backup RAM error was returned by the counter device. |
| 634 | | Counter device control board defective |
| | | Backup battery of counter device defective |
| | | Replace the counter device. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| | CTL B | Counter device error 4 |
| | | A backup battery error was returned by the counter device. |
| 635 | | Counter device control board defective |
| | | Backup battery of counter device defective |
| | | Replace the counter device. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| 636 | CTL D | SD Card Error |
| | | 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. |
| 01 | | No expanded authentication module Defective SD card No DESS module |
| | | Install the expanded authentication module. Install the SD card. Install the DESS module. |
| | - | Version error |
| | | The version of the expanded authentication module is not correct. |
| 02 | | Incorrect module version |
| | | Install the correct file of the expanded authentication module. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| 641 | CTL | BICU control data transfer abnormal |
| | D | A sampling of the control data sent from the BICU reveals an abnormality. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | Controller board defective |
| | | External noise |
| | | BICU board defective |
| | | Replace the controller board. |
| | | 2. Replace the BICU. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|------|----------|---|
| 650 | CTL B | Communication error of the remote service modem (Cumin-M) |
| | | Authentication error |
| | | The authentication for the Cumin-M fails at a dial up connection. |
| 001 | | Incorrect SP settings |
| -001 | _ | Disconnected telephone line |
| | | Disconnected modem board |
| | | 1. Check and set the correct user name (SP5816-156) and password (SP5816-157). |
| | - | Incorrect modem setting |
| 004 | | Dial up fails due to the incorrect modem setting. |
| -004 | | Same as -001 |
| | | 1. Check and set the correct AT command (SP5819-160). |
| | - | Communication line error |
| -005 | | The supplied voltage is not sufficient due to the defective communication line or defective connection. |
| | | Same as -001 |
| | | Consult with the user's local telephone company. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) | |
|-----|------|---|--|
| 651 | CTL | Incorrect dial up connection | |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | -001: Program parameter error |
| | | -002: Program execution error |
| | С | 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) |
|-----|------|--|
| | D | EEPROM error |
| 669 | | Retry of EEPROM communication fails three times after the machine has detected the EEPROM error. |
| | | Caused by noise |
| | | Turn the main power switch off and on. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| | CTL D | Engine start up error |
| 670 | | The ready signal from the engine board is not detected. |
| | | Defective BICU |
| | | 1. Replace the BICU. |

| 671 | CTL D | Engine board mismatch error |
|-----|----------|--|
| | | Engine board and controller mismatch detected. |
| | | Wrong engine board installed. |
| | | Wrong controller board installed. |
| | | Check the type of engine board and controller board. |
| | | 1. Replace the BICU. |
| | | 2. Replace the controller board. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|--|
| 672 | CTL D | Controller-to-operation panel communication error at startup |
| | | After powering on the machine, the communication circuit between the controller and the operation panel is not opened, or communication with controller is interrupted after a normal startup. |
| | | Controller stall |
| | | Controller board installed incorrectly |
| | | Controller board defective |
| | | Operation panel connector loose or defective |
| | | 1. Check the harness connection. |
| | | 2. Replace the controller board. |

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| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | D | RFID: Communication error Communication error occurs when the RFID starts to communicate with the RFID receptor. Retry of RFID communication fails three times after the machine has detected the RFID communication error. Defective RFID reader and writer |
| 681 | | Defective KTD reader and writer Disconnected ASAP I/F No memory chip on the toner cartridge Noise |
| | | Replace the RFID controller board. Replace the toner cartridge. |

| 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. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | No memory chip on the development unit |
| | | Noise |
| | | 1. Replace the PCU. |
| | | 2. Replace the BICU. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | RFID: Unit check error |
| 683 | В | The machine gets RFID communication error even the toner cartridges have not been installed in the machine. |
| | | Caused by noise |
| | | Turn the main power switch off and on. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | D | Memory address command error |
| | | The BICU does not receive a memory address command from the controller 120 seconds after paper is in the position for registration. |
| 687 | | Loose connection Defective controller Defective BICU |
| | | Check if the controller is firmly connected to the BICU. Replace the controller. Replace the BICU. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | | GAVD communication error |
| 690 | D | The I2C bus device ID is not identified during initialization. A device-status error occurs during I2C bus communication. The I2C bus communication is not established due to an error other than a buffer shortage. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | | Loose connection Defective BICU |
| | | Defective LD controller board |
| | | Turn the main switch off and on. Check the cable connection. |
| | | 3. Replace the laser optics-housing unit.4. Replace the BICU board. |

SC7xx: Peripherals

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | | Original stopper HP error |
| | | When the pick-up motor turns on clockwise, the original stopper HP sensor does not detect the home position of the original stopper. |
| | D | Detached timing belt for the pick-up motor |
| | | Defective original stopper HP sensor |
| 700 | | Defective pick-up motor |
| | | Defective DF drive board |
| | | Check the timing belt for the pick-up motor. |
| | | 2. Replace the DF drive board if the pick-up motor does not work correctly. |
| | | 3. Replace the pick-up motor. |
| | | 4. Replace the original stopper HP sensor. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | Pick-up roller HP error |
| 701 | D | When the pick-up motor turns on counterclockwise, the pick-up roller HP sensor does not detect the home position of the pick-up roller. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | | Defective pick-up roller HP sensor |
| | | Defective pick-up motor |
| | | Defective DF drive board |
| | | Replace the DF drive board if the pick-up motor does not work correctly. |
| | | 2. Replace the pick-up motor. |
| | | 1. Replace the pick-up roller HP sensor. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | 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. |
| 721 | В | The 1st failure issues an original jam message, and the 2nd failure issues this SC code. |
| | | Jogger HP sensor disconnected, defective |
| | | Jogger motor disconnected, defective |
| | | Jogger motor overloaded due to obstruction |
| | | Finisher main board and jogger motor |
| | | Check the connections and cables for the components mentioned above. |
| | | 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 |
| 723 | | 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. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | | Defective stack feed-out HP sensor |
| | | 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. |
| | | 2. 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) |
|-----|------|--|
| | 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 |
| 725 | | 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. |
| | | 3. Replace the guide plate position sensor and/or guide plate motor |
| | | 4. Replace the finisher main board. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | В | Finisher Tray 1 shift motor error |
| 730 | | 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 |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | | Shift tray motor of the upper tray overloaded due to obstruction |
| | | Check the connections and cables for the components mentioned above. |
| | | 2. Check for blockages in shift motor mechanism. |
| | | 3. Replace the shift tray HP sensor and/or shift motor |
| | | 4. Replace the finisher main board. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | В | Finisher corner stapler motor error |
| 740 | | 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 • The stapler motor does not switch off within the prescribed time after operating. • The HP sensor of the staple unit does not detect the home position after the staple unit moves to its home position. • The HP sensor of the staple unit detects the home position after the staple unit moves from its home position. |
| | | Staple jam Motor overload Defective stapler motor 1. 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) |
|-----|------|--|
| 741 | В | Finisher corner stapler rotation motor error |
| | | The stapler does not return to its home position within the specified time after stapling. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code. |
| | | Defective stapler rotation motor Overload to the stapler rotation motor |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | Defective stapler rotation HP sensor |
| | | Replace the stapler rotation motor. |
| | | 2. Replace the stapler rotation HP sensor. |

| 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 |
| | | 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). |
| 742 | В | 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) |
|-----|------|--|
| | В | Booklet stapler motor error 1 |
| 743 | | The 1st detection failure issues a jam error, and the 2nd failure issues this SC code. For the 2000/3000-sheet (booklet) finisher The front stapler unit saddle-stitch motor does not start operation within the specified time. |
| | | Motor overload |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | Loose connection of the front stapler motor |
| | | Defective front stapler motor |
| | | 1. Replace the front stapler motor. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| 744 | В | Booklet staple motor error 2 |
| | | The 1st detection failure issues a jam error, and the 2nd failure issues this SC code. For the 2000/3000-sheet (booklet) finisher The rear stapler unit saddle-stitch motor does not start operation within the specified time. |
| | | Motor overload Loose connection of the rear stapler motor Defective rear stapler motor 1. Replace the front stapler motor. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| 714 | В | 1000-sheet booklet finisher: Stack feed motor error |
| 746 | | This SC is not used in this machine. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| 750 | В | 1000/2000/3000-sheet (booklet) finisher: Tray lift motor error |
| | | 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) |
|-----|------|---|
| 753 | В | Return roller motor error |
| | | This occurs during the operation of the lower tray pressure motor |
| | | Motor harness disconnected, loose, defective |
| | | Motor overloaded |
| | | Home position sensor harness disconnected, loose, defective |
| | | Home position defective |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | В | Finisher punch motor error |
| 760 | | The punch HP sensor is not activated within the specified time after the punch motor turned on. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code. |
| | | Punch HP sensor disconnected, defective |
| | | Punch motor disconnected or defective |
| | | Punch motor overload due to obstruction |
| | | Check the connections and cables for the punch motor and HP sensor. |
| | | Check for blockages in the punch motor mechanism. |
| | | 3. Replace the punch HP sensor and/or punch motor |
| | | 4. Replace the finisher main board. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| 761 | В | Finisher folder plate motor error |
| | | 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. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | 3. Replace the folder plate HP sensor and/or folder plate motor |
| | | 4. Replace the finisher main board. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| 763 | 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 2nd failure issues this SC code. |
| | | Motor harness disconnected, loose, defective Defective motor |
| | | Check the connections to the punch movement motor. Defective punch movement motor |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| 764 | 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. Defective paper position sensor slide motor. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | В | Fold unit bottom fence motor error |
| 765 | | 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 |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | Check the connections to the fold unit bottom fence motor. |
| | | 2. Defective fold unit bottom fence motor. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| 766 | В | Stacking sponge roller motor error |
| | | The sponge roller 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 stacking sponge roller motor. Defective stacking sponge roller motor. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| 767 | В | Stack junction gate motor error |
| | | The stack junction gate 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 stack junction gate motor. Defective stack junction gate. |

| 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 |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | | 1. Check the connections to the shift motor and the shift motor HP sensor. |
| | | 2. Defective 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. |
| 791 | | 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) |
|-----|------|--|
| | | Finisher error |
| | | The machine does not recognize the finisher, but recognizes the bridge unit. |
| | | Defective connector |
| 792 | В | Defective harness |
| | | Incorrect installation |
| | | Check the connections between the finisher and the machine. |
| | | 2. Install a new finisher. |

SC8xx: Overall System

SC816 RTB 34

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| | CTL D | Energy saving I/O sub-system error |
| 816 | | The energy saving I/O sub-system detects an error. |
| | | Controller board defective |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | Replace the controller board. |

| No. | Туре | Details (Symptom, Possible Cause | r, Troubleshooting Procedures) |
|----------|------|--|--------------------------------|
| | CTL | Fatal kernel error | |
| 819 | С | Due to a control error, a RAM overflow oc of the following messages was displayed o | |
| [0x503 | 2] | HAIC-P2 error | System program defective |
| [0x5245] | | vm_pageout: VM is full | Controller board defective |
| [0x5355] | | L2 status time out | Optional board defective |
| [554C] | | USB error | Replace controller firmware |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|--------|----------|---|
| 820 | CTL D | Self-diagnostics error: CPU [XXXX]: Detailed error code |
| [0612] | | Cut-in in ASIC occurs. |
| | | Defective ASIC Defective devices in which ASIC detects cut-in. |
| | | 1. Replace the controller board. |

SC824 RTB 40

SC82x RTB 55

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|--------|----------|---|
| 833 | CTL C | Self-diagnostic error 8: Engine I/F ASIC |
| [OF30] | | ASIC (Mandolin) for system control could not be detected. After the PCI configuration, the device ID for the ASIC could not be checked. |
| [OF31] | | Replace the BICU. |
| [OF41] | | ASIC (Mandolin) for system control could not be detected. After the PCI configuration, the device ID for the ASIC could not be checked. |
| | | Replace the BICU. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|--------|------|---|
| [50B1] | | Could not initialize or read the bus connection. |
| | | Check for loose connections at the mother board. |
| | | Replace the mother board |
| | | Value of the SSCG register is incorrect. |
| [50B2] | | Check for loose connections at the mother board. |
| | | Replace the mother board |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| | CTL B | IEEE1394 interface error |
| | | The 1394 interface is unusable. |
| 851 | | Defective IEEE1394 Defective controller. |
| | | 1. Turn the main switch off and on. |
| | | 2. Replace the IEEE1394 interface board. |
| | | 3. Replace the controller. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| | | Wireless LAN card not detected |
| 853 | CTL B | The wireless LAN card is not detected before communication is established, though the wireless LAN board is detected. |
| | | Loose connection |
| | | 1. Check the connection. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| | CTL B | Wireless LAN/Bluetooth card not detected |
| 854 | | The wireless LAN/Bluetooth card is not detected after communication is established, but the wireless LAN board is detected. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | Loose connection |
| | | 1. Check the connection. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | Wireless LAN/Bluetooth card error |
| | | An error is detected in the wireless LAN/Bluetooth card. |
| 855 | CTL | Loose connection |
| 856 | В | Defective wireless LAN/Bluetooth card |
| | | 1. Check the connection. |
| | | 2. Replace the wireless LAN/Bluetooth card. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| 857 | CTL B | USB interface error |
| | | The USB interface cannot be used due to a driver error. |
| | | Defective USB driver Loose USB connection |
| | | Replace the controller board. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | CTL | HDD Encryption unit error 1 |
| 858 | С | A serious error occurs when data is encrypted to update an encryption key with the HDD encryption unit. |
| | [0] | Encryption key acquisition error: The controller fails to get a new encryption key. |
| | | Defective controller board Replace the controller board. |
| | [1] | Encryption key setting for HDD error: The controller fails to copy a new encryption key to the HDD. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | | Defective SATA chip on the controller board Replace the controller board. |
| | [0] | Encryption key setting for HDD error: The controller fails to copy a new encryption key to the HDD. |
| | [2] | Defective SATA chip on the controller board Replace the controller board. |
| | [30] | NVRAM data encryption error 2: An error occurs before the NVRAM data is encrypted. |
| | | Defective controller board Replace the controller board. |
| | [0] | NVRAM data encryption error 2: An error occurs before the NVRAM data is encrypted. |
| | [31] | Other error: A serious error occurs while the data is encrypted. |
| | | Same as SC991 |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| 859 | CTL C | HDD Encryption unit error 2 |
| | | A serious error occurs when the HDD data is encrypted to update an encryption key with the HDD encryption unit. |
| | | HDD check error: The HDD is not correctly installed. |
| | [8] | 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. |
| | [9] | Power failure during the data encryption: |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|------|------|---|
| 859 | CTL | HDD Encryption unit error 2 |
| | С | A serious error occurs when the HDD data is encrypted to update an encryption key with the HDD encryption unit. |
| [10] | | The data encryption (NVRAM and HDD) has not been completed. |
| | | Power failure during the data encryption Initialize the HDD. |
| | | Data read/write error: The DMAC error is detected twice or more. |
| | | Same as SC863 |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| 860 | CTL B | HDD: Initialization error |
| | | The controller detects that the hard disk fails. |
| | | HDD not initialized Defective HDD |
| | | Reformat the HDD. |
| | | 2. Replace the HDD. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| | CTL D | HDD: Reboot error |
| | | The HDD does not become ready within 30 seconds after the power is supplied to the HDD. |
| | | Loose connection |
| 861 | | Defective cables |
| | | Defective HDD |
| | | Defective controller |
| | | Check the connection between the HDD and controller. |
| | | 2. Check and replace the cables. |
| | | 3. Replace the HDD. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | 4. Replace the controller. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| | CTL D | HDD: Read error |
| 863 | | The data stored in the HDD cannot be read correctly. |
| | | Defective HDD |
| | | Defective controller |
| | | 1. Replace the HDD. |
| | | 2. Replace the controller. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|--|
| | CTL D | HDD: CRC error |
| 864 | | While reading data from the HDD or storing data in the HDD, data transmission fails. |
| | | Defective HDD |
| | | 1. Replace the HDD. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| 865 | CTL D | HDD: Access error |
| | | An error is detected while operating the HDD. |
| | | Defective HDD |
| | | 1. Replace the HDD. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| | CTL B | SD card authentication error |
| 866 | | A correct license is not found in the SD card. |
| | | SD-card data is corrupted. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | 1. Store correct data in the SD card. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| | CTL D | SD card error |
| 867 | | The SD card is ejected from the slot. |
| | | 1. Install the SD card. |
| | | 2. Turn the main switch off and on. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| 868 | CTL D | SD card access error • -13 to -3: File system error • Other number: Device error An error report is sent from the SD card reader. • An error is detected in the SD card. 1. For a file system error, format the SD card on your PC. 2. For a device error, turn the mains switch off and on. 3. Replace the SD card. |
| | | 4. Replace the controller. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| | CTL B | Address book error |
| | | An error is detected in the data copied to the address book over a network. |
| | | Defective software program Defective HDD |
| 870 | | Incorrect path to the server |
| | | 1. Initialize the address book data (SP5-846-050). |
| | | 2. Initialize the user information (SP5-832-006). |
| | | 3. Replace the HDD. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| 872 | CTL B | HDD mail data error An error is detected in the HDD at machine initialization. |
| | | Defective HDD |
| | | Power failure during an access to the HDD |
| | | 1. Turn the main switch off and on. |
| | | 2. Initialize the HDD partition (SP5-832-007). |
| | | 3. Replace the HDD. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | HDD mail transfer error |
| | | An error is detected in the HDD at machine initialization. |
| 873 | CTL | Defective HDD |
| | В | 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) |
|-----|----------|---|
| | CTL D | Delete All error 1: HDD |
| 874 | | An error is detected while all of the HDD or NVRAM are formatted physically by the Data Overwrite Security Unit (D377). |
| | | Data Overwrite Security Unit (SD card) not installed Defective HDD |
| | | Install the Data Overwrite Security Unit (D377). Replace the HDD. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| 875 | CTL | Delete All error 2: Data area |
| 0/3 | D | book / iii ciror 2. baid area |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|--|
| | | An error is detected while all of the HDD or NVRAM are formatted logically by the Data Overwrite Security Unit (D377). |
| | | 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) |
|-------|---|---|
| | CTL | Log Data Error |
| 876 D | 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 |
| -001 | | Damaged log data file in the HDD |
| | | 1. Initialize the HDD with SP5832-004. |
| | | Log Data Error 2 |
| 000 | | An encryption module not installed |
| -002 | | 1. Disable the log encryption setting with SP9730-004 ("0" is off.) |
| | | 1. Install the DESS module. |
| | | Log Data Error 3 |
| -003 | | Invalid log encryption key due to defective NVRAM data |
| | | 1. Initialize the HDD with SP5832-004. |
| | | 2. Disable the log encryption setting with SP9730-004 ("0" is off.) |
| | | Log Data Error 4 |
| -004 | | Unusual log encryption function due to defective NVRAM data |
| | | 1. Initialize the HDD with SP5832-004. |
| | | Log Data Error 5 |
| -005 | | Installed NVRAM or HDD which is used in another machine |
| | | Reinstall the previous NVRAM or HDD. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|------|------|---|
| | | 2. Initialize the HDD with SP5832-004. |
| | | Log Data Error 99 |
| -099 | | Other than the above causes |
| | | Ask your supervisor. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| 877 | CTL D | 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 (D377)SD card (D377) not installed |
| | | Replace the NVRAM and then install the new SD card (D377). Check and reinstall the SD card (D377). |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|--|
| 878 | CTL D | TPM system authentication error |
| | | The system firmware is not authenticated by TPM (security chip). |
| | | Incorrect updating for the system firmware |
| | | Defective flash ROM on the controller board |
| | | 1. Replace the controller board. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| | CTL D | File format converter error |
| 880 | | The file format converter does not respond. |
| | | Defective file format converter |
| | | 1. Replace the file format converter. |

SC9xx: Miscellaneous

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| | CTL D | Electric counter error |
| | | Abnormal data in the counters. |
| | | Defective NVRAM |
| 900 | | Defective controller |
| | | Check the connection between the NVRAM and controller. |
| | | 2. Replace the NVRAM. |
| | | 3. Replace the controller. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| 910 | | External Controller Error 1 |
| 911 | | External Controller Error 2 |
| 912 | CTL D | External Controller Error 3 |
| 913 | | External Controller Error 4 |
| 914 | | External Controller Error 5 |
| - | - | The external controller alerted the machine about an error. |
| - | - | Please refer to the instructions for the external controller (application). |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| 919 | CTL D | External Controller Error 6 |
| | | 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 |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|------|---|
| | | Connection to EFI controller loose |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| | CTL D | Printer application error |
| 920 | | An error is detected in the printer application program. |
| | | Defective software Unexpected hardware resource (e.g., memory shortage) |
| | | Onexpected hardware resource (e.g., memory shortage) |
| | | Software defective; switch off/on, or change the controller firmware if the problem is not solved |
| | | 2. Insufficient memory |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| | CTL D | Printer font error |
| | | A necessary font is not found in the SD card. |
| 921 | | A necessary font is not found in the SD card. The SD card data is corrupted. |
| | | Check that the SD card has the correct data. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|---|
| | CTL D | Software performance error |
| | | The software makes an unexpected operation. |
| | | Defective software |
| | | Defective controller |
| 990 | | 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) |
|-----|----------|---|
| | CTL C | Software continuity error |
| 991 | | 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) |
|-----|----------|---|
| | CTL D | Undefined error |
| 992 | | Defective software program |
| | | An error undetectable by any other SC code occurred |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|--|
| 994 | CTL C | 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 there if there are 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 |
| | -001 | Defective BICU NVRAM Replacement error 1. Install the previous NVRAM. 2. Input the serial number with SP5811-004, and turn the main power switch off/on. |
| | -002 | Defective NVRAM Defective controller |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|------|------|---|
| 995 | D | CPM setting error |
| | | Update the controller firmware. Install a new NVRAM, and turn off and on the main power switch after SC995-002 has occurred. |
| | -003 | Incorrect type controller installed Defective controller 1. Replace the controller with the correct type. |
| -004 | | Incorrect model controller installed. 1. Replace the controller with the correct model. |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) |
|-----|----------|--|
| 997 | CTL B | Application function selection error The application selected by the operation panel key does not start or ends abnormally. 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. |
| | | 2. 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) |
|-----|----------|---|
| 998 | CTL D | Application start error |
| | | No applications start within 60 seconds after the power is turned on. |
| | | Loose connection of RAM-DIMM, ROM-DIMM |
| | | Defective controller |

| No. | Туре | Details (Symptom, Possible Cause, Troubleshooting Procedures) | |
|-----|----------------------------|---|--|
| | | Software problem | |
| | | 1. Check the setting of SP5875-001. If the setting is set to "1 (OFF)", change it to "0 (OFF)". | |
| | | 2. Check if the RAM-DIMM and ROM-DIMM are correctly connected. | |
| | | 3. Reinstall the controller system firmware. | |
| | 4. Replace the controller. | | |

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

4. Appendix: Process Control Error Conditions

Process Control Tables

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. Do the developer initialization again when done in SP mode. Reinstall the engine main firmware if the result is the same. 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 IOB 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. |

4

| 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 defectiveSame as 53 |
| 99 | Unexpected error | Process control fails. | Power Failure Check the power source. |

Vsg Adjustment Result

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" (SP3-32 4-004) | 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 | - | - |

Note

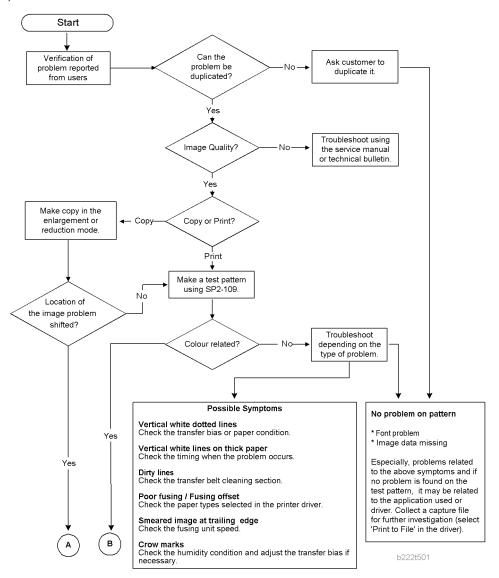
• For details, see the "Troubleshooting Guide - Line Position Adjustment" section.

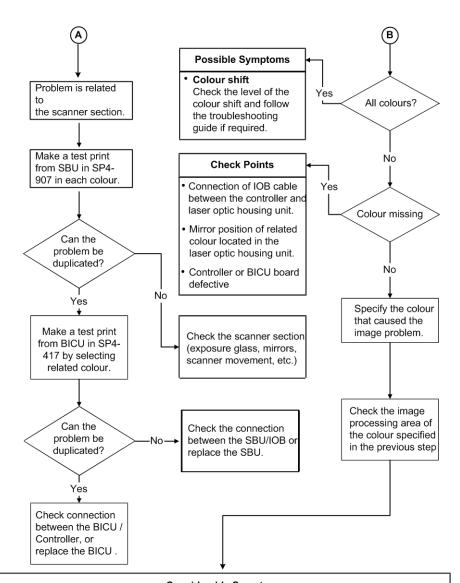
5. Appendix: Troubleshooting Guide

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).
- 2. Use SP2-194-007 to check if the result of the line position adjustment is correct (0: Completed successfully, 1: Not completed). If the result is "1", refer to 'Countermeasure list for color registration errors'.
- 3. Do SP2-111-001 (Mode a: fine adjustment twice).
- 4. Use SP2-194-007 to check if the result of the line position adjustment is correct (0: Completed successfully, 1: Not completed). If the result is "1", refer to 'Countermeasure list for color registration errors'.
- 5. Put some 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 |
|--|---|
| | Defective laser optics housing unit shutter |
| | Defective image processing unit |
| White image, Abnormal image, Low density | Low density of test pattern |
| density | Defective BICU |
| | 1. Replace the shutter motor. |

| Test pattern check | Possible cause/Countermeasure |
|------------------------------|--|
| | Replace the high voltage power supply unit. |
| | 3. Do the forced process control (SP3-011-001) or supply some toner (SP3-015-xxx). |
| | 4. Replace the BICU. |
| | Defective ID sensor shutter |
| | Defective ID sensor |
| Normal image, but with color | Defective BICU |
| registration errors | 1. Replace the ID sensor shutter solenoid. |
| | 2. Replace the ID sensor. |
| | 3. Replace the BICU. |

• 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 M, C, Y are shifted by more than ±15 mm from the main scan registration of K. | Defective laser optics housing unit Defective BICU Replace the laser optics housing unit. Replace the BICU. |
| The sub scan registrations of M, C, Y are shifted by more than ±20 mm from the sub scan registration of K. | Defective image transfer belt Defective drive units Defective BICU Replace the image transfer belt. Replace the drum motor. Replace the BICU. |
| The main scan registration is shifted by more than ±0.66 mm, but only at the central area of the image on the output. | Defective ID sensor at center Deformed center area on the image transfer belt Defective BICU Replace the ID sensor. Replace the image transfer belt. Replace the BICU. |

| Test pattern check | Possible cause/Countermeasure |
|---|--|
| The skew for M, C, Y is more than ±0.75 mm from the main scan registration of K | Defective PCU Defective laser optics housing unit Defective BICU Reinstall or replace the PCU. Replace the laser optics housing unit. Replace the BICU. |
| Others | Skew correction upper limit error Defective BICU Defective laser optics housing unit Replace the BICU. 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, | Defective laser optics housing unit shutter |
| Low density | Defective image processing unit |
| | Low density of test pattern |
| | Defective BICU |
| | 1. Replace the shutter motor. |
| | 2. Replace the high voltage power supply unit. |
| | 3. Do the forced process control (SP3-011-001) or supply some toner (SP3-015-xxx). |

| Test pattern check | Possible cause/Countermeasure |
|--|--|
| | 4. Replace the BICU. |
| Normal image, but with color registration errors | Defective ID sensor shutter |
| | Defective ID sensor |
| | Defective BICU |
| | 1. Replace the ID sensor shutter solenoid. |
| | 2. Replace the ID sensor. |
| | 3. Replace the BICU. |

- 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 M, C, Y are shifted by more than ±1.4 mm from the main scan registration of K. | No defective component Defective laser optics housing unit Defective BICU Do SP2-111-003 again. Replace the laser optics housing unit. Replace the BICU. |
| The sub scan registrations of M, C, Y 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 BICU 1. Do SP2-111-003 again. 2. Replace the image transfer belt. 3. Replace the drum motor. 4. Replace the BICU. |

| 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 BICU Replace the ID sensor. Replace the image transfer belt. Replace the BICU. |
| The skew for M, C, Y is more than ± 0.75 mm from the main scan registration of K. – at the end of the scan line? | Defective PCU Defective laser optics housing unit Defective BICU Reinstall or replace the PCU. Replace the laser optics housing unit. Replace the BICU. |
| Others | Skew correction upper limit error Defective BICU Defective laser optics housing unit Replace the BICU. 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. |

After Executing SP2-111-001

• 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 BICU Replace the ID sensor. Replace the image transfer belt. Replace the BICU. |
| The main scan registrations of M, C, Y are shifted. | Defective laser optics housing unit Defective ID sensor Defective BICU Incorrect SP value Replace the laser optics housing unit. Replace the ID sensor. Replace the BICU. Adjust the value with SP2-182-004 to -021. |
| The sub scan registrations of M, C, Y are shifted. | Defective image transfer belt Defective drive units Defective ID sensor Defective BICU Incorrect SP value Replace the image transfer belt. Replace the ID sensor. Replace the drum motor. Replace the BICU. Adjust the value with SP2-182-022 to -039. |
| The skew of M, C, Y is different. | Defective PCU Defective laser optics housing unit Defective IOB Reinstall or replace the PCU. |

| Test pattern check | Possible cause/Countermeasure |
|---|--|
| | 2. Replace the laser optics housing unit. |
| | 3. Replace the IOB. |
| The sub scan lines are shifted. Shifted | Defective PCU |
| lines appear cyclically. | Defective drive unit |
| | Drum phase adjustment error |
| | Do SP1-902-001 (Drum phase adjustment); see Replacement and Adjustment – Drive Unit – Gear Unit for details. |
| | 2. Reinstall or replace the PCU. |
| | 3. Check or replace the drive unit. |

6. Appendix: Jam Detection

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 |
|-------------|------------|---|----------------|
| 7504 3 | Tray 1: ON | Paper is not fed from tray 1. | Α |
| 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). | Υ |
| 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. | Α |
| 7504 9 | Duplex: ON | Paper is jammed at the duplex unit. | Z |
| 7504 10 | - | - | - |

| Jam Code SP | Display | Description | LCD Display |
|-------------|------------------------------|--|----------------|
| 7504 11 | Vertical Transport 1: ON | Vertical transport sensor 1 does not detect paper from tray 1. | А |
| 7504 12 | Vertical Transport 2: ON | Vertical transport sensor 2 does not detect paper from tray 2. | А |
| 7504 13 | Bank Transport 1 | Vertical transport sensor 1 or relay sensor does not detect paper from tray 3 (LCT). | Y |
| 7504 15 | - | - | - |
| 7504 16 | - | - | - |
| 7504 17 | Registration: ON | Registration sensor does not detect paper. | В |
| 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 |
| 7504 53 | Bank SEF Sensor 1 | Vertical transport sensor or relay sensor 1 does not turn off. | Y |

| Jam Code SP | Display | Description | LCD Display |
|-------------|------------------------------------|--|----------------|
| 7504 54 | Bank SEF Sensor 2 | Vertical transport sensor 2 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 (B408) | Paper does not reach to the entrance sensor or stay at the entrance sensor. | R1-R2 |
| 7504 101 | Finisher Shift Tray Exit (B408) | Paper does not reach to the lower tray exit sensor or stay at the lower tray exit sensor. | R1-R2 |
| 7504 102 | Finisher Staple (B408) | Paper does not reach to the staple tray entrance sensor or stay at the staple tray entrance sensor. | R3-R5 |
| 7504 103 | Finisher Exit (B408) | 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 |

| Jam Code SP | Display | Description | LCD Display |
|-------------|--|--|----------------|
| 7504 104 | - | - | - |
| 7504 105 | Finisher Tray Lift Motor (B408) | 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 (B408) | 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 (B408) | 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 (B408) | 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 (B408) | 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 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 |

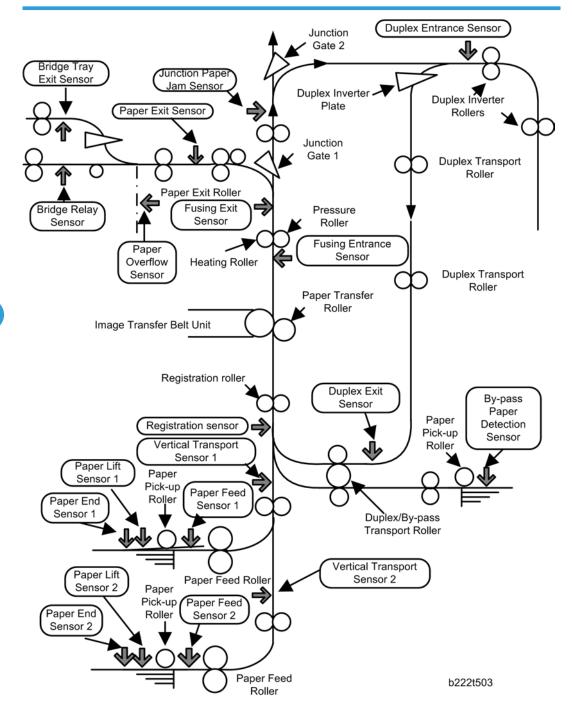
| Jam Code SP | Display | Description | LCD Display |
|-------------|---|--|----------------|
| 7504 194 | Finisher Stapler Exit: EUP (B804/B805) | Stapling tray paper sensor does not turn on after the finisher entrance sensor has turned on. Stapling tray paper sensor does not turn off after it has turned 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 | - | - | - |
| 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. | R8-R12 |
| | | Fold unit exit sensor does not turn off after the fold rollers have stopped. | |
| 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 |

| Jam Code SP | Display | Description | LCD Display |
|-------------|--|---|----------------|
| 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 |
| 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 on/off after the stack junction gate motor has turned on. | R8-R12 |
| 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 |

Paper Size Code

| Size Code | Paper Size | Size Code | Paper Size |
|-----------|------------|-----------|------------|
| 05 | A4 LEF | 141 | B4 SEF |
| 06 | A5 LEF | 142 | B5 SEF |
| 14 | B5 LEF | 160 | DLT SEF |
| 38 | LT LEF | 164 | LG SEF |
| 44 | HLT LEF | 166 | LT SEF |
| 132 | A3 SEF | 172 | HLT SEF |
| 133 | A4 SEF | 255 | Others |
| 134 | A5 SEF | - | - |

Sensor Locations



7. Appendix: Electrical Component Defects

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 |
|-----|-----------------------------------|------------|----------|-----------|----------------------------------|
| | | | | Open | "Open Cover" is displayed. |
| SW1 | Right Door Open Switch | L | CN204/1 | Shorted | "Open cover" cannot be detected. |
| | | | | Open | "Open Cover" is displayed. |
| S9 | Duplex Door | L | CN232/B9 | Shorted | "Open cover" cannot be detected. |
| | ID Sensor: M | Α | CN211/ | Open/ | |
| | TO Sensor. M | ^ | 7, 11 | Shorted | |
| | ID Sensor: C | A | CN211/ | Open/ | SC400 |
| | TD Selisor. C | | 8, 12 | Shorted | 30400 |
| | ID Sensor: Y | A | CN211/ | Open/ | |
| S1 | TO Selisor. 1 | | 9, 13 | Shorted | |
| 31 | ID Sensor: Front | A | CN211/1 | Open/ | SC258 |
| | To Sensor. From | | CINZIII | Shorted | 30230 |
| | ID Sensor: Center and K | A | CN211/2 | Open/ | SC400 / SC258 |
| | 15 ochsor. Cenier dila K | | CINZII/Z | Shorted | 00400 / 00200 |
| | ID Sensor: Rear | A | CN211/3 | Open/ | SC258 |
| | 15 ochsor. Redi | | C14211/0 | Shorted | 00200 |

| No. | Sensor Name/ Sensor Board Name | Activ e | CN | Condition | Symptom |
|------------|--|------------|----------------------|------------------|---|
| | | | | Open | Jam A (Jam8, 17) |
| S12 | Registration Sensor | L | CN224/A2 | Shorted | Jam A, B (Jam1) |
| S30 | Drum Gear Position Sensor-K | Н | CN222/A2 | Open/ Shorted | SC380/SC396 |
| \$31 | Drum Gear Position Sensor-M | Н | CN222/ A5 | Open/ Shorted | SC380/SC397 |
| \$32 | Drum Gear Position Sensor-C | Н | CN222/ A8 | Open/ Shorted | SC380/SC398 |
| \$33 | Drum Gear Position Sensor-Y | Н | CN222/A11 | Open/ Shorted | SC380/SC399 |
| S26 | Toner End Sensor - K | | CN207/A1 CN207/B9 | Open | Toner end cannot be detected. |
| S27 | Toner End Sensor - Y | | CN207/ | | |
| S28 | Toner End Sensor - C | L | B12 | | Toner end is detected when |
| S29 | Toner End Sensor - M | | CN207/ B15 | Shorted | there is enough toner. |
| S34 | Image Transfer Belt Rotation Sensor | H/L | CN208/11 | Open/ Shorted | SC443 |
| 0.1.0 | Vertical Transport Sensor | | 0) 1000 (17 | Open | Jam A (Jam3, 11) |
| S19 | 1 | L | CN230/A7 | Shorted | Jam A, B (Jam1) |
| S20 | Paper End | ı | CN230/ | Open | Paper end is not detected when there is no paper in the paper tray. |
| S24 | Sensor 1, 2 | L | A10, B10 | Shorted | Paper end is detected when there is paper in the paper tray. |
| S21 S25 | Paper Lift Sensor 1, 2 | Н | CN230/ A13, B13 | Open/ Shorted | SC501, SC502 |

| No. | Sensor Name/ Sensor Board Name | Activ e | CN | Condition | Symptom |
|--------------|------------------------------------|------------|---------------------------------|------------------|--|
| S23 | Vertical Transport Sensor | L | CN1220 /B7 | Open | Jam A (Jam4, 12) |
| 323 | 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. |
| \$16 \$17 | 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 |
| S22 | Tray 2 Paper Feed Sensor | L | CN230/B4 | Open/ Shorted | Jam A, B |
| SW4 | Torred Control | L | CN224/40 | Open | Tray 1 is not detected when tray 1 is set. |
| 3004 | Tray 1 Set Switch | L | CN224/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 |
| SW2 | | | CN232/ | Open | Paper on the by-pass tray is not detected when paper is set. |
| 3002 | By-pass Paper Detection | L | A15 | Shorted | Paper on the by-pass tray is detected when paper is not set. |
| \$10 | By-pass Paper Length | | CN232/ | Open | Davis an aims annua |
| 310 | Sensor | L | B12 | Shorted | Paper size error |
| S8 | Fusing Entrance Senser | L | CN232/B6 | Open | Jam C (Jam 18) |
| | Fusing Entrance Sensor | L | CINZUZ/ DU | Shorted | Jam C (Jam 1) |
| S6 | Duplex Entrance Sensor | L | CN232/A8 | Open | Jam Z (Jam 26/27) |

| No. | Sensor Name/ Sensor Board Name | Activ e | CN | Condition | Symptom |
|------|-----------------------------------|------------|---------------------------------|------------------|--|
| | | | | Shorted | Jam Z (Jam 1) |
| 67 | D F :: C | | CN232/ | Open | Jam Z (Jam 25) |
| S7 | Duplex Exit Sensor | L | A11 | Shorted | Jam Z (Jam 1) |
| S39 | TD Sensor - K | А | CN227/A7 | Open/ Shorted | SC372 |
| \$40 | TD Sensor - M | А | CN227/ A15 | Open/ Shorted | SC373 |
| S41 | TD Sensor - C | А | CN227/B7 | Open/ Shorted | SC374 |
| S42 | TD Sensor - Y | А | CN227/ B15 | Open/ Shorted | SC375 |
| C.4 | F : F :: C | | CN1004/10 | Open | Jam C (Jam 19) |
| S4 | Fusing Exit Sensor | L | CN204/12 | 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. |
| SW3 | Waste Toner Bottle Set | L | CN1224/A7 | Open | Waste toner bottle is not detected when the waste toner bottle is set. |
| 3443 | Switch | L | CN224/A7 | 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 |

| No. | Sensor Name/ Sensor Board Name | Activ e | CN | Condition | Symptom |
|------|-----------------------------------|------------|------------------|------------------|--|
| S35 | Temperature/ Humidity Sensor | А | CN231/ 25, 27 | Open/ Shorted | SC498 Printed image has some problems such as rough image, dirty background, weak image or poor fusing. |
| \$36 | Thermopile | А | CN209/16 | Open/ Shorted | SC541 |
| TH2 | Thermistor - Heating Roller | А | CN212/22 | Open/ Shorted | SC551 |
| TH1 | Thermistor - Pressure Roller | А | CN212/18 | Open/ Shorted | SC561 |
| S3 | D | | CN1204/0 | Open | Jam C (Jam 20) |
| 33 | Paper Exit Sensor | L | CN204/9 | Shorted | Jam C (Jam 1) |
| | | | | Open | Paper overflow message is not displayed when the paper overflow condition still remains. |
| \$5 | Paper Overflow Sensor | L | CN204/15 | Shorted | Paper overflow message is displayed when the paper overflow condition does not remain. |
| CAE | Original Width Sensor 1 | А | CN313/14 SIO | Open/ Shorted | Original paper size cannot be detected. |
| S45 | Original Width Sensor 2 | А | CN313/11 SIO | Open/ Shorted | Original paper size cannot be detected. |
| CA/ | Original Length Sensor 1 | А | CN313/8 SIO | Open/ Shorted | Original paper size cannot be detected. |
| S46 | Original Length Sensor 2 | А | CN313/5 SIO | Open/ Shorted | Original paper size cannot be detected. |

| No. | Sensor Name/ Sensor Board Name | Activ e | CN | Condition | Symptom |
|-----|-----------------------------------|------------|----------------|------------------|---|
| S47 | Original Length Sensor 3 | А | CN313/2 SIO | Open/ Shorted | Original paper size cannot be detected. |
| S43 | Scanner HP Sensor | Н | CN318/2 | Open | SC120 |
| | | | SIO | Shorted | SC121 |
| S44 | Platen Cover Sensor | L | CN318/5 SIO | Open/ Shorted | Platen cover open cannot be detected. |
| S37 | Heating Roller Rotation Sensor | H/L | CN210/2 | Open/ Shorted | SC584 |
| S38 | Pressure Roller HP Sensor | L | CN210/5 | Open/ Shorted | SC569 |
| S2 | Junction Paper Jam Sensor | L | CN204/6 | Open/ Shorted | Jam C (Jam 24/64) |

Blown Fuse Conditions

Power Supply Unit

| | Rat | ing | Complement of the second of th |
|---------|----------|-------------|--|
| Fuse | 115V | 220V - 240V | Symptom when turning on the main switch |
| FU1 | 15A/125V | 8A/250V | No response. (5V power to the PSU is not supplied.) |
| FU2 | 10A/125V | 6.3A/250V | No response. (5V power to the BICU and controller is not supplied.) |
| FU3 | 2A/250V | 1A/250V | 5V power to the scanner heater and tray heater is not supplied. |
| FU4 | 1A/250V | 1A/250V | 5V power to the SIO and heater is not supplied. |
| FU5 | 5A/250V | 5A/250V | 5V power to the IOB not supplied. |
| FU6 | 2A/250V | 2A/125V | 5VS power to the BICU not supplied. |

| E | Rat | ing | C |
|------|-----------|-------------|--|
| Fuse | 115V | 220V - 240V | Symptom when turning on the main switch |
| FU7 | 10A/125V | 10A/125V | 24VS power to the IOB not supplied. |
| FU8 | 10A/125V | 10A/125V | 24VS power to the IOB not supplied. |
| FU9 | 6.3A/125V | 6.3A/125V | 24V power to the IOB not supplied. |
| FU10 | 6.3A/125V | 6.3A/125V | 24V power to the SIO not supplied. |
| FU11 | 6.3A/125V | 6.3A/125V | 24V power to the BICU and MB not supplied. |
| FU12 | 6.3A/125V | 6.3A/125V | 24V power to the PFU or LCT not supplied. |
| FU13 | 6.3A/125V | 6.3A/125V | 24V power to the finisher not supplied. |
| FU14 | 5A/250V | 5A/250V | 5V power to the BICU not supplied. |

IH Inverter

| F | Rat | ing | Complement of the second of th |
|------|----------|-------------|--|
| Fuse | 115V | 220V - 240V | Symptom when turning on the main switch |
| FU1 | 15A/125V | 8A/250V | 15V power to the IH coil unit is not supplied. SC689 occurs. |
| FU2 | 113 | 5°C | No response |
| FU3 | 113 | 5°C | No response |
| FU4 | 1A/2 | 250V | 15V power to the IH coil unit is not supplied. SC689 occurs. |

ACAUTION

• For continued protection against risk of fire, replace only with same type and rating of fuse.

8. Appendix: SP Mode Tables

System Service Mode

Service Mode Table

SP1-XXX (Feed)

| 1001 | [Leading Edge Registration] Lead (Tray Location, Paper Type, Colo | • | Registration Adjustment Paper Type -> Plain, Thick 1 or Thick 2 |
|------|--|--------------|---|
| 1001 | Adjusts the leading edge registro | ition by cha | nging the registration motor operation timing for |
| 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 | |
| 010 | By-pass: Thick 2 | *ENG | [-9 to 9 / 0.0 / 0.1 mm/step] |
| 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 |
| 021 | By-pass: Middle Thick: 1200 | *ENG |
| 022 | By-pass: Thick 1:1200 | *ENG |
| 023 | Duplex: Plain:1200 | *ENG |
| 024 | Duplex: Middle Thick:1200 | *ENG |
| 025 | Duplex: Thick 1:1200 | *ENG |

| 1002 | [Side to Side Reg.] Side-to-Side Registration Adjustment | | | | |
|------|---|------|--------------------------------------|--|--|
| | Adjusts the side-to-side registration by changing the laser main scan start position for each mode. | | | | |
| 001 | By-pass Table | *ENG | [-4 to 4 / 0.0 / 0.1 mm/step] | | |
| 002 | Paper Tray 1 | *ENG | | | |
| 003 | Paper Tray 2 | *ENG | | | |
| 004 | Paper Tray 3 | *ENG | | | |
| 005 | Paper Tray 4 | *ENG | | | |
| 006 | Duplex | *ENG | | | |
| 008 | Large Capacity Tray | *ENG | | | |

| 1003 | [Paper Buckle] Paper Buckle Adjustment (Tray Location, Paper Type), Paper Type: N: Normal, TH: Thick | | | | |
|------|--|------|-----------------------------------|--|--|
| | Adjusts the amount of paper buckle at the registration roller by changing the paper feed timing. | | | | |
| 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 | [-9 to 5 / -2 / 1 mm/step] | | |
| 007 | Paper Tray2/3/4/5/LCT: Plain | *ENG | | | |
| 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 to 5 / 0 / 1 /-to] |
| 013 | By-pass: Middle Thick | *ENG | [-9 to 5 / 0 / 1 mm/step] |
| 014 | By-pass: Thick 1 | *ENG | [-9 to 5 / -2 / 1 mm/step] |
| 018 | Duplex: Plain | *ENG | [0, 5/0/1 /,] |
| 019 | Duplex: Middle Thick | *ENG | [-9 to 5 / 0 / 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 | [-9 to 5 / 0 / 1 mm/step] |
| 023 | Tray 2/3/4/5LCT: Plain: 1200 | *ENG | |
| 024 | Tray 2/3/4/5LCT: Mid: 1200 | *ENG | |
| 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 | 29 By-pass: Thick 1: 1200 | | |
| 030 | 030 Duplex: Plain: 1200 | | [0 to 5 / 0 / 1 mm / to 1 |
| 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 | | | |
|------|--|------|--|--|
| 001 | LG | *ENG | [0 or 1 / 0 / -] 0: OFF, 1: ON | |
| | 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) | | | |

| 1103 | [Fusing Idling] Fusing Idling Adjustment |
|------|--|
|------|--|

| 001 | Extra Idling Time | *ENG | [0 to 60 / 0 / 1 sec/step] Not used | | |
|-----|--|------|---|--|--|
| 001 | Specifies how long the extra idling operation is executed. | | | | |
| 014 | Minimum Idling Time | *ENG | [0 to 10 / 0 / 1 sec/step] | | |
| | Extra Idling Time (L) | *ENG | Specifies how long the extra idling operation is executed for each environment. | | |
| 016 | | | [0 to 250 / 70 / 1 sec/step] | | |
| | | | Each environment is determined with SP1112-001 and 002. | | |
| 017 | Extra Idling Time (H) | *ENG | [0.1. 0.50 / 62 - 20 62 - 25 / 1 / 1 / 1 / 1 | | |
| 018 | Extra Idling Time (M) | *ENG | [0 to 250 / C2c : 20, C2d : 35 / 1 sec/step] | | |
| 019 | Pressure TempThreshold | *ENG | [10 to 200 / 180 / 1 deg/step] | | |

| | [Idling Before Job] | | | | |
|------|---|--|---|--|--|
| | Paper Type -> Plain, Thin, Thick, OHP, Middle Thick, Special | | | | |
| | Pressure Temp: Pressure Roller | Pressure Temp: Pressure Roller Temperature | | | |
| 1104 | Feed or Fusing Temp: Heating | Roller Tem | perature | | |
| | Specifies the threshold tempero | iture for th | e paper feed waiting in each mode. | | |
| | The machine does not feed paper until the temperature of the pressure or heating roreaches temperatures specified by the following SPs. | | | | |
| 001 | Feed: Pressure Temp: Plain: FC | *ENG | | | |
| 002 | Feed: Pressure Temp: Plain: FC:PR | *ENG | [10 to 150 / 20 / 1 deg/step] | | |
| 003 | Feed: Pressure Temp: Mid: BW | *ENG | [0 to 150 / C2c : 70, C2d : 90 / 1 deg/step] | | |
| 004 | Feed: Pressure Temp: Mid: FC | *ENG | | | |
| 005 | Feed: Pressure Temp: Plain: BW: PR | *ENG | [10 to 150 / 20 / 1 deg/step] | | |
| 006 | Feed: Pressure Temp: Carl: M- Humidity | *ENG | [10 to 150 / 90 / 1 deg/step] | | |
| 007 | Feed: Pressure Temp: Carl: H- Humidity | *ENG | [10 to 150 / 100 / 1 deg/step] | | |

| O10 Feed: Plain1: BW: Offset *ENG O11 Feed: Plain1: 2C: Offset *ENG O12 Feed: Plain1: 2C: Offset *ENG O13 Feed: Plain: Standby: Offset *ENG O14 Feed: Middle Thick: Ready: Offset *ENG O15 Feed: Middle Thick: Standby: Offset *ENG O15 Feed: Middle Thick: Standby: Offset *ENG O16 Feed: Thick: Ready: Offset *ENG O16 Feed: Thick: Standby: Offset *ENG O17 Feed: Thick: Standby: Offset *ENG O18 Feed: Plain1: Ready: 3C: Offset *ENG O18 Feed: Plain1: Ready: 3C: Offset *ENG O100 / C2c: 20, C2d: 10 / 1 deg/step] O17 Feed: Plain1: Ready: 3C: Offset *ENG O100 / C2c: 20, C2d: 10 / 1 deg/step] O19 Feed: Plain1: Ready: 3C: Offset *ENG O100 / C2c: 10, C2d: 5 / 1 deg/step] O20 Fusing Temp: Plain: Ready *ENG O100 / C2c: 10, C2d: 5 / 1 deg/step] O21 Fusing Temp: Mid Speed: *ENG O100 / O1000 / O100 / O100 / O100 / O100 / O100 / O1000 / O100 / O100 / O1 | | I | 1 | I |
|--|-----|------------------------------|------|--|
| 011 Feed: Plain1: 2C: Offset *ENG 012 Feed: Plain1: 2C: Offset: P *ENG [0 to 100 / 10 / 1 deg/step] 013 Feed: Plain: Standby: Offset *ENG 014 Feed: Middle Thick: Ready: *ENG [0 to 100 / 5 / 1 deg/step] 015 Feed: Middle Thick: Standby: Offset *ENG 016 Feed: Thick: Standby: Offset *ENG 017 Feed: Thick: Standby: Offset *ENG 018 Feed: Plain1: Ready: 3C: Offset *ENG 019 Feed: Plain1: Ready: 3C: Offset: P *ENG 020 Fusing Temp: Plain: Ready *ENG [0 to 100 / C2c: 10, C2d: 5 / 1 deg/step] 021 Fusing Temp: Mid Speed: Ready *ENG [0 to 20 / 10 / 1 deg/step] 021 Fusing Temp: Mid Speed: Ready *ENG [0 to 20 / 20 / 1 deg/step] 022 Fusing Temp: Mid Speed: Ready: Bw: Offset *ENG [0 to 20 / 0 / 1 deg/step] 023 Feed: Plain2: Ready: Bw: Offset *ENG [0 to 100 / 100 / 1 deg/step] 024 Feed: Plain2: Ready: 2C: Offset: P *ENG [0 to 100 / 20 / 1 deg/step] 025 | 010 | Feed: Plain 1: BW: Offset | *ENG | [0 to 100 / 100 / 1 deg/step] |
| 013 Feed: Plain: Standby: Offset *ENG 014 Offset *ENG 015 Feed: Middle Thick: Standby: Offset *ENG 016 Feed: Thick: Ready: Offset *ENG 017 Feed: Thick: Standby: Offset *ENG 018 Offset *ENG Oto 100 / 5 / 1 deg/step] 018 Feed: Plain1: Ready: Offset *ENG 019 Offset *ENG Oto 100 / 5 / 1 deg/step] 019 Feed: Plain1: Ready: 3C: Offset *ENG 019 Offset: P *ENG Oto 100 / C2c: 20, C2d: 10 / 1 deg/step] 020 Fusing Temp: Plain: Ready *ENG Oto 100 / C2c: 10, C2d: 5 / 1 deg/step] 021 Fusing Temp: Mid Speed: Ready *ENG Oto 20 / 10 / 1 deg/step] 022 Fusing Temp: Mid Speed: Standby *ENG Oto 20 / 20 / 1 deg/step] 023 Offset: P *ENG Oto 20 / 0 / 1 deg/step] 024 Feed: Plain2: Ready: 2C: Offset: P *ENG 025 Offset: P *ENG Oto 100 / 20 / 1 deg/step] 026 Offset: P *ENG Oto 100 / 20 / 1 deg/step] 027 Feed: Plain2: Ready: 3C: Offset: P *ENG Oto 100 / 20 / 1 deg/step] 028 Oto 100 / 20 / 1 deg/step] 029 Oto 100 / 20 / 1 deg/step] 020 Oto 100 / 20 / 1 deg/step] 021 Oto 100 / 20 / 1 deg/step] 022 Offset: P *ENG Oto 100 / 20 / 1 deg/step] 023 Oto 100 / 20 / 1 deg/step] 024 Oto 100 / 20 / 1 deg/step] 025 Oto 100 / 20 / 1 deg/step] 026 Oto 100 / 20 / 1 deg/step] 027 Oto 100 / 20 / 1 deg/step] 028 Oto 100 / 20 / 1 deg/step] 029 Oto 100 / 20 / 1 deg/step] 020 Oto 100 / 20 / 1 deg/step] 021 Oto 100 / 20 / 1 deg/step] 022 Oto 100 / 20 / 1 deg/step] 023 Oto 100 / 20 / 1 deg/step] 024 Oto 100 / 20 / 1 deg/step] 025 Oto 100 / 20 / 1 deg/step] 026 Oto 100 / 20 / 1 deg/step] 027 Oto 100 / 20 / 1 deg/step] 028 Oto 100 / 20 / 20 / 20 / 20 / 20 / 20 / 20 | 011 | Feed: Plain 1: 2C: Offset | *ENG | [0 10 100 / 100 / 1 deg/ siep] |
| Teed: Middle Thick: Ready: Offset | 012 | Feed: Plain 1: 2C: Offset: P | *ENG | [0 to 100 / 10 / 1 deg/step] |
| Offset | 013 | Feed: Plain: Standby: Offset | *ENG | |
| 015 Offset *ENG [0 to 100 / 100 / 1 deg/step] 016 Feed: Thick: Ready: Offset *ENG [0 to 100 / 5 / 1 deg/step] 017 Feed: Plain 1: Ready: 3C: Offset *ENG [0 to 100 / C2c: 20, C2d: 10 / 1 deg/step] 018 Feed: Plain 1: Ready: 3C: Offset: P *ENG [0 to 100 / C2c: 10, C2d: 5 / 1 deg/step] 019 Feed: Plain 1: Ready: 3C: Offset: P *ENG [0 to 20 / 10 / 1 deg/step] 020 Fusing Temp: Mid Speed: Ready *ENG [0 to 20 / 20 / 1 deg/step] 021 Fusing Temp: Mid Speed: Ready: Bw: Offset *ENG [0 to 20 / 0 / 1 deg/step] 023 Feed: Plain2: Ready: Bw: Offset *ENG [0 to 100 / 100 / 1 deg/step] 024 Feed: Plain2: Ready: 2C: Offset: P *ENG [0 to 100 / 20 / 1 deg/step] 025 Feed: Plain2: Ready: 3C: Offset: P *ENG [0 to 100 / 20 / 1 deg/step] 026 Feed: Plain2: Ready: 3C: Offset: P *ENG [0 to 100 / 10 / 1 deg/step] | 014 | , | *ENG | [0 to 100 / 5 / 1 deg/step] |
| 017 Feed: Thick: Standby: Offset *ENG [0 to 100 / 5 / 1 deg/step] 018 Feed: Plain1: Ready :3C: Offset *ENG [0 to 100 / C2c: 20, C2d: 10 / 1 deg/step] 019 Feed: Plain1: Ready :3C: Offset:P *ENG [0 to 100 / C2c: 10, C2d: 5 / 1 deg/step] 020 Fusing Temp: Plain: Ready *ENG [0 to 20 / 10 / 1 deg/step] 021 Fusing Temp: Mid Speed: Ready *ENG [0 to 20 / 20 / 1 deg/step] 022 Fusing Temp: Mid Speed: Standby *ENG [0 to 20 / 0 / 1 deg/step] 023 Feed: Plain2: Ready :Bw: Offset *ENG [0 to 100 / 100 / 1 deg/step] 024 Feed: Plain2: Ready :2C: Offset :P *ENG [0 to 100 / 20 / 1 deg/step] 025 Feed: Plain2: Ready :3C: Offset :P *ENG [0 to 100 / 20 / 1 deg/step] 026 Feed: Plain2: Ready :3C: Offset :P *ENG [0 to 100 / 10 / 1 deg/step] 027 Feed: Plain2: Ready :3C: Offset :P *ENG [0 to 100 / 10 / 1 deg/step] | 015 | · · | *ENG | |
| The proof of the | 016 | Feed: Thick: Ready: Offset | *ENG | [0 to 100 / 100 / 1 deg/step] |
| Offset Offset Offset Offset: Feed: Plain1: Ready :3C: Offset: Of | 017 | Feed: Thick: Standby: Offset | *ENG | [0 to 100 / 5 / 1 deg/step] |
| Offset:P Offset | 018 | , | *ENG | [0 to 100 / C2c: 20, C2d: 10 / 1 deg/step] |
| 021 Fusing Temp: Mid Speed: Ready *ENG [0 to 20 / 20 / 1 deg/step] 022 Fusing Temp: Mid Speed: Standby *ENG [0 to 20 / 0 / 1 deg/step] 023 Feed: Plain2: Ready :Bw: Offset *ENG 024 Feed: Plain2: Ready :2C: Offset *ENG 025 Feed: Plain2: Ready :2C: Offset :P *ENG 026 Feed: Plain2: Ready :3C: Offset *ENG 027 Feed: Plain2: Ready :3C: Offset :P *ENG 027 Feed: Plain2: Ready :3C: Offset :P *ENG 027 Feed: Plain2: Ready :3C: Offset :P *ENG | 019 | , | *ENG | [0 to 100 / C2c: 10, C2d: 5 / 1 deg/step] |
| Ready | 020 | Fusing Temp: Plain: Ready | *ENG | [0 to 20 / 10 / 1 deg/step] |
| 022 Standby *ENG [0 to 20 / 0 / 1 deg/step] 023 Feed: Plain2: Ready :Bw: Offset *ENG 024 Feed: Plain2: Ready :2C: Offset *ENG 025 Feed: Plain2: Ready :2C: Offset :P *ENG 026 Feed: Plain2: Ready :3C: Offset *ENG 027 Feed: Plain2: Ready :3C: Offset :P *ENG 027 Feed: Plain2: Ready :3C: Offset :P *ENG | 021 | | *ENG | [0 to 20 / 20 / 1 deg/step] |
| Offset Offset Offset Offset Offset Feed: Plain2: Ready :2C: Offset :P Offset: P Offset TENG [0 to 100 / 100 / 1 deg/step] *ENG [0 to 100 / 100 / 1 deg/step] *ENG [0 to 100 / 20 / 1 deg/step] *ENG Offset TENG [0 to 100 / 20 / 1 deg/step] *ENG Offset: P *ENG Offset: P TENG [0 to 100 / 20 / 1 deg/step] | 022 | | *ENG | [0 to 20 / 0 / 1 deg/step] |
| 024 Feed: Plain2: Ready :2C: Offset *ENG 025 Feed: Plain2: Ready :2C: Offset :P *ENG 026 Feed: Plain2: Ready :3C: Offset *ENG 027 Feed: Plain2: Ready :3C: Offset :P *ENG [0 to 100 / 10 / 1 deg/step] | 023 | | *ENG | [0100 / 100 / 1] |
| Offset : P Offset | 024 | , | *ENG | [U to 100 / 1 00 / 1 deg/step] |
| 026 Feed: Plain2: Ready :3C: | 025 | , | *ENG | [0. 100 /00 /1 /.] |
| Offset :P | 026 | , | *ENG | [U to 100 / 20 / 1 deg/step] |
| 030 Feed: F: Ready: U limit | 027 | · | *ENG | [0 to 100 / 10 / 1 deg/step] |
| | 030 | Feed: F: Ready : U limit | *ENG | [0 to 100 / 15 / 1 deg/step] |

| 031 | Offset: Feed Start: F | *ENG | | |
|-----|---|------------|---|--|
| 032 | Feed: Glossy: Ready : U limit | *ENG | | |
| 033 | Offset: Feed Start: Glossy | *ENG | | |
| 040 | 1 bin: Paper Feed: Pressure Temp | *ENG | [20 to 120 / 90 / 1 deg/step] | |
| 040 | Specifies the threshold of the pressure roller for the paper feed to the 1bin tray in 600 dpi mode. | | | |
| 041 | F:1bin: Paper Feed: Pressure Temp | *ENG | [20 to 120 / 80 / 1 deg/step] | |
| | Specifies the threshold of the prode. | essure rol | ler for the paper feed to the 1bin tray in 1200 dpi | |

| 1105 | [Fusing Temperature] Fusing Temperature Adjustment | | | |
|------|--|------|---|--|
| | (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 | Fusing Ready Temp. | *ENG | [150 to 200 / C2c : 165 , C2d : 170 / 1 deg/ step] | |
| | Specifies the heating roller target temperature for the ready condition. | | | |
| | Fusing Ready: Offset | *ENG | [0 to 100 / 5 / 1 deg/step] | |
| 002 | Sets the heating roller offset temperature for the printing ready condition. Ready temperature = (Target temperature specified in SP1-105-1) – Temperature specified in this SP mode | | | |
| | Fusing Ready Temp: H | *ENG | [150 to 200 / C2c : 165 , C2d : 170 / 1 deg/step] | |
| 007 | Sets the heating roller offset temperature at the end of the heating roller. This value is one of the thresholds to determine if the machine is at the heating roller target temperature during warm-up. | | | |
| 008 | Ready Target Add Pressure | *ENG | [0 to 200 / 80 / 1 deg /step] | |

| | Sets the upper limit temperature of the heating roller at the end of the heating roller. This value is one of the thresholds to determine if the machine is at the heating roller target temperature during warm-up. | | |
|------|--|---------------|--|
| | Stand-By: Pressure | * ENG | [60 to 130 / 90 / 1 deg/step] |
| 012 | Sets the pressure roller offset te the machine is at the heating ro | • | . This value is one of the thresholds to determine if temperature during warm-up. |
| | Panel Off Mode 2: Pressure | * ENG | [60 to 130 / 90 / 1 deg /step] |
| 013 | - | | oller. This value is one of the thresholds to determine et temperature during the warm-up. |
| 01.4 | Low Power: Pressure | * ENG | [60 to 130 / 90 / 1 deg /step] |
| 014 | Specifies the stand-by tempera | iture for the | pressure roller. |
| 030 | Plain: FC: Simplex | *ENG | |
| 032 | Plain: FC: Duplex | *ENG | [130 to 180 / C2c: 160, C2d: 165 / 1 deg / |
| 034 | Plain: BW: Simplex | *ENG | step] |
| 036 | Plain: BW: Duplex | *ENG | |
| 038 | Thin: FC: Simplex | *ENG | [130 to 180 / C2c : 155 , C2d : 160 / 1 deg/ |
| 042 | Thin: BW: Simplex | *ENG | step] |
| 046 | Thick 1: FC: Simplex | *ENG | |
| 048 | Thick 1: FC: Duplex | *ENG | [140, 100 / 175 / 1] |
| 050 | Thick 1: BW: Simplex | *ENG | [140 to 190 / 175 / 1 deg /step] |
| 052 | Thick 1: BW: Duplex | *ENG | |
| 054 | Thick 2: FC: Simplex | *ENG | |
| 055 | Thick 2: BW: Simplex | *ENG | [140 + 100 / 140 / 1 1 1 1 1 |
| 056 | OHP: FC: Simplex | *ENG | [140 to 190 / 160 / 1 deg /step] |
| 057 | OHP: BW: Simplex | *ENG | |
| 058 | Special 1: FC: Simplex | *ENG | [120 to 190 / C2c: 165, C2d: 170 / 1 deg/ |
| 060 | Special 1: FC: Duplex | *ENG | step] |

| 062 | Special 1: BW: Simplex | *ENG | | | |
|-----|--|------|--|--|--|
| 064 | Special 1: BW: Duplex | *ENG | | | |
| 066 | Special 2: FC: Simplex | *ENG | | | |
| 068 | Special 2: FC: Duplex | *ENG | | | |
| 070 | Special 2: BW: Simplex | *ENG | | | |
| 072 | Special 2: BW: Duplex | *ENG | | | |
| 074 | Special 3: FC: Simplex | *ENG | | | |
| 076 | Special 3: FC: Duplex | *ENG | | | |
| 078 | Special 3: BW: Simplex | *ENG | | | |
| 080 | Special 3: BW: Duplex | *ENG | | | |
| 000 | Recovery Target Temp. | *ENG | [130 to 180 / C2c: 165, C2d: 170 / 1 deg / step] | | |
| 083 | Specifies the target temperature for the print mode without printing/copying job after the machine's recovery. | | | | |
| 089 | Thick 3: FC: Simplex | *ENG | | | |
| 091 | Thick 3: BW: Simplex | *ENG | [140, 100 / 170 / 1 / ,] | | |
| 093 | Envelop: FC | *ENG | [140 to 190 / 170 / 1 deg/step] | | |
| 094 | Envelop: BW | *ENG | | | |
| 095 | Middle Thick: Middle Speed: FC: Simplex | *ENG | | | |
| 097 | Middle Thick: Middle Speed: FC: Duplex | *ENG | [100+ 170 / 145 / 1 1 1 1 1 | | |
| 099 | Middle Thick: Middle Speed: BW: Simplex | *ENG | [120 to 170 / 165 / 1 deg /step] | | |
| 101 | Middle Thick: Middle Speed: BW: Duplex | *ENG | | | |
| 103 | Middle Thick: Constant Speed: Offset | *ENG | [0 to 15 / C2c: 5, C2d: 10 / 1 deg /step] | | |

| 113 | Thick 4: FC: Simplex | *ENG | [140 to 190 / 175 / 1 deg/step] |
|-----|------------------------------|------|---|
| 114 | Thick 4: BW: Simplex | *ENG | [140 to 190 / 175 / 1 deg/step] |
| 115 | Thick 5: FC: Simplex | *ENG | [140 to 190 / 170 / 1 deg/step] |
| 116 | Thick 5: BW: Simplex | *ENG | [140 to 190 / 170 / 1 deg / step] |
| 120 | Plain2: FC: Simplex | *ENG | |
| 122 | Plain2: FC: Duplex | *ENG | [130 to 180 / C2c : 165, C2d : 170 / 1 deg/ step] |
| 124 | Plain2: BW: Simplex | *ENG | |
| 126 | Plain2: BW: Duplex | *ENG | [130 to 180 / C2c : 165 , C2d : 170 / 1 deg/ step] |
| 128 | F: Plain 1: FC : Simplex | *ENG | [100 to 170 / 105 / 1 do m/ston] |
| 130 | F: Plain 1: BW : Simplex | *ENG | [120 to 170 / 135 / 1 deg/step] |
| 132 | F: Plain2: FC: Simplex | *ENG | [120 to 170 / 140 / 1 deg /step] |
| 134 | F: Plain2: BW: Simplex | *ENG | [120 to 170 / 140 / 1 deg / step] |
| 136 | F: Middle Thick: FC: Simplex | *ENG | [120 to 170 / 145 / 1 deg /step] |
| 138 | F: Middle Thick: BW: Simplex | *ENG | [12010170 / 145 / 1 deg / siep] |
| 140 | F: Thick 1: FC: Simplex | *ENG | [120 to 170 / 150 / 1 deg/step] |
| 141 | F: Thick 1: BW: Simplex | *ENG | [12010170 / 130 / 1 deg/slep] |
| 142 | Glossy: Plain1 | *ENG | [120 to 170 / 135 / 1 deg/step] |
| 144 | Glossy: Plain2 | *ENG | [120 to 170 / 140 / 1 deg/step] |
| 146 | Glossy: Middle Thick | *ENG | [120 to 170 / 145 / 1 deg/step] |
| 148 | 1 bin: Plain | *ENG | [130 to 180 / C2c : 150 , C2d : 155 / 1 deg/ step] |
| 150 | F: 1bin: Plain | *ENG | [120 to 170 / 135 / 1 deg/step] |

| 1106 | [Fusing Temperature Display] Fusing Temperature Display (Heating or Pressure) | | |
|------|---|---|-------------------------------|
| 1100 | Displays the current temperature of the heating and pressure rollers. | | |
| 001 | Fusing: Center | _ | [-20 to 250 / 0 / 1 deg/step] |

| | | | The heating roller has two lamps. One heats the center of the heating roller and the other heats both ends of the heating roller. |
|-----|--------------|---|---|
| 002 | Fusing: Ends | - | [-10 to 250 / 0 / 1 deg/step] |
| 003 | Pressure | - | The heating roller has two lamps. One heats the center of the heating roller and the other heats both ends of the heating roller. |

| 1100 | [Forced Ready Setting] | | | | |
|------|-------------------------|------|--|--|--|
| 1108 | Japan use only | | | | |
| 001 | ON/OFF | *ENG | [0 or 1 / 0 / 1] 0: OFF, 1: ON | | |
| 002 | Target Voltage Ratio | *ENG | [85 to 115 / 92 / 1 %/step] | | |
| 003 | Measured Voltage Ratio | *ENG | [70 to 120 / 100 / 1 %/step] | | |
| 005 | Temp: Threshold | *ENG | [10 to 32 / 17 / 1 deg/step] | | |
| 006 | Auto Off Timer | *ENG | [0 to 255 / 0 / 1 min/step] | | |
| 007 | Time | *ENG | [7 to 60 / C2c : 14.0 , C2d : 24.0 / 0.1 sec/ step] | | |
| 008 | 10s Forced Ready ON/OFF | *ENG | [0 or 1 / 1 / 1] 0: OFF, 1: ON | | |
| 009 | 10s Forced Ready Time | *ENG | [0 to 20 / 9.0 / 0.1 sec/step] | | |

| 1109 | [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 255 / 240 / 1 sec/step] | |
| | Specifies the fusing rotation time | e before ex | ecuting SP1109-001. | |

| 003 | Stop Time | * ENG | [5 to 30 / 10 / 1 sec/step] | | |
|------|--|-------|-----------------------------|--|--|
| | Specifies the time for measuring the nip. | | | | |
| 00.4 | Pressure Position | * ENG | [0 to 3 / 0 / 1] | | |
| 004 | Specifies the pressure position for measuring the nip. | | | | |

| 1110 | [Pressure Release] | | | | |
|------|---|-------|--|--|--|
| | Shift Time | *ENG | [0 to 240 / 1 / 1 min/step] DFU | | |
| 001 | Adjusts the time when the pressure roller moves from the pressing position to the no-pressing position. | | | | |
| 002 | Feed Pressure: 1 | *ENG | | | |
| 003 | Feed Pressure: 2 | * ENG | Not used [0 to 700 / 0 / 1 msec/step] | | |
| 004 | Feed Pressure: 3 | * ENG | [c ic / cc / c / i inicce/ slop] | | |
| | | | DFU | | |
| 005 | SC Detection | * ENG | [0 or 1 / 1 / 1] | | |
| | | | 0: OFF, 1: ON | | |

| 1112 | [Environmental Correction: Fusing] | | | | |
|--|---|---------------|-------------------------------------|--|--|
| 001 | Temp.: Threshold: Low | *ENG | [10 to 23 / 17 / 1 deg/step] | | |
| 001 | Specifies the threshold temper | ature for low | temperature condition. | | |
| 002 | Temp.: Threshold: High | *ENG | [24 to 40 / 30 / 1 deg/step] | | |
| 002 | Specifies the threshold temperature for high temperature condition. | | | | |
| | Low Temp. Correction | *ENG | [0 to 15 / 5 / 1 deg/step] | | |
| Specifies the temperature correction for the heating roller. When the low tem condition (specified with SP1112-001) is detected, the value of this SP is adderoller temperature. | | | | | |
| | High Temp. Correction | *ENG | [0 to 15 / 0 / 1 deg/step] | | |
| 004 | Specifies the temperature correction for the heating roller. When the high temperature condition (specified with SP1112-002) is detected, the value of this SP is subtracted from the heating roller temperature. | | | | |

| | Reference Temp | *ENG | [15 to 25 | 5 / 20 / 1 deg/step] |
|-----|--|------|-----------|------------------------------------|
| 005 | Specifies the temperature correction for to condition (specified with SP1112-002) if the heating roller temperature. | | • | |
| 006 | Low Temp Correction a | | *ENG | [0 to 15 / 5 / 1 deg/step] |
| 007 | Reference Temp Correction a | | *ENG | [0 to 15 / 0 / 1 deg/step] |
| 008 | High Temp Correction a | | *ENG | [0 to 15 / 0 / 1 deg/step] |
| 009 | Low Temp Correction b | | *ENG | [0 to 15 / 10 / 1 deg/step] |
| 010 | Reference Temp Correction b | | *ENG | [0 to 15 / 0 / 1 deg/step] |
| 011 | High Temp Correction b | | *ENG | [0 to 15 / 0 / 1 deg/step] |

| 1113 | [Stand-by Time] | | | | |
|------|---|------|-------------------------------------|--|--|
| | Shift Time | *ENG | [0 to 180 / 60 / 1 sec/step] | | |
| 001 | Specifies the interval from the ready mode to the stand-by mode. | | | | |
| | If the machine does not do any printing job for the time specified with this SP after the heating roller has reached the ready temperature, the machine returns to the stand-by mode. | | | | |
| | After Recovery | *ENG | [0 to 60 / 10 / 1 sec/step] | | |
| 003 | Specifies the time for keeping the target temperature after recovery (SP1105-083) with any jobs. | | | | |
| 004 | Time After Paper Feed | *ENG | [0 to 10 / 0 / 1 sec/step] | | |
| 006 | Offset: Center and Ends | *ENG | [0 to 100 / 100 / 1 deg/step] | | |

| 1115 | [Stand-by Idling] | | | |
|------|---|------|---------------------------------------|--|
| | Interval | *ENG | [1 to 240 / 60 / 1 min/step] | |
| 001 | g stand-by mode. ents the roller deformation. | | | |
| 000 | Idling Time | *ENG | [0 to 60 / 0.7 / 0.1 sec/step] | |
| 002 | Specifies the length of each idling operation during stand-by mode. | | | |

| 111 <i>7</i> | [Idling Time After Heater OFF] | | | | |
|--|--|--|--|--|--|
| Time After Heater OFF *ENG [0 to 20 / 0 / 1 sec/step] | | | | | |
| Specifies the idling time without the lamp on after job end. | | | | | |
| | This idling prevents the heating roller overheating after job end. | | | | |

| 1118 | [Curl Temperature Correction] | | | | |
|------|---|------|--|--|--|
| 001 | ON/OFF | *ENG | [0 or 1 / 0 / 1] 0: OFF, 1: ON | | |
| | Enables or disables the curl correction mode. | | | | |
| 002 | Humidity 1 | *ENG | [0 to 100 / 60 / 1 %] | | |
| 003 | Humidity 2 | *ENG | [0 to 100 / 80 / 1 %] | | |

| 1120 | [Continues Print Mode Switch] | | | |
|--|--|--|--|--|
| Paper Feed Condition *ENG [0 or 2 / 0 / 1] | | | | |
| 001 | Selects the paper feed timing. O: Productivity priority, 2: Fusing quality priory | | | |

| 1121 | [Idling Time After Job] | | |
|------|-------------------------|------|-------------------------------------|
| 001 | Discontinues Job | *ENG | [0 to 200 / 15 / 1 sec/step] |
| 002 | Job End: Min | *ENG | [0 to 200 / 5 / 1 sec/step] |
| 003 | Job End: Max | *ENG | [0 to 200 / 15 / 1 sec/step] |

| 1122 | [Repeat Print temp. Correction] DFU | | |
|------|-------------------------------------|------|---------------------------------------|
| 001 | JOB Interval: Plain | *ENG | [0.4-120/20/1/.4] |
| 002 | JOB Interval: M-Thick | *ENG | [0 to 120 / 30 / 1 sec/step] |
| 003 | Shift Time a | *ENG | [0 to 1200 / 150 / 1 sec/step] |
| 004 | Shift Time b | *ENG | [0 to 1200 / 150 / 1 sec/step] |
| 005 | Shift Time c | *ENG | [0 to 1200 / 300 / 1 sec/step] |

| 006 | Shift Time d | *ENG | [0 to 1200 / 80 / 1 sec/step] |
|-----|----------------|------|--|
| 007 | Shift Time e | *ENG | [0 to 1200 / 150 / 1 sec/step] |
| 008 | Shift Time f | *ENG | [0 to 1200 /50 / 1 sec/step] |
| 009 | Shift Time g | *ENG | [0 to 1200 / 0 / 1 sec/step] |
| 010 | Shift Time h | *ENG | [0 to 1200 / 40 / 1 sec/step] |
| 011 | Offset Value a | *ENG | [0 to 20 / 5 / 1 deg/step] |
| 012 | Offset Value b | *ENG | [0 to 20 / 10 / 1 deg/step] |
| 013 | Offset Value c | *ENG | [0 to 20 / 5 / 1 deg/step] |
| 014 | Offset Value d | *ENG | [0 to 20 / 5 / 1 deg/step] |
| 015 | Offset Value e | *ENG | [0 to 20 / 0 / 1 deg/step] |
| 016 | Offset Value f | *ENG | [0 to 20 / EU/NA/AA / 1 deg/step] EU/AA: 0, NA: 5 |
| 017 | Offset Value g | *ENG | [0 to 20 / 0 / 1 deg/step] |
| 018 | Offset Value h | *ENG | [0 to 20 / 5 / 1 deg/step] |

| 1123 | [Fuser Cleaning] | | | | |
|--------------------------|--|---------------------------------------|--------------------------------------|--|--|
| | Select Operation | *ENG | [0 or 1 / 0 / -] | | |
| 001 | Enables or disables the fusing cleaning mode. 0: Cleaning OFF, 1: Cleaning ON | | | | |
| 002 Compulsion execution | | - | Execute the fusing cleaning mode. | | |
| 003 | Control temperature | *ENG | [100 to 185 / 185 / 1°C/step] | | |
| 003 | Adjusts the temperature for the fusing cleaning mode. | | | | |
| 004 | Continuance time | *ENG | [1 to 300 / 160 / 1 sec/step] | | |
| 004 | Adjusts the execution time for the fusing cleaning mode. | | | | |
| | Operation interval | *ENG [1 to 240 / 5 / 1 K/step] | | | |
| 005 | Adjusts the execution interval for the fusing cleaning mode. 1K= 100 sheets | | | | |

| 006 Count when operating | *ENG | [0 to 240,000 / - / 1 page/step] |
|--------------------------|------|----------------------------------|
|--------------------------|------|----------------------------------|

| 1159 | [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 | | | |

| 1801 | [Motor Speed Adj.] FA | | |
|------|--------------------------------|------|--------------------------------------|
| 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 / 01 /019//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] |
| 800 | Registration:Thick 2:Low | *ENG | [24 2 / 11 /019//44] |
| 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 | [-4 to 4 / 0.0 / 0.1 %/step] |

| | | | I |
|-----|---------------------------------|------|---------------------------------------|
| 020 | Duplex CCW:Middle Thick:Mid | *ENG | |
| 021 | Duplex CCW:Middle Thick:high | *ENG | |
| 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 | |
| 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 | |
| 047 | Registration: 115: Middle Thick | *ENG | [-2 to 2 / 0 / 0.05 %/step] |
| 060 | KOpcDevMot:High | *ENG | |
| 061 | KOpcDevMot:Low | *ENG | [-4 to 4 / -0.6 / 0.01 %/step] |

| 062 | KOpcDevMot:Mid | *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 / 1.9 / 0.01 %/step] |
| 073 | Fusing: Mid | *ENG | [-4 to 4 / 1.4 / 0.01 %/step] |
| 074 | Fusing: Low | *ENG | [-4 to 4 / 1.7 / 0.01 %/step] |
| 075 | TransferMot:High | *ENG | |
| 076 | TransferMot:Mid | *ENG | [-4 to 4 / - 0.2 / 0.01 %/step] |
| 077 | TransferMot:Low | *ENG | |
| 078 | TonerMot | *ENG | [-30 to 30 / 10 / 5 %/step] |
| 079 | Fusing Exit Motor: 1200 | *ENG | [-4 to 4 / 2.1 / 0.01 %/step] |
| 100 | Drum Adjust | *ENG | [0 or 1 / 1 / 1] 0: Off, 1: On |
| | Enables or disables the drum amplitud | e adjustme | ent. |
| 101 | 230mm/s:M | *ENG | |
| 102 | 230mm/s:C | *ENG | [-10 to 10 / C2c: 0 / 1 step/step] [-9 to 9 / C2d: 0 / 1 step/step] |
| 103 | 230mm/s:Y | *ENG | [/ 10 / / Ozu. v / 1 step/ step] |
| 104 | 205mm/s:M | *ENG | |
| 105 | 205mm/s:C | *ENG | [-7 to 7 / 0 / 1 step/step] |
| | | | |

| 106 | 205mm/s:Y | *ENG | |
|-----|-----------|------|------------------------------------|
| 107 | 154mm/s:M | *ENG | |
| 108 | 154mm/s:C | *ENG | [-14 to 14 / 0 / 1 step/step] |
| 109 | 154mm/s:Y | *ENG | |
| 110 | 77mm/s:M | *ENG | |
| 111 | 77mm/s:C | *ENG | [-7 to 7 / 0 / 1 step/step] |
| 112 | 77mm/s:Y | | |

| 1901 | [Recovery Temp. Ope. Time] | | |
|------|----------------------------|------|--|
| 004 | - | *ENG | [0 to 60 / 10 / 1 sec/step] Not used |

| 1902 | [Amplitude Control] | | |
|------|---------------------|--------------------------------------|--|
| 001 | Execute | - Execute the drum phase adjustment. | |
| | | | [0 to 3 / 0 / 1] |
| | | | Displays the result of the drum phase adjustment. |
| 002 | Result | *ENG | 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 |

| 1907 | [Paper Feed Timing Adj.] DFU | | | | |
|------|------------------------------|------|--------------------------------------|--|--|
| 002 | Feed Solenoid ON: Plain | *ENG | [-10 to 40 / 0 / 2.5 mm/step] | | |
| 003 | Feed Clutch OFF: Plain | *ENG | | | |
| 004 | Feed Clutch ON: Plain | *ENG | | | |
| 005 | Inverter Stop Position | *ENG | [-10 to 10 / 0 / 1 mm/step] | | |
| 006 | Reverse Stop Position | *ENG | | | |

| 007 | Re-Feed Stop Position | *ENG | |
|-----|-------------------------|------|--------------------------------------|
| 008 | By-pass Solenoid OFF | *ENG | [0 to 40 / 0 / 1 mm/step] |
| 009 | By-pass Solenoid Re-ON | *ENG | [0 or 1 / 1 / -] |
| 010 | By-pass Feed Clutch ON | *ENG | [-10 to 10 / 0 / 1 mm/step] |
| 012 | Feed Solenoid ON: Thick | *ENG | [-10 to 40 / 0 / 2.5 mm/step] |
| 013 | Feed Clutch OFF: Thick | *ENG | [10+ 10 / 0 / 1 / +] |
| 014 | Feed Clutch ON: Thick | *ENG | [-10 to 10 / 0 / 1 mm/step] |

| 1908 | [Paper Bank Feed Timing Adj.] DFU | | | | |
|------|-----------------------------------|------|------------------------------------|--|--|
| 008 | Feed Clutch ON: Plain | *ENG | | | |
| 009 | Feed Clutch ON: Thick | *ENG | | | |
| 010 | Bridge Junction Gate Sol-ON | *ENG | | | |
| 011 | Bridge Junction Gate Sol-OFF | *ENG | | | |
| 012 | 1 Bin Junction Gate Sol-ON | *ENG | [104- 10 / 0 / 1 /-+] | | |
| 013 | 1 Bin Junction Gate Sol-OFF | *ENG | [-10 to 10 / 0 / 1 mm/step] | | |
| 015 | Junction Gate SOL1:ON:Plain | *ENG | | | |
| 016 | Junction Gate SOL1:ON:Thick | *ENG | | | |
| 017 | Junction Gate SOL1:OFF:Plain | *ENG | | | |
| 018 | Junction Gate SOL1:OFF:Thick | *ENG | | | |

| | [Fusing Feed Start Time] | | | | | |
|------|--|------|------------------------------------|--|--|--|
| 1910 | ne machine has entered the print ready | | | | | |
| 011 | Plain FC: Ready: M *ENG | | | | | |
| 012 | Plain FC: Standby: M | *ENG | | | | |
| 013 | Plain FC: Ready: L | *ENG | [0 to 250 / 0 / 1 sec/step] | | | |
| 014 | Plain FC: Standby: L | *ENG | | | | |

| 015 | Middle Thick: Ready: M | *ENG |
|-----|--------------------------|------|
| 013 | Wilder Filek. Reddy. W | 2110 |
| 016 | Middle Thick: Standby: M | *ENG |
| 017 | Middle Thick: Ready: L | *ENG |
| 018 | Middle Thick: Standby: L | *ENG |
| 019 | Thick Paper: Ready: M | *ENG |
| 020 | Thick Paper: Standby: M | *ENG |
| 021 | Thick Paper: Ready: L | *ENG |
| 022 | Thick Paper: Standby: L | *ENG |
| 023 | Plain FC: stb. Rcv. | *ENG |
| 024 | Mthick FC: stb. Rcv. | *ENG |
| 025 | Thick FC: stb. Rcv. | *ENG |

| 1912 | [Capacitor Condition Display] Not used | | |
|------|--|------|--------------------------------------|
| 001 | Latest Capacity | *ENG | [0 to 150 / 45 / 1 F/step] |
| 002 | Current Voltage | *ENG | [0 to 50 / 0 / 0.01 V/step] |
| 003 | Charge Time | *ENG | [0 to 50000 / 0 / 10 ms/step] |
| 004 | Deterioration Counter | *ENG | [0 to 1000 / 0 / 1 /step] |
| 005 | Charge Current | *ENG | [5 to 15 / 10 / 0.1 A/step] |

| 1913 | [Capacitor Discharge Stop Voltage Setting] Not used | | | |
|------|---|------|-----------------------------------|--|
| 001 | - | *ENG | [10 to 25 / 20 / 1 V/step] | |

| 1914 | [Capacitor Deterioration Detection Condition] Not used | | |
|------|--|------|------------------------------------|
| 001 | AC Input Voltage Display | *ENG | [0 to 150 / 100 / 1 V/step] |
| 002 | Deterioration Counter | *ENG | [10 to 250 / 30 / 1 /step] |
| 003 | AC Input Voltage | *ENG | [80 to 100 / 90 / 1 V/step] |
| 004 | Capacitor Capacity | *ENG | [20 to 130 / 35 / 1 F/step] |

| 1915 | [After Ready Setting] | | |
|------|-------------------------------|------|---|
| 011 | Offset: Plain: Ready | *ENG | [0 to 50 / C2c: 0, C2d: 0 / 1 deg/step] |
| 012 | Offset: Plain: Standby | *ENG | [0 to 50 / 0 / 1 deg/step] |
| 013 | Offset: Middle Thick: Ready | *ENG | [0 to 50 / 20 / 1 deg/step] |
| 014 | Offset: Middle Thick: Standby | *ENG | |
| 015 | Offset: Thick: Ready | *ENG | [0 to 50 / 0 / 1 deg/step] |
| 016 | Offset: Thick: Standby | *ENG | |
| 017 | Time: Plain: Ready | *ENG | |
| 018 | Time: Plain: Standby | *ENG | |
| 019 | Time: Middle Thick: Ready | *ENG | [040 /10 /1/] |
| 020 | Time: Middle Thick: Standby | *ENG | [0 to 60 / 10 / 1 sec/step] |
| 021 | Time: Thick: Ready | *ENG | |
| 022 | Time: Thick: Standby | *ENG | |
| 023 | Coefficient: Plain | *ENG | |
| 024 | Coefficient: Middle Thick | *ENG | [0 to 5 / 1 / 0.1 deg/sec/step] |
| 025 | Coefficient: Thick | *ENG | |

| 1916 | [CPM Down Setting] | | |
|------|-----------------------|------|---|
| 026 | Voltage Target | *ENG | [80 to 120 / 93 / 1 %/step] |
| 031 | On/Off | *ENG | [0 to 3 / 1 / 1] 0: OFF 1: ON 2: M-Thick: ON 3: Plain: ON |
| 032 | D1: Plain: BW: Offset | *ENG | [0 to 100 / 25 / 1 deg/step] |
| 033 | D2: Plain: BW: Offset | *ENG | [0 to 100 / 27 / 1 deg/step] |
| 034 | D3: Plain: BW: Offset | *ENG | [0 to 100 / 30 / 1 deg/step] |

| 035 | D1: Plain: FC: Offset | *ENG | [0 to 100 / 20 / 1 deg/step] |
|-----|------------------------------|------|--|
| 036 | D2: Plain: FC: Offset | *ENG | [0 to 100 / 22 / 1 deg/step] |
| 037 | D3: Plain: FC: Offset | *ENG | [0 to 100 / 25 / 1 deg/step] |
| 038 | D1: Middle Thick: BW: Offset | *ENG | [0 to 100 / 30 / 1 deg/step] |
| 039 | D2: Middle Thick: BW: Offset | *ENG | [0 to 100 / 32 / 1 deg/step] |
| 040 | D3: Middle Thick: BW: Offset | *ENG | [0 to 100 / 35 / 1 deg/step] |
| 041 | D1: Middle Thick: FC: Offset | *ENG | [0 to 100 / 20 / 1 deg/step] |
| 042 | D2: Middle Thick: FC: Offset | *ENG | [0 to 100 / 22 / 1 deg/step] |
| 043 | D3: Middle Thick: FC: Offset | *ENG | [0 to 100 / 25 / 1 deg/step] |
| 044 | D1: Plain :BW : CPM | *ENG | [20 to 40 / C2c : 35 / 1 cpm/step] [20 to 50 / C2d : 45 / 1 cpm/step] |
| 045 | D2: Plain :BW : CPM | *ENG | [20 to 40 / C2c : 30 / 1 cpm/step] [20 to 50 / C2d : 40 / 1 cpm/step] |
| 046 | D3: Plain :BW : CPM | *ENG | [20 to 40 / C2c : 25 / 1 cpm/step] [20 to 50 / C2d : 35 / 1 cpm/step] |
| 047 | D1: Plain :FC : CPM | *ENG | [20 to 40 / C2c : 35 / 1 cpm/step] [20 to 50 / C2d : 45 / 1 cpm/step] |
| 048 | D2: Plain :FC : CPM | *ENG | [20 to 40 / C2c : 30 / 1 cpm/step] [20 to 50 / C2d : 40 / 1 cpm/step] |
| 049 | D3: Plain :FC : CPM | *ENG | [20 to 40 / C2c : 25 / 1 cpm/step] [20 to 50 / C2d : 35 / 1 cpm/step] |
| 050 | D1: Middle Thick: BW: CPM | *ENG | [20 to 40 / C2c : 35 / 1 cpm/step] [20 to 50 / C2d : 45 / 1 cpm/step] |
| 051 | D2: Middle Thick: BW: CPM | *ENG | [20 to 40 / C2c : 30 / 1 cpm/step] [20 to 50 / C2d : 40 / 1 cpm/step] |
| 052 | D3: Middle Thick: BW: CPM | *ENG | [20 to 40 / C2c : 25 / 1 cpm/step] [20 to 50 / C2d : 35 / 1 cpm/step] |
| 053 | D1: Middle Thick: FC: CPM | *ENG | [20 to 40 / C2c : 35 / 1 cpm/step] |
| | | | |

| | | | [20 to 50 / C2d : 45 / 1 cpm/step] |
|-----|---------------------------|------|--|
| 054 | D2: Middle Thick: FC: CPM | *ENG | [20 to 40 / C2c: 30 / 1 cpm/step] [20 to 50 / C2d: 40 / 1 cpm/step] |
| 055 | D3: Middle Thick: FC: CPM | *ENG | [20 to 40 / C2c: 25 / 1 cpm/step] [20 to 50 / C2d: 35 / 1 cpm/step] |
| 056 | Operation Time | *ENG | [0 to 120 / 5 / 1 sec/step] |
| 057 | Operation Time:D0 | *ENG | [0 to 120 / 5 / 1 sec/step] |
| 060 | Ends Down ON/OFF | *ENG | [0 or 1 / 1 / 1 /step] 0: OFF, 1: ON |
| 061 | Limit Temperature | *ENG | [200 to 250 / 250 / 1 deg/step] |
| 062 | D1: Paper Width1: Offset | *ENG | [10 to 100 / 15 / 1 deg/step] |
| 063 | D2: Paper Width1: Offset | *ENG | [10 to 100 / 15 / 1 deg/step] |
| 064 | D1: Paper Width2: Offset | *ENG | [10 to 100 / 35 / 1 deg/step] |
| 065 | D2: Paper Width2: Offset | *ENG | [10 to 100 / 30 / 1 deg/step] |
| 066 | D1: Paper Width3: Offset | *ENG | [10 to 100 / 35 / 1 deg/step] |
| 067 | D2: Paper Width3: Offset | *ENG | [10 to 100 / 30 / 1 deg/step] |
| 068 | D1: Paper Width1: CPM | *ENG | [10 to 40 / C2c: 20 / 5 cpm/step] [10 to 50 / C2d: 20 / 5 cpm/step] |
| 069 | D2: Paper Width 1: CPM | *ENG | [10 to 40 / C2c: 20 / 5 cpm/step] [10 to 50 / C2d: 20 / 5 cpm/step] |
| 070 | D1: Paper Width2: CPM | *ENG | [10 to 40 / C2c: 35 / 5 cpm/step] [10 to 50 / C2d: 45 / 5 cpm/step] |
| 071 | D2: Paper Width2: CPM | *ENG | [10 to 40 / C2c: 20 / 5 cpm/step] [10 to 50 / C2d: 20 / 5 cpm/step] |
| 072 | D1: Paper Width3: CPM | *ENG | [10 to 40 / C2c: 35 / 5 cpm/step] [10 to 50 / C2d: 45 / 5 cpm/step] |
| 073 | D2: Paper Width3: CPM | *ENG | [10 to 40 / C2c: 20 / 5 cpm/step] [10 to 50 / C2d: 20 / 5 cpm/step] |

| 074 | Ends: Sustained Time | *ENG | [0 to 120 / 30 / 1 sec/step] |
|-----|--------------------------|------|--|
| 075 | Pressure Start Temp | *ENG | [0 to 100 / 100 / 1 deg/step] |
| 076 | D1: Paper Width4: Offset | *ENG | [10 to 100 / 45 / 1 deg/step] |
| 077 | D2: Paper Width4: Offset | *ENG | [10 to 100 / 40 / 1 deg/step] |
| 078 | D1: Paper Width4: CPM | *ENG | [10 to 40 / C2c: 35 / 1 cpm/step] [10 to 50 / C2d: 45 / 1 cpm/step] |
| 079 | D2: Paper Width4: CPM | *ENG | [10 to 40 / C2c: 20 1 cpm/step] [10 to 50 / C2d: 20 / 1 cpm/step] |

| 191 <i>7</i> | [Magnetic Field Roller HP Detection] | | | |
|--------------|---|---|---|--|
| | Position Replacement | *ENG | [5 to 100 / 40 / 1 times/step] | |
| 001 | | the ferrite roller rotation for initializing the home position of the ite roller rotates more than 40 times, the machine starts to find the e roller. | | |
| | Continuous Feed Page | *ENG | [100 to 1000 / 500 / 10 sheets/step] | |
| 002 | Specifies the limit sheets of outputs for initializing the home position of the ferrite roller. We the outputs are more than 500 sheets of paper, the machine starts to find the home post of the ferrite roller. | | | |

| 1050 | [Fan Cooling Time Set] Not used | | | | |
|------|--|------|-------------------------------------|--|--|
| 1950 | 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 | [0 to 60 / 0 / 1 sec/step] | | |
| 800 | PSU Fan | *ENG | | | |
| 009 | Fusing IH Coil Fan | *ENG | | | |
| 010 | IH Power Supply Fan | *ENG | [0 to 60 / 3 0 / 1 sec/step] | | |
| 011 | Second Duct Fan | *ENG | [0 to 60 / 0 / 1 sec/step] | | |
| 012 | Third Duct Fan | *ENG | [0 to 60 / 0 / 1 sec/step] | | |

SP2-XXX (Drum)

| | [Charge DC Voltage] Charge | [Charge DC Voltage] Charge Roller DC Voltage Adjustment | | |
|------|--|---|---|--|
| | (Paper Type, Process Speed, C | Color) | | |
| 2005 | Paper Type -> Plain, Thick 1, 1 | Thick 2 | | |
| | Plain: 205 (C2c)/ 230 (C2d) | mm/sec, T | hick 1: 154 mm/sec, | |
| | Thick 2&FINE: 77 mm/sec | | | |
| | Adjusts the DC component of t | he charge ı | roller bias in the various print modes. | |
| | Charge bias (DC component) is automatically adjusted during process control; therefore, adjusting these settings does not effect while process control mode (SP3-041-1 Default: ON) is activated. When deactivating process control mode with SP3-041-1, the values in these SP modes are used for printing. | | | |
| 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. 1000 / /00 / 10 W/.] | |
| 007 | Thick 1: C | *ENG | [0 to 1000 / 690 / 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 | | |
| 013 | Plain | *ENG | [-100 to 100 / C2c: -23, C2d: -16 / 1 -V/ step] | |
| 014 | Thick 1 | *ENG | [-100 to 100 / - 24 / 1 -V/step] | |
| 015 | Thick 2&FINE | *ENG | [-100 to 100 / 2 / 1 -V/step] | |

| 2006 | [Charge AC Voltage] Charge Roller AC Voltage Adjustment |
|------|---|
| 2000 | [Charge AC voltage] Charge Roller AC voltage Adjustment |

(Paper Type, Process Speed, Color) Paper Type -> Plain, Thick 1, Thick 2 Plain: 205 (C2c)/230 (C2d) mm/sec, Thick 1: 154 mm/sec, Thick 2&FINE: 77 mm/sec 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 *FNG 002 Plain: M *ENG *ENG 003 Plain: C *ENG 004 Plain: Y *ENG 005 Thick 1: Bk 006 Thick 1: M *ENG [0 to 3 / **2.1** / 0.01 KV/step] 007 Thick 1: C *ENG *ENG Thick 1: Y 800 009 Thick 2&FINE: Bk *ENG 010 Thick 2&FINE: M *ENG 011 Thick 2&FINE: C *ENG *ENG 012 Thick 2&FINE: Y

| 2007 | [Charge AC Current: LL] Charge Roller AC Current Adjustment for LL (Color) | | | |
|------|--|------|--|--|
| 2007 | Displays/sets the AC current target of the charge roller for LL environment (Low temperature and Low humidity). DFU | | | |
| 001 | Environmental Target: Bk | *ENG | | |
| 002 | Environmental Target: M | *ENG | [0 to 3 / C2c : 1.41, C2d : 1.59 / 0.01 mA/ | |
| 003 | Environmental Target: C | *ENG | step] | |
| 004 | Environmental Target: Y | *ENG | | |

| [Charge AC Current: ML] Charge Roller AC Current Adjustment for MM (Color) | | | Current Adjustment for MM | |
|--|---|------|--|--|
| 2000 | Displays/sets the AC current target of the charge roller for ML environment (Meddle temperature and Low humidity). DFU | | | |
| 001 | Environmental Target: Bk | *ENG | | |
| 002 | Environmental Target: M | *ENG | [0 to 3 / C2c : 1.49 , C2d : 1.68 / 0.01 mA/ | |
| 003 | Environmental Target: C | *ENG | step] | |
| 004 | Environmental Target: Y | *ENG | | |

| [Charge AC Current: MM] Charge Roller AC Current Adjustment for MM (Color) | | | C Current Adjustment for MM | |
|--|---|---|--|--|
| 2007 | Displays/sets the AC current target temperature and Middle humidity | get of the charge roller for MM environment (Middle y). DFU | | |
| 001 | Environmental Target: Bk | *ENG | | |
| 002 | Environmental Target: M | *ENG | [0 to 3 / C2c : 1.56 , C2d : 1.76 / 0.01 mA/ | |
| 003 | Environmental Target: C | *ENG | step] | |
| 004 | Environmental Target: Y | *ENG | | |

| 2010 | [Charge AC Current: MH] Charge Roller AC Current Adjustment for MH (Color) | | | | |
|------|--|---|--|--|--|
| 2010 | Displays/sets the AC current target temperature and High humidity). | ays/sets the AC current target of the charge roller for MH environment (Middle erature and High humidity). DFU | | | |
| 001 | Environmental Target: Bk | *ENG | | | |
| 002 | Environmental Target: M | *ENG | [0 to 3 / C2c : 1.64, C2d : 1.83 / 0.01 mA/ | | |
| 003 | Environmental Target: C | *ENG | step] | | |
| 004 | Environmental Target: Y | *ENG | | | |

| 0011 | [Charge AC Current: HH] Charge Roller AC Current Adjustment for HH | |
|------|--|--|
| 2011 | (Color) | |

| | Displays/sets the AC current target of the charge roller for HH environment (High temperature and High humidity). DFU | | |
|-----|--|------|---|
| 001 | Environmental Target: Bk | *ENG | |
| 002 | Environmental Target: M | *ENG | [0 to 3 / C2c: 1. 66, C2d: 1.85 / 0.01 mA/ |
| 003 | Environmental Target: C | *ENG | step] |
| 004 | Environmental Target: Y | *ENG | |

| 2012 | [Charge Output Control] | | |
|------|-------------------------|------|--|
| 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.) |

| 2013 | [Environmental Correction: PCI | U] | |
|------|--------------------------------|-------|---|
| | | | Displays the environmental condition, which is measured in absolute humidity. |
| | | | [1 to 5 / - / 1 /step] |
| 001 | Current Environmental: | *5.10 | 1: LL (LL <= 4.3 g/m ³) |
| 001 | Display | *ENG | 2: ML (4.3 < ML <= 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 / 4.3 / 0.01 g/m ³ /step] |

| 004 | Absolute Humidity: Threshold 2 | *ENG | Changes the humidity threshold between ML and MM. [0 to 100 / 11.3 / 0.01 g/m³/step] |
|-----|--|------|---|
| 005 | Absolute Humidity: Threshold | *ENG | Changes the humidity threshold between MM and MH. [0 to 100 / 18.0 / 0.01 g/m³/step] |
| 006 | Absolute Humidity: Threshold | *ENG | Changes the humidity threshold between MH and HH. [0 to 100 / 24.0 / 0.01 g/m³/step] |
| 007 | Current Temp.: Display | *ENG | Displays the current temperature. [0 to 100 / 0 / 1 deg/step] |
| 008 | Current Relative Humidity: Display | *ENG | Displays the current relative humidity. [0 to 100 / 0 / 1%RH/step] |
| 009 | Current Absolute Humidity: Display | *ENG | Displays the absolute humidity. [0 to 100 / 0 / 0.01 g/m ³ /step] |
| 010 | Previous Environmental: Display | *ENG | Displays the previous environmental condition, which is measured in absolute humidity. [1 to 5 / - / 1 /step] 1: LL, 2: ML, 3: MM, 4: MH, 5: HH |
| 011 | Previous Temp.: Display | *ENG | Displays the previous temperature. [0 to 100 / 0 / 1 deg/step] |
| 012 | Previous Relative Humidity: Display | *ENG | Displays the previous relative humidity. [0 to 100 / 0 / 1%RH/step] |
| 013 | Previous Absolute Humidity: Display | *ENG | Displays the previous absolute humidity. [0 to 100 / 0 / 0.01 g/m ³ /step] |

| 2014 | [Charge AC Control: Setting] [| DFU | |
|------|--------------------------------|----------------|--|
| 2014 | Specifies the charge AC contro | ol interval or | thresholod for each condition. |
| 001 | Exec Interval: Power ON | *ENG | [0.45.2000./500./1.mmm./stan] |
| 002 | Exec Interval: Print | *ENG | [0 to 2000 / 500 / 1 page/step] |

| 003 | Page Interval | *ENG | [0 to 500 / 10 / 5 page/step] |
|-----|-------------------|------|--|
| 004 | Temperature | *ENG | [0 to 99 / 25 / 1 deg/step] |
| 005 | Relative Humidity | *ENG | [0 to 99 / 50 / 1 %RH/step] |
| 006 | Absolute Humidity | *ENG | [0 to 99 / 12 / 1 g/m ³ /step] |
| 007 | Temp Threshold M | *ENG | [0 to 99 / 10 / 1 deg/step] |
| 008 | RH Threshold M | *ENG | [0 to 99 / 50 / 1 %RH/step] |
| 009 | AH Threshold M | *ENG | [0 to 99 / 6 / 1 g/m ³ /step] |
| 010 | Temp Threshold S | *ENG | [0 to 20 / 1 / 0.1 deg/step] |
| 011 | RH Threshold S | *ENG | [0 to 50 / 5 / 1 %RH/step] |
| 012 | AH Threshold S | *ENG | [0 to 20 / 1 / 0.1 g/m ³ /step] |
| 013 | Non-use Time | *ENG | [0 to 1440 / 360 / 10 min/step] |

| 2015 | [Charge AC Adj: Result] | | |
|------|-------------------------|------|--|
| 001 | Bk | *ENG | [0 to 9 / 0 / 1 /step] |
| 002 | М | *ENG | 0: Success |
| 003 | С | *ENG | Out of tolerance range Out of adjustable range |
| 004 | Υ | *ENG | 3: Adjustment incompleted |

| | [Color Registration Correction |] FA | |
|------|--|-----------------------------------|--|
| 2101 | at the factory. However, you roptics housing unit. For details | must input a v s, see "Laser (| omatic line position adjustment and are adjusted value for SP2101-001 after replacing the laser Optics Housing Unit" in the "Replacement and rovided with the new laser optics housing unit. |
| 001 | Main Dot: Bk | *ENG | |
| 002 | Main Dot: M | *ENG | [-512 to 511 / 0 / 1 dot/step] |
| 003 | Main Dot: C | *ENG | [-312 10 311 / 0 / 1 dol/ siep] |
| 004 | Main Dot: Y | *ENG | |
| 005 | Sub Line: Bk | *ENG | [-16384 to 16383 / 0 / 1 line/step] |

| (| 006 | Sub Line: M | *ENG |
|---|-----|-------------|------|
| (| 007 | Sub Line: C | *ENG |
| (| 800 | Sub Line: Y | *ENG |

| 2102 | [Magnification Adjustment] DF | U | |
|------|--------------------------------|------|---|
| 001 | Main Mag.: High Speed: Bk | *ENG | |
| 002 | Main Mag.: Medium Speed: Bk | *ENG | |
| 003 | Main Mag.: Low Speed: Bk | *ENG | |
| 004 | Main Mag.: High Speed: M | *ENG | |
| 005 | Main Mag.: Medium Speed: M | *ENG | |
| 006 | Main Mag.: Low Speed: M | *ENG | These are results of the main scan length adjustment. |
| 007 | Main Mag.: High Speed: C | *ENG | [0 to 560 / 280 / 1 /step] |
| 008 | Main Mag.: Medium Speed: C | *ENG | |
| 009 | Main Mag.: Low Speed: C | *ENG | |
| 010 | Main Mag.: High Speed: Y | *ENG | |
| 011 | Main Mag.: Medium Speed: Y | *ENG | |
| 012 | Main Mag.: Low Speed: Y | *ENG | |
| 013 | Offset: Mag Bk1-2 | *ENG | |
| 014 | Offset: Mag M1-2 | *ENG | [254-255/0/1 |
| 015 | Offset: Mag C1-2 | *ENG | [-256 to 255 / 0 / 1 sub-dot/step] |
| 016 | Offset: Mag Y1-2 | *ENG | |

| 2103 | [Erase Margin Adjustment] (Area, Paper Size) |
|------|---|
| | Adjusts the erase margin by deleting image data at the margins. |

| 001 | Lead Edge Width | *ENG | [0 to 0.0 / 4.2 / 0.1 mm /stan] |
|-----|----------------------------|------|---------------------------------------|
| 002 | Trail. Edge Width | *ENG | [0 to 9.9 / 4.2 / 0.1 mm/step] |
| 003 | Left | *ENG | [0+-00/2/01/+1 |
| 004 | Right | *ENG | [0 to 9.9 / 2 / 0.1 mm/step] |
| 005 | Lead Edge Width: Thin | *ENG | [0 to 9.9 / 5 / 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 | [0.1.1.5 / 0.2 / 0.1 / 1] |
| 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 /] |
| 015 | Duplex Right Edge:Thick | *ENG | [0 to 1.5 / 0.3 / 0.1 mm/step] |
| | | | |

| 2105 | [LD Power Adj.] (Process Spee | d, Color) | |
|------|---|--------------|---|
| | Adjusts the LD power of each of Each LD power setting is decided. High Speed: 205 (C2c)/230 77 mm/sec | ed by proces | ' |
| 001 | High Speed: Bk | *ENG | |
| 002 | High Speed: M | *ENG | [50 to 120 / 100 / 1%/step] |
| 003 | High Speed: C | *ENG | Decreasing a value makes lines thinner on the |
| 004 | High Speed: Y | *ENG | output. Increasing a value makes lines thicker on the |
| 005 | Middle Speed: Bk | *ENG | output. |
| 006 | Middle Speed: M | *ENG | |

| 007 | Middle Speed: C | *ENG |
|-----|-----------------|------|
| 008 | Middle Speed: Y | *ENG |
| 009 | Low Speed: Bk | *ENG |
| 010 | Low Speed: M | *ENG |
| 011 | Low Speed: C | *ENG |
| 012 | Low Speed: Y | *ENG |

| 2106 | [Polygon Rotation Time] | | |
|------|--|------|------------------------------------|
| | Adjusts the time of the polygon motor rotation. DFU | | |
| 001 | Warming-Up | *ENG | [040./10./1/] |
| 002 | Job End | *ENG | [0 to 60 / 10 / 1 sec/step] |

| 2107 | [Image Parameter] | | |
|------|-------------------------|------|------------------------|
| 2107 | DFU | | |
| 001 | Image Gamma Flag | *ENG | [0 or 1 / 1 / 1 /step] |
| 002 | Shading Correction Flag | *ENG | [0 or 1 / 1 / 1 /step] |

| 0100 | [Test Pattern] | | | |
|------|--|--|--------------------------------------|--|
| 2109 | Generates the test pattern using "COPY Window" tab in the LCD. | | | |
| 003 | Pattern Selection - | | [0 to 23 / 0 / 1/step] | |
| | 0 None | | 11. Independent Pattern (1dot) | |
| | 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 | |

| | 0, | | 21: Grayscale Horizontal Margin |
|-----|-----------------|---|---|
| | | | 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: M | - | [0 to 15 / 15 / 1 /step] |
| 800 | Density: C | - | 0: Lightest density |
| 009 | Density: Y | - | 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. | |

| 2117 | [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 SC285 occurs. For details, see "Laser Optics Housing Unit" in the "Replacement and Adjustment" section. | | |
|-----|--|------|---------------------------------------|
| 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 the |
| 002 | Execute: C | *ENG | values specified with SP2117. These SPs must be used when a new laser optics |
| 003 | Execute: Y | *ENG | housing unit is installed or when SC285 occurs. For details, see "Laser Optics Housing Unit" in the "Replacement and Adjustment" section. |

| 2119 | [Skew Adjustment Display] | | | |
|------|---|------|---------------------------------------|--|
| 2117 | Displays the current skew adjustment value for each skew motor. | | | |
| 001 | М | *ENG | | |
| 002 | С | *ENG | [-50 to 50 / 0 / 1 pulse/step] | |
| 003 | Υ | *ENG | | |

| 214 | 2120 | [Thick Paper Skew Adj] Not used | | | |
|-----|------|--|------|--------------------------------------|--|
| | 2120 | Selects the skew adjustment value for thick paper. | | | |
| | 001 | On/Off | *ENG | [0 or 1 / 1 / 1 /step] 0: Off, 1: On | |

| | [ID Sensor Check Result] DFU | | | |
|--|--|------|---------------------------------|--|
| Displays the results of the ID sensor check. | | | | |
| 2140 | Bk, M, C, Y: ID sensors for the process control | | | |
| | Front, Center, Rear: ID sensors for the automatic line position adjustment | | | |
| 001 | Bk | *ENG | [0 to 1024 / 0 / 1/step] | |

| 002 | М | *ENG |
|-----|--------|------|
| 003 | С | *ENG |
| 004 | Υ | *ENG |
| 005 | Front | *ENG |
| 006 | Center | *ENG |
| 007 | Rear | *ENG |

| | [ID Sensor Check Result: Ave.] DFU | | | |
|------|---|------|---------------------------------------|--|
| 2141 | Displays the average result values of the ID sensor check. Bk, M, C, Y: ID sensors for the process control Front, Center, Rear: ID sensors for the automatic line position adjustment | | | |
| 001 | Bk | *ENG | | |
| 002 | M | *ENG | | |
| 003 | C | *ENG | | |
| 004 | Υ | *ENG | [0 to 5.5 / 0 / 0.01V/step] | |
| 005 | Front | *ENG | [0 10 0.0 / 0 / 0.0 / v/ siep] | |
| | | | | |
| 006 | Center | *ENG | | |
| 007 | Rear | *ENG | | |

| | [ID Sensor Check Result] DFU | | | | |
|------|---|------|------------------------------------|--|--|
| 2142 | Displays the maximum result values of the ID sensor check. | | | | |
| | Bk, M, C, Y: ID sensors for the process control Front, Center, Rear: ID sensors for the automatic line position adjustment | | | | |
| | | | | | |
| 001 | Maximum: Bk | *ENG | | | |
| 002 | Maximum: M | *ENG | [0 55/0/00N//] | | |
| 003 | Maximum: C | *ENG | [0 to 5.5 / 0 / 0.01V/step] | | |
| 004 | Maximum: Y | *ENG | | | |

| 005 | Maximum: Front | *ENG |
|-----|-----------------|------|
| 006 | Maximum: Center | *ENG |
| 007 | Maximum: Rear | *ENG |

| | [ID Sensor Check Result] DFU | | | | |
|------|--|------|------------------------------------|--|--|
| 2143 | Displays the minimum result values of the ID sensor check. | | | | |
| | Bk, M, C, Y: ID sensors for the process control | | | | |
| | Front, Center, Rear: ID sensors for the automatic line position adjustment | | | | |
| 001 | Minimum: Bk | *ENG | | | |
| 002 | Minimum: M | *ENG | | | |
| 003 | Minimum: C | *ENG | | | |
| 004 | Minimum: Y | *ENG | [0 to 5.5 / 0 / 0.01V/step] | | |
| 005 | Minimum: Front | *ENG | | | |
| 006 | Minimum: Center | *ENG | | | |
| 007 | Minimum: Rear | *ENG | | | |

| | [ID Sensor Check Result] DFU | | | | |
|------|--|------|------------------------------------|--|--|
| 2144 | Displays the maximum result 2 values of the ID sensor check. | | | | |
| | Bk, M, C, Y: ID sensors for the process control | | | | |
| | Front, Center, Rear: ID sensors for the automatic line position adjustment | | | | |
| 001 | Maximum 2: Bk | *ENG | | | |
| 002 | Maximum 2: M | *ENG | | | |
| 003 | Maximum 2: C | *ENG | | | |
| 004 | Maximum 2: Y | *ENG | [0 to 5.5 / 0 / 0.01V/step] | | |
| 005 | Maximum 2: Front | *ENG | | | |
| 006 | Maximum 2: Center | *ENG | | | |
| 007 | Maximum 2: Rear | *ENG | | | |

| | [ID Sensor Check Result] DFU | | | | |
|------|--|------|------------------------------------|--|--|
| 2145 | Displays the minimum result 2 values of the ID sensor check. | | | | |
| | Bk, M, C, Y: ID sensors for the process control | | | | |
| | Front, Center, Rear: ID sensors for the automatic line position adjustment | | | | |
| 001 | Minimum 2: Bk | *ENG | | | |
| 002 | Minimum 2: M | *ENG | | | |
| 003 | Minimum 2: C | *ENG | | | |
| 004 | Minimum 2: Y | *ENG | [0 to 5.5 / 0 / 0.01V/step] | | |
| 005 | Minimum 2: Front | *ENG | | | |
| 006 | Minimum 2: Center | *ENG | | | |
| 007 | Minimum 2: Rear | *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 th | Decreasing a value makes the image shift to the left side on the print. | | | | |
| | Increasing a value makes the | g a value makes the image shift to the right side on the print. | | | | |
| | 1 pulse = 1/16 dot | | | | | |
| 027 | Area0: Bk | *ENG | [-256 to 255 / 0 / 1 sub-dot/step] | | | |
| 028 | Area1: Bk | *ENG | | | | |
| 029 | Area2: Bk | *ENG | | | | |
| 030 | Area3: Bk | *ENG | | | | |
| 031 | Area4: Bk | *ENG | Adjusts the area magnification for LD 0. | | | |
| 032 | Area5: Bk | *ENG | [-256 to 255 / 0 / 1 sub-dot/step] | | | |
| 033 | Area6: Bk | *ENG | | | | |
| 034 | Area7: Bk | *ENG | | | | |
| 035 | Area8: Bk | *ENG | | | | |

| 036 | Area9: Bk | *ENG | |
|-----|-------------|------|---|
| 037 | Area 10: Bk | *ENG | Natural |
| 038 | Areal 1: Bk | *ENG | Not used |
| 039 | Area12: Bk | *ENG | |
| 040 | Area0: Bk | *ENG | Not used |
| 041 | Areal: Bk | *ENG | |
| 042 | Area2: Bk | *ENG | |
| 043 | Area3: Bk | *ENG | |
| 044 | Area4: Bk | *ENG | Adjusts the area magnification for LD 1. |
| 045 | Area5: Bk | *ENG | [-256 to 255 / 0 / 1 sub-dot/step] |
| 046 | Area6: Bk | *ENG | |
| 047 | Area7: Bk | *ENG | |
| 048 | Area8: Bk | *ENG | |
| 049 | Area9: Bk | *ENG | |
| 050 | Area 10: Bk | *ENG | Niskovski |
| 051 | Areal 1: Bk | *ENG | Not used |
| 052 | Area 12: Bk | *ENG | |
| 079 | Area0: M | *ENG | Not used |
| 080 | Area1: M | *ENG | Adjusts the area magnification for LD 0. [-255to 255 / 0 / 1 sub-dot/step] |
| 081 | Area2: M | *ENG | |
| 082 | Area3: M | *ENG | |
| 083 | Area4: M | *ENG | |
| 084 | Area5: M | *ENG | [-256to 255 / 0 / 1 sub-dot/step] |
| 085 | Area6: M | *ENG | |
| 086 | Area7: M | *ENG | |

| 087 | Area8: M | *ENG | |
|-----|-------------|------|---|
| 088 | Area9: M | *ENG | |
| 089 | Area 10: M | *ENG | Niskovski |
| 090 | Areal 1: M | *ENG | Not used |
| 091 | Area12: M | *ENG | |
| 092 | Area0: Bk | *ENG | Not used |
| 093 | Area1: Bk | *ENG | |
| 094 | Area2: Bk | *ENG | |
| 095 | Area3: Bk | *ENG | |
| 096 | Area4: Bk | *ENG | Adjusts the area magnification for LD 1. |
| 097 | Area5: Bk | *ENG | [-256 to 255 / 0 / 1 sub-dot/step] |
| 098 | Area6: Bk | *ENG | |
| 099 | Area7: Bk | *ENG | |
| 100 | Area8: Bk | *ENG | |
| 101 | Area9: Bk | *ENG | |
| 102 | Area10: Bk | *ENG | |
| 103 | Areal 1: Bk | *ENG | Not used |
| 104 | Area12: Bk | *ENG | |
| 131 | Area0: C | *ENG | Not used |
| 132 | Areal: C | *ENG | |
| 133 | Area2: C | *ENG | |
| 134 | Area3: C | *ENG | |
| 135 | Area4: C | *ENG | Adjusts the area magnification for LD 0. |
| 136 | Area5: C | *ENG | [-256 to 255 / 0 / 1 sub-dot/step] |
| 137 | Area6: C | *ENG | |
| 138 | Area7: C | *ENG | |
| | | | |

| 139 | Area8: C | *ENG | |
|-----|------------|------|---|
| 140 | Area9: C | *ENG | |
| 141 | Area10: C | *ENG | Nishmand |
| 142 | Areal 1: C | *ENG | Not used |
| 143 | Areal2: C | *ENG | |
| 144 | Area0: C | *ENG | Not used |
| 145 | Areal: C | *ENG | |
| 146 | Area2: C | *ENG | |
| 147 | Area3: C | *ENG | |
| 148 | Area4: C | *ENG | Adjusts the area magnification for LD 1. |
| 149 | Area5: C | *ENG | [-256 to 255 / 0 / 1 sub-dot/step] |
| 150 | Area6: C | *ENG | |
| 151 | Area7: C | *ENG | |
| 152 | Area8: C | *ENG | |
| 153 | Area9: C | *ENG | |
| 154 | Area10: C | *ENG | Nickers |
| 155 | Areal 1: C | *ENG | Not used |
| 156 | Area12: C | *ENG | |
| 183 | Area0: Y | *ENG | Not used |
| 184 | Areal: Y | *ENG | |
| 185 | Area2: Y | *ENG | |
| 186 | Area3: Y | *ENG | |
| 187 | Area4: Y | *ENG | Adjusts the area magnification for LD 0. |
| 188 | Area5: Y | *ENG | [-256 to 255 / 0 / 1 sub-dot/step] |
| 189 | Area6: Y | *ENG | |
| 190 | Area7: Y | *ENG | |
| | • | | |

| 191 | Area8: Y | *ENG | |
|-----|------------|------|---|
| 192 | Area9: Y | *ENG | |
| 193 | Area10: Y | *ENG | N.Ad |
| 194 | Areall: Y | *ENG | Not used |
| 195 | Areal2: Y | *ENG | |
| 196 | Area0: Y | *ENG | Not used |
| 197 | Areal: Y | *ENG | |
| 198 | Area2: Y | *ENG | |
| 199 | Area3: Y | *ENG | |
| 200 | Area4: Y | *ENG | Adjusts the area magnification for LD 1. |
| 201 | Area5: Y | *ENG | [-256 to 255 / 0 / 1 sub-dot/step] |
| 202 | Area6: Y | *ENG | |
| 203 | Area7: Y | *ENG | |
| 204 | Area8: Y | *ENG | |
| 205 | Area9: Y | *ENG | |
| 206 | Area 10: Y | *ENG | Not used |
| 207 | Areal1:Y | *ENG | INOI used |
| 208 | Area12: Y | *ENG | |
| | | | |

| | [Area Shad. Correct. Setting] | FA | | |
|------|--|--|--|--|
| | Adjusts the area correction value for each LD power. | | | |
| 2152 | The main scan is divided into to area 14. | However, the image areas are limited from area 1 | | |
| | For BK and Magenta, area 1 area 14 is at the front side of | ear side of the machine (left side of the image) and ne (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 | This is for the synchronizing detection board. | |

| 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 | [50 to 150 / 100 / 1 %/step] |
| 009 | Area 8: Bk | *ENG | [50 10 130 / 100 / 1 70/ step] |
| 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: M | *ENG | This is for the synchronizing detection board. |
| 034 | Area 1: M | *ENG | |
| 035 | Area 2: M | *ENG | |
| 036 | Area 3: M | *ENG | |
| 037 | Area 4: M | *ENG | |
| 038 | Area 5: M | *ENG | [50 to 150 / 100 / 1 %/step] |
| 039 | Area 6: M | *ENG | |
| 040 | Area 7: M | *ENG | |
| 041 | Area 8: M | *ENG | |
| 042 | Area 9: M | *ENG | |
| | • | | • |

| 043 | Area 10: M | *ENG | |
|-----|------------|------|--|
| 044 | Area 11: M | *ENG | |
| 045 | Area 12: M | *ENG | |
| 046 | Area 13: M | *ENG | |
| 047 | Area 14: M | *ENG | |
| 048 | Area 15: M | *ENG | This is out of the image area. [50 to 150 / 100 / 1 %/step] |
| 065 | Area 0: C | *ENG | This is for the synchronizing detection board. [50 to 150 / 100 / 1 %/step] |
| 066 | Area 1: C | *ENG | |
| 067 | Area 2: C | *ENG | |
| 068 | Area 3: C | *ENG | |
| 069 | Area 4: C | *ENG | |
| 070 | Area 5: C | *ENG | |
| 071 | Area 6: C | *ENG | |
| 072 | Area 7: C | *ENG | [50. 150 / 100 / 10/ / .] |
| 073 | Area 8: C | *ENG | [50 to 150 / 100 / 1 %/step] |
| 074 | Area 9: C | *ENG | |
| 075 | Area 10: C | *ENG | |
| 076 | Area 11: C | *ENG | |
| 077 | Area 12: C | *ENG | |
| 078 | Area 13: C | *ENG | |
| 079 | Area 14: C | *ENG | |
| 080 | Area 15: C | *ENG | This is out of the image area. [50 to 150 / 100 / 1 %/step] |
| 097 | Area 0: Y | *ENG | This is for the synchronizing detection board. |

| | | | [50 to 150 / 100 / 1 %/step] |
|-----|------------|------|-------------------------------------|
| 098 | Area 1: Y | *ENG | |
| 099 | Area 2: Y | *ENG | |
| 100 | Area 3: Y | *ENG | |
| 101 | Area 4: Y | *ENG | |
| 102 | Area 5: Y | *ENG | |
| 103 | Area 6: Y | *ENG | |
| 104 | Area 7: Y | *ENG | [50 to 150 / 100 / 1 % / to] |
| 105 | Area 8: Y | *ENG | [50 to 150 / 100 / 1 %/step] |
| 106 | Area 9: Y | *ENG | |
| 107 | Area 10: Y | *ENG | |
| 108 | Area 11: Y | *ENG | |
| 109 | Area 12: Y | *ENG | |
| 110 | Area 13: Y | *ENG | |
| 111 | Area 14: Y | *ENG | |
| 112 | Area 15: Y | *ENG | This is out of the image area. |

| 2140 | [Vertical Line Width] DFU | | | | |
|------|---|------|----------------------------------|--|--|
| 2160 | Adjusts the width of the vertical line. | | | | |
| 001 | 600dpi:Bk | *ENG | | | |
| 002 | 600dpi:Ma | *ENG | | | |
| 003 | 600dpi:Cy | *ENG | | | |
| 004 | 600dpi:Ye | *ENG | [10 to 15 / 15 / 1 /step] | | |
| 005 | 1200dpi:Bk | *ENG | | | |
| 006 | 1200dpi:Ma | *ENG | | | |
| 007 | 1200dpi:Cy | *ENG | | | |

2181

[Line Position Adj. Result]

| 2180 | [Line Position Adj. Setting Clear] | | |
|------|------------------------------------|---|-----|
| 001 | Color Regist. | - | DFU |
| 002 | Main Scan Length Detection | - | DFU |
| 003 | MUSIC Result | - | DFU |
| 004 | Area Magnification Correction | - | DFU |

| | , | | | | |
|-----|--|---------------|--|--|--|
| | Displays the values for each correction. | | | | |
| | "Paper Int. Mag: Subdot" indicates the magnification correction value between two sheets of paper. | | | | |
| | "Mag.Cor. Subdot" indicate | es the magr | ification correction value. | | |
| | • "M. Scan Erro." indicates th | e shift corre | ection value in the main scan direction. | | |
| | • "S. Scan Erro." Indicates the | shift corre | ction value in the sub scan direction. | | |
| | • "M. Cor.: Dot" indicates the | dot correc | tion value in the main scan direction. | | |
| | • "M. Cor.: Subdot" indicates | the sub do | t correction value in the main scan direction. | | |
| | Bk: Black, M: Magenta, C: | Cyan, Y: Y | ellow | | |
| 001 | Paper Int. Mag: Subdot: Bk | *ENG | [-32768 to 32767 / 0 / 1 pulse/step] | | |
| 002 | Mag.Cor. Subdot: Bk | *ENG | [-32768 to 32767 / 0 / 1 pulse/step] | | |
| 003 | Skew: M | *ENG | [5000 to 5000 / 0 / 0 001 /storl | | |
| 004 | Bent: M | *ENG | [-5000 to 5000 / 0 / 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 / 0 001 / to 1 | | |
| 008 | S. Scan Erro.: Left: M | *ENG | [-5000 to 5000 / 0 / 0.001 um/step] | | |
| 009 | S. Scan Erro.: Center: M | *ENG | | | |
| 010 | S. Scan Erro.: Right: M | *ENG | | | |

8

| 011 | M. Cor.: Dot: M | *ENG | [-512 to 511 / 0 / 1 dot/step] |
|-----|---------------------------|------|--|
| 012 | M. Cor.: Subdot: M | *ENG | [-15 to 15 / 0 / 1 pulse/step] |
| 013 | Paper Int. Mag: Subdot: M | *ENG | |
| 014 | Mag.Cor. Subdot: M | *ENG | [007/0, 007/7 /0 /1 |
| 015 | M. Left Mag.: Subdot: M | *ENG | [-32768 to 32767 / 0 / 1 pulse/step] |
| 016 | M. Right Mag.: Subdot: M | *ENG | |
| 017 | S. Cor.: 600 Line: M | *ENG | [-16384 to 16383 / 0 / 1 line/step] |
| 018 | S. Cor.: 600 Sub: M | *ENG | [-1 to 1 / 0 / 0.001 line/step] |
| 019 | S. Cor.: 1200 Line: M | *ENG | [-16384 to 16383 / 0 / 1 line/step] |
| 020 | S. Cor.: 1200 Sub: M | *ENG | [-1 to 1 / 0 / 0.001 line/step] |
| 021 | Skew: C | *ENG | [5000 to 5000 / 0 / 0 001 /.to] |
| 022 | Bent: C | *ENG | [-5000 to 5000 / 0 / 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 to 5000 / 0 / 0.001 um/step] |
| 026 | S. Scan Erro.: Left: C | *ENG | [-3000 to 3000 / 0 / 0.00 f bill/ slep] |
| 027 | S. Scan Erro.: Center: C | *ENG | |
| 028 | S. Scan Erro.: Right: C | *ENG | |
| 029 | M. Cor.: Dot: C | *ENG | [-512 to 511 / 0 / 1 dot/step] |
| 030 | M. Cor.: Subdot: C | *ENG | [-15 to 15 / 0 / 1 pulse/step] |
| 031 | Paper Int. Mag: Subdot: C | *ENG | |
| 032 | Mag.Cor. Subdot: C | *ENG | [22760 to 22767 / 0 / 1 |
| 033 | M. Left Mag.: Subdot: C | *ENG | [-32768 to 32767 / 0 / 1 pulse/step] |
| 034 | M. Right Mag.: Subdot: C | *ENG | |
| 035 | S. Cor.: 600 Line: C | *ENG | [-16384 to 16383 / 0 / 1 line/step] |
| 036 | S. Cor.: 600 Sub: C | *ENG | [-1 to 1 / 0 / 0.001 line/step] |

| 037 | S. Cor.: 1200 Line: C | *ENG | [-16384 to 16383 / 0 / 1 line/step] |
|-----|---------------------------|------|--|
| 038 | S. Cor.: 1200 Sub: C | *ENG | [-1 to 1 / 0 / 0.001 line/step] |
| 039 | Skew: Y | *ENG | |
| 040 | Bent: Y | *ENG | |
| 041 | M. Scan Erro.: Left: Y | *ENG | |
| 042 | M. Scan Erro.: Center: Y | *ENG | [5000 |
| 043 | M. Scan Erro.: Right: Y | *ENG | [-5000 to 5000 / 0 / 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 / 0 / 1 dot/step] |
| 048 | M. Cor.: Subdot: Y | *ENG | [-15 to 15 / 0 / 1 pulse/step] |
| 049 | Paper Int. Mag: Subdot: Y | *ENG | |
| 050 | Mag.Cor. Subdot: Y | *ENG | [22740 to 22747 / 0 / 1 multiples / tom] |
| 051 | M. Left Mag.: Subdot: Y | *ENG | [-32768 to 32767 / 0 / 1 pulse/step] |
| 052 | M. Right Mag.: Subdot: Y | *ENG | |
| 053 | S. Cor.: 600 Line: Y | *ENG | [-16384 to 16383 / 0 / 1 line/step] |
| 054 | S. Cor.: 600 Sub: Y | *ENG | [-1 to 1 / 0 / 0.001 line/step] |
| 055 | S. Cor.: 1200 Line: Y | *ENG | [-16384 to 16383 / 0 / 1 line/step] |
| 056 | S. Cor.: 1200 Sub: Y | *ENG | [-1 to 1 / 0 / 0.001 line/step] |
| | ! | | <u> </u> |

| | [Line Position Adj. Offset] | | | |
|--|-----------------------------|------|-------------------------------------|--|
| 2182 (Color) M. Scan: Main scan, S. Scan: Sub-scan High: 205 (C2c)/ 230 (C2d) mm/sec, Medium: 154 mm/sec, Low: 77 mm/sec | | | | |
| | | | 154 mm/sec, Low: 77 mm/sec | |
| 001 | M Magnification | *ENG | Adjusts the line position manually. | |
| 002 | C Magnification | *ENG | [-1 to 1 / 0 / 0.001%/step] | |

| 003 | Y Magnification | *ENG | When line shifts are not corrected by the automatic line position adjustment, do this SP. Increasing a value reduces the image in the main scan direction. Decreasing a value enlarges the image in the main 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 [-16384 to 16383 / 0 / 1 line/step] 032 S. Scan: Low: Subline: C *ENG [-16384 to 16383 / 0 / 1 line/step] 033 S. Scan: High: Line: Y *ENG [-16384 to 16383 / 0 / 1 line/step] 034 S. Scan: High: Subline: Y *ENG [-16384 to 16383 / 0 / 1 line/step] 035 S. Scan: Medium: Line: Y *ENG [-16384 to 16383 / 0 / 1 line/step] 037 S. Scan: Medium: Subline: Y *ENG [-16384 to 16383 / 0 / 1 line/step] 038 S. Scan: Low: Line: Y *ENG [-16384 to 16383 / 0 / 1 line/step] 039 S. Scan: Low: Subline: Y *ENG [-16384 to 16383 / 0 / 1 line/step] <th></th> <th></th> <th></th> <th></th> | | | | |
|---|-----|-----------------------------|------|--|
| 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 [-16384 to 16383 / 0 / 1 line/step] 032 S. Scan: Low: Line: C *ENG Not used 033 S. Scan: Low: Subline: C *ENG [-16384 to 16383 / 0 / 1 line/step] 034 S. Scan: High: Line: Y *ENG [-16384 to 16383 / 0 / 1 line/step] 035 S. Scan: High: Subline: Y *ENG [-16384 to 16383 / 0 / 1 line/step] 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] | 025 | S. Scan: Medium: Subline: M | *ENG | [-1 to 1 / 0 / 0.001 /line] |
| 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] | 026 | S. Scan: Low: Line: M | *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] | 027 | S. Scan: Low: Subline: M | *ENG | Not used |
| 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] | 028 | S. Scan: High: 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] | 029 | S. Scan: High: 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] | 030 | S. Scan: Medium: 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] | 031 | S. Scan: Medium: Subline: C | *ENG | [-1 to 1 / 0 / 0.001 /line] |
| 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] | 032 | S. Scan: Low: Line: C | *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] | 033 | S. Scan: Low: Subline: C | *ENG | Not used |
| 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] | 034 | S. Scan: High: 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] | 035 | S. Scan: High: Subline: Y | *ENG | [-1 to 1 / 0 / 0.001 /line] |
| 038 S. Scan: Low: Line: Y *ENG [-16384 to 16383 / 0 / 1 line/step] | 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] |
| 039 S. Scan: Low: Subline: Y *ENG Not used | 038 | S. Scan: Low: Line: Y | *ENG | [-16384 to 16383 / 0 / 1 line/step] |
| | 039 | S. Scan: Low: Subline: Y | *ENG | Not used |

| 2183 | [Main Scan Length Detection] | DFU | |
|------|------------------------------|-----|--|
| 001 | Execute: High: Bk | - | |
| 002 | Execute: Medium: Bk | - | |
| 003 | Execute: Low: Bk | - | |
| 004 | Execute: High: M | - | |
| 005 | Execute: Medium: M | - | Executes the adjustment for the main scan length detection manually. |
| 006 | Execute: Low: M | - | asicensii mancany. |
| 007 | Execute: High: C | - | |
| 008 | Execute: Medium: C | - | |
| 009 | Execute: Low: C | - | |

| 010 | Execute: High: Y | - |
|-----|--------------------|---|
| 011 | Execute: Medium: Y | - |
| 012 | Execute: Low: Y | - |

| 2184 | [Main Scan Length Detection Target] DFU | | |
|------|---|---|--|
| 001 | Execute: Bk | - | |
| 002 | Execute: M | - | Executes the target value for the main scan length |
| 003 | Execute: C | - | detection. |
| 004 | Execute: Y | - | |

| | [Main Scan Length Detection Disp.] | | | | |
|------|--|------|--|--|--|
| | Displays/adjusts the target value for the main scan magnification correction of the line position adjustment. | | | | |
| 2185 | After replacing the laser optics housing unit, input the standard value for Bk provided the new unit. For details, see "Laser Optics Housing Unit" in the "Replacement Adjustm section. It is not necessary to input the values for the other colors; these are automatic adjusted after doing the line position adjustment. | | | | |
| 001 | Bk | *ENG | | | |
| 002 | М | *ENG | [0 to 244447 / 240440 / 1 cub dat/stan] | | |
| 003 | С | *ENG | [0 to 266667 / 249449 / 1 sub-dot/step] | | |
| 004 | Υ | *ENG | | | |

| 2186 | [Main Scan Length Detection] DFU | | | |
|------|---|-------------------|---|--|
| 001 | Selection Enables or disables the main | *ENG scan leng | [0 or 1 / 1 / 1/step] 0: OFF, 1: ON th detection for the laser. | |
| 002 | Paper Interval | *ENG | [0 to 999 / 1 / 1 sec/step] | |
| | Adjusts the interval of the main scan length detection for the laser. | | | |

| 2190 | [Line Position Adj.] | | |
|------|-----------------------------|------|--|
| 001 | Paper Int. Mag.: Subdot: Bk | *ENG | |
| 002 | Paper Int. Mag.: Subdot: M | *ENG | DFU |
| 003 | Paper Int. Mag.: Subdot: C | *ENG | [0 or 1 / 1 / 1/step] |
| 004 | Paper Int. Mag.: Subdot: Y | *ENG | |
| 005 | M. Scan Mag.: Subdot: M | *ENG | DFU |
| 006 | M. Scan Mag.: Subdot: C | *ENG | [0 or 1 / 1 / 1/step] |
| 007 | M. Scan Mag.: Subdot: Y | *ENG | 0: Disable correction, 1: Enable correction |
| 008 | Area Mag.: Subdot: M | *ENG | |
| 009 | Area Mag.: Subdot: C | *ENG | DFU [0 or 1 / 1 / 1/step] |
| 010 | Area Mag.: Subdot: Y | *ENG | [0 01 1 / 1 / 1 / 3100] |
| 011 | S. Scan Cor. Setting | *ENG | DFU [0 or 1 / 0 / 1/step] 0: Adjusted with Bk 1: Adjusted in minimum shift among four colors |
| 012 | 1 Line Shift Control | *ENG | DFU [0 or 1 / 0 / 1/step] |

| 2191 | [MUSIC Coefficient Setting] Line Position Adjustment: Coefficient Setting DFU | | | | |
|------|---|------|--|--|--|
| 2171 | ch 0: ID sensor at rear, ch 1: ID sensor at center, ch 2: ID sensor at front | | | | |
| 001 | ch 0: Filter: Front: a1 | *ENG | [-131071 to 131071 / 125869 / 1 bit/step] | | |
| 002 | ch 0: Filter: Front: a2 | *ENG | [-131071 to 131071 / -60488 / 1 bit/step] | | |
| 003 | ch 0: Filter: Front: b0 | *ENG | [-131071 to 131071 / 39 / 1 bit/step] | | |
| 004 | ch 0: Filter: Front: b1 | *ENG | [-131071 to 131071 / 77 / 1 bit/step] | | |
| 005 | ch 0: Filter: Front: b2 | *ENG | [-131071 to 131071 / 39 / 1 bit/step] | | |
| 006 | ch 0: Filter: Rear: a 1 | *ENG | [-131071 to 131071 / 128596 / 1 bit/step] | | |

| 007 | ch 0: Filter: Rear: a2 | *ENG | [-131071 to 131071 / -63398 / 1 bit/step] |
|-----|-------------------------|------|--|
| 008 | ch 0: Filter: Rear: b0 | *ENG | [-131071 to 131071 / 84 / 1 bit/step] |
| 009 | ch 0: Filter: Rear: b1 | *ENG | [-131071 to 131071 / 168 / 1 bit/step] |
| 010 | ch 0: Filter: Rear: b2 | *ENG | [-131071 to 131071 / 84 / 1 bit/step] |
| 011 | ch 1: Filter: Front: a1 | *ENG | [-131071 to 131071 / 125869 / 1 bit/step] |
| 012 | ch 1: Filter: Front: a2 | *ENG | [-131071 to 131071 / -60488 / 1 bit/step] |
| 013 | ch 1: Filter: Front: b0 | *ENG | [-131071 to 131071 / 39 / 1 bit/step] |
| 014 | ch 1: Filter: Front: b1 | *ENG | [-131071 to 131071 / 77 / 1 bit/step] |
| 015 | ch 1: Filter: Front: b2 | *ENG | [-131071 to 131071 / 39 / 1 bit/step] |
| 016 | ch 1: Filter: Rear: a1 | *ENG | [-131071 to 131071 / 128596 / 1 bit/step] |
| 017 | ch 1: Filter: Rear: a2 | *ENG | [-131071 to 131071 / -63398 / 1 bit/step] |
| 018 | ch 1: Filter: Rear: b0 | *ENG | [-131071 to 131071 / 84 / 1 bit/step] |
| 019 | ch 1: Filter: Rear: b1 | *ENG | [-131071 to 131071 / 168 / 1 bit/step] |
| 020 | ch 1: Filter: Rear: b2 | *ENG | [-131071 to 131071 / 84 / 1 bit/step] |
| 021 | ch 2: Filter: Front: a1 | *ENG | [-131071 to 131071 / 125869 / 1 bit/step] |
| 022 | ch 2: Filter: Front: a2 | *ENG | [-131071 to 131071 / -60488 / 1 bit/step] |
| 023 | ch 2: Filter: Front: b0 | *ENG | [-131071 to 131071 / 39 / 1 bit/step] |
| 024 | ch 2: Filter: Front: b1 | *ENG | [-131071 to 131071 / 77 / 1 bit/step] |
| 025 | ch 2: Filter: Front: b2 | *ENG | [-131071 to 131071 / 39 / 1 bit/step] |
| 026 | ch 2: Filter: Rear: a 1 | *ENG | [-131071 to 131071 / 128596 / 1 bit/step] |
| 027 | ch 2: Filter: Rear: a2 | *ENG | [-131071 to 131071 / -63398 / 1 bit/step] |
| 028 | ch 2: Filter: Rear: b0 | *ENG | [-131071 to 131071 / 84 / 1 bit/step] |
| 029 | ch 2: Filter: Rear: b1 | *ENG | [-131071 to 131071 / 168 / 1 bit/step] |
| 030 | ch 2: Filter: Rear: b2 | *ENG | [-131071 to 131071 / 84 / 1 bit/step] |
| 031 | Q Format Selection | *ENG | [0 to 3 / 3 / 1/step] |
| | | | |

| 2192 | [MUSIC Threshold Setting] Line Position Adjustment: Threshold Setting DFU ch 0: ID sensor at rear, ch 1: ID sensor at center, ch 2: ID sensor at front | | | |
|------|--|------|--------------------------------------|--|
| 001 | ch 0: 1st | *ENG | | |
| 002 | ch 0: 2nd | *ENG | | |
| 003 | ch 0: 3rd | *ENG | | |
| 004 | ch 0: 4th | *ENG | | |
| 005 | ch 1: 1st | *ENG | | |
| 006 | ch 1: 2nd | *ENG | [0.5], 2./1.2./0.1.V/] | |
| 007 | ch 1: 3rd | *ENG | [0.5 to 3 / 1.2 / 0.1 V/step] | |
| 800 | ch 1: 4th | *ENG | | |
| 009 | ch 2: 1st | *ENG | | |
| 010 | ch 2: 2nd | *ENG | | |
| 011 | ch 2: 3rd | *ENG | | |
| 012 | ch 2: 4th | *ENG | | |

| 2193 | [MUSIC Condition Set] Line Position Adjustment: Condition Setting | | | | |
|------|---|--------------|---------------------------------------|--|--|
| 001 | Auto Execution | *ENG | [0 or 1 / 1 / 1] 0: OFF, 1: ON | | |
| | Enables/disables the automatic | line positio | on adjustment | | |
| | Page: Job End: BW+FC | *ENG | [0 to 999 / 500 / 1 page/step] | | |
| 002 | Adjusts the threshold of the line position adjustment for BW and color printing mode after job end. | | | | |
| 002 | Page: Job End: FC | *ENG | [0 to 999 / 200 / 1 page/step] | | |
| 003 | Adjusts the threshold of the line position adjustment 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. | | | | |

| 225 | Page: Interrupt: FC | *1 | 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 | *1 | ENG | [0 to 999 / 100 / 1 page/step] | | |
| 006 | The line position adjustment is do | | position adjustment for BW printing mode in stand-by mode. one when the number of outputs in BW printing mode reaches and the condition of SP2-193-008 or SP2-193-009 is | | | |
| | Page: Stand-By: FC | * | ENG | [0 to 999 / 100 / 1 page/step] | | |
| 007 | The line position adjustment is | done | when th | justment for FC printing mode in stand-by mode. ne number of outputs in color printing mode the condition of SP2-193-008 or SP2-193-009 | | |
| | Temp. | *1 | ENG | [0 to 100 / 5 / 1deg/step] | | |
| 008 | | | | threshold for the line position adjustment (Mode b: adjustment ion adjustment depends on the combinations of several | | |
| | Time | *1 | ENG | [1 to 1440 / 300 / 1 minute/step] | | |
| 009 | | | e line position adjustment (Mode b: adjustment once). The ent depends on the combinations of several conditions. | | | |
| | Magnification | * | ENG | [0 to 10 / 0.1 / 0.01%/step] | | |
| 010 | | | | position adjustment. If the length of the main scan us MUSIC, then MSUIC is done again. | | |
| | Temp. 2 | * | ENG | [0 to 100 / 10 / 1deg/step] | | |
| 011 | | change threshold for the line position adjustment (Mode a: adjustment eposition adjustment depends on the combinations of several | | | | |
| | 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. | | | | | |
| 013 | Page: Power ON:BW+FC | *ENG | ; [(| 0 to 999 / 200 / 1 page/step] | | |

Adjusts the threshold of the line position adjustment for BW and FC printing mode at poweron. 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 / 0 / 1 year/step] | |
| 002 | Month | *ENG | [1 to 12 / 1 / 1 month/step] | |
| 003 | Day | *ENG | [1 to 31 / 1 / 1 day/step] | |
| 004 | Hour | *ENG | [0 to 23 / 0 / 1 hour/step] | |
| 005 | Minute | *ENG | [0 to 59 / 0 / 1 minute/step] | |
| 006 | Temperature | *ENG | [0 to 100 / 0 / 1 deg/step] | |
| 007 | Execution Result | *ENG | [0 or 1 / 0 / 1 /step] 0: Completed successfully, 1: Failed | |
| 800 | Number of Execution | *ENG | [0 to 999999 / 0 / 1 times/step] | |
| 009 | Number of Failure | *ENG | [0 to 999999 / 0 / 1 times/step] | |
| 010 | Error Result: M | *ENG | [0 to 9 / 0 / 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 | |

| 2197 | | [MUSIC Start Time] | | | |
|------|------|------------------------|------|--|--|
| | 2177 | DFU | | | |
| | 001 | MUSIC Start Time (EDT) | *ENG | [10 to 40 / 20 / 10ms/step] | |
| | 002 | TM Sensor Position | *ENG | [50 to 500 / 105.5 / 0.1 mm/step] | |

ď

| 2198 | [Music A/D Interval] | | |
|------|----------------------|------|---------------------------------------|
| 2170 | ADC Trigger Counter | | |
| 001 | ADC Trigger Counter | *ENG | [7.5 to 20 / 10 / 0.1 µs/step] |

| [Music Error Time Setting] | | | | | | | |
|----------------------------|------|-------------------------|------|---|--|--|--|
| | 2177 | DFU | | | | | |
| | 001 | Error Detection Counter | *ENG | [0.5 to 3 / 2.5 / 0.1 sec /step] | | | |

| | [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: 205 (C2c)/230 (C2d) mm/sec, Thick 1: 154 mm/sec, Thick 2&Fine: 77 mm/sec | | | | | | |
| 001 | Plain: Bk | | | | | | |
| 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 | | | | | |

| 2229 | [Development DC Vias] Development DC Bias Adjustment | | |
|------|--|--|--|
| 2229 | Adjusts the development bias. | | |

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: 205 (C2c)/230 (C2d) mm/sec, Thick 1: 154 mm/sec, Thick 2&Fine: 77 mm/sec *ENG 001 Plain: Bk *ENG 002 Plain: M 003 Plain: C *ENG 004 Plain: Y *ENG 005 Thick 1: Bk *ENG 006 Thick 1: M *ENG 007 Thick 1: C *ENG 800 Thick 1: Y *ENG [0 to 800 / **550** / 10 -V/step] *ENG 009 Thick 2: Bk 010 Thick 2: M *ENG 011 Thick 2: C *ENG 012 Thick 2: Y *ENG 013 Fine: Bk *ENG 014 Fine: M *ENG 015 Fine: C *ENG 016 Fine: Y *ENG

| 2241 | [Temperature/Humidity: Display] | | | | |
|------|--|---|--|--|--|
| 2241 | Displays the environment temperature and humidity. | | | | |
| 001 | Temperature | - | [-1280 to 1270 / - / 0.1deg/step] | | |
| 002 | Relative Humidity | - | [0 to 1000 / - / 0.1 %RH/step] | | |
| 003 | Absolute Humidity | - | [0 to 100 / - / 0.01 g/m ³ /step] | | |

| 2202 | [Environmental Correction: Transfer] | | | |
|------|--|------|---|--|
| 2302 | Environmental Correction: Image Transfer Belt Unit | | | |
| 002 | Forced Setting | *ENG | Sets the environment condition manually. [0 to 6 / 0 / 1 / step] 0: Automatic environment control 1: LL (Low temperature/ Low humidity) 2: ML (Middle temperature/ Low humidity) 3: MM (Middle temperature/ Middle humidity) 4: MH (Middle temperature/ High humidity) 5: HH (High temperature/ High humidity) | |
| 003 | Absolute Humidity: Threshold 1 | *ENG | Adjusts the threshold value between LL and ML. [0 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/m³/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] | |

| 2200 | [Paper Size Correction] | | | |
|------|--|------|--|--|
| 2308 | 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. |
|-----|-------------|------|-------------------------------------|
| | | | [0 to 350 / 148 / 1 mm/step] |
| | | | Threshold 4 ≤ paper ≤ Threshold 3: |
| 004 | Threshold 4 | *ENG | 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 130 / 5 / 1 –μA/step] |

| 2326 | [Transfer Roller CL: Bias] Transfer Roller Cleaning: Bias Adjustment | | | | | |
|------|---|---|--|--|--|--|
| 001 | Positive | *ENG | [0 to 2100 / 500 / 100 V /step] | | | |
| 001 | Adjusts the positive voltage o | Adjusts the positive voltage of the paper transfer roller for cleaning the paper transfer roller. | | | | |
| 002 | Negative | *ENG | [10 to 400 / 300 / 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] | | | |

| 2351 | [Common: BW: Bias] Image Transfer Belt: B/W: Bias Adjustment | | | | |
|--|--|------|--|--|--|
| 2351 | Plain: 205 (C2c)/230 (C2d) mm/sec, Thick 1: 154 mm/sec, Thick 2&Fine: 77 mm/ | | | | |
| 001 | ITB unit: Plain | *ENG | [0 to 80 / C2c : 33, C2d : 37 / 1 μA] | | |
| Adjusts the current for the image transfer belt in B/W mode for plain paper. | | | belt in B/W mode for plain paper. | | |

| | 002 | ITB unit: Thick 1 | *ENG | [0 to 80 / 25 / 1 μA] | |
|--|-----|---|------|------------------------------|--|
| | | Adjusts the current for the image transfer belt in B/W mode for thick 1 paper. | | | |
| | 003 | ITB unit: Thick 2 & FINE | *ENG | [0 to 80 / 12 / 1 μA] | |
| | | Adjusts the current for the image transfer belt in B/W mode for thick 2 paper or FINE mode. | | | |

| | [Common: FC: Bias] Image Transfer Belt: Full Color: Bias Adjustment | | | | |
|------|---|---------------|---------------------|---|--|
| 2357 | Plain: 205 (C2c)/230 (C2d) mm/sec, Thick 1: 154 mm/sec, Thick 2&Fine: 77 mm/ | | | • | |
| 001 | ITB unit: Plain: Bk | *ENG | [0 to 80 / 0 | C2c: 30, C2d: 33 / 1 μA] | |
| 001 | Adjusts the current for the imag | je transfer l | oelt for Black | in full color mode for plain paper. | |
| 002 | ITB unit: Plain: M | *ENG | [0 to 80 / 0 | C2c: 30, C2d: 33 / 1 μA] | |
| 002 | Adjusts the current for the imag | e transfer b | elt for Mager | nta in full color mode for plain paper. | |
| 003 | ITB unit: Plain: C | *ENG | [0 to 80 / 0 | C2c: 33, C2d: 37 / 1 μA] | |
| 003 | Adjusts the current for the imag | je transfer l | pelt for Cyan | in full color mode for plain paper. | |
| 004 | ITB unit: Plain: Y | *ENG | [0 to 80 / 0 | C2c: 38, C2d: 42 / 1 μA] | |
| 004 | Adjusts the current for the imag | je transfer l | oelt for Yellov | v in full color mode for plain paper. | |
| 005 | ITB unit: Thick 1: Bk | *ENG | [0 to 80 / 2 | 22 / 1 μΑ] | |
| 003 | 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 / 2 | 22 / 1 μΑ] | |
| 000 | 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 / 2 | 25 / 1 μΑ] | |
| 007 | Adjusts the current for the imag | je transfer l | pelt for Cyan | in full color mode for thick 1 paper. | |
| 008 | ITB unit: Thick 1: Y | *ENG | [0 to 80 / 2 | 28 / 1 μΑ] | |
| 008 | Adjusts the current for the image transfer belt for Yellow in full color mode for thick 1 paper. | | | | |
| 009 | ITB unit: Thick 2 & FINE: Bk | *ENG | [0 to 80 / 1 | I 1 / 1 μΑ] | |
| 009 | Adjusts the current for the imag | e transfer b | elt for Black ir | n full color mode for Thick 2 and fine. | |
| 010 | ITB unit: Thick 2 & FINE: M | | *ENG | [0 to 80 / 11 / 1 μA] | |

| | Adjusts the current for the image transfer belt for Magenta in full color mode for Thick 2 and fine. | | | | |
|-----|--|------|------------------------------|--|--|
| 011 | ITB unit: Thick 2 & FINE: C | *ENG | [0 to 80 / 12 / 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 belt for Yellow in full color mode for Thick 2 and fine. | | | | |

| 2360 | [Common: BW Environment 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 | | |
| 010 | ITB unit: Thick 1: C | *ENG | [1 to 60 / 2 / 1 /step] | |
| 011 | ITB unit: Thick 1: Y | *ENG | | |
| 012 | ITB unit: Thick 2: Bk | *ENG | [1 to 60 / 31 / 1 /step] | |
| 013 | ITB unit: Thick 2: M | *ENG | [1 to 60 / 2 / 1 /step] | |
| 014 | ITB unit: Thick 2: C | *ENG | [1 to 60 / 1 / 1 /step] | |
| 015 | ITB unit: Thick 2: Y | *ENG | | |

| | [Plain: Bias] |
|------|--|
| 2401 | Adjusts the DC voltage of the discharge plate for plain paper. |
| | Plain: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec |

| 001 | Separation DC: Plain: 1st Side | *ENG | [0 to 4000 / 2000 / 10 -V/step] |
|-----|--------------------------------|------|--|
| 002 | Separation DC: Plain: 2nd Side | *ENG | [0 to 4000 / 3000 / 10 -V/step] |
| 003 | Separation DC: 1200: 1st Page | *ENG | [0 to 4000 / 2000 / 10 -V/step] |
| 004 | Separation DC: 1200: 2nd side | *ENG | [0 to 4000 / 3000 / 10 –V/step] |

| | [Plain: Bias: BW] | | | | |
|---|------------------------------------|------|---|--|--|
| Adjusts the current for the paper transfer roller for plain paper in blace. Plain: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec | | | | | |
| 001 | Paper Transfer: Plain: 1 st Side | *ENG | | | |
| 002 | Paper Transfer: Plain: 2nd Side | *ENG | [0 to 250 / C2c: 30, C2d: 34 / 1 -µA /step] | | |
| 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] | | | | |
|---|------------------------------------|------|--|--|--|
| Adjusts the current for the paper transfer roller for plain paper in full color model. Plain: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec | | | | | |
| 001 | Paper Transfer: Plain: 1 st Side | *ENG | [0 to 250 / C2c: 36, C2d: 40 / 1 - µA / step] | | |
| 002 | Paper Transfer: Plain: 2nd Side | *ENG | [0 to 250 / C2c : 45 , C2d : 50 / 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: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec | | | | |
|-----|--|------|--|--|--|
| 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: 2nd side: 1200: S1 | *ENG | | | |
| 005 | Paper Transfer: Plain: 1 st 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: 2nd side: 1200: S2 | *ENG | [100 to 600 / 150 / 5%/step] | | |
| 009 | Paper Transfer: Plain: 1 st 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: 2nd side: 1200: S3 | *ENG | [100 to 600 / 300 / 5%/step] | | |
| 013 | Paper Transfer: Plain: 1 st 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 \ge S4 size \ge 148 mm (Paper width) | | |

| 016 | Paper Transfer: 2nd side: 1200: S4 | *ENG | [100 to 600 / 340 / 5%/step] |
|-----|---|------|---|
| 017 | Paper Transfer: Plain: 1 st 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: 2nd side: 1200: S5 | *ENG | [100 to 600 / 400 / 5%/step] |

| | [Plain: Leading Edge Correction] Plain Paper: Leading Edge Correction | | | | | |
|---------|--|--------------|-----------------------------------|--|--|--|
| | 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. | | | | | |
| 2421 | Plain: 205 (C2c)/230 (C2d |) mm/sec, 1 | 200: 77 mm/sec | | | |
| | ₩Note | | | | | |
| | The paper leading edg | 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 | [0.4-400 / 100 / 59/ /44-1] | | | |
| 004 | Paper Transfer: 1200: 2nd side | *ENG | [0 to 400 / 100 / 5%/step] | | | |
| 2421 | Adjusts the correction to the discharge plate current at the paper leading edge in each mode. SP2401 is multiplied by these SPs values. | | | | | |
| 005-008 | Note | | | | | |
| | The paper leading edge area can be adjusted with SP2422. | | | | | |
| 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 | |
| 800 | 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: 205 (C2c)/230 (C2d) r | Plain: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec | | | | | |
| 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 | | | | | |
| 005 | Separation DC: Plain: 1st Page | *ENG | [0 to 50 / 0 / 2 mm/step] | | | | |
| 006 | Separation DC: Plain: 2nd Page | *ENG | | | | | |
| 007 | Separation DC: 1200: 1st Page | *ENG | | | | | |
| 008 | Separation DC: 1200: 2nd side | *ENG | | | | | |

| 2423 | [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. | | | | |
| | Plain: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec | | | | |

| | U 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 | | | | | |
| 005 | Separation DC: Plain: 1st Page | *ENG | [0 to 400 / 100 / 5%/step] | | | | |
| 006 | Separation DC: Plain: 2nd Page | *ENG | | | | | |
| 007 | Separation DC: 1200: 1st Page | *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: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec | | | | |
| 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 | [0.15.50./0./2/.1] | | |
| 005 | Separation DC: Plain: 1st Page | *ENG | [0 to 50 / 0 / 2 mm/step] | | |
| 006 | Separation DC: Plain: 2nd Page | *ENG | | | |
| 007 | Separation DC: 1200: 1st Page | *ENG | | | |
| 008 | Separation DC: 1200: 2nd side | *ENG | | | |

| 2430 | [Plain: Environment Correction] DFU Plain: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec | | | | |
|------|--|------|---------------------------------|--|--|
| 001 | Separation DC: Plain: 1st Page | *ENG | [1 to 60 / 26 / 1 /step] | | |
| 002 | Separation DC: Plain: 2nd Page | *ENG | [1 to 60 / 32 / 1 /step] | | |
| 003 | Paper Transfer: BW: 1st Side | *ENG | [1 to 60 / 1 / 1 /step] | | |
| 004 | Paper Transfer: BW: 2nd Side | *ENG | [1 to 60 / 11 / 1 /step] | | |
| 005 | Paper Transfer: FC: 1st Side | *ENG | [1 to 60 / 39 / 1 /step] | | |
| 006 | Paper Transfer: FC: 2nd Side | *ENG | [1 to 60 / 14 / 1 /step] | | |
| 007 | Separation DC: 1200: 1st Page | *ENG | [1 to 60 / 26 / 1 /step] | | |
| 800 | Separation DC: 1200: 2nd side | *ENG | [1 to 60 / 32 / 1 /step] | | |
| 009 | Paper Transfer: 1200: BW: 1st Side | *ENG | [140 / 11 / 1 /] | | |
| 010 | Paper Transfer: 1200: BW: 2 | *ENG | [1 to 60 / 11 / 1 /step] | | |
| 011 | Paper Transfer: 1200: FC: 1st Side | *ENG | [1 + 40 / 40 / 1 / +] | | |
| 012 | Paper Transfer: 1200: FC: 2 | *ENG | [1 to 60 / 49 / 1 /step] | | |

| 2451 | [Thin: Bias] | | |
|------|---|------|-----------------------------------|
| | Adjusts the DC voltage of the discharge plate for thin paper. Plain: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec | | |
| 001 | Separation DC: Plain: 1st Side | *ENG | [0 to 4000 / 2000 / 10 –V/ |
| 003 | Separation DC: 1200: 1st Page | *ENG | step] |

| | [Thin: Bias: BW] | | | | | |
|--|------------------|---|------|---|--|--|
| | 2453 | Adjusts the current for the paper transfer roller for thin paper in black-and-white mode. Plain: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec | | | | |
| | 001 | Paper Transfer: Plain: 1st Side | *ENG | [0 to 250 / C2c: 30, C2d: 34 / 1 – µA /step] | | |
| | 003 | Paper Transfer: 1200: 1st Side | *ENG | [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: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec | | |
| 001 | Paper Transfer: Plain: 1st Side | *ENG | [0 to 250 / C2c: 40, C2d: 45 / 1 – µA /step] |
| 003 | Paper Transfer: 1200: 1st Side | *ENG | [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: 205 (C2c)/230 (C2d) mm/sec | | |
| 001 | Paper Transfer: Plain: 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 / 120 / 5%/step] 297 mm ≥ S2 size ≥ 275 mm (Paper width) |
| 009 | Paper Transfer: Plain: 1st Side: S3 | *ENG | [100 to 600 / 140 / 5%/step] 297 mm ≥ S2 size ≥ 275 mm (Paper width) |
| 013 | Paper Transfer: Plain: 1st Side: S4 | *ENG | [100 to 600 / 160 / 5%/step] 297 mm ≥ S2 size ≥ 275 mm (Pape r width) |
| 017 | Paper Transfer: Plain: 1st Side: S5 | *ENG | [100 to 600 / 180 / 5%/step] |

| | [Thin: Leading Edge Correction] Thin | Paper: Leadir | ng Edge Correction |
|---|--|--------------------|----------------------------|
| Adjusts the correction to the paper transfer roller current at the paper le | | | |
| 2471 | Plain: 205 (C2c)/230 (C2d) mm/se | c, 1200: <i>77</i> | mm/sec |
| | ●Note | | |
| | The paper leading edge area can be adjusted with SP2472. | | d with SP2472. |
| 001 | Paper Transfer: Plain: 1st Side | *ENG | [0 to 400 / 100 / 5%/step] |

| 003 | Paper Transfer: 1200: 1st Side | *ENG | |
|------|--|------|-----------------------------------|
| 005 | Separation DC: Plain: 1st Side | *ENG | |
| 2471 | Adjusts the correction to the discharge plate current at the paper leading edge in each mode. SP2451 is multiplied by these SP values. | | |
| | The paper leading edge area can be adjusted with SP2472. | | |
| 007 | Separation DC: 1200: 1st Side | *ENG | [0 to 400 / 100 / 5%/step] |

| | [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: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec | | |
| 001 | Paper Transfer: Plain: 1st Side | *ENG | |
| 003 | Paper Transfer: 1200: 1st Side | *ENG | [0. 50 / 0 / 0 / 1 |
| 005 | Separation DC: Plain: 1st Page | *ENG | [0 to 50 / 0 / 2 mm/step] |
| 007 | Separation DC: 1200: 1st Side | *ENG | |

| | [Thin: Trailing Edge Correction] Thin Paper: Trailing Edge Correction | | |
|--|---|------|-----------------------------------|
| Adjusts the correction coefficient to the paper transfer roller current for the page in each mode. SP2453 and SP2457 are multiplied by these SP values | | | |
| 2473 | Plain: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec Note • The paper trailing edge area can be adjusted with SP2474. | | |
| | | | |
| | | | |
| 001 | Paper Transfer: Plain: 1st 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 to 400 / 100 / 5%/step] |
| 007 | Separation DC: 1200: 1st Page | *ENG | [0 to 400 / 100 / 5%/step] |

| 2474 |
|------|
|------|

| | 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: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec | | |
|-----|--|------|-----------------------------------|
| 001 | Paper Transfer: Plain: 1st Side | *ENG | [0 to 50 / 0 / 2 mm /ston] |
| 003 | Paper Transfer: 1200: 1st Side | *ENG | [0 to 50 / 0 / 2 mm/step] |
| 005 | Separation DC: Plain: 1st Side | *ENG | [0.4-50 / 0 / 1 /] |
| 007 | Separation DC: 1200: 1st Page | *ENG | [0 to 50 / 0 / 1 mm/step] |

| 2480 | [Thin: Environment Correction] Plain: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec | | |
|------|---|------|---------------------------------|
| 001 | Separation DC: Plain: 1st Side | *ENG | [1 to 60 / 26 / 1 /step] |
| 003 | Paper Transfer: Plain: BW: 1st Side | *ENG | [1 to 60 / 11 / 1 /step] |
| 005 | Paper Transfer: Plain: FC: 1st Side | *ENG | [1 to 60 / 1 / 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] |

| 2481 | [Glossy: Bias] | | |
|------|---|------|--|
| 001 | Separation DC: Glossy: 1st Side | *ENG | [0 to 4000 / 2000 / 10 –V/step] |
| 001 | Adjusts the DC voltage of the discharge plate for glossy paper. | | lossy paper. |

| 2482 | [Glossy: Bias: BW] | | |
|---|----------------------------------|---------------------------------------|--------------------------------------|
| 001 | Paper Transfer: Glossy: 1st Side | *ENG | [0 to 250 / 12 / 1 –µA /step] |
| Adjusts the current for the paper transfer roller for glossy paper in black-and-white | | glossy paper in black-and-white mode. | |

| 2483 | [Glossy: Bias: FC] | | |
|--|----------------------------------|----------------------------------|--------------------------------------|
| 001 | Paper Transfer: Glossy: 1st Side | *ENG | [0 to 250 / 15 / 1 –µA /step] |
| Adjusts the current for the paper transfer roller for glossy paper in full color mode. | | glossy paper in full color mode. | |

| 2484 | [Glossy: Paper Size Correction] | | |
|------|--------------------------------------|------|-------------------------------------|
| 001 | Paper Transfer: Glossy: 1st Side: S1 | *ENG | [100 to 600 / 100 / 5%/step] |
| 005 | Paper Transfer: Glossy: 1st Side: S2 | *ENG | [100 to 600 / 120 / 5%/step] |
| 009 | Paper Transfer: Glossy: 1st Side: S3 | *ENG | [100 to 600 / 140 / 5%/step] |
| 013 | Paper Transfer: Glossy: 1st Side: S4 | *ENG | [100 to 600 / 160 / 5%/step] |
| 017 | Paper Transfer: Glossy: 1st Side: S5 | *ENG | [100 to 600 / 180 / 5%/step] |

| 2485 | [Glossy: Leading Edge Correction] | | |
|------|-----------------------------------|------|-------------------------------------|
| 001 | Paper Transfer: Glossy: 1st Side | *ENG | [10 to 400 / 100 / 5%/step] |
| 005 | Separation DC: Glossy: 1st Page | *ENG | [10 to 400 / 100 / 5%/step]] |

| 2486 | [Glossy: Switch Timing: Lead. Edge] | | |
|------|-------------------------------------|------|-----------------------------------|
| 001 | Paper Transfer: Glossy: 1st Side | *ENG | [0 to 50 / 0 / 2 mm/step] |
| 005 | Separation DC: Glossy: 1st Page | *ENG | [0 to 30 / 0 / 2 mm/ step] |

| 2487 | [Glossy: Trailing Edge Correction] | | |
|------|------------------------------------|------|------------------------------------|
| 001 | Paper Transfer: Glossy: 1st Side | *ENG | [0 to 400 / 100 / 5 %/step] |
| 005 | Separation DC: Glossy: 1st Page | *ENG | [0 10 400 / 100 / 3 %/ step] |

| 2488 | [Glossy: Switch Trail. Edge] | | |
|------|----------------------------------|------|----------------------------------|
| 001 | Paper Transfer: Glossy: 1st Side | *ENG | [0 to 50 / 0 / 2 mm/step] |
| 005 | Separation DC: Glossy: 1st Page | *ENG | |

| 2489 | [Glossy: Environment Correction] | | |
|------|----------------------------------|------|---------------------------------|
| 001 | Separation DC: Glossy: 1st Page | *ENG | [1 to 60 / 26 / 1 /step] |
| 003 | Paper Transfer: BW: 1st Side | *ENG | [1 to 60 / 11 / 1 /step] |
| 005 | Paper Transfer: BW: 2nd Side | *ENG | [1 to 60 / 1 / 1 /step] |

| | [Thick 1: Bias] | | |
|------|--|------|---------------------------------|
| 2501 | Adjusts the DC voltage of the discharge plate for thick 1 paper. Thick 1: 154 mm/sec, 1200: 77 mm/sec | | |
| 001 | Separation DC: Plain: 1st Side | *ENG | |
| 002 | Separation DC: Plain: 2nd Side | *ENG | [0 to 4000 / 1000 / 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 transf | | hick 1 paper in black-and-white mode. | |
| 001 | Paper Transfer: Thick 1: 1st Side | *ENG | [0.0.050 / 0.4 / 1 |
| 002 | Paper Transfer: Thick 1: 2nd Side | *ENG | [0 to 250 / 24 / 1 –µA /step] |
| 003 | Separation DC: 1200: 1st Side | *ENG | [0 to 250 / 12 / 1 -µA /step] |

| | [Thick 1: Bias: FC] | | |
|--|-----------------------------------|------|--------------------------------------|
| Adjusts the current for the paper transfer roller for thick 1 paper in full color mo Thick 1: 154 mm/sec, 1200: 77 mm/sec | | | hick 1 paper in full color mode. |
| 001 | Paper Transfer: Thick 1: 1st Side | *ENG | [0.4- 0.50 / 20 / 1 |
| 002 | Paper Transfer: Thick 1: 2nd Side | *ENG | [0 to 250 / 30 / 1 -µA /step] |
| 003 | Separation DC: 1200: 1st Side | *ENG | [0 to 250 / 15 / –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. | | | |
| | Thick 1: 154 mm/sec, 1200: 77 mm/sec | | | |
| 001 | Paper Transfer: Thick 1: 1st Side: S1 | *ENG | [100 to 600 / 100 / 5%/step] | |
| 002 | Paper Transfer: Thick 1: 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: Thick 1: 1st Side: S2 | *ENG | [100 to 600 / 105 / 5%/step] 297 mm ≥ S2 size ≥ 275 mm (Paper width) |
| 006 | Paper Transfer: Thick 1: 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: Thick 1: 1st Side: S3 | *ENG | [100 to 600 / 110 / 5%/step] 275 mm ≥ S3 size ≥ 210 mm (Paper width) |
| 010 | Paper Transfer: Thick 1: 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: Thick 1: 1st Side: S4 | *ENG | [100 to 600 / 115 / 5%/step] 210 mm ≥ S4 size ≥ 148 mm (Paper width) |
| 014 | Paper Transfer: Thick 1: 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: Thick 1: 1st Side: S5 | *ENG | [100 to 600 / 120 / 5%/step] 148 mm ≥ S5 size (Paper width) |
| 018 | Paper Transfer: Thick 1: 2nd Side: S5 | *ENG | [100 to 600 / 220 / 5%/step] 148 mm ≥ S5 size (Paper width) |

| 010 | 019 Paper Transfer: 1200: 1st Side: S5 | *ENG | [100 to 600 / 180 / 5%/step] | |
|-----|--|------|-------------------------------------|--|
| 019 | Taper Italisier. 1200. Tsi Side. 33 | LING | 148 mm ≥ S5 size (Paper width) | |

| | [Thick 1: Leading Edge Correction] Thick 1 Paper: Leading Edge Correction | | | | |
|-------|--|------|-----------------------------------|--|--|
| 0.507 | 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 | Thick 1: 154 mm/sec, 1200: 77 mm/sec Note The paper leading edge area can be adjusted with SP2522. | | | | |
| | | | | | |
| | | | | | |
| 001 | Paper Transfer: Thick 1: 1st Side | *ENG | [0+-400/100/59/4+] | | |
| 002 | Paper Transfer: Thick 1: 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: Thick 1: 1st Side | *ENG | [0+, 400 / 100 / 59 / +] | | |
| 006 | Separation DC: Thick 1: 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. | | | | |
| | Thick 1: 154 mm/sec, 1200: 77 mm/sec | | | | |
| 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 | | | |

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.

Thick 1: 154 mm/sec, 1200: 77 mm/sec

UNote

• The paper trailing edge area can be adjusted with SP2524.

| 001 | Paper Transfer: Thick 1: 1st Side | *ENG | |
|-----|-----------------------------------|------|-----------------------------------|
| 002 | Paper Transfer: Thick 1: 2nd Side | *ENG | [0 to 400 / 100 / 5%/step] |
| 003 | Paper Transfer: 1200: 1st Side | *ENG | [0 to 400 / 100 / 3 %/ step] |
| 005 | Paper Transfer: Thick 1: 1st Side | *ENG | |
| 006 | Paper Transfer: Thick 1: 2nd Side | *ENG | [0.1.400/100/59//] |
| 007 | Paper Transfer: 1200: 1st Side | *ENG | [0 to 400 / 100 / 5%/step] |

| | [Thick 1: 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. | | | - · |
| | Thick 1: 154 mm/sec, 1200: 77 mm/sec | | |
| 001 | Paper Transfer: Thick 1: 1st Side | *ENG | |
| 002 | Paper Transfer: Thick 1: 2nd Side | *ENG | |
| 003 | Paper Transfer: 1200: 1st Side | *ENG | [0.4-50./0./1/] |
| 005 | Paper Transfer: Thick 1: 1st Side | *ENG | [0 to 50 / 0 / 1 mm/step] |
| 006 | Paper Transfer: Thick 1: 2nd Side | *ENG | |
| 007 | Paper Transfer: 1200: 1st Side | *ENG | |

| 2530 | [Thick 1: Environment Correction] Thick 1: 154 mm/sec, 1200: 77 mm/sec | | |
|------|--|------|---------------------------------|
| 001 | Paper Transfer: Thick 1: 1st Side | *ENG | [] to 40 / 22 / 1 /ston] |
| 002 | Paper Transfer: Thick 1: 2nd Side | *ENG | [1 to 60 / 22 / 1 /step] |
| 003 | Paper Transfer: Thick 1: BW: 1st Side | *ENG | [1 to 60 / 11 / 1 /step] |

| 004 | Paper Transfer: Thick 1: BW:2nd Side | *ENG | |
|-----|---------------------------------------|------|---------------------------------|
| 005 | Paper Transfer: Thick 1: FC: 1st Side | *ENG | [1 to 60 / 1 / 1 /step] |
| 006 | Paper Transfer: Thick 1: FC:2nd Side | *ENG | [1 to 60 / 11 / 1 /step] |
| 007 | Paper Transfer: 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 Page | *ENG | [04000 / 1000 / 10. \//] | |
| 002 | Separation DC: 2nd Page | *ENG | [0 to 4000 / 1000 / 10 –V/step] | |

| 2553 | [Thick 2: Bias: BW] | | | |
|------|--|------|--|--|
| 2555 | Adjusts the current for the paper transfer roller for thick 2 paper in black-and-white mode. | | | |
| 001 | Paper Transfer: 1st Side | *ENG | [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] | | | |
|------|---|------|--|--|
| 2556 | Adjusts the current for the paper transfer roller 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] | | | |
|------|---|------|-------------------------------------|--|
| 2561 | Adjusts the size correction coefficient for the paper transfer roller current for each paper size. SP2553 and SP2558 are multiplied by these SP values. | | | |
| 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) | |
| 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 | Note | | | | |
| | The paper leading edge area can be adjusted with SP2572. | | | | | |
| 001 | Paper Transfer: 1st Side | *ENG | [0 to 400 / 100 / 5% /stop] | | | |
| 002 | 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 Page | *ENG | [0.4-400/100/59//44-1] | | | |
| 004 | Separation DC: 2nd Page | *ENG | [0 to 400 / 100 / 5%/step] | | | |

| | [Thick 2: Switch Timing: Lead. Edge] | | | | | | |
|------|--|------|---------------------------------|--|--|--|--|
| 2572 | per transfer roller/ discharge plate at the area and 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 Page | *ENG | [0 to 50 / 0 / 2mm/step] | | | | |
| 004 | Separation DC: 2nd Page | *ENG | | | | | |

[Thick 2: Trailing Edge Correction] Thick 2 Paper: Trailing Edge Correction 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. 2573 **₩** Note • The paper trailing edge area can be adjusted with SP2574. *ENG 001 Paper Transfer: 1st Side [0 to 400 / 100 / 5%/step] 002 Paper Transfer: 2nd Side *ENG 003 *ENG [0 to 400 / 100 / 5%/step] Separation DC: 1st Page [0 to 400 / 100 / 5%/step] 004 *ENG Separation DC: 2nd Page

| | [Thick 2: Switch Trailing Edge Correction] | | | | | |
|---|--|------|----------------------------------|--|--|--|
| 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. | | | | | | |
| 001 | Paper Transfer: 1st Side | *ENG | | | | |
| 002 | Paper Transfer: 2nd Side | *ENG | [0 to 50 / 0 / 2 mm/step] | | | |
| 003 | Separation DC: 1st Page | *ENG | | | | |

| 2580 | [Thick 2 Environment Correction] | | | |
|------|----------------------------------|------|---------------------------------|--|
| 001 | Separation DC: 1st Page | *ENG | [] to 60 / 22 /] /stow] | |
| 002 | Separation DC: 2nd Page | *ENG | [1 to 60 / 22 / 1 /step] | |
| 003 | Paper Transfer: BW: 1st Side | *ENG | [0.45,40,/11,/1,/45,1] | |
| 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] | | | |
|------|--|------|---------------------------------|--|
| 2001 | Adjusts the DC voltage of the discharge plate for OHP. | | | |
| 001 | Separation DC | *ENG | [0 to 4000 / 1000 / 10 -V/step] | |

| 2603 | [OHP: Bias: BW] | | | | |
|------|--|------|--|--|--|
| 2003 | 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) |

| | [OHP: Leadin Edge Correction] 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. | | | | |
| 001 | 001 Paper Transfer *ENG [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 | 2 Separation DC *ENG [0 to 400 / 100 / 5%/step] | | | | |

| | [OHP: Switch Timing: Leadn. Edge] | | | | |
|------|---|------|----------------------------------|--|--|
| 2622 | 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] OHP: Trailing Edge Correction 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.

| | [OHP: Trailing Edge Correction] | | | | |
|---|---------------------------------|------|------------------------------------|--|--|
| 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. | | | | | |
| 001 | Paper Transfer | *ENG | [-100 to 0 / 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] | | | | |
|------|--|------|--|--|--|
| 2030 | Adjusts the DC voltage of the discharge plate for thick paper 3. | | | | |
| 001 | Separation DC: 1st Page | *ENG | [0 to 4000 / 1000 / 10 –V/step] | | |
| 002 | Separation DC: 2nd Page | *ENG | [0 to 4000 / 1000 / 10 - v / step] | | |

| 2651 | [Thick3: Bias: BW] | | | | |
|------|---|------------------|--------------------------------------|--|--|
| 2031 | Adjusts the current for the paper transfe | r roller for thi | ck 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] Adjusts the size correction coefficient for the paper transfer roller current for each paper size. SP2651 and SP2652 are multiplied by these SP values. | | | | | |
|------|---|------|---|--|--|--|
| 2653 | | | | | | |
| 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: S3 | *ENG | [100 to 600 / 600 / 5%/step] 148 mm ≥ S5 size (Paper width) | | | |

2654 [Thick 3: Leading Edge Correction] Thick 3 Paper: Leading Edge Correction

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. **W** Note • The paper leading edge area can be adjusted with SP2655. 001 Paper Transfer: 1st Side *ENG [0 to 400 / 100 / 5%/step] 002 Separation DC: 1st Page *ENG Adjusts the correction to the discharge plate current at the paper leading edge in each mode. SP2650 is multiplied by these SP values. 2654 **Note** • The paper leading edge area can be adjusted with SP2655. *ENG 003 Paper Transfer: 2nd Side [0 to 400 / 100 / 5%/step] Separation DC: 2nd Page *ENG 004

| | [Thick 3: Switch Timing: Lead. Edge] | | | | |
|--|--------------------------------------|------|----------------------------------|--|--|
| Adjusts the bias/voltage switch timing of the paper transfer roller/discharge p paper leading edge between the erase margin area and the image area. | | | | | |
| 001 | Paper Transfer: 1st Side | *ENG | | | |
| 002 | Separation DC: 1st Page | *ENG | [0 + 50 / 0 / 2 /] | | |
| 003 | Paper Transfer: 2nd Side | *ENG | [0 to 50 / 0 / 2 mm/step] | | |
| 004 | Separation DC: 2nd Page | *ENG | | | |

| | [Thick 3: Trailing 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. | | | | |
| | Note | | | | |
| | The paper trailing edge area can be adjusted with SP2657. | | | | |
| 001 | Paper Transfer: 1st Side | *ENG | ENG | | |
| 002 | Paper Transfer: 2nd Side | *ENG | [0 to 400 / 100 / 5%/step] | | |
| 003 | Separation DC: 1st Page | *ENG | NG | | |

| 004 Separation DC: 2st Page | 004 Sengration DC: 2st Page *FNG |
|-------------------------------|----------------------------------|
|-------------------------------|----------------------------------|

| | [Thick 3: Trailing 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 Page | *ENG | [0 to 50 / 0 / 2 mm/step] | | |
| 004 | Separation DC: 2nd Page | *ENG | | | |

| | [Thick 3: Environment Correction] Thick 3 Paper: MM Environment Coefficient Adjustment | | | |
|------|--|---|---------------------------------|----------------------------------|
| 2660 | Adjusts the environment coefficient for each mode. When the environment is detected MM, SP2651 and SP2652 are multiplied by these SP values. | | | |
| 001 |] | | | |
| 002 | - | * | [1 to 60 / 22 / 1 /step] | |
| | Adjusts the environment coefficient for each mode. When the environment is detected as MM, SP2650 is multiplied by these SP values. | | | |
| 003 | Paper Transfer: Thick 3: 2nd Side | | *ENG | I . |
| 004 | Separation DC: Thick 3: 2nd Side: | | *ENG | [1 to 60 / 11 / 1 / step] |
| 005 | Paper Transfer: FC: 1 st Side | | *ENG | [1 to 60 / 55 / 1 /step] |
| 006 | Paper Transfer: FC: 2st 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: 205 (C2c)/230 (C2d) mm/sec, Fine: 77 mm/sec | | |
| 001 | Separation DC: Plain: 1st Side | *ENG | [0 to 4000 / 2000 / 10 –V/step] |
| 002 | Separation DC: Plain: 2nd Side | *ENG | [0 to 4000 / 3000 / 10 –V/step] |
| 003 | Paper Transfer: Thick 1: 1st Side | *ENG | [0 to 4000 / 2000 / 10 –V/step] |

| | [Special 1: Bias: FC] | | | |
|------|---|------|---|--|
| 2757 | Adjusts the current for the paper transfer roller for special paper 1 in full color mode. Plain: 205 (C2c)/230 (C2d) mm/sec, Fine: 77 mm/sec | | | |
| 001 | Paper Transfer: Plain: 1st Side | *ENG | [0 to 250 / C2c : 40 , C2d : 45 / 1 – µA /step] | |
| 002 | Paper Transfer: Plain: 2nd Side | *ENG | [0 to 250 / C2c : 45 , C2d : 50 / 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. 2761 SP2753 and SP2757 are multiplied by these SP values. Plain: 205 (C2c)/230 (C2d) mm/sec, Fine: 77 mm/sec 001 Paper Transfer: Plain: 1st Side: S1 *ENG [100 to 600 / **100** / 5%/step] S1 size \geq 297 mm (Paper width) 002 Paper Transfer: Plain: 2nd Side: S1 *ENG 005 Paper Transfer: Plain: 1st Side: S2 *ENG [100 to 600 / **120** / 5%/step] 297 mm \ge S2 size \ge 275 mm (Paper 006 Paper Transfer: Plain: 2nd Side: S2 *ENG width) 009 Paper Transfer: Plain: 1st Side: S3 *ENG [100 to 600 / **140** / 5%/step] $275 \text{ mm} \ge S3 \text{ size} \ge 210 \text{ mm}$ (Paper 010 Paper Transfer: Plain: 2nd Side: S3 *ENG width) *ENG 013 Paper Transfer: Plain: 1st Side: S4 [100 to 600 / **160** / 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) |
| 017 | Paper Transfer: Plain: 1st Side: S5 | *ENG | [100 to 600 / 180 / 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) |

| | [Special 1: Leading Edge Correction] Special 1 Paper: Leading Edge Correction | | | |
|------|--|------|------------------------------------|--|
| | 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: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec | | | |
| | ◆ 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] | |
| | Adjusts the correction to the discharge plate current at the paper leading edge in each to SP2751 is multiplied by these SP values. | | | |
| 2771 | ●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: Switch Timing: Lead. 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.

| | Plain: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec | | | |
|-----|--|------|----------------------------------|--|
| 001 | Paper Transfer: Plain: 1st Side | *ENG | [0.45.50.70.70 | |
| 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: Trailing 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: 205 (C2c)/230 (C2d) mm/sec, 12 | 200: <i>77</i> m | m/sec | |
| | Note | | | |
| | 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 to 400 / 100 / 5%/step] | |
| 005 | Separation DC: Plain: 1st Side | *ENG | [0 10 400 / 1 00 / 3 %/ siep] | |
| 006 | Separation DC: Plain: 2nd Side | *ENG | | |
| 007 | Separation DC: 1200: 1st Side | *ENG | | |

| | [Special 1: Switch Timing: Trail. Edge] | | |
|--|---|------|----------------------------------|
| Adjusts the bias/voltage switch timing of the paper transfer roller/discharge planer trailing edge between the erase margin area and the image area. Plain: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec | | | |
| | | | m/sec |
| 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 | *ENG | |

| 005 | Separation DC: Plain: 1st Side | *ENG |
|-----|--------------------------------|------|
| 006 | Separation DC: Plain: 2nd Side | *ENG |
| 007 | Separation DC: 1200: 1st Side | *ENG |

| 2780 | [Special 1: Environment Correction] Plain: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec | | | |
|------|--|------|---------------------------------|--|
| 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. (0 /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] | | | |
|------|--|------|--|--|
| 2801 | Adjusts the DC voltage of the discharge plate for special paper 2. Plain: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec | | | |
| 001 | Separation DC: Plain: 1st Side | *ENG | [0 to 4000 / 2000 / 10 –V/step] | |
| 002 | Separation DC: Plain: 2nd Side | *ENG | [0 to 4000 / 3000 / 10 –V/step] | |
| 003 | Separation DC: 1200: 1st Side | *ENG | [0 to 4000 / 2000 / 10 –V/step] | |

| | [Special2: Bias: BW] | | |
|---|---------------------------------|------|---|
| Adjusts the current for the paper transfer roller for special paper 2 in black-and- Plain: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec | | | |
| 001 | Paper Transfer: Plain: 1st Side | *ENG | [0 to 250 / C2c : 30/ C2d : 34 / 1 – |
| 002 | Paper Transfer: Plain: 2nd Side | *ENG | μA /step] |

| | [Special2: Bias: FC] | | |
|---|---------------------------------|------|--|
| Adjusts the current for the paper transfer roller for special paper 2 in full color more Plain: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec | | | • • |
| 001 | Paper Transfer: Plain: 1st Side | *ENG | [0 to 250 / C2c: 40/ C2d: 45 / 1 –µA /step] |
| 002 | Paper Transfer: Plain: 2nd Side | *ENG | [0 to 250 / C2c: 45/ C2d: 50 / 1 –µA /step] |
| 003 | Separation DC: 1200: 1st Side | *ENG | [0 to 250 / 15 / 1 -µA /step] |

| | [Special2: Paper Size Correction] | | | | | |
|------|--|------|---|--|--|--|
| 2811 | Adjusts the size correction coefficient for the paper transfer roller current for each paper SP2803 and SP2807 are multiplied by these SP values. Plain: 205 (C2c)/230 (C2d) mm/sec | | | | | |
| 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) | | | |
| 005 | Paper Transfer: Plain: 1st Side: S2 | *ENG | [100 to 600 / 120 / 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) | | | |
| 009 | Paper Transfer: Plain: 1st Side: S3 | *ENG | [100 to 600 / 140 / 5%/step] 275 mm ≥ S3 size ≥ 210 mm (Paper width) | | | |
| 010 | Paper Transfer: Plain: 2nd Side: S3 | *ENG | [100 to 600 / 140 / 5%/step] 275 mm ≥ S3 size ≥ 210 mm (Paper width) | | | |
| 013 | Paper Transfer: Plain: 1st Side: S4 | *ENG | [100 to 600 / 160 / 5%/step] | | | |

ŏ

| | | | 210 mm ≥ S4 size ≥ 148 mm (Paper width) |
|-----|-------------------------------------|------|---|
| 014 | Paper Transfer: Plain: 2nd Side: S4 | *ENG | [100 to 600 / 220 / 5%/step] 210 mm ≥ S4 size ≥ 148 mm (Paper width) |
| 017 | Paper Transfer: Plain: 1st Side: S5 | *ENG | [100 to 600 / 180 / 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) |

| | [Special 2: Leading Edge Correction] Special 2 Paper: Leading Edge Correction | | | |
|------|--|-------------|-----------------------------------|--|
| 2821 | 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. | | | |
| 2021 | Plain: 205 (C2c)/230 (C2d) mm/sec, 120 | 0: 77 mm/ | /sec | |
| | ₩ Note | | | |
| | The paper leading edge area can be c | ıdjusted wi | th 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] | |
| 0001 | Adjusts the correction to the discharge plate current at the paper leading edge in each mode. SP2801 is multiplied by these SP values. | | | |
| 2821 | U Note | | | |
| | The paper leading edge area can be adjusted with SP2822. | | | |
| 005 | D5 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: Switch Timing: Lead. 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.

| | Plain: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec | | |
|-----|--|------|----------------------------------|
| 001 | Paper Transfer: Plain: 1st Side | *ENG | |
| 002 | Paper Transfer: Plain: 2nd Side | *ENG | |
| 003 | Paper Transfer: 1200: 1st Side | *ENG | [0.4-50/0/2/] |
| 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 | |

| | [Special 2: Trailing 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: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec | | | | |
| | U Note | Note | | | |
| The paper trailing edge area can be adjusted with SP2824. | | | h SP2824. | | |
| 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 2: Switch Timing: Trail. Edge] | | |
|---|---|-----------|----------------------------------|
| Adjusts the bias/voltage switch timing of the paper transfer roller/dischar paper trailing edge between the erase margin area and the image area. Plain: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec | | | d the image area. |
| | Fidin. 203 (C2C)/ 230 (C2d) min/ sec, 120 | 10:77 mm/ | rsec |
| 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 | *ENG | |

| 005 | Separation DC: Plain: 1st Side | *ENG |
|-----|--------------------------------|------|
| 006 | Separation DC: Plain: 2nd Side | *ENG |
| 007 | Separation DC: 1200: 1st Side | *ENG |

| 2830 | [Special 2: Environment Correction] Plain: 205 (C2c)/230 (C2d) mm/sec, 1200: 77 mm/sec | | |
|------|--|------|---------------------------------|
| 001 | Paper Transfer: Plain: 1st Side | *ENG | [1 to 60 / 26 / 1 /step] |
| 002 | Paper Transfer: Plain: 2nd Side | *ENG | [1 to 60 / 32 / 1 /step] |
| 003 | Paper Transfer: Plain: BW: 1st Side | *ENG | [1 to 60 / 1 / 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 | Paper Transfer: 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. | | | |
| Thick 1: 154 mm/sec, 1200: 77 mm/sec | | | | |
| 001 | Separation DC: Thick 1: 1st Side | *ENG | [0 to 4000 / 2000 / 10 –V/ step] | |
| 002 | Separation DC: Thick 1: 2nd Side | *ENG | [0 to 4000 / 3000 / 10 -V/ step] | |
| 003 | Separation DC: 1200: 1st Side | *ENG | [0 to 4000 / 2000 / 10 –V/ step] | |

| | | [Special 3: Bias: BW] | |
|------|--|--|---|
| 2852 | | Adjusts the current for the paper transfer roller for special paper 3 in black-and-white mode. |] |
| | | Thick 1: 154 mm/sec, 1200: 77 mm/sec | |

| 001 | Paper Transfer: Thick 1: 1st Side | *ENG | [0 to 250 / C2c : 30/ C2d : |
|-----|-----------------------------------|------|---|
| 002 | Paper Transfer: Thick 1: 2nd Side | *ENG | 34 / 1 –μΑ /step] |
| 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 special Thick 1: 154 mm/sec, 1200: 77 mm/sec | | | cial paper 3 in full color mode. | |
| 001 | Paper Transfer: Thick 1: 1st Side | *ENG | [0 to 250 / C2c : 40/ C2d : 45 / 1 –µA /step] | |
| 002 | Paper Transfer: Thick 1: 2nd Side | *ENG | [0 to 250 / C2c : 45/ C2d : 50 / 1 –µA /step] | |
| 003 | Paper Transfer: 1200: 1st Side | *ENG | [0 to 250 / 15 / 1 –µA /step] | |

| | [Special 3: Paper Size Correction] | | | | |
|---|---------------------------------------|------|--|--|--|
| Adjusts the size correction coefficient for the paper transfer roller current for each possible SP2852 and SP2857 are multiplied by these SP values. Thick 1: 154 mm/sec | | | | | |
| | Tiller 1. 134 lillily sec | I | | | |
| 001 | Paper Transfer: Thick 1: 1st Side: S1 | *ENG | [100 to 600 / 100 / 5%/step] | | |
| 002 | Paper Transfer: Thick 1: 2nd Side: S1 | *ENG | S1 size ≥ 297 mm (Paper width) | | |
| 005 | Paper Transfer: Thick 1: 1st Side: S2 | *ENG | [100 to 600 / 120 / 5%/step] 297 mm ≥ S2 size ≥ 275 mm (Paper width) | | |
| 006 | Paper Transfer: Thick 1: 2nd Side: S2 | *ENG | [100 to 600 / 120 / 5%/step] 297 mm ≥ S2 size ≥ 275 mm (Paper width) | | |
| 009 | Paper Transfer: Thick 1: 1st Side: S3 | *ENG | [100 to 600 / 140 / 5%/step] 275 mm ≥ S3 size ≥ 210 mm (Paper width) | | |
| 010 | Paper Transfer: Thick 1: 2nd Side: S3 | *ENG | [100 to 600 / 140 / 5%/step] 275 mm ≥ S3 size ≥ 210 mm (Paper width) | | |

| 013 | Paper Transfer: Thick 1: 1st Side: S4 | *ENG | [100 to 600 / 160 / 5%/step] 210 mm ≥ S4 size ≥ 148 mm (Paper width) |
|-----|---------------------------------------|------|---|
| 014 | Paper Transfer: Thick 1: 2nd Side: S4 | *ENG | [100 to 600 / 160 / 5%/step] 210 mm ≥ S4 size ≥ 148 mm (Paper width) |
| 017 | Paper Transfer: Thick 1: 1st Side: S5 | *ENG | [100 to 600 / 180 / 5%/step] 148 mm ≥ S5 size (Paper width) |
| 018 | Paper Transfer: Thick 1: 2nd Side: S5 | *ENG | [100 to 600 / 180 / 5%/step] 148 mm ≥ S5 size (Paper width) |

| | [Special 3: Leading 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 | Thick 1: 154 mm/sec, 1200: 77 mm/sec Note | | | |
| | | | | |
| | The paper leading edge area can be c | adjusted wi | th SP2872. | |
| 001 | Paper Transfer: Thick 1: 1st Side | *ENG | | |
| 002 | Paper Transfer: Thick 1: 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 adjusted with SP2872. | | | |
| 005 | Separation DC: Thick 1: 1st Side *ENG | | | |
| 006 | Separation DC: Thick 1: 2nd Side | *ENG | [0 to 400 / 100 / 5%/step] | |
| 007 | Separation DC: 1200: 1st Side | *ENG | | |

| 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. Thick 1: 154 mm/sec, 1200: 77 mm/sec | | |
|-----|---|------|----------------------------------|
| 001 | Paper Transfer: Thick 1: 1st Side | *ENG | |
| 002 | Paper Transfer: Thick 1: 2nd Side | *ENG | |
| 003 | Paper Transfer: 1200: 1st Side | *ENG | [0+-50/0/2/-+] |
| 005 | Separation DC: Thick 1: 1st Side | *ENG | [0 to 50 / 0 / 2 mm/step] |
| 006 | Separation DC: Thick 1: 2nd Side | *ENG | |
| 007 | Separation DC: 1200: 1st Page | *ENG | |

| | [Special 3: Trailing Edge Correction] Special 3 Paper: Trailing Edge Correction | | | |
|------|---|------|-----------------------------------|--|
| 0070 | Adjusts the correction to the paper transfer roller current for the paper trailing edge in e mode. SP2852 and SP2857 are multiplied by these SP values. | | | |
| 2873 | Thick 1: 154 mm/sec, 1200: 77 mm/sec | | | |
| | Note | | | |
| | The paper trailing edge area can be adjusted with SP2874. | | | |
| 001 | Paper Transfer: Thick 1: 1st Side | *ENG | | |
| 002 | Paper Transfer: Thick 1: 2nd Side | *ENG | | |
| 003 | | | [0.1.400 / 100 / 59/ /.1] | |
| 005 | Separation DC: Thick 1: 1st Side | *ENG | [0 to 400 / 100 / 5%/step] | |
| 006 | Separation DC: Thick 1: 2nd Side | *ENG | | |
| 007 | Separation DC: 1200: 1st Side | *ENG | | |

| | [Special 3: Switch Timing: Trail. Edge] | | |
|------|--|------|----------------------------------|
| 2874 | 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. Thick 1: 154 mm/sec, 1200: 77 mm/sec | | |
| 001 | Paper Transfer: Thick 1: 1st Side *ENG | | |
| 002 | Paper Transfer: Thick 1: 2nd Side | *ENG | [0 to 50 / 0 / 2 mm/step] |

| 003 | Paper Transfer: 1200: 1st Side | *ENG |
|-----|----------------------------------|------|
| 005 | Separation DC: Thick 1: 1st Side | *ENG |
| 006 | Separation DC: Thick 1: 2nd Side | *ENG |
| 007 | Separation DC: 1200: 1st Side | *ENG |

| 2880 | [Special 3: Environment Correction] Thick 1: 154 mm/sec, 1200: 77 mm/sec | | |
|------|--|------|---------------------------------|
| 001 | Separation DC: Thick 1: 1st Side | *ENG | [1 to 60 / 26 / 1 /step] |
| 002 | Separation DC: Thick 1: 2nd Side | *ENG | [1 to 60 / 32 / 1 /step] |
| 003 | Paper Transfer: Thick 1: BW: 1st Side | *ENG | [] 40 / 11 / 1 /] |
| 004 | Paper Transfer: Thick 1: BW:2nd Side | *ENG | [1 to 60 / 11 / 1 /step] |
| 005 | Paper Transfer: Thick 1: FC: 1st Side | *ENG | [140 / 11 / 1 /] |
| 006 | Paper Transfer: Thick 1: 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] |

| | [OPC Drum Brake Time] | | | |
|------|---|------|---|--|
| 2901 | Adjusts the time when the OPC drum motor reverses from normal rotation after job end. DF Plain: 205 (C2c)/230 (C2d) mm/sec, Thick 1: 154 mm/sec, Thick 2&Fine: 77 mm/sec | | | |
| 001 | Plain | *ENG | | |
| 002 | Thick 1 | *ENG | [300 to 1500 / 500 / 10 msec/step] | |
| 003 | Thick 2 & FINE | *ENG | | |

| 2902 | [OPC Drum Reverse Time] | | | |
|------|---|------|---------------------------------------|--|
| 2902 | Adjusts the time for how long the OPC drum motor reverses after job end. DFU | | | |
| 001 | All: BW | *ENG | [0 to 200 / 30 / 10 msec/step] | |

| | [Image Transfer Roller Brake Ti | me] | |
|--|---------------------------------|------|---|
| Adjusts the time when the image transfer belt motor reverses from normal rotation end. DFU Plain: 205 (C2c)/230 (C2d) mm/sec, Thick 1: 154 mm/sec, Thick 2&Fine: 77 m | | | t motor reverses from normal rotation after job |
| | | | k 1: 154 mm/sec, Thick 2&Fine: 77 mm/sec |
| 003 | Plain | *ENG | |
| 004 | Thick 1 | *ENG | [300 to 1500 / 500 / 10 msec/step] |
| 005 | Thick 2 & FINE | *ENG | |

| 2904 | [Image Transfer Roller Reverse Time] | | | |
|------|--|------|---------------------------------------|--|
| 2904 | Adjusts the time for how long the image transfer belt motor reverses after job end. DFU | | | |
| 003 | All | *ENG | [0 to 200 / 30 / 10 msec/step] | |

| 2004 | [Phase Angle] | | | | | |
|------|---------------------|------|---------------------------------------|--|--|--|
| 2906 | DFU | | | | | |
| 001 | Y Drum | *ENG | | | | |
| 002 | C Drum | *ENG | [0.4-250 / 0 / 1 d /] | | | |
| 003 | M Drum | *ENG | [0 to 359 / 0 / 1 deg/step] | | | |
| 004 | K Drum | *ENG | | | | |
| 2906 | [Amplitude Setting] | | | | | |
| 006 | Y Drum | *ENG | | | | |
| 007 | C Drum | *ENG | [0.4-100/ 00 /01/41 | | | |
| 800 | M Drum | *ENG | [0 to 100 / 0.0 / 0.1 μm/step] | | | |
| 009 | K Drum | *ENG | | | | |

| | [ACS Setting (FC to Bk)] |
|------|--|
| 2907 | Adjusts the threshold for moving away the image transfer belt from the color PCUs. This SP moves the image transfer belt away from the color PCUs 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] | | | |

| 0000 | [Gain Adjust] Gain Adjustment of Image Transfer Belt Motor | | | | |
|------|--|------|--|--|--|
| 2908 | DFU | | | | |
| 001 | 230 mm/sec | *ENG | [0 or 1 / 0 / 1/step] 0: High speed (Low level) 1: Low speed (High level) | | |
| 002 | 205 mm/sec | *ENG | [0 or 1 / 1 / 1/step] | | |
| 003 | 115 mm/sec | *ENG | 0: High speed (Low level) | | |
| 004 | 77 mm/sec | *ENG | 1: Low speed (High level) | | |

| 2911 | [Offset Angle] DFU | | |
|------|--------------------|------|------------------------------------|
| 001 | Y Drum | *ENG | |
| 002 | C Drum | *ENG | [0.1. 250 / 0. / 1.]/ |
| 003 | M Drum | *ENG | [0 to 359 / 0 / 1 deg/step] |
| 004 | K Drum | *ENG | |

| 2912 | [Offset Amplitude Setting] DFU | | |
|------|--------------------------------|------|---------------------------------------|
| 001 | Y Drum | *ENG | |
| 002 | C Drum | *ENG | [0.4-100/00/01/41 |
| 003 | M Drum | *ENG | [0 to 100 / 0.0 / 0.1 µm/step] |
| 004 | K Drum | *ENG | |

| 2914 | [Shutter Motor] Not used | | |
|------|--------------------------|------|-------------------------------------|
| 001 | Delay Time Open | *ENG | DFU |
| 002 | Delay Time Close | *ENG | [1 to 50 / 38 / 1 msec/step] |

| 003 | Shutter Open | *ENG | Opens the shutter on the laser optics housing unit manually for test purposes. |
|-----|---------------|------|---|
| 004 | Shutter Close | *ENG | Closes the shutter on the laser optics housing unit manually for test purposes. |

| 2920 | [Transfer Motor 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 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] | |

| 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 or 1 / 0 / 1 /step] 0: No cleaning, 1: Cleaning |
| 002 | Refresh | *ENG | [0 or 1 / 1 / 1 /step] 0: No cleaning, 1: Cleaning |

| 2971 | [T1 Non Image Area ON Timing] | | |
|------|-------------------------------|------|--|
| 001 | - | *ENG | [-270 to 180 / C2c : 10/ C2d : 20 / 10 msec/step] |

Adjusts the timing for the non-image area bias of the image transfer roller.

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 successful. | (K): The self- | check for Cyan failed but the others were | | |
| | See the "Error Condition Tables" in the "Appendix: Process Control Error Conditions" section for details. | | | | |
| 001 | History: Latest | | | | |
| 002 | Result: Latest 1 | *ENG | | | |
| 003 | Result: Latest 2 | *ENG | [1111 to 99999999 / 99999999 / 1/step] | | |
| 004 | Result: Latest 3 | *ENG | | | |

| 3013 | [T Sensor Initial Set: Execution] Developer Initialization Setting | | |
|------|--|---|---|
| 001 | Execution: ALL | - | |
| 002 | Execution: COL | - | |
| 003 | Execution: Bk | - | |
| 004 | Execution: M | - | Executes the developer initialization for each color. |
| 005 | Execution: C | - | |
| 006 | Execution: Y | - | |

| 3014 | [T Sensor Initial Set Result: Display] Developer Initialization Result: Display | | | |
|------|--|------|--|--|
| | Display: YCMK | *ENG | [0 to 9999 / 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 | - | Executes the manual toner supply to the development unit. |
| 003 | Execution: Bk | - | development onto |

| 004 | Execution: M | - |
|-----|--------------|---|
| 005 | Execution: C | - |
| 006 | Execution: Y | - |

| 3016 | [Forced Toner Supply: Setting] Forced Toner Supply Setting ([Color]) | | | | |
|------|--|------|-----------------------------------|--|--|
| 3010 | Specifies the manual toner supply time for each color. | | | | |
| 001 | Supply Time: Bk | *ENG | | | |
| 002 | Supply Time: M | *ENG | [0 += 20 / 4 / 1 -== /-+==1 | | |
| 003 | Supply Time: C | *ENG | [0 to 30 / 4 / 1 sec/step] | | |
| 004 | Supply Time: Y | *ENG | | | |

| 2020 | [Vt Limit Error] | | | | |
|------|-----------------------------------|------|-------------------------------------|--|--|
| 3020 | DFU | | | | |
| 001 | Delta Vt Threshold | *ENG | [0 to 5 / 5 / 0.01 V/step] | | |
| 002 | Upper Threshold | *ENG | [0 to 5 / 4.7 / 0.01 V/step] | | |
| 003 | Threshold Number of Upper counter | *ENG | [0 to 99 / 20 / 1 time/step] | | |
| 004 | Lower Threshold | *ENG | [0 to 5 / 0.5 / 0.01 V/step] | | |
| 005 | Threshold Number of Lower counter | *ENG | [0 to 99 / 10 / 1 times/step] | | |
| 006 | Upper Counter: Bk | *ENG | | | |
| 007 | Upper Counter: M | *ENG | | | |
| 008 | Upper Counter: C | *ENG | | | |
| 009 | Upper Counter: Y | *ENG | [0 to 99 / 0 / 1 times/step] | | |
| 010 | Lower Counter: Bk | *ENG | | | |
| 011 | Lower Counter: M | *ENG | | | |
| 012 | Lower Counter: C | *ENG | | | |

| 3021 | [TD Sensor Initial Set] Developer Initialization Setting | | | | |
|---------|---|------|---|--|--|
| 3021 | Specifies the developer agitation time for each color at the developer initialization. DFU | | | | |
| 001 | Agitation Time: Bk | *ENG | | | |
| 002 | Agitation Time: M | *ENG | [0.1. 200 / 20 / 1 / 1] | | |
| 003 | Agitation Time: C | *ENG | [0 to 200 / 30 / 1 sec/step] | | |
| 004 | Agitation Time: Y | *ENG | | | |
| 005-008 | Sets the execution flag of the developer initialization for each color. DFU | | | | |
| 005 | Execution Flag: Bk | *ENG | [0 or 1 / 0 / 1/step] | | |
| 006 | Execution Flag: M | *ENG | 0: Flag OFF, 1: Flag ON | | |
| 007 | Execution Flag: C | *ENG | This flag is cleared after executing TD sensor | | |
| 008 | Execution Flag: Y | *ENG | initialization. | | |
| 009 | Prohibition | *ENG | Enables or disables developer initialization. DFU [0 or 1 / 0 / 1/step] 0: Enable, 1: Disable | | |

| 3022 | [Toner Replenishment Mode] DFU | | | |
|---------|--|------|-----------------------------------|--|
| 3022 | Specifies the toner supply time for each color in the toner supply mode. | | | |
| 001 | Number: Bk | *ENG | [0 to 30 / 8 / 1 sec/step] | |
| 002 | Number: M | *ENG | | |
| 003 | Number: C | *ENG | [0 to 30 / 6 / 1 sec/step] | |
| 004 | Number: Y | *ENG | | |
| 005-008 | Sets the execution flag for the toner supply mode for each color. | | | |
| 005 | Execution Flag: Bk | *ENG | [0 or 1 / 0 / 1/step] | |
| 006 | Execution Flag: M | *ENG | 0: Flag OFF, 1: Flag ON | |

| 007 | Execution Flag: C | *ENG | This flag is cleared after executing TD sensor |
|-----|-------------------|------|--|
| 800 | Execution Flag: Y | *ENG | initialization. |

| 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 pot | tential control. | 1 | | | |
| 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. | | | | | |
| 004 | Pre-ACC | *ENG | [0 to 2 / 2 / 1 / step] 0: Not Executed 1: Process Control 2: TC Control (TD Adjustment) 3: Not used | | | |
| | Selects the process control mode that is done before ACC. | | | | | |

| 3043 | [TD Adjustment Mode] | | | | | | |
|------|--|---------------------|-----------------------------------|--|--|--|--|
| | Repeat Number: Power ON | *ENG | [0 to 9 / 4 / 1 time/step] | | | | |
| 001 | Specifies the maximum number of repeats 0: Disabled, 1 to 3: Repeat number, 4: Repeat three times (No consumption m 5: Repeat three times (Toner is supplied o consumed only when the toner density is to 6 to 9: Disabled | ode) nly when th | | | | | |
| 002 | Repeat Number: Initialization | *ENG | [0 to 9 / 3 / 1 time/step] | | | | |

| | density adjustment at the developer | | | | | | |
|-----|---|------|-----------------------------------|--|--|--|--|
| | 0: 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] | | | | |
| 003 | Specifies the maximum number of repeats of the toner density adjustment in stand by mode. 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: ACC | *ENG | [0 to 9 / 3 / 1 time/step] | | | | |
| 004 | Specifies the maximum number of repeats of the toner density adjustment at ACC. 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 | | | | | | |
| 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] | | | | |
| 006 | Specifies the maximum number of repeats of the toner density adjustment at job end. 0: 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 to consumed only when the toner density is too dark.) 6 to 9: Disabled | | | | | | |
| 007 | Repeat: Interrupt | *ENG | [0 to 9 / 0 / 1 time/step] | | | | |

| | Specifies the maximum number of repeats of the toner density adjustment during printing. DFU | | | | | |
|-----|---|--|--------|--------|----------|---|
| 000 | Toner Supply Coefficient *El | | | G | [0 to | 25.5 / 10 / 0.1 sec/step] |
| 800 | Adjusts the time for the toner sup | ply mode | when o | a tone | er dens | ity is detected to be low. |
| | Consumption pattern: Bk *E | | | G | [0 to | 255 / 5 / 1 time/step] |
| 009 | Specifies the belt mark generating is detected to be low at the tone | | | _ | olack to | oner density when toner density |
| | Consumption pattern: M | | *EN | G | [0 to 2 | 255 / 5 / 1 time/step] |
| 010 | Specifies the belt mark generating density is detected to be low at t | - | | - | - | enta toner density when toner |
| | Consumption pattern: C | *ENG | [O to | o 255 | 5/5/ | 'l time/step] |
| 011 | Specifies the belt mark generating time for checking the cyan toner density when toner density is detected to be low at the toner density adjustment. | | | | | |
| | Consumption pattern: Y | rn: 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. | | | | | |
| 013 | T1 Bias: Bk | *ENG | [O to | o 80 , | / C2c | : 22, C2d : 30 / 1 µA/step] |
| 013 | Adjusts the image transfer belt bias for Black. | | | | | |
| 014 | T2 Bias: M | *ENG | [O to | o 80 , | / C2c | : 22, C2d: 30 / 1 μA/step] |
| 014 | Adjusts the image transfer belt bias for Magenta. | | | | | |
| 015 | T3 Bias: C | *ENG | [O t | o 80 , | / C2c | : 25, C2d: 33 / 1 μA/step] |
| 013 | Adjusts the image transfer belt bias for Cyan. | | | | | |
| 016 | T4 Bias: Y | *ENG | [O to | o 80 , | / C2c | : 33, C2d: 45 / 1 µA/step] |
| 010 | Adjusts the image transfer belt bias for Yellow. | | | | | |
| 017 | Developer Mixing Time | *ENG | [O to | o 250 | / 10 | / 1 sec/step] |
| 017 | Specifies the developer mixing time at the toner density adjustment. | | | | | |
| 018 | Consumption Pattern: LD: DUTY: | Bk | | *E | NG | [0 to 15 / 15 / 1 /step] |
| 010 | Adjusts the LD duty for the toner | consumpti | on mo | de at | the ton | er 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 Pattern: 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 Pattern: LD: DUTY: C | *ENG | [0 to 15 / 15 / 1 /step] | | | | |
| 020 | 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 (SP3611-003) exceed the target values (SP3611-007) by more than the specified thresholds (SP3239-009). | | | | | | |
| | Consumption Pattern: LD: DUTY: Y | *ENG | [0 to 15 / 15 / 1 /step] | | | | |
| 021 | 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 (SP3611-004) exceed the target values (SP3611-008) by more than the specified thresholds (SP3239-009). | | | | | | |

| 3044 | [Toner Supply Type] Toner | · Supply Type | ([Color]) | | | | |
|------|-----------------------------|---------------|--|--|--|--|--|
| 3044 | Selects the toner supply me | ethod type. | type. ENG [0 to 3 / 2 / 1/step] Alphanumeric O: FIXED (with the supply rates stored with SP 3401) 1: PID (Vtref_Fixed) | | | | |
| 001 | Bk | *ENG | [0 to 3 / 2 / 1/step] Alphanumeric | | | | |
| 002 | М | *ENG | 0: FIXED (with the supply rates stored with SP 3401) | | | | |
| 003 | С | *ENG | 1 : PID (Vtret_Fixed) 2: PID (Vtref_Control) | | | | |
| 004 | Υ | *ENG | 3: Not used | | | | |

| 3045 | [Toner End Dete | ection: Set] | |
|------|-----------------|--------------|---|
| 3043 | Enables/disabl | es the tone | r alert display on the LCD. |
| 001 | 001 ON/OFF *ENG | | [0 or 1 / 0 / 1/step] 0: Detect, 1: Not Detect |

| 3101 | [Toner End/Near End] |
|------|----------------------|
|------|----------------------|

| | Displays the amount of each color toner. DFU | | | | | |
|---------|--|-------------|---|--|--|--|
| 001 | K Toner Replenishmen | | [1 to 600 / 510 / 1 g/step] | | | |
| 002 | M Toner Replenishment | *ENG | | | | |
| 003 | O3 C Toner Replenishment | | [1 to 600 / 400 / 1 g/step] | | | |
| 004 | Y Toner Replenishment | *ENG | | | | |
| 005-008 | Displays the consumed amount of each co | lor toner. | | | | |
| 005 | K Toner Consumption | *ENG | | | | |
| 006 | M Toner Consumption | *ENG | [0 to 2000 / 0 / 0 001 m/ston] | | | |
| 007 | C Toner Consumption | *ENG | [0 to 3000 / 0 / 0.001 g/step] | | | |
| 008 | Y Toner Consumption | *ENG | | | | |
| 009-012 | Displays the remaining amount of each col times of the toner supply pumps. | or toner. T | hese are calculated by the operating | | | |
| 009 | K Toner Remaining | *ENG | | | | |
| 010 | 010 M Toner Remaining 011 C Toner Remaining | | [-50000 to 600 / 0 / 0.001 g/ step] | | | |
| 011 | | | | | | |
| 012 | Y Toner Remaining | *ENG | | | | |
| 013-016 | Adjusts the threshold of toner near end for each color. The toner near end message appears on the LCD when the remaining toner amount reaches this threshold. When one of these SPs (SP3-101-009 to 012 or -032 to -035) reaches this threshold, toner near end is detected. | | | | | |
| 013 | Near End Threshold: Bk | *ENG | | | | |
| 014 | Near End Threshold: M | *ENG | [0.4-400 / 50 / 1 - /] | | | |
| 015 | Near End Threshold: C | *ENG | [0 to 600 / 50 / 1 g/step] | | | |
| 016 | Near End Threshold: Y * | | | | | |
| 017-020 | DFU | | | | | |
| 017 | 17 Cartridge Error Threshold: Bk | | [-50000 to 0 / -50000 / 1 g/ | | | |
| 018 | Cartridge Error Threshold: M | *ENG | step] | | | |

| 019 | 019 Cartridge Error Threshold: C | | | | | | |
|--------------------------------------|--|-------------|---------------------------------------|--|--|--|--|
| 020 | Cartridge Error Threshold: Y | *ENG | | | | | |
| | Delta Vt Threshold | *ENG | [0 to 5 / 0.5 / 0.01 V/step] | | | | |
| 021 | This SP is the threshold for toner end. Delta | Vt: Vt-Vtre | of . | | | | |
| | When both this SP and SP3-101-026 occur at same time, toner end is determined. | | | | | | |
| 022-025 | Displays the total delta Vt (Vt-Vtref) value for each color. These are calculated by pixel counting. | | | | | | |
| 022 | Delta Vt Sum: Bk | *ENG | | | | | |
| 023 | Delta Vt Sum: M | *ENG | [0. (55 (0. (0.01))/] | | | | |
| 024 | Delta Vt Sum: C | *ENG | [0 to 655 / 0 / 0.01 V/step] | | | | |
| 025 | Delta Vt Sum: Y | *ENG | | | | | |
| 026 | Delta Vt Sum Threshold | *ENG | [0 to 255 / 10 / 1 V/step] | | | | |
| 027 Gamma Threshold: Coefficient *EN | | *ENG | Not used | | | | |
| 028-031 | Displays the consumed toner amount calculated with the pixel count for each color. | | | | | | |
| 028 | Pixel: Consumption: Bk | *ENG | | | | | |
| 029 | Pixel: Consumption: M | *ENG | [0. 2000 / 0 / 0 00] / .] | | | | |
| 030 | Pixel: Consumption: C | *ENG | [0 to 3000 / 0 / 0.001 g/step] | | | | |
| 031 | Pixel: Consumption: Y | *ENG | | | | | |
| 032-035 | Displays the remaining toner amount for ea | ach color, | using pixel count. | | | | |
| 032 | Pixel: Remaining : Bk | *ENG | | | | | |
| 033 | Pixel: Remaining : M | *ENG | [-50000 to 600 / 0 / 0.001 g/ | | | | |
| 034 | Pixel: Remaining : C | *ENG | step] | | | | |
| 035 | Pixel: Remaining : Y | *ENG | | | | | |
| 036-039 | Adjusts the threshold of toner end for each color. | | | | | | |
| 036 | End Threshold: Bk | *ENG | | | | | |
| 037 | End Threshold: M | *ENG | Not used | | | | |
| | | | ! | | | | |

| 038 | End Threshold: C | *ENG | |
|---------|--|------|---|
| 039 | End Threshold: Y | *ENG | |
| 040-043 | Displays the pixel M/A for each color. | | |
| 040 | Pixel M/A: Bk | *ENG | |
| 041 | Pixel M/A: M | *ENG | [0 to 1 / 0.4 / 0.001 mg/cm ² / |
| 042 | Pixel M/A: C | *ENG | step] |
| 043 | Pixel M/A: Y | *ENG | |
| 044 | Delta Vt Threshold Before Near End | *ENG | Adjusts the delta Vt (Vt – Vtref) of toner end before toner near end is detected. [0 to 5 / 0.5 / 0.01 V/step] |
| 045 | Delta Vt Sum Threshold Before Near End | *ENG | Adjusts the total delta Vt (Vt – Vtref) of toner end before toner near end is detected. [0 to 255 / 10 / 1 V/step] |
| 046-049 | Displays the latest mohno-pump off time. | | |
| 046 | Mohno Off Time | *ENG | |
| 047 | Mohno Off Time | *ENG | [O+o O v EEEEEEE / / 1 -o-o /-+1 |
| 048 | Mohno Off Time | *ENG | [0 to 0 x FFFFFFFF/-/1 sec/step] |
| 049 | Mohno Off Time | *ENG | |

| | [Toner End Recovery] | | | |
|------|---|--|------------------------------------|--|
| 3102 | Adjusts the number of times ton continues to detect toner end d | er supply is attempted for each color when the TD sensor uring toner recovery. | | |
| 001 | Repeat: Bk | *ENG | | |
| 002 | Repeat: M | *ENG | [14, 20 / 5 / 15 / 4] | |
| 003 | Repeat: C | *ENG | [1 to 20 / 5 / 1 time/step] | |
| 004 | Repeat: Y | *ENG | | |

| 3201 | [TD Sensor: Vt Display] | | |
|------|--|------|--|
| | Display the current voltage of the TD sensor for each color. | | |
| 001 | Current: Bk | *ENG | |
| 002 | Current: M | *ENG | [0.5.5./001/001//] |
| 003 | Current: C | *ENG | [0 to 5.5 / 0.01 / 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 | |
| 002 | Thick 1 Shift: M | *ENG | [0 to 5 / C2c : 0.28 , C2d : 0.39 / 0.01 |
| 003 | Thick 1 Shift: C | *ENG | V/step] |
| 004 | Thick 1 Shift: Y | *ENG | |
| 005 | Thick 2 & FINE Shift: Bk | *ENG | |
| 006 | Thick 2 & FINE Shift: M | *ENG | [0 to 5 / C2c : 0.74 , C2d : 0.85 / 0.01 |
| 007 | Thick 2 & FINE Shift: C | *ENG | V/step] |
| 008 | Thick 2 & FINE Shift: Y | *ENG | |

| 3221 | [Vtcnt: Display/Set] |
|------|----------------------|
|------|----------------------|

| | Displays or adjusts the current Vtcnt value for each color. | | |
|---------|--|------|--|
| 001 | Current: Bk | *ENG | |
| 002 | Current: M | *ENG | [24-5/204/0017/4] |
| 003 | Current: C | *ENG | [2 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 | [2 to 5 / 3.86 / 0.01 V/step] |
| 007 | Initial: C | *ENG | [2 10 3 / 3.00 / 0.01 v /siep] |
| 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 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 v | alue for ea | ch color at developer initialization. DFU | | |
| 005 | Initial: Bk | *ENG | | | |
| 006 | Initial: M | *ENG | [0 to 5.5 / 3 / 0.01 V/step] | | |
| 007 | Initial: C | *ENG | [0 to 3.3 / 3 / 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 to 5.5 / 0 / 0.01 V/step] | | |
| 011 | Pixel Correction: C | *ENG | | | |

| 2002 | [Vtref Upper Lower: Set] DFU | | |
|------|---|------|--|
| 3223 | Adjusts the lower or upper limit value of Vtref for each color. | | |
| 001 | Lower: Bk | *ENG | |
| 002 | Lower: M | *ENG | [0. 5 / 0 /0.01 V/.] |
| 003 | Lower: C | *ENG | [0 to 5 / 2 / 0.01 V/step] |
| 004 | Lower: Y | *ENG | |
| 005 | Upper: Bk | *ENG | |
| 006 | Upper: M | *ENG | [0.5 / 4 / 0.01 \ V / 1] |
| 007 | Upper: C | *ENG | [0 to 5 / 4 / 0.01 V/step] |
| 800 | Upper: Y | *ENG | |
| 009 | Initial TC | *ENG | Adjusts the initial toner concentration. [1 to 15 / 7 / 0.1 wt%/step] |
| 010 | Upper: TC | *ENG | Adjusts the upper limit of the toner concentration. [1 to 15 / 9.5 / 0.1 wt%/step] |
| 011 | Lower: TC | *ENG | Adjusts the lower limit of the toner concentration. [1 to 15 / 4 / 0.1 wt%/step] |
| 012 | Upper Sensitivity | *ENG | Adjusts the upper limit of the TD sensor sensitivity. [0.2 to 0.5 / 0.44 / 0.001 V/wt% /step] |
| 013 | Lower Sensitivity | *ENG | Adjusts the lower limit of the TD sensor sensitivity. [0.2 to 0.5 / 0.209 / 0.001 V/wt% / step] |
| 014 | Toner Density Between H and M | *ENG | [1 to 10 / 3.5 / 0.1 wt%/step] |
| 015 | Toner Density Between M and L | *ENG | [1 to 10 / 3.5 / 0.1 wt%/step] |

3224 [Vtref Correction: Pixel] DFU

| | Adjusts the coefficient of Vtref correction fo | or each coverd | age and color. |
|-----|--|----------------|---|
| 001 | Low Coverage Coefficient: Bk | *ENG | |
| 002 | Low Coverage Coefficient: M | *ENG | [0 + 5 / 1 / 0 1 / +] |
| 003 | Low Coverage Coefficient: C | *ENG | [0 to 5 / 1 / 0.1 /step] |
| 004 | Low Coverage Coefficient: Y | *ENG | |
| 005 | High Coverage Coefficient: Bk | *ENG | [0 to 5 / 1 / 0.01 V/step] |
| 006 | High Coverage Coefficient: M | *ENG | |
| 007 | High Coverage Coefficient: C | *ENG | [0 to 5 / 0.5 / 0.01 V/step] |
| 008 | High Coverage Coefficient: Y | *ENG | |
| 009 | Low Coverage: Threshold | *ENG | Adjusts the threshold of the low coverage. [0 to 20 / 3 / 0.1 %/step] |
| 010 | High Coverage: Threshold | *ENG | Adjusts the threshold of the high coverage. [0 to 100 / 60 / 1 %/step] |
| 011 | TC Upper Limit Correction | *ENG | [0 to 5 / 0 / 0.1 wt%/step] |
| 012 | Upper Limit TC: Display: Bk | *ENG | |
| 013 | Upper Limit TC: Display: M | *ENG | [1. 15 / 10 / 0 1 10/ / : 1 |
| 014 | Upper Limit TC: Display: C | *ENG | [1 to 15 / 10 / 0.1 wt% /step] |
| 015 | Upper Limit TC: Display: Y | *ENG | |
| 016 | Process Control Execution Threshold | *ENG | [0 to 255 / 50 / 1 time/step] |

| 3231 | [Toner Supply: Setting] | | |
|---|----------------------------|------|--|
| Adjusts the coefficient of the toner supply time for each color. DFU | | | |
| 001 | Replacement Coefficient:Bk | *ENG | [0.5 to 9.99 / 1.66 / 0.01 /step] |
| 002 | Replacement Coefficient: M | *ENG | [0.5 to 9.99 / 1.66 / 0.01 /step] |
| 003 | Replacement Coefficient: C | *ENG | [0.5 to 9.99 / 1.6 / 0.01 /step] |

| 3232 | [Toner Supply Coefficient: Setting] DFU | | | |
|------|---|------|---|--|
| 001 | Vt Proportion: Bk | *ENG | | |
| 002 | Vt Proportion: M | *ENG | [0 to 2550 / 50 / 1 /stan] | |
| 003 | Vt Proportion: C | *ENG | [0 to 2550 / 50 / 1 /step] | |
| 004 | Vt Proportion: Y | *ENG | | |
| 005 | Pixel Proportion: Bk | *ENG | | |
| 006 | Pixel Proportion: M | *ENG | [0 to 2.55 / 0.47 / 0.01 /step] | |
| 007 | Pixel Proportion: C | *ENG | [0 10 2.33 / 0.47 / 0.01 / siep] | |
| 800 | Pixel Proportion: Y | *ENG | | |
| 009 | Vt Integral Control: Bk | *ENG | | |
| 010 | Vt Integral Control: M | *ENG | [0 to 2550 / 500 / 1 /step] | |
| 011 | Vt Integral Control: C | *ENG | [0 10 2330 / 300 / 1 / siep] | |
| 012 | Vt Integral Control: Y | *ENG | | |
| 013 | Vt Sum Times: Bk | *ENG | | |
| 014 | Vt Sum Times: M | *ENG | [1 to 255 / 20 / 1 time/step] | |
| 015 | Vt Sum Times: C | *ENG | [1 10 233 / 20 / 1 IIIIle/siep] | |
| 016 | Vt Sum Times: Y | *ENG | | |

| 3233 | [Pixel Proportion Coefficient 2: Setting] DFU | | |
|------|---|------|--|
| 001 | Correction Coefficient: 1 | *ENG | [0 to 2.55 / 1 / 0.01 /step] |
| 002 | Correction Coefficient: 2 | *ENG | [0 to 2.55 / 0.5 / 0.01 /step] |
| 003 | Correction Coefficient: 3 | *ENG | [0 to 2.55 / 0 / 0.01 /step] |
| 004 | Correction Coefficient: 4 | *ENG | [0 to 2.55 / 0.25 / 0.01 /step] |
| 005 | Correction Coefficient: 5 | *ENG | [0 to 2.55 / 0.5 / 0.01 /step] |

| 3234 | [Pixel Proportion Coefficient 3: Setting] DFU | | | | | |
|------|---|------|--|--|--|--|
| 001 | Correction Value 1 | *ENG | [-0.1 to 0 / - 0.01 / 0.01 /step] | | | |
| 002 | Correction Value 2 | *ENG | [0 to 0.1 / 0.01 / 0.01 /step] | | | |

| 3235 | [Toner Supply Coefficient: Display] DFU | | | | | |
|------|---|------|---------------------------------------|--|--|--|
| 001 | Pixel Proportion 2: Bk | *ENG | | | | |
| 002 | Pixel Proportion 2: M | *ENG | [0 2.55 / 1 / 0.01 /] | | | |
| 003 | Pixel Proportion 2: C | *ENG | [0 to 2.55 / 1 / 0.01 /step] | | | |
| 004 | Pixel Proportion 2: Y | *ENG | | | | |
| 005 | Pixel Proportion 3: Bk | *ENG | | | | |
| 006 | Pixel Proportion 3: M | *ENG | [0.7, 1.2 / 1 / 0.01 / , 1 | | | |
| 007 | Pixel Proportion 3: C | *ENG | [0.7 to 1.3 / 1 / 0.01 /step] | | | |
| 800 | Pixel Proportion 3: Y | *ENG | | | | |
| 009 | Vt Integral: Bk | *ENG | | | | |
| 010 | Vt Integral: M | *ENG | [255 to 255 / 0 / 0.01 /ston] | | | |
| 011 | Vt Integral: C | *ENG | [-255 to 255 / 0 / 0.01 /step] | | | |
| 012 | Vt Integral: Y | *ENG | | | | |

| 3236 | [Toner Supply Consumption: Display] DFU | | | | | |
|------|--|------|---------------------------------------|--|--|--|
| | Displays the toner amount of the latest toner supply for each color. | | | | | |
| 001 | Latest: Bk | *ENG | | | | |
| 002 | Latest: M | *ENG | [0.4,40000 / 0.701 / 4] | | | |
| 003 | Latest: C | *ENG | [0 to 40000 / 0 / 0.1 mg/step] | | | |
| 004 | Latest: Y | *ENG | | | | |

| 3237 | [Developer Mixing Setting] | | | | | |
|------|---|--|--|--|--|--|
| 3237 | Displays the toner amount of the latest toner supply for each color. DFU | | | | | |

| 3238 | [Vt Target: Setting] | | | | | |
|------|--|------|-------------------------------------|--|--|--|
| 3230 | Displays the Vt target value at developer initialization. DFU | | | | | |
| 001 | Bk | *ENG | | | | |
| 002 | М | *ENG | [0.5 / 25 / 0.01 \ / \] | | | |
| 003 | С | *ENG | [0 to 5 / 2.5 / 0.01 V/step] | | | |
| 004 | Υ | *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 to 1 / 0.1 / 0.01 V/step] | | | | |
| 005 | (-)Consumption: Bk | *ENG | [0 10 1 / 0.1 / 0.01 v/siep] | | | | |
| 006 | (-)Consumption: M | *ENG | | | | | |
| 007 | (-)Consumption: C | *ENG | | | | | |
| 008 | (-)Consumption: Y | *ENG | | | | | |
| 009-012 | Threshold for development g | 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 / 0.1 / 0.1 /step] | | | | |
| 011 | P Rank 3 Threshold | *ENG | [-2 to 0 / -0.1 / 0.1 /step] | | | | |
| 012 | P Rank 4 Threshold | *ENG | [-2 to 0 / -0.2 / 0.1 /step] | | | | |
| 013-014 | Threshold for image density rank on the image 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] | | | | |

| 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] | | | |
| 800 | 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 | Coefficient: Bk | *ENG | | | | |
| 002 | Coefficient: M | *ENG | [1000 += 1000 / 70 / 1 / +] | | | |
| 003 | Coefficient: C | *ENG | [-1000 to 1000 / 79 / 1 /step] | | | |
| 004 | Coefficient: Y | *ENG | | | | |
| 005 | Offset: Bk | *ENG | | | | |
| 006 | Offset: M | *ENG | [1000 to 1000 / 42 / 1 /ston] | | | |
| 007 | Offset: C | *ENG | [-1000 to 1000 / 62 / 1 /step] | | | |
| 008 | Offset: Y | *ENG | | | | |

| 3251 | [Coverage] | | | | | |
|------|--|------|--|--|--|--|
| 3231 | These (-001 to -016) are coefficients for SP3-222-009 to -012. | | | | | |
| 001 | Latest: Bk | *ENG | | | | |
| 002 | Latest: M | *ENG | Displays the latest coverage for each color. [0 to 9999 / 0 / 1 cm ² /step] | | | |
| 003 | Latest: C | *ENG | [O 10 4444 / O / 1 cm / siep] | | | |

| 004 | Latest: Y | * E1 | ΝG | | |
|---------|---|-----------------------|---------|-------------------------------------|--|
| 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 | * E1 | *ENG | | |
| 006 | Average S: M | * E1 | ΝG | [0.1 | . 100 / 5 / 0.01 9/ / 1 |
| 007 | Average S: C | * E1 | VG [0 t | | o 100 / 5 / 0.01 %/step] |
| 008 | Average S: Y | * E1 | ٧G | | |
| 009-012 | Displays the average coverage of each color for the Vtref correction. "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 | | |
| 010 | Average M: M | * E1 | ٧G | o 100 / 5 / 0.01 %/step] | |
| 011 | Average M: C | * E1 | ENG [0 | | 0 100 / 3 / 0.01 /6/siepj |
| 012 | Average M: Y | * E1 | *ENG | | |
| 013-016 | . , | en the | | | lor for the Vtref correction. f developed pages does not reach the number |
| 013 | Average L: Bk | * E1 | ΝG | | |
| 014 | Average L: M | *E1 | ΝG | [0 + | o 100 / 5 / 0 01 % /ctopl |
| 015 | Average L: C | *E1 | ΝG | [0 to 100 / 5 / 0.01 %/step] | |
| 016 | Average L: Y | *E1 | ΝG | | |
| 017-019 | Adjusts the threshold for SP3-251-005 to -016. | | | | |
| 017 | Total Page Setting: S | | *EN | 1G | [1 to 100 / 10 / 1 sheet/step] |
| 018 | Total Page Setting: M | Total Page Setting: M | | 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 for SP3-251-024 to -027. | | | | |

| 020 | Total Page Setting: S2 | *ENG | [1 to 100 / 20 / 1 sheet/step] | | |
|---------|---|------|---------------------------------------|--|--|
| 021 | Total Page Setting: M2 | *ENG | [1 to 500 / 10 / 1 sheet/step] | | |
| 022 | Total Page Setting: L2 | *ENG | [1 to 999 / 50 / 1 sheet/step] | | |
| 024-027 | Displays the latest coverage ratio for each color. | | | | |
| 024 | Latest Coverage: Bk | *ENG | | | |
| 025 | Latest Coverage: M | *ENG | [0 to 100 / - / 0.01 %/step] | | |
| 026 | Latest Coverage: C | *ENG | [0 10 100 / - / 0.01 %/ siep] | | |
| 027 | Latest Coverage: Y | *ENG | | | |
| 028 | Displays the threshold of whether to perform developer churning or not. | | | | |
| 028 | DevMix Threshold | *ENG | [0 to 100 / 20 / 1 %/step] | | |

| 3311 | [ID Sensor Detection Value: Voffset] | | | | | |
|---------|--|------|-------------------------------------|--|--|--|
| 3311 | Displays the ID sensor (regular) offset voltage for Vsg adjustments. | | | | | |
| 001 | Voffset reg: Bk | *ENG | [0 to 5 / 0 / 0.01 V/step] | | | |
| 002 | Voffset reg: M | *ENG | | | | |
| 003 | Voffset reg: C | *ENG | [0 to 5.5 / 0 / 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 / 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 / 0.01 V/step] | | | |
| 010 | Voffset TM (Rear) | *ENG | | | | |

| 3321 | [Vsg Adjustment: Execution] |
|------|-----------------------------|
|------|-----------------------------|

| 2222 | [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+-55/0/00] \\/.+] | | |
| 006 | Vsg dif: C | *ENG | [0 to 5.5 / 0 / 0.01 V/step] | | |
| 007 | Vsg dif: Y | *ENG | | | |
| 800 | Vsg TM (Front) | *ENG | | | |
| 009 | Vsg TM (Center) | *ENG | | | |
| 010 | Vsg TM (Rear) | *ENG | | | |

| 3323 | [Vsg Adjustment Result: Ifsg] DFU | | |
|------|-----------------------------------|------|------------------------------------|
| 001 | Ifsg: Bk | *ENG | |
| 002 | Ifsg: M | *ENG | [0.4-50/0/01-04/44-1] |
| 003 | Ifsg: C | *ENG | [0 to 50 / 0 / 0.1 mA/step] |
| 004 | Ifsg: Y | *ENG | |
| 005 | Ifsg TM (Front) | *ENG | |
| 006 | Ifsg TM (Center) | *ENG | [0 to 50 / 0 / 0.1 mA/step] |
| 007 | Ifsg TM (Rear) | *ENG | |

| 3324 | [Vsg Adjustment: Set] DFU | | |
|------|---------------------------|------|--------------------------------------|
| 003 | Vofset Error Counter | *ENG | [0 to 99 / 0 / 0.1 time/step] |

| 004 | Vofset Threshold | *ENG | [0 to 5 / 1 / 0.01 V/step] |
|-----|---------------------|------|-------------------------------------|
| 005 | Vsg Upper Threshold | *ENG | [0 to 5 / 4.5 / 0.01 V/step] |
| 006 | Vsg Lower Threshold | *ENG | [0 to 5 / 3.5 / 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 Cyan, sensor for Center, sensor for Magenta, sensor for Yellow and sensor for Rea | | | |
| 001 | History: Latest | *ENG | | |
| 002 | Result: Latest 1 | *ENG | | |
| 003 | Result: Latest 2 | *ENG | | |
| 004 | Result: Latest 3 | *ENG | [111111 to 999999 / 999999 / 1 /step] | |
| 005 | Result: Latest 4 | *ENG | 9: Unexpected error | |
| 006 | Result: Latest 5 | *ENG | Offset voltage error State | |
| 007 | Result: Latest 6 | *ENG | 1: O.K | |
| 008 | Result: Latest 7 | *ENG | | |
| 009 | Result: Latest 8 | *ENG | | |
| 010 | Result: Latest 9 | *ENG | | |

| 3361 | [ID Sensor Sensitivity: Display] Not Used | | |
|------|---|------|-----------------------------|
| 001 | K2K (Latest) | *ENG | |
| 002 | K5K (Latest) | *ENG | |
| 003 | K2M (Latest) | *ENG | |
| 004 | K5M (Latest) | *ENG | [0 to 5 / - / 0.0001 /step] |
| 005 | K2C (Latest) | *ENG | |
| 006 | K5C (Latest) | *ENG | |
| 007 | K2Y (Latest) | *ENG | |

| 3362 | [ID Sensor Sensitivity: Setting] DFU | | |
|------|--------------------------------------|------|---|
| 001 | K2: Upper | *ENG | [0 to 1 / 0.32 / 0.01 /step] |
| 002 | K2: Lower | *ENG | [0 to 1 / 0.22 / 0.01 /step] |
| 003 | K5: Upper | *ENG | [0 to 10 / 5 / 0.01 /step] |
| 004 | K5: Lower | *ENG | [0 to 1 / 0.5 / 0.01 /step] |
| 005 | Kn: Upper | *ENG | [0 to 1 / 0.1 / 0.01 /step] |
| 006 | Kn: Lower | *ENG | [0 to 1 / 1 / 0.01 /step] |
| 007 | K5 Edit Point | *ENG | [0 to 1 / 0.15 / 0.01 /step] |
| 008 | K5 Target Voltage | *ENG | [0 to 5 / 1.63 / 0.01 V/step] |
| 009 | K5 Approximate Method | *ENG | [0 to 1 / 1 / 1 /step] |
| 007 | | | 0:Linear, 1: Curve |
| 010 | K2: Upper/Lower Limit Coefficient 1 | *ENG | [0 to 1 / 0 / 0.01 /step] |
| 011 | K2: Upper Limit Correction | *ENG | [-0.2 to 0.4 / 0.07 / 0.01 /step] |
| 012 | K2: Lower Limit Correction | *ENG | [-0.2 to 0.4 / -0.07 / 0.01 /step] |
| 013 | Diffusion Correction: M | *ENG | |
| 014 | Diffusion Correction: C | *ENG | [0.75 to 1.35 / 1 / 0.01 /step] |
| 015 | Diffusion Correction: Y | *ENG | |
| 016 | K2: Check: M | *ENG | |
| 017 | K2: Check: C | *ENG | [0 to 1 / 0.25 / 0.001 /step] |
| 018 | K2: Check: Y | *ENG | |

| 3363 | [ID Pattern Timing Setting] DFU | | |
|------|---------------------------------|------|---|
| 001 | Scan YCMBk | *ENG | Adjusts the detection timing for the process control pattern. [-500 to 500 / 13.7 / 1 mm/step] |

| 002 | Paper Transfer Release Start Time | *ENG | Adjusts the timing when the paper transfer unit is kept away from the image transfer belt. [0 to 2500 / 0 / 1 msec/step] |
|-----|--------------------------------------|------|---|
| 003 | Delay Time | *ENG | Adjusts the processing timing for the process control pattern. [0 to 2500 / 880 / 1 msec/step] |
| 004 | MUSIC Delay Time | *ENG | Adjusts the processing timing for the pattern that is used for the line position adjustment. [-2500 to 2500 / 300 / 1 msec/step] |

| 3371 | [M/A Calculation] DFU | | |
|------|----------------------------|------|---|
| 001 | Correction Coefficient: Bk | *ENG | [0.5 to 2.0 / 1 / 0.01 /step] |
| 002 | Correction Coefficient: M | *ENG | [0.5 to 2.0 / 0.95 / 0.01 /step] |
| 003 | Correction Coefficient: C | *ENG | [0.5 to 2.0 / 1 / 0.01 /step] |
| 004 | Correction Coefficient: Y | *ENG | [0.5 to 2.0 / 1.02 / 0.01 /step] |

| 3401 | [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] | | |
|---|------------------------------|------|---------------------------|
| Displays the current toner supply rate. | | | |
| 001 | Latest: Bk | *ENG | |
| 002 | Latest: M | *ENG | [0100 / /19//] |
| 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] |
| 800 | Minimum Supply Time: Y | *ENG | |

| 3451 | [Toner Supply Carry Over: Display] DFU | | |
|------|--|------|---------------------------------------|
| 001 | Bk | *ENG | |
| 002 | М | *ENG | [0.1.10000 / 0./1/] |
| 003 | С | *ENG | [0 to 10000 / 0 / 1 msec/step] |
| 004 | Υ | *ENG | |

| 3452 | [Toner Supply Carry Over: Setting] DFU | | |
|------|--|------|--|
| 001 | Maximum: Bk | *ENG | |
| 002 | Maximum: M | *ENG | [0.1.10000 / 1000 / 1 / 1] |
| 003 | Maximum: C | *ENG | [0 to 10000 / 1000 / 1 msec/step] |
| 004 | Maximum: 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 to 1 / 0.444 / 0.001 mg/cm ² /step] | |
| 003 | Maximum M/A: C | *ENG | | |

|--|

| [Pixel Adj. Sheet Counter: Display] | | | |
|-------------------------------------|-------------------------------------|-----------|--------------------------------------|
| 3310 | Displays the total page counter for | each adju | stment mode. |
| 001 | Potential Control: BW | *ENG | |
| 002 | Potential Control: FC | *ENG | |
| 003 | Power ON: BW | *ENG | |
| 004 | Power ON: FC | *ENG | [0.4-2000 / 0 / 1 = === /++==1 |
| 005 | MUSIC: BW | *ENG | [0 to 2000 / 0 / 1 page/step] |
| 006 | MUSIC: FC | *ENG | |
| 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 adjustm | nent 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 / .] | | |
| 008 | 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 Coefficient 1: JE: BW | *ENG | [0 to 1 / 0.2 / 0.01 page/step] |
| 023 | Correction Coefficient 2: JE: BW | *ENG | [0 to 1 / 1 / 0.01/step] |
| 024 | Correction Coefficient 1: JE: FC | *ENG | [0 to 1 / 0.5 / 0.01/step] |
| 025 | Correction Coefficient 2: JE: FC | *ENG | [0 to 1 / 1 / 0.01/step] |
| 026 | Correction Coefficient 1: Interrupt: BW | *ENG | [0 to 1 / 0.1 / 0.01/step] |
| 027 | Correction Coefficient 2: Interrupt: BW | *ENG | [0 to 1 / 1 / 0.01/step] |
| 028 | Correction Coefficient 1: Interrupt: FC | *ENG | [0 to 1 / 0.25 / 0.01/step] |
| 029 | Correction Coefficient 2: Interrupt: FC | *ENG | [0 to 1 / 1 / 0.01/step] |
| 030 | Max. Number Correction Threshold | *ENG | [0 to 99 / 5 / 1/step] |
| 031 | Max. Number Correction Counter | *ENG | [0 to 255 / 0 / 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 | , , | time that the PCU motors stopped. or process control execution timing. | | | |
| 001 | Year | *ENG | [0 to 99 / 0 / 1/step] | | |
| 002 | Month | *ENG | [1 to 12 / 1 / 1/step] | | |

| 00 | 03 | Date | *ENG | [1 to 31 / 1 / 1/step] |
|----|----|--------|------|-------------------------------|
| 0(| 04 | Hour | *ENG | [0 to 23 / 0 / 1/step] |
| 0(| 05 | Minute | *ENG | [0 to 59 / 0 / 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 / 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/cm ³ /step] | |

| | [Execution Interval: Display] | | | | |
|------|---|---|--|--|--|
| 3515 | Displays the current interval for process control execution. | | | | |
| | When the machine calculates the These are the results after consi | or process control, it uses a number of conditions. he conditions. | | | |
| 001 | Job End: Potential Control: BW | *ENG | [0 to 2000 / 500 / 1 page/step] | | |
| 002 | Job End: Potential Control: FC | *ENG | [0 to 2000 / 200 / 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] | | |

| | [Refresh Mode] DFU | | | | |
|------|--|--|--|--|--|
| 3516 | While making prints with low coverage, the developer is agitated with less toner consumption and the toner carrier attraction tends to increase. This may cause low image density or poor transfer (white dots). To prevent this, the coagulated toner or overcharged toner has to be consumed by performing the refresh mode. | | | | |
| 001 | Dev. Motor Rotation: Display: Bk *ENG | | | | |
| 002 | Dev. Motor Rotation: Display: M *ENG [0 to 1000 / 0 / 0.1 m/step] | | | | |
| 003 | Dev. Motor Rotation: Display: C *ENG | | | | |

| 004 Dev. Motor Rotation: Display: Y | | | 1 | 1 |
|--|-----|--|------|---|
| 006 Pixel Coverage Sum: Bk *ENG 007 Pixel Coverage Sum: M *ENG 008 Pixel Coverage Sum: C *ENG 009 Pixel Coverage Sum: Y *ENG 009 Pixel Coverage Sum: Y *ENG 010 Required Area: Bk *ENG 011 Required Area: M *ENG 012 Required Area: M *ENG 013 Required Area: Y *ENG 014 Refresh Threshold: Bk *ENG 015 Refresh Threshold: M *ENG 016 Refresh Threshold: C *ENG 017 Refresh Threshold: C *ENG 018 Pattern Generation Number: Bk *ENG 019 Pattern Generation Number: M *ENG 020 Pattern Generation Number: C *ENG 021 Pattern Generation Number: Upper limit *ENG 022 Pattern Generation Number: Upper limit *ENG 023 Toner Consumption Pattern Area *ENG 010 2.55 / 1 / 0.01 / step 024 Supply Coefficient *ENG 010 2.55 / 1 / 0.01 / step 026 Job End Vb Coefficient *ENG 010 010 / 40 / 1 % / step 026 Job End Vb Coefficient *ENG 010 010 / 40 / 1 % / step 026 Job End Vb Coefficient *ENG 010 010 / 40 / 1 % / step 026 Job End Vb Coefficient *ENG 010 / 40 / 1 % / step 026 Job End Vb Coefficient *ENG 010 / 40 / 1 % / step 026 Job End Vb Coefficient *ENG 010 / 40 / 1 % / step 026 Job End Vb Coefficient *ENG 010 / 40 / 1 % / step 026 Job End Vb Coefficient *ENG 010 / 40 / 1 % / step 026 Job End Vb Coefficient *ENG 010 / 40 / 1 % / step 026 Job End Vb Coefficient *ENG 010 / 40 / 1 % / step 026 Job End Vb Coefficient *ENG 010 / 40 / 1 % / step 026 Job End Vb Coefficient *ENG 010 / 40 / 1 % / step 026 Job End Vb Coefficient *ENG 010 / 40 / 1 % / step 026 Job End Vb Coefficient *ENG 010 / 40 / 1 % / step 026 Job End Vb Coefficient *ENG 010 / 40 / 1 % / step 026 Job End Vb Coefficient *ENG 010 / 40 / 1 % / step 026 Job End Vb Coefficient *ENG 010 / 40 / 1 % / step 026 Job End Vb Coefficient *ENG 010 / 40 / 1 % / step 026 Job End Vb Coefficient *ENG 010 / 40 / 1 % / step 026 | 004 | Dev. Motor Rotation: Display: Y | *ENG | |
| 007 Pixel Coverage Sum: M *ENG 008 Pixel Coverage Sum: C *ENG 009 Pixel Coverage Sum: Y *ENG 010 Required Area: Bk *ENG 011 Required Area: M *ENG 012 Required Area: C *ENG 013 Required Area: Y *ENG 014 Refresh Threshold: Bk *ENG 015 Refresh Threshold: M *ENG 016 Refresh Threshold: C *ENG 017 Refresh Threshold: Y *ENG 018 Pattern Generation Number: Bk *ENG 019 Pattern Generation Number: M *ENG 020 Pattern Generation Number: V *ENG 021 Pattern Generation Number: V *ENG 022 Pattern Generation Number: Upper limit *ENG 023 Toner Consumption Pattern Area *ENG 024 Supply Coefficient *ENG 025 Job End Area Coefficient *ENG [0 to 2.55 / 1 / 0.01/step] 026 Job E | 005 | Rotation Threshold | *ENG | [0 to 1000 / 1 / 1 m/step] |
| 008 Pixel Coverage Sum: C | 006 | Pixel Coverage Sum: Bk | *ENG | |
| 008 Pixel Coverage Sum: C *ENG 009 Pixel Coverage Sum: Y *ENG 010 Required Area: Bk *ENG 011 Required Area: M *ENG 012 Required Area: C *ENG 013 Required Area: Y *ENG 014 Refresh Threshold: Bk *ENG 015 Refresh Threshold: M *ENG 016 Refresh Threshold: C *ENG 017 Refresh Threshold: Y *ENG 018 Pattern Generation Number: Bk *ENG 019 Pattern Generation Number: M *ENG 020 Pattern Generation Number: Y *ENG 021 Pattern Generation Number: Upper limit *ENG 022 Pattern Generation Number: Upper limit *ENG 023 Toner Consumption Pattern Area *ENG 024 Supply Coefficient *ENG 025 Job End Area Coefficient *ENG 026 Job End Vb Coefficient *ENG | 007 | Pixel Coverage Sum: M | | [0. 45505 / 0 / 1 2 / . 1 |
| 010 Required Area: Bk *ENG 011 Required Area: M *ENG 012 Required Area: C *ENG 013 Required Area: Y *ENG 014 Refresh Threshold: Bk *ENG 015 Refresh Threshold: M *ENG 016 Refresh Threshold: C *ENG 017 Refresh Threshold: Y *ENG 018 Pattern Generation Number: Bk *ENG 019 Pattern Generation Number: M *ENG 020 Pattern Generation Number: C *ENG 021 Pattern Generation Number: Y *ENG 022 Pattern Generation Number: Upper limit *ENG [0 to 255 / 0 / 1 time/step] 023 Toner Consumption Pattern Area *ENG [10 to 255 / 0 / 1 time/step] 024 Supply Coefficient *ENG [0 to 2.55 / 1 / 0.01/step] 025 Job End Area Coefficient *ENG [0 to 100 / 40 / 1%/step] | 008 | Pixel Coverage Sum: C | *ENG | [U to 65535 / U / 1 cm²/step] |
| 011 Required Area: M *ENG 012 Required Area: C *ENG 013 Required Area: Y *ENG 014 Refresh Threshold: Bk *ENG 015 Refresh Threshold: M *ENG 016 Refresh Threshold: C *ENG 017 Refresh Threshold: Y *ENG 018 Pattern Generation Number: Bk *ENG 019 Pattern Generation Number: M *ENG 020 Pattern Generation Number: C *ENG 021 Pattern Generation Number: Y *ENG 022 Pattern Generation Number: Upper limit *ENG 023 Toner Consumption Pattern Area *ENG [0 to 255 / 0 / 1 time/step] 023 Toner Consumption Pattern Area *ENG [0 to 255 / 1 / 0.01/step] 024 Supply Coefficient *ENG [0 to 2.55 / 1 / 0.1/step] 025 Job End Area Coefficient *ENG [0 to 100 / 40 / 1%/step] | 009 | Pixel Coverage Sum: Y | *ENG | |
| 012 Required Area: C | 010 | Required Area: Bk | *ENG | |
| 012 Required Area: C *ENG 013 Required Area: Y *ENG 014 Refresh Threshold: Bk *ENG 015 Refresh Threshold: M *ENG 016 Refresh Threshold: C *ENG 017 Refresh Threshold: Y *ENG 018 Pattern Generation Number: Bk *ENG 019 Pattern Generation Number: M *ENG 020 Pattern Generation Number: C *ENG 021 Pattern Generation Number: Y *ENG 022 Pattern Generation Number: Upper limit *ENG [0 to 255 / 0 / 1 time/step] 023 Toner Consumption Pattern Area *ENG [10 to 2550 / 300 / 10 cm²/step] 024 Supply Coefficient *ENG [0 to 2.55 / 1 / 0.01/step] 025 Job End Area Coefficient *ENG [0 to 100 / 40 / 1%/step] | 011 | Required Area: M | *ENG | [0.1.45525 / 0./12/1] |
| 014 Refresh Threshold: Bk *ENG 015 Refresh Threshold: M *ENG 016 Refresh Threshold: C *ENG 017 Refresh Threshold: Y *ENG 018 Pattern Generation Number: Bk *ENG 019 Pattern Generation Number: M *ENG 020 Pattern Generation Number: C *ENG 021 Pattern Generation Number: Y *ENG 022 Pattern Generation Number: Upper limit *ENG [0 to 255 / 0 / 1 time/step] 023 Toner Consumption Pattern Area *ENG [10 to 2550 / 300 / 10 cm²/step] 024 Supply Coefficient *ENG [0 to 2.55 / 1 / 0.01/step] 025 Job End Area Coefficient *ENG [0 to 100 / 40 / 1%/step] | 012 | Required Area: C | *ENG | [0 to 65535 / 0 / 1 cm ⁻ /step] |
| 015 Refresh Threshold: M *ENG 016 Refresh Threshold: C *ENG 017 Refresh Threshold: Y *ENG 018 Pattern Generation Number: Bk *ENG 019 Pattern Generation Number: M *ENG 020 Pattern Generation Number: C *ENG 021 Pattern Generation Number: Y *ENG 022 Pattern Generation Number: Upper limit *ENG [0 to 255 / 0 / 1 time/step] 023 Toner Consumption Pattern Area *ENG [10 to 2550 / 300 / 10 cm²/step] 024 Supply Coefficient *ENG [0 to 2.55 / 1 / 0.01/step] 025 Job End Area Coefficient *ENG [0 to 100 / 40 / 1%/step] | 013 | Required Area: Y | *ENG | |
| O16 Refresh Threshold: C | 014 | Refresh Threshold: Bk | *ENG | |
| 016 Refresh Threshold: C *ENG 017 Refresh Threshold: Y *ENG 018 Pattern Generation Number: Bk *ENG 019 Pattern Generation Number: M *ENG 020 Pattern Generation Number: C *ENG 021 Pattern Generation Number: Y *ENG 022 Pattern Generation Number: Upper limit *ENG [0 to 255 / 0 / 1 time/step] 023 Toner Consumption Pattern Area *ENG [10 to 2550 / 300 / 10 cm²/step] 024 Supply Coefficient *ENG [0 to 2.55 / 1 / 0.01/step] 025 Job End Area Coefficient *ENG [0.1 to 25.5 / 1 / 0.1/step] 026 Job End Vb Coefficient *ENG [0 to 100 / 40 / 1%/step] | 015 | Refresh Threshold: M | *ENG | [0], 255 /24 /1 2 / /4] |
| 018 Pattern Generation Number: Bk *ENG 019 Pattern Generation Number: M *ENG 020 Pattern Generation Number: C *ENG 021 Pattern Generation Number: Y *ENG 022 Pattern Generation Number: Upper limit *ENG [0 to 255 / 0 / 1 time/step] 023 Toner Consumption Pattern Area *ENG [10 to 2550 / 300 / 10 cm²/step] 024 Supply Coefficient *ENG [0 to 2.55 / 1 / 0.01/step] 025 Job End Area Coefficient *ENG [0.1 to 25.5 / 1 / 0.1/step] 026 Job End Vb Coefficient *ENG [0 to 100 / 40 / 1%/step] | 016 | Refresh Threshold: C | *ENG | [0 to 255 / 34 / 1 cm-/m/step] |
| 019 Pattern Generation Number: M *ENG 020 Pattern Generation Number: C *ENG 021 Pattern Generation Number: Y *ENG 022 Pattern Generation Number: Upper limit *ENG [0 to 255 / 0 / 1 time/step] 023 Toner Consumption Pattern Area *ENG [10 to 2550 / 300 / 10 cm²/step] 024 Supply Coefficient *ENG [0 to 2.55 / 1 / 0.01/step] 025 Job End Area Coefficient *ENG [0.1 to 25.5 / 1 / 0.1/step] 026 Job End Vb Coefficient *ENG [0 to 100 / 40 / 1%/step] | 017 | Refresh Threshold: Y | *ENG | |
| 020 Pattern Generation Number: C *ENG 021 Pattern Generation Number: Y *ENG 022 Pattern Generation Number: Upper limit *ENG [0 to 255 / 0 / 1 time/step] 023 Toner Consumption Pattern Area *ENG [10 to 2550 / 300 / 10 cm²/step] 024 Supply Coefficient *ENG [0 to 2.55 / 1 / 0.01/step] 025 Job End Area Coefficient *ENG [0.1 to 25.5 / 1 / 0.1/step] 026 Job End Vb Coefficient *ENG [0 to 100 / 40 / 1%/step] | 018 | Pattern Generation Number: Bk | *ENG | |
| 020 Pattern Generation Number: C *ENG 021 Pattern Generation Number: Y *ENG 022 Pattern Generation Number: Upper limit *ENG [0 to 255 / 0 / 1 time/step] 023 Toner Consumption Pattern Area *ENG [10 to 2550 / 300 / 10 cm²/step] 024 Supply Coefficient *ENG [0 to 2.55 / 1 / 0.01/step] 025 Job End Area Coefficient *ENG [0.1 to 25.5 / 1 / 0.1/step] 026 Job End Vb Coefficient *ENG [0 to 100 / 40 / 1%/step] | 019 | Pattern Generation Number: M | *ENG | [0 to 255 / 0 / 1 time /cton] |
| 022 Pattern Generation Number: Upper limit *ENG [0 to 255 / 0 / 1 time/step] 023 Toner Consumption Pattern Area *ENG [10 to 2550 / 300 / 10 cm²/step] 024 Supply Coefficient *ENG [0 to 2.55 / 1 / 0.01/step] 025 Job End Area Coefficient *ENG [0.1 to 25.5 / 1 / 0.1/step] 026 Job End Vb Coefficient *ENG [0 to 100 / 40 / 1%/step] | 020 | Pattern Generation Number: C | *ENG | [0 to 233 / 0 / 1 time/ step] |
| 023 Toner Consumption Pattern Area *ENG [10 to 2550 / 300 / 10 cm²/step] 024 Supply Coefficient *ENG [0 to 2.55 / 1 / 0.01/step] 025 Job End Area Coefficient *ENG [0.1 to 25.5 / 1 / 0.1/step] 026 Job End Vb Coefficient *ENG [0 to 100 / 40 / 1%/step] | 021 | Pattern Generation Number: Y | *ENG | |
| 023 Toner Consumption Pattern Area ENG step | 022 | Pattern Generation Number: Upper limit | *ENG | [0 to 255 / 0 / 1 time/step] |
| 025 Job End Area Coefficient *ENG [0.1 to 25.5 / 1 / 0.1/step] 026 Job End Vb Coefficient *ENG [0 to 100 / 40 / 1%/step] | 023 | Toner Consumption Pattern Area | *ENG | |
| 026 Job End Vb Coefficient *ENG [0 to 100 / 40 / 1%/step] | 024 | Supply Coefficient | *ENG | [0 to 2.55 / 1 / 0.01/step] |
| | 025 | Job End Area Coefficient | *ENG | [0.1 to 25.5 / 1 / 0.1/step] |
| 027 Job End Length *ENG [0 to 56 / 25 / 1 mm/step] | 026 | Job End Vb Coefficient | *ENG | [0 to 100 / 40 / 1%/step] |
| | 027 | Job End Length | *ENG | [0 to 56 / 25 / 1 mm/step] |

| 028 | Job End Supply | *ENG | [0 to 1 / 0.45 / 0.001 mg/cm ² / 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] | |

| 3518 | [Image Quality Adj. Execution Flag] DFU | | |
|------|---|----------------------------|--|
| 001 | Toner End Recovery: Bk | *ENG | |
| 002 | Toner End Recovery: M | *ENG [0 or 1 / 0 / 1/step] | [0 or 1 / 0 / 1/step] |
| 003 | Toner End Recovery: C | *ENG | 0: OFF. 1: ON |
| 004 | Toner End Recovery: Y | *ENG | |
| 005 | Vsg Adį. | *ENG | [0 or 1 / 0 / 1/step] 0: OFF. 1: ON |
| 006 | Developer Mixing | *ENG | [0 or 1 / 0 / 1/step] 0: OFF. 1: ON |
| 007 | Process Control | *ENG | [0 to 2 / 0 / 1/step] 0: OFF. 1: ON (once), 2: ON (twice) |
| 008 | MUSIC | *ENG | [0 to 2 / 0 / 1/step] 0: OFF. 1: ON (once), 2: ON (twice) |
| 009 | OPC Drive Control | *ENG | [0 or 1 / 0 / 1/step] 0: OFF. 1: ON |
| 010 | Charge AC Control | *ENG | [0 or 1 / 0 / 1/step] 0: OFF. 1: ON |
| 011 | Blade Damage Prevention | *ENG | [0 or 1 / 0 / 1/step] 0: OFF. 1: ON |

| 3519 | [Toner End Prohibition Setting] |
|------|---------------------------------|
|------|---------------------------------|

| | 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 | 1: Forbid (adjustment is not done at toner near end condition) |

| 3520 | [ITB Idling Number] | | | |
|------|--------------------------|------|---|--|
| 3320 | r each condition. | | | |
| 001 | Temperature: H | *ENG | | |
| 002 | Temperature: M | *ENG | [0 2 / 0 / 1 /] | |
| 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 Setting] | | | | |
|------|--|------|--|--|--|
| | Adjusts the threshold for the process control at power on. | | | | |
| 3522 | 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 cexecuted. | | | | |
| 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] |
|-----|-------------------------------------|------------|---|
| | [Rapi_timer] | | |
| 100 | Time Setting | *ENG | [0 to 255 / 30 / 1 sec/step] |
| | Adjusts the time-out time for the R | api timer. | |

| | [Non-use Time Process Control S | etting] | |
|------|------------------------------------|-------------|---|
| 2521 | Adjusts the threshold for the proc | ess control | at stand-by. |
| 3531 | | , | more than the values of these SPs when as operation, the process control at stand-by is |
| 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 | Displays the target development gamma for |
| 006 | M (Target Display) | *ENG | each color. [0 to 5 / 0.85 / 0.01 mg/cm ² /kV /step] |
| 007 | C (Target Display) | *ENG | [0 to 5 / 0.8 / 0.01 mg/cm ² /kV /step] |
| 800 | Y (Target Display) | *ENG | [0 to 5 / 0.77 / 0.01 mg/cm ² /kV /step] |

| 009 | Bk (Standard Target Set) | *ENG | Displays the standard target development gamma for each color. [0 to 5 / 0.9 / 0.01 mg/cm ² /kV /step] |
|-----|--------------------------|------|--|
| 010 | M (Standard Target Set) | *ENG | |
| 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 | |
| 015 | M (Max Correction) | *ENG | Adjusts the maximum correction value for each color. These SPs are effective only when the |
| 016 | C (Max Correction) | *ENG | setting of SP3-611-013 is set to "1". |
| 017 | Y (Max Correction) | *ENG | [0 to 5 / 0.1 / 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 / 15 / 1 g/m ³ /step] |

| 3612 | [Vk Display] | | |
|------|-----------------------------|------|------------------------------|
| 3012 | Displays Vk for each color. | | |
| 001 | Bk | *ENG | |
| 002 | М | *ENG | [200+-200 / /1 //] |
| 003 | С | *ENG | [-300 to 300 / - / 1 V/step] |
| 004 | Υ | *ENG | |

| 0.401 | [Development DC Control: Display] |
|-------|---|
| 3621 | Plain: 205 (C2c)/230 (C2d) mm/sec, Thick 1: 154 mm/sec, Thick 2 & FINE: 77 mm/sec |

| | Displays the development DC k | pias adjusted | with the process control for each line speed and |
|-----|-------------------------------|---------------|--|
| 001 | Plain: Bk | *ENG | |
| 002 | Plain: M | *ENG | [0 700 / FFO / 1 \ \ / \ \ |
| 003 | Plain: C | *ENG | [0 to 700 / 550 / 1 -V/step] |
| 004 | Plain: Y | *ENG | |
| 005 | Thick 1: Bk | *ENG | |
| 006 | Thick 1: M | *ENG | [0700 / FFO / 1 \ \ / \] |
| 007 | Thick 1: C | *ENG | [0 to 700 / 550 / 1 -V/step] |
| 800 | Thick 1: Y | *ENG | |
| 009 | Thick 2 & FINE: Bk | *ENG | |
| 010 | Thick 2 & FINE: M | *ENG | [0700 / FFO / 1 \ \ / \ |
| 011 | Thick 2 & FINE: C | *ENG | [0 to 700 / 550 / 1 -V/step] |
| 012 | Thick 2 & FINE: Y | *ENG | |

| 3631 | [Charge DC Control: Display] Plain: 205 (C2c)/230 (C2d) r | mm/sec, Thic | k 1: 154 mm/sec, Thick 2 & FINE: 77 mm/sec |
|------|---|---------------|---|
| 3031 | Displays the charge DC voltag color. | e adjusted wi | ith the process control for each line speed and |
| 001 | Plain: Bk | *ENG | |
| 002 | Plain: M | *ENG | [0.4-2000 / 400 / 1] //] |
| 003 | Plain: C | *ENG | [0 to 2000 / 690 / 1 -V/step] |
| 004 | Plain: Y | *ENG | |
| 005 | Thick 1 & FINE: Bk | *ENG | |
| 006 | Thick 1 & FINE: M | *ENG | [0 to 2000 / 400 / 1 \ |
| 007 | Thick 1 & FINE: C | *ENG | [0 to 2000 / 690 / 1 -V/step] |
| 008 | Thick 1& FINE: Y | *ENG | |

| 009 | Thick 2 & FINE: Bk | *ENG | |
|-----|--------------------|------|--------------------------------------|
| 010 | Thick 2 & FINE: M | *ENG | [0.4-2000 / 400 / 1] //1 |
| 011 | Thick 2 & FINE: C | *ENG | [0 to 2000 / 690 / 1 -V/step] |
| 012 | Thick 2 & FINE: Y | *ENG | |

| 3641 | [Charge AC Control: Display] Plain: 205 (C2c)/230 (C2d) r Displays the charge AC voltag | <u>'</u> | th the process control for each color. |
|------|---|----------|--|
| 001 | Plain: Bk | *ENG | |
| 002 | Plain: M | *ENG | [0. 0 /175 /001] |
| 003 | Plain: C | *ENG | [0 to 3 / 1.75 / 0.01 kV/step] |
| 004 | Plain: Y | *ENG | |

| 3651 | [LD Power Control: Display] Plain: 205 (C2c)/230 (C2d) r | mm/sec, Thic | k 2 & FINE: 77 mm/sec |
|------|--|---------------|------------------------------------|
| | Displays the LD power adjusted | d for each en | vironment. |
| 001 | Plain: Bk | *ENG | |
| 002 | Plain: M | *ENG | [0. 000 / 100 / 10/ / .] |
| 003 | Plain: C | *ENG | [0 to 200 / 100 / 1 %/step] |
| 004 | Plain: Y | *ENG | |
| 005 | Thick 1: Bk | *ENG | |
| 006 | Thick 1: M | *ENG | [0 200 / 100 / 1.9/ /] |
| 007 | Thick 1: C | *ENG | [0 to 200 / 100 / 1 %/step] |
| 800 | Thick 1: Y | *ENG | |
| 009 | Thick 2 & FINE: Bk | *ENG | |
| 010 | Thick 2 & FINE: M | *ENG | [0 to 200 / 100 / 1 %/step] |
| 011 | Thick 2 & FINE: C | *ENG | |

| TZ THICK Z GTHVL. I |
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| [HST Concentration Control: Set] | | | | |
|----------------------------------|--|-------------|---|--|
| 3 <i>7</i> 10 | TD Sensor: Toner Concentration Control Setting | | | |
| | Selects the toner concentration cont | 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 | |

| 0711 | [HST Concentration Control: Bk] | | |
|------|--------------------------------------|------------|--|
| 3711 | Displays the factory settings of the | e black PC | U. |
| 001 | Vcnt | *ENG | [0 to 5 / 4 / 0.1 V/step] |
| 002 | Vt | *ENG | [0 to 5 / 2.5 / 0.1 V/step] |
| 003 | Sensitivity: HL | *ENG | [1.22 to 3.77 / 2.1 / 0.01 V/step] |
| 004 | Sensitivity: HM | *ENG | [0. 0.55 / 1.05 /0.01 V/.] |
| 005 | Sensitivity: ML | *ENG | [0 to 2.55 / 1.05 / 0.01 V/step] |
| 006 | Set Detection | *ENG | [0 to 5 / 1 / 0.1 V/step] |
| 007 | Without Developer | *ENG | [0 to 5 / 1.2 / 0.1 V/step] |
| 800 | With Developer | *ENG | [0 to 5 / 1.3 / 0.1 V/step] |
| 009 | Serial Number 1 | *ENG | [0.4- 0.55 / /1 \//] |
| 010 | Serial Number 2 | *ENG | [0 to 255 / - / 1 V/step] |
| 011 | Adjustment: Vt | *ENG | [0 to 5 / 3 / 0.1 V/step] |
| 012 | Adjustment: Vtref | *ENG | [0 to 5 / 3 / 0.1 V/step] |
| 013 | Adjustment: Vtcnt | *ENG | [0 to 5 / 4 / 0.01 V/step] |
| 014 | Adjustment: Gamma | *ENG | [0 to 2.55 / 0 / 0.01 mg/cm ² /kV /step] |
| 015 | Adjustment: Vcnt Result | *ENG | [0 to 9 / 9 / 1 /step] |

| 3712 | [HST Concentration Control: M] |
|------|---|
| 3712 | Displays the factory settings of the magenta PCU. |

| 001 | Vcnt | *ENG | [0 to 5 / 4 / 0.1 V/step] |
|-----|-------------------------|------|--|
| 002 | Vt | *ENG | [0 to 5 / 2.5 / 0.1 V/step] |
| 003 | Sensitivity: HL | *ENG | [1.22 to 3.77 / 2.1 / 0.01 V/step] |
| 004 | Sensitivity: HM | *ENG | [0+0.55 /1.05 /0.01 \//+] |
| 005 | Sensitivity: ML | *ENG | [0 to 2.55 / 1.05 / 0.01 V/step] |
| 006 | Set Detection | *ENG | [0 to 5 / 1 / 0.1 V/step] |
| 007 | Without Developer | *ENG | [0 to 5 / 1.2 / 0.1 V/step] |
| 008 | With Developer | *ENG | [0 to 5 / 1.3 / 0.1 V/step] |
| 009 | Serial Number 1 | *ENG | [0.4-055 / /1.1//.4] |
| 010 | Serial Number 2 | *ENG | [0 to 255 / - / 1 V/step] |
| 011 | Adjustment: Vt | *ENG | [0 to 5 / 3 / 0.1 V/step] |
| 012 | Adjustment: Vtref | *ENG | [0 to 5 / 3 / 0.1 V/step] |
| 013 | Adjustment: Vtcnt | *ENG | [0 to 5 / 4 / 0.01 V/step] |
| 014 | Adjustment: Gamma | *ENG | [0 to 2.55 / 0 / 0.01 mg/cm ² /kV /step] |
| 015 | Adjustment: Vcnt Result | *ENG | [0 to 9 / 9 / 1 /step] |

| 2712 | [HST Concentration Control: C |] | |
|------|----------------------------------|--------------|---|
| 3713 | Displays the factory settings of | the cyan PCl | J. |
| 001 | Vcnt | *ENG | [0 to 5 / 4 / 0.1 V/step] |
| 002 | Vt | *ENG | [0 to 5 / 2.5 / 0.1 V/step] |
| 003 | Sensitivity: HL | *ENG | [1.22 to 3.77 / 2.1 / 0.01 V/step] |
| 004 | Sensitivity: HM | *ENG | [0. 0.55 / 1.05 / 0.01 \/ / .] |
| 005 | Sensitivity: ML | *ENG | [0 to 2.55 / 1.05 / 0.01 V/step] |
| 006 | Set Detection | *ENG | [0 to 5 / 1 / 0.1 V/step] |
| 007 | Without Developer | *ENG | [0 to 5 / 1.2 / 0.1 V/step] |
| 008 | With Developer | *ENG | [0 to 5 / 1.3 / 0.1 V/step] |

| 009 | Serial Number 1 | *ENG | [0 + 255 / /1 \//] |
|-----|-------------------------|------|--|
| 010 | Serial Number 2 | *ENG | [0 to 255 / - / 1 V/step] |
| 011 | Adjustment: Vt | *ENG | [0 to 5 / 3 / 0.1 V/step] |
| 012 | Adjustment: Vtref | *ENG | [0 to 5 / 3 / 0.1 V/step] |
| 013 | Adjustment: Vtcnt | *ENG | [0 to 5 / 4 / 0.01 V/step] |
| 014 | Adjustment: Gamma | *ENG | [0 to 2.55 / 0 / 0.01 mg/cm ² /kV /step] |
| 015 | Adjustment: Vcnt Result | *ENG | [0 to 9 / 9 / 1 /step] |

| 3714 | [HST Concentration Control: Y] | | | |
|------|----------------------------------|---------------|--|--|
| 3/14 | Displays the factory settings of | the yellow Po | CU. | |
| 001 | Vcnt | *ENG | [0 to 5 / 4 / 0.1 V/step] | |
| 002 | Vt | *ENG | [0 to 5 / 2.5 / 0.1 V/step] | |
| 003 | Sensitivity: HL | *ENG | [1.22 to 3.77 / 2.1 / 0.01 V/step] | |
| 004 | Sensitivity: HM | *ENG | [0+255/105/0017/+] | |
| 005 | Sensitivity: ML | *ENG | [0 to 2.55 / 1.05 / 0.01 V/step] | |
| 006 | Set Detection | *ENG | [0 to 5 / 1 / 0.1 V/step] | |
| 007 | Without Developer | *ENG | [0 to 5 / 1.2 / 0.1 V/step] | |
| 008 | With Developer | *ENG | [0 to 5 / 1.3 / 0.1 V/step] | |
| 009 | Serial Number 1 | *ENG | [0+-255 / /1 \//] | |
| 010 | Serial Number 2 | *ENG | [0 to 255 / - / 1 V/step] | |
| 011 | Adjustment: Vt | *ENG | [0 to 5 / 3 / 0.1 V/step] | |
| 012 | Adjustment: Vtref | *ENG | [0 to 5 / 3 / 0.1 V/step] | |
| 013 | Adjustment: Vtcnt | *ENG | [0 to 5 / 4 / 0.01 V/step] | |
| 014 | Adjustment: Gamma | *ENG | [0 to 2.55 / 0 / 0.01 mg/cm ² /kV /step] | |
| 015 | Adjustment: Vcnt Result | *ENG | [0 to 9 / 9 / 1 /step] | |

| 3800 | [Toner Collection Bottle Full Detection] |
|------|--|
|------|--|

| | Displays/ adjusts the toner coll | ection 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 / - / 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 / - / 1 cm ² /step] |
| 005 | Pixel Count After Replacement | *CTL | Displays the pixel counter after replacement of toner collection bottle. [0 to 200000 / - / 1 cm ² /step] |
| 800 | Coefficient | *ENG | [0.5 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 |
| | | ", the machin | eed before the machine detects used toner near e cannot detect toner collection bottle near full. |
| | Day Threshold: Toner Collection bottle:NF | *ENG | [1 to 30 / 5 / 1 day/step] |
| 012 | | hold days for the near-full display. The near-full of the toner collection bottle is er the toner collection full sensor has detected the actuator in the toner collection | |
| 013 | Total:Toner Collection Bottle | *ENG | Displays the total amount of the used toner. [0 to 999999999 / 1 / 1] |
| 014 | Mechanism Full Detection Date | *ENG | Displays the date of the full detection fot the toner collection bottle. |

| 3900 | | [Toner Collection Bottle Full Detection] | | | |
|------|-----|---|------|------------------|--|
| 3900 | | Turns toner collection bottle full detection on or off. | | | |
| C | 001 | ON/OFF Setting | *ENG | [0 or 1 / 1 / -] | |

| | 0: OFF, 1: ON |
|--|---------------|
| | |

| 3901 | [New PCU Detection] | | | |
|------|------------------------------------|------|-----------------------------------|--|
| 3901 | Turns new PCU 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 sectio 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 (Drum Unit): Bk | *ENG | | |
| 010 | PCU (Drum Unit): Y | *ENG | [0 or 1 / 0 / -] | |
| 011 | PCU (Drum Unit): C | *ENG | 0: OFF, 1: ON | |
| 012 | PCU (Drum Unit): 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. | |

SP4-XXX (Scanner)

| 4008 | [Sub Scan Magnification Adjustment] | | | |
|------|---|------|--|--|
| 4006 | Adjusts the sub-scan magnification by changing the scanner motor speed. | | | |
| 001 | Sub Scan Magnification Adjustment | *ENG | [-1.0 to 1.0 / 0 / 0.1%/step] FA | |

| | [Leading Edge Registration Adjustment] | | | | |
|------|--|------|--|--|--|
| 4010 | Adjusts the leading edge registration by changing the scanning start timing in the sub-scan direction. | | | | |
| 001 | - | *ENG | [-2.0 to 2.0 / 0 / 0.1 mm/step] FA | | |

| | [Side-to-Side registration Adjustment] | | | | |
|------|---|------|---|--|--|
| 4011 | Adjusts the side-to-side registration by changing the scanning start timing in the main scan direction. | | | | |
| 001 | - | *ENG | [-2.5 to 2.5 / 0 / 0.1 mm/step] FA | | |

[Scanner Erase Margin: Scale] Scanner: Erase Margin: Scale 4012 Sets the blank margin at each side for erasing the original shadow caused by the gap between the original and the scale. 001 Book: Leading Edge 002 Book: Trailing Edge [0 to 3.0 / 0 / 0.1 mm/step] FA*ENG 003 Book: Left 004 Book: Right 005 ADF: Leading Edge [0 to 3.0 / 0 / 0.1 mm/step] FA*ENG 007 ADF: Right ADF: Left 800

| 4013 | [Scanner Free Run] |
|------|---|
| 4013 | Performs the scanner free run with the exposure lamp on or off in the following mode. |

| | Full color mode / Full Size / A3 or DLT | | |
|-----|---|------|-------------------------|
| 001 | Lamp: OFF | *ENG | [0 or 1 / 0 / -] |
| 002 | Lamp: ON | ENG | 0: OFF, 1: ON |

| 401.4 | [Scan] | | |
|--|----------------------|-------|---|
| Execute the scanner free fun with each mode. | | 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 | Detection: ON/OFF | *ENG | Turns the ADF scan glass dust check on/off. [0 or 1 / 0 / 1 /step] 0: OFF, 1: ON |
| 002 | Detection: Level | *ENG | Selects the detect level. [0 to 8 / 4 / 1 /step] 0: lowest detection level 8: highest detection level |
| 003 | Correction Level | *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 |

| | [APS Operation Check] | | | |
|------|--|---|---|--|
| 4301 | Displays a code that represents the original size detected by the original sensors. (See "Input Check Table" in this section.) | | | |
| 001 | APS Operation Check | - | - | |

| 4202 | [APS Min Size (A5/HLT/16K)] | | | |
|------|---|------|--|--|
| 4303 | Specifies the result of the detection when the outputs from the original sensors are all OF | | | |
| 001 | APS Min. Size (A5/HLT/ 16K) | *ENG | [0 to 2 / 0 / 1 /step] 0: No Original 1: A5-Lengthwise (16K SEF if 4305 is set to 3) 2: A5-Sideways (16K LEF if 4305 is set to 3) | |

| 4305 | [8K/16K Detection] | *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 |
|------|--|------|--|
| 001 | This program enables the machine to automatically recognize the 8K/16K size. | | |

| | [Scanner Erase Margin] | *ENG | | | |
|------|---|---|--|--|--|
| 4400 | Set the Mask for Original. These SPs set the area to be masked | ked during platen (book) mode scanning. | | | |
| 001 | Book: Leading Edge | | | | |
| 002 | Book: Trailing Edge | [0 to 3.0 / 0 / 0.1 mm/step] | | | |
| 003 | Book: Left | | | | |
| 004 | Book: Right | | | | |
| 005 | ADF: Leading Edge | | | | |
| 007 | ADF: Right | | | | |
| 008 | ADF: Left | | | | |

| 4417 | [IPU Test Pattern] |
|------|-------------------------------|
| 4417 | Selects the IPU test pattern. |

| | | [0 to 24 / 0 / 1/step] | |
|-----|--------------|--------------------------------|----------------------------|
| | | 0: Scanned image | 13: Grid pattern CMYK |
| | | 1: Gradation main scan A | 14: Color patch CMYK |
| | | 2: Gradation main scan B | 15: Gray pattern (1) |
| | | 3: Gradation main scan C | 16: Gray pattern (2) |
| | | 4: Gradation main scan D | 17: Gray Pattern (3) |
| 001 | Test Pattern | 5: Gradation sub scan (1) | 18: Shading pattern |
| 001 | Selection | 6: Grid pattern | 19: Thin line pattern |
| | | 7: Slant grid pattern | 20: Scanned + Grid pattern |
| | | 8: Gradation RGBCMYK | 21: Scanned + Gray scale |
| | | 9: UCR pattern | 22: Scanned + Color patch |
| | | 10: Color patch 16 (1) | 23: Scanned + Slant Grid C |
| | | 11: Color patch 16 (2) | 24: Scanned + Slant Grid D |
| | | 12: Color patch 64 | |

| 4429 | [Illegal Copy Output] | | |
|------|-----------------------|------|-------------------------------|
| 001 | Сору | | |
| 002 | Scanner | *ENG | [0 to 3 / 3 / 1 /step] |
| 003 | Fax | | |

| 4440 | [Saturation Adjustment] | | | | |
|------|--|------|--|--|--|
| 4440 | Adjusts the level of saturation for copying. | | | | |
| 001 | Saturation Adj. 1 | *ENG | [0 to 5 / 3 / 1 /step] 0: High 1: Lowest 2: Lower 3: Default | | |
| | | | 4: Higher 5: Highest | | |

| 4450 [Scan Image Path Selection] | |
|----------------------------------|--|
|----------------------------------|--|

Black Subtraction ON/OFF

[0 or 1 / 1 / -] 0: OFF, 1: ON

| | [Digital AE Set] DFU | | | |
|------|---|------|---|--|
| 4460 | Specifies the level of deleting the background in the ADS mode. You can adjust its leve each scanning method (platen, ADF). | | | |
| 001 | Lower Limit | *ENG | [0 to 1023 / 364 / 4 digit/step] | |
| 002 | Background Level | *ENG | [512 to 1532 / 932 / 1 digit/step] | |

| 4501 | [ACC Target Density] | | | | |
|------|-------------------------|------|--------------------------------|--|--|
| 4501 | Selects the ACC result. | | | | |
| 001 | Copy: Bk: 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: Bk: Photo | *ENG | 10: Darkest density | | |
| 006 | Copy: C: Photo | *ENG | | | |
| 007 | Copy: M: Photo | *ENG | | | |
| 008 | Copy: Y: Photo | *ENG | | | |

| | 4505 | [ACC Offset: Light] | | |
|---|------|---------------------|------|------------------------------------|
| Adjusts the offset correction for light areas of the ACC patter | | | | eas of the ACC pattern. |
| | 001 | Self Machine: Bk | *ENG | |
| | 002 | Self Machine: C | *ENG | [-128 to 127 / 0 / 1 /step] |
| | 003 | Self Machine: M | *ENG | |

ď

| 004 | Self Machine: Y | *ENG | |
|-----|-------------------|------|----------|
| 005 | Other Machine: Bk | *ENG | |
| 006 | Other Machine: C | *ENG | D |
| 007 | Other Machine: M | *ENG | Reserved |
| 008 | Other Machine: Y | *ENG | |

| 4507 | [ACC Offset: Dark] | | | |
|------|-----------------------------------|--------------------------------|------------------------------------|--|
| 4506 | Adjusts the offset correction for | dark areas of the ACC pattern. | | |
| 001 | Self Machine: Bk | *ENG | | |
| 002 | Self Machine: C | *ENG | [120 + 127 / 0 / 1 / + - 1 | |
| 003 | Self Machine: M | *ENG | [-128 to 127 / 0 / 1 /step] | |
| 004 | Self Machine: Y | *ENG | | |
| 005 | Other Machine: Bk | *ENG | | |
| 006 | Other Machine: C | *ENG | Reserved | |
| 007 | Other Machine: M | *ENG | reserved | |
| 800 | Other Machine: Y | *ENG | | |

| | [Printer Vector Correction] | | | | |
|---------|--|------|---|--|--|
| 4540 | This SP corrects the printer coverage of 12 hues (RY, YR, YG, etc. x 4 Colors [R, 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 | | Specifies the printer vector correction | | |
| 013-016 | GY Phase: Option/R/G/B | *ENG | value. | | |
| 017-020 | GC Phase: Option/R/G/B | | [0 to 255 / 0 / 1 /step] | | |
| 021-024 | CG Phase: Option/R/G/B | | | | |
| 025-028 | CB Phase: Option/R/G/B | | | | |

| 4550 | [Scanner Application: text/Printing] DFU | | | |
|------|---|---------------|---|--|
| 4551 | [Scanner Application: text] DFU | | | |
| 4552 | [Scanner Application: text (Dro | p Out Coor |)] DFU | |
| 4553 | [Scanner Application: text-Phot | o] DFU | | |
| 4554 | [Scanner Application: Photo] D | FU | | |
| 4565 | [Scanner Application: GraySco | ale] DFU | | |
| 4570 | [Scanner Application: Color: To | ext-Photo] D | FU | |
| 4571 | [Scanner Application: Color: Glossy Photo] DFU | | | |
| 4572 | [Scanner Application: AutoColor] DFU | | | |
| -005 | MTF: 0 (Off), 1-15 (Strong) | *ENG | [0 to 15 / 8 / 1 /step] 0: MTF Off | |
| -003 | Sets the MTF level (Modulation higher for stronger effect, lowe | | nction) designed to improve image contrast. Set r effect. | |
| -006 | Smoothing: 0 (x1), 1-7 (Strong) | *ENG | [0 to 7 / 4 / 1 /step] | |
| | Use to remove "jaggies" if they | appear. Se | t higher for smoother images. | |
| -007 | Brightness: 1–255 | *ENG | [1 to 255 / 128 / 1 /step] | |
| -007 | Set higher for darker, set lower for lighter. | | | |
| -008 | Contrast: 1–255 | *ENG | [1 to 255 / 128 / 1 /step] | |
| -006 | Set higher for more contrast, se | t lower for l | ess contrast. | |

| | Independent Dot Erase (0), 1-7 (Strong) | *ENG | [0 to 7 / 0 / 1 /step] | | |
|------|--|------|-------------------------------|--|--|
| -009 | Sets the erasure level of Irregular Dots. Set higher for stronger effect, lower for weaker effect. O: Not activated | | | | |

| 4580 | [FAX Application: Text/Chart] DFU | | | | |
|------|--|----------------|---|--|--|
| 4582 | [FAX Application: Text/Photo] DFU | | | | |
| 4583 | [FAX Application: Photo] DFU | | | | |
| -005 | MTF: 0 (Off), 1-15 (Strong) | *ENG | [0 to 15 / 8 / 1 /step] 0: MTF Off | | |
| -003 | Sets the MTF level (Modulation higher for stronger effect, lower | | nction) designed to improve image contrast. Set effect. | | |
| -006 | Smoothing: 0 (x1), 1-7 (Strong) | *ENG | [0 to 7 / 4 / 1 /step] | | |
| | Use to remove "jaggies" if they appear. Set higher for smoother images. | | | | |
| -007 | Brightness: 1–255 | *ENG | [1 to 255 / 128 / 1 /step] | | |
| -007 | Set higher for darker, set lower | for lighter. | | | |
| -008 | Contrast: 1–255 | *ENG | [1 to 255 / 128 / 1 /step] | | |
| -006 | Set higher for more contrast, se | t lower for le | ess contrast. | | |
| | Independent Dot Erase (0), 1-7 (Strong) | *ENG | [0 to 7 / 0 / 1 /step] | | |
| -009 | Selects the contrast level for B/W the Text mode. Sets the erasure level of Irregular Dots. Set higher for stronger effect, lower for weaker effect. O: Not activated | | | | |
| | Texture Erase: 0 | *ENG | [0 to 2 / 0 / 1 /step] | | |
| -010 | Sets the erasure level of textures. Set higher for stronger effect, lower for weaker effect. This SP (suffix "-010") only exists in SP4580, 4582 and 4583. O: Not activated | | | | |

| 4581 | [FAX Application: Text] DFU |
|------|-----------------------------|
|------|-----------------------------|

| 4584 | [FAX Application: Original 1] DFU | | | | |
|------|--|----------------|---|--|--|
| 4585 | [FAX Application: Original 2] DFU | | | | |
| -005 | MTF: 0 (Off), 1-15 (Strong) | *ENG | [0 to 15 / 8 / 1 /step] 0: MTF Off | | |
| -003 | Sets the MTF level (Modulation higher for stronger effect, lower | | nction) designed to improve image contrast. Set effect. | | |
| -006 | Smoothing: 0 (x1), 1-7 (Strong) | *ENG | [0 to 7 / 4 / 1 /step] | | |
| | Use to remove "jaggies" if they appear. Set higher for smoother images. | | | | |
| 007 | Brightness: 1–255 | *ENG | [1 to 255 / 128 / 1 /step] | | |
| -007 | Set higher for darker, set lower | r for lighter. | | | |
| 000 | Contrast: 1–255 | *ENG | [1 to 255 / 128 / 1 /step] | | |
| -008 | Set higher for more contrast, se | t lower for le | ess contrast. | | |
| | Independent Dot Erase (0), 1-7 (Strong) | *ENG | [0 to 7 / 0 / 1 /step] | | |
| -009 | Selects the contrast level for B/W the Text mode. Sets the erasure level of Irregular Dots. Set higher for stronger effect, lower for weaker effect. O: Not activated | | | | |

| 4600 | [SBU Version Display] | | |
|------|-----------------------|---|----------------------------------|
| 001 | SBU_ID | - | Displays the ID of the SBU. |
| 002 | GASBU-N_ID | - | Displays the ID of the GASBU. |
| 003 | VSP5100_ID | - | 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. |
| 002 | Address Set | - | Natural |
| 003 | Data Set | - | Not used |

| 4603 | [AGC Execution] | | |
|------|----------------------|---|-------------------|
| 001 | HP Detection Enable | - | Executes the AGC. |
| 002 | HP Detection Disable | - | DFU |

| 4604 | [FGATE Open/Close] DFU | | |
|------|------------------------|---|--|
| 001 | - | - | Opens or closes the FGATE signal. This SP automatically returns to the default status (close) after exiting this SP. |
| | | | [0 or 1 / 0 / 1/step] |
| | | | 0: OFF, 1: ON |

| 4609 | [Gray Balance Set: R] | | |
|------|-----------------------|---|---|
| 001 | Book Read | - | [-512 to 511 / -46 / 1 digit/step] |
| 002 | DF Read | - | [-512 to 511 / -46 / 1 digit/step] |

| 4610 | [Gray Balance Set: G] | | |
|------|-----------------------|---|---|
| 001 | Book Read | | [510 to 511 / 20 / 1 divit/tool |
| 002 | DF Read | - | [-512 to 511 / -20 / 1 digit/step] |

| 4611 | [Gray Balance Set: B] | | |
|------|-----------------------|---|---|
| 001 | Book Read | | [512 - 511 / 20 / 1 dinit/] |
| 002 | DF Read | _ | [-512 to 511 / -28 / 1 digit/step] |

| 4623 | [Black Level Fine Adj. Display] | | | | |
|------|---|---|--|--|--|
| 4020 | RE: Red Even signal, RO: Red Odd signal | | | | |
| 001 | Latest: RE Color | - | Displays the black offset value (rough adjustment) for the even red signal in the CCD circuit board (color printing speed). [0 to 16383 / 0 / 1 digit/step] | | |

| 4624 [Black Level Rough Adj. Display] GE: Green Even signal, GO: Green Odd signal | | | d signal |
|---|------------------|---|--|
| 001 | Latest: GE Color | - | Displays the black offset value (rough adjustment) for the even green signal in the CCD circuit board (color printing speed). [0 to 16383 / 0 / 1 digit/step] |
| 002 | Latest: GO Color | - | Displays the black offset value (rough adjustment) for the odd green signal in the CCD circuit board (color printing speed). [0 to 16383 / 0 / 1 digit/step] |

| 4625 [Black Level Rough Adj. Display] BE: Blue Even signal, BO: Blue Odd signal | | | |
|---|------------------|---|---|
| 001 | Latest: BE Color | - | Displays the black offset value (rough adjustment) for the even blue signal in the CCD circuit board (color printing speed). [0 to 16383 / 0 / 1 digit/step] |
| 002 | Latest: BO Color | - | Displays the black offset value (rough adjustment) for the odd blue signal in the CCD circuit board (color printing speed). [O to 16383 / 0 / 1 digit/step] |

| | 4628 | [Gain Adjustment] | | | | |
|--|------|--|---|------------------------------------|--|--|
| | | Displays the gain value of the amplifiers on the controller for Red. | | | | |
| | 001 | Latest: RE Color | - | [0 to 7 / 0 / 1 digit/step] | | |

| 4629 | [Gain Adjustment] |
|------|--|
| 4029 | Displays the gain value of the amplifiers on the controller for Green. |

| 001 Latest: GE Color | - | [0 to 7 / 0 / 1 digit/step] |
|----------------------|---|------------------------------------|
|----------------------|---|------------------------------------|

| 4630 | [Gain Adjustment] | | | | |
|------|---|--|------------------------------------|--|--|
| 4030 | Displays the gain value of the amplifiers on the controller for Blue. | | | | |
| 001 | 001 Latest: BE Color - [0 to 7 / 0 / 1 digit/step] | | [0 to 7 / 0 / 1 digit/step] | | |

| 4631 | [Gain Adjustment] | | | | |
|------|--|---|---------------------------------------|--|--|
| 4031 | Displays the gain value of the amplifiers on the controller for Red. | | | | |
| 001 | Latest: RE Color | | | | |
| 002 | Latest: RO Color | - | [0 to 1023 / 0 / 1 digit/step] | | |

| 4632 | [Gain Adjustment] | | | | |
|------|--|---|---------------------------------------|--|--|
| 4032 | Displays the gain value of the amplifiers on the controller for Green. | | | | |
| 001 | Latest: GE Color | | | | |
| 002 | Latest: GO Color | - | [0 to 1023 / 0 / 1 digit/step] | | |

| 4633 | [Gain Adjustment] | | | | |
|------|---|---|---------------------------------------|--|--|
| 4033 | Displays the gain value of the amplifiers on the controller for Blue. | | | | |
| 001 | Latest: BE Color | - | [0 to 1023 / 0 / 1 digit/step] | | |
| 002 | Latest: BO Color | - | [0 to 1023 / 0 / 1 aigit/step] | | |

| 4645 | [Scan Adj. Time Out Error] | | |
|------|----------------------------|---|---|
| 001 | White Offset Correction | - | [0 to 65535 / 0 / 1 digit/step] |
| 002 | Black Offset Correction | - | [0 10 03333 / 0 / 1 digit/ step] |

| 4647 | [Read Hard Error] | | | | |
|------|--|--|---|--|--|
| 404/ | Displays the result of the SBU connection check. | | | | |
| 001 | Payer ON | | [0 to 35535 / 0 / 1 digit /step] | | |
| 001 | 001 Power-ON - | 0: OK, Other: SBU connection check failure | | | |

| If the SBU connection check fails, SC144 occu | urs. |
|---|------|
|---|------|

| 4654 | [Black Level Fine Adj. Display] RE: Red Even signal, RO: Red Odd signal | | | | |
|------|---|------|--|--|--|
| 001 | Last Correct Value: RE Color | *ENG | Displays the black offset value (rough adjustment) for the even red signal in the CCD circuit board (color printing speed). [0 to 16383 / 0 / 1 digit/step] | | |
| 002 | Last Correct Value: RO Color | *ENG | Displays the black offset value (rough adjustment) for the odd red signal in the CCD circuit board (color printing speed). [0 to 16383 / 0 / 1 digit/step] | | |

| 4655 | | [Black Level Fine Adj. Display] GE: Green Even signal, GO: Green Odd signal | | | | |
|------|-----|---|------|--|--|--|
| С | 001 | Last Correct Value: GE Color | *ENG | Displays the black offset value (rough adjustment) for the even green signal in the CCD circuit board (color printing speed). [0 to 16383 / 0 / 1 digit/step] | | |
| С | 002 | Last Correct Value: GO Color | *ENG | Displays the black offset value (rough adjustment) for the odd green signal in the CCD circuit board (color printing speed). [0 to 16383 / 0 / 1 digit/step] | | |

| 4656 | [Black Level Fine Adj. Display] BE: Blue Even signal, BO: Blue Odd signal | | | | |
|------|---|------|---|--|--|
| 001 | Last Correct Value: BE Color | *ENG | Displays the black offset value (rough adjustment) for the even blue signal in the CCD circuit board (color printing speed). [0 to 16383 / 0 / 1 digit/step] | | |
| 002 | Last Correct Value: BO Color | *ENG | Displays the black offset value (rough adjustment) for the odd blue signal in the CCD circuit board (color printing speed). [0 to 16383 / 0 / 1 digit/step] | | |

| | 4658 | [Gain Adjustment] | | |
|---|------|------------------------------|------|------------------------------------|
| Displays the previous gain value of the amplifiers on the controller for Red. | | | | on the controller for Red. |
| | 001 | Last Correct Value: RE Color | *ENG | [0 to 7 / 0 / 1 digit/step] |

| 4659 | [Gain Adjustment] | | | | |
|------|---|------|------------------------------------|--|--|
| 4039 | Displays the previous gain value of the amplifiers on the controller for Green. | | | | |
| 00 | Last Correct Value: GE Color | *ENG | [0 to 7 / 0 / 1 digit/step] | | |

| 4660 | [Gain Adjustment] | | | | |
|------|--|------|------------------------------------|--|--|
| 4000 | Displays the previous gain value of the amplifiers on the controller for Blue. | | | | |
| 001 | Last Correct Value: BE Color | *ENG | [0 to 7 / 0 / 1 digit/step] | | |

| 4661 | [Gain Adjustment] RE: Red Even signal, RO: Red Odd signal | | | |
|------|---|------|---------------------------------------|--|
| 001 | Last Correct Value: RE Color | *ENG | [0.4-1022 / 0 / 1 distrib/stand | |
| 002 | Last Correct Value: RO Color | *ENG | [0 to 1023 / 0 / 1 digit/step] | |

| 4662 | | [Gain Adjustment] | | |
|------|----|------------------------------------|-----------|---------------------------------------|
| 4002 | | GE: Green Even signal, GO: Green O | dd signal | |
| 0 | 01 | Last Correct Value: GE Color | *ENG | [0 to 1023 / 0 / 1 digit/step] |
| 0 | 02 | Last Correct Value: GO Color | *ENG | |

| 4663 | [Gain Adjustment] BE: Blue Even signal, BO: Blue Odd signal | | |
|------|---|------|---------------------------------------|
| 001 | Last Correct Value: BE Color | *ENG | [0 to 1023 / 0 / 1 digit/step] |
| 002 | Last Correct Value: BO Color | *ENG | |

| 14 | 4673 | [Black Level Fine Adj. Display] | |
|----|------|---|--|
| 40 | 73 | 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 (color printing speed) [0 to 16383 / 0 / 1 digit/step] |
|-----|---------------------------|------|---|
| 002 | Factory Setting: RO Color | *ENG | Displays the factory setting values of the black level adjustment (rough adjustment) for the odd red signal in the CCD circuit board (color printing speed). [0 to 16383 / 0 / 1 digit/step] |

| 4674 | [Black Level Fine Adj. Display] | | | |
|------|---|------|--|--|
| 40,4 | GE: Green Even signal, GO: Green Odd signal | | | |
| 001 | Factory Setting: GE Color | *ENG | Displays the factory setting values of the black level adjustment (rough adjustment) for the even green signal in the CCD circuit board (color printing speed). [0 to 16383 / 0 / 1 digit/step] | |
| 002 | Factory Setting: GO Color | *ENG | Displays the factory setting values of the black level adjustment (rough adjustment) for the odd green signal in the CCD circuit board (color printing speed). [0 to 16383 / 0 / 1 digit/step] | |

| 4675 | [Black Level Fine 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 (rough adjustment) for the even blue signal in the CCD circuit board (color printing speed). [0 to 16383 / 0 / 1 digit/step] |
| 002 | Factory Setting: BO Color | *ENG | Displays the factory setting values of the black level adjustment (rough adjustment) for the odd blue signal in the CCD circuit board (color printing speed). [0 to 16383 / 0 / 1 digit/step] |

| 4677 | [Gain Adjustment] | | | | |
|------|---|------|------------------------------------|--|--|
| 40// | Displays the factory setting values of the gain adjustment for Red. | | | | |
| 001 | Factory Setting: RE Color | *ENG | [0 to 7 / 0 / 1 digit/step] | | |

| 4678 | [Gain Adjustment] | | | |
|------|---|------|------------------------------------|--|
| 4076 | Displays the factory setting values of the gain adjustment for Green. | | | |
| 001 | Factory Setting: GE Color | *ENG | [0 to 7 / 0 / 1 digit/step] | |

| 4679 | [Gain Adjustment] | | | | |
|------|--|------|------------------------------------|--|--|
| 40/9 | Displays the factory setting values of the gain adjustment for Blue. | | | | |
| 001 | Factory Setting: BE Color | *ENG | [0 to 7 / 0 / 1 digit/step] | | |

| 4680 | [Gain Adjustment] | | | | |
|------|--|------|---------------------------------------|--|--|
| 4000 | Displays the gain value of the amplifiers on the controller for Red. | | | | |
| 001 | Factory Setting: RE Color | *ENG | [0 to 1023 / 0 / 1 digit/step] | | |
| 002 | Factory Setting: RO Color | *ENG | | | |

| 4681 | [Gain Adjustment] | | | | |
|------|--|------|---------------------------------------|--|--|
| 4001 | Displays the gain value of the amplifiers on the controller for Green. | | | | |
| 001 | Factory Setting: GE Color | *ENG | [0 1002 / 0 / 1 | | |
| 002 | Factory Setting: GO Color | *ENG | [0 to 1023 / 0 / 1 digit/step] | | |

| 4682 | [Gain Adjustment] | | | |
|------|-------------------------------------|---------------|---------------------------------------|--|
| 4002 | Displays the gain value of the ampl | ifiers on the | e controller for Blue. | |
| 001 | Factory Setting: BE Color | *ENG | [0 to 1023 / 0 / 1 digit/step] | |
| 002 | Factory Setting: BO Color | *ENG | | |

| 4688 | [DF: Density Adjustment] |
|------|---|
| 4000 | Adjusts the white shading parameter when scanning an image with the ARDF. |

| 4690 | [White Level Peak Read] | | | |
|------|--|---|---------------------------------------|--|
| 4090 | Displays the peak level of the white level scanning. | | | |
| 001 | RE | - [0 to 1023 / 0 / 1 digit/step] | [0 to 1000 / 0 / 1 divit/store] | |
| 002 | RO | | [0 to 1023 / 0 / 1 aigit/step] | |

| 4691 | [White Level Peak Read] | | |
|--|-------------------------|---|---------------------------------------|
| Displays the peak level of the white level scanning. | | el scanning. | |
| 001 | GE | - [0 to 1023 / 0 / 1 digit/step] | [0.1.1002 / 0 / 1.1tmt/] |
| 002 | GO | | [0 to 1023 / 0 / 1 aigit/step] |

| 4692 | [White Level Peak Read] | | scanning. | |
|---|-------------------------|------------|--------------------------------------|--|
| Displays the peak level of the white le | | vhite leve | el scanning. | |
| 001 | BE | - [0 + 10 | 0 to 1023 / 0 / 1 digit/step] | |
| 002 | ВО | - | | |

| 4693 | [Black Level Peak Read] | | |
|--|-------------------------|--------------------------------------|---------------------------------------|
| Displays the peak level of the black level scanning. | | el scanning. | |
| 001 | RE | - | [0 1002 / 0 / 1 distr/scal |
| 002 | RO | [0 to 1023 / 0 / 1 digit/step | [U to 1023 / U / 1 aigit/step] |

| 4404 | 4694 [Black Level Peak Read] Displays the peak level of the black level scanning. | | | |
|------|---|---------------------------------|---------------------------------------|--|
| 4094 | | | | |
| 001 | GE | - [01002 / 0 / 1 divit/] | [0 to 1023 / 0 / 1 digit/step] | |
| 002 | GO | - | | |

| | Displays the peak level of the black level scanning. | | |
|-----|--|---|---------------------------------------|
| 001 | BE | - | [0 to 1000 / 0 / 1 digit/storn] |
| 002 | ВО | - | [0 to 1023 / 0 / 1 digit/step] |

| 4802 | [DF Shading FreeRun] | | |
|------|----------------------|---|--|
| 001 | Lamp OFF | | Executes the scanner free run of shading movement |
| 002 | Lamp ON | _ | with exposure lamp on or off. Press "OFF" to stop this free run. Otherwise, the free run lasts. |

| 4804 | [Home Position] | | |
|------|-----------------|---|------------------------------------|
| 001 | - | - | Executes the scanner HP detection. |

| 4806 | [Carriage Save] | | |
|------|-----------------|---|---|
| 001 | - | - | 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] | |
|------|---------------------------|---|
| 001 | - | [0 to 250 / 0 / 1 /step] 1: Grid pattern 2: Gradation main scan 3: Gradation sub scan 4 to 250: Default (Scanning Image) |

| 4808 | [Factory Setting Input] | | |
|------|-------------------------|---|-------------------------------|
| 002 | Execution Flag | - | [0 or 1 / 0 / 1 /step] |

| 4902 | [ACC Data Display] |
|------|--|
| 4902 | This SP outputs the final data read at the end of ACC execution. |

| | A zero is returned if there was an error reading the data. | | |
|-----|--|------|--------------------------------|
| | [0 to 255 / 0 / 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) |

| 4904 | [Scanner IPU BoardTest] | | |
|------|---------------------------------|----------|---|
| 001 | Test 1 | - | Bit0: TAURUS register Bit1: ORION register Bit2: LUPUS register Bit3 to 11: Not used Bit12: Ri20 |
| | | | Bit 13 to 15: Not used 0: OK, 1: Error |
| | Performs a write and read check | k of the | ASICs on the BICU board and displays the result. |
| 002 | Test2 | - | Bit0: Image path from SBU to TAURUS Bit1: Image path from TAURUS to ORION Bit2: Image path from ORION to TAURUS Bit3: Image path from TAURUS to LUPUS Bit4 to 11: Not used Bit12: Image path from LUPUS to Ri20 Bit13: Image path from Ri20 to GAVD Bit14 and 15: Not used O: OK, 1: Error |
| | Performs an image path check o | on the B | ICU board and displays the result. |

| 4905 |
|------|
|------|

| | Changes the parameters for error diffusion. | | |
|-----|---|------|--|
| 001 | Dither Selection | *ENG | [0 to 255 / 0 / 1 /step] DFU |

| | [Manual Gamma] | | | |
|---|----------------|---|--|--|
| 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 | | | , | |
| 009 | Change | - | Enter the manual gamma adjustment screen (-001 to 008). For details, see the "Printer Gamma Correction" in the section "Replace and Adjustment". | |

| 4954 | [Standard Chart Scan: Clear Setting] | | |
|------|--------------------------------------|---|---|
| 001 | Execution | - | Execute the scanning of the A4 chart. |
| 002 | Clear Setting | - | Clear the data of the scanned A4 chart. |
| 004 | Rewrite Target | - | Overwrite the standard data. |

| | [IPU Image Path 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 | PDF Sensitivity Level text/ photo | *ENG | [0 to 2 / 1 / 1 /step] 0: Text priority 1: Normal 2: Photo priority | |

SP5-XXX (Mode)

| 5024 | [mm/inch Display Selection] | | | |
|--|-----------------------------|------|-----------------------------------|--|
| 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. NOTE: The counting method can be changed only once, regardless of whether the counter value is negative or positive. | | |
| 001 | Counter Method | *CTL | [0 or 1 / 0 / -] 0: Developments 1: Prints |

| 5047 | [Paper Display] | | | | |
|------|---|------|---------------------------------------|--|--|
| 3047 | Turns on or off the printed paper display on the LCD. | | | | |
| 001 | - | *CTL | [0 or 1 / 0 / -] 0: OFF, 1: ON | | |

| 5051 | [TonerRefillDetectionDisplay] | | | | |
|-------|----------------------------------|------------|---|--|--|
| 5051 | Enables or disables the toner re | efill dete | ction display. | | |
| 50511 | Toner Refill Detection Display | *CTL | [0 or 1 / 0 / -] Alphanumeric 0: ON 1: OFF | | |

| 5055 | [Display IP Address] | | | |
|------|--|------|--------------------------------------|--|
| 3033 | Display or does not display the IP address on the LCD. | | | |
| 001 | - | *CTL | [0 or 1 / 0 / -] 0: OFF 1: ON | |

| 5056 | [Coverage Counter Display] | | | |
|------|--|------|---|--|
| 3036 | Display or does not display the coverage counter on the LCD. | | | |
| 001 | - | *CTL | [0 or 1 / 0 / -] 0: Not display, 1: Display | |

| 5061 | [Toner Remaining Icon Display Change] | | | |
|------|--|------|--|--|
| 3001 | Display or does not display the remaining toner display icon on the LCD. | | | |
| 001 | - | *CTL | [0 or 1 / 0 / -] 0: Not display, 1: Display | |

| 5062 | [Parts PM Display Setting] | | | | |
|------|---|------|----------------------------|--|--|
| 3002 | Display or does not display the PM part yield on the LCD. | | | | |
| 001 | K Drum Unit | *CTL | | | |
| 002 | M Drum Unit | *CTL | | | |
| 003 | C Drum Unit | *CTL | [0 or 1 / 1 / -] | | |
| 004 | Y Drum Unit | *CTL | 0: Not display, 1: Display | | |
| 005 | K Dev Unit | *CTL | | | |
| 006 | M Dev Unit | *CTL | | | |

| 007 | C Dev Unit | *CTL |
|-----|---------------------|------|
| 008 | Y Dev Unit | *CTL |
| 009 | K Developer | *CTL |
| 010 | M Developer | *CTL |
| 011 | C Developer | *CTL |
| 012 | Y Developer | *CTL |
| 013 | ITB Unit | *CTL |
| 014 | Belt Cleaning Unit | *CTL |
| 015 | Fusing Unit | *CTL |
| 016 | PTR Unit | *CTL |
| 017 | Waster Toner Bottle | *CTL |

| 5066 | [Parts PM Menu Display Setting] | | |
|--|---------------------------------|---------------------------|--|
| Display or does not display the "PM parts" buttonn on the LCD. | | arts" buttonn on the LCD. | |
| 001 | - | *CTL | [0 or 1 / 1 / -] 0: Not display, 1: Display |

| | [Parts PM System Setting] | | | |
|------|--|------|----------------------------|--|
| 5067 | Selects the service maintenance or user maintenance for each PM parts. If the user service is selected, PM alart is displayed on the LCD. | | | |
| 001 | PCU (Drum Unit):Bk | *CTL | | |
| 002 | PCU (Drum Unit):M | *CTL | [0, Section] on [1, 1] and | |
| 003 | PCU (Drum Unit):C | *CTL | [0: Service] or [1: User] | |
| 004 | PCU (Drum Unit):Y | *CTL | | |
| 005 | Dev Unit:Bk | *CTL | | |
| 006 | Dev Unit:M | *CTL | [0: Service] or [1: User] | |
| 007 | Dev Unit:C | *CTL | | |

| 008 | Dev Unit:Y | *CTL | |
|-----|--------------------|------|---------------------------|
| 009 | Developer:Bk | *CTL | |
| 010 | Developer:M | *CTL | [O. Sanisa] and [I. Haar] |
| 011 | Developer:C | *CTL | [0: Service] or [1: User] |
| 012 | Developer:Y | *CTL | |
| 013 | Int Trans Unit | *CTL | [0: Service] or [1: User] |
| 014 | Belt Cleaning Unit | *CTL | [0: Service] or [1: User] |
| 015 | Fusing Unit | *CTL | [0: Service] or [1: User] |
| 016 | Transfer Roller | *CTL | [0: Service] or [1: User] |
| 017 | WasteToner Bottle | *CTL | [0: Service] or [1: User] |

| 5104* | 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. |

| 5112 | [Non-Std. Paper Sel.] Non-Standard Paper Selection | | | |
|------|---|--|--|--|
| 001 | Determines whether a non-standard paper size can be input for the universal cassette trays (Tray 2, and Optional paper tray unit trays 1 and 2) [0 or 1/0/-] 0: OFF 1: ON, If "1" is selected, the customer will be able to input a non-standard paper size using the UP mode. | | | |

| 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 |
|------------------------------------|-----------|-----------------------|---|
| | | | This program specifies the external counter type. |
| 002 External Optional Counter Type | 5 10 1 10 | | 0: None |
| | *CTL | 1: Expansion Device 1 | |
| | Type | | 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] | *CTL | [0: Not disabled/ 1: Disabled] |
|------|--------------------------------|------|--------------------------------|
| 001 | This program disables copying. | | |

| 5120 | [Mode Clear Opt. Counter Removal] | *CTL | [0: Yes (removed)/ 1: Standby (installed but not used)/ 2: No (not removed)] |
|------|--|------|--|
| 001 | This program updates the information on the optional counter. When you install or rer an optional counter, check the settings. | | |

| 5121 | [Counter Up Timing] | *CTL | [0: Feed/ 1: Exit] |
|------|---|----------|---|
| 001 | This program specifies when th "paper exit" respectively. | e counte | r goes up. The settings refer to "paper feed" and |

| 5126 | [F Size Original Setting] | *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) |
|------|----------------------------------|------|---|
| 001 | Selects F size original setting. | | |

| 5127 | [APS Mode] | *CTL | [0: Not disabled/ 1: Disabled] |
|------|--------------------------------|------|--------------------------------|
| 001 | This program disables the APS. | | |

| 5128 | [Code Mode With Key/Card Option] | *CTL | - |
|------|----------------------------------|------|---|
| 001 | DFU | | |

| 5131 | [Paper Size Type Selection] | *ENG | [0: JP (Japan)/ 1: NA / 2: EU] |
|------|---|--------------------------|---|
| 001 | The program selects a paper s the LT system (1), and the AF s | ize system ystem (2). | from the following alternatives: the AB system (0), |

| 5148 | Size Detection Off | *CTL | [0: OFF/ 1: ON] |
|------|--------------------|------|-----------------|
| | 0: Detecte | | |
| | 1: Not Detecte | | |

| 5150 | [By-Pass Length Setting] | *CTL | [0: OFF/ 1: ON] |
|------|--------------------------|-----------|---|
| 001 | | sub scani | om the by-pass tray is used or not. ning paper from the by-pass tray is limited to 600 P to 1260 mm. |

| 5162 | [App. Switch Method] | *CTL | [0: Soft Key Set/ 1: Hard Key Set] |
|------|-----------------------------------|------------|------------------------------------|
| 001 | This program specifies the switch | ch that se | elects an application program. |

| | [Fax Printing Mode at Optional] | | | | |
|---|--|------|---|--|--|
| Enables or disables the automatic print out without an accounting device. The when the receiving fax is accounted by an external accounting device. | | ū | | | |
| 001 | Fax Printing Mode at Optional Counter Off | *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 by you go into the printer SP mode. | | | |
| 001 | CE Login | *CTL | [0 or 1 / 0 / -] 0: Disabled | |

| | 1: Enabled |
|--|------------|
| | |

| 5179 | [By-pass Size Error Detection] | | | | |
|------|--|------|---|--|--|
| 31/9 | Turns on or off the by-pass tray size error message. | | | | |
| 001 | - | *ENG | [0 or 1 / 0 / 1/step] 0: OFF 1: ON (Paper size error message is displayed when the paper jam occurs due to the wrong direction of set paper in by-pass mode.) | | |

| 5181 | [Size Adjust] | | | | |
|------|---------------------------------------|------|---|--|--|
| 3101 | Adjusts the paper size for each tray. | | | | |
| 001 | Paper 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 | [O or 1 / O (EU/ASIA), 1 (NA) / -] O: 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 |

| | [RK 4] | | | |
|------|--|------|---|--|
| 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 machinautomatically jams a sheet of paper and stops. | | | |
| 001 | - | *ENG | [0 or 1 / 0 / 1/step] 0: Disable 1: Enable | |

| 5188 | [Copy NvVersion] | | | | |
|------|---|--|--|--|--|
| 3100 | Displays the version number of the NVRAM on the controller board. | | | | |
| 001 | | | | | |

| 5191 | [Mode Set] DFU | | |
|------|--|------|--------------------------------|
| 001 | - | *CTL | [0 or 1 / 1 / -] 0: Off, 1: On |
| | Enables or disables the STR (Suspend to RAM) mode. | | |

| 5193 | [External Controller Info. Settings] | | | |
|------|--------------------------------------|---|---|--|
| 001 | - | - | - | |

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]

0: No external controller installed

1: EFI controller

2: Ratio controller

3: Egret controller

4 to 10: Reserved

| 5195 | [Limitless SW] DFU | | | |
|------|--|------|--------------------------|--|
| | | | [0 or 1 / 1 / -] | |
| | - | *CTL | 0: Productivity priority | |
| | | | 1: Tray priority | |
| | Selects the paper feed mode. | | | |
| | Productivity priority: | | | |
| 001 | This changes the feeding tray as soon as the machine detects the priority tray even the paper still remains in the feeding tray. | | | |
| | Tray priority: | | | |
| | This changes the feeding tray after the paper in the tray where the machine has been feeding paper has been run out of. | | | |
| | This SP is activated only when a customer selects the "Auto Paper Selsct". | | | |

| 5196 | [90 degree rotation (copy)] Not used | | |
|------|--------------------------------------|------|---|
| 001 | - | *CTL | - |

| 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). | | | |

Q

 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 | | |
|------|--|---|------------------------------|--|
| | | ogram adjusts the position of the second side page numbers. alue" moves the page number positions to the left edge. A "+ value" moves the page or positions to the right edge. | | |
| 003 | Duplex Printout Right/Left Position | [-10 to | 0 10 / 0 / 1 mm/step] | |
| 004 | Duplex Printout High/Low Position | [-10 to | o 10 / 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 540 (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 | T: D:// | *CTL | | | |
| | Time Difference [-1440 to 1440 / Area / 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 | |
| | 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] 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. [00 to 23] 7th digit: The length of the advanced time. [0 to 9 / 1 hour /step] 8th digit: The length of the advanced time. [0 to 5 / 10 minutes /step] • The digits are counted from the left. Make sure that SP5-307-1 is set to "1". For example: 3500010 (EU default) The timer is advanced by 1 hour at am 0:00 on the 5th Sunday in March 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] 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".

| 5401 | [Access Control] | | |
|------|---|------|--|
| 3401 | When installing the SDK application, SAS (VAS) adjusts the following settings. DFU | | |
| 103 | Default Document ACL | *CTL | |

| | (for Windows, LDAP, RDH), t setting. [0 to 3 / 0 / 1] 0: View 1: Edit 2: Edit/Delete 3: Full control | he defau | to the address book in external certification mode ult document ACL is updated according to this SP | |
|-----|---|----------|---|--|
| 162 | Extend Certification Detail | *CTL | Bit 0: Log-out without an IC card 0: Not allowed (default) 1: Allowed | |
| | Selects the log out type for the extend authentication device. | | | |
| 200 | SDK1 UniqueID | *CTL | | |
| 201 | SDK1 Certification Method | *CTL | | |
| 210 | SDK2 UniqueID | *CTL | "SDK" is the "Software Development Kit". This data | |
| 211 | SDK2 Certification Method | *CTL | can be converted from SAS (VAS) when installed | |
| 220 | SDK3 UniqueID | *CTL | or uninstalled. (DFU) | |
| 221 | SDK3 Certification Method | *CTL | | |
| 230 | SDK certification device | *CTL | | |
| | Detail Option | *CTL | - | |
| 240 | Enalbes or disables the log out confirmation option. • Bit 0: Log out confirmation option O: Enable (default), 1: Disable Selects the automatic log out time. • Bit 1 and 2: Automatic log out timer reduction O0: 60 seconds (default), 01: 10 seconds, 10: 20 seconds, 11: 30 seconds | | | |

5404 [User Code Count Clear]

| 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. |

| 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] |
| 005 | Counter Clear Time | *CTL | Not Used |

| 5414 | [Access Mitigation] | | |
|------|---------------------|------|---|
| 001 | Mitigation On/Off | *CTL | Switches on/off masking of continuously used IDs and passwords that are identical. [0 or 1 / 0 / -] 0: Off, 1: On |
| 002 | Mitigation Time | *CTL | Sets the length of time for excluding continuous access for identical user IDs and passwords. [0 to 60 / 15 / 1 min./step] |

| 5415 | [Password Attack] | | |
|------|--------------------|------|--|
| 001 | Permissible Number | *CTL | Sets the number of attempts to attack the system with random passwords to gain illegal access to the system. [0 to 100 / 30 / 1 attempt/step] |
| 002 | Detect Time | *CTL | Sets the time limit to stop a password attack once such an attack has been detected. [1 to 10 / 5 / 1 sec./step] |

| 5416 | [Access Information] | | |
|------|-------------------------|------|---|
| 001 | Access User Max Num | *CTL | Limits the number of users used by the access exclusion and password attack detection functions. [50 to 200 / 200 / 1 users/step] |
| 002 | Access Password Max Num | *CTL | Limits the number of passwords used by the access exclusion and password attack detection functions. [50 to 200 / 200 / 1 password/step] |
| 003 | Monitor Interval | *CTL | Sets the processing time interval for referencing user ID and password information. [1 to 10 / 3 / 1 sec./step] |

| 5417 | [Access Attack] | | |
|------|---------------------------|------|--|
| 001 | Access Permissible Number | *CTL | Sets a limit on access attempts when an excessive number of attempts are detected for MFP features. [0 to 500 / 100 / 1/step] |

| 002 | Attack Detect Time | *CTL | Sets the length of time for monitoring the frequency of access to MFP features. [10 to 30 / 10 / 1 sec./step] |
|-----|------------------------|------|---|
| 003 | Productivity Fall Wait | *CTL | Sets the wait time to slow down the speed of certification when an excessive number of access attempts have been detected. [0 to 9 / 3 / 1 sec./step] |
| 004 | Attack Max Num | *CTL | Sets a limit on the number of requests received for certification in order to slow down the certification speed when an excessive number of access attempts have been detected. [50 to 200 / 200 / 1 attempt/step] |

| | [User Authentication] | | | | | |
|------|--|---|--|--|--|--|
| 5420 | These settings should be done | tings should be done with the System Administrator. | | | | |
| | Note: These functions are end | abled on | ly 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". | | | | | |
| | 0: Enable (default), 1: Disable | | | | | |
| 002 | BitO: B/W mode | | | | | |
| | Bit1: Mono color mode | | | | | |
| | Bit2: Two colors mode | | | | | |
| | Bit3: Full color mode | | | | | |
| | Bit4: Automatic color mode | | | | | |
| | Bit5 to 7: Reserved | | | | | |
| 011 | DocumentServer | *CTL | Determines whether certification is required before a user can use the document server. | | | |
| | | | [0 or 1/ 0 /1] | | | |

| | | | 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 | *CTL | [0 or 1 / 0 / 1] 0: ON. 1: OFF |
| 061 | SDK2 | | Determines whether certification is required before |
| 071 | SDK3 | | a user can use the SDK application. |

| 5.401 | [Authentication Error Code] | | | |
|-------|---|------|--|--|
| 5481 | These SP codes determine how the authentication failures are displayed. | | | |
| 001 | System Log Disp | *CTL | Determines whether an error code appears in the system log after a user authentication failure occurs. [0 or 1/0/1] 0: Off, 1: On | |
| 002 | Panel Disp | *CTL | Determines whether an error code appears on the operation panel after a user authentication failure occurs. [0 or 1/1/1] 1: On, 0: Off | |

| 5490 | [MF KeyCard (Japan only)] | | |
|------|---------------------------|-------|--|
| 001 | | * CTI | Sets up operation of the machine with a keycard. |
| 001 | - | CIL | [0 to 1 / 0 / 1] |

0: Disabled. Cancels operation without a user

| 5501 | [PM Alarm] | *CTL | - | |
|------|----------------------|---|---|--|
| 001 | PM Alarm Level | [0 to 9999 / 0 / 1 /step] 0: Alarm off | | |
| | | 1 to 99 ≥ PM c | 99: Alarm goes off when Value (1 to 9999) x 1000 ounter | |
| 002 | Original Count Alarm | _ | / 1 / –] alarm sounds | |
| | | | m sounds after the number of originals passing the ARDF ≥ 10,000 | |

| 5504 | [Jam Alarm] | *CTL | - |
|--|--------------------------------------|---|---|
| Sets the alarm to sound for the specified jam level (document misfeeds are | | d jam level (document misfeeds are not included). | |
| 001 | [0 to 3 / 3 / 1 /step] 0: Zero (Off) | | |
| 001 1: Low (2.5K jams) | | | |
| | 2: Medium (3K jams) | | |
| | 3: High (6K jams) | | |

| | [Error Alarm] | | |
|---|--|---------------------------------|---|
| | Sets the error alarm level. | | |
| 5505 | 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 she (for example, default 1500 sheets). | | |
| The error alarm occurs when the SC error alarm co | | rror alarm counter reaches "5". | |
| 001 | - | *CTL | [0 to 255 / C2c : 50 , C2d : 100 / 100 copies / step] |

| 001 | Paper Supply Alarm | 0: Off, 1: On, DFU |
|-----|---------------------|---|
| 002 | Staple Supply Alarm | 0: Off, 1: On, Japan only |
| 003 | Toner Supply Alarm | 0: Off, 1: On, DFU |
| 080 | Toner Call Timing | Changes the timing of the "Toner Supply Call" via the NRS, when the following conditions occur. O: Toner is replaced (default) 1: Toner near end or End |
| 128 | Interval :Others | |
| 132 | Interval :A3 | |
| 133 | Interval :A4 | |
| 134 | Interval :A5 | |
| 141 | Interval :B4 | [250 to 10000 / 1000 / 1 / to all DE [] |
| 142 | Interval :B5 | [250 to 10000 / 1000 / 1 /step] DFU |
| 160 | Interval :DLT | |
| 164 | Interval :LG | |
| 166 | Interval :LT | |
| 172 | Interval :HLT | |

| 5508* | [CC Call] | *CTL | - | | |
|-------|--|-----------------------|---------------------------|--|--|
| 001* | Jam Remains | | 0: Disable, 1: Enable | | |
| 001* | Enables/disables initiating a call for an unattended paper jam. | | | | |
| 000+ | Continuous Jams | 0: Disable, 1: Enable | | | |
| 002* | Enables/disables initiating a call for consecutive paper jams. | | | | |
| 000+ | Continuous Door Open | 0: Dis | able, 1: Enable | | |
| 003* | Enables/disables initiating a call when the front door remains open. | | | | |
| 011* | Jam Detection: Time Length | [3 to 3 | 30 / 10 / 1 minute /step] | | |

| | Sets the time a jam must remain before it becomes an "unattended paper jam". This setting is enabled only when SP5508-004 is set to "1". | | |
|------|--|---------------------------------|--|
| 012* | Jam Detection: Continuous Count | [2 to 10 / 5 / 1 /step] | |
| | Sets the number of consecutive paper jams required to initiate a call. This setting is enabled only when SP5508-004 is set to "1". | | |
| | Door Open: Time Length | [3 to 30 / 10 / 1 /step] | |
| 013* | 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 can an SC error occurs. If this SP is switched off, the SC call is not issued when an SC occurs. | | |
| 001 | SC Call | | |
| 002 | Service Parts Near End Call | | [0 or 1 / 1 / -] |
| 003 | Service Parts End Call | | 1: On |
| 004 | User Call | | |
| 006 | Communication Test Call | | |
| 007 | Machine Information Notice | | [0 or 1 / 1 / -] 0: Off 1: On |
| 008 | Alarm Notice | | |
| 009 | Non Genuine Tonner Alarm | | |
| 010 | Supply Automatic Ordering Call | | |
| 011 | Supply Management Report Call | | |
| 012 | Jam/Door Open Call | | |

| 5516 | [Individual PM Part Alarm Call] | *CTL | - |
|------|------------------------------------|---|---|
| 001 | Disable/ Enable Setting | Enables or disables the PM part alarm call. [0 or 1 / 1 / -] | |

| | 0: Not Send, 1: Send |
|--|----------------------|
| | |

| 5610 | [Base Gamma Control Point: Command] | | | |
|------|--|---|---|--|
| 004 | Factory Setting | - | - | |
| 004 | Recalls the factory settings. | | | |
| 005 | Restore | - | - | |
| | Overwrites the current values onto the factory settings. | | | |
| 006 | Restore | - | - | |
| | 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 correct | ion value of t | he blue signal in two-color mode. | | |
| 002 | B-M | *ENG | [0 to 128 / 100 / 1 /step] 128: Darkest density | | |
| | Adjusts the Magenta cor | Adjusts the Magenta correction value of the blue signal in two-color mode. | | | |
| 003 | G-C | *ENG | [0 to 128 / 100 / 1 /step] 128: Darkest density | | |
| | Adjusts the Cyan correct | Adjusts the Cyan correction value of the blue signal in two-color mode. | | | |
| 004 | G-Y | *ENG | [0 to 128 / 100 / 1 /step] 128: Darkest density | | |
| | Adjusts the Yellow correction value of the blue signal in two-color mode. | | | | |
| 005 | R-M | *ENG | [0 to 128 / 100 / 1 /step] 128: Darkest density | | |
| | Adjusts the Magenta correction value of the blue signal in two-color mode. | | | | |
| 006 | R-Y | *ENG | [0 to 128 / 100 / 1 /step] 128: Darkest density | | |

Adjusts the Yellow correction value of the blue signal in two-color mode.

| 5618 | [Color Mode Display Selection] | | |
|------|----------------------------------|------|--|
| 001 | - Selects the color selection of | *CTL | [0 or 1 / 1 / -] 0: ACS, Colour, Black & White, Two Colour, Single colour 1: ACD, Full Colour, Black & White 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: |

d

SP5801 008 RTB 72

| | | 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.

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.

| 5803 | [Input Check] | - | See "Input Check Table" in this section. |
|------|----------------|---|---|
| 5804 | [Output Check] | - | See "Output Check Table" in this section. |

| 5805 | [Anti-Condensation Heater] | | |
|------|----------------------------|------|---|
| 002 | 0:OFF / 1:ON | *ENG | - |

| | [SC Reset] | | |
|------|--------------------------------|-----------|------------------------------|
| 5810 | Resets a type A service call c | ondition. | |
| | Turn the main switch off | and on a | after resetting the SC code. |
| 001 | Fusing SC Reset | - | - |

| 5811 | [MachineSerial] Machine Serial Number Display | | |
|------|---|--|-------------------------------------|
| 002 | Display | | Displays the machine serial number. |
| 004 | Set:BICU | | 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 characters (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 chara | cters (both | numbers and alphabetic characters can be input). |

8

| | Supply | *CTL | - | |
|-----|--|------|---|--|
| 003 | Use this to input the telephone number of your supplier for consumables. Enter the number and press #. | | | |
| | Operation | *CTL | - | |
| 004 | Use this to input the telephone number of your sales agency. Enter the number and press #. | | | |

| 5816 | [Remote Service] | *CTL | - |
|------|--|-------------|---|
| | I/F Setting | | |
| 001 | Selects the remote service s [0 to 2 / 2 / 1 / step] 0: Remote service off 1: CSS remote service on | etting. | |
| | 2: NRS remote service on | | |
| | CE Call | | |
| 002 | Performs the CE Call at the [0 or 1 / 0 / 1 /step] 0: Start of the service 1: End of the service | start or en | d of the service. |
| | NOTE: This SP is activated | only when | SP 5816-001 is set to "2". |
| | Function Flag | | |
| 003 | Enables or disables the rem [0 to 1 / 0 / 1 / step] 0: Disabled 1: Enabled | ote service | e function. |
| | SSL Disable | | |
| 007 | Controls if RCG (Remote Controls if RCG (Remote RCG send for the @Remote [0 or 1 / 0 / 1 / step] | | tion Gate) confirmation is done by SSL during an twork interface. |
| | O: 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 remote firmware updating. | | |
| 013 | [0 or 1 / 1 / -] | | |
| | 0: Any status of a target machine | | |
| | 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 | | |
| 022 | RCG – C Regist Detail | | |
| 022 | This SP displays the RCG device installation status. | | |

| | 0: RCG device not registere | ad | | | |
|-----|---|---|--|--|--|
| | 1: RCG device registered | | | | |
| | - | | | | |
| | 2: Device registered | | | | |
| | 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 | | | | |
| 061 | Cert. Expire Timing DFU | Proximity of the expiration of the certification. | | | |
| 062 | Use Proxy | This SP setting determines if the proxy server is used when the machine communicates with the service center. | | | |
| | 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. | | | | |
| 063 | The address is necessary to set up the embedded RCG-N. | | | | |
| | ↓ 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 | | | | |
| 064 | 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 | | | | |
| 004 | | | | | |
| | 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. | | | | |
| 065 | ↓ Note | | | | |
| | The length of the name character is ignored. | e is limited to 31 characters. Any character beyond the 31st | | | |
| | This name is customer | information and is not printed in the SMC report. | | | |
| 066 | Proxy Password | | | | |

This SP sets the HTTP proxy certification password. Note 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. The certification request (setAuthKey) for update has been received from the GW 1 URL and certification is presently being updated. The certification update is completed and the GW URL is being notified of the 2 successful update. 3 The certification update failed, and the GW URL is being notified of the failed update. The period of the certification has expired and new request for an update is being 4 sent to the GW URL. A rescue update for certification has been issued and a rescue certification setting 11 is in progress for the rescue GW connection. 067 The rescue certification setting is completed and the GW URL is being notified of the 12 certification update request. The notification of the request for certification update has completed successfully, 13 and the system is waiting for the certification update request from the rescue GW URL. The notification of the certification request has been received from the rescue GW 14 controller, and the certification is being stored. The certification has been stored, and the GW URL is being notified of the successful 15 completion of this event. The storing of the certification has failed, and the GW URL is being notified of the 16 failure of this event. 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 17 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. O 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 GW URL does not exist. | | |
| 069 | CERT | :Up ID | The ID of the request for certification. | |
| 083 | FirmUp Status | | Displays the status of the firmware update. | |
| 085 | 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 Version | Displays the macro version of the @Remote certification. | |
| 088 | CERT | : PAC Version | 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 Number | 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. | | |
| | 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 AutomaticJudgm | <u> </u> | | |
| | | | | |
| 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. | | | |
| 152 | 0: Success | | | |
| | 1: In progress (no result ye | t). Please wait. | | |
| | 2: Line abnormal | | | |
| | 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 LineOutgoing 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). | | | | | | |
| 154 | If the execution of SP5816-151 has succeeded and embedded RCG-M has connected to the external line, this SP display is completely blank. | | | | | | |
| | If embedded RCG-M has connected to an internal line, then the number of the connection to the external line is displayed. | | | | | | |
| | If embedded RCG-M has connected to an external line, a comma is displayed with the number. The comma is inserted for a 2 sec. pause. | | | | | | |
| | • The number setting for the external line can be entered manually (including commas). | | | | | | |
| | 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: | | | | | | |
| | Name length: Up to 32 characters | | | | | | |
| | Spaces and # allowed but the entire entry must be enclosed by double quotation marks ("). | | | | | | |

Dial Up Password Use this SP to set a password for access to remote dial up. Follow these rules when setting a user name: 157 • Name length: Up to 32 characters • Spaces and # allowed but the entire entry must be enclosed by double quotation marks ("). Local Phone Number Use this SP to set the telephone number of the line where embedded RCG-M is connected. 161 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 164 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 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.

| 173 | Modem Serial Number | This SP dis | splays the serial number registered for the RCG-M. | | |
|-----|---|--|---|--|--|
| | Retransmission Limit | | | | |
| 174 | Normally, it is best to allow unlimited time for certification and ID2 update requests, and for the notification that the certification has been completed. However, RCG-M generates charges based on transmission time for the customer, so a limit is placed upon the time allowed for these transactions. If these transactions cannot be completed within the allowed time, do this SP to cancel the time restriction. | | | | |
| | FAX TX Priority | - | | | |
| 187 | in progress to open the line set to "0". | _ | off-hook button will interrupt a RCG-M transmission isaction. This SP can be used only if SP5816 164 is | | |
| | [0 or 1/ 0 /-] | | | | |
| | 0: Disable, 1: Enable | | | | |
| 200 | Manual Polling | - | Executes the manual polling. | | |
| | Regist: Status | | | | |
| | Displays a number that indicates the status of the @Remote service device. | | | | |
| | 0: Neither the registered device by the external nor embedded RCG device is set. | | | | |
| 201 | 1: The embedded RCG device is being set. Only Box registration is completed. In this status, this unit cannot answer a polling request from the external RCG. | | | | |
| | 2. The embedded RCG device is set. In this status, the external RCG unit cannot answer a polling request. | | | | |
| | 3. The registered device by the external RCG is being set. In this status the embedded RCG device cannot be set. | | | | |
| | 4 The registered module by | the 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 t | he inquiry request to the @Remote GW URL. | | |
| 204 | Confirm Result | · | | | |
| | Displays a number that indi | cates the re | esult of the inquiry executed with SP5816 203. | | |
| | 0: Succeeded | | , , | | |
| | 1: Inquiry number error | | | | |
| | | | | | |

| | 2: Registration in progress | | | | | |
|-----|--|------------------------|--|--|--|--|
| | 3: Proxy error (proxy enabled) | | | | | |
| | 4: Proxy error (proxy disabled) | | | | | |
| | 5: Proxy error (Illegal user | name or passv | word) | | | |
| | 6: Communication error | 6: Communication error | | | | |
| | 7: Certification update erro | or | | | | |
| | 8: Other error | | | | | |
| | 9: Inquiry executing | | | | | |
| | Confirm Place | | | | | |
| 205 | | | to the device from the GW URL in answer to the result is registered at the GW URL. | | | |
| 206 | Register Execute | Executes "En | nbedded RCG Registration". | | | |
| | Register Result | | | | | |
| | Displays a number that indicates the registration result. | | | | | |
| | 0: Succeeded | | | | | |
| | 2: Registration in progress | | | | | |
| | 3: Proxy error (proxy enabled) | | | | | |
| 207 | | | | | | |
| | 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. | | | | | |
| 208 | Cause | Code | Meaning | | | |
| | | -11001 | Chat parameter error | | | |
| | Illegal Modem Parameter | -11002 | Chat execution error | | | |
| | | -11003 | Unexpected error | | | |
| | | | | | | |

| | -12002 | Inquiry, registration attempted without acquiring device status. |
|----------------------------|---|--|
| Operation Error, Incorrect | -12003 | Attempted registration without execution of an inquiry and no previous registration. |
| | -12004 | Attempted setting with illegal entries for certification and ID2. |
| | -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 |
| Error Caused by Response | -2392 | Parameter error |
| from GVV UKL | -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 |
| Instal Clear | Releases the | machine from its embedded RCG setup. |
| CommLog Print | Prints the communication log. | |
| | Error Caused by Response from GW URL | Operation Error, Incorrect Setting -12003 -12004 -2385 -2387 -2389 -2390 -2391 -2392 -2393 -2394 -2395 -2396 -2397 -2398 Instal Clear Releases the |

| 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. |

| 5824 [| [NV-RAM Data Upload] |
|--------|----------------------|
|--------|----------------------|

| | ' | | except for counters and the serial number) from the ee the "NVRAM Data Upload/Download" in this |
|-----|--------------------|---|---|
| 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. [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 | Treatment of the job when a spooled job exists at power on. 0: ON (Data is cleared) 1: OFF (Automatically printed) | | |
| 069 | Job Spooling (Protocol) | Validates or invalidates the job spooling function for each protocol. O: Validates 1: Invalidates bit0: LPR bit1: FTP bit2: IPP | | |

| | | bit3: SMB bit4: BMLinkS bit5: DIPRINT bit6: sftp bit7: (Reserved) |
|-----|------------------------------------|---|
| 090 | TELNET (0: OFF 1: ON) | Enables or disables the Telnet protocol. [O or 1 / 1 / -] O: Disable, 1: Enable |
| 091 | Web (0: OFF 1: ON) | Enables or disables the Web operation. [0 or 1 / 1 / -] 0: Disable, 1: Enable |
| 145 | Active IPv6 Link Local Address | This is the IPv6 local address link referenced on the Ethernet or wireless LAN (802.11b) in the format: "Link Local Address" + "Prefix Length" The IPv6 address consists of a total 128 bits configured in 8 blocks of 16 bits each. |
| 147 | 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" The IPv6 address consists of a total 128 bits configured in 8 |
| 153 | Active IPv6 Stateless Address 4 | blocks of 16 bits each. |
| 155 | Active IPv6 Stateless Address 5 | |
| 156 | IPv6 Manual Address | This SP is the IPv6 manually set address referenced on the Ethernet or wireless LAN (802.11b) in the format: "Manual Set Address" + "Prefix Length" The IPv6 address consists of a total 128 bits configured in 8 blocks of 16 bits each. |

| 158 | IPv6 Gateway Address | This SP is the IPv6 gateway address referenced on the Ethernet or wireless LAN (802.11b). The IPv6 address consists of a total 128 bits configured in 8 blocks of 16 bits each. | |
|-----|-----------------------------|--|--|
| 161 | IPvó 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 | |
| 238 | Web supplies Link visible | Displays or does not display the link to Consumable Supplier on the top page and link page of the web system. [0 to 1 / 1 / 1] 0: Not display, 1:Display | |
| 239 | Web Link1 Name | This SP confirms or changes the URL1 name on the link page of the web system. The maximum characters for the URL name are 31 characters. | |
| 240 | Web Link1 URL | This SP confirms or changes the link to URL1 on the link page of the web system. The maximum characters for the URL are 127 characters. | |
| 241 | Web Link1 visible | Displays or does not display the link to URL1 on the top page of the web system. [0 to 1 / 1 / 1] 0: Not display, 1:Display | |
| 242 | Web Link2 Name | Same as "-239" | |
| 243 | Web Link2 URL | Same as "-240" | |
| 244 | Web Link2 visible | Same as "-241" | |

| 5832 | [HDD] 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) | Initializes the hard disk. Use this SP mode only | |
| 006 | HDD Formatting (User Info) | | |
| 007 | Mail RX Data | is a har | d 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 Settings] | *CTL | - | |
|------|---|-----------|---|--|
| | Capture Function (0:Off 1:On) | | 0: Disable, 1: Enable | |
| 001 | With this function disabled, the setti | ings rela | ted to the capture feature cannot be initialized, | |
| 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 | d Printer | Document Reduction | |
| | The following 6 SP modes set the codocument management server via | | eduction for stored documents sent to the | |
| | Enabled only when optional MLB (| (Media l | .ink 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: 1to-1 , 1: 1/2, 2: 1/3, 3: 1/4, 6: 2/3 | |
| 073 | Reduction for Copy B&W Other | | 0: 1to-1, 1: 1/2, 2: 1/3, 3: 1/4, 6: 2/3 | |
| 074 | Reduction for Printer Color | | 0: 1to-1, 1: 1/2, 2: 1/3 , 3: 1/4 | |

| | 075 | Reduction for Printer B&W | | 0: 1to-1 , 1: 1/2, 2: 1/3, 3: 1/4, 6: 2/3 |
|-------|--------------|---------------------------------|---------|--|
| | 076 | 76 Reduction for Printer B&W HQ | | 0: 1to-1 , 1: 1/2, 2: 1/3, 3: 1/4 |
| 077 | Reduction fo | or Printer Color 1200 | 1: 1/2, | 3: 1/4, 4: 1/6 , 5: 1/8 (2: skipped) , 6: 2/3 |
| 0 7 8 | Reduction fo | or Printer B&W 1200 | 1: 1/2, | 3: 1/4, 4: 1/6, 5: 1/8 (2: skipped) , 6: 2/3 |

5836-81 to 5836-86, Stored document format

The following 6 SP modes set Sets the default format for stored documents sent to the document management server via the MLB.

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 |
| 091 | Default for JPEG | [5 to 95 / 50 / 1 /step] |
| | the MLB with JPEG selected as the format. | sent to the document management server via |

| | Enabled only when optional MLB (Media Link Board) is installed. | | |
|-----|---|--|--|
| 101 | Primary srv IP address Sets the IP address for the primary capture server. This is basically adjusted by the remote system. | | |
| 102 | Primary srv scheme | This is basically adjusted by the remote system. | |
| 103 | Primary srv port number | This is basically adjusted by the remote system. | |
| 104 | Primary srv URL path | This is basically adjusted by the remote system. | |
| 111 | Secondary srv IP address | Sets the IP address for the secondary capture server. This is basically adjusted by the remote system. | |
| 112 | Secondary srv scheme | This is basically adjusted by the remote system. | |
| 113 | Secondary srv port number | This is basically adjusted by the remote system. | |
| 114 | Secondary srv URL path | This is basically adjusted by the remote system. | |
| 120 | Default Reso Rate Switch | This is basically adjusted by the remote system. | |
| | 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 | | v copy mode. This is basically adjusted by the remote system. 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi | |
| 100 | Reso: Print (Color) | This is basically adjusted by the remote system. [0 to 3 / 2 / 1/step] | |
| 123 | Selects the resolution for col | or print mode. This is basically adjusted by the remote system. | |
| | 0: 600dpi/ 1: 300dpi/ 2: | 150dpi/ 3: 75dpi | |
| | Reso: Print (Mono) | This is basically adjusted by the remote system. [0 to 5 / 3 / 1/step] | |
| 124 | | / print mode. This is basically adjusted by the remote system. 300dpi/ 3: 200dpi/ 4: 150dpi/ 5: 100dpi | |

| 5840 | [IEEE 802.11] | |
|------|---------------|--|
|------|---------------|--|

[1 to 11 or 13 / 11 or 13 / 1 / step]

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| 011 | WEP key Select | *CTL | Selects the WEP key. [00 to 11 / 00 / 1 binary] 00: Key #1 01: Key #2 (Reserved) 10: Key #3 (Reserved) 11: Key #4 (Reserved) |
|-----|-----------------|------|---|
| 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 | | Specifies supply names. These appear on |
| 004 | Toner Name Setting: Magenta | *CTL | the screen when the user presses the Inquiry button in the user tools screen. |
| 007 | OrgStamp | | |
| 011 | Staple Std1 | | |

| 5842 | [GWWS Analysis] DFU | | |
|------|---------------------|------|--|
| 001 | Setting 1 | *CTL | Default: 00000000 – do not change Netfiles: Jobs to be printed from the document server using a PC and the DeskTopBinder software |
| 002 | Setting 2 | *CTL | Adjusts the debug program modesetting. Bit7: 5682 mmseg-log setting O: Date/Hour/Minute/Second 1: Minute/Second/Msec. O to 6: Not used |

| 5844 | [USB] | | |
|--------------------------------|-----------------------|-------------------|---|
| | Transfer Rate *CTL | | 0x01: Full speed |
| 001 | | 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 - | | | |
|------|--|------------|-----------------------------|--|
| 3845 | Provides items for delivery server settings. | | | |
| 001 | FTP Port No. | [0 to 6553 | 35 / 3670 / 1 /step] | |

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| | Sets the FTP port number used when image files to the Scan Router Server. | | |
|-----|--|--|--------------------|
| | IP Address (Primary) | Range: 000.000.000 to 255.253 | 5.255.255 |
| 002 | Use this SP to set the Scan Router Servican be referenced by the initial system | ver address. The IP address under the tra n setting. | nsfer tab |
| | Delivery Error Display Time | [0 to 999 / 300 / 1 second /step] | |
| 006 | | n of time the prompt message is displayensfer with the NetFile application and an | |
| | IP Address (Secondary) | Range: 000.000.000 to 255.253 | 5.255.255 |
| 008 | | e computer designated to function as the P allows only the setting of the IP address | |
| | 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 | very server registered by the I/O device | Э. |
| 010 | Delivery Svr. Capability | [0 to 255 / 0 / 1 /step] | |
| | Bit7 = 1 Comment information exits | | |
| | Bit6 = 1 Direct specification of mail ac | ddress possible | Changes the |
| | Bit5 = 1 Mail RX confirmation setting p | possible | capabilit |
| | Bit4 = 1 Address book automatic upd | ate function exists | y of the registere |
| | Bit3 = 1 Fax RX delivery function exists d that the | | |
| | Bit2 = 1 Sender password function exists device | | |
| | Bit 1 = 1 Function to link MK-1 user an | d Sender exists | registere d. |
| | BitO = 1 Sender specification required | (if set to 1, Bit6 is set to "0") | |
| 011 | Delivery Svr Capability (Ext) | [0 to 255 / 0 / 1 /step] | |

| Changes the capability of the registered that the I/O device registered. Bit7 = 1 Address book usage limitation (Limitation for each authorized user) Bit6 = 1 RDH authorization link Bit5 to 0: Not used Server Scheme (Primary) DFU This is used for the scan router program. Server Port Number (Primary) DFU This is used for the scan router program. Server URL Path (Primary) DFU This is used for the scan router program. Server Scheme (Secondary) DFU This is used for the scan router program. Server Port Number (Secondary) DFU This is used for the scan router program. Server Port Number (Secondary) DFU This is used for the scan router program. Server URL Path (Secondary) DFU This is used for the scan router program. Repid Sending Control Enables or disables the prevention function for the continuous data sending error. [0 to 1 / 0 / -] 0: Disable, 1: Enable | | |
|--|-----|--|
| Bit6 = 1 RDH authorization link Bit5 to 0: Not used Server Scheme (Primary) DFU This is used for the scan router program. Server Port Number (Primary) DFU This is used for the scan router program. Server URL Path (Primary) DFU This is used for the scan router program. Server Scheme (Secondary) DFU This is used for the scan router program. Server Port Number (Secondary) DFU This is used for the scan router program. Server Port Number (Secondary) DFU This is used for the scan router program. Server URL Path (Secondary) DFU This is used for the scan router program. Rapid Sending Control Enables or disables the prevention function for the continuous data sending error. [0 to 1 / 0 / -] | | Changes the capability of the registered that the I/O device registered. |
| Bit5 to 0: Not used Server Scheme (Primary) DFU This is used for the scan router program. Server Port Number (Primary) DFU This is used for the scan router program. Server URL Path (Primary) DFU This is used for the scan router program. Server Scheme (Secondary) DFU This is used for the scan router program. Server Port Number (Secondary) DFU This is used for the scan router program. Server Port Number (Secondary) DFU This is used for the scan router program. Server URL Path (Secondary) DFU This is used for the scan router program. Rapid Sending Control Enables or disables the prevention function for the continuous data sending error. [0 to 1 / 0 / -] | | Bit $7 = 1$ Address book usage limitation (Limitation for each authorized user) |
| Server Scheme (Primary) DFU This is used for the scan router program. Server Port Number (Primary) DFU This is used for the scan router program. Server URL Path (Primary) DFU This is used for the scan router program. Server Scheme (Secondary) DFU This is used for the scan router program. Server Port Number (Secondary) DFU This is used for the scan router program. Server Port Number (Secondary) DFU This is used for the scan router program. Server URL Path (Secondary) DFU This is used for the scan router program. Rapid Sending Control Enables or disables the prevention function for the continuous data sending error. [0 to 1 / 0 / -] | | |
| This is used for the scan router program. Server Port Number (Primary) DFU This is used for the scan router program. Server URL Path (Primary) DFU This is used for the scan router program. Server Scheme (Secondary) DFU This is used for the scan router program. Server Port Number (Secondary) DFU This is used for the scan router program. Server Port Number (Secondary) DFU This is used for the scan router program. Server URL Path (Secondary) DFU This is used for the scan router program. Rapid Sending Control Enables or disables the prevention function for the continuous data sending error. [0 to 1 / 0 / -] | | Bit5 to 0: Not used |
| This is used for the scan router program. Server Port Number (Primary) DFU This is used for the scan router program. Server URL Path (Primary) DFU This is used for the scan router program. Server Scheme (Secondary) DFU This is used for the scan router program. Server Port Number (Secondary) DFU This is used for the scan router program. Server Port Number (Secondary) DFU This is used for the scan router program. Server URL Path (Secondary) DFU This is used for the scan router program. Rapid Sending Control Enables or disables the prevention function for the continuous data sending error. [0 to 1 / 0 / -] | 013 | Server Scheme (Primary) DFU |
| This is used for the scan router program. Server URL Path (Primary) DFU This is used for the scan router program. Server Scheme (Secondary) DFU This is used for the scan router program. Server Port Number (Secondary) DFU This is used for the scan router program. Server URL Path (Secondary) DFU This is used for the scan router program. Server URL Path (Secondary) DFU This is used for the scan router program. Rapid Sending Control Enables or disables the prevention function for the continuous data sending error. [0 to 1 / 0 / -] | 010 | This is used for the scan router program. |
| This is used for the scan router program. Server URL Path (Primary) DFU This is used for the scan router program. Server Scheme (Secondary) DFU This is used for the scan router program. Server Port Number (Secondary) DFU This is used for the scan router program. Server URL Path (Secondary) DFU This is used for the scan router program. Server URL Path (Secondary) DFU This is used for the scan router program. Rapid Sending Control Enables or disables the prevention function for the continuous data sending error. [0 to 1 / 0 / -] | 014 | Server Port Number (Primary) DFU |
| This is used for the scan router program. Server Scheme (Secondary) DFU This is used for the scan router program. Server Port Number (Secondary) DFU This is used for the scan router program. Server URL Path (Secondary) DFU This is used for the scan router program. Rapid Sending Control Enables or disables the prevention function for the continuous data sending error. [0 to 1 / 0 / -] | 014 | This is used for the scan router program. |
| This is used for the scan router program. Server Scheme (Secondary) DFU This is used for the scan router program. Server Port Number (Secondary) DFU This is used for the scan router program. Server URL Path (Secondary) DFU This is used for the scan router program. Rapid Sending Control Enables or disables the prevention function for the continuous data sending error. [0 to 1 / 0 / -] | 015 | Server URL Path (Primary) DFU |
| This is used for the scan router program. Server Port Number (Secondary) DFU This is used for the scan router program. Server URL Path (Secondary) DFU This is used for the scan router program. Rapid Sending Control Enables or disables the prevention function for the continuous data sending error. [0 to 1 / 0 / -] | 013 | This is used for the scan router program. |
| This is used for the scan router program. Server Port Number (Secondary) DFU This is used for the scan router program. Server URL Path (Secondary) DFU This is used for the scan router program. Rapid Sending Control Enables or disables the prevention function for the continuous data sending error. [0 to 1 / 0 / -] | 016 | Server Scheme (Secondary) DFU |
| This is used for the scan router program. Server URL Path (Secondary) DFU This is used for the scan router program. Rapid Sending Control Enables or disables the prevention function for the continuous data sending error. [0 to 1 / 0 / -] | 010 | This is used for the scan router program. |
| This is used for the scan router program. Server URL Path (Secondary) DFU This is used for the scan router program. Rapid Sending Control Enables or disables the prevention function for the continuous data sending error. [0 to 1 / 0 / -] | 017 | Server Port Number (Secondary) DFU |
| This is used for the scan router program. Rapid Sending Control Enables or disables the prevention function for the continuous data sending error. [0 to 1 / 0 / -] | 017 | This is used for the scan router program. |
| This is used for the scan router program. Rapid Sending Control Enables or disables the prevention function for the continuous data sending error. [0 to 1 / 0 / -] | 010 | Server URL Path (Secondary) DFU |
| Enables or disables the prevention function for the continuous data sending error. [0 to 1 / 0 / -] | 016 | This is used for the scan router program. |
| [0 to 1 / 0 / -] | | Rapid Sending Control |
| | 022 | Enables or disables the prevention function for the continuous data sending error. |
| 0: Disable, 1: Enable | | [0 to 1 / 0 / -] |
| | | 0: Disable, 1: Enable |

| 5846 | [UCS Settings] | *CTL | - | |
|------|--|----------|-----------------------------|-------------|
| | Machine ID (For Delivery Ser | ver) | | Displays ID |
| 001 | Displays the unique device ID in use by the delivery server directory. The value is or displayed and cannot be changed. This ID is created from the NIC MAC or IEEE 13 EUI. The ID is displayed as either 6-byle or 8-byte binary. | | om the NIC MAC or IEEE 1394 | |
| 002 | Machine ID Clear (For Delive | ry Serve | r) | Clears ID |

| | this SP if the connection of the devi | ce to the de | name in the file transfer directory. Execute elivery server is unstable. After clearing the ally by cycling the machine off and on. | | |
|-----|---|---|--|--|--|
| | Maximum Entries | [2000 to | 20000/ 2000 / 1 /step] | | |
| 003 | Changes the maximum number of entries that UCS can handle. | | | | |
| | If a value smaller than the present v data (excluding user code informa | | the UCS managed data is cleared, and the layed. | | |
| | Delivery Server Retry Timer | | [0 to 255 / 0 / 1 /step] | | |
| 006 | Sets the interval for retry attempts w server address book. | hen the de | livery server fails to acquire the delivery | | |
| | Delivery Server Retry Times | | [0 to 255 / 0 / 1 /step] | | |
| 007 | Sets the number of retry attempts whaddress book. | en the deliv | ery server fails to acquire the delivery server | | |
| | Delivery Server Maximum Entries | | [2000 to 50000 / 2000 / 1/step] | | |
| 008 | Sets the maximum number account entries of the delivery server user information managed by UCS. | | | | |
| 010 | LDAP Search Timeout | | [1 to 255 / 60 / 1 /step] | | |
| 010 | Sets the length of the timeout for the search of the LDAP server. | | | | |
| 020 | WSD Maximum Entries | | [5 to 250 / 250 / 1 /step] | | |
| 020 | Sets the maximum entries for the address book of the WSD (WS-scanner). | | | | |
| 040 | Addr Book Migration (USB => HDI | D) | | | |
| 040 | Not used in this machine. | | | | |
| | Fill Addr Acl Info. | | | | |
| 041 | that previously had no HDD. The find installed, the system automatically onto the new HDD. However, the r | rst time the lakes the address tage. Executage. | tallation of an HDD unit in a basic machine machine is powered on with the new HDD ddress book from the NVRAM and writes it is book on the HDD can be accessed only uting this SP by the service technician is book access to all users. | | |
| | 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 use can access the address book. | | |
| | | Displays the slot number where an address book data is in. | |
| | | [0 to 30 / - /1] | |
| | | 0: Unconfirmed | |
| | | 1: SD Slot 1 | |
| 043 | Addr Book Media | 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. | |
| | 1 | 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 of | case characters | |
| | 1: Japan Only | | |
| | 2: Japan Only | | |
| | 3: Japan Only | | |
| | 4 to 7: Not Used | | |
| | Complexity option 1 | | |
| | | s for password entry to access the local address book. assword entry to upper case and sets the length of the | |
| 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 im | age qua | lity of image files handled by NetFile. |

| | "Net files" are jobs to be printed from th DeskTopBinder software. | e document server using a PC and the | |
|-----|--|---|--|
| 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 | |
| | | 0: 1x | |
| | Rate for Printer Color 1200dpi | 1: 1/2x | |
| 007 | | 2: 1/3x | |
| 006 | | 3: 1/4x | |
| | | 4: 1/6x | |
| | | 5: 1/8x | |
| | | 0: 1x | |
| | | 1: 1/2x | |
| 007 | D-4- f D-: D 8 \ \ \ 1 200 d: | 2: 1/3x | |
| 007 | Rate for Printer B&W 1200dpi | 3: 1/4x | |
| | | 4: 1/6x | |
| | | 5: 1/8x | |
| | Network Quality Default for JPEG | | |
| 021 | Sets the default value for the quality of Jf is available only with the MLB (Media Li [5 to 95 / 50 / 1 /step] | PEG images sent as NetFile pages. This function nk Board) option installed. | |

| | [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 of to 1 gigabyte. | allowed t | or downloaded images. The default is equal | | |
| 002 | Access Ctrl: Repository (only Lower 4 bits) | | No access control Denies access to DeskTop Binder. | | |

| | | 0010: No writing control |
|-----|--|---|
| 003 | Access Control: Doc. Svr. Print (Lower 4 bits) | |
| 004 | Access Control: User Directory (Lower 4 bits) | |
| 007 | Access Ctrl: Comm. Log Fax (Lower 4 bits) | Switches access control on and off. 0000: No access control |
| 009 | Access Ctrl: Job Ctrl (Lower 4 bits) | 0001: Denies access to DeskTop Binder. |
| 011 | Access Ctrl: Device management | |
| 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 1024 / 1024 / 1 MB / step] |
| 210 | Setting: LogType: Job 1 | |
| 211 | Setting: LogType: Job2 | |
| 212 | Setting: LogType: Access | |
| 213 | Setting: Primary Srv | NIIA |
| 214 | Setting: Secondary Srv | NIA |
| 215 | Setting: Start Time | |
| 216 | Setting: Interval Time | |
| 217 | Setting: Timing | |

| 5849 | [Installation Date] | *CTL | - |
|--------|---------------------|------|--|
| 5849 1 | Display | | on the control on the control on Date on Tate on "Inst. Date". |

| 5849 2 | Switch to Print | Determines whether the installation date is printed on the printout for the total counter. [0 or 1 / 1 / -] 0: OFF (No Print) 1: ON (Print) |
|--------|-----------------|--|
| 003 | Total Counter | - |

| 5850 | [Address Book Function] | *CTL | - |
|------|-----------------------------------|-------------------|--|
| | Replacement of Circuit Classifica | tion 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. |

| | [Bluetooth] |
|------|---|
| 5851 | Sets the operation mode for the Bluetooth Unit. Press either key. |
| | [O:Public] [1: Private] |

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] | | | | |
|------|---|------|---|--|--|
| 5856 | rare using a local port (IEEE1284) when | | | | |
| 002 | Local Port | *CTL | [0 to 1 / 0 / 1/step] 0: Disable 1: Enable | | |
| 5857 | [Save Debug Log] | *CTI | _ | | |

| | 1 | | | | |
|-----|--|--|--|--|--|
| | On/Off (1:ON 0:OFF) | 0: OFF, 1: 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 SP5-858 are satisfied. | e debug logs information when the conditions set with | | | |
| | [2 to 3 / 2 / 1 /step] | | | | |
| | Save to HDD | | | | |
| 005 | Saves the debug log of the input | SC number in memory to the HDD. | | | |
| 005 | to avoid overwriting existing file names on the SD Card. SD Card. 4 MB segments can be copied one by one to | | | | |
| 006 | Save to SD Card | | | | |
| 008 | 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 | 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 nber. Refer to Section 4 for a list of SC error codes. |

| 001 | Engine SC Error (0: OFF, 1: ON) | Turns on/off the debug save for SC codes generated by copier engine errors. [O 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. |

| 5859 | [Debug Save Key No.] | *CTL | - | | |
|------|----------------------|--|---|--|--|
| 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 f functions that use common memory on the controller board. [-9999999 to 9999999 / 0 / -] | D | | |
| 005 | Key 5 | | , | | |
| 006 | Кеу б | | 0000 +- 0000000 / 0 / 1 | | |
| 007 | Key 7 | | 7999 10 9999999 / 0 / -] | | |
| 800 | Key 8 | | | | |
| 009 | Key 9 | | | | |
| 010 | Key 10 | | | | |

| 5860 | [SMTP/POP3/IMAP4] | *CTL | - | | |
|------|--|------|---|--------------------------------------|--|
| 020 | Partial Mail Receive Timeout | | | [1 to 168 / 72 / 1 hour/step] | |
| | Sets the amount of time to wait before saving a mail that breaks up during reception. The received mail is discarded if the remaining portion of the mail is not received during this prescribed time. | | | | |
| 021 | MDN Response RFC2298 Compliance | | | [0 to 1 / 1 / -] | |
| | Determines whether RFC2298 compliance is switched on for MDN reply mail. | | | | |
| | 0: No | | | | |

| | 1: Yes | | | | |
|-----|--|-----------|------------|--|--|
| 022 | SMTP Auth. From Field Replac | ement | | [0 to 1 / 0 / -] | |
| | Determines whether the FROM item of the mail header is switched to the validated account after the SMTP server is validated. 0: No. "From" item not switched. 1: Yes. "From item switched. | | | | |
| 025 | SMTP Auth. Direct Setting | | | [0 or 1 / 0 / –] | |
| | Selects the authentication meth | od for SN | ΛPT. | | |
| | Bit switch: | | | | |
| | Bit 0: LOGIN | | | | |
| | Bit 1: PLAIN | | | | |
| | Bit 2: CRAM MD5 | | | | |
| | Bit 3: DIGEST MD5 | | | | |
| | • Bit 4 to 7: Not used | | | | |
| | Note | | | | |
| | This SP is activated only v | vhen SMT | P authoriz | ation is enabled by UP mode. | |
| | | | Selects th | ne MIME header type of an E-mail sent by | |
| 026 | S/MIME: MIME Header Setting | | [0 to 2 / | 0/1] | |
| 020 | | - | 0: Micro | soft Outlook Express standard | |
| | | | 1: Interne | et Draft standard | |
| | | | | andard | |

| 5866 | [E-mail Report] Not Used | | |
|------|--------------------------|------|--|
| 001 | Report Validity | *CTL | Enables or disables the e-mail alert. [O or 1 / O / -] O: Enable, 1: Disable |
| 005 | Add Date Field | *CTL | Adds or does not add the date field to the header of the alert mail. [0 or 1 / 0 / -] 0: Not added, 1: Added |

| 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 Mo | [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] | | |
|------|------------------|------|---|
| 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] | | |
|------|--|------|--|
| 3663 | Selects the line speed for middle thick paper. | | |
| 001 | Middle Thick | *ENG | [0 or 1 / 1 / 1 / step] 0: MID CARD: Half Speed (115 mm/sec) 1: MID CARD: Normal Speed (C2c: 154, C2d: 205 mm/sec) |

| E00E | [WIM Settings] Web Image Monitor Settings | | | |
|------|---|------|---|--|
| 5885 | Close or disclose the functions of web image monitor. | | | |
| 020 | Document Server 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 | Document Server List Def. Lines | *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 | Signature Setting | *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] | |

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| 588 <i>7</i> | [SD Get Counter] | | | |
|--------------|--|------|--|--|
| 3667 | 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). 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 | - |
|------|---------------------------|------|---|
|------|---------------------------|------|---|

| | 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-5 | |

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| 5894 | [External Charge Unit Setting] | | |
|------|--------------------------------|------|------------------------------|
| 3094 | - | | |
| 001 | Switch Charge Mode | *ENG | [0 to 2 / 0 / 1/step] |

| | [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] | |
|------|---|--|
| | 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 |
|------|----------------------------|-------------|--|
| | | ea of the H | a security measure that prevents image IDD. After changing this setting, you must w setting. |

| 5974 | [Cherry Server] | | |
|------|---------------------------------|----------|---|
| 39/4 | Specifies which version of Scar | nRouter, | "Lite" or "Full", is installed. |
| 001 | Cherry Server | *CTL | [0 or 1 / 0 / –] 0: Lite, 1: Full |

| [Device Setting] | | |
|------------------|------------------|--|
| 5985 | | 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 controller is must be set to "1". |
| | | [0 to 2 / 0 / 1 /step] 0: Disable, 1: Enable, 2: Function limitation |
| | 001 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 | 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 | - |

| 5998 | [Fusing Cont mode] Fusing Control Mode | | |
|------|---|------|---|
| 3990 | 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) |

SP6-XXX (Peripherals)

| 6006 | [ADF Adj.] ADF Adjustment | | | | |
|------|---|-------|---|--|--|
| | Adjusts the side-to-side and leading registration of originals with the ARDF. | | | | |
| 001 | Side-to-Side Registration | *5510 | [20+20/0/0]/+] | | |
| 002 | Side-to-Side Registration | *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 | *5510 | [-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] | | |

| | [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 ("Input Check Table" in this section). | |

| | [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 (*Output Check Table" in this section). |

| 6009 | [ADF Free Run] | | | | | |
|------|---|---|---|--|--|--|
| 0009 | Performs a DF free run in simplex, duplex mode or stamp mode. | | | | | |
| 001 | Free Run Simplex Motion | - | | | | |
| 002 | Free Run Duplex Motion | - | - | | | |
| 003 | Free Run Stamp Motion | - | | | | |

| 6010 | [Stamp Position Adj.] Fax Stamp Position Adjustment | | |
|-------|--|------|--------------------------------------|
| 0010 | Adjusts the horizontal position of the stamp on the scanned originals. | | |
| 60101 | Stamp Position Adj. | *ENG | [-5.0 to 5.0 / 0 / 1 mm/step] |

| 6016 | [Original Size Detection Priority] Original Size Detection Priority | | | | |
|------|--|------|--|---------------------|--|
| | Specifies the original size for a size detected by the original sensor, since original sensors cannot recognize all sizes. | | | | |
| | Original Size Detection Priority | *ENG | [0 or 1 / 0 / -] 0: Setting 1, 1: Setting 2 | | |
| 001 | | NA | Setting 1 | Setting 2 | |
| | | | DLT SEF | Folio SEF 11" x 15" | |
| | | | LG SEF | Foolscap SEF | |

| | | LT SEF | US EXE 8" x 10" |
|------|--------|------------------|------------------|
| | | LT LEF | US EXE LEF |
| | | DLT SEF | 8K 267 x 390 mm |
| ASIA | LT SEF | 16K 195 x 267 mm | |
| | 7.017 | 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 | DF Magnification Adj. | *CTL | [-5.0 to 5.0 / 0 / 0.1 %/step] | | |

| 4020 | [Skew Correction Moving Setting] | | | |
|------|--|------|---|--|
| 6020 | Turns the original skew correction in the 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) | |

| 6128 | [Punch Position: Sub Scan] | | | |
|------|--|------|--|--|
| 0120 | Adjusts the punching position in the sub scan direction. | | | |
| 001 | 1.Domestic 2Hole (Europe 2Hole) | *ENG | | |
| 002 | 2.North America 3Hole | *ENG | | |
| 003 | 3.Europe 4Hole | *ENG | [-7.5 to 7.5 / 0 / 0.5 mm/step] | |
| 004 | 4.North Europe 4Hole | *ENG | | |
| 005 | 5.North Europe 2Hole | *ENG | | |

| 6129 | [Punch Position: Main Scan] | | |
|------|---|------|--|
| | Adjusts the punching position in the main scan direction. | | |
| 001 | 1.Domestic 2Hole (Europe 2Hole) | *ENG | [-2.0 to 2.0 / 0 / 0.4 mm/step] |

| 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 | [504-50/0/025/] | | |
| 007 | DLT-T | *ENG | [-5.0 to 5.0 / 0 / 0.25 mm/step] | | |
| 800 | LG-T | *ENG | | | |
| 009 | LT-T | *ENG | | | |
| 010 | LT-Y | *ENG | | | |
| 011 | 12" x 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 | [0 or 1 / 1 / 1 / step] |
| 003 | A4T | *ENG | 0: No (No skew correction) 1: Roller Stop Skew Correction |
| 004 | A4Y | *ENG | |

| 005 | B5T | *ENG |
|-----|-----------|------|
| 006 | B5Y | *ENG |
| 007 | DLT-T | *ENG |
| 800 | LG-T | *ENG |
| 009 | LT-T | *ENG |
| 010 | LT-Y | *ENG |
| 011 | 12" x 18" | *ENG |
| 012 | Other | *ENG |

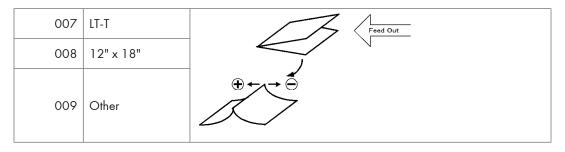
| | [Jogger Fence Fine Adj] | | |
|------|---|------|---|
| 6132 | This SP adjusts the distance between the jogger fences and the sides of the stack on the finisher stapling tray in the (Booklet) Finisher B804/B805. The adjustment is done perpendicular to the direction of paper feed. | | er B804/B805. The adjustment is done |
| 001 | АЗТ | *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" x 18" | *ENG | |
| 012 | Other | *ENG | |

| 6133 | [Staple Position Adjustment] |
|------|------------------------------|
|------|------------------------------|

| 6134 | [Saddle Stitch Positi | on Adjustment] |
|------|---|--|
| | Use this SP to adjust folded in the Bookle | t the stapling position of the booklet stapler when paper is stapled and et 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" x 18" | $\bigoplus \leftarrow \rightarrow \ominus$ |
| 009 | Other | |

| [Folder Position Adj.] | |
|---------------------------------|---|
| This SP corrects the f B804. | olding position when paper is stapled and folded in the Booklet Finisher |
| A3T | |
| B4T | |
| A4T | [-3.0 to 3.0 / 0 / 0.2 mm/step] + Value: Shifts staple position toward the crease Value: Shifts staple position away from the crease. |
| B5T | |
| DLT-T | |
| LG-T | |
| | This SP corrects the f B804. A3T B4T A4T B5T DLT-T |

g



| 6136 | [Folding Number] | |
|------|---|------------------------------------|
| | Sets the number of times that folding is done in the Booklet Finisher B804. | |
| 001 | - | [2 to 30 / 2 / 1 time/step] |

| 6137 | [Fin. Free Run] Not used | |
|------|--|--|
| 0137 | These SPs are used only for B793 finisher. | |
| 001 | Free Run 1 Free run for paper edge stapling. | |
| 002 | Free Run 2 | Free run for booklet stapling. |
| 003 | Free Run 3 | Shipping free run. Simulates standby conditions during shipping. |
| 004 | Free Run 4 | DFU |

| 61 | 138 | [FIN (TIG) INPUT Check] Finisher (B793) Input Check |
|----|-----|---|
| | | Not Used in this machine |

| 6139 | [FIN (KIN) INPUT Check] Finisher (B408) Input Check | |
|------|---|--|
| | Displays the signals received from sensors and switches of the booklet finisher. ("Input Check Table" in this section) | |

| 6140 | [FIN (EUP) INPUT Check] Finisher (B804/B805) Input Check |
|------|---|
| | Displays the signals received from sensors and switches of the (booklet) finisher. (•"Input Check Table" in this section) |

| 614 | 12 | [FIN (JAK) INPUT Check] |
|-----|----|--------------------------|
| | | Not Used in this machine |

| 6143 | [FIN (TIG) OUPUT Check] Finisher (B793) Output Check |
|------|--|
| | Not Used in this machine |

| 6144 | [FIN (KIN) OUPUT Check] Finisher (B408) Output Check |
|------|--|
| | Displays the signals received from sensors and switches of the booklet finisher. (•"Output Check Table" in this section) |

| 6145 | [FIN (EUP) OUPUT Check] Finisher (B804/B805) Output Check |
|------|--|
| | Displays the signals received from sensors and switches of the (booklet) finisher. (•"Output Check Table" in this section) |

| 6147 | [FIN (JAK) OUPUT Check] |
|------|---------------------------|
| | Not used in this machine. |

| 6148 | [Jogger Fine Adj] | *ENG | Fine Adjust Output Jogger Unit Fences | |
|------|-------------------|--|--|--|
| 001 | АЗТ | | | |
| 002 | B4T | | | |
| 003 | A4T | This SP co | rrects the distance between the jogger fences and the | |
| 004 | A4Y | sides of th | e stack when the output jogger unit attached to the side | |
| 005 | B5Y | the made + Value: | chine jogs sheets as they exit the finisher. | |
| 006 | A5Y | Increases distance between jos stack. - Value: | distance between jogger fences and the sides of the | |
| 007 | DLT-T | | | |
| 008 | LG-T | | | s the distance between the jogger fences and the sides |
| 009 | LT-T | | sk. | |
| 010 | LT-Y | | [-1.5 to 1.5 / 0 / 0.5 mm/step] | .5 / 0 / 0.5 mm/step] |
| 011 | HLT-Y | | | |
| 012 | Other | | | |

| [Max. Pre-Stack Sheet] | *ENG | Number of Pre-Stack Sheets |
|------------------------|------|----------------------------|
|------------------------|------|----------------------------|

| | This SP sets the nur | nber of sheets sent to the pre-stack tray. |
|-----|----------------------|---|
| | Note: | |
| | You may need to d | 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) ("Input Check Table" in this section). |

| | [OUTPUT Check] | |
|------|---|--|
| 6151 | Displays the signals received from sensors and switches of the brisge unit (D386) (User "Output Check Table" in this section). | |

[INPUT Check] Displays the signals received from sensors and switches of the shift tray (D388) ("Input Check Table" in this section).

| | [OUTPUT Check] |
|------|---|
| 6153 | Displays the signals received from sensors and switches of the shift tray (D388) (Use "Output Check Table" in this section). |

| | [INPUT Check] | |
|------|--|--|
| 6154 | Displays the signals received from sensors and switches of the 1 bin tray (D414) ("Input Check Table" in this section). | |

| | [OUTPUT Check] |
|------|--|
| 6155 | Displays the signals received from sensors and switches of the 1 bin tray (D414) ("Output Check Table" in this section) |
| 001 | 1 bin: Junction Solenoid |

| 6160 | [INPUT Check] | | | |
|------|---------------|--|--|--|
|------|---------------|--|--|--|

Displays the signals received from sensors and switches of the two-tray paper feed unit (D351), LCT 2000 (D352) and LCT 1200 (D353) (

"Input Check Table" in this section)

6161 [OUTPUT Check]

Displays the signals received from sensors and switches of the two-tray paper feed unit (D351), LCT 2000 (D352) and LCT 1200 (D353) (Output Check Table in this section)

SP7-XXX (Data Log)

| 7401 | [Total SC Counter] | | |
|------|--------------------------------|-------------|----------------------------------|
| 7401 | Displays the number of SC code | es detected | |
| 001 | SC Counter | *CTL | [0 to 9999 / 0 / 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 | Latest | | | | |
| 002 | Latest 1 | | | | |
| 003 | Latest 2 | | | | |
| 004 | Latest 3 | | | | |
| 005 | Latest 4 | *CTL | | | |
| 006 | Latest 5 | CIL | - | | |
| 007 | Latest 6 | | | | |
| 008 | Latest 7 | | | | |
| 009 | Latest 8 | | | | |
| 010 | Latest 9 | | | | |

| 7502 | [Total Paper Jam Counter] |
|------|---------------------------|
|------|---------------------------|

d

| | Displays the total number of jams detected. | | |
|-----|---|-------|--|
| 001 | Total Jam | * CTL | [0 to 9999 / 0 / 1 sheet/step] |

| <i>75</i> 03 | [Total Original Jam Counter] | | | | |
|--------------|---|------|--|--|--|
| 7503 | Displays the total number of original jams. | | | | |
| 001 | Original Jam counter | *CTL | [0 to 9999 / 0 / 1 original/step] | | |

| 7504 | [Paper Jam Location] ON: On check, OFF: Off Check | | | | | |
|------|--|------|------------------------------------|--|--|--|
| 7304 | 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 | | | | |
| 007 | LCT : ON | *CTL | | | | |
| 800 | Bypass: ON | *CTL | | | | |
| 009 | Duplex: ON | *CTL | For details, (• "Jam Detection" in | | | |
| 011 | Vertical Transport 1: ON | *CTL | "Appendix: Jam Detection" section | | | |
| 012 | Vertical Transport 2: ON | *CTL | | | | |
| 013 | Bank: Transport Sn 1 | *CTL | | | | |
| 014 | Bank: Transport Sn2 | *CTL | | | | |
| 017 | Registration: ON | *CTL | | | | |
| 018 | Fusing Entrance: ON | *CTL | | | | |
| 019 | Fusing Exit: ON | *CTL | | | | |
| 020 | Paper Exit: ON | *CTL | | | | |

s, (🖝 "Jam Detection" in the c: Jam Detection" section.

| 021 | Bridge Exit: ON | *CTL |
|-----|-------------------------------|------|
| | | |
| 022 | Bridge Transport: ON | *CTL |
| 024 | Junction Gate Sensor : On | *CTL |
| 025 | Duplex Exit: ON | *CTL |
| 026 | Duplex Entrance: ON (Out) | *CTL |
| 027 | Duplex Entrance: ON (Out) | *CTL |
| 051 | Vertical Transport 1: Off | *CTL |
| 052 | Vertical Transport 2: Off | *CTL |
| 053 | Bank Transport 1: Off | *CTL |
| 054 | Bank Transport 2: Off | *CTL |
| 057 | Registration Sensor: Off | *CTL |
| 058 | LCT Feed Sensor : Off | |
| 060 | Paper Exit Off | *CTL |
| 061 | Bridge Exit: Off | *CTL |
| 062 | Bridge Transport: Off | *CTL |
| 064 | Junction Gate Sensor : Off | |
| 065 | Duplex Exit: Off | *CTL |
| 066 | Duplex Entrance: Off (In) | *CTL |
| 067 | Duplex entrance : Off (Out) | |
| 100 | Finisher Entrance: KIN | *CTL |
| 101 | Finisher Shift Tray Exit: KIN | *CTL |
| 102 | Finisher Staple: KIN | *CTL |
| 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, (Jam Detection" in the "Appendix: Jam Detection" section. |
| 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 Detection] | | | | |
|------|---|----------|---|--|--|
| 7505 | Displays the total number of original jams by location. | | | | |
| 001 | At Power On | Power On | | | |
| 003 | Skew Correction Sensor: On | | | | |
| 004 | Registration Sensor: On | | | | |
| 005 | Original Sensor: On | | | | |
| 006 | Registration Sensor: On | *CTL - | - | | |
| 007 | Original Exit Sensor: On | | | | |
| 008 | Reverse Sensor: On | | | | |
| 053 | Skew Correction Sensor: Off | | | | |

| <i>7</i> 506 | [Jam Count by Paper Size] | | | |
|--------------|--|------|--|--|
| 7506 | Displays the number of jams according to the paper size. | | | |
| 005 | A4 LEF | | | |
| 006 | A5 LEF | | | |
| 014 | B5 LEF | | | |
| 038 | LT LEF | | | |
| 044 | HLT LEF | | | |
| 132 | A3 SEF | | | |
| 133 | A4 SEF | | | |
| 134 | A5 SEF | *CTL | [0 to 9999 / 0 / 1 sheet/step] | |
| 141 | B4 SEF | | | |
| 142 | B5 SEF | | | |
| 160 | DLT SEF | | | |
| 164 | LG SEF | | | |
| 166 | LT SEF | | | |
| 172 | HLT SEF | | | |
| 255 | Others | | | |

| - | 7507 | [Plotter Jam History] | | |
|---|------|-------------------------------|------------|------------|
| | 7307 | Displays the 10 most recently | detected p | aper jams. |
| | 001 | Latest | *CTL | - |

| 002 | Latest 1 |
|-----|----------|
| 003 | Latest 2 |
| 004 | Latest 3 |
| 005 | Latest 4 |
| 006 | Latest 5 |
| 007 | Latest 6 |
| 008 | Latest 7 |
| 009 | Latest 8 |
| 010 | Latest 9 |

| 7500 | [Original Jam History] | | |
|------|-------------------------------|------------|---------------|
| 7508 | Displays the 10 most recently | detected c | riginal jams. |
| 001 | Latest | | |
| 002 | Latest-1 | | |
| 003 | Latest-2 | | |
| 004 | Latest-3 | | |
| 005 | Latest-4 | *CTL | |
| 006 | Latest-5 | CIL | - |
| 007 | Latest-6 | | |
| 008 | Latest-7 | | |
| 009 | Latest-8 | | |
| 010 | Latest-9 | | |

| 7624 | Part Replacement Operation ON/OFF | |
|------|---|-----------------------|
| 7624 | Selects the PM maintenance for each part. | |
| 001 | K Drum Unit | [0 or 1 / 1 -] |
| 002 | M Drum Unit | 0: Not PM maintenance |

| 003 C Drum Unit 004 Y Drum Unit 005 K Dev Unit 006 M Dev Unit 007 C Dev Unit 008 Y Dev Unit 009 K Developer 010 M Developer 011 C Developer 012 Y Developer 013 ITB Unit 014 Belt Cleaning Unit 015 Fusing Unit 016 PTR Unit 017 Waste Toner Bottle | | | |
|---|-----|--------------------|-------------------|
| 005 K Dev Unit 006 M Dev Unit 007 C Dev Unit 008 Y Dev Unit 009 K Developer 010 M Developer 011 C Developer 012 Y Developer 013 ITB Unit 014 Belt Cleaning Unit 015 Fusing Unit 016 PTR Unit | 003 | C Drum Unit | |
| 006 M Dev Unit 007 C Dev Unit 008 Y Dev Unit 009 K Developer 010 M Developer 011 C Developer 012 Y Developer 013 ITB Unit 014 Belt Cleaning Unit 015 Fusing Unit 016 PTR Unit | 004 | Y Drum Unit | |
| 007 C Dev Unit 008 Y Dev Unit 009 K Developer 010 M Developer 011 C Developer 012 Y Developer 013 ITB Unit 014 Belt Cleaning Unit 015 Fusing Unit 016 PTR Unit | 005 | K Dev Unit | |
| 008 Y Dev Unit 009 K Developer 010 M Developer 011 C Developer 012 Y Developer 013 ITB Unit 014 Belt Cleaning Unit 015 Fusing Unit 016 PTR Unit | 006 | M Dev Unit | |
| 009 K Developer 010 M Developer 011 C Developer 012 Y Developer 013 ITB Unit 014 Belt Cleaning Unit 015 Fusing Unit 016 PTR Unit | 007 | C Dev Unit | |
| 010 M Developer 011 C Developer 012 Y Developer 013 ITB Unit 014 Belt Cleaning Unit 015 Fusing Unit 016 PTR Unit | 008 | Y Dev Unit | |
| 011 C Developer 012 Y Developer 013 ITB Unit 014 Belt Cleaning Unit 015 Fusing Unit 016 PTR Unit | 009 | K Developer | |
| O12 Y Developer O13 ITB Unit O14 Belt Cleaning Unit O15 Fusing Unit O16 PTR Unit | 010 | M Developer | 1: PM maintenance |
| 013 ITB Unit 014 Belt Cleaning Unit 015 Fusing Unit 016 PTR Unit | 011 | C Developer | |
| 014 Belt Cleaning Unit 015 Fusing Unit 016 PTR Unit | 012 | Y Developer | |
| O15 Fusing Unit O16 PTR Unit | 013 | ITB Unit | |
| 016 PTR Unit | 014 | Belt Cleaning Unit | |
| | 015 | Fusing Unit | |
| 017 Waste Toner Bottle | 016 | PTR Unit | |
| | 017 | Waste Toner Bottle | |

| 7 801 | [ROM No/ Firmware Version | n] | |
|--------------|---------------------------|------|---|
| 255 | Engine | *CTL | Displays all versions and ROM numbers in the machine. |

| 7803 | [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. |
| | 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 fe | ed station. | |
|-----|---|---|--|
| 001 | Paper | *CTL | - |
| 002 | Page: K Drum Unit | | |
| 003 | Page: M Drum Unit | | |
| 004 | Page: C Drum Unit | | |
| 005 | Page: Y Drum Unit | | |
| 006 | Page: K Dev Unit | | |
| 007 | Page: M Dev Unit | | |
| 800 | Page: C Dev Unit | | |
| 009 | Page: Y Dev Unit | | |
| 010 | Page: K Developer | *ENG | - |
| 011 | Page: M Developer | | |
| 012 | Page: C Developer | | |
| 013 | Page: Y Developer | | |
| 014 | Page: ITB Unit | | |
| 015 | Page: Belt Cleaning Unit | | |
| 016 | Page: Fusing Unit | | |
| 017 | Page: PTR Unit | | |
| 018 | Page: Toner Collection Bottle | | |
| | Displays the number of revolutions of molecular [0 to 9999999 / 0 / 1 revolution/ste When a unit is replaced, the machine a Then, the current PM counter value is au (SP7-906-11 to 20) and is reset to "0". unit replaced can be checked with SP7- | p] utomaticall utomaticall The total n | ly detects that the new unit is installed. y moved to the PM Counter - Previous number of revolutions made with the last |
| 031 | Rotation: K Drum Unit | *5\10 | [0], 000000000 / /1 // 1 |
| 032 | Rotation: M Drum Unit | *ENG | [0 to 999999999 / - / 1 mm/step] |

| | | | - | |
|-----|---|---------|------------|--|
| 033 | Rotation: C Drum Unit | | | |
| 034 | Rotation: Y Drum Unit | | | |
| 035 | Rotation: K Dev Unit | | | |
| 036 | Rotation: M Dev Unit | | | |
| 037 | Rotation: C Dev Unit | | | |
| 038 | Rotation: Y Dev Unit | | | |
| 039 | Rotation: K Developer | | | |
| 040 | Rotation: M Developer | | | |
| 041 | Rotation: C Developer | | | |
| 042 | Rotation: Y Developer | | | |
| 043 | Rotation: ITB Unit | | | |
| 044 | Rotation: Cleaning Unit | | | |
| 045 | Rotation: Fusing Unit | | | |
| 046 | Rotation: PTR Unit | | | |
| 047 | Measurement: Toner Collection bottle | | | |
| | Displays the value given by the following | formu | ıla: | |
| | (Current revolution \div Target revolution) \times lifetime has been used up. | 100. | This show | rs how much of the unit's expected |
| | The Rotation% counter is based on rotation the limit, the machine enters the end condition first, the machine also enters the end condition 100%. | ion for | that unit. | If the print count lifetime is reached |
| 061 | Rotation (%): K Drum Unit | | | |
| 062 | Rotation (%): M Drum Unit | | | |
| 063 | Rotation (%): C Drum Unit | | | |
| 064 | Rotation (%): Y Drum Unit | | *ENG | [0 to 255 / - / 1 %/step] |
| 065 | Rotation (%): K Dev Unit | | | |
| 066 | Rotation (%): M Dev Unit | | | |

| 067 | Rotation (%): C Dev Unit | | |
|-----|--|-------------|---|
| 068 | Rotation (%): Y Dev Unit | | |
| 069 | Rotation (%): K Developer | | |
| 070 | Rotation (%): M Developer | | |
| 071 | Rotation (%): C Developer | | |
| 072 | Rotation (%): Y Developer | | |
| 073 | Rotation (%): ITB Unit | | |
| 074 | Rotation (%): Cleaning Unit | | |
| 075 | Rotation (%): Fusing Unit | | |
| 076 | Rotation (%): PTR Unit | | |
| 077 | Measurement (%): Toner Collection bottle | | |
| | Displays the value given by the following form | | |
| | (Current printouts ÷ Target printouts) × 100. T lifetime has been used up. | his shows | how much of the unit's expected |
| | The Page% counter is based on printouts, not rethe limit, the machine enters the end condition reached first, the machine also enters the end is still less than 100%. | for that un | it. If the revolution count lifetime is |
| 091 | Page (%): K PCU (Drum Unit) | | |
| 092 | Page (%): M PCU (Drum Unit) | | |
| 093 | Page (%): C PCU (Drum Unit) | | |
| 094 | Page (%): Y PCU (Drum Unit) | | |
| 095 | Page (%): K Dev Unit | | |
| 096 | Page (%): M Dev Unit | *ENG | [0 to 255 / - / 1 %/step] |
| 097 | Page (%): C Dev Unit | | |
| 098 | Page (%): Y Dev Unit | | |
| 099 | Page (%): K Developer | | |
| 100 | Page (%): M Developer | | |
| | | | |

| 101 | Page (%): C Developer | |
|-----|-------------------------|--|
| 102 | Page (%): Y Developer | |
| 103 | Page (%): ITB Unit | |
| 104 | Page (%): Cleaning Unit | |
| 105 | Page (%): Fusing Unit | |
| 106 | Page (%): PTR Unit | |

| 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 |
| 100 | All |

| 7807 | [SC/Jam Counter Reset] | | | | |
|------|---|---|---|--|--|
| 7607 | Clears the counters related to SC codes and paper jams. | | | | |
| 001 | SC/Jam Clear | - | - | | |

| 7826 | [MF Error Counter] Japan Only |
|------|-------------------------------|
| 001 | Error Total |
| 002 | Error Staple |

7827 [MF Error Counter Clear] Japan Only

| 7832 | [Self-Diagnose Result Display] | | | | |
|------|---|------|---|--|--|
| 7032 | Displays the result of the diagnostics. | | | | |
| 001 | Diag. Result | *CTL | - | | |

| 7835 | [ACC Counter] | | |
|------|---------------|------|---|
| 001 | Сору АСС | *CTL | Displays the ACC exection times for each mode |
| 002 | Printer ACC | *CTL | Displays the ACC exectuion times for each mode. |

| 7836 | Total Memory Size | |
|------|--|--|
| 7630 | Displays the memory capacity of the controller system. | |

[DF Scan Glass Dust Check Counter]

| 70.50 | [Replacement Counter] | | | | |
|--------------|-------------------------------|--------------|--------------------------|--|--|
| <i>7</i> 853 | Displays the PM parts replace | ment number. | | | |
| 001 | K Drum Unit | *CTL | | | |
| 002 | M Drum Unit | *CTL | | | |
| 003 | C Drum Unit | *CTL | | | |
| 004 | Y Drum Unit | *CTL | | | |
| 005 | K Dev Unit | *CTL | | | |
| 006 | M Dev Unit | *CTL | | | |
| 007 | C Dev Unit | *CTL | | | |
| 008 | Y Dev Unit | *CTL | | | |
| 009 | K Developer | *CTL | [0 to 255 / - / 1 /step] | | |
| 010 | M Developer | *CTL | | | |
| 011 | C Developer | *CTL | | | |
| 012 | Y Developer | *CTL | | | |
| 013 | ITB Unit | *CTL | | | |
| 014 | Belt Cleaning Unit | *CTL | | | |
| 015 | Fusing Unit | *CTL | | | |
| 016 | PTR Unit | *CTL | | | |
| 017 | Toner Collection Bottle | *CTL | | | |

[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

| | | [Assert Info] | | | | | | |
|--|-----|-----------------|------|---|--|--|--|--|
| Records the location where a problem is detected in the program. The data stored SP is used for problem analysis. DFU | | | | n is detected in the program. The data stored in this | | | | |
| | 001 | File Name | | | | | | |
| | 002 | Number of Lines | *CTL | - | | | | |
| | 003 | Location | | | | | | |

[1 to 200 / 20 / 1]

*CTL

002

Coverage Range 2

| | [Prev. Unit PM Counter] | | | | |
|------|---|--|--|--|--|
| 7906 | (Page or Rotations, Unit, [Color]), Dev | Unit, [Color]), Dev.: Development Unit | | | |
| | Displays the number of sheets printed | with the pre | evious maintenance units. | | |
| 001 | Page: K Drum Unit | *ENG | [0 to 9999999 / 0 / 1 page/step] | | |

| 002 | Page: M Drum Unit | | |
|-----|--|-------------|---|
| 003 | Page: C Drum Unit | | |
| 004 | Page: Y Drum Unit | | |
| 005 | Page: K Dev Unit | | |
| 006 | Page: M Dev Unit | | |
| 007 | Page: C Dev Unit | | |
| 008 | Page: Y Dev Unit | | |
| 009 | Page: K Developer | | |
| 010 | Page: M Developer | | |
| 011 | Page: C Developer | | |
| 012 | Page: Y Developer | | |
| 013 | Page: ITB Unit | | |
| 014 | Page: Cleaning Unit | | |
| 015 | Page: Fusing Unit | | |
| 016 | Page: PTR Unit | | |
| 017 | Page: Toner Collection Bottle | | |
| | Displays the number of revolutions for | motors or c | clutches in the previous maintenance units. |
| 031 | Rotation: K Drum Unit | | |
| 032 | Rotation: M Drum Unit | | |
| 033 | Rotation: C Drum Unit | | |
| 034 | Rotation: Y Drum Unit | | |
| 035 | Rotation: K Dev Unit | *ENG | [0 to 9999999 / 0 / 1 mm/step] |
| 036 | Rotation: M Dev Unit | | |
| 037 | Rotation: C Dev Unit | | |
| 038 | Rotation: Y Dev Unit | | |
| 039 | Rotation: K Developer | | |

| 040 | Rotation: M Developer | | |
|-----|---------------------------------------|--------------|---|
| 041 | Rotation: C Developer | | |
| 042 | Rotation: Y Developer | | |
| 043 | Rotation: ITB Unit | | |
| 044 | Rotation: Cleaning Unit | | |
| 045 | Rotation: Fusing Unit | | |
| 046 | Rotation: PTR Unit | | |
| 047 | Measurement: Toner Collection bottle | | |
| | Displays the number of sheets printed | with the pre | evious maintenance unit or toner cartridge. |
| 061 | Rotation (%): K Drum Unit | | |
| 062 | Rotation (%): M Drum Unit | | |
| 063 | Rotation (%): C Drum Unit | | |
| 064 | Rotation (%): Y Drum Unit | | |
| 065 | Rotation (%): K Dev Unit | | |
| 066 | Rotation (%): M Dev Unit | | |
| 067 | Rotation (%): C Dev Unit | | |
| 068 | Rotation (%): Y Dev Unit | | |
| 069 | Rotation (%): K Developer | *ENG | [0 to 255 / 0 / 1 %/step] |
| 070 | Rotation (%): M Developer | | |
| 071 | Rotation (%): C Developer | | |
| 072 | Rotation (%): Y Developer | | |
| 073 | Rotation (%): ITB Unit | | |
| 074 | Rotation (%): Cleaning Unit | | |
| 075 | Rotation (%): Fusing Unit | | |
| 076 | Rotation (%): PTR Unit | | |
| | ! | ! | |

| 077 | Measurement (%): Toner Collection bottle | | | | | |
|-----|---|-------|----|----------------------------------|--|--|
| | Displays the value given by the following formula: | | | | | |
| | (Current count ÷ Yield count) x 100, where "Current count" is the current values in the counter for the part, and "Yield count" is the recommended yield. | | | | | |
| 091 | Page (%): K Drum Unit | | | | | |
| 092 | Page (%): M Drum Unit | | | | | |
| 093 | Page (%): C Drum Unit | | | | | |
| 094 | Page (%): Y Drum Unit | | | | | |
| 095 | Page (%): K Dev Unit | | | [0 to 255 / 0 / 1 %/step] | | |
| 096 | Page (%): M Dev Unit | | | | | |
| 097 | Page (%): C Dev Unit | | | | | |
| 098 | Page (%): Y Dev Unit | * - 1 | 10 | | | |
| 099 | Page (%): K Developer | *EN | 1G | | | |
| 100 | Page (%): M Developer | | | | | |
| 101 | Page (%): C Developer | | | | | |
| 102 | Page (%): Y Developer | | | | | |
| 103 | Page (%): ITB Unit | | | | | |
| 104 | Page (%): Cleaning Unit | | | | | |
| 105 | Page (%): Fusing Unit | | | | | |
| 106 | Page (%): PTR Unit | | | | | |

| <i>7</i> 931 | [Toner Bottle Bk] | | | |
|--------------|---|------|--|--|
| 7931 | Displays the toner bottle information for Bk. | | | |
| 001 | Machine Serial ID | *ENG | | |
| 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. | |
| 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 | |
| | | |

| 7022 | [Toner Bottle M] | | |
|------|--|------|------|
| 7932 | Displays the toner bottle information for M. | | |
| 001 | Machine Serial ID | | |
| 002 | Cartridge Ver | *ENG | *ENG |
| 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. |
| 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 |

| 7933 | [Toner Bottle C] | | |
|------|--|------|------|
| 7933 | Displays the toner bottle information fo | r C. | |
| 001 | Machine Serial ID | | |
| 002 | Cartridge Ver | *ENG | *ENG |
| 003 | Brand ID | | |
| 004 | Area ID | | |
| 005 | Product ID | | |
| 006 | Color ID | | |
| 007 | Maintenance ID | | |

| 800 | 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 |
| 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 | *ENG |
| 006 | Color ID | |
| 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 |
| 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 | Displays the toner bottle information |
| 002 | Attachment Date | | |
| 003 | Attachment: Total Counter | | log 1 for Bk. |
| 004 | Refill Information | | |
| 011 | Serial No. | *ENG | Displays the toner bottle information log 2 for Bk. |
| 012 | Attachment Date | | |
| 013 | Attachment: Total Counter | | |
| 014 | Refill Information | | |
| 021 | Serial No. | | Displays the toner bottle information log 3 for Bk. |
| 022 | Attachment Date | *ENG | |
| 023 | Attachment: Total Counter | | |
| 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. | *ENG | Displays the toner bottle information log 5 for Bk. |
| 042 | Attachment Date | | |
| 043 | Attachment: Total Counter | | |
| 044 | Refill Information | | |

| 7936 | [Toner Bottle Log 1: M] | | |
|------|---------------------------|-------|--|
| 001 | Serial No. | *ENG | Displays the toner bottle information log 1 for M. |
| 002 | Attachment Date | | |
| 003 | Attachment: Total Counter | | |
| 004 | Refill Information | | |
| 011 | Serial No. | | |
| 012 | Attachment Date | *5510 | Displays the toner bottle information log 2 for M. |
| 013 | Attachment: Total Counter | *ENG | |
| 014 | Refill Information | | |
| 021 | Serial No. | | Displays the toner bottle information log 3 for M. |
| 022 | Attachment Date | *ENG | |
| 023 | Attachment: Total Counter | ENG | |
| 024 | Refill Information | | |
| 031 | Serial No. | | |
| 032 | Attachment Date | *ENG | Displays the toner bottle information log 4 for M. |
| 033 | Attachment: Total Counter | | |
| 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 | Displays the toner bottle information log 1 for C. |
| 002 | Attachment Date | | |
| 003 | Attachment: Total Counter | | |
| 004 | Refill Information | | |
| 011 | Serial No. | | |
| 012 | Attachment Date | *ENG | Displays the toner bottle information log 2 for C. |
| 013 | Attachment: Total Counter | EING | |
| 014 | Refill Information | | |
| 021 | Serial No. | *ENG | Displays the toner bottle information log 3 for C. |
| 022 | Attachment Date | | |
| 023 | Attachment: Total Counter | | |
| 024 | Refill Information | | |
| 031 | Serial No. | | Displays the toner bottle information log 4 for C. |
| 032 | Attachment Date | *ENG | |
| 033 | Attachment: Total Counter | LINO | |
| 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. | *ENG | Displays the toner bottle information log 1 for Y. |
| 002 | Attachment Date | | |
| 003 | Attachment: Total Counter | | |
| 004 | Refill Information | | |
| 011 | Serial No. | *ENG | Displays the toner bottle information log 2 for Y. |
| 012 | Attachment Date | | |
| 013 | Attachment: Total Counter | | |
| 014 | Refill Information | | |
| 021 | Serial No. | *ENG | Displays the toner bottle information log 3 for Y. |
| 022 | Attachment Date | | |
| 023 | Attachment: Total Counter | | |
| 024 | Refill Information | | |
| 031 | Serial No. | *ENG | Displays the toner bottle information log 4 for Y. |
| 032 | Attachment Date | | |
| 033 | Attachment: Total Counter | | |
| 034 | Refill Information | | |
| 041 | Serial No. | *ENG | Displays the toner bottle information log 5 for Y. |
| 042 | Attachment Date | | |
| 043 | Attachment: Total Counter | | |
| 044 | Refill Information | | |

| 7950 | [Unit Replacement Date] | | | |
|------|--|------|--|--|
| | Displays the replacement date of each PM unit. | | | |
| 001 | Image Transfer Belt | *ENG | | |
| 002 | Cleaning Unit | | | |

| <i>7</i> 951 | [Remaining Day Counter] | | | | | |
|--------------|---|------|--------------------------------------|--|--|--|
| 7931 | Displays the remaining unit life of each PM unit. | | | | | |
| 001 | Page: K Drum Unit | | | | | |
| 002 | Page: M Drum Unit | *ENG | [0 to 255 / 255 / 1 day/step] | | | |
| 003 | Page: C Drum Unit | | | | | |
| 004 | Page: Y Drum Unit | | | | | |
| 005 | Page: K Dev Unit | | | | | |
| 006 | Page: M Dev Unit | | | | | |
| 007 | Page: C Dev Unit | | | | | |
| 008 | Page: Y Dev Unit | | | | | |
| 009 | Page: K Developer | | | | | |
| 010 | Page: M Developer | | | | | |
| 011 | Page: C Developer | | | | | |
| 012 | Page: Y Developer | | | | | |
| 013 | Page: ITB Unit | | | | | |
| 014 | Page: Cleaning Unit | | | | | |
| 015 | Page: Fusing Unit | | | | | |
| 016 | Page: PTR Unit | | | | | |

| 031 | Rotation: K Drum Unit | | |
|-----|---|------|--------------------------------------|
| 032 | Rotation: M Drum Unit | | |
| 033 | Rotation: C Drum Unit | | |
| 034 | Rotation: Y Drum Unit | | |
| 035 | Rotation: K Dev Unit | | |
| 036 | Rotation: M Dev Unit | | |
| 037 | Rotation: C Dev Unit | | |
| 038 | Rotation: Y Dev Unit | | |
| 039 | Rotation: K Developer | *ENG | [0 to 255 / 255 / 1 day/step] |
| 040 | Rotation: M Developer | | , ===, ,, , |
| 041 | Rotation: C Developer | | |
| 042 | Rotation: Y Developer | | |
| 043 | Rotation: ITB Unit | | |
| 044 | Rotation: Cleaning Unit | | |
| 045 | Rotation: Fusing Unit | | |
| 046 | Rotation: PTR Unit | | |
| 047 | Measurement: Toner Collection bottle | | |

| 7952 | [PM Yield Setting] | | |
|------|---|------|---|
| 7932 | Adjusts the unit yield of each PM unit. | | |
| 001 | Rotation: ITB Unit | *CTL | [0 to 99999999 / 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: ITB Unit | *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: K Drum Unit | | |
| 022 | Day: M Drum Unit | | |
| 023 | Day: C Drum Unit | | |
| 024 | Day: Y Drum Unit | | |
| 025 | Day: K Dev Unit | | |
| 026 | Day: M Dev Unit | | |
| 027 | Day: C Dev Unit | | |
| 028 | Day: Y Dev Unit | | Adjusts the threshold day for the near end fro each |
| 029 | Day: K Developer | *CTL | PM unit. [1 to 30 / 15 / 1 day/step] |
| 030 | Day: M Developer | | These threshold days are used for @Remote alarms. |
| 031 | Day: C Developer | | |
| 032 | Day: Y Developer | | |
| 033 | Day: ITB Unit | | |
| 034 | Day:Cleaning Unit | | |
| 035 | Day: Fusing Unit | | |
| 036 | Day: PTR Unit | | |
| 037 | Day: Toner Collection Botte | | |
| 038 | Rotation: PCU (Drum Unit): Bk | | |
| 039 | Rotation: PCU (Drum Unit): M | | [0.4-000000000 / 0 / 1 / 4] |
| 040 | Rotation: PCU (Drum Unit): C | | [0 to 999999999 / 0 / 1 mm/step] |
| 041 | Rotation: PCU (Drum Unit): Y | | |
| 042 | Rotation: Development Unit: Bk | | |
| 043 | Rotation: Development Unit: M | | [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 | [0 to 99999999 / 0 / 1 mm/step] |
| 048 | Rotation: Developer: C | [0 to 99999999 / 0 / 1 mm/ step] |
| 049 | Rotation: Developer: Y | |
| 050 | Page: PCU (Drum Unit): Bk | |
| 051 | Page: PCU (Drum Unit): M | [0 to 999999 / 0 / 1 sheet/step] |
| 052 | Page: PCU (Drum Unit): C | [0 10 444444 / 0 / 1 street/ steb] |
| 053 | Page: PCU (Drum Unit): Y | |
| 054 | Page: Development Unit: Bk | |
| 055 | Page: Development Unit: M | [0 to 999999 / 0 / 1 sheet/step] |
| 056 | Page: Development Unit: C | [0 to 999999 / 0 / 1 sneet/ step] |
| 057 | Page: Development Unit: Y | |
| 058 | Page: Developer: Bk | |
| 059 | Page: Developer: M | [0 to 000000 / 0 / l shoot/storn] |
| 060 | Page: Developer: C | [0 to 999999 / 0 / 1 sheet/step] |
| 061 | Page: Developer: Y | |

| 7953 | [Operation Env. Log: PCU: Bk] | | |
|------|--|--------|---------------------------------|
| | Displays the PCU 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>+ 0.71</td><td></td></t<=5:0<=h<30<> | + 0.71 | |
| 003 | 0 <t<=5: 30<="H<70</td"><td>*CTL</td><td>[0 to 99999999 / - / 1 mm/step]</td></t<=5:> | *CTL | [0 to 99999999 / - / 1 mm/step] |
| 004 | 0 <t<=5: 70<="H<=100</td"><td></td><td></td></t<=5:> | | |

| 005 | 5 <t<15: 0<="H<30</td"></t<15:> |
|-----|--|
| 006 | 5 <t<15: 30<="H<55</td"></t<15:> |
| 007 | 5 <t<15: 55<="H<80</td"></t<15:> |
| 800 | 5 <t<15: 80<="H<=100</td"></t<15:> |
| 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: 55<=H<55 |
| 015 | 25<=T<30: 55<=H<80 |
| 016 | 25<=T<30: 80<=H<=100 |
| 017 | 30<=T: 0<=H<30 |
| 018 | 30<=T: 30<=H<55 |
| 019 | 30<=T: 55<=H<80 |
| 020 | 30<=T: 80<=H<=100 |

| 7954 | [Operation Env. Log Clear] |
|---------------------------------------|----------------------------|
| Clears the operation environment log. | |
| 001 | |

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 when |
| P: | Print application. | 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 |
| 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) |

| Abbreviation | What it means |
|--------------|---|
| 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 |
| 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) |



• 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 |
|-------|--------------|------|---|
| 8 002 | C:Total Jobs | *CTL | 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.

Q

- 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 01 1 | T:Jobs/LS | *CTL |
|--------|-----------|------|
| 8 012 | C:Jobs/LS | *CTL |
| 8 013 | F:Jobs/LS | *CTL |
| 8 014 | P:Jobs/LS | *CTL |
| 8 015 | S:Jobs/LS | *CTL |
| 8 016 | L:Jobs/LS | *CTL |
| 8 017 | O:Jobs/LS | *CTL |

These SPs count the number of jobs stored to the document server by each application, to reveal how local storage is being used for input.

[0 to 9999999/ 0 / 1]

The L: counter counts the number of jobs stored from within the document server mode screen at the operation panel.

- 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] |
| 8 025 | S:Pjob/LS | *CTL | The L: counter counts the number of jobs stored from 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 output documents from the document server. |
| 8 033 | F:Pjob/DesApl | *CTL | [0 to 9999999 / 0 / 1] |
| 8 034 | P:Pjob/DesApl | *CTL | The L: counter counts the number of jobs printed from |
| 8 035 | S:Pjob/DesApl | *CTL | within the document server mode screen at the operation panel. |
| 8 036 | L:Pjob/DesApl | *CTL | |

- When documents already stored on the document server are printed, the count for the application that started the print job is incremented.
- When the print job is started from a network application (Desk Top Binder, Web Image Monitor, etc.)
 the L: counter increments.

| 8 041 | T:TX Jobs/LS | *CTL | These SPs count the applications that stored files on the |
|-------|--------------|------|---|
| 8 042 | C:TX Jobs/LS | *CTL | document server that were later accessed for transmission over the telephone line or over a network |
| 8 043 | F:TX Jobs/LS | *CTL | (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] Note: Jobs merged for sending are counted |
| 8 045 | S:TX Jobs/LS | *CTL | separately. |
| 8 046 | L:TX Jobs/LS | *CTL | The L: counter counts the number of jobs scanned from within the document server mode screen at the |
| 8 047 | O:TX Jobs/LS | *CTL | 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 country with the country of t |
|-------|------------------|------|--|
| 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 over a |
| 8 053 | F:TX Jobs/DesApl | *CTL | network (attached to an e-mail, or as a fax image by I-Fax). Jobs merged for sending are counted |
| 8 054 | P:TX Jobs/DesApl | *CTL | 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 finishin application. | g methods | . The finishing method is specified by the |

| | C:FIN Jo | bs | *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 Jobs | | *CTL | [0 to 9999999/ 0 / 1] | | |
| 8 063 | These SP | - | ethods for | fax jobs only. The finishing method is specified by | | |
| | Note: Fin | ishing features fo | or fax jobs | are not available at this time. | | |
| | P:FIN Jol | os | *CTL | [0 to 9999999/ 0 / 1] | | |
| 8 064 | 1 | s total finishing m | ethods for | print jobs only. The finishing method is specified | | |
| | S:FIN Jol | os | *CTL | [0 to 9999999/ 0 / 1] | | |
| 8 065 | These SPs total finishing methods for scan jobs only. The finishing method is specified by the application. | | | | | |
| | Note: Finishing features for scan jobs are not available at this time. | | | | | |
| | L:FIN Jobs | | *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 So and then stored on the document server, the L: counter increments. (See St 066 1) | | | | |
| 8 06x 2 | Stack | nck 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 | | 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. |

| | 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 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 nun | nber of fo | ux jobs by size based on the number of | | |
| | P:Jobs/PGS | *CTL | [0 to 9 | 999999/ 0 /1] | | |
| 8 074 | These SPs count and calculate the number of print jobs by size based on the number of pages in the job. | | | | | |
| | S:Jobs/PGS | | [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 9999999/ 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 | | 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 avail | able 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.

| 8 121 | T:IFAX TX Jobs | *CTL | [0 to 9999999/ 0 / 1] | | | | |
|--|---|--|------------------------------|--|--|--|--|
| | These SPs count the total number of jobs (color or black-and-white) sent, either directly or using a file stored on the document server, as fax images using I-Fax. | | | | | | |
| | Note: Color fax sending | Note: Color 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 blackand-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 | 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 | 3 151 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 media by the |
|-------|----------------------|------|---|
| 8 185 | S:Scan to Media Jobs | *CTL | 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 | 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 disp | layed in the | SMC Report, and in the User Tools display. | | | |
| | F: LSize Scan PGS | *CTL | [0 to 9999999/ 0 / 1] | | | |
| 8 203 | 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. | | | | | |
| | S:LSize Scan PGS | *CTL | [0 to 9999999/ 0 / 1] | | | |
| 8 205 | 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. | | | | | |

Note: 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.

| 0.001 | ADF Org F | eeds | *CTL | [0 to 9999999/ 0 / 1] | | | |
|---------|-------------|--|-------------|--|--|--|--|
| 8 221 | These SPs o | count the number of | of pages fe | ed through the ADF for front and back side scanning. | | | |
| 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] | | | |
|---------|--|---|---|--|--|--|
| 8 231 | These SPs count the number work load on the ADF. | ant the number of pages scanned by each ADF mode to d the ADF. | | | | |
| 8 231 1 | Large Volume | Selectable. Large copy jobs that cannot be loaded in th ADF at one time. | | | | |
| 8 231 2 | SADF | Selec | ctable. Feeding pages one by one through the ADF. | | | |
| 8 231 3 | Mixed Size | Selectable. Select "Mixed Sizes" on the operation pane | | | | |
| 8 231 4 | Custom Size | Selectable. Originals of non-standard size. | | | | |
| 8 231 5 | Platen | Book mode. Raising the ADF and placing the original directly 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 scanned by original type for Copy jobs | | | | |
| 8 243 | F:Scan PGS/Org | *CTL | [0 to 9999999/ 0 / 1] | | |
| 0 243 | 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 scanned by original type for Scan jobs. | | | | |
| 8 246 | L:Scan PGS/Org | *CTL | [0 to 9999999/ 0 / 1] | | |

These SPs count the number of pages scanned and stored from within the document server mode screen at the operation panel, and with the Store File button from within the Copy mode screen

| | 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 | 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: 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 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 Erase> Center |
| 8 256 | L:Scan PGS/ImgEdt | *CTL | Image Repeat |
| | | | Centering |
| | | *CTL | Positive/Negative |
| 8 257 | O:Scan PGS/ImgEdt | | [0 to 9999999/ 0 / 1] |
| O 237 O Scall 1 Goy Inligital | | | 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. |

| 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 feat | | |
| 8 26x 3 | Background | have been selected at the operation panel. | | |
| 8 26x 4 | Other | | | |

| 8 281 | T:Scan PGS/TWAIN | *CTL | These SPs count the number of pages scanned using a | |
|-------|------------------|------|---|--|
| 8 285 | S:Scan PGS/TWAIN | *CTL | 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 the |
|-------|------------------|------|--|
| 8 293 | F:Scan PGS/Stamp | *CTL | 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]. | | | | |
| 8 302 | C:Scan PGS/Size | *CTL | [0 to 9999999/ 0 / 1] | | |

| | These SPs count by size the total number of pages scanned by the Copy application. Use these totals to compare original page size (scanning) and output (printing) page size [SP 8-442]. | | | | |
|-----------|--|------|---|--|--|
| | F:Scan PGS/Size | *CTL | [0 to 9999999/ 0 / 1] | | |
| 8 303 | - | | of pages scanned by the Fax application. Use e (scanning) and output page size [SP 8-443]. | | |
| | S:Scan PGS/Size | *CTL | [0 to 9999999/ 0 / 1] | | |
| 8 305 | , | | er of pages scanned by the Scan application. ge size (scanning) and output page size [SP | | |
| | 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 | HLT | | | | |
| 8 30x 10 | Full Bleed | | | | |
| 8 30x 254 | Other (Standard) | | | | |
| 8 30x 255 | Other (Custom) | | | | |

| 8 311 | T:Scan PGS/Rez | *CTL | [0 to 9999999/ 0 / 1] |
|-------|----------------|------|------------------------------|
|-------|----------------|------|------------------------------|

| | These SPs count by resolut that can specify resolution | • | e total number of pages scanned by applications |
|---------|--|-----------|---|
| | S: Scan PGS/Rez | *CTL | [0 to 9999999/ 0 / 1] |
| 8 315 | that can specify resolution | settings. | e total number of pages scanned by applications 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 | 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 from |
| 8 385 | S:Total PrtPGS | *CTL | within the document server mode screen at the |
| 8 386 | L:Total PrtPGS | *CTL | operation panel. Pages stored with the Store File button from within the Copy mode screen go to the C: counter. |
| 8 387 | O:Total PrtPGS | *CTL | |

- 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 prin | ted on par | per sizes A3/DLT and larger. |
| | Note : In addition to being a displayed in the User Tools | . , | n the SMC Report, these counters are also 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 used |
| 8 403 | F:PrtPGS/LS | *CTL | 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 | |

- 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. [O to 9999999/0/1] |
|-------|---------------|------|--|
|-------|---------------|------|--|

| | T:PrtPGS/Dup Comb | *CTL | [0 to 9999999/ 0 / 1] |
|-------|--|------|--|
| 8 421 | These SPs count by binding a processed for printing. This is | | oine, and n-Up settings the number of pages for all applications. |
| | C:PrtPGS/Dup Comb | *CTL | [0 to 9999999/ 0 / 1] |
| 8 422 | These SPs count by binding a processed for printing by the | | pplication. |
| 8 423 | F:PrtPGS/Dup Comb | *CTL | [0 to 9999999/ 0 / 1] |

| | These SPs count by bir processed for printing | - | | oine, and n-Up settings the number of pages lication. |
|----------|---|-------|----------|---|
| | P:PrtPGS/Dup Comb | | *CTL | [0 to 9999999/ 0 / 1] |
| 8 424 | These SPs count by bir processed for printing | | | oine, and n-Up settings the number of pages application. |
| | S:PrtPGS/Dup Comb | | *CTL | [0 to 9999999/ 0 / 1] |
| 8 425 | These SPs count by bir 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 | 1 | - | | oine, and n-Up settings the number of pages document server mode window at the operation |
| | O:PrtPGS/Dup Comb | | *CTL | [0 to 9999999/ 0 / 1] |
| 8 427 | These SPs count by bir 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 | 2> | 2 pag | ges on 1 | side (2-Up) |
| 8 42x 7 | 4> | 4 pag | ges on 1 | side (4-Up) |
| 8 42x 8 | 6> | 6 pag | ges on 1 | side (6-Up) |
| 8 42x 9 | 8> | 8 pag | ges on 1 | side (8-Up) |
| 8 42x 10 | 9> | 9 pag | ges on 1 | side (9-Up) |
| 8 42x 11 | 16> | 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 num | | iges output with the three features below, sed. |
| | C:PrtPGS/ImgEdt | *CTL | [0 to 9999999/ 0 / 1] |
| 8 432 | These SPs count the total num copy application. | ber of pag | ges output with the three features below with the |
| | P:PrtPGS/ImgEdt | *CTL | [0 to 9999999/ 0 / 1] |
| 8 434 | These SPs count the total num print application. | ber of pag | ges output with the three features below with the |
| | L:PrtPGS/ImgEdt | *CTL | [0 to 9999999/ 0 / 1] |
| 8 436 | These SPs count the total number window at the operation paners | | ges output from within the document server mode e three features below. |
| 8 437 | O:PrtPGS/ImgEdt | *CTL | [0 to 9999999/ 0 / 1] |

| | These SPs count the to | tal number of pages 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 43× 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 po | per size th | ne number of pages printed by all applications. |
| | C:PrtPGS/Ppr Size | *CTL | [0 to 9999999/ 0 / 1] |
| 8 442 | These SPs count by print po | iper size th | ne number of pages printed by the copy |
| 8 443 | F:PrtPGS/Ppr Size | *CTL | [0 to 9999999/ 0 / 1] |
| 0 443 | These SPs count by print pa | per size the | e 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 po | iper size th | ne number of pages printed by the printer |
| | S:PrtPGS/Ppr Size | *CTL | [0 to 9999999/ 0 / 1] |
| 8 445 | These SPs count by print po | iper size th | number of pages printed by the scanner |
| | L:PrtPGS/Ppr Size | *CTL | [0 to 9999999/ 0 / 1] |
| 8 446 | These SPs count by print po | | ne number of pages printed from within the operation panel. |
| 8 447 | O:PrtPGS/Ppr Size | *CTL | [0 to 9999999/ 0 / 1] |
| 0 44/ | These SPs count by print pa | per size the | e 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 | he num | ber of sheets | fed from each paper feed station. | |
| 8 451 1 | Bypass Tray | Вура | ss Tray | | |
| 8 451 2 | Tray 1 | Copi | er | | |
| 8 451 3 | Tray 2 | Copi | Copier | | |
| 8 451 4 | Tray 3 | Pape | Paper Tray Unit (Option) | | |
| 8 451 5 | Tray 4 | Pape | Paper Tray Unit (Option) | | |
| 8 451 6 | Tray 5 | LCT (| LCT (Option) | | |
| 8 451 7 | Tray 6 | Curre | ently not used. | | |
| 8 451 8 | Tray 7 | Curre | Currently not used. | | |
| 8 451 9 | Tray 8 | Curre | Currently not used. | | |
| 8 451 10 | Tray 9 | Curre | Currently not used. | | |

| 8 461 | T:PrtPGS/Ppr Type | *CTL | [0 to 9999999/ 0 / 1] |
|-------|-------------------------------|----------|---------------------------------------|
| 0 401 | These SPs count by paper type | the numb | er pages printed by all applications. |

| | | measure th | the PM counter. The PM counter is based on ne service life of the feed rollers. However, ming. | | |
|---------|--|-----------------------|--|--|--|
| | Blank sheets (covers, cha | pter cover | s, slip sheets) are also counted. | | |
| | During duplex printing, po on one side counts as 1. | one side counts as 1. | | | |
| 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 numb | er pages printed by the printer application. | | |
| | L:PrtPGS/Ppr Type | *CTL | [0 to 9999999/ 0 / 1] | | |
| 8 466 | These SPs count by paper type server mode window at the op | | er pages printed from within the document inel. | | |
| 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 | ОНР | | | | |
| 8 46x 8 | Other | | | | |

| 8 471 | PrtPGS/Mag | *CTL | [0 to 9999999/ 0 / 1] |
|---------|-------------------------|--------------------|------------------------------|
| 0 4/ 1 | These SPs count by magn | ification 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 numbe | r of pages | printed with the Toner Save feature switched on. |
| | Note: These SPs return the | same resu | Its as this SP is limited to the Print application. |
| | [0 to 9999999/ 0 / 1] | | |

| | CTL | T:PrtPGS/Col Mode | 8 491 |
|---|-----|--|---|
| | CTL | C:PrtPGS/Col Mode | 8 492 |
| mber of pages printed in the | CTL | F:PrtPGS/Col Mode | 8 493 |
| ·FF · · · · · · · · · · · · · · · · · · | CTL | L:PrtPGS/Col Mode | 8 496 |
| | CTL | O:PrtPGS/Col Mode | 8 497 |
| | ' | B/W | 8 49x 1 |
| | | Single Color | 8 49x 2 |
| | | Two Color | 8 49x 3 |
| | | Full Color | 8 49x 4 |
| mber of pages printe | CTL | F:PrtPGS/Col Mode L:PrtPGS/Col Mode O:PrtPGS/Col Mode B/W Single Color Two Color | 8 496 8 497 8 49x 1 8 49x 2 8 49x 3 |

| 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 coun | it by printe | r emulation | mode the total number of pages printed. |
| 8 5 1 4 | P:PrtPGS/Emul | | *CTL | [0 to 9999999/ 0 / 1] |
| 8 3 1 4 | These SPs coun | it by printe | r 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 | | | |
| 8 514 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 | Japan O | nly | |

|--|--|

- \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] | | |
|---------|--|--|--|--|--|
| 0 321 | These SPs count by finishing m | unt 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 application. | nt by finishing mode the total number of pages printed by the Copy | | | |
| | F:PrtPGS/FIN | *CTL [0 to 9999999 / 0 / 1] | | | |
| 8 523 | application. | 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 rapplication. | nt by finishing mode the total number of pages printed by the Print | | | |
| | S:PrtPGS/FIN | *CTL | [0 to 9999999 / 0 / 1] | | |
| 8 525 | These SPs count by finishing application. | unt by finishing mode the total number of pages printed by the Scanner | | | |
| | L:PrtPGS/FIN | *CTL | [0 to 9999999 / 0 / 1] | | |
| 8 526 | These SPs count by finishing a | | rotal number of pages printed from within 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 | | | | |
| | | | | | |

- 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 *CT |
|-------------------|
|-------------------|

| | T:Counter | *CTL | [0 to 9999999 / 0 / 1] |
|----------|--|------|-------------------------------|
| 8 581 | These SPs count the total output broken down by color output, regardless of the application used. In addition to being displayed in the SMC Report, these counters are also displayed in the User Tools display on the copy machine. | | |
| 8 581 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 Colour Mode Print | | |

ď

| 8 581 18 | Full Colour Print (Twin) | | | |
|----------|--|------------------------|------------------------------|--|
| 8 581 19 | Mono Colour Print (Twin) | | | |
| 8 581 20 | Full Colour Total (CV) | | | |
| 8 581 21 | Mono Colour Total (CV) | | | |
| 8 581 22 | Full Colour Print (CV) | Full Colour 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 | 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 | | | |

| 8 586 | L:Counter | *CTL | [0 to 9999999/ 0 / 1] |
|-------|-----------|------|------------------------------|
|-------|-----------|------|------------------------------|

8 584 4

8 584 5

Single Color

Two Color

| | 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 | These SPs count the totals for A3/DLT paper use, number of duplex pages printed, at the number of staples used. These totals are for Other (O:) applications only. | | |
| 8 591 1 | A3/DLT | | |
| 8 591 2 | Duplex | | |

| | Coverage Counter | *CTL | [0 to 9999999/ 0 / 1] |
|----------|--|------|------------------------------|
| 8 601 | These SPs count the total coverage for each color and the total printout pages for each 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 | | |

| 0.417 | 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 |

| 8 631 | T:FAX TX PGS | *CTL | [0 to 9999999/ 0 / 1] | |
|---------|--|------|--|--|
| 6 03 1 | These SPs count by color mode the number of pages sent by fax to a telephone | | | |
| 0.422 | 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 | | er 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] |
|---|---------------|--|------------------------------|
| These SPs count by color mode the number of pages sent by fax to as fax in I-Fax. | | | |
| | F:IFAX TX PGS | *CTL | [0 to 9999999/ 0 / 1] |
| These SPs count by color mode the number of pages sent by Fax as fax I-Fax. | | 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 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-Scan application only. | | | |
| 8 65x 1 | B/W | | | |
| 8 65x 2 | Color | | | |



- 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 s 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 | 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 | These SPs count by color mode the total number of pages sent to a folder on 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 | B/W | | | | |
| 8 67x 2 | Color | | | | |

| 8 681 | T:PCFAX TXPGS | *CTL | These SPs count the number of pages sent by PC Fax. These |
|-------|---------------|------|--|
| 8 683 | F:PCFAX TXPGS | *CTL | 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 used to store the pages is incremented. |
| 8 693 | F:TX PGS/LS | *CTL | [0 to 9999999/ 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 | | 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. |

U Note

- Print jobs done with Web Image Monitor and Desk Top Binder are added to the count.
- If several documents are merged for sending, the number of pages stored are counted for the application that stored them.
- When several documents are sent by a Fax broadcast, the F: count is done for the number of pages sent to each destination.

| | TX PGS/Port | *CTL | [0 to 9999999/ 0 / 1] | |
|---------|---|------|------------------------------|--|
| 8 701 | These SPs count the number of pages sent by the physical port used to send them. example, if a 3-page original is sent to 4 destinations via ISDN G4, the count for (G3, G4) is 12. | | | |
| 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] |
|------------------------------------|--------------------|------------|------------------------------------|
| 0.71.5 | S:Scan PGS/Comp | *CTL | [0 to 9999999/ 0 / 1] |
| These SPs count the number of page | | 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 | | |

| ı | | | | |
|---|-------|-----------------|------|------------------------------|
| | 8 721 | T:Deliv PGS/WSD | *CTL | [0 to 9999999/ 0 / 1] |

| 8 725 | S: Dvliv PGS/WSD | *CTL | | |
|-------|---|------|--|--|
| 6723 | 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 | - | | | |

| 8 741 | RX PGS/Port | *CTL | [0 to 9999999/ 0 / 1] | | | |
|---------|---|------|------------------------------|--|--|--|
| 0 / 4 1 | These SPs count the number of pages received by the physical port used to receive the | | | | | |
| 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 | K | | | | | |
| 8 771 3 Y | | | | | | |
| 8 771 4 | 3 771 4 M | | | | | |
| 8 771 5 | С | | | | | |

| | Toner_Bottle_Ir | nfo. *ENG | | [0 to 9999999/ 0 / 1] |
|--|-----------------|-------------------------------------|--------------|------------------------------|
| These SPs display the number of already replaced toner bottles. NOTE: Currently, the data in SP7-833-011 through 014 and the data i through 004 are the same. | | | , . | |
| 8 781 1 | Toner: BK | The number of black-toner bottles | | |
| 8 781 2 | Toner: Y | The number of yellow-toner bottles | | v-toner bottles |
| 8 781 3 | Toner: M | The number of magenta-toner bottles | | |
| 8 781 4 | Toner: C | The numb | oer 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] | |
|--|------------------|------|--|--|
| | Toner Remain | *CTL | [0 to 100/0/1] | |
| 8 801 to check the toner supply at any time. Note: This precise method of measuring | | | remaining for each color. This SP allows the user g remaining toner supply (1% steps) is better than only measure in increments of 10 (10% steps). | |
| 8 801 1 | K | | | |
| 8 801 2 | | | | |
| 8 801 3 | | | | |
| 8 801 4 | С | | | |

| | CVr Cnt: 0-10% | *ENG | [0 to 9999999/ 0 / 1] | | | | |
|----------|---|----------|------------------------------|-------------|--|--|--|
| 8 851 | These SPs display the number of scanned sheets on which the coverage of each color is from 0% to 10%. | | | | | | |
| 8 851 11 | 0 to 2%: BK | 8 851 31 | | 5 to 7%: BK | | | |
| 8 851 12 | 0 to 2%: Y | 8 8 5 | 51 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] | |
|---------|---|--|------------------------------|--|
| 8 861 | These SPs display the num is from 11% to 20%. | ned sheets on which the coverage of each color | | |
| 8 861 1 | BK | | | |
| 8 861 2 | | | | |
| 8 861 3 | | | | |
| 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%. | ned sheets on which the coverage of each color | | |
| 8 871 1 | ВК | | | |
| 8 871 2 | Υ | | | |
| 8 871 3 | M | | | |
| 8 871 4 | С | | | |

| | CVr Cnt: 31%- | *ENG | [0 to 9999999/ 0 / 1] | | | |
|---------|--|------|------------------------------|--|--|--|
| 8 881 | These SPs display the number of scanned sheets on which the coverage of each color is 31% or higher. | | | | | |
| 8 881 1 | ВК | | | | | |
| 8 881 2 | Y M | | | | | |
| 8 881 3 | | | | | | |
| 8 881 4 | С | | | | | |

| 8 901 | Page/Toner_prev1 | *ENG | [0 to 9999999/ 0 / 1] | | | |
|---------|----------------------------|--|------------------------------|--|--|--|
| 0 901 | These SPs display the amou | display the amount of the remaining 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 amou | aining 2nd previous toner for each color. | |
| 8 9 1 1 1 | BK | | |
| 8 911 2 | Υ | | |
| 8 911 3 | М | | |
| 8 911 4 | С | | |

| 8 921 | Cvr Cnt/Total | *CTL | [0 to 9999999/ 0 / 1] |
|---------|-----------------------------|--------------|---------------------------------|
| 0 921 | Displays the total coverage | 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 | SPs are useful for custom | SPs count the amount of time the machine spends in each operation mode. These useful for customers who need to investigate machine operation for ement in their compliance with ISO Standards. | | | | |
| 8 941 1 | Operation Time | 0 , | ation time. Does not include time while controller ta 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 of with the power switches. | | | | |
| 8 941 6 | SC | Total time w | hen 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 | Supply PM Unit End | Total time when toner end has been staying | | | | |

| 8 951 | AddBook Register *CTL | | | | | |
|-------------------------|-----------------------|--------------------------|------------------------|------------------------------|--|--|
| These SPs count the num | | umber of even | ts when the machine mo | anages data registration. | | |
| 8 951 1 | User Code/User ID | User code registrations. | | [0 to 9999999/ 0 / 1] | | |

| | 1 | 1 | |
|----------|------------------|--|-----------------------------|
| 8 951 2 | Mail Address | Mail address registrations. | |
| 8 951 3 | Fax Destination | Fax destination registrations. | |
| 8 951 4 | Group | Group destination registrations. | |
| 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 | Fax application registrations with the Program (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 9999 | 999/0/1] | | | |
|----------|---|------|------------|----------|--|--|--|
| 0 999 | 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 |

SP9-XXX: Others

| 9511 | Skew Origin Set | *CTL | | |
|------|-----------------|--|--|--|
| 001 | M: Skew Motor | | | |
| 002 | C: Skew Motor | These SPs reset the skew correction value (SP2-119-00 to -003) to "0". | | |
| 003 | Y: Skew Motor | | | |

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 |

| 7 | - | × |
|---|---|---|
| r | a | 1 |
| ĸ | ۰ | 2 |
| r | ۸ | |
| U | v | |

| 5000 | Daggi-# | Rea | ding | |
|---------|---|-----------------------------------|--------------------|--|
| 5803 | Description | 0 | 1 | |
| 5803 1 | 2nd Tray Size Detection | See table 2 following 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 | 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 | g this table. | |
| 5803 7 | 1st Tray Paper End Detection | No paper | Paper remaining | |
| 5803 8 | 3 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 | g this table. | |
| 5803 14 | 1st Paper Feed Sensor | Paper detected | Paper not detected | |
| 5803 15 | 2st 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 | 1 st 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 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 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 Loc | |
|---|----------|
| | ck |
| 5803 55 Paper Exit Fan:Lock Normal Loc | ck |
| 5803 56 Fusing Coil Fan: Lock Normal Loc | ck |
| 5803 57 IH Power Supply Cooling Fan: Lock Normal Loc | ck |
| 5803 60 ITB Contact Motor Position Not contact Con | tact |
| 5803 61 Paper Transfer Contact Motor Position Not contact Con | tact |
| 5803 62 Toner Relay Motor: Lock Normal Loc | ck |
| 5803 63 ITB Drive Motor: Lock Normal Loc | ck |
| 5803 64 K Drum/Development Drive Motor: Lock Normal Loc | ck |
| 5803 65 M Drum/Development Drive Motor: Lock Normal Loc | ck |
| 5803 66 C Drum/Development Drive Motor: Lock Normal Loc | ck |
| 5803 67 Y Drum/Development Drive Motor: Lock Normal Loc | ck |
| 5803 68 Fusing Exit Motor:Lock Normal Loc | ck |
| 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 85 Fusing Destination Detection: EU Set Not | set |
| 5803 86 Fusing Destination Detection: TWN 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 Con | tact |
| 5803 94 GAVD Open/Close Detection Closed Op | en |

| | | (LD5V ON) | (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

| 1 | | 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 |

Table 3: Paper Size (By-pass Table)

0: ON, 1: OFF

| Ву | -pass Pape | er Size Sens | sor | Janeth Canaar | NA | ELL/ACIA |
|------|------------|--------------|------|---------------------|-------------|----------|
| bit3 | Bit2 | Bit1 | BitO | Length Sensor NA EU | | 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 | 1 | 0 | 0 | DLT SEF | A3 SEF |

^{*1:} The machine detects either 11" x 17" SEF or A3 SEF, depending on the setting of SP 5-181-003.

^{*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.

| Ву | -pass Pape | r Size Sens | sor | Innath Canan | NIA | EU/ASIA | |
|------|------------|-------------|------|---------------|----------|---------|--|
| bit3 | Bit2 | Bit1 | BitO | Length Sensor | NA NA | EU/ASIA | |
| 1 | 1 | 1 | 0 | 1 | LT LEF | A4 LEF | |

^{* 1:} The paper size (LT or LG) can be selected with SP1-007-001.

Table 4: APS Original Size Detection

| Original | Le | Length Sensor | | Width Sensor | | SP4-301 | | |
|---|-----------------------------|---------------|----|--------------|----|---------|----------|--|
| Metric version | Inch version | L3 | L2 | L1 | W1 | W2 | display | |
| А3 | 11" x 17" | 0 | 0 | 0 | 0 | 0 | 00011111 | |
| B4 | 10" x 14" | 0 | 0 | 0 | 0 | Х | 00011110 | |
| F4 8.5" x 13", 8.25" x 13", or 8" x 13" SP 5126 controls the size that is detected | 8.5" x 14" | 0 | 0 | 0 | X | X | 00011100 | |
| A4 LEF | 8.5" x 11" | Х | Х | Х | 0 | 0 | 00000011 | |
| B5 LEF | - | Х | Х | Х | 0 | Х | 00000010 | |
| A4 SEF | 11" x 8.5" | Х | 0 | 0 | Х | Х | 00001100 | |
| B5 SEF | - | Х | Х | 0 | Х | Х | 00000100 | |
| A5 LEF/ SEF | 5.5" x 8.5", 8.5" x 5.5" | Х | Х | Х | Х | Х | 00000000 | |

ADF (B802)

| 6007 | 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 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 |
| | | | |

2000/3000-Sheet (Booklet) Finisher (B804, B805)

| 6140 | Bit | Description | Read | ing |
|--------|-----------------------------|--------------------------|-----------------------|-------------------|
| 0140 | DII | Description | 0 | 1 |
| 6140 1 | Entra | ince Sensor | Paper not detected | Paper detected |
| 6140 2 | Proo | Exit Sensor | Paper not detected | Paper detected |
| 61403 | Proof Full Detection Sensor | | Not Full | Full |
| 61404 | Traili | ng Edge Detection: Shift | Paper not detected* 1 | Paper detected* 1 |

| /1405 | C. F.; C | D . I I | D 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 | НР |
| 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 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 | 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 | НР |
| 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 |
| 6140 47 | Exit Jogger HP Sensor: Front | Not used in t | ne machine |
| 6140 48 | Exit Jogger HP Sensor: Rear | Not used in t | ne machine |
| 6140 49 | Exit Jogger HP Sensor: Upper | Not used in t | ne machine |
| | | | |

* 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 (B408)

| 4100 | 5 | Read | ling |
|---------|--|--------------------|---------------------|
| 6139 | Description | 0 | 1 |
| 61391 | 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 |

Bridge Unit (D386)

| 6150 | Description - | Read | ling |
|--------|------------------------------|----------------|--------------------|
| 6130 | | 0 | 1 |
| 6150 1 | Bridge: Exit Sensor | Paper detected | Paper not detected |
| 61502 | Bridge: Feed Sensor | Paper detected | Paper not detected |
| 61503 | Bridge:Set Detection | Set | Not set |
| 61504 | Bridge: Exit Cover Detection | Closed | Open |
| 61505 | Bridge: Feed Cover Detection | Closed | Open |

Internal Shift Tray (D388)

| 6152 | Description | Read | ing |
|--------|------------------------|----------------------|---------------------|
| 6132 | Description | 0 | 1 |
| 6152 1 | Shift:Set Detection | Set | Not set |
| 6152 2 | Shift: Position Sensor | Tray position: Front | Tray position: Rear |

1 Bin Tray (D414)

| 6154 | Description | Read | ing |
|--------|----------------------|------|---------|
| 0134 | Description | 0 | 1 |
| 6154 1 | 1 bin: Set Detection | Set | Not set |

| 6154 2 1 bin: Paper Sensor Paper detected Paper not detected |
|--|
|--|

One or Two-Tray PFU (D387/D351)/ LCIT 2000 (D352)/ LCIT 1200 (D353)

| 6160 | Description | Read | ing |
|---------|----------------------------------|--------------------|----------------|
| 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 |
| 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 |
|---------|----------------------------|---|
| 5804 3 | Drum/Dev Motor: K: 230mm/s | Drum/Development Drive Motor-K: 230 mm/s |
| 5804 4 | Drum/Dev Motor: K: 205mm/s | Drum/Development Drive Motor-K: 205 mm/s |
| 5804 5 | Drum/Dev Motor: K: 154mm/s | Drum/Development Drive Motor-M: 154 mm/s |
| 58047 | Drum/Dev Motor: K: 77mm/s | Drum/Development Drive Motor-M: 77 mm/s |
| 5804 10 | Drum/Dev Motor: M: 230mm/s | Drum/Development Drive Motor- C: 230 mm/s |

| 5804 11 | Drum/Dev Motor: M: 205mm/s | Drum/Development Drive Motor-Y: 205 mm/s |
|---------|-------------------------------|---|
| 5804 12 | Drum/Dev Motor: M: 154mm/s | Drum/Development Drive Motor-Y: 154 mm/s |
| 5804 14 | Drum/Dev Motor: M: 77mm/s | Drum/Development Drive Motor-Y: 77 mm/s |
| 5804 17 | Drum/Dev Motor: C: 230mm/s | Drum/Development Drive Motor- C: 230 mm/s |
| 5804 18 | Drum/Dev Motor: C: 205mm/s | Drum/Development Drive Motor-Y: 205 mm/s |
| 5804 19 | Drum/Dev Motor: C: 154mm/s | Drum/Development Drive Motor-Y: 154 mm/s |
| 5804 21 | Drum/Dev Motor: C: 77mm/s | Drum/Development Drive Motor-Y: 77 mm/s |
| 5804 24 | Drum/Dev Motor: Y: 230mm/s | Drum/Development Drive Motor- C: 230 mm/s |
| 5804 25 | Drum/Dev Motor: Y: 205mm/s | Drum/Development Drive Motor-Y: 205 mm/s |
| 5804 26 | Drum/Dev Motor: Y: 154mm/s | Drum/Development Drive Motor-Y: 154 mm/s |
| 5804 28 | Drum/Dev Motor: Y: 77mm/s | Drum/Development Drive Motor-Y: 77 mm/s |
| 5804 31 | Fusing Exit Motor: 230mm/s | Fusing/Paper Exit Motor: 230 mm/s |
| 5804 32 | Fusing Exit Motor: 205mm/s | Fusing/Paper Exit Motor: 205 mm/s |
| 5804 33 | Fusing Exit Motor: 154mm/s | Fusing/Paper Exit Motor: 154 mm/s |
| 5804 35 | Fusing Exit Motor: 77mm/s | Fusing/Paper Exit Motor: 77 mm/s |
| 5804 36 | Fusing Exit Motor: 56mm/s | Fusing/Paper Exit Motor: 56 mm/s |
| 5804 37 | Toner Relay Motor | Toner Transport Motor |
| 5804 40 | Image Transfer Motor: 230mm/s | ITB Drive Motor: 230 mm/s |
| 5804 41 | Image Transfer Motor: 205mm/s | ITB Drive Motor: 205 mm/s |
| 5804 42 | Image Transfer Motor: 154mm/s | ITB Drive Motor: 154 mm/s |
| 5804 44 | Image Transfer Motor: 77mm/s | ITB Drive Motor: 77 mm/s |
| 5804 50 | Feed Motor: 300mm/s | Paper Feed Motor: 300 mm/s |
| 5804 51 | Feed Motor: 265mm/s | Paper Feed Motor: 265 mm/s |
| 5804 53 | Feed Motor: 230mm/s | Paper Feed Motor: 230 mm/s |
| - | | · |

| | | <u> </u> |
|---------|-----------------------------------|--|
| 5804 54 | Feed Motor: 205mm/s | Paper Feed Motor: 205 mm/s |
| 5804 55 | Feed Motor: 154mm/s | Paper Feed Motor: 154 mm/s |
| 5804 56 | Regist Motor: 115mm/s | Paper Feed Motor: 115mm/s |
| 5804 57 | Feed Motor: 77mm/s | Paper Feed Motor: 115mm/s |
| 5804 58 | Regist Motor: 215mm/s | Registration Motor: 215 mm/s |
| 5804 60 | Regist Motor: 230mm/s | Registration Motor: 230 mm/s |
| 5804 61 | Regist Motor: 205mm/s | Registration Motor: 205 mm/s |
| 5804 62 | Regist Motor: 154mm/s | Registration Motor: 154 mm/s |
| 5804 64 | Regist Motor: 77mm/s | Registration Motor: 77 mm/s |
| 5804 67 | Duplex Feed M:CW:230mm/s | Duplex/By-pass Motor: CW: 230 mm/s |
| 5804 68 | Duplex Feed M:CW:205mm/s | Duplex/By-pass Motor: CW: 205 mm/s |
| 5804 69 | Duplex Feed Motor: CW: 154mm/s | Duplex/By-pass Motor: CW: 154 mm/s |
| 580471 | Duplex Feed Motor: CW: 77mm/s | Duplex/By-pass Motor: CW: 77 mm/s |
| 580474 | Duplex Feed M:CCW:230mm/s | Duplex/By-pass Motor: CCW: 230 mm/s |
| 5804 75 | Duplex Feed M:CCW:205mm/s | Duplex/By-pass Motor: CCW: 205 mm/s |
| 5804 76 | Duplex Feed Motor: CCW: 154mm/s | Duplex/By-pass Motor: CCW: |
| 5804 78 | Duplex Feed Motor: CCW: 77mm/s | Duplex/By-pass Motor: CCW: 77 mm/s |
| 5804 81 | Duplex Reverse M:CW:230mm/s | Duplex Inverter Motor: CW: 230 mm/s |
| 5804 82 | Duplex Reverse M:CW:205mm/s | Duplex Inverter Motor: CW: 205 mm/s |
| 5804 83 | Duplex Reverse Motor: CW: 154mm/s | Duplex Inverter Motor: CW: 154 mm/s |
| 5804 85 | Duplex Reverse Motor: CW: 77mm/s | Duplex Inverter Motor: CW: 77 mm/s |
| 5804 88 | Duplex Reverse M:CCW:230mm/s | Duplex Inverter Motor: CCW: |

| | | 230 mm/s |
|----------|------------------------------------|---|
| 5804 89 | Duplex Reverse M:CCW:205mm/s | Duplex Inverter Motor: CCW: 205 mm/s |
| 5804 90 | Duplex Reverse Motor: CCW: 154mm/s | Duplex Inverter Motor: CCW: 154 mm/s |
| 5804 92 | Duplex Reverse Motor: CCW: 77mm/s | Duplex Inverter Motor: CCW: 77 mm/s |
| 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 | IH Coil Fan |

| 5804 122 | IH Power Supply Cooling Fan | IH Inverter 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 142 | Feed Tray Lock Solenoid | Tray Lock 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 147 | Duplex Junction Solenoid | Duplex Junction 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 | Bank Motor 2: 115mm/s | Paper Feed Motor 2: 115 mm/s (Optional Paper Feed Unit) |
| 5804 182 | Bank Motor 2: 154mm/s | Paper Feed Motor 2: 154 mm/s (Optional Paper Feed Unit) |
| 5804 183 | Bank Motor 2: 205mm/s | Paper Feed Motor 2: 205 mm/s (Optional Paper Feed Unit) |
| 5804 184 | Bank Motor 2: 215mm/s | Paper Feed Motor 2: 215 mm/s (Optional Paper Feed Unit) |
| 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:230mm/s | - |
| 5804 238 | PP:Charge AC:K:205mm/s | - |
| 5804 239 | HVPS: ChargeAC: K: 154mm/s | - |
| 5804 241 | HVPS: ChargeAC: K: 77mm/s | - |
| 5804 244 | PP:Charge AC:M:230mm/s | - |
| 5804 245 | PP:Charge AC:M:205mm/s | - |
| 5804 246 | HVPS: ChargeAC: M: 154mm/s | - |
| 5804 248 | HVPS: ChargeAC: M: 77mm/s | - |
| 5804 251 | PP:Charge AC:C:230mm/s | - |
| 5804 252 | PP:Charge AC:C:205mm/s | - |
| 5804 253 | HVPS: ChargeAC: C: 154mm/s | - |
| 5804 255 | HVPS: ChargeAC: C: 77mm/s | - |
| | | |

ARDF (B802)

| 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 Solenoid |
|------------------------|
|------------------------|

1000-Sheet Finisher (B408)

| 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

| 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 |
| 6145 30 | Exit Jogger Motor: Front | - |

| 6145 31 | Exit Jogger Motor: Rear | - |
|---------|---------------------------|---|
| 6145 32 | Exit Jogger Release Motor | - |

Bridge Unit (D386)

| 6151 | Display | Description |
|---|--|-----------------------------|
| 6151 1 | 6151 1 Bridge: Feed Motor: Current Selection Bridge: Feed Motor: Current switching | |
| 6151 2 Bridge: Feed Motor:Reset Bridge: Feed Motor:Reset | | Bridge: Feed Motor:Reset |
| 61513 | Bridge: Feed Motor:Enable | Bridge: Feed Motor:Enable |
| 6151 6 Bridge: Feed Motor:230mm/s Bridge: Feed Motor: 230mm/s | | Bridge: Feed Motor: 230mm/s |
| 61517 | Bridge: Feed Motor:205mm/s | Bridge: Feed Motor: 205mm/s |
| 61518 | Bridge: Feed Motor: 154mm/s | Bridge: Feed Motor: 154mm/s |
| 6151 10 | Bridge: Feed Motor: 77mm/s | Bridge: Feed Motor: 77mm/s |
| 6151 11 | Bridge: Junction Solenoid | Bridge: Junction Solenoid |

Shift Tray (D388)

| 6153 | Display | Description |
|--------|----------------------|-------------|
| 6153 1 | Shift: Lift-up Motor | - |

1 Bin Tray (D414)

| 6155 | Display | Description |
|--------|--------------------------|-------------|
| 6155 1 | 1 bin: Junction Solenoid | - |

One or Two-Tray PFU (D387/D351)/ LCIT 2000 (D352)/ LCIT 1200 (D353)

| 6161 | Display | Description |
|-------|---------------------------|--------------------|
| 61615 | Bank1: Feed Motor:300mm/s | Feed Motor:300mm/s |

| | | (D351/D352/D387) |
|---------|---------------------------|---|
| 6161 6 | Bank1: Feed Motor:265mm/s | Feed Motor:265mm/s (D351/D352/D387) |
| 61618 | Bank1: Feed Motor:230mm/s | Feed Motor:230mm/s (D351/ D352/D387) |
| 61619 | Bank1: Feed Motor:215mm/s | Feed Motor:215mm/s (D351/D352/D387) |
| 6161 10 | Bank1: Feed Motor:205mm/s | Feed Motor:205mm/s (D351/D352/D387) |
| 616111 | Bank1: Feed Motor:154mm/s | Feed Motor:154mm/s (D351/D352/D387) |
| 6161 12 | Bank1: Feed Motor:115mm/s | Feed Motor:115mm/s (D351/D352/D387) |
| 6161 13 | Bank1: Feed Motor:77mm/s | Feed Motor:77mm/s (D351/D352/D387) |
| 6161 15 | Bank2: Feed Motor:300mm/s | Feed Motor:300mm/s (D353) |
| 6161 16 | Bank2: Feed Motor:265mm/s | Feed Motor:265mm/s (D353) |
| 6161 18 | Bank2: Feed Motor:230mm/s | Feed Motor:230mm/s (D353) |
| 6161 19 | Bank2: Feed Motor:215mm/s | Feed Motor:215mm/s (D353) |
| 6161 20 | Bank2: Feed Motor:205mm/s | Feed Motor:205mm/s (D353) |
| 616121 | Bank2: Feed Motor:154mm/s | Feed Motor:154mm/s (D353) |
| 6161 22 | Bank2: Feed Motor:115mm/s | Feed Motor:115mm/s (D353) |
| 6161 23 | Bank2: Feed Motor:77mm/s | Feed Motor:77mm/s (D353) |
| 6161 25 | Bank1:Tray Lock Solenoid | Tray Lock Solenoid (D351/D352) |
| 6161 26 | Bank2:Tray Lock Solenoid | Tray Lock Solenoid (D353) |
| 6161 30 | Bank:Tray3: PU Solenoid | Pick-up Solenoid (D351/D352) |
| 616131 | Bank:Tray4: PU Solenoid | Pick-up Solenoid (D351/D353) |

| 6161 32 Bank:Tray5: PU Solenoid | | Pick-up Solenoid (D353) | |
|---------------------------------|-------------------------|------------------------------|--|
| 6161 35 | Bank:Tray3: Feed Clutch | Pick-up Solenoid (D351/D352) | |
| 6161 36 Bank:Tray4: Feed Clutch | | Pick-up Solenoid (D351/D353) | |
| 6161 37 | Bank:Tray5: Feed Clutch | Pick-up Solenoid (D353) | |

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. Patte | rn |
|-----------------------|----|
|-----------------------|----|

| 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 |
| 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 |

Printer Service Mode

SP1-XXX (Service Mode)

| 1001 | Bit Swi | Bit Switch | | |
|----------------------------|---------|---|--|------------------|
| 001 Bit Switch 1 | | 0 | 1 | |
| | bit 0 | DFU | - | - |
| | bit 1 | DFU | - | - |
| | bit 2 | DFU | - | - |
| | bit 3 | No I/O Timeout | 0: Disable | 1: Enable |
| Enable: The MFP I/O Timeou | | Enable: The MFP I/O Timeout setting will have no effe | eout 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 Function" in "System Maintenance Reference" section | | |
| | 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 Swit | Bit Switch | | | | |
|------|----------|--|---|----------------|--|--|
| 002 | Bit Swit | Bit Switch 2 | | 1 | | |
| | bit 0 | DFU | - | - | | |
| | bit 1 | DFU | - | - | | |
| | bit 2 | bit 2 Applying a collation Type | | Normal Collate | | |
| | | A collation type (shift or normal) will be applied to all jobs that do not already have a 'Collate Type' configured. | | | | |

| 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 and PCL5e/c. If Auto PDL switching is disabled, these jobs will not be printed properly. | | |
| bit 4 | DFU | - | - |
| bit 5 | DFU | - | - |
| bit 6 | DFU | - | - |
| bit 7 | DFU | - | - |

| 1001 | Bit Swi | Bit Switch | | |
|-------------|------------------|--|---|-----------|
| 003 | Bit Switch 3 0 1 | | 1 | |
| | bit 0 | DFU | - | - |
| | bit 1 | DFU | - | - |
| | bit 2 | [PCL5e/c]: Legacy HP compatibility 0: Dis | | 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 change to "<esc>*r1A"</esc></esc> | | |
| | bit 3 | t 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 |
|------|------------|
|------|------------|

| 005 | Bit Sw | itch 5 | 0 | 1 | | | |
|-----|---|--|------------------|-------------------|--|--|--|
| | | Show "Collate Type", "Staple Type" and "Punch Type" buttons on the operation panel. | Disable | Enable | | | |
| | If enabled, users will be able to configure a Collate Type, Staple Type, and Punch bit 0 from the operation panel. The available types will depend on the device and configure 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 of Type settings to 1000. The default is 100. | can be stored o | n the HDD via Job | | | |
| | bit 5 | Face-up output | Disable | Enable | | | |
| | | Enable: All print jobs will be output face-up in the destination tray. | | | | | |
| | bit 6 | DFU | - | - | | | |
| | bit 7 | DFU | - | - | | | |

| 1001 | Bit Switch | | |
|------|-------------------------|---|---|
| 006 | Bit Switch 6 DFU | - | - |

RTB 62 Bit switch 6-7 added

| 1001 | Bit Switch | | |
|------|-------------------------|---|---|
| 007 | Bit Switch 7 DFU | - | - |

| 1001 | Bit Swi | 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 will be printed even if usercode authentication is enabled. • Note • Color jobs will not be printed without a valid user code. | | | | |
| | 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. | PostScript jobs | (Landscape or | | |
| | bit 7 | [PDF]: Orientation Auto Detect Function | Enable | Disable | | |
| | | Automatically chooses page orientations of PDF jobs the content printed on the page. | (Landscape or | Portrait) based on | | |

SP1003 RTB 72

| 1003 | 1003 [Clear Setting] | |
|-----------------------|---|--|
| 1002.1 | Initialize Printer System | |
| 1003 1 | Initializes settings in the "System" menu of the user mode. | |
| 1003 3 Delete Program | | |

| | 1004 | 04 [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. 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] |
|--|--|
| 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" menu. | | | |
| 11041 | 1 Black: Highlight *CTL [0 to 30 / 15 / 1/step] | | [0 to 30 / 15 / 1/step] | |

| 1104 2 | Black: Shadow |
|---------|--------------------|
| 11043 | Black: Middle |
| 11044 | Black: IDmax |
| 1104 21 | Cyan: Highlight |
| 1104 22 | Cyan: Shadow |
| 1104 23 | Cyan: Middle |
| 1104 24 | Cyan: IDmax |
| 110441 | 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] | | | |
|--------|---|--|---------------------------------------|--|
| 1100 | Adjusts the maximum toner amount for image development. | | | |
| 1106 1 | 1 Toner Limit Value *CTL | | [100 to 400 / 260 / 1 %/step] | |

8

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] | | | |
|--------|---|------|---------------------------------|--|
| 1005 | 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] | *CTL | [0 or 1 / 0 / -] 0: enable, 1: disable |
|--------|--------------------------------|------|---|
| 1009 1 | Enable or disable remote scan. | 1. | |

| 1010 | [Non Display Clear Light PDF] | *CTL | [0 or 1 / 0 / -] 0: Display, 1: No display |
|--------|--------------------------------|------|--|
| 1010 1 | Enable or disable remote scan. | | |

RTB 24 Additional scanner SPs

SP2-XXX (Scanning-image quality)

| | [Compression Level (Gray-scale)] | | | |
|--|----------------------------------|------|---|--|
| Selects the compression ratio for grayscale processing mode (JPEG) for can be selected at the operation panel. | | | mode (JPEG) for the three settings that | |
| 2021 1 | Level 3 (Middle Image Quality) | *CTL | | |
| 2021 2 | Level 2 (High Image Quality) | | | |

| 2021 3 | Level 4 (Low Image Quality) | [5 to 95 / 30 / 1 /step] |
|--------|---------------------------------|----------------------------------|
| 2021 4 | Level 1 (Highest Image Quality) | [5 to 95 / 60 / 1 /step] |
| 2021 5 | Level 5 (Lowest Image Quality) | [5 to 95 / 20 / 1 /step] |

| 2024 | [Compression ratio of ClearLight PDF] | | |
|--------|--|------|----------------------------------|
| | Selects the compression ratio for clearlight PDF for the two settings that can be selected at the operation panel. | | |
| 2024 1 | Compression Ratio (Normal image) | *CTL | [5 to 95 / 25 / 1 /step] |
| 2024 2 | Compression Ratio (High comp image) | | [5 to 95 / 20 / 1 /step] |